BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

BOARD OF DIRECTORS
REGULAR MEETING
OCTOBER 19, 2016

A regular meeting of the Bay Area Air Quality Management District Board of Directors will be held at 9:45 a.m. in the 1st Floor Board Room at the Air District Headquarters, 375 Beale Street, San Francisco, California 94105.

Questions About an Agenda Item	The name, telephone number and e-mail of the appropriate staff Person to contact for additional information or to resolve concerns is listed for each agenda item.
Meeting Procedures	The public meeting of the Air District Board of Directors begins at 9:45 a.m. The Board of Directors generally will consider items in the order listed on the agenda. However, any item may be considered in any order. After action on any agenda item not requiring a public hearing, the Board may reconsider or amend the item at any time during the meeting. This meeting will be webcast. To see the webcast, please visit http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes at the time of the meeting.

Public Comment Procedures

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

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

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

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

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

BOARD OF DIRECTORS REGULAR MEETING
AGENDA

WEDNESDAY **BOARD ROOM**
OCTOBER 19, 2016 **1st FLOOR**
9:45 A.M.

CALL TO ORDER **Chairperson, Eric Mar**

1. **Opening Comments**
   Roll Call
   Pledge of Allegiance

   The Chair shall call the meeting to order and make opening comments. The Clerk of the Boards shall take roll of the Board members. The Chair shall lead the Pledge of Allegiance.

PUBLIC COMMENT ON NON-AGENDA MATTERS

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

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

CLOSED SESSION

3. **CONFERENCE WITH LEGAL COUNSEL**

   ANTICIPATED LITIGATION (Government Code Section 54956.9(d)(2))

   Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: one potential case.

OPEN SESSION

CONSENT CALENDAR (ITEMS 4 – 10) **Staff/Phone (415) 749-**

4. Minutes of the Board of Directors Regular Meeting of September 21, 2016
   Clerk of the Boards/5073

   The Board of Directors will consider approving the draft minutes of the Regular Board of Directors Meeting of September 21, 2016.

5. Board Communications Received from September 21, 2016 through October 18, 2016

J. Broadbent/5052
jbroadbent@baaqmd.gov

A copy of communications directed to the Board of Directors received by the Air District from September 21, 2016 through October 18, 2016, if any, will be at each Board Member's place.

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

J. Broadbent/5052
jbroadbent@baaqmd.gov

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

7. Notices of Violations Issued and Settlements in Excess of $10,000 in the month of September 2016

J. Broadbent/5052
jbroadbent@baaqmd.gov

In accordance with Resolution No. 2012-08, the Board of Directors will receive a list of all Notices of Violations issued, and all settlements for amounts in excess of $10,000 during the month of September 2016.

8. Consider Adopting Changes to the Air District's Administrative Code, Division I: Operating Policies and Procedures, Section 15: Non-Discrimination Policy and Complaint Procedure

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will consider adopting the recommended *changes to the Air District's Administrative Code, Division I: Operating Policies and Procedures, Section 15: Non-Discrimination Policy and Complaint Procedure as attached.*

9. Set a Public Hearing on December 7, 2016 to Consider Proposed Amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA)

J. Broadbent/5052
jbroadbent@baaqmd.gov

At the December 7, 2016 meeting, the Board of Directors will consider proposed amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA).

10. Consider Authorizing the Execution of Purchase Orders in Excess of $100,000 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 transferring funds from the Reserve for Mobile Monitoring Equipment to Program 811 of the Fiscal Year Ending (FYE) 2017 budget and authorize the Executive Officer/APCO to execute a purchase order to Inficon in the amount not to exceed $370,000.

COMMITTEE REPORT

11. Report of the **Mobile Source Committee** Meeting of September 22, 2016

CHAIR: S. Haggerty

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Committee received the following reports:

A) **Projects and Contracts with Proposed Grant Awards over $100,000**

1) Approve the Carl Moyer Program (CMP) and Transportation Fund for Clean Air (TFCA) projects with proposed grant awards over $100,000;

2) Allocate $1,500,000 in Mobile Source Incentive Funds (MSIF) for Compressed Natural Gas (CNG) tank replacements on school buses; and

3) Authorize the Executive Officer/APCO to enter into agreements with applicants for the recommended CMP and TFCA projects, and Lower Emission School Bus Program projects.

B) **Update on the Shuttle and Rideshare Program**

1) Approve $406,000 in Transportation Fund for Clean Air – for fiscal year ending (FYE) 2017 Regional Funds to be transferred to the Spare the Air Program FYE 2017 budget for the purposes of:

a. Securing an advertising contract with the Livermore Amador Valley Transit Authority (LAVTA) at a cost of $322,000 for FYE 2017, and

b. Paying approximately $84,000 to cover the cost of wrapping seven LAVTA transit operated shuttle buses with Spare the Air messaging.

2) Authorize the Executive Officer/APCO to execute all contracts and agreements with LAVTA related to the wrapping and advertising rights; and

3) Authorize the Executive Officer/APCO to extend the advertising service contract with LAVTA at a cost not to exceed $322,000 annually for up to two additional years, at the Air District's discretion, based on contractor's performance.

C) **Accept, Obligate, and Expend Funding from the Bay Area Clean Air Foundation (Foundation)**

1) Adopt a Resolution authorizing the Bay Area Air Quality Management District (Air District) to accept, oblige, and expend up to $1,266,600, plus any interest accrued, from the Bay Area Clean Air Foundation (Foundation) for roadside air pollution monitoring projects; and

2) Authorize the Executive Officer/APCO to enter into all agreements necessary to accept and expend this funding.

ADVISORY COUNCIL REPORT

12. Report of the **Advisory Council** Meeting of October 3, 2016

BOARD LIAISON: R. Sinks

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Council received the following reports:

A) **Council Deliberation on the Key Question**

1) None; receive and file.

B) **Air District Clean Air Plan: Areas for Future Focus**

1) None; receive and file.

PUBLIC HEARING

13. Public Hearing to Consider Adoption of Proposed Amendments to Regulation 9: Inorganic Pollutants, Rule 13: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants for Portland Cement Manufacturing and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA)

The Board of Directors will consider adoption of proposed amendments to Regulation 9: Inorganic Pollutants, Rule 13: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants for Portland Cement Manufacturing and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA).

PRESENTATIONS

14. **PRESENTATION BY MR. GORDON SCHREMP OF THE CALIFORNIA ENERGY COMMISSION**

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will receive an update on the processing of various crude oil types, the potential impacts of emission caps on the California gasoline market and trends in product exports and imports and the effects of recent refinery outages on those trends.

15. **UPDATE ON REGULATION 12, RULE 16: PETROLEUM REFINING FACILITY-WIDE EMISSIONS AND REGULATION 11, RULE 18: REDUCTION OF RISK FROM AIR TOXIC EMISSOINS AT EXISTING FACILITIES**

J. Broadbent/5052
jbroadbent@baaqmd.gov

The Board of Directors will receive an informational update on Regulation 12, Rule 16; Petroleum Refining Facility-Wide Emissions Limits and Regulation 11, Rule 18; Reduction of Risk from Air Toxic Emissions at Existing Facilities.

PUBLIC COMMENT ON NON-AGENDA MATTERS

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

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

BOARD MEMBERS' COMMENTS

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

OTHER BUSINESS

18. Report of the Executive Officer/APCO: Update on Progress of Regulation 12, Rule 16 and Regulation 11, Rule 18

19. Chairperson's Report

20. Time and Place of Next Meeting:

Wednesday, November 16, 2016, 375 Beale Street, San Francisco, California 94105 at 9:45 a.m.

21. Adjournment

The Board meeting shall be adjourned by the Board Chair.

CONTACT:

MANAGER, EXECUTIVE OPERATIONS **(415) 749-5016**
375 BEALE STREET, SAN FRANCISCO, CA 94105 **FAX: (415) 928-8560**
mmartinez@baaqmd.gov **BAAQMD homepage:**
www.baaqmd.gov

- To submit written comments on an agenda item in advance of the meeting. Please note that all correspondence must be addressed to the "Members of the Board of Directors" and received at least 24 hours prior, excluding weekends and holidays, in order to be presented at that Board meeting. Any correspondence received after that time will be presented to the Board at the following meeting.

- To request, in advance of the meeting, to be placed on the list to testify on an agenda item.

- 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 District's offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District's policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District's Non-Discrimination Coordinator, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 BEALE STREET, SAN FRANCISCO, CALIFORNIA 94105
FOR QUESTIONS PLEASE CALL (415) 749-5016 or (415) 749-4941

EXECUTIVE OFFICE:
MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

OCTOBER 2016

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Executive Committee *(Meets on the 3rd Monday of each Month)* **- CANCELLED**	**Monday**	**17**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Stationary Source Committee *(Meets on the 3rd Monday of each Month)* **- CANCELLED**	**Monday**	**17**	**10:30 a.m.**	**1st Floor Board Room**
Board of Directors Regular Meeting *(Meets on the 1st & 3rd Wednesday of each Month)*	**Wednesday**	**19**	**9:45 a.m.**	**1st Floor Board Room**
Board of Directors Public Engagement Committee *(At the Call of the Chair)*	**Thursday**	**20**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Budget & Finance Committee *(Meets on the 4th Wednesday of each Month)* **- CANCELLED**	**Wednesday**	**26**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Mobile Source Committee *(Meets on the 4th Thursday of each Month)*	**Thursday**	**27**	**9:30 a.m.**	**1st Floor Board Room**

NOVEMBER 2016

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets on the 1st & 3rd Wednesday of each Month)* **- CANCELLED**	**Wednesday**	**2**	**9:45 a.m.**	**1st Floor Board Room**
Nominating Committee *(At the Call of the Chair)*	**Wednesday**	**16**	**9:00 a.m.**	**1st Floor Board Room**
Board of Directors Regular Meeting *(Meets on the 1st & 3rd Wednesday of each Month)*	**Wednesday**	**16**	**9:45 a.m.**	**1st Floor Board Room**
Board of Directors Climate Protection Committee *(Meets on the 3rd Thursday of every other Month)*	**Thursday**	**17**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Executive Committee *(Meets on the 3rd Monday of each Month)*	**Monday**	**21**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Stationary Source Committee *(Meets on the 3rd Monday of each Month)*	**Monday**	**21**	**10:30 a.m.**	**1st Floor Board Room**
Board of Directors Budget & Finance Committee *(Meets on the 4th Wednesday of each Month)*	**Wednesday**	**23**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Mobile Source Committee *(Meets on the 4th Thursday of each Month)*	**Thursday**	**24**	**9:30 a.m.**	**1st Floor Board Room**

DECEMBER 2016

TYPE OF MEETING	DAY	DATE	TIME	ROOM
Board of Directors Regular Meeting *(Meets on the 1st & 3rd Wednesday of each Month)*	**Wednesday**	**7**	**9:45 a.m.**	**1st Floor Board Room**
Board of Directors Executive Committee *(Meets on the 3rd Monday of each Month)*	**Monday**	**19**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Stationary Source Committee *(Meets on the 3rd Monday of each Month)*	**Monday**	**19**	**10:30 a.m.**	**1st Floor Board Room**
Board of Directors Regular Meeting *(Meets on the 1st & 3rd Wednesday of each Month)*	**Wednesday**	**21**	**9:45 a.m.**	**1st Floor Board Room**
Board of Directors Mobile Source Committee *(Meets on the 4th Thursday of each Month)*	**Thursday**	**22**	**9:30 a.m.**	**1st Floor Board Room**
Board of Directors Budget & Finance Committee *(Meets on the 4th Wednesday of each Month)*	**Wednesday**	**28**	**9:30 a.m.**	**1st Floor Board Room**

HL – 10/11/16 (4:40 p.m.) **G/Board/Executive Office/Moncal**

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 5, 2016

Re: Minutes of the Board of Directors Regular Meeting of September 21, 2016

RECOMMENDED ACTION

Approve the attached draft minutes of the Board of Directors Regular Meeting of September 21, 2016.

DISCUSSION

Attached for your review and approval are the draft minutes of the Board of Directors Regular Meeting of September 21, 2016.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 4A: Draft Minutes of the Board of Directors Regular Meeting of September 21, 2016.

Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 749-5073

Board of Directors Regular Meeting
Wednesday, September 21, 2016

DRAFT MINUTES

Note: Audio recordings of the meeting are available on the website of the Bay Area Air Quality Management District at
http://www.baaqmd.gov/about-the-air-district/board-of-directors/resolutionsagendasminutes

CALL TO ORDER:

1. Opening Comments: Secretary Hudson called the meeting to order at 9:54 a.m.

Roll Call:

Present: Chairperson Eric Mar; Vice-Chairperson Liz Kniss; Secretary David Hudson; and Directors John Avalos, Teresa Barrett, Tom Bates, David J. Canepa, Cindy Chavez, Osby Davis, John Gioia, Carole Groom, Scott Haggerty, Rebecca Kaplan, Nate Miley, Karen Mitchoff, Katie Rice, Brad Wagenknecht, and Shirlee Zane.

Absent: Directors Jan Pepper, Mark Ross, Rod Sinks, Warren Slocum, and Jim Spering.

2. REPORT OF THE EXECUTIVE OFFICER/APCO (OUT OF ORDER, ITEM 22)

This item was split into two parts; the first part occurred just after the roll call, and the second part occurred after Board Members' Comments, at the end of the meeting. For the purpose of the minutes, both parts of this item have been combined into one section.

Part 1:

Jack Broadbent, Executive Officer / Air Pollution Control Officer (APCO), requested to move this item to the top of the agenda, in order to provide the Board with the monthly status report that tracks staff's refinery rulemaking progress. (At the July 20, 2016 Board meeting, staff agreed to the Board's request to provide a monthly update on the refinery rulemaking schedule and progress.) Mr. Broadbent emphasized that during the months of June and July, the Board and staff discussed the development of a rule that incorporates the Community-Worker Proposal to cap emissions at refineries, as well as a rule that establishes a risk-management threshold. The District's committed schedule of milestones and deliverables for the development of the Environmental Impact Report (EIR) (encompassing both proposals as equal options) was displayed. Mr. Broadbent said that on August 19, the project description was officially released, and staff plans to release the Notice of Preparation, the first step in the EIR process, on October 15.

Board Comments:

The Board and staff discussed how Mr. Broadbent will give monthly verbal and written updates on this topic as part of the Executive Officer/APCO's report at Board meetings, and how these updates will supplement more detailed updates that will be presented at the Stationary Source Committee meetings; and the odor detected in Vallejo on September 20 caused by an oil sheen and hospitalizing residents, and how the District has responded to complaints from the public.

Part 2:

Mr. Broadbent announced that the end of the ozone season is approaching and displayed a chart showing that there were 12 days in 2016 in which the federal ambient air standard for ozone was exceeded; more wildfires in CA are anticipated, which results in worsening air quality. He reminded the Board members that each were allotted free admission to the Climate Forward Bay Area: A Leadership Forum on October 13 and 14 hosted by the District. Mr. Broadbent also recognized Director of Engineering, Jim Karas, for 42 years of service, as Mr. Karas will be retiring in October.

3. PUBLIC COMMENT ON NON-AGENDA MATTERS (ITEM 2)

Steven Yang, Chevron, addressed the Board regarding his concern that the District wishes to regulate refineries out of existence, which he considers "unsound policy." Mr. Yang listed industries and end users that would be affected by the dissolution of refineries, and urged the Board to involve refineries in policy development that will not harm the economy.

San Francisco resident, Johnny Schenone, addressed the Board regarding frustration from his attempts to receive a phone call back from Mr. Broadbent after leaving multiple requests with staff to speak with Mr. Broadbent.

Mary Privitera, MWH Global, addressed the Board regarding her concern that a local cap on greenhouse gas (GHG) emissions at refineries will result in negative impacts, such as job security, for those working in the refinery industry.

Amy McTigue, MWH Global, encouraged the Board to follow the recommendation of District staff and the Advisory Council, and not pursue a cap on local GHG emissions at refineries.

Kevin Buchan, Western States Petroleum Association (WSPA), addressed the Board regarding WSPA's support of staff's recommendation to pursue a single EIR that analyzes both proposals for Rule 12-16 and Rule 11-18.

Fairfield resident, Mike Easter, urged the Board to consider *all* possible impacts on the community that may result from the passing of proposed regulation (Rules 12-16 and/or 11-18).

Tom Lewis, United Steelworkers Local 5, urged the Board to be wary of corporate, greed-based policies and not to let the threat of lawsuits from refiners intimidate the District into expanding the scope of Rule 12-16 in order to delay its implementation. Mr. Lewis acknowledged that he has been singled out by the refinery industry for opposing the industry's position on the development of this rule.

Berkeley resident, L.A. Wood, addressed the Board regarding Title V permitting practices between the District and Pacific Steel Casting. Mr. Wood had previously submitted a letter from the Golden Gate University's School of Law (Environmental Law and Justice Clinic) regarding the proposed Synthetic Minor Operating Permit (SMOP) for Pacific Steel Casting, which requested that economic benefits of non-compliance be recovered and designated to an emissions-reduction project in Berkeley. Chair Mar requested a District staff update on Pacific Steel Casting activities and Damian Breen, Deputy Air Pollution Control Officer, said that staff is scheduling a meeting with the Berkeley community to hear public concerns prior to making a recommendation on the SMOP permit.

Bill Pinkham, Sunflower Alliance, urged the Board to keep staff on schedule regarding the rulemaking progress of Rules 12-16 and 11-18. Mr. Pinkham also stated that no one wishes to close down refineries; only limit emissions at refineries.

Charles Davidson, Sunflower Alliance, addressed the Board regarding his concern that staff is already behind schedule with the EIR that encompasses proposed Rules 12-16 and 11-18. Mr. Davidson predicted the impending need to split the single EIR into two separate EIRs, due to the difference of time-sensitivity and complexity between the two rules.

Mark Brett, an engineering business development professional, stated that he observed that, regarding the discussions of Rule 12-16 and 11-18 development, refineries base their arguments on conclusive data, while community activists use exaggeration and repetition to instill fear in the Board members. Mr. Brett also stated that California refiners have the most stringent air permitting requirements in the world, and he urged the Board to act based on facts, not fear.

Janet Pygeorge, Rodeo Citizens Association (RCA), stated that the RCA is suing the Contra Costa County Board of Supervisors and Phillips 66 for their plan to increase propane and butane recovery at the Rodeo refinery, and threatened to litigate the District if the District does not intervene on the community's behalf. Mr. Pygeorge complained of Phillips 66's lack of consideration for the community adjacent to its Rodeo refinery, and emphasized that RCA is not "anti-refinery", but wants refineries to operate "right".

<u>CONSENT CALENDAR</u> (ITEMS 3-14)

4. **Minutes of the Board of Directors Regular Meeting of July 20, 2016 (ITEM 3)**
5. **Board Communications Received from July 20, 2016 to September 20, 2016 (ITEM 4)**
6. **Air District Personnel on Out-of-State Business Travel (ITEM 5)**
7. **Notices of Violations Issued and Settlements in Excess of $10,000 in the months of July and August 2016 (ITEM 6)**
8. **Quarterly Report of the Executive Office and Division Activities for the Months of April 2016 – June 2016 (ITEM 7)**
9. **Consider Authorizing a 5-Year Computer Hardware Maintenance Contract (ITEM 8)**
10. **Consider Authorizing the Executive Officer/APCO to Amend a Contract with Commercial Interior Builders, Inc. (CIB) in an Amount not to Exceed $124,990 (ITEM 9)**
11. **Consider Authorizing the Executive Officer/APCO to Enter into a Contract with NOVO Construction (NOVO) in an Amount not to exceed $300,000.00 for Design, Construction, and Installation of Equipment in the Air District Laboratory's Clean Room (ITEM 10)**
12. **Consider Adopting of Amendments to the Air District's Administrative Code, Division II: Fiscal Policies and Procedures, Section 4.3: Contract Limitations (ITEM 11)**

13. Notification of Proposed Future Adoption to the Air District's Administrative Code, Division I: Operating Policies and Procedures, Section 15: Non-Discrimination Policy and Complaint Procedure (ITEM 12)

14. Set Public Hearing for October 19, 2016 to Consider Adoption of Proposed Amendments to Regulation 9, Rule 3: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing (ITEM 13)

15. Extension of Contracts for My Air Online Development Services (ITEM 14)

Public Comments:

No requests received.

Board Comments:

Director Chavez requested that staff provide her with expanded explanations of background details relative to contracts and the District's selection process.

Board Action:

Director Haggerty made a motion, seconded by Director Wagenknecht, to **approve** the Consent Calendar Items 3 through 14, inclusive; and the motion **carried** by the following vote of the Board:

AYES:	Avalos, Barrett, Bates, Canepa, Chavez, Davis, Gioia, Groom, Haggerty, Hudson, Kaplan, Kniss, Mar, Miley, Mitchoff, Rice, Wagenknecht, and Zane.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Pepper, Ross, Sinks, Slocum, and Spering.

COMMITTEE REPORTS

16. Report of the Climate Protection Committee Meeting of September 15, 2016 (ITEM 15)

Legislative Committee Vice Chair Avalos read:

The Climate Protection Committee met on Thursday, September 15, 2016, and approved the minutes of March 17, 2016.

The Committee received and discussed the staff presentation Climate Legislation Update, including background and climate bills.

The Committee then received and discussed the staff presentation Climate Forward Bay Area: A Leadership Forum - Update, including conference planning, date and location, speakers, agenda, registration, and sponsors.

The Committee then received and discussed the staff presentation State Cap and Trade Funding Update, including background, Fiscal Year 2016/2017 Cap and Trade Expenditure Plan: $900 Million, recent awards to Bay Area, Future Opportunities for Air District in Fiscal Year Ending 2016/2017, and future for Cap and Trade funding.

Lastly, the Committee received and discussed the staff presentation 2016 Clean Air Plan/Regional Climate Protection Strategy Update, including Clean Air Plan/Regional Climate Protection Strategy, state and regional climate planning, recent work, Bay Area greenhouse gas

emissions, Bay Area greenhouse gas projection to 2050 with key state programs, Bay Area in 2050, tools and objectives, transportation, stationary sources, energy, buildings, waste and water, agriculture and natural and working lands, short-lived climate pollutants, progress underway, and next steps.

The next meeting of the Committee is on Thursday, November 17, 2016, at 9:30 a.m., at 375 Beale Street, San Francisco, CA 94105.

This concludes the Chair report of the Climate Protection Committee.

Public Comments:

Richmond resident, Nick Despota, addressed the Board regarding a collaborative university research brief entitled *The Preliminary Environmental Equity Assessment of California's Cap and Trade Program.* Mr. Despota said that the report confirms what the community has been fearing: highest-emitting facilities are disproportionately located in low-income communities; toxics and particulate matter that are emitted with GHG emissions cause immediate health problems; and while California is on track to meet its statewide emission targets under AB 32, local emission levels from refineries have increased since 2013. Mr. Despota said that the District is justified in not relying on Cap and Trade to improve local air quality, and that he hopes that the Board remains open to the possibility of separating the single EIR into two. Chair Mar requested that the aforementioned report be sent to the Board.

Rick Purser, Eichleay Engineers, addressed the Board regarding his opposition to the proposal to cap emissions at refineries. He requested that the Board consider the livelihood of refinery workers that may be impacted if this proposal is implemented.

Steve Grillo, Performance Contracting, Inc., urged the Board to consider the job security of refinery workers and contractors that may be affected if the caps on emissions is implemented.

Board Comments:

None.

Board Action:

None; receive and file.

17. Report of the Executive Committee Meeting of September 19, 2016 (ITEM 16)

Executive Committee Chair Mar read:

The Committee met on Monday, September 19, 2016, and approved the minutes of May 6, 2016.

The Committee reviewed and discussed the Hearing Board Quarterly Report from April through June 2016, which included a summary of the cases and fees collected.

The Committee then reviewed and discussed the presentation Fiscal Year Ending 2017 Community Grant Program Guidelines including: Community Science Grant Program background, Fiscal Year Ending 2017 Community Science Grant Program elements, two-step process for grant selection, general grant eligibility, and recommendation. The Committee recommends the Board:

1) Approve the Fiscal Year Ending 2017 Community Grant Program Guidelines.

The Committee then reviewed and discussed the staff presentation Update on Climate Forward Bay Area: A Leadership Forum, including conference planning, date and location, speakers, agenda, registration, and sponsors.

Due to a shortage of time, Jack Broadbent, Executive Officer/Air Pollution Control Officer, requested that the staff presentation, Update on My Air Online Permitting and Compliance System Progress, be postponed until the next meeting. Chair Mar approved this request.

The next meeting of the Committee is on Monday, November 21, 2016, at 9:30 a.m., at the Bay Area Air Quality Management District Office, 375 Beale Street, San Francisco, California 94105.

I move that the Board approve the Executive Committee's recommendations.

This concludes the Chair report of the Executive Committee.

Public Comments:

No requests received.

Board Comments:

None.

Chair Mar made a motion, seconded by Secretary Hudson, to **approve** the Executive Committee's recommendations; and the motion **carried** by the following vote of the Board:

AYES:	Avalos, Barrett, Bates, Canepa, Chavez, Davis, Gioia, Groom, Haggerty, Hudson, Kaplan, Kniss, Mar, Miley, Mitchoff, Rice, Wagenknecht, and Zane.
NOES:	None.
ABSTAIN:	None.
ABSENT:	Pepper, Ross, Sinks, Slocum, and Spering.

18. Report of the Stationary Source Committee Meeting of September 19, 2016 (ITEM 17)

Stationary Source Committee Chair Gioia read:

The Committee met on Monday, September 19, 2016, and approved the minutes of June 1, 2016.

The Committee reviewed and discussed the staff presentation Upcoming Changes to Regulation 9, Rule 13: Cement Kilns, including overview, regulatory background and purpose, results of rule adoption, technical issues of ammonia standard, ammonia standard solution, proposed rule amendments, and continuing issues of concern.

The Committee then reviewed and discussed the staff presentation Amendments to Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants, including outline, effectiveness of control programs, stationary source programs, Regulation 2-5 New Source Review for Toxic Air Contaminants, summary of Regulation 2-5, proposed Rule 2-5 changes, impacts of Rule 2-5 revisions, California Environmental Quality Act analysis, socioeconomic analysis, public outreach, comments and responses, and next steps.

The Committee finally reviewed and discussed the staff presentation Update on Wood Smoke Reduction Incentive Program, including background, Air District's Wood Smoke Reduction Incentive Program, program funding, outreach, launch, timeline, and statistics, and next steps.

The next meeting of the Committee is on Monday, November 21, 2016, at 10:30 a.m., at the Bay Area Air Quality Management District Office, 375 Beale Street, San Francisco, California 94105.

This concludes the Chair report of the Stationary Source Committee.

Public Comments:

No requests received.

Board Comments:

The Board and staff discussed the tentative date of the next Stationary Source Committee meeting, which is October 17, 2016.

Board Action:

None; receive and file.

At this time, Mr. Broadbent segued into a staff update on the recent successful launch of the District's Wood Smoke Reduction Incentive Program. He introduced Karen Schkolnick, Air Quality Program Manager, who presented Wood Smoke Reduction Incentive program statistics, including: the number of applications received, including those that are waitlisted; (of the areas that were identified as "highly-impacted") the number of applications that request low-income assistance, the number of applications that quality for high wood smoke area funding, and the number of applications that request additional funding for sole source of heat exemption; and applications by project type and received by County. Ms. Schkolnick concluded by stating that staff anticipates that the numbers will change by the time the project ends (after the wood smoke season ends) and that staff will provide a second presentation to the Board at that time. The full Wood Smoke Reduction Incentive Program presentation was given to the Stationary Source Committee on September 19, 2016.

Board Comments on Wood Smoke Presentation:

The Board and staff discussed the need to add more funds to the program, based on the public's interest; specific outreach efforts directed at highly-impacted areas; considerations made for applicants with sole source of heat exemptions; Marin County's collaboration with the District to provide supplemental local outreach of this program; staff's interpretation of the program's success based on geographic location of applicants; the Board's acknowledgement of the Spare the Air Program prompting the public to respond so positively to the Wood Smoke program; and the Board's concern of the 72-hour delay in posting the District meeting webcasts on the website after a meeting adjourns.

CLOSED SESSION (commenced at 10:52 a.m.)

19. EXISTING LITIGATION (Government Code Section 54956.9(a)) (ITEM 18)

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

A. **California Building Industry Association v. Bay Area AQMD**, Alameda County Superior Court, Case No. RG-10548693; California Court of Appeal, First Appellate District, Case No. A135335; California Supreme Court, Case No. S213478

B. **Communities for a Better Environment, et al. v. Bay Area AQMD, Kinder Morgan Material Services, LLC, et al., Real Parties in Interest**, San Francisco County Superior Court, Case No. CPF-14-513557; First District Court of Appeal, Case No. A143634

C. **Valero Refining Company – California, Tesoro Refining & Marketing Company, LLC, and Phillips 66 Company v. Bay Area AQMD**, Contra Costa County Superior Court, Case No. N16-0095.

D. **Western States Petroleum Association, Valero Refining Company – California, Tesoro Refining & Marketing Company, LLC, and Phillips 66 Company v. Bay Area AQMD**, Contra Costa County Superior Court, Case No. N16-0963

Public Comments:

Laurie Minzter, Chevron, emphasized Chevron's appreciation for the District's past practice of collaborating with refineries during the rulemaking process *and* before proposed Rules are voted upon, and urged the Board to revert back to this practice, as she said that, for refinery rules adopted in 2015, the District did not engage with refinery staff until after the new rules had been adopted

Board Comments:

None.

Board Action:

Brian Bunger, District Counsel, stated that there was no reportable action for this item.

20. INITIATING LITIGATION (ITEM 19)

Pursuant to Government Code Section 54956.9(c), a need exists to meet in closed session to decide whether to initiate litigation with respect to one case.

Public Comments:

No requests received.

Board Comments:

None.

Board Action:

Mr. Bunger stated that the Board authorized staff to proceed with the recommended action for this item.

OPEN SESSION (commenced at 11:50 a.m.)

21. PUBLIC COMMENT ON NON-AGENDA MATTERS (ITEM 20)

None.

22. BOARD MEMBERS' COMMENTS (ITEM 21)

Director Wagenknecht reported on his experience at the Air and Waste Management Association's 109th Annual Conference that was held in New Orleans in June 2016; he highlighted the topic of trends and implications of citizens measuring air quality.

Director Gioia reported on his experience at the Air and Waste Management Association's 109th Annual Conference that was held in New Orleans in June 2016. He remarked that California is progressive in climate change initiatives, and highlighted Emissions from Oil and Gas Operations in the United States and their Air Quality Implications, A Comprehensive Regional Approach to Addressing GHG Emissions, and Future Proofing Cities Through Local Climate Action Planning.

Secretary Hudson said that at the 2016 American Public Transportation Association Annual Meeting held between September 11-14, California's role as a leader was indisputable, especially regarding new technology. He added that California may be in competition with other states for new technology soon.

Director Zane reported that Sonoma County's Regional Climate Protection Authority released a Draft Climate Protection Report of all 9 cities (and unincorporated county), and she also encouraged the other Bay Area counties to organize such an authority in their own jurisdictions.

Director Bates said that he looked forward to the District's upcoming conference, Climate Forward Bay Area: A Leadership Forum, which will be held on October 13-14 at the Mission Bay Conference Center at UCSF. He encouraged all Board members to attend, and also commended staff on the success of the Wood Smoke Reduction Incentive program.

Director Kaplan reported that she sat on the Goods Movements and Infrastructure panel at the East Bay Manufacturing and Logistics Summit on September 16, where she spoke about the large backlog of trucks regularly trying to enter the Port of Oakland, due of limited hours of operation at the Port. She and others helped mitigate this problem by extending Port hours into evenings and weekends.

OTHER BUSINESS

23. Chairperson's Report

Chair Mar encouraged the Board members to attend the Climate Forward Bay Area Leadership Forum, noting several of the speakers.

24. Time and Place of Next Meeting

Wednesday, October 19, 2016, 1st Floor Board Room, 375 Beale Street, San Francisco, California 94105 at 9:45 a.m.

25. Adjournment

The Board meeting adjourned at 12:03 p.m.

Marcy Hiratzka
Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 10, 2016

Re: Board Communications Received from September 21, 2016 through October 18, 2016

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Copies of communications directed to the Board of Directors received by the Air District from September 21, 2016, through October 18, 2016, if any, will be at each Board Member's place at the October 19, 2016, Board meeting.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Vanessa Johnson
Reviewed by: Maricela Martinez

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 4, 2016

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

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

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

The report covers the out-of-state business travel for the month of September 2016. The monthly out-of-state business travel report is presented in the month following travel completion.

DISCUSSION

No out-of-state business travel activities occurred in the month of September 2016.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Stephanie Osaze
Reviewed by: Jeff McKay

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 7, 2016

Re: Notices of Violation Issued and Settlements in Excess of $10,000 in the month of September 2016

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

In accordance with Resolution No. 2012-08, attached to this Memorandum is a listing of all Notices of Violation issued, and all settlements for amounts in excess of $10,000 during the calendar month prior to this report.

BUDGET CONSIDERATION/FINANCIAL IMPACT

The amounts of civil penalties collected are included in the Air District's general fund budget.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Brian C. Bunger

Attachment: 7A: Notices of Violations for the Month of September 2016

NOTICES OF VIOLATION ISSUED

The following Notice(s) of Violation were issued in September 2016:

Alameda

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Berkeley Auto Body Inc	A5469	Berkeley	A56682A	9/9/16	2-1-302	operating with an expired P/O, permit expired in November 1, 2014
Construction Site	Y1561	Oakland	A56005A	9/8/16	11-2-303	Improper asbestos removal
Construction Site	Y1561	Oakland	A56005B	9/8/16	11-2-304	RACM not kept in leak tight labeled container
Construction Site	Y1561	Oakland	A56006A	9/8/16	11-2-401.3	Failure to notify for renovation work
East Bay Municipal Utility District	A0591	Oakland	A56330A	9/27/16	2-6-307	E#07A03, P/O Condition #18860, Part 3, Increased H2S
East Bay Municipal Utility District	A0591	Oakland	A56331A	9/27/16	2-6-307	E#07A11, P/O Condition #18860, Part 3, Increased H2S
Newark Hilton Hotel	B3858	Newark	A55635A	9/28/16	2-1-301	No A/C, P/O for 61 HP Emergency Standby Engine
Newark Hilton Hotel	B3858	Newark	A55635B	9/28/16	2-1-302	No A/C, P/O for 61 HP Emergency Standby Engine

Contra Costa

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Acme Fill Corporation	A1464	Martinez	A56239A	9/15/16	8-34-301.2	component leaks greater than 1000 ppm

Chevron Products Company	A0010	Richmond	A56814A	9/22/16	2-6-307	Failed to monitor Alky CWT HC levels; P/C 14596; Dev 4223
Chevron Products Company	A0010	Richmond	A56814B	9/22/16	1-523-1	Failed to monitor Alky CWT HC levels; P/C 14596; Dev 4223
Chevron Products Company	A0010	Richmond	A56815A	9/22/16	2-6-307	ESP temp deviation; P/C 11066(7A); Dev 4578
Chevron Products Company	A0010	Richmond	A56816A	9/22/16	8-10-501	Failure to monitor process vessel prior to opening
Chevron Products Company	A0010	Richmond	A56817A	9/22/16	8-18-404	Failed to monitor valve on Quarterly basis; Dev 4430
Chevron Products Company	A0010	Richmond	A56818A	9/22/16	6-1-302	Opacity excess @ FCC; Alignment issues for CEM
Chevron Products Company	A0010	Richmond	A56818B	9/22/16	2-6-307	Opacity excess @ FCC; Alignment issues for CEM
Shell Martinez Refinery	A0011	Martinez	A56183A	9/14/16	2-6-307	PC#4288 Part 9 leak test conducted after 20% cargo loaded
StoneMor California Subsidiary, Inc	A2634	Lafayette	A56238A	9/7/16	2-1-307	Failed to operate afterburner >1500 degrees F
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56206A	9/8/16	2-6-307	Violations documented associated with 2014 TA flaring
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56206B	9/8/16	9-1-313.2	Violations documented associated with 2014 TA flaring6
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56206C	9/8/16	10	Violations documented associated with 2014 TA flaring
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56207A	9/8/16	2-6-307	Failed Source Test; Late reporting
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56208A	9/8/16	2-6-307	Steam/FG ratio < 2.0. RCA #06Z55

Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56209A	9/8/16	2-6-307	Steam/FG ratio < 2.0. RCA #06Z74
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56210A	9/8/16	8-5-304	Product found on roof of Tk-642
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56211A	9/8/16	2-1-301	No A/C, PTO. Used for stand-by/back-up for plant air system
Tesoro Refining & Marketing Company LLC	B2758	Martinez	A56211B	9/8/16	2-1-302	No A/C, PTO. Used for stand-by/back-up for plant air system

Marin

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Wardrobe Cleaners	A1729	Novato	A56105A	9/6/16	1-410	Failure to renew registration-HC drycleaner

San Mateo

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
SFPP, LP	A4021	Brisbane	A56506A	9/22/16	2-6-307	Failed Source Test OS-6314 on vapor burner
Siebel Systems Inc	B3219	San Mateo	A56505A	9/13/16	2-1-302	Expired permit to operate since 2008

Santa Clara

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
1525 Comstock C/O Digital Realty Trust	B9293	Santa Clara	A55631A	9/12/16	2-1-307	Failed to conduct Regens; P/C #23613-#3, includes S# 2,3,4,5,6

Alliance Environmental Group, Inc.	Q8668	San Jose	A55992A	9/8/16	11-2-401.3	Failure to wait10 working days. Renovation did not qualify for emergency
AXIS HOA	B8907	San Jose	A55704A	9/6/16	2-1-302	Permit to Operate Expired 3/27/2009
Chevron USA/Food Mart #0243	C4377	Santa Clara	A55884A	9/9/16	8-7-302.3	Failed source test #16202, #16203, #16201
Custom Scaffold	Y2726	San Jose	A55634A	9/20/16	5-301	Illegal Fire
Donald Von Raesfeld Power Plant	B4991	Santa Clara	A55632A	9/14/16	2-6-307	NOx exceedance; P/C# 24252-#20(a); include S# 2
Donald Von Raesfeld Power Plant	B4991	Santa Clara	A55633A	9/14/16	2-6-307	NOx exceedance; P/C# 24252- #20 (a)(b), includes S# 4
Equilon Enterprises LLC-San Jose Terminal	A0064	San Jose	A55680A	9/13/16	8-5-322.1	4 rips/cracks in secondary seal
Mancia's Steel Company	A2583	San Jose	A55703A	9/6/16	2-1-302	Permit to Operate expired on 10/1/2010
Proto Paint	A9209	Santa Clara	A55629A	9/9/16	2-1-302	expired permit; includes S# 2
Proto Paint	A9209	Santa Clara	A55630A	9/9/16	8-19-501	Failure to keep records; includes S# 2,3

Solano

Site Name	Site #	City	NOV #	Issuance Date	Regulation	Comments
Sutter Health Sacto/Sierra Region	A4064	Vallejo	A56085A	9/12/16	2-1-307	Source 4 boiler exceeded Permit Condition #15010 90,000 therms annual usage limit
Valero Refining Company	B2611	Benicia	A56455A	9/12/16	8-33-305	Leaking vapor recovery hoses

Valero Refining Company - California	B2626	Benicia	A56432A	9/1/16	2-6-307	Excess ID#06Y15/06Y53 - Excessive visible emissions
Valero Refining Company - California	B2626	Benicia	A56432B	9/1/16	6-1-302	Excess ID#06Y15/06Y53 - Excessive visible emissions

Sonoma						
Site Name	**Site #**	**City**	**NOV #**	**Issuance Date**	**Regulation**	**Comments**
CVE NB Contracting Group Inc.	W2528	Rohnert Park	A55994A	9/19/16	11-2-303.6	No negative air and view ports on containment
CVE NB Contracting Group Inc.	W2528	Rohnert Park	A55994B	9/19/16	11-2-304.1	RACM waste not wetted and in sealed leak-tight labeled containers

SETTLEMENTS FOR $10,000 OR MORE REACHED

There was 1 settlement(s) for $10,000 or more completed in September 2016.

On September 8, 2016, the District reached settlement with Kraft Heintz Food Company for $10,000, regarding the allegations contained in the following 1 Notice of Violation:

NOV #	Issuance Date	Occurrence Date	Regulation	Comments from Enforcement
A50219A	5/4/16	11/4/15	2-1-307	NOx>0.92 #/ton PC# 24014.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 4, 2016

Re: Consider Adopting Changes to the Air District's Administrative Code, Division I: Operating Policies and Procedures, Section 15: Non-Discrimination Policy and Complaint Procedure

RECOMMENDATION

Recommend the Board of Directors will consider adopting the recommended changes to the Air District's Administrative Code, Division I: Operating Policies and Procedures, Section 15: Non-Discrimination Policy and Complaint Procedure as attached.

BACKGROUND

The Air District recently updated its Non-Discrimination Policy and Complaint Procedure. The policy affirms the Air District's commitment of providing fair and equal access to the benefits of a program or activities offered or conducted by the Air District. It also includes a process and procedure that allows members of the public to file a complaint.

At its September 21, 2016 Regular Board Meeting, the Board of Directors noticed the future adoption of these changes per the Administrative Code, Division I: Operating Policies and Procedures, Section 14: Amendments to Administrative Code.

DISCUSSION

Staff has evaluated the Non-Discrimination Policy and Complaint Procedure since its implementation to comply with federal law and to provide the public with a process to resolve complaints. Recently, the United States Environmental Protection Agency (EPA) has refined the EPA Non Discrimination Program for recipients of federal grant dollars. To maintain compliance with the federal program and making some enhancements to the Air District's program, staff has made amendments to the policy and procedure, including the following documents: 1) Non-Discrimination Policy and Complaint Procedure; 2) Non-Discrimination Coordinator Statement of Responsibilities; 3) Discrimination Complaint Form.

In addition, staff is recommending to formally adopt the policy and procedure and incorporate it into the Air District's Administrative Code Division I: Operating Policies and Procedures as follows:

SECTION 15 NON DISCRIMINATION POLICY

15.1 POLICY

Accessibility and Non-Discrimination Policy: The Bay Area Air Quality Management District (BAAQMD) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the BAAQMD's policy to provide fair and equal access to the benefits of a program or activity administered by BAAQMD. BAAQMD will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by BAAQMD. Members of the public who believe they or others were unlawfully denied full and equal access to a BAAQMD program or activity may file a discrimination complaint with BAAQMD under this policy. This non-discrimination policy also applies to other people or entities affiliated with BAAQMD, including contractors or grantees that BAAQMD utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the BAAQMD in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to a BAAQMD program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the BAAQMD Non-Discrimination Coordinator, (415) 771-6000 or visit www.baaqmd.gov/accessibility for more information.

15.2 COMPLAINT PROCEDURE

The complaint procedure has four steps:

1. Submission of Complaint:
   A person who believes that he or she or a specific class of persons has, on the basis of any protected class, been excluded from or denied the benefits of, or been subjected to discrimination under, any program or activity of the Air District may file a written complaint with the Non-Discrimination

Coordinator for the Air District. Such complaint must be filed within 180 calendar days after the date the person believes the discrimination occurred. See the Discrimination Complaint form (277 k PDF, 2 pgs).

2. Referral to Review Officer:
   Upon receipt of the complaint, the Non-Discrimination Coordinator will appoint one or more staff review officers, as appropriate, to evaluate and investigate the complaint, in consultation with the District Counsel. The staff review officer(s) will complete their review no later than 60 calendar days after the date the Air District received the complaint using a preponderance of the evidence standard. If more time is required, the Non-Discrimination Coordinator will notify the complainant of the estimated time for completing the review. Upon completion of the review, the staff review officer(s) will make a recommendation regarding the merit of the complaint and whether remedial actions are available to provide redress. Additionally, the staff review officer(s) may recommend improvements to the Air District's processes as they relate to the Non-Discrimination Policy and environmental justice, as appropriate. The staff review officer(s) will forward their recommendations to the Non-Discrimination Coordinator for review. The Non-Discrimination Coordinator will issue the Air District's written response to the complainant.

3. Appeal:
   If the complainant is dissatisfied with the response, the complainant may request an appeal, in writing, to the Executive Officer/Air Pollution Control Officer within 10 calendar days after receipt of the response. The request for appeal should explain any items the complainant feels were not addressed by the Non-Discrimination Coordinator. The Executive Officer/Air Pollution Control Officer will notify the complainant within 10 calendar days whether the request for appeal has been accepted or rejected.

4. Re-Evaluation:
   In cases where the Executive Officer/Air Pollution Control Officer agrees to reconsider the matter, the matter shall be returned to the staff review officer(s) to re-evaluate in accordance with Paragraph 2, above.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully Submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Judy Yu
Reviewed by: Rex Sanders

Attachments: 8A: Non-Discrimination Policy and Complaint Procedure
8B: Non-Discrimination Coordinator Statement of Responsibilities
8C: Discrimination Complaint Form

Non-Discrimination Policy and Complaint Procedure

POLICY STATEMENT

Accessibility and Non-Discrimination Policy: The Bay Area Air Quality Management District (BAAQMD) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the BAAQMD's policy to provide fair and equal access to the benefits of a program or activity administered by BAAQMD. BAAQMD will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by BAAQMD. Members of the public who believe they or others were unlawfully denied full and equal access to a BAAQMD program or activity may file a discrimination complaint with BAAQMD under this policy. This non-discrimination policy also applies to other people or entities affiliated with BAAQMD, including contractors or grantees that BAAQMD utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the BAAQMD in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to a BAAQMD program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the BAAQMD Non-Discrimination Coordinator, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov.

DEFINITIONS

Complainant: Individual(s) or other interested parties filing a discrimination complaint under this policy.

Discrimination: The unlawful denial of fair and equal access to a program or activity offered, conducted or administered by BAAQMD based on a protected class. "Denial of Fair and Equal Access" includes:

(i) The denial of any program benefit,

(ii) Providing a different level of benefits than provided to other program users,

(iii) Restricting the benefit or advantage of any program in a manner dissimilar to restrictions placed on others program users without a protected characteristic.

(iv) Subjecting a person to segregation or separate treatment in any way related to receiving the benefits of the program,

(v) Denial to any person, or group of people, the opportunity to participate as a member of any planning or advisory body otherwise open to the public in some fashion, and

(vi) Using criteria or methods of administering its program that has the effect of discriminating against a user, or potential user, of the program offered by BAAQMD.

Protected class: A characteristic of a person which cannot be targeted for discrimination including race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability.

RESPONSIBILITY

BAAQMD's Executive Officer/Air Pollution Control Officer will have final authority and responsibility for compliance with this policy.

BAAQMD's Non-Discrimination Coordinator, on behalf of the Executive Officer/Air Pollution Control Officer, will coordinate this policy's implementation within BAAQMD. The Non-Discrimination Coordinator will also ensure that BAAQMD is complying with state and federal reporting and record retention requirements, including those required by Code of Federal Regulations, title 40, section 7.10 et seq.

COMPLAINT PROCEDURE

The complaint procedure has four steps:

1. **Submission of Complaint:**
   A person who believes that he or she or a specific class of persons has, on the basis of any protected class, been excluded from or denied the benefits of, or been subjected to discrimination under, any program or activity of the Air District may file a written complaint with the Non-Discrimination Coordinator for the Air District. Such complaint must be filed within 180 calendar days after the date the person believes the discrimination occurred. See the Discrimination Complaint form (277 k PDF, 2 pgs).

2. **Referral to Review Officer:**
   Upon receipt of the complaint, the Non-Discrimination Coordinator will appoint one or more staff review officers, as appropriate, to evaluate and investigate the complaint, in consultation with the District Counsel. The staff review officer(s) will complete their review no later than 60 calendar days after the date the Air District received the complaint using a preponderance of the evidence standard. If more time is required, the Non-Discrimination Coordinator will notify the complainant of the estimated time for completing the review. Upon completion of the review, the staff review officer(s) will make a recommendation regarding the merit of the

complaint and whether remedial actions are available to provide redress. Additionally, the staff review officer(s) may recommend improvements to the Air District's processes as they relate to the Non-Discrimination Policy and environmental justice, as appropriate. The staff review officer(s) will forward their recommendations to the Non-Discrimination Coordinator for review. The Non-Discrimination Coordinator will issue the Air District's written response to the complainant.

3. **Appeal:**
   If the complainant is dissatisfied with the response, the complainant may request an appeal, in writing, to the Executive Officer/Air Pollution Control Officer within 10 calendar days after receipt of the response. The request for appeal should explain any items the complainant feels were not addressed by the Non-Discrimination Coordinator. The Executive Officer/Air Pollution Control Officer will notify the complainant within 10 calendar days whether the request for appeal has been accepted or rejected.

4. **Re-Evaluation**:
   In cases where the Executive Officer/Air Pollution Control Officer agrees to reconsider the matter, the matter shall be returned to the staff review officer(s) to re-evaluate in accordance with Paragraph 2, above.

CONFIDENTIALITY

BAAQMD strives to protect the confidentiality of the complainant and all participants in the discrimination complaint process to the greatest extent possible and as authorized by law. The nature of this process does not permit absolute confidentiality. The Non-Discrimination Coordinator may release information as necessary to resolve this complaint. If a remedial action results in employee discipline, the Non-Discrimination Coordinator may release information provided during the complaint process to appropriate BAAQMD personnel and outside parties including independent investigators.

Retaliation for filing a complaint is prohibited and claims of retaliation will be handled promptly if it occurs.

COMPLAINT FORM

To initiate a complaint, the complainant must complete BAAQMD's Discrimination Complaint Form and send it to BAAQMD's Non-Discrimination Coordinator within the time period discussed above. Send the complaint form to the BAAQMD Non-Discrimination Coordinator, Rex Sanders, at 375 Beale Street, Suite 600, San Francisco, California 94105 or by email at rsanders@baaqmd.gov.

Non-Discrimination Coordinator

Policy and Statement of Responsibilities

Accessibility and Non-Discrimination Policy: The Bay Area Air Quality Management District (BAAQMD) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the BAAQMD's policy to provide fair and equal access to the benefits of a program or activity administered by BAAQMD. BAAQMD will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by BAAQMD. Members of the public who believe they or others were unlawfully denied full and equal access to a BAAQMD program or activity may file a discrimination complaint with BAAQMD under this policy. This non-discrimination policy also applies to other people or entities affiliated with BAAQMD, including contractors or grantees that BAAQMD utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the BAAQMD in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to a BAAQMD program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the BAAQMD Non-Discrimination Coordinator, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov.

As the Non-Discrimination Coordinator, you are expected to perform the following, on behalf of the BAAQMD:

1. Providing information internally and externally regarding rights to services, aids, benefits, and participation without regard to race, national origin, color, sex, disability, age or prior opposition to discrimination;

2. Providing notice of your Agency's formal and informal grievance processes and the ability to file a discrimination complaint;

3. Establishing grievance policies and procedures or mechanisms (e.g., an investigation manual);

4. Tracking all complaints filed with your Agency under federal non-discrimination statutes including any patterns or systemic problems;

5. Semiannual reviews of all complaints filed with your Agency under federal non-discrimination statutes in order to identify and address any patterns or systemic problems;

6. Appropriate training for your Agency's employees on your Agency's non-discrimination policies and procedures and obligations to comply with federal non-discrimination statutes;

7. Updating complainants on the progress of their complaints filed with your Agency under federal non-discrimination statutes and any determinations made; and

8. Periodic evaluations of the efficacy of your Agency's efforts to provide services, aids, benefits, and participation in any of your Agency's programs or activities without regard to race, national origin, color, sex, disability, age or prior opposition to discrimination.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Bay Area Air Quality Management District
Discrimination Complaint Form

Section I:				
Name:				
Address:				
Telephone (Home):				
Telephone (Work):				
Email Address:				
Accessible Format Requirements? (check all that apply)	☐ Large Print	☐ TDD	☐ Audio Tape	Other: _____ _____

Section II:		
Are you filing this complaint on your own behalf?	☐Yes*	☐No
*If you answered "yes" to this question, go to Section III.		
If not, please supply the name and relationship of the person for whom you are filing this complaint:		
Please explain why you are filing for this person: _____ _____ _____		
Please confirm that you have obtained the permission of the complaining person if you are filing on their behalf.	☐Yes	☐No

Section III	
I believe the discrimination I experienced was based on the following protected class(es) of persons:	

Complaints must be filed within 180 days of the alleged act of discrimination.

Date(s) of Alleged Discrimination (Month, Day, Year):	

Explain as clearly as possible what happened and why you believe discrimination has occurred with respect to a BAAQMD program or activity. Describe all persons who were involved. Include the name and contact information of the person(s) who discriminated against you (if known) as well as the names and contact information of any witnesses. (Attach additional sheets if needed.)

_____
_____
_____
_____
_____
_____

Section IV		
Have you previously filed a Title VI complaint with this agency?	☐Yes	☐No

Section V		
Have you previously filed a complaint with any other Federal, State or local agency, or with any Federal or State Court?	☐Yes	☐No
If yes, check all that apply.	☐Federal Agency ☐Federal Court ☐State Court	☐State Agency ☐Local Agency

You may attach any written material or other information that you think is relevant to your complaint.

Signature: _____

Date: _____

Note – The Air District cannot accept your complaint without a signature.

Mail your completed form to:

Bay Area Air Quality Management District
Non-Discrimination Coordinator
375 Beale Street
San Francisco, CA 94105

Complaints must be filed within 180 days of the alleged act of discrimination.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 5, 2016

Re: Set a Public Hearing on December 7, 2016 to Consider Proposed Amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA)

RECOMMENDED ACTION

Set a Public Hearing for December 7, 2016 to Consider Adoption of Proposed Amendments to Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants.

BACKGROUND

The Air District implements several programs that are designed to identify and reduce public exposure to toxic air contaminants (TACs). The Air District's Permitting Program relies on standardized procedures to assess potential health impacts from new and modified sources. The state Office of Environmental Health Hazard Assessment (OEHHA) develops and periodically updates the Health Risk Assessment (HRA) guidelines, while California Air Resources Board (CARB) and California Air Pollution Control Officers Association (CAPCOA) provide risk management (RM) guidance. In 2015, OEHHA adopted major revisions to the HRA guidelines and CARB/CAPCOA updated the RM guidelines. These revised guidelines reflect improved methods for calculating public health risk and account for children's heightened sensitivity to toxic air contaminants.

DISCUSSION

The Air District's risk management policies and procedures for the Air Toxics Permitting Program are implemented through Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants. The Air District is proposing to incorporate the updated HRA and RM guidelines into Regulation 2, Rule 5. Overall, the proposed amendments will increase the stringency of this rule. For most carcinogens, the calculated cancer risk for residents will increase by about 40% compared to the Air District's current procedures. For carcinogens with multiple exposure pathways, the calculated cancer risk may increase by 2-5 times.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS

The amendments to Rule 2-5 are projected to result in approximately 100 additional New Source Review Health Risk Assessments per year. Approximately two additional FTEs will be required from the Engineering Division to conduct these activities in order to meet permit application regulatory timelines.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jaime Williams
Reviewed by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 5, 2016

Re: Consider Authorizing the Execution of Purchase Orders in Excess of $100,000 Pursuant to Administrative Code Division II Fiscal Policies and Procedures Section 4.3 Contract Limitations

RECOMMENDED ACTION

The Board of Directors will consider transferring funds from the Reserve for Mobile Monitoring Equipment to Program 811 of the Fiscal Year Ending (FYE) 2017 budget and authorizing the Executive Officer/APCO to execute a purchase order to Inficon in the amount not to exceed $370,000 for mobile monitoring equipment needed to respond to non-routine releases of air contaminants.

BACKGROUND

The Mobile Monitoring Section provides mobile measurements of pollutant concentrations in support of Air District programs as well as non-routine releases of air contaminants. The equipment needed to perform these measurements must be mobile, maintain operability on a constant basis, be able to be deployed quickly and with little to no notice and be capable of measuring a wide variety of gaseous compounds to levels normally seen in ambient air.

DISCUSSION

Equipment needed to perform this analysis requires laboratory grade capabilities in a mobile platform. Since these operational requirements are very specific, staff contacted agencies most likely to require similar equipment to determine equipment that would meet requirements based on analytical capabilities, portability, operational uptime and capital and operational costs. After discussions with the Environmental Protection Agency, Region 9, the California Department of Toxic Substance Control and the South Coast Air Quality Management District, two manufacturers were identified that met the requirements. Staff met with applications engineers and then performed evaluations of selected equipment using laboratory grade instrumentation for comparison purposes. The Inficon instrument was selected as the best option to meet Air District needs based on operational requirements, performance and its ability to meet the precise specifications required. Therefore, staff recommends the purchase of the equipment from Inficon because this represents the best overall value to the Air District.

BUDGET CONSIDERATION/FINANCIAL IMPACT

Funds for this purchase were included in the fiscal year end (FYE) budget and placed in reserve to allow for this purchase.

Respectfully Submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Eric Stevenson
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 5, 2016

Re: Report of the Mobile Source Committee Meeting of September 22, 2016

RECOMMENDED ACTION

The Mobile Source Committee (Committee) recommends Board of Directors' approval of the following items:

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

1) Approve Carl Moyer Program (CMP) and Transportation Fund for Clean Air (TFCA) projects with proposed grant awards over $100,000;

2) Allocate $1,500,000 in Mobile Source Incentive Funds (MSIF) for Compressed Natural Gas (CNG) tank replacements on school buses; and

3) Authorize the Executive Officer/APCO to enter into agreements with applicants for the recommended CMP and TFCA projects, and Lower Emission School Bus Program projects.

B) Update on the Shuttle and Rideshare Program

1) Approve $406,000 in Transportation Fund for Clean Air – for fiscal year ending (FYE) 2017 Regional Funds to be transferred to the Spare the Air Program FYE 2017 budget for the purposes of:

a. Securing an advertising contract with the Livermore Amador Valley Transit Authority (LAVTA) at a cost of $322,000 for FYE 2017, and

b. Paying approximately $84,000 to cover the cost of wrapping seven LAVTA transit operated shuttle buses with Spare the Air messaging.

2) Authorize the Executive Officer/APCO to execute all contracts and agreements with LAVTA related to the wrapping and advertising rights; and

3) Authorize the Executive Officer/APCO to extend the advertising service contract with LAVTA at a cost not to exceed $322,000 annually for up to two additional years, at the Air District's discretion, based on contractor's performance.

C) Accept, Obligate, and Expend Funding from the Bay Area Clean Air Foundation

1) Adopt a Resolution authorizing the Bay Area Air Quality Management District (Air District) to accept, oblige, and expend up to $1,266,600, plus any interest accrued, from the Bay Area Clean Air Foundation (Foundation) for roadside air pollution monitoring projects; and

2) Authorize the Executive Officer/APCO to enter into all agreements necessary to accept and expend this funding.

BACKGROUND

The Committee met on Thursday, September 22, 2016, and received the following reports and recommendations:

A) Projects and Contracts with Proposed Grant Awards over $100,000; and

B) Update on the Shuttle and rideshare Program; and

C) Accept, Obligate, and Expend Funding from the Bay Area Clean Air Foundation

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

BUDGET CONSIDERATION/FINANCIAL IMPACT

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

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

C) Acceptance of the Foundation monies requires an amendment to the FYE 2017 budget. Air District and Foundation staff time for the implementation of these projects is covered in the administrative fees associated with the funding.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 11A: 09/22/16 – Mobile Source Committee Meeting Agenda #4
Attachment 11B: 09/22/16 – Mobile Source Committee Meeting Agenda #5
Attachment 11C: 09/22/16 – Mobile Source Committee Meeting Agenda #6

AGENDA: 4

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 9, 2016

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

RECOMMENDATIONS

Recommend Board of Directors:

1. Approve Carl Moyer Program (CMP) and Transportation Fund for Clean Air (TFCA) projects with proposed grant awards over $100,000 as shown in Attachment 1;

2. Allocate $1,500,000 in Mobile Source Incentive Funds (MSIF) for Compressed Natural Gas (CNG) tank replacements on school buses; and

3. Authorize the Executive Officer/APCO to enter into agreements with applicants for the recommended CMP and TFCA projects, and Lower Emission School Bus Program projects.

BACKGROUND

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

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

On February 18, 2015, the Board of Directors (Board) authorized Air District participation in Year 17 of the CMP, and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with CMP funds or MSIF revenues, with individual grant award amounts up to $100,000.

In 1991, the California State Legislature authorized the Air District to impose a $4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions within the Air District's jurisdiction. The statutory authority for the Transportation Fund for Clean Air (TFCA) and requirements of the program are set forth in California HSC Sections 44241 and 44242. Sixty percent of TFCA funds are awarded by the Air District to eligible projects and programs implemented directly by the Air District (e.g., Spare the Air, Plug-in Electric Vehicle Program) and to a program referred to as the TFCA Regional Fund. Each year, the Board allocates funding and adopts policies and evaluation criteria that govern the expenditure of TFCA funding.

On May 6, 2015, the Board authorized the allocation of $13.77 million in new TFCA revenue for Fiscal Year Ending (FYE) 2016 and authorized the Executive Officer/APCO to execute Grant Agreements and amendments for projects funded with TFCA revenues with individual grant award amounts up to $100,000.

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

DISCUSSION

Carl Moyer Program:

The Air District started accepting project applications for the CMP Year 17 funding cycle on August 17, 2015. The Air District had approximately $9 million available for CMP projects from a combination of MSIF and CMP funds for the Year 17 cycle. Project applications were accepted and evaluated on a first-come, first-served basis.

As of August 30, 2016, the Air District had received 76 project applications for the CMP Year 17 cycle. Of the applications that have been evaluated between June 7, 2016 and August 30, 2016, four eligible projects have proposed individual grant awards over $100,000. These projects will replace five tractors and six marine engines. These projects will reduce over 2.7 tons of NOx, ROG and PM per year. Staff recommends the allocation of $580,480 to these projects from a combination of CMP funds and MSIF revenues. Attachment 1, Table 1, provides additional information on these projects.

Attachment 2, lists all of the eligible projects that have been received by the Air District as of August 30, 2016, and summarizes the allocation of funding by equipment category, and county. This list also includes the Voucher Incentive Program (VIP) on-road replacement projects awarded since the last Committee update. Approximately 34% of the funds have been awarded to projects that reduce emissions in highly impacted Bay Area communities. Attachment 3 summarizes the cumulative allocation of CMP, MSIF, and VBB funding since 2009 (more than $125 million awarded to 757 projects).

Lower-Emission School Bus Program:

To date, the Air District has provided over $2.5 million for the replacement of CNG tanks on 133 Bay Area school buses. Through this program, public school districts are eligible for up to $20,000 per bus to cover the costs of new CNG tanks and installation. On June 4, 2014, the Board of Directors allocated $6.3 million in MSIF funds to school bus retrofit, replacement and CNG tank replacement projects under the Lower Emission School Bus Program (LESBP). Of the funds allocated, $1.3 million was specifically set aside for CNG tank replacement projects on school buses. Due to the high demand for project funding from the recent solicitation, and the importance of timely CNG tank replacement projects, staff is recommending an additional $1.5 million in MSIF funding be allocated for CNG tank replacement projects. Staff plans to return to the Committee with a recommended funding allocation for LESBP school bus replacement and retrofit projects within the next year.

Transportation Fund for Clean Air:

On May 6, 2015, the Board allocated $24.47 million in TFCA funding, of which $13.77 million are new funds for eligible projects in FYE 2016 and authorized cost-effectiveness limits and evaluation criteria for Air District-sponsored FYE 2016 programs. On July 29, 2015, the Board adopted policies and evaluation criteria for the FYE 2016 TFCA Regional Fund program.

As of August 30, 2016 the Air District had received 139 applications for FYE 2016 funding. Of these, staff has evaluated 135 applications, of which 109 projects were approved or recommended for funding; 20 projects were not recommended; and six applications were withdrawn. Of the applications that were evaluated between June 7, 2016 and August 30, 2016, two eligible projects have proposed an individual grant award over $100,000. These projects will replace 10 diesel buses with battery electric 40-foot buses and deploy two battery electric 35-foot buses. These two projects will reduce more than 1.65 tons of NOx, ROG, and PM per year. Staff recommends the allocation of $609,012 in TFCA funds to these projects. Attachment 1, Table 2, provides additional information on these projects.

Attachment 4 lists the 109 eligible FYE 2016 TFCA projects that were evaluated by the Air District as of August 30, 2016. In total, these projects represent approximately $12.4 million in funding awards, which include TFCA funds, $450,000 in Reformulated Gasoline (RFG) Settlement funds, and $239,850 in California Energy Commission (CEC) funds. These projects will reduce approximately 61.21 tons of NOx, ROG, and PM, and about 31,000 tons of tailpipe greenhouse gas emissions per year. Approximately 47.6% of the FYE 2016 TFCA funds awarded have been awarded to projects that reduce emissions in highly impacted Bay Area communities. Attachment 5 summarizes the allocation of funding by project category (Figure 1), and county (Figure 2).

BUDGET CONSIDERATION / FINANCIAL IMPACT

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

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Anthony Fournier and Michael Neward
Reviewed by: Chengfeng Wang and Karen Schkolnick

Attachment 1: Projects with grant awards greater than $100,000 (evaluated 6/7/16 – 8/30/16)

Attachment 2: Summary of all CMP/ MSIF and VIP approved and eligible projects (evaluated 11/20/15 – 8/30/16)

Attachment 3: Summary of program distribution by county and equipment category for CMP, MSIF, VBB, and VIP funding since 2009.

Attachment 4: Summary of all TFCA approved and eligible projects (evaluated 7/1/2015 - 8/30/16)

Attachment 5: Summary of distribution of TFCA funds by county and project category (evaluated 7/1/15 - 8/30/16)

AGENDA 4 - ATTACHMENT 1

Table 1 - Summary of Carl Moyer Program/ Mobile Source Incentive Fund projects
with grant awards greater than $100k (Evaluated between 6/7/16 and 8/30/16)

Project #	Applicant name	Equipment category	Project description	Proposed contract award	Total project cost	Emission Reductions (Tons per year)			County
						NOx	ROG	PM	
17MOY65	SF Boat Support	Marine	Replacement of two diesel marine engines.	$ 149,000.00	$ 175,782.44	0.864	0.007	0.031	San Francisco
17MOY76	James B Smith, DBA, California Dawn Sportfishing	Marine	Replacement of two diesel marine engines.	$ 126,000.00	$ 149,951.00	0.530	0.000	0.028	Contra Costa
17MOY67	Stagecoach Vineyards Limited Partnership	Ag/ off-road	Replacement of five diesel tractors.	$ 193,480.00	$ 241,865.27	0.687	0.102	0.045	Napa
17MOY64	Scomas Restaurant Inc. (Commercial fishing)	Marine	Replacement of two diesel marine engines.	$ 112,000.00	$ 176,808.34	0.399	0.012	0.017	San Francisco
	4 Projects			**$ 580,480.00**		**2.480**	**0.121**	**0.121**	

Table 2 - Summary of Transportation Fund for Clean Air projects
with grant awards greater than $100k (Evaluated between 6/7/16 and 8/30/16)

Project #	Project Sponsor	Project Category	Project Description	City	Est. C/E	Proposed Contract Award	Emission Reductions (Tons per year)			County
							NO_X	ROG	PM	
16HDZ005	San Mateo County Transit District	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 10 40' zero-emission battery electric buses and scrap 10 model year 2003 buses	Regional	$97,211	$473,990	1.435	0.100	0.005	San Mateo
16HDZ007	Marin County Transit District	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 2 35' zero-emission battery electric buses	San Rafael/ Marin	$249,999	$135,022	0.097	0.005	0.004	Marin
	2 Projects					**$609,012**	**1.531**	**0.105**	**0.008**	

AGENDA 4 - ATTACHMENT 2

Summary of all CMP, MSIF and VIP approved/ eligible projects (between 11/20/15 and 8/30/16)

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
17MOY5	Ag/ off-road	Equipment replacement	1	$ 249,000.00	Ironhouse Sanitary District	0.925	0.078	0.027	12/16/2015	Contra Costa
17MOY8	Marine	Engine replacement	1	$ 117,400.00	Andrew Guiliano, DBA, Andrew Guiliano (Charter fishing)	0.407	0.025	0.015	12/16/2015	Contra Costa
17MOY7	Off-road	Engine replacement	3	$ 213,500.00	Dees- Hennessey, Inc. (Construction)	0.966	0.109	0.038	12/16/2015	San Mateo
17MOY1	Ag/ off-road	Equipment replacement	3	$ 126,370.00	Robert Giacomini Dairy, Inc.	0.357	0.055	0.023	12/16/2015	Marin
17MOY2	Ag/ off-road	Equipment replacement	1	$ 60,710.00	Donald J. Moreda, Sr. (Dairy)	0.190	0.027	0.010	APCO	Sonoma
17MOY3	Marine	Engine replacement	1	$ 154,500.00	Daniel Lazzari DBA Daniel Lazzari (Commercial fishing)	0.887	0.017	0.032	12/16/2015	San Francisco
16MOY97	Ag/ off-road	Equipment replacement	1	$ 61,200.00	Imhof Tractor Service, Inc.	0.207	0.007	0.009	APCO	Alameda
17MOY6	Ag/ off-road	Equipment replacement	1	$ 93,645.00	Gregory Lyons (Lyon's Farms)	0.339	0.048	0.021	APCO	Contra Costa
17MOY11	Ag/ off-road	Equipment replacement	2	$ 337,232.00	Ben Silacci dba Silacci Dairy	2.628	0.307	0.109	12/16/2015	Sonoma
17MOY19	Ag/ off-road	Equipment replacement	1	$ 120,650.00	Ghiggeri and Stonebarger, LLC	0.530	0.029	0.009	12/16/2015	Contra Costa
17MOY4	Off-road	Equipment replacement	1	$ 33,150.00	Pacific Coast General Engineering, Inc.	0.161	0.027	0.010	APCO	Contra Costa
17MOY25	Ag/ off-road	Equipment replacement	1	$ 172,820.00	Spring Hill Jersey Cheese	0.913	0.095	0.033	2/17/2016	Sonoma
17MOY18	Marine	Engine replacement	2	$ 207,000.00	Tom Mattusch, DBA, F/V Huli Cat	1.393	-0.010	0.054	2/17/2016	San Mateo
17MOY28	Ag/ off-road	Equipment replacement	1	$ 282,200.00	Lum Family Farms, Inc.	0.959	0.100	0.034	3/16/2016	Solano
17MOY40	Ag/ off-road	Equipment replacement	1	$ 121,490.00	F.A. Maggiore & Sons, LLC	0.533	0.030	0.009	3/16/2016	Contra Costa
17MOY36	Ag/ off-road	Equipment replacement	1	$ 129,595.00	Bayview Vineyards Corp.	0.601	0.061	0.023	3/16/2016	Napa
17MOY31	Marine	Engine replacement	1	$ 145,800.00	Chris W. Lawson (Commercial fishing)	0.639	0.012	0.023	3/16/2016	San Mateo
17MOY26	Ag/ off-road	Equipment replacement	3	$ 187,405.00	Diamond M Dairy	0.573	0.090	0.033	3/16/2016	Sonoma
17MOY29	Marine	Engine replacement	1	$ 98,800.00	Richard L. Ogg II (Commercial fishing)	0.364	0.009	0.012	APCO	Sonoma
17MOY42	Marine	Engine replacement	1	$ 70,000.00	Nicholas Krieger (Charter fishing)	0.393	0.009	0.015	APCO	San Francisco
17MOY15	Ag/ off-road	Equipment replacement	1	$ 31,600.00	E & M Deniz Dairy	0.105	0.004	0.004	APCO	Sonoma
17MOY30	Marine	Engine replacement	1	$ 78,500.00	Christian Troy Cavanaugh (Charter fishing)	0.234	0.000	0.013	APCO	Marin
17MOY20	Ag/ off-road	Equipment replacement	1	$ 21,635.00	Cortina Vineyard Management	0.072	0.004	0.003	APCO	Napa
17MOY32	Ag/ off-road	Equipment replacement	1	$ 48,210.00	Ronald William Cardoza (Farmer)	0.125	0.018	0.008	APCO	San Mateo
17MOY27	Ag/ off-road	Equipment replacement	2	$ 52,300.00	Martinelli Brothers (Vineyard and orchard)	0.068	0.041	0.011	APCO	Sonoma
17MOY35	Ag/ off-road	Equipment replacement	1	$ 76,690.00	R. Rossi Co. (Farmer)	0.458	0.065	0.023	APCO	San Mateo
17MOY39	Ag/ off-road	Equipment replacement	1	$ 15,600.00	David Bertram (Cattle and vineyards)	0.021	0.012	0.003	APCO	Solano
17MOY37	Ag/ off-road	Equipment replacement	1	$ 72,000.00	Kehoe Dairy, Inc.	0.226	0.027	0.010	APCO	Marin
17MOY16	Ag/ off-road	Equipment replacement	1	$ 49,357.00	Poncia Family, LLC (Cattle and dairy)	0.274	0.039	0.014	APCO	Marin
17MOY38	Ag/ off-road	Equipment replacement	1	$ 35,825.00	Dittmer Ranch	0.073	0.015	0.007	APCO	Solano
17MOY34	Marine	Engine replacement	1	$ 26,000.00	F/V Miss Hailee (Commercial fishing)	0.256	0.014	0.012	5/18/2016	San Francisco

AGENDA 4 - ATTACHMENT 2

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
17MOY41	Marine	Engine replacement	2	$ 212,000.00	David J. Shogren (Commercial fishing)	0.994	0.004	0.044	5/18/2016	Solano
17MOY21	Off-road	Equipment replacement	2	$ 80,500.00	Economy Lumber Company of Oakland, Inc.	0.358	0.058	0.026	APCO	Alameda
17MOY47	Ag/ off-road	Equipment replacement	1	$ 121,360.00	Andrew Poncia dba Poncia Fertilizer Spreading	0.474	0.049	0.017	5/18/2016	Sonoma
17MOY45	Ag/ off-road	Equipment replacement	1	$ 58,800.00	Bianchini, Inc. (Dairy)	0.124	0.022	0.011	APCO	Marin
17MOY48	Ag/ off-road	Equipment replacement	1	$ 182,750.00	Mertens Dairy	1.352	0.162	0.058	5/18/2016	Sonoma
17MOY44	Ag/ off-road	Equipment replacement	1	$ 103,500.00	Andrew Poncia dba Poncia Fertilizer Spreading	0.388	0.012	0.012	5/18/2016	Sonoma
17MOY52	Ag/ off-road	Equipment replacement	2	$ 71,400.00	Peter C. Haywood (Vineyard)	0.136	0.029	0.014	APCO	Sonoma
17MOY53	Off-road	Equipment replacement	3	$ 938,000.00	Hanson Aggregates, Mid-Pacific, Inc.	7.167	0.812	0.287	5/18/2016	Contra Costa
17MOY50	Ag/ off-road	Equipment replacement	1	$ 23,255.00	Colinas Farming Company	0.076	0.016	0.004	APCO	Napa
17MOY54	Ag/ off-road	Equipment replacement	2	$ 84,700.00	Valley View Dairy	0.335	0.048	0.021	APCO	Sonoma
17MOY55	Off-road	Equipment replacement	1	$ 29,000.00	Coastside Lumber dba South City Lumber & Supply	0.143	0.020	0.009	APCO	San Mateo
17MOY57	Off-road	Equipment replacement	2	$ 85,550.00	Peninsula Building Materials Co	0.358	0.069	0.029	APCO	Santa Clara
17MOY63	Off-road	Equipment replacement	3	$ 813,055.00	Noah Concrete Corporation	5.607	0.591	0.213	7/20/2016	Santa Clara
17MOY60	Ag/ off-road	Equipment replacement	2	$ 197,410.00	Dwelley Family Farms, LLC	0.882	0.071	0.024	7/20/2016	Contra Costa
17MOY33	Off-road	Equipment replacement	1	$ 51,000.00	Clarks Home and Garden Inc.	0.147	0.041	0.021	APCO	Alameda
17MOY51	Off-road	Equipment replacement	1	$ 45,860.00	Mt. Diablo Landscape Centers, LLC	0.211	0.039	0.015	APCO	Contra Costa
17MOY56	Off-road	Equipment replacement	1	$ 49,775.00	Associated Trucking, Inc.	0.149	0.040	0.020	APCO	San Mateo
17MOY62	Marine	Engine replacement	1	$ 90,000.00	JMC Ryan Corp	0.343	-0.008	0.014	APCO	Marin
17MOY72	Marine	Engine replacement	1	$ 30,000.00	Wyliecat LLC	0.070	-0.003	0.006	APCO	Contra Costa
17MOY65	Marine	Engine replacement	2	$ 149,000.00	SF Boat Support	0.864	0.007	0.031	TBD	San Francisco
17MOY71	Ag/ off-road	Equipment replacement	2	$ 75,850.00	Daniel Yolo	0.165	0.032	0.014	APCO	Sonoma
17MOY75	Ag/ off-road	Equipment replacement	1	$ 35,329.00	St. Supery Inc.	0.076	0.016	0.008	APCO	Napa
17MOY73	Ag/ off-road	Equipment replacement	1	$ 35,350.00	Carneros Vineyard Management LLC	0.117	0.004	0.005	APCO	Sonoma
17MOY59	Off-road	Equipment replacement	1	$ 35,900.00	Channel Lumber Company, Inc..	0.215	0.026	0.009	APCO	Contra Costa
17MOY76	Marine	Engine replacement	2	$ 126,000.00	James B Smith, DBA, California Dawn Sportfishing	0.530	0.000	0.028	TBD	Alameda
17MOY67	Ag/ off-road	Equipment replacement	5	$ 193,480.00	Stagecoach Vineyards Limited Partnership	0.687	0.102	0.045	TBD	Napa
17MOY64	Marine	Engine replacement	2	$ 112,000.00	Scomas Restaurant Inc. (Commercial fishing)	0.399	0.012	0.017	TBD	San Francisco
17MOY74	Off-road	Equipment replacement	6	$ 45,320.00	JetBlue Airways Corporation	0.208	0.015	0.010	APCO	Alameda
VIP265	VIP	Truck Replacement	1	$ 40,000.00	Tien Cong Huynh / Tai Cong Huynh	0.860	0.010	0.000	APCO	Alameda
VIP266	VIP	Truck Replacement	1	$ 45,000.00	IEC Puno Trans Inc or Randy Puno	0.950	0.010	0.000	APCO	Santa Clara
VIP267	VIP	Truck Replacement	1	$ 45,000.00	Martin S. Mileck	1.400	0.050	0.000	APCO	Mendocino
VIP268	VIP	Truck Replacement	1	$ 35,000.00	Dennis E. Allen	0.700	0.020	0.000	APCO	Sacramento

AGENDA 4 - ATTACHMENT 2

Project #	Equipment category	Project type	# of engines	Proposed contract award	Applicant name	Emission Reductions (Tons per year)			Board approval date	County
						NOx	ROG	PM		
VIP269	VIP	Truck Replacement	1	$ 25,000.00	Steven R. Martini	0.560	0.020	0.000	APCO	Santa Clara
VIP270	VIP	Truck Replacement	1	$ 45,000.00	Richard Jones	0.980	0.040	0.000	APCO	Tehama
VIP271	VIP	Truck Replacement	1	$ 20,000.00	Gravel Sand and Soil Delivery LLC	0.460	0.020	0.000	APCO	Sonoma
VIP272	VIP	Truck Replacement	1	$ 45,000.00	Gurjot Pawar	0.870	0.030	0.000	APCO	Santa Clara
VIP273	VIP	Truck Replacement	1	$ 40,000.00	Guru Dutt Saini	0.840	0.010	0.000	APCO	San Joaquin
VIP274	VIP	Truck Replacement	1	$ 35,000.00	Juan Cortes	1.710	0.020	0.000	APCO	Solano
VIP275	VIP	Truck Replacement	1	$ 45,000.00	Miller Trucking Corp.	0.890	0.010	0.000	APCO	Shasta
VIP276	VIP	Truck Replacement	1	$ 35,000.00	James David Gray DBA Jim Gray Trucking	0.670	0.010	0.000	APCO	Glenn
VIP277	VIP	Truck Replacement	1	$ 30,000.00	Armando Gutierrez	1.390	0.020	0.000	APCO	Sacramento
VIP278	VIP	Truck Replacement	1	$ 30,000.00	Humberto Santiago Nunez	0.630	0.000	0.000	APCO	Mendocino
VIP279	VIP	Truck Replacement	1	$ 15,000.00	Dawn M. Lambert DBA Lambert Trucking	0.310	0.010	0.000	APCO	Monterey
VIP280	VIP	Truck Replacement	1	$ 45,000.00	Charnjit Singh	0.890	0.030	0.000	APCO	Contra Costa
VIP281	VIP	Truck Replacement	1	$ 25,000.00	Jeffrey/Michelle L. Pederson	0.500	0.010	0.000	APCO	Santa Clara
	89	**Projects**	**108**	**$ 8,166,328.00**		**53.062**	**3.970**	**1.656**		

AGENDA 4 - ATTACHMENT 2

Figure 1: CMP/ MSIF Funding Distribution by Equipment Category as of 8/30/16

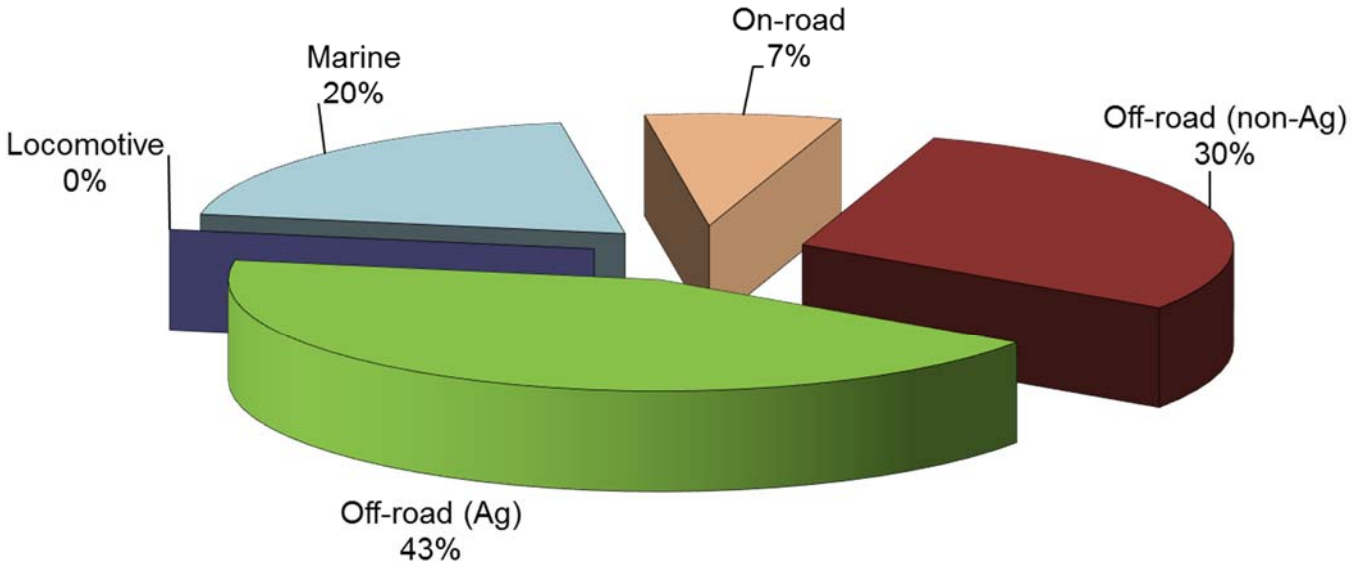
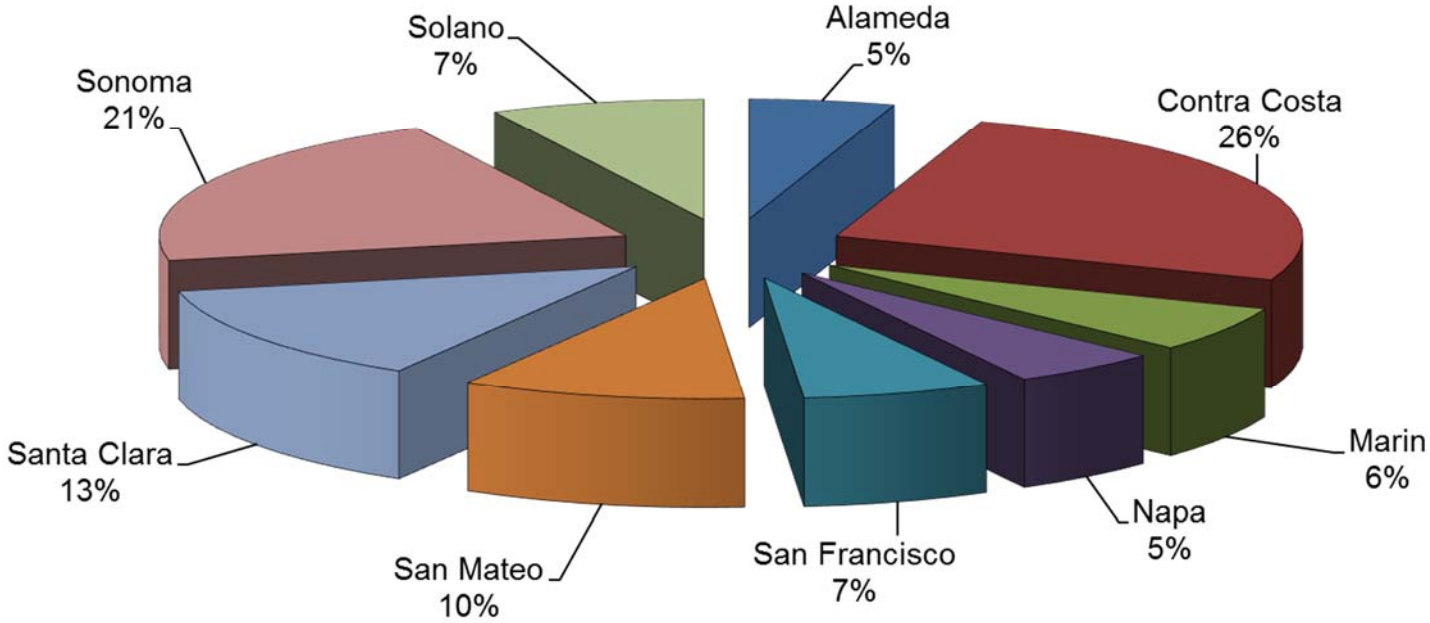


Figure 2: CMP/ MSIF Funding Distribution by County as of 8/30/16



AGENDA 4 - ATTACHMENT 3

Figure 3: CMP, MSIF, VBB and VIP funding since 2009 by equipment category

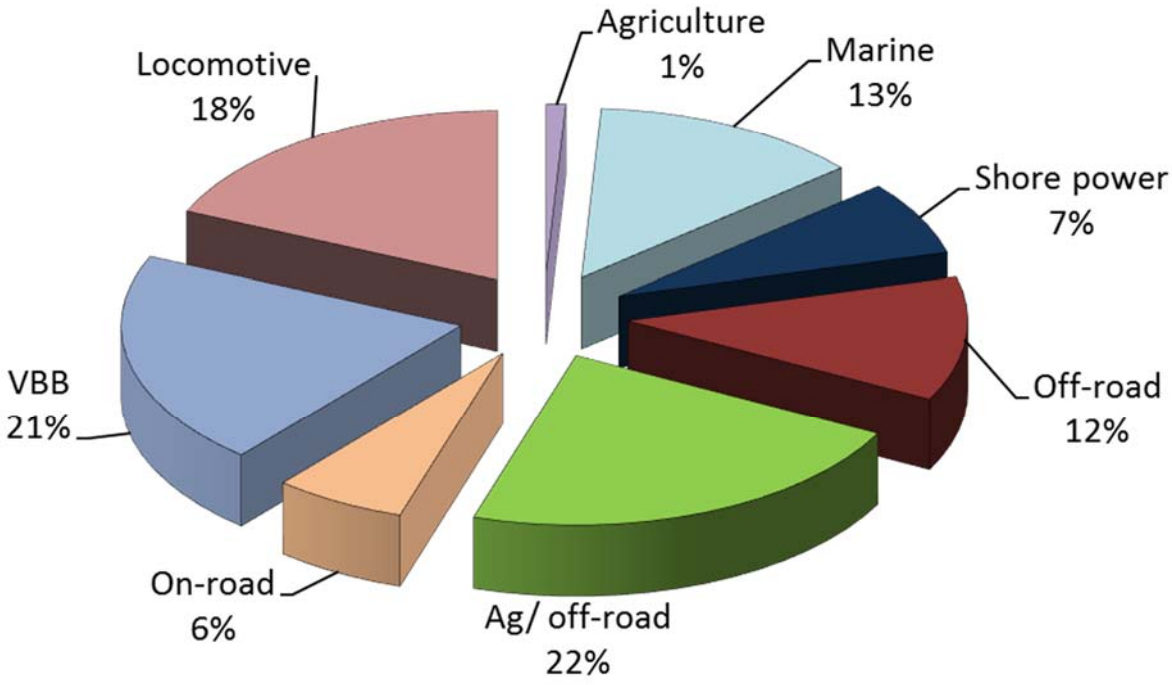
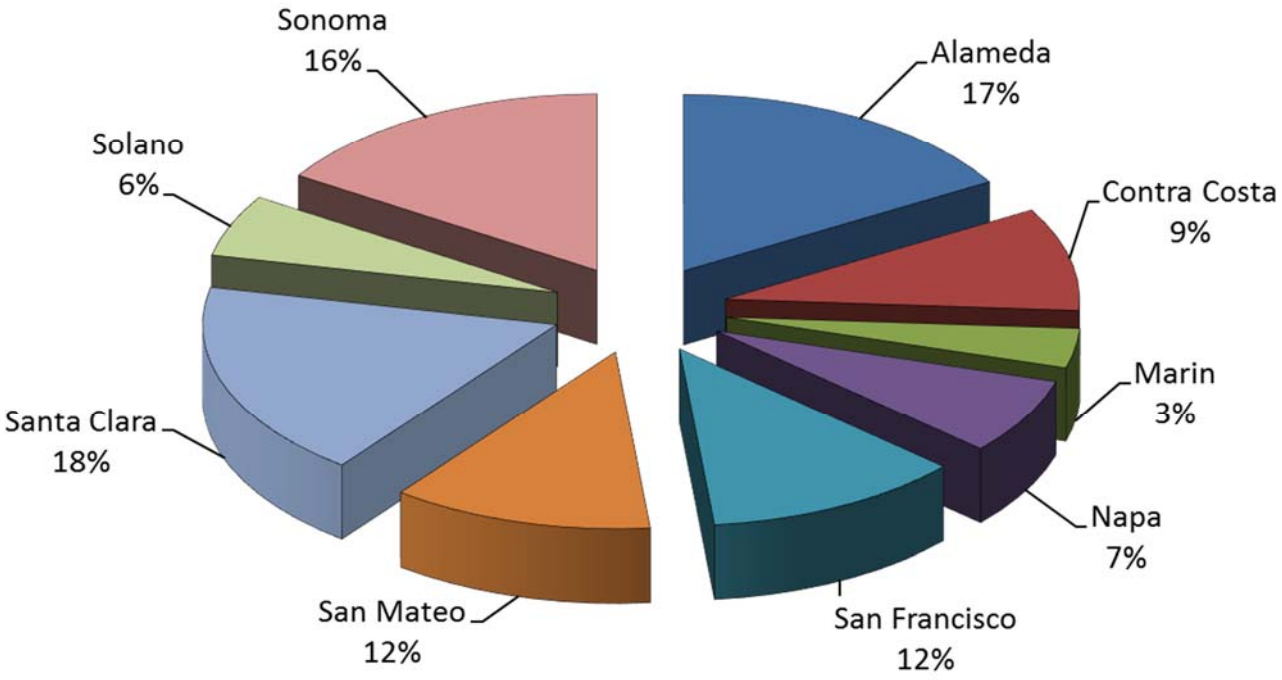


Figure 4: CMP, MSIF, VBB and VIP funding since 2009 by county



AGENDA 4 - ATTACHMENT 4

Summary of all TFCA approved and eligible projects (evaluated between 6/7/2015 and 8/30/2016)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO_X	ROG	PM			
16EV001	Plug-in Electric Vehicles (PEV)	Install 10 single-port Level 2 charging stations in San Jose	$30,000	Car Charging, Inc.	0.008	0.010	0.001	10/5/15	Yes	Santa Clara
16EV003	PEV	Install 39 single-port Level 2 charging stations (with solar) in San Francisco	$234,000	Powertree Services Inc.	0.030	0.039	0.004	11/18/15	Yes	San Francisco
16EV004	PEV	Install 2 dual-port Level 2 charging stations in Dublin	$12,000	S & V, LLC	0.003	0.004	0.000	10/5/15	Yes	Alameda
16EV005	PEV	Install 3 single-port DC charging stations (with solar) in Campbell	$22,500	DTTC Properties, LLC	0.003	0.004	0.000	12/18/15	No	Santa Clara
16EV006	PEV	Install 7 dual-port Level 2 and 2 DC fast EV charging stations (with solar) in Rohnert Park	$184,000	Sonoma Mountain Village, LLC	0.024	0.031	0.003	2/17/16	No	Sonoma
16EV009	PEV	Install 6 single-port Level 2 charging stations in Petaluma	$18,000	Clear Blue Commercial	0.005	0.006	0.001	12/22/15	No	Sonoma
16EV010	PEV	Install 24 single-port DC charging stations (with solar) in Palo Alto	$120,000	Palo Alto Research Center Incorporated	0.016	0.020	0.002	2/17/16	No	Santa Clara
16EV012	PEV	Install 98 dual-port Level 2 charging stations in Santa Clara	$338,546	Santa Clara Campus Owners' Association	0.088	0.113	0.013	12/16/15	No	Santa Clara
16EV013	PEV	Install 24 single-port DC charging stations (with solar) in Mountain View	$116,190	Intuit Inc.	0.015	0.019	0.002	2/17/15	No	Santa Clara
16EV015	PEV	Install 8 dual-port Level 2 charging stations in Santa Rosa and Petaluma	$48,000	Sonoma County Junior College District	0.012	0.016	0.002	2/18/16	No	Sonoma
16EV016	PEV	Install 20 single-port Level 2 charging stations in Vallejo	$60,000	City of Vallejo	0.016	0.020	0.002	2/18/16	Yes	Solano
16EV017	PEV	Install 2 dual-port and 5 single-port Level 2 charging stations in Martinez	$21,000	Contra Costa County	0.005	0.007	0.001	7/18/16	No	Contra Costa
16EV018	PEV	Install 3 single-port Level 2 charging stations (with wind) in San Francisco	$10,925	Oceanview Village HOA	0.002	0.003	0.000	6/14/16	No	San Francisco
16EV019	PEV	Install 2 dual-port Level 2 charging stations in Hayward	$12,000	California State University, East Bay	0.003	0.004	0.000	12/30/15	No	Alameda
16EV021	PEV	Install 1 DC fast and 8 dual-port Level 2 charging stations in Richmond	$73,000	Ford Point LLC	0.019	0.024	0.003	12/31/15	Yes	Contra Costa
16EV022	PEV	Install 3 dual-port & 1 single-port Level 2 charging stations (w/solar) in Napa	$25,500	Napa Creek Village, LLC.	0.003	0.004	0.001	4/19/16	No	Napa
16EV023	PEV	Install 2 dual-port Level 2 charging stations in Livermore	$12,000	Ferrotec (USA) Corporation	0.003	0.004	0.000	4/26/16	Yes	Alameda
16EV024	PEV	Install 20 dual-port Level 2 charging stations in Palo Alto	$240,000	City of Palo Alto	0.031	0.040	0.004	5/18/16	No	Santa Clara
16EV025	PEV	Install 12 dual-port Level 2 charging stations in San Mateo	$72,000	San Mateo County Community College District	0.019	0.024	0.003	2/23/16	No	San Mateo
16EV026	PEV	Install 4 single-port Level 2 charging stations in Petaluma and Marshall	$11,040	Straus Family Creamery	0.029	0.004	0.000	2/11/16	No	Regional
16EV027	PEV	Install 21 dual-port Level 2 charging stations (with solar) in San Jose	$223,777	VF/UTC Service, Inc.	0.029	0.037	0.004	3/16/16	Yes	Santa Clara
16EV028	PEV	Install 4 single port Level 2 charging stations (w/ solar) in Palo Alto	$24,000	Unitarian Universalist Church of Palo Alto	0.003	0.004	0.000	4/28/16	No	Santa Clara
16EV030	PEV	Install 4 single-port Level 2 charging stations (with solar) in Danville	$24,000	Crow Canyon Medical Center, L.P.	0.003	0.004	0.000	3/11/16	No	Contra Costa
16EV031	PEV	Install 6 single-port DC and 3 dual-port Level 2 charging stations in San Leandro	$48,000	Infinite Velocity Automotive Inc.	0.013	0.016	0.002	2/18/16	Yes	Alameda
16EV032	PEV	Install 9 dual-port Level 2 charging stations (with solar) in Palo Alto	$108,000	Komuna Energy, LLC	0.014	0.018	0.002	5/18/16	No	Santa Clara
16EV034	PEV	Install 5 dual-port Level 2 charging stations in San Mateo County	$15,000	County of San Mateo	0.004	0.050	0.001	4/7/16	No	San Mateo
16EV035	PEV	Install 4 dual-port Level 2 charging stations in Atherton and Menlo Park Schools	$24,000	Menlo Park City School District	0.006	0.008	0.001	5/2/16	No	San Mateo
16EV036	PEV	Install 6 dual-port Level 2 charging stations in San Jose	$30,177	Good Samaritan Hospital	0.008	0.010	0.001	4/12/16	No	Santa Clara
16EV037	PEV	Install 2 dual-port Level 2 charging stations in Suisun City	$12,000	City of Suisun City	0.003	0.004	0.000	6/15/16	No	Solano
16EV038	PEV	Install 2 dual-port Level 2 charging stations in Santa Rosa	$24,000	Artemedica	0.003	0.004	0.000	2/26/16	No	Sonoma

AGENDA 4 - ATTACHMENT 4

Summary of all TFCA approved and eligible projects (evaluated between 6/7/2015 and 8/30/2016)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO_X	ROG	PM			
16EV039	PEV	Install 2 single-port Level 2 and 1 dual-port Level 2 charging stations in Lafayette	$12,000	City of Lafayette	0.003	0.004	0.000	4/28/16	No	Contra Costa
16EV040	PEV	Install 4 dual-connector Level 2 charging stations in Rohnert Park	$14,000	Sonoma State University	0.004	0.005	0.001	4/13/16	No	Sonoma
16EV041	PEV	Install 1 dual-connector Level 2 and 2 Low kW DC fast single-port charging stations in Novato	$13,500	Velocity Prime Automotive Inc.	0.004	0.005	0.001	4/13/16	No	Marin
16EV043	PEV	Install1 quad-port and 1 dual-port Level 2 charging stations in San Carlos	$10,364	Peninsula Components Inc.	0.003	0.004	0.000	3/17/16	No	San Mateo
16EV044	PEV	Install 4 single-port Level 2 charging stations in Berkeley	$10,000	Siemens Molecular Diagnostics	0.003	0.004	0.000	4/13/16	Yes	Alameda
16EV045	PEV	Install 3 single-port Level 2 charging stations (with solar) in Sunnyvale	$18,000	Executive Inn, Inc.	0.002	0.003	0.000	4/6/16	No	Santa Clara
16EV046	PEV	Install 5 dual-port Level 2 charging stations in San Jose	$30,000	3901 North First, LLC	0.008	0.010	0.001	4/13/16	No	Santa Clara
16EV048	PEV	Install 4 single-port Level 2 charging stations (with solar) in Palo Alto	$24,000	Kehilat Etz Chayim	0.003	0.004	0.000	4/13/16	No	Santa Clara
16EV049	PEV	Install 4 single-port Level 2 charging stations in San Francisco	$10,319	One Hawethorne Owners Association	0.003	0.003	0.000	4/13/16	Yes	San Francisco
16EV051	PEV	Install 4 single-port Level 2 charging stations in San Francisco	$12,000	8 Octavia Boulevard Owners' Assoc	0.003	0.004	0.000	4/18/16	Yes	San Francisco
16EV052	PEV	Install 4 single-port Level 2 charging stationsin Oakland	$12,000	Belmont-Staten Condo Association	0.003	0.004	0.000	4/19/16	Yes	Alameda
16EV053	PEV	Install 3 single-port and 4 dual-port Level 2 charging stations in Oakland	$23,000	UCSF Benioff Children's Hospital Oakland	0.006	0.008	0.001	4/18/16	Yes	Alameda
16EV054	PEV	Install 350 EV Level 2 charging stations in Cupertino	$250,000	Apple Inc.	0.065	0.084	0.009	3/16/16	No	Santa Clara
16EV055	PEV	Purchase & install 5 dual-port Level 2 charging stations (w/Solar) in San Rafael	$60,000	Marin Clean Energy	0.008	0.010	0.001	6/1/16	Yes	Marin
16EV056	PEV	Install 32 dual-port Level 2 and 5 dual-connector DC charging stations in San Francisco	$295,182	Bay Area Headquarters Authority	0.076	0.098	0.011	3/16/16	Yes	San Francisco
16EV057	PEV	Install 2 dual-port Level 2 charging stations in Atherton	$12,000	Town of Atherton	0.003	0.004	0.000	2/11/16	No	San Mateo
16EV058	PEV	Install 4 dual-connector DC fast and 24 dual-port Level 2 charging stations in Oakland	$244,000	City of Oakland	0.063	0.081	0.009	5/18/16	Yes	Alameda
16EV059	PEV	Install 3 dual-port Level 2 charging stations in San Jose	$16,583	Sikh Gurdwara - San Jose	0.004	0.006	0.001	4/19/16	Yes	Santa Clara
16EV060	PEV	Install 2 dual-port Level 2 charging stations in Napa	$12,000	Verasa Napa Condominium Owners Association, Inc.	0.003	0.004	0.000	4/13/16	No	Napa
16EV061	PEV	Install 3 dual connector Level 2 charging stations in Petaluma	$10,500	Amy's Kitchen	0.003	0.004	0.000	4/20/16	No	Sonoma
16EV062	PEV	Install 5 single-port Level 2 charging stations in San Jose	$15,000	Carrara at Tuscany Hills Owners' Association	0.004	0.005	0.001	7/26/16	Yes	Santa Clara
16RFG01*	PEV	Install 12 dual-port Level 2 EV charging stations in Livermore and Hayward	$65,112	Chabot Las Positas Community College District	0.019	0.024	0.003	2/17/16	Yes	Alameda
16RFG02*	PEV	Install 9 dual-port Level 2 EV charging stations in Fremont	$81,486	City of Fremont	0.014	0.018	0.002	2/17/16	No	Alameda
16RFG08*	PEV	Install 8 dual-port Level 2 EV charging stations in Millbrae	$78,000	City of Millbrae	0.012	0.016	0.002	2/17/16	No	San Mateo
16RFG09*	PEV	Install 1 DC fast, and 5 dual-port Level 2 EV charging stations in Oakland	$41,000	City of Oakland	0.007	0.009	0.001	2/17/16	Yes	Alameda
16RFG11*	PEV	Install 8 DC fast EV charging stations in Moffett Field	$307,569	The NASA Ames Exchange	0.052	0.067	0.007	2/17/16	No	Santa Clara
16RFG15*	PEV	Install 11 dual- and 2 single-port Level 2, and 3 single port Level 1 EV charging stations in Palo Alto	$121,945	City of Palo Alto	0.020	0.026	0.003	2/17/16	No	Santa Clara

AGENDA 4 - ATTACHMENT 4

Summary of all TFCA approved and eligible projects (evaluated between 6/7/2015 and 8/30/2016)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO_X	ROG	PM			
16RFG17*	PEV	Install 1 DC fast and 1 single-port Level 2 EV charging station in Richmond	$47,511	City of Richmond	0.007	0.009	0.001	2/17/16	Yes	Contra Costa
16RFG18*	PEV	Install 18 dual- and 5 single-port Level 2 EV charging stations in Fremont	$250,000	San Francisco Bay Area Rapid Transit District (BART)	0.032	0.041	0.005	2/17/16	No	Alameda
16RFG19*	PEV	Install 1 DC fast, and 7 dual-port Level 2 EV charging stations in Oakland and Hayward	$149,610	County of Alameda	0.017	0.022	0.002	2/17/16	Yes	Alameda
16DCFC01**	PEV	Install 1 DC fast - single unit w/dual connectors charging station in Saratoga	$35,000	City of Saratoga	0.007	0.008	0.001	5/18/16	No	Santa Clara
16DCFC02**	PEV	Install 1 DC fast - single unit w/dual connectors and 1 Level 2 charging station in Colma	$43,000	Town of Colma	0.007	0.009	0.001	5/18/16	No	San Mateo
16DCFC03**	PEV	Install 1 dual-connector DC fast - charging station in Brisbane	$40,000	City of Brisbane	0.007	0.008	0.001	5/18/16	No	San Mateo
16DCFC04**	PEV	Install 8 DC fast - single unit w/ dual connectors and 48 single-port Level 2 charging stations (with solar) in 8 cities in 4 counties	$699,950	Clean Fuel Connection	0.089	0.115	0.013	5/18/16	Yes	Regional
16DCFC05**	PEV	Install 7 DC fast - single units w/dual connectors and 6 single-port Level 2 charging stations in in 7 cities in 5 counties	$292,900	NRG EV Services	0.050	0.064	0.007	5/18/16	No	Regional
16PEV002	PEV	Purchase one zero emissions motorcycle (ZEM)	$2,500	Town of Colma Police Department	0.000	0.007	0.000	10/20/15	No	San Mateo
16PEV003	PEV	Purchase one ZEM	$2,500	Pittsburg Police Department	0.000	0.007	0.000	12/23/15	No	Contra Costa
16PEV004	PEV	Purchase 15 battery electic vehicles (BEV)	$37,500	County of Alameda	0.006	0.007	0.001	4/19/16	Yes	Alameda
16PEV005	PEV	Purchase 10 BEVs	$25,000	City of Oakland	0.004	0.005	0.001	6/3/16	Yes	Alameda
16PEV006	PEV	PEV rebate for 7 BEVs	$17,500	City of San Jose	0.003	0.004	0.000	8/17/16	Yes	Santa Clara
16PEV007	PEV	PEV rebate for 2 ZEMs	$5,000	City of Berkeley	0.000	0.014	0.000	7/28/16	Yes	Alameda
16HDZ001	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 15 30' zero-emission battery electric buses	$334,549	UC Regents	0.268	0.033	0.007	7/20/16	Yes	San Francisco
16HDZ002	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 2 40' zero-emission battery electric buses and scrap 1 vehicle	$96,190	Solano County Transit	0.409	0.279	0.002	8/10/16	Yes	Solano
16HDZ005	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 10 40' zero-emission battery electric buses and scrap 10 model year 2003 buses	$473,990	San Mateo County Transit District	1.435	0.100	0.005	Pending	No	San Mateo
16HDZ007	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 2 35' zero-emission battery electric buses	$135,022	Marin County Transit District	0.097	0.005	0.004	Pending	No	Marin
16HDG001	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 11 zero-emission battery-electric trucks and scrap one model year 2004 truck	$151,430	Goodwill Industries	0.296	0.016	0.003	7/20/16	Yes	San Francisco
16HDG002	Zero-Emission Heavy-Duty Trucks & Buses	Purchase 10 zero-emission, hydrogen fuel-cell tranist buses and scrap 10 model year 2002 buses	$1,000,000	Alameda-Contra Costa Transit District	3.690	1.548	0.007	7/20/16	Yes	Alameda/ Contra Costa
16R11	Shuttle & Rideshare	511 regional carpool program	$1,000,000	Metropolitan Transportation Commission	7.780	7.290	6.860	11/18/15	Yes	Regional
16R12	Shuttle & Rideshare	SJSU ridesharing & trip reduction	$140,000	Associated Students, San Jose State University	1.830	1.780	1.580	11/18/15	Yes	Regional
16R15	Shuttle & Rideshare	Ace shuttle 53 & 54	$80,000	San Joaquin Regional Rail Commission	0.260	0.460	0.450	11/18/15	Yes	Alameda
16R17	Shuttle & Rideshare	PresidiGo shuttle	$100,000	Presidio Trust	0.380	0.380	0.350	11/18/15	Yes	San Francisco
16R18	Shuttle & Rideshare	Broadway shuttle	$186,500	City of Oakland	0.230	0.350	0.350	11/18/15	Yes	Alameda
16R19	Shuttle & Rideshare	Caltrain shuttle program	$767,100	Peninsula Corridor Joint Powers Board	2.380	2.450	2.160	11/18/15	No	San Mateo
16R20	Shuttle & Rideshare	ACE shuttle bus program	$960,000	Santa Clara Valley Transportation Authority	3.760	3.350	3.430	11/18/15	No	Santa Clara

AGENDA 4 - ATTACHMENT 4

Summary of all TFCA approved and eligible projects (evaluated between 6/7/2015 and 8/30/2016)

Project #	Project Category	Project Description	Award Amount	Applicant Name	Emission Reductions (Tons per year)			Board Approval Date	CARE Area	County
					NO_X	ROG	PM			
16R30	Pilot Trip Reduction	Bishop Ranch Business Park shared autonomous vehicle shuttle pilot	$1,000,000	Contra Costa Transportation Authority	0.580	0.629	0.295	5/18/16	Yes	Contra Costa
16R22	Bicycle Lockers	Purchase and install 1 eLocker quad and 2 eLocker doubles in Campbell	$20,000	City of Campbell	0.011	0.012	0.012	3/9/16	Yes	Santa Clara
16R23	Bicycle Lockers	Purchase and install 20 eLocker quads in Berkeley, Dublin/Pleasanton, Millbrae, San Leandro, and Union City	$200,000	Bay Area Rapid Transit District	0.112	0.115	0.116	7/20/16	Yes	Alameda/ San Mateo
16R24	Bicycle Lockers	Purchase and install 4 eLocker quads in Emeryville and Santa Clara	$40,000	Capitol Corridor Joint Powers Authority	0.022	0.023	0.023	4/13/16	Yes	Alameda/ Santa Clara
16BR001	Bicycle Racks	Purchase and install 5 bike racks in San Carlos	$3,000	San Carlos School District	0.006	0.009	0.004	12/21/15	No	San Mateo
16BR003	Bicycle Racks	Purchase and install 8 bike racks in Los Altos	$3,840	Mountain View Los Altos Union High School District	0.008	0.011	0.005	12/31/15	No	Santa Clara
16BR004	Bicycle Racks	Purchase and install 15 bike racks in Dublin	$1,800	Dublin Unified School District	0.004	0.005	0.002	1/26/16	Yes	Alameda
16BR005	Bicycle Racks	Purchase and install 72 bike racks in Richmond	$11,160	City of Richmond	0.024	0.033	0.015	1/21/16	Yes	Contra Costa
16BR007	Bicycle Racks	Purchase and install 6 bike racks for in Livermore	$2,880	Granada High School	0.006	0.009	0.004	3/23/16	Yes	Alameda
16BR008	Bicycle Racks	Purchase and install 23 bike racks in Los Gatos	$9,000	Los Gatos Unified School District	0.019	0.027	0.012	3/22/16	No	Santa Clara
16BR009	Bicycle Racks	Purchase and install 9 bicycle racks in Los Gatos	$4,260	Los Gatos High School	0.009	0.013	0.006	3/23/16	No	Santa Clara
16BR010	Bicycle Racks	Purchase and install 125 bicycle racks in Mountain View	$15,000	Mountain View Whisman School District	0.032	0.044	0.020	3/15/16	No	Santa Clara
16BR011	Bicycle Racks	Purchase and install 70 bike racks in Palo Alto	$8,400	Palo Alto Unified School District	0.018	0.025	0.011	3/23/16	No	Santa Clara
16BR012	Bicycle Racks	Purchase and install 11 bike racks in Burlingame	$3,960	Burlingame School District	0.008	0.012	0.005	3/23/16	No	San Mateo
16BR013	Bicycle Racks	Purchase and install 12 bike racks in Napa	$1,342	Napa County	0.003	0.004	0.002	4/8/16	No	Napa
16BR014	Bicycle Racks	Purchase and install 4 bicycle racks for San Carlos School District (24 capacity)	$2,880	San Carlos School District	0.006	0.009	0.004	7/28/16	No	San Mateo
16BR015	Bicycle Racks	Purchase and install 33 bicycle racks for City of Fremont (66 capacity)	$3,960	City of Fremont	0.008	0.012	0.005	7/19/16	No	Alameda
16BR016	Bicycle Racks	Purchase and install 5 bicycle racks for City of Saint Helena (10 capacity)	$600	City of Saint Helena	0.001	0.002	0.001	7/19/16	No	Napa
16BR017	Bicycle Racks	Purchase and install 4 bike racks for Napa County Office of Education (8 capacity)	$480	Napa County Office of Education	0.001	0.001	0.001	7/28/16	No	Napa
16BR018	Bicycle Racks	Purchase and install 30 bike racks for City of Menlo Park (60 capacity)	$3,600	City of Menlo Park	0.008	0.011	0.005	8/8/16	No	San Mateo
16BR019	Bicycle Racks	Purchase and install 25 bike racks for City of Morgan Hill (50 capacity)	$3,000	City of Morgan Hill	0.006	0.009	0.004	8/4/16	No	Santa Clara
16BR020	Bicycle Racks	Purchase and install 10 bike racks for City of Napa (200 capacity)	$1,200	Napa Valley Transportation Authority	0.003	0.004	0.002	8/8/16	No	Napa
16BR021	Bicycle Racks	Purchase and install 28 bike racks for City of Richmond (60 capacity)	$3,600	City of Richmond	0.008	0.011	0.005	8/4/16	Yes	Contra Costa
16BR022	Bicycle Racks	Purchase and install 100 bike racks for Gunn High School (200 capacity)	$10,548	Gunn High School	0.025	0.035	0.016	8/8/16	No	Santa Clara
16BR023	Bicycle Racks	Purchase and install 3 bike racks for City of Cupertino (36 capacity)	$2,160	City of Cupertino	0.005	0.006	0.003	8/22/16	No	Santa Clara
	109 Projects		**$12,422,636**		**24.79**	**20.49**	**15.93**			

* Award amount for these nine projects includes a total of $450,000 in Reformulated Gas (RFG) Settlement funds.

** Award amount for these projects include $239,850 in California Energy Commission (CEC) funds, pending CEC approval.

AGENDA 4 - ATTACHMENT 5

Summary of FYE 2016 TFCA funds distributed by county and project category, as of 8/30/16

Figure 1: TFCA Projects Awarded in FYE2016
Distributed by Project Category

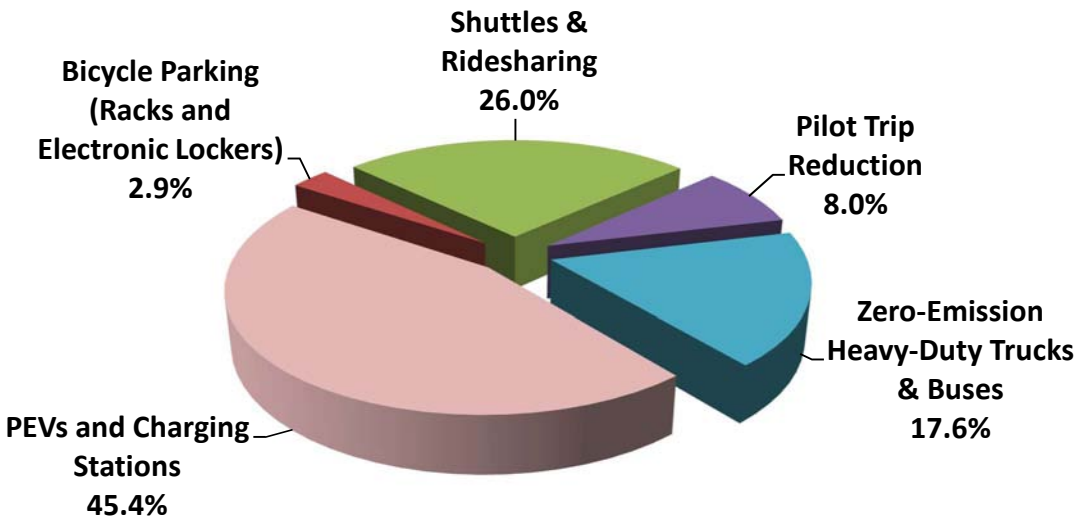
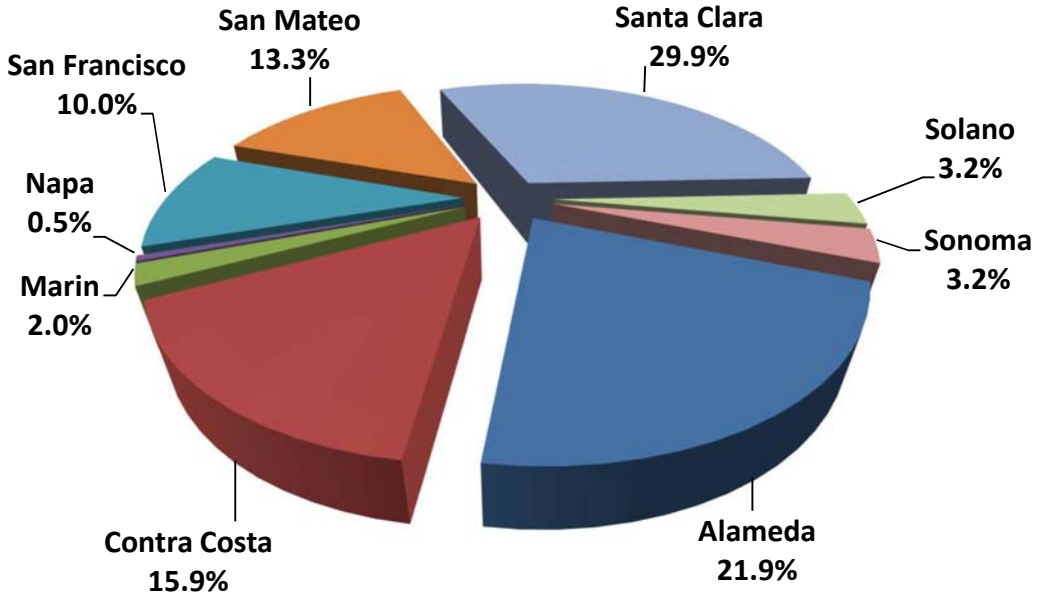


Figure 2: TFCA Projects Awarded in FYE2016
Distributed by County



AGENDA: 5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 7, 2016

Re: Update on the Shuttle and Rideshare Program

RECOMMENDATIONS

Recommend Board of Directors:

1) Approve $406,000 in Transportation Fund for Clean Air – for fiscal year ending (FYE) 2017 Regional Funds to be transferred to the Spare the Air Program FYE 2017 budget for the purposes of:
   a. Securing an advertising contract with the Livermore Amador Valley Transit Authority (LAVTA) at a cost of $322,000 for FYE 2017, and
   b. Paying approximately $84,000 to cover the cost of wrapping seven LAVTA transit operated shuttle buses with Spare the Air messaging.
2) Authorize the Executive Officer/APCO to execute all contracts and agreements with LAVTA related to the wrapping and advertising rights; and
3) Authorize the Executive Officer/APCO to extend the advertising service contract with LAVTA at a cost not to exceed $322,000 annually for up to two additional years, at the Air District's discretion, based on contractor's performance.

BACKGROUND

In 1991, the California State Legislature authorized the Bay Area Air Quality Management District (Air District) to impose a $4 surcharge on motor vehicles registered within the nine-county Bay Area to fund projects that reduce on-road motor vehicle emissions. Since 1992, the Air District has allocated these funds to its Transportation Fund for Clean Air (TFCA) Program to fund eligible projects. The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code (HSC) Sections 44241 and 44242.

Sixty percent of TFCA funds are awarded by the Air District to eligible programs implemented directly by the Air District (e.g., the Smoking Vehicle, Enhanced Mobile Source Enforcement, Spare the Air, and Bicycle Facility Programs) and through a grant program known as the Regional Fund. The remaining forty percent of TFCA funds are forwarded to a designated agency within each Bay Area county to be distributed via the County Program Manager Fund.

Staff will provide an overview of the current TFCA Regional Fund Shuttle and Ridesharing Incentive Program, discuss alternative options for providing funding to shuttle operators, and present a recommendation for funding for a pilot project with LAVTA.

DISCUSSION

The TFCA Shuttle and Rideshare Program (Program) was developed in the early 1990's to target emissions reductions from light-duty passenger commute vehicles. The Program achieves this by offering grant funding to first- and last-mile shuttle services that connect commuters between mass-transit and employment centers with the goal of helping commuters shift away from single-occupant vehicles (SOV) and towards transit. Although the Program has been extremely popular, over time, shuttle and ridesharing projects have become increasingly challenging to fund mainly due to increasingly stricter motor vehicle engine standards imposed by the California Air Resources Board (CARB), meaning newer passenger vehicles are emitting fewer pollutants, and the air quality benefits from removing these increasingly cleaner passenger vehicles from the road are lessened. Additionally, the Program relies heavily on Project-Sponsor-collected survey data, which is inconsistent among projects, and is difficult to verify. As a result, some projects struggle to comply with the requirement to quantify the air quality benefits.

Decreasing Project Cost Effectiveness

The Air District historically has allocated approximately $4 million in TFCA funding annually to eligible projects; however, both the pool of eligible projects and the amount of funding that can be awarded to any given project have been diminishing over time.

During the past five years, the Program has awarded approximately $3.5 million in Transportation Fund for Clean Air grants funding to between 7 to 10 projects each year, most of which are projects that have been applying for funds annually for 10 or more years. In order to maintain funding for shuttle operations, the cost-effectiveness limit for this project category has been raised significantly in order to allow projects to qualify for funding at historical levels. In Fiscal Year Ending (FYE) 2013, shuttle projects were required to meet a cost-effectiveness of $90,000 per ton of emissions reduced[1] and in the current FYE 2017 cycle this limit has been increased to $200,000 for existing projects, $250,000 for existing projects in CARE areas and in Priority Development Areas (PDA), and $500,000 for Pilot Trip Reduction projects in CARE areas or PDAs. And, staff anticipates that with annual adjustments to the cost/effectiveness limits some, but not all, of the existing projects can remain eligible for funding under this Program for the foreseeable future.

[1] Cost-effectiveness ($/weighted ton) is based on the ratio of TFCA funds awarded divided by the sum of surplus emissions reduced of reactive organic gases (ROG), nitrogen oxides (NOx), and weighted PM10 (particulate matter 10 microns in diameter and smaller) over a project's useful life.

Outreach

For over four years, staff has been exploring options for improving the Program in order to ensure that it continues to support the Board of Directors' direction to provide funding to support last mile commute solutions. As part of this effort, from October 8, 2013 through February 2016, staff held more than 10 public workshop meetings and 30 direct meetings with stakeholders including Project Sponsors, Congestion Management Agencies and County Program Managers, transit agencies, regional agency partners, and other interested parties. Based on the input received from these meetings, staff has implemented several measures to improve the Program by recommending modifications to the program's policies, application requirements, and project evaluation methodology. While these updates have helped to allow many shuttle projects to meet the cost-effectiveness limit and remain eligible for funding, relying on funds for shuttle operators solely through the current Program will continue to be a challenge in the long term.

Options for Future Funding

For this reason, staff has begun to examine other options for funding projects that no longer qualify for TFCA Shuttle program funds via a number of pilot projects:

Pilot 1 – Oakland Broadway Shuttle: One option explored was to provide unspent funds from the Trip Reduction category through the Spare the Air Program for the Oakland Broadway Shuttle. In July 2016, the Air District Board of Directors authorized $235,000 in Spare the Air funding to the City of Oakland to help offset the cost of AC Transit's operation of the Broadway B Shuttle Service. This funding was provided as a bridge for a limited period of time to allow the shuttle operator to seek a new source of revenue to pay for the existing service. This project also provided the Air District with valuable advertising for its Spare the Air program in return for the bridge funding.

The Spare the Air program was established by the Air District in 1991 to reduce air pollution and provide advance notice when air quality is forecast to be unhealthy. Because most air pollution is preventable, Spare the Air is focused on educating the public and promoting changes in behavior, such as encouraging transit use, and trip-linking. Shuttle operators who are interested in being Spare the Air partners, could be paid for advertising Spare the Air messaging on their vehicles. Under the Spare the Air Program, cost-effectiveness is measured for the program as a whole, allowing more flexibility for projects to qualify for funding.

Pilot 2 – LAVTA: A similar pilot project is being recommended for LAVTA as part of this agenda item. Staff is currently recommending that $406,000 in Transportation Fund for Clean Air – FYE 2017 Regional Funds to be transferred to the Spare the Air Program budget. That funding would be used to secure an advertising contract with the Livermore Amador Valley Transit Authority (LAVTA) at a cost of $322,000 per year for up to three years, and to budget approximately $84,000 for the cost of wrapping seven LAVTA transit operated shuttle buses with the Spare the Air messaging. LAVTA has identified seven 40' buses for full, Spare the Air bus wraps. Three of the buses travel daily along the I-580 and I-680 corridors and four travel on local streets throughout the Tri-Valley. The advertising revenues received would be used to fund a LAVTA-sponsored pilot Shared Autonomous Vehicle (SAV) project in Dublin, which aims to deploy two SAVs in

Dublin by 2018-2019:

- ***Year 1 revenue*** would be used to help support their participation in the GoMentum partnership that is being led by Contra Costa Transportation Authority and would allow LAVTA to share in the existing SAV testing that is currently underway.
- ***Year 2 revenu***e would be dedicated towards continuing the work started in year one and that they would also begin the process of procuring their first SAV.
- ***Year 3 revenue*** would be dedicated to finalizing the purchase of both SAVs and putting them into revenue service. The SAVs would also be available for full bus wrap advertising by the Air District in year three.

Next Steps

Staff will present some preliminary recommendations from the pilot projects to the Committee and seek input on the overall direction for the Program in future cycles. Based on the Committee's direction and guidance regarding the options for the Program, staff will continue to solicit public input and further evaluate the specific changes that would be necessary in order to address the issues and challenges described above. Staff anticipates returning to the Committee in May 2017 with recommendations for the FYE 2018 cycle that reflect the Committee and stakeholder's input.

BUDGET CONSIDERATION / FINANCIAL IMPACT

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

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Karen Schkolnick
Reviewed by: Damian Breen

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

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

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 12, 2016

Re: Accept, Obligate, and Expend Funding from the Bay Area Clean Air Foundation (Foundation)

RECOMMENDATIONS

Recommend Board of Directors:

1. Adopt a Resolution authorizing the Bay Area Air Quality Management District (Air District) to accept, oblige, and expend up to $1,266,600, plus any interest accrued, from the Bay Area Clean Air Foundation (Foundation) for roadside air pollution monitoring projects; and

2. Authorize the Executive Officer/APCO to enter into all agreements necessary to accept and expend this funding.

BACKGROUND

The Foundation is a nonprofit support organization for the Air District. As part of its operation, the Foundation applies for grant funding from various sources and also accepts funding to reduce and offset air emissions within the boundaries of the Air District. In order to administer the grant programs associated with this funding, the Foundation has a contract with the Air District which allows for staff to be used to complete work to expend these monies.

The Reformulated Gasoline Settlement Fund (RFG) is the result of the settlement of 14 class action lawsuits against Union Oil Company of California and Unocal Corporation (Unocal) to resolve a dispute regarding a claim that Unocal affected the price for California Air Resources Board (ARB) compliant summertime reformulated gasoline in California by urging ARB to adopt its proprietary formula for summertime reformulated gasoline. Before trial, the Plaintiff and Unocal agreed to settle the class actions and agreed to distribute approximately $7 million through an open competitive grants program directed to nonprofit organizations for projects to achieve vehicle emissions or fuel efficiency benefits for California consumers. The majority of the RFG grants program funding was awarded in 2010, including a grant to the Foundation for a project to deploy converted plug-in electric vehicles in partnership with City CarShare, and more recently, for a project to quickly deploy electric vehicle charging stations in partnership with public agencies, which is currently in progress.

DISCUSSION

On August 9, 2016, the Foundation submitted an application to the RFG administrators for $1,301,127, which represents the final tranche of available RFG Open Competitive Grants Program funding. The Air District has recently been notified that the maximum funding award being considered is approximately $1,266,600. The application was submitted in partnership with the Air District and Sacramento Metropolitan Air Quality Management District (SMAQMD), who propose to use RFG funding to construct and operate a new roadside air pollution monitoring station in each district. Roadside measurements can be used to collect data on roadway emissions in order to better quantify the emissions that result from heavily trafficked roadways, and to model expected emissions and ambient concentrations for other similar near road environments.

The Air District has completed a preliminary assessment and determined that a potential location for a new mobile roadside monitoring station site is along the I-580 corridor just east of the I-680 junction, near Dublin. This location is ideal for near-road monitoring since it is a heavily trafficked area with a traffic mix that includes heavy-duty diesel trucks. Information from this monitoring project will help each district to improve their estimates of mobile source emissions, the modeling of air quality impacts near roadways, and the effectiveness of strategies developed to mitigate impacts, such as informing land-use decisions on school locations and other air pollution sensitive facility placements. The information characterizing a variety of near road environments may also help link the observed health effects to specific pollutants or other factors, which may also help the development of improved mitigation strategies.

The Foundation would contract with each of the air districts for the associated work and for reporting progress to the RFG administrators. As part of this report, the Committee will consider a recommendation to adopt a resolution that would authorize the Air District to accept and obligate up to $1,266,600, plus any interest accrued, into the Air District's FYE 2017 budget, and authorize the Air District's Executive Officer to enter into all necessary agreements to accept and expend these funds.

BUDGET CONSIDERATION / FINANCIAL IMPACT

Acceptance of the Foundation monies requires an amendment to the FYE 2017 budget. Air District and Foundation staff time for the implementation of these projects is covered in the administrative fees associated with the funding.

Respectfully submitted,

Jack P. Broadbent
Executive Director/APCO

Prepared by: Karen Schkolnick
Reviewed by: Damian Breen

Attachment: Board Resolution to Accept, Obligate, and Expend Foundation funds.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RESOLUTION NO. 2016-_____

A Resolution of the Board of Directors of the Bay Area Air Quality Management District authorizing the Bay Area Air Quality Management District to accept and obligate up to $1,266,600, plus any interest accrued, in funding from the Bay Area Clean Air Foundation for roadside air pollution monitoring projects and to authorize the Executive Officer/Air Pollution Control Officer to execute all necessary agreements, required documents, and amendments required to expend this funding

WHEREAS, the purpose of this Resolution is to authorize the Bay Area Air Quality Management District ("Air District") to accept and obligate up to $1,266,600, plus any interest accrued, in funding from the Bay Area Clean Air Foundation ("Foundation") for roadside air pollution monitoring projects and to authorize the Executive Officer/Air Pollution Control Officer to execute all necessary agreements, required documents, and amendments required to expend this funding;

WHEREAS, the Reformulated Gasoline Settlement Fund (RFG) is the result of the settlement of 14 class action lawsuits against Union Oil Company of California and Unocal Corporation (Unocal) to resolve a dispute regarding a claim that Unocal affected the price for California Air Resources Board (ARB) compliant summertime reformulated gasoline in California, and an open competitive grants program was created to distribute approximately $7 million, which was agreed between the Plaintiff and Unocal to settle the class actions before trial, to nonprofit organizations for projects to achieve vehicle emissions or fuel efficiency benefits for California consumers;

WHEREAS, the majority of the RFG grants program funding was awarded in 2010, including a grant to the Foundation for a project to deploy converted plug-in electric vehicles in partnership with City CarShare, and more recently, for a project to quickly deploy electric vehicle charging stations in partnership with public agencies, which is currently in progress;

WHEREAS, on August 9, 2016, in partnership with the Air District and Sacramento Metropolitan Air Quality Management District (SMAQMD), the Foundation submitted an application to the RFG administrators for approximately $1,266,600 in funding, which represents the final tranche of funding available through the RFG's Open Competitive Grants Program, to construct and operate one new roadside air pollution monitoring station in each of the districts to supplement and expand their existing monitoring network;

WHEREAS, roadside measurements can be used to collect data on the roadway emissions in order to better quantify the emissions that result from heavily trafficked roadways, and to model expected emissions and ambient concentrations for other similar near road environments.

WHEREAS, the Air District performs contract work for the Bay Area Clean Air Foundation;

WHEREAS, if the Bay Area Clean Air Foundation is awarded RFG funds, it will seek to transfer up to $1,266,600 to the Air District, plus any interest accrued, to pay for costs related to the project and to reimburse the District for Foundation administrative staff time;

NOW, THEREFORE, BE IT RESOLVED that the Air District's Board of Directors authorizes the Executive Officer/Air Pollution Control Officer to accept and obligate these funds into the Air District's FYE 2017 budget, expend these funds, and execute all agreements, required documents for Bay Area Clean Air Foundation Funding, and any amendments thereto.

The foregoing resolution was duly and regularly introduced, passed and adopted at a regular meeting of the Board of Directors of the Bay Area Air Quality Management District on the Motion of Director _____, seconded by Director _____, on the ____ day of _____, 2016 by the following vote of the Board:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Eric Mar
Chair of the Board of Directors

ATTEST:

_____
David E. Hudson
Secretary of the Board of Directors

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 5, 2016

Re: Report of the Advisory Council Meeting of October 3, 2016

RECOMMENDED ACTION

The Advisory Council (Council) received only informational items and has no recommendations of approval by the Board of Directors (Board).

BACKGROUND

The Council met on October 3, 2016 and discussed the following items:

A) Council Deliberation on the Key Question

B) Air District Clean Air Plan: Areas for Future Focus

Director/Ex-Officio Advisory Council member, Rod Sinks, will provide an oral report of the Council meeting to the Board of Directors.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Maricela Martinez

Attachment 12A: 7/19/16 – Advisory Council Meeting Agenda #5
Attachment 12B: 7/19/16 – Advisory Council Meeting Agenda #6

AGENDA: 5

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Stan Hayes and Members
of the Advisory Council

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 19, 2016

Re: Council Deliberation on the Key Question

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

The Council will discuss the efficacy of Greenhouse Gas (GHG) caps for local refineries, considering information provided to date. The discussion may include topics such as toxics co-benefits, the reduction of emissions from sources not covered by Cap-and-Trade, and leakage and opportunity costs. The Council will review a summary of their prior deliberations and opinions.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Jeff McKay

Attachment 5A: Draft Bay Area Air Quality Management District Advisory Council Efficacy of Greenhouse Gas Caps on Bay Area Refineries

BAY AREA AIR QUALITY MANAGEMENT DISTRICT ADVISORY COUNCIL
EFFICACY OF GREENHOUSE GAS CAPS ON BAY AREA REFINERIES

KEY QUESTION BEFORE THE COUNCIL

Air District staff asked the Advisory Council to consider the following question:

"What is the efficacy of imposing greenhouse gas caps on Bay Area refineries?"

SUMMARY

Based on the material that it has considered, its deliberations, and its collective expertise and experience, the Council has reached the following conclusions:

- Key Question: The Council has concluded that facility-level caps on Bay Area refinery greenhouse gas (GHG) emissions likely would not be effective in mitigating global climate change.
- Policy Recommendation: Rather than caps, the Bay Area Air Quality Management District (Air District) should continue to encourage or require Bay Area refineries to reduce GHG emissions by methods that reduce total global GHG emissions, and also encourage state regulators to implement state-wide refinery policies on these topics.
- Related Policy Recommendation: Toxics and criteria pollutants should be regulated directly through established programs, rather than indirectly as co-benefits of GHG reduction policies. The most effective place for Bay Area GHG emissions policy is within a comprehensive multipollutant strategy that accounts for the realities of conflicting effects where present.
- Related Policy Recommendation: The Air District should continue to coordinate with the California Air Resources Board (CARB) and other agencies when expanding its role in GHG emission reduction beyond refineries. The Air District's collaboration with CARB on landfills provides a template for such partnering.

DISCUSSION

It is the mission of the Air District to "create a healthy breathing environment for every Bay Area resident while protecting and improving public health, air quality, and the global climate."

Toward that end, the Air District has regulated toxics and criteria pollutants for over 60 years. During this time, there has been continuous improvement in Bay Area air quality due to Air District efforts, along with CARB, the U.S. Environmental Protection Agency (USEPA), and other contributors. This process of continuous improvement has incorporated evolving understanding of atmospheric science, toxics and criteria pollutant health effects, and improving emissions control technology. The Air District has acted within a framework of State, Federal and local regulations, while also enacting its own rules.

Over a period of decades, the Air District has implemented a number of effective and proven regulatory programs and adopted rules to ensure that clean air health and other environmental standards are met.

These programs are specifically directed at toxics [e.g., New Source Review of Toxic Air Contaminant for new sources, emission and/or performance standards for hazardous air pollutants, the Community Air Risk Evaluation (CARE) Program, the California Air Toxics "Hot Spots" Program for existing sources] and criteria pollutants [e.g., Multi-Pollutant Clean Air Plan (which also includes GHGs), New Source Performance Standards for new sources, emission and/or performance standards for existing sources]. The Air District also has enacted a number of rules directed specifically at reducing toxics and criteria pollutant emissions from refineries, with additional such rules the subject of currently on-going rulemaking.

Similarly, the Air District seeks to take effective action to reduce global climate change [e.g., Climate Protection Program, Regional Climate Protection Strategy, GHG emission inventories, Plan Bay Area (with the Metropolitan Transportation Commission and others)].

Climate change is one of the most serious and urgent challenges confronting not just the Bay Area, but the entire world. That is why, for more than a decade, since 2005, the Air District Board, Staff, and Advisory Council have worked together in efforts that today place the Air District at the leading-edge of climate protection efforts by local agencies in California and throughout the U.S.

In determining the most effective path forward for its climate protection efforts, the Air District works within a framework of existing climate regulations enacted by the State of California, USEPA, and others. Unlike toxics and criteria pollutants, for which effects of concern typically occur adjacent to emitting sources (tens of meters) or near-downwind (hundreds of meters to several kilometers), the relevant effects of climate change (and the GHGs that cause it) are global. In the Bay Area, results will include flooding from sea level rise, and increases in airborne pollutants from wild fires.

Climate change is one-world in scope, driven not just by GHG emissions from a single facility, localized area, or even a large geographical region, but by the world-wide total of all GHG emissions. While a ton of GHGs emitted anywhere in the world has the same effect on global climate as a ton of GHG emitted in the Bay Area, this is not a rationale for inaction but rather a call for leadership.

> ***The Council strongly supports climate protection efforts by the Air District, State and Federal authorities, and others, and the Council views as urgent further efforts by all to take <u>effective</u> steps to address global climate change.***

To be effective, efforts directed at global climate change must reduce total global GHG emissions. It is not sufficient to reduce GHG emissions in one place if those emissions are simply moved elsewhere to another part of the world, an effect called "leakage." Avoiding leakage, or at least minimizing its risk, is key to ensuring the climate protection effectiveness of adopted policies and measures.

The Council is concerned about the potential for such GHG leakage. In permitting, refineries, like other stationary sources, are required to install emission controls sufficient to ensure that operations meet clean air toxics and criteria pollutant health standards, even if the refinery were to be operated at its theoretical maximum emission rate. If the effect of a cap is to prevent a refinery from processing the volume of materials it would otherwise have processed within its permit, the total amount of crude processed globally will not be reduced – rather the amount processed by that refinery will be reduced, with the excess over the cap relocated elsewhere out of the Bay Area. Therefore, if a refinery GHG cap is set at current actual emissions, which are less than their permitted maximums, there is concern that leakage will be triggered.

Because petroleum companies are large, globally integrated industries, the Council considers it likely that refinery production (and the GHGs associated with that production), if displaced from the Bay Area as a result of Refinery GHG caps, would move elsewhere, out from underneath the caps and negating their intended climate benefit.

The ready mobility of global refinery production and gasoline shipment re-equilibration, and thus the strong potential for GHG leakage, is illustrated by a recent example in Southern California. In February 2015, an explosion and fire at a large refinery in Torrance shut down the refinery for more than a year. Almost immediately, the loss of gasoline production was made up by large outside shipments.

According to the U.S. Energy Information Administration (October 13, 2015), "Over a five-month period following an explosion at a California oil refinery in February 2015, imports of gasoline into California increased to more than 10 times their typical level, drawing from sources that include India, the United Kingdom, and Russia."

The Council is concerned that merely shifting Bay Area refinery GHG emissions to other locations outside the Bay Area will not truly reduce total global GHG emissions, and as a result, will not provide the climate protection expected and needed. In fact, should such a shift result in additional transport of displaced refinery products, as happened in the Torrance example, the carbon footprint of those products would actually increase.

Concern for leakage is not an excuse for inaction, however. There is much that can and must be done in the Bay Area and elsewhere to reduce total global GHG emissions, including those from petroleum based sources, and there exist important opportunities for the Air District to provide leadership. The question is not whether to reduce global GHG emissions, but how to do it in a manner that will be effective in mitigating global climate change.

For example, emissions of high global warming potential (GWP) pollutants such as methane are not covered under cap-and-trade when emitted as fugitives, meaning emissions that are unintentional and do not pass through a stack, or other equivalent opening. However, the GWP of methane is up to 25 times greater than that of carbon dioxide. The Air District can play a significant role in addressing fugitive emissions of methane in the Bay Area, whether by accidental discharges or from routine fugitive emissions at facilities.

More generally, the Air District should coordinate with CARB on its Short Lived Climate Pollutant (SLCP) strategy which will be finalized later in 2016. The strategy addresses emissions of other high-GWP pollutants such as soot (black carbon), fluorinated gases and hydrofluorocarbons. In addition, at the federal level, there is already a Prevention of Significant Deterioration requirement for GHG.

Points of opportunity for Air District refinery focus include:

- Enhanced monitoring of high-GWP emissions such as methane
- Enhanced regulation of fugitive emissions of high-GWP emissions such as methane
  Enhanced energy efficiency reviews
- Increased focus on energy efficiency in the definition of GHG best practices and best available control technology

The Air District can also influence Bay Area GHG emissions in other ways:

> ***The Council strongly encourages Air District efforts to identify, systematically evaluate and prioritize, and adopt Bay Area GHG reduction policies and measures, including ones directed at refineries as appropriate, that are effective in reducing total global GHG emissions, minimizing leakage risk, and complementing and reinforcing GHG reduction measures adopted by the State (e.g., CARB's GHG cap-and-trade and methane reduction programs), USEPA, and others.***

To maximize climate protection afforded by policies directed at petroleum-based GHGs, it is important to target both stationary and mobile sources. For example, in the Bay Area, as elsewhere in California, petroleum-fueled mobile sources collectively are the largest emitters of GHGs. Approximately 80% of the GHGs emitted over the life-cycle of a barrel of petroleum used to produce gasoline are produced when that gasoline is burned as fuel in motor vehicles, that is, from "tank-to-wheels." By comparison, refining accounts for about 12% of those petroleum life-cycle GHGs.

Relevant refinery GHG emissions information includes the following:

- Refineries emit approximately 16% of Bay Area GHG emissions, compared to transportation sources, which emit about 38%, two-thirds of which is from passenger cars/trucks.
- Refineries are five of the six largest emitters of GHGs among Bay Area stationary sources.
- Refining accounts for approximately 12% of the well-to-wheels GHG emissions from internal combustion engine transportation.
- Burning of fuel in vehicle engines (tank-to-wheels) accounts for approximately 80% of the well-to-wheels GHG emissions for internal combustion engine transportation.
- Refinery GHG emissions are primarily from process heaters and boilers, and from fluid catalytic cracking units, which together emit more than 90% of refinery GHGs.

Global emissions of petroleum-based GHGs can be reduced most directly by reducing demand for petroleum-based fuels. Past experience suggests that gasoline demand is inelastic, that is, it is relatively insensitive to gasoline price over a broad range. This implies that GHG-reduction policies that reduce gasoline demand may be more effective in reducing gasoline usage (and resulting GHG emissions) than policies that rely on increased price.

Petroleum fuel demand can be reduced by lowering vehicle miles travelled (VMT) through a variety of local Bay Area policies, including, for example, ones that encourage more efficient and transportation integrated land use (e.g., Plan Bay Area, Smart Growth) and increased availability and use of public transit (e.g., increased transit funding, bike and car share programs, expanded public education). Many of these policies are already key elements in plans to reduce toxics and criteria pollutant air pollution, and will be compatible with efforts to reduce GHG emissions.

In addition to petroleum fuel demand reduction, complementary measures are being adopted that reduce per-vehicle-mile GHG emissions. Such measures include a requirement for lower carbon fuel intensity (e.g., Low Carbon Fuel Standard), more stringent mileage standards for petroleum-fueled vehicles, and replacement of petroleum-fueled vehicles with cleaner, non-petroleum-fueled alternatives (e.g., electric vehicles, ideally powered by renewable-generated electricity).

Current paths to reduce carbon emissions in the Bay Area will not attain the stated 2050 goals without significant additional policies aimed at decarbonizing power sources. Therefore, the Air District should support policy efforts at the state and federal level to encourage development and deployment of carbon capture and sequestration (CCS), especially of natural gas power plants.

Certain individual sources of GHGs and/or other pollutants are known to release atypically large emissions, disproportionately larger than other similar sources and materially higher than estimated using standard bottom-up GHG emission estimation methods. The Air District should consider a find-and-fix program to identify and repair GHG "super-emitters," if and where present, reducing non-inventory "hidden" (but real) GHG emissions from such sources.

GUIDING PRINCIPLES

After deliberation, the Council has developed a list of guiding principles that it regards as useful when evaluating the efficacy of Refinery GHG caps:

1. Clear goals: The Air District should clearly state its goals. If the goal of a proposed GHG reduction measure, such as a Refinery GHG cap, is climate protection, then that goal should be explicitly stated. If, instead, the goal is to limit or reduce the amount or nature of crude throughput at Bay Area refineries, that is a different goal, and should be clearly stated. Similarly, if toxics reduction is the goal, that should be stated.

2. Systematic evaluation of policies to ensure that they actually support the goals: Air District policies, including refinery-related GHG measures, should be aligned with these goals and grounded in plausible and workable pathways specific to those goals, and careful of unintended consequences. The Air District should systematically evaluate and prioritize the effectiveness of GHG reduction options:

    i) Total global GHG emissions must actually be reduced. To ensure effective climate protection benefits, the Air District should adopt policies that truly reduce total global GHG emissions, and not simply displace Bay Area GHG emission elsewhere outside the Bay Area through leakage.

    ii) GHG regulations should be complementary and non-conflicting. The climate change regulatory landscape is complex. To be most effective, Air District policies should be complementary and non-conflicting with those established by CARB, USEPA, and others. iii) Interactions of GHG and other programs and policies should be evaluated. While GHG reduction policies and toxics and criteria pollutant control programs are often synergistic, they are not always so. It is important that interactions among such programs and policies be evaluated and addressed to maximize health and climate benefits.

3. Effective polices directed at methane and other high-GWP GHGs will benefit from additional measurement data: Discrepancies often exist between top-down and more standard bottom-up emission estimation methods. To ensure that emissions of methane and other high-GWP GHGs from refineries and other sources are better understood and more accurately characterized, additional measurement data are needed to improve estimates of methane emissions, perhaps including integrated top-down monitoring, focusing on the largest methane emission sources. The Air District should consider adopting requirements for such additional measurements, including coordination with other agencies, and especially the State of California.

CONCLUSIONS

Based on the material that it has considered, its deliberations, and its collective expertise and experience, the Council has reached the following conclusions:

- Key Question: The Council has concluded that facility-level caps on refinery GHG emissions likely would not be effective in mitigating global climate change. GHG reduction policies are effective in providing climate protection only if total global GHG emissions are reduced, and if leakage occurs, which is likely, refinery GHG caps would not provide such protection.
- Policy Recommendation: Rather than caps, the Air District should continue to encourage or require Bay Area refineries to reduce GHG emissions by methods that reduce the total global GHG emissions. Such policies should minimize leakage risk, focus on the largest GHG sources (e.g., process boilers and heaters, FCCUs), and incorporate increased fugitive methane emission monitoring and control. The Air District also should encourage State regulators to implement state-wide refinery policies on these topics.
- Related Policy Recommendation: Toxics and criteria pollutants should be regulated directly through established programs, rather than indirectly as co-benefits of GHG reduction policies. The most effective place for Bay Area GHG emissions policy is within a comprehensive multipollutant strategy that accounts for the realities of conflicting effects where present.
- Related Policy Recommendation: The Air District should continue to coordinate with CARB and other agencies when expanding its role in GHG emission reduction. The Air District's collaboration with CARB on landfills provides a template for such partnering. Because the relevant GHG inventory is global, such partnering is crucial to efficacy. Areas for continued partnering include electric vehicles, reduction of vehicle miles travelled, best practices for "top-down" methane emission monitoring and reduction, and best practices for monitoring and reduction of emissions of other high GWP sources, especially "super-emitters."

ATTACHMENT A
Advisory Council Members

Pursuant to California Health and Safety Code § 40260-40268, the Advisory Council consists of seven members "skilled and experienced in the fields of air pollution, climate change, or the health impacts of air pollution," and the Air District Board Chair (or their representative) as an ex-officio member. Council members are appointed by the Air District Board and are "selected to include a diversity of perspectives, expertise, and backgrounds." Members of the Advisory Council include:

Member	Background	Air Pollution	Health	Climate
Stan Hayes	Member, Advisory Council (1995-2007, 2009-) and former chair; emeritus Principal, Ramboll Environ; air-related research consulting	X	X	X
Severin Borenstein	Professor of Business Administration and Public Policy, Haas School of Business, University of California, Berkeley			X
Tam Doduc	Member and former chair, State Water Resources Control Board; served as Deputy Secretary, Cal/EPA, directed environmental justice	X	X	
Robert Harley	Professor, Civil Engineering, Chair, Energy, Civil Infrastructure and Climate Environmental Engineering, University of California, Berkeley; former member, Advisory Council	X		
Michael Kleinman	Professor, Environmental Toxicology, Co-Director, Air Pollution Health Effects Laboratory, Adjunct Professor, College of Medicine, University of California, Irvine	X	X	
Tim Lipman	Co-Director, Transportation Sustainability Research Center, energy and environmental technology, economics, and policy researcher and lecturer; University of California, Berkeley	X		X
Jane CS Long	Chair, California's Energy Future Committee, California Council on Science and Technology			X

ATTACHMENT B
Process and Speakers

DELIBERATIVE PROCESS

Presentations to the Council were made by more than a dozen speakers from the Air District, CARB, the California Energy Commission (CEC), and various interested stakeholders. A full list of speakers is provided below.

Speakers included Richard Corey, Executive Officer, CARB; Jack P. Broadbent, Executive Officer/APCO and other senior management and staff of the Air District; and senior representatives of Communities for a Better Environment, 350 Bay Area (by letter), the California Council for Environmental and Economic Balance, and the Western States Petroleum Association.

Council deliberation was conducted in five full-day meetings on December 3, 2015, and February 3, April 25, July 19, and October 3, 2016.

SPEAKERS

- Bay Area Air Quality Management District
  - Jack P. Broadbent, Executive Officer/APCO
  - Brian Bunger, General Counsel
  - Jeff McKay, Deputy APCO
  - Jim Karas, Director of Engineering
  - Henry Hilken, Director of Planning and Climate Protection

- California Air Resources Board
  - Richard Corey, Executive Officer
  - Sam Wade, Chief, Transportation and Fuels Branch
  - Jason Gray, Manager, Climate Change Market Monitoring Section

- California Energy Commission – Gordon Schremp, Senior Fuels Specialist

- Stakeholders
  - Communities for a Better Environment (CBE) – Greg Karras
  - 350 Bay Area – Letter
  - California Council for Environmental and Economic Balance (CCEEB) and Western States Petroleum Association (WSPA) – Bill Quinn and Berman Obaldia; Gary Rubenstein, Sierra Research on behalf of CCEEB and WSPA

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Stan Hayes and Members
of the Advisory Council

From: Jack P. Broadbent
Executive Officer/APCO

Date: September 16, 2016

Re: Air District Clean Air Plan: Areas for Future Focus

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Air District is updating the 2010 Bay Area Clean Air Plan. The updated Clean Air Plan/Regional Climate Protection Strategy (Plan) will be a roadmap for the Air District's efforts over the next few years to reduce air pollution and protect public health and the global climate. The 2017 Plan is required by the California Clean Air Act to identify potential rules, control measures, and strategies for the Air District to implement in order to meet state ambient air quality standards for ozone or "smog." The Plan also addresses measures and programs to reduce emissions of fine particulates and toxic air contaminants. In addition, the Bay Area's first-ever comprehensive Regional Climate Protection Strategy will be included in the 2017 Plan - which will identify measures that the Air District can pursue to reduce greenhouse gas emissions throughout the Bay Area.

DISCUSSION

The 2017 Plan will also include discussion of topics that may be appropriate for potential rules, research, control measures, and strategies in the future. The Air District will ask for the Advisory Council's expertise in considering topics that should be included in this forward-looking portion of the Plan. During these deliberations, the Council may wish to provide input on topics such as the evolving understanding of the health effects of air pollutants, the Air District's role in reducing Vehicle Miles Travelled in the Bay Area, the Air District's role in electrification of transportation in the Bay Area, the Air District's role in de-carbonizing power generation in the Bay Area, and the possibility of the Air District supporting "tipping point" technologies or policies that could have state-wide effects. These topics are examples, and the Air District seeks the Advisory Council's opinion to include these or other topics.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Henry Hilken
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 12, 2016

Re: Public Hearing to Consider Adoption of Proposed Amendments to Regulation 9: Inorganic Pollutants, Rule 13: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants for Portland Cement Manufacturing and adoption of a Negative Declaration pursuant to the California Environmental Quality Act (CEQA)

RECOMMENDED ACTION

Recommend the Board of Directors:

- Adopt amendments to Regulation 9, Rule 13: Nitrogen Oxides, Particulate Matter and Toxic Air Contaminants from Portland Cement Manufacturing; and

- Direct staff to file a Notice of Exemption from California Environmental Quality Act review with the County Clerk.

BACKGROUND

On September 12, 2012, the Board of Directors adopted Regulation 9, Rule 13: Nitrogen Oxides, Particulate Matter and Toxic Air Contaminants from Portland Cement Manufacturing ("Rule 9-13"), setting lower emission standards for nitrogen oxides (NOx), particulate matter (PM), and reducing risk from toxic air contaminants (TAC). The rule also contains a 10% opacity standard for miscellaneous operations at the facility and sets a number of operational requirements to reduce fugitive dust from quarrying, conveying and transport operations. The rule also contained requirements to reduce health risk that resulted in construction of a single, higher stack to replace 32 ground level emission points. The rule requirements became effective on September 9, 2013 at the one facility currently impacted, the Lehigh cement kiln near Cupertino.

The adoption of this rule has led to emissions reductions, reduced health risk, more accurate monitoring, improved dust mitigation and enhanced enforceability. However, there is a technical problem with the ammonia limit in the rule. The rule requires the injection of ammonium hydroxide into the kiln to control NO_X. The rule sets an ammonia limit to guard against excessive emissions due to over-use of the ammonium hydroxide. This limit was set without the benefit of data about the inherent variability of nitrate in the limestone feedstock used to make cement. The nitrate in the feedstock is converted to ammonia in the kiln. The unanticipated variability of nitrate

levels in the feedstock can cause the facility to exceed its regulatory limit for ammonia independent of the amount of ammonium hydroxide injected.

DISCUSSION

Staff has developed changes to the ammonia standard that will remedy the issue with the current ammonia limit and allow the entire rule to be incorporated into the facility's Title V permit, thereby becoming federally enforceable. Proposed amendments to Rule 9-13 will address ammonia emissions by establishing a fixed exhaust ammonia concentration over a longer averaging time while ensuring public health is protected and guarding against nuisance odors.

Pursuant to the California Environmental Quality Act (CEQA), the Air District has concluded that the proposed amendments to Rule 9-13 are exempt under CEQA guidelines Section 15301, Class 1. The rule amendment would involve negligible or no expansion of an existing use. Class 1 exemptions consist of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. Air District Staff will file a Notice of Exemption with the County Clerk after adoption by the Board of Directors.

RULE DEVELOPMENT PROCESS

The staff met several times with concerned stakeholders in Cupertino and also communicated closely with Lehigh. There were two opportunities for Lehigh and concerned stakeholders to review and comment on the draft rule amendments, before finalizing the proposed amendments.

A public hearing notice, the proposed Rule 9-13, the staff report, and the socioeconomic analysis are available on District's website at http://www.baaqmd.gov/rulehearings.

BUDGET CONSIDERATIONS/FINANCIAL IMPACTS

The amendments to Rule 9-13 will change the ammonia standard in the rule. There will be no budget implications for the Air District.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Greg Nudd
Reviewed by: Eric Stevenson

Attachments: 13A: Proposed Amended Rule
13B: Final Staff Report
13C: Appendix A Interoffice Memo: Ammonia Air Dispersion Anaysis
13D: Appendix B Socio Economic Report
13E: Comments Received and Staff Response

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 13
NITROGEN OXIDES, PARTICULATE MATTER, AND TOXIC AIR CONTAMINANTS FROM PORTLAND CEMENT MANUFACTURING

INDEX

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 13
NITROGEN OXIDES, PARTICULATE MATTER, AND TOXIC AIR CONTAMINANTS FROM PORTLAND CEMENT MANUFACTURING

(Adopted September 17, 2012)

9-13-100 GENERAL

9-13-101 Description: This rule limits the emissions of nitrogen oxides, particulate matter, and toxic air contaminants from the manufacture of Portland cement.

9-13-200 DEFINITIONS

9-13-201 24-Hour Rolling Average: The arithmetic mean of the emissions as prescribed in Section 9-13-301 of the most recent 24 hours of operation of the kiln. Each hour initiates a new rolling average period.

9-13-202 30-Operating Day Rolling Average: The arithmetic mean of the emissions as prescribed in Section 9-13-301 of the most recent 30 operating days. Each operating day initiates a new rolling average period.

9-13-203 Adequately Wetted: Sufficiently moistened with water to minimize the release of particulate matter into the ambient air as determined by the provisions of Section 9-13-611.

9-13-204 Clinker: The product of feedstock sintered in a kiln which is then ground and mixed with additives to make cement.

9-13-205 Clinker Cooler: Equipment into which clinker leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.

9-13-206 Dioxins and Furans (D/F): Tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzodioxins and furans.

9-13-207 HEPA Filter: High Efficiency Particulate Air filter used to remove particles less than 1 micron in diameter operating at removal efficiencies of 99.9 percent or greater.

9-13-208 Kiln: Any device including associated preheater and precalciner devices that produce clinker by heating limestone and other raw materials for subsequent production of Portland cement.

9-13-209 Miscellaneous Operations: Any activity performed at the facility that could generate emissions of fugitive dust. Examples of miscellaneous operations include: material conveyance and transporting, vehicular traffic, shoveling and sweeping, and material storage.

9-13-210 Nitrogen Oxides (NOx) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO_2) in the flue gas, collectively expressed as nitrogen dioxide.

9-13-211 Operating Day: A calendar day during which Portland cement is manufactured by the kiln. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates and excludes any measurements made during the daily 24-hour period when the kiln was not operating or was in startup or shutdown.

9-13-212 Particulate Matter: Any material that is emitted as liquid or solid particles or gaseous material which becomes filterable at the testing temperatures specified in the referenced test method.

9-13-213 Portland Cement Manufacturing Facility: Any facility that produces Portland cement or associated products, as defined in the Standard Industrial Classification Manual as Industry Number 3241, Portland Cement Manufacturing.

9-13-214 Shutdown: The period of time between when kiln raw material feed and fuel to the kiln begin to be decreased to reduce the kiln operating temperature until both feed

and fuel are no longer fed into the kiln and it has ceased operation. A shutdown period shall not last more than 24 hours.

9-13-215 **Startup:** The period of time between when fuel is first introduced into the kiln to heat it and when the kiln operating temperature reaches normal operating limits and raw material feed begins. A startup period shall not last longer than 36 hours.

9-13-216 **TEQ:** The international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and –dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

9-13-217 **Total Hydrocarbon (THC):** For the purposes of this rule, total hydrocarbon emissions measured as propane, that also serve as a surrogate for the emissions of organic HAP compounds, as measured in accordance with Section 9-13-606.

9-13-218 **Total Organic HAP:** For the purposes of this rule, the sum of the concentrations of compounds of formaldehyde, benzene, toluene, styrene, m-xylene, p-xylene, o-xylene, acetaldehyde, and naphthalene as measured in accordance with Section 9-13-607.

9-13-219 **Track-Out:** Any bulk material that adheres to or agglomerates on the exterior surfaces of motor vehicles, haul trucks, and/or mobile equipment, including tires and that has fallen or been deposited onto a paved public roadway.

9-13-220 **182-Operating Day Rolling Average:** The arithmetic mean of the emissions as prescribed in sections 9-13-301 of the most recent 182 operating days. Each operating day initiates a new rolling average period.

9-13-300 STANDARDS

9-13-301 **Emission Limits:** Effective September 9, 2013, no person shall operate a Portland cement manufacturing facility unless the following emission limits are met:

301.1 The 30-operating day rolling average of nitrogen oxides (NOx) emissions from the kiln shall not exceed 2.3 pounds per ton of clinker produced;

301.2 Particulate matter (PM) emissions from the kiln shall not exceed 0.04 pounds per ton of clinker produced, based on a three run test average;

301.3 PM emissions from the clinker cooler shall not exceed 0.04 pounds per ton of clinker produced, based on a three run test average;

301.4 The ~~24-hour~~182-operating day rolling average of ammonia (NH_3) emissions from the kiln shall not exceed ~~baseline emission levels by more than 10~~270 ppmv, dry at 7 percent oxygen;

301.5 The 24-hour rolling average dioxins and furans (D/F) emissions from the kiln shall not exceed 0.2 ng-TEQ/dscm at 7 percent oxygen;

301.6 The 30-operating day rolling average of mercury emissions from the kiln shall not exceed 55 pounds per million tons of clinker produced;

301.7 The 30-operating day rolling average of total hydrocarbon (THC) emissions from the kiln shall not exceed 24 ppmv, dry at 7 percent oxygen; or as an alternative, provided the provisions of Section 9-13-403 have been completed, the 30-operating day rolling average of total organic HAP emissions from the kiln shall not exceed 12 ppmv, dry at 7 percent oxygen;

301.8 The 30-operating day rolling average hydrogen chloride (HCl) emissions from the kiln shall not exceed 3 ppmv, dry at 7 percent oxygen.

9-13-302 **Opacity:** Effective September 9, 2013, no person shall operate a Portland cement manufacturing facility with emissions to atmosphere from any miscellaneous operation or emission point other than from the kiln or clinker cooler that are equal to or greater than ten percent opacity for more than three minutes aggregated in any one-hour period, determined in accordance with Section 9-13-609, or half as dark in shade as that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines. Emissions to the atmosphere from the kiln and clinker cooler are subject to the opacity limit in Regulation 6, Rule 1.

9-13-303 **Stack Requirements:** Effective September 9, 2013, no person shall operate a Portland cement manufacturing facility unless emissions from the kiln are monitored

as per Section 9-13-501 and enter the atmosphere from a point or points that, at maximum potential to emit, or maximum permitted emission level, when combined with other facility emissions, have been demonstrated not to exceed the notification threshold established under Air Toxics "Hot Spots" Information and Assessment Act requirements as codified in California Health and Safety Code Section 44300 et al. and the Districts' Air Toxics Hot Spots program.

9-13-304 Fugitive Dust Mitigation Control Measures: Any person operating a Portland cement manufacturing facility shall at a minimum implement the following measures to mitigate emissions of fugitive dust:

304.1 Accessed disturbed open areas and unpaved roads shall be watered as needed to maintain adequate wetness.

304.2 In areas that have not had vehicular traffic for more than 7 days, the exposed soils shall be stabilized by the use of water, aggregate, or non-toxic soil stabilizers. Vehicular access to these designated areas shall be limited through the use of signage and vehicular access barricades.

304.3 Ground covering on disturbed areas shall be reestablished as soon as reasonably possible through the use of aggregates, berms, or permanent blockage in combination with hydro-seeding or seeding and watering.

304.4 An operational water truck shall be onsite at all times to prevent fugitive dust emissions. Water shall be applied as needed to comply with Section 9-13-302 for all mining, aggregate, and cement plant operations. Application of water may be curtailed during wet weather. All water truck operations shall be recorded in a District approved log and include date, times, locations and activities.

304.5 Material Storage Piles: Fugitive dust emissions from material storage piles shall be controlled by one or more of the following methods:

5.1 Fine, dry material not amenable to water applied dust suppression shall be covered and have wind breaks installed;

5.2 Water and/or soil stabilizers shall be employed to reduce windblown dust. Water may be supplied by water truck or water spray equipment; or

5.3 In areas surrounding material storage piles, soils shall be stabilized by the use of water, aggregate, or non-toxic soil stabilizers.

304.6 Material Transfer Processes: Fugitive dust emissions resulting from all transfer processes, including but not limited to the transfer of material to or from stockpiles, belt conveyors, front end loading equipment, vehicular transport, and bin transfer which involves a free fall of mined, purchased, or manufactured materials, shall be controlled by one or more of the following mitigation methods:

6.1 Drop heights shall be minimized for all front end loaders transferring materials for mobile transport (quarry truck, transfer truck, bulk truck);

6.2 Incorporation of wind breaks, enclosures, and area covers;

6.3 Installation of temporary or permanent water spray systems, or water truck incorporation to increase material moisture content and suppress fugitive dust emissions from infrequent material transfer operations; or

6.4 HEPA filter vacuuming of any spilled cement powder during cement bulk loading operations into mobile equipment.

304.7 Track-out Prevention and Control: The following mitigation methods shall be employed to prevent fugitive dust emissions from track-out:

7.1 All vehicles and equipment owned or operated by the Portland cement manufacturing facility shall be washed prior to exiting the facility onto public paved streets.

7.2 All other vehicles shall be washed prior to exit onto public paved streets if they have traveled on unpaved roads on the facility.

7.3 A street sweeper shall be operated at least once a day to remove visible track-out from the paved roadway between the plant entrance and the facility boundary.

304.8 Vehicle Traffic Speed: The speed of all vehicles and mobile equipment traveling within the facility shall be limited to 15 miles per hour (mph) or less. The operator of the facility shall provide training, signage, and maintain video and photographic monitoring, and speed sensors to ensure compliance with the posted speed limit. The operator of the facility shall maintain records demonstrating compliance with this provision through enforcement of the following actions in progressive order:

8.1 Customers or visitors found to be travelling in excess of the posted speed limit; 1) issue verbal warning; 2) facility access to be limited; and 3) facility access to be denied,

8.2 Employees found to be travelling in excess of the posted speed limit: 1) issue verbal warning; and 2) progressive discipline up to and including termination.

8.3 Contractors and subcontractors deemed to be travelling in excess of the posted speed limit: 1) issue verbal warning; and 2) site removal and future facility access denied.

304.9 Quarries: All quarried and graded materials shall be kept adequately wet to minimize airborne dust. Blasting shall not occur if hourly averaged wind speeds are 25 mph or greater.

304.10 Material Handling Equipment: At the start of each shift or material handling equipment start-up, the operators shall assess the operational status of the water spray abatement equipment or confirm that the materials are sufficiently wet as to not require water spray abatement and record these determinations in a district approved log.

304.11 Housekeeping and Material Cleanup: All housekeeping activities shall be performed so as to minimize fugitive dust emissions.

304.12 Training: Employees, contracted and subcontracted personnel shall be initially and at least annually thereafter be trained on techniques and best management practices to avoid fugitive dust emissions. Training shall include all relevant procedures identified in facility plans including but not limited to the Fugitive Dust Control Plan, and Operation and Maintenance Plan, and Preventative Maintenance Program for Dust Control. Records shall be maintained to demonstrate compliance with this provision.

9-13-400 ADMINISTRATIVE REQUIREMENTS

9-13-401 Initial and Annual Demonstration of Compliance: No later than 30 operating days after September 9, 2013, any person manufacturing Portland cement shall conduct an initial demonstration of compliance with Section 9-13-301 by conducting a source test according to the methods referenced in Sections 9-13-601 through 608. An annual demonstration of compliance with Sections 9-13-301.1 through 301.4, 301.6 and 301.8 shall be conducted at least once each calendar year following the initial test, and not more than 15 months after the most recently conducted annual demonstration of compliance. A demonstration of compliance with Sections 9-13-301.5 and 301.7 shall be conducted at least once every 30 months.

~~**9-13-402 Baseline Ammonia Emission Level Determination:** No later than 90 operating days after rule adoption, any person manufacturing Portland cement shall begin monitoring ammonia emissions from the kiln for the purpose of establishing a baseline emission level for kiln operations prior to the installation and subsequent operation of NOx control equipment. Monitoring shall be conducted according to Section 9-13-501, and determination of the baseline ammonia emission level shall be calculated as specified in regulation 9-13-610.~~

9-13-403 Total Organic HAP Emissions Test: No later than 30 operating days after September 9, 2013, any person manufacturing Portland cement seeking to satisfy the alternative emission limit in Section 9-13-301.7, shall conduct a source test to determine emissions of total organic HAP according to the methods referenced in Section 9-13-607. Each source test shall consist of three separate runs conducted

for at least 1 hour. Concurrent with the source test, THC emissions shall be determined by operating the parametric monitor specified in Section 9-13-501.2. The duration of the source test shall be 3 hours and the average THC concentration during the 3-hour test shall be calculated. A correlation between Total Organic HAP and THC concentrations shall be determined based on these results. This correlation procedure shall be conducted thereafter at least once every 30 months.

9-13-404 Health Risk Assessment: Prior to construction or modification to emission points from the kiln or clinker cooler, the operator of a Portland cement manufacturing facility shall complete and submit to the District a health risk assessment conducted according to Health Risk Assessment Guidelines adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for use in the Air Toxics Hot Spots Program. District review of the HRA shall be conducted concurrent to review of application of authority to construct and permit to operate submitted for emission point modifications.

9-13-405 Dioxins and Furans Emissions Test: No later than 30 operating days after September 9, 2013, any person manufacturing Portland cement shall conduct a source test to determine emissions of dioxins and furans (D/F) according to the methods referenced in Section 9-13-604. Each source test shall consist of three separate runs conducted under representative conditions. Concurrent with the source tests, the temperature of the kiln exhaust gas at the inlet to the PM control device shall be determined by operating the parametric monitor specified in Section 9-13-501.2. The duration of each run shall be at least 3 hours and the average temperature during the 3-hour run shall be calculated. A correlation between D/F concentrations and temperature shall be determined based on these results. This correlation procedure shall be conducted thereafter at least once every 30 months.

9-13-500 MONITORING AND RECORDS

9-13-501 Emissions Monitoring: Any person who operates a Portland cement manufacturing facility subject to Section 9-13-301 shall provide, properly install, maintain in good working order, and operate the following emission monitoring equipment:

501.1 Continuous Emissions Monitoring: A continuous emission monitoring system (CEMS) for each emission point from the kiln, to demonstrate compliance with the provisions of this rule by measuring nitrogen oxides (NOx), and either oxygen (O_2) or carbon dioxide (CO_2). The CEMS shall meet the requirements of the District Manual of Procedures, Volume V, Continuous Emission Monitoring, Policy and Procedures. Each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen (15) minute period.

501.2 Parametric Monitoring: Suitable instruments to monitor continuously for each emission point from the kiln, to demonstrate compliance with the provisions of this rule by measuring ammonia (NH_3), temperature for dioxins and furans (D/F), mercury (Hg), total hydrocarbon (THC), hydrochloric acid (HCl), operational integrity of PM control device, and volumetric flow. The parametric monitors shall meet the requirements specified in the most recent revision to 40 CFR, Part 60 and Appendices.

9-13-502 Production Monitoring: Any person who operates a Portland cement manufacturing facility subject to Section 9-13-301 shall determine hourly clinker production by one of the following two methods:

502.1 Provide, properly install, maintain in good working order, and operate permanent weigh scale system to measure and record weight rates of the amount of clinker produced in tons of mass per hour. The system of measuring hourly clinker production shall be maintained within 5% accuracy, and the accuracy of the system shall be verified and recorded on a weekly basis. Hourly clinker production rates shall be totaled every 24 hours to provide a daily production rate.

502.2 Provide, properly install, maintain in good working order, and operate permanent weigh scale system to measure and record weight rates of the amount of feed into the kiln in tons of mass per hour. The system of measuring hourly feed into the kiln shall be maintained within 5% accuracy, and the accuracy of the system shall be verified and recorded on a weekly basis. Calculate the hourly clinker production rate using feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio shall be updated monthly. If the ratio is changed at monthly reconciliation, the new ratio shall be used to determine clinker production rates going forward but shall not change previously estimated production rates retroactively. Hourly clinker production rates shall be totaled every 24 hours to provide a daily production rate.

9-13-503 Records: Any person subject to the requirements of this rule shall keep records of the following:

503.1 The results of any source testing conducted to determine compliance with Section 9-13-301 as specified in Section 9-13-401.

503.2 The continuous emission monitoring system (CEMS) measurements for NOx, and diluents O_2 or carbon dioxide in ppmv; and hourly (lbs/hour) and daily (lbs/day) NOx emissions from the kiln.

503.3 The parametric monitoring measurements for NH_3, D/F, Hg, HCl, and THC; and hourly (lbs/hour) and daily (lbs/day) NH_3, Hg, HCl, and THC emissions from the kiln.

503.4 The clinker production rate in tons per day for each day of operation of the kiln.

503.5 The calculated NOx, PM, and Hg emission rates from the kiln in pounds per ton of clinker produced for each day of operation of the kiln.

503.6 The calculated PM emission rate from the clinker cooler in pounds per ton of clinker produced for each day of operation of the kiln.

503.7 The daily average NH_3, HCl, and THC concentration emitted in ppmv for each day of operation of the kiln.

503.8 The calculated Total Organic HAP concentration emitted in ppmv for each day of operation of the kiln.

503.9 The calculated daily average D/F concentration emitted in ng-TEQ/dscm for each day of operation of the kiln.

503.10 The date, time, and duration of any startup, shutdown or malfunction in the operation of any unit, emissions control equipment or emission monitoring equipment.

503.11 The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of all CEMS and parametric monitors required by this rule.

Such records shall be retained for a minimum of 60 months from date of entry and be made available to District staff upon request.

9-13-504 Reporting Requirements: A person subject to the requirements of Sections 9-13-301 shall meet the following reporting requirements:

504.1 Report to the APCO any exceedance of Section 9-13-301 in accordance with the requirements of Regulation 1-522 for continuous emission monitoring systems (CEMS), and Regulation 1-523 for parametric monitors.

504.2 Submit a written report for each calendar month to the APCO. The report shall be due on the 30th day following the end of the calendar month and shall include:

2.1 A summary of the data obtained from the CEMS or equivalent parametric monitoring system; and

2.2 The date, time, duration, and magnitude of emissions in excess of the appropriate standards; the nature and cause of the excess (if known); the corrective actions taken; and the preventive measure adopted.

9-13-600 MANUAL OF PROCEDURES

9-13-601 **Determination of Nitrogen Oxides:** Compliance with the emission limit of Section 9-13-301.1 shall be determined by the source tests specified in Section 9-13-401 using ST-13A (nitrogen oxides), ST-14 (oxygen), and ST-5 (carbon dioxide), and by the continuous emission monitors that have been installed pursuant to Section 9-13-501 and meet the requirements of Volume V of the District Manual of Procedures and the federal requirements specified in the most recent revision of the Code of Federal Regulations, Title 40 (40 CFR), Parts 60, 63 and Appendices.

9-13-602 **Determination of Particulate Matter:** Compliance with the limits set forth in Section 9-13-301.2, and 301.3 shall be determined by the source tests specified in Section 9-13-401 using United States Environmental Protection Agency (EPA), Method 5 – Determination of Particulate Matter from Stationary Sources and by the parametric monitors that have been installed pursuant to Section 9-13-501 and meet either the requirements of EPA Fabric Filter Bag Leak Detection Guidance (1997) or the requirements of EPA performance specification 11 for PM CEMS, and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-603 **Determination of Ammonia:** Compliance with the ammonia emission limit of Section 9-13-301.4 shall be determined by the source tests specified in Section 9-13-401 using the methods set forth in District Manual of Procedures, Volume IV, ST-1B and EPA Method 350.3, and by the parametric monitors that have been installed pursuant to Section 9-13-501 and meet the requirements of EPA Preliminary Performance Specification PPS-001 for Ammonia CEMS.

9-13-604 **Determination of Dioxins and Furans:** Compliance with the D/F emission limit of Section 9-13-301.5 shall be determined by the source tests specified in Section 9-13-401 using the methods set forth in EPA Method 23 and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-605 **Determination of Mercury:** Compliance with the mercury emission limit of Section 9-13-301.6 shall be determined by the source tests specified in Section 9-13-401 using the methods set forth in District Manual of Procedures, Volume IV, ST-10, and by the parametric monitors that have been installed pursuant to Section 9-13-501 and meet the requirements EPA Performance Specifications 12A, or 12b and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-606 **Determination of Total Hydrocarbon:** The THC parametric monitors that have been installed pursuant to Section 9-13-501 shall meet the requirements of EPA Performance Specification 8A and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-607 **Determination of Total Organic HAP:** Compliance with the Total Organic HAP emission limits of Section 9-13-301.7 shall be determined by the source tests specified in Section 9-13-403 using the methods set forth in EPA method 320 or ASTM D6348-03 and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-608 **Determination of Hydrochloric Acid:** Compliance with the hydrochloric acid emission limit of Section 9-13-301.8 shall be determined by the source tests specified in Section 9-13-401 using the methods set forth in EPA Method 320, 321 and by the parametric monitors that have been installed pursuant to Section 9-13-501 and meet the requirements of EPA Performance Specification 15 and the federal requirements specified in the most recent revision to 40 CFR, Parts 60, 63 and Appendices.

9-13-609 **Determination of Visible Emissions:** Visible emissions shall be determined by Manual of Procedures, Volume 1 – Enforcement Procedures, Part 1: Evaluation of Visible Emissions.

~~**9-13-610** **Baseline Ammonia Emission Level Calculation:** The following methodology shall be used to calculate baseline ammonia emissions in order to determine compliance with Section 9-13-301.4:~~

~~610.1 The baseline period consists of the period immediately preceding the initial operation of control equipment installed to comply with Section 9-13-301.1. The baseline period shall not be less than 6 months in duration. The owner or operator of the Portland cement manufacturing facility shall have sufficient records of the kiln's operation to substantiate the emission rate during the baseline period.~~

~~610.2 Baseline emission level, expressed in ppmv, dry at 7 percent oxygen, is the median of the 6 monthly average values of the ammonia (NH_3) emissions from the kiln.~~

9-13-611 Determination of Adequately Wetted: A sample of at least one quart in volume shall be taken from the top three inches from the surface of unpaved road, bare area, or from the surface of a stockpile. The sample shall be poured out from a height of four feet onto a clean hard surface. The material shall be considered to be adequately wetted if there is no observable dust emitted when the material is dropped.

AGENDA: 13B – FINAL STAFF REPORT

Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105

BAAQMD Regulation 9, Rule 13:

NITROGEN OXIDES, PARTICULATE MATTER, AND TOXIC AIR CONTAMINANTS FROM PORTLAND CEMENT MANUFACTURING

Final Staff Report

September 2016

Prepared by:

Robert Cave
Senior Air Quality Specialist
Meteorology, Measurement, and Rules Division

ACKNOWLEDGEMENTS

The following District staff members participated in the development of the proposed amendments to this rule, and deserve recognition for their important contributions:

Thu Bui – Engineering

Ted Hull - Engineering

John Marvin – Compliance and Enforcement

Katherine Hoag – Meteorology, Measurement, and Rules

David Holstius – Planning and Climate Protection

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APPENDICES

1.0 Executive Summary

The Bay Area Air Quality Management District ("Air District") is proposing amendments to Regulation 9, Rule 13: *Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing* ("Regulation 9-13" or "the rule"). Regulation 9-13 was adopted at a Public Hearing by the Board of Directors on September 19, 2012. The rule set emissions standards for nitrogen oxides (NOx), particulate matter (PM), and toxic air contaminants (TACs). The rule also requires analysis of health risk effects to the surrounding community from any modifications to the emissions stack of the kiln, and provides fugitive dust control and mitigation measures at the facility to further reduce particulate emissions. The proposed amendments will address technical problems with the current ammonia limit in the rule and will not result in changes in emissions from the facility.

Portland cement manufacturing is a multi-billion-dollar industry in the United States, with annual domestic consumption of over 500 pounds per person. One hundred plants across the country produce 85 to 90 percent of this total with imports accounting for the remaining portion.

Regulation 9-13 contains an ammonia standard to prevent excess emissions from control equipment installed to meet the NO_X standard in the rule. The Lehigh facility near Cupertino has a selective non-catalytic reduction (SNCR) system which injects an ammonium hydroxide solution (ammonium) to reduce NOx and emissions limits are often imposed on such systems to prevent excess emissions (ammonia "slip"), typically limited to 10 parts per million by volume (ppmv) above background concentrations. The averaging period for the ammonia standard as it is currently stated in the rule is of insufficient duration to account for the variable background ammonia in the exhaust stream caused by the inherent variability of nitrate content in the limestone feedstock used to make cement. Additionally, the regulated procedure for determining background ammonia levels is similarly problematic. Until this technical issue is resolved, the requirements of Regulation 9-13 cannot become federally enforceable through incorporation in the Title V permit for the facility.

In order to enable federal enforceability of the requirements of the rule, Air District staff recommends amending sections of the rule pertaining to the ammonia emissions (standard and baseline determination) to allow for an averaging period that better accommodates background concentration variability.

Simultaneous rule development efforts are underway to address health risk assessments and particulate matter more generally Air District-wide. These rules are likely to impact the Lehigh Facility. Source testing, research, and evaluation of emissions control methods are ongoing and Staff commits to develop further amendments in the future to address condensable PM and sulfur dioxide (SO_2) emissions and to review and confirm toxic emissions calculation methodologies and consider further measures to protect public health.

2.0 Background

Portland cement is combined with water, gravel, sand, or other aggregate to form concrete, which is used in road building and a variety of other construction projects. Portland cement manufacture is a $10 billion per year industry in the United States. In 2015, Americans consumed 92 million tons of cement nationally, or 575 pounds per person for the year. Approximately 88% of that is produced in the United States with the rest imported primarily from China, Canada, Colombia, Mexico and Korea.

There are 104 Portland cement manufacturing plants operating in 36 states, with 10 in California, two in Northern California, and one in the Bay Area. Lehigh Southwest Cement Plant (Lehigh), located in unincorporated Santa Clara County, west of Cupertino, is the only cement manufacturing facility in the Air District. Consistent with national economic trends, Lehigh steadily decreased production from 2006 until 2010, when they produced 847 thousand tons of clinker (a preliminary stage of cement), a little over half their permitted operating capacity. They began to increase production with the improving economy, but this was limited due to concern over health impacts given the configuration of their emissions profile. After adoption of Regulation 9-13, under the terms of a compliance agreement with the Air District, Lehigh accepted a reduced production limit until they were able to complete modifications to their facility to increase dispersion of pollutants. Having completed these modifications, Lehigh has increased production in 2015 to 1.29 million tons of clinker, a little over three quarters of the permitted amount. Their Air District operating permit limits production of clinker to 1.6 million tons per year.

Prior to installing controls necessary to meet the standards of Regulation 9-13, Lehigh was the Bay Area's largest source of NOx emissions without modern NOx controls such as ultra-low NOx burners, staged combustion, or add-on controls such as selective non-catalytic reduction. The plant has been in operation since 1939, and underwent major modifications in 1981, converting from a wet process to a dry process with a preheater/precalciner kiln. In anticipation of Federal regulatory amendments, Lehigh implemented control systems for TACs. Since adoption of Reg. 9-13, Lehigh has installed a NOx emissions control system and constructed a 300-foot tall centralized emissions stack to obtain more representative monitoring results and reduce health effects through greater dispersion of pollutants.

Portland Cement Kiln Overview

Portland cement is a fundamental ingredient of concrete, consisting of calcium, silicon, aluminum, and iron. These materials are combined in a number of steps requiring careful control to ensure that the final product meets specific chemical and physical specifications required for building and construction needs. Figure 1 shows a schematic diagram of Portland cement manufacturing.

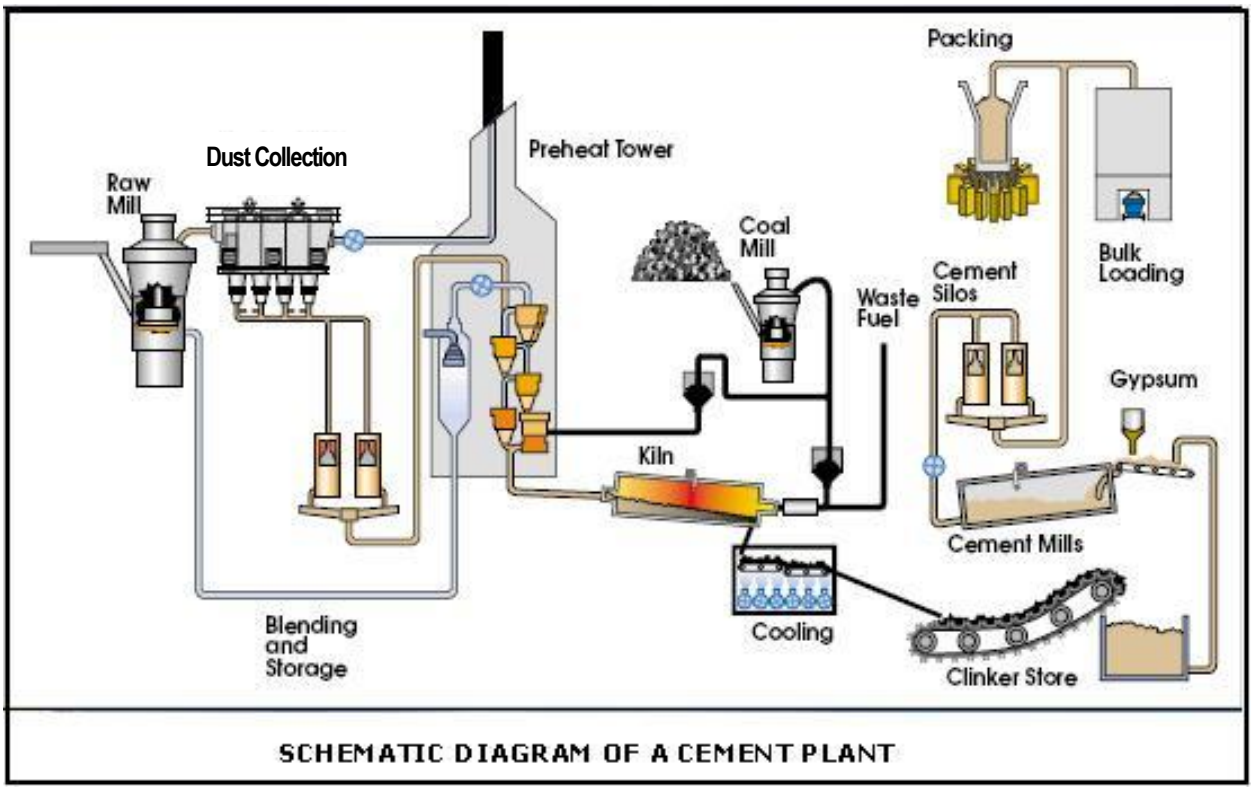
Manufacturing Steps

Portland cement manufacturing is a series of steps which take place at a large industrial facility usually located adjacent to a source of raw materials. Raw materials consist of limestone, shells or chalk, clay, sand, alumina and iron ore. The bulk of these are mined at a quarry, blended, and

ground to a powder. This blended material is subjected to intense heat in a kiln to cause a series of chemical reactions, transforming the powdered raw materials into something called cement clinker. Cement clinker consists of grayish-black pellets the size of marbles or golf balls, which is cooled, ground and mixed with gypsum and other additives to form powdered Portland cement.

In the initial manufacturing step, limestone is mined from a quarry near the plant. At the quarry, the material is reduced to a manageable size (from chair or desk size to softball size) by a two-stage primary crusher before stockpiling and transport to the kiln. The limestone is crushed for a third time and then pre-blended to homogenize the quality of the limestone. It is then mixed with bauxite (a source of alumina) and iron ore before being ground inside a ball mill and further blended to create the required proportions necessary for the desired end product.

Figure 1 – Schematic of Cement Manufacturing Process



In older cement manufacturing plants water is added to the raw materials to form a slurry, and grinding and mixing operations are completed in a slurry form. This aids in conveying the material, but the dry method is ultimately more energy efficient. The Lehigh facility converted from wet to dry process in 1981. In order to produce clinker, the material must be heated to at least 2400 degrees Fahrenheit and this is much easier when the raw materials are dry. At modern plants, the materials are preheated before entering the kiln and at many facilities the process of making cement is begun at this stage in a process called precalcining. A preheater/precalciner tower is utilized at the Lehigh facility to heat the material to approximately 1650 degrees F, and begin the cement manufacturing process prior to the material entering the rotary kiln.

At the heart of the manufacturing process is the cement kiln. The blended mixture of raw material is fed from the preheater/precalciner into the upper end of a tilted rotating cylindrical kiln where it will reach temperatures of 2400 to 3000 degrees F. This intense heat causes the material to fuse and undergo chemical reactions to create cement clinker. The clinker is discharged from the lower end of the kiln where it is cooled and then run through a roll press to reduce the clinker size. Some of this heat is recovered at this stage and routed to the preheater. The clinker is mixed with gypsum and ground one final time to make the final product.

Emissions from Portland Cement Manufacturing

The manufacturing of cement requires the movement and processing of many tons of material as well as the combustion of large amounts of fuel in order to heat that material to extremely high temperatures. Generally, emissions of concern from cement manufacture are criteria pollutants (NOx, SO_2, PM, and VOCs) and toxic air contaminants (TACs) from combustion. Emissions of pollutants are directly attributable to both the fuel combustion and materials processing. The formation of NOx during the manufacture of cement is due to the high temperature, oxidizing atmosphere necessary for clinker formation. Similar to NOx, the formation of SO_2 is a product of the chemical make-up of the raw materials and fuel, as well as the high operating temperatures and oxygen concentration in the kiln. The production of SO_2 is more dependent on the sulfur content of fuel and raw materials however, whereas NOx formation is more dependent on combustion conditions.

Emissions of TACs arise from the presence of these compounds predominantly in the raw materials and the fuel to fire the kiln. Predominant TACs emitted include mercury, hydrochloric acid (HCl), benzene, dioxins and furans, and dependent on the raw materials used, metals such as lead and hexavalent chrome. Particulate emissions arise from crushing, mixing and storage of raw materials, clinker production and cooling, finish grinding, packaging, and from vehicle traffic. For the most part, emissions of metallic TACs are limited at Lehigh due to relatively low levels in raw materials and fuel used at the plant, combined with the high level of control from fabric filtration systems in use at the plant. Mercury emissions are more significant than other metallic TACs due to relatively high mercury levels in the limestone quarried at the facility and because the metal is volatilized by the high temperatures of the kiln. Other TACs emitted from the kiln include hydrochloric acid (HCL), dioxins, furans, and benzene.

Federal Regulations

Two federal rules address air emissions from the manufacture of Portland cement: New Source Performance Standards (NSPS) and National Emission Standard for Hazardous Air Pollutants (NESHAP). EPA generally promulgates NSPS for specific industrial operations to address emissions of criteria pollutants from new, modified, and reconstructed sources. NESHAP addresses emissions of TACs (also known as hazardous air pollutants or HAPs) from both new and existing sources, and may have separate standards for each case.

On August 6, 2010, EPA issued amendments to both NSPS and NESHAP. These were then appealed directly to EPA, and further challenged in Federal Court. On July 18, 2012, as part of a settlement agreement, EPA revised its proposed emissions limits for PM and Organic HAPs, made changes to monitoring requirements, and extended the compliance date to September 10,

2015. The revised NESHAP significantly reduced hazardous (toxic) emissions from new and existing Portland cement kilns. Table 1 illustrates the NESHAP limits. The Lehigh facility has not been modified or reconstructed after the date of applicability specified in the regulation (June 6, 2008) and so is not subject to the emissions standards for new facilities.

Table 1 – 2012 National Emission Standards for Hazardous Air Pollutants		
Pollutant	Existing Facilities	New and Modified Facilities
Mercury	55 lbs/million tons of clinker, averaged over 30 days	21 lbs/million tons of clinker, averaged over 30 days
Dioxins/Furans	0.2 nanograms/dry standard cubic meter (ng/dscm)(TEQ)*, averaged over 24 hours	0.2 ng/dscm (TEQ)*, averaged over 24 hours
Total Hydrocarbons	24 parts per million by volume (ppmv), averaged over 30 days	24 ppmv, averaged over 30 days
Total Organic HAP*	12 ppmv, averaged over 30 days	12 ppmv, averaged over 30 days
Particulate Matter (PM)	0.07 lb/ton of clinker, averaged over 30 days	0.02 lb/ton of clinker, averaged over 30 days
Hydrochloric Acid (HCL)	3 ppmv, averaged over 30 days	3 ppmv, averaged over 30 days

**NOTES: Toxic Equivalent (TEQ) weighs the toxicity of less toxic compounds as fractions of the most toxic compound of the group. The Total Organic HAP standard is an alternative to the Total Hydrocarbon Standard.*

Air District Regulations

The Air District adopted Regulation 9-13 to achieve the maximum feasible, cost effective emissions reductions of NOx and PM in concert with efforts to bring the Lehigh facility into compliance with limits for TACs consistent with the federal NESHAP. As the effective date of the NESHAP requirements was unclear during the development of Regulation 9-13, the Air District incorporated these requirements into the rule. Regulation 9-13's effective date of September 9, 2013 corresponds with that originally proposed for the 2010 amended NESHAP. The equipment and operational modifications necessary to meet the proposed NOx emission limit had the potential to result in excess ammonia emissions, and so an ammonia emissions limit was included in the rule. Significant modifications to the facility were implemented to reduce NOx and TAC emissions and to meet the enhanced monitoring requirements of the rule. Additional requirements of the rule addressed concerns over the configuration of the emission point from the kiln, and the need for enforceable fugitive dust control and mitigation measures.

In addition to Regulation 9-13, Portland cement manufacturing operations are subject to a number of Air District regulations that govern permitting (e.g., Regulation 2-1, 2-2), emissions of toxic or hazardous compounds (Reg. 2-5), and some general or miscellaneous regulations for

individual pollutants (Reg. 6-1 for PM, Reg. 8-2 for Volatile Organic Compounds (VOCs), Reg. 9-1 for SO_2, and Reg. 11-1 for lead). Requirements of all Air District rules are incorporated into the Title V permit for Lehigh along with the applicable federal requirements of the NESHAP and NSPS.

Issues Since Rule Adoption

Regulation 9-13 contains an ammonia standard to prevent excess emissions from control equipment installed to meet the NO_X standard in the rule. The Lehigh facility near Cupertino has a selective non-catalytic reduction (SNCR) system which injects ammonium to reduce NOx and emissions limits are often imposed on such systems to prevent excess emissions (ammonia "slip"), typically limited to 10 ppmv above background. This is a simple matter for sources with steady state operating conditions, such as boilers, furnaces or turbines, but can be problematic for sources with highly variable operations such as cement kilns. The averaging period for the ammonia standard as it is currently stated in the rule is of insufficient duration to account for the variable background ammonia in the exhaust stream caused by the inherent variability of nitrate content in the local limestone feedstock used to make cement. Additionally, the regulated procedure for determining background ammonia levels is similarly problematic. Until this issue is resolved, the requirements of Regulation 9-13 cannot be made federally enforceable through incorporation into the facility's Title V permit.

Air District staff recommends amending sections of the rule pertaining to the ammonia emissions (standard and baseline determination) to allow for replacement of the rolling 24-hour average with a rolling 182-operating day averaging period. In addition, staff recommends deletion of provisions for determining baseline levels and replacement with a fixed standard based on the last three years of operating data. Rule development efforts are underway to address health risk assessments and particulate matter more generally Air District-wide. Source testing, research, and evaluation of emissions control methods are ongoing and staff commits to develop further amendments to address condensable PM and SO_2 emissions and to review and confirm toxic emissions calculation methodologies and consider further measures to protect public health.

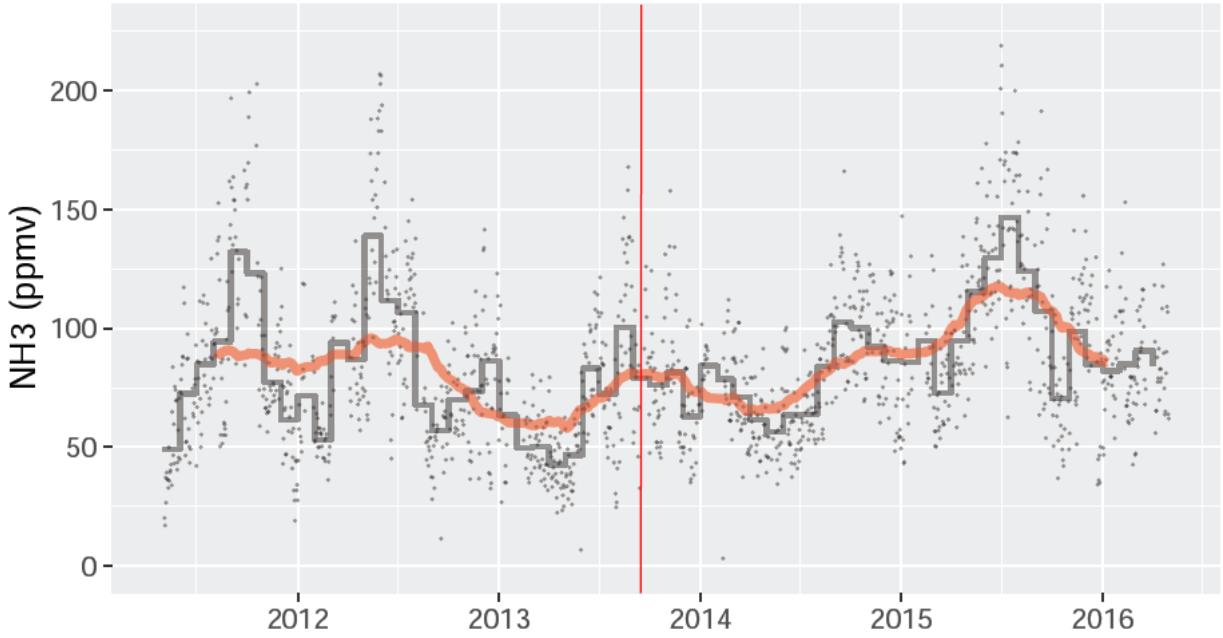
3.0 Technical Review

Ammonia Standard

The limestone used in the manufacture of cement is not purely calcium carbonate, but contains traces of other materials mixed into the rock, including mercury, sulfur compounds, and nitrates. These occur in varying amounts in the limestone quarried in the lands surrounding the kiln at the Lehigh facility. As the limestone undergoes chemical reactions under the intense heat of the cement kiln, these impurities can lead to emissions of mercury, SO_2, and ammonia in similarly varying levels to that found in the feedstock. In the case of nitrates and subsequent ammonia emissions, the level of variability is greater than that anticipated during development of Regulation 9-13. Ammonia emissions are monitored at the facility by a continuous emissions monitoring system (CEMS) that records the ammonia concentration in the emissions train at regular intervals. Lehigh has recorded these monitoring results for the past five years.

Figure 2 below provides a plot of the ammonia concentrations measured at the emission point of the kiln. The dots represent daily averaged values, the grey line indicates monthly values, the orange curve represents the 182-operating day rolling average, and the red line down the center indicates the start of ammonium injection. A review of this data shows that the variability of ammonia levels is consistent over the periods before and after installation of the SNCR system that injects additional ammonium into the kiln to reduce emissions of NOx. The magnitude of this variability far exceeds the increase normally attributed to ammonia slip (10 ppmv), and the time scale far exceeds the 24-hour averaging time currently provided in the rule. It is clear from this data that the ammonia emissions are primarily driven by the nitrate content of the feedstock and not by the ammonium injection for the SNCR system.

Figure 2 – Ammonia Concentrations at the Lehigh Emission point



One concern about ammonia is its potential to cause a nuisance due to its unpleasant odor. The concentration at which people detect ammonia can vary depending on how often one is exposed to the chemical, and so the odor threshold has been documented in various studies as low as 0.04 ppmv, and as high as 57 ppmv. The US Coast Guard Manual provides a value of 46.8 ppmv, the American Association of Railroads says most people can smell ammonia between 0.04 to 20 ppmv, and an odor threshold of between 5 and 50 ppmv is listed for ammonia by the Federal Occupational Safety and Health Administration (OSHA). Most organizations agree that the majority of people can smell ammonia somewhere around 5 ppmv, but there is some evidence that people can lose their ability to detect ammonia after working around it for long periods.

More important than its potential to cause a nuisance, ammonia is a TAC with both acute and chronic effects. For non-carcinogenic compounds such as ammonia, toxicity is expressed as a Reference Exposure Level (REL) which is the air concentration at or below which exposure is unlikely to result in adverse health effects to even sensitive members of the general population through inhalation exposure. According to the California Office of Environmental Health Hazard Assessment (OEHHA), the chronic REL for ammonia is an annual average concentration of 0.3 ppmv, and the acute REL is 4.5 ppmv for an exposure time of one hour. Exposure to ammonia in concentrations above these RELs can cause irritation of the eyes, nose and upper respiratory tract, with coughing and difficulty breathing.

The Air District routinely uses air dispersion modeling to assess the health impacts of existing facilities. EPA's approved AERMOD model utilizes onsite and local meteorology data, surrounding terrain heights, takes into account variations in surface heating and friction from different land use applications near the site, along with emission rates, stack characteristics and downwind locations of individuals offsite. The results of this modeling provide the maximum expected ambient concentration for a particular emission rate which is directly tied to stack concentration. The model is designed to be conservative in nature, meaning that it is more likely to over-predict exposures than under-predict them.

Air District staff conducted an air dispersion modeling analysis to evaluate the relationship between the concentration of ammonia in exhaust gasses from the Lehigh Cement Kiln and the potential health hazard at the maximally exposed offsite location. This potential health hazard is determined by the ambient air concentration of ammonia as compared to the RELs discussed previously. For a given stack concentration or emission rate, the model can be used to estimate the maximum one-hour average concentration at a given location for the acute REL, as well as the maximum annual average concentration for the chronic REL. Additionally, the model can be used to determine the likelihood that any offsite individual would detect an ammonia smell by comparing the highest one-hour average concentration to an accepted odor threshold value. A memo providing inputs and results of the air dispersion modeling is attached to this report as Appendix A.

The air dispersion analysis results can also be used to determine the maximum acceptable ammonia concentration in the kiln stack to prevent exceeding a given downwind ambient concentration value. This target downwind concentration can be assigned any value, be it acute or chronic REL, or any value within the range of odor detection threshold. The acute REL (4.5 ppmv) is just below the low end of odor threshold according to OSHA (5ppmv to 50 ppmv). Choosing a target of 0.5 ppmv (11% of the acute REL, and 10% of the lower bound of the

OSHA odor threshold) would provide an extra level of safety to public health while allowing a reasonable cushion to prevent public nuisance. The Air District's dispersion modeling analysis shows that in order to prevent exceeding a 0.5 ppmv downwind one-hour average concentration, the maximum allowable kiln stack concentration is 270 ppmv. At this same maximum stack concentration, the Air District's modeling analysis shows that the maximum annual offsite ammonia concentration is 0.004 ppmv, which is 1.5 % of the chronic REL. The Air District believes that this limit is therefore sufficiently stringent to protect public health.

4.0 Regulatory Proposal

The Air District is considering amendments to Regulation 9-13 addressing inconsistencies with the ammonia limit in order to aid compliance and ensure federal enforceability through incorporation of the rule's standards into Lehigh's Title V operating permit. As currently written, beginning 90 days from adoption, the rule proscribes monitoring of ammonia concentrations in the exhaust stream of the kiln to determine a baseline average (section 9-13-402). The rule provides a methodology (section 9-13-610) to determine that average concentration over a period of no less than 6 months immediately prior to the installation of control equipment to meet the NOx standard (section 9-13-301.1). Ammonia concentrations are limited to that 6-month baseline average concentration plus 10 ppmv, but the averaging period for the standard is a rolling 24 hours (section 9-13-301.4).

Air District staff proposes to increase the averaging period to a 182-operating day rolling average in order to reconcile it with the originally proposed 6-month background period. This longer averaging period will allow for short term variations in ammonia concentrations. Air District staff proposes to amend the ammonia standard in section 9-13-301.4 to a set value of 270 ppmv averaged over a rolling 182 operating day period. Based on monitoring data required by Regulation 9-13, ammonia concentrations in Lehigh's kiln stack have never exceeded the 270 ppmv threshold. The Air District therefore believes that this standard is sufficiently stringent to ensure that ambient ammonia concentrations at downwind locations will not cause adverse health effects, and are unlikely to exceed odor detection thresholds. Proposed amendments to rule language are detailed below with specific changes provided in strikethrough/underline format.

182-Operating Day Rolling Average Definition

A new definition has been added to accommodate the 6-month averaging period for the revised ammonia standard. To allow for a rolling daily average, 6 months becomes 182 days, and only operating days (as defined in section 9-13-211) are counted to exclude periods during which the kiln is either down or in start-up (defined in section 9-13-215) or shutdown mode (section 9-13-214).

9-13-220 **182-Operating Day Rolling Average:** The arithmetic mean of the emissions as prescribed in sections 9-13-301 of the most recent 182 operating days. Each operating day initiates a new rolling average period.

Ammonia Emission Limit

The averaging period for the standard is revised from a 24-hour rolling average to a 182-operating day rolling average, and the standard is proposed as a set value of 270 ppmv rather than 10 ppmv over a calculated baseline.

9-13-301 **Emission Limits:** Effective September 9, 2013, no person shall operate a Portland cement manufacturing facility unless the following emission limits are met:

301.1 The 30-operating day rolling average of nitrogen oxides (NOx) emissions from the kiln shall not exceed 2.3 pounds per ton of clinker produced;

301.2 Particulate matter (PM) emissions from the kiln shall not exceed 0.04 pounds per ton of clinker produced, based on a three run test average;

301.3 PM emissions from the clinker cooler shall not exceed 0.04 pounds per ton of clinker produced, based on a three run test average;

301.4 The ~~24-hour~~182-operating day rolling average of ammonia (NH_3) emissions from the kiln shall not exceed ~~baseline emission levels by more than 10~~270 ppmv, dry at 7 percent oxygen;

301.5 The 24-hour rolling average dioxins and furans (D/F) emissions from the kiln shall not exceed 0.2 ng-TEQ/dscm at 7 percent oxygen;

301.6 The 30-operating day rolling average of mercury emissions from the kiln shall not exceed 55 pounds per million tons of clinker produced;

301.7 The 30-operating day rolling average of total hydrocarbon (THC) emissions from the kiln shall not exceed 24 ppmv, dry at 7 percent oxygen; or as an alternative, provided the provisions of Section 9-13-403 have been completed, the 30-operating day rolling average of total organic HAP emissions from the kiln shall not exceed 12 ppmv, dry at 7 percent oxygen;

301.8 The 30-operating day rolling average hydrogen chloride (HCl) emissions from the kiln shall not exceed 3 ppmv, dry at 7 percent oxygen.

Baseline Ammonia Emission Level Determination and Methodology

The baseline period has passed, and the emission limit is provided as a set value. These sections are no longer necessary and so are deleted.

~~**9-13-402 Baseline Ammonia Emission Level Determination:** No later than 90 operating days after rule adoption, any person manufacturing Portland cement shall begin monitoring ammonia emissions from the kiln for the purpose of establishing a baseline emission level for kiln operations prior to the installation and subsequent operation of NOx control equipment. Monitoring shall be conducted according to Section 9-13-501, and determination of the baseline ammonia emission level shall be calculated as specified in regulation 9-13-610.~~

~~**9-13-610 Baseline Ammonia Emission Level Calculation:** The following methodology shall be used to calculate baseline ammonia emissions in order to determine compliance with Section 9-13-301.4:~~

~~610.1 The baseline period consists of the period immediately preceding the initial operation of control equipment installed to comply with Section 9-13-301.1. The baseline period shall not be less than 6 months in duration. The owner or operator of the Portland cement manufacturing facility shall have sufficient records of the kiln's operation to substantiate the emission rate during the baseline period.~~

~~610.2 Baseline emission level, expressed in ppmv, dry at 7 percent oxygen, is the median of the 6 monthly average values of the ammonia (NH_3) emissions from the kiln.~~

5.0 Emissions

The proposed amendments will not result in changes in emissions. Ammonia emissions are driven more by feedstock variations than by ammonium injection as part of SNCR. The amended limit protects public health and guards against nuisance conditions while providing insurance against excess ammonium injection with a sufficient buffer for normal feedstock variations.

6.0 Economic Impacts

Cost of Controls

There are no anticipated costs associated with these amendments.

Socioeconomic Analysis

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." As noted above, there are no anticipated costs associated with these proposed amendments and so they would not have a significant economic impact to the affected industry. BAE Urban Economics of Emeryville, California has completed an updated socioeconomic analysis with an updated economic profile of the industry affected by the rule. Their analysis is attached as Appendix B to this report.

7.0 Environmental Impacts

California Environmental Quality Act

Pursuant to the California Environmental Quality Act (CEQA), the Air District has concluded that the proposed amendments to Regulation 9-13 are exempt under CEQA guidelines Section 15301, Class 1. The rule amendment would involve negligible or no expansion of an existing use. The proposed change to the averaging period will merely effectuate the original intent of the rule. Actual emissions will not increase. Likewise, changing the baseline methodology will not affect emissions. Air District Staff will file a Notice of Exemption with the County Clerk after adoption by the Board of Directors.

8.0 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.

As stated in the Background section of this report, there are two federal rules which govern air emissions from the manufacture of Portland cement. The NSPS provides emissions standards for NOx, SO_2, and PM from new or modified Portland cement kilns and the NESHAP provides emissions standards for TACs from all Portland cement kilns with one set of standards for existing kilns, and one for new or modified kilns. The kiln at Lehigh has not undergone sufficient modification to be deemed new or modified after the effective dates of either rule, so is subject to only the existing source emissions standards contained in the NESHAP. All of these standards for TACs are included in the District's proposed rule. The proposed rule amendments are unlikely to result in any increase in emissions of ammonia and will have no effect on other emissions standards contained in the rule.

There are currently no State rules that specifically regulate cement manufacture, other than greenhouse gas emissions cap and trade (AB 32), and those rules governing the use of scrap tires as fuel. Several air districts (Antelope Valley, Amador, Kern, Mojave, and Monterey Bay Unified) with cement kilns operating within their jurisdiction have adopted regulations to address emissions of NOx and/or PM from these sources. South Coast Air Quality Management District has adopted several cement manufacturing regulations addressing emissions of NOx, PM, CO, as well as hexavalent chromium and fugitive dust. At least two of these regulations were adopted to address specific conditions at individual cement manufacturing facilities. These regulations are different in format, and include provisions tailored to the facilities in their jurisdiction. Air District staff believes that the current rule is no less stringent than any of the regulations governing cement manufacture from other air district in California, and is more stringent in terms of actual emissions standards for NOx, and TACs. The proposed amendments will not make the rule any less stringent in comparison to other air district rules in California.

9.0 Rule Development Process

In advance of proposing amendments to Regulation 9-13, rule development staff consulted internally with Air District staff, met with representatives of the affected facility, and held community stakeholder meetings in Cupertino to address concerns of community members and local elected officials. Internal meetings were initiated shortly after the rule became effective when monitoring data showed the full extent of the variability of ammonia concentrations in the emissions train and it became clear that the methodology for determining the ammonia baseline would likely result in an unattainable standard. Staff from the Engineering, Compliance and Enforcement, and Legal Divisions worked initially to develop a compliance agreement, and later determined that amending the rule was the best way forward. Representatives from Lehigh engaged staff in this effort as different proposals were explored. As a regulatory solution began to take shape, the Air District reached out to the affected community to discuss the ammonia standard as well as solicit community engagement on other concerns such as emissions of TAC, PM and SO_2 from the facility.

On March 10th of this year, Air District staff held a public stakeholders meeting in Cupertino to discuss the approach of first correcting the ammonia standard to facilitate incorporation of the rule requirements into the facility's federal operating permit, with a commitment to address particulate and SO_2 emissions in the future. Members of the public included two Cupertino City Council Members, along with representatives of several environmental and health advocacy groups, including the Sierra Club, Breathe California, Bay Area for Clean Environment, and Quarry No. Members of the public expressed concerns about the health impacts due to emissions from Lehigh and conveyed doubts in the Air District's ability to evaluate these impacts. Some attendees expressed the belief that ammonia emissions were driving the health risk and that by adjusting the standard the Air District would be giving Lehigh a pass to cause greater health impacts. Air District staff provided data to assuage these concerns, while emphasizing the importance of the current goal to make Regulation 9-13 requirements part of the facility's Title V permit and committed to continue the process towards reducing health impacts through future rule development.

A second stakeholders meeting was held on May 16th, again in Cupertino with most of the same interested community members. Air District staff provided greater detail as to reasons behind the proposed amendments, explaining the fluctuations of ammonia levels and the need for consistent averaging periods. Staff further explained the relatively low potential health risk posed by ammonia, and detailed the larger scale rule development effort to address toxic health impacts. Additionally, rule development staff working on general particulate matter regulations provided an update on those efforts and how they would affect emissions at Lehigh. Members of the public expressed guarded acceptance of the Air Districts approach as long as sufficient documentation and analysis were provided in any proposal. The Air District committed to provide that analysis as may be found in this report, and to continue to evaluate avenues for further emissions reductions, where achievable.

A third stakeholders meeting was held on September 7th in Cupertino with many of the same interested community members. Air District staff provided an update on the current rule development effort, discussed continuing concerns regarding the proposal, and provided a status update for future rule development efforts to address emissions of TACs (proposed Regulation

11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities) and PM (Regulation 6, Rule 6: Prohibition of Track Out, and Regulation 6, Rule 8: Bulk Material Storage, Handling and Transport).

On September 1, 2016, the final proposed rule, a staff report, and a socioeconomic analysis were published for comment. Three members of the public submitted written comments by email. The comments received and staff responses are included as Appendix C of this report. A summary of the comments and staff response is provided below.

Averaging Period

Comments received indicated a belief that the change in averaging period was done for the convenience of the facility and that the change to a longer averaging period only considered long-term cumulative effects of ammonia and ignored short-term effects. Other comments pointed to ambiguity over the difference between operating days and calendar days.

The 182-operating day average in the emissions standard replicates the baseline averaging period of 6 months in a more precise form. It is not based on the convenience of the facility, but is rather intended to better capture the variability of baseline conditions. A review of ammonia monitoring data shows that ammonia concentrations in the stack are highly variable and this variability is driven by nitrates in the feedstock independent of ammonia injected into kiln to reduce emissions of nitrogen oxides. Air District staff is confident that the proposed changes to the regulation will result in a more enforceable health-protective standard. The 182-operating day rolling average is defined in the regulations such that it excludes periods when the kiln is not in operation (see sections 9-13-211 and 9-12-220). This ensures that the measured average value is not reduced artificially by including days when the exit concentration is negligible (the kiln does not emit appreciable amounts when it is not operating). Although this may result in an averaging period extending beyond 6 calendar months, it provides for a more representative average as well as more stringent standard.

Concentration Value in Proposed Standard

Comments received indicated that proposed amended standard would result in an increase in emissions. Some comments argued that this increase was a result of the increase of averaging period. Other comments indicated some apparent misunderstanding of the meaning of the current ammonia standard.

A review of ammonia monitoring data shows that ammonia concentrations in the stack are highly variable and this variability is driven by nitrates in the feedstock independent of ammonia injected into kiln to reduce emissions of nitrogen oxides. The current ammonia standard and the proposed change (as provided in section 9-13-301.4) limit the concentration level at the emission point of the kiln. The proposed amendment would change the standard from a 24-hour rolling average value (of 10 ppmv plus a calculated background value which is in turn is based on a 6-month average) to a 182-operating day rolling average total emissions limit of 270 ppmv. This latter value was derived by performing and air dispersion modeling analysis to determine the concentration at the emissions stack that would ensure that a downwind concentration of 0.5 ppmv is not exceeded in any one-hour period. The fundamental problem with the regulation as

currently written is that the emissions standard is averaged over a much shorter period (24 hours) than the baseline period (effectively 6 months). That 24-hour average is too short to accommodate that variability of the background level and a 182-operating day rolling average is more appropriate to account for that variability.

Compliance with Current Regulations

Comments received expressed concerns that the Lehigh facility was not in compliance with the current regulation, and some comments insisted that Lehigh be made to cease operations if they were unable to comply with the ammonia standard as currently written. Further comments portrayed a negotiated compliance agreement between the Air District and Lehigh as a secret pay-to-play arrangement.

Air District staff believes that the current regulation is not enforceable because it is impossible to comply with a 24-hour standard given that the feedstock variability results in emissions variations that far exceed the 10 ppmv slip stream limit. The Air District recognizes this problem and is proposing a solution with the proposed amendments to the regulation. The Air District does not have the authority to shut down a facility based on the emissions of pollutants above established regulatory or permitted limits. The Air District enforces its regulations and permit limits through fines and penalties; however, the Air District would not seek fines or penalties for an exceedance over a standard which it recognizes is fundamentally flawed.

Regarding the compliance agreement of 2013, after adoption of Regulation 9-13, Lehigh took the Air District to federal court arguing that it did not have sufficient time to construct a single tall stack to meet the monitoring and health risk requirements of the rule. Lehigh and the Air District entered into a limited term compliance agreement which limited production levels until such time that the stack could be constructed. The facility did exceed those limits, and so as stipulated in the compliance agreement, Lehigh had to pay a fine for that exceedance. As is the case with many negotiated legal arrangements, the compliance agreement was worked out confidentially and was not subject to public review

Air Dispersion Modelling Analysis

Comments received raised concerns that the modeling analysis did not accurately represent emissions from Lehigh, and some comments asked about potential physical changes to the ammonia after it exits the stack resulting in more toxic impact.

Whenever the Air District evaluates the health risks from a source of toxic air contaminants, this analysis is performed according to guidelines established by OEHHA. These guidelines are used throughout California and provide toxicity values and accepted protocols for emissions estimation as well as specifications for the air dispersion models. Air dispersion modeling as performed for this rule development effort is the standard way to evaluate health effects throughout California and in other states throughout the country.

Once the ammonia is emitted from the stack it is unlikely to react in such a way that it would become more toxic. The most likely reaction would be to form ammonium sulfate or ammonium nitrate particles, both of which are no more toxic than ammonia based on information from the National Institute of Health Database. The formation of particles for a portion of the ammonia

would cause concentrations at downwind locations to decrease as an aerosol of particles would behave differently than a gas and as such the plume would disperse due to deposition of the particles. The dispersion model that was used does not account for deposition, but this results in a more conservative health-protective estimate, given that the model assumes that the ammonia behaves homogeneously in gaseous form.

Feasible and Cost-effective versus Health-Protective

Comments received expressed concern that the Air District was allowing Lehigh to maximize profits and ignoring health impacts.

When considering adoption or amendment to any existing regulation, the California Health and Safety Code requires the Air District to conduct an evaluation of feasibility and cost effectiveness of controls necessary to meet the requirements of that regulation. The Air District must also ensure that these regulations are necessary to protect public health as directed by the California Health and Safety Code. The Air District met both these requirements when it adopted Regulation 9-13, and has met these requirements in its considerations of the proposed amendments.

New or Modified

Comments received requested that the rule be changed so that emissions standards in the rule are as stringent as those applied to "new or modified" sources under the NSPS and NESHAP regulations.

The standards contained in Regulation 9-13 represent reasonably achievable cost-effective emission standards for the facility, and in fact represent more stringent standards than the applicable federal rules since, as an existing facility, Lehigh is not subject to the amended NSPS or NESHAP standards for "new or modified" facilities. In the Code of Federal Regulations (40 C.F.R. Section 60.14(a)), "Modification" is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies…Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere." The code goes on to exclude from consideration routine maintenance, repair, and replacement. Also excluded are increases in production rate or emissions increases that do not involve a capital expenditure in excess of 50% of the fixed capital costs required to construct an entirely new comparable facility. Furthermore, modifications to permit conditions that do not result in an increase in emissions do not trigger new or modified standards. Neither do modifications undertaken to bring a facility into compliance with newly adopted regulations. The Air District does not have information establishing that Lehigh has undertaken any changes in operation or equipment after the effective dates that could be deemed as "modifications" per the definitions contained in the appropriate sections of the Code of Federal Regulations.

10.0 Conclusion

Pursuant to Section 40727 of the California Health and Safety Code, the proposed rule amendments must meet findings of necessity, authority, clarity, consistency, non-duplication, and reference before the Board of Directors adopt, amend, or repeal a rule. The proposed amended Rule is:

- Necessary to protect public health by ensuring reduction in toxic air contaminants to nearby residents and by reducing ozone and PM precursors to meet the commitment of Control Measure SSM-9 of the Bay Area 2010 Clean Air Plan;
- Authorized by California Health and Safety Code Sections 40000, 40001, 40702, and 40725 through 40728;
- Clear, in that the rule specifically delineates the affected industry, compliance options, and administrative requirements for industry subject to this rule, so that its meaning can be easily understood by the persons directly affected by it;
- Consistent with other California air district rules, and not in conflict with state or federal law;
- Non-duplicative of other statutes, rules, or regulations; and,
- Implementing, interpreting and making specific and the provisions of the California Health and Safety sections 40000 and 40702.

A socioeconomic analysis prepared by Bay Area Economics has found that the proposed rule amendments would not have a significant economic impact or cause regional job loss. A California Environmental Quality Act (CEQA) analysis prepared by Environmental Audit, Inc., concludes that the proposed amendments are exempt under CEQA Guidelines Section 15301, Class 1. Air District staff have reviewed and accepted this analysis and will file a Notice of Exemption after amendments are adopted by the Board of Directors.

11.0 References

1. Bay Area Air Quality Management District; *Bay Area 2010 Clean Air Plan, "SSM 9 – Cement Kilns"*, Volume 2, September 15, 2010.

2. Portland Cement Association; *Cement Industry Overview, Economics of the U.S Cement Industry*, May 2013; www.cement.org

3. US EPA; *National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants*; Federal Register / Vol. 75, No. 174 / September 9, 2010.

4. US EPA; *FACT SHEET for Final Amendments to National Air Toxics Emission Standards and New Source Performance Standards for Portland Cement Manufacturing*; August 9, 2010.

5. US EPA, Office of Air Quality Planning and Standards; *Regulatory Impact Analysis: Amendments to the National Emissions Standards for Hazardous Air Pollutants and New Source Performance Standards (NSPS) for the Portland Cement Manufacturing Industry Final Report*; August 2010

6. US EPA; *National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; 40 CFR Parts 60 and 63*[EPA-HQ-OAR-2011-0817; FRL-9629-9] RIN 2060-AQ93; June 25, 2012.

7. US EPA; *Proposed Amendments to Air Toxics Standards and New Source Performance Standards for Portland Cement Manufacturing FACT SHEET;* June 25, 2012.

8. US Department of Health and Human Services, National Institute for Occupational Safety and Health; US Department of Labor, Occupational Safety and Heal Administration; *Occupational Safety and Health Guideline for Ammonia*; 1992; http://www.cdc.gov/niosh/docs/81-123/pdfs/0028-rev.pdf

9. California Office of Environmental Health Hazard Assessment; *Acute, 8-hour and Chronic Reference Exposure Level (REL) Summary*; June 28, 2016; http://oehha.ca.gov/air/general-info/oehha-acute-8-hour-and-chronic-reference-exposure-level-rel-summary

INTEROFFICE MEMORANDUM
July 11, 2016

TO: **Eric Stevenson**
VIA: **Jaime Williams**
Sanjeev Kamboj

FROM: **Ted Hull**

SUBJECT: **Evaluation of Ammonia Level of Significance from the Kiln at Lehigh Southwest Cement**

SUMMARY: Per your request, I have used dispersion modeling to evaluate the concentration of ammonia in the exhaust gases from the Lehigh Cement Kiln that would result in a potential health hazard at the maximally exposed offsite receptor location. I have determined that the maximum acceptable ammonia (NH_3) concentration from the kiln stack is **2,432 ppm vol. (@ 20°C)**. This value coincides with the modeled offsite receptor point at which the Acute Reference Exposure Level (REL)* for ammonia (3,200 ug/m^3) is first reached for a 1-hour averaging period; i.e. the point of maximum impact (PMI). At this same maximum stack concentration, the maximum annual average offsite ammonia concentration is 28 ug/m^3. This is 14% of the Chronic REL (200 ug/m^3).

* Inhalation RELs are air concentrations or doses at or below which adverse health effects are not expected even in sensitive members of the general population under specified exposure scenarios. The acute RELs are for infrequent 1 hour exposures that occur no more than once every two weeks in a given year. The chronic RELs are for 24 hour per day exposures for at least a significant fraction of a lifetime, defined as about 8 years (≥12 percent of a 70year lifespan).

EMISSIONS: The maximum ammonia emission rate used in the model was 351.1 grams per second. This corresponds to the maximum acceptable stack concentration (2,432 ppm vol.) at the following typical kiln stack conditions:

- Kiln Flow Rate = 298.2 m^3/s @ 428.7 °K; converted to 203.81 m^3/s @ standard conditions (20°C)
- NH_3 stack concentration = 1.723 E+06 ug/m^3 (micrograms per cubic meter) @ 20°C; equivalent to 2,432 ppm vol. @ 20°C

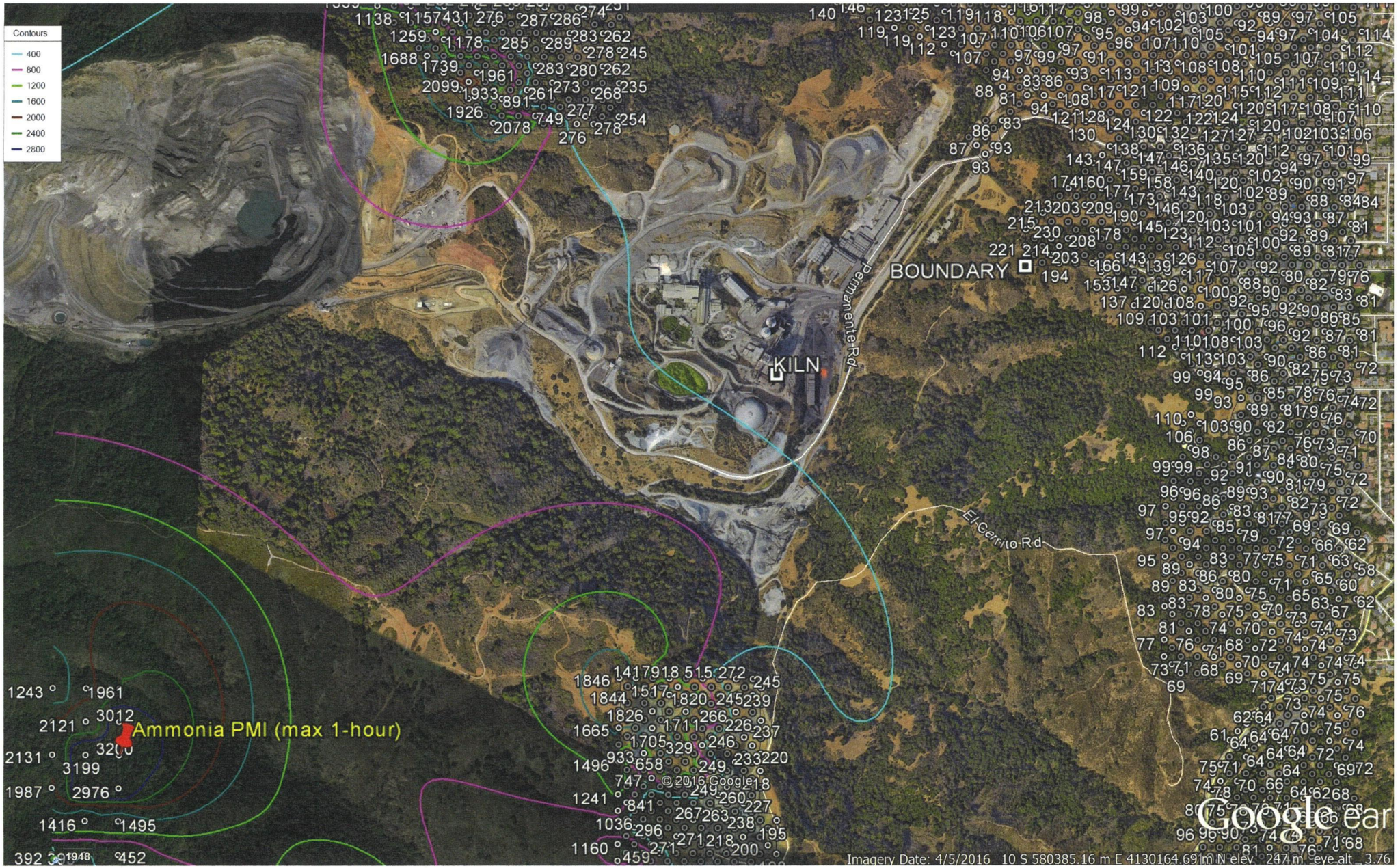
The following constant values were used in unit conversions:

- Molar volume of gas at 1 atm and 20°C = 24.04 liters/mole
- Molecular Weight of NH_3 = 17.03 g/mole

MODELING: The AERMOD air dispersion computer model (version 15181) was used to estimate maximum 1-hour and annual average ambient air concentrations. The model was run with 1 year on on-site meteorological data. Upper air data for the same time period was taken from the Oakland International Airport station. The model is referenced in NAD 83 UTM coordinates and uses terrain data from Santa Clara County 10m NED files.

I have attached a plot of the results for modeled 1-hour maximum ammonia emissions.

CONCLUSION: Kiln stack ammonia emissions from Lehigh Southwest Cement do not present offsite health hazards at stack concentrations below 2,432 ppm vol. (@ 20°C).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AGENDA: 13D – APPENDIX B SOCIO ECONOMIC REPORT

Socio-Economic Impact Study of the Proposed 2016 Changes to BAAQMD Regulation 9, Rule 13: Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing

Submitted to: Bay Area Air Quality Management District
July, 2016

bae urban economics

Table of Contents

San Francisco
2600 10th St., Suite 300
Berkeley, CA 94710
510.547.9380

Sacramento
803 2nd St., Suite A
Davis, CA 95616
530.750.2195

Los Angeles
706 South Hill St., Suite 1200
Los Angeles, CA 90014
213.471.2666

Washington DC
1400 I St. NW, Suite 350
Washington, DC 20005
202.588.8945

New York City
49 West 27th St., Suite 10W
New York, NY 10001
212.683.4486

www.bae1.com

DESCRIPTION OF PROPOSED RULE

Regulation 9, Rule 13 contains an ammonia standard to prevent excess emissions from control equipment installed to meet the NO_X standard in the rule. Due to issues related to problems with the short averaging period for ammonia emissions related to inherent variability of nitrate content in the limestone feedstock used to make cement at the Lehigh Southwest Cement Plant (the "Lehigh facility") located in unincorporated Santa Clara County west of Cupertino, Air District Staff recommends amending sections of the rule pertaining to the ammonia emissions (standard and baseline determination) to allow for replacement of the rolling 24-hour average with a rolling 182-operating day averaging period. In addition, Staff recommends deletion of provisions for determining baseline levels and replacement with a fixed standard based on the last three years of operating data. The Lehigh facility is the only cement manufacturing facility in the Air District, and is thus the only facility to be impacted by this Rule revision.

METHODOLOGY

The analysis begins with an overview of current demographic and economic conditions in the Air District region, to provide context for the impact analysis that follows. Following that overview, BAE provides more detail on the specific industry, and in the case of this rule revision, the single location, that may be affected by the rule revisions, including data on number of establishments as classified by number of employees, estimated revenues per employee, and net profits for the affected industry.

This report uses data from a number of sources, including County Business Patterns, the 2012 Economic Census, the US Bureau of Labor Statistics, the State of California's Employment Development Department (EDD) Labor Market Information Division and Department of Finance, the Internal Revenue Service, and the Air District itself.

Using this information, BAE generated an overview of regional demographic and economic trends, developed a profile of the potentially impacted business establishment, and estimated net income as percent of revenues. These figures were then compared to the compliance costs associated with the revised Rule, and determined the potential for these costs to be a significant portion of estimated profits (using a 10 percent impact threshold). Then, if impacts on profit could result in job losses, BAE analyzed the direct and indirect job losses using the IMPLAN input-output model. Finally, the potential for impacts on small businesses is assessed.

REGIONAL TRENDS

Regional Demographic Trends

Table 1 shows the population and household trends for the nine county Bay Area and California between 2000 and 2015. During this time, the Bay Area's population increased by 10.7 percent, compared to 14.3 percent for California as a whole. Similarly, the number of Bay Area households grew by 8.5 percent, compared to 11.5 percent growth statewide, as average household size increased in both geographies.

Table 1: Population and Household Trends, 2000-2015

Bay Area (a)	**2000**	**2015**	**Total Change 2000-2015**	**% Change 2000-2015**
Population	6,784,348	7,510,942	726,594	10.7%
Households	2,466,020	2,675,537	209,517	8.5%
Average Household Size	2.69	2.75		
California				
Population	33,873,086	38,714,725	4,841,639	14.3%
Households	11,502,871	12,830,035	1,327,164	11.5%
Average Household Size	2.87	2.95		

Notes:
(a) Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.

Sources: California State Department of Finance, 2015; US Census, 2000; BAE 2015.

The Bay Area's slower growth is tied 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 only experienced moderate increases in housing units.

Regional Economic Trends

Table 2 shows jobs by sector in 2010 and 2015[1] for the Bay Area and California. In the five-year period between 2010 and 2015, the Bay Area's employment base grew by 17.5 percent, increasing from 3.2 million jobs to 3.7 million jobs, as the area economy has recovered from the depths of the Great Recession and continued to grow. The state saw somewhat smaller job growth, increasing by 12.3 percent from 14.7 million jobs in 2010 to 16.5 million jobs in 2015.

The largest non-government sectors in the Bay Area economy are Professional & Business Services; Education & Health Services; Leisure & Hospitality; and Retail Trade. These sectors each constituted nine percent or more of the region's total jobs in 2015. Overall, the Bay Area's economic base largely reflects the state's base, sharing a similar distribution of employment across sectors. One noteworthy variation is the high regional employment in the Professional & Business Services, which makes up 19.2 percent of employment in the Bay Area compared to only 15.1 percent statewide.

All industry sectors showed an increase in employment in the Bay Area between 2010 and 2015, with increases of greater than 20 percent in Mining, Logging, & Construction; Information; Professional & Business Services; and Leisure & Hospitality. Statewide growth was also over 20 percent in three of these four sectors; Information only grew by 12.6 percent, compared to 44.4 percent in the Bay Area, where the tech economy is driving growth. For both the Bay Area and the state, the slowest growth was in the Government sector.

Production at the Lehigh facility has tracked with national economic trends as demand for cement for construction has ebbed and flowed. Lehigh steadily decreased production from 2006 until 2010, a period where the facility produced 847,000 tons of clinker in total, a little over half their permitted operating capacity. Production increased with the improving economy, but this was limited due to concern over health impacts given the configuration of their emissions profile. Following the adoption of Regulation 9-13, Lehigh reduced production until they were able to complete modifications to their facility to increase dispersion of pollutants. Having completed these modifications, Lehigh increased production in 2015 to 1.29 million tons of clinker, slightly above three quarters of the permitted amount.

[1] Most recent year for which full-year employment data are available.

Table 2: Jobs by Sector, 2010-2015 (a)

Industry Sector	Bay Area 2010 (b) Jobs	Bay Area 2010 (b) % Total	Bay Area 2015 (c) Jobs	Bay Area 2015 (c) % Total	Bay Area % Change 2010-2015	California 2010 (b) Jobs	California 2010 (b) % Total	California 2015 (c) Jobs	California 2015 (c) % Total	California % Change 2010-2015
Agriculture	20,900	0.7%	21,800	0.6%	4.3%	382,800	2.6%	423,300	2.6%	10.6%
Mining, Logging, and Construction	132,600	4.2%	179,800	4.8%	35.6%	586,700	4.0%	756,400	4.6%	28.9%
Manufacturing	307,500	9.7%	333,600	9.0%	8.5%	1,244,000	8.5%	1,291,900	7.8%	3.9%
Wholesale Trade	113,200	3.6%	127,800	3.4%	12.9%	644,000	4.4%	721,200	4.4%	12.0%
Retail Trade	309,700	9.8%	345,700	9.3%	11.6%	1,517,700	10.3%	1,663,100	10.1%	9.6%
Transportation, Warehousing, and Utilities	89,500	2.8%	106,200	2.9%	18.7%	466,300	3.2%	554,000	3.4%	18.8%
Information	113,500	3.6%	163,900	4.4%	44.4%	429,000	2.9%	483,000	2.9%	12.6%
Financial Activities	168,400	5.3%	180,100	4.8%	6.9%	759,700	5.2%	797,400	4.8%	5.0%
Professional & Business Services	546,500	17.3%	716,100	19.2%	31.0%	2,076,900	14.2%	2,493,800	15.1%	20.1%
Educational & Health Services	474,500	15.0%	552,300	14.8%	16.4%	2,123,400	14.5%	2,456,200	14.9%	15.7%
Leisure & Hospitality	325,900	10.3%	405,100	10.9%	24.3%	1,501,600	10.2%	1,830,000	11.1%	21.9%
Other Services, except Public Administration	108,500	3.4%	123,600	3.3%	13.9%	484,900	3.3%	545,700	3.3%	12.5%
Government (d)	458,200	14.5%	468,100	12.6%	2.2%	2,448,400	16.7%	2,458,800	14.9%	0.4%
Total, All Employment (e)	**3,168,000**	**100.0%**	**3,723,800**	**100.0%**	**17.5%**	**14,665,300**	**100.0%**	**16,474,800**	**100.0%**	**12.3%**

Notes:
(a) Includes all wage and salary employment.
(b) Represents annual average employment for calendar year 2010.
(c) Represents annual average employment for calendar year 2015.
(d) Government employment includes workers in all local, state and Federal workers, not just those in public administration. For example, all public school staff are in the Government category.
(e) Totals may not sum from parts due to independent rounding.
(f) Santa Clara County data is for MSA, which includes San Benito County. As of 2014, San Benito had approximately 16,100 wage and salary jobs, an insignificant number relative to the Bay Area total.

Sources: California Employment Development Department, 2016; BAE, 2016.

SOCIO-ECONOMIC IMPACTS

This section discusses the methodology for this analysis, as well as the economic profile of the affected industry, and annualized rule compliance costs associated with revising Rule 9-13. It then determines whether the annualized compliance costs would significantly burden the affected industry, and estimates adoption of the rule's regional economic impacts.

Methodology

In order to estimate the economic impacts of adopting Rule 9-13 on the Portland cement manufacturing industry, this report compares the affected industry's annualized compliance costs with its profit ratios. The analysis uses data from the BAAQMD, 2014 US Census County Business Patterns, the 2004-2014 Annual Survey of Manufacturers, and 2003-2012 IRS corporate income returns data.

Economic Profile of Affected Industry

The proposed rule would affect Portland cement manufacturers, which are included in the Cement Manufacturing sector (NAICS Code 327310). According to the US Census, in 2014, the Bay Area had four cement manufacturing establishments that accounted for an estimated 246 jobs. Dividing the total jobs by the number of establishment shows that on average, each establishment employed 62 workers. However, BAAQMD staff indicated that there is only one Portland cement plant in the Bay Area, Lehigh, that would be subject to the proposed rule. According to the operators, the Bay Area Lehigh plant employs 130 workers.

Since the NAICS sector has a broader definition of firms than the proposed rule, Census data includes additional cement manufacturing establishments that would not be subject to Rule 9-13. Lehigh is represented as the firm with over 100 employees. Table 3 shows the profile of the affected industry.

Table 3: Profile of Affected Industry, 2014

Industry	Cement Manufacturing (a)
Employment (b)	246
Average Employment per Establishment	62
Number of Establishments (by workforce size)	
1-4	1
5-9	0
10-19	0
20-49	2
50-99	0
100 to 249	1
Total	4 (c)

Notes:
(a) The Portland Cement Manufacturing industry is defined as NAICS 327310, Cement Manufacturing.
(b) In cases where the actual employment number is not disclosed for confidentiality purposes, the analysis uses the midpoint employment number for each size cohort.
(c) BAAQMD estimates that the Bay Area has one establishment in this sector will be affected by the proposed Rule.

Sources: U.S. Census County Business Patterns, 2014; BAE, 2016.

As shown in Table 4, according to 2004-2014 US Annual Survey of Manufactures data, the firms in the Cement Manufacturing sector have average annual sales per employee of approximately $798,266.[2] Multiplying the average revenues per employee by the number of Lehigh employees (130 workers) shows that on average, Lehigh's establishment has estimated total annual revenues of approximately $104 million. Table 4 shows the affected industry's annual employment and sales data.

[2] Data presented in 2015 dollars, adjusted using the Producer Price Index for Cement.

Table 4: Portland Cement Manufacturing Industry, Sales

Number of Employees	Number of Establishments (a)	Average # of Employees (b)	Average Annual Sales (c)	Total Sales	Total Employees
1-4	0	0	$0	$0	0
5-9	0	0	$0	$0	0
10-19	0	0	$0	$0	0
20-49	0	0	$0	$0	0
50-99	0	0	$0	$0	0
100+	1	130	$103,774,517	$103,774,517	130
Total	**1**	**130**	**$103,774,517**	**$103,774,517**	**130**

Notes:
(a) The number and sizes of businesses affected for each industry comes from BAAQMD data.
(b) Per BAAQMD staff.
(c) Based on 2004-2014 Annual Survey of Manufactures data for cement manufacturing businesses in the United States. 327310, Cement Manufacturing. Reported in 2015 dollars.
Average revenues per employee $798,266

Sources: Annual Survey of Manufactures, 2004-2014; BAAQMD, 2016; BLS Producer Price Index; BAE, 2016.

The IRS provides data on total sales and net income for the Cement, Concrete, Lime, and Gypsum Product Manufacturing sector. According to the most recently available IRS data, between 2003 and 2012 cement manufacturing firms averaged a 4.7 percent rate of return on total sales. As Table 5 shows, during an average year the Lehigh plant would generate estimated net profits of approximately $4.8 million.

Table 5: Cement Manufacturing Industry Profits

Number of Employees	Number of Establishments	Average Annual Sales (a)	Average Return on Sales (b)	Average Profits	Total Profits
1-4	0	$0	4.7%	$0	$0
5-9	0	$0	4.7%	$0	$0
10-19	0	$0	4.7%	$0	$0
20-49	0	$0	4.7%	$0	$0
50-99	0	$0	4.7%	$0	$0
100+	1	$103,774,517	4.7%	$4,844,500	$4,844,500
Total	**1**	**$103,774,517**	4.7%	**$4,844,500**	**$4,844,500**

Notes:
(a) See previous table for derivation of this estimate.
(b) Based on 2003-2012 IRS data for Corporation Income Tax Returns: Returns of Active Corporations, Table 1.

Sources: Annual Survey of Manufactures, 2004-2014; BLS Producer Price Index; IRS, 2003-2012; BAE, 2016.

Description of Compliance Costs

According to Air District staff, there are no additional compliance costs anticipated due to the change in how ammonia emissions compliance is measured.

Affected Industry Economic Impact Analysis

As there are no costs involved, there will be no effect on profits, and thus no socio-economic impacts related to implementation of the proposed Rule revision.

Ability to Pass Through Costs

There are no costs to pass through so the 10 percent profit impact threshold is not relevant for this proposed Rule revision.

Affected Industry and Regional Employment Impacts

Since there are no direct impacts on employment or revenues for the Lehigh facility, the only site affected by the proposed Rule revision, there will be no additional indirect regional employment impacts.

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.

Based on these criteria, Lehigh (the only facility impacted) does not qualify as a small business. Since the proposed rule would not affect any other businesses, it would not place a disproportionate burden on small businesses.

Appendix C – Comments Received and Staff Response

During the Public Comment Period, three members of the Public provided comments all by email. Staff appreciates the comments and concerns and has provided responses below.

Dr. Gary Latshaw:

Robert - I have two questions about the staff report.

1. As I understand the text, the underlying assumption in the health impact of the ammonia (3.0 Technical Review and Appendix A) is that the exhausted ammonia molecules do not undergo significant chemical or physical reactions between the exhaust stack and the receptor locations. Can you please elaborate on this issue?

2. Do have an estimate as to how much ammonia is injected into the SNCR relative to the "background" from the input nitrates?

Staff Response:

1. The ammonia is unlikely to react in such a way that it would become more toxic. The most likely reaction would be to form ammonium sulfate or ammonium nitrate particles. Reviewing the toxicity of each, ammonium sulfate aerosol seems to be less toxic by a factor of 2 to 5, and ammonium nitrate aerosol appears to be roughly the same toxicity of ammonia gas (See National Institute of Health Database and NIH Database). OEHHA does not provide a REL for these compounds, only for ammonia itself. The formation of particles for a portion of the ammonia would cause concentrations at downwind locations to decrease as an aerosol of particles would behave differently than a gas and as such the plume would have a lower concentration of ammonia due to the reaction and deposition of the particles. The dispersion model that we used does not account for deposition, but this results in a more conservative health-protective estimate, given that the model assumes that the ammonia behaves homogeneously in gaseous form.

The Air District is concerned about the formation of secondary PM from emissions at Lehigh, but staff believes that the best approach is to address condensable PM emissions as a whole, as opposed to concentrating on one precursor compound (ammonia). In the time since adoption of Regulation 9-18 in 2012, US EPA has issued final approval of source test methodology for condensable PM (EPA method 202). Air District staff have begun conducting condensable PM source tests at Lehigh and other facilities in the Air District and anticipate rulemaking efforts in the 2017-2018 time-frame.

2. The input nitrate varies, and the facility monitors ammonia concentrations and NO_X levels with CEMs that take measurements every minute. If ammonia levels are high (for example due to high levels of nitrates in the feedstock), and NOx levels are below the emission limit, the facility would reduce ammonia injection. Lehigh did run a test where they did not inject ammonia for a period of a few hours when background levels were sufficiently high that they did

not exceed their NO_X limit. The purpose of this test was to show that the background ammonia had a greater effect on stack concentrations than the injection ammonia. So, in general the amount injected relative to background really varies according to the level of the background. They are inversely proportional to one another.

Rhoda Fry (three successive emails):

Dear Mr. Cave,

I am writing you about the proposed amendments to Regulation 9, Rule 13.

1. I have in the past lodged complaints with BAAQMD of odors from the plant and have been told that this likely ammonia which is created after the pollutants have left the stack. These odors create a serious quality of life issue (let alone potential health issues) and I am very concerned that the averaging proposal scheme spanning what appears to be far greater than 6 elapsed months will create more odor days.
2. Instead of the previous 10 ppmv per day of ammonia, 270 ppmv is proposed over a 182-day rolling average. A daily maximum, hourly maximum, or even minute maximum is not proposed. Consequently, the facility could conceivably release 270 ppmv for 1 minute, as long as the subsequent 181 days were zero. This is not acceptable and must be changed. BAAQMD must put the health concerns of residents ahead of corporate profits. The effects of a SINGLE event must be taken into account in addition to the effects of cumulative events.
3. In the following, when a page number is referred to, it is coming from this document: http://www.baaqmd.gov/~/media/files/planning-and-research/public-hearings/2016/101916-rule-9-13/staff-report-pdf.pdf?la=e Page 4 re-writes history and misleads the reader into believing that Lehigh properly reduced production in order to reduce emissions. In fact, BAAQMD staff devised a pay-to-play scheme subrosa and Lehigh paid fines because they exceeded the secret agreed-to limits while the residents suffered from more pollution. See page 2 of this document: http://www.baaqmd.gov/~/media/files/compliance-and-enforcement/fact-sheets/lehigh_fact_sheet.pdf?la=en
4. Page 6 states "the maximum feasible, cost effective emissions reductions of NOx and PM in concert with efforts to bring the Lehigh facility into compliance with limits for TACs consistent with the federal NESHAP." Feasible and cost effective should not be considered. Human health and environmental health must take precedence over maximizing profits of a multinational company. According to Lehigh's parent company website, "HeidelbergCement became the number 1 in aggregates production, number 2 in cement, and number 3 in ready-mixed concrete."
5. Page 8, replacing a 24 hour average with a 182 day average is simply not acceptable. The proposal for the 182 day average is based on the convenience of the business and not on the health of its neighbors.

6. There is lack of clarity about these 182 days. Page 8 refers to "182-operating day averaging period" yet other areas simply refer to "day." There is quite a difference between these two concepts. Many days, the facility is not operating and thus depending on the interpretation of "day," the data could be skewed. Page 11 describes the 6-month averaging scheme as being in operating days and it is good that it is defined – although in many places it is unclear and this should be cleaned up. Finally, the document fails to explain the actual elapsed time of those 6 months.
7. The excuse for using a 182 day or 182 operating day average on the heterogeneity of materials is not relevant. Human health must take precedence. The excuse for the mercury pollution and other pollution has been that it occurs naturally – however, the pollution occurs only when the limestone material is disturbed. For example, the plant has, in the past, imported limestone that is lower in mercury. Residents must not shoulder the burden of the plant being incapable of securing material that is less toxic when cooked.
8. Page 11 "unlikely to exceed odor detection thresholds" must be changed to "shall not exceed odor detection thresholds."

I implore again that BAAQMD hold Lehigh to the "new or modified" plant standard rather than a grandfathered in standard that allows more pollution. Please keep in mind that the World Health Organization estimates that approximately 7 million deaths occurred prematurely due to air pollution worldwide in 2012. Air pollution is now the world's largest single environmental health risk. BAAQMD has a very important job to do.

Dear Mr. Cave,

The plan expects that there will be no odors. However, it does not appear to address the remote possibility of residents smelling pollution from the plant. The plan must include an expedited remedy and opportunity to reset limits in the event that residents smell pollution. Thanks and Have a Good Weekend,

Rhoda Fry

Staff Response:

In response to your last comment about revision of the rule. Air District staff is confident that there will not be an increase in ammonia emissions as a result of these proposed amendments. The Air District has regulations and procedures in place to address odors. The Air District is committed to continuing our public outreach efforts in Cupertino, and should ammonia odors become a problem, please bring this up at the next stakeholder meeting. We anticipate future rulemaking efforts as we continue to investigate condensable PM emissions, and we can revisit the ammonia standard at that time, if necessary.

1. A review of Air District records indicate that you called the to complain of a sulfur odor on 10/10/2013 and a chlorine odor on 4/01/2015. During the course of investigating the latter occurrence, the reporting inspector (R/I) indicated that raw materials can contain trace

amounts of chlorine and other compounds that contribute to odor. The R/I also indicated that the raised stack may result in emissions traveling farther.

The tall stack is more likely to provide better dispersion of pollutants resulting in lower concentrations of odorous compounds at downwind locations. Dispersion modeling indicates that limiting concentrations at the stack to 270 ppmv will ensure that the maximum concentration in any one hour at a downwind location will not exceed 0.5 ppmv. This is well below the acute one-hour reference exposure level (REL) of 4.5 ppmv.

The 182-operating day average in the emissions standard replicates the baseline averaging period of 6 months in a more precise form. The 182-operating day rolling average is defined in the regulations such that it excludes periods when the kiln is not in operation (see sections 9-13-211 and 9-12-220). This ensures that the measured average value is not reduced artificially by including days when the exit concentration is negligible (the kiln does not emit appreciable amounts when it is not operating). Although this may result in an averaging period extending beyond 6 calendar months, it provides for a more representative as well as more stringent standard.

2. The current standard is not 10 ppmv averaged over 24 hours, but rather 10ppm + a 6-month baseline value which is then averaged over 24 hours. The fundamental problem with the regulation as currently written is that the emissions standard is averaged over a much shorter period (24 hours) than the baseline period (6 months). Reviewing monitoring data for that baseline period, the baseline value would work out to be approximately 73 ppmv (the average of 6 monthly averages: {80 + 100 + 75 + 85 + 50 + 45}/6 = 73); however, over that same 6-month period, 24-hour averaged values range from less than 25 ppmv to well over 150 ppmv. So even within the background period, there are many 24-hour averaged values that would well exceed the standard of 83 ppmv (73 + 10 = 83). This is why the regulation as currently written is unenforceable. Compliance is not possible because the standard is a 24-hour average, but the value of that standard is based on a 6-month average. As a result, the 24-hour average is too short to accommodate that variability of the background level. A 182-operating day rolling average is more appropriate to account for that variability.

   The dispersion modeling analysis performed for this facility indicates that in order to exceed the 1-hour Acute REL of 4.5 ppmv at a downwind location, concentrations at the stack would have to exceed 2,432 ppmv. This value is an order of magnitude higher than any concentration recorded at the stack since the installation of continuous emissions monitors (CEMs) for ammonia. CEMs record the concentration once every minute.

3. After adoption of Regulation 9-13, Lehigh took the Air District to federal court arguing that it did not have sufficient time to construct a single tall stack to meet the monitoring and health risk requirements of the rule. Lehigh and the Air District entered into a limited term compliance agreement which limited production levels until such time that the stack could be constructed. The facility did exceed those limits, and so as stipulated in the compliance agreement, Lehigh had to pay a fine for that exceedance.

   As is the case with many negotiated legal arrangements, the compliance agreement was worked out confidentially and was not subject to public review. The Air District does not

have the authority to physically stop a facility from emitting pollutants above established regulatory or permitted limits. The Air District enforces its regulations and permit limits through fines and penalties.

4. For any Regulation that the Air District considers for adoption, the California Health and Safety Code requires an evaluation of feasibility and cost effectiveness of controls necessary to meet the requirements of that regulation. The Air District must also ensure that these regulations are necessary to protect public health as directed by the California Health and Safety Code. The Air District met both these requirements when it adopted Regulation 9-13.

5. As stated earlier, the 182-operating day average in the proposed emissions standard replicates the baseline averaging period of 6 months in a more precise form. It is not based on the convenience of the facility, but is rather intended to better capture the variability of baseline conditions. Air District staff is confident that the proposed changes to the regulation will result in a more enforceable health-protective standard.

6. The 182-operating day rolling average is defined in the regulations such that it excludes periods when the kiln is not in operation (see sections 9-13-211 and 9-12-220). This ensures that the measured average value is not reduced artificially by including days when the exit concentration is negligible (the kiln does not emit appreciable amounts when it is not operating). Although this may result in an averaging period extending beyond 6 calendar months, it provides for a more representative as well as more stringent standard.

7. Air District staff is confident that the proposed standard will ensure that no person will be exposed to unhealthy ammonia concentrations at a downwind location. The current standard is unattainable for reasons detailed in the staff report (see item 2 above, as well). Importing "cleaner" limestone to meet the current standard would likely result in greater emissions from the transport of those materials.

8. The staff report is not intended to be a standard or regulation but rather a description of the proposed amendments to the regulation. Odor thresholds are provided as a range of concentrations and while most public health agencies would likely provide a limit of about 5 ppmv, some agencies may provide a value well below the Air District's target value of 0.5 ppmv. A reasonable determination indicates that the odor threshold value established by the Air District will not result in the odor threshold being reached.

9. Since their initial adoption, the NSPS (1971) and NESHAP (1999) have undergone several amendments with standards generally becoming more stringent at each revision. Dates are provided with each amendment to indicate the applicable sets of standards for facilities modified or commencing operation before or after said date. The pertinent dates for the most recent amendments to the federal rules are June 16th, 2008 for the NSPS, and May 6th, 2009 for the NESHAP. In the Code of Federal Regulations (40 C.F.R. Section 60.14(a)), "modification" is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies…Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere." The code goes on to exclude from consideration routine maintenance, repair,

and replacement. Also excluded are increases in production rate or emissions increases that do not involve a capital expenditure in excess of 50% of the fixed capital costs required to construct an entirely new comparable facility. Furthermore, modifications to permit conditions that do not result in an increase in emissions do not trigger new or modified standards. Neither do modifications undertaken to bring a facility into compliance with newly adopted regulations.

The District does not have information establishing that Lehigh has undertaken any changes in operation or equipment after the effective dates that would meet the definition of "modifications" contained in the appropriate sections of the Code of Federal Regulations. The standards contained in the proposed Air District regulation represent reasonably achievable cost-effective emission standards for the facility, and in fact represent more stringent standards than the applicable federal rules since, as an existing facility, Lehigh is not subject to the amended NSPS or NESHAP standards for "new or modified" facilities. Some commenters suggested that these federal standards have been proven to be feasible and cost effective by the EPA for all cement manufacturing facilities. However, if this were the case, the more stringent standards would be applied all kilns, including those at existing facilities, rather than only for those at "new or modified" facilities.

Cathy Helgerson (two successive emails):

Hello Robert, David and Stakeholders,

I have attached my comments and also two other items for your review.

I could also be sending more comments after our meeting Sept. 7, 2016.

This e-mail is also a reminder feel free to send this information on to others.

Thanks

Cathy Helgerson

CAP - Citizens Against Pollution

Attachment provided at the end of this appendix along with copies of earlier email, sent to members of the Stationary Source Committee.

Staff Response:

1. Staff summarization of your comments and responses are provided below. You do not agree with way that the proposed changes to the regulation have been indicated in the supporting documents.
2. You do not agree with the proposed changes in themselves. You feel that ammonia emissions are too high already, and that the changes to the regulation will lead to an increase in emissions. You have provided some calculations that you show the emissions standard is

being raised from 10 ppmv to 16.18 ppmv, and that this will result in increased pollution from Lehigh.

3. You believe that Lehigh should cease operations if they cannot comply with the current rule. You believe that emissions of ammonia are unsafe at any level, and the only way to end the constant bombardment of ammonia pollution is by closing the Lehigh Southwest Cement and Quarry.
4. You do not agree with the conclusions drawn from the air dispersion modeling results. In particular, you disagree with the conclusion that the maximum acceptable stack concentration would be 2,432 ppmv. You also do not believe that the modeling truly represents ongoing emissions at Lehigh, and that the public is suffering health impacts from ammonia emissions at Lehigh.
5. You do not believe that Lehigh is complying with many sections of the current regulation and you identify all of these with comments providing your own observations and opinions as to why and how Lehigh is not in compliance.
6. In additional correspondence you indicate that the proposed changes to the rule do not qualify for and exemption from California Environmental Quality Act review, because you disagree that the proposed changes will not result in an increase in emissions from Lehigh.

1. The Air District uses a standard strikethrough/underline format to indicate the proposed changes to the rule. In doing so, the Air District attempts to keep redundancy of that text struck through and underlined to a minimum. The staff report and other supporting documents provide additional commentary to explain the purpose of the changes so that these amendments are clear.

2. A review of ammonia monitoring data shows that ammonia concentrations in the stack are highly variable and this variability is driven by nitrates in the feedstock independent of ammonia injected into kiln to reduce emissions of nitrogen oxides. The current ammonia standard and the proposed change (as provided in section 9-13-301.4) limit the concentration level at the emission point of the kiln. The proposed amendment would change the standard from a 24-hour rolling average value (of 10 ppmv plus a calculated background value which is in turn based on a 6-month average) to a 182-operating day rolling average value of 270 ppmv. This latter value was derived by performing and air dispersion modeling analysis to determine the concentration at the emissions stack that would ensure that a downwind concentration of 0.5 ppmv is not exceeded in any one-hour period. The current standard is not 10 ppmv averaged over 24 hours, but rather 10ppm + a 6-month baseline value which is then averaged over 24 hours. The fundamental problem with the regulation as currently written is that the emissions standard is averaged over a much shorter period (24 hours) than the baseline period (effectively 6 months). That 24-hour average is too short to accommodate that variability of the background level caused by the feedstock. Air District staff believe a 182-operating day rolling average is more appropriate to account for that variability.

3. As stated in response number 2 above, the current regulation is not enforceable because it is impossible to comply with a 24-hour standard that is based on 6-month average given that the range of daily averaged concentrations far exceeds the 10 ppmv buffer allowed in the standard. The Air District recognizes this problem is addressing it in the proposed amendments to the regulation. The Air District does not have the authority to physically stop

a facility from emitting pollutants above established regulatory or permitted limits. The Air District enforces its regulations and permit limits through fines and penalties; however, the Air District would not seek fines or penalties for an exceedance over a standard which it recognizes is fundamentally flawed.

4. Whenever the Air District evaluates the health risks from a source of toxic air contaminants, this analysis is performed according to guidelines established by the California Office of Environmental Health Hazard Assessment. These guidelines provide toxicity values and accepted protocols for emissions estimation as well as specifications for the air dispersion models. These guidelines and toxicity values are used throughout California. The air dispersion analysis concluded that in order to ensure that downwind concentrations never exceed the acute reference exposure level for ammonia of 4.5 ppmv, the ammonia concentration at the stack must not exceed 2,432 ppmv. Air District staff is proposing an ammonia concentration standard of 270 ppm which will ensure that downwind concentrations do not exceed 0.5 ppmv which is 90% less than the acute REL. Air dispersion modeling as performed for this rule development effort is recognized as the standard way to evaluate health effects throughout California and in other states throughout the country.

5. The other sections of the Regulation 9-13 to which you have provided comments are not subject to proposed amendments and are therefore beyond the scope of this proposed rule development effort. Air District monitoring, compliance and enforcement efforts indicate compliance with these sections by Lehigh.

6. In terms of emission levels, the current standard cannot be compared to that proposed in the amendments because the current standard is technically invalid due to the difference in averaging periods between the baseline period and that of the standard. The 182-operating day average in the proposed emissions standard replicates the baseline averaging period of 6 months in a more precise form. Pursuant to the California Environmental Quality Act (CEQA), the Air District has concluded that the proposed amendments to Regulation 9-13 are exempt under CEQA guidelines Section 15301, Class 1. The rule amendment would involve negligible or no expansion of an existing use. The proposed change to the averaging period will merely effectuate the original intent of the rule. Actual emissions will not increase. Likewise, changing the baseline methodology will not affect emissions. Air District staff will file a Notice of Exemption with the County Clerk after adoption by the Board of Directors.

Comments from Cathy Helgerson in Full:

Comments: Regarding unacceptable levels of Ammonia Pollution coming from Lehigh Southwest Cement via kiln pollution changes under review with Regulation 9 Rule 13 and more.

From: Cathy Helgerson

Added: 9-13-200 under Definitions 9-13-220 (New) pg. 9-13-1 proposed revision as follows: (I do not agree with New Rule Imposed)

19-13-220 182- Operating Day Rolling Average:

Cancelled Out: Listing 9-13-400 under Administrative Requirements section: 9-13-402 proposed revision to omit pg. 9-13-1

9-13-402 Baseline Ammonia Emission Level Determination

Cancelled Out: Listing 9-13-600 under Manual of Procedures section 9-13-610 proposed revision to omit pg. 9-13-2

9-13-610 Baseline Ammonia Emission Level Calculation

9-13-100 General & 9-13-200 Definitions see pg. 9-13-4 (I do not agree with New Rule Imposed)

Added: 9-131-100 series pg. 9-13-3 & pg. 9-13-4

Added: Listing 9-13-220: 182-Operating Day Rolling Average: The arithmetic means of the emissions as prescribed in sections 9-13-301 of the most recent 182 operating days. Each operating day initiates a new rolling average period.

9-132-300 Standards (I do not agree with New Rule Imposed)

Added and Changed 9-13-301 Series Emissions Limits under 301.4 pg. 9-13-4

301.4 The 182-Operating Day rolling average of ammonia (NH3) emissions from the kiln shall not exceed 270 ppmv, dry at 7 percent oxygen.

Note: I do not believe in this change and it will harm the public with serious pollution.

Cancelled Out: The 24 hour rolling average of ammonia (NH3) emissions from the kiln shall not exceed baseline emissions levels by more than 10 ppmv, dry at 7 percent oxygen.

Note: This should have been written this way on the Regulation 9 Rule 13 and it was not prior to the change on the revised version 10 ppmv should have been crossed out in full and the new or revised version should have been written separately. I do not agree with this cancellation change the limits should be stronger to protect the public. There is a serious pollution problem strong levels of ammonia are released every day and we are told there is no harm I do not believe this and the public is not aware of the danger. The calculations are higher at 16.18 ppmv we do not want less stringent rules we want stronger rules at a 24 hr. rolling operating level. What is the safe operating level that has yet to be determined if even there is a safe operating level unfortunately I do not think so.

9-12-400 Administrative Requirements

Changed Deleted: 9-13-402 I did not type in all of the change. Pg. 9-13-6

Note: There needs to be some mention of the Baseline Ammonia Emission Level staying at the level established under and by this new Regulation 9 Rule 13 under Administrative Requirements 9-13-400.

9-13-600 Manual of Procedures

Changed Deleted: 9-13-610 Baseline Ammonia Emissions Level Calculation: I did not type in all of the change included 610.1 & 610.2 Pg. 9-13-10.

Note: There needs to be some mention of the Baseline Ammonia Emissions Level staying at the levels established under and by this new regulation 9 Rule 13 under Manual of Procedures 9-13-600.

Stakeholder and BAAQMD please review this information very important!

Emission Limits - New calculations stated by the BAAQMD

182 days x 24 hrs. = 4,368 hrs. –

4,368 hrs. divided by 270 ppm = 16.1777 p.m. rounded off to 16.18 ppmv per day allowed pollution.

Note: On the paperwork of revisions and changes next for 10 ppmv was left off and then 270 on same line but the ppnv was on the next line this is not acceptable the public needed to have the 10 ppmv show on the changes.

16.18 ppmv x 365 days (1 yr.) = 5,905 ppmv & 10 ppmv x 365 days = 3,650 ppmv (subtract 3,650 from 5,905 results in 2,255 ppmv increased pollution allowance for Lehigh

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Old calculations by the BAAQMD were 24 hr. at a 10 ppmv per day

The BAAQMD has given Lehigh more opportunity to pollute at a higher level not acceptable.

There is a difference of 16.18 ppmv from 10 ppmv = 6.18 ppmv (Public subject to more pollution)

The changes to the rule are unacceptable they are worse than the original rules which will cause the public more contamination the math needs to be spelled out in detail.

If Lehigh Southwest Cement could not even comply with the old rule at 10 ppmv than the BAAQMD and the EPA should make them comply or shut down. We the public want a stronger Rule with 24 hr. monitoring less than 10 ppmv and greater accountability in order to guarantee that the public is protected from this pollution.

I personally do not believe that this allowance of ammonia is safe at any level and the public is constantly bombarded by ammonia pollution and other pollution this needs to end by closing the Lehigh Southwest Cement and Quarry.

Reference Interoffice Memorandum – To Eric Stevenson from Ted Hull – Subject Evaluation of Ammonia Level of Significance from the Kiln at Lehigh Southwest Cement. Copy sent to me by BAAQMD Robert Cave.

Comment: A Conclusion was stated as follow: Stated in memo Kiln stack ammonia emissions from Lehigh Southwest Cement do not present offsite health hazards at stack concentrations below 2,432 ppm vol. (@ 20 degree C). This is a terrible Conclusion and using a modeling system does not truly represent the ongoing emissions of ammonia coming from the kiln at the Lehigh Southwest Cement facility it should be monitored at the source and precisely.

The other statement on the memo says that they have determined that the maximum acceptable ammonia (NH3) concentration from the kiln stack is 2,432 ppm vol. (@ degree C). Inhalation RELs are air concentrations or doses at or below which adverse health effects are not expected even in sensitive members of the general population under specified exposure scenarios. The acute RELs are for infrequent 1 hour exposures that occur no more than once every two weeks in a given year. The chronic RELs are for 24 hour per day exposures for at least a significant fraction of a lifetime, defined as about 8 years (2 percent of a 70 year lifespan). It states that the value 2,432 ppm vol. (@ 20 degree C) coincides with the modeled offsite receptor point at which the Acute Reference Exposure Level (REL) * for ammonia (3,200 ug/m3) as first reached for a 1-hour averaging period; i.e. the point of maximum impact (PMI). At this same maximum stack concentration, the maximum annual average offsite ammonia concentration is 28ug/m3. This is 14% of the Chronic REL. (200 ug/m3).

Note: I have attached the copy of the Interoffice Memo and the plot map. Question who decides what we can tolerate?

The public cannot and should not be subjected to these ammonia levels and are suffering from the pollution I can testify to that fact due to my many health issues and so can others.

9-13-100 General

9-13-203 Adequately Wetted: Sufficiently moistened with water to minimize the release of particulate matter into the ambient air as determined by the provisions of Section 9-13-611 which states as follows:

9-13-611 Determination of Adequately Wetted: A sample of at least one quart in volume shall be taken from the top three inches from the surface of unpaved road, bare areas or from the surface of stockpile. The sample shall be poured out from a height of four feet onto a clean hard surface. The material shall be considered to be adequately wetted if there is no observable dust emitted when material is dropped.

Comment: This Rule is not being adhered to by any means there is dust all over the road, parking lots and sides of the road on the grass and trees. There are extremely large limestone boulders on the side of the road that have high levels of Mercury and other pollutants in them and so when it rains this pollution is washed into the groundwater. The dust is all over the Cement Plant and Buildings at the site and there is a great number of blight on the grounds. The ventilation system is full of pollution and old buildings are not closed or demolished. The company does not wash down the road and trucks as they should and this is evident the pollution dust coming from the trucks goes down Foothill Blvd. and the 208 Freeway.

9-13-209 Miscellaneous Operations: Any activity performed at the facility that could generate emissions of fugitive dust. Examples of miscellaneous operations include material conveyance and transporting, vehicular traffic, shoveling and sweeping, and material storage.

Comment: This Rule is not being adhered to by any means the Petroleum Coke a waste material of Petroleum and possibly coal is not being stored properly and I have complained before this needs to be looked into and rectified. There are dust emissions at and around the quarry from trucks at the cement plant and the quarry that are not being sprinkled to keep the dust down and the public suffers from this violation.

9-13-212 Particulate Matter: Any material that is emitted as liquid or solid particles or gaseous material which becomes filterable at the testing temperatures specified in the referenced test method.

Comment: This Rule is absolutely not being adhered to by any means the emission levels do not control the Particulate Matter at any level and the public is and has been subjected to constant dust particulate matter. There is dust all over my house a gray dust and it fills the air pollutes the air, water and the soil and the BAAQMD does nothing to control it my question is why not? I would also like to add here where are all the other agencies while this is taking place? We the public have to be subjected to this pollution which is killing us we are eating and swallowing this dust and breathing it into our lungs which causes a great many health problems. I can tell when Lehigh is open and closed my health is effected and my body knows right away because I am sick and cannot breathe I have asthma. My other health problems due to this pollution and not limited to and consist of diabetes, cancer, and planters foot. I have also very dry skin, itchy eyes, sore throat, sinus congestion, ear congestion and sometimes suffer from stomach problems.

9-13-219 Total Organic HAP: For the purpose of this rule, the sum of the concentrations of compounds of formaldehyde, benzene, toluene, styrene, m-xylene, p-xylene, o-xylene, acetaldehyde, and naphthalene as measured in accordance with Section 9-13-607.

Comment: This rule is not being adhered to by any means no tests are being conducted to keep the public safe.

9-13-219 Track-Out: Any bulk material that adheres to or agglomerates on the exterior surfaces of motor vehicles, haul trucks, and/or mobile equipment, including tires and that has fallen or been deposited into a paved public roadway.

Comment: This rule is not being adhered to by any means the road next to the large boulders and along the Stevens Creek Blvd. is full of dirt and dust from the trucks which is carried further down to the Foothill Expressway and HW 280. I have collected dust/dirt gray matter and rocks from the road. I called the City of Cupertino one time to get them to clean up the road because of the rocks and pollution. The City of Cupertino street cleaners do a very bad job of cleaning up this mess. Lehigh does not water down the road and the trucks. The workers up at the plant are breathing in this dust and are not using breathing masks to protect them and I understand that MISHA/OSHA has sighted Lehigh for failure to protect the workers. There was also a killing at the plant a worker went crazy and killed his fellow workers it was terrible. I spoke to a friend of the family and he said that Mr. S. Almon has just had throat surgery and that he had lung disease and that he was upset because the company would not help him. This was a terrible disaster and I am sorry to say it should have never happened I have Lehigh to blame.

9-13-300 Standards: 9-13-301 through 301-8

Comment: These rules that apply to these standards are not being adhered to and there have been violations recorded to many to mention now. People have called to report emission problems and the public is not being contacted or informed about the emissions or violations not acceptable. There needs to be a quick turn around when citizens call in and there is not no one calls us back anymore and we do not receive a copy of the complaint. Note: I called the BAAQMD complaint line and the inspector would call me and even meet with me up at the parking lot next to the road and plant. I would talk to him about what I see or saw and if I asked him for a report he would have it sent to me, now the way things are no one at BAQQMD does anything and I have complained. I was told that if I wanted a copy of the complaint I needed to go on line and request one this could take weeks to get and this is not acceptable the public needs to know what is wrong up at Lehigh.

9-13-302 Opacity:

Comment: Opacity was a problem and still remains a problem this standard is not being adhered to why not? It seems unless the emissions are black or gray that the BAAQMD will not submit violation to Lehigh this should not always be the case. I also understand that there is a problem with the inspector because he knows there was a violation but he states he cannot list it as a violation because he did not see it and it was noted on the monitoring equipment why is that? The issue is how can he always get there in time to see the violation especially after hours, weekends and holidays seems there needs to be better monitoring and we do not have that so the public suffers. If Lehigh is sited they only pay a fine and walk away and violate again. They just right it off as a business expense and the public suffers. I have suggested cameras and reporting monitoring methods 24/7 that would be reported directly to the

BAAQMD or the EPA I would suggest both be monitoring Lehigh but no one responded to my suggestion.

9-13-304 Fugitive Dust Mitigation Control Measures: States that: Any person operating a Portland cement manufacturing facility shall at a minimum implement the following measures to mitigate emissions of fugitive dust.

Comment: 304.1 through 304.12 ALL – I feel that there continues to be a disregard for compliance by the Lehigh Southwest Cement and Quarry Company. The BAAQMD inspectors would have to be at the site 24/7, or a monitoring visual surveillance camera system employed in order to make sure these regulations and rules are followed. Calling the BAAQMD Complaint Department does no good especially now with the new inspector. The dust needs to be controlled and this is not happening it is on everything and we are suffering from the pollution with health issues and even death as a result.

Bill Almon passed on and mentioned at two stake holder meetings that he had cancer and that it was caused by a stationary source he lived right next to Lehigh Cement and Quarry in the Los Altos hills. He mentioned that his doctor stated it was a result of benzene and other serious pollution the BAAQMD has done nothing to stop the pollution and we are told that the levels are acceptable and regulated.

The Cumulative effect from these pollutants and the chemical cocktail caused by the atmosphere mixing with all of this pollution is killing us. There is climate change and the drought which makes things even worse and still Lehigh Southwest Cement and Quarry remain open with no hope in anyone closing them down.

9-13-400 Administrative Requirements

Comment: 9-13-401- Initial and Annual Demonstration of Compliance: The time period of these compliance tests are far out reference 9-13-301 Emissions Limits 301-1 through 301-8, there needs to be a closer watch on emissions. Note: 301.4 up for change especially I do not agree with the change the public will suffer.

9-13-402 – BAAQMD – omitted

9-13-403 Total Organic HAP Emissions Test: Tests should be conducted more frequently and the public should be notified that they are in compliance with access to reports by the BAAQMD. The violations should also be noted and the amount of the fine stated in the reports. If the Lehigh Cement facility continues to violate the rules and are unable to comply with the limits they should be shut down.

9-13-404 Health Risk Assessment: THE HEALTH OF THE PUBLIC IS AT IMPORTANT –

Comment: The Health Risk Assessment is worthless Lehigh is not in compliance and the public suffers. Lehigh has been noted to be a great health risk to the public in many reports, and we have seen the violations this needs to be seriously addressed by the BAAQMD, State Water Board, EPA Region 9 & Federal EPA, Santa Clara County, City of Cupertino, City of Los Altos, Mid Pen, Fish and Game, State Conservation Dept., and any other agency that is involved.

9-13-405 Dioxins and Furans Emissions Test:

Comment: Conducting the Test every 30 months is not enough the public suffers and they demand to know the daily risk and the method used to monitor the facility with source tests to determine emissions. The reports should be made ready and if there is a problem Lehigh should be fined. I would even go further with this situation why is there no monitoring units taking down the information and transferring it to the BAAQMD and the EPA Region 9? The continued ongoing release of these pollutants with their toxic emissions into our air is serious, Lehigh needs to install more sophisticated equipment and if they cannot comply with stronger regulations they should be shut down.

9-13-500 Monitoring and Records

9-13-501 Emissions Monitoring: 501.1 and 501.2

Comment: Lehigh Southwest Cement and Quarry monitor themselves and they also calibrate the monitoring equipment can we expect them to register information correctly it is like the fox watching the chicken coop. I mentioned before that there needs to be equipment that will transfer the information directly to the BAAQMD and the EPA right off of the monitors and if there is a violation then the inspector should immediately go to the facility and site them. If Lehigh cannot comply and they keep violating the rules they should be shut down in order to protect the public form further pollution.

9-13-502 Production Monitoring: 502.1 & 502.2

Comment: Lehigh is left again to monitor themselves how do we know they are really staying within the rules clinker production rates should be set and should not be allowed to change but in this situation they are. The more clinker production the more the public is subjected to pollution.

9-13-503 Records: 503.1 through 503.11

Comment: Lehigh monitors and keeps their own records and the results remain on site and the BAAQMD can review these files. In the past there has been problems with records not being available and lost this should not be happening and Lehigh should be sited. It does not state how often BAAQM District goes out to inspect these records and it should be. It does state they need to keep these records for 60 months not long enough. The BAAQMD needs to keep the records from Lehigh but of course this would be a great deal of work for BAAQMD to maintain but in order to assure the public of compliance it is necessary. There is even no mention of an inspector going up unannounced and going up frequently to make sure that records are kept correctly and honestly.

9-13-504 Reporting Requirements: A person subject to the requirements of Section 9-13-301 shall meet the following reporting requirement: 504.1 & 504.2

Comment: I wonder who that person is that has to inspect, report, compile information and site Lehigh I suspect it is the inspector assigned to Lehigh. There is a problem with the inspector how does the public

know that all of 9-13-301 is being adhered to? I have trouble getting him to respond to my complaints and get me a report so how can we trust him to do his job? We need a better system and we need to make sure that the system is working.

9-13-600 Manual of Procedures

9-13-601 Determination of Nitrogen Oxides:

Comment: Nitrogen Oxides harmful to the clean air environment the public is continually subjected to this pollution and it must stop. Who sets the limits and says we the public can live with these limits they are very wrong and there are serious health problems and even death associated with this pollution. There needs to be stronger regulations the same regulations that New Cement Plants are subject to and that is not happening at Lehigh and it should.

9-13-602 Determination of particulate Matter:

Comment: Method 5 determination of Particulate Matter from a stationary source as Lehigh is not stopping the particulate pollution and it seems the BAAQMD is not doing anything about it. The dust is everywhere and people are ill from all kinds of health problems what is the BAAQMD going to do about this violation the public wonders and waits.

9-13-603 Determination of Ammonia: I AM STRONGLY AGAINST THE NEW RULE!

Comment: The Ammonia problem is a serious problem and it is causing serious health problems with the public who must endure this pollution. I for one believe my health problems are a result of the continued polluted air emissions coming from the Lehigh Southwest Cement and Quarry. I have had to go to the emergency room recently for two asthma treatments, a lung x-ray, experience two blood tests, determine my oxygen all this to find out what was wrong with me. The doctor said it is the asthma the heavy feeling in my lungs was from the asthma and he informed me I will not need to take my inhalers twice a day. I can tell when Lehigh is operating or not my body can feel the tightness in my chest and other breathing problems it is not right human life is more important than cement. Note: The New Rule as proposed regarding Ammonia will put more pollution into the air and more people will suffer. I talk to people and they say they will probably move if Lehigh puts in a new pit this is a very sad state of affairs and who will stop them?

9-13-604 Determination of Dioxins and Furans, 9-13-605 Determination of Mercury, 9-13-606 Determination of Total Hydrocarbon, 9-13-607 Determination of Total Organic HAP, 9-13-608 Determination of Hydrochloric Acid, 9-13-609 Determination of Visible Emissions and 9-13-611 Determination of Adequately Wetted: **ALL OF THESE ITEMS ARE STRONGLY SUBJECT TO NONCOMPLIANCE BY LEHIGH CONTINUALLY!**

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Hello Robert,
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I am sending you this e-mail regarding Regulation 9 Rule 13 as part of my comments to Bay Area Air Quality Management District to be added to the comments I have already sent to you prior. Please include both e-mail messages I want it noted in the record that I sent it to all board members.

Thanks

Cathy Helgerson

CAP - Citizens Against Pollution

408-253-0490

---------- Forwarded message ----------
From: **Cathy Helgerson** <cathyhelger@gmail.com>
Date: Thu, Sep 15, 2016 at 11:59 AM
Subject: Fwd: Lehigh Southwest Cement and Quarry
To: mhiratzka@baaqmd.gov

Hello,

I just spoke to you about this e-mail I sent out to the EPA Region 9 and the EPA Federal EPA I asked you to send this to the entire board please do so today. I hope they will read this e-mail before the meeting on Monday with the Executive Committee Stationary Source Co. date Sept. 19, 2016 and the BAAQMD Board Meeting Oct. 19, 2016 both meetings are for Regulation 9 Rule 13 this very important information.

Thanks

Cathy Helgerson

CAP - Citizens Against Pollution

408-253-0490

---------- Forwarded message ----------
From: **Cathy Helgerson** <cathyhelger@gmail.com>
Date: Thu, Sep 15, 2016 at 11:39 AM
Subject: Lehigh Southwest Cement and Quarry
To: "Reeder, John" <Reeder.john@epa.gov>, strauss.alexis@epa.gov, mccarthy.gina@epa.gov
Cc: Karen Del+Compare <kdcyew@excite.com>, Ken Yew <ken_yew@yahoo.com>, "FRYHOUSE@EARTHLINK.NET" <FRYHOUSE@earthlink.net>, jlucas1099@aol.com

Hello John, Alexis, and Gina,

I have been in touch with John Reeder and forwarded information to him regarding the Lehigh Southwest Cement and Quarry so that he could help with a matter here in Cupertino, Ca.

The Bay Area Air Quality Management District is amending a Regulation 9 Inorganic Gaseous Pollutants Rule 13 Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing. and there is a draft in process this matter will be taken up by the Executive Committee Stationary Source Commitee on Sept. 19, 2016 Monday in San Francisco, Ca. at 10:30 - 5:00 PM address 375 Beale Street, San Francisco, Ca. 94105.

The Bay Air Air Quality Management District will also submit the conclusion of the Executive Committee Stationary Source Commitee decision to the BAAQMD Board on Oct. 19, 2016, at the Board Meeting at 10:30 AM - 5:00 PM, in San Francisco, Ca. address 375 Beale Street, San Francisco, Ca. 94105.

I have sent John the paperwork to reivew about this matter and hope he has forwarded it on to you for your review, and he has instructed me that you Alexis Strauss will not be handling this matter.

The problem is the ammonia levels coming from Lehigh Southwest Cement and Quarry the Bay Area Air Quality Management District is allowing increased levels of ammonia with this new Regulation 9 Rule 13. I am sure that due to this increased level from 10 ppmv to 16.18 ppmv perd day that it is not safe for people to be exposed to this increase. I would like your office to look into this matter ASAP. Due to the urgency of the matter and the set dates above for review by the agencies who will make a final decision. I have submitted paperwork showing the calculations please review these comments that I have made to the BAAQMD.

The Bay Area Air Quality Management District is also says that they will submit an application for a CEQA excemption of Lehigh Southwest Cement and Quarry Regulation 9 Rule 13 after the BAAQMD Board votes this is very wrong. The Lehigh Southwest Cement and Quarry should have no excemption because under CEQA Article 19. Categorical Exemptions Section 15300 to 15333 they do not qualify for an Exemption.

The Bay Area Air Quality Management District has added to their Staff Report on this Rule 13 Regulation 9 under 7.0 Environmental Impacts it states as follows:

California Environmental Quality Act - Pursuant to the California Environmental Quality Act (CEQA), the Air District has concluded that the proposed amendmanets to Regulaiton 9-13 are emempt under CEQA guidelines Section 15301, Class 1. The rule amendment would involve negligible or no expansion of an existing use. The proposed change to the averaging period will merely effectuate the original intent of the rule. Actual emissions will not increase. Likewise, changing the baseline methodology will not affect emissions. Air District Staff will file a Notice of Exemption with the County Clerk after adoption by the Board of Directors.

The BAAQMD is in error the changing the baseline methology will affect emissions and cause the public to be exposed to more pollution that is seriously hazardous to our health and life itself.

CEQA Unter Article 19 . Categorical Exemptions 15300. Categorical Exemptions which the BAAQMD has referenced in their Staff Report it states as follows:

Section 21084 of the Public Resources Code requires these Guidelines to include a list of classes of projects which havae been determined not to have a significant effect on the environment and which shall, therefore, be exempt from the provisions of CEQA.

It goes on to state that - In response to that mandate, the Secretary for Resources has found that the follwing classes of projects listed in this article do not have a significant effect on the environment, and they are declared to be categorically exempt form the requirement for the preparation of the environmental documents.

Under Class 1 Existing Facilities Exemptions 15301 Class 1 Note: Last Paragraph partly states under Discussion application of this exemption, as all categorical exemptions is limited by the factors described n section 15300.2 accordinly, a project with SIGNIFICANT CUMULATIVE IMPACT OR WHICH OTHERWISE HAS A REASONABLE POSSIBILITY OF RESULTING IN A SIGNIFICANT EFFECT DOES NOT QUALIFY FOR CLASS 1 EXEMPTION.

Lehigh Southwest Cement and Quarry can not use this Exemption.

Under CEQA Article 19 Categorical Exemptions Title 14 California Code of Regulations Chapter 3. Guidelines for Implementation of the California Environmental Qualtity Act Section 15300 to 15333.

Listing: 15300.2 Exceptions - Staes (a) Location - Classes 3,4,5,6, and 11 are qualified by consideration of where the project is to be located - a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances except where the project may impact on an ENVIRONMENTAL RESOURCE OF HAZARDOUS OR CRITICAL CONCERN where designated, precisely mapped, and offically adopted pursuant to law by federa, state or local agencies.

(b) CUMULATIVE IMPACT.- All excemptions for thee classes are impplicable when cumulative impact or successive project of the same type in the same place, over time is significant.

(c) SIGNIFICANT EFFECT - A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the envoronment du to unusual circumstances.

(d) omit not sure

(e) HAZARDOUS WASTE SITES - A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

(f) HISTORICAL RESOURCES - A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of historical resource.

Dissussion: In McQueen v. Mid Peninsula Regional Open Space (1988 202 Cal. App. 3d 1136, the court reiterated thqat categorical exemptions are constucted strictly, shall not be unreasonably expanded beyond their terms, and may not be used where there is substantial evidence that there are unusual circumstnces (including future activities) resulting in (or which might reasonably result in) significant impacts which threaten the environment

Lehigh Southwest Cement and Quarry should not have an exemption and the BAAQMD is in error on their Staff Report. The increase of ammonia pollution to the public must be stopped and their must be a way to curtail the pollution as a whole. The longer 6 month (182 days) Operating Day Rolling Average will not protect the public from this pollution. The 270 ppmv inclrease for a 6 month period (182 days) will come out an increase from 10 ppmv to 16.18 ppmv per day of allowed pollution.

The BAAQMD has argued with the Public and stated at the last Stake holders meeting that Lehigh cannot control their ammonia emissions that are erratic and out of control.The ammonia producted by the kiln and the ammonia on site from the limestone rock is way more than Lehigh can control.There does not need to be a more laxed regulation alternative this kind of thinking only gives Lehigh more room to polute the public and this is not acceptable.It they can not stop this pollution than they should be closed down.

Please look into this matter it is very important I have ccd some stake holders that will be interested in this matter.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 4, 2016

Re: Presentation by Mr. Gordon Schremp of the California Energy Commission

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The California Energy Commission (CEC) is the agency responsible for identifying and assessing major energy trends and issues in California, including those associated with crude oil markets and the refining of crude oil within the State of California.

DISCUSSION

Mr. Gordon Schremp, Senior Fuels Specialist who advises the Commissioners, Executive Officer, Governor's Office and Legislator, will present information on processing of various crude oil types, the potential impacts of emission caps on the California gasoline market and trends in product exports and imports and the effects of recent refinery outages on those trends.

BUDGET CONSIDERATION/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Eric Stevenson
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 12, 2016

Re: Update on Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions and Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

At the July 20, 2016 Board meeting, the Board of Directors directed staff to conduct a full regulatory analysis of two options in one Environmental Impact Report (EIR) to address concerns about the impact of emissions from refineries: a proposal by staff to significantly reduce toxic risk from refineries and hundreds of other sources throughout the Bay Area (draft Regulation 11, Rule 18 or "Rule 11-18") and a proposal by Communities for a Better Environment (CBE) and associated organizations to limit greenhouse gas (GHG) and specific criteria pollutant emissions from refineries (draft Regulation 12, Rule 16 or "Rule 12-16"). Staff presented a timeline for this effort culminating in Board consideration of the rules in May 2017.

Staff is fully developing both rules and is on track to bring them to the Board for consideration by May of 2017. The first milestone in this process was a public draft of the project description for the EIR for the two rules that was released on schedule on August 19, 2016. Seven comments from community groups, industry and the public were received at the close of the comment period on September 9, 2016. The next milestone is to release a draft of each rule and the Initial Study for the EIR by October 14, 2016. Staff continues to meet with key stakeholders throughout the rule development process. A brief description of both draft rules is provided below.

Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits:

At the July 20, 2016 meeting, the Board of Directors directed staff to develop regulatory language that represents a proposal by CBE to limit specific emissions from petroleum refining facilities and three support facilities using numeric limits on GHG, particulate matter (PM), oxides of nitrogen (NOx) and sulfur dioxide (SO_2) at defined historic levels. Staff have been working closely with CBE to reflect their proposal in regulatory language. Staff has identified a number of issues

regarding this draft rule and discussed these issues with CBE. CBE has indicated that they do not want to make any changes to their proposal in order to address these concerns.

Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities:

In order to address concerns regarding health impacts for communities located near refineries and other facilities, staff is developing a rule that would significantly reduce toxic emissions from sources such as refineries, metal melting facilities, and stationary diesel generators. Rule 11-18 would apply to all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers. Rule 11-18 would achieve significant reductions of toxic air contaminants by setting a cap on the allowable risk for all facilities across the Bay Area. Air District staff would perform Health Risk Assessments (HRAs) to identify risk levels at facilities with potential to exceed the cap and then require appropriate measures to reduce risk to acceptable levels.

DISCUSSION

Staff is on schedule to bring these rules to the Board for consideration in May 2017. Recent and upcoming milestones are as follows:

- August 19, 2016: Project description for EIR posted for public review and comment.
- October 14, 2016: Publication of draft rules, and Initial Study for the EIR
- October 19, 2016: Update to the Board of Directors
- Mid-November, 2016: Scoping meeting for EIR
- December 2016: Update to Stationary Source Committee
- March 3, 2017: Publication of rules, staff analysis, socioeconomic analysis, EIR
- May 17, 2017: Board Hearing

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Eric Stevenson
Reviewed by: Jean Roggenkamp

BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Eric Mar and Members
of the Board of Directors

From: Jack P. Broadbent
Executive Officer/APCO

Date: October 12, 2016

Subject: Report of the Executive Officer / APCO: Update on Progress of Regulation 12, Rule 16 and Regulation 11, Rule 18

BACKGROUND

At the July 20, 2016 Board meeting, the Board of Directors directed staff to conduct a full regulatory analysis of two options to address concerns about the impact of emissions from refineries: a proposal by staff to significantly reduce toxic risk from refineries and hundreds of other sources throughout the Bay Area (draft Regulation 11, Rule 18 or "Rule 11-18") and a proposal by Communities for a Better Environment and associated organizations (CBE) to limit greenhouse gas (GHG) and specific criteria pollutant emissions from refineries (draft Regulation 12, Rule 16 or "Rule 12-16"). Staff presented a timeline for this effort and will fully develop both rules and bring them to the Board for consideration by May of 2017. The first milestone in this process was a public draft of the project description for the Environmental Impact Review (EIR) for the two rules that was released on schedule on August 19th. Seven comments from community groups, industry and the public were received at the close of the comment period on September 9th. On October 14, 2016 staff will post draft rules and a Notice of Preparation/Initial Study for the Environmental Impact Report for both rules.

Regulation 12, Rule 16: Petroleum Refining Facility-Wide Emissions Limits:

At the July 20th meeting, the Board of Directors directed staff to develop regulatory language that represents a proposal by CBE to limit emissions from petroleum refining facilities and three support facilities using specific numeric limits on GHG, particulate matter (PM), oxides of nitrogen (NOx) and sulfur dioxide (SO_2) at defined historic levels. Staff have been working closely with CBE to define their proposal, develop appropriately representative language in the recently released project description and develop representative regulatory language.

Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities:

Staff is developing a rule that would significantly reduce toxic emissions from sources such as refineries, metal melting facilities, and stationary diesel generators. Rule 11-18 would apply to all facilities whose emissions of toxic air contaminants may result in a significant risk to nearby residents and workers. The purpose of Rule 11-18 is to set toxic air contaminant caps for those

facilities causing the highest health impacts across the Bay Area, including refineries, and to require these facilities to reduce that health risk. Staff has conducted two initial outreach meetings for this rule and has six more planned for November 2016.

SCHEDULE

Staff is on schedule to bring these rules to the Board for consideration in May 2017. Upcoming milestones are as follows:

- October 14, 2016: Publication of draft rules and Initial Study for the EIR
- October 19, 2016: Update to Board of Directors
- November 10-17: Outreach events around the Bay Area
- Mid-November, 2016: Scoping meetings for EIR
- December, 2016: Update to Stationary Source Committee
- March 3, 2017: Publication of rules, staff analysis, socioeconomic analysis, EIR
- May 17, 2017: Board Hearing

The Executive Officer will update the Board on other Key District initiatives as part of the Executive Officer Report on October 19, 2016.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO