

BOARD OF DIRECTORS EXECUTIVE COMMITTEE MEETING

COMMITTEE MEMBERS

LIZ KNISS – CHAIR TERESA BARRETT CAROLE GROOM MARK ROSS BRAD WAGENKNECHT

DAVID E. HUDSON – VICE CHAIR JOHN GIOIA KAREN MITCHOFF JIM SPERING

WEDNESDAY FEBRUARY 22, 2017 10:30 A.M. 1ST FLOOR YERBA BUENA ROOM 375 BEALE STREET SAN FRANCISCO, CA 94105

AGENDA

1. CALL TO ORDER - ROLL CALL - PLEDGE OF ALLEGIANCE

The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members. The Committee Chair shall lead the Pledge of Allegiance.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS

(Public Comment on Non-Agenda Items Pursuant to Government Code § 54954.3) Members of the public are afforded the opportunity to speak on any agenda item. All agendas for regular meetings are posted at Air District headquarters, 375 Beale Street, San Francisco, CA, 94105, and at the Air District's website at least 72 hours in advance of a regular meeting. At the beginning of the regular meeting agenda, an opportunity is also provided for the public to speak on any subject within the Committee's subject matter jurisdiction. Speakers will be limited to three (3) minutes each.

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.

Staff/Phone (415) 749-

3. APPROVAL OF THE MINUTES OF NOVEMBER 21, 2016

Clerk of the Boards/5073

The Committee will consider approving the draft minutes of the Executive Committee meeting of November 21, 2016.

4. HEARING BOARD QUARTERLY REPORT: JULY – SEPTEMBER 2016 AND OCTOBER – DECEMBER 2016 T. Trumbull/5073

TerryT1011@aol.com

The Hearing Board Chair will present the Hearing Board Quarterly Report for the period of July through September 2016 and October through December 2016.

5. BAY AREA REGIONAL COLLABORATIVE (BARC) UPDATE

J. Roggenkamp/4646

jroggenkamp@baaqmd.gov

The Committee will receive an update by BARC Director, Allison Brooks, on the activities of the Bay Area Regional Collaborative.

6. TECHNOLOGY IMPLEMENTATION OFFICE (TIO) UPDATE

J. Broadbent/5052

jbroadbent@baaqmd.gov

The Committee will receive an update on actions being taken to launch the Technology Implementation Office (TIO), and will include discussions regarding initial projects and possible funding.

7. ADVISORY COUNCIL OPINION ON GREEN HOUSE GAS (GHG) CAPS AT BAY AREA REFINERIES J. McKay/4629

jmckay@baaqmd.gov

The Committee will be presented with a summary of the Advisory Council's process, their deliberations, and their final opinion from the February 6, 2017 meeting.

8. COMMITTEE MEMBER COMMENTS / OTHER BUSINESS

Any member of the Committee, 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).

9. TIME AND PLACE OF NEXT MEETING

Monday, March 20, 2017, Bay Area Air Quality Management District Office, 375 Beale Street, San Francisco, California 94105 at 9:30 a.m.

10. **ADJOURNMENT**

The Committee meeting shall be adjourned by the Committee Chair.

CONTACT:

MANAGER, EXECUTIVE OPERATIONS 375 BEALE STREET, SAN FRANCISCO, CA 94105

mmartinez@baaqmd.gov

(415) 749-5016 FAX: (415) 928-8560 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 Executive Committee" 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

FEBRUARY 2017

TYPE OF MEETING	<u>DAY</u>	DATE	TIME	ROOM						
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of each Month) - CANCELLED	Monday	20	10:30 a.m.	1st Floor Board Room						
Board of Directors Budget & Finance Committee (Meets on the 4th Wednesday of each Month)	Wednesday	22	9:30 a.m.	1st Floor, Yerba Buena Room #109						
Board of Directors Executive Committee (Meets on the 3 rd Monday of each Month)	Wednesday	22	10:30 a.m.	1 st Floor, Yerba Buena Room #109						
Board of Directors Mobile Source Committee (Meets on the 4 th Thursday of each Month)	Thursday	23	9:30 a.m.	1st Floor Board Room						
MARCH 2017										
TYPE OF MEETING	DAY	DATE	TIME	ROOM						
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	1	9:45 a.m.	1st Floor Board Room						
Board of Directors Climate Protection Committee (Meets on the 3 rd Thursday of Every Other Month)	Thursday	2	9:30 a.m.	1 st Floor Board Room						
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	15	9:45 a.m.	1 st Floor Board Room						
Board of Directors Climate Protection Committee (Meets on the 3 rd Thursday of every other Month) – RESCHEDULED TO 3/2/17	Thursday	16	9:30 a.m.	1 st Floor Board Room						
Board of Directors Executive Committee (Meets on the 3 rd Monday of each Month)	Monday	20	9:30 a.m.	1st Floor Board Room						
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of each Month)	Monday	20	10:30 a.m.	1st Floor Board Room						
Board of Directors Budget & Finance Committee (Meets on the 4 th Wednesday of each Month)	Wednesday	22	9:30 a.m.	1st Floor, Yerba Buena Room #109						
Board of Directors Mobile Source Committee (Meets on the 4 th Thursday of each Month)	Thursday	23	9:30 a.m.	1st Floor Board Room						
Board of Directors Personnel Committee (Meets At the Call of the Chair)	Friday	24	9:30 a.m.	1 st Floor Board Room						

APRIL 2017

TYPE OF MEETING	DAY	DATE	TIME	<u>ROOM</u>
Advisory Council Mtg. (Meets on the 1 st Monday of Every Other Month)	Monday	3	10:00 a.m.	1st Floor Board Room
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	5	9:45 a.m.	1st Floor Board Room
Board of Directors Executive Committee (Meets on the 3 rd Monday of each Month)	Monday	17	9:30 a.m.	1st Floor Board Room
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of each Month)	Monday	17	10:30 a.m.	1st Floor Board Room
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	19	9:45 a.m.	1st Floor Board Room
Board of Directors Budget & Finance Committee (Meets on the 4 th Wednesday of each Month)	Wednesday	26	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Mobile Source Committee (Meets on the 4th Thursday of each Month)	Thursday	27	9:30 a.m.	1st Floor Board Room

HL - 2/16/17 (8:25 a.m.)

G/Board/Executive Office/Moncal

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members

of the Executive Committee

From: Jack P. Broadbent

Executive Officer/Air Pollution Control Officer

Date: February 14, 2017

Re: Approval of the Minutes of November 21, 2016

RECOMMENDED ACTION

Approve the attached draft minutes of the Executive Committee (Committee) meeting of November 21, 2016.

DISCUSSION

Attached for your review and approval are the draft minutes of the Committee meeting of November 21, 2016.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: <u>Marcy Hiratzka</u>
Reviewed by: <u>Maricela Martinez</u>

Attachment 3A: Draft Minutes of the Committee Meeting of November 21, 2016

Draft Minutes - Executive Committee Meeting of November 21, 2016

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

DRAFT MINUTES

Summary of Board of Directors Executive Committee Meeting Monday, November 21, 2016

1. CALL TO ORDER – ROLL CALL

Executive Committee (Committee) Chairperson, Eric Mar, called the meeting to order at 9:33 a.m.

Roll Call:

Present: Committee Chairperson Eric Mar, and Directors John Gioia, Carole Groom,

Scott Haggerty, David Hudson, Mark Ross, and Brad Wagenknecht.

Absent: Vice-Chairperson Liz Kniss and Director Jan Pepper.

Also Present: None.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS:

No requests received.

3. APPROVAL OF THE MINUTES OF SEPTEMBER 19, 2016

Public Comments:

No requests received.

Committee Comments:

None.

Committee Action:

Director Haggerty made a motion, seconded by Director Hudson, to approve the minutes of September 19, 2016; and the motion carried by the following vote of the Committee:

AYES: Gioia, Groom, Haggerty, Hudson, Mar, Ross, and Wagenknecht.

NOES: None. ABSTAIN: None.

ABSENT: Kniss and Pepper.

4. BAY AREA REGIONAL COLLABORATIVE (BARC) UPDATE

Jean Roggenkamp, Deputy Executive Officer, introduced Allison Brooks, Executive Director of BARC, who gave a verbal update of recent activities, including: a presentation on "Fossil-Free Bay Area" that BARC received from the San Francisco Bay Area Planning and Urban Research Association; BARC's upcoming nomination of a new Chair to succeed outgoing Chair, Director Haggerty; the collaboration of the District, BARC, the Bay Area Regional Area Network, and the California Energy Commission in order to assist local jurisdictions adopt solar ordinances; the upcoming launch of a Caltrans grant for planning around sea level rise; BARC's assistance in launching the Resilient by Design Bay Area Challenge; and BARC's completion of its 2-year Work Plan which covers 2015-2017. Ms. Brooks concluded by stating that several significant plans and reports will be released by BARC member agencies in 2017, and that showing cross-coordination between agencies is BARC's goal.

Public Comments:

No requests received.

Committee Comments:

The Committee and Ms. Brooks discussed predictions on how the incoming Presidential administration will affect resiliency in the Bay Area and the work that BARC is doing.

Committee Action:

None; receive and file.

5. UPDATE OF REMOTE PARTICIPATION PROTOCOL FOR COMMITTEE MEETINGS

Jack Broadbent, Executive Officer/Air Pollution Control Officer, introduced John Chiladakis, Director of Information Services, who gave the staff presentation *Update of Remote Participation Protocol for Committee Meetings*, including; Board meeting video conferencing at 939 Ellis street and 375 Beale Street; and protocols.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed how the District's current policy does not utilize remote participation of Board members for action items, and whether or not this should remain the policy in the future; whether or not reducing vehicle miles traveled, especially on Spare the Air days, is more important than Board members being physically present to vote on action items; the costs associated with reserving remote meeting spaces; the need for better publication of the remote meeting locations and assurance that their availability remains consistent; the need for a remote location in the San Ramon Valley area; the suggestion of analyzing new locations based upon the public's convenience; how frequently the remote locations are used; the possibility of

implementing a two-tiered stipend for Board members in which Board members that attend meetings in person are paid a greater stipend than those who attend remotely; the need to bifurcate viewing live feeds and the capability to interact with the live feed; the current trend of the utilization of coffee shops for remote work locations; preference for scouting out new remote meeting locations within the *public* sector; and rooms at 375 Beale Street that are equipped with videoconferencing capabilities.

Committee Action:

None; receive and file.

6. CLEAN AIR PLAN/REGIONAL CLIMATE PROTECTION STRATEGY UPDATE

Ms. Roggenkamp introduced Henry Hilken, Director of Planning and Climate Protection, who gave the staff presentation 2017 Clean Air Plan/Regional Climate Protection Strategy Update, including: Bay Area leadership is critical; Clean Air Plan/Regional Climate Protection Strategy (2017 Plan); recent work; Bay Area in 2050; Multi-Pollutant, Multi-Sector Control Strategy; Air District's key priorities and roles; progress to date and underway; 2017 Plan development process; and next steps.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed how the California Air Resources Board (ARB) is developing new measures that local agencies will be able to adopt in order to achieve the State's 2030 (midterm) greenhouse gas (GHG) reduction target, and how the 2030 goal should be elevated over the 2050 goal; the feasibility of monitoring agricultural and commercial wood burning activities, besides residential; Bay Area jurisdictions' clean fleet accomplishments and the different types of clean vehicles deployed within the District's fleet; whether or not the District can obtain vehicle miles traveled reduction data from FasTrak or insurance companies as an indirect source; which agency or jurisdiction would administer a carbon tax; the status and development of the District's "Protect Your Climate" curriculum program for elementary school students; the need to resist the possible curtailment of climate and sustainability-related support from the incoming Presidential administration; and how the community's positive response to the implementation of Community Choice Aggregation programs may provide an opportunity for collaboration on common goals at the District.

Committee Action:

None; receive and file.

7. ONGOING COMMUNITY GRANT PROJECT STATUS AND REPORT ON FIRST ROUND OF PROPOSED COMMUNITY SCIENCE PARTNERSHIP PROJECTS FOR FISCAL YEAR END (FYE) 2017

Ms. Roggenkamp introduced David Ralston, Community Engagement Manager, who gave the staff presentation *Community Grant Project Status and Report on First Round of Proposed Community Science Grants*, including: FYE 2016 James Cary Smith Community Grants status and highlights; Rose Foundation for Communities and the Environment/Bay Localize/Emilia Zapata Street Academy; Earth Team — Oakland High/Richmond High; San Francisco Bicycle Coalition/Community Bike Builds; Rails to Trails/Rich City Rides; Hunters Point Family/Bayview Hunters Point; La Clinica de la Raza/Escuela de Promotores/Freedom Breathers Pittsburg; Center for Climate Protection/ECO2School/Santa Rosa; FYE 2017 Community Science Grants preliminary results of submitted proposals; preliminary community science grants for scoping; and other grant proposals in review.

Public Comments:

Ted Tagami, Magnitude.IO, addressed the Committee as an applicant who has been in discussions with staff about implementing Next Generation Science Standards, which were adopted by the state and the curriculum of which will be deployed in several years, in K-12 classrooms. Mr. Tagami described the elements of this new curriculum, the type of classroom projects that would become available to students through this curriculum, and the school districts with which Mr. Tagami has relationships.

Dr. Raymond Tompkins, Rafiki Wellness Center, addressed the Committee as an applicant whose Community Science project application (for the FYE 2017 funding cycle) is being scoped for contract development. Dr. Tompkins explained his proposed project, Bayview Hunters Point Community EJ Air Particulate Phase 1 Study, and was asked to elaborate on the overall goal of the project, beyond Phase 1.

Committee Comments:

The Committee and staff discussed the criteria for new community science grant in the FYE 2017 funding cycle; and the possible need for improved outreach in certain geographic areas in order to generate relationships with potential candidates.

Committee Action:

None; receive and file

8. UPDATE ON MY AIR ONLINE PROGRAM

Damian Breen, Deputy Air Pollution Control Officer, introduced Jaime Williams, Director of Engineering, who gave the staff presentation "My Air Online" Program Update, including: 2016 program deliverables; winter Spare the Air season; wood smoke investigation form; supervisor dashboard; asbestos renovation/demolition process; what's next; small source activities; 2016 Compliance & Enforcement activities; complex facility plan progress; and refinery emissions inventory reporting integration.

Public Comments:

No requests received.

Committee Comments:

The Committee and staff discussed the interest that the South Coast Air Quality Management District has taken in this system.

Committee Action:

None; receive and file.

9. COMMITTEE MEMBER COMMENTS / OTHER BUSINESS

Director Haggerty acknowledged Chair Mar's service as Chair of the Executive Committee, as this will be his last meeting serving in this capacity.

Mr. Broadbent announced that the District does not anticipate having to call a Spare the Air day on Thanksgiving.

10. TIME AND PLACE OF NEXT MEETING

At the call of the Committee Chair.

11. ADJOURNMENT

The meeting adjourned at 11:23 a.m.

Marcy Hiratzka Clerk of the Boards

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members

of the Executive Committee

From: Chairperson Terry Trumbull, Esq., and Members

of the Hearing Board

Date: February 8, 2017

Re: <u>Hearing Board Quarterly Report: July – September 2016 and October – December 2016</u>

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

As the third quarter Hearing Board Quarterly Report of 2016 was not included on the November 21, 2016 Executive Committee meeting agenda, this report will cover the third *and* fourth quarters of 2016.

During the **third** quarter of 2016 (July - September), the Hearing Board:

- Held one Hearing on an Accusation (3692) and one Hearing on a variance (3693); and
- Processed a total of four Orders, including three Orders for Dismissal (3688, 3693, 3694) and one Order Granting Emergency Variance (3691); and
- Collected a total of \$0.00 in filing fees.

Below is a detail of Hearing Board activity during the same period:

Locations: Alameda County; City of Fremont; AND Solano County; City of Vallejo

Docket: 3688 - APCO vs. SB Gas and Wash Management, Inc., et al – Accusation

Regulation(s): Regulation 2, Rule 1 - Section 302

Synopsis: Complainant alleged that since at least May 2014, Respondents have owned or operated two gasoline dispensing facilities (GDF) in Fremont and Vallejo, California, for which they must hold a current and valid District permit to operate gasoline dispensing equipment, pursuant to District Regulation 2, Rule 1. After taking ownership, Respondents did not renew the expired permits for either facility or submit applications for obtain new permits, but continued to operate these facilities continuously in violation of District Regulation 2-1-302. Despite efforts by the District to bring Respondents in compliance with permit requirements, Respondents continued to operate in violation of District Regulation 2-1-302. Complainant sought an Abatement Order that Respondents cease violating District regulation 2, Rule 1, Section 302, at its Vallejo and Fremont facilities unless and until Respondents obtain valid District permits to operate.

Status: Hearing was originally scheduled for June 2, 2016 and was continued to August 11, 2016, and then to September 29, 2016; the parties resolved the matter and the Complainant sought a Dismissal, which the Hearing Board granted on September 22, 2016; Order for Dismissal filed September 26, 2016; docket closed.

Period of Variance: n/a

Estimated Excess Emissions: n/a **Fees collected this quarter:** n/a

Location: Santa Clara County; City of San Jose

Docket: 3691 - Shell Oil Products – *Application for Emergency Variance*

Regulation(s): Regulation 8, Rule 5 - Section 322

Synopsis: Applicant operates a storage tank, an internal floating roof tank storing ethanol used for bulk storage and loading of petroleum products. Tears in the secondary seal of the tank were noticed upon inspection on May 10, 2016, and Applicant determined that the cause of the failure was unknown. Excess emissions were considered negligible. Repairs were scheduled to begin on May 11, 2016.

Status: On May 12, 2016, the Hearing Board Granted the Applicant's request for an Emergency Variance; Order Granting Emergency Variance filed on August 8, 2016; docket closed.

Period of Variance: May 11, 2016, at 1:00 p.m., to June 10, 2016, at 1:00 p.m. (30 days)

Estimated Excess Emissions: 4.75 lbs per day of Pollutants of Concern

Fees collected this quarter: \$0

Location: Alameda County; City of Union City

Docket: 3692 - APCO vs. K&A Gas and Auto Repair, Inc., et al – Accusation

Regulation(s): Regulation 2, Rule 1 - Section 302

Synopsis: Respondents own or operate a GDF in Union City, California for which they must hold a current and valid District permit to operate gasoline dispensing equipment, pursuant to District Regulation 2, Rule 1. Since February 2014, Respondents have been conducting gasoline dispensing operations continuously at this gas station without a permit to operate, in violation of District Regulation 2-1-302. Complainant seeks an order that Respondents cease gasoline dispensing operations at this facility until the obtain a current, valid District permit to do so.

Status: First Hearing held July 14, 2016.

Period of Variance: n/a

Estimated Excess Emissions: n/a

Fees collected this quarter: n/a

Location: Contra Costa County; City of Martinez

Docket: 3693 - Shell Chemicals, LP - Application for Short-Term Variance

Regulation(s): Regulation 8, Rule 5 - Section 307; Permit Conditions 19945 and 15124

Synopsis: The plant subject to this variance request manufactures solid and liquid catalyst used in the petrochemicals business. The Applicant planned that two abatement devices would be out of service for maintenance and natural gas supply piping upgrades during variance period, leaving eight other devices unabated while organic liquids or vapors were present. The facility did not plan to operate processes associated with these sources during the variance period, and did not anticipate any changes in chemicals in the vessels. Negligible emissions were anticipated during this short variance period. When the application was submitted, the Applicant was in compliance with permit conditions, but was requesting variance relief for planned work. The applicant planned to return to compliance upon completion of the planned work on the natural gas line.

Status: Hearing was originally scheduled for July 7, 2016; on July 1, 2016, parties filed joint request to continue the Hearing, and the Hearing Board denied this request; on July 6, Applicant requested the withdrawal of the application, but the Hearing Board chose to meet on July 7 as planned, as this request was submitted less than 24 hours prior to the scheduled Hearing; Order for Dismissal filed on July 14, 2016; docket closed.

Period of Variance: July 11, 2016 to July 26 2016 (15 days)

Estimated Excess Emissions: 0.56 lbs per day of Pollutants of Concern

Fees collected this quarter: \$0

Location: Santa Clara County; City of San Jose

Docket: 3694 - APCO vs. Classic Auto Body & Paint Five Star, Inc., et al – Accusation

Regulation(s): Regulation 2, Rule 1

Synopsis: Complainant was informed and believed and thereon alleged that since 2004, one or both of the Respondents have owned or operated a facility in San Jose, California where they conduct motor vehicle refinishing operations, for which they must hold a current and valid District permit to operate, pursuant to District Regulation 2, Rule 1. At the time that the Accusation was filed, Respondents operated that facility without a current permit, despite their knowledge of the permit requirements. Since owning or operating the facility, Respondents had never renewed or reinstated their permit to operate in a timely manner. Complainant sought an Order that Respondents cease conducting these operations until they obtain a District permit to do so.

Status: Complainant requested a Dismissal on August 3, 2016, and the Hearing Board approved; Order for Dismissal filed on August 10, 2016; docket closed.

Period of Variance: n/a

Estimated Excess Emissions: n/a **Fees collected this quarter:** n/a

During the **fourth** quarter of 2016 (October - December), the Hearing Board:

- Held no Hearings of any kind; and
- Processed a total of five Orders, including three Orders for Dismissal (3692, 3695, 3697), one Order Granting Emergency Variance (3687), and one Order Denying Emergency Variance (3696); and
- Collected a total of \$5,703.00 in filing fees, including one Emergency Variance (3696), and one Short-Term/Interim Variance (3697).

Below is a detail of Hearing Board activity during the same period:

Location: Contra Costa County; City of Richmond

Docket: 3687 - Chevron Products Co. – *Application for Emergency Variance*

Regulation(s): Regulation 8, Rule 5, Sections 304, 321.1, 321.3, 322.1, 322.3, and 322.5

Synopsis: Applicant operates a Title V refinery that refines crude oil and intermediates for gasoline and diesel fuel. On April 6, 2016, Applicant discovered that a portion of the primary and secondary rim seals on tank T-3197, which contained naphtha, were damaged. There was no indication of rim seal problems at the last inspection of T-3197, which is regularly inspected. Once damage to the seals was discovered, Applicant acted promptly to stop product from entering or leaving the tank, informed the Air District of the problem, and injected construction foam to suppress excess VOC emissions from the damaged section of the tank. Fire foam was used to reduce excess VOC emissions during decommissioning.

Status: On October 4, 2016, the Hearing Board granted the Applicant's request for an Emergency Variance. Order Granting Emergency Variance filed on October 4, 2016; docket closed.

Period of Variance: April 8, 2016, at 9:00 a.m., to April 18, 2016 (10 days)

Estimated Excess Emissions: 10 lbs per day of Hydrocarbon.

Fees collected this quarter: \$0

Location: Alameda County; City of Union City

Docket: 3692 - APCO vs. K&A Gas and Auto Repair, Inc., et al – Accusation

Regulation(s): Regulation 2, Rule 1 - Section 302

Synopsis: Respondents own or operate a GDF in Milpitas, California for which they must hold a current and valid District permit to operate gasoline dispensing equipment, pursuant to District Regulation 2, Rule 1. Since at least October 2010, one or more of the Respondents had been conducting gasoline dispensing operations continuously at this GDF. Since at least September 1, 2012, they had been operating without a permit to operate, in violation of District Regulation 2-1-302. Complainant sought an order that Respondents cease gasoline dispensing operations at this facility until they obtain a current, valid District permit to do so.

Status: First Hearing held July 14, 2016; request for a Continued Hearing on November 3, 2016 was filed by the Complainant on October 6, 2016 and approved by the Hearing Board; Order for Dismissal filed October 19, 2017; docket closed.

Period of Variance: n/a

Estimated Excess Emissions: n/a

Fees collected this quarter: n/a

Location: Santa Clara County; City of Milpitas

Docket: 3695 - APCO vs. California Auto Tech 2, Inc., et al - Accusation

Regulation(s): Regulation 2, Rule 1

Synopsis: Respondents own or operate a gas station in Milpitas, California for which they must hold a current and valid District permit to operate gasoline dispensing equipment, pursuant to District Regulation 2, Rule 1. Since at least September 2011, gasoline dispensing operations have been conducted continuously at the gas station without a District permit in violation of District Regulation 2-1-302. Complainant seeks an order that Respondents cease gasoline dispensing operations at this facility until they obtain a current, valid District permit to do so.

Status: Pre-Hearing was originally scheduled for October 27, 2016, but was continued to November 10, 2016; request to cancel Pre-Hearing and schedule a Hearing for December 8, 2016 filed by Complainant on November 1, 2016 was approved by the Hearing Board; request for Dismissal filed by Complainant on November 28, 2016 was approved by Hearing Board; Order for Dismissal filed on December 7, 2016; docket closed.

Period of Variance: n/a

Estimated Excess Emissions: n/a

Fees collected this quarter: \$0

Location: Santa Clara County; City of San Jose

Docket: 3696 - Shell Oil Products - Application for Emergency Variance

Regulation(s): Regulation 8, Rule 5 - Section 322.1

Synopsis: Applicant submitted application for the same equipment failure at the same facility in May 2016 (Docket No. 3691.) Applicant operates a storage tank, an internal floating roof tank storing ethanol used for bulk storage and loading of petroleum products. Tears in the secondary seal of the tank were noticed upon inspection on November 17, 2016, and Applicant determined that the cause of the failure was unknown. Excess emissions were considered negligible. Repairs were scheduled to begin on November 30, 2016.

Status: On November 23, 2016, the Hearing Board denied the Applicant's request for an Emergency Variance; Order Denying Emergency Variance filed on December 7, 2016; docket closed.

Period of Variance: November 17, 2016 at 2:30 p.m. to December 17, 2016 at 2:30 p.m. (30 days)

Estimated Excess Emissions: None.

Fees collected this quarter: \$1,054.00

Location: Santa Clara County; City of San Jose

Docket: 3697 - Shell Oil Products - Application for Short-Term/Interim Variance

Regulation(s): Regulation 8, Rule 5 - Section 322

Synopsis: Applicant submitted this application in response to the Hearing Board's denial of an Emergency Variance for Docket No. 3696, regarding the same equipment failure at the same facility. Applicant operates a storage tank, an internal floating roof tank storing ethanol used for bulk storage and loading of petroleum products. Tears in the secondary seal of the tank were noticed upon inspection on November 17, 2016, and Applicant determined that the cause of the failure is unknown. Repairs were completed on November 30, 2016. Primary and secondary seals will be replaced, but the tank must be taken out of service prior to seal replacements. Efforts to empty the tank and remove it from service were expected to be completed no later than December 15, 2016, and a full API 653 inspection will be completed once the tank has been taken out of service.

Status: Hearings for both the Short-Term and Interim Variances were scheduled on December 22, 2016; on December 13, 2016, Applicant requested withdrawal of the application, which was approved by the Hearing Board; Order for Dismissal filed on December 22, 2016; docket closed.

Period of Variance: November 17, 2016 to December 15, 2016 (29 days)

Estimated Excess Emissions: <<14.1 lbs per day of Volatile Organic Compounds

Fees collected this quarter: \$4,649.00

Respectfully submitted,

Terry Trumbull, Esq. Chair, Hearing Board

Prepared by: <u>Marcy Hiratzka</u>
Reviewed by: Maricela Martinez

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members

of the Executive Committee

From: Jack P. Broadbent

Executive Officer/Air Pollution Control Officer

Date: February 15, 2017

Re: <u>Bay Area Regional Collaborative (BARC) Update</u>

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Bay Area Regional Collaborative (BARC) consists of Board/Commission representatives of the four regional agencies and provides a forum for discussing issues of regional importance.

DISCUSSION

At the upcoming Executive Committee meeting, the BARC Director, Allison Brooks, will provide an update on the activities of the BARC.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: Jean Roggenkamp

AGENDA: 6

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Liz Kniss and Members

of the Executive Committee

From: Jack P. Broadbent

Executive Officer/Air Pollution Control Officer

Date: February 15, 2017

Re: <u>Technology Implementation Office (TIO) Update</u>

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

At the Board of Directors (Board) Special Meeting on January 18, 2017, staff introduced the concept of establishing a Technology Implementation Office (TIO). The purpose of this office is to serve as a catalyst for innovation in the field of greenhouse gas (GHG) emissions reduction by deploying disruptive, low-cost solutions in the areas of zero emissions vehicles; smart/connected technologies; and zero emissions energy generation and efficiency technologies.

Staff believes that this office is necessary in order to assist regulated stationary sources with the deployment of the technologies that will help us achieve the goal of a carbon-free Bay Area by 2050, as envisioned in the Bay Area Air Quality Management District's (Air District's) new draft Clean Air Plan (CAP). While the transportation and public sector have moved relatively quickly to embrace climate protection, the Air District believes that the stationary source sector has lagged in adopting climate change goals and technologies. This is in large part due to economic and regulatory uncertainties, a lack of information sharing across industry sectors and a reluctance to invest in unfamiliar technologies.

Additionally, while the electric vehicle and the enhanced and connected mobility sectors are thriving in the Bay Area, staff believes that additional support will be necessary for both to achieve the carbon free future envisioned CAP. In order to ensure that the Air District continues to encourage innovation and zero emissions technologies in the transportation sector, staff is proposing the transfer of the Electric Vehicle and Enhanced Mobility Programs from the Strategic Incentives Division to the TIO. This transfer will require an ongoing commitment of Transportation Fund for Clean Air monies to the TIO to support these efforts.

DISCUSSION

At the upcoming meeting, staff will discuss the actions underway as part of the fiscal year ending 2018 budget to launch the TIO, its initial projects, and possible funding with the Executive Committee.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: <u>Damian Breen</u>

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Kniss and Members

of the Executive Committee

From: Jack P. Broadbent

Executive Officer/APCO

Date: February 15, 2017

Re: Advisory Council Opinion on Green House Gas (GHG) Caps at Bay Area Refineries

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

The Advisory Council completed its discussion on the efficacy of Greenhouse Gas (GHG) caps for local refineries during its meeting on February 6, 2017. The Advisory Council's opinion takes into consideration information provided from a variety of sources, including presentations by the California Air Resources Board, the California Energy Commission and Communities for a Better Environment. The Committee will be presented with a summary of the Advisory Council's process, their deliberations and their final opinion.

BUDGET CONSIDERATIONS/FINANCIAL IMPACT

None.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: <u>Jeff McKay</u>

Attachment 7A: Advisory Council Opinion on the 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?"

PREAMBLE

While the key question focuses on refinery greenhouse gas (GHG) emissions and global climate change, the Council recognizes that there are also community concerns about the effects of refinery toxics and criteria pollutant emissions on health risk, particularly near refineries. We view both climate and health risk considerations as crucially important, and the Council's opinions are meant to address both.

With respect to climate, we conclude that refinery GHG caps are unlikely to be effective in mitigating global climate change. That conclusion, however, is not an endorsement of inaction. The Council strongly supports coordinated climate protection efforts by the Air District, CARB, USEPA, and others, and the Council views as urgent further efforts by all to take effective steps toward climate protection.

With respect to health risk, we conclude that toxics and criteria pollutant health risk are most effectively addressed directly, through established health-based programs and measures such as draft rule 11-18, rather than indirectly as co-benefits of GHG reduction policies.

CONCLUSIONS

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

- Conclusion on Key Question: The Council concludes that facility-level caps on Bay Area refinery
 GHG emissions are unlikely to 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 (that is, GHG emissions are shifted outside of the Bay Area to
 other locations instead of being reduced), which is likely with refinery GHG caps, such caps
 would not provide such protection.
- <u>Policy Recommendation</u>: The Council recommends that the Air District identify, systematically
 evaluate, 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,
 minimize leakage risk, and complement and reinforce GHG reduction measures adopted by
 CARB (e.g., GHG cap-and-trade and methane reduction programs), USEPA, and others.
- <u>Policy Recommendation</u>: The Council recommends that the Air District address community concerns about toxics and criteria pollutants directly, through established programs, rather than indirectly as co-benefits of GHG reduction policies. The approach embodied in proposed rule 11-18 is consistent with this recommendation.

GUIDING PRINCIPLES

The Council has developed the following guiding principles that it regards as useful when evaluating the efficacy of Refinery GHG caps:

- 1. <u>Clear goals</u>: The Air District should state its goals clearly. 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 toxics reduction is the goal, that should be 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.
- 2. <u>Systematic evaluation of policies to ensure that they support the goals</u>: The Air District should align its policies, including refinery-related GHG measures, with its goals and ground them in plausible and workable pathways specific to those goals, and careful of unintended consequences.
- 3. <u>Evaluation and prioritization of GHG reduction options</u>: The Air District should systematically evaluate and prioritize the effectiveness of Bay Area GHG reduction options. Criteria should include the following:
 - i) <u>Total global GHG emissions must actually be reduced</u>. 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. Coordination should include enhanced measurements of GHG emissions.
 - 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 complimentary, 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 and minimize unintended consequences.

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 those of CARB, USEPA, and others. 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. Programs specifically directed at toxics include New Source Review of Toxic Air Contaminants, emission and/or performance standards for hazardous air pollutants, the Community Air Risk Evaluation (CARE) Program, and the California Air Toxics "Hot Spots" Program. Programs directed at criteria pollutants include the Multi-Pollutant Clean Air Plan (which also includes GHGs), New Source Performance Standards for new sources, and emission and/or performance standards for existing sources.

The Air District 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. A significant expansion of community risk-based protection would be provided by draft "Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities". This rule would improve air quality and reduce toxic emissions from facilities ranging in size from large-scale plants like factories and refineries to smaller operations like back-up generators and gas stations. The Air District estimates that hundreds of facilities throughout the Bay Area may be subject to the proposed rule, which would incorporate recently adopted risk management guidelines and health risk values from the California Office of Environmental Health Hazard Assessment.

Rule 11-18

Under draft Rule 11-18, Air District staff would conduct site-specific health risk screening analyses for all facilities that report toxic air contaminant emissions, and calculate health prioritization scores based on the amount of toxic air pollution emitted, the degree of toxicity of these pollutants, and the proximity of these facilities to local communities. The Air District would conduct health risk assessments for facilities found to have priority scores above a threshold value.

All facilities found to have a cancer risk in excess of 10 in a million or an acute hazard index greater than 1.0 would be required to reduce their risk below 10 in a million and their hazard index below 1.0, or install Best Available Retrofit Control Technology for Toxic Pollutants on all significant sources of toxic emissions.

Because their effectiveness and focus have been amply demonstrated, the Council concludes that toxics and criteria pollutants should be regulated directly through such 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 multi-pollutant strategy that accounts for the realities of conflicting effects, where present, including both co-benefits and dis-benefits.

Climate change is one of the most serious and urgent challenges confronting not just the Bay Area, but the 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. Programs directed at global climate change include the Climate Protection Program, Regional Climate Protection Strategy, GHG emission inventories, and Plan Bay Area (with the Metropolitan Transportation Commission and others).

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, the Federal government, 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, such effects will include flooding from sea level rise, and increases in property damage and 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 location 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 with refineries. 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. The effect of a GHG cap, especially if set at actual throughput levels that are below permitted maximums, may be to prevent a refinery from processing the volume of crude it would otherwise have processed within its permit. If so, the Council is concerned that leakage will be triggered. Because the petroleum industry is globally integrated, the Council considers it likely that such excess crude over the cap (and the GHGs associated with that production) will be displaced from the Bay Area and relocated to refineries 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 <u>whether</u> to reduce global GHG emissions, but <u>how</u> 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 34 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. 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 CARB (e.g., 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-fuelled 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 suggests use of alternate strategies to reduce demand and increase efficiency may be appropriate.

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-fuelled vehicles, and replacement of petroleum-fuelled vehicles with cleaner, non-petroleum-fuelled 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 a wide variety of policies to accomplish this goal, including policies to research and develop technologies, including for instance carbon capture and sequestration.

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.

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		Health	Climate
Stan Hayes	Member, Advisory Council (1995-2007, 2009-) and former chair; emeritus Principal, Ramboll Environ; air-related research consulting	Х	X	Х
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 and Department Chair, Civil and Environmental Engineering, University of California, Berkeley	X		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		Х
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 Olbaldia; Gary Rubenstein, Sierra Research on behalf of CCEEB and WSPA