

ADVISORY COUNCIL REGULAR MEETING

THURSDAY JULY 19, 2018 10:00 A.M. 1ST FLOOR BOARD ROOM 375 BEALE STREET SAN FRANCISCO, CA 94105

<u>AGENDA</u>

1. CALL TO ORDER - ROLL CALL PLEDGE OF ALLEGIANCE

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

Staff/Phone (415) 749-

2. APPROVAL OF THE MINUTES OF OCTOBER 30, 2017 AND MARCH 26, 2018 Clerk of the Boards/5073

The Advisory Council will consider approving the draft minutes of the Advisory Council Regular Meetings of October 30, 2017 and March 26, 2018.

3. PUBLIC COMMENT ON AGENDA MATTERS

Pursuant to Government Code Section 54954.3, the public has the opportunity to speak on any agenda item. All agendas for Council meetings are posted at the Air District, 375 Beale Street, San Francisco, California 94105 at least 72 hours before a meeting.

This meeting will be webcast. To see the webcast, please visit http://www.baaqmd.gov/about-the-air-district/advisory-council/agendasreports at the time of the meeting. Closed captioning may contain error and omissions, and are not certified for their content or form.

4. INTRODUCTION OF NEW MEMBERS TO THE AIR DISTRICT'S ADVISORY COUNCIL J. McKay/4629

jmckay@baaqmd.gov

New members to the Air District's Advisory Council will be introduced.

5. UPDATE ON ASSEMBLY BILL 617 (AB 617)

J. McKay/4629

jmckay@baaqmd.gov

The Council will receive an update on Assembly Bill 617 (AB 617).

6. HEALTH IMPACTS AND ASSESSMENTS OF DIESEL PARTICULATE MATTER IN THE BAY AREA J. McKay/4629

jmckay@baaqmd.gov

The Council will discuss health impacts and assessments of diesel particulate matter in the Bay Area.

7. UPDATE ON THE AIR DISTRICT'S DIESEL PARTICULATE MATTER EMISSIONS REDUCTION STRATEGY J. McKay/4629

jmckay@baaqmd.gov

The Council will receive a request to provide input to the Air District's Board of Directors in support of a voluntary diesel emissions reduction effort.

8. ONGOING DISCUSSION OF DIESEL PARTICULATE MATTER: HOW LOW IS "LOW ENOUGH"? J. McKay/4629

jmckay@baaqmd.gov

The Council will continue a discussion of diesel particulate matter and review specific targets.

9. **CHAIRPERSON'S REPORT**

The Chairperson will provide the Advisory Council with a report of recent and upcoming activities.

10. REPORT OF THE EXECUTIVE OFFICER/APCO

11. PUBLIC COMMENT ON NON-AGENDA MATTERS

Pursuant to Government Code Section 54954.3, an opportunity is provided for the public to speak on any subject within the Council's purview. Speakers are typically limited to three minutes each.

12. COUNCIL MEMBER COMMENTS / OTHER BUSINESS

Council members may make a brief announcement, provide a reference to staff about factual information or ask questions about subsequent meetings.

13. TIME AND PLACE OF NEXT MEETING

At the Call of the Chair.

14. **ADJOURNMENT**

The Council meeting shall be adjourned by the Chair.

CONTACT:

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

vjohnson@baaqmd.gov

(415) 749-4941 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 "Advisory Council" and received at least 24 hours prior,
 excluding weekends and holidays, in order to be presented at that Council meeting. Any
 correspondence received after that time will be presented to the Council 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) 749-4941

EXECUTIVE OFFICE: MONTHLY CALENDAR OF AIR DISTRICT MEETINGS

JULY 2018

TYPE OF MEETING	<u>DAY</u>	DATE	TIME	ROOM
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of every other Month) – CANCELLED AND RESCHEDULED TO MONDAY, JULY 30, 2018 AT 9:30 A.M.	Monday	16	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) - CANCELLED	Wednesday	18	9:30 a.m.	1st Floor Board Room
Board of Directors Climate Protection Committee (Meets on the 3 rd Thursday of every other Month) - CANCELLED	Thursday	19	9:30 a.m.	1 st Floor Board Room
Advisory Council Meeting (At the Call of the Chair)	Thursday	19	10:00 a.m.	1st Floor Board Room
Board of Directors Executive Committee (At the Call of the Chair)	Monday	23	9:30 a.m.	1st Floor Board Room
Board of Directors Budget & Finance Committee (Meets on the 4th Wednesday of each Month) - CANCELLED	Wednesday	25	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Ad Hoc Refinery Oversight Committee (At the Call of the Chair)	Wednesday	25	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	26	9:30 a.m.	1st Floor, Yerba Buena Room #109
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of every other Month)	Monday	30	9:30 a.m.	1 st Floor Board Room

AUGUST 2018

TYPE OF MEETING	<u>DAY</u>	DATE	TIME	<u>ROOM</u>
Board of Directors Special Meeting as The Sole Member of The Bay Area Clean Air Foundation (At the Call of the Chair) - CANCELLED	Wednesday	1	9:00 a.m.	1 st Floor Board Room
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	1	9:30 a.m.	1st Floor Board Room
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	15	9:30 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

SEPTEMBER 2018

TYPE OF MEETING	<u>DAY</u>	DATE	TIME	<u>ROOM</u>
Board of Directors Regular Meeting (Meets on the 1 st & 3 rd Wednesday of each Month)	Wednesday	5	9:30 a.m.	1st Floor Board Room
Board of Directors Stationary Source Committee (Meets on the 3 rd Monday of every other Month)	Monday	17	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	19	9:30 a.m.	1st Floor Board Room
Board of Directors Climate Protection Committee (Meets on the 3 rd Thursday of every other Month)	Thursday	20	9:30 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 4 th Thursday of each Month)	Thursday	27	9:30 a.m.	1st Floor, Yerba Buena Room #109

JB - 7/12/18 - 2:58 p.m.

G/Board/Executive Office/Moncal

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: Approval of the Minutes of October 30, 2017 and March 26, 2018

RECOMMENDED ACTION

Approve the attached draft minutes of the Advisory Council meetings of October 30, 2017 and March 26, 2018.

DISCUSSION

Attached for your review and approval are the draft minutes of the Advisory Council meetings of October 30, 2017 and March 26, 2018.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: <u>Marcy Hiratzka</u> Reviewed by: <u>Vanessa Johnson</u>

Attachment 2A: Draft Minutes of the Advisory Council Meeting of October 30, 2017 Attachment 2B: Draft Minutes of the Advisory Council Meeting of March 26, 2018 Draft Minutes - Advisory Council Regular Meeting of October 30, 2017

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

DRAFT MINUTES

Advisory Council Regular Meeting Monday, October 30, 2017

Note: An audio recording of the meeting is available on the website of the Bay Area Air Quality Management District at http://www.baaqmd.gov/about-the-air-district/advisory-council/agendasreports

1. CALL TO ORDER

Advisory Council (Council) Chair, Stan Hayes, called the meeting to order at 10:02 a.m.

Roll Call:

Present: Council Chair Stan Hayes and Vice Chair Dr. Michael Kleinman; and

Members Professor Severin Borenstein, Tam Doduc, Dr. Tim Lipman, and Dr.

Jane Long.

Absent: Member Dr. Robert Harley.

Also Present: Cupertino Councilman Rod Sinks, Board of Directors (Board) Liaison.

Opening Remarks: Chair Hayes thanked Director Sinks for representing the Air District's Board of Directors. Director Sinks explained that the District's rulemaking landscape has changed considerably since the Council's last meeting, due to the passing of Assembly Bill 398, which, among other things, prevents air districts from adopting or implementing emission reduction rules for carbon dioxide from stationary sources that are also subject to the Cap and Trade Program. Chair Hayes listed the items on the agenda.

2. APPROVAL OF THE MINUTES OF FEBRUARY 6, 2017 AND APRIL 3, 2017 MEETINGS

Council Comments:

Chair Hayes noted that the minutes of February 6, 2017 were carried over from the April 3, 2017 meeting for further modifications, and have since been finalized. Regarding the minutes of April 3, 2017, Chair Hayes requested that the Clerk make the following changes to Item 5 (*Presentation on Rules 11-18, 12-16, and 13-1*):

- Council Comments regarding Draft Rule 13-1 (page 3): "...the need for a consumption-side intervention inventory, versus a production-side intervention inventory..."
- Council's Consensus on Draft Rule 12-16 (page 3): "The Council opposes this Draft Rule because it feels that the cap is unlikely to be effective in addressing climate change or improvements the air in refinery communities, and will eause be subject to leakage."

Council Action:

Member Kleinman made a motion, seconded by Member Lipman, to approve the Advisory Council minutes of February 6, 2017 as amended; and the motion carried by the following vote of the Council:

AYES: Borenstein, Doduc, Hayes, Kleinman, and Lipman.

NOES: None. ABSTAIN: None.

ABSENT: Harley and Long.

Member Kleinman made a motion, seconded by Member Doduc, to approve the Advisory Council minutes of April 3, 2017 as amended; and the motion carried by the following vote of the Council:

AYES: Borenstein, Doduc, Hayes, Kleinman, and Lipman.

NOES: None. ABSTAIN: None.

ABSENT: Harley and Long.

3. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were made by Kim Ronan, Valero; and Bob Brown, Western States Petroleum Association.

Council Comments:

Professor Borenstein expressed his concern about the relationship between Staff, the Board, and the Council regarding the proceedings of Rule 12-16. He specifically cited the Council's lack of awareness of the correspondence between the Board and Staff and concern that the Council's reports could be ignored. Jack Broadbent, Executive Officer/Air Pollution Control Officer, explained that the Council's deliberations on the efficacy of caps on greenhouse gas (GHG) emissions at refineries were communicated to the Board, and how the proposed Rule 12-16 began to change over time, due to the California Air Resources Board's change of opinion. Director Sinks apologized to the Council on behalf of the Board, acknowledging the Council's dedication and time, and said that he would strive to increase communication between the Board and the Council. Chair Hayes requested that staff bring back to the Council suggestions on how to improve communication between Staff, the Council, and the Board, as an item on an upcoming agenda.

NOTED PRESENT: Dr. Long was noted present at 10:18 a.m.

4. PROTECTING REFINERY COMMUNITIES FROM AIR POLLUTION

Mr. Broadbent introduced Greg Nudd, Acting Rules and Strategic Policy Officer, who gave the staff presentation *Protecting Refinery Communities from Air Pollution*, including: overview; direct regulation of criteria pollutants; capping risk from toxic air contaminants (TAC); monitoring refinery inputs and air pollution; recap: three-pronged approach; and next steps.

Council Comments:

The Council and staff discussed the variety of crude slates at refineries and how much they are changing; how Draft Rule 11-18 addresses concerns about changing crude slates and how those might impact all emissions, including CO₂; the frozen baseline for the goal of a 20% reduction of refinery criteria pollutants by 2020; how the District's "three-pronged" approach of addressing community concerns about air pollution in refinery communities will directly improve human health; the types of facilities and sources that will be reviewed under Draft Rule 11-18; and the expanded community monitoring that will result from Assembly Bill (AB) 617 and the District's concern that the bill's implementation schedule is too aggressive and unattainable.

Council Action:

None; receive and file.

5. AIR MONITORING AND ATTAINMENT STATUS OF CRITERIA POLLUTANT STANDARDS IN THE SAN FRANCISCO BAY AREA

Dr. Jeff McKay, Deputy Air Pollution Control Officer, introduced Eric Stevenson, Director of Meteorology and Measurement, who gave the staff presentation *Air Monitoring and Attainment Status of Criteria Pollutant Standards in the San Francisco Bay Area*, including: chart of example pollutants of concern; Bay Area health impacts; Clean Air Act requirements; pollutants impacting Bay Area air quality; national and state standards; form of the standards; attainment status; air monitoring network; Ozone and Particulate Matter (PM)_{2.5} exceedance trends; and changes needed to AB 617.

Council Comments:

The Council and staff discussed the current annual health and social costs of Bay Area pollution chart; the fact that the benefit of reducing PM_{2.5} and all its particular forms far outweighs those of other pollutants; how the deployment of many air monitors is cost-prohibitive, however necessary; the different monitoring technologies that the District is exploring, and the District's methodologies of identifying which neighborhoods are more likely to require more expensive, precise monitoring over time; how the District plans to interpret its monitoring data and communicate the results to the affected communities; and the fact that health impacts from ultrafine PM are not yet well understood.

Council Action:

None; receive and file.

6. ADVISORY COUNCIL NEXT AREA OF FOCUS: BEYOND ATTAINMENT – PRIORITIZATION FOR LOCAL HEALTH IMPACTS

Dr. McKay explained that the District seeks to review its prioritization of efforts based on public health impact, and asked the Council to consider PM as a particular element of focus, as the impacts of PM are serious, and it is a complicated mechanism about which there is much to learn. Chair Hayes added that PM is the driver of risk for criteria pollutants, and, through diesel particulate, the driver of health risks from toxics as well.

7. INTRODUCTION TO THE OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT (OEHHA) IN ANTICIPATION OF FUTURE DISCUSSION REGARDING PARTICULATE MATTER HEALTH EFFECTS

Dr. McKay introduced Dr. Melanie Marty, who, prior to retiring, was OEHHA's Deputy Director for Scientific Affairs. Dr. Marty, gave the presentation *Introduction to the OEHHA in Anticipation of Future Discussion Regarding Particulate Matter Health Effects*, including: OEHHA's role at the California Environmental Protection Agency (CalEPA); and mandates related to air pollution. The presentation was continued by Dr. John Budroe, Chief of the Air Toxicology and Risk Assessment Section of OEHHA, whose slides included: Air Toxics Hot Spots Program and OEHHA's role; non-cancer reference exposure levels; cancer slope factors; and Toxic Air Contaminant Program. The presentation was continued by Dr. Keita Ebisu, Research Scientist of the Air and Climate Epidemiology Section of the OEHHA, whose slides included: characterizing PM dose-response with epidemiology study data; epidemiological studies – PM_{2.5} and Health; example: Short-Term PM_{2.5} Exposure and Cardiovascular Disease; meta-analysis; PM_{2.5} from wildfire and health outcomes; PM_{2.5} chemical constituents and sources; where are PM_{2.5} chemical constituents coming from; potential sources of PM_{2.5} chemical constituents; acute PM_{2.5} exposure and atrial fibrillation – exposure timing; and summary.

Council Comments:

The Council and staff discussed the magnitude of nationwide health impacts caused by PM_{2.5}; the fact that the studies referenced in the presentation focus on the correlation between PM_{2.5} exposure and risk of respiratory related death, but do not imply causation; whether OEHHA has an inventory of the toxicity levels of various elements (sea salt, sulfates, road dust, etc.), and the Council's desire to understand sources that are not toxic by themselves, but are related to health effects; the historical "split" between criteria pollutants and TACs, and if/how their health effects can be compared; the number of designated TACs that currently exist in California; the issue of generalizing risk from a specific study to a broader population; the cancer slope factor related to the many sources of hexavalent chromium, action taken to regulate it in Southern California, and detection of it in the Bay Area; and the difficulties of putting a dollar value on a human life.

The Council recessed at 12:46 p.m. and resumed at 1:30 p.m.

8. COMPLEXITY OF PARTICULATE MATTER AND ITS EFFECTS ON HUMAN HEALTH

Chair Hayes introduced Vice-Chair Kleinman, who gave the presentation, *Air Pollution and Human Health: Particles are the Heart of the Matter*. Slides included: air pollution contributes to multiple diseases; epidemiological studies link air pollution to cardiovascular disease; ambient pollutants that are associated with adverse cardiovascular effects; the role of PM constituents on health; California air pollution is strongly associated with deaths; inhaled pollutants can induce effects through multiple pathways; controlled studies using models of diseases can be used to identify causal agents and mechanisms; health-related characteristics of ultrafine PM; and chronic PM exposure leads to different effects in susceptible populations.

Council Comments:

The Council discussed where people get the most exposure to ultrafine PM; the inequality of particles; whether organic particles are emitted directly or are emitted as products of secondary

formation in the atmosphere through chemical processes; and particles generated by hydrogen, fuel cell, and electric vehicles.

9. ADVISORY COUNCIL DELIBERATION: BEYOND ATTAINMENT – PRIORITIZATION FOR LOCAL HEALTH IMPACTS

The Council's deliberations included identifying actions the District can take to make a noticeable difference after reaching attainment of air quality standards; the suggestion of identifying sub-topics of "beyond attainment", i.e.: what is the regulatory approach to exposure-based or risk-based regulation, defining what is harmful, and identifying topics in which people interested in researching; the suggestion trying to balance economic tradeoffs, especially regarding money versus human health; the exploration of sources of ultrafine PM, and learning about emerging retrofit technologies to address it; the suggestion that the District needs more detailed information on which populations (for the same amount of exposure) have the worst health effects, to better understand what causes the damage in those populations; and the need to move beyond associations and explore into causality (identification and reduction of causal agents).

10. ADVISORY COUNCIL TERMS

Dr. McKay stated that the current 2-year Council term limits expire in December 2017, and that Chair Hayes, Dr. Kleinman, Dr. Borenstein, Dr. Lipman, and Dr. Long have all expressed their desire to continue serving on the Council. He confirmed that Dr. Harley and Ms. Doduc have tendered their resignation, effective immediately, due to schedule conflicts, were they to be reappointed for the upcoming term. Dr. McKay added that Dr. Harley would like to be considered for another appointment to the Council in the future. Chair Hayes acknowledged both Ms. Doduc and Dr. Harley for their contributions and time.

11. CHAIRPERSON'S REPORT

Chair Hayes had nothing to report.

12. PUBLIC COMMENT ON NON-AGENDA MATTERS

No requests received.

13. COUNCIL MEMBER COMMENTS / OTHER BUSINESS

None.

14. TIME AND PLACE OF NEXT MEETING

Staff said that the Council would be polled for dates in January or February 2018.

15. ADJOURNMENT

The meeting adjourned at 3:10 p.m.

Draft Minutes - Advisory Council Regular Meeting of March 26, 2018

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

DRAFT MINUTES

Advisory Council Regular Meeting Monday, March 26, 2018

An audio recording of the meeting is available on the website of the Bay Area Air Quality Management District at http://www.baaqmd.gov/about-the-air-district/advisory-council/agendasreports

1. **CALL TO ORDER**

Advisory Council (Council) Chair, Stan Hayes, called the meeting to order at 12:17 p.m.

Roll Call:

Present: Council Chair Stan Hayes; Vice Chair Dr. Michael Kleinman; and Members

Prof. Severin Borenstein, Dr. Tim Lipman, and Dr. Jane Long.

Absent: None.

Also Present: Ex-Officio Advisory Council Member, Rod Sinks, Board of Directors (Board)

Liaison.

Opening Remarks: Chair Hayes remarked that the Board of Directors' Executive Committee held a joint meeting that morning with the members of the Advisory Council, and that he hopes that this is the beginning of many more joint meetings and opportunities for the Board and Council members to interact. Ex-Officio member Sinks stated that he was grateful for a chance to improve connections between the Board and Council members, and that he believes that the Council's voice will become more effective in time.

NOTED PRESENT: Member Lipman was noted present at 12:19 p.m.

2. APPROVAL OF THE MINUTES OF DECEMBER 11, 2017

Council Comments:

None.

Council Action:

Member Lipman made a motion, seconded by Member Long, to approve the Minutes of December 11, 2017; and the motion carried by the following vote of the Council:

AYES: Borenstein, Hayes, Kleinman, Lipman, Long.

NOES: None. ABSTAIN: None. ABSENT: None.

3. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments on Item 4 were given by Charles Davidson, Sunflower Alliance.

4. PARTICULATE MATTER IN THE BAY AREA

Dr. Phil Martien, Engineering Manager, gave the staff presentation *Particulate Matter in the Bay Area;* including: overview; Particulate Matter (PM)_{2.5} annual design value attains national standard since 2003; PM_{2.5} 24-hour design value attains national standard since 2009; modeled primary and secondary PM_{2.5} - about 1/3 of PM_{2.5} is secondary; receptor modeling: chemical mass balance; PM_{2.5} source apportionment: Bay Area and Central Valley; Bay Area source apportionment shifts during PM_{2.5}-high periods; for community-scale source apportionment: intake fraction (IF); IF determinants and typical values; Ports of Los Angeles/Long Beach modeled exposures; modeled PM_{2.5} contribution from multiple sources in San Francisco; West Oakland Google car monitoring study; West Oakland 100 x 100 black carbon study; PM_{2.5} emissions apportionment: on-road vehicles; apportionment to action: DPM reductions; greater health benefits, per PM_{2.5} increment, below the U.S. National Ambient Air Quality Standards; methods needed for PM health risk assessment; and summary.

Council Comments:

The Council and staff discussed whether the 2017 wildfire activity in the Bay Area would be considered "exceptional" events, and if the Bay Area remains in attainment despite such events; the importance, but difficulty, of distinguishing wood smoke and secondary organic compounds as sources of PM_{2.5}; the importance of factoring in a vehicle's age and the proportions of gas passenger cars to diesel trucks when analyzing emissions apportionment in on-road vehicles, and the need for comparative electric vehicle (EV) data; how vehicle tire wear and road are a leading cause of particle emissions; regenerative breaks; the suggestion of frequently washing down streets and roads to reduce dust; contributing factors to the decrease in overall PM_{2.5} emissions from on-road vehicles between 2008 and 2015 in California; and attributable cardiopulmonary deaths relative to ambient PM_{2.5} concentration.

Council Action:

None; receive and file.

5. ADVISORY COUNCIL NEXT AREA OF FOCUS; CONTINUATION OF DISCUSSIONS OF PARTICULATE MATTER

Dr. McKay introduced Damien Breen, Deputy Air Pollution Control Officer of Technology, who gave the staff presentation *Advisory Council Next Area of Focus: Continuation of Discussions of Particulate Matter*, including: PM; proposed approach: initial focus on diesel PM (DPM); sources and impacts of DPM; current efforts to reduce DPM; Case study- Port of Oakland 2008-2017; trends in light and heavy-duty vehicle deployment - "cost-effectiveness schedule" for batteries, and Air District investment in Zero Emissions Technology; trends in stationary and off-road sources; commitments on DPM to reduce petroleum/diesel; and proposed strategy – DPM and PM.

Council Comments:

The Council and staff discussed the increased health risk per unit of exposure to DPM; a request for information on how other countries that ban diesel vehicles or strive for zero emissions manage/retire

older vehicles; the levels of DPM exposure to passengers inside vehicles; the importance of monitoring acute (versus chronic) effects of DPM, and types of acute activities that can be accurately measured; and whether diesel particulates are a large proportion of PM_{2.5} emissions in the Bay Area, how other sources of PM_{2.5} compare, and how those levels vary from place to place in the Bay Area.

Council Action:

None; receive and file.

6. CHAIRPERSON'S REPORT

Chair Hayes announced the following:

- Council members have until March 30, 2018 to register (with Vanessa Johnson) for the Air and Waste Management Association's 111th Annual Conference in June, in Hartford.
- The District is still recruiting for the two vacant Council member seats, and Council members are encouraged to circulate the open recruitment. Dr. Kleinman suggested that the District contact the University of California's Office of the President, as that office maintains a list of skillsets for UC faculty. Dr. Long also suggested utilizing the list maintained by the California Council on Science and Technology.

7. REPORT OF THE EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER

On behalf of Mr. Broadbent, Dr. McKay announced that the Council will be updated by District staff regarding Governor Brown's Global Climate Action Summit that is to be held in San Francisco from September 12-14, 2018. Dr. McKay also announced that a Personnel Committee meeting is scheduled for May 7, 2018 to interview and consider candidates to fill the two vacancies on the Council.

8. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Charles Davidson, Sunflower Alliance.

9. COUNCIL MEMBER COMMENTS / OTHER BUSINESS

Chair Hayes suggested that the Council meets twice by the end of August, so that the Council can offer its comments on the topics that will be discussed at the Global Climate Action Summit.

10. TIME AND PLACE OF NEXT MEETING

At the call of the Chair.

11. **ADJOURNMENT**

The meeting adjourned at 2:06 p.m.

Marcy Hiratzka Clerk of the Boards

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: Introduction of New Members to the Air District's Advisory Council

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Senate Bill 1415 (SB 1415), effective July 1, 2015, reconstituted the membership of the Bay Area Air Quality Management District (Air District) Advisory Council to include seven appointed members "skilled and experienced in the fields of air pollution, climate change, or the health impacts of air pollution. Members shall be selected to include a diversity of perspectives, expertise and backgrounds." The Council is "to advise and consult with the bay district board and the bay district air pollution control officer in effectuating the purposes of" the Air District.

MEMBERSHIP

At its May 7, 2018 meeting the Personnel Committee recommended, and the Board subsequently approved the appointment of Gina M. Solomon, M.D., M.P.H., and Linda Rudolph, M.D., M.P.H., to the Council for a two-year term.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

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

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: Update on Assembly Bill 617 (AB 617)

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

The Advisory Council has been previously informed of Assembly Bill 617. The California Legislature passed, and Governor Jerry Brown signed, a number of key legislative actions that included AB 617. This bill specifically addresses concerns about local air quality by requiring:

- Emission reduction plans for overburdened communities;
- Additional air monitoring in impacted communities;
- A state-wide clearing house for Best Available Retrofit Control Technology (BARCT);
- Adoption of rules requiring the latest BARCT for all criteria pollutants for which an area has not achieved attainment of California Ambient Air Quality Standards; and
- Uniform state-wide reporting of emissions inventories.

DISCUSSION

Staff last updated the Advisory Council in March of this year. Staff will describe early progress regarding AB 617 implementation, including discussions with the California Air Resources Board and how this moves the Air District's program beyond the target of attainment for criteria pollutants.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

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

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: Health Impacts and Assessments of Diesel Particulate Matter in the Bay Area

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Diesel particulate matter (diesel PM) remains a significant contributor to health impacts from air pollution in the Bay Area, especially for disadvantaged communities living near freeways and industrial areas.

DISCUSSION

Diesel PM consists of over 40 known toxic air contaminants and has been classified as a potent carcinogen by CalEPA's Office of Environmental Health Hazard Assessment. Health studies show that exposure to fine PM (with diameter less than 2.5 micrometers, PM_{2.5}), including diesel PM, is associated with an increased risk of cardiovascular and respiratory disease. In the Bay Area, areas with the highest cumulative impact from air pollution were identified through regional modeling and other studies conducted under the Air District's Community Air Risk Evaluation (CARE) program to focus agency resources in these areas. Staff will summarize the health impacts from exposures to diesel PM and present regional and local analyses and measurement studies that further our understanding of diesel PM emissions and exposures in the Bay Area. Such studies show that diesel PM contributes about 65% of the regional cancer risk from air pollution and about 15% of regional PM_{2.5}.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

Prepared by: Phil Martien

Reviewed by: Jeff McKay and Greg Nudd

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: <u>Update on the Air District's Diesel Particulate Matter Emissions Reduction</u> Strategy

RECOMMENDED ACTION

The Advisory Council will consider providing input to the Air District Board of Directors in support of voluntary diesel emissions reduction efforts.

BACKGROUND

Several Air District initiatives including the Community Air Risk Reduction (CARE), Community Health Protection, Mobile Source, regulatory and permitting programs have identified diesel particulate matter (diesel PM) as being a significant concern relative to climate, air quality and public health. To address this pollutant, the Air District has devised a multilayered approach to reducing and eliminating diesel PM from Bay Area industries and communities.

DISCUSSION

At the previous Advisory Council meeting, Air District staff discussed a focus on aggressively curbing diesel transport emissions in Bay Area communities, and sought concurrence on a process to evaluate and possibly implement a variety of strategies, including strategies that use incentives and other non-regulatory methods.

As part of this agenda item, staff will update the Council on the scope of the Air District's current diesel emissions reductions program and will seek advice and direction on additional areas of focus that should be considered.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: <u>Damian Breen</u> Reviewed by: <u>Jeff McKay</u>

Memorandum

To: Chairperson Stan Hayes and Members

of the Advisory Council

From: Jack P. Broadbent

Executive Officer/APCO

Date: July 9, 2018

Re: Ongoing Discussion of Diesel Particulate Matter: How Low is "Low Enough"?

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

Criteria pollutants have minimum targets for the Bay Area. However, specific targets for Diesel Particulate Matter (diesel PM), especially diesel PM treated as a local issue, require further study. Staff will introduce the topic of targets for diesel PM.

Respectfully submitted,

Jack P. Broadbent Executive Officer/APCO

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