

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

APPROVED MINUTES

Advisory Council Regular Meeting
Monday, December 9, 2019

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 10:04 a.m. Chair Hayes congratulated Ex-Officio Advisory Council member, Rod Sinks, for being appointed as Chairperson of the Air District's Board of Directors for 2020. Mr. Sinks talked about upcoming Air District regulations that the Board will be considering in 2020.

Roll Call:

Present: Council Chair Stan Hayes; Vice Chair Dr. Michael Kleinman; and Members Prof. Severin Borenstein, Dr. Tim Lipman, Dr. Linda Rudolph, and Dr. Gina Solomon, and Ex-Officio Council Member, Rod Sinks, Board of Directors (Board) Liaison.

Absent: Member Dr. Jane Long.

Also Present: None.

2. APPROVAL OF THE MINUTES OF OCTOBER 28, 2019

Council Comments

Chair Hayes requested that the following revisions (in blue and red) to page 1 of the Draft Minutes of October 28, 2019 be made:

Advisory Council (Council) Chair, Stan Hayes, called the meeting to order at 9:10 a.m. Chair Hayes gave opening remarks, explaining that while this was a regular meeting of the Council, the first in a series ~~part~~ of a "Particulate Matter (PM) Symposia" would be held during this meeting. He stated that the three years of intense wildfire smoke, the District's focus on reducing Diesel Particulate Matter (PM) emissions, and the conclusion that PM is the overwhelming health risk driver in Bay Area air, ~~events since 2017 to present day~~ have caused the Air District to focus on the need for measures to further protect public health from PM and explained that two panels had been convened; one to address "Particulate Matter Health Effects," and another to address "Particulate Matter Exposure and Risk."

Prof. Borenstein asked when an appropriate time would be to discuss the Council’s vision for the subsequent PM symposia, and Chair Hayes suggested discussing that during item 4.

Council Action

Prof. Borenstein made a motion, seconded by Dr. Solomon, to **approve** the Minutes of October 28, 2019 **as amended**; and the motion carried by the following vote of the Council:

AYES: Borenstein, Hayes, Lipman, Rudolph, Solomon.
NOES: None.
ABSTAIN: None.
ABSENT: Kleinman and Long.

3. PUBLIC COMMENT ON AGENDA MATTERS

Public comments were given by Dr. Ashley McClure, California Climate Health Now; Jed Holtzman, 350 Bay Area; and Greg Karras, Communities for a Better Environment (CBE).

Committee Comments

The Council discussed what has been informing its decision to recommend that PM standards should be lowered.

NOTED PRESENT: Vice Chair Kleinman was noted present at 10:16 a.m.

4. PARTICULATE MATTER SYMPOSIUM OVERVIEW

Chair Hayes gave the presentation *PM Protection Symposium (Advisory Council Meeting of October 28, 2019)*, including: PM focus; PM symposia; key points; speaker profiles; Air District’s questions; discussion questions; Council initial deliberation; PM symposium series; ambient PM; mortality (long-term PM_{2.5} exposure); Draft PM Integrated Science Assessment effects: causality determinations; populations potentially at increased risk of a PM-related health effect; summary of risk estimates; preliminary conclusions on the current primary PM_{2.5} standards; primary PM_{2.5} marginal damages; damages and premature mortality; regional-scale and community-scale modeling in 2017; clear evidence of an association between wildfire smoke and respiratory health; and wildfire-PM_{2.5} increases heart attack and stroke.

Council Comments

The Council and staff discussed proposed PM symposia timeline into 2020; the request for a proposed plan that focuses on implementation that will address the current National Ambient Air Quality Standards, currently viewed by the Air District as inadequate; and whether the Air District believes that costs should be considered when these standards are revised.

Council Action

None; receive and file.

5. UPDATE ON PARTICULATE MATTER AIR DISTRICT WORK

Dr. Jeff McKay explained that various Air District staff, and a staff member from the California Air Resources Board (CARB), had separate presentations to present to the Council within this item.

Dr. Phil Martien, Director of Assessment, Inventory, and Modeling, gave the staff presentation *Regional-and-Local-Scale PM_{2.5} Source Apportionment*, including: overview; regional modeling; primary and secondary contributions; 2016 Bay Area emissions summary for key secondary PM_{2.5} precursors; PM_{2.5} Bay Area emissions summary for primary PM_{2.5}; emissions inventory for information gaps; PM_{2.5} Bay Area emissions apportionment; on-road vehicles; regional-scale and community-scale modeling in 2017; modeled primary PM_{2.5}; local versus regional; West Oakland example; unequal impacts: PM_{2.5} in West Oakland; additional emissions inventory information gaps identified; PM_{2.5} emissions from permitted facilities; and summary.

Council Comments: The Council and staff discussed different impacts that Primary PM_{2.5} could impose on human health, depending on its proximity (regional versus localized); the annual average of PM_{2.5} levels from local sources in West Oakland, and whether the Air District's modeling of this indicates variability on a weekly basis; the fact that uncertainty in the emissions for sources such as road dust, on-road wear, residential wood combustion, and commercial cooking are very high, outdated, still being evaluated, and not included in the data of presentation; the settlement between the U.S. Environmental Protection Agency (EPA) and Lehigh Cement Company, LLC and Lehigh White Cement Company, LLC, which addresses how the companies will rectify Clean Air Act violations at their facilities located in seven states, and the Air District's involvement as a plaintiff; how community-level source apportionment in the Bay Area affects global warming impacts; technologies for mitigating vehicle brake and tire wear; whether the Air District has the capability of modeling regional-level source apportionment; the suggestion that the Air District considers an air toxics approach that may also reduce PM emissions; the impact of vehicle exhaust and how speed and traffic flow affect that; and whether the Air District has the authority to regulate commercial cooking and residential wood combustion for PM_{2.5} emissions, and if so, whether those reductions can be easily achieved.

Dr. Ranyee Chiang, Director of Meteorology and Measurements, introduced Assistant Managers, Ila Perkins and Kate Hoag, who gave the staff presentation *Monitoring*, including: measurements in the Bay Area; regional/regulatory network objective; monitoring network design criteria; PM measurements; Air District PM instrumentation; ultrafine PM (UFP) monitoring; new developments: hyperlocal, street-by-street monitoring, mobile laboratory, and portable platforms; what does the UFP data show; wildfire smoke dramatically affects Bay Area PM_{2.5} levels; Air District's strategy to reduce impacts from wildfire smoke; combining monitoring strategies for multiple objectives; and integrated PM network assessment.

NOTED DEPARTURE: Prof. Borenstein left the meeting at 12:00 p.m.

Council Comments: The Council and staff discussed the costs of UFP monitoring technology and the suggestion that the EPA, CARB, and Air District pool their resources to fund a challenge for companies to develop more affordable monitoring technology for UFP; sources of near-roadway UFP, and whether the Air District has considered implementing regulations to reduce near-roadway exposure to UFP; the difficulties of correlating UFP and PM_{2.5} concentrations;

how UFP precursors can be influenced by both photochemical reactions and anthropogenic activity; whether the Air District has the resources to monitor UFP concentrations at various distances from roadways, and whether the Air District has seen correlations between UFP concentrations and stationary sources; and the manner in which data from the Air District's Regional Network is made publicly available.

Karen Schkolnick, Strategic Incentives Division, gave the staff presentation *Air District Grant Programs Overview*, including: overview; background; grants overview and priorities; project evaluation; >\$97 million awarded to eligible projects in 2018; eligible projects in on-road vehicle, off-road vehicle, trip reduction, and passthrough and other categories; supporting Air District initiatives: path to Diesel-Free by '33, Bay Area electric vehicle (EV) trends and goals, advanced technology demonstrations, and early emissions reductions at the Port of Oakland; results and highlights; and next steps.

Council Comments: The Council and staff discussed Diesel PM (DPM) emission reductions at the Port of Oakland that were achieved by retrofit projects sponsored by the Air District; which funds may finance vehicle miles traveled (VMT) reduction projects, and the comparison between funds allocated for VMT reduction projects versus other types of transportation projects; the intended objectives of the Air District's Diesel Free by '33 initiative; the type of PM that is used in the current cost-effectiveness formula dictated by the CARB Carl Moyer Program Guidelines; and the number of public EV charging ports that have been paid for with Air District funds that are powered by renewable energy.

The Council recessed at 12:38 p.m.; the Council resumed at 1:18 p.m.

Alvaro Alvarado, Air Pollution Specialist at CARB, gave the presentation *PM Exposure: CARB Health Research and Rule*, including: PM exposure is an important public health concern; additional evidence of PM's negative health impacts; PM_{2.5} trend in the San Francisco Bay Area Basin; CARB's current efforts and new challenges; wildfire-related PM exposures; wildfire health impacts in Rhesus Macaques; wildfire emissions; PM from brake and tire wear; health risk from UFP; health effects of UFP; short-term PM exposure; and statewide Mobile Source Strategy overview: heavy-duty trucks, warehouses, passenger cars, and trains.

Council Comments: The Council and staff discussed potential developments that could help shape CARB's regulatory agenda; the suggestion of offering incentives for regenerative braking systems in passenger vehicles; the speculated severity of exposure to day-to-day PM emissions (non-wildfire events); whether the definition of "premature death" varies amongst state and federal public health and regulatory agencies; and historical concerns of increases in UFP due to the deployment of natural gas and diesel-reduction technologies, and whether such increases have occurred.

Victor Douglas, Rules Development Manager, gave the staff presentation *PM Rules and Regulatory Development*, including: overview; regulation of PM; regional approach; PM rules and regulations; PM rulemaking efforts; 2018 PM rules; and current and future efforts.

Council Comments: The Council and staff discussed how undifferentiated PM cannot yet be regulated in California; a global warming approach to regulating PM that the Air District is currently choosing not to utilize and why; Health Risk Assessment-based approaches, such as Air District Regulation 11-18 and California's Assembly Bill (AB) 2588 Air Toxics "Hot Spots"

Program, created to identify and reduce localized impacts and health risks; and whether the Office of Environmental Health Hazard Assessment has established a timeline for evaluating undifferentiated PM, and whether the Air District has the authority to create its own standard for undifferentiated PM.

Public Comments

Public comments were given by Dr. Ashley McClure, California Climate Health Now; Jed Holtzman and Richard Grey, 350 Bay Area; and Greg Karras, Communities for a Better Environment (CBE).

Council Action

None; receive and file.

6. DELIBERATION AND POSSIBLE APPROVAL ON PARTICULATE MATTER SYMPOSIUM SUMMARY REPORT

Dr. McKay acknowledged Elizabeth Andrews, whom the Air District commissioned to write a Summary Report on the October 28, 2019 PM Symposium. He asked that the Council deliberate on the content of the Summary Report, as the Air District seeks to investigate health-focused attainment guidelines as a result of this deliberation.

Council Comments

The Council and staff discussed appreciation for capturing the individual public comments and the “Sense of the Council” at the end of the Summary Report; the suggestion that the last page of the Summary Report be given a more specific than “next steps”; the anticipated timeline of the rest of the PM Symposia series; concerns about the fact that multiple panelists at the October 28, 2019 PM Symposium agreed that there is a lack of evidence of a threshold for PM; how to archive the discussion questions that were asked of the panelists of the October 28, 2019 PM Symposium; the suggestion that the panelists from the October 28, 2019 PM Symposium be sent the Summary Report for review; the suggestion that Air District staff publishes a draft of the Summary Report on the Air District’s website so that the public may comment on it prior to the next PM Symposium in spring 2020, and how that could be circulated among the Council members without violating the Ralph M. Brown Act; suggested revisions to the “Executive Summary” and “Council Deliberation” sections of the Summary Report; adding a section to the Summary Report called “Council Findings” and when those might be submitted to the Board of Directors.

Council Action

None; receive and file.

7. CHAIRPERSON'S REPORT

Chair Hayes reported the following:

- On November 6, 2019, the Board of Directors' Executive Committee received a report on the Advisory Council Particulate Matter Symposium from October 28, 2019.
- On November 20, 2019, the full Board of Directors received a report on the Advisory Council Particulate Matter Symposium from October 28, 2019.
- The Air & Waste Management Association's 113th Annual Conference and Exhibition will be held in San Francisco from June 29, 2020 to July 2, 2020. Council members are encouraged to attend, given that the events will be held in the Bay Area.

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

On behalf of Jack Broadbent, Executive Officer/Air Pollution Control Officer, Dr. McKay stated that there was nothing to report.

9. PUBLIC COMMENT ON NON-AGENDA MATTERS

Public comments were given by Dr. Ashley McClure, California Climate Health Now; and Jed Holtzman, 350 Bay Area.

10. COUNCIL MEMBER COMMENTS / OTHER BUSINESS

Ex-Officio Advisory Council member, Rod Sinks, announced that Brian Bunger, Air District Counsel, was elected President-Elect of the Air and Waste Management Association for 2020 and will be President in 2021.

11. TIME AND PLACE OF NEXT MEETING

At the conclusion of the meeting, it was announced that the next meeting would take place at the Call of the Chair, but following the meeting, the next meeting date was established as Tuesday, March 24, 2020, at the Oakland Marriott City Center, 1001 Broadway, Oakland, CA 94607. This meeting of the Council will also serve as the next PM Symposium in the series.

12. ADJOURNMENT

The meeting adjourned at 3:38 p.m.

/s/ Marcy Hiratzka
Marcy Hiratzka
Clerk of the Boards