

Bay Area Air Quality Management District
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APPROVED MINUTES

Advisory Council Regular Meeting
Monday, March 11, 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 10:06 a.m.

Roll Call:

Present: Council Chair Stan Hayes; Vice Chair Dr. Michael Kleinman; and Members Prof. Severin Borenstein, Dr. Tim Lipman, Dr. Jane Long, and Dr. Linda Rudolph, and Dr. Gina Solomon.

Absent: None.

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

2. APPROVAL OF THE MINUTES OF OCTOBER 29, 2018

Council Comments

Chair Hayes requested that the following additional language be added to the third page of the Draft Advisory Council Minutes of October 2018, under the Council Comments of the item entitled “Strategic Targets for Assembly Bill 617 Implementation”:

...how the disbanding of the Environmental Protection Agency’s (EPA) Clean Air Scientific Advisory Committee’s Particulate Matter (PM) Review Panel may prompt the need for an independent review by the State of California in tandem with the National Ambient Air Quality Standards’ five-year review of PM; and the difficulty in defining “health equity”.

Council Action

Member Long made a motion, seconded by Vice Chair Kleinman, to **approve** the Minutes of October 29, 2018 as amended; and the motion carried by the following vote of the Council:

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

3. PUBLIC COMMENT ON AGENDA MATTERS

Public comments were given by Jed Holtzman and Janet Stromberg, 350 Bay Area.

Council Comments

The Council and staff discussed whether to allow the public to comment on each individual Advisory Council meeting agenda item as each item is heard by the Council, as opposed to the current structure, which only allows two opportunities for public comments (on agenda and non-agenda matters) at Advisory Council meetings; and developing a process in which members of the public may submit documents for the Council's review, as they relate to upcoming Council agenda matters. Chair Hayes stated that moving forward, he will give the public additional opportunities to comment, prior to the Council deliberating or taking action.

4. DISCUSSION ON ELECTION OF OFFICERS

Chair Hayes read from § 40267 (Advisory Council Officers) of the *2019 California Air Pollution Control Laws* (Health & Safety Code) which explains how the Council's Chairperson and Vice Chairperson are selected. He stated that he and Vice Chair Kleinman have been the Council's Chairperson and Vice Chairperson since the Council's new format of seven members was created in December 2015 and opened a discussion to establish a formal Council Officers selection process and set term limits.

Council Comments

The Council and staff discussed the Chairperson's ability to adopt a policy on his/her own without the Council's input; various suggestions for officer term limits; possibilities for reappointment; at what points elections should occur; and the request that Air District staff summarize this discussion and continue it at the next Council meeting.

Council Action

None; receive and file.

5. PRESENTATION OF THE ENVIRONMENTAL PROTECTION AGENCY'S INTEGRATED SCIENCE ASSESSMENT (ISA) FOR PARTICULATE MATTER (EXTERNAL REVIEW DRAFT)

Dr. Jeff McKay, Chief Financial Officer, introduced Jason Sacks, Senior Epidemiologist in the National Center for Environmental Assessment within U.S. EPA's Office of Research and Development, who gave the presentation *Overview of Main Conclusions of the Integrated Science Assessment for PM External Review Draft*, including: disclaimer; overview of the process for reviewing the National Ambient Air Quality Standards for Particulate Matter; weight-of-evidence approach for causality determinations for health and welfare effects;

evaluation of the scientific evidence; framework for causality determinations in the ISA; contents of the Draft PM ISA; scope; Executive Summary and Chapter 1; PM concentrations and trends (Chapter 2); exposure to PM (Chapter 3); dosimetry of PM (Chapter 4); Draft PM ISA – health effects: causality determinations and example; respiratory effects (Chapter 5); cardiovascular effects (Chapter 6); nervous system effects (Chapter 8); cancer (Chapter 10); mortality – short-term and long-term PM_{2.5} exposure (Chapter 11); other causality determinations (Chapters 5-10); policy-relevant considerations (Chapter 1); populations potentially at increased risk of a PM-related health effect (Chapter 12); Draft PM ISA – welfare effects: causality determinations; welfare effects (Chapter 13); PM ISA team; supplemental materials; and at-risk framework description.

Council Comments

The Council and staff discussed how the EPA’s Office of Research and Development and Office of Air Quality Planning and Standards work together on the ISA; whether health risk exposure, health risk assessment, and cost-benefit analysis are included in the policy analysis; impacts that are to be considered in the risk analysis; how uncertainty and exposure error can influence the effects observed in epidemiology studies, and how difficult it would be to reduce error; how overestimation of health effects can occur if an exposure model has low spatial resolution and underestimates exposures; the difficulty of establishing a universal definition of “ultrafine” particles; how determinations were made that there are likely causal relationships between short and long-term PM_{2.5} exposure and respiratory effects, and how much of those effects are due to ultrafine particles; relative risk or odds ratios from epidemiology studies; health effects from individual chemical components versus PM mass; the difficulty in drawing distinctions between chemical compositions of ultrafine particles and bigger PM; how retrograde transport up the olfactory nerve to the brain relates to particle size fraction; how the EPA’s Office of Research and Development will ensure that the ISA is scientifically reviewed by the Clean Air Scientific Advisory Committee, given the recent disbandment of the Committee’s PM Review Panel, and whether the former PM Review Panel’s research and findings will be considered by whomever reviews the ISA; the ratio of non-accidental to accidental mortality; the likelihood of a study being subjected to publication bias based on the number of cities the study encompasses; whether the data interpretations from long-term exposure studies are comparable to those of short-term exposure studies; the amount of time it takes for health effects to occur from short-term exposure, and what kinds of health effects result in the the Bay Area; whether studies take human defensive measures or averting behaviors into account; the observation that studies are not conducted during major air events, but during average concentration levels; the lack of consistency resulting from studies on health effects on human reproduction (pregnancy and birth) and mortality; whether data exists to confirm that certain populations are at increased risk; the definition of “inadequate” evidence for factors that may increase the risk of PM_{2.5}-related health effects in a population or life stage, and why a person’s residential location is considered inadequate evidence; climate effects of PM_{2.5}; which party at the EPA makes the final causality determinations; the fact that, should the Council reach different conclusions, evidence, or findings than the EPA, the Air District may base its rulemakings on the findings of the Council; a summarization of comments on the ISA from community health organizations; how the EPA’s Office of Air Quality Planning and Standards determines when a formal risk assessment on PM_{2.5} should be conducted; the fact that health effects are still present in areas with lower concentrations; how much wildfires contribute to annual PM_{2.5} concentrations; how long the EPA will wait, upon the ISA’s completion and review, to conduct a subsequent risk and exposure assessment; challenges determining causality in real time using retrospective analyses;

and the EPA's decision to put metabolic effects into its own category, separate from cardiovascular effects.

Council Action

None; receive and file.

The Council recessed at 12:36 p.m., and resumed at 1:13 p.m.

Public Comments

Public comments were given by Jed Holtzman and Janet Stromberg, 350 Bay Area.

6. PROPOSED PARTICULATE MATTER SYMPOSIUM

Jack P. Broadbent, Executive Officer/Air Pollution Control Officer, explained that the Air District wishes to hold a symposium to focus on the state of the science of PM relative to health effects in the Bay Area. Dr. Jeff McKay, Chief Financial Officer, gave the staff presentation *Particulate Matter Symposium*, stating that the Air District wished to have the Council convene the symposium at its October meeting.

Council Comments

The Council and staff discussed the creation of a temporary ad-hoc committee made up solely of less than a quorum of the Council to plan this event via conference calls; the need for a scientific research and health effects component, followed by a policy and implementation component; the need to include wildfires and the Air District's wildfire legislation into the discussion; the identification of potential invitees; and whether the symposium should address other environmental and climate issues (such as black carbon, aerosols, water, etc.), the costs of regulation and monetary benefits, and exposure levels in which health effects occur.

Council Action

None; receive and file.

7. DELIBERATION ON QUESTIONS RELATED TO PARTICULATE MATTER

Dr. McKay gave the presentation *Deliberation on Questions Related to Particulate Matter*, explaining that Air District staff assumed that the Council would wish to continue discussing particular topics, as they may relate to the upcoming symposium.

Council Comments

The Council and staff discussed the societal tradeoffs of minimizing risk; the concern that the current National Ambient Air Quality Standards are not protective enough; the need to identify whose health needs to be protected most (the general population versus sensitive groups who are at a higher risk); the fact that California has not updated its PM standards since 2003 nor has it set a 24-hour PM_{2.5} standard, and whether the State should do so; how the Air District conducts a cost-effectiveness analysis when proposing a new regulation, and historical benefit-cost ratio

trends; whether the Air District monitors ultrafine particles and if so, what the Air District is doing with the data that is collected, and whether there is an interest in a future presentation on this topic; and whether the Air District has analyzed the relationship between particle counts and black carbon.

Council Action

None; receive and file.

8. REPORT OF THE EXECUTIVE OFFICER/AIR POLLUTION CONTROL OFFICER (OUT OF ORDER, ITEM 9)

Mr. Broadbent reported the following:

- Air District staff would like to give the Council a status report on the Air District's Wildfire Response Program and corresponding legislation, Assembly Bill 836 (Bay Area Clean Air Incentive Program.)
- Air District staff would like to give the Council an update on the Air District's monitoring program in preparation for the PM symposium.
- The Air District's 2018 Climate Protection Grant Program has awarded \$4.5 million to the following 17 projects at 15 regional public agencies in two program areas: (1) reducing greenhouse gases (GHGs) from existing buildings, and (2) fostering innovative strategies for long-term GHG reduction.
- Upcoming rulemakings include: Draft Regulation 13 - Climate Pollutants; Draft Regulation 13, Rule 2 - Organic Material Handling and Composting Operations; Draft concepts for Regulation 13, Rule 4 - Sewage Treatment and Anaerobic Digestion; and Draft concepts for Regulation 8, Rule 34 - Solid Waste Disposal Sites.
- The Air District has developed and adopted an Expedited Best Available Retrofit Control Technology (BARCT) Implementation Schedule to meet requirements mandated by Assembly Bill 617, which requires air districts to implement BARCT on pollution sources located at facilities subject to the Cap-and-Trade program.
- The Air District's Proposed Fiscal Year Ending 2020 Budget is being drafted.
- Land use conflicts are increasing in the Bay Area, regarding the placement of schools, residences, and centers for sensitive receptors (children and the elderly) in industrial zones. The Air District's Board of Directors wishes to provide guidance to cities and counties to prevent placing people at risk.

9. CHAIRPERSON'S REPORT (ITEM 8)

Chair Hayes reported the following:

- He attended an Air & Waste Management Association-sponsored conference entitled "Impacts of Wildfires on Air Quality and Health" in Santa Rosa in mid-February at which Mr. Broadbent, Vice Chair Kleinman, and Eric Stevenson, then Director of Meteorology and Measurement, spoke.
- He will be giving a report on the Council's activities to the Air District's Board of Directors' Executive Committee meeting on March 20, 2019, and to the full Board of Directors on April 3, 2019.

- The Air & Waste Management Association's 112th Annual Conference will be held in Quebec City on June 25, 2019 to June 28, 2019 and he and Vice Chair Kleinman will be attending.

10. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

No requests received.

11. **COUNCIL MEMBER COMMENTS / OTHER BUSINESS**

Board Liaison Sinks thanked the Council members for their time and input, and announced that he will be chairing the Air District's Stationary Source Committee, which will be discussing Air District Rule 11-18 (Reduction of risk from air toxic emissions at existing facilities) on March 18, 2019.

12. **TIME AND PLACE OF NEXT MEETING**

At the call of the Chair.

13. **ADJOURNMENT**

The meeting adjourned at 3:00 p.m.

/s/ Marcy Hiratzka
Marcy Hiratzka
Clerk of the Boards