

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
(415) 749-5073

APPROVED MINUTES

Advisory Council Regular Meeting & Retreat
Wednesday, January 14, 2015

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/The-Air-District/Board-of-Directors/Advisory-Council/Agendas-and-Minutes.aspx>.

1. CALL TO ORDER

Vice-Chairperson Jessica Range called the meeting to order at 9:07 a.m.

Opening Comments: None

Roll Call:

Present: Chairperson Liza Lutzker, M.P.H.; Vice-Chairperson Jessica Range, LEED A.P.; Secretary Jonathan Cherry, A.I.A.; and Members Sam Altshuler, P.E., Robert Bornstein, Ph.D., Stan Hayes, Frank Imhof, Kraig Kurucz, Rick Marshall, P.E., P.L.S., Bruce Mast, SaraT L. Mayer, M.P.P., Timothy O'Connor, Esq., and Laura E. Tam.

Absent: Members Ana M. Alvarez, D.P.P.D., and Harold Brazil.

Also Present: None.

2. PUBLIC COMMENT ON NON-AGENDA MATTERS: No requests received.

3. APPROVAL OF THE MINUTES OF THE ADVISORY COUNCIL (COUNCIL) MEETING ON NOVEMBER 12, 2014

Council Comments: None.

RECOGNITION

4. Recognition of Outgoing Council Members

Vice-Chairperson Range recognized outgoing Council Members Benjamin Bolles, Jeffrey Bramlett, Heather Forshey and former Member Estes Al Phillips, all in absentia, for their service on the Council.

Vice-Chairperson Range recognized outgoing Council Member John Holtzclaw, Ph.D., for his service on the Council. Dr. Holtzclaw addressed the Council in gratitude.

Council Comments:

Member Hayes expressed his gratitude for Dr. Holtzclaw's contribution to the Council.

Public Comments: No requests received.

Council Action: None.

5. Recognition of Outgoing Council Chairperson

Vice-Chairperson Range recognized outgoing Chairperson Altshuler for his dedicated leadership and service to air quality in the Bay Area.

Council Comments:

Member Hayes expressed his gratitude for Member Altshuler's contribution as Council Chairperson.

Public Comments: None.

Council Action: None.

RETREAT

6. Review and Discussion of 2014 AND

7. Discussion of 2015

Jean Roggenkamp, Deputy Air Pollution Control Officer, introduced the topic and Saffet Tanrikulu, Research and Modeling Manager of the Planning, Rules and Research Division, who gave the staff presentation, *Council Regular Meeting and Retreat*, including review of 2014 and discussion of 2015, a sample albedo map of San Francisco and the California Energy Commission's (CEC's) building climate zone map.

NOTED PRESENT: Member Marshall was noted present at 9:23 a.m. and Chairperson Lutzker was noted present at 9:27 a.m.

The Council and staff discussed, at slide 5, *Discussion of 2015 (cont.)*, *Discussion on Possible Mitigation Strategies*, if and how solar panel roofs mitigate as effectively as cool roofs; the nature of sensible heat flux and the various forms of solar heating; and additional details about the energy dynamic in the "urban with increase cool roofs and pavements" example.

Dr. Tanrikulu continued the presentation.

The Council and staff discussed, at slide 6, *Discussion of 2015 (cont.)*, the counterintuitive nature of the numbers provided and what types of modeling the data are used for; if the chart means that San Francisco and Oakland do not have the same heat island issues as other urban areas and whether the differences can be attributed to the measurements being taken at their respective airports; the possibility that a greater degree of urban foliage may be contributing to the difference; what size monitoring network is necessary to obtain these measurements; the applicability of these figures to Council work; how the national urban average was established and what it means in comparison to the Bowen ratio provided for individual cities; whether tree density can be increased to positive effect; information and technology available to determine how much foliage exists relative to urban development and the direct measurement of temperatures; the types of modeling available in this field; how individual emissions will impact different areas with varying Bowen ratios and what that means for air quality monitoring; and the definition of “urban” in this chart.

NOTED PRESENT: Member Imhof was noted present at 9:39 a.m.

Dr. Tanrikulu continued the presentation.

The Council and staff discussed, at slide 7, *Discussion of 2015 (cont.)*, the significant impact that results from the small difference between the albedo of urban and rural areas and what the meaning of “cool roof.”

Dr. Tanrikulu continued the presentation.

The Council and staff discussed, at slide 8, *A Sample Albedo Map of San Francisco*, the exclusion of road measurements on the map.

Dr. Tanrikulu continued the presentation.

The Council and staff discussed, at slide 9, *CEC’s Building Climate Zone Map*, what the various zones are based upon; the applicability of the map; heat generation from roadways and automobiles as having important, but perhaps unrecognized, impacts; the nature of anthropogenic heat; and how these climate zones were established.

Dr. Tanrikulu concluded the presentation.

Council Comments:

The Council and staff discussed report formatting and membership in the report writing work group for the upcoming presentation; the lack of webcasting for today’s meeting; and when and on what topic the next speaker should present.

Public Comments: No requests received.

Council Action: None.

PRESENTATION

8. Urban Heat Island Effects on Energy Use, Climate, Air Pollution, Greenhouse Gases (GHGs) and Health

Dr. Tanrikulu introduced John Melvin and provided a brief description of his background.

John Melvin, State Urban Forester
Urban Forestry Advisor Staff
California Department of Forestry and Fire Protection (CAL FIRE)
Sacramento, California

Mr. Melvin gave a presentation entitled *BAAQMD [Bay Area Air Quality Management District] Urban Forestry Overview* (a copy of which is available on the website of the Bay Area Air Quality Management District at <http://www.baaqmd.gov/The-Air-District/Board-of-Directors/Advisory-Council/Agendas-and-Minutes.aspx>).

Council Comments:

The Council, staff and Mr. Melvin discussed whether any information exists regarding the effect of trees on the Bowen ratio and similar dynamics, including whether specific types of plants or landscape designs change the result; possible recommendations regarding tree types with multiple benefits; carbon sequestration capabilities of various tree types; urban pollen sources, the impact of pollen in urban environments, recent trends in the planting of male and female trees, and the potential exacerbation of pre-existing asthma from urban pollen; the importance of considering tree species in urban planting as each has a distinct impact for those suffering from asthma; how CAL FIRE is involved in community planning; the complexity of the impact of urban trees on air quality, including but not limited to arrangement, tree type, and variable heat island effects; whether CAL FIRE grants require the maintenance of and check-ups on trees planted; the mortality rate of young trees and long-term benefits of early investment in tree health; CAL FIRE's opinion relative to the carbon accounting in the California Air Resources Board's new protocols; whether and how varying types of trees and their usual pruning result in variable GHG sequestration capabilities; issues and trends relative to constructing new buildings around existing trees; the declining canopy in San Francisco resulting from the ease of planting and difficulty of successful maintenance programs; cities that are planting and maintaining trees well; whether it is recommended for cities to establish dedicated funds for landscape maintenance; Palo Alto, Menlo Park and Atherton as emerging models for tree maintenance in the Bay Area; if any efforts are being made to plant and maintain trees for residents who are willing to host, but unable to maintain, trees on their property; what factors are taken into account for calculations of the benefit of urban forestry; additional information regarding the studies listed on slide 23, *Bay Area Specific Information*, and which websites have published each; concerns and differences of opinion regarding trees and water usage; opinions relative to municipal requirements for minimum clearance between trees and buildings; the skewing of urban canopy figures by large parks; and the viability of trees and bushes in planters, such as in bike lane dividers, and their benefits and challenges compared with trees planted in the ground.

Public Comments: No requests received.

Council Action: None; receive and file.

AIR DISTRICT OVERVIEW

9. Report of the Executive Officer/Air Pollution Control Officer (APCO) (Out of Order Agenda Item 10)

Jack Broadbent, Executive Officer/APCO, gave the staff presentation *Air District Overview Council Special Meeting / Retreat*, including key 2015 initiatives and key 2015 policy initiatives.

Mr. Broadbent presented a summary of the Winter Spare the Air Season to date.

Council Comments:

The Council and staff discussed the trend of exceedences of the federal ozone standard and staff opinions relative to expected adjustments to the standard; the Bay Area ambient air quality in comparison to the background level; whether source apportionment information exists that is more recent than several years ago, which attributed up to 40% of particulate matter levels to wood smoke; whether the new Air District headquarters are 375 Beale Street will become the Milton Feldstein Building; the air quality impact of back-up generators and rulemaking plans relative to the same; possible updates to the Clean Air Plan; recent media coverage citing air quality experts that are not Air District employees and who are, perhaps erroneously, attributing nearly all of the winter air quality problems to wood smoke; progress on the community engagement program and plan; and a possible transition plan for the Council.

Public Comments: No requests received.

Council Action: None; receive and file.

3. APPROVAL OF THE MINUTES OF THE COUNCIL MEETING ON NOVEMBER 12, 2014 (CONTINUED)

Public Comments: No requests received.

Council Action:

Member Kurucz made a motion, seconded by Member Hayes, to approve the minutes of the Council meeting on November 12, 2014; and the motion carried by the following vote of the Council:

AYES: Altshuler, Bornstein, Cherry, Hayes, Kurucz, Lutzker, Marshall, Mast, Range and Tam.
NOES: None.
ABSTAIN: Imhof.
ABSENT: Alvarez, Brazil, Mayer and O'Connor.

DISCUSSION

10. Discussion of Draft Report on the Council's Meeting on October 8, 2014 (Agenda Item 9)

The Council postponed this item to a future meeting date.

The Council and staff discussed the form and timing of Council reports and presentations to the Board of Directors (Board); the advisability of initially delivering the Council's 2014 reports to the Board without an accompanying presentation; the desire among some Council members to deliver more than one presentation to the Board and its committees between now and May 2015; which Council members will prepare the Council summary of 2014 reports; and which Council members will present to the Board.

OTHER BUSINESS

11. Chairperson's Report

Chairperson Lutzker thanked the outgoing Council members and Chair for their service.

12. Council Member Comments/Other Business

Chairperson Lutzker provided a summary of the air sensor workshop on November 19, 2014, hosted by the California Air Pollution Control Officers Association.

Member Bornstein commented on the value and importance of continued collaboration between the Air District and the South Coast Air Quality Management District (SCAQMD). Member Bornstein and staff discussed how the SCAQMD modelling compares to that of the Air District.

Member Altshuler announced the availability of a phone application that senses noise levels.

Member Kurucz noted recent news reports regarding increases in average temperatures.

13. Time and Place of Next Meeting:

Wednesday, February 11, 2015, Bay Area Air Quality Management District Headquarters, 939 Ellis Street, San Francisco, CA 94109 at 9:00 a.m.

14. Adjournment: The meeting adjourned at 12:27 p.m.

IS/ Sean Gallagher

Sean Gallagher
Clerk of the Boards