

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

APPROVED MINUTES

Advisory Council Regular Meeting
Wednesday, September 11, 2013

Note: Audio and webcast recordings of the meeting are 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>.

CALL TO ORDER: Vice-Chairperson Altshuler called the meeting to order at 9:04 a.m.

ROLL CALL

Present: Vice-Chairperson Sam Altshuler, P.E.; Secretary Liza Lutzker, M.P.H.; and Members Ana M. Alvarez, D.P.P.D., Jennifer Bard, M.S., C.S.P., Harold Brazil, Jonathan Cherry, A.I.A., LEED A.P., John Holtzclaw, Ph.D., Kraig Kurucz, Estes Al Phillips, Jessica Range, LEED A.P., and Murray Wood.

Absent: Chairperson Robert Bornstein, Ph.D.; and Members Benjamin Bolles, Jeffrey Bramlett, Heather Forshey, Stan Hayes, Gary Lucks, J.D., C.P.E.A., Kathryn Lyddan, J.D., Rick Marshall, P.E., P.L.S., and Timothy O'Connor, J.D.

Also Present: None.

OPENING COMMENTS:

Vice-Chairperson Altshuler welcomed new Member Alvarez who made introductory comments to the Council.

PUBLIC COMMENT PERIOD: None.

PRESENTATIONS [OUT OF ORDER]

1. Black Carbon: Health Effects of Exposure

- A. Climate Change – Health Impacts Caused by the Changing Climate
Linda Rudolph, M.D., M.P.H.
Executive Director
Center for Public Health and Climate Change
Public Health Institute
Oakland, California

Vice-Chairperson Altshuler introduced the topic of today's presentations and Linda Rudolph, M.D., M.P.H., Executive Director, Center for Public Health and Climate Change, Public Health Institute, Oakland, California. Eric Stevenson, Director of Technical Services, provided a brief description of her background.

Dr. Rudolph gave a presentation entitled, "Climate Change and Health" (*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>*), with supplemental comments from and discussion with the Council as follows:

NOTED PRESENT: Member Wood was noted present at 9:12 a.m.

Council Comments:

Member Holtzclaw asked for a more detailed description of Valley Fever, which was provided by Dr. Rudolph.

Member Bard thanked Dr. Rudolph for her presentation, commended her professional work and asked how to go about incorporating health metrics in the Sustainable Communities Strategies and similar regional agency projects, which question was answered by Dr. Rudolph.

Member Lutzker thanked Dr. Rudolph for her presentation and her leadership in the field and asked for recommendations on how to mitigate exposure for those who utilize alternative modes of transportation, which question was partially answered by Dr. Rudolph.

Member Holtzclaw said protected bike lanes are a solution to mitigate increased bicycle-related injuries that are expected to result from decreased motor vehicle use.

Member Philips thanked Dr. Rudolph for her presentation, attributed wildfires to poor land management, and suggested that climate change projections, temperature changes over the last 100 years, and deaths attributed to climate change as being inconsistent and asked how to reconcile this disparity, which question was partially answered and partially deferred by Dr. Rudolph.

Vice-Chairperson Altshuler noted the direct and indirect health impacts of extreme heat, in the forms of heat-related health complications and increased air pollution from air conditioner use, respectively.

Member Kurucz asked about the physiological effects of increased physical exertion during periods of decreased, as opposed to average, ambient air quality, which question was answered by Dr. Rudolph.

Vice-Chairperson Altshuler asked whether any health studies are being conducted during and about the Stanislaus National Forest Rim Fire, which question was answered by Dr. Rudolph.

Member Bard asked for proposed recommendations for the Council to carry forward in its report on today's presentations, which question was answered by Dr. Rudolph.

Vice-Chairperson Altshuler thanked Dr. Rudolph.

B. Black Carbon – Health Effects of Exposure

Michael T. Kleinman, Ph.D.

Professor

Division of Occupational and Environmental Health

University of California, Irvine

Mr. Stevenson introduced Professor Michael T. Kleinman, Ph.D., Division of Occupational and Environmental Health, University of California, Irvine, and provided a brief description of his background.

Prof. Kleinman gave a presentation entitled, “Black and Brown Carbon Aerosols: Nanoparticles and Mega-Problems” (*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>*), with supplemental comments from and discussion with the Council as follows:

Vice-Chairperson Altshuler asked, regarding slide 26, Typical Ambient Black Carbon Nanoparticles vs. Engineered Particles, for elaboration on carbon nanotubes, which was provided by Prof. Kleinman.

Prof. Kleinman continued the presentation.

Member Lutzker asked, regarding slide 31, Objectives, what remains after a thermal denuder strips components, which question was answered by Prof. Kleinman.

Prof. Kleinman concluded the presentation.

Council Comments:

Vice-Chairperson Altshuler asked whether the research presented is current, if one could solve a number of problems by developing a way to prevent organics from attaching to BC, whether the same could be said of brown carbon, and whether organics attach to sulfates and nitrates, which questions were answered by Prof. Kleinman.

Member Lutzker asked for clarification on the particle removal process by the lymph nodes and lungs, what the eight-week time span in the mice experiments equates to for humans, and for clarification on whether the BC core or affixed organics are responsible for the attributable health effects, which information was provided and questions were answered by Prof. Kleinman.

Member Holtzclaw thanked Prof. Kleinman for his presentation and asked, regarding slide 36, Ambient Particulate Matter (PM) Exposure Causes Reduced Heart Rate Variability – Removing the Organic Constituents Blocks the Effect, for clarification on the meaning of the chart components, which was provided by Prof. Kleinman.

Member Bard asked for proposed recommendations for the Council to carry forward in its report on today's presentations relative to nanotubes and ultrafine particles emitted from refineries, which questions were answered by Prof. Kleinman.

Member Brazil asked, regarding slide 16, [untitled] regarding combustor reaction zones, whether the toxic components produced at the end of the graph are products that result from how a motor vehicle is manufactured or how it is operated, which question was answered by Prof. Kleinman.

Member Wood thanked Prof. Kleinman for his presentation and asked how to plan nanomaterial mitigation efforts when they prove so elusive in terms of determining their nature and effects, which question was answered by Prof. Kleinman.

Member Kurucz relayed a professional experience with nanoparticles and asked if nanoparticles represent a high percentage of PM and should be a special focus of the Air District as a result, which questions were answered by Prof. Kleinman.

Vice-Chairperson Altshuler asked if roadway and airport exposures are the most significant concerns for the Council to consider, about the health impact of aged air masses at greater distances from roadways and airports, and whether any studies indicate the pancreas is negatively affected by BC, which questions were answered by Prof. Kleinman.

Vice-Chairperson Altshuler thanked Prof. Kleinman.

Public Comments: None.

PANEL DISCUSSION

2. Black Carbon – Health Effects of Exposure

The Panel Discussion was waived due to the early departure of Dr. Rudolph.

CONSENT CALENDAR

3. Approval of the Minutes of the Advisory Council meeting of July 10, 2013

Council Comments: None.

Public Comments: None.

Council Action:

Approval of the Minutes of July 10, 2013, was postponed for lack of a quorum.

OTHER BUSINESS

4. Chairperson's Report: None.

5. **Council Member Comments/Other Business:** None.
6. **Time and Place of Next Meeting:** Wednesday, October 9, 2013, Bay Area Air Quality Management District Headquarters, 939 Ellis Street, San Francisco, CA 94109 at 9:00 a.m.
7. **Adjournment:** The meeting adjourned at 12:08 p.m.

/s/ Sean Gallagher

Sean Gallagher
Clerk of the Boards