

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
(415) 749-5000

APPROVED MINUTES

Advisory Council Regular Meeting
9:00 a.m., Wednesday, March 14, 2012

CALL TO ORDER – ROLL CALL

Chairperson Stan Hayes called the meeting to order at 9:12 a.m.

Present: Chairperson Stan Hayes; Vice Chairperson Robert Bornstein, Ph.D.; Secretary Sam Altshuler, P.E.; and Council Members Jennifer Bard, Benjamin Bolles, Harold Brazil, Jonathan Cherry, John Holtzclaw, Ph.D., Kraig Kurucz, Gary Lucks, J.D., Estes Al Phillips, Jessica Range and Murray Wood.

Arrived Late: None.

Absent: Council Members Louise Bedsworth, Ph.D., Ken Blonski, M.S., Jeffrey Bramlett, Liza Lutzker, Jane Martin, Dr.P.H., and Dorothy Vura-Weis, M.D., M.P.H.

Also Present: None.

PUBLIC COMMENT PERIOD

None.

CONSENT CALENDAR

1. Approval of Minutes of February 8, 2012, Advisory Council Regular Meeting

Member Kurucz requested an amendment to the partial paragraph at the end of page 2, to read, "... the cube of the radius~~diameter~~, and measurements of mass are taken at arbitrary points along the scale..."

Member Holtzclaw made a motion to approve the minutes of February 8, 2012, as amended. Member Kurucz seconded; carried unanimously without objection.

PANEL DISCUSSION

2. Discussion of draft report on the Advisory Council's February 8, 2012 meeting

Chairperson Hayes made introductory comments regarding the speakers and report drafting process. Member Kurucz made introductory comments regarding the draft report currently under review and invited input from the Members on the sections within as follows:

Key Points – Dr. Philip M. Fine

Member Range suggested the “50%” statistic provided at #4 is internally inconsistent with Emerging Issue #1.d. Member Holtzclaw proposed the distinction to be the result of intrusion by ultrafine particulate matter (UFP) from outdoor sources versus indoor levels when indoor sources are taken into account. Member Cherry agreed with Member Range and suggested an amendment to remove the figure to note instead that indoor levels tend to be lower.

Member Altshuler noted, regarding #1, that measurement techniques are still in the research phase and that fact may be worth noting. Member Kurucz suggested the addition be held for discussion relative to the Recommendations or Emerging Issues sections, as the current language is representative of Dr. Fine's presentation.

Chairperson Hayes, regarding #2, questioned the accuracy of the statement, “The zone of influence can actually extend much beyond that...,” noting that his general recollection is that UFP zones dissipate very quickly beyond 300 meters. Member Kurucz replied that Dr. Fine seemed to say 300 meters is generally true subject to fluctuations resulting from location-specific conditions.

Gary Kendall, Advisory Council Liaison, clarified that the accepted norm is that indoor air pollution levels are approximately 50% of that found outside but this is still an unknown for UFP and indoor sources contribute significantly to the total level. Chairperson Hayes noted that he was struck by the information provided by Dr. Fine relative to the Santa Monica Airport. Member Kurucz suggested the Los Angeles area climate and their typical HVAC use as possible factors in the difference. Eric Stevenson, Director of Technical Services, noted Dr. Fine's comment that the composition of the fine particulate matter (PM_{2.5}) and UFP near the airport was very carbonaceous and, therefore, too “sticky” to be making it through various openings in the house.

Member Bard suggested, regarding #1, the use of “Methods for accurately measuring...” in place of “Measurements for...” and, regarding #3, that the current statement doesn't move the dialogue forward and it be revised to “Filters...” in place of “The right filtration...” Member Kurucz concurred with both points but suggested that the proposal for #3 would be better placed in Recommendations because the current wording should clarify for readers that filter choice will have an effect on the outcome. Member Bolles interjected that HEPA filters are commonly used in the construction field and speculated that the implementation of something similar for an entire building would require the equivalent of a jet engine. Member Phillips noted that the use of the recirculate feature of a filter system will create a pressurized system that pulls outdoor air in through any fissures. Member Bornstein seconded Member Bard's proposal regarding #3 and suggested the addition of “...and effective” after “...expensive.” Member Kurucz noted the seal issues involved in the proper use of HEPA filtration. Member Bornstein further proposed the

addition of a note regarding the importance of a proper seal. Member Kurucz replied that this would be an accurate statement but it does not accurately reflect what was said by Dr. Fine, who was speaking about schools and how teachers have control of air sources and the resulting air quality in classrooms. Member Bornstein suggested instead the use of, "...if properly installed and used" and agreed with the need for a modification of the specific percentage in #4.

Chairperson Hayes suggested, regarding #3, adding language noting the other filters as being used for PM_{2.5}.

Member Lucks proposed editorial changes, including the addition of meter, nanometer, particulate matter, ACES, carb and similar terms to the Glossary. Member Kurucz asked if there is a glossary for the Advisory Council generally that would be a better place for them to which Chairperson Hayes replied that they should be added to the Glossary in this report.

Key Points – Dr. Eric Fujita

Member Cherry suggested the addition of a point about microenvironments and topography. Member Kurucz agreed that they were a focus of Dr. Fujita's presentation but it is unclear whether it is a Key Point or an Emerging Issue.

Member Lucks suggested, regarding #2, the addition of "...the emissions of..." before "...the vehicle ahead."

Jean Roggenkamp, Deputy Air Pollution Control Officer, noted that the terms "UFP" and "PM" are both used in the report and shared her concern about consistency and accuracy. Member Bornstein suggested that UFP is used almost exclusively and the report seems clear. Ms. Roggenkamp responded that she was not present for the entire presentation but that Dr. Fujita seemed to jump between the terms, using them interchangeably while she was present. Mr. Stevenson interjected to clarify that Dr. Fujita discussed wood smoke in the context of PM_{2.5} and Dr. Fine provided additional information regarding particle size, concluding that perhaps separating the attributions is advisable for accuracy's sake and, at the same time, accomplishing the clarification sought by Ms. Roggenkamp. Chairperson Hayes and Member Kurucz expressed their agreement with this suggestion. Member Bard urged the proper attribution of presenter statements. Member Phillips agreed with Ms. Roggenkamp's assessment regarding the lack of clarity in term usage. Member Kurucz proposed that the focus of the presentation was noting the varying particle peaks rather than a direct comparison. Mr. Kendall recalled that PM_{2.5} measurements were discussed relative to roadways and camp fires, with peak particle size a topic of later discussion. Mr. Stevenson clarified that Dr. Fine was talking about conditions relative to forest fires, not wood burning generally. Member Bornstein suggested, regarding Dr. Fine's Key Point #1, the size range be provided so as to avoid confusion. Member Kurucz asked what the size set should read to which Mr. Kendall replied 100 nanometers is the maximum in the range. Member Bornstein suggested that if wood smoke appears to not be a big contributor to UFP then it should be stated as such and left at that. Member Altshuler suggested that it is as yet unknown. Member Bornstein suggested a review of the notes. Member Holtzclaw shared his recollection that the description was less conclusive than the report and Council are making it out to be and urged caution using this level of detail.

Chairperson Hayes suggested, regarding #3, the inclusion of language that relays the importance of proximity to sources. Member Bornstein noted that he will follow up with his acquaintance whom is a specialist on forest fires. Member Kurucz said that he will add a bullet point for Dr. Fine and correct the bullet point for Dr. Fujita. Member Altshuler suggested that perhaps too much is being made of camp fires and that more data through further testing is required. Member Kurucz concurred.

Emerging Issues

Member Holtzclaw relayed that it was news to him to consider camp fires as having significant health consequences and suggested noting the same. Member Bard agreed, further suggesting an addition to #1 regarding the unknowns of the health consequences of UFP from wood smoke. Member Phillips proposed that UFP was the focus of the presentations, with wood smoke as an aside, and that the Council be cautious not to allow the wood smoke issue to lead it astray.

Member Bornstein suggested, regarding #1.d. an addition to read "...between UFP source..." instead of "...between source..." and a revision the opening words to something along the lines of "A better understanding is needed..." and that the Council should omit specifics, instead noting that airports are special circumstances. Members Kurucz and Bornstein discussed how best to break the bullet point in two.

Member Holtzclaw noted that the San Francisco International Airport insulated a number of homes near the airport for noise abatement purposes and their air quality may be beneficially impacted.

Member Bard proposed, regarding #2, including outdoor grills, wood-fired pizza ovens and other cooking-related emitters at homes and businesses as items with unclear data that require further, prioritized research and the inclusion of an excerpt from the public comment by Susan Goldsborough, Executive Director, Families for Clean Air, on January 11, 2012. Member Kurucz expressed his support of Member Bard's suggestion to include cooking-related emitters and his hesitation to include comments from a non-presenter. Chairperson Hayes expressed his support of Member Kurucz's comments. Mr. Stevenson suggested including the items as an emerging issue with a general description to capture the broad universe of emissions sources, thereby satisfying both preferences. Ms. Roggenkamp pointed out that some of the items seem best characterized as statements and others as Council items of interest, suggesting that this is not problematic but is disconcerting, and further suggested an opening statement that clarifies. Chairperson Hayes agreed and suggested, in keeping with the concept that Emerging Issues is a future action list for Council assessment and not a recitation of statements, that the bullet points be revised to avoid statement phrasing.

Member Bolles noted that the expenditure of Air District resources on emissions testing technology and public information campaigns are the points where the Council's work is commonly converted into action and asked how and where these items should be placed in the report. Ms. Roggenkamp said that they can go in either Emerging Issues or Recommendations depending on the Council's approach.

Member Kurucz said he would either correct each bullet point in Emerging Issues or insert an introductory statement. Member Bornstein said that there are three statements possible, the known, unknown and things we need to do know more about, and that if an item falls in the latter category it belongs in Emerging Issues. Chairperson Hayes and Member Bornstein discussed the nature and purpose of statements in the report. Member Bornstein suggested that Sources of UFP be advanced to #1, Measurements to #2 and Exposure become #3; that the first portion of #1.f. is misplaced and should instead be placed before #1.d.; and that the second portion of #1.f. is a Recommendation that should be a new bullet point elsewhere, the final location to be determined based on its final wording. Member Kurucz responded that #1.f. seems like the appropriate location for the information as it follows #1.d. and e., suggesting that it is premature to move it from Emerging Issues to Recommendations. Chairperson Hayes said that Member Bornstein's suggestion regarding reordering #1 seems to make logical sense but that he likes Exposure at the front end for the sake of readers. Members Bornstein and Kurucz discuss the varying writing conventions between business and academic circles. Member Kurucz asked for a show of hands and the majority of the Council agreed to leave the sections in their current order.

Member Bolles said that much of the last year left him searching for a sense of where the Council was headed in its engagement of issues until the end of the year and asked staff to provide some direction on what the District needs or where it sees the Council heading. Mr. Stevenson answered to affirm that this is an over-arching principle for the Council and that there are a number of areas where Air District resources might be applied in a beneficial way.

Member Holtzclaw mentioned the emerging issue of secondary organic aerosols, suggesting them to be UFP by a different name, and the comparisons drawn between the weekday and weekend levels in a recent third-party study, suggesting the addition of these findings as a potential emerging issue. Member Kurucz asked if secondary organic aerosols are nitrates and sulfates. Mr. Stevenson briefly explained the genesis of secondarily formed organic compounds. Chairperson Hayes responded that it is difficult to say how and when an emerging issue should enter the discussion. Member Kurucz suggested that it be vetted by Mr. Kendall for its applicability and the availability of speakers. Chairperson Hayes agreed and urged adherence to past practice. Member Phillips said, regarding Mr. Stevenson's comment, that it is not in the Council's best interest to limit the list to a narrow field at this point.

Member Bard noted the chart from Dr. Fujita regarding cooking within public buildings and suggested that the effect of these facilities on public health be added as an Emerging Issue. Member Cherry noted that they are already captured by the existing text in #1.c. to which Member Bard recommended that specific language be added. Member Kurucz suggested adding this point to Dr. Fujita's Key Points #3 and then it can be carried forward as an Emerging Issue.

Chairperson Hayes highlighted the juxtaposition of #3.a. and b. as they currently read, sharing his commendation of the Air District's decision to get in front of an issue by acquiring the necessary equipment rather than waiting for the perfect equipment, just as they are doing at the South Coast Air Quality Management District (SCAQMD). Mr. Kendall added that even if the equipment isn't perfect, as was the case with the first ozone monitors available years ago, there is important value in acquiring trend data and that despite the wording in #3.a., the equipment is quite good. Chairperson Hayes agreed and suggested an editorial revision of #3.a. or the addition

of a statement that SCAQMD has purchased 10 particle counters. Member Kurucz said that the intended point was that the Council is not ready to make a final call on a network standard and asked for suggestions about how best to rectify #3.a. and b. to capture the appropriate caveats and brighten the assessment. Member Bornstein suggested adding, “The Air District has thus purchased 4 state of the art particle counters for...” to #3.b. Mr. Stevenson agreed with this suggestion and recommended the addition of, “... to develop information about sources, trends, and so on.” Chairperson Hayes noted that the Air District is engaging an emerging issue and that in order to do so effectively it must acquire the necessary equipment. Member Kurucz said that was the intent of #3. Mr. Kendall made various editorial suggestions.

Member Bornstein suggested the deletion of #3.a.iii. Member Kurucz relayed that the intent was to avoid encouraging another set of unnecessary tests and that, “...measurements tend to confirm...” may better convey the sentiment. Member Bornstein inquired whether it is appropriate to include Ambient Air Quality Standard (AAQS) in #3.a.i. Ms. Roggenkamp confirmed that AAQS refers to the concentrations present in the air, not necessarily how many or what type of people are exposed. Henry Hilken, Director of Planning, Rules & Research, noted that staff has undergone a much broader engagement of the issue than what is currently listed in #3.b. and suggested language be added to exemplify these activities. Member Bolles asked if this is where the report should recommend the Air District’s resources be redirected. Chairperson Hayes suggested an addition to Recommendations regarding broader efforts by the Air District. Member Lucks proposed the inclusion of “Some... tend to...” to #3.a.iii. along with the additional statement already discussed.

Member Altshuler asked staff about the nature of the aside between by Dr. Fine and staff during the presentation. Mr. Stevenson shared his recollection that it was regarding the results of efforts by SCAQMD to enhance school filtration systems and the Air District’s current efforts on the same front.

Mr. Stevenson, in regard to the prior discussion about #3.b., noted that the Air District provides feedback to manufacturers of these devices and suggested the inclusion of language that exemplifies the Air District’s involvement in that process.

Member Kurucz summarized the proposed changes to Emerging Issues.

Member Bornstein suggested the addition of a phrase in #3.a.iii which calls out the tendency to assume a common trend between PM_{2.5} and UFP. Member Lucks and Member Bornstein discussed the nature of their shared chemistry and coagulation issues. Member Kurucz suggested that the presenters were making a deeper point that researchers tend to take known data and modeling to build a hypothesis and then, when measuring, set out to confirm it. Member Bornstein asked Saffet Tanrikulu, Research & Modeling Manager of Planning, Rules & Research, about the accuracy of Member Kurucz’s summary. Mr. Tanrikulu agreed with the statement.

Member Phillips noted that UPF and PM_{2.5} do not follow the same trends. Member Kurucz asked where this comment belongs in the report.

Member Range noted that #2 is missing the various cooking sources that were discussed. Chairperson Hayes suggested amending the list so vehicles are the opening and most important item followed by ever lesser contributors. Member Bard agreed. Member Kurucz suggested engines at the front end and then “others, such as...” at the end.

Recommendations

Member Bard suggested, regarding #1, the addition of “...by distance” after “UFP.” Member Kurucz suggested instead the addition of another letter bullet under #2 regarding proximity.

Member Altshuler suggested, regarding #1, the addition of “...emissions...” before “strength” to which Member Lucks proposed the substitution of “contribution” in place of “strength” and insertion of “...emissions...” before “sources.”

Chairperson Hayes recommended moving #4 to #1 as an overarching statement with the addition of “The Air District should continue development of its UFP program, including air monitoring, a source emission inventory, air quality modeling, exposure assessment and health impacts, development of UFP...” to which Member Kurucz agreed.

Mr. Kendall recommended, regarding #2.c., the deletion of the portion that begins, “Note:...” as redundant in light of the aforementioned revision to #1.

Mr. Stevenson recommended, regarding #2.c., the insertion of “...and other sources...” after “wood smoke.”

Ms. Roggenkamp inquired about the reason for drawing a distinction between #2.a. and c., in response to which Member Kurucz asked if #2.a. should be deleted or added to the new #2.c. Ms. Roggenkamp replied to question the distinction between “role” and “significance.” Member Altshuler suggested the genesis as having to do with lube oil as a universal issue and wood smoke to be one more exclusive to the Bay Area. Member Kurucz agreed. Chairperson Hayes asked about the distinction between #1 and 2. Member Kurucz described #1 as being an opening statement regarding Recommendations generally.

Member Range questioned whether #2 is properly a key question under Recommendations or better placed as a Source under Emerging Issues. Member Kurucz proposed that it is a key question which references back to Emerging Issues, noting that #2 may be deleted in light of the #1 proposed by Chairperson Hayes and that #3 has become somewhat of a repeat of #2.a. Chairperson Hayes noted that the purpose of #2 is to flag especially important items for investigation. Member Altshuler suggested elaboration on wood smoke to include a list of sources such as wood stoves, grills and so on. Member Kurucz proposed lube oil be added as part of the short list.

Member Lucks asked, regarding #5, whether schools and assisted living facilities should also be included. Mr. Stevenson suggested the use of “sensitive populations” should the Council opt to amend #5 pursuant to Member Lucks’ suggestion.

Member Cherry noted that #5 seems to be making two different points of focusing on sensitive receptors and determining what is an effective filtration method. Member Kurucz warned about making the statement too vague to which Member Lucks replied that the solution is to provide context for the statements. Chairperson Hayes agreed and noted the importance of UFP's correlation with PM_{2.5} and suggested the insertion of "...and interrelationship with PM_{2.5}" at the end of #5. Member Bolles noted that this is only relevant to existing buildings to which Chairperson Hayes replied that it is more broadly relevant, noting that filtration or vegetation barrier requirements are applicable to new construction near major sources. Member Kurucz suggested instead adding a note to #2 regarding the interrelation. Chairperson Hayes agreed. Member Range noted that a somewhat related issue is whether outdoor UFP are penetrating homes at all and at what rate. Chairperson Hayes agreed and asked for recommended language. Member Range suggested a separate Recommendation, "Further monitoring and evaluation of indoor versus outdoor UFP concentrations at buildings, not necessarily emissions source proximity testing only." Member Kurucz agreed to insert this as a key question in #2.

Chairperson Hayes recommended the use of "...without waiting for..." in place of "...without regard to..." Ms. Roggenkamp suggested that the Recommendations, as they currently read, are inconsistent with the Air District's public education approach of very focused and conscious messaging; the Recommendations instead seem broad in scope, overly conclusive and heavy-handed in their delivery; and finally provided an example from the wood smoke campaign. Chairperson Hayes suggested that public outreach staff assist with tailoring the final message. Member Kurucz noted that almost every editorial comment characterized this as conclusive data that required immediate action and agreed with Chairperson Hayes. Member Altshuler proposed that the Recommendations may be a perfect first draft of the job description for a public health officer at the Air District. Ms. Roggenkamp replied that the public health officer, if and when the Air District has one, will help to inform the public relations officer but not be conducting public relations work independently.

Member Holtzclaw suggested the addition of heavy smoking to the list to which Member Lucks proposed that there is a foundation for the same. Member Kurucz responded that the point of the exercise is to develop recommendations but not necessarily in such a prescriptive fashion and perhaps including it in the list of key points would be more appropriate.

Member Bard agreed with Chairperson Hayes that public outreach staff be left to tailor the message and requested that #7 be added to the report to read, "Consider policies to reduce exposures to outdoor grilling, burning and cooking." Chairperson Hayes responded that it is unclear how to insert the language except as an item in a list of possible dangers. Member Bard replied that the current wood smoke regulations started as a voluntary recommendation, noting that the same evolution would be acceptable for this issue and again requested its addition as a Recommendation. Member Kurucz suggested that it is already captured, to the extent it is appropriate, by the current #4 going to #1. Member Bard said that the Council needs to be aware of all issues despite UFP being the prescribed topic and that it is among the Council's duties to push issues to the forefront of dialogue. Chairperson Hayes expressed his appreciation for Member Bard's comment and his agreement with Member Kurucz's sentiment that it is premature and unfounded at this time.

Member Bard made a motion to amend the report in keeping with her suggestion that Council recommend consideration of policies to reduce exposures to outdoor grilling, burning and cooking. Member Holtzclaw seconded the motion; defeated with four votes in favor and seven opposed. Member Kurucz clarified that the recommendation may be in keeping with what the Council concludes but it is currently premature.

Member Bolles asked if the notion was captured that airports are major emissions sources at first glance but represent a lesser issue when considered comparatively. Member Kurucz replied in the affirmative, noting that it is captured by different wording.

Chairperson Hayes made closing comments.

Public comments: None.

OTHER BUSINESS

3. Council Member Comments/Other Business

Member Holtzclaw noted the strengthening recommendation in the community that Caltrain be electrified, specifically that portion running between San Francisco and San Jose, and asked if the Air District has plans regarding an analysis of or stance on the recommendation. Ms. Roggenkamp responded that staff is talking with the Metropolitan Transit Commission regarding whether any Air District grant money may be used to electrify the line but is not involved in conducting an analysis or making a recommendation.

Chairperson Hayes invited letters of interest from those members of the Council that are interested in attending the Air and Waste Management Association 2012 Annual Conference and Exhibition in June.

Ms. Roggenkamp announced the birth of Member Lutzker's baby girl.

Mr. Stevenson noted that Member Lucks will be presenting an informal legislative update here at noon today. Member Lucks made an introductory statement.

4. Time and Place of Next Meeting: Wednesday, April 11, 2012, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, CA 94109 at 9:00 a.m.

5. Adjournment: The meeting adjourned at 11:54 a.m.

151 Sean Gallagher
Sean Gallagher
Clerk of the Boards