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

APPROVED MINUTES

Advisory Council Regular Meeting Wednesday, March 13, 2013

CALL TO ORDER

Chairperson Robert Bornstein called the meeting to order at 9:03 a.m.

ROLL CALL

Present: Chairperson Robert Bornstein, Ph.D., Vice-Chairperson Sam Altshuler,

P.E.; Secretary Liza Lutzker, M.P.H.; and Members Jennifer Bard, Benjamin Bolles, Jeffrey Bramlett, M.S., C.S.P., Harold Brazil, Jonathan Cherry, A.I.A., LEED A.P., Heather Forshey, Caryl Hart, J.D., Ph.D., Stan Hayes, Kraig Kurucz, Gary Lucks, J.D., C.P.E.A., Kathryn Lyddan, J.D., Rick Marshall, P.E., P.L.S., Timothy O'Connor, J.D., Estes Al Phillips,

Jessica Range, LEED A.P., and Murray Wood.

Absent: Members John Holtzclaw, Ph.D.

Also Present: None.

OPENING COMMENTS

Chairperson Bornstein, on behalf of the Council, recognized Member Hayes for his dedicated leadership and service to air quality in the Bay Area as last year's Chairperson and presented him with a token of appreciation. Member Hayes addressed the Council.

PUBLIC COMMENT PERIOD: None.

CONSENT CALENDAR

1. Approval of the Minutes of the Advisory Council meeting of February 13, 2013

Council Comments:

Chairperson Bornstein said to amend page 2, second paragraph from the bottom, to read "Beart."

Chairperson Bornstein said to amend page 3, second full paragraph, to read "BRrC" and to make the same change throughout.

Member Lutzker said to amend page 3, sixth full paragraph, to read "aroundless than 0.1 to 2.5 microns."

Chairperson Bornstein said to amend page 3, last full paragraph, to add "by adsorption" at the end of the last sentence.

Chairperson Bornstein said to amend page 3, partial paragraph at the end, to read "detail it-was delivered."

Chairperson Bornstein said to amend page 4, partial paragraph at the beginning, to read "briefing."

Member Range said to amend page 4, sixth full paragraph, to read "individual trucks <u>in the Caldecott Tunnel during the study accounted for."</u>

Chairperson Bornstein said to amend page 5, second full paragraph, to read "health effects different than from."

Chairperson Bornstein said to amend page 5, second to last paragraph, to read "10 years [sic] and only."

Member Lutzker said to amend page 5, second to last paragraph, to read "through deposits, in particular on snow and ice packs."

Member Lutzker said to amend page 6, third paragraph, to read "target for <u>Air District BC</u> reductions in light of the emissions attributed to <u>the charbroiling</u>, <u>of eight hamburger patties the jurisdictional authority of the Air District</u>, and <u>significant progress made in diesel</u>."

Member Bard said to amend page 6, fourth paragraph, to read "but that is it-very roughly 25% for in California."

Member Range said to amend page 7, first paragraph, to delete "Mr. Croes said he believed CARB just got the waivers for new vehicle standards and he is not aware of any delays in retrofit requirements rules."

Chairperson Bornstein said to amend page 7, last paragraph, to read "Ms. Rizk recommended taking a pollutant scopewide assessment like that."

Chairperson Bornstein said to amend page 8, first paragraph, to read "to be lessersmaller or even possibly warnming, to which."

Member Lutzker said to amend page 8, second paragraph, to read "Bond and RomanoffinRamanathan papers will."

Member Bard said to amend page 8, sixth paragraph, to read "improving some of the erosswalksintersections between tail pipe."

Member Forshey said to amend page 8, seventh paragraph, to read "Ms. Riszk said the."

Chairperson Bornstein said to amend page 8, seventh paragraph, to read "or framework <u>is necessary</u> to handle."

Chairperson Bornstein said to amend page 8, eighth paragraph, to read "disproportionate contributors and thus he views this as an important."

NOTED PRESENT: Members Lucks and Wood were noted presented at 9:33 a.m.

Member Lutzker said to amend page 8, last paragraph, to read "look at <u>all</u> short-lived area pollutants."

Chairperson Bornstein said to amend page 9, first paragraph, to read "mitigation of diesel ais still relevant."

Public Comments: None.

<u>Council Action:</u> Member Marshall made a motion to approve the minutes of February 13, 2013, as amended; Member Hayes seconded; and the motion was unanimously approved without objection.

DISCUSSION

2. Discussion of draft report on the Advisory Council's meeting on February 13, 2013

Chairperson Bornstein made introductory comments regarding the merging of "Emerging Issues" and "Recommendations" in the draft report and the composition of the report drafting work group. Members Lutzker, Hayes and Range expressed their concern with merging the sections.

Member Kurucz made introductory comments regarding the report drafting process by the work group, noted that in its prior form, the report had almost identical lists for each of the two sections and the newly merged version is an improvement, and asked Chairperson Bornstein to address some of the questions he posed during the work group drafting process regarding Bart Croes' "Key Points" numbers 1 and 2. Chairperson Bornstein clarified that his intention was only to point out the need for answers to the questions, whether those answers come from the Council, staff or the presenters. Member Kurucz suggested the figures not to be central to the substance of this report and asked Eric Stevenson, Director of Technical Services, to talk to Mr. Croes about whether the information is available and, if so, if it can be provided.

Chairperson Bornstein invited input from the Members on the sections within the report as follows:

"PRESENTATIONS DELIVERED"

Member Hayes said, regarding the top of the page 1, to delete "Version 3," and regarding page 1, first full paragraph, to delete "s" from "Protections," and add "US" to "(EPA)."

Member Altshuler said, regarding page 1, first full paragraph, to add "climate impacts" before "BC."

"KEY POINTS BY Sarah Rizk, United States Environmental Protection Agency (EPA)"

Member Range suggested, regarding page 2, numbers 4 and 5, adding some examples. Member Altshuler suggested deleting the items instead. Member Lutzker said Ms. Rizk provided some metrics and had said they would determine the outcome, all in an effort to make an important point that should not be deleted altogether.

Chairperson Bornstein said, regarding page 2, number 5, the Council must either define "metric" or provide examples and asked the Council its preference. Member Hayes argued against the deletion of numbers 4 and 5 so they may serve to assist the District in its work developing and implementing its own metrics, an approach that may involve determining the net climate forcing, and how that figure fits in the bigger picture of how the District evaluates all of the pollutant controls in place. Member Hayes added that this would serve to put all of these considerations on one proverbial page, similar to what is done with carbon dioxide (CO₂) equivalents, and would be a real contribution to the field.

Member Philips suggested the use of metrics in establishing an inventory of climate change contributors.

Member Bard said the Council could simplify the statements by amending page 2, number 5, first sentence, to read "mitigation strategies that account for both climate and health impacts—for controlling BC is important."

Member Altshuler agreed with the suggestion of Member Hayes.

Member O'Connor said metrics were included in the report not only because of the presentation before the Council but because of the extensive discussion on that subject in the EPA report to Congress. Member O'Connor added that the words "evaluate and track" were chosen specifically to get to metrics in terms of impacts on the system, as well as in terms of how regulatory measures are traced for efficacy.

Chairperson Bornstein said they would not be deleted, examples should be included, the existing language should be developed a bit and invited Member Hayes to suggest something. Member Hayes said the first sentence is a reflection of Ms. Rizk's words and is hesitant to change it so long as the Council understands the meaning and suggested that many of the items being discussed belong in the Recommendations portions of the report.

Chairperson Bornstein suggested "quantitative metrics" or "weighted" or "scaled." Member Hayes said it is fine as it reads and the matter should be addressed in Recommendations.

Chairperson Bornstein asked for examples to include. Member Bramlett suggested the use of Ms. Rizk's examples. Member Hayes echoed the suggestion of Member Bramlett. Chairperson Bornstein asked if the examples mentioned by Member O'Connor are from Ms. Rizk. Member O'Connor mentioned a slide from the presentation that highlighted the interplay between health

and climate. Chairperson Bornstein said to pull out an example from her presentation that the Council feels is illustrative. Member Lutzker suggested "global warming potential."

Member Lutzker suggested "global warming potential" and "global temperature potential." Chairperson Bornstein said no and to include examples, one for health and one for climate change. Member Lutzker said she did not believe that Ms. Rizk was speaking to health specifically and mentioned the concept of pulse versus sustained metrics.

Chairperson Bornstein said, regarding page 2, number 5, to insert "(e.g., global warming potential)" after "Establishment of metrics..." Member Hayes said Ms. Rizk used the term "net forcing." Chairperson Bornstein said, regarding page 2, number 5, to instead insert "(e.g., global warming net forcing)" after "Establishment of metrics..."

Member O'Connor said Ms. Rizk was mostly referring to climate equivalency metrics and when the Council asked her about considerations for choosing a metric she spoke about health impacts as well so it seems the metric goes to both but she was very specific as to climate equivalency as the basis for a metric. Chairperson Bornstein said to leave it as previously directed but that metrics in the health area should be addressed in the Recommendations portion.

Member Range noted Ms. Rizk's presentation, slide 27, Considerations for choosing & applying a metric, and suggested her point and what needs to be included is something about how the identification of goals defines the metrics. Chairperson Bornstein asked if the report should include all that Member Range said. Member Range said no but that an example from each consideration might be a good approach. Member Bornstein asked for suggested language.

Member Lutzker said Ms. Rizk offered a range of climate specific metrics and had said that choosing which of those metrics you want to use will depend on what your goals are but, regardless, they all are climate specific metrics. Chairperson Bornstein asked if "establishment" should be changed. Member Lutzker suggested "Choice" or "Selection" and include "time horizon" as Ms. Rizk said that was also important.

Mr. Stevenson said this is typical EPA strategy and summarized the strategy as advocating for the setting of goals with appropriate metrics to ensure that those goals are met through a measurable strategy and suggested that is what the work group is working to capture here.

Member Bramlett suggested, regarding page 2, number 5, the addition of "Based on stated goals," at the beginning and to include the two examples. Chairperson Bornstein agreed, said to also change "Establishment" to "selection" and asked if the Council has a suggested example that goes to health impacts. Member Hayes suggested inserting "health benefits."

Member Range said Ms. Rizk mentioned "value of damages" and suggested that can also be related to health. Member Lutzker suggested "cost effectiveness." Chairperson Bornstein asked if a reference to health impacts should be included and then said to insert "cost effectiveness" after "forcing" in parenthesis. Member Lutzker said to add "and time horizon" after the parenthesis.

Member Kurucz asked if "goals" should be expanded upon, such as "short-lived climate forcers." Member Lutzker suggested "Based on stated health and climate goals." Chairperson Bornstein

recalled an earlier suggestion by Member Bard to put that phrase elsewhere in the report and asked the preferred location. Member Bard said including it at the beginning makes it unclear. Member Kurucz said that was why he suggested the expansion of "goals." Member Lutzker suggested "Based on long-term and short-term health and climate goals." Member Kurucz said that still left it a bit unclear as there is little in the way of reference points.

Member Altshuler asked how much the Council wants to focus on the health-impact aspect. Member Bard suggested health-impact was the key point of Ms. Rizk's presentation. Member Altshuler said the Council has spent two years discussing ultrafine particulate matter (UFP) as it relates to health and the Air District has put out a fine particulate matter (PM_{2.5}) report that addresses health. Member Bard restated that this was Ms. Rizk's key point and is the appropriate focus in preparing Key Points. Member Altshuler said the two key metrics, in terms of the climate issue, appear to be the global warming potential, which does not include the longevity of the pollutant in the air, and the half-life of the pollutant in the air and noted the realization from the presentation was that BC has a 14-day life in the atmosphere which needs to be balanced against CO₂ with a more than 100-year life. Chairperson Bornstein echoed the comments of Member Kurucz, said to insert "short-term and long-term climate and health" before "goals" and asked what needs to be done to the remainder of number 5.

Member Lutzker said to delete the second sentence. Chairperson Bornstein asked about retaining "to explore the implications of remaining uncertainties." Member Hayes said it should stay and Chairperson Bornstein agreed. Member Bard said Ms. Rizk's point was that metrics should also account for uncertainties and Members Hayes and Kurucz agreed. Member Kurucz suggested inserting the phrase after "track mitigation strategies" and deleting the language currently in between the two phrases. Member Bard suggested that results in a long and complicated sentence. Chairperson Bornstein asked if "for controlling BC is important" needs to be retained. Member Kurucz said no. Chairperson Bornstein asked for language. Member Kurucz repeated his suggestion. Chairperson Bornstein said to insert "and" before "to explore." Member Lutzker suggested it is no longer a sentence. Member Kurucz said "Selection" should be replaced with "Select." Member Lutzker asked if it should read "Select BC" and Member Kurucz said no because the metric is unknown at this time and the emphasis is that they need to be in line with the stated goal. Chairperson Bornstein asked if "is important" needs to remain regardless. Member Hayes said it is implicit.

Chairperson Bornstein conducted a time check, suggested that the process needs to move along, and said, regarding page 2, number 6, to delete the extra space at the beginning of the line.

Member Kurucz said, regarding page 2, number 5, that the first word needs to be "Based." Chairperson Bornstein restated Member Kurucz's suggestion and spelled the same and restated his suggestion regarding page 2, number 6, to delete the extra space at the beginning of the line.

Member O'Connor suggested, based on the likelihood of report proofing before the next phase, minor grammar issues such as commas and extra spaces would be best addressed outside of the public meeting so the Council may get to the substance of the report.

Chairperson Bornstein said regarding, page 2, number 6, end of the first sentence, to insert ", e.g.," and asked Member Range how many examples should be provided. Member Range said just one, "CARB's diesel risk reduction plan." Member Bornstein said not to insert "such as."

Member Altshuler suggested inserting "mainly as a result of" before the new phrase. Member Lutzker noted this information was relative to the nation and state. Member Bornstein said to remove "such as" and that "CARBs" needs to have in apostrophe inserted. Member Altshuler said "CARB's" should be excluded because of federal and state efforts in that regard. Chairperson Bornstein repeated Member Altshuler's suggestion and said to insert a period and comma after "e.g". Member Hayes said it will be captured later. Chairperson Bornstein said to insert "diesel PM reduction plan."

Member Lucks said, regarding page 2, numbers 5 through 7, to insert "measures" after "mitigation" in all three instances.

Member Cherry suggested, regarding page 2, number 2, to replace "avoid" with "delay." Member Kurucz alternately suggested deleting "avoid or." Chairperson Bornstein directed staff to not make any changes to the report before there is consensus and agreed with Member Kurucz.

Member Lutzker suggested moving the last sentence in number 2 into number 4, as the second to last sentence, because number 2 is about BC as a climate forcing pollutant and does not actually talk about the short life in the atmosphere as number 4 does. Chairperson Bornstein directed staff to not make any changes to the report before there is consensus. Member Kurucz agreed with Member Lutzker. Chairperson Bornstein expressed his doubt and suggested that "short term" does not belong in number 2 but the rest of the phrase can remain because ice cap elimination and sea level rise is not short term and BC does not affect sea level rises. Member Lutzker disagreed and said Ms. Rizk stated that BC could be the tipping point to making the ice caps melt and that by reducing BC immediately could have a profound affect. Chairperson Bornstein said it depends on the definition of short-term. Member Bard said it is facilitating ice melt. Member Kurucz said it is not in the 14-day range but is much less than the 10 to 40 years for CO₂. Member Lutzker said regardless of the details there was no prior mention of the fact that BC is a more short-term form climate forcer. Member Kurucz said the work group felt this short-term opportunity was the key point that Ms. Rizk brought before the Air District so its placement in the report was advanced to highlight its importance. Member Lutzker suggested deleting "thus" as an alternative. Chairperson Bornstein said "thus" was his addition.

Member Bard suggested moving the discussion to "Emerging Issues" as that is where the bulk of the discussion properly belongs. Chairperson Bornstein said to delete "thus."

Member Altshuler asked, regarding page 2, number 2, if Ms. Rizk was really talking about brown carbon (BrC) and asked if the topic should at least be included somewhere. Chairperson Bornstein asked if the entire item relates to BrC and Member Altshuler clarified that he is referring to the portion about organic carbon (OC) and that maybe both should be mentioned so as to get BrC into the discussion, particularly in light of its reflective characteristic and asked if Member O'Connor was the point of origin of the article delivered to Council members through staff. Member O'Connor said yes but clarified that he was not the author.

Chairperson Bornstein asked whether OC should be replaced by BrC or if both should be included. Mr. Stevenson noted that OC is considered to be BrC by definition. Chairperson Bornstein said the Council should be clear and suggested including both. Mr. Stevenson and

Member O'Connor clarified the definitions of each. Member Hayes suggested using BrC. Chairperson Bornstein said to insert ", a component of BrC" after "(OC)."

"KEY POINTS BY Bart Croes, California Air Resources Board (CARB)"

Chairperson Bornstein said to pass Key Points by Mr. Croes, to be revisited later, time permitting.

"EMERGING ISSUES AND RECOMMENDATIONS"

Chairperson Bornstein asked for comments on the introductory sentence and asked the Council how they prefer to proceed with the conversation.

Member Lutzker said the report lacks specificity about who should be taking action and what that action might be. Member Range suggested inserting "Recommendation: [Substance]; [Party name]" for each item listed. Member Marshall asked if the Council would be making recommendations to anyone other than the Air District. Member Hayes responded no. Member Lutzker said there are a variety of actions that should be taken. Member Marshall suggested the opening sentence might address that concern. Member Lutzker said no and, by way of example, that some recommendations to the Air District are to follow research and others are to conduct the research and suggested the Council be more specific about the action recommended. Member Kurucz said, regarding page 3, number 5, that it implies the Air District would work with another agency. Member Lutzker suggested the Council focus its recommendations on what the Air District role should be in each of these situations.

Member Altshuler suggested adding "BrC" to page 3, number 1, at the end. Chairperson Bornstein said to hold specific comments for the time being while the Council focuses on the overview and said to add "BrC and BrC emissions." Member Altshuler questioned the use of "near-term" and suggested long-term is what is being dealt with. Chairperson Bornstein said to hold specific comments for the time being while the Council focuses on overview comments.

Member Lucks complemented Member O'Connor on the draft report and said, regarding page 3, numbers 3 and 5, they both seem to be speaking to reduction strategies and suggested merging them under a similarly titled heading with subparts for "biomass burning" and "diesel engines strategies." Chairperson Bornstein said that will be addressed when the dialogue gets to number 3. Member Lucks said the same is true of pages 3 and 4, numbers 4 and 7, and label them as "inventory" or "inventory, modeling and planning" with "brown carbon" as a subpart. Chairperson Bornstein said any reduction in the numbers is a positive change.

Member Hayes suggested extracting Recommendations from the newly merged section so that Emerging Issues stands out for readers as important items deserving attention and suggested approaching today's conversation similarly so that each section becomes easier to grapple with despite the arguments to be had for a merged section. Members Bard and Bolles agreed. Member Cherry argued for keeping them merged as it helps readers to tie the two sections together and suggested reformatting to address these concerns, if necessary. Member Bolles said the Recommendations were historically tied to Key Points and Emerging Issues was in some ways a different creature. Chairperson Bornstein suggested moving through the report in its current form and then revisit the question of formatting.

Mr. Stevenson suggested two versions be prepared for comparison purposes.

Member Bolles asked how Member O'Connor decided to merge the two. Member O'Connor said the report was generated using a template from a past report, so the two sections were initially separate, but prior reports seemed to lack clarity in making the connection from one section to the next so an effort was made to improve it by clearly defining topics via sub-headings within a merged section. Member O'Connor recalled a conversation that suggested the Council could generate an enormous list if everything was included but that it is the Council's role to process the information so as to present a more reasonable set of Recommendations given various constraints and noted the draft report expanded in size during the process of adding and expanding upon providing an individual Recommendation for every Emerging Issue and became broader than it was intended as a result. Member O'Connor added that not every Emerging Issue may result in a Recommendation. Chairperson Bornstein said some Recommendations can be eliminated and that he went out of his way to make sure there was a Recommendation for every Emerging Issue but that is not necessary.

Member Bard suggested an introductory paragraph that frames the two sections and said much of page 3, numbers 1 and 2, could be moved into that paragraph, added that it is the Council's role to put emphasis on where the Recommendations are directed, and asked, as an example, if the Council thinks climate change or health impacts should be primary. Chairperson Bornstein said the introductory paragraph is a good idea and the Council will revisit it.

Member Kurucz clarified that one of the work group's draft reports looked very much like where the conversation seems to be taking the report in terms of pairing down the number and length of Recommendations, leaving them fairly clear and focused, and said that although he likes the new format, all of the Recommendations now seem to have the same weight. Chairperson Bornstein suggested inserting adjectives to clarify the priority of each of the Recommendations.

Member Hayes suggested each member assume the phrase "there is a need for" at the beginning of each Emerging Issue when crafting the language. Chairperson Bornstein said there are many different wordings that can be used. Member Hayes said his suggestion is not for a change of wording but a mindset and it is another argument for separating the sections once more. Chairperson Bornstein said the Council will evaluate each item, rephrase each "It is thus recommended" so as to include a prioritizing adjective or remove the phrase altogether, and then evaluate the two versions staff generates to see where preferences lie in terms of the merged section. Member Lutzker echoed Member Range's earlier suggestion about reformatting the Recommendation to be immediately below each corresponding Emerging Issue.

Chairperson Bornstein asked for suggestions regarding the introductory paragraph. Member Lutzker asked Member Bard to explain the concept behind the paragraph and if there is general agreement, suggested she forward proposed language to the work group. Member Bard suggested an earlier draft of the report may have one to use. Member Kurucz said there was no introductory paragraph in earlier drafts. Member Bard withdrew her recommendation so as to focus on the substance and requested a renewed Council focus on the same. Member Kurucz asked if the Council can simply decide if they want a paragraph, regardless of its content. Chairperson Bornstein said Member Bard writing and submitting the paragraph to the work group is a good idea and suggested the intent of the paragraph was to establish the big picture.

Chairperson Bornstein invited comments on individual items, asked for attention to the priority of each Recommendation because he crafted the language so that they all have equal weight, and asked all to consider who is going to take the action.

Chairperson Bornstein asked whether Climate Change or Public Health should be first, explained his reasoning for listing Climate Change first, and clarified that he neither added nor removed language, but merely changed the wording slightly and added Recommendations for those where none was provided.

Member Kurucz said, regarding page 3, number 1, that Member Altshuler suggested the inclusion of BrC and asked where and how it would be most appropriate. Member Altshuler suggested the integration of numbers 1 and 4. Member Lutzker disagreed and suggested it detracts from the topic of BC and that BrC should be included without moving the focus away from BC, climate change and health by trying to address discoveries regarding co-emitted species. Member Altshuler said that co-emitted species are mentioned in the first paragraph to serve as an introduction. Member Lutzker said there a lot of other co-emitted species and suggested a couple examples of how to insert clarifying language. Chairperson Bornstein asked for comments. Member Lutzker suggested keeping BrC separate.

Member Range said that instead of prioritizing climate change and public health, the integration of the impacts of climate change and public health in terms of BC was either one of, or perhaps the, valuable take away item for the Council and that integration needs to be acknowledged and then the report can move on to the Recommendations. Chairperson Bornstein asked the work group to integrate numbers 1 and 2 and asked for the associated Recommendation, if any. Member Range said the existing recommendations should not be dropped but instead moved elsewhere. Member Lutzker said Recommendation number 1 is vague and many of the other Recommendations are directed towards more specific actions regarding the same common goal. Chairperson Bornstein directed the work group to merge numbers 1 and 2 and to develop a Recommendation, if appropriate.

Member Altshuler asked for clarification about the new information received by the Council on the health effects of BC. Chairperson Bornstein said the Council knew that aerosols affect health but the focus was not on BC aerosols. Member Lutzker said the focus was not on what was known about the impacts in each realm but rather the dual-consequence of BC impacts. Member Altshuler did not deny that but suggested it has been discussed via other subject matters, such as diesel particulate matter (PM) controls and discussions of UFP. Member Lutzker clarified that the proposal is not to address all of the health issues but instead, in developing a reduction strategy, that rather than focusing on PM and the health consequences or greenhouse gases and the climate change impacts, that a focus on BC brings both together and that synthesis is the first Emerging Issue that Member Range is suggesting. Member O'Connor said it was intended as an introductory, umbrella statement and that they can definitely be combined. Chairperson Bornstein suggested the combination become the introductory paragraph. Member Bolles agreed with Member Altshuler.

Chairperson Bornstein suggested language can be added to clarify what has been dealt with in the past. Member O'Connor suggested, regarding page 3, number 2, deleting "new." Member Kurucz clarified the intent was not to make claims about new information or to re-emphasize

issues but to tie BC in with the greater PM discussion. Member Altshuler said the important thing is that they are not conflicting and the motivation on BC should not be health because efforts are already on track in that area. Member Bramlett said more work is necessary. Chairperson Bornstein asked if it should be merged as number 1 or into the introductory paragraph. Member Lutzker said as number 1 if the Council wants it to be read.

Chairperson Bornstein said to move number 4 to number 3 so that biomass burning and diesel engines are back-to-back, if not later combined, and asked for comments on BrC.

Member Kurucz said BrC is a real and traditional Emerging Issue and the Recommendation needs to be simply learning more. Chairperson Bornstein said insert "new" somewhere to clarify that it is new information for the Council. Member Altshuler agreed and suggested adding language addressing the uncertainties of the impacts on clouds by BrC. Member Bolles said there was also mention of yellow carbon and asked if it should be included in the report.

Member Hart said, regarding page 3, the proposed consolidated number 1, that all language conveying the certainty of impacts regarding climate change should be tightened. Chairperson Bornstein agreed that the health impacts are known and should be stressed and the climate impacts remain unclear and the language should be adjusted accordingly.

Chairperson Bornstein directed the work group to insert "new" and asked if yellow carbon needed to be addressed. Mr. Stevenson said yellow carbon is condensation of sulfur containing compounds and elemental carbon and was only mentioned once or twice in passing.

Member Altshuler asked if there are sources of sulfur in the Bay Area. Mr. Stevenson said there are not but it is relevant on a global scale as coal firing results in sulfur emissions. Chairperson Bornstein said it is very relevant to certain regions and asked if it should be included and where. Member Kurucz said it is not a local issue subject to Air District authority. Member Altshuler said it could be addressed so as to dismiss it. Chairperson Bornstein said to exclude it.

Member Lutzker said, regarding page 3, new number 3 BrC, to expand the Recommendation to include language suggesting the need for a better understanding of BrC emissions, sources and impacts. Member Kurucz said earlier comments suggested focusing on impacts only because this will be subject to further study. Chairperson Bornstein said to insert "impacts and" before "emissions" on the last line. Member Lutzker said the warming effects should also be known, not just the health effects, and its role in climate change. Member Lutzker suggested the work group can insert the language. Chairperson Bornstein asked if the work group had adequate direction. Member O'Connor agreed but said it raises a question because the point of separating out BrC was to make the case that BrC remains up for discussion and it was not a Recommendation of the work group that the Air District pursue mitigation measures specifically aimed at BrC. Member O'Connor added that he would not want a separate section to be used as justification for premature mitigation efforts. Member Lutzker agreed but said the Recommendation can be to learn more. Member O'Connor agreed. Member Bard suggested inserting a new Emerging Issue of "There is a need to understand the different sources, health and net climate forcing impacts of BrC." Member O'Connor agreed.

Member Lucks restated his suggestion that numbers 3 and 5 be combined. Member Bard said they seem to have different issues. Member Lucks said the proposal does not compromise those issues and the suggestion only goes to the organization of the stand alone paragraphs. Member Bard said that the Recommendations for each are very different and suggested they should not be grouped. Member Kurucz agreed and said that if the Air District finds it is pursuing both, there are very different paths to address each. Member Bard said there is a need to understand more about BrC. Member Lutzker suggested inserting "Reduction Strategies for" before each of the two headings. Chairperson Bornstein said separate is better and asked in which order they should be listed. Member Kurucz said the questions are whether Air District action can be taken on each and what they might be and suggested that biomass burning is a very young issue that may not have a strong Recommendation. Member Altshuler said the Recommendation for BrC may be addressing the need to know more, asked where fireplaces fall on the BC and BrC scale, and suggested the "lube oil from gasoline engines" issue should be included with Diesel Engines. Chairperson Bornstein directed the work group to make the changes discussed. Member Altshuler said an assessment of BC or BrC emissions from fireplaces should be recommended.

Member Range suggested said BC was reported as only contributing 11% to climate change and maybe it should be moved further down the list and include some information on the contribution and sources specific to the Bay Area before trying to grapple with reduction strategies. Chairperson Bornstein asked what number the comment is relative to. Member Cherry said the inventory is number 7. Member Range said research is inventory, modeling and planning and suggested advancing numbers 6 through 8 closer to the top of the list.

Chairperson Bornstein asked for any additional comments on numbers 1 through 5. Member Lutzker asked that Biomass Burning include reference to biomass power cogeneration facilities. Chairperson Bornstein said that numbers 3 and 5 were linked together by putting "Reduction strategies for" before "Biomass Burning" and "Diesel Engines" and by their newly adjacent placement.

Member Range said, regarding numbers 6 through 8, that the research aspect needs to be emphasized up front, followed by what is involved in the research, such as inventory, modeling and planning, and then include the need for identifying metrics as set forth in number 9. Chairperson Bornstein asked in what order they should be listed and said Research should be number 6. Member Range said Research should be the new number 4, after number 3 BrC, followed by a new section 5 consisting of the current numbers 6 and 7 because monitoring is part of the research, and asked for suggestions on where Control Strategy Metrics belongs. Chairperson Bornstein said metrics are part of planning so combine them or reorganize them into two related groups. Member Range suggested Inventory, Modeling and Monitoring and then Planning and Metrics. Chairperson Bornstein said monitoring generally comes first. The Council asked for staff's input. Mr. Stevenson said usually monitoring goes with inventory and modeling follows a separate path and the monitoring is used to later validate the modeling. Member Lutzker said planning should be separated as it seems like a separate effort. Chairperson Bornstein said they are all tied together.

Member Altshuler asked, regarding page 4, number 6, whether the Air District PM_{2.5} Report has the data in there in regard to PM speciation and asked how much more PM needs to be monitored. Mr. Stevenson said that is a more difficult question than one would think, the Air District has done speciation for some time and could break out elemental carbon versus OC but

there are new monitoring methods that look specifically at BC. Member Lutzker asked if there are for BrC also. Mr. Stevenson said yes, to some extent and apologized for being so vague. Member Altshuler said BC has been monitored for years even if it was not as quantitative as now. Mr. Stevenson agreed and said that is where the gray areas lie, in that there are a lot of studies but not a lot of differentiation which is now possible.

Chairperson Bornstein said research is not necessary as a separate Recommendation and should be deleted. Member Kurucz disagreed based on the desire to highlight those items, not to drop them altogether based on the supposition that they are implied. Chairperson Bornstein said he may have shortened number 8 and conceded it should remain and asked if the Research Recommendation should be more focused. Member Lutzker said it should be left broad as the new number 4.

Member Hayes said he is struggling with the new format of merged Emerging Issues and Recommendations and the mixing of priorities for each; said numbers 6, 7, 9 and 10 include recommendations specifically to the Air District; mentioned that he often organizes his thoughts by considering the various types of work the Air District does so as to match Recommendations with them and asked a series of questions about how to organize the report and frame the Council's thoughts; and suggested the content be separated, reorganized and revised for more specificity of action. Chairperson Bornstein asked what the Council should take away from Member Hayes' statement. Member Hayes said to mentally separate items at every opportunity. Chairperson Bornstein directed the working group to take that up and asked how to organize numbers 6 through 9, both within the report and within each of the paragraphs. Member Hayes said to separate them for the sake of considering the state of work and action to be taken. Chairperson Bornstein said Monitoring is separate and asked about inventory, modeling and planning. Member Hayes suggested the work group address that kind of organization. Chairperson Bornstein took comments on the separation of those three items.

Member Kurucz said inventory, modeling and planning can be combined because of what is being Recommended and asked for staff input. Chairperson Bornstein asked staff what would be most useful in terms of the items in numbers 6 and 7. Mr. Stevenson said staff's struggle is similar to the Council's as there is a great deal of cross-over in what is being discussed and what staff needs is recommendations such as, if monitoring should continue how do you want to direct the monitoring of BC to specifics, such as where to monitor, whether modeling should be done, the specifics of modeling in terms of what aspects should be included. Henry Hilken, Director of Planning, Rules & Research Division, said work on inventory, monitoring and modeling are the measurement work that provides the scientific and technical foundation for policy decisions and recommendations or, in other words, planning, that is brought to the Board of Directors but as to how the report is structured, it does not matter.

Chairperson Bornstein said to keep Research as the title with Monitoring, Inventory and Modeling as subsets and then Planning as a separate item. Member Lutzker suggested adding another point under Research regarding that done by others which the Council feels the District should be tracking. Chairperson Bornstein suggested "Tracking" or something similar that the work group comes up with.

Member Kurucz said it seems that a Recommendation to track other's research is really recommending what is already being done as they brought these very speakers before the Council and asked staff for guidance. Mr. Stevenson suggested "continue to follow." Chairperson Bornstein said "continue."

Member Lutzker said, regarding page 2, number 1, the percentages provided by Mr. Croes were for a 100-year time frame and continue to be referenced by the Council but the figure may be completely different if viewed on a 10-year scale and suggested the Council clarify the time frame in number 1 and in its deliberations because BC may be more significant in the short-term than the number implies. Chairperson Bornstein asked if "long-term climate change" should be inserted. Member Lutzker suggested inserting at the end "(using a global warming potential metric with a 100-year time frame)" but the larger point is that 11% may be larger or smaller. Chairperson Bornstein directed the work group to craft the appropriate language.

Member Lutzker said, regarding page 4, number 10, that the item is more than educational outreach, such as incentive programs or ensuring regulatory compliance, both of which do not fall under the current title. Chairperson Bornstein asked for more appropriate language. Member Lutzker said they can be split out or the Recommendation renamed. Chairperson Bornstein directed the work group to craft the appropriate language.

Member Bard said Emerging Issues should include something about "the specific health risks of wildfires due to increased warming, the impact of wildfires on climate change and need for greater focus and study" and "wildfire prevention and PM_{2.5} emission reductions techniques need to be evaluated." Chairperson Bornstein directed the Council to forward any suggestions for additional language to the work group and directed them to craft the appropriate language. Member Kurucz asked to hear the suggested language for the sake of the work group putting the comments in context. Chairperson Bornstein said time is running out and a new report emphasis is being suggested. Member Bard suggested it be a future discussion topic but the issue of wildfire prevention and hazard reduction strategies needs to be brought into better focus. Chairperson Bornstein said it is an Emerging Issue but not within the realm of the Air District's work. Jean Roggenkamp, Deputy Air Pollution Control Officer, said it is within the Air District's realm of work. Chairperson Bornstein encouraged Member Bard to send the language, an explanation of the context, and the specific location for its insertion to the work group. Member Bard suggested a discussion about natural gas shale deposits leakage from gas extraction and BC related to that process. Member Bolles said it was discussed but the work group did not know if it fit in this report. Member Kurucz asked if it is a local issue. Member Bard was unsure if there is anything closer than Monterey. Mr. Stevenson said the closest operation is currently in Monterey.

Member Altshuler said the Council has suggested in the past that the Air District interact with the Bureau of Automotive Repair regarding more discussions about identifying lube oil burners and getting them off the road through a strengthening of the inspection maintenance program in the name of BC and there has been no discussion of a cumulative impacts analysis. Chairperson Bornstein said the phrase could be under the Planning Recommendation.

Chairperson Bornstein directed the Council to forward ideas to the work group. Member Kurucz said the review time will be necessary at the next Council meeting if no discussion is had today. Chairperson Bornstein agreed.

Member Kurucz asked for more information regarding Air District involvement in wildfire prevention. Ms. Roggenkamp said there is a lot of interest in this topic in terms of climate change and the Air District is involved for health reasons, such as open burning and smoke management plans, and agreed that having speakers on the topic is a good idea.

"GLOSSARY"

None.

Council Comments: None.

Public Comments: None.

Mr. Stevenson said staff will forward a redline version of the report to the work group that reflects some, if not all, of the changes contemplated at today's meeting.

OTHER BUSINESS

3. Council Member Comments/Other Business:

Member Altshuler said the emails issuing from Council members through staff are good but cautioned against any discussion via email. Chairperson Bornstein mentioned an earlier suggestion to staff of instead establishing an electronic bulletin board. Mr. Stevenson reported hearing of preferences for each and asked for a final tally. Member O'Connor preferred them sent. Chairperson Bornstein suggested they be posted on a bulletin board followed by email notification. Mr. Stevenson said they will continue to be sent until the bulletin board is set up.

4. Report of the Executive Officer/Air Pollution Control Officer

Ms. Roggenkamp presented the Report of the Executive Officer, including updates on the Winter Spare the Air Season, the Air District office building move, staff preparations for presenting at the annual Air and Waste Management Association (AWMA) conference, and an overview of proposed state legislation with Air District impacts.

Member Lucks said that his presentation after today's meeting will touch on some of the legislation mentioned by Ms. Roggenkamp.

Member Bard asked for the specific number of complaints and citations regarding the Spare the Air campaign. Ms. Roggenkamp said this season there were 2,316 complaints and 179 violation notices. Chairperson Bornstein asked for information regarding the nature of the incidences. Ms. Roggenkamp said wood smoke. Member Bard asked if the violation notices are fines. Brian Bunger, District Counsel, said first-time violators have the option of an online course or paying a penalty of \$100, and as of yesterday, more than 65 had taken and passed the course and four had sent \$100. Member O'Connor asked if there is a fee for the course and Ms. Roggenkamp answered no.

Member Altshuler asked if the Air District has a position on Senator DeSaulnier's bill and Ms. Roggenkamp said staff is not recommending a position but the Board of Directors Legislative Committee meets tomorrow. Member Altshuler said as we discuss cumulative impacts it is natural to get air and water issues working together. Ms. Roggenkamp said the regional water agency is not part of the bill.

Chairperson Bornstein asked for staff comments on the AWMA conference. Mr. Stevenson said it will be in Chicago on June 25 through 28, Executive Office staff will reach out to the membership regarding their interest, and that only four members may attend through the Air District. Chairperson Bornstein asked for a list of papers that will be presented by staff. Mr. Stevenson said the four attendees will be briefed. Chairperson Bornstein said to provide the list to the entire Council.

Mr. Stevenson announced that John Englander, author of "High Tide on Main Street: Rising Sea Level and the Coming Coastal Crisis," will be a guest speaker at the Air District on Monday, March 15th at 3:15pm and invited the Council to attend.

Chairperson Bornstein announced there would not be a staff presentation at the next Council meeting and asked how best to proceed with the creation of two draft reports for comparison purposes. Mr. Stevenson suggested the working group revise the existing report with the edits from today's meeting and provide it to staff who will create the second version. Member Kurucz suggested a vote on preferences now to avoid the additional work. A consensus of the members present agreed that the new format was preferable.

Member Bramlett urged the Council to allow the work group to do the work assigned to it. Member O'Connor suggested that members with a desire to contribute more centrally to the draft report consider joining the work group.

Chairperson Bornstein asked about the status of arrangements for future presenters. Mr. Stevenson responded that staff has confirmed Dr. Ramanathan and are working on a number of potential speakers that focus on different areas such as health and mitigation, monitoring and modeling, and more. Chairperson Bornstein suggested that BC will be finished after the next report cycle and asked the members to keep the selection of a topic for the third cycle in mind.

Member Kurucz asked what Dr. Ramanathan's topic would be. Mr. Stevenson responded that he can cover a wide range of topics and has been asked about his preference for the time allowed. Member Kurucz said the broad scope is already established and suggested a deep look at some narrowly focused topics. Chairperson Bornstein suggested Dr. Ramanathan's focus be on modeling and the second speaker focus on impacts and mitigation. Member Lutzker asked at Dr. Ramanathan speak to BrC and that his BC focus be more local or, at least, not global.

Mr. Stevenson announced that immediately after the Council meeting today, Member Lucks will present his legislative summary of energy, climate change and air quality related matters.

- **5. Time and Place of Next Meeting:** Wednesday, April 10, 2013, Bay Area Air Quality Management District Office, 939 Ellis Street, San Francisco, CA 94109 at 9:00 a.m.
- **6. Adjournment:** The meeting adjourned at 12:09 p.m.

151 Sean Gallagher

Sean Gallagher Clerk of the Boards