

**U.S. Environmental Protection Agency (EPA) Board of Scientific Counselors (BOSC)
Executive Committee (EC)
Teleconference Meeting Minutes
February 8, 2016**

Date and Time: February 8, 1:00 p.m. to 3:00 p.m. Eastern Standard Time

Location: U.S. EPA Headquarters, 1200 Pennsylvania Ave, N.W., Washington, DC

Designated Federal Officer (DFO) Welcome

Mr. Thomas Tracy, Designated Federal Official

Mr. Thomas Tracy, DFO for the Board of Scientific Counselors (BOSC) Executive Committee (EC) formally opened the meeting. Mr. Tracy noted that the discussion was a public meeting and complied with all Federal Advisory Committee Act requirements. He turned the meeting over to Dr. Deborah Swackhamer for the discussion of the BOSC EC final report.

BOSC EC Final Report

Dr. Swackhamer noted that the participants from the general public have indicated they have no comments, but she gave them another opportunity to make any comments at this point. Hearing none, she outlined her agenda. She stated that she would first ask for overall comments on the draft report from the EC members, adding that she also received comments from EPA's Office of Research and Development (ORD). Next she planned to ask for comments from the EC members on specific sections of the report. Finally, the EC will determine how to move forward in order to formally submit the report to EPA.

Overall Comments

Dr. Ponisseril Somasundaran noted that the report is well written.

Dr. Viney Aneja underscored Dr. Somasundaran's statement, adding that the report reads and flows well.

Dr. Paula Olsiewski also commented that it reads well. She also pointed out one difference in terms of style. The environmental justice (EJ) and climate change (CC) sections are integrated in report, whereas the subcommittee reports are summarized with the full versions in the appendix.

Dr. Swackhamer clarified that the full EJ and CC reports are included in the main body of the EC final report is because there are no subcommittees on EJ and CC, as there are for the research programs. The EJ and CC sections were written in real time by EC workgroups during the face-to-face meeting in December, 2015.

Dr. Shahid Chaudhry stated that this draft report is a much improved version compared to the first draft. However, he pointed out that the document should be dated January 8, 2016, not January 8, 2015.

Dr. Swackhamer asked if any members felt that the draft report was off the mark. She then summarized the comments from ORD. First, ORD also pointed out the incorrect date. Second, ORD commented that CSS is not named correctly in some instances. Dr. Swackhamer will conduct a search and replace to ensure the correct name is used in all instances. Finally, ORD recommended that the EC give an overall summary of how the research programs are performing

in the Strategic Research Action Plan (StRAP) and Roadmaps sections. Dr. Swackhamer will add a few sentences to clarify that point. She suggested something along the lines of: “In general the programs are on track and are looking as though they will meet their objectives.”

Alternatively, she suggested using language from the subcommittee reports.

Dr. Courtney Flint replied that she was comfortable with the changes Dr. Swackhamer noted. She added that the overarching comments should get at the fact that ORD has quickly and robustly moved from the siloed approach of the past to an integrated approach with a focus on sustainability. She commented that the refocus to interdisciplinary science is remarkable.

Dr. Swackhamer voiced her agreement with Dr. Flint’s comment and asked for any other impressions.

Common Thread Recommendations

Dr. Swackhamer turned the discussion to specific sections within the report, beginning with the recommendations that were common across the various subcommittee reports.

Dr. Swackhamer noted that ORD commented that recommendations #4 and #8 are not differentiated clearly enough. She clarified that one touches on engagement across research process, while the other gets at communication.

Dr. Somasundaran commented that he thought these two recommendations were well written in the sense that the EC did not want to overemphasize how ORD should move forward in achieving this goal.

Dr. Olsiewski added that #4 addresses communication, while #8 addresses the discussion of science. She suggested adding the term “science” or “science and technology.”

Dr. Swackhamer stated that the underlying parts of the recommendations might not be clear enough.

Dr. Flint responded that she can see the overlap and wondered if it gets back to recommendation #1, in which the EC recommends that EPA clearly define partners, stakeholders, and end users. She continued, saying that #4 really addressed the depth and breadth of communication inside and outside the Agency, while #8 may address interagency communication. Dr. Flint noted that the confusion might surround who the EC is talking about communicating with. She also suggested that if the two recommendations are distinct, they should be ordered next to each other.

Dr. Swackhamer replied that she is struggling to figure out why they were two separate recommendations in the first place. She agreed with Dr. Flint that it might be a good idea to list them together. She asked the members if they think #8 is different enough to be separate or if it should be folded into #4.

Dr. Chaudhry commented that they are two separate points. He clarified that #4 addresses multidirectional communication with outside stakeholders. Recommendation #8 addresses communication within EPA. He added that to strengthen #4, the EC should recommend clarification of the mechanism of how outside stakeholders are approached. He also agreed that #8 might be moved after #4 to allow the reader to more clearly see the difference between the two recommendations.

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Ms. Sandy Smith noted that if the EC changes the order of #4 and #8, then the EC will also need to look at where other recommendations are placed, as there are others that are interrelated. She pointed out that #9 is related to #8, as well (cross program and interdisciplinary interaction). She reiterated that the flow of the bullets should make sense.

Dr. Olsiewski commented that #11 could stand alone after the first nine.

Dr. Swackhamer agreed, but noted that #12 follows from #11. She agreed that the recommendations build on one another in many cases.

Ms. Smith stated that the last sentence in #6 is an important point and added that it might benefit from clarification on what “mutually informative” means.

Dr. Swackhamer asked if the members had suggestions for clarifying this language. She added that she did not write this sentence, but she would attempt to clarify it.

Dr. Somasundaran asked if the terms end user, stakeholder, and partner are defined in the report.

Dr. Swackhamer responded that they are defined in the appendices and that the EC has recommended that EPA define them consistently.

Dr. Robert Kavlock added that reordering the common thread recommendations will be helpful, since ORD has to respond to each individually. It will be critical to understand what each means. He also suggested using the term “intra-agency” in #8, adding that interagency, typically means between multiple federal agencies, rather than within a single agency.

Synthesis of Key Recommendations

Dr. Swackhamer thanked the subcommittee chairs for their great writing in the individual subcommittee report summaries and asked for any comments. She added that she did not change any of the content, but simply made the use of acronyms consistent and corrected a few typos.

Ms. Smith commented that they were all well written and easy to understand. She pointed out that some of the summaries have language that repeats the common thread recommendations.

Dr. Swackhamer clarified that she had left in specific tool recommendations, but removed any general recommendations that were repetitive. She added that she would take another look at this section.

Dr. Olsiewski stated that an abbreviation on page 9 that needs to be spelled out. Dr. Swackhamer replied that she will replace “DBP” with “disinfection byproducts.” She stated that, overall, the subcommittee summaries are fine.

Review of Cross-cutting Roadmaps

Dr. Swackhamer asked for comments from the EC members on the sections of the final report that review the EJ and CC Roadmaps.

She asked for comments on the introduction, and there were none. Next she asked for comments on the EJ Roadmap review, noting that ORD is interested in general comments addressing how EPA is performing in terms of EJ- and CC-related work.

Dr. Flint commented that the EJ section accurately reflects the EC’s discussions. She added that the EC might include an overarching comment that underscores how positive the EJ working group felt about the Agency’s EJ work. She also pointed out that the EC might not be quite as overwhelmingly positive about the CC roadmap, which seems to need more work.

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Dr. Swackhamer noted that she will pull the cross-cutting comments to the front of each section to be clearer.

Dr. Flint stated that the issue of EJ is bigger, broader, and deeper than the EPA programs related to EJ. She recommended that the EC should more clearly articulate that it is not asking EPA to do everything related to EJ at large, noting that this piece of the EJ section is a bit buried currently.

Dr. Swackhamer agreed that these big picture comments should be pulled to the beginning of the EJ and CC sections. She noted that the EC had a number of critical comments related to the CC roadmap, and that she will add language that the Agency needs to more clearly articulate their role in the CC space (e.g., whether they will focus on adaptation in a research).

Dr. Somasundaran noted that the EJ section is about six pages, while the other summaries are one to three pages. He asked if it matters and if the EC should condense the EJ section to four pages.

Dr. Swackhamer replied that the EJ and CC roadmap sections are different than the research program report summaries, and they do not need to be the same length.

Dr. Flint stated that she would be reluctant to remove text from the EJ section, adding that the EC should not cut one section simply to balance another other in length.

Mr. Tracy interjected to remind the EC members that one of their recommendations included re-examining the climate change roadmap. He added that the EC will have another chance to make further recommendations on CC, while they will not have a similar opportunity for EJ.

Dr. Swackhamer added that EJ roadmap was more complete to begin with, so the EC had more substance on which to comment.

Appendices to the Final Report

Dr. Swackhamer stated that the five appendices will comprise the five subcommittee reports. She noted that the EC members should have received the latest version of all five reports from Mr. Tracy. She pointed out that the Safe and Sustainable Water Resources (SSWR) report still needs editing, as the recommendations are not clearly articulated. She added that the other four reports are acceptable. She then asked for comments on the full reports.

Dr. Chaudhry replied that, based on feedback the subcommittee received during the December 2015 meeting, the SSWR subcommittee report is much improved. He noted that he will add the names of the subcommittee members to make the SSWR report consistent with the other subcommittee reports. He asked Dr. Swackhamer for clarification on whether she planned to add the recommendations.

Dr. Swackhamer responded that she would prefer that Dr. Chaudhry add them. She clarified that charge question one is fine, but the other charge questions will require extra articulation. She pointed out that the recommendations are already in the summary, but they need to be pulled out. Dr. Swackhamer thanked Dr. Chaudhry for his extra effort.

Next Steps

Dr. Swackhamer informed the EC members that she would like to add a one page cover letter to the final report when the group officially submits the document to EPA. She also noted that the

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final report will be submitted to Dr. Tom Burke, Dr. Kavlock, and Mr. Lek Kadeli. She asked for any comments on attaching a cover letter, and there were none.

Dr. Swackhamer stated that she will send the next draft of the EC final report to the EC members via email. She added that the EC members should respond to Mr. Tracy's email as to whether they accept her edits.

Dr. Jim Galloway replied that he feels comfortable moving forward without reviewing the next draft.

Dr. Chaudhry replied that if Dr. Swackhamer expects to make significant changes, it will be best to ask for quick responses from the members one more time. He added that if she does not plan to make substantial changes, then the members may not need another round of review, as they have discussed the changes.

Dr. Swackhamer noted the biggest change would be the addition of the overarching comments on the EC's general impressions of how the research programs are doing.

Dr. Olsiewski commented that she would be happy to look at one more round of edits, as everyone's name will be on the report.

Dr. Flint added that it would be helpful to have the new edits pointed out.

Dr. Swackhamer responded that she will send a redline version. She added that she would like to get the final report out to ORD by the end of the month. She clarified that, for this final round of review, EC members can respond to Mr. Tracy's email with a simple "I approve this version."

Dr. Chaudhry added that he will send an updated SSWR report in a few days.

Dr. Swackhamer asked for other comments or questions.

Dr. Somasundaran asked whether these subcommittee reports all need to be in the same format.

Dr. Swackhamer replied that they do not. She noted that when ORD convened the subcommittees, they did not provide a style guide or a general report format, and they are not asking that the formats be exactly the same. She clarified that she did want to make sure that there is some consistency in terms of naming committee members and pulling out the recommendations, but noted that otherwise the formatting is fine.

Dr. Kavlock agreed, stating that the current formats are fine. He added that next time ORD will give more guidance, but there is no need to change anything for this report.

Dr. Swackhamer thanked Dr. Kavlock for the clarification. She asked for any final comments, and there were none.

Dr. Swackhamer closed the meeting by reminding the EC members that they can expect an email from Mr. Tracy with the planned edits highlighted in track changes. She pointed out that this final round of review will allow any Executive Committee members who were absent from the current meeting to contribute any final comments. She reiterated that after the EC members approve the draft final report, she will formally submit the report to EPA.

Dr. Kavlock congratulated the EC members. He added that ORD has never gotten back a report in less than one year, and that their three month timeline has been incredible. He noted ORD's appreciation of the significant effort.

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Dr. Swackhamer responded that if ORD is going to move forward quickly, then the EC needs to respond quickly to make the feedback most useful. She added that the EC looks forward to hearing from Dr. Kavlock on how the subcommittees can continue to interact with ORD in a helpful way. She then turned the meeting over to Mr. Tracy.

Mr. Tracy thanked the EC members and the National Program Directors for their participation, and noted he is looking forward to the EC's final report.

Appendix: Participants

BOSC EC Members:

Deb Swackhamer, Chair

Viney Aneja

Shahid Chaudhry

Courtney Flint

Jim Galloway

Paula Olsiewski

Sandra Smith

Ponisseril Somasundaran

Tammy Taylor

EPA Designated Federal Officer (DFO): Tom Tracy, *Office of Research and Development*

Other EPA Attendees:

Bob Kavlock, *Deputy Assistant Administrator for Science, ORD*

Tina Bahadori, *National Program Director for Chemical Safety and Sustainability, ORD*

[Others may have been present but did not identify themselves.]