

MINUTES FROM THE EPA SCIENCE ADVISORY BOARD
Drinking Water Committee
Revised Total Coliform Rule (rTCR) Review
Public Meeting
June 9-10, 2009

ATTENDEES:

SAB Committee Members –

Dr. Joan Rose (Chair)
Dr. Mark Borchardt
Dr. John Colford
Dr. Penny Fenner-Crisp
Dr. Jeff Griffiths
Dr. Joseph Landolph
Dr. Desmond Lawler
Dr. Christine Moe
Dr. Christine Owen
Dr. Richard Sakaji
Dr. Gary Saylor
Dr. Gina Solomon

SAB Board Member

Dr. Lauren Zeise

SAB Staff –

Dr. Sue Shallal, Designated Federal Officers (DFO)

EPA Presenters –

Jeremy Bauer
Pamela Barr

Other Participants – See Attachment A for the list of participants who sign-in at the meeting

MEETING MATERIALS: The following meeting materials were available prior to the June 9-10, 2010 face-to-face meeting and were available on the general SAB Web site, <http://www.epa.gov/sab>, and specifically .at the following URL:
<http://yosemite.epa.gov/sab/sabproduct.nsf/MeetingCal/509845139F173E588525756E0050C57D?OpenDocument>

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- FEDERAL REGISTER NOTICE
- MEETING AGENDA
- WORK GROUP ROSTER
- CHARGE TO THE COMMITTEE
 - Charge Questions Memo for Drinking Water Committee (DWC) Total Coliform Rule (TCR). (PDF, 5 pp., 410,702 bytes)
- AGENCY BRIEFING MATERIAL
 - Agency's Powerpoint Presentation by Jeremy Bauer. (PDF, 25 pp., 415,742 bytes)
- PUBLIC COMMENTS
 - Public Comments by Steve Via on behalf of American Water Works Association (AWWA). (PDF, 3 pp., 33,009 bytes)

PURPOSE: To offer an opportunity for panel members to deliberate on the Agency's charge questions regarding the draft proposed revised Total Coliform Rule (rTCR), its content, purpose and the models used in deriving risk estimates.

LOCATION: Ritz-Carlton Hotel, 1150 22nd St, NW, Washington, DC 20037

DATE AND TIME: June 9, 2009 from 9:00 to 5:00 PM eastern time and June 10, 2009 from 9:00 to 4:00 pm eastern time.

MEETING SUMMARY: The meeting followed the agenda (Attachment B). A summary of the meeting follows.

Tuesday June 9, 2009

Convene the Meeting and Introductory Remarks – Dr. Suhair Shallal, Designated Federal Officer (DFO), opened the meeting at 9:00 am. She welcomed the participants and presented background information on the SAB panel formation process and informed the audience that the SAB operates under the rules and regulations of FACA where all meetings, during which deliberations take place, are held in public. She also reminded the members of the panel and the audience that the background materials including the charge questions (Attachments F), the Agency's presentation (Attachment G), etc. can be found on the table outside the meeting room and on the SAB website.

Welcome - Dr. Rose welcomed DWC members and invited experts. She then explained the importance of the TCR for improving and maintaining the quality of drinking water. She also reviewed the agenda and the purpose of the meeting which was to deliberate on and respond to the Agency's charge questions. She stated that the meeting will begin with presentations from the Agency and then committee members will be able to ask clarifying questions. The

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committee would also have the opportunity to learn from the EPA representatives who were present about the analysis and assessment. She also asked each committee member to introduce themselves and describe their background and expertise.

Agency Presentation- Pamela Barr of the EPA's Office of Water (OW) presented some of the background regarding the development of the rTCR document. She explained the process that the Agency had created to revise the Total Coliform Rule and the establishment of a FACA committee. She stated that after extensive discussions with all stakeholders (12 meetings in 13 months), an Agreement in Principle (AIP) was reached which EPA was committed to following as they develop their final document.

Jeremy Bauer then followed with a presentation describing the background materials that were provided to the DWC and the supporting analysis that EPA developed to revise the TCR. He explained how the overall supporting analyses fit into the context of the Health Risk Reduction and Cost Analysis (HRRCA) requirements and described the components that formed the foundation of the Agency's analysis.

Panel members then had an opportunity to ask clarifying questions after the presentation period. Panel members asked about the data that was used in the Agency's analysis and its source(s), the assumptions, and how variability and uncertainty were addressed. There were also questions about the impact of these changes on small versus large water treatment facilities.

Public comments- There was one public commenter for this meeting, Mr. Steve Via of the American Water Works Association (see written comments, Attachment H).

Committee Deliberations- Dr. Rose explained that the lead discussants would first respond to their assigned question and then other members of the panel would be able to add their thoughts and comments.

Charge Question #1

The lead discussants were Drs. Desmond Lawler, Lauren Zeise and Penelope Fenner-Crisp. The panel commended the Agency on its effort to gather and analyze a large amount of data. The panel suggested that the Agency describe their assumptions more fully and present them in a more transparent manner. A sensitivity analysis was suggested to determine if the Agency's assumptions were reasonable. The panel also suggested that a Maximum Likelihood Distribution (MLD) be attempted to show the range of uncertainty associated with the data. Agency representatives were present to explain the analysis that was undertaken and to clarify the methods that were used.

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Charge Question #2

The lead discussants were Drs. Christine Owen, Gary Sayler and Gina Solomon. The panel members found the list of corrective actions to be reasonable but it was not clear how the list was developed. There was a concern that the cost to smaller systems vs. larger systems was disproportionate. Also panel members were concerned that the percent of corrective actions (10%) that the Agency used in their analysis was too low and therefore was not health protective enough. Panel members agreed that more and better data gathering was a major need.

Charge Question #3

The lead discussants were Drs. Richard Sakaji, Mark Borchardt and Joseph Landolph. Panel members indicated that an analysis to determine the predictiveness of the model was needed. An error analysis and/or a sensitivity analysis would help to determine the reliability of the Agency's estimates. Basing the analysis on only one year rather than 5 or more years was a concern.

Charge Question #4

The lead discussants were Drs. Christine Moe, Jack Colford and Ms. Susan Teefy. Panel members stated that total coliform measurements are not a reliable indicator of water quality. Using measures or endpoints of public health outcomes is a better indicator of the health and quality of water supplies. Computer-based systems can help to track break-downs in water treatment system functions, for example, Google trends, GI illness reporting databases, etc.

Before the end of this session, Dr. Rose asked panel members to review their responses and determine the top 2-3 recommends that they wanted to convey to the Agency regarding the revisions to the TCR.

Wednesday June 10, 2009

Dr. Shallal opened the meeting at 9:00 a.m. and welcomed the panel and audience to the second day of the DWC rTCR meeting. She reminded everyone that they are operating under the rules and regulations of FACA and she turned the meeting over to the chair of the SAB DWC, Dr. Rose.

Dr. Rose informed panel members that she wanted to continue the discussion from the previous day. She also stated that panel members would have an opportunity to meet within their groups to agree on their final recommendations for their assigned charge question. Each group would be asked to present their recommendations after the morning break and other panel members would then add their comments.

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A discussion ensued surrounding the integration of the Surface Water Treatment Rule (SWTR) and the Ground Water Rule (GWR) with the Total Coliform Rule (TCR) and their impacts on one another. Panel members offered other option for improving the TCR, such as requiring corrective action, gathering data and reporting of test results and the cost vs. benefit of such requirements.

Panel members then spent approximately one hour discussion their recommendation with team members. Then each group presented its integrated findings. Other panel members were asked to add their comments.

Before adjourning the meeting, Dr. Rose assigned one person in each group to write the group's integrated response. The assignments were as follows- Charge Question 1: Desmond Lawler, Charge Question 2: Christine Owen, Charge Question 3: Joe Landolph, and Charge Question 4: Christine Moe. She asked panel members that their written responses be sent to her and Dr. Shallal by June 24, 2009.

Dr. Shallal then asked panel member to include her as a recipient on any correspondence with other panel members. The meeting adjourned at approximately 4:00 PM.

Respectfully Submitted:

/signed/

Dr. Suhair Shallal

Designated Federal Officer, EPA SAB DWC rTCR Panel

I certify that these minutes are accurate to the best of my knowledge:

/signed/

Dr. Joan Rose

Chair, EPA SAB DWC rTCR Panel

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ATTACHMENT A

Other Participants (names listed as they appear on sign-in sheets, excluding those listed as presenters)

June 9, 2009

Steve Via	American Water Works Association
Frank Letkiewics	Cadmus
Scott Biernat	Cadmus Group, Inc.
Bentley Coffey	Cadmus Group
Darrell Osterhoudt	ASDWA
Alan Roberson	AWWA
Crystal Rodgers-Jenkins	EPA
Erica Brown	AWWA
Nicole Shao	EPA
Brendan Kearns	EPA
Mike Messner	EPA
Jimmy Chen	EPA
Deborah Pitts	City of Baltimore
Jeanne Briskin	EPA
Julie Javier	EPA
Sean Conley	EPA
Laura Paulet	EPA
Brian Heninger	EPA

June 10, 2009

Scott Slaughter	CRE
Scott Biernat	Cadmus Group, Inc.
Frank Letkiewics	Cadmus Group, Inc.
Bentley Coffey	Cadmus Group, Inc.
Mike Messner	EPA
Stig Regli	EPA
Crystal C. Rodgers-Jenkins	EPA
Jeanne Briskin	EPA
Darrell Osterhoudt	ASDWA
Nicole Shao	EPA