

# Meeting 10 Summary – September 14, 2023

## Meeting Summary

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### Background

The United States Environmental Protection Agency (EPA) has sought public input and information to inform potential regulatory revisions of eight National Primary Drinking Water Regulations (NPDWRs) included in five Microbial and Disinfection Byproducts (MDBP) rules following the third Six-Year Review. EPA hosted an initial virtual public meeting in October 2020 to solicit input on further improving public health protection from MDBPs in drinking water. Throughout 2021, EPA sought input relevant to potential rule revisions through additional public meetings focusing on topics identified through public comments and information.

EPA has charged the National Drinking Water Advisory Council (NDWAC or Council), a Federal Advisory Committee (FAC) established under the Safe Drinking Water Act (SDWA) of 1974 to provide the agency with advice and recommendations on potential revisions to the MDBP Rules. In addition, to support the work of the Council, EPA asked the NDWAC to form a Working Group (WG) to explore specific issues and identify potential MDBP rule revision options for the Council to consider in making recommendations to EPA. More information on the NDWAC MDBP Rule Revisions WG meeting schedules and other information are available at: <https://www.epa.gov/ndwac/national-drinking-water-advisory-council-ndwac-microbial-and-disinfection-byproducts-mdbp>. EPA is providing the public with an opportunity to send written input to EPA via the public docket at [www.regulations.gov](http://www.regulations.gov), Docket ID: EPA-HQ-OW-2020-0486.

Meeting summaries and background documents on each meeting topic are available in the MDBP Rule Revisions public docket at [www.regulations.gov](http://www.regulations.gov), Docket ID: EPA-HQ-OW-2020-0486. More information on the potential rule revisions is available at: <https://www.epa.gov/dwsixyearreview/potential-revisions-microbial-and-disinfection-byproducts-rules>.

### Meeting Purpose

The tenth WG meeting was held to review and discuss and initial levels of support for preliminary draft recommendations to the NDWAC.

This document provides an abbreviated summary of discussions from the meeting on September 14, 2023. The summary presents the agenda segments in the order that they were discussed. The order of discussion varies from the posted agenda topics and timing.

The following materials were shared with the WG members ahead of the meeting:

- Draft Recommendations
- Responses to WG questions

In addition to WG members, approximately 100 observers viewed the meeting.

## Segment 1

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### **Agenda Review and Meeting Procedures**

**Elizabeth Corr**, MDBP Rule Revisions WG Designated Federal Officer, Office of Ground Water and Drinking Water (OGWDW), Office of Water, EPA

Ms. Corr thanked all for joining the tenth meeting of the National Drinking Water Advisory Council's, Microbial and Disinfection Byproducts Rule Revisions WG. She noted that the Working Group (WG) is assisting the Council and responding to EPA's November 2021 charge on potential revisions to MDBP rules.

**Yu-Ting Guilaran**, Deputy Office Director, OGWDW, Office of Water, EPA

Ms. Guilaran thanked all members for their participation and input through the past nine meetings and for their continued engagement. Ms. Guilaran emphasized the importance of this group's work to address disinfection byproducts (DBPs), *Legionella*, Environmental Justice and implementation concerns, risk balancing and different areas that the agency needs to consider. Ms. Guilaran noted that OGWDW has a wealth of experience and engagement with federal working groups, and the support of this working group is crucial in helping EPA develop a proposed rule, including nonregulatory approaches, outreach, training, and guidance. She stated that the suite of MDBP regulations is a cornerstone of delivering safe drinking water to American people and there are opportunities to protect public health through regulatory and nonregulatory improvement. Ms. Guilaran noted that the WG is looking to finalize recommendations over the next two months, and the NDWAC is to provide recommendations to EPA by December 15, 2023. Ms. Guilaran thanked WG members for their efforts over the past year as well as for work to come over the next few months. She also thanked the Technical Analysts for helping us understand causes of public health concerns and public health benefits of potential interventions.

**Lisa Daniels**, NDWAC MDBP Rule Revisions WG Co-Chair

Ms. Daniels welcomed all to the tenth meeting and expressed continued thanks and appreciation for all of the work to date from the WG members, EPA, and technical analysts.

**Andy Kricun**, NDWAC MDBP Rule Revisions WG Co-Chair

Mr. Kricun echoed the Co-Chair's sentiments. He extended thanks to the WG members for providing their expertise, EPA and the technical staff for their guidance, and to Ross Strategic and their team for helping to frame discussions.

**Robert Greenwood**, Principal, Ross Strategic

Mr. Greenwood reviewed the meeting's agenda and the logistics for virtual participants.

See Appendix 1 for a roster of WG members and an indication of those in attendance.

## Segment 2

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Mr. Greenwood reviewed the schedule for the WG's remaining two to three meetings, including a briefing meeting for the NDWAC, the full presentation of the WG final report to the NDWAC, and the NDWAC's review

and consideration of recommendations to EPA. The report from the NDWAC is targeted for delivery to EPA by December 15, 2023, if possible. Next Mr. Greenwood reviewed the topics of the 12 WG draft recommendations and cross-referenced the recommendations to the NDWAC charge areas, explaining how the charge areas were covered by the draft recommendations. Mr. Greenwood also explained that the charge area of “Mischaracterized ground water under the direct influence of surface water (GWUDI)” was the only charge area not currently addressed by the WG.

Mr. Greenwood then described the discussion approach for the day, encouraging WG members to be in a problem-solving mode, in that if they cannot support a suggestion, they should propose an alternative and be specific. He explained the straw polling system he would use throughout the meeting to understand WG member level of support for draft recommendations. The following framework was used to characterize the level of support and the aggregated WG member perspectives:

- Full: Support from all the present WG members<sup>1</sup>
- Substantial: Support from more than 7/8 present WG members<sup>2</sup>
- Strong: Support from more than half the present WG members
- Limited: Support from less than half of the present WG members
- Little: Support from less than ¼ of the present WG members

Mr. Greenwood described the draft recommendations that were provided before the meeting as a first attempt to reach across the needs and interests expressed by the WG members. Each item in these draft recommendations is there because it represents a key need or interest by one or more WG members. Following today’s meeting there will be significant shoring up of the technical content in the recommendations to make them more practical, but today’s content represents a starting point to gauge WG support.

### Segment 3

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Mr. Greenwood introduced Draft Recommendation 3, related to Disinfection Byproduct (DBP) Data Gaps and Analysis. The overall purpose of this recommendation is to reflect the WG understanding that there has been new science since implementation of the Stage 1 and Stage 2 D/DBP Rules indicating there are DBPs that are unregulated and need attention, and that additional data and analysis is important in order to have the understanding needed to set MCLs in the future.

Mr. Greenwood then introduced Draft Recommendation 4: Multi-benefit precursor control. Prior to this meeting some WG members had already suggested revisions to the Facilitation Team on this item, such as the need to better define the wastewater problem and move to specifics about wastewater constituents.

Mr. Greenwood gave a high-level overview of the draft recommendation, which is intended to provide additional treatment in a problem-based approach to reduce precursors to DBP formation and disinfectant demand. The recommendation suggests an initial source water evaluation for screening source water into high, medium, or low vulnerability categories for DBP precursors, then look to additional treatment for those

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<sup>1</sup> 17 out of 18 WG members were in attendance for most of the meeting; 16 out of 18 for some segments. For the final report, all 18 WG members would have to support a recommendation for it to be considered having received “full support” of the workgroup.

<sup>2</sup> For the final workgroup report, level of support would consider the ratio of support of all workgroup members (irrespective of whether they attended today’s meeting).

precursors as indicated by the screening and current treatment practices undertaken by the public water supply (PWS). Evaluations would be required only when conditions either in surface waters or in the distribution system (e.g., chronic compliance issues) indicate action is needed. Screening factors as part of the surface water evaluation could include whether the PWS has a history of SWTR or D/DBPR violations and/or challenging water quality conditions (e.g., a high percentage of wastewater, 303(d) impaired waters, or relatively high surface water total organic carbon (TOC), bromide, cyanobacteria, nitrogen, and/or phosphorus). PWSs may be able to receive “credit” if they have advanced treatment technologies. Medium and high-vulnerability systems would be required to monitor their surface waters on a scheduled basis, determined by such factors as seasonal variability. The draft recommendation then provides a range of approaches EPA could consider including to achieve reduction in DBP precursor control, including: increasing the stringency of the 3x3 matrix; adding a numeric maximum for TOC entering the distribution system; guidance for further control of TOC; a matrix that bins source water for TOC and bromide; and for PWSs with elevated wastewater in surface waters, a requirement to analyze trihalomethane (THM) samples collected for four haloacetonitriles (HAN4, dichloroacetonitrile, trichloroacetonitrile, bromochloroacetonitrile, and dibromoacetonitrile); and supporting, through enhanced guidance, further consideration of better management of DBP formation in distribution systems such as with reducing water age, improved storage management, and controlling disinfectant residual.

The Working Group members had an active discussion, along with contributions from Technical Analysts, regarding the appropriate precursors and surrogates to use for screening, whether this approach should be a requirement or in guidance, the DBP reduction that could reasonably be achieved, the integrity of and collection of information that could be expected, what outcome was expected from this recommendation and what level of technical detail is appropriate for this recommendation; the reasonableness of an expectation for microbial control; the further analysis any proposal would be subjected to in the EPA rulemaking process; and the impact of this recommendation on utilities serving communities with Environmental Justice (EJ) concerns.

Following the discussion Mr. Greenwood asked for a straw poll to indicate the Working Group’s level of support for Draft Recommendation 4, noting Draft Recommendation 4 would require significant revisions following this meeting, given all of the comments from the WG, and at this time he wanted to gauge support for a problem-based treatment technique requirement for enhanced precursor control:

Straw Poll: The WG indicated Substantial support.

Mr. Greenwood then asked the WG to signal the level of support for Draft Recommendation 3:

Straw Poll: The WG indicated Substantial support.

Path Forward: The Facilitators will consult with the Technical Analysts and review the WG members discussion points in order to revise Draft Recommendation 4 to present a clearer objective, update and streamline the punch list of items, and review the monitoring and screening sections. The overall goal for Recommendation 4 is to explicitly include a problem-based approach for a treatment technique.

## Segment 4

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Mr. Greenwood introduced for discussion Draft Recommendation 9 regarding Environmental Justice. He noted that the lexicon around EJ is evolving, and for this WG we will attempt to use the terminology – “communities with EJ concerns” rather than “underserved” or “disadvantaged” communities. He described

the draft recommendation as including four action areas. Action Area 1: EPA analysis to support rule revisions should identify and account for existing and potential disparate impact to communities with EJ concerns. Action Area 2: Structure new requirements in MDBP rule revisions to enable and incentivize systems to find problems and proactively improve their systems rather than raise concerns for finding problems. Action Area 3: New rule revisions would be tested by EPA to examine how proposed revisions may have changed outcomes in previous water crisis situations and changed outcomes in those communities. Action Area 4: Improving community access to PWS performance information, outlined in three intervention subparts: 1) improve availability of PWS compliance and performance information to community members; 2) enhance PWS data management and communications capacity; 3) improve systemic SDWA data access.

The Working Group had a robust discussion on the purposes of public notice and the potential for more timely or expanded public notice; the relationship between community trust or distrust and notice of water system issues; the advantages and disadvantages of embedding notice templates and specificity regarding distribution methodology in rules; the costs, capacity and capability of lab sampling and methodology; and the body of research that is available regarding meaningful public notice and its impact in communities.

Following the discussion Mr. Greenwood sought to gauge the level of support among the WG members for specific segments of Draft Recommendation 9, in order to signal where work was needed on this draft recommendation:

Straw Poll Action Area 1 (Regulatory Analysis): Substantial support

Straw Poll Action Area 2 (Problem Solving): Substantial support

Straw Poll Action Area 3 (Changed Outcomes): Limited support

Straw Poll Action Area 4 (Public Notification): Limited support

Straw Poll Action Area 4 (Public Notification modified to provide best practices and additional resources): Strong support

Mr. Greenwood notes that EJ is a specific topic area outlined in the NDWAC charge and the WG can continue to work towards a recommendation that will garner the full support of the group. He stated that before the next meeting, with the guidance of the Co-Chairs, this recommendation could be redrafted for consideration by the WG by the WG.

## Segments 5 and 6

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Although the Agenda had designated time for discussion of Draft Recommendation 6 (Chloramination) and Draft Recommendation 7 (Consecutive Systems) time did not allow for discussion of these items. These topics will be included as part of the process for soliciting individual WG member feedback and revisions to the draft recommendations.

Mr. Greenwood described the process for revising draft recommendations before Meeting 11 on October 5.

The Co-Chairs, Lisa Daniels and Andy Kricun, thanked the WG, the Facilitators, the Technical Analysts, and EPA for the thoughtful discussion and smooth meeting today.

Elizabeth Corr, DFO, closed the meeting.

Appendix 1: MDBP WG Meeting Attendance –  
September 14, 2023

<b>Name</b>	<b>Attendance</b>
<b>Andy Kricun, WG Co-Chair</b>	X
<b>Lisa Daniels, WG Co-Chair</b>	X
<b>Alex Rodriguez</b>	X
<b>Benjamin Pauli</b>	X
<b>Bill Moody</b>	X
<b>Elin Betanzo</b>	X
<b>Erik Olson</b>	X
<b>Gary Williams</b>	X
<b>Jeffrey Griffiths</b>	X
<b>John Choate</b>	X
<b>Jolyn Leslie</b>	X
<b>Kay Coffey</b>	X
<b>Lynn Thorp</b>	X
<b>Lisa Ragain</b>	X
<b>Michael Hotaling</b>	X
<b>Nancy Quirk</b>	
<b>Rosemary Menard</b>	X
<b>Scott Borman</b>	X