Minnesota 3M PFC Settlement

Notes for Combined Working Group Meeting

Wednesday, July 20, 2022
9 a.m. – 10:30 a.m.

Hybrid WebEx and in-person meeting

Combined working group members in attendance

- Brian Bachmeier
- Chris Hartzell
- Chris Volkers
- Clint Gridley
- Daniel Kyllo
- Dave Schulenberg
- David Filipiak
- Greg Johnson
- Jack Griffin
- James Creaghe
- Jamie Wallerstedt
- Jeff Dionisopoulos
- Jeff Holtz
- Jennifer Levitt
- Jess Richards
- Jessica Stolle
- Jim Kelly
- Jim Westerman
- Karie Blomquist
- Kirk Koudelka
- Kristina Handt
- Laurie Elliott
- Marian Appelt
- Mary Hurliman
- Matt Moore
- Michael Madigan
- Mike Kothe
- Monica Stiglich
- Paul Schoenecker
- Richard Thron
- Ron Moorse
- Ryan Burfeind
- Ryan Stempski
- Stephanie Souter
- Steve Love
- Steven Johnson

Presenters

- Kirk Koudelka, Minnesota Pollution Control Agency (MPCA)
- Jess Richards, Minnesota Department of Natural Resources (DNR)
- Debra Fleischer, Abt Associates
- Eric Burneson, U.S. Environmental Protection Agency (EPA)
- Betsy Behl, EPA
- Jim Kelly, Minnesota Department of Health (MDH)

Welcome and updates

Debra Fleischer (Abt Associates) welcomed the work group to the meeting and reviewed the agenda. Kirk Koudelka (MPCA) and Jess Richards (DNR) also welcomed the group. They then provided updates on Priority 2. They explained that Priority 2 meetings are expected to begin in the fall, and they introduced Ken Roberts (DNR), the new Priority 2 Coordinator. Kirk then reminded the work group that EPA released new interim health-based values for PFAS on June 15, the morning of the June work group meeting, and that this July meeting is intended to provide an overview of PFAS actions at the Federal level, describe how the new EPA values could have an impact on Minnesota's health-based values, and discuss how these new numbers may affect the Conceptual Drinking Water Supply Plan. The planning process for projects in the East Metro will continue, but State agencies are considering how these new values may impact other communities around Minnesota as well.

Recent and Planned Actions for PFAS in Drinking Water

Eric Burneson and Betsy Behl (EPA) provided an update on PFAS actions at the Federal level. EPA provided an overview of the PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024, which was released in October 2021. The roadmap is a strategic approach to addressing PFAS and commits EPA to developing drinking water health advisories (HAs) and a national drinking water regulation.

On June 15, 2022, EPA released interim, and final HAs for four PFAS compounds:

- GenX:
  - 10 parts per trillion (ppt) (final health advisory)
  - Minimum reporting level: 5 ppt
- PFBS
  - 2,000 ppt (final health advisory)
  - Minimum reporting level: 3 ppt
- PFOA:
  - 0.004 ppt (interim health advisory)
  - Minimum reporting level: 4 ppt
- PFOS:
  - 0.02 ppt (interim health advisory)
  - Minimum reporting level: 4 ppt

EPA noted that, although they released "final" HAs for GenX and PFBS, they may be changed in the future if warranted by new data. EPA explained that these new values aim to replace existing HAs based on new health studies showing that PFOA/PFOS can impact human health at lower exposure levels than previously thought. The PFOA/PFOS HA values are currently undergoing review by the Science Advisory Board and, while the toxicity levels will likely change because of this review, the HAs are likely to remain below the PFOA and PFOS minimum reporting level of 4 ppt.

EPA reviewed next steps. EPA is currently developing a proposed national primary drinking water regulation for PFOA and PFOS. They will be utilizing input from the Science Advisory Board to develop Maximum Contaminant Level Goals (MCLGs, which are non-enforceable health-based goals) and Maximum Contaminant Levels (MCLs, which are enforceable standards). The MCLs will be set as close as possible to the MCLGs, and EPA will consider the feasibility of measuring and treating PFAS as well as the costs and benefits when setting these standards. EPA expects a proposed rule in fall of 2022 and a final rule in fall of 2023. Additional information is available on the EPA website: https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos.

Feedback

One work group member asked if the recent West Virginia Supreme Court ruling would impact PFAS HAs. EPA clarified that they cannot speculate on legal proceedings, but the West Virginia case dealt with the Clean Air Act and not the Clean Water Act, so they plan to move forward with developing MCLGs/MCLs under the Safe Drinking Water Act. EPA has promulgated over 90 standards under the State Drinking Water Act, so they have a lot of confidence that the authorities under this Act have been well tested.

Another work group member asked how many labs were qualified to measure PFAS concentrations down to ppt or parts per quadrillion (ppq). EPA explained that 4 ppt is the minimum reporting level set right now under the Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) and EPA is assessing the ability for labs to quantify individual PFAS. Under UCMR 5, EPA must go through a lab approval process and has an online list of state labs that are qualified.

One work group member explained to the EPA that there was a lot of uncertainty as municipalities try to design water treatment systems, and then asked if it made sense to treat all water in an affected area. EPA said they could not provide recommendations for water treatment in a specific area. One goal of the Safe Drinking Water Act is that contaminants exist at non-detectable levels to reduce health risks; however, they must consider the costs and feasibility of treatment. The same work group member asked about the qualifications of those on the Science Advisory Board that EPA uses to propose HAs. EPA explained that the agency uses a robust process to solicit members of the Science Advisory Board. They cover a range of expertise including water issues and economic evaluations.

Another work group member explained to EPA that their community had been dealing with PFAS issues since the early 2000s and that it is hard for communities to keep up with new technologies while ensuring their community's trust. Local governments understand that better treatment technologies exist, but do not have the funds to implement them. The work group member then asked if EPA plans to take leadership and help with communication, and also provide funding to municipalities for treatment. EPA recognized that the changing science creates challenges at the local level. EPA has a commitment to provide information based on best available science. The 2021 Infrastructure Bill provided $5 billion for emerging contaminants. EPA previously announced that $1 billion of $5 billion is available for addressing PFAS in small and underserved communities.

EPA PFAS HAs – What's next for Minnesota?

Jim Kelly (MDH) provided an overview of the status of current PFAS guidance values in Minnesota and described how the new EPA values could impact Minnesota's own health-based values. Minnesota currently has Health-Based Values (HBVs) for six PFAS compounds: PFOA, PFOS, PFHxS, PFHxA, PFBA, and PFBS. Minnesota uses an additivity approach to calculate the risk of PFAS that occur in mixtures. Minnesota is currently looking at documents from California, the European Union, and EPA to determine if MDH can use similar methodology (based on human epidemiological data) to develop new Minnesota HBVs for PFOA and PFOS. Minnesota is aiming to have new HBVs completed by the end of 2022.

Feedback

One work group member asked what information they can provide to residents to help alleviate their concerns about drinking contaminated water. This work group member indicated that the science seems to be changing faster than communities can update treatment. Another work group member expressed appreciation for the scientific perspective but wanted to be able to communicate that all the residents are going to receive treated water. MDH indicated a goal of no PFAS exposure is not always feasible given current technology. MDH is going to continue to do their own research and determine if Minnesota's HBVs should be lowered.

Another work group member asked about how PFAS impacted vaccine efficacy. Jim explained that there have been some published studies showing a relationship between (higher) PFAS serum levels and lower vaccine

efficacy in children. However, the actual risk to public health is less clear as no cases of the vaccine preventable diseases were observed in the study populations.

Resilience of the Conceptual Drinking Water Supply Plan

Kirk Koudelka (MPCA) and Jess Richards (DNR) explained how the new EPA HAs would impact the Conceptual Drinking Water Supply Plan (Conceptual Plan). Kirk explained that the Conceptual Plan included a proactive treatment threshold by treating all wells with a Health Index (HI) of 0.5 or greater instead of using an HI of 1 (level at which well advisories are currently issued). Kirk also explained that anticipation of changing health values was one reason that there was a contingency allotment established in the Conceptual Plan. Therefore, the Conceptual Plan is still applicable and does not need to be updated.

As described in the Conceptual Plan (Chapter 10), the treatment threshold of HI of 0.5 or greater is only applicable using the HI calculation at the time of the plan release (and as written in the plan). This threshold was intended to provide a buffer in cases where concentrations in wells increased, health values changed, or new PFAS were added to the calculation after the plan release. Treatment eligibility is therefore tied to wells that either exceed the HI of 0.5 or greater using the HI calculation at the time of the plan release and/or those that receive a health advisory because they exceed the HI of 1.0 using the updated calculation (Figure 10.2).

Kirk reminded the group that once the Settlement funds are depleted, the original 2007 Consent Order will fund treatment for wells with a health advisory (HI≥1).

Kirk also reviewed ongoing activities under the Conceptual Plan. They include supplying private wells, conducting private and public well sampling, connecting homes to public water supplies, etc. Kirk noted that plans with the State Board of Investment (SBI) to invest the Settlement funds is on hold until Co-Trustees can better evaluate the impact of future Minnesota HBVs and EPA MCLs. At the state level, MPCA and MDH set up an inter-agency PFAS remediation/response team to plan for lower health-based criteria across the state.

Kirk also described that MDH is working through multiple scenarios to understand how lower HBVs could impact the East Metro, including using 2 ppt (represents the MDH lab method reporting limits) for PFOS and PFOA and 4 ppt (UCMR 5 minimum reporting level) for PFOS and PFOA to evaluate impacts in the East Metro. Under these scenarios, the following wells could be impacted:

- Three public wells in Cottage Grove need more sampling
- One public well in Lake Elmo needs more sampling
- Five public wells in Woodbury need more sampling and five public wells in Woodbury that could be issued HAs

Treatment for some of those public wells were included in the Conceptual Plan.

Kirk also reviewed how these scenarios could impact private wells. Approximately 3,600 of 7,000-8,000 wells have been sampled in the East Metro. Under these scenarios tested by MDH, approximately:

- 39% of private wells would need to be resampled before determining the HI using 4 ppt
- 14% of private wells would be eligible for treatment (HI>1) using 4 ppt
- 10% of private wells do not need treatment using 4 ppt
- 37% of private wells already have well advisories (based on current HBVs)

- *above values are similar for 2ppt

Feedback

One work group member asked if labs in Minnesota have the ability to test to down to 2 or 4 ppt and/or to the parts per quadrillion. Jim explained that regular labs may not yet have the ability to measure these quantities. Though not explicitly mentioned during the work group meeting, there are no laboratories currently with the capability to detect PFAS down to sub-ppt level (i.e., ppq, where EPA interim guidance values are for PFOA and PFOS).

Another work group member asked if granulated activated carbon (GAC) treats to non-detect levels. Jim explained that GAC could treat to non-detect, depending on how often the media is changed.

A workgroup member and representative from Woodbury read a prepared remark and asked if the Co-Trustees would commit in writing to treating all wells to non-detect levels or would reimburse communities that need to increase their system capacities to meet forthcoming EPA standards. Kirk requested an email copy of the prepared response.

A few work group members asked if it was possible to hold off on spending Priority 2 funds until the financial impact to the Conceptual Plan was determined. One work group member was concerned about the costs associated with re-testing many wells. Jess (DNR) explained that natural resource protection was a piece of the Settlement, but that the Co-Trustees would speak to the work groups prior to spending Priority 2 funding if needed.

Another work group member expressed concern that the Legislature had not yet come to a conclusion about White Bear Lake and suggested that it might be worth looking back at options considered under the Conceptual Plan other than the final options selected. Their community is already using expedited funds to connect people to municipal water, despite the fact they are unable to get more water appropriations. They are very concerned that they could not tell citizens where their water would come from in the future, and now feel they are unable to tell citizens if the water they receive will be clean.

One work group member expressed concern about why EPA's guidance values for PFOA/PFOS are lower than MDH's and suggested that there would be an advantage to following EPA's guidance for state and communities in terms of safety and communication.

One work group member referenced past MDH health outcome studies, including a 2018 report that concluded there were no identifiable health impacts related to PFAS exposure in the East Metro. This work group member was concerned that MDH had a bias against EPA's new science to justify their previous findings. The work group member was unsure why MDH could not adopt EPA's new standards now. Jim explained that MDH uses the best available science at a given time. In 2018, they were using the tools available to them and clarified that the report does not state there are no health impacts, but that they have not been observed using the data available to MDH. Kirk emphasized that MDH follows the science and needs robust science to justify any health-based values and will review what supporting data EPA provides on their values. Kirk also reminded the work group that whatever value MDH decides to use must be applicable across the State. Not all communities have a Settlement which can provide funding for treatment beyond the EPA requirements (e.g., treating all water). The work group member said they understood that the East Metro was unique with the Settlement, but that the primary purpose of the Co-Trustees is to protect communities. They said since health-based Standards have

continued to be lowered, it made sense to treat as much water as possible now. Another work group member reminded the work group that if Minnesota or East Metro is using values lower than EPA values, they would have to defend that decision, which would require time, money, and research.

Other work group members echoed the prepared statement from Woodbury in support of treating all wells and one work group member stressed the importance of having an open and transparent public process for amending the Conceptual Plan. They do not feel that Co-Trustees are currently being transparent. Kirk said that this work group meeting was an opportunity to get feedback from work group members so that decisions can be made and then relayed to community members. The Co-Trustees are trying to balance decisions with timelines of on-going work to determine what decisions can be made now or later while also considering the implications these decisions have on planning for other communities in the East Metro.

One work group member asked if Project 1007 would continue in light of funding allocations potentially needing to be reevaluated. Kirk explained that this was a larger question about funding reallocation. If additional funding is needed for treatment, Co-Trustees would plan to use contingency funds, not drinking water protection funds. Project 1007 is important to support a balanced plan because it targets the source of the contamination instead of only focusing on treatment. However, Co-Trustees will continue to consider reallocation and discuss it with work group members. The same work group member expressed concern that pump and treat methods could not reasonably manage parts per quadrillion or ppt. The State should be considering other methods of aquifer treatment as well.

One work group member asked about the process of drawing East Metro borders. They asked if there was a scientific reason for excluding nearby systems (e.g., Hastings). Kirk explained that not all nearby communities were impacted from 3M. That point had to be proven before communities could be involved in the Settlement.

A few work group members had questions about sampling. Kirk explained that MDH continues to sample municipal wells, and the MPCA continues to sample private wells, prioritizing wells around those that had known PFAS contamination. That is a typical sampling process. Kirk noted that not all private wells have been sampled as some well owners do not give permission. When asked about the timing of sampling, work group members expressed that the sooner testing could begin, the better. Another work group member asked if the new sampling information would go on the MDH dashboard. A representative from MDH said yes.

Another work group member asked how funds from the Infrastructure Bill would be used throughout the State. Kirk explained that was still up for discussion and had not yet been determined.