

Achieving Greater Success Through Strong Partnerships

November 14-17, 2023 • Kansas City, MO

PFAS Policy updates and initiatives to support human health and the environment

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- Status of per- and polyfluoroalkyl substance (PFAS) regulation in Minnesota's Superfund program
- Evaluating PFAS impacted drinking water in Minnesota including Department of Defense (DoD) sites
- Personally identifiable information (PII) policy differences and impacts at DoD sites in Minnesota



MPCA Framework for addressing PFAS





PFAS pollution wherever possible





Manage

PFAS pollution when prevention is not feasible or pollution has already occurred





Clean up

PFAS contaminated sites

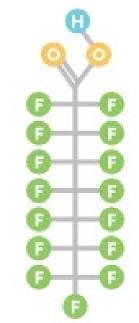
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MPCA Superfund Program

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MPCA - PFAS Monitoring Plan

- PFAS Monitoring Plan released in March of 2022 PFAS Monitoring Plan (state.mn.us)
- Provides guidance for monitoring PFAS at:
 - Solid waste, wastewater and stormwater facilities
 - Hazardous waste landfills
 - Facilities with air emissions
 - Superfund and brownfield sites (Remediation Appendix E)
- The PFAS Monitoring Plan does not establish facility-specific requirements.
- It outlines how the MPCA plans to prioritize locations for PFAS monitoring and what the monitoring will entail



Remediation Division PFAS Guidance Development

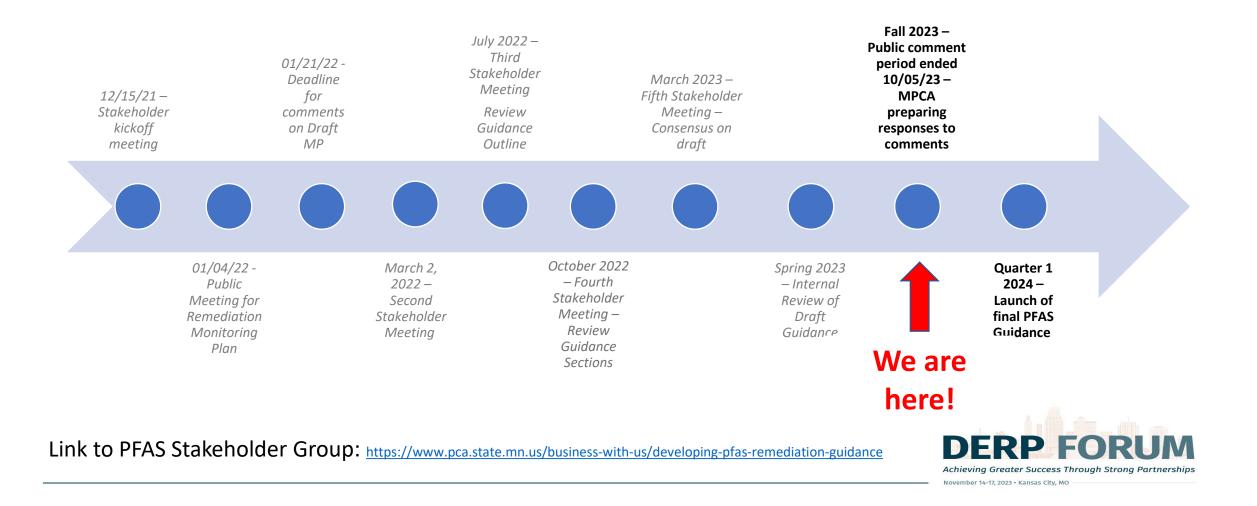
The MPCA Remediation Division is developing a program-specific PFAS guidance document including:

- Site usage (potential for historic PFAS use at a site)
- Site investigation
- Risk assessment
- Remediation
- Site closure
- Brownfield sites
- Communications and Environmental Justice



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Remediation Division PFAS Guidance Timeline



Remediation Division PFAS Guidance Development

- Because PFAS found in releases and threatened releases meet the definition of a hazardous waste under Minn. Stat. § 116.06, subd. 11, they are therefore hazardous substances under MERLA, Minn. Stat. § 115B.02, subd. 8.
- PFAS Monitoring Plan will provide PFAS direction for Remediation until Remediation PFAS guidance document is released
- MPCA Remediation is currently requiring Responsible and Voluntary Parties to sample, mitigate and remediate for PFAS
- PFAS Guidance document will be iterative as the science around PFAS investigation, fate and transport and remediation continues to evolve



Human Health-Based Guidance for PFAS in drinking water

Minnesota Department of Health (MDH)

Water Value Type	PFOS	PFOA	PFBA	PFHxA	PFHxS	PFBS
Health Risk Limit (HRL)	300	<mark>35</mark>	<mark>7,000</mark>			7,000
Health Based Value (HBV)	<mark>15</mark>			<mark>200</mark>	<mark>47</mark>	<mark>100</mark>

Human Health-Based Water Guidance Table - MN Dept. of Health (state.mn.us)

Concentrations are in nanograms per liter (ng/L)

HRLs are promulgated by Minnesota Department of Health (MDH)

HBVs are technical guidance calculated by MDH using the same methodology as HRLs; however, HBVs are not promulgated

indicates the value used by MPCA and MDH to determine when mitigation is necessary for a drinking water supply



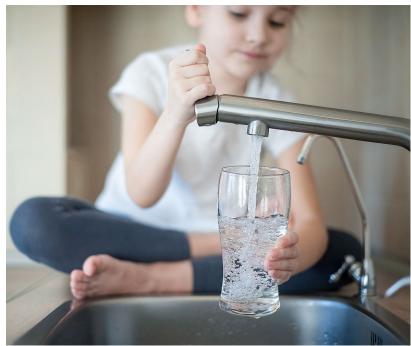
MN PFAS Health Risk Limits (HRLs) and Health Based Values (HBVs) for drinking water

- HRLs are promulgated, HBVs are not
- HRLs are developed by toxicologists at MDH using the best science and public health policies available at the time of their development
- HRLs are based only on potential health impacts and do not consider cost and technology of prevention and/or treatment
- HBVs are technical guidance calculated using the same methodology as HRLs, and are on their way to becoming promulgated HRLs



Evaluating impacted drinking water in Minnesota

- Municipal water systems are regulated by the MDH under the federal Safe Drinking Water Act (SDWA)
- Private drinking water well impacts from Superfund sites are evaluated by the MPCA using MDH's HRLs and HBVs to determine when mitigation is necessary
- When responsible parties use federal values for evaluating private drinking water well impacts at a Superfund site in Minnesota, this is inconsistent with the state approach

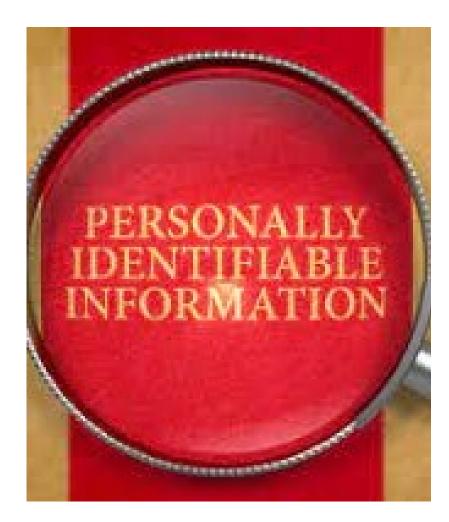




Evaluating impacted drinking water in Minnesota

- MPCA has had to provide mitigation for private drinking water wells at DoD lead sites where the PFAS concentrations exceed state but not federal values
- This has created confusion and delay for residents receiving mitigation from the state while other well owners nearby are receiving mitigation from DoD because they are above the federal values

Drinking water Value	PFOS (ppt)	PFOA (ppt)
HRL (MDH)	300	<mark>35</mark>
HBV (MDH)	<mark>15</mark>	
RSL (EPA)	70 DER	70 PFORUS



Personally Identifiable Information (PII)

- Site information including analytical data collected for MPCA Superfund sites is public information and we are required to provide it upon request under State Statute
- This has created delays in MPCA and MDH receiving pertinent drinking water well data, homeowners had to call the state to share their results and discuss next steps with us
- Homeowners were told by DoD their drinking water is safe under federal levels and MPCA had to tell them their water is not safe under state criteria and that the state would be providing mitigation

Summary

- State and federal drinking water criteria for PFAS will continue to be in a state of flux for the foreseeable future
- Developing and implementing a consistent approach for determining how to handle impacted drinking water that is between the state and federal criteria would be very helpful
- Developing more effective communication strategies to handle the issue of PII that would reduce delays in providing mitigation to impacted parties and reduce confusion and anxiety to homeowners would be very beneficial to all parties







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