Frequently Asked Questions on the MPART and EGLE Process to Establish Drinking Water MCLs for PFAS

June 27, 2019

What was MPART's Science Advisory Workgroup's role in helping Michigan establish drinking water MCLs?

On March 26, 2019, Governor Gretchen Whitmer directed the Michigan PFAS Action Response Team (MPART) to form a Science Advisory Workgroup to recommend health-based values for PFAS by July 1, 2019. The conclusions are posted on the MPART website under "MPART Meetings".

These health-based values will inform the rulemaking for the Michigan Department of Environment, Great Lakes, and Energy's (EGLE's) drinking water standards for Michigan. Once passed, these drinking water standards must be followed by public water supply operators around the state. The standards are known as Maximum Contaminant Levels, or MCLs. MCLs have been developed for many different chemicals over time, not just PFAS.

What did the Science Advisory Workgroup do?

The Science Advisory Workgroup reviewed existing reports and drinking water standards from around the nation to develop the health-based values that were shared with MPART on June 27, 2019. The Workgroup:

- Reviewed the 2018 report by the independent MPART Science Advisory Panel

 This panel said that the United States Environmental Protection Agency's (USEPA) Lifetime

 Health Advisory (LHA) level of 70 parts per trillion (ppt) or nanograms per liter (ng/L) for PFOS

 and PFOA, alone or combined, might not be low enough to protect human health.
- Considered the health-based screening levels developed by the Michigan Department of Health and Human Services (MDHHS)
 This group was led by the MPART Human Health Workgroup and used recommendations from groups including the Natural Resources Defense Council (NRDC), Agency for Toxic Substances and Disease Registry (ATSDR), and other states that have proposed or established MCLs.
- Looked at the available science and proposed standards for several other PFAS beyond PFOS and PFOA.

What was the outcome of the MPART Science Advisory Workgroup's work?

The Science Advisory Workgroup focused on the most common five compounds that other states and ATSDR have been reviewing, which are: PFOA, PFOS, PFNA, PFBS, and PFHxS. They also developed health-based values for two more PFAS, which are: PFHxA and GenX.

The Workgroup developed these health-based values as a starting point for the development of EGLE's Maximum Contaminant Levels (MCL) for these PFAS:

| Table 1: Drinking | Water | Health-Based | Values | for Specific | PFAS |
|-------------------|-------|--------------|--------|--------------|------|
| | | | | | |

| Specific PFAS | Drinking Water Health Based Value parts per trillion (ppt) | |
|---------------|--|--|
| PFOA | 8 ng/L (ppt) | |
| PFOS | 16 ng/L (ppt) | |
| PFHxS | 51 ng/L (ppt) | |
| PFNA | 6 ng/L (ppt) | |
| PFBS | 420 ng/L (ppt) | |
| GenX | 370 ng/L (ppt) | |
| PFHxA | 400,000 ng/L (ppt) | |

Scientists identify PFAS based on the number of carbons they contain. They look at them as two groups: long-chain (6-8 carbons or more) or short-chain (less than 6-8 carbons). This Science Advisory Workgroup also recommended MPART and water supply operators work toward reducing contamination from other long-chain PFAS when found at levels above 6 ppt.

The Science Advisory Workgroup determined that there is not enough information at this time to support health-based values or drinking water standards for other PFAS chemicals. However, the report concluded that these PFAS are expected to have about the same health effects. It also said that EGLE should continue to look for other PFAS, identify other sources, try to limit human exposure, and continue to share findings with the public.

The report acknowledges that science continues to advance at the state and federal level. It is expected that changes to these numbers will happen over time as scientists learn more and apply professional judgement.

The report noted that there are not large differences between the health-based values developed by the Science Advisory Workgroup and those from the handful of other states looking at PFAS standards for drinking water. The report also noted that all state and federal health-base values for PFAS in drinking water are trending lower over time.

What happens next in the rule-making process?

The health-based values derived by the Science Advisory Workgroup will be considered during the required rule-making process. EGLE will draft the rule as quickly as possible and get input from stakeholders before October 1, 2019.

After October 1, the draft rule will follow the Administrative Rules Process handled by the Environmental Rules Review Committee, Michigan Office of Administrative Hearings and Rules, and Joint Committee on Administrative Rules. The final rule is expected to be adopted by April 2020.

Will Michigan change its clean-up criteria of 70 ppt for PFOS/PFOA?

Michigan law states that if a state drinking water standard is created for a chemical that has an existing groundwater cleanup criterion, then the new state drinking water standard for that chemical becomes the state's groundwater cleanup criterion. Michigan currently has groundwater cleanup criteria for PFOS and PFOA. Other PFAS chemicals would have to follow a rule-making process to establish groundwater cleanup criteria.

How did MDHHS's previous work on health-based screening levels inform the Science Advisory Workgroup's review?

MDHHS shared their process used to develop the Public Health Screening Levels for PFAS that were developed by the MPART Human Health Workgroup. These Public Health Screening Levels were designed for use in the MDHHS ATSDR Public Health Assessment process during the state's ongoing response to PFAS contamination.

MDHHS does not generally recommend action when PFAS is below the screening level, unless the nearby groundwater plume is known to have very high levels of PFAS or is not well defined. When PFAS is above the screening level, MDHHS will gather more information, notify those who may be exposed, and make public health recommendations to limit the potential for exposure.

The screening levels document shared by MDHHS is one of many that the Science Advisory Workgroup considered when developing the health-based values.

For more information about health effects and what individuals can do to avoid PFAS exposure visit: https://www.atsdr.cdc.gov/toxfaqs/tfacts200.pdf

What is the immediate impact on homeowners or municipalities with PFAS detections in their drinking water?

MDHHS and EGLE continue to work with closely with individual homeowners, schools and municipalities when any PFAS is detected.

If you have a private well and are near <u>an official MPART site</u>, please contact your local health department, MDHHS, or EGLE for more information.

For public water supplies not in an EGLE MPART site investigation, MDHHS works with EGLE to provide the following resources:

https://www.michigan.gov/documents/som/DHHS Toolkit-PFAS FAQ 623413 7.pdf

If homeowners are testing their own water and want to talk to a toxicologist about their results, they can call the MDHHS toll free number 800-648-6942 and ask to talk to a drinking water toxicologist.

Why is Michigan moving so fast? Why not wait for the USEPA to act?

Michigan is well ahead of most states in responding to PFAS, so moving forward this year with drinking water MCL's is the next logical step in our commitment to safer drinking water for Michiganders.

The State of Michigan has consistently encouraged the federal government to prioritize PFAS response. We have also stressed the importance of national research and standards to guide states like Michigan, that are working hard to protect our citizens.

Michigan is also part of the group of Great Lakes states and provinces calling on the federal governments of the United States and Canada to rush risk communications, site assessments, remediation, research on the treatment and prevention of PFAS contamination, and assume costs associated with these efforts for contamination that arises on and from federal properties. http://www.gsgp.org/media/2172/gsgp-resolution-pfas-coordination-6-14-19.pdf

While we continue to support federal action on PFAS, we are concerned that the timeline for federal action on PFAS standards and regulations is not more aggressive.

Michigan remains available to assist the USEPA. We also support continued efforts to expedite the federal process of decision making.