

Questions and Answers Sheet

MassDEP's Briefing for Public Water Suppliers on EPA's PFAS Health Advisories

8/1/2022

EPA Health Advisories Questions:

1. **Is it likely that the EPA's new 2023 threshold will be "0" or non-detectable for PFAS and related chemicals?**

When developing the proposed and final PFOA and PFOS Maximum Contaminant Levels (MCLs), EPA will consider three feasibility factors: feasibility of measuring down to that level, feasibility of treating to that level, and the cost and benefits. The proposed/final MCLs are expected to be some degree higher than the interim Health Advisory levels, however MassDEP cannot speak to any exact values at this time. Proposed MCLs are expected in late 2022, and final MCLs are expected in 2023.

2. **Could clarification be provided on what GenX and PFBS are, exactly, and what we as operators/owners should expect with these?**

GenX and PFBS are shorter chain PFAS compounds that are available in the marketplace as replacement compounds for PFOA and PFOS. Shorter chain PFAS compounds are generally believed to be less toxic to the human body from exposure than longer chain PFAS such as PFOA and PFOS. Extensive PFAS sampling in Massachusetts has not found GenX and PFBS at problematic levels in the Commonwealth's drinking water.

3. **What does it mean GenX (with a health advisory of 10 parts per trillion [ppt]) is a replacement for PFOA and likewise PFBS (with a health advisory of 2,000 ppt) replaces PFOS?**

"Replacement" refers to GenX being a substitute compound in the marketplace for uses of PFOA and PFBS being a substitute compound for uses of PFOS. However, even though PFOA and PFOS are no longer manufactured in the United States, they persist in the environment and so are still being detected.

4. **How much confidence is there in the ability of scientists (toxicologists) to discern meaningful health impacts at exposure levels of 4 parts per quadrillion of anything?**

MassDEP is currently reviewing EPA's assessment and the science behind it. PFAS health exposure studies expose participants to higher levels and extrapolate to determine at what level there would be no health effects. Therefore, the final "no effect" level is much lower than the levels participants are exposed to during the study.

5. **Currently, what is the lowest accurate testing levels of these compounds?**

Laboratories using EPA methods 537/537.1 are capable of detection levels less than 1 ppt. MassDEP requires laboratories to achieve a quantification level of 2 ppt for the six regulated PFAS.

6. **How low do current treatment levels reduce PFAS and PFOS?**

Public water systems in Massachusetts that have installed typical treatment for PFAS, such as granular activated carbon (GAC), have treated their water so that the sum of the six regulated PFAS ("PFAS6") are not detected at levels of 2 ppt.

- 7. MassDEP had a strong emphasis on Sensitive Subgroups when developing its PFAS6 MCL. The EPA suggests that the Health Advisories are for all consumers. Do you have any suggestions on reconciling who needs to be concerned?**

Different scientific studies were used to develop the EPA levels than were used to develop the Massachusetts PFAS6 MCL. EPA concluded that its health advisory levels are protective for all consumers of the water for a lifetime of exposure, not just sensitive subgroups.

- 8. Is it likely that the EPA will seek to have PFAS and related chemicals declared "hazardous" substances, and, if so, will that effectively require all public water suppliers to remove all such chemicals to a non-detect level?**

MassDEP cannot speak for EPA plans, but we will continue to share all EPA information with you as it becomes available. For more information on EPA's PFAS Strategic Roadmap:

https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf and EPA's National PFAS strategy: <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/national-pfas-testing-strategy>

Other EPA links of interest

<https://www.epa.gov/newsreleases/epa-responds-new-mexico-governor-and-acts-address-pfas-under-hazardous-waste-law>

https://www.epa.gov/system/files/documents/2021-10/oct_2021_response_to_nm_governor_pfas_petition_corrected.pdf

Massachusetts PFAS6 MCL Questions:

- 1. The 3-year review cycle was mentioned. Can you clarify when the MA MCL might change to incorporate this new info?**

MassDEP is currently reviewing the science and assessments from EPA and awaiting the final opinion of EPA's Science Advisory Board. EPA will release the proposed standards in late 2022 and the final standards are anticipated to be released sometime in 2023. At that time, MassDEP will review the levels against our current MCL. States are required to implement EPA's regulations and have standards that are at least as stringent as EPA's. If EPA's final PFOS and PFOA MCLs are more stringent than Massachusetts' current PFAS6 MCL, MassDEP will be required to lower its standard to a level at least as stringent as EPA's.

- 2. How many Public Water Suppliers have tested for PFAS to date?**

1,468 public water systems in the Commonwealth are required to sample for PFAS. All Community and Non-transient Non-Community systems have already tested. Transient Non-

Community systems have until September 30, 2022, to collect, analyze and report their PFAS samples. To date, 1,300 of the 1,468 systems required to sample have already tested for PFAS.

3. Why doesn't the MA DEP MCL process also consider feasibility and costs?

MassDEP determined that analytical and treatment feasibility at the proposed standard for the subgroup of regulated compounds was well established when it considered the PFAS6 MCL. In addition, MassDEP followed the requirements of the State Administrative Procedure Act, MGL c.30A. Section 5 of this law, in particular, required MassDEP to evaluate the new regulation's fiscal effect including on the public and private sector, and to prepare a statement considering the impact of the regulation on small business.

PFAS Funding Questions:

- 1. Can we have a correction on what funds are available for PFAS treatment? My district had applied to the town for ARPA funds and was denied. So, ARPA is not a source of funding for everyone. And the BIL funding is not money but a funding process or loan. So money is not freely available.**

The State Revolving Fund (SRF) program offers 0% interest loans for PFAS remediation projects. Projects serving disadvantaged communities are eligible for added subsidies in the form of principal forgiveness for a portion of the SRF loan (<https://www.mass.gov/info-details/the-disadvantaged-community-program>).

- 2. I have many community small systems that are privately owned (condo complexes and manufactured home communities). They are ineligible for grants as they are not municipal, tribes, or non-profits. Many cannot take out a low interest loan as these systems have mortgages; the holders of the mortgages are first lien-holders, but the low interest loans available also want to be first lien-holders. What help is available for these types of systems?**

Privately owned public water systems are eligible for the SRF program and MassDEP SRF staff are committed to helping small privately-owned systems navigate the loan process. However, MassDEP recognizes that the collateral needed to apply for an SRF loan can be an issue for privately-owned small systems and disadvantaged communities. There are multiple new grant programs in development specifically targeted towards helping small and disadvantaged systems with costs associated with PFAS contamination.

Small and Disadvantaged Community Grant Opportunities:

- Small and Disadvantaged Communities PFAS Response Grant Program: approximately 1 million dollars will be available for small and disadvantaged systems (those serving less than 10,000 people) for the cost of installing point of entry (POE) treatment systems or other interim or permanent measure that removes detectable PFAS to non-detect. This will be a competitive grant opportunity. MassDEP anticipates announcement of this grant opportunity later in 2022.
- Emerging Contaminants in Small or Disadvantaged Communities Grant: EPA funding to provide grants for a broad scope of assistance to small and disadvantaged communities in response to emerging contaminants. This may include sampling, outreach, treatment,

and technical assistance. MassDEP will provide additional information when EPA announces the available funding.

3. Could you clarify the rolling application process starting with 2023 IUP? Is this for all SRF projects or just PFAS projects?

The rolling application process is for all SRF planning projects and for PFAS design projects. Once the 2023 Final Intended Use Plans are published, MassDEP will start accepting loan applications on a rolling basis throughout the year.

4. Will this program cover the disposal of Point of Use (POU) treatment filters?

MassDEP's grant programs and SRF funding cover capital costs only, not operation and maintenance costs.

5. Will SRF funding allow for PFAS design only or will that include Emerging Contaminants design too?

SRF financing is being offered for the design phase of PFAS remediation only.

6. If we wanted to install PFAS treatment for detectable levels of PFAS but that are not above the MCL, would we be eligible for SRF?

Yes, it would be an eligible project; however, because program capacity is limited, preference will be given to systems that have demonstrated exceedances of the MCL. This would be reflected in the scoring of the projects to develop the Intended Use Plan.

Miscellaneous Questions:

1. Can you comment on the recent Guardian article relative to total organic fluorine testing and its possibility of being a better indicator of potential contamination?

This analytical technology is new, and the sensitivity is lower than the EPA methodologies currently used by Massachusetts certified laboratories to analyze PFAS in drinking water. The total organic fluorine (TOF) testing methodology would not be capable of demonstrating levels below the Massachusetts PFAS6 MCL. Additionally, TOF does not identify which PFAS are present and as such may not give useful results when individual PFAS have widely separated levels of concern (e.g., GenX vs. PFBS).

2. Is Manganese considered an "emerging contaminant" in Massachusetts?

Yes, manganese is considered an emerging contaminant.

3. Once the GAC is spent and has to be disposed of, what are systems doing and at what cost?

MassDEP encourages public water suppliers to work with their GAC vendors during the planning process on regeneration and other reuse options for spent GAC. See EPA's **Interim Guidance on Destroying and Disposing of Certain PFAS and PFAS-Containing Materials That Are Not Consumer Products**: <https://www.epa.gov/pfas/interim-guidance-destroying-and-disposing-certain-pfas-and-pfas-containing-materials-are-not>. MassDEP will share information on the

disposal practices of Massachusetts' public water systems when it is compiled and available. MassDEP encourages public water suppliers to contact their regional Drinking Water Program contacts to discuss their specific disposal issues.

- 4. Revised PFAS MCLs could make some PFAS treatment systems that PWSs are currently designing obsolete, with huge cost implications. Would the treatment systems available now be practicable under significantly lower MCLs?**

MassDEP is aware that there may be changes in PFAS science and solutions and will continue to discuss such potential changes with PWSs and other interested parties during the planning, design and funding discussions.

- 5. How will DEP's Water Management Act program handle potential operational changes on sources in order to minimize PFAS concentrations?**

If a PWS needs to withdraw volumes of water from its sources that exceed its Water Management Act permit, it should contact the Water Management Act program to discuss its options.

- 6. Some PFAS treatment systems require that manganese be removed first. The cheapest technology seems to be water softening with sodium chloride. This adds sodium to the finished water and, possibly, to the raw water via underground disposal of backwash water. What is DEP's position on this when a system's sodium levels already exceed Health Advisories?**

This will be addressed on a case-by-case basis. Please contact your MassDEP regional Drinking Water Program contact to discuss system-specific technical responses.

- 7. Will the DEP be providing any assistance in reviewing filtration or other methods to remove PFAS and will the state or Feds be helping with costs? Has DEP given any thought to getting filtration manufacturers and suppliers on a state bid list, which could be very helpful in making such equipment more affordable?**

MassDEP will review all treatment options submitted by a PWS to address PFAS. See the answers above regarding PFAS treatment funding. MassDEP will consider the request to "getting filtration manufacturers and suppliers on a state bid list."

Additional Resources:

EPA Health Advisories: <https://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos>

Emerging Contaminants in Small and Disadvantaged Communities Grant Program:
<https://www.epa.gov/dwcapacity/emerging-contaminants-ec-small-or-disadvantaged-communities-grant-sdc#:~:text=Background-,The%20goal%20of%20the%20Emerging%20Contaminants%20in%20Small%20or%20Disadvantaged,states%2C%20territories%2C%20and%20tribes>

MassDEP PFAS Information: <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>

MassDEP SRF Program: <https://www.mass.gov/lists/state-revolving-fund-applications-forms>