

**Questions for MassDEP – PFAS Roundtable with the Public Water Systems**  
**March 9, 2021**

**SAMPLING:**

- 1. Is there anything to be gained by removing (if possible) Teflon taped fittings from potential PFAS sample taps?**

MassDEP does not prohibit the use of Teflon tape or equivalent dopes in drinking water facilities. Nor has MassDEP taken the position that PFAS treatment must be constructed without any Teflon tape, dope, components, etc. At this point, although MassDEP is aware that the laboratory instrumentation that is used to test for PFAS requires a Teflon-free retrofit when it is put into service, MassDEP has not heard a convincing argument that this type of application of Teflon tape is contributing significant amounts of PFAS. This is not to say that we won't identify this practice as a contributing PFAS source. The outstanding question is the scale of any potential contribution.

- 2. Will the free PFAS testing for TNC clients fulfill the required sampling that must be reported to the state by Sept. 20, 2022 for these clients?**

Yes. Analyses conducted under the Free PFAS Lab Analyses Program which pass QA/QC may be used toward regulatory baseline testing requirements. Note: As the free funding is scheduled to expire by June 30, 2021, small systems are encouraged to register for the Free PFAS Lab Analyses Program and collect samples as soon as possible so that they can reduce their implementation costs.

This response can also be found in the FAQ about MassDEP Free PFAS Lab Analyses Program for Public Water Systems. See link in Resource Section below.

- 3. When is eDEP reporting going to be implemented for PFAS sample results? And will PWS still continue to get a full lab package or only the summary available through eDEP?**

Electronic reporting of testing results via eDEP is not currently available. MassDEP will notify PWSs and laboratories when it becomes available. Reporting via eDEP will require the submittal of a full laboratory package as an attachment.

- 4. A system noted that their sample schedule contained initial monitoring for source water, why is DEP including source water sampling when the regulation calls for sampling at the entry point to the distribution system?**

The PFAS regulation requires the collection of compliance samples at the entrance point of the distribution system. For systems with multiple sources

feeding an entrance point under various operational practices, it is beneficial to analyze the level of PFAS6 in all sources that feed that entrance point to ascertain the levels of PFAS6 that may enter the distribution system under various operational practices.

**5. What will MassDEP require of the PWS if a homeowner does their own sample at their tap and there is a detection?**

The compliance sampling location for PFAS6 is the entry point to the distribution system as specified at 310 CMR 22.07G(4). Consumer tap sampling for any SDWA contaminant with a similar entry point compliance location is not regulatory and does not necessarily trigger any regulatory response by MassDEP or the PWS. However, MassDEP Drinking Water Program (DWP) practice is to discuss with the customer, or ask the PWS to discuss with the customer, how the private results compare to standards and existing regulatory results. We encourage the PWS to provide educational information to the customer and to report any follow-up to MassDEP/DWP. In some cases, PWSs may elect to offer voluntary sampling at that home to confirm the private results but MassDEP does not require that they do so.

**6. Many PWS have sample results prior to the regulation, is there guidance from DEP on pre-regulatory and post-regulatory sampling results. Pre-regulatory results may not have had the QC analysis that is currently being done (perhaps some of those samples would have fallen into the category of invalidation, but it was not put through that level of review)?**

MassDEP will review all data received and provide a case-by-case evaluation and response. PWS should contact their MassDEP Drinking Water Program regional contact with any questions. See PFAS Contacts in the Resources Section below.

**7. If a PWS only has one well or source, is it necessary to collect a raw sample or can only a finished water sample be collected?**

Sampling untreated source water is not required by 310 CMR 22.07G(7)(d) when there is only one source feeding the entry point to the distribution system. The treated water sample is used for MCL compliance purposes. However, there may be cases where an untreated source water sample is required by MassDEP, such as for investigatory purposes.

**8. Will the addition of PFAS treatment require the PWS to return to semi-annual LCR monitoring?**

Yes, the addition of any new treatment requires a PWS to return to semiannual monitoring under the LCR.

**9. How long will a PWS be required to continue monthly monitoring of a source with PFAS6 concentrations consistently between 10 and 20 ppt?**

The regulations require a PWS to continue monitoring monthly until the affected sampling location is determined in writing to be reliably and consistently below the MCL. A PWS may return to quarterly monitoring if PFAS treatment has been installed, and MassDEP has determined that location to be reliably and consistently below the MCL, as specified at 310 CMR 22.07G(8)(c). See 310 CMR 22.07G(8)(d) for criteria to be met for annual monitoring. See the PFAS Monitoring Flow Charts in the Resources Section below.

**LAB RESULTS AND LABS:**

**10. In DEP's "How to Interpret Lab Results" the document mentions nothing of understanding the importance of the QC, blank and/or sample MDL's, and surrogate's recoveries and whether the report is valid, can DEP add this information? Alternatively, could DEP share the guidance being used by UMass for PWS to evaluate their own data?**

The guidance, "How to Interpret my PFAS Laboratory Report and Compare my Results to MassDEP's Maximum Contaminant Level (MCL) for PFAS6" available at <https://www.mass.gov/doc/how-to-interpret-my-pfas-laboratory-report/download> makes mention of all the relevant sections of a full lab report including the case narrative and the QA/QC sections. It includes a page covering qualifiers, the most common indication of a QC issue, and says that "these situations often require resampling." The field blank is described as well as the need to resample if the blank shows detections. The Department has shared our QC documents with stakeholders and can make them generally available. A good resource to understand the QC requirements is Table 13 in EPA Method 537.1 (available at [https://cfpub.epa.gov/si/si\\_public\\_record\\_Report.cfm?dirEntryId=343042&Lab=NERL](https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=343042&Lab=NERL)).

**11. Will MassDEP complete the QAQC process for public water system samples, as UMass has completed for the State-funded sampling to date?**

Yes, MassDEP will continue QA/QC as it does for all other SDWA contaminants. MassDEP works with UMass in the current effort.

**12. MassDEP indicated at the Safe Drinking Water Act Advisory Committee meeting on February 23<sup>rd</sup> that it intends to scale back on its level of QC review for PFAS results; DEP should not do that until after the first year of implementation of the regulations.**

MassDEP is not scaling back on all QA/QC review and, in fact, will maintain the same level of review that other SDWA contaminants receive but based on its

experience to date will be implementing a more targeted approach for the most rigorous review where it is justified.

**13. There are numerous reports of problems with PFAS analysis including failing QA/QC, inconsistent results in split samples and variable interpretation of regulations by DEP regions. These need to be addressed before this goes on much longer, especially with the bulk of systems testing next quarter. Would DEP consider taking a pause in PFAS reg implementation and enforcement so they can focus on solving these issues?**

MassDEP is currently working with the regional offices to adopt a more efficient QA/QC process. MassDEP is not considering a pause in implementation of the regulations. MassDEP will consider analysis issues on a case-by-case basis.

**14. What percentage of samples have been identified as having QC issues?**

Current review practices accepted 75% of all reports. Of the remaining reports 10% were partially accepted (i.e. PFAS6 results were acceptable) and 11% were rejected. 4% are on hold for acceptance pending responses from the labs.

**15. What percentage of samples have subsequently been invalidated due to QC failure?**

11% of reports have been rejected for QC failures affecting PFAS6 results.

**16. Is there a correlation with QC failure and particular labs?**

There is always some variability in drinking water testing results from one certified laboratory to another. This is true whether labs are analyzing drinking water for PFAS or for any other contaminant. Testing results will vary within a lab as well as across labs. In accordance with 310 CMR 42.00 each laboratory is certified to ensure that their results meet the accepted laboratory standards set by the MassDEP Laboratory Certification Program. The same is true if a lab has been reviewed by another certification authority. Labs must pass Quality Assurance/Quality Control criteria in order to receive certification and pass periodic performance tests and audits to retain certification. The certification is subject to revocation if MassDEP finds problems. A PWS can report a lab to MassDEP for review if they experience problems. In addition, MassDEP has temporarily contracted UMass Amherst to do the Quality Control review of all the PFAS lab reports we receive from PWS. As in all analytical monitoring programs, confidence in the PFAS testing results being reported by labs and the best indication of the levels of PFAS6 in the water will increase after looking at numerous testing results over time.

**17. Can we put together a stakeholder group to discuss the PFAS QC matter going forward?**

The existing and active MassDEP's Laboratory Advisory Committee is the appropriate forum to discuss these matters.

**18. Has DEP seen seasonal variations in results?**

It's too early to tell but in some cases there does appear to be a seasonality. Whether this turns out to be the case will depend on the outcome of more sampling.

**19. Water suppliers have expressed concern about sampling costs if labs data does not pass QC, is there a role for DEP to play in standardizing an approach to address this concern?**

For samples from the MassDEP free sampling program, MassDEP is paying for any cost related to QA/QC failure. For samples where the PWS contracts with a laboratory, the contract should spell out the responsibility for the cost of any resampling. We encourage PWS when contracting for any analytical services to ensure that the laboratory is responsible for the cost of analysis related to QA/QC failure based on conditions under the laboratory's control. Note that QA/QC can fail based on contamination in a field blank (indicating a sample collection issue) or due to something else in the water (matrix interference). These problems can and do occur with the analysis of other SDWA contaminants and are beyond the control of the laboratory.

**20. Can DEP provide guidance to PWS on the process that a PWS can use to initiate an investigation into a lab's ability to properly analyze samples?**

The PWS must contact their regional Drinking Water Contact and provide a written request with documentation describing the complaint/issue.

**21. Do invalidated results get reported on Public Education, Public Notice or in CCR or are they truly thrown out?**

If MassDEP invalidates a result it is not required to be reported in PE, PN or CCR with one exception.

The exception is where PFAS6 is reported above the MCL but the surrogate recovery (a measure of the quality of the sample preparation and analysis) is lower than required. This means that the reported detections are lower than actually exist in the sample. If this is the only QC failure these results can and will be used to require PE as they indicate a level of concern even though the exact (higher) value isn't known. Your regional MassDEP Drinking Water Program contact will work with your system if this exception arises.

**22. Labs are being challenged by standard turn-around times for PFAS, how will DEP handle reporting and compliance deadlines if data is delayed?**

PWSs are encouraged to conduct all monitoring early enough in the monitoring period to accommodate potential delays in obtaining results and to be able to resample if, for example, a bottle is lost or broken. MassDEP is aware of the potential for delay as well as the challenges of any initial rule implementation issues and will evaluate each set of circumstance on a case-by-case basis. MassDEP may forbear from taking enforcement action during the initial monitoring period for each system but will document all violations. Collecting samples late in the monitoring period may play a role in whether MassDEP chooses to issue enforcement.

Under new federal rules, DWP has always provided a forbearance from the enforcement period where we document the violation and offer new rule implementation compliance assistance.

**23. Some PWS are getting lab analysis without getting the state reporting form at the same time. Is DEP going to mandate that the labs provide the state form at the same time? When does the regulatory clock start ticking and when does the PWS need to notify DEP of the results, when the lab analysis is received or upon receipt of the state form?**

As part of MassDEP's regulation, laboratories must use the MassDEP PFAS form. When labs begin to submit via eDEP this will remove issues related to the use of the paper form and will require the full report, including QC sections, be attached to the electronic submission.

**24. According to the regulation (310 CMR 22.00), the Minimum Reporting Level is the minimum concentration that can be reported as a quantitated value for a target analyte in a sample following analysis. Based on this, why is MassDEP having labs report quantities of PFAS down to the MDL?**

Detections of PFAS below the MRL but at or above the MDL ("J" values) indicate that PFAS is present in the field sample and knowing the full scope of which PFAS are present may be used in site discovery activities to help identify the likely source of contamination.

**25. In 22.07G(3)(b), it states that PFAS detection shall mean a concentration of any PFAS measured in accordance with 310 CMR 22.07G(12) which is greater than or equal to the analytical laboratory's applicable Minimum Reporting Level (or MRL). With these levels below the MRL but above the MDL being reported, what should not be a detection according to 22.07G(3)(b) means that the result will not be "Non-Detect" but instead be a quantity with "J" next to it. This is very confusing for our elected**

**officials and water commissioners to understand, let alone the public. Can you explain why this is required?**

Qualified detections of PFAS ("J" values) allow for a better understanding of the mix of PFAS at a sampling location and may help identify the source of contamination.

**26. Can MassDEP provide a list of PFAS approved testing labs?**

Laboratories certified by MassDEP for PFAS analysis can be found at <https://eeaonline.eea.state.ma.us/DEP/Labcert/Labcert.aspx>.

**TREATMENT:**

**27. EPA, when setting Drinking Water Standards, proposes affordable small system compliance technology. Did DEP consider affordable technology for small systems? We operate many small community and NTNC systems; they cannot barely afford to comply with the regulations as they were before an MCL was set for PFAS in Massachusetts. Small systems have been hit very hard by the pandemic; condo associations may be experiencing lag time in collecting HOA fees, NTNC's (many of which are businesses) were directly impacted by the pandemic, either due to closures mandated by the Commonwealth or decrease in revenue.**

No, MassDEP did not propose a small system compliance technology for PFAS6. We would note that EPA has listed GAC as a small system compliance technology for other SDWA contaminants and we included GAC as a BAT for PFAS6.

**28. Will DEP consider wellhead treatment for single sources that are more significantly impaired than other sources which all go into one treatment plant (rather than treating all the wells within the plant)?**

MassDEP will review all treatment proposals on a case-by-case basis. These may include one that only treats a subset of sources prior to a manifold point and downstream treatment.

**29. Can a Public Water Supplier (PWS) offer home treatment systems or devices or incentives for homeowner treatment systems to remove PFAS?**

Yes. A PWS may offer home treatment systems or devices or incentives for homeowner treatment systems to remove PFAS under the following conditions:

A PWS must be aware and inform consumers that home treatment systems and devices are not specifically designed to meet Massachusetts' drinking water standard for PFAS6. Currently available home treatment systems or devices

have been designed to meet the USEPA's Health Advisory of 70 ng/L for the sum of PFOS and PFOA. At a minimum, any such treatment system or device should be certified to meet the National Sanitation Foundation (NSF) standard P473 to remove PFOS and PFOA compounds so that the sum of their concentrations is below the USEPA Health Advisory of 70 ng/L. Please be aware that 70 ng/L is significantly greater than the MassDEP's drinking water standard of 20 ng/L for the PFAS6 compounds. Many of these treatment systems and devices certified to meet NSF standard P473 will likely be able to reduce PFAS6 levels below 70 ng/L, but there are no federal or state processes to confirm this possibility.

A PWS offering home treatment systems or devices or offering incentives for homeowner treatment systems must inform the homeowners of the above information and whether or not the PWS has evaluated the efficacy of specific devices to remove and maintain PFAS6 below the MassDEP MCL.

MassDEP is aware that some homeowners will decide to install a home treatment unit despite the current lack of certification by a national organization to treat water to levels below the MassDEP PFAS6 MCL. Therefore, if a PWS mentions home treatment as an option to reduce PFAS6 levels in a PFAS public notices or educational information the PWS should also inform all consumers who choose to install a home treatment system or device, that they should check to see if the manufacturer has independently verifiable monitoring results demonstrating that the device can reduce PFAS6 below 20 ng/L. For more detailed information on home treatment systems see <https://www.mass.gov/service-details/home-water-treatment-devices-point-of-entry-and-point-of-use-drinking-water> and <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas-in-private-well-drinking-water-supplies-faq>.

A PWS delivering water with PFAS6 concentrations over 20 ng/L (as measured at any entry point to the system) must obtain MassDEP Drinking Water Program written approval before offering any home treatment systems or devices or incentives for homeowner treatment systems for PFAS6 removal, such as rebates.

A PWS delivering water with PFAS6 concentrations below 20 ng/L and following MassDEP guidance (see question 14) at <https://www.mass.gov/doc/per-and-polyfluoroalkyl-substances-pfas-in-public-drinking-water-supplies-questions-and-answers/download> and <https://www.mass.gov/service-details/home-water-treatment-devices-point-of-entry-and-point-of-use-drinking-water> may offer rebates and other assistance with home treatment systems or devices without obtaining prior MassDEP Drinking Water Program approval for such programs.

A PWS in violation of the PFAS6 MCL must comply with 310 CMR 22.23 if seeking to use home treatment devices to comply with the PFAS6 MCL. For



more information see <https://www.mass.gov/doc/self-guide-for-point-of-use-and-point-of-entry-treatment-devices/download>.

For more information contact your MassDEP regional PFAS contact or the Drinking Water Program at [program.director-dwp@mass.gov](mailto:program.director-dwp@mass.gov).

### **SOURCE IDENTIFICATION/WASTE SITE QUESTIONS:**

**30. If PFAS contamination is from a Federal site (such as a military base) or a site being managed by the Superfund Program, and there is no federal standard, will water suppliers be able to recoup their costs of treatment from these Federal sites?**

The promulgation of a Massachusetts MCL for PFAS6 makes the prospect for contribution for treatment of PFAS6 contamination more likely at sites managed under the federal Superfund Program, although the timing may not meet a water supplier's immediate need to address the problem. State standards that are more stringent than the equivalent federal criteria are identified as "applicable or relevant and appropriate requirements", or "ARARs". Selected remedies at Superfund sites must comply with identified ARARs (unless a waiver is justified), although the timing will follow the often lengthy federal process. At state sites undergoing assessment and cleanup through the Massachusetts Contingency Plan, regulations often require more timely action by the parties conducting the cleanup, including – where appropriate – contribution to treatment costs.

**31. DEP's recent analysis that Anvil 10+10 containers were leaching PFAS into the product has us wondering if DEP has done any analysis on the containers used to transport and store water treatment chemicals?**

The PFAS detected in Anvil 10+10 has been associated with a fluoridation process used to enhance container stability. MassDEP and MDAR are working with USEPA to evaluate PFAS in such containers, test other pesticide types and to assess what other products, including water treatment chemicals, may use fluorinated containers.

**32. Is MassDEP aware of instances of common equipment or materials used in production facilities that may contribute PFAS? This would be beyond the concerns of Teflon tape and pipe sealant. Can research be done to better understand this potential similar to the work done to understand PFAS in Anvil 10 + 10? Are NSF certifications able to establish that PFAS levels at the part per trillion level are not able to leach from drinking water equipment?**

MassDEP is not aware of any at this time. MassDEP will investigate whether any fluorinated plastics are used in common equipment or materials in this sector.

**33. Will DEP be doing audits on previously closed BWSC sites that may pose a risk?**

A previously closed BWSC site may still have assessment and cleanup obligations if new PFAS-related contamination is discovered. This may come about in a number of different ways, including through the Waste Site Cleanup audit program. In cases where PFAS contamination has been found in specific public or private drinking water supplies, MassDEP uses a number of tools available to identify potential sources of the contamination and require potentially responsible parties to initiate response actions. This is known as Source (or Site) Discovery. More broadly, MassDEP is working across its programs to identify common sources of PFAS to the environment – Source Discovery is just one aspect of this work. As the Department understands these sources better, actions directed towards these potential sources (such as targeted sampling, Requests for Information, and possibly BWSC audits) may be initiated even before contaminated downgradient wells are reported.

**34. Will DEP be providing better guidance to LSPs on identification of sites that had a process or product applied (current guidance seems limited based on knowledge of PFAS containing material)?**

As noted above in #33, as the Department learns more about sources of PFAS contamination to the environment, there will be a number of likely follow-up actions. This would include updating guidance to Licensed Site Professionals (LSPs) on where/when sampling for PFAS should be included in the site assessment.

**35. Does DEP have a process for undertaking an investigation after the PWS identifies PFAS in their source, if so, what is that process and will you proactively share that with impacted water systems?**

MassDEP's Source Discovery activities implemented after a PWS identifies PFAS in their source will be case specific – there is no single process. Regional staff in the Waste Site Cleanup and Drinking Water Programs coordinate closely on case specifics and information can/will be shared with affected water systems as appropriate.

**36. If EPA regulates PFAS as a hazardous waste, what is the potential liability to a PWS and is there any legal exemption under state law for PWS for federal standards under CERCLA if EPA regulates it?**

Under CERCLA (the federal Superfund law), EPA may soon designate PFAS as a "hazardous substance" (not "hazardous waste"). This would make EPA's regulation of PFAS similar to how they regulate other hazardous substances we are more familiar with, such as chlorinated solvents (e.g., trichloroethylene). The

“hazardous substance” designation would provide EPA with the authority to require parties responsible for the contamination to include PFAS in the Superfund assessment process and, where necessary, address risks posed by these contaminants. For what this means to a PWS affected by PFAS at/from a Superfund site, the Public Water Supplies currently affected by *non-PFAS* contamination at/from a Superfund would provide examples. MassDEP would also note that state law cannot provide legal exemptions for *federal* liability.

**37. Has DEP investigated any association between septic-system effluent (i.e., nitrate) and PFAS?**

The Silent Spring Institute (SSI) and recent Harvard University studies of PFAS in waters of Cape Cod suggest that septic systems may be a source of various PFAS. However, MassDEP is not aware of evidence that indicates a strong overall association of septic system inputs and PFAS6 above the MCL and has not begun an investigation of the association between PFAS contamination and septic systems.

**38. How has waste site cleanup bureau scaled up to address the extra work of discovering the sources of PFAS contamination that ultimately will be discovered from testing PWS’s and Private wells?**

Consistent with MassDEP’s overall approach to the resource demands created by the discovery of PFAS contamination, the waste site cleanup program has implemented a combination of measures, including the hiring additional staff, re-organizing existing staff, prioritizing the PFAS work, and the use of contractors.

**PUBLIC EDUCATION/PUBLIC NOTICE/COMMUNICATION:**

**39. Where are the templates for public notice and public education? This regulation is 6 months old, yet these items are still not publicly available on DEP’s website.**

MassDEP is developing PFAS specific PN and PE templates. The templates are being finalized with revisions based on the first rounds of public education materials sent by PWSs. While the templates are being finalized, PWSs will be provided with templates as needed by the regional MassDEP office. Standard notification templates can be found here: <https://www.mass.gov/lists/public-notification-forms-and-templates>.

**40. Why did DEP add immune-compromised to the sensitive subgroup? What support has DEP given to water systems who put out notices that did not include this as a sensitive subgroup to explain why this group was added?**

Recent developments have further heightened concerns regarding potential PFAS effects on the immune system. In July 2020, the European Food Safety

Authority (EFSA) published an updated PFAS assessment and concluded that “Based on available studies in animals and humans, effects on the immune system were considered the most critical for risk assessment.” Based on this finding, EFSA proposed a PFAS food intake limit based on potential immune effects for the sum of PFOA, PFNA, PFHxS and PFOS.

The COVID-19 pandemic has also heightened concerns over potential PFAS effects on the immune system as these could potentially enhance susceptibility or reduce vaccine effectiveness. These possibilities have been raised by several academic researchers.

Based on the above and the potential that individuals with compromised immune systems may be more sensitive to PFAS immune effects, MassDEP has decided it is prudent to update the sensitive subgroup for PFAS exposures attributable to drinking water to include individuals diagnosed by their health care provider to have a compromised immune system.

MassDEP have developed a document outlining this justification, and it is available at <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas>.

**41. Would you please define exactly what immune-sensitive or immune-compromised means?**

The definition of immune-compromised used for the purposes of defining the sensitive subgroup is people diagnosed by their health care provider to have a compromised immune system.

**42. What is DEP and DPH doing for broader education to Commonwealth’s residents and health care providers about PFAS?**

MassDEP and DPH are coordinating on PFAS and will be sharing information on this aspect of the program in the near future.

**MCL COMPLIANCE:**

**43. What will be the process to turn a well back online if it was taken offline for a result above 20 ppt?**

MassDEP will evaluate any such request on a case-by-case basis taking into consideration: the level of PFAS6 in the offline well, the length of time the well has been offline, the need to put the well back online and any other relevant actions the PWS has taken to mitigate the risk to public health. The PWS may be required to monitor the well prior to it going back online and may be required to issue PE/PN depending on the level of PFAS6 that will be delivered to the public.

PWS should contact their MassDEP Drinking Water Program regional contact with any questions. See PFAS contacts in the Resources section below.

**44. Can DEP provide written guidance on returning wells to service and on using wells above 20 ppt?**

MassDEP will evaluate any such request on a case-by-case basis taking into consideration: the level of PFAS6 in the offline well, the length of time the well has been offline, the need to put the well back online and any other relevant actions the PWS has taken to mitigate the risk to public health. The PWS may be required to monitor the well prior to it going back online and may be required to issue PE/PN depending on the level of PFAS6 that will be delivered to the public.

PWS should contact their MassDEP Drinking Water Program regional contact with any questions. See PFAS contacts in the Resources section below.

**45. What are the sampling protocols required for PWS with existing treatment systems that are removing PFAS, but were not specifically designed to do so?**

Where MassDEP is made aware of PFAS6 contamination in the untreated water at levels above the PFAS6 MCL the existing treatment will be considered necessary for compliance and the PWS will be required to monitor quarterly.

**46. With recent sample results fluctuating as much as 20% in certain cases, month to month, not to mention a wider fluctuation from summer to winter months, will MassDEP handle regulation enforcement differently, especially when the fluctuation occurs around the 20 ppt?**

MassDEP shall enforce the MCL requirement to ensure that consumers are not receiving water that is over the MCL without the public water supplier issuing an approved public notification and implementing an approved plan for the provision of an alternate source of water for the sensitive subpopulation while the public water supplier is working toward addressing the MCL exceedance.

**47. How is the waiver process working?**

- a. **We had a round of samples paid for by DEP in 2020 with no detections; I requested from DEP these samples be considered as one of our rounds of samples in December. Have not received an answer yet. When should we expect an answer?**
- b. **We took our first quarter samples in January 2021, received the results, and submitted to DEP. Requested from DEP the January 2021 round be combined with the 2020 samples (all no detection) to count for two rounds, and that we be granted a waiver. When will that**

**waiver be approved, and why isn't there a waiver form similar to the IOC/SOC/VOC/Perchlorate waiver forms?**

- c. Our next sampling for PFAS is scheduled for April. If we do not hear from DEP in time, will we need to sample again in April? Who will pay for these samples if a waiver process is supposed to be in place, but there is no movement from DEP? Time is of the essence.**

The Initial Monitoring (Quarters 3 and 4) Waiver Form is now available at <https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas#massachusetts-drinking-water-standard-and-health-information>. Please download, complete and return this form and we will expedite your response.

- 48. Why does a system that gets a 2.5 parts per trillion result at one site required to do confirmatory sampling if the MCL is 20 for combination of all 6, why does one compound matter at concentration of 2.5 ppt? What are we confirming that we did not exceed the 20 parts per trillion MCL?**

This is not unlike other SDWA contaminants that require increased monitoring for detections at or just above the detection limit (e.g. SOC, VOC) even though in some cases these detections can be orders or magnitude below their corresponding MCLs. It is important to confirm the initial result. Anything above the laboratory's minimum reporting level (MRL) is considered a detection, requiring confirmation sampling. If the initial sample and confirmation sample average over 10 ppt, then monthly monitoring would be required to determine compliance with the MCL.

- 49. Can MassDEP expand on the regulation requirements for minimizing PFAS entering water systems? Is there a MassDEP required, or recommended, timeline for a PWS to minimize PFAS entering their water system, when they test over 20 ppt, or is that up to the PWS? Does the level of PFAS entering the system play a part in the requirement or timing to minimize PFAs, i.e., 21 ppt compared to 55 ppt?**

The drinking water regulations do not specify a universal timeline for coming into compliance with any MCLs. PFAS6 is no different in this regard. If a PWS is unable to implement an immediate corrective action, such as taking a contaminated source off-line or altering operational practices to lower the PFAS6 level being delivered to the public, "the Department may establish a schedule for compliance within an administrative consent order or other enforceable document that may include interim measures that the Supplier of Water must take." (see 310 CMR 22.03(1)). The level of PFAS6 being delivered could affect this schedule depending on the actions that are being taken at the PWS to, for example, provide an alternate source of water to the sensitive subpopulation or if the levels are high enough to put more of the population at risk.

**50. Has DEP given consideration to the devastating economic impact the average water rate payer has experienced during the Commonwealth's shutdowns? Will DEP consider suspending implementation of the PFAS regulation given these circumstances? The US Department of Commerce surveyed over 200,000 small businesses per week for 27 weeks beginning in April 2020; 24 of those 27 weeks Massachusetts small business owners reported a "Large, negative impact" to their businesses each week, and at rates well over the national average. Small businesses, and their employees have been hit hard by mandatory shutdowns. That leads to a decrease in income (thus a decrease in ability to pay water rates, HOA fees which would otherwise fund water system improvements).**

MassDEP is not considering the suspension of its public health-based standard for PFAS6. However, MassDEP continues to advocate for relief for public water suppliers. We continue to engage with the Clean Water Trust to ensure funding is available for PFAS treatment and corrective actions. MassDEP is also working diligently with public water suppliers to expend the funding from the Supplemental Budget for design grants, free initial PWS PFAS testing and selected private wells to characterize the PFAS levels in the Commonwealth.

**51. Regarding TNC's (Transient Non-Community) Public Water Systems, how has DEP scaled up to meet the "Site Specific health assessments" prescribed in the regulation?**

- a. What is the expected turnaround time for those assessments?**
  - b. What guidance is available for local boards of health who may permit these establishments also?**
  - c. Will results have to be public and/or posted in the establishment?**
- a. Depending on the volume of assessments, in general, MassDEP expects to be able to complete these assessments within a week or two of confirmatory sampling results. MassDEP will prioritize establishments based on the nature of the potentially exposed populations and the PFAS concentration, with expedited turnarounds in situations with higher exposure potential to sensitive populations and higher PFAS6 concentrations.
  - b. MassDEP will continue to share its private well information and guidance with local Boards of Health. See <https://www.mass.gov/service-details/home-water-treatment-devices-point-of-entry-and-point-of-use-drinking-water>
  - c. Whether results will have to be posted will be determined on a case-by-case basis depending on concentrations, populations exposed and response measures taken to address the risk. If the results are determined to be over a level of concern for that specific transient use establishment MassDEP will require the results to be posted by the TNCs on its' premises, as specified. The results will also be provided by

MassDEP to the TNC in its annual consumer confidence report. The information for that report will be located at <https://www.mass.gov/service-details/public-water-supplier-document-search> .

## **OUTREACH:**

### **52. Has DEP had a discussion with the Attorney General to file a lawsuit on behalf of the citizens of the Commonwealth and the public water suppliers?**

MassDEP has stayed in touch with the Attorney General's office regarding PFAS contamination issues.

### **53. Has DEP been in contact with the legislature about the convening of the PFAS Task Force that was passed at the end of 2020?**

MassDEP has been in contact with Speaker Pro Tempore Hogan, the sponsor of the amendment, regarding convening of the PFAS Task Force established in the FY21 budget signed by Governor Baker in December. As a legislatively chaired Task Force, the Department is looking forward to providing the task force with our expertise on the science and landscape of PFAS in the Commonwealth, as well as information on our ongoing mitigation efforts.

### **54. What conversations has DEP had with the legislature to let them know about the financial impact to water suppliers to meet the MCL and to get additional funding to support compliance beyond the \$8.4 million already appropriated?**

MassDEP has met with members of both the House and Senate, to discuss PFAS and highlight the contaminant's potential impact on water suppliers. We have also been in communication with legislators who represent individual communities impacted by PFAS contamination, to assist with the specific issues they are facing. Further, we continue to provide the legislature with updates on the evolving work of the Department's mitigation efforts and funding opportunities such as the availability of free testing through mid-2021, the Treatment Design Grants, and the private wells PFAS sampling program.

### **55. Is DEP advising Planning Boards on the possible impact of proposed housing developments (with septic systems) on groundwater quality, specifically PFAS?**

MassDEP has notified Planning Boards and other local officials about PFAS and will continue to do so.

### **56. Can DEP work with DCR to encourage the siting of new wells in State Forest where the groundwater-quality is likely to be the highest in the Commonwealth? We are concerned about the possible demise of**



**municipal water supply in Massachusetts, which over the last four decades has been regularly subjected to one upheaval after the next, PFAS being only the latest.**

MassDEP can make sure DCR is aware of this issue, however, would note that Article 97 of the state constitution establishes perpetual protection of state park and forest lands and limits the purposes for which they may be used.

**OTHER:**

**57. What is the Commonwealth doing to prevent further contamination from PFAS / PFOA compounds?**

MassDEP has collected 200,000 pounds of aqueous film forming foam used in firefighting in a take-back program. MassDEP has also been coordinating with the US Environmental Protection Agency and the not-for-profit-organization PEER in evaluating the presence and origination of PFAS in Anvil 10+10, the pesticide used in Massachusetts to control mosquitos affected by EEE (eastern equine encephalitis). MassDEP is also working with the Executive Office of Energy & Environmental Affairs' Office of Technical Assistance to provide technical assistance on the reduction of PFAS to industrial dischargers and industries that discharge to municipal systems.

**58. Will MassDEP be reviewing the current PFAS MCL to include other fluorinated compounds as more data is collected?**

Yes. The Department will review its PFAS rules as required by the PFAS regulations at 22.07G(3)(e), which say that MassDEP "shall perform a review of relevant developments in the science, assessment and regulation of PFAS in drinking water." That review is required by December 31, 2023, at the latest.

**59. Does DEP plan on extending the time that communities have to spend PFAS Round 2 grant funding beyond June 2021 considering that they have not yet announced the recipients?**

MassDEP is looking into this issue.

**60. Does MassDEP have a plan to work with other states or NEIWPC to mitigate the sources of PFAS from the Merrimack River?**

MassDEP is coordinating with the U.S. Environmental Protection Agency, NEIWPC, and NHDES on issues related to water quality in the Merrimack River including combined sewer overflows, nutrients, and PFAS.

**RESOURCES**

**For all questions:**

MassDEP Drinking Water Program [Program.director-dwp@mass.gov](mailto:Program.director-dwp@mass.gov)

**MassDEP PFAS Contacts:**

Western: Catherine Wanat, 413-755-2216, [Catherine.Wanat@mass.gov](mailto:Catherine.Wanat@mass.gov)

Central: Paula Caron, 508-767-2719, [Paula.Caron@mass.gov](mailto:Paula.Caron@mass.gov)

Northeast: Amy LaPusata, 978-694-3291, [Amy.Lapusata@mass.gov](mailto:Amy.Lapusata@mass.gov)

Southeast: William Schwartz, 508-946-2818, [William.Schwartz@mass.gov](mailto:William.Schwartz@mass.gov)

Boston: Margaret Finn, 617-292-5746, [Margaret.Finn@mass.gov](mailto:Margaret.Finn@mass.gov)

**Links to PFAS information:**

More information on PFAS can be found at:

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

PFAS in Public Drinking Water Supplies FAQ for PWS:

<https://www.mass.gov/doc/per-and-polyfluoroalkyl-substances-pfas-in-public-drinking-water-supplies-questions-and-answers/download>

PFAS Regulations Questions and Answers for PWS:

<https://www.mass.gov/doc/pfas-regulations-questions-answers-for-pws/download>

PFAS Regulations Quick Reference Guide:

<https://www.mass.gov/doc/per-and-polyfluoroalkyl-substances-pfas-drinking-water-regulations-quick-reference-guide/download>

PFAS in Drinking Water FAQ for Consumers:

<https://www.mass.gov/doc/massdep-fact-sheet-pfas-in-drinking-water-questions-and-answers-for-consumers/download>

PFAS Monitoring Flowchart for Small COM and NTNC PWS:

<https://www.mass.gov/doc/pfas-monitoring-flowchart-for-small-public-water-suppliers-com-and-ntnc/download>

PFAS Monitoring Flowchart for COM and NTNC PWS:

<https://www.mass.gov/doc/pfas-monitoring-flowchart-for-public-water-suppliers-com-and-ntnc/download>