

**PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**RECOMMENDATION**  
**TO THE PENNSYLVANIA ENVIRONMENTAL QUALITY BOARD**  
**ON THE**  
**DELAWARE RIVERKEEPER NETWORK PETITION FOR**  
**RULEMAKING**  
**TO SET AN MCL FOR PFOA**

**June 1, 2021**

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## **A. DESCRIPTION OF THE PETITION FOR RULEMAKING PROCEDURE**

Any person may petition the Environmental Quality Board (“EQB”) to initiate a rulemaking proceeding for the issuance, amendment, or repeal of a regulation administered and enforced by the Pennsylvania Department of Environmental Protection (“Department”). 71 P.S. § 510-20(h). The EQB has developed a policy for processing petitions for rulemaking. *See* 25 Pa. Code Chapter 23 (relating to Policy for Processing Petitions – Statement of Policy). Among other things, a petition for rulemaking must contain the following information: (1) the petitioner’s name, address, and telephone number; (2) a description of the action requested including suggested regulatory language if the petition requests the EQB to adopt or amend regulations; (3) the reason the petitioner is requesting the action from the EQB; and (4) the types of persons, businesses, and organizations likely to be impacted by the proposal. 25 Pa. Code § 23.1 (relating to Petitions). When a petition for rulemaking is submitted, the Department examines the petition before it is submitted to the EQB to determine if it meets the following conditions: (1) the petition is complete as required by § 23.1; (2) the petition requests an action that can be taken by the EQB; and (3) the requested action does not conflict with Federal law. 25 Pa. Code § 23.2 (relating to Departmental review).

The Department then notifies the EQB and the petitioner of its determination. If the Department determines that the petition is not appropriate, the notification will state why and give the petitioner 30 days to modify the request. 25 Pa. Code § 23.3 (relating to Notification).

Where the Department determines that a petition is appropriate, the petitioner may make a five-minute presentation to the EQB and the Department will also make a recommendation as to whether to accept the petition. 25 Pa. Code § 23.4 (relating to Oral presentation).

The EQB may refuse to accept a petition if: (1) the EQB has within the past two years considered the issue addressed in the petition; (2) the action requested by the petitioner is currently under litigation; (3) the requested action is inappropriate for policy or regulatory considerations; or (4) the petition involves an issue previously considered by the EQB, and it does not contain information that is new or sufficiently different to warrant reconsideration of that issue. 25 Pa. Code § 23.5 (relating to Board determination).

If the EQB accepts the petition, a notice of acceptance will be published in the *Pennsylvania Bulletin* and a report will be prepared. 25 Pa. Code § 23.6 (relating to Notice of acceptance and Department report).

Once the report is completed, the Department will send a copy of it to the petitioner who may then submit to the Department a written response to the report within 30 days of the mailing of the report. 25 Pa. Code § 23.7 (relating to Response to report).

The Department will prepare a recommendation to the EQB based on the report and comments received from the petitioner. If regulatory amendments are recommended, the Department will develop a proposed rulemaking for EQB consideration within 6 months after the Department mailed its report to the petitioner. If regulatory amendments are not recommended, the Department will present its recommendation and basis to the EQB at the first meeting occurring at least 45 days after the Department mailed its report to the petitioner. 25 Pa. Code § 23.8 (relating to Board consideration).

**B. DESCRIPTION OF THE DELAWARE RIVERKEEPER NETWORK PETITION**

On May 8, 2017, the EQB received a petition to promulgate a rule to set a drinking water maximum contaminant level (MCL) for perfluorooctanoic acid (PFOA) not to exceed 6 parts per trillion (ppt or nanograms per liter (ng/L)).

The petition was submitted by Tracy Carluccio, Deputy Director, on behalf of the Delaware Riverkeeper Network (DRN), 925 Canal Street, Suite 3701, Bristol, PA 19007.

In support of this petition, Ms. Carluccio, on behalf of DRN, cites PFOA monitoring data from the U.S. Environmental Protection Agency's (EPA) Unregulated Contaminant Monitoring Rule 3 (UCMR 3), 77 FR 26072 (May 2, 2012), information and data from several contamination sites in Bucks and Montgomery counties and other sites across the state, and scientific studies and reports to support the conclusions that PFOA is in many public water systems in Pennsylvania, that the EPA's Health Advisory Level (HAL) of 70 ppt is ineffective at protecting public health, and that a more protective standard not to exceed 6 ppt should be set for PFOA to protect Pennsylvania citizens. *See* Petition, p. 15.

On June 22, 2017, the Department sent a letter to Ms. Carluccio notifying DRN that the petition met the established criteria in Section 23.2 of the EQB's petition policy. The letter also set August 15, 2017 as the date the EQB would consider the petition.

At the August 15, 2017 EQB meeting, Ms. Carluccio, on behalf of DRN, made a brief presentation as to why the EQB should accept the petition for further study. The Department recommended that the EQB accept the petition for further study. The EQB voted unanimously to accept the petition for further study.

On August 26, 2017, the Department published a notice of acceptance of the petition in the *Pennsylvania Bulletin*. *See* 47 Pa.B. 4986 (August 26, 2017).

At the August 15, 2017 EQB meeting, at which the Department recommended that the EQB accept the petition for further evaluation to help inform whether additional measures are needed to protect public health, the Department stated that it had never in its history set an MCL and would require toxicology expertise to evaluate the rulemaking petition and prepare the report. It was expected that this would require independent work, research, and review. The Department provided updates to the EQB on June 19, 2018 and June 18, 2019, where the Department expressed the need for more time and provided a summary of the challenges and actions taken to secure the necessary expertise to evaluate the rulemaking petition and prepare this report.

At the time of submission of the petition, neither the Department nor the Pennsylvania Department of Health (DOH) employed a full-time toxicologist. The DOH had access to a retired toxicologist on a very limited basis (90 days per year) as an annuitant. The DOH recognized the need to hire one or more full time toxicologists and initiated the hiring process in late 2017. The DOH began interviewing candidates in January of 2018, but had difficulty filling the position for various reasons. The DOH was finally able to fill the toxicologist position in July of 2019.

While the DOH was working to fill the toxicologist position, the Department moved forward in early 2019 with plans to secure additional toxicology resources to assist in evaluating the petition. The Department developed a scope of work and began soliciting interest in a toxicology services contract in May of 2019. The Department reviewed the submitted quotes for services in July of 2019 and awarded the contract to Drexel University. The contract was finalized and executed in December of 2019. The contract was for a one-year period and included: (1) a review and analysis of work by other states and federal agencies that had developed PFAS action levels and MCLs; and (2) an independent review of the data, science, and studies, and development of recommended maximum contaminant level goals (MCLG) for select PFAS.



The contract continued throughout 2020, with Drexel providing updates to Department and DOH staff every few months. The project experienced some delays due to the COVID-19 pandemic. The project deliverables were completed and submitted to the Department at the end of January 2021. The deliverables include the “Drexel PFAS Workbook,” which contains the review and analysis of work by other states and federal agencies, and the “MCLG Drinking Water Recommendations for PFAS in the Commonwealth of Pennsylvania” report. These documents are included in the Appendix to this report.

During this same time period, the Department announced it would begin sampling for PFAS at public water systems across the state. The PFAS Sampling Plan was developed in early 2019 and the final plan was posted to the Department’s [PFAS webpage](#) in April of 2019.

The PFAS Sampling Plan is intended to prioritize sites for PFAS sampling and generate statewide occurrence data. Several factors were considered in developing the plan including:

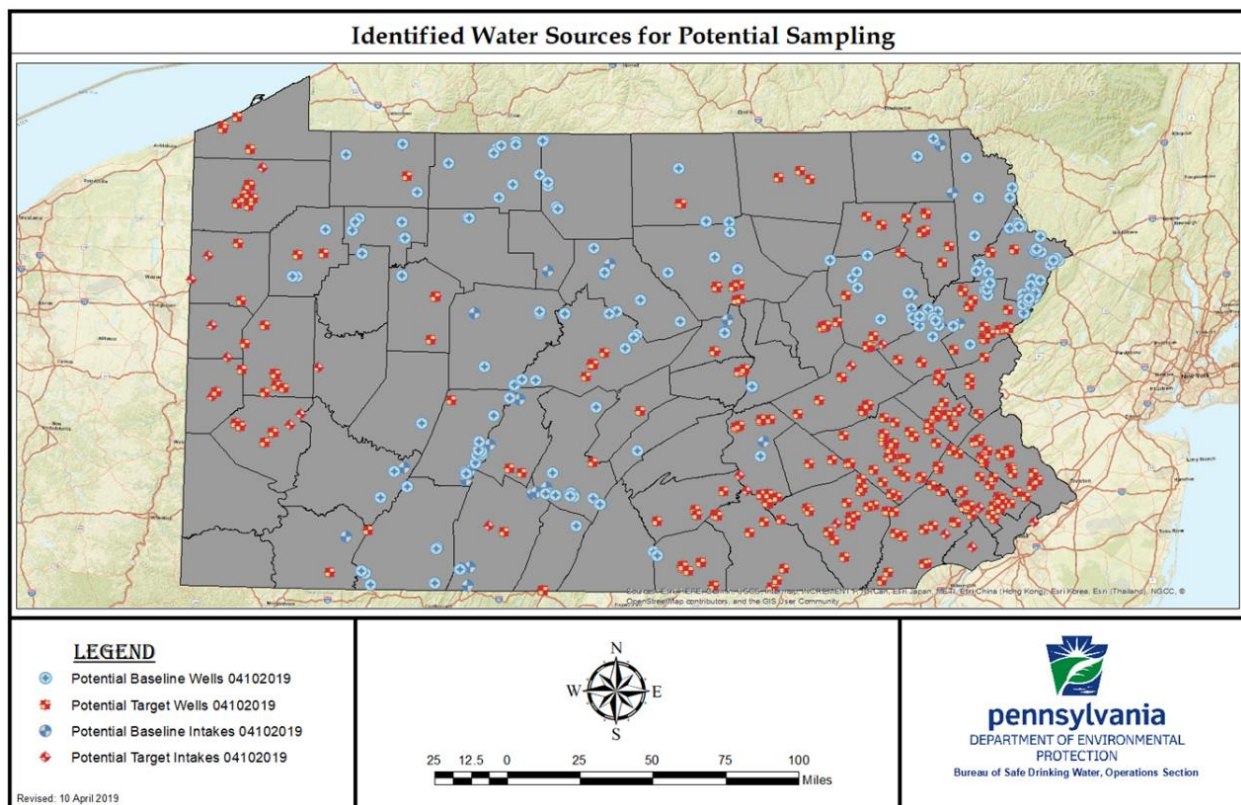
- Location of potential sources of PFAS contamination (PSOC)
- Known locations of PFAS contamination
- Relative risk to users of nearby public water system sources of drinking water
- Selection of public water system sources to serve as a control group
- Available funds - \$500,000

The selection process involved a combination of spatial analysis and programmatic review. The spatial analysis included the creation of a Geographic Information System (GIS) project using ArcMap 10.4.1 that focused on public water system source locations and information about PSOCs. The sampling pool was prioritized based on relative risk and included community water systems and nontransient noncommunity water systems.

In order to prioritize sampling, the selection process included an assessment of the potential risk from nearby PSOCs. Several layers containing locational and other information specific to PSOCs were created or otherwise included in the GIS. These layers include the following industries and land uses:

- Military bases
- Fire training schools/sites
- Airports
- Landfills
- HSCA sites
- Superfund sites
- Manufacturing facilities:
  - Apparel and other products made from fabrics
  - Chemicals
  - Electronic and electrical equipment
  - Fabricated metal products
  - Paper products
  - Plastic products
  - Textile and leather products
  - Upholstered furniture

Based on the compilation of PSOCs, the information was used to select public water system sources that are located within ½ mile of a PSOC. The targeted sample pool included approximately 493 public water system sources. A second query was performed to identify baseline sources to serve as a control group. Baseline sources are located in a HUC-12 watershed (a watershed assigned a 12-digit [hydrologic unit code](#), or HUC, by the U.S. Geological Survey) with at least 75% forested land and at least five miles from a PSOC. Figure 1 is a map of the pool of public water system sources for sampling.



**Figure 1.** Public water system sources identified for sampling.

The final plan included the collection of samples from 360 targeted public water system sources and 40 baseline sources for a total of 400 samples. Sampling began in June of 2019 and included analysis of six (6) PFAS (PFOS, PFOA, PFNA, PFHxS, PFHpA, and PFBS) to be consistent with EPA’s UCMR 3. However, the Department had the opportunity in 2020 to expand the sampling to 18 PFAS by using EPA Method 537.1. Sampling was repeated for the public water systems that were sampled in 2019, and sampling continued for the remainder of the water systems throughout 2020. Note that sampling was halted in March of 2020 due to the pandemic and stay-at-home orders. Sampling resumed in August of 2020 under an approved return to work plan with appropriate health and safety measures. Sampling was completed by the end of March 2021.

On April 16, 2021, the Department sent the evaluation report of the Petition to the Petitioner, which recommended that the EQB move forward with a proposed rulemaking to establish an MCL for PFOA. The Department further recommended that the number advocated

for in the Petition for Rulemaking not be the basis for the proposed MCL. Rather, the Department's proposed rulemaking should be based on available data, studies, and science, and should consider all factors such as health effects, technical limitations, and cost as required under the Federal SDWA and Pennsylvania's Regulatory Review Act (RRA), 71 P.S. §§ 745.1—745.15.

On May 16, 2021, the Petitioner submitted its reply to the Department's report ("Petitioner's Reply" or "Reply") which recommended that the Department should reconsider the Petition for Rulemaking as the basis for its recommendation to the EQB. The Petitioner's Reply now requests that an MCL for PFOA in Pennsylvania should be set at 1 ppt, or, in the alternative, should not exceed the originally requested 6 ppt.

### C. SUMMARY OF THE DEPARTMENT'S REPORT ON THE PETITION

On April 16, 2021, the Department sent its *Evaluation Report on the Delaware Riverkeeper Network Petition for Rulemaking to Set an MCL for PFOA* (April 16 Report) to the Petitioner. (See Appendix 3). That April 16 Report identified a number of actions that the Department has implemented to address PFOA and protect public health. For instance, since 2016, based on existing authority and long-standing policies and procedures, the Department has implemented EPA's HAL of 70 ppt as an interim measure by requiring public water systems that exceed the HAL to provide one-hour reporting of sample results to the Department. This is to ensure the Department is immediately alerted to the situation and can provide the necessary oversight regarding investigative and corrective actions, such as collecting confirmation samples, issuing Tier 2 public notice to consumers, conducting quarterly monitoring to continue to track contaminant levels, and if levels continue to exceed the HAL, taking additional actions as needed to reduce levels below the HAL (taking contaminated sources off-line, blending, installing treatment, etc.).

As mentioned above, in 2019, the Department developed and awarded a contract to Drexel University to review and analyze the work by other states and federal agencies that had developed action levels and MCLs for per- and poly-fluoroalkyl substances (PFAS), conduct an independent review of the data, science and studies, and develop recommended MCLGs for select PFAS. The project deliverables were completed and submitted to the Department at the end of January 2021. The deliverables include the "Drexel PFAS Workbook," which contains the review and analysis of work by other states and federal agencies, and the "MCLG Drinking Water Recommendations for PFAS in the Commonwealth of Pennsylvania" report. These documents are included in the Appendix to this report.

Also as mentioned above, in 2019, the Department developed and implemented a PFAS Sampling Plan to prioritize sites for PFAS sampling and generate statewide occurrence data. Sampling was completed by the end of March 2021. The final release of all PFAS sample results was posted to the Department's PFAS webpage.

As a result of the work done by Drexel University on behalf of the Department and the occurrence data generated from the PFAS Sampling plan, the Department concluded that additional measures were needed to further protect public health. However, when the Department reviewed the DRN's basis for the recommendation in the Petition for Rulemaking, it determined that DRN failed to recognize the process that the Department must follow when setting an MCL. Specifically, the Department must consider other factors in addition to health effects when proposing an MCL as required by the Federal SDWA and RRA. Among other things, the Department must consider technical limitations such as available analytical methods and detection and reporting limits, treatability of the contaminant and available treatment technologies, and costs. 71 P.S. § 745.5b. MCL rules must also include the necessary provisions to define applicability, the means to comply, and how compliance will be determined. All of these details were missing from the Petition for Rulemaking.

The Department concluded that DRN did not consider all of the relevant factors when recommending the MCL for PFOA not to exceed 6 ppt. As a result, it was recommended that the number advocated for in the Petition for Rulemaking not be the basis for a proposed rulemaking to establish an MCL for PFOA. While the Department agreed that it should move forward with a proposed rulemaking to set an MCL for PFOA, it did not believe that DRN's proposed MCL was developed appropriately. The Department's proposed rulemaking should be based on available data, studies, and science, and should consider all factors such as health effects, technical

limitations, and costs. As a result, the Department recommended that the EQB move forward with a proposed rulemaking to establish an MCL for PFOA.

**D. PETITIONER'S REPLY TO THE DEPARTMENT'S APRIL 16, 2021  
EVALUATION REPORT**

The Petitioner's Reply identifies specific faults it finds in the Department's April 16 Report. The Petitioner asserts that the Commonwealth should have moved forward years ago with regulatory action. The Petitioner contends that the Department ignored the supporting technical material it provided. The Petitioner concludes that its Rulemaking Petition was, in fact, legally sufficient and met the requirements of the Federal SDWA and RRA.

The Petitioner's Reply also asserts that the Department's proposed MCLG for PFOA of 8 ppt is legally inadequate and fails to rise to the level of a standard based exclusively on public health considerations.

Finally, the Petitioner's Reply provides a summary of the constitutional obligations it believes the Department must meet in this matter under Article 1, Section 27 of the Pennsylvania Constitution. The Petitioner contends that although cost is a consideration that may be taken into account in setting an MCL, the Department has a constitutional obligation to take affirmative action to protect the Commonwealth's right to pure water. The Petitioner recommends that, in light of its analysis, the Department should reconsider the Petition for Rulemaking as the basis for its recommendation and now states that an MCL for PFOA in Pennsylvania should be set at 1 ppt, or, in the alternative, should not exceed 6 ppt.

What follows is the Department's Response to the Petitioner's Reply.



## **E. DEPARTMENT'S RESPONSE TO THE PETITIONER'S REPLY**

### **PETITIONER COMMENT**

**DRN's Rulemaking Petition was legally adequate and, as a result, DEP and EQB should establish an MCL for PFOA of 1 ppt but not to exceed 6 ppt. DRN's Rulemaking Petition met the requirements of the Federal Safe Drinking Water Act and the Regulatory Review Act and was legally sufficient. As DRN has shown DEP's reasoning for dismissing the Rulemaking Petition are inaccurate, it should be reconsidered and the MCL for PFOA should be 1 ppt, but should not exceed 6 ppt.**

### **DEPARTMENT RESPONSE**

The Department thoroughly reviewed all the supporting technical information that was included in the Petition for Rulemaking. The Department acknowledges that select information was provided on PFAS analytical methods and treatment technologies. The Petitioner's characterization of the Department's position is incorrect. The Department did not state that the Petitioner failed to provide supporting data. Rather, the Department contends that the Petitioner did not consider or otherwise use all of the relevant factors when recommending the MCL for PFOA not to exceed 6 ppt. In other words, the Petitioner's explanation for determining and calculating the recommended MCL only included health effects information as referenced in the Cambridge Environmental Consulting (CEC) health effects study and did not describe how the other factors were taken into consideration.

As discussed in the Department's April 16 Report, DRN fails to recognize the process that the Department must follow when setting an MCL. Specifically, the Department must consider other factors in addition to health effects when proposing an MCL as required by the Federal

SDWA and Pennsylvania's Regulatory Review Act (RRA), 71 P.S. §§ 745.1—745.15. Among other things, the Department must consider technical limitations such as available analytical methods and detection and reporting limits, treatability of the contaminant and available treatment technologies, and costs. 71 P.S. § 745.5b.

In addition to state requirements, the Department needs to consult the Federal SDWA and its implementing regulations. *See* 42 U.S.C. §§ 300f—300j-9; *see also* 40 CFR Parts 141, 142, and 143. For example, within the definitions in the Federal SDWA:

- “MCLG” means the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons served would occur, and which allows an adequate margin of safety. MCLGs are non-enforceable health goals.
- “MCL” means the maximum permissible level of a contaminant in water which is delivered to any user of a public water system.

EPA further explains the difference between MCLGs and MCLs and how the agency sets standards at the following link: [www.epa.gov/sdwa/how-epa-regulates-drinking-water-contaminants](http://www.epa.gov/sdwa/how-epa-regulates-drinking-water-contaminants). In establishing an MCL, the Department would also be informed by EPA's procedure to establish an MCL as detailed below. It is important to understand the process of setting an MCL because similar criteria are required of the Department under the RRA. In addition, in order to retain primacy, the Department's standard setting process would need to be as stringent as the federal process.

After reviewing health effects data, EPA sets an MCLG. MCLGs are non-enforceable public health goals. MCLGs consider only public health and not the limits of detection and treatment technology effectiveness. Therefore, MCLGs sometimes are set at levels which water systems cannot meet because of technological limitations.

Once the MCLG is determined, EPA sets an enforceable standard. In most cases, the standard is an MCL. The MCL is set as close to the MCLG as feasible. Taking cost into consideration, EPA must determine the feasible MCL. This is defined by the Federal SDWA as the level that may be achieved with:

- use of the best available technology or treatment techniques, and
- other means which EPA finds are available (after examination for efficacy under field conditions, not solely under laboratory conditions).

As a part of the rule analysis, the Federal SDWA also requires EPA to prepare a health risk reduction and cost analysis in support of any standard. EPA must analyze the quantifiable and non-quantifiable benefits that are likely to occur as the result of compliance with the proposed standard. EPA must also analyze certain increased costs that will result from the proposed drinking water standard. In addition, EPA must consider:

- incremental costs and benefits associated with the proposed and alternative MCL values;
- the contaminant's adverse health effects on the general population and sensitive subpopulations;
- any increased health risk to the general population that may occur as a result of the new MCL; and
- other relevant factors such as data quality and the nature of the risks.

Where the benefits of a new MCL do not justify the costs, EPA may adjust the MCL for a particular class or group of systems to a level that maximizes health risk reduction benefits at a cost that is justified by the benefits.

MCL rules must include the necessary provisions to define applicability, the means to comply, and how compliance will be determined. If the Petitioner would have simply

recommended that the Department move forward with a rulemaking to set an MCL, it would have been sufficient to simply provide technical information for the Department's consideration. However, since the Petitioner recommended a specific MCL value, it was contingent upon the Petitioner to provide all factors and technical information to support that MCL value. Otherwise, there was no way the Department could have moved forward with the Petitioner's recommendation. For example, which water systems must comply with the MCL? Acute contaminants generally apply to all public water systems, whereas chronic contaminants generally apply to community water systems and nontransient noncommunity water systems only. The Petition did not specify applicability. What are the approved analytical methods? Which treatment technologies are approved? The Petition did not provide any information about ion exchange, or what the design and efficacy standards should be for PFAS treatment technologies. How will systems monitor for the contaminant, and how will compliance be determined? All of these details were missing from the Petition for Rulemaking, so it is unclear how the recommended MCL value would apply or be implemented.

**Drexel's MCLG Drinking Water Recommendations for PFAS Report:** The report was developed by the Drexel PFAS Advisory Group (DPAG), which is a unique multidisciplinary team consisting of experts in the fields of medical toxicology, epidemiology, environmental toxicology, drinking water standards, and risk assessment. The DPAG evaluated existing and proposed standards from across the country. The DPAG was also charged with developing recommended MCLGs. In order to do this, the DPAG reviewed the pertinent literature and work done across the country, and independently developed recommended MCLGs.

As mentioned previously and as further discussed in the report, MCLGs are non-enforceable as they are developed solely based on health effects and do not take into consideration

other factors, such as limitations with analytical methods and available treatment technologies and cost. MCLGs are the starting point for determining MCLs. The DPAG's recommended MCLG for PFOA is 8 ppt. The DPAG conducted a literature search and review of the available evidence and recommendations from various agencies and developed an MCLG recommendation based on Non-Cancer endpoints. The report includes a discussion of the relevant inputs. The DPAG selected Koskela (2016) and Onishchenko (2011) as the critical studies. Table 1 below represents DPAG's development of the Non-Cancer MCLG for PFOA.

**Table 1.** The Drexel PFAS Advisory Group’s development of the Non-Cancer MCLG for PFOA

PFOA	
Dose Response Modeling Method	LOAEL
POD	The average serum concentration was estimated in the mice (8.29 mg/L) using a three-compartment pharmacokinetic model (Wambaugh et al. 2013) using animal species, strain, sex-specific parameters. (ATSDR 2018)
HED = POD x DAF (mg/kg/d)	DAF = Ke x Vd Ke = 0.000825175 (8.2 x 10 <sup>-4</sup> ) based on a human serum half-life of 840 days (Bartell et al. 2010) Vd = 0.17 L/kg (Thompson et al. 2010) HED <sub>LOAEL</sub> = POD <sub>LOAEL</sub> x DAF HED <sub>LOAEL</sub> = POD <sub>LOAEL</sub> x Ke x Vd HED <sub>LOAEL</sub> = 8.29 mg/L x 0.000825175 x 0.17 L/kg HED <sub>LOAEL</sub> = 0.001163 mg/kg/d or 1.163 x 10 <sup>-3</sup> mg/kg/d
Uncertainty Extrapolation	
Human Variability (UFH)	10 (standard)
Animal to Human (UFA)	3 (DAF applied)
Subchronic to Chronic (UFS)	1 (Chronic effect studied)
LOAEL to NOAEL (UFL)	10 (standard)
Database (UFD)	1
Total Composite (UFT)	300
RfD = HED/UFT (mg/kg/d)	RfD = 0.001163 mg/kg/d/300 RfD = 3.9 ng/kg/day (3.9 x 10 <sup>-6</sup> mg/kg/d)
THSV = POD / UFT	THSV = 8.29 mg/L / 300 THSV = 0.028 mg/L
Receptor	Infant exposure via breastmilk for 1 year, from mother chronically exposed via water, followed by lifetime of exposure via drinking water. Protective for short-term, subchronic and chronic. (also protective of formula fed infant). Goeden Model Parameters: Placental transfer of 87% and breastmilk transfer of 5.2% (MDH (2020 PFOA)). The Human Serum half-life is set at 840 days (Bartell et al. 2010). The Volume of distribution of 0.17 L/kg (Thompson et al. [2010]) Other factors include, 95th percentile drinking water intake, consumers only, from birth to more than 21 years old. Upper percentile (mean plus two standard deviations) breast milk intake rate. Time-weighted average water ingestion rate from birth to 30-35 years of age is used to calculate maternal serum concentration at delivery. (Goeden et al. [2019]) A Relative Source Contribution of 50% (0.5) is applied and based on studies which showed that infants RSC is similar to NHANES 95th percentiles for 3-11 (2013-2014) and over 12 years old (2015-2016) participants. (CDC 2019)
Chronic Non-Cancer MCLG	The model produces a Chronic Non-Cancer MCLG of 8 ng/L (ppt). This protects health during the growth and development of a breast fed infant. Figure 2

**PFAS Sampling Plan:** As mentioned above, the Department developed and implemented a PFAS Sampling Plan to prioritize sites for PFAS sampling and generate statewide occurrence data. The final release of all PFAS sample results was posted to the Department’s PFAS webpage, available at the following link: [https://files.dep.state.pa.us/Water/DrinkingWater/Perfluorinated%20Chemicals/SamplingResults/PFAS\\_Sampling\\_Final\\_Results\\_May\\_2021.pdf](https://files.dep.state.pa.us/Water/DrinkingWater/Perfluorinated%20Chemicals/SamplingResults/PFAS_Sampling_Final_Results_May_2021.pdf). Table 2 presents a brief summary of the PFOA sample results.

**Table 2.** Summary of final PFOA sample results

	<b>PFOA</b>	<b>Units</b>
<b>Total # Samples</b>	412	--
<b>Average</b>	2.0	ng/l
<b>Median</b>	0 (ND)	ng/l
<b>Minimum</b>	0 (ND)	ng/l
<b>Maximum</b>	59.6	ng/l
<b># &amp; % of Detects</b>		
	112 (27%)	--
<b>Average Detect Value</b>	7.5	ng/l
<b>Median Detect Value</b>	5.3	ng/l
<b>Min Detect Value</b>	1.7	ng/l
<b>Max Detect Value</b>	59.6	ng/l

The Department could not have moved forward with a proposed rulemaking until the above-mentioned tasks were completed and the criteria under the Federal SDWA and RRA are met.

### **PETITIONER COMMENT**

**DEP's proposed MCLG of 8 ppt does not rise to the level necessary for a standard based exclusively on public health considerations.**

### **DEPARTMENT RESPONSE**

The Petitioner's characterization of the Department's position is incorrect. The Department did not propose an MCLG for PFOA in its April 16 Report. The only recommendation that the Department is making is to move forward with a proposed rulemaking.

### **PETITIONER COMMENT**

**In the alternative, DEP must improve upon the DPAG Report and promulgate an MCLG and MCL for PFOA that adheres to its Constitutional obligations under the Environmental Rights Amendment. Although DPAG's work can still be improved, it is critical for DEP and the EQB to act to regulate PFAS in the face of U.S. EPA inaction. DEP is Constitutionally constrained in its ability to lessen the MCLG to establish an MCL in a way that U.S. EPA is not.**

### **DEPARTMENT RESPONSE**

The Department understands its obligations under the Environmental Rights Amendment of the Pennsylvania Constitution and will fulfill those obligations in its development of an MCL.



## **F. DEPARTMENT'S RECOMMENDATION**

As the Department noted in its April 16 Report, the Petitioner failed to recognize the process that the Department must follow when setting an MCL. Specifically, the Department must consider other factors in addition to health effects when proposing an MCL as required by the Federal SDWA and Pennsylvania's RRA. Among other things, the Department must consider technical limitations such as available analytical methods and detection and reporting limits, treatability of the contaminant and available treatment technologies, and costs. In addition to state requirements, the Department needs to consult the Federal SDWA and its implementing regulations. Moreover, the Department contends that the Petitioner did not consider or otherwise use all of the relevant factors mentioned above when recommending the MCL for PFOA not to exceed 6 ppt.

As a result of its April 16 Report, the Petitioner's Reply and the Department's Response to that Reply, the Department recommends that the EQB move forward with a proposed rulemaking to establish an MCL for PFOA. The Department further recommends that the number advocated for in the Petition for Rulemaking not be the basis for the proposed MCL. Rather, the Department's proposed rulemaking should be based on available data, studies, and science, and should consider all factors such as health effects, technical limitations, and costs.

## **G. APPENDIX**

1. Maximum Contaminant Level Goal Drinking Water Recommendations for Per- and Polyfluoroalkyl Substances (PFAS) in the Commonwealth of Pennsylvania, The Drexel PFAS Advisory Board, January 2021.
2. Drexel PFAS Workbook, June 2020.
3. Evaluation Report on the Delaware Riverkeeper Network Petition for Rulemaking to Set an MCL for PFOA, The Pennsylvania Department of Environmental Protection, April 2021.