



## Talking Points and Background Information on PFAS in Pennsylvania

- Per- and poly-fluorinated alkyl substances (PFAS) have been used widely in manufacturing, such as coatings, plastics and firefighting foam. They are so widespread that most of us have traces in our blood; some PFAS have even been found in polar bears in the Arctic. PFAS are highly toxic at very low doses and tend to build up in the blood, where it remains for many years after exposure. Even miniscule concentrations in drinking water can have adverse health effects and many people have been drinking contaminated water for long periods, increasing their risks for developing adverse health effects linked to PFAS including cancers, thyroid disease, high cholesterol, and developmental effects in the fetus and young children. Scientific studies document the dangers such as those linked to PFOA and other PFAS: <http://www.c8sciencepanel.org/newsletter10.html> and <https://bit.ly/2qFO3mV>.
- The Governor's Action Team announced on Friday, April 12, that PADEP would start to collect water samples of water supply systems statewide in May. It is very important to gather the information about how many people are exposed to PFAS in their drinking water, where pollution is located, which PFAS compounds are being found and at what levels are they being found. However, DEP says it will take about a year and we have already been waiting for years since we found out about this problem – years with no action by DEP. We need the sampling data as soon as it can be gathered and compiled so that we will not have to wait another year before DEP proposes maximum contaminant levels for PFAS compounds. After a proposal is made, it usually takes a state about one year to finish the rulemaking process and enact a standard. We needed action yesterday, not years from now. We also need to have samples of private well water taken because greater than one quarter of the population in Pennsylvania get its drinking water from private wells.

- PFAS compounds do not break down or biodegrade, becoming a permanent threat in the environment. That is why it is still in the ground and surface water around where it was discharged, even though many of the original PFAS compounds are no longer in use. In addition, it can spread over time as the pollution plume moves with groundwater or other environmental media. As we have seen in the results of sampling in the Bucks and Montgomery County region, PFAS is in the streams below the military bases. Some of the contamination is coming from poorly controlled stormwater flows from the military bases. And PFAS can spread in many ways in addition to releases locally by manufacturing, commercial products, and firefighting foams: through the air and dust; sewage sludge and biosolids that are spread on agricultural and other lands; the disposal of waste or soils from sites being remediated; waste solids or sewage sludge in landfills; or by dredging up of sediments. Yet there is little data or reliable tracking and little regulation of these means of spreading PFAS farther into the environment and into water supplies, sometimes far from the original source of contamination.
- I am concerned for my health, my family's and community's health. For instance, one of the most frequently found PFAS compounds is PFOA and, according to findings of the comprehensive C8 Study, it is linked to devastating disease: Kidney Cancer, Testicular Cancer, Thyroid Disease, High Cholesterol, Pregnancy-Induced Hypertension/Preeclampsia, and Ulcerative Colitis. ([http://www.c8sciencepanel.org/prob\\_link.html](http://www.c8sciencepanel.org/prob_link.html)) Even tiny concentrations in drinking water can have adverse health effects and many of us have been drinking PFOA-contaminated water for decades.
- Unregulated at the federal level, states are beginning to step out on their own to protect public health and the environment by establishing statewide mandatory safe drinking water standards, also called maximum contaminant levels or MCLs. New Jersey, New York, Vermont and Michigan are setting standards, with New Jersey being the first state to adopt a mandatory MCL ([https://www.state.nj.us/dep/watersupply/g\\_reg.html](https://www.state.nj.us/dep/watersupply/g_reg.html)). It is critical that MCLs are adopted by Pennsylvania since the federal government is not taking that action. There is way to avoid exposure unless it is removed by treatment from drinking water, which is the primary source of exposure for people.
- In Pennsylvania, PFAS have been found in various locations by water sampling conducted by the U.S. Environmental Protection Agency: <https://bit.ly/2QCjCJL>. Since then, water systems and the military have collected samples in Bucks and Montgomery Counties, finding more

locations as sampling widens. Between 70,000 and 100,000 residents and at least two dozen communities have discovered their water was contaminated by PFAS, primarily Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS). In a recent blood study discussed by the PA Department of Health in December, people who live around the military bases in Bucks and Montgomery Counties were found to have elevated levels of PFOA, PFOS, and Perfluorohexanesulfonic acid (PFHxS) and perfluorononanoic acid (PFNA). Some large water systems have installed treatment but problems with costs, mapping of pollution, identifying additional sources of contamination, medical monitoring and health effects, remediation and cleanup of ground and surface water, water sampling and treatment, and the persistent presence and movement of these dangerous chemicals in the environment continue.

- The military and some water companies, such as Aqua PA, use EPA's health advisory level (not mandatory) of 70 ppt of PFOA/PFOS as the trigger requiring treatment but that is not protective of human health. The Michigan Science Advisory Board has recommended that 70 ppt is not sufficiently protective of human health, especially children. (<https://bit.ly/2FZS4f1>) In June 2018, the federal Agency for Toxic Substances and Disease Registry (ATSDR) released "minimum risk levels" that reduce the level at which no harm can be expected from exposure down to approximately 14 ppt for PFOS and 21 ppt for PFOA. (<https://bit.ly/2T8H3vx>) Other states are developing MCLs since the federal government has not. The New Jersey Drinking Water Quality Institute (NJDWQI), for instance, has issued rulemaking to set mandatory maximum contaminant levels (MCLs) of 14 ppt for PFOA and 13 ppt for PFOS, a much more protective level (<https://bit.ly/2qFO3mV>). NJDEP has now adopted a groundwater standard of 10 ppt for both PFOA and PFOS (and 13ppt for PFNA) that they are enforcing to cleanup polluted sites and to limit any discharges into groundwater that is used for drinking. New York's Drinking Water Advisory Council has recommended MCLs of 10 ppt for these two chemicals. Michigan has set July 1, 2019 as the deadline for their recommended MCLs for 3 PFAS.
- Those who are exposed by fish consumption and other food sources, can compound risk, leading NJ Dept. of Environmental Protection to issue a fish consumption advisory for PFAS, which includes parts of the Delaware River. (<https://www.nj.gov/dep/dsr/>) PA should do the same.
- Recognizing the need for urgent action, a petition was submitted by Delaware Riverkeeper Network (DRN) to the PA EQB asking that they set an MCL for PFOA of 1ppt or no greater

than 6ppt (<http://bit.ly/2psG1uu>) in May 2017. The PA EQB unanimously accepted the petition in August 2017 but has not taken any action since. In June 2018, a follow-up letter was sent regarding an MCL to be set for PFOS. DRN is advocating for stricter standards to be set for PFOA (1ppt or no greater than 6ppt) and PFOS (5ppt) and no greater than 13 ppt for the two compounds combined to provide greater protection for the fetus and young children, based on the recommendations of an independent scientist they commissioned.

- Due to lack of inaction by PA EQB, no MCL has been set, despite its statutory mandate to provide safe water under Pennsylvania's Safe Drinking Water Act. This action is essential to provide a uniform, mandatory, and protective statewide standard that will require the removal of these chemicals from the water we drink and the places we live and work. PADEP recently announced they are going to set a MCL but so far, no regulatory action has yet been taken.
- The military bases, manufacturers and other sources that caused the PFAS contamination are responsible for cleaning it up at their expense, like all other polluters. It is a fact that the Department of Defense still uses these compounds in their firefighting foams, although they claim they are less toxic than the original PFAS compounds used. This must stop. The Department of Defense and all other responsible parties must budget sufficient funds to remove these powerful toxic compounds from our environment. We need the "PFAS Action Team" to advocate for this and to start rulemaking to list these as hazardous substances to facilitate comprehensive cleanup of the pollution and set groundwater, surface water, and other environmental media standards (such as soil, air, and food sources like fish) for remediation of sites polluted with PFAS.