



**Testimony before the Pennsylvania Senate Democratic Policy Committee regarding legislation to ban the intentional use of Per- and Polyfluoroalkyl Substances (PFAS)**  
**Joint Policy Committee Hearing**  
**September 6, 2024**

Good morning Senator and Chair Katie Muth, Senator Maria Collett, Representative Greg Scott and Representative Brian Munroe. Thank you for holding this hearing today on legislation to ban the intentional use of Per- and Polyfluoroalkyl Substances (PFAS) in all industrial applications with an exclusion for essential uses as defined by the Pennsylvania Department of Health (DOH) and the Pennsylvania Department of Environmental Protection (DEP). I am Tracy Carluccio, Deputy Director of Delaware Riverkeeper Network. We appreciate the opportunity to testify today in support of such legislation.

We highlight these two issues as crucial to consider in any legislation:

We strongly support the inclusion of oil and gas products in the covered uses included in legislation. Oil and gas use of PFAS in drilling and hydraulic fracturing (fracking) is a currently uncontrolled and unmonitored pathway of contamination that allows PFAS compounds to enter the environment. In 2021, a report was released that documented drilling and fracking companies were injecting fracking fluids containing PFAS to extract gas, potentially contaminating ground and surface water and allowing PFAS to make its way into the wastewater produced by fracking.<sup>1</sup> The study showed drilling company reports revealed that XTO Energy, Inc., EOG Resources, Chevron, and Anadarko all developed and operated wells in Pennsylvania and may have employed forever chemicals in fracking.<sup>2</sup>

Alarmed by this revelation, the Philadelphia Inquirer conducted a follow up investigation soon after this report was released. The Inquirer found and reported publicly further evidence that PFAS (PTFE or Teflon) had been used in a minimum of eight oil and gas wells drilled in Pennsylvania.<sup>3</sup> When the editors asked if DEP would audit the list of fracking chemicals reported by all oil and gas companies without revealing trade secret details, DEP responded that ingredients in fracking

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<sup>1</sup> Dusty Horwitt, J.D., "Fracking with "Forever Chemicals", Physicians for Social Responsibility, 2021. <https://psr.org/wp-content/uploads/2021/07/fracking-with-forever-chemicals.pdf>

<sup>2</sup> *Ibid.*

<sup>3</sup> <https://www.inquirer.com/opinion/editorials/fracking-pennsylvania-pfas-toxic-chemicals-water-20210805.html>

mixtures that are considered trade secrets are legally withheld from the public and combing through the reports would be too time consuming.

In 2022, a report was issued explaining that under Pennsylvania regulations and in other states chemical manufacturers are not required to disclose a complete list of the chemicals in fracking and drilling mixtures and due to trade secret exemptions, so it's difficult to find out if they are being used.<sup>4</sup> Unfortunately, to this day this information is still kept secret and there is no publicly available reporting by DEP for the use of PFAS in fracking.

In a report issued in 2023<sup>5</sup>, it was reported that surfactants (fluorosurfactants are PFAS and are a subcategory of surfactants) were used in fracking 1,234 wells, in 23 Pennsylvania counties.<sup>6</sup> There's no way to know if these were PFAS but the extremely high toxicity of PFAS makes even a small number a grave threat.

DEP has conducted statewide PFAS water sampling but there has been no comprehensive testing of private wells or drinking water sources centered on oil and gas extraction and operation sites for PFAS. Many areas where drilling and related operations are occurring are dependent on private wells. Since private wells are not regulated in the Commonwealth and 3.5 people use them, the new drinking water regulations that Pennsylvania and the federal government set for some of the most commonly found and highly toxic PFAS compounds are not applied and many Pennsylvanians are not protected from toxic PFAS in their drinking water.

For instance, an incident was reported in 2022 when University of Pittsburgh Researchers tested water samples from a private well near fracking wells and found seven of the 14 PFAS they tested for.<sup>7</sup> That's a red flag that shows that PFAS can find its way into wells in fracking regions but due to lack of monitoring, people have no way of knowing if they and their families are drinking contaminated water. Banning PFAS in oil and gas well extraction operations is necessary to eliminate a pathway of pollution that is now completely ignored by regulations. This would provide much needed protection for residents and the environment.

We have one other issue regarding the banning of PFAS that we want to bring to your attention.

There are many compounds that are used that do not meet the definition of PFAS but break down into PFAS. A "Third Generation" of chemical byproducts such as Polymeric PVDF Byproducts, are appearing as breakdown substances in the environment around locations where there are discharges of PFAS and PFAS substitutions. The break down occurs either during processing or they develop in the environment when mixed with other substances.<sup>8</sup> The chemicals are often

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<sup>4</sup> <https://psr.org/wp-content/uploads/2022/07/chemical-makers-exemptions-from-fracking-chemical-disclosure-rules.pdf>

<sup>5</sup> <https://psr.org/wp-content/uploads/2023/10/fracking-with-forever-chemicals-in-pennsylvania.pdf>

<sup>6</sup> "According to EPA, surfactants are commonly used in fracking. These substances lower the surface tension of a liquid, the interaction at the surface between two liquids (called interfacial tension), or the interaction between a liquid and a solid. Compared to other surfactants, fluorosurfactants are said to be "superior in their aqueous surface tension reduction at very low concentrations and are useful as wetting and leveling agents, emulsifiers, foaming agents, or dispersants." At least some fluorosurfactants are PFAS, including the dangerous chemicals PFOA and PFOS and 8:2 fluorotelomer alcohol, a nonionic fluorosurfactants that can break down into PFOA." From: <https://psr.org/wp-content/uploads/2023/10/fracking-with-forever-chemicals-in-pennsylvania.pdf> PDF P. 6.

<sup>7</sup> <https://www.ehn.org/pfas-fracking-in-drinking-water-2657776204/unsolvable-mysteries-pfas-contamination>

<sup>8</sup> Seth Newton, National Exposure Research Laboratory, U.S.EPA, et al, "Novel Polyfluorinated Compounds Identified Using High Resolution Mass Spectrometry Downstream of Manufacturing Facilities near Decatur, Alabama." Environmental Science and Technology, January 13, 2017. Doi:10.1021/acs.est.6b05330.

novel substances and are emerging as scientists examine groundwater, surface water, soils, and fish and may carry similar toxic properties as PFAS. We encourage Pennsylvania to investigate and analyze for the presence of these potentially dangerous chemicals in the environment. Types of companies using some of these products that break down into PFAS are the semi-conductor industry and lithium-ion batteries. Both of these are fast growing industries here. Some of these companies are well aware of the byproducts but are not controlling them, making their discharge intentional. There is no regulatory program that covers this dangerous and just emerging source of PFAS. Once evidence of the breakdown of PFAS is found in the environment around these facilities, a ban on their use will be an important step in controlling the wanton spread of PFAS in Pennsylvania.

The greater the exposure of people to PFAS, especially our most vulnerable populations, infants and children, the greater the risk of developing a disease linked to PFAS. These exposures can lead to devastating health conditions, lifelong adverse developmental effects, and diseases such as cancer – **your consideration of a ban is the right thing to do and Delaware Riverkeeper Network strongly supports it.**

Thank you.

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