



Dear Lisa Daniels,

Would Pennsylvania citizens allow the class of hazardous per- and polyfluoroalkyl substance (PFAS) chemicals in their everyday products if they knew about the environmental and health hazards? The Pennsylvania Department of Environmental Protection, (DEP) has come to realize that they would not. DEP has gathered data and written a rulemaking draft for monitoring and protecting drinking water from two PFAS chemicals. This important step is commendable. I am here today to ask the DEP for more rigorous and comprehensive monitoring and to lower maximum contamination levels (MCL's) based on science and a cost benefit analysis that includes the environmental, societal and health costs.

The American Chemical Council, the fossil fuel and petrochemical industries and other major chemical companies such as Chemour (formerly DuPont) get to be inventive with creating products that solve problems such as corrosion from water, oil and heat by creating compounds such as PFAS. They can then apply and use these chemicals in products without proof of safety for the environment and human health.

DuPont used these harmful chemicals for over seventy years knowing that they were [hazardous to human health](#) through their own research.<sup>1</sup> The Environmental Protection Agency (EPA) has known about the dangers of PFAS for [more than two decades](#).<sup>2</sup> One of the largest [epidemiological studies with nearly 70,000](#) participants proved the irrefutable connections of PFAS to ulcerative colitis, thyroid disease, pregnancy-induced hypertension, high cholesterol, testicular cancer and kidney cancer.<sup>3</sup> Occupational health studies also suggest that PFAS disrupt the endocrine system and alter thyroid, kidney, and metabolic functions. Of particular concern in today's pandemic, PFAS are linked to a reduction of vaccine efficacy due to the [immunosuppressant effects](#) of these chemicals.<sup>4</sup>

Perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were [phased out in 2015 and 2002](#) respectively but are still contaminating our air and drinking water because of legacy inputs to the environment and because products are imported with these chemicals.<sup>5</sup> There are over [6000 different PFAS chemicals](#) that are a part of our water cycle and are jeopardizing the structure and function of all organisms because of the bioaccumulation of this pervasive chemical.<sup>6</sup> Integrated Atmospheric Deposition Network (IADN) documented [1,000 parts-per-trillion \(ppt\) of PFAS compounds in Ohio's rain water](#) over the period of two weeks.<sup>7</sup> PFAS like nitrogen, phosphates, and sediments vary diurnally in the amount and concentrations in watersheds. Because of the transient and bioaccumulating nature of PFAS, more regular testing is needed than proposed even in sites that do not show hazardous levels during a single test period.

It is not enough to regulate just two of the many hazardous chemicals. During the Bureau of Safe Drinking water study [one-third of the samples](#) had eight different PFAS analogues out of 18 that were tested for.<sup>8</sup> We should be monitoring all the PFAS analogues in the EPA's certified PFAS test 537.1. This is important because it includes Chemour's replacement for PFOS and PFOA, known as GenX chemicals.

GenX chemicals have proven to be just as harmful as noted in a [lawsuit from Cape Fear, North Carolina](#).<sup>9</sup> DuPont illegally discharged 2.5 million pounds of C8 polluting the drinking water in six water districts in West Virginia and Ohio. The passing of fifteen years of exhaustive litigation led to 3500 people winning a \$670 mil settlement for suffering kidney and testicular cancer, and ulcerative colitis.

Some consider GenX chemicals more troublesome than PFOS and PFOA because it is very difficult and expensive to filter out of water and biomonitor. [GenX chemicals](#) don't reside in the blood but get into the organ tissue.<sup>9</sup> This is especially troubling for fetuses and children because they are [developing organs](#).<sup>10</sup> The older legacy PFAS are already impacting the developmental and cognitive growth of this age population. The suggested MCL's should reflect levels that would prevent harm to this population. BSDW's cost benefit analysis must include the cost of environmental and health harms and decrease economic and social productivity that will come from impaired developmental and [immunological health](#).<sup>11</sup>

It is imperative the DEP implements the most comprehensive and rigorous monitoring and cleanup. Pennsylvanians are uninformed, vulnerable and unprotected by DEP when we inhale and drink these harmful chemicals. We expect to have our Pennsylvania right to clean and safe drinking water per Article 1, Section 27, of the Pennsylvania Constitution upheld.

I urge the Department of Environmental Protection to take stronger steps to reduce PFAS pollution by doing the following:

1. Monitor and publicly report for the **18 PFAS chemicals** listed in the test 537.1 during all four quarters.
2. Set the **MCLs at 1-6 ppt for the 18 PFAS** in the 537.1 test as advised by the [Delaware Riverkeepers Network \(DRN\)](#).<sup>12</sup>
3. Set stricter standards for the harmful chemicals **PFOA (1ppt MCL or no greater than 6ppt)** and **PFOS (5ppt MCL)** 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 report commissioned by Delaware River Keepers Network.<sup>13</sup>
4. If **MCL's (Maximum Contamination Level) for the 18 PFAS** are found to be above 6 ppt in two consecutive quarters, the DEP should begin implementing methods to decrease contamination (i.e. filtration systems, finding source & stopping it there)
5. Require **inspections at all wells one-half mile from potential sources of PFAS** contamination including military bases, fire training schools/sites, airports, landfills, manufacturing facilities, and state/federal cleanup sites. Over one million Pennsylvania

residents get their drinking water from a private well. Drinking water from these wells is not regulated.

6. **Hold chemical manufacturers of PFAS and the products that use them accountable** for their environmental and health impacts and cleaning up contaminants by implementing producer responsibility regulations.

Thank you for protecting our health,

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