

State Representatives Mary Lightbody, Ph.D. & Allison Russo, DrPH

Sponsor Testimony for House Bill 365 February 15, 2022

Chairman Koehler, Vice Chair Creech, Ranking Member Brent, and members of the Ohio House Agriculture and Conservation Committee: thank you for the opportunity for us to provide sponsor testimony on House Bill 365 today. If enacted, House Bill 365 would require the Ohio EPA to establish maximum contaminant levels in drinking and source water for certain toxic chemicals such as PFAS, chromium-6, 1,4 dioxane, and others as the need arises.

The presence of harmful chemicals in our water is, unfortunately, not a new news story. For example, chromium-6 was made famous by the 2000 "Erin Brockovich" movie¹ starring Julia Roberts in the title role². Used in the manufacturing of stainless steel, textiles, anticorrosion coatings, and leather tanning, chromium-6 is also carcinogenic³. If inhaled, it can cause lung cancer and asthma; in small amounts, it can also cause stomach cancer, allergic skin reactions, and complications during childbirth. Analysis of EPA data collected between 2013 and 2015 of over 60,000 water samples from all 50 states revealed levels of chromium-6 unsafe for humans, according to a PBS news story in 2016¹. Similarly, the chemical 1,4 dioxane, which can cause kidney and liver damage, as well as miscarriages, stillbirths, and cancer in both humans and animals⁴, was found in the water near Uniontown, Ohio⁵. Cleveland.com reported the water as contaminated in 2015⁶, while the Center for Public Integrity underscored the presence of 1,4 dioxane and chromium-6 in the water as recently as 2021⁵.

More recently featured in the news are Perfluoroalkyl and Polyfluoroalkyl Substances, or PFAS. A <u>family of nearly 5,000 chemicals</u>, PFAS was first introduced to consumer products in the 1940s and is used to make many common-place products, from food packaging to non-stick

¹ "What is chromium-6 and how did it infiltrate America's drinking water?" Norris, Courtney. https://www.pbs.org/newshour/science/chromium-6-wash-many-drinking-supplies.

² "Erin Brockovich." https://www.imdb.com/title/tt0195685/.

³ "Chromium-6 Found in Tap Water of 31 U.S. Cities." Cho, Renee. *Columbia Climate School, Climate Earth and Society|State of the Planet*. https://news.climate.columbia.edu/2010/12/30/chromium-6-found-in-tap-water-of-31-u-s-cities/.

⁴ "Technical Fact Sheet – 1,4 Dioxane" *US EPA*. https://www.epa.gov/sites/default/files/2014-03/documents/ffrro factsheet contaminant 14-dioxane january2014 final.pdf.

⁵ "Inside the decades-long fight over an Ohio Superfund site." Rice Lamb, Yanick. *The Center for Public Integrity*. https://publicintegrity.org/inequality-poverty-opportunity/workers-rights/worker-health-and-safety/ohio-superfund-site/

⁶ "Uniontown landfill Superfund site includes industrial, radioactive waste: Toxic remains." Harper, John. *Cleveland.com*. https://www.cleveland.com/akron/2015/12/is_groundwater_in_uniontown_oh.html.

cookware, water-repellent clothing, carpets, and firefighting foams⁷. Every PFAS molecule is a highly toxic man-made chemical. Known as "forever chemicals" for their ability to linger in the environment for years on end and to not degrade, PFAS leaches into and contaminates soil, air, and water. According to the CDC, 99% of Americans already have PFAS in their blood. These chemicals bind to blood plasma proteins, circulating through each organ in the body. Not only is PFAS difficult to break down once it's in the body, but it can also bioaccumulate, since the body takes in PFAS at a higher rate than it is capable of expelling it. PFAS can cause birth defects, reproductive and immune system problems, liver and thyroid disease, and cancer^{8,9}. It can also be found in breast milk, umbilical cord blood, and the bloodstreams of most Americans, thus affecting babies and children¹⁰. While the US EPA recommends a PFAS maximum contaminant level of 70 parts per trillion (ppt), the CDC suggested lowering the health threshold to 7 - 11 ppt (which is 10 times lower), based on more recent research¹¹.

Ohio has been subjected to PFAS contaminated water for some time now. From 1951 to 2003, DuPont's Washington Works Plant released 1.7 million pounds of PFAS into the Ohio River, contaminating drinking water in parts of Washington, Athens, and Meigs counties¹². The Toledo Air National Guard identified PFAS in 7 of their 16 wells. (Water samples from one well showed PFAS levels of 349 ppt—50 times higher than what is deemed safe for humans by the CDC—prompting local health officials to distribute bottled water to residents.) PFAS was also detected in Dayton's water supply, as certain wells were contaminated by the firefighting foam used by Wright-Patterson Air Force Base¹³. And, in case you thought PFAS contamination was limited to ground water or source water, rainfall measured in Cleveland contained surprisingly high amounts of PFAS. In other words: it is literally raining PFAS¹⁴. This will certainly have an impact on any crops and livestock, as both will bioaccumulate PFAS, in turn contaminating any byproducts or commodities they yield with these chemicals, harming Ohioans in the long run¹⁵.

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⁷ "Per-and Polyfluoroalkyl Substances (PFAS)." *FDA*. https://www.fda.gov/food/chemical-contaminants-food/and-polyfluoroalkyl-substances-pfas

⁸ "Toxicology Profile for Perfluoroalkyls." https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf

⁹ "PFAS Explained." EPA. https://www.epa.gov/pfas/pfas-explained

¹⁰ "Polyfluoroalkyl Chemicals in the US Population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003-2004 and Comparisons with NHANES 1999-2000." Calafat, A. et al. *Environ Health Perspective*. Nov 2007. 115(11): 1596-1602. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2072821/

¹¹ "CDC Report on PFAS: A Good Start But Improvements Needed." Reade, Anna. *National Resources Defense Council*. https://www.nrdc.org/experts/anna-reade/cdc-report-pfas-good-start-improvements-needed ¹² State of Ohio vs E.I. DuPont De Nemours And Co. Case No. 20180T32.

https://www.ohioattorneygeneral.gov/Files/Briefing-Room/News-Releases/Environmental-Enforcement/2018-02-08-DuPont-Complaint.aspx

¹³ "Investigating Drinking Water Contamination in Ohio by Per- and Polyfluoroalkyl Substances." Patzke, Jeff. *Ohio EPA*. https://odh.ohio.gov/wps/wcm/connect/gov/2f24a853-a2c1-4f52-bfde-dc62c496495e/Drinking+Water+Contamination+in+Ohio+by+PFAs.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEI

¹⁴ "It's raining 'forever chemicals' in Cleveland. What's being done to make Ohio water safe?" McGraw, Daniel. *Ohio Capital Journal*. https://ohiocapitaljournal.com/2021/06/25/its-raining-forever-chemicals-in-cleveland-whats-being-done-to-make-ohio-water-safe/

¹⁵ "Multiple crop bioaccumulation and human exposure of perfluoroalkyl substances around a mega fluorochemical industrial park, China: Implication for planting optimization and food safety." Environmental

The extent of PFAS contamination in water has been acknowledged on both the federal and state levels to some degree, including by this body. The federal Infrastructure Deal passed in November of 2021 provides funding for the testing, filtering, and removal of PFAS from drinking water systems ¹⁶. The US EPA is tasked with reviewing scientific data regarding the health effects of PFAS ¹⁷; and the Fiscal Year 2022 National Defense Authorization Act includes provisions requiring the Department of Defense to mitigate negative effects of PFAS before incineration ¹⁸. On the state level, the Ohio EPA recently finished its final testing for PFAS in drinking water from Ohio's public water systems at the direction of Governor DeWine, of which 106 water systems were found to have some detectable level of PFAS ¹⁹. The Ohio House of Representatives also took action with the passage of Representative Baldridge's House Bill 158 this General Assembly, restricting the use of firefighter's foam with PFAS during training exercises in order to limit firefighter exposure to this family of carcinogens ²⁰.

Currently, the Environmental Working Group estimates the drinking water of more than 200 million Americans is contaminated with PFAS. Found in the groundwater, rivers, lakes, and rainwater replenishing these other water sources, PFAS is clearly omnipresent²¹. It is important to take action to make sure our drinking water, source water, and rain water remain protected and clear of the presence of PFAS if we are to remain healthy. In order to accomplish this, the next logical step would be to set maximum contamination levels for these and other chemicals²².

House Bill 365 will do just that: it will establish state-level standards that limit known toxins in our drinking water and protect families, homes, schools, and businesses from the long-term health effects of these harmful chemicals. This legislation will require the Director of Ohio's Environmental Protection Agency to adopt rules establishing maximum allowable contaminant levels in drinking water and source water for certain contaminants, including PFAS. Specifically, the director shall establish a maximum contaminant level for PFAS compounds, Chromium-6, and 1,4 dioxane by considering the following:

International. Volume 127, June 2019, pp 671-684.

https://www.sciencedirect.com/science/article/pii/S0160412018332069

¹⁶ "Biden Billions for PFAS in Drinking Water." *The National Law Review*. Volume XII, No 44. February 13, 2022. https://www.natlawreview.com/article/biden-billions-pfas-drinking-

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¹⁷ "EPA Advances Science to Protect the Public from PFOA and PFOS in Drinking Water." EPA Press Office. https://www.epa.gov/newsreleases/epa-advances-science-protect-public-pfoa-and-pfos-drinking-water

¹⁸ "Earthjustice Applauds Inclusion of PFAS Incineration Provision in Final Passage of NDAA, Calls for Continued Action to Address PFAS Contamination." Nolan, Geoffrey. *Earthjustice*.

https://earthjustice.org/news/press/2021/earthjustice-applauds-inclusion-of-pfas-incineration-provision-in-final-passage-of-ndaa-calls-for-continued

¹⁹ "'Forever chemicals' found in 24 drinking water systems in region." Turay, Jr., Ismail. *Dayton Daily News*. https://www.daytondailynews.com/news/forever-chemicals-found-in-24-drinking-water-systems-in-region/3VFPJ45T3FBTZEJBNV2IE2MFCY/

²⁰ https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA134-HB-158

²¹ "Study: More Than 200 Million Americans Could Have Toxic PFAS in Their Drinking Water." *EWG*. https://www.ewg.org/news-insights/news-release/study-more-200-million-americans-could-have-toxic-pfas-their-drinking

²² "PFAS should be managed as a single class of chemicals, experts say." Weaver, Janelle. *Environmental Factor*, August 2020. https://factor.niehs.nih.gov/2020/8/papers/pfas/index.htm

- Establish state-wide maximum contaminant levels for PFOS, PFOA, other PFAS compounds, chromium-6 and 1,4 dioxane in public drinking water systems;
- Direct the state to consider limits on other pollutants in drinking water systems when two or more other states have set limits or issued guidance on a given pollutant;
- Provide for review of the best available scientific evidence in setting maximum contaminant limits:
- Ensure contaminant limits sufficient to protect vulnerable people, including pregnant and nursing mothers, infants, and children.

There is no cost to the state from these initiatives. These proposals direct existing regulatory agencies to set state-level standards for drinking water based on a review of the best available scientific evidence. Nor is there a cost to companies or manufacturers: we are not prohibiting or restricting the manufacture, sale, or use of these chemicals. Instead, by establishing maximum contamination levels of harmful chemicals in our water, we are providing clear guidance to Ohio's companies on how to maintain a healthy environment while continuing to participate in a thriving economy, as well as protecting the health of Ohioans and reassuring them that a life of health, safety, and security can be lived right here at home.

Chairman Koehler, Vice Chair Creech, Ranking Member Brent, and members of the Agriculture and Conservation Committee: thank you for the opportunity to testify in support of this important piece of legislation. We would be happy to answer any questions the committee members may have.