

ONE HUNDRED FIFTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

September 4, 2018

To: Subcommittee on Environment Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on “Perfluorinated Chemicals in the Environment: An Update on the Response to Contamination and Challenges Presented”

On **Thursday, September 6, 2018, at 10:00 a.m. in room 2123 of the Rayburn House Office Building**, the Subcommittee on Environment will hold a hearing on “Perfluorinated Chemicals in the Environment: An Update on the Response to Contamination and Challenges Presented.”

I. BACKGROUND

DuPont (now DowDuPont) introduced perfluorooctanoic acid (PFOA) as Teflon in 1949. PFOA and Perfluorooctane sulfonate (PFOS) are chemicals that are included in a large class of chemicals known as per- and polyfluoroalkyl substances, commonly referred to as PFAS. Since 1949, manufacturers have used PFAS substances in many common products, such as firefighting foams, food packaging materials, nonstick cookware, cleaning products, toiletries, and stain and water-resistant fabrics and treatments.¹ While PFOA and PFOS are no longer produced domestically, U.S. manufacturers reported production volumes of PFOA and PFOS between

¹ Interstate Technology & Regulatory Council, *History and Use of Per- and Polyfluoroalkyl Substances (PFAS)* (Nov. 13, 2017) ([pfas-1.itrcweb.org/wp-content/uploads/2017/11/pfas_fact_sheet_history_and_use__11_13_17.pdf](https://www.itrcweb.org/wp-content/uploads/2017/11/pfas_fact_sheet_history_and_use__11_13_17.pdf)); Agency for Toxic Substances and Disease Registry, *Per- and Polyfluoroalkyl Substances (PFAS) and Your Health* (www.atsdr.cdc.gov/pfas/pfas-exposure.html) (accessed Aug. 28, 2018).

10,000–500,000 pounds in 2002.² PFAS chemicals do not occur in nature; they enter the environment through chemical dumping, emissions, or landfill leachate from sources such as airports, military bases, firefighting training facilities, paper mills, chemical companies, and landfills.³

Between 1951 and 2003, DuPont dumped and emitted over 1.7 million pounds of PFOA in West Virginia.⁴ In 2002, the U.S. Environmental Protection Agency (EPA) ordered DuPont to provide alternative drinking water for residents near the Washington Works facility in Washington, West Virginia.⁵ PFOA was one of the hazardous contaminants found in the community's drinking water. This drinking water crisis focused national attention on PFAS exposures and their potential health risks.

II. PFAS AND PUBLIC HEALTH

PFOS and PFOA are the two best studied and most abundant unmonitored drinking water PFAS contaminants. Because of the extreme chemical stability of PFAS, these contaminants are environmentally persistent and can accumulate over time. Health studies show that PFAS bioaccumulate and will remain in the human body for years. Frequent exposures to PFOS and PFOA can build up, and are linked to severe adverse health effects, including, but not limited to, certain cancers including kidney and liver cancers, suppressed antibody response, reproductive problems, and thyroid hormone disruption.⁶ In 2003-2004, PFOA and PFOS were detected in, respectively, the blood of 99.7 percent and 99.9 percent of those tested in the U.S.⁷

² Agency for Toxic Substances and Disease Registry, *Toxicological Profile for Perfluoroalkyls, Draft for Public Comment* (Jun. 2018) (www.atsdr.cdc.gov/toxprofiles/tp200.pdf).

³ Interstate Technology & Regulatory Council, *History and Use of Per- and Polyfluoroalkyl Substances (PFAS)* (Nov. 13, 2017) (pfas-1.itrcweb.org/wp-content/uploads/2017/11/pfas_fact_sheet_history_and_use__11_13_17.pdf).

⁴ The Allegheny Front, *Ohio River Communities are Still Coping with Teflon's Toxic Legacy* (Oct. 28, 2016).

⁵ U.S. Environmental Protection Agency, *E.I. DuPont de Nemours and Company PFOA Settlements* (www.epa.gov/enforcement/ei-dupont-de-nemours-and-company-pfoa-settlements) (accessed Aug. 28, 2018).

⁶ See note 2.

⁷ *Id.*

In 2009, EPA established a provisional health advisory for PFOS and PFOA.⁸ In response, states began testing for PFOS and PFOA, and several states created their own state-enforceable drinking water standards, known as maximum contaminant levels (MCL).⁹ As testing and research on health effects continued, it became clear EPA underestimated the extent of drinking water contamination by PFAS and the severity of adverse health effects. According to research from the Environmental Working Group, PFAS contamination above EPA's reporting levels has been found in drinking water systems serving approximately 16 million Americans, and over 110 million Americans likely have some PFAS in their water.¹⁰

In May 2016, EPA lowered its nonbinding lifetime health advisory level (HAL) for PFOS and PFOA from 400 parts per trillion (ppt) to 70 ppt.¹¹ And, EPA still has not yet set an MCL under the Safe Drinking Water Act (SDWA) for any PFAS despite severe health effects, frequency of contamination, and serious safety risks from very low levels of exposure. Several thousand PFAS chemicals, other than PFOA or PFOS (referred to as alternative PFAS chemicals) are active in commerce.¹² Of those thousands, EPA has reviewed 294 alternative PFAS chemicals – 64 percent of those chemicals required further regulation in order to mitigate associated risks.¹³

⁸ U.S. Environmental Protection Agency, *Provisional Health Advisories for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS)* (Jan. 8, 2009) (www.epa.gov/sites/production/files/2015-09/documents/pfoa-pfos-provisional.pdf).

⁹ The National Conference of State Legislatures, *Per- And Polyfluoroalkyl Substances (PFAS) State Legislation 2017-2018* (Jun. 29, 2018) (www.ncsl.org/research/environment-and-natural-resources/per-and-polyfluoroalkyl-substances-pfas-state-laws.aspx).

¹⁰ Environmental Working Group, *Report: Up to 110 Million Americans Could Have PFAS-Contaminated Drinking Water* (May 22, 2018) (www.ewg.org/research/report-110-million-americans-could-have-pfas-contaminated-drinking-water).

¹¹ U.S. Environmental Protection Agency, *Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate*, 81 Fed. Reg. 33250 (May 25, 2016).

¹² *Pruitt pledges EPA action on legacy PFASs*, Chemical Watch (May 24, 2018) (chemicalwatch.com/67167/pruitt-pledges-epa-action-on-legacy-pfas).

¹³ U.S. Environmental Protection Agency, *PFAS Laws and Regulations* (www.epa.gov/pfas/pfas-laws-and-regulations) (accessed Aug. 28, 2018).

III. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY REPORT

On June 20, 2018, the Agency for Toxic Substances and Disease Registry (ATSDR) released a draft study of the public health risks posed by PFAS.¹⁴ That study found the maximum safe level of PFOS and PFOA exposure to be approximately seven to ten times less than the health advisory level set by the EPA. Lower levels could significantly affect response and cleanup efforts at PFAS sites nationwide. For example, the Department of Defense will not supply water long term to homes near current and former military bases contaminated by PFAS unless their well or other drinking water source tests above 70-ppt.¹⁵

In May, 2018, the Union of Concerned Scientists obtained emails showing that ATSDR was preparing to release toxicological profiles severely ratcheting down PFAS safe exposure levels. EPA and the White House stepped in to block their release citing a “public relations nightmare.”¹⁶

IV. RECENT LEGISLATIVE EFFORTS TO ADDRESS PFAS

Representative Pallone (D-NJ) introduced H.R. 1068, the Safe Drinking Water Act Amendments of 2017 on February 15, 2017.¹⁷ H.R. 1068 reauthorizes and revises SDWA to address a number of outstanding public health and infrastructure matters not currently resolved by the law. The legislation specifically addresses PFAS contamination by requiring the EPA Administrator to publish an MCL goal and promulgate a national primary drinking water regulation for PFAS compounds, including PFOS and PFOA.

On June 29, 2017, Representative Boyle (D-PA) introduced H.R. 3106 to amend SDWA. His bill would require EPA to promulgate a national primary drinking water regulation for PFAS compounds and it would set a two-year deadline for EPA to set an MCL for PFAS.¹⁸

¹⁴ Agency for Toxic Substances and Disease Registry, *Toxicological Profile for Perfluoroalkyls, Draft for Public Comment* (Jun. 2018) (www.atsdr.cdc.gov/toxprofiles/tp200.pdf).

¹⁵ *Blocked report drops PFAS safety level into single digits*, MLive (Jun. 21, 2018) (www.mlive.com/news/index.ssf/2018/06/atsdr_pfas_toxprofiles_study.html).

¹⁶ *Id.*

¹⁷ H.R. 1068

¹⁸ H.R. 3106

V. WITNESSES

Panel One

Dr. Peter Grevatt

Director, Office of Ground Water & Drinking Water
Environmental Protection Agency

Maureen Sullivan

Deputy Assistant Secretary of Defense for Energy
Department of Defense

Panel Two

Lisa Daniels

President, Association of State Drinking Water Administrators
Pennsylvania Department of Environmental Protection

Sandeep Burman

Region 5 Representative
Association of State and Territorial Solid Waste Management Officials
Minnesota Pollution Control Agency

Erik D. Olson

Senior Director, Health and Food, Healthy People & Thriving Communities Program
Natural Resources Defense Council

Emily Donovan

Co-Founder
Clean Cape Fear