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September 28, 2018

Acting Administrator Andrew R. Wheeler
& Office of Ground Water and Drinking Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW Washington, D.C. 20460

RE: EWG Comments on PFAS National Leadership Summit and Engagement,
Docket ID No. EPA-HQ-OW-2018-0270

Dear Administrator Wheeler:

The Environmental Working Group appreciates the opportunity to submit these comments in response to EPA's request for information from the public to address challenges caused by per- and polyfluoroalkyl substances (PFAS) currently facing states and local communities.

EWG has been actively studying and reporting on PFAS substances since reports emerged of widespread PFOA contamination in Parkersburg, Virginia.¹ In the last twenty years, EWG has issued numerous reports on PFAS contamination including reports on drinking water, food packaging,² and cosmetics.³ EWG, in collaboration with Northeastern University, regularly updates a drinking water map showing publicly known PFAS pollution sites and drinking water contamination across the country.⁴

PFAS contamination is pervasive. Patrick Bryce, a senior official with the Centers for Disease Control and Prevention, has stated that PFAS contamination in drinking water represents "one of

¹ See *Dupont Hid Teflon Pollution for Decades*, Environmental Working Group (Dec. 13, 2002), <https://www.ewg.org/research/dupont-hid-teflon-pollution-decades#.W67Gk5NKi1s>.

² See, e.g., Rachel Smilan-Goldstein, *These Toxic Chemicals in Food are Getting Into Your Meals*, Environmental Working Group (June 19, 2018), <https://www.ewg.org/childrenshealth/22091/these-toxic-chemicals-food-packaging-are-getting-your-meals#.W67G0pNKi1s>; David Andrews & Bill Walker, *Many Fast Food Wrappers Still Coated in PFCs, Kin to Carcinogenic Teflon Chemical*, Environmental Working Group (Feb. 1, 2017), <https://www.ewg.org/research/many-fast-food-wrappers-still-coated-pfcs-kin-carcinogenic-teflon-chemical#.W67G-5NKi1t>; Olga Naidenko et al., *Credibility Gap: Toxic Chemicals in Food Packaging*, Environmental Working Group (June 9, 2008), <https://www.ewg.org/research/credibility-gap-toxic-chemicals-food-packaging-and-duponts-greenwashing#.W67SOJNKi1s>.

³ David Andrews & Carla Burns, *Is Teflon in Your Cosmetics*, Environmental Working Group (March 14, 2018), <https://www.ewg.org/skindeep/2018/03/07/is-teflon-in-your-cosmetics#.W67H3ZNKi1s>.

⁴ See, e.g., Bill Walker, *Update: Mapping the Expanding PFAS Crisis*, Environmental Working Group (July 30, 2018) <https://www.ewg.org/research/update-mapping-expanding-pfas-crisis#.W65TtpNKi1u>; David Andrews, *Report: Up to 110 Million Americans Could Have PFAS-Contaminated Drinking Water*, Environmental Working Group (May 22, 2018), <https://www.ewg.org/research/report-110-million-americans-could-have-pfas-contaminated-drinking-water#.W62GR5NKi1s>; Bill Walker & Soren Rundquist, *Mapping a Contamination Crisis: PFCs Pollute Tap Water for 15 Million People, Dozens of Industrial Sites*, Environmental Working Group (June 8, 2017), <https://www.ewg.org/research/mapping-contamination-crisis#.W67IJZNKi1s>.

the most seminal public health challenges for the next decades.”⁵ According to EWG research, more than 1500 drinking water systems serving more than 110 million Americans may be contaminated with PFAS chemicals at levels greater than 2.5 parts per trillion.⁶ Independent scientific research has been used to calculate that a safe level of exposure to PFAS chemicals in water is 1 ppt or lower.⁷ Recently, the Pentagon also released data showing that 36 U.S. military installations found on-base drinking water contamination that exceeded the EPA’s lifetime health advisory for perfluorooctane sulfonate (“PFOS”) and perfluorooctanoic acid (“PFOA”). The Pentagon also identified 90 installations where PFOA/PFOS released on base had contaminated drinking water, in some cases migrating to off-base civilian communities.⁸ Just this week, the Union of Concern Scientists mapped 131 military sites in 37 states and found that 90 percent of them had PFAS concentrations at least 10 times higher than the level recommended under the recent PFAS study released by the Agency for Toxic Substances and Disease Registry.⁹

By EPA’s own estimate, there are approximately 5,000 different PFAS chemicals.¹⁰ These chemicals are known to persist in the environment and many bioaccumulate in the body. PFAS chemicals are linked to numerous health effects including kidney cancer, testicular cancer, bladder cancer, liver function impairment, impaired fetal development, chronic intestinal inflammation, disruption of critical thyroid hormones, weakened immune system, and high cholesterol.¹¹

While the risks from long-chain PFAS compounds like PFOA and PFOS are well understood, there is inadequate evidence to show that newer generation short-chain PFAS chemicals are safe. What’s more, evidence suggests that short-chain PFAS chemicals are more likely to migrate through the environment and are more difficult to remove using granular activated carbon filters.¹² Given the sheer volume of different PFAS chemicals, the pervasiveness of contamination, the well-documented health risks from some PFAS chemicals, the significant data gaps that exist for other PFAS chemicals, and the high likelihood of human exposure

⁵ Pat Rizzuto et al., *CDC Sounds Alarm on Chemical Contamination in Drinking Water*, Bloomberg Env’t. (Oct. 17, 2017, 4:23 PM), <https://bna.news/bna.com/environment-and-energy/cdc-sounds-alarm-on-chemical-contamination-in-drinking-water?context=article-related>.

⁶ David Andrews, *Report: Up to 110 Million Americans Could Have PFAS-Contaminated Drinking Water*, Environmental Working Group (May 22, 2018), <https://www.ewg.org/research/report-110-million-americans-could-have-pfas-contaminated-drinking-water#.W62GR5NKi1s>.

⁷ Philippe Grandjean & Richard Clapp, *Perfluorinated Alkyl Substances: Emerging Insights Into Health Risks*, 25 *New Solutions: A Journal of Environmental and Occupational Health Policy* 147 (2015), <https://www.ncbi.nlm.nih.gov/pubmed/26084549>.

⁸ Bill Walker, *Update: Mapping the Expanding PFAS Crisis*, Environmental Working Group (July 30, 2018) <https://www.ewg.org/research/update-mapping-expanding-pfas-crisis#.W65TtpNKi1u>.

⁹ Union of Concerned Scientists, *A Toxic Threat: Government Must Act Now on PFAS Contamination at Military Bases* (Sept. 25, 2018), <https://www.ucsusa.org/center-science-and-democracy/preserving-science-based-safeguards/toxic-threat-pfas-contamination-military-bases#.W67WB5NKi1s>.

¹⁰ Environmental Protection Agency, National Priorities: PER- AND POLYFLUOROALKYL SUBSTANCES, <https://www.epa.gov/research-grants/national-priorities-and-polyfluoroalkyl-substances> (last visited Sept. 28, 2018).

¹¹ See, e.g., C8 Science Panel, C8 Probable Link Reports, http://www.c8sciencepanel.org/prob_li nk.html (last updated Oct. 29, 2012).

¹² Stephan Brendel et al., *Short-Chain Perfluoroalkyl Acids: Environmental Concerns and a Regulatory Strategy Under REACH*, 30 *Environmental Sciences Europe* 9 (2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5834591/>.

through multiple pathways, it is important that EPA study and regulate PFAS chemicals as a class rather than on an individual basis.

Specifically, EWG recommends that EPA study and regulate the class of PFAS chemicals by:

- **Requiring testing for PFAS chemicals in all public water systems.** The information acquired under the Unregulated Contaminant Monitoring Rule 3 was inadequate to understand the extent of PFAS contamination in public drinking water systems. The UCMR 3 only tested for six PFAS chemicals¹³ and only made public detections greater than 10-70 ppt, including 40 ppt for PFOS. EPA should require testing and monitoring of drinking water systems for all PFAS chemicals for which analytical methods exist, and should publicly disclose all detections greater than 1 ppt.
- **Developing new analytical methods.** EPA currently lacks analytical methods for the vast majority of PFAS chemicals. EPA should invest in the development of new analytical methods for PFAS chemicals, using the lowest available detection limits. EPA should additionally develop and validate methods for detecting total organic fluorine, as recommended by Dr. Linda Birnbaum, Director of the National Institute for Environmental Health Sciences, this week during her testimony before the Senate Homeland Security and Governmental Affairs Committee.¹⁴
- **Maintaining interactive maps.** While EWG has mapped PFAS contamination in drinking water based on the UCMR 3 data, EWG is limited to information that is publicly available. EPA should maintain an interactive national map of locations that have used or are suspected of having used PFAS chemicals, similar to what the state of Michigan recently undertook.¹⁵ EPA should also maintain an interactive map of all soil, groundwater, surface water, and drinking water detections of PFAS chemicals greater than 1 ppt.
- **Designating PFAS chemicals as hazardous substances and ensuring that polluters pay to clean contaminated sites.** EPA should designate PFAS substances as hazardous substances under sections 304 and 311 of the Clean Water Act. This would trigger important monitoring, reporting, and permitting requirements to control future pollution. It would also add PFAS chemicals a hazardous substance under section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA, which would help facilitate clean-ups and ensure responsible parties pay for remediation.
- **Adding PFAS chemicals to the Toxic Release Inventory.** Adding PFAS chemicals to the toxic release inventory under the Emergency Planning and Community Right to

¹³ *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg. 26,072 (May 2, 2012).

¹⁴ *The Federal Role in the Toxic PFAS Chemical Crisis: Hearing Before the Subcomm. on Federal Spending Oversight and Emergency Management of the Senate Comm. on Homeland Security and Governmental Affairs*, 115th Cong. (2018), <https://www.hsgac.senate.gov/hearings/the-federal-role-in-the-toxic-pfas-chemical-crisis>.

¹⁵ State of Michigan, *Confirmed PFAS Sites*, <https://www.michigan.gov/pfasresponse/0,9038,7-365-86511---.00.html> (last visited Sept. 28, 2018).

Know Act, or EPCRA, would provide vital information to the public about PFAS releases. PFAS chemicals should be added to the TRI as a class, as EPA has done with other chemical classes like PCBs.

- **Ordering additional studies of PFAS chemicals.** EPA should use its order authority under section 4 of the amended Toxic Substances Control Act to order the development of additional studies on PFAS chemicals where data gaps exist. These studies should include a thorough assessment of potential impacts to the immune system and the endocrine system. Particular care should be taken to ensure that there are studies to understand the risks to vulnerable populations like children, pregnant women, veterans, and fenceline communities. For example, Dr. Linda Birnbaum noted during the recent HSGAC hearing on PFAS chemicals that there is a lack of studies on pediatric effects of PFAS chemicals. EPA should use its authority to fill these data gaps.¹⁶
- **Not allowing new PFAS chemicals on the market without adequate safety review and informing the public about PFAS chemicals already in commerce.** At EPA's May 2018 summit, EPA Director of the Office of Pollution Prevention and Toxics, Jeff Morris, stated that nearly 900 PFAS chemicals have been approved for commercial production and use under section 5 of TSCA.¹⁷ The public knows little about these chemicals, including which are currently being manufactured. EPA should take steps to inform the public about how many PFAS chemicals are actually in use. EPA should also ensure that premanufacture notices for new PFAS chemicals are only approved if there is robust safety data. All new PFAS chemicals should be required to file a premanufacture notice regardless if they would otherwise be subject to one of the exemptions (e.g. low-volume, chemical byproducts, etc.) under section 5.
- **Providing resources to the states.** States have played a leading role in addressing the risks from PFAS chemicals. The EPA should support this state-level work by providing resources for additional research, monitoring, and remediation.
- **Coordinating with other agencies.** PFAS chemicals are used in a wide variety of applications spanning many different regulatory jurisdictions. EPA should continue to share data and coordinate with other federal agencies to mitigate risks from PFAS chemicals through all potential exposure routes.

EWG appreciates the opportunity to provide these comments. EWG has also joined comments submitted by Earthjustice, which discuss some of these ideas in greater detail. Should you wish to discuss these comments further, please contact Melanie Benesh, mbenesh@ewg.org.

¹⁶ *The Federal Role in the Toxic PFAS Chemical Crisis: Hearing Before the Subcomm. on Federal Spending Oversight and Emergency Management of the Senate Comm. on Homeland Security and Governmental Affairs*, 115th Cong. (2018), <https://www.hsgac.senate.gov/hearings/the-federal-role-in-the-toxic-pfas-chemical-crisis>.

¹⁷ Jeff Morris, Per- and Polyfluoroalkyl Substances Under the Toxic Substances Control Act, at slide 2 (May 22, 2018), https://www.epa.gov/sites/production/files/2018-05/documents/pfas_summit_jeff_morris_22_may_2018.pdf.