Attorneys General of California, Colorado, and Oregon

June 10, 2019

Via Federal Rulemaking Portal

The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, N.W.
Washington, D.C. 20460

RE: Draft Interim Recommendations for Addressing Groundwater Contaminated with Perfluorooctanoic Acid and Perfluorooctane Sulfonate; EPA DOCKET Number EPA-HQ-OLEM-2019-0229

Dear Administrator Wheeler:

The undersigned Attorneys General submit the following comments on the United States Environmental Protection Agency's ("EPA") "Draft Interim Recommendations to Address Groundwater Contaminated with Perfluorooctanoic Acid and Perfluorooctane Sulfonate" ("Draft Guidance").[1] Given the widespread presence of per- and polyfluoroalkyl substances ("PFAS") in contaminated groundwater impacting numerous communities throughout the United States, it is essential to develop robust federal guidance and standards for the cleanups of PFAS chemicals, including perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonate ("PFOS").[2] Without such regulation, PFAS contamination will cause continued harm to citizens across the country, including residents of the undersigned states.

EPA's screening level and preliminary remediation goal proposed in the Draft Guidance are too high, unsupported by the science, unjustifiably limited to only PFOS and PFOA, and not sufficiently protective of human health and the environment. The high screening level would result in many contaminated sites going unidentified and unaddressed. Furthermore, the proposed preliminary remediation goal is similarly too high, and impacted sites would be cleaned up inadequately, leaving behind levels of PFAS contamination that will continue to threaten human health. Therefore, we urge EPA to set the screening level and preliminary remedial goal at lower levels that are protective of human health and the environment.

In addition, we urge EPA to set screening and cleanup standards for more than just PFOA and PFOS - two chemicals in the PFAS chemical family. PFAS contamination is comprised of more than just these two well-known PFAS chemicals and generally occurs in a complex mixture.

[1] https://www.regulations.gov/docket?D=EPA-HQ-OLEM-2019-0229
[2] PFAS are a large class of man-made chemicals that includes PFOS and PFOA.

Furthermore, adverse health impacts occur from the additive effects of all these chemicals.[3] EPA's cleanup and screening levels must address the entire suite of PFAS chemicals.

Lastly, we request that EPA immediately designate PFAS chemicals as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq*. ("CERCLA"). Under CERCLA, responsible parties are required to perform and reimburse response costs for releases of hazardous substances. Therefore, action by EPA to list PFAS chemicals is important to ensure that PFAS contamination is promptly and effectively addressed under CERCLA and polluters will be required to pay for their pollution.

EPA is the federal agency entrusted with protecting the health, safety, and welfare of the public in our states. Therefore, the undersigned states respectfully request that EPA, revise the Draft Guidance to ensure that government actions to address PFAS contamination, including clean up actions pursuant to CERCLA, are conducted comprehensively and in a manner that protects the public health and our natural resources.

A. The Toxicity of PFAS Chemicals and the Widespread PFAS Contamination Must Be Addressed Urgently

PFAS chemicals were first manufactured in the 1940s, and thousands of new PFAS compounds have been and continue to be developed. PFAS chemicals have fire-resistant properties and act as oil, grease, and water repellants. They have been used in many consumer products, including Teflon®, Stainmaster®, Scotchgard®, Gore-Tex®, and Tyvek®. PFAS has long been used in aqueous film-forming foam ("AFFF"), which has been widely used in firefighting. Many civilian airports and military fire training areas where AFFF has been used are contaminated by PFAS and the groundwater and surface waters surrounding these sites contain high PFAS concentrations.

The toxicity of these chemicals has been well characterized in both human and animal models.[4] Some PFAS chemicals are classified as likely human carcinogens and may also cause autoimmune and endocrine disorders and developmental impacts to fetuses and to infants.[5] The

[3] U.S. Department of Health and Human Services and Centers for Disease Control and Prevention, *Fourth National Report on Human Exposure to Environmental Chemicals*, Updated Tables (March 2018)(available at https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume1_Mar2018.pdf).

[4] There are many studies regarding the potential harms of these substances. See the references at the end of this comment letter and the footnotes herein. The Agency for Toxic Substances and Disease Registry ("ATSDR") performs risk assessment and evaluation of chemicals for the U.S. Centers for Disease Control and Prevention. It released a draft Toxicological Profile for Perfluoroalkyls in June 2018. See generally, ATSDR and National Center for Environmental Health, *An overview of Perfluoraklyl and Polyfluoroalkyl Substances and Interim Guidance for Clinicians Responding to Patient Exposure Concerns*, Interim Guidance (May 7, 2018) (available at https://www.atsdr.cdc.gov/pfas/docs/pfas_clinician_fact_sheet_508.pdf).

[5]ATSDR and U.S. Department of Health and Human Services, *Toxicological Profile for Perfluoroalkyls*, Draft for Public Comment (June 2018). In addition, see the resources listed at the end of this comment letter and the following: Virginia Ballesteros, et al., *Exposure to Perfluoroalkyl substances and thyroid function in pregnant women and children: A systematic review of epidemiologic studies*, 99 Env't Int'l 15-28 (2017); Gloria B. Post, et al., *Perfluoroalkyl acid (PFOA), an emerging drinking water contaminant: A critical review of recent literature*, 116 Envtl. Res. 93-117 (2012); *C8 Science Panel Report* (and related sub-sections) (Jan. 4, 2017) (available at: http://www.c8sciencepanel.org/); Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (Dec. 7, 2018) (available at:

substantial weight of the scientific evidence demonstrates adverse health effects on populations exposed to PFAS-contaminated drinking water – particularly on the young – and at very low levels. Due to health concerns, some of the PFAS family of chemicals were voluntarily phased out of U.S. manufacturing. These chemicals, however, are still manufactured internationally and can be imported into the U.S. in consumer goods.[6]

Nearly all Americans have been exposed to PFAS toxins in drinking water, in consumer products, and/or in food.[7] PFAS are highly persistent in the environment and are resistant to metabolic and environmental degradation and thus are referred to as the "forever chemicals." They are bio-accumulative, resulting in the buildup of these toxins in living tissue. As a result, people exposed to these chemicals accumulate increasing concentrations of PFAS in their blood.

The widespread use of PFAS and their extreme resistance to degradation have resulted in ubiquitous PFAS contamination - with more areas being documented almost daily.[8]

In many states, including the undersigned states, PFAS contamination has been found at numerous sites. At least 610 sites in 43 states are known to be contaminated with PFAS, including drinking water systems serving an estimated 19 million people.[9]

California is suffering from substantial PFAS groundwater contamination. PFOA and PFOS have been detected at least 430 times in California drinking water supplies. 18 drinking water sources in California are over the PFOA notification level and 25 are over the PFOS notification level.[10] At least 21 Department of Defense sites in California have been identified as contaminated, including the Naval Air Weapons Station at China Lake, where PFAS concentrations reached

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https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf); Xindi C. Hu, et al., *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*, 3 Envtl. Sci. Tech. Letters 344-350 (2016); Natural Resources Defense Council, *Scientific and Policy Assessment for Addressing Per-and Polyfluoroalkyl Substances in Drinking Water* (March 15, 2019) (available at: https://www.nrdc.org/sites/default/files/assessment-for-addressing-pfas-chemicals-in-michigan-drinking-water.pdf).

[6] U.S. EPA, *Basic Information on PFAS* (available at: https://www.epa.gov/pfas/basicinformation-pfas).

[7] The 2011-2012 U.S. National Health and Nutrition Examination Survey reported detectable serum PFAS concentrations in virtually all individuals (97%) (available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5062567/.); see Ryan C. Lewis, et.al, *Serum Biomarkers of Exposure to Perfluoroalkyl Substances in Relation to Serum Testosterone and Measures of Thyroid Function among Adults and Adolescents from NHANES 2011–2012*, 12 Int'l J. Envtl. Res. Pub. Health 6098-6114 (2015); Xindi C. Hu, et al., *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*, 3 Envtl. Sci. Tech. Letters 344-350 (2016).

[8] See interactive map of PFAS contamination sites throughout the United States: https://www.ewg.org/interactive-maps/2019_pfas_contamination/map. See also Xindi C. Hu, et al., *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*, 3 Envtl. Sci. Tech. Letters 344-350 (2016) (finding drinking water supplies of 6 million U.S. residents exceed U.S. EPA's lifetime health advisory of 70 ppt for PFOA and PFOA; these sites may have groundwater, surface water and soil contamination).

[9] See the interactive map of PFAS contamination sites in the United States at https://www.ewg.org/interactive-maps/2019_pfas_contamination/ and accompanying articles.

[10] Water Boards – PFAS Phased Investigation Approach (available at: https://www.waterboards.ca.gov/pfas/docs/7_investigation_plan.pdf).

8,000,000 parts per trillion ("ppt").[11] The California State Water Resources Control Board ("CA Water Board") has also begun investigating airports, landfills, and other sites to better understand the full scope of PFAS contamination in the state.[12] California's state agencies continue to respond to the growing threat of PFAS contamination to protect Californians.

In Colorado, the PFAS contamination temporarily shut-down three local water supplies in Fountain, Security and Widefield, which required bottle water for over 60,000 residents. As a result, the Air Force, in conjunction with the Army Corps of Engineers, is constructing new water treatment facilities in each area. In response, Colorado adopted a site-specific groundwater standard for PFOA and PFOS in the Fountain Creek Aquifer to drive cleanup. Since adoption, Colorado has learned of contamination in drinking water supply wells in other areas of the State.

Additionally, Colorado has listed PFOA and PFOS as a hazardous constituent. Colorado is evaluating the extent of PFAS contamination to determine what additional standards are necessary.

Michigan is similarly impacted by PFAS contamination. Five years ago, the EPA conducted testing for six PFAS chemicals at a few sites throughout the state and, at two of these sites, PFAS were detected. Recently, Michigan conducted extensive testing of public water systems serving water to over 25 people and found 119 systems contaminated with PFAS.[13] Concurrent site investigations have uncovered 54 contamination sites.[14]

Pennsylvania is currently facing PFAS contamination in communities across the state.[15] In response to this growing concern, Pennsylvania is documenting the extent of contamination throughout the state and working to develop state standards.[16]

B. The Screening Levels and Preliminary Remediation Goal Proposed in the Draft Guidance Are Not Supported by the Science and Will Not Protect Public Health and the Environment

The Draft Guidance proposes to set the screening level for PFOS and PFOA individually at 40 ppt and the Preliminary Remediation Goal ("PRG") for PFOS and PFOA in groundwater at 70

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[11] Maureen Sullivan, "Addressing Perfluorooctane Sulfonate (PFOS) and Perfluorooctonaic Acid (PFOA)," Dept. of Defense, Mar. 2018.

[12] Water Boards – PFAS Phased Investigation Approach (available at: https://www.waterboards.ca.gov/pfas/docs/7_investigation_plan.pdf).

[13] See State of Michigan, *PFAS Sites Being Investigated* (available at: https://www.michigan.gov/pfasresponse/0,9038,7-365-86511---,00.html); State of Michigan, *Statewide Testing Initiative* (available at: https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_87918-464299--,00.html); Keith Matheny, *DEQ: Harmful PFAS Might Contaminate More than 11,000 Sites Statewide* (July 30, 2018) (available at: https://www.freep.com/story/news/local/michigan/2018/07/30/deq-pfas-chemical-contamination-pollution-michigan/851152002/).

[14] See Michigan Department of Environment, Great Lakes, and Energy PFAS Sites (available at: https://www.michigan.gov/documents/pfasresponse/2019-05-30_Michigan_PFAS_Sites_-_54_656597_7.pdf.)

[15] Xindi C. Hu, et al., *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*, 3 Envtl. Sci. Tech. Letters 344-350 (2016).

[16] See the PFAS Action Team web page at www.dep.pa.gov.

ppt, adopting EPA's Lifetime Drinking Water Health Advisory Level for PFOA/PFOS. Draft Guidance at 1. As the Draft Guidance recognizes, screening levels are risk-based and are used during "the process of identifying and defining areas, contaminants, and conditions at a particular site that may warrant further attention." Draft Guidance at 2. No further action under CERCLA or other federal programs are generally warranted where a contaminant concentration is below a screening level. *Id.* The Draft Guidance also notes that PRGs "are used to set initial targets for cleanup." *Id.*

The proposed screening and PRG levels are not protective of public health and not supported by the science. In fact, the current scientific knowledge demonstrates that EPA's draft levels are likely to result *in adverse health effects from long-term exposure*.[17]

In 2018, the federal Agency for Toxic Substances and Disease Registry ("ATSDR") released a comprehensive study with recommendations that translate into a PFAS health advisory that is *much* lower than EPA's 70 ppt. The ATSDR proposal is equivalent to 21 ppt for PFOA and 14 ppt for PFOS.[18] We urge EPA to revise its proposed cleanup and screening standards downward to be consistent with ATSDR's recent recommendations. In addition, in 2016, the federal Food and Drug Administration ("FDA") banned several PFAS chemicals for use in food packaging. The FDA determined that these PFAS compounds could be treated as a class and, utilizing the data available, banned the food contact use of these chemicals because it was no longer reasonably certain that there was no harm from their use.[19] The ATSDR and FDA actions support the undersigned states' position that in order to adequately address public health impacts from PFAS exposure, EPA's screening and clean up levels for these dangerous chemicals should be more stringent and comprehensive.

ATSDR's more protective standards are not the only evidence indicating that the draft screening and clean up standards are not unjustifiably high and will not protect public health. States across the country, including California, Michigan, North Carolina, New Jersey, New York, and Vermont, have taken steps to develop their own standards and policies based on the current scientific knowledge. Below are examples of these state PFAS regulatory standards.

The California Office of Environmental Health Hazard Assessment has listed PFOA and PFOS on the Proposition 65 list of chemicals known to cause cancer or reproductive harms[20], and the

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[17] See references below in this comment letter. See also Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (Dec. 7, 2018) (available at: https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf).

[18] These numbers assume that the human exposure is 100% from water. As EPA does with drinking water, this is the level the ATSDR established for the most sensitive health effects, protective of the most vulnerable populations, child exposure. Infants are extremely vulnerable to effects of PFAS exposure. EPA should ensure that its standard will be protective of the most vulnerable populations. See ATSDR and U.S. Department of Health and Human Services, *Toxicological Profile for Perfluoroalkyls*, Draft for Public Comment (June 2018) (available at: https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf).

[19] Indirect Food Additives: Paper and Paperboard Components, 81 Fed. Reg. 5 (Jan 4, 2016) (to be codified at 21 C.F.R. pt. 176).

[20] Office of Environmental Health Hazard Assessment, *Chemicals Listed Effective November 10, 2017 as Known to the State of California to Cause Reproductive Toxicity: Perfluorooctanoic Acid (PFOA) and Perfluorooctane*

CA Water Board has set interim notification levels for drinking water at 14 ppt for PFOA and 13 ppt for PFOS.[21]

New Jersey established interim groundwater quality standards for PFOA and PFOS at 10 ppt – substantially lower than EPA's HA of 70 ppt.[22] In setting these standards, the New Jersey Drinking Water Quality Institute performed comparative analysis of the EPA's and its own risk assessments of PFOA/PFOA that clearly support its recommended levels which are about 5 times lower than EPA's.[23] Michigan specifically addressed the EPA's proposed 70 ppt. Michigan estimated the human exposure associated with drinking PFAS-contaminated water at the EPA Health Advisory levels, 70 ppt, on a regular basis and concluded that there would be potential adverse health effects from long-term exposure even below 70 ppt.[24]

Many other states, however, have not yet been able to develop their own standards for the PFAS chemicals. Thus, these states in particular will be adversely impacted by EPA's failure to propose a protective standard. Even in states with state screening and cleanup standards, more regulation is needed. Given the potential for contamination to cross state boundaries, prompt and comprehensive federal action to establish protective PFAS standards is critical.

EPA's proposed screening levels for PFOA or PFOS are set so high that many sites will be prematurely screened out and thus will go unaddressed even in situations where state PFAS standards are lower than the 40 ppt level proposed in the Interim Guidance. A case in point is the State of Michigan where the publicly available data shows that most of the contaminated sites would be screened out and thus not identified for further action if the EPA's proposed screening level were used.[25] Based on the scientific data, including the ATSDR study, EPA's proposed PRG levels are also too high and need to be lowered in order to protect the public and the environment from the harms of PFAS contamination.

Sulfonate (PFOS) (available at: https://oehha.ca.gov/proposition-65/crnr/chemicals-listed-effective-november-10-2017-known-state-california-cause).

[21] State Water Resources Control Board, *Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)* (available at: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html).

[22] State of New Jersey, Interim Specific Ground Water Quality Standards (available at: https://nj.gov/dep/wms/bears/gwqs.htm.)

[23] New Jersey Drinking Water Quality Institute Health Effects Subcommittee, *Health-based Maximum Contaminant Level Support Document: Perfluorooctanoic Acid (PFOA)*, Appendix 2: Comparison of USEPA Office of Water Health Advisory and DWQI recommended Health-based MCL for PFOA (Feb. 15, 2017) (available at: https://www.nj.gov/dep/watersupply/pdf/pfoa-appendixa.pdf).

[24] See Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (Dec. 7, 2018) at pp. 58-59 (available at: https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf).

[25] State of Michigan PFAS Response, *Phase 1 (2018)* (available at: https://www.michigan.gov/pfasresponse/0,9038,7-365-86510_88061_92549_92526-495899--,00.html); State of Michigan, *PFAS Results CWS* (available at: https://data.michigan.gov/Environment/PFAS-Results-CWS/fa3u-vbsk).

C. EPA Must Develop Cleanup Standards for the Whole Class of PFAS Chemicals, Not Just PFOA and PFOS.

Given the scientific evidence demonstrating the adverse health impacts of PFAS chemicals as a class, EPA should not only regulate PFOS and PFOA, but also set screening and cleanup levels for the whole class of PFAS chemicals.

Leading U.S. government scientists have acknowledged that PFAS cannot be regulated individually. Dr. Linda Birnbaum, Director of the National Institute of Environmental Health Sciences and the National Toxicology Program of the National Institutes of Health ("NIH"), testified before the U.S. Senate, saying that approaching PFAS as a class for assessing exposure and biological impact is the best way to protect public health.[26]

Major international studies provide a consensus from more than 200 scientists on the potential harms associated with the entire class of PFAS.[27] Information is now available to include additional PFAS compounds in EPA's clean up and screening standards. As EPA recognizes in its Draft Guidance, the PFAS chemicals share similar structure and properties, including extreme persistence and high mobility in the environment. Draft Guidance, at 2-3. Some of the PFAS chemicals –such as perfluoroalkyl acids (PFAAs)[28] – are so similar in structure and properties and often co-occur in our environment, that there is potential for additive toxicity among these PFAS.[29]

EPA has precedence for regulating a group of chemicals as a class. One example is polychlorinated biphenyls ("PCBs"). Drinking water standards and regulations regarding their cleanup, disposal and storage apply to the class of PCBs rather than to individual chemicals. [30] So setting a standard for a class of PFAS would not be anything new to EPA.

ATSDR established minimal risk levels of PFAS for more than just PFOA and PFOS. The ATSDR included PFOA, PFOS, PFHxS, and PFNA. Several states have already established enforceable groundwater cleanup criteria for combined levels of PFAS chemicals. For example,

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[26] Sept. 26, 2018, Testimony before the United States Senate.

[27] Martin Sheringer, et al., *Helsingør Statement on poly- and perfluorinated alkyl substances (PFASs)*, 114 Chemosphere 337-339 (2014); Arlene Blum, et al., *The Madrid Statement on Poly- and Perfluoroalkyl Substances (PFASs)*, 123 Envtl. Health Persp. A107-A111 (2015).

[28] GenX is HFPO dimer acid and its ammonium salt; PFNA is perfluorononanoic acid; PFHxS is perfluorohexane sulfonic acid;

[29] New Jersey Drinking Water Quality Institute Health Effects Subcommittee, *Health-based Maximum Contaminant Level Support Document: Perfluorooctanoic Acid (PFOA)*, Appendix 2: Comparison of USEPA Office of Water Health Advisory and DWQI recommended Health-based MCL for PFOA (Feb. 15, 2017) (available at: https://www.nj.gov/dep/watersupply/pdf/pfoa-appendixa.pdf); New Jersey Department of Environmental Protection, Division of Science, Research & Environmental Health, *Technical support document: interim specific ground water criterion for perfluorooctanoic acid* (PFOA, C8) (CAS #: 335-67-1; Chemical Structure: CF3(CF2)6COOH) (2019) (available at: https://www.nj.gov/dep/dsr/Technical%20Support%20Document%20Draft%20ISGWQC%20for%20PFOA.pdf).

[30] See e.g. 40 C.F.R. §§ 761.1—761.398 (federal regulations applicable to the manufacture, processing, distribution in commerce, use, disposal, storage, and marking of PCBs); U.S. EPA 2018 Edition of the Drinking Water Standards and Health Advisories Tables (listing drinking water limits for PCBs) (available at https://www.epa.gov/sites/production/files/2018-03/documents/dwtable2018.pdf).

Minnesota and Vermont adopted standards for combined PFOA and PFOS and additional PFAS chemicals.[31]

By using a class-based approach for PFAS, EPA can use the toxicological properties of chemicals with greater amounts of data to estimate toxicity of the others with data limitations. Furthermore, by regulating these PFAS chemicals as a class, EPA will prevent the manufacturers from easily substituting one of the thousands of PFAS chemicals as a replacement when just one of the chemicals is regulated.

D. EPA Must Take Action to Designate PFAS as Hazardous Substances under CERCLA

Lastly, we request that EPA take immediate action to designate PFAS chemicals as hazardous substances under CERCLA. Without this action, EPA's proposed screening and remediation levels in the Draft Guidance have limited value, because responsible parties are only required to address *hazardous substances* under CERCLA. *See* 42 U.S.C. § 9607(a); *Eagle-Picher Industries, Inc. v. U.S. EPA*, 759 F.2d 922, 932 (D.C. Cir. 1992) ("the owner of a facility may be liable for cleanup of a release of a 'hazardous substance,' but not for the cleanup of a release of a 'pollutant or contaminant'").

Given the known toxicity characteristics of PFAS, EPA should promptly list PFAS as "hazardous substances" under section 101(14) of CERCLA. This important step is necessary to achieve comprehensive and expedient federal action to address the widespread harms from PFAS contamination.[32]

CONCLUSION

We respectfully request that EPA revise the Draft Guidance to address the undersigned states' comments. Given the enormity of the PFAS crisis, EPA must regulate PFAS chemicals in a more protective, holistic manner designed to address all the potential sources of contamination for all the PFAS class of chemicals and from all the various paths of exposure. [33]

We urge EPA to revise the proposed PFAS screening and cleanup standards. These standards could result in many contaminated sites being unidentified and leave many others with cleanups inadequate to protect the public health. Furthermore, we urge EPA to establish standards for the entire family of PFAS chemicals. Finally, EPA should list PFAS as hazardous substances under CERCLA.

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[31] See state by state comparison chart, Michigan PFAS Science Advisory Panel, *Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan* (Dec. 7, 2018) (available at: https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf).

[32] We also urge EPA to immediately initiate steps to adopt a maximum contaminant level for PFAS under the Safe Drinking Water Act, 42 U.S.C. § 300f *et seq.*, and require reporting of PFAS under the Toxics Release Inventory, Section 313 of the Emergency Planning and Right-to-Know Act (EPCRA), 42 U.S.C. § 11023 *et seq*.

Respectfully submitted,

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SOURCE REFERENCES

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