

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comments on Preliminary Effluent Guidelines Program Plan 14

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Earthjustice * Alaska Community Action on Toxics * Appalachian Citizens' Law Center * Buxmont Coalition for Safer Water * Center for Environmental Health * Citizens Against Longwall Mining * Citizens Coal Council * Citizens for Safe Water Around Badger * Clean Cape Fear * Clean Water Action / Clean Water Fund * Conservation Law Foundation * Environmental Health Strategy Center * Environmental Working Group * Friends of the Earth US * Illinois Council of Trout Unlimited * Kentucky Resources Council, Inc. * Merrimack Citizens for Clean Water * Natural Heritage Institute * Newburgh Clean Water Project * Ohio Valley Environmental Coalition * PFOAProjectNY * Riverkeeper, Inc. * Safer States * Sierra Club * Toxics Action Center * Women's Voices for the Earth * Your Turnout Gear and PFOA

The undersigned organizations submit the following comments solely regarding EPA's review of industrial sources and discharges of per- and polyfluoroalkyl substances ("PFAS") in *Preliminary Effluent Guidelines Program Plan 14* ("Preliminary Plan 14"), 84 Fed. Reg. 57,019 (Oct. 24, 2019).¹ These comments respond to EPA's stated "next steps" for review of PFAS in industrial discharges and its discussion of an alleged lack of information affecting those steps. The organizations submitting these comments include community groups in areas affected by PFAS contamination, a national coalition of impacted communities, and local and national organizations advocating for strengthened protections against the risks posed by existing and new PFAS. For the reasons below, we strongly urge EPA to take steps to draft effluent limitations guidelines ("ELGs") and pretreatment standards for the industries discharging or likely to discharge PFAS in our waters, and to take steps so it can better gather and publicize critical information regarding PFAS discharges.

¹ The undersigned organizations do not take a position herein on other parts of Preliminary Plan 14. Preliminary Plan 14 can also be referred to as U.S. EPA, EPA-821-R-19-005, *Preliminary Effluent Guidelines Program Preliminary Plan 14* 1-1 (2019), and is available at https://www.epa.gov/sites/production/files/2019-10/documents/prelim-eg-plan-14_oct-2019.pdf. In these comments, references to Preliminary Plan 14 will use pagination of the web version rather than the Federal Register pagination (i.e., "Preliminary Plan 14 at 1-1").

I. Legal Overview and Background

A. Effluent Guidelines and Pretreatment Standards Under the Clean Water Act

The Clean Water Act (“CWA”) is the primary federal law governing water pollution. The main objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To achieve this goal, the CWA directs EPA to regulate the discharge of pollutants from discernible, confined “point sources” such as industrial facilities and Publicly Owned Treatment Works (“POTWs”). 33 U.S.C. §§ 1311(b), 1362(14).

Under the CWA, it is unlawful for point sources to discharge pollutants into the nation’s waters without a National Pollutant Discharge Elimination System (“NPDES”) permit. *See* 33 U.S.C. §§ 1342(a), 1311(a); 40 C.F.R. § 403 *et. seq.* Each NPDES permit includes effluent limitations restricting the discharge of pollutants into the nation’s waters. 33 U.S.C. §§ 1362(11), 1311(b). For certain industries, EPA drafts ELGs based on (a) the type of discharger; and (b) the type of pollutant. 33 U.S.C. § 1314(b)(1). If EPA has drafted ELGs, they function as a floor for pollutant reduction for a particular industry, and must be used by NPDES permit drafters when establishing effluent limitations. 33 U.S.C. § 1311(b)(1)(A); *E. I. du Pont de Nemours & Co. v. Train*, 430 U.S. 112, 129–30 (1977).

If a facility discharges its effluent to a POTW, effluent limitations take the form of pretreatment standards. *See* 33 U.S.C. 1317(b); 40 C.F.R. § 403 *et. seq.* POTWs are devices or systems owned by a state or municipality that treat municipal sewage, and/or liquid industrial waste before discharging the effluent into U.S. waters. 33 U.S.C. § 1292(2)(A); 40 C.F.R. § 125.58(u). CWA section 307(b) requires EPA to establish pretreatment standards for pollutants “which are determined not to be susceptible to treatment” by POTWs or “which interfere[] with, pass[] through, or [are] otherwise incompatible with such works.” 33 U.S.C. § 1314(g); *see also id.* at 1317(b)(1). The discharger then must “pretreat” its polluted effluent before sending it to a POTW, meaning it must reduce, alter, or eliminate the pollutants at issue in accordance with the pretreatment standards. 40 C.F.R. § 403.3(s). For some industries, categorical pretreatment standards apply, which specify the quantities and concentrations of pollutants that users in that particular industry may discharge to a POTW. 40 C.F.R. § 403.6.

In this regulatory action, and pursuant to its duties under CWA section 304(m), EPA announces its Preliminary Effluent Guidelines Program Preliminary Plan 14. Section 304(m) requires EPA to, among other things, identify categories of sources discharging toxic or nonconventional pollutants for which ELGs have not been published, and then to establish a schedule for promulgation of those guidelines. 33 U.S.C. § 1314(m); *see also* Preliminary Plan 14 at 1-1. As part of Preliminary Plan 14, EPA acknowledges several known and likely industrial categories discharging the highly toxic chemicals known as PFAS. Preliminary Plan 14 at 3-20. Currently, neither ELGs nor pretreatment standards regulate PFAS discharges. For the reasons described below, this glaring omission—one that is already threatening the integrity of the nation’s waters—must be fixed as expeditiously as possible.

B. PFAS

PFAS are a “large, complex, and ever-expanding” class of more than 5,000 man-made chemicals that contain fluorine atoms bonded to a carbon chain.² The carbon-fluorine bond is “one of the strongest ever created by man,” making PFAS extremely persistent in the environment, and difficult to break down or remediate.³ Government and independent academic research, including large epidemiological studies of human PFAS exposure, has shown that many PFAS bioaccumulate in the bodies of living organisms and are highly toxic. Studies link certain PFAS to significant adverse effects including immunotoxicity, testicular and kidney cancer, and developmental defects, and exposure to even relatively low levels of PFAS is associated with liver damage, high cholesterol, thyroid disease, decreased antibody response to vaccines, asthma, decreased fertility, and decreased birth weight.⁴ Data also suggests that PFAS may also affect the growth, learning, and immune response of infants and older children.⁵

Because the carbon-fluorine bond in PFAS cannot be broken naturally by heat, chemical reactions, photolysis, or microbial degradation, PFAS persist in the environment for decades or longer and have the potential to biomagnify along ecosystem food chains.⁶ Acute and chronic toxicity has been observed across many aquatic wildlife species, including algae, invertebrates, amphibians, and fish, causing a range of mortality, growth, and developmental effects.⁷

PFAS are highly mobile, migrating long distances through air, soil, and, in particular, water.⁸ As of October 2019, there were over 1,300 known locations across 49 states affected by PFAS contamination, and more than 100 million Americans may have PFAS in their drinking

² *Examining the Federal Response to the Risks Associated with Per- and Polyfluoroalkyl Substances (PFAS): Hearing Before the S. Comm. on Env't & Pub. Works*, 116th Cong., 1–2 (Mar. 28, 2019) (Testimony of Linda S. Birnbaum, Director, Nat'l Inst. of Env'tl. Health Sci. & Nat'l Toxicology Program, Nat'l Insts. of Health) (“Birnbaum Testimony”), https://www.epw.senate.gov/public/index.cfm/hearings?Id=918A6066-C1F1-4D81-A5A0-F08BBE06D40B&Statement_id=D2255C99-7544-42CA-B9DC-0D4F11CCB964; see also Robert C. Buck et al., *Perfluoroalkyl and Polyfluoroalkyl Substances in the Environment: Terminology, Classification, and Origins*, 7 *Integrated Env'tl. Assessment & Mgmt.* 513–541 (Oct. 2011); U.S. EPA, *PFAS Master List of PFAS Substances*, https://comptox.epa.gov/dashboard/chemical_lists/pfasmaster (last visited Nov. 22, 2019).

³ Birnbaum Testimony, *supra* note 2, at 2–3.

⁴ See Agency for Toxic Substances & Disease Registry (“ATSDR”), *Toxicological Profile for Perfluoroalkyls* (Draft for Public Comment) 5–6 (June 2018) (“ATSDR Toxicological Profile”), <https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf>.

⁵ Kristen M. Rappazzo et al., *Exposure to Perfluorinated Alkyl Substances and Health Outcomes in Children: A Systematic Review of the Epidemiologic Literature*, 14 *Int'l J. Env'tl. Res. & Pub. Health* 691 (July 2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551129/>.

⁶ See Interstate Technology & Regulatory Council, *Naming Conventions and Physical and Chemical Properties of Per- and Polyfluoroalkyl Substances (PFAS)* 13–14 (2017) (“PFAS Naming Conventions & Properties Fact Sheet”), https://pfas-1.itrcweb.org/wp-content/uploads/2017/10/pfas_fact_sheet_naming_conventions_11_13_17.pdf.

⁷ Lutz Ahrens & Mirco Bundschuh, *Fate and Effects of Poly- and Perfluoroalkyl Substances in the Aquatic Environment: A Review*, 33 *Env'tl. Toxicology & Chemistry* 1921, 1921 (June 2014), <https://setac.onlinelibrary.wiley.com/doi/full/10.1002/etc.2663>; John P. Giesy et al., *Aquatic Toxicology of Perfluorinated Chemicals, in 2021 Reviews of Environmental Contamination and Toxicology* 1–5 (2010), https://link.springer.com/chapter/10.1007%2F978-1-4419-1157-5_1.

⁸ Zhanyun Wang et al., *A Never-Ending Story of Per- and Polyfluoroalkyl Substances (PFASs)?*, 51 *Env'tl. Sci. Tech.* 2508, 2511 (Feb. 2017), <https://pubs.acs.org/doi/10.1021/acs.est.6b04806>; ATSDR Toxicological Profile, *supra* note 4, at 535; PFAS Naming Conventions & Properties Fact Sheet, *supra* note 6, at 3.

water.⁹ An estimated six million Americans drink water containing PFAS levels exceeding EPA's lifetime health advisory for perfluorooctanoic acid ("PFOA") and perfluorooctane sulfonate ("PFOS"), two widespread and highly toxic PFAS.¹⁰ Nearly 99 percent of Americans have PFAS in their blood.¹¹ And Arctic mammals and birds in supposedly pristine, uncontaminated habitats have detectable PFAS concentrations in their blood serum, liver, and fat tissues.¹²

Because of the unique physical properties of PFAS, sending PFAS-containing wastewater to POTWs creates additional PFAS contamination problems. Current effluent treatment technologies at POTWs lead to the degradation and transformation of polyfluoroalkyl precursor compounds, which form perfluoroalkyl acids ("PFAAs" such as PFOA and PFOS) that then pass through the POTWs.¹³ In addition, during wastewater treatment, a fraction of PFAS also bind to solid particles in sewage sludge that persists despite the treatment – indeed, PFAS have been detected in treated biosolids.¹⁴

The subsequent application of treated sludge containing PFAS on land acts as a concerning source of PFAS to contaminate surface water, groundwater, downstream ecosystems and food supplies. For example, some farmers rely on (often state-sponsored) programs that use

⁹ Env'tl. Working Grp., *Mapping the PFAS Contamination Crisis: New Data Show 1,361 Sites in 49 States* (Oct. 2019), https://www.ewg.org/interactive-maps/2019_pfas_contamination/; see also Jared Hayes & David Andrews, Env'tl. Working Grp., 'Forever Chemicals' in Over 500 N.J. Water Systems and Sources – More Than 1,000 Contamination Sites Nationwide (Nov. 5, 2019), <https://www.ewg.org/news-and-analysis/2019/10/forever-chemicals-almost-200-nj-water-systems-and-sources-more-1000>.

¹⁰ Xindi C. Hu, et al., *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in US Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*, 3 *Env'tl. Sci. & Tech. Letters* 344, 346 (Oct. 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5062567/>.

¹¹ Antonia M. Calafat et al., *Polyfluoroalkyl Chemicals in the US Population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003–2004 and Comparisons with NHANES 1999–2000*, 115 *Env'tl. Health Perspectives* 1596, 1600 (Nov. 2007), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2072821/pdf/ehp0115-001596.pdf>; see also ATSDR, *An Overview of Perfluoroalkyl and Polyfluoroalkyl Substances and Interim Guidance for Clinicians Responding to Patient Exposure Concerns 2* (2018), https://www.atsdr.cdc.gov/pfas/docs/pfas_clinician_fact_sheet_508.pdf.

¹² See, e.g., Wouter A. Gebbink et al., *Observation of Emerging Per- and Polyfluoroalkyl Substances (PFASs) in Greenland Marine Mammals*, 144 *Chemosphere* 2384, 2384 (Feb. 2016), <https://nammo.no/wp-content/uploads/2017/08/fi06-gebbink-et-al.-2015.pdf>.

¹³ Katarzyna H. Kucharzyk et al., *Novel Treatment Technologies for PFAS Compounds: A Critical Review*, 204 *J. Env'tl. Mgmt.*, 757, 758 (Aug. 2017), https://www.researchgate.net/publication/319125507_Novel_treatment_technologies_for_PFAS_compounds_A_critical_review; Erika F. Houtz et al., *Poly- and Perfluoroalkyl Substances in Wastewater: Significance of Unknown Precursors, Manufacturing Shifts, and Likely AFFF Impacts*, 95 *Water Res.* 142, 142 (Mar. 2016), https://www.researchgate.net/publication/297756242_Poly-and_perfluoroalkyl_substances_in_wastewater_Significance_of_unknown_precursors_manufacturing_shifts_and_likely_AFFF_impacts; Ulrika Eriksson et al., *Contribution of Precursor Compounds to the Release of Per- and Polyfluoroalkyl Substances (PFASs) from Waste Water Treatment Plants (WWTPs)*, 61 *J. Env'tl. Sci.* 80, 80 (Nov. 2017), <https://www.ncbi.nlm.nih.gov/pubmed/29191318>.

¹⁴ Hanna Hamid, *Role of Wastewater Treatment Plant (WWTP) in Environmental Cycling of Poly- and Perfluoroalkyl (PFAS) Compounds*, 2 *Ecocycles* 43, 44 (Nov. 2016), https://www.researchgate.net/publication/316250264_Role_of_wastewater_treatment_plant_WWTP_in_environmental_cycling_of_poly-and_perfluoroalkyl_PFAS_compounds/link/58f793c2a6fdcc86f8122358/download; see, e.g., Arjun K. Venkatesan & Rolf U. Halden, *National Inventory of Perfluoroalkyl Substances in Archived U.S. Biosolids from the 2001 EPA National Sewage Sludge Survey*, 252 *J. Hazardous Materials* 413, 413 (May 2013), <https://www.sciencedirect.com/science/article/pii/S0304389413001921>.

nutrient-rich recycled waste sludge from POTWs to fertilize their fields. In 2016, the discovery of PFAS-contaminated waste sludge used as fertilizer across hundreds of farms in Maine led to widespread concern over milk supplies tainted with PFAS, spelling financial ruin and causing panic for small-scale dairy producers.¹⁵ In Michigan, the Department of Agriculture and Rural Development is “aware of contaminated milk” resulting from dairy farmers’ proximity to industry and waste sludge-spreading programs and is contemplating next steps to address the issue.¹⁶ EPA itself has identified PFAS in biosolids.¹⁷

Because different PFAS chemicals have similar health effects, and people are exposed in many different ways, it is critical that EPA consider both aggregate and cumulative exposures when evaluating and regulating PFAS. Looking at exposure pathways (i.e., drinking water, food, air, etc.) and PFAS chemicals in isolation ignores the reality of how people are exposed and understates the risks facing communities affected by PFAS.¹⁸

Despite the data set forth above, EPA continues to approve new PFAS under the Toxic Substances Control Act (“TSCA”), even when it lacks sufficient information to find that the new chemicals are not likely to present unreasonable risks to health or the environment. EPA has approved over 400 PFAS through the TSCA new chemicals program, of which less than half included human toxicity, ecotoxicity, and environmental fate data.¹⁹

II. EPA Should Immediately Develop and Impose Pretreatment Standards for PFAS.

As EPA notes in Preliminary Plan 14, PFAS chemicals are “known to pass through POTW[s].” Preliminary Plan 14 at 3-20; *see also id.* at 3-19 (“The high water solubility of some PFAS allows them to pass through most POTW treatment processes.”). And EPA has identified eighteen facilities with reported PFAS discharges, as well as several industries that are likely to discharge PFAS. *Id.* at 3-20. Accordingly, as discussed further below, EPA must not delay in developing and imposing pretreatment standards in order to protect human health and the environment.

¹⁵ Richard Valdmanis & Joshua Schneyer, *The Curious Case of Tainted Milk from a Maine Dairy Farm*, Reuters (Mar. 19, 2019), <https://www.reuters.com/article/us-usa-dairy-chemicals/the-curious-case-of-tainted-milk-from-a-maine-dairy-farm-idUSKCN1R01AJ>.

¹⁶ Tom Perkins, *Some Michigan Cows Are Contaminated with PFAS, but the State Won’t Test Milk*, Detroit Metro Times (Oct. 2, 2019), <https://www.metrotimes.com/detroit/some-michigan-cows-are-contaminated-with-pfas-but-the-state-wont-test-milk/Content?oid=22804009>.

¹⁷ U.S. EPA, Report No. 19-P-0002, *EPA Unable to Assess the Impact of Hundreds of Unregulated Pollutants in Land-Applied Biosolids on Human Health and the Environment* 15 (Nov. 2018), https://www.epa.gov/sites/production/files/2018-11/documents/epa_oig_20181115-19-p-0002.pdf.

¹⁸ Birnbaum Testimony, *supra* note 2, at 3–4.

¹⁹ *See* Tala R. Henry, Dir., Risk Assessment Div., Office of Pollution Prevention & Toxics, U.S. EPA, Presentation at the Progress Implementing Changes to the New Chemicals Review Program Under the Amended TSCA Public Meeting 8 (Dec. 6, 2017), https://www.epa.gov/sites/production/files/2017-12/documents/presentation_4_and_5_-_categories_sustainable_futures_december_6th_pub.pdf (noting that EPA has approved “approximately 400 [perfluorinated] chemicals in several structural categories....Data (health tox, eco tox, fate) for < half”) (emphases omitted).

EPA has a mandatory duty under the Clean Water Act to promptly develop and impose pretreatment standards for PFAS. Under CWA section 307(b), EPA must “publish proposed regulations establishing pretreatment standards” for pollutants determined “not to be susceptible to treatment by [POTWs] or which would interfere with the operation of such treatment works.” 33 U.S.C. § 1317(b)(1)*id.* § 1314(g). PFAS meet both standards for regulation under this section. First, PFAS are pollutants—and arguably toxic pollutants—under the Clean Water Act. *See id.* § 1362(6) (defining pollutant to include chemical and industrial waste); *see also id.* § 1362(13) (defining toxic pollutants as those that cause “cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.”)²⁰ Second, EPA admits that PFAS are not susceptible to treatment by POTWs at this time (Preliminary Plan 14 at 3-19–20) and could be interfering with the operation of treatment works. *See* 40 C.F.R. § 403.3(k) (defining “interference” as inhibiting or disrupting “the POTW, its treatment processes or operations, or its sludge processes, use, or disposal” and therefore causing a violation of a NPDES permit or other statutory regulation or permit); *see also* Preliminary Plan 14 at 3-18 (noting that EPA contacted permitting authorities to investigate facilities’ permits where DMRs showed discharges of PFAS); *supra* notes 13, 14 and 17. Indeed, the treatment process itself causes certain compounds to transform into PFAS that then pass through the POTWs. *See supra* note 13.

The Preliminary Plan recognizes that PFAS pass through POTWs, “discharging to surface waters in their effluent and accumulating in the biosolids.” Preliminary Plan 14 at 3-20. Treatment of wastewater containing PFAS and PFAS-contaminated sludge are already causing harm around the nation. *See supra* Section I.B. EPA must take steps now to regulate PFAS discharges under CWA section 307(b). *See* 33 U.S.C. § 1317(b)(2).

III. EPA Must Take Further Action Towards Promulgating ELGs Limiting or Prohibiting the Discharge of Effluent-Containing PFAS.

Under the CWA, EPA has a duty to annually review ELGs and pretreatment standards, identify any new or existing industrial categories selected for effluent guidelines pretreatment standards rulemaking, and provide a schedule for such rulemakings. 33 U.S.C. §§ 1314(m), (g). Preliminary Plan 14 fails in this task with respect to PFAS.

Throughout Preliminary Plan 14, EPA relies on a supposed lack of information for failing to create ELGs for PFAS. *See* Preliminary Plan 14 at 3-19 (noting that EPA does not currently have an approved CWA analytical method for monitoring PFAS in discharges); *id.* (noting the lack of data on discharges in part due to the lack of methods to detect these compounds in wastewater). But much is already known about the discharge of and harmful effects of PFAS. *See id.* at 3-20 (recognizing that in 2016 thirteen facilities and five POTWs reported discharge of PFAS); *supra* Section I.B. In any event, uncertainty is not a factor that can justify delaying

²⁰ Regulating PFAS as a chemical class for regulation under the CWA comports with approaches endorsed throughout the federal government. *See* Birnbaum Testimony, *supra* note 2, at 13 (“Approaching PFAS as a class for assessing exposure and biological impact is the most prudent approach to protect public health.”).

regulation. See *United Steelworkers of Am. v. Marshall*, 647 F.2d 1189, 1266 (D.C. Cir. 1980) (An agency should not allow harm “while it awaits the Godot of scientific certainty.”). Similarly, EPA cannot justify delaying regulating PFAS discharges merely because the agency put forth its PFAS Action Plan in February 2019. See U.S. EPA, *Per- and Polyfluoroalkyl Substances Action Plan* (Feb. 2019) (“PFAS Action Plan”). Notably, EPA’s PFAS Action Plan does not even comprehensively address the dangers posed by PFAS discharges. The Action Plan, for example, discusses water regulations for only two PFAS; with respect to the other thousands of PFAS chemicals, the Action Plan states only that it will continue to gather information to “inform the development of a national drinking water regulation for a broader class of PFAS in the future.” *Id.* at 22.

A. EPA Should Take Actions with Respect to the Categories that Definitively Discharge PFAS.

Preliminary Plan 14 continues EPA’s failure to fully protect the public from the dangers associated with PFAS. EPA identifies three point source categories it is aware discharge PFAS: Organic Chemicals Polymers and Synthetic Fibers Point Source Category, petroleum refining, and landfills. *Id.* at 3-20. Yet, despite acknowledging the potential dangers associated with PFAS, *id.* at 3-17, EPA makes no mention of drafting ELGs regulating discharges from facilities within these source categories. EPA must act. It should amend Preliminary Plan 14 so as to outline a schedule for a rulemaking for ELGs regulating the discharge of the class of PFAS from Organic Chemicals Polymers and Synthetic Fibers Point Source Category, petroleum refining, and landfills. At the very least, EPA should amend Preliminary Plan 14 to address the following two points.

1. EPA Must Immediately Take Steps to Prohibit the Discharge of PFOA and PFOS from the Categories of Facilities It Knows Discharge PFAS.

In Preliminary Plan 14, EPA acknowledges that PFOA and PFOS can lead to adverse human health effects. *Id.* Yet, despite having known the toxicity of these chemicals for almost two decades,²¹ EPA has failed to prohibit their discharge. Instead, in 2006, EPA launched the PFOA Stewardship Program that urged eight manufacturers to agree to gradually reduce emissions and product content levels of PFOA.²² Preliminary Plan 14 touts the success of this program, but EPA has made few strides to eliminate the sources of PFOA not addressed by the program—sources that still pose dangers to the public. For instance, as EPA states in Preliminary Plan 14, “companies that did not participate in the PFOA Stewardship Program may still domestically manufacture or import PFOA or related long-chain PFAS.” *Id.* at 3-18. And even the Stewardship Program participants are permitted to use *existing* stockpiles of PFOA; EPA itself explains that “[s]ome presence of PFAS can be attributed to legacy PFOS and PFOA stockpiles.” *Id.* at 3-20. Indeed, the Preliminary Plan states that of the thirteen facilities and five POTWs reporting discharges of PFAS in 2016, twelve of them reported discharges of PFOA. *Id.*

²¹ U.S. EPA, Fact Sheet: 2010/2015 PFOA Stewardship Program (last updated Aug. 9, 2018), <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program>.

²² *Id.*

This known contamination must be addressed. EPA must immediately begin rulemaking for ELGs prohibiting the discharge of PFOS and PFOA in the three categories EPA has already identified as dischargers of PFAS.

2. EPA Must Keep Its Petroleum Refining Category Study Open to Gather Data On, and Eventually Regulate, PFAS Discharges.

In the alternative to immediately commencing action to promulgate ELGs for petroleum refining facilities (40 C.F.R. § 419)—a category of known PFAS dischargers (*see* Preliminary Plan 14 at 3-20)—EPA must keep its study on these facilities open so that it can move towards creating ELGs for this category, or otherwise initiate a new study to gather needed data to inform ELG regulation. EPA recognized that petroleum refining facilities discharge PFAS chemicals (*id.*), yet decided to conclude its study of facilities in this category and take no further action. *See id.* at 4-1 (noting EPA’s decision to conclude its petroleum refining discharge study). That decision is erroneous and harmful to public health and the environment.

B. EPA Must Also Evaluate and Regulate PFAS Discharges from Sources It Deems Likely to Discharge PFAS.

EPA also identifies several other “industries that are likely to discharge PFAS,” including “airports, organic chemical manufacturers, paper and paperboard manufacturers, textiles and carpet manufacturers, and semiconductor manufacturers.” *Id.* at 3-20. But Preliminary Plan 14 fails to clearly commit to immediately study all of the relevant categories to determine if ELGs should ultimately be promulgated to combat PFAS discharge, and fails to set forth the parameters of any study it might take. EPA must correct these omissions.

For example, EPA should clarify the parameters of its Electrical and Electronic Component (“E&EC”) industry study and, as a part of the study, include information-gathering specific to PFAS uses, discharges, and treatment. In one part of the Plan, EPA notes that the “presence of PFAS in wastewater discharges associated with semiconductor manufacturing will be evaluated as part of the ongoing detailed study of the Electrical and Electronic Component ELG.” *Id.* at 3-21. Yet when discussing its next steps for the E&EC industry elsewhere in the Plan, EPA does not specify any action to study PFAS uses, discharges, or treatment among facilities in the E&EC category. *Id.* at 4-1. Rather, EPA vaguely states that it will contact “some of the facilities” in this industry to determine if they are candidates for site visits to “identify and characterize their current operations.” *Id.* Because EPA acknowledges that this industrial category likely discharges PFAS, EPA should update Preliminary Plan 14 to commit to immediately studying PFAS dischargers within the E&EC industry, including conducting site visits, so it can develop ELGs for PFAS releases from this industry.

EPA should also amend Preliminary Plan 14 to commit to immediately beginning a comprehensive study for each of the remaining industrial categories it lists as likely to discharge PFAS.²³ Indeed, EPA has previously recognized airports where firefighting training occurs as a

²³ Organic chemical manufacturers, however, should not be included on a list of “likely dischargers” because the Preliminary Plan recognizes them as known PFAS dischargers. Preliminary Plan 14 at 3-20. While EPA may want

major source of PFAS water contamination.²⁴ While the Preliminary Plan refers to the PFAS Action Plan regarding its intention to study some of those categories, *see* Preliminary Plan 14 at 3-20, the Action Plan similarly fails to set forth either a time frame or the parameters for such studies. PFAS Action Plan at 29–30.²⁵ It is imperative that EPA commit to immediate and comprehensive studies for likely sources of PFAS discharges.

IV. EPA Must Track PFAS Discharges, and Make this Data Easily Accessible to the Public.

It is imperative that EPA take further steps to gather, compile, and inform the public about PFAS discharges. In Preliminary Plan 14, EPA itself laments the “limited data on discharges of PFAS in the environment.” *Id.* at 3-19. EPA claims it has inadequate data because of the absence of “CWA-approved analytical methods for measuring PFAS in industrial wastewater,” a gap it states it is working to address. *Id.* at 3-19–20. It is important for EPA to continue to develop such methods; yet, as recognized earlier, such development cannot justify inaction here. In any event, it is EPA’s own failure to meaningfully and comprehensively require disclosure of PFAS discharges that has resulted in limited data. To better monitor PFAS and protect the public, EPA must: a) add the class of PFAS to the Toxics Release Inventory (“TRI”) and b) compile the data it receives on all PFAS in a publicly available database.

A. EPA Should Add PFAS to the Toxics Release Inventory

EPA claims it had limited data about PFAS discharge to review, because it had data reported only in Discharge Monitoring Reports (“DMR”), which are required by NPDES. This is because facilities using or generating PFAS are not required to report PFAS discharge to the TRI. *Id.* at 3-18. Established by Congress in response to public concern regarding the lack of readily available information about hazardous substances,²⁶ the TRI “tracks the management of certain toxic chemicals that may pose a threat to human health and the environment” and requires facilities to annually report how much of each listed chemical it releases into the environment or manages through recycling, energy recovery, and treatment.²⁷

But it is EPA’s own inaction that has created this dearth of information. EPA has the authority to add pollutants to the TRI. 42 U.S.C. § 11023(d)(1). Indeed, EPA announced in 2005 that it would “initiate efforts to add PFOA and related chemicals to the Toxics Release

to further study discharges from these manufacturers, any such study should not prevent EPA from immediately outlining a schedule for a rulemaking for ELGs for that category. *See infra* Section IV.A.

²⁴ U.S. EPA, Basic Information on PFAS, <https://www.epa.gov/pfas/basic-information-pfas> (last updated Dec. 6, 2018).

²⁵ EPA also notes in the Preliminary Plan that it intends to conduct a textile mills study, *see* Preliminary Plan 14 at 6-2, but much like the E&EC study discussed above, EPA does not commit to studying PFAS as part of the study or provide any further details about the study.

²⁶ U.S. EPA, Toxics Release Inventory (TRI) Program, <https://www.epa.gov/toxics-release-inventory-tri-program/what-toxics-release-inventory#Why%20was%20the%20TRI%20Program%20created?> (last updated Sep. 27, 2019).

²⁷ *Id.*

Inventory (TRI).”²⁸ However, *fourteen* years later, EPA still has not added even one PFAS to the TRI. Preliminary Plan 14 continues this dithering, stating that EPA is still “considering whether to add PFAS compounds to the TRI.” Preliminary Plan 14 at 3-18. Further delay serves no purpose. When it does add PFAS to the TRI, EPA should establish a reporting threshold of ten pounds, consistent with other classes of chemicals of special concern such as polychlorinated biphenyls (“PCBs”). 40 C.F.R. § 372.28. While the TRI statutorily applies to all manufacturers in Standard Industrial Classification Codes 20 through 39 with ten or more full-time employees, *see* 42 U.S.C. § 11023(b)(1)(A), EPA should further ensure that the reporting requirements also apply to facilities that are in Standard Industrial Classification Codes 45 (airports) and 97 (military). It is imperative that the public know when facilities in all industries that have caused significant PFAS contamination release these toxic substances into the environment.²⁹ Indeed, it is likely that if PFAS were added to the TRI, industry likely would develop analytical methods to test for PFAS in their wastewater.

B. EPA Should Develop a Publicly Available Database Listing Information About All Detectable PFAS

EPA claims that it wants to actively engage and partner with other federal agencies, states, tribes, industry groups, associations, local communities, and the public. PFAS Action Plan at 1. And EPA has the capability to gather and post data in a comprehensible way so that the public could readily discern which of the thousands of PFAS are currently in commerce and used in or near their communities. At EPA’s May 2018 PFAS Summit, Jeff Morris, Director of the Office of Pollution Prevention and Toxics, stated that nearly 900 PFAS chemicals have come through EPA’s Toxic Substances Control Act (“TSCA”) program since 2006.³⁰ EPA’s website indicates that almost 500 PFAS, including 330 non-confidential PFAS, are listed on the TSCA inventory.³¹

But EPA has failed to coherently present data regarding PFAS to the public. Thus, state and local government officials, tribes, and communities cannot readily determine which substances on the TSCA Inventory are PFAS, and which PFAS are manufactured or used for industrial purposes in their area. And if the public cannot determine what chemicals are PFAS, they also cannot determine where PFAS are being discharged into waters in their communities. EPA should develop, publish on EPA.gov, and regularly update a database of known and active PFAS. For each PFAS, the database should identify: where it is manufactured, processed, or otherwise used for industrial purposes; an estimate of the maximum amount of total PFAS

²⁸ See Press Release, EPA, *100 Percent Participation and Commitment in EPA’s PFOA Stewardship Program* (Mar. 2, 2006), https://archive.epa.gov/epapages/newsroom_archive/newsreleases/95de36c6115a523a8525712500693772.html.

²⁹ U.S. EPA, Basic Information on PFAS, <https://www.epa.gov/pfas/basic-information-pfas> (last updated Dec. 6, 2018).

³⁰ Jeff Morris, Dir., Office of Pollution Prevention and Toxics, U.S. EPA, Presentation at the PFAS National Leadership Summit and Engagement, *Per- and Polyfluoroalkyl Substances under the Toxic Substances Control Act (TSCA) 2* (May 22, 2018), https://www.epa.gov/sites/production/files/2018-05/documents/pfas_summit_jeff_morris_22_may_2018.pdf.

³¹ See U.S. EPA, *PFAS Laws and Regulations*, <https://www.epa.gov/pfas/pfas-laws-and-regulations> (last updated July 30, 2018).

present at the facility; and the general category or categories of use. A PFAS database would keep officials and communities apprised about PFAS near them, and help them prepare for possible contamination.

Conclusion

PFAS contamination of our country's waters is "one of the most seminal public health challenges of the next decades."³² Recognizing the urgency of the PFAS threat, EPA insisted it "heard clearly the public's desire for immediate action to address potential human health and economic impacts from PFAS in the environment."³³ Yet, PFAS remain highly unregulated, leaving the public at risk and with a lack of necessary information. EPA should amend Preliminary Plan 14 and implement the suggestions made herein as a step towards protecting the public from these toxic and ubiquitous chemicals.

Sincerely,

Earthjustice
Alaska Community Action on Toxics
Appalachian Citizens' Law Center
Buxmont Coalition for Safer Water
Center for Environmental Health
Citizens Against Longwall Mining
Citizens Coal Council
Citizens for Safe Water Around Badger
Clean Cape Fear
Clean Water Action / Clean Water Fund
Conservation Law Foundation
Environmental Health Strategy Center
Environmental Working Group
Friends of the Earth US

Illinois Council of Trout Unlimited
Kentucky Resources Council, Inc.
Merrimack Citizens for Clean Water
Natural Heritage Institute
Newburgh Clean Water Project
OVEC-Ohio Valley Environmental Coalition
PFOAProjectNY
Riverkeeper, Inc.
Safer States
Sierra Club
Toxics Action Center
Women's Voices for the Earth
Your Turnout Gear and PFOA

³² Pat Rizzuto et al., *CDC Sounds Alarm on Chemical Contamination in Drinking Water*, Bloomberg Env't (Oct. 17, 2017), <https://news.bloombergenvironment.com/environment-and-energy/cdc-sounds-alarm-on-chemical-contamination-in-drinking-water>.

³³ PFAS Action Plan at 2.