COMMITTEE ON
ENERGY & COMMERCE
CHAIRMAN FRANK PALLONE, JR.

MEMORANDUM

March 24, 2022

To: Subcommittee on Environment and Climate Change Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Hearing on "Trusting the Tap: Upgrading America's Drinking Water Infrastructure"

On **Tuesday, March 29, 2022, at 10:30 a.m. (EDT), in the John D. Dingell Room, 2123 of the Rayburn House Office Building, and via Cisco WebEx online video conferencing,** the Subcommittee on Environment and Climate Change will hold a hearing entitled, "Trusting the Tap: Upgrading America's Drinking Water Infrastructure."

I. BACKGROUND

A. The Safe Drinking Water Act & the Drinking Water State Revolving Fund

Congress enacted the Safe Drinking Water Act (SDWA) in 1974 to protect drinking water quality in the United States.[1] SDWA requires the Environmental Protection Agency (EPA) to set standards for naturally occurring and man-made contaminants in the nation's public water supply and requires public water system operators or owners to comply with these standards.[2] The SDWA Amendments of 1996 significantly changed the process for setting drinking water standards and created new funding mechanisms for drinking water infrastructure improvements. Now, SDWA includes an array of grant programs through which EPA can provide funding and technical assistance to states, water utilities, school districts, and others. The 1996 Amendments created the Drinking Water State Revolving Fund (SRF), the primary funding mechanism for drinking water infrastructure. Congress most recently reauthorized the SRF in the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), which authorized several other drinking water grant programs as well.

Under the Drinking Water SRF program, EPA allocates capitalization grants to states for their drinking water SRFs based on the results of the most recent quadrennial survey, which reports the capital improvement needs of eligible water systems.[3] States then provide loans and other authorized assistance to public water systems for eligible infrastructure projects. States

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[1] 42 U.S.C. § 300f.

[2] Environmental Protection Agency, *Summary of the Safe Drinking Water Act* (Sept. 28, 2021) (www.epa.gov/laws-regulations/summary-safe-drinking-water-act).

[3] Environmental Protection Agency, *How the Drinking Water State Revolving Fund Works* (www.epa.gov/dwsrf/how-drinking-water-state-revolving-fund-works#tab-1) (accessed Mar. 18, 2022).

may use a portion of the funds, known as set-asides, for other specific purposes, such as improving the managerial and technical capacity of water systems. States must provide a 20 percent match for the federal capitalization grant.

B. Need for Increased Federal Funding for Drinking Water Infrastructure

In its 2021 Report Card, the American Society of Civil Engineers (ACSE) gave the nation's drinking water infrastructure system a "C-" grade.[4] The U.S. drinking water infrastructure system is composed of 2.2 million miles of pipe, and the system is aging and underfunded. At least one study has estimated that there is a water main break every two minutes, and as much as six billion gallons of treated water is lost each day, equating to 2.1 trillion gallons per year.[5] Between 2012 and 2018, the rate of water main breaks increased by 27 percent.[6] EPA's 2018 Report to Congress on Drinking Water Infrastructure Needs concluded that the United States needed to invest $472.6 billion to maintain and improve the nation's drinking water and infrastructure over the next 20 years.[7]

C. Lead Service Lines

Lead exposure leads to developmental delays and learning difficulties in children, as well as difficulties with memory and concentration, joint and muscle pain, and high blood pressure in adults.[8] Lead service lines (LSLs) can release lead into the drinking water they transport, thereby contaminating the supply for homes and communities that rely upon them.[9] By 2023, EPA estimates there will be nearly 9.3 million LSLs remaining in homes across the United States.[10] According to a recent report by the Government Accountability Office, LSLs are most likely to be found in low income communities, communities with older housing stock, and communities of color.[11] Lead pipes are being replaced annually at an average rate of 0.5 percent

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[4] American Society of Civil Engineers (ASCE), *Report Card for America's Infrastructure: Drinking Water* (Mar. 3, 2021) (www.infrastructurereportcard.org/cat-item/drinking-water/).

[5] Center for Neighborhood Technology, *The Case for Fixing the Leaks* (2013) (www.cnt.org/sites/default/files/publications/CNT_CaseforFixingtheLeaks.pdf).

[6] Value of Water Campaign, ASCE, *The Economic Benefits of Investing in Water Infrastructure: How a Failure to Act Would Affect the US Economic Recovery* (www.uswateralliance.org/sites/uswateralliance.org/files/publications/VOW%20Economic%20Paper_1.pdf).

[7] Environmental Protection Agency, *Drinking Water Infrastructure Needs Survey and Assessment, Sixth Report to Congress* (Mar. 2018) (EPA 816-K-17-002).

[8] World Health Organization, *Lead poisoning* (Aug. 23, 2019) (www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health).

[9] Environmental Defense Fund, *Recognizing Efforts to Replace Lead Service Lines* (www.edf.org/health/recognizing-efforts-replace-lead-service-lines) (accessed Mar. 15, 2022).

[10] Environmental Protection Agency, *Economic Analysis for the Proposed Lead and Copper Rule Revisions* (Oct. 2019).

[11] Government Accountability Office, *Drinking Water: EPA Could Use Available Data to Better Identify Neighborhoods at Risk of Lead Exposure* (Dec. 2020) (GAO-21-78).

of all the remaining LSLs. At that pace, replacing all LSLs in the United States would take approximately two centuries.[12]

On December 16, 2021, the Biden Administration announced its Lead Pipe and Paint Action Plan—a plan comprised of 15 actions across 10 federal agencies that aims to reduce lead exposure in communities across the nation.[13] As part of that plan, EPA will provide technical assistance and leverage funding appropriated through the BIL to accelerate LSL removal.[14]

D. PFAS

Since 1949, the large class of chemicals known as per- and polyfluoroalkyl substances, commonly referred to as PFAS, have been manufactured and used in many common products, such as firefighting foams, food packaging materials, nonstick cookware, cleaning products, toiletries, and stain and water-resistant fabrics.[15] Two of these chemicals, PFOA and PFOS, have been voluntarily phased out by most manufacturers,[16] but several thousand PFAS formulations continue to be produced.

Because PFAS have very high chemical stability, these contaminants are environmentally persistent and can accumulate over time.[17] Frequent exposures to PFAS can build up in the body, and are linked to severe adverse health effects, including, but not limited to, certain cancers, suppressed antibody response, reproductive problems, and thyroid hormone disruption.[18] In 2003-2004, PFOA and PFOS were detected in the blood of 99.7 percent and 99.9 percent, respectively, of those people tested in the United States.[19]

Under SDWA, EPA sets health-based standards for drinking water contaminants. To date, EPA has not set any drinking water standards for PFAS, but the agency has issued a non-

[12] *Lead in America's Water Systems is a National Problem*, CBS News (Nov. 21, 2018).

[13] White House, *FACT SHEET: The Biden-Harris Lead Pipe and Paint Action Plan* (Dec. 16, 2021) (www.whitehouse.gov/briefing-room/statements-releases/2021/12/16/fact-sheet-the-biden-harris-lead-pipe-and-paint-action-plan/).

[14] *Id.*

[15] Interstate Technology & Regulatory Council, *History and Use of Per- and Polyfluoroalkyl Substances (PFAS)* (Nov. 13, 2017) (www.pfas-1.itrcweb.org/wpcontent/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).

[16] Environmental Protection Agency, *PFOA Stewardship Program* (www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoastewardship-program) (accessed Mar. 18, 2022).

[17] *See* note 15.

[18] *Id*.

[19] *Id.*

binding health advisory for PFOA and PFOS.[20] Millions of Americans currently receive water that exceeds EPA's health advisory level of concern for PFOA and PFOS.

II. THE BIPARTISAN INFRASTRUCTURE LAW

President Biden signed H.R. 3684, the BIL, into law on November 15, 2021.[21] The BIL included a historic investment in our nation's drinking water infrastructure. It reauthorized the SRF for five years starting at $2.4 billion in fiscal year (FY) 2022 and increasing to $3.25 billion each year for FY 2025 through FY 2026. Additionally, the BIL provided $11.7 billion in supplemental appropriations to the SRF over five years from FY 2022 through FY 2026.[22] BIL funding for the SRF represents a nearly 70 percent increase over current levels.

Typically, SDWA requires states to provide a 20 percent match for capitalization funds through the SRF. The BIL reduced the state-match requirement to 10 percent for the first two fiscal years, after which the state-match returns to 20 percent. Of the appropriated funds, 49 percent are eligible for 100 percent principal forgiveness or grants. The BIL also included $15 billion for LSL replacement and activities related to the identification, planning, design, and replacement of LSLs. LSL funding through BIL does not contain a state-matching requirement, and 49 percent of funding is available for grant and principal loan forgiveness.

The BIL provided two funding mechanisms to address emerging contaminants with a focus on PFAS. The Small and Underserved Communities Emerging Contaminant Grant Program, funded at $5 billion, provides grants to public water systems in small and underserved or disadvantaged communities. The BIL also appropriated $4 billion as grants for projects eligible under the SRF and will address emerging contaminants as its primary purpose.[23]

In addition to appropriations, the BIL amended SDWA and authorized several grant programs.[24] The BIL establishes the Drinking Water System Infrastructure Resilience and Sustainability Program for midsize and large systems. It also reauthorizes the Drinking Water Infrastructure Risk and Resiliency program for small communities, which provides grants to water systems to increase resiliency. Further, the BIL authorizes technical assistance programs

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[20] Environmental Protection Agency, *Drinking Water Health Advisories for PFOA and PFOS* (www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos) (accessed Mar. 20, 2022).

[21] Pub. L. No. 117-58 (2021).

[22] Environmental Protection Agency, *Bipartisan Infrastructure Law: A Historic Investment in Water* (Nov. 2021) (www.epa.gov/system/files/documents/2021-11/e-ow-bid-fact-sheet-final.508.pdf).

[23] While the focus of the funding is to address PFAS contamination in drinking water, states have the flexibility to fund projects for any contaminant in any of EPA's Contaminant Candidate Lists. Environmental Protection Agency*, Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law* (Mar. 8, 2022) (www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf).

[24] Congressional Research Service, *Infrastructure Investment and Jobs Act (IIJA): Drinking Water and Wastewater Infrastructure* (Jan. 4, 2022) (www.crs.gov/Reports/R46892?source=search&guid=074cbb6bff634d45bde2392374704a76&index=0).

for small systems, including a Small System Technical Assistance set-aside through the SRF, which allows up to two percent of the Drinking Water SRF to be used by nonprofit organizations to provide technical assistance for small systems to achieve compliance.[25] The legislation also made permanent the American Iron and Steel requirement for the SRF, and established a rural and low-income assistance grant pilot program at EPA, among other provisions.[26]

III. WITNESSES

The following witnesses have been invited to testify:

Erik D. Olson
Senior Strategic Director for Health & Food
Natural Resources Defense Council

Lori J. Mathieu
Public Health Branch Chief
Environmental Health & Drinking Water Branch
Connecticut Department of Public Health
President
Association of Drinking Water Administrators

Kareem Adeem
Director of Water and Sewer Utilities
The City of Newark, NJ

Richard Diaz
Midwest Regional Field Organizer
BlueGreen Alliance

Jim McGoff
Chief Operating Officer and Director of Environmental Programs
Indiana Finance Authority
On behalf of Council of Infrastructure Financing Authorities

[25] Environmental Protection Agency, *About the Drinking Water State Revolving Fund (DWSRF) Set-Asides* (www.epa.gov/dwcapacity/about-drinking-water-state-revolving-fund-dwsrf-set-asides#aside) (accessed Mar. 15, 2022).

[26] *See* note 21.