

September 30, 2022

Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail code 1101A
Washington, DC 20460

Dear Administrator Regan,

Thank you for being an environmental justice champion at the EPA, and changing course from the former Administration since your confirmation.

As organizations dedicated to the elimination of plastic pollution and toxic exposure, we are writing to request that the EPA protect people's health and safety by addressing two specific requests regarding the Lead Service Line Replacement effort. Funds from the 2021 Bipartisan Infrastructure Law for the Lead Service Line Replacement effort are soon to be distributed to water systems across the country. This effort is an important opportunity to achieve our common goals of protecting people's health and safety by eliminating toxic environmental materials from affected communities.

We support replacing lead pipes used for drinking water and urge the EPA to take the following actions when implementing the Lead Service Line Replacement program:

1. The EPA should promote the use of filtered water, rather than single-use plastic bottles, during the lead pipe replacement program.

Before, during and for at least six months after lead service pipes are replaced, families served by lead service lines should be provided with access to safe drinking water through water filters certified for lead removal.¹ These communities must be notified of the health risks presented to them if they consume water directly from lead pipes and should be guided and trained on how to filter water before consumption.

The EPA should strongly discourage the use of single-use plastic water bottles during the lead service line replacements, as single-use plastic water bottles have significant environmental impacts over their lifecycle. Many single-use plastic water bottles are made from polyethylene terephthalate (PET), which a scientific review article found “may yield

¹ Alliance of Nurses for Health Environments, Beyond Plastics, Clean Water Action, Earthjustice, Environmental Advocates NY, Environmental Policy Innovation Center, Environmental Protection Network, Gulf Coast Center for Law and Policy, Healthy Babies Bright Futures, League of Conservation Voters, Little Village Environmental Justice Organization, MI Welfare Rights Organization, Natural Resources Defense Council, New Jersey Future, Newark Education Workers Caucus, People's Water Board Coalition, Waterway Advocates, & WE ACT for Environmental Justice. (2022). (issue brief). *Principles for Lead Service Line Replacements*. Natural Resources Defense Council.

endocrine disruptors under conditions of common use, particularly with prolonged storage and elevated temperature.”² Plastic production also harms frontline communities, and the majority of plastic waste ends up polluting our air, soil, and water.

Furthermore, a recent EPA memo makes clear that pursuant to the Safe Drinking Water Act, single-use plastic water bottles are not eligible for State Revolving Funds (SRF). Both pitchers and filters are eligible for this funding.³ That is a very wise policy and we applaud the EPA for adopting it.

The EPA ought to allocate funds towards communication efforts surrounding the recommendation of using filtered water and not bottled water. We appreciate that the EPA requires the use of pitcher or point of use filters for at least six months after the lead service line replacements, but also urge the agency to strongly encourage water systems to provide filters in most instances while lead service lines are in use.⁴

2. The EPA should recommend the use of recycled copper to replace the lead service lines and strongly discourage the use of polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), and other plastic materials. To do so, the EPA must provide educational resources and training to municipalities and other decision makers about the dangers of replacing pipes with CPVC and other plastic materials and provide guidance for more environmentally preferable piping materials. The EPA must not solve one problem, lead in drinking water, by creating a toxic trade off, promoting the production and use of plastics that release highly hazardous chemicals in frontline environmental justice communities.

Many local governments do not fully understand the various kinds of materials available for use in the replacement service pipes. PVC and other plastic replacement materials should be discouraged as the material for the replacement service pipe, as their lifecycle has negative impacts on our public health and further climate and environmental degradation. Recycled copper should be the preferred material for replacement service pipes in most instances.

Allowing the use of CPVC or PVC or other plastic pipe is out of step with EPA’s commitment to environmental justice and protecting American families from toxic chemicals.⁵ While the EPA is currently considering a rule that would ban the use of chrysotile asbestos used in the chlor-alkali industry, the production and disposal of PVC plastic still uses and/or releases other hazardous

² Sax, Leonard. “Polyethylene Terephthalate May Yield Endocrine Disruptors.” *Environmental Health Perspectives* 118, no. 4 (April 2010): 445–48. <https://doi.org/10.1289/ehp.0901253>.

³ Fox, Radhika. Letter to EPA Regional Water Division Directors. “Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law.” *United States Environmental Protection Agency*. United States Environmental Protection Agency, March 8, 2022. https://www.epa.gov/system/files/documents/2022-03/combined_srf-implementation-memo_final_03.2022.pdf.

⁴ We recognize that in certain unusual circumstances, such as where a system’s water chemistry results in the substantial production of nanoparticles of lead that may escape standard point of use filtration, or where there are ongoing microbial contamination risks in a water system that could result in growth of microbes in such filters, that alternative methods of ensuring safe water may be necessary, such as water buffaloes or reusable water bottles.

⁵ Rep. *Environmental Justice & the PVC Chemical Industry*. Center for Health, Environment and Justice (CHEJ), n.d. <https://chej.org/wp-content/uploads/PVC%20&%20Environmental%20Justice%20-%20REP%20026.pdf>.

chemicals including vinyl chloride, ethylene dichloride, chlorine gas, PFAS, mercury, organotins, dioxins and furans, and other hazardous chlorinated by-products.^{6,7} The use and release of these chemicals can lead to notable exposures to hazardous chemicals in frontline environmental justice communities where PVC plastic is frequently manufactured and disposed of. In fact, some PVC frontline communities in Louisiana, such as in Mossville, Reveilletown, Morrisonville, and Plaquemine have been forced to relocate due to groundwater or air contamination.⁸ PVC chemical manufacturers have also been fined by the U.S. EPA for millions of dollars for violating federal laws and regulations.⁹ Accidents and explosions have also impacted workers at PVC plants, killing workers in incidents over the years. For instance on April 23, 2004, a PVC plant in Illinois exploded, sending a plume of toxic smoke for miles around surrounding communities and killing five people.¹⁰

PVC pipes used in the United States can leach endocrine disruptors such as phthalates and neurotoxic organotin contaminants.^{11,12} Preliminary data suggests that PVC pipes may be a source of low levels of microplastics in drinking water.¹³ Research has suggested that cross-linked polyethylene (PEX), another common plastic pipe material, has been found to leach the compounds toluene and MTBE, which can be neurotoxic, endocrine disrupting, and carcinogenic.¹⁴ The degradation of PVC and other plastic drinking water pipes can be a source of water contamination and new service pipes should not utilize this material.¹⁵

Furthermore, recent research found that thermally damaged plastic drinking water pipes can leach volatile organic compounds (VOCs) similar to the VOCs found in the contaminated

⁶ Autocase Economic Advisory, Center for Environmental Health, and Material Research L3C, “Flooring’s Dirty Climate Secret,” 2022, <https://ceh.org/wp-content/uploads/2022/05/PVC-Report-5-5.pdf>.

⁷ Vallette, J. “Chlorine & Building Materials Project: Phase 1 Africa, The Americas, and Europe” (Healthy Building Network, 2018), <https://healthybuilding.net/reports/18-chlorine-building-materials-project-phase-1-africa-the-americas-and-europe>

⁸ Joe Thornton, “Environmental Impacts of Polyvinyl Chloride (PVC) Building Materials” (Healthy Building Network, 2010), <http://mts.sustainableproducts.com/SMaRT/ThorntonRevised.pdf>.

⁹ Rep. *Environmental Justice & the PVC Chemical Industry*. Center for Health, Environment and Justice (CHEJ), n.d. <https://chej.org/wp-content/uploads/PVC%20&%20Environmental%20Justice%20-%20REP%20026.pdf>.

¹⁰ U.S. Chemical Safety and Hazard Investigation Board. Rep. *Investigation Report: Vinyl Chloride Monomer Explosion*. U.S. Chemical Safety and Hazard Investigation Board, March 2007. https://www.csb.gov/assets/1/20/formosa_il_report.pdf?13838.

¹¹ Faust, Derek R., Kimberly J. Wooten, and Philip N. Smith. “Transfer of Phthalates from C-Polyvinyl Chloride and Cross-Linked Polyethylene Pipe (PEX-B) into Drinking Water.” *Water Supply* 17, no. 2 (September 28, 2016): 588–96. <https://doi.org/10.2166/ws.2016.164>.

¹² Adams, William A., Ying Xu, John C. Little, Anthony F. Fristachi, Glenn E. Rice, and Christopher A. Impellitteri. “Predicting the migration rate of diakly organotins from PVC pipe into water.” *Environmental Science & Technology* 45(July 5, 2011): 6902-6907. <https://pubs.acs.org/doi/pdf/10.1021/es201552x>.

¹³ Mintenig, S.M., M.G.J. Löder, S. Primpke, and G. Gerdt. “Low Numbers of Microplastics Detected in Drinking Water from Ground Water Sources.” *Science of The Total Environment* 648 (January 15, 2019): 631–35. <https://doi.org/10.1016/j.scitotenv.2018.08.178>.

¹⁴ Kelley, Keven M., Alexandra C. Stenson, Rajarashi Dey, and Andrew J. Whelton. “Release of Drinking Water Contaminants and Odor Impacts Caused by Green Building Cross-Linked Polyethylene (PEX) Plumbing Systems.” *Water Research* 67 (December 15, 2014): 19–32. <https://doi.org/10.1016/j.watres.2014.08.051>.

¹⁵ Isaacson, K. P., Proctor, C. R., Wang, Q. E., Edwards, E. Y., Noh, Y., Shah, A. D., & Whelton, A. J. (2021). Drinking water contamination from the thermal degradation of plastics: Implications for wildfire and Structure fire response. *Environmental Science: Water Research & Technology*, 7(2), 274–284. <https://doi.org/10.1039/d0ew00836b>

drinking water after the devastating Paradise, Camp, and Tubbs wildfires in California.¹⁶ The marked increase in wildfires in recent years, a trend that is expected to continue with heightened climate change, is yet another reason why PVC and other plastic piping should be discouraged as replacements for lead service lines.¹⁷

Lastly, the International Association of Fire Fighters (IAFF) and the United Association of Plumbers, Fitters, Welders and Service Techs (UA) have called for changes to the building code to “reduce and restrict” the use of plastics in building construction, including plastic piping, stating in a 2019 news release that: “when plastics burn, they emit carcinogens and increase the risk of occupational illness and death for firefighters.... plastic produces toxic gasses and can cause fires to spread more quickly and easily, creating an immediate hazard for firefighters and the public.”¹⁸

In order to help you reach these goals, we request a virtual meeting with you and your staff at your earliest convenience.

Please let us know when you are available to meet with us by emailing Julia Cohen, Plastic Pollution Coalition Co-Founder and Managing Director, at julia@plasticpollutioncoalition.org. This meeting is essential so that we can create an ongoing, lasting and important collaboration for the duration of this ten year project.

Please note that The Society of Native Nations, signed onto this letter, as Indigenous people, offer to support the difficult conversations for solutions that cause no further harm to the water, the land, the air, the people and all of our relatives, finned, feathered, four legged, other two legged and creepy crawlers. We need to share the truth for the matters of climate crisis and specifically mitigating lead pipes, we must offer prayers for the hard headed and hard hearted who seek profit from these proper plans for communities to have healthy water pipes and plumbing.... We all are connected and we all are deserving of healing.

Thank you.

Sincerely,

Julia Cohen, Managing Director - Plastic Pollution Coalition
Judith Enck, President - Beyond Plastics
Sarah Doll, National Director & Renee Sharp, Strategic Advisor - Safer States

¹⁶ Isaacson, Kristofer P., Caitlin R. Proctor, Q. Erica Wang, Ethan Y. Edwards, Yoorae Noh, Amisha D. Shah, and Andrew J. Whelton. “Drinking Water Contamination from the Thermal Degradation of Plastics: Implications for Wildfire and Structure Fire Response.” *Environmental Science: Water Research & Technology* 7, no. 2 (2021): 274–84. <https://doi.org/10.1039/d0ew00836b>.

¹⁷ United States Environmental Protection Agency. “Climate Change Indicators: Wildfires.” United States Environmental Protection Agency. Environmental Protection Agency, April 2021. <https://www.epa.gov/climate-indicators/climate-change-indicators-wildfires#:~:text=Earlier%20spring%20melting%20and%20reduced,more%20easily%20and%20burn%20hotter>.

¹⁸ International Association of Fire Fighters. “IAFF and UA Call for Building Code Changes to Restrict Plastic Piping.” *International Association of Fire Fighters*. June 4, 2019. <https://www.iaff.org/news/iaff-and-ua-call-for-building-code-changes-to-restrict-plastic-piping/>.

Heather Trim, Executive Director - Zero Waste Washington
Joshua Perkins, Chief Operating Officer - Black Millennials For Flint
Charlie Cray, Senior Research Specialist - Greenpeace USA
Mike Schade, Mind the Store Program Director - Toxic-Free Future
Sarah Packer, Director Petrochemicals, Plastics & Climate - Center for Environmental Health
Frankie Orona, Executive Director, Society of Native Nations
Yvette Arellano, Founder and Director, - Fenceline Watch
Khrystle Bullock, Think 100% Climate Justice Fellow - Hip Hop Caucus
Carlos Ochoa, National Policy Associate - Azul
Mariana Del Valle Prieto Cervantes, Director of Strategic Initiatives - GreenLatinos
Juan Parra, Executive Director - Texas Environmental Justice Advocacy Services (T.E.J.A.S)
Manasa Mantravadi, CEO - Ahimsa
Terrence Collins, Director - Institute for Green Science at Carnegie Mellon University
Tierney Thys, Co-Creator - Around the World in 80 Fabrics
Sedat Gundogdu, Founder - Microplastics Research Group
Shige Takada, Lead Scientist - International Pellet Watch
Abigail Barrows, Lab Head - Ocean Analytics at the College of the Atlantic
Arlene Blum, Executive Director - Green Science Policy
Jackie Nuñez, Founder - The Last Plastic Straw
Dr. Wallace J Nichols, Founder - The Blue Mind Movement





CEH CENTER for ENVIRONMENTAL HEALTH



HIP HOP CAUCUS



A HOUSTON BASED ENVIRONMENTAL JUSTICE ORGANIZATION



Texas Environmental Justice Advocacy Services



GREENLATINOS
Luchando por la Liberación Ambiental

THE INSTITUTE FOR
GREEN SCIENCE
CARNEGIE MELLON UNIVERSITY



Around the World in
80 FABRICS 

An adventure in textiles searching for sustainable fashion



