

June 5, 2026

Submitted via Regulations.gov

Lee Zeldin, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave, N.W.
Washington, DC 20460-0001

**Re: Comments on Drinking Water Contaminant Candidate List 6--Draft;
Docket No. EPA-HQ-OW-2022-0946**

Dear Administrator Zeldin:

The 30 undersigned groups submit these comments on the proposal to list microplastics as a chemical group on the U.S. Environmental Protection Agency's ("EPA") draft Sixth Contaminant Candidate List (hereafter "Draft CCL-6").¹ Our organizations work to protect human health and the environment from plastics and microplastics² across their lifecycle. Some of our groups are based in Texas with members living on the frontline of plastics manufacturing. Production and transportation of these materials cause significant pollution, including from microplastic particles. These particles enter air, water and soil placing residents of these communities – and especially their children – at increased risk of harm, especially in combination with the numerous other toxic substances to which they are regularly exposed.

We applaud EPA for identifying microplastics as a drinking water priority. As we explain below, EPA should prioritize taking the steps necessary to make a well-informed, well-supported determination on whether to adopt a National Primary Drinking Water Regulation ("NPDWR") for microplastics. Under the Safe Drinking Water Act ("SDWA"), the first step in the NPDWR process is adding the contaminant to an Unregulated Contaminant Monitoring Rule ("UCMR"), which leads to development of data on the occurrence, frequency and level of the contaminant in drinking water – a key element in the decision whether to regulate. Given the overwhelming and well-justified concerns about microplastics in drinking water (discussed in the

¹ Drinking Water Contaminant Candidate List 6 – Draft, 91 Fed. Reg. 86 (April 6, 2026), <https://www.federalregister.gov/documents/2026/04/06/2026-06662/drinking-water-contaminant-candidate-list-6-draft>.

² The term "microplastics" in these comments refers to the definition that EPA uses on its Microplastics Research page, namely "plastic particles ranging in size from 5 millimeters ... to 1 nanometer (nm)," which includes nanoparticles, which are microplastics that are smaller than 1 µm (1 micrometer or 1000 nm)." <https://www.epa.gov/water-research/microplastics-research> As discussed in Section E below, we urge EPA to adopt this definition in its SDWA rulemakings.

section immediately below), it is critical that EPA list microplastics on the forthcoming UCMR-6. Indeed, EPA has a legal duty to list microplastics on the UCMR-6 based on a petition from seven governors. Even if EPA isn't ready to list microplastics on the UCMR-6 from the outset, it should leave space for adding microplastics to UCMR-6 mid-cycle.

In addition, EPA should use the CCL-6 listing to develop and implement a strong research agenda. Specifically, and as explained further below, we urge EPA to: 1) use the CCL-6 listing to prioritize research on developing validated detection methodologies, building on work that is already in progress; 2) study the known occurrence of microplastic pollution in drinking water systems as a result of plastic pipes, fixtures and service lines; 3) develop research and policy plans for protecting drinking water from microplastics in the first place, rather than relying on treatment, which can present its own environmental challenges; and 4) use the definition of microplastics that appears on EPA's website, which it is already using. Finally, we urge EPA to correct glitches we have identified in implementation of the prioritization process for the CCL-6.

A. Health Concerns Arising from the Presence of Microplastics in Drinking Water Demand Federal Action

Plastic particles are pervasive environmental pollutants, leading to human exposure by inhalation and ingestion--including ingestion of water from plastic bottles and the tap.³ Citing the World Health Organization, a recent study noted that “detected microplastic concentrations in treated water are not negligible and suggest that potable water could be an important source of microplastics to humans.”⁴

³ Pironti, C., Ricciardi, M., Motta, O., Miele, Y., Proto, A., & Montano, L. (2021). Microplastics in the Environment: Intake through the Food Web, Human Exposure and Toxicological Effects. *Toxics*, 9(9), 224. <https://doi.org/10.3390/toxics9090224>; Zhang, J.; Liu, Y.; Zhao, L.; Peng, C.; Wang, L. Microplastics and nanoplastics in drinking water and beverages: occurrence and human exposure. *J. Environ. Expo. Assess.* 2024, 3, 24. <http://dx.doi.org/10.20517/jeea.2024.37>.

⁴ Pironti, C., Ricciardi, M., Motta, O., Miele, Y., Proto, A., & Montano, L. (2021). Microplastics in the Environment: Intake through the Food Web, Human Exposure and Toxicological Effects. *Toxics*, 9(9), 224. <https://doi.org/10.3390/toxics9090224>.

Microplastics have been found throughout the organs and tissues of adults, including in hearts,⁵ lungs,⁶ and reproductive organs.⁷ By comparing autopsies, scientists have determined that the brains of people who died in 2024 had nearly twice as many microplastics as people who died in 2016, suggesting that exposures may be increasing dramatically.⁸

The widespread presence of microplastics in the environment and our bodies is a serious public health concern. According to a 2024 federal interagency policy committee on plastic pollution: “[r]esearchers are sounding alarm bells over the growing presence of microplastics in the human body, and are concerned that the ingestion of microplastics and exposure to plastics-related pollution are posing a growing risk to public health.”⁹ More recently, Department of Health and Human Services (“HHS”) Secretary Robert F. Kennedy, Jr. referred to microplastics as a “growing threat to human health.”¹⁰ Two months ago, when HHS announced a groundbreaking new program “to combat toxic microplastics in the human body,” it stated that animal studies show that exposures to microplastics *cause* disease, while human data show a high correlation with disease.¹¹ Consistent with HHS’s statements, a recent large-scale review of existing research concluded that exposure to microplastics is suspected to harm reproductive,

⁵ Marfella, R., Prattichizzo, F., Sardu, C., Fulgenzi, G., Graciotti, L., Spadoni, T., D’Onofrio, N., Scisciola, L., La Grotta, R., Frigé, C., Pellegrini, V., Municinò, M., Siniscalchi, M., Spinetti, F., Vigliotti, G., Vecchione, C., Carrizzo, A., Accarino, G., Squillante, A., Spaziano, G., ... Paolisso, G. (2024). Microplastics and Nanoplastics in Atheromas and Cardiovascular Events. *The New England journal of medicine*, 390(10), 900–910. <https://doi.org/10.1056/NEJMoa2309822>.

⁶ Jenner, L. C., Rotchell, J. M., Bennett, R. T., Cowen, M., Tentzeris, V., & Sadofsky, L. R. (2022). Detection of microplastics in human lung tissue using μ FTIR spectroscopy. *The Science of the total environment*, 831, 154907. <https://doi.org/10.1016/j.scitotenv.2022.154907>.

⁷ Codrington, J., Varnum, A. A., Hildebrandt, L., Pröfrock, D., Bidhan, J., Khodamoradi, K., Höhme, A. L., Held, M., Evans, A., Velasquez, D., Yarborough, C. C., Ghane-Motlagh, B., Agarwal, A., Achua, J., Pozzi, E., Mesquita, F., Petrella, F., Miller, D., & Ramasamy, R. (2025). Detection of microplastics in the human penis. *International journal of impotence research*, 37(5), 377–383. <https://doi.org/10.1038/s41443-024-00930-6>.

⁸ Nihart, A. J., Garcia, M. A., El Hayek, E., Liu, R., Olewine, M., Kingston, J. D., Castillo, E. F., Gullapalli, R. R., Howard, T., Bleske, B., Scott, J., Gonzalez-Estrella, J., Gross, J. M., Spilde, M., Adolphi, N. L., Gallego, D. F., Jarrell, H. S., Dvorscak, G., Zuluaga-Ruiz, M. E., West, A. B., ... Campen, M. J. (2025). Bioaccumulation of microplastics in decedent human brains. *Nature medicine*, 31(4), 1114–1119. <https://doi.org/10.1038/s41591-024-03453-1>.

⁹ Mobilizing Federal Action on Plastic Pollution: Progress, Principles, and Priorities, A collaborative effort of the Interagency Policy Committee on Plastic Pollution and a Circular Economy (July 2024), <https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/07/Mobilizing-Federal-Action-on-Plastic-Pollution-Progress-Principles-and-Priorities-July-2024.pdf>

¹⁰ U.S. Dep’t of HHS, ARPA-H Launches Groundbreaking, \$144 million Program to Combat Toxic Microplastics in the Human Body (April 2, 2026), <https://www.hhs.gov/press-room/arpa-h-launches-groundbreaking-144-million-program-combat-toxic-microplastics-human-body.html>

¹¹ *Id.*

digestive, and respiratory health, and suggested a link to colon and lung cancer.¹² Similarly, multiple scientific studies have demonstrated that public health impacts to microplastics in drinking water, including, for example, engineers at Rice University who demonstrated that the breakdown of polystyrene as microplastic pollution was likely aiding antibiotic resistance bacteria.¹³

The toxicity of microplastics is linked, at least in significant part, to the chemicals added to plastic polymers as fillers, plasticizers, colorants, stabilizers, flame retardants, antistatic agents, and more.¹⁴ More than 16,500 chemicals are added to plastic polymers, many of which are highly toxic such as PFAS and ortho-phthalates.¹⁵ In addition, environmental pollutants (such as heavy metals, persistent organic pollutants) bind to microplastics in the environment, meaning that microplastics become vectors of toxic environmental pollution in drinking water and food, increasing health concerns.¹⁶

The concern for children's health from microplastics is particularly strong. Microplastics are found in children from the time of their birth – they can cross the placental barrier (as well as

¹² Chartres, N., Cooper, C. B., Bland, G., Pelch, K. E., Gandhi, S. A., BakenRa, A., & Woodruff, T. J. (2024). Effects of Microplastic Exposure on Human Digestive, Reproductive, and Respiratory Health: A Rapid Systematic Review. *Environmental science & technology*, 58(52), 22843–22864. <https://doi.org/10.1021/acs.est.3c09524>.

¹³ Yuan, Q., Sun, R., Yu, P., Cheng, Y., Wu, W., Bao, J., & Alvarez, P. J. J. (2022). UV-aging of microplastics increases proximal ARG donor-recipient adsorption and leaching of chemicals that synergistically enhance antibiotic resistance propagation. *Journal of hazardous materials*, 427, 127895. <https://doi.org/10.1016/j.jhazmat.2021.127895>.

¹⁴ Marsit, C. J., Bennett, D. H., Birnbaum, L. S., Brody, C., Eskenazi, B., Gartner, E., Hertz-Picciotto, I., Hirtz, D., Miller, P., Perera, F., Schantz, S. L., Swanson, M., Khemet Taiwo, T., & Ritz, B. (2026). Protecting the developing brains of children from Plastics-Derived chemicals and microplastic particles. *Environment international*, 212, 110284. Advance online publication. <https://doi.org/10.1016/j.envint.2026.110284>.

¹⁵ *Id.*

¹⁶ Alijagic, A., Suljević, D., Fočak, M., Sulejmanović, J., Šehović, E., Särndahl, E., & Engwall, M. (2024). The triple exposure nexus of microplastic particles, plastic-associated chemicals, and environmental pollutants from a human health perspective. *Environment international*, 188, 108736. <https://doi.org/10.1016/j.envint.2024.108736>.

the blood-brain barrier),¹⁷ and have been found in the uterus,¹⁸ placenta,¹⁹ and the first stool of newborns,²⁰ with exposures continuing postnatally through ingestion of breastmilk and infant formula. Children are at heightened risk of harm from the chemical additives in microplastics, many of which are linked to substantial evidence of developmental neurotoxicity²¹ and endocrine disruption,²² which can harm the development of their brains, and reproductive systems.²³

B. Development of NPDWRs Involves 3 Sequential Steps, Starting with UCMR Listing

In order to protect the public from contaminated drinking water, the SDWA authorizes EPA to adopt NPDWRs – rules that set standards or treatment techniques for contaminants that may adversely affect human health. With the 1996 amendments to the SDWA, Congress prescribes that development of NPDWRs involves three steps in sequence: (a) adding unregulated contaminants to the UCMR so occurrence data can be generated; (b) adding unregulated contaminants to the CCL, based in part on consideration of occurrence data generated by the UCMR; and (c) selecting 5 or more CCL substances for regulatory determinations (which also includes consideration of occurrence data). These steps are described further below.

¹⁷ Bai, C. L., Wang, D., Luan, Y. L., Huang, S. N., Liu, L. Y., & Guo, Y. (2024). A review on micro- and nanoplastics in humans: Implication for their translocation of barriers and potential health effects. *Chemosphere*, 361, 142424. <https://doi.org/10.1016/j.chemosphere.2024.142424>.

¹⁸ Qin, X., Cao, M., Peng, T., Shan, H., Lian, W., Yu, Y., Shui, G., & Li, R. (2024). Features, Potential Invasion Pathways, and Reproductive Health Risks of Microplastics Detected in Human Uterus. *Environmental science & technology*, 58(24), 10482–10493. <https://doi.org/10.1021/acs.est.4c01541>.

¹⁹ Garcia, M. A., Liu, R., Nihart, A., El Hayek, E., Castillo, E., Barrozo, E. R., Suter, M. A., Bleske, B., Scott, J., Forsythe, K., Gonzalez-Estrella, J., Aagaard, K. M., & Campen, M. J. (2024). Quantitation and identification of microplastics accumulation in human placental specimens using pyrolysis gas chromatography mass spectrometry. *Toxicological sciences: an official journal of the Society of Toxicology*, 199(1), 81–88. <https://doi.org/10.1093/toxsci/kfae021>

²⁰ Zhang, J., Waing, L., Trasande, L., & Kannan, K. (2021). “Occurrence of Polyethylene Terephthalate and Polycarbonate Microplastics in Infant and Adult Feces.” *Environmental Science & Technology Letters*. <https://pubs.acs.org/doi/abs/10.1021/acs.estlett.1c00559>.

²¹ Marsit, C. J., Bennett, D. H., Birnbaum, L. S., Brody, C., Eskenazi, B., Gartner, E., Hertz-Picciotto, I., Hirtz, D., Miller, P., Perera, F., Schantz, S. L., Swanson, M., Khemet Taiwo, T., & Ritz, B. (2026). Protecting the developing brains of children from Plastics-Derived chemicals and microplastic particles. *Environment international*, 212, 110284. Advance online publication. <https://doi.org/10.1016/j.envint.2026.110284>.

²² Amran, N. H., Zaid, S. S. M., Mokhtar, M. H., Manaf, L. A., & Othman, S. (2022). Exposure to Microplastics during Early Developmental Stage: Review of Current Evidence. *Toxics*, 10(10), 597. <https://doi.org/10.3390/toxics10100597>.

²³ *Id.*

The SDWA provision entitled “National drinking water regulations” sets forth the process for developing NPDWRs; it covers identification of contaminants that should be considered for regulation, and the standards EPA must use to make a regulatory determination. **First**, EPA selects the unregulated contaminants that it *may* consider for a NPDWR. These regulatory candidates are published on a list that EPA refers to as the contaminant candidate list or “CCL.”²⁴ Contaminants can be added to the CCL so long as they (a) “are not subject to any proposed or promulgated national primary drinking water regulations”; (b) “are known or anticipated to occur in public water systems”; and (c) “may require [national primary drinking water] regulation.” In addition, before CCL listing, EPA must satisfy three prerequisites: consultation with the scientific community, including the Science Advisory Board; notice and public comment; and “consider[ation of] the occurrence database established pursuant to section 300j-4(g) of this title.”²⁵

Second, every 5 years, EPA selects at least 5 contaminants from the CCL for which it must determine whether to adopt a NPDWR – a “regulatory determination.”²⁶ **Third**, EPA must promulgate a NPDWR if it determines that: “(i) the contaminant may have an adverse effect on the health of persons; (ii) the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and (iii) in the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.”²⁷

Notably, the development of the CCL and the regulatory determination both require consideration of occurrence data. Before listing a contaminant on the CCL, EPA must “consider[] the occurrence database established pursuant to section 300j-4(g) of this title.”²⁸ And as part of the regulatory determination, EPA must determine whether “the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern.”²⁹ Development of occurrence data for unregulated contaminants is required by the “[m]onitoring program for unregulated

²⁴ 42 U.S.C. § 300g-1(b)(1)(B)(i). This subsection is called “Listing of contaminants for consideration.”

²⁵ 42 U.S.C. § 300g-1(b)(1)(B)(i)(I).

²⁶ 42 U.S.C. § 300g-1(b)(1)(B)(ii).

²⁷ 42 U.S.C. § 300g-1(b)(1)(A)(i)-(iii).

²⁸ 42 U.S.C. § 300g-1(b)(1)(B)(i)(I).

²⁹ 42 U.S.C. § 300g-1(b)(1)(A)(ii).

contaminants”³⁰ (often referred to as the UCMR) and that data is captured in the occurrence database (which also covers regulated contaminants).³¹

The text and structure of the SDWA show that development and compilation of occurrence data for unregulated contaminants is a necessary prerequisite for the SDWA regulatory process, which includes both the development of the CCL and regulatory determinations for a subset of CCL substances. The entire purpose of the CCL is to identify candidates for NPDWR regulatory determinations, but the CCL listing, and the regulatory determinations must include analysis of occurrence data, which will not exist in most cases unless EPA has previously required monitoring under the UCMR. As a result, unless UCMR listing occurs before or contemporaneously with CCL listing, the 5 mandated regulatory determinations will virtually always result in EPA deciding not to regulate. Indeed, that has been the case for the thirty years since these SDWA provisions have been in effect.³²

C. EPA Should List Microplastics on UCMR-6 In Addition to CCL-6

While we are pleased that EPA recognizes the need to prioritize microplastics in drinking water, the CCL alone is not a meaningful step toward ensuring that drinking water is safe from microplastic contamination. As discussed immediately above, the only consequence of listing a contaminant on the CCL is that it is a candidate to be one of five contaminants that EPA must select in five years to “make determinations of whether or not to regulate” (a “regulatory determination”).³³ For CCL listing to be meaningful, then, EPA must promptly begin taking steps so that it will be ready in five years to conduct each of the required analyses for a NPDWR regulatory determination. Therefore, unless EPA lists microplastics on the UCMR-6, it is doubtful that it will have the data necessary to make the finding required for the second prong of the NPDWR regulatory determination, as explained below.³⁴

³⁰ 42 U.S.C. § 300j-4(a)(2).

³¹ These data requirements are in the “Records and inspections” section of the SDWA, which is separate from the provision on adoption of NPDWRs. 42 U.S.C. § 300j-4(g).

³² CCL listing has led to binding, permanent NPDWRs for only two contaminants. Between 1996 and 2024, the EPA added 184 individual chemicals to the CCL, including many more than once, but it was not until 2024, when EPA adopted NPDWRs for 6 PFAS chemicals that a CCL listing has culminated in a final NPDWR. Earthjustice, *The Safe Drinking Water Act at 50*, at 3, <https://earthjustice.org/wp-content/uploads/2024/12/the-safe-drinking-water-act-needs-urgent-reform-1.pdf>. Moreover, EPA is now seeking to rescind the NPDWR for 4 of those 6 PFAS. Rescission of Regulatory Determinations and Removal of Related Provisions for Four PFAS Substances (PFHxS, PFNA, HFPO-DA (GenX), and the Mixture of These Three PFAS Plus PFBS), 91 Fed. Reg. 29413 (May 20, 2026).

³³ 42 U.S.C.A. § 300g-1(b)(1)(B)(ii)(I).

³⁴ EPA has previously listed contaminants on the CCL and UCMR contemporaneously. Most recently, lithium is on CCL-5 and UCMR-5, and PFAS as a group was included on CCL-5, while several individual PFAS were listed on UCMR-5.

EPA already has a significant basis on which to make the finding for the first prong of the NPDWR regulatory determination: HHS and scientists across the globe have already determined that microplastics “may have an adverse effect on the health of persons,”³⁵ as discussed in Section A above. In addition, multiple studies have shown the efficiency and efficacy of various forms of wastewater treatment to eliminate these contaminants from drinking water, indicating that regulations could create consistency for facilities, provide guidance to local entities,³⁶ and “present[] a meaningful opportunity for health risk reduction for persons served by public water systems,”³⁷ satisfying the third prong of the NPDWR standard.

However, while it is well documented that microplastics contaminants are found in public water systems,³⁸ EPA may need more information to make a determination regarding the second prong of the NPDWR test: whether microplastics are “known to occur or there is a substantial likelihood that [they] will occur in public water systems with a frequency and at levels of public health concern.”³⁹ In other words, if there is a key data gap for EPA to focus on filling, it involves occurrence, frequency, and levels of microplastics in drinking water. This data is precisely the type of information that would be generated by listing microplastics on the UCMR-6. Therefore, adding microplastics to a UCMR is a critical step for determining whether to adopt a NPDWR for microplastics. We therefore urge EPA to list microplastics on the UCMR-6.

Indeed, EPA must list microplastics on the UCMR-6 because it received a legal petition asking it do so from the governors of seven states (NJ, DE, IL, MD, MI, WI and CT).⁴⁰ This petition triggered a SDWA legal requirement to list microplastics on UCMR-6 “unless [EPA] determines that the action would prevent the listing of other contaminants of a higher public

³⁵ 42 U.S.C. § 300g-1(b)(1)(A)(i).

³⁶ <https://www.sciencedirect.com/science/article/pii/S2667010021002432> ; see also <https://www.sciencedirect.com/science/article/abs/pii/S0043135416300021> (“Understanding the fate and transport pathways of microplastics in wastewater treatment processes is of great interest to plant design engineers and environmental scientists alike. New findings could help us to refine and improve existing treatment plant processes to manage or eliminate this new class of pollutants.”)

³⁷ 42 U.S.C. § 300g-1(b)(1)(A)(iii).

³⁸ Balkenbusch, C., Glienke, J., Wu, Y., Munno, K., Jung, M., Almuhtaram, H., & Andrews, R. C. (2025). Microplastic removal across ten drinking water treatment facilities and distribution systems. *NPJ clean water*, 8(1), 103. <https://doi.org/10.1038/s41545-025-00531-w>.

³⁹ 42 U.S.C. § 300g-1(b)(1)(A)(ii).

⁴⁰ Legal Petition under 42 U.S.C. § 300j-4(a)(2)(B)(ii) to Lee Zeldin, Administrator, from Governors Phil Murphy, Ned Lamont, Wes Moore, Tony Evers, Matt Meyer, JB Pritzker, and Gretchen Whitmer (Nov. 26, 2025),

https://d31hzlkh6di2h5.cloudfront.net/20251126/24/85/ad/24/77a93608fa1b601e94b31756/Microplastics_Petition.pdf.

concern.”⁴¹ It seems unlikely that there are chemicals or chemical groups that have not yet been listed on the UCMR and that have garnered “higher public concern” than microplastics.⁴²

Even if EPA does not add microplastics to UCMR-6 at the outset of the cycle in 2027, delay in monitoring public water systems for microplastics until 2032, when UCMR-7 is scheduled to begin, would be unacceptable. Therefore, if EPA determined that more work is required to develop and validate analytical methods before public water systems are able to monitor for microplastics (which we do not concede), EPA should develop those methods on an expedited basis, and then it should amend the UCMR to add microplastics *during the UCMR-6 cycle*. Nothing in the SDWA precludes amending a UCMR to add additional unregulated contaminants during an existing cycle. EPA is required to adopt a new UCMR at least every 5 years, but it is not foreclosed from adding new contaminants mid-cycle. The only limitation is that during each cycle there can be only 30 UCMR-listed contaminants.⁴³ To ensure that EPA is not foreclosed from amending UCMR-6 to add microplastics mid-cycle, if it does not list microplastics on UCMR-6 from the outset, it should list no more than 29 unregulated contaminants to leave a slot open to add microplastics later in this cycle, without exceeding the 30-contaminant limit.

D. If EPA Finalizes the Draft CCL-6, It Should Prioritize Development of Robust Information About Microplastics in Drinking Water at the Source and the Tap, And Develop Plans for Protecting – Rather than Treating - Source Waters

Adding microplastics as a group to the CCL-6 has the potential to spur efforts to fill critical research needs, but that will not happen automatically under the SDWA. If EPA finalizes this listing, we strongly urge it to use the listing to catalyze rapid development of information that is targeted to result in expedited adoption of safeguards to protect human health and the environment from microplastics. In particular, we make the following suggestions.

First, we urge EPA to more fully investigate and prioritize research necessary to develop microplastic detection technology so public water systems (as well as other governmental entities and scientists) can monitor and measure the occurrence and concentrations of microplastics in drinking water. EPA identifies this in Draft CCL-6 as a significant data gap, and ongoing studies

⁴¹ 42 U.S.C. § 300j-4(a)(2)(B)(ii).

⁴² In recent polling, 90% of Americans are concerned about the effect of microplastics on their health. 5 Gyres, Tiny Plastics, Big Opinions, <https://static1.squarespace.com/static/6537fd1a80e60f606d49aaff/t/687ed00306f41f153a704a94/1753141333338/Microplastics+Polling+Report.pdf> [slide 7].

⁴³ 42 U.S.C. § 300j-4(a)(2)(B)(i).

throughout the country on behalf of wastewater professionals shows that federal action is needed in order to create standards to be achieved.⁴⁴

The Draft CCL-6 does not reference the fact that this work is already well underway, including ongoing work by the state of California to fulfill a legal requirement for development of analytical methods.⁴⁵ Nor does it reference other scientific literature—dating back more than a decade—by wastewater engineers and other professionals recognizing this key pollutant and the concern and care that these professionals are currently taking in an attempt to minimize contamination. There is no need to start anew.⁴⁶ Rather, EPA should move quickly to identify the true gaps in detection techniques, endeavor to fill them, and then promptly validate methods so that occurrence data can be collected.

Second, we also urge EPA to study microplastic contamination that is known to occur in the drinking water system as a result of degradation of plastic fixtures, service lines and pipes, so that it can adopt NPDWRs to address this source of contamination, as well as source water contamination.⁴⁷ NSF/ANSI Standard 61,⁴⁸ a privately-developed general water materials standard, has minimal testing requirements and does not quantify exposure at the tap. It is not a proxy for supplying safe drinking water.

Third, we urge EPA to develop a plan for keeping microplastics out of drinking water *sources* in the first place, which is the only sensible, economically sound, and long-term solution

⁴⁴ 91 Fed. Reg. at 17193.

⁴⁵ California law requires the California State Water Board to adopt analytical methods for microplastics and accredit California laboratories. In September 2022, the State Water Board approved two official testing methods for detecting microplastics in drinking water, Raman Spectroscopy and Infrared Spectroscopy, and accredited three laboratories to detect microplastics in clean water samples. https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/microplastics/swb-mp2-rev1.pdf

⁴⁶ Section 5 and Tables 1 and 2 of this March 2026 review summarizes analytical methods for detection of microplastics: Kamalasekaran, K., & Sundramoorthy, A. K. (2026). A review on microplastics: sources, environmental fate, degradation pathways, and analytical identification methods. *RSC advances*, 16(15), 13851–13874. <https://doi.org/10.1039/d5ra09062h> Mohsin, M. & Abd Zaid, A. (2025) Microplastic Pollution in the Environment: A Chemical Engineering Perspective on Sources, Fate, and Mitigation Strategies. *Polymers*, 2026 18, 29 at <https://pmc.ncbi.nlm.nih.gov/articles/PMC12788071/pdf/polymers-18-00029.pdf>.

⁴⁷ Safe Piping Matters, Plastic Pipes, Microplastics & Human Health, <https://safepipingmatters.org/2023/12/01/plastic-pipes-microplastics-impacts-on-human-health/>; Mohammadi, A., Dobaradaran, S., Schmidt, T. C., Malakootian, M., & Spitz, J. (2022). Emerging contaminants migration from pipes used in drinking water distribution systems: a review of the scientific literature. *Environmental science and pollution research international*, 29(50), 75134–75160. <https://doi.org/10.1007/s11356-022-23085-7>.

⁴⁸ NSF/ANSI Standard 61, <https://www.nsf.org/knowledge-library/nsf-ansi-standard-61-drinking-water-system-components-health-effects>

for ensuring access to microplastic-free drinking water. And the only way to prevent or significantly limit the presence of microplastics in source waters is to reduce production and use of plastics⁴⁹—even if that is beyond the scope of SDWA. This is because plastics, due to their physical and chemical properties, will inevitably degrade or fragment during manufacture, use, and disposal, forming persistent, toxic and environmentally mobile microplastics that enter drinking water sources in a variety of ways including direct industrial discharge into waterbodies, runoff from roadways, and air deposition. Even if there are treatment techniques to remove a high percentage of microplastics, the microplastic-contaminated sludge or filters must be disposed of, presenting additional environmental challenges. Developing a research and policy agenda for a long-term solution to the microplastics problem should be a key priority for EPA.

Finally, we appreciate the important research involving microplastics that is underway,⁵⁰ including a new major effort initiated by HHS.⁵¹ However, we want to underscore that EPA need not wait for the conclusion of this research (which may go on for decades), to adopt NPDWRs for microplastics, particularly when known treatment options are available.⁵²

⁴⁹ “Microplastics originate mainly from human activities such as tire wear, synthetic textiles, plastic waste degradation, and agricultural runoff. They contaminate soil, water, and air and are transferred between these environments through runoff and atmospheric deposition. In soil, major sources include agricultural mulch, sewage sludge, industrial waste, and fragmented litter from farming and waste management activities. In water bodies, microplastics mainly come from wastewater effluent, land-based runoff, tire particles, industrial pellets, and fishing gear. In the air, they originate from synthetic clothing fibers, tire dust, and industrial emissions. In terrestrial environments, microplastics result primarily from degraded plastic waste, agricultural runoff, and landfill debris.” Kamalasekaran, K., & Sundramoorthy, A. K. (2026). A review on microplastics: sources, environmental fate, degradation pathways, and analytical identification methods. *RSC advances*, 16(15), 13851–13874. <https://doi.org/10.1039/d5ra09062h>.

⁵⁰ The 2024 federal interagency policy committee on plastic pollution and a circular economy lists many of these efforts in its recent report, including: NIST facilitates a program on measurements and standards for contaminants in environmental samples, and ongoing work includes development of materials certified for microplastic content; NIOSH is conducting research to optimize in vitro exposure of nano and microplastic to compare common plastic types of different sizes using toxicity screening; FDA has been working to advance the science on microplastic and nanoplastic in food through analysis of testing methodologies; and EPA is evaluating potential adverse human health outcomes from exposure to microplastic and nanoplastic. <https://bidenwhitehouse.archives.gov/wp-content/uploads/2024/07/Mobilizing-Federal-Action-on-Plastic-Pollution-Progress-Principles-and-Priorities-July-2024.pdf>.

⁵¹ U.S. Dep’t of HHS, ARPA-H Launches Groundbreaking, \$144 million Program to Combat Toxic Microplastics in the Human Body (April 2, 2026), <https://www.hhs.gov/press-room/arpa-h-launches-groundbreaking-144-million-program-combat-toxic-microplastics-human-body.html>.

⁵² Balkenbusch, C., Glienke, J., Wu, Y., Munno, K., Jung, M., Almuhtaram, H., & Andrews, R. C. (2025). Microplastic removal across ten drinking water treatment facilities and distribution systems. *NPJ clean water*, 8(1), 103. <https://doi.org/10.1038/s41545-025-00531-w>.

E. EPA Should Use the Agency’s Existing Definition of Microplastics

The Draft CCL-6 indicates that among the microplastics-related data gaps EPA has identified is a “health-based definition.”⁵³ We strongly urge EPA to use the definition that EPA researchers use, as set forth on the Microplastics Research page of EPA’s website.⁵⁴ Specifically, EPA researchers define microplastics as “plastic particles ranging in size from 5 millimeters (mm), which is about the size of a pencil eraser, to 1 nanometer (nm). . . . Nanoplastics . . . are a subset of microplastics and they are smaller than 1 μm (1 micrometer or 1000 nm).”⁵⁵ EPA should not sow confusion by using a novel definition that is inconsistent with the definition that is already in use by its own scientists and other regulators, such as the states of Illinois⁵⁶ and New Jersey.⁵⁷

We are confused by EPA’s statement in Draft CCL-6 that one of the data gaps for microplastics is a “health-based definition.” There is an important distinction between the scientific definition of microplastics – which EPA has already adopted – and the effects of microplastics on health, which would benefit from more research. For this reason, we disagree with EPA’s suggestion that the “colors, polymers, and shapes” of microplastics could impact the proper definition.⁵⁸ We urge EPA not to link the definition of microplastics with their health effects.

F. The process EPA used for selecting CCL chemicals does not rely on complete and current data, and some of the decisions are hard to follow

EPA has requested comments on the process the EPA used to screen the CCL 6 Chemical Universe. We provide a few concerns about implementation of the process, but this is not intended to be a comprehensive compilation of concerns.

First, EPA is not using all of the most current available data in its screening process. For example, one of the main data sources used for estimating contaminant prevalence is Chemical Data Reporting (CDR) submissions under the Toxic Substances Control Act,⁵⁹ which includes production volume information. EPA relies on 2020 CDR data (covering 2016-2019), even

⁵³ 91 Fed. Reg. 17193.

⁵⁴ US EPA, Microplastics Research, <https://www.epa.gov/water-research/microplastics-research>.

⁵⁵ *Id.*

⁵⁶ IL EPA, Microplastics, <https://epa.illinois.gov/topics/water-quality/microplastics.html>.

⁵⁷ NJ DEP, Microplastics: JNJ DEP’s Approach to Evaluating Sources, Impacts, and Removal Technologies, <https://dep.nj.gov/wp-content/uploads/cleanwatercouncil/presentations/microplastics-in-new-jersey.pdf>.

⁵⁸ 91 Fed. Reg. 17193.

⁵⁹ Technical Support Document, at 9, Table 2, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0032>.

though the 2024 data was submitted to the agency in late 2024, giving EPA ample time to incorporate that information into its CCL process. Relying on the most up-to-date sources is essential and we urge EPA to review the 2024 CDR data for all contaminants on the Preliminary Contaminant Candidate List 6 to ensure that it has not missed something significant by relying on the outdated CDR data.

Second, some of EPA’s proposed listing/non-listing decisions cannot be reconciled with the methodology that is described and/or the data provided in the Chemical Information Sheets (CISs) in the docket.⁶⁰ For example, we do not understand EPA’s proposal to list 2,6-dinitrotoluene (“2,6-d”),⁶¹ but not to list 2,4-dinitrotoluene (“2,4-d”).⁶² Both substances are carcinogens with a linear mode of action; both have a prevalence of 1; but 2,4-d has a magnitude of 10 as compared with the magnitude of 1 for 2,6-d.⁶³ In addition, it is difficult to understand the decision to list 2,6-d, but not 2, 4-d, since 2,4-d has a higher final hazard quotient: 2,4-d’s final hazard quotient = 7500; 2,6-d’s final hazard quotient = 980.⁶⁴ We urge EPA to reconsider the decision not to list 2,4-d.

Third, the CIS’s contain numerous examples of data that is missing, despite it likely being readily available. We are concerned that these chemicals may have been incorrectly excluded from the list, and more broadly, we are concerned that these gaps may be representative of more widespread flaws in implementing the selection process. For example:

- The CIS for 1,1-dichloroethane includes no information about prevalence or magnitude.⁶⁵ However, EPA completed a TSCA risk evaluation for this chemical in June 2025,⁶⁶ which contained information relevant to these data points (modeled and measured).
- The CIS for 1,3-butadiene lacks many data points, including potency and severity,⁶⁷ despite the fact that the toxicity of this substance is well-studied, including as the

⁶⁰ Technical Support Document for the Draft CCL 6 - Contaminant Information Sheets, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0033>

⁶¹ Technical Support Document for the Draft CCL 6 - Contaminant Information Sheets, at A-63--A-66, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0033>.

⁶² Technical Support Document for the Draft CCL 6 - Contaminant Information Sheets, at A-59--A-62, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0033>.

⁶³ See CISs cited in notes 61, 62.

⁶⁴ A final hazard quotient greater than 1.0 “indicates a water concentration exceeding the health concentration value (higher concern).” Technical Support Document, at 52, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0032>.

⁶⁵ Technical Support Document for the Draft CCL 6 - Contaminant Information Sheets, at A-11, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0033>.

⁶⁶ <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-evaluation-1-1-dichloroethane>

⁶⁷ Technical Support Document for the Draft CCL 6 - Contaminant Information Sheets, at A-31, <https://www.regulations.gov/document/EPA-HQ-OW-2022-0946-0033>.

subject of an IRIS assessment.⁶⁸ The CIS's for ammonia, argon, phosphorus, potassium, and chloromethane are also lacking potency and severity information, though EPA is proposing to add chloromethane to the CCL even without these data points. The CIS's for silica and silicon are lacking virtually all information.

CONCLUSION

Given the rapidly growing evidence that microplastics are present throughout the human body and are associated with serious disease, we urge EPA to promptly take the steps needed to develop a NPDWR for microplastics. Listing microplastics on both the CCL-6 and the UCMR-6 would be the most effective route to that result. It would underscore the high priority EPA is giving to the broad concern about microplastics in drinking water, and the UCMR-6 listing would lead to development of the occurrence, frequency, and level data that is needed for a NPDWR regulatory determination. Because these data are so critical, EPA should add microplastics to UCMR-6 mid-cycle even if it does not do so at the outset of the UCMR-6 cycle. Finally, the CCL-6 listing of microplastics should be a catalyst for critically needed research, especially related to detection method development and disposal of contaminated sludge and filters.

When confidence in drinking water quality declines – as is happening now due to the presence of microplastics and other toxic contaminants – the social consequences can be significant, including reduced trust in government institutions and increased consumption of bottled water and sweetened beverages, which raise sustainability, equity, and public health concerns.⁶⁹ Strengthening public confidence in the safety of drinking water is an additional reason EPA should act swiftly to adopt measures to identify, measure, and meaningfully regulate microplastics under the SDWA.

Thank you for your consideration. If you have any questions, please contact Eve Gartner, Director of Crosscutting Toxics Strategies at Earthjustice, egartner@earthjustice.org.

Able Differently

Alaska Community Action on Toxics

Alliance of Nurses for Healthy Environments

⁶⁸ Chemical Assessment Summary, 1,3-Butadiene; CASRN 106-99-0, https://iris.epa.gov/static/pdfs/0139_summary.pdf

⁶⁹ Olatunde, K. , Patton, S. K. , York, M. , & Igboanugo, J. (2025). Public Perception of Drinking Water Quality in the United States: A Thirty-Three Year (1990-2023) Systematic Review of Primary Research Articles. *American Journal of Water Resources*, 13(2), 26-50.

Beyond Plastics
Breast Cancer Prevention Partners
Center for Environmental Health
Center for Health, Environment & Justice
Clean & Healthy
Consumer Reports
Defend Our Health
Earthjustice
Environmental & Public Health Consulting
Gulf Trust
Just Zero
Learning Disabilities Association of America
Learning Disabilities Association of Illinois
Learning Disabilities Association of New Hampshire
Learning Disabilities Association of New York State
Learning Disabilities Association of Ohio
Learning Disabilities Association of South Carolina
Learning Disabilities Association of Texas
Learning Disabilities Association of Utah
Learning Disabilities Association of Virginia
Learning Disabilities Association of Wisconsin
Moms Across America Movement
Safer States
San Antonio Bay Estuarine Waterkeeper
Texas Health and Environment Alliance
Turtle Island Restoration Network
Zero Waste Washington