6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 141

[EPA-HQ-OW-2022-0946; FRL-10773-01-OW]

Drinking Water Contaminant Candidate List 6—Draft

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability; request for comments.

SUMMARY: The U.S. Environmental Protection Agency (EPA) is publishing a draft list of contaminants that are currently not subject to any proposed or promulgated national primary drinking water regulations for public review and comment. These contaminants are known or anticipated to occur in public water systems and may require regulation under the Safe Drinking Water Act (SDWA) in the future. The draft list provided in this document is the sixth Contaminant Candidate List (CCL) published by the Agency since the SDWA amendments of 1996. The draft Sixth Contaminant Candidate List (CCL 6 or the list) includes 75 chemicals, 4 chemical groups (disinfection byproducts (DBPs), microplastics, per- and polyfluoroalkyl substances (PFAS), and pharmaceuticals) and 9

microbes. The EPA seeks public comment on the draft CCL 6 and the process used to develop the draft CCL 6. The EPA will consider all information and comments received in response to this notice for determining the final CCL 6.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may send comments, identified by Docket ID Number EPA-HQ-OW-2022-0946, by any of the following methods:

Federal eRulemaking Portal: https://www.regulations.gov (our preferred method). Follow the online instructions for submitting comments.

Mail: U.S. Environmental Protection Agency, EPA Docket Center, Water Docket, Environmental Protection Agency, Mail code: 28221T, 1200 Pennsylvania Ave. NW, Washington, D.C. 20460.

Hand Delivery / Courier: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, D.C. 20004. The Docket Center's hours of operations are 8:30 a.m. - 4:30 p.m., Monday -Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. EPA-HQ-OW-2022-0946 for this rulemaking. Comments received may be posted without change to https://www.regulations.gov, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking

process, see the "Public Participation" heading of the **SUPPLEMENTARY**

INFORMATION section of this notice.

FOR FURTHER INFORMATION CONTACT: Thomas Lombardi, Standards and

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SUPPLEMENTARY INFORMATION:

Table of Contents

I. General Information.

A. Does this Action Impose Any Requirements on Public Water Systems?

The draft CCL 6 and the final CCL 6, when published, will not impose any requirements on regulated entities.

B. Public Participation.

Submit your comments, identified by Docket ID No. EPA-HQ-OW-2022-0946, at https://www.regulations.gov (our preferred method), or the other methods identified in the **ADDRESSES** section of this notice. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit https://www.epa.gov/dockets/commenting-epa-dockets.

C. What Should I Consider as I Prepare My Comments for the EPA?

You may find the following suggestions helpful for preparing your comments:

- Explain your views as clearly as possible.
- Describe any assumptions that you used.
- Provide any technical information, alternative scientific analyses, and/or data you used that support your views.
- Provide full references for any peer reviewed publication you used that support your views.
- Provide specific examples to illustrate your concerns.
- Offer alternatives.

Make sure to submit your comments by the comment period deadline. To ensure proper receipt by the EPA, identify the appropriate docket identification number in the subject line on the first page of your response. It would also be helpful if you provided the name, date, and *Federal Register* citation related to your comments.

II. Purpose, Background, and Statutory Requirements of this Action.

This section briefly summarizes the purpose of this action, the statutory requirements, previous activities related to the CCL and the approach used to develop the draft CCL 6.

A. What is the Purpose of this Action?

The purpose of this action is to present and seek comment upon the EPA's draft CCL 6 and the selection process used to make the list. When finalized, CCL 6 will be

used to prioritize research and data collection efforts for drinking water contaminants. In a future, separate action the EPA will make regulatory determinations on whether to regulate at least five contaminants from the CCL with National Primary Drinking Water Regulations (NPDWRs) under the SDWA, section 1412(b)(1)(B)(ii).

B. Background and Statutory Requirements for the CCL.

SDWA section 1412(b)(1)(B)(i), as amended in 1996, requires the EPA to publish the CCL every five years. SDWA specifies that the list must include contaminants that are not subject to any proposed or promulgated NPDWRs, are known or anticipated to occur in public water systems (PWSs), and may require regulation under the SDWA. The statute provides that the unregulated contaminants considered for listing shall include, but not be limited to, hazardous substances identified in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, and substances registered as pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). SDWA section 1412(b)(1)(C) directs the EPA to identify those contaminants that present the greatest public health concern related to exposure from drinking water, and, in making such selection, to take into consideration the human health effects after exposure to a contaminant specifically to sensitive subgroups that comprise a meaningful portion of the general population (such as infants, children, pregnant women, the elderly, and individuals with a history of serious illness or other

subpopulations) that are identifiable as being at greater risk of adverse health effects due to exposure to contaminants in drinking water than the general population.

C. Interrelationship of the CCL and Related SDWA Programs, Regulatory Determinations, and Unregulated Contaminant Monitoring Rule.

The CCL is the first step in the SDWA regulatory framework, serving as the initial screening of contaminants to identify those which may require regulation under SDWA. The CCL informs future Unregulated Contaminant Monitoring Rules (UCMR) and Regulatory Determinations. The inclusion of a contaminant on the CCL, whether as an individual or in a group, does not mean that any particular contaminant will necessarily be regulated in the future. Rather, the CCL serves as a first level of evaluation for unregulated drinking water contaminants that may need further investigation of potential health effects and the levels at which they are found in drinking water. Contaminants from the CCL with sufficient health effects and occurrence information are considered for regulatory determination and rulemaking under SDWA.

SDWA section 1445(a)(2) as amended in 1996, requires that once every five years the EPA issues a UCMR with a list of no more than 30 unregulated contaminants to be monitored in drinking water by PWSs. The UCMR provides nationally representative occurrence data for unregulated contaminants in drinking water. The UCMR is related to the CCL in two ways. First, EPA considers contaminants from the CCL in selecting

contaminants for the UCMR. Second, the contaminant occurrence data collected under the UCMR can inform EPA's consideration of contaminants for future CCLs.

The CCL is also related to the regulatory determinations process. Following the publication of a final CCL, the EPA evaluates those CCL contaminants with sufficient information to make a regulatory determination, using the three statutory criteria listed in SDWA section 1412(b)(1)(A):

(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.

Based upon this evaluation, the EPA determines whether a regulation is appropriate (positive determination) or not appropriate (negative determination). The EPA is required by SDWA to make regulatory determinations for at least five contaminants listed on the CCL every five years.

D. Summary of the Most Recent CCL.

The EPA has published five CCLs since 1996. The EPA published its most recent CCL, CCL 5, in the *Federal Register* (87 FR 68060, USEPA 2022a) on November 14,

2022. The final CCL 5 included 81 contaminants or groups. The list is comprised of 66 chemicals, 3 chemical groups (cyanotoxins, disinfection byproducts (DBPs), and per- and polyfluoroalkyl substances (PFAS)) and 12 microbial contaminants.

E. What is Included on the Draft CCL 6?

The draft CCL 6 includes 88 contaminants (Exhibits 1a, 1b, and 1c). The list is comprised of 75 chemicals, four chemical groups, and nine microbes.

Exhibit 1a—Chemical Contaminants on the Draft CCL 6

Chemical Name	CASRN[1]	DTXSID[2]
1,2,3-Trichloropropane	96-18-4	DTXSID9021390
1,2,4-Triazole	288-88-0	DTXSID6027131
1,2,4-Trimethylbenzene	95-63-6	DTXSID6021402
1,2-Diphenylhydrazine	122-66-7	DTXSID7020710
1,4-Dioxane	123-91-1	DTXSID4020533
1-Methylnaphthalene	90-12-0	DTXSID9020877
2,4,6-Trinitrotoluene	118-96-7	DTXSID7024372
2,6-Dinitrotoluene	606-20-2	DTXSID5020528
4-tert-Octylphenol	140-66-9	DTXSID9022360
Acephate	30560-19-1	DTXSID8023846
Acrylonitrile	107-13-1	DTXSID5020029
alpha-1,2,3,4,5,6-Hexachlorocyclohexane	319-84-6	DTXSID2020684
Aluminum	7429-90-5	DTXSID3040273
Anthraquinone	84-65-1	DTXSID3020095
Bensulide	741-58-2	DTXSID9032329
Benzyl butyl phthalate	85-68-7	DTXSID3020205
Bisphenol A	80-05-7	DTXSID7020182
Bromoxynil	1689-84-5	DTXSID3022162
Carbaryl	63-25-2	DTXSID9020247
Carbendazim	10605-21-7	DTXSID4024729

Chemical Name	CASRN[1]	DTXSID[2]
Chlordecone (Kepone)	143-50-0	DTXSID1020770
Chloromethane	74-87-3	DTXSID0021541
Chlorothalonil	1897-45-6	DTXSID0020319
Chlorpyrifos	2921-88-2	DTXSID4020458
Clothianidin	210880-92-5	DTXSID2034465
Cobalt	7440-48-4	DTXSID1031040
Diazinon	333-41-5	DTXSID9020407
Dicamba	1918-00-9	DTXSID4024018
Dichlorvos	62-73-7	DTXSID5020449
Dicrotophos	141-66-2	DTXSID9023914
Dithiopyr	97886-45-8	DTXSID9032379
Diuron	330-54-1	DTXSID0020446
Ethalfluralin	55283-68-6	DTXSID8032386
Ethylene thiourea	96-45-7	DTXSID5020601
Fenbuconazole	114369-43-6	DTXSID8032548
Fipronil	120068-37-3	DTXSID4034609
Flufenacet	142459-58-3	DTXSID2032552
Fluometuron	2164-17-2	DTXSID8020628
Fluoranthene	206-44-0	DTXSID3024104
Imazalil	35554-44-0	DTXSID8024151
Iodide	20461-54-5	DTXSID80912339
Iprodione	36734-19-7	DTXSID3024154
Isophorone	78-59-1	DTXSID8020759
Lithium	7439-93-2	DTXSID5036761
Malaoxon	1634-78-2	DTXSID9020790
Malathion	121-75-5	DTXSID4020791
Manganese	7439-96-5	DTXSID2024169
Methomyl	16752-77-5	DTXSID1022267
Methyl mercury	22967-92-6	DTXSID9024198
Methyl tert-butyl ether (MTBE)	1634-04-4	DTXSID3020833
Nicotine	54-11-5	DTXSID1020930
Nitroglycerin	55-63-0	DTXSID1021407
Nonylphenol	25154-52-3	DTXSID3021857
Oryzalin	19044-88-3	DTXSID8024238

Chemical Name	CASRN[1]	DTXSID[2]
Oxadiazon	19666-30-9	DTXSID3024239
Oxyfluorfen	42874-03-3	DTXSID7024241
p-Cresol	106-44-5	DTXSID7021869
Phorate	298-02-2	DTXSID4032459
Phosmet	732-11-6	DTXSID5024261
Propargite	2312-35-8	DTXSID4024276
Quinoline	91-22-5	DTXSID1021798
Silver	7440-22-4	DTXSID4024305
Strontium	7440-24-6	DTXSID3024312
Terbufos	13071-79-9	DTXSID2022254
tert-Butyl alcohol	75-65-0	DTXSID8020204
Thiamethoxam	153719-23-4	DTXSID2034962
Tolyltriazole	29385-43-1	DTXSID0026171
Tri-allate	2302-17-5	DTXSID5024344
Tributyl phosphate	126-73-8	DTXSID3021986
Trifluralin	1582-09-8	DTXSID4021395
Triphenyl phosphate	115-86-6	DTXSID1021952
Tris(2-chloroethyl) phosphate	115-96-8	DTXSID5021411
Tungsten	7440-33-7	DTXSID8052481
Vanadium	7440-62-2	DTXSID2040282
Zinc	7440-66-6	DTXSID7035012

[1] Chemical Abstracts Service Registry Number (CASRN) is a unique identifier assigned by the Chemical Abstracts Service (a division of the American Chemical Society) to every chemical substance (organic and inorganic compounds, polymers, elements, nuclear particles, etc.) in the open scientific literature. It contains up to 10 digits, separated by hyphens into three number strings.

[2] Distributed Structure Searchable Toxicity Substance Identifiers (DTXSID) is a unique substance identifier used in the EPA's CompTox Chemicals database, where a substance can be any single chemical, mixture or polymer.

Exhibit 1b—Chemical Groups on the Draft CCL 6

Chemical Group	Inclusion
Disinfection byproducts (DBPs)	Twenty-seven unregulated DBPs (brominated haloacetic acids, haloacetonitriles, halonitromethanes, iodinated trihalomethanes, nitrosamines, and others). See Section 4.8 of the *Chemical Technical Support Document* for a complete table (USEPA, 2026a).
Microplastics	See Section III.A.3.d.ii
Per- and polyfluoroalkyl substances (PFAS)*	PFAS that contain one of three chemical structures: 1) R-(CF2)-CF(R′)R″, where both the CF2 and CF moieties are saturated carbons, and none of the R groups can be hydrogen 2) R-CF2OCF2-R′, where both the CF2 moieties are saturated carbons, and none of the R groups can be hydrogen 3) CF3C(CF3)RR′, where all the carbons are saturated, and none of the R groups can be hydrogen
Pharmaceuticals	Substances that meet the definition for a "drug" under the Federal Food, Drug, and Cosmetic Act (21 U.S.C § 321).

* Excludes PFAS covered under a national primary drinking water regulation (National Primary Drinking Water Regulations, Subpart Z - Control of Per- and Polyfluoroalkyl Substances (PFAS), n.d.).

Exhibit 1c—Microbial Contaminants on the Draft CCL 6

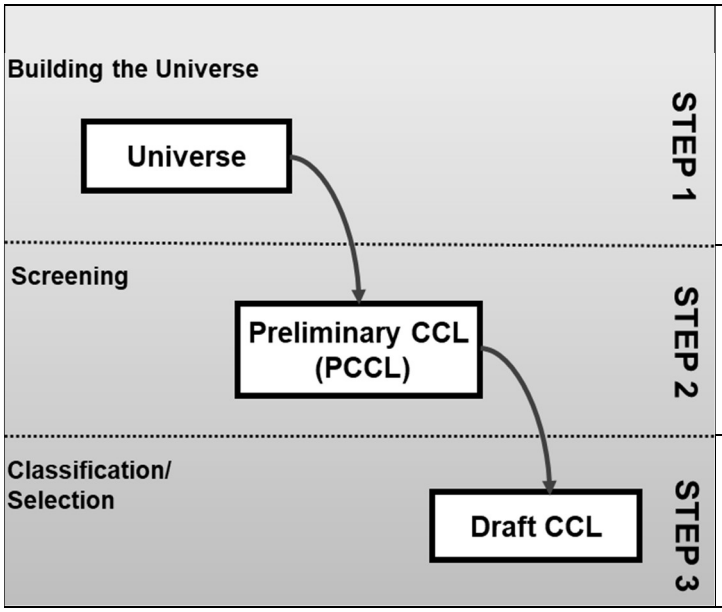
Microbial Name	Type of Microorganism
Acanthamoeba spp.	Protozoa
Balamuthia mandrillaris	Protozoa
Calicivirus	Virus
Campylobacter jejuni	Bacteria
Escherichia coli (O157)	Bacteria
Legionella pneumophila	Bacteria
Pathogenic waterborne mycobacteria group (includes *M. avium, M. abscessus, M. fortuitum; M. gordonae; M. mucogenicum; M. chelonae; M. kansasii; M. xenopi; M. intracellulare*)	Bacteria
Naegleria fowleri	Protozoa
Pseudomonas aeruginosa	Bacteria

III. Developing the Draft CCL 6.

In developing the draft CCL 6, the EPA followed a 3-step process that is illustrated in Exhibit 2. The EPA applied this process separately to both chemical and microbial contaminants to develop the draft CCL 6. In the first step, the Agency developed the CCL 6 Chemical Universe and the CCL 6 Microbial Universe by compiling available health and occurrence data. In the second step, the EPA developed subsets of the Chemical Universe and Microbial Universe, called the Chemical and Microbial Preliminary Contaminant Candidate Lists (PCCLs), by prioritizing contaminants using a points-based screening system. Finally in the third step, the EPA

selected the contaminants from the Chemical and Microbial PCCLs that are most likely to occur in public water systems and that pose the greatest potential public health concern in drinking water. Exhibit 2 lists the number of chemicals, chemical groups and microbes the EPA considered at each step of the process.

Exhibit 2—Overall Draft CCL 6 Development Process and Contaminant Counts

	Number of Chemicals /Chemical Groups	Number of Microbes
	~25,000 240 79	~1,450 36 9

The draft CCL 6 technical support documents provide comprehensive details about the draft CCL 6 chemical and microbial processes: *Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) - Chemical Contaminants* (USEPA, 2026a) and the *Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) - Microbial Contaminants* (USEPA, 2026c), hereafter referred to as the *Chemical Technical Support Document* and *Microbial Technical Support Document*, respectively.

A. Approach Used to Identify Chemical Candidates for the Draft CCL 6.

1. Building the Chemical Universe.

In the first step of the CCL 6 development process for chemical candidates, the EPA identified a broad universe of potential drinking water contaminants. The EPA began the development process by compiling data sources to identify chemicals for inclusion in the CCL 6 Chemical Universe. The EPA identified data sources from previous CCLs, the Science Advisory Board (SAB), and scientific literature searches.

The EPA assessed data sources for their potential use in the CCL 6 development process based on four assessment factors; relevancy, completeness, redundancy, and retrievability. The EPA identified 20 sources of health effects data and 41 sources of occurrence data, including 18 new data sources. In total, 25,305 chemicals were identified from the main data sources and comprise the CCL 6 Chemical Universe. This is the largest universe of chemicals and the greatest number of data sources that the EPA has evaluated for any CCL. For more information about building the CCL 6 Chemical Universe and data sources used, see Chapter 2 of the *Chemical Technical Support Document* (USEPA, 2026a).

2. Screening the Chemical Universe to a Preliminary Contaminant Candidate List (PCCL).

In the second step of the CCL 6 development process, the EPA screened chemicals from the CCL 6 Chemical Universe to identify the list of chemicals that should

be further evaluated, namely the PCCL 6. The EPA applied a points-based screening system to determine which contaminants are placed onto the PCCL. The EPA assigned cumulative points to contaminants across health effects and occurrence data elements. The scoring is described in Section 3.2 of the *Chemical Technical Support Document* (USEPA, 2026a). The EPA used these screening scores, along with statistical models and analyses described in Section 4.6 of the *Chemical Technical Support Document* (USEPA, 2026a), to prioritize chemicals to inform the PCCL 6.

The EPA identified the highest scoring chemicals for inclusion on the PCCL 6 and validated the selection of the top scoring chemicals and the screening score framework using a statistical modeling approach. As a result of screening the CCL 6 Chemical Universe, the PCCL 6 started with 274 chemicals. From this pool, the protocol excluded 34 chemicals from the PCCL: nine chemicals were excluded due to recent regulatory determinations made for contaminants on CCL 5 (90 FR 3830, USEPA, 2025) or a pending Agency action. An additional 25 chemicals were excluded because they were canceled pesticides with no reported alternative uses that break down quickly in the environment and are therefore not anticipated to occur in public water systems.

The EPA also excluded chemicals from the base PCCL 6 that were within chemical groups that the Agency had determined to list (see Exhibit 1b and Section III.A.3.d). Eight chemicals were excluded because EPA had determined to include them in the DBP group, 15 chemicals were excluded because EPA had identified them for

inclusion under the pharmaceutical group, and four other chemicals were excluded because EPA found they met the structural definition requirements for inclusion within the PFAS group (see Exhibit 1b for more details). In total, 213 chemicals remained on the PCCL 6 to be evaluated individually in the classification step. A more detailed summary of the PCCL 6 is included in Section 3.8 of the *Chemical Technical Support Document* (USEPA, 2026a).

3. Classification of PCCL Chemical Contaminants to Select a Draft CCL.

In the third step of the CCL process, the EPA narrowed down the PCCL 6 to determine the draft CCL 6 through a classification process. For the purposes of CCL 6, classification refers to the process by which, first, the Agency incorporated the knowledge and evaluation by the EPA scientists, referred to as "chemical evaluators," to recommend contaminants for listing for the draft CCL. To facilitate the classification process, the EPA conducted literature and assessment searches to gather supplemental health and occurrence data for the PCCL 6 chemicals. The main and supplemental data were compiled by chemical, and relevant health effects and occurrence data metrics were imported into a standardized document format, called the Contaminant Information Sheet (CIS) that are provided in the *Technical Support Document for the Draft Sixth Contaminant Candidate List (CCL 6) – Contaminant Information Sheets* (USEPA, 2026b). The chemical evaluators reviewed the health effects and occurrence information

provided on the CISs to inform consensus listing recommendations for the PCCL chemicals.

a. Supplemental Data Collection Used in Classification.

During classification, the EPA gathered supplemental data to better evaluate the PCCL 6 chemicals and determine which contaminants were more likely to be present in drinking water at levels that may require regulation. These supplemental data were used to inform more specific evaluations of the PCCL 6 chemicals. For example, supplemental health data was gathered to calculate health concentrations, which are non-regulatory health-based toxicity values at or below which no adverse effects are expected to occur. The EPA compares occurrence data to the health concentrations to characterize the likelihood that the contaminant may be in drinking water at levels of health concern that may require regulation. Information on supplemental data used in the draft CCL 6 is in Section 4.2 of the *Chemical Technical Support Document* (USEPA, 2026a).

b. Evaluation Team Listing Recommendation Process.

Chemical evaluators reviewed the health effects and occurrence data on the CIS for each chemical, and the evaluation teams provided consensus listing recommendations. A detailed description of the chemical evaluation team listing process can be found in Section 4.5 of the *Chemical Technical Support Document* (USEPA, 2026a).

c. Additional Refinement for Contaminants with Previous Negative Regulatory Determinations.

The Agency developed an additional step for the CCL 6 process to further analyze a subset of the chemicals recommended for listing by the evaluators that had previous negative regulatory determinations. This was done to provide clarity regarding chemicals that have previously received decisions not to regulate under SDWA as well as to be consistent with the purpose of CCL as an iterative process that aims to improve each time. The CCL 6 chemical evaluators recommended twelve chemicals for listing that EPA had previously determined not to regulate under the separate SDWA regulatory determination process, which like CCL, occurs in 5-year cycles. For this subset of chemicals, the EPA examined whether any new health and/or occurrence information available since the time of the original determinations indicate the contaminant is of greater public health concern now and could potentially result in a different (i.e., positive) decision under a future cycle of regulatory determination. For nine of these contaminants the currently available data do not indicate a greater public health concern at this time and these chemicals were consequently removed from consideration for the draft CCL 6. A description of the refinement can be found in Section 4.7 of the *Chemical Technical Support Document* (USEPA, 2026a).

d. Chemical Groups on the Draft CCL 6.

In addition to the 75 chemicals proposed for listing on the draft CCL 6, the EPA proposes listing four chemical groups (disinfection byproducts, microplastics, PFAS, and pharmaceuticals) (see Exhibit 1b). These chemical groups have been identified as Agency

priorities and contaminants of concern for drinking water by public stakeholders and under other EPA actions. Listing these four chemical groups on the draft CCL 6 does not mean that the EPA will make subsequent regulatory decisions for the entire group. The EPA will evaluate available scientific data on the listed groups, subgroups, and individual contaminants, as appropriate, included in the group to inform any regulatory determinations for the group, subgroup, or individual contaminants in the group.

i. Disinfection Byproducts.

DBPs are formed when disinfectants, used for purposes of antimicrobial treatment in drinking water, react with naturally occurring or man-made materials in water. The EPA is proposing to list DBPs as a group on the draft CCL 6, acknowledging this as an Agency priority for drinking water. The DBP group includes 27 unregulated DBPs, twenty-three of these were listed under the DBP chemical group published under the CCL 5 process (87 FR 68060, USEPA, 2022a); the other four unregulated DBPs (bromochloroacetonitrile, chloral hydrate, chloronitramide anion, and trichloroacetonitrile) are being added to the group based on consultation with the Agency microbial and disinfection byproduct subject matter experts.

ii. Microplastics.

The EPA acknowledges the concern for microplastics in sources of drinking water and also received a public nomination for including microplastics on CCL 6 that was accompanied by three data sources (Miller et al., 2021; Ragusa et al., 2021; and Zarus et

al., 2021), all indicating potential concern for exposure to microplastics. In the Science Advisory Board's recommendations for the draft CCL 5, the SAB encouraged the EPA to consider the assessment and inclusion of microplastics on future CCLs (USEPA, 2022b). Therefore, the Agency is including microplastics as a group on the draft CCL 6 as a first step toward defining and better understanding potential public health risk from exposure via drinking water.

As of the publication of the draft CCL 6, there remain significant data gaps for microplastics that will require further research before the Agency can fully understand the risks associated with microplastics in drinking water. The known data gaps requiring further research include (but are not limited to) the following:

1. A health-based definition: the need to determine the characteristics of the microplastics (i.e., colors, polymers, shapes, sizes, etc.) most associated with adverse health effects in humans from exposure in drinking water.
2. Detection technology: the need for a validated analytical method with the proper quality control data, accuracy, and precision that will allow the EPA to be able to detect and analyze the concentrations of microplastics occurring in drinking water reliably.
3. Microplastics combined with other substances: the need to better understand how microplastics occurring in mixtures may impact detecting specific microplastics and identifying their associated health risks.

4. Sources: the need to better understand all potential sources of plastic pollution that contribute to the formation of microplastics in sources of drinking water.

In summary, research is needed to determine the adverse health effects from ingesting microplastics and to determine the characteristics of the microplastics (i.e., size, type of plastic, etc.) that are associated with the adverse health effects posing the greatest potential health risk from exposure via drinking water. This research will also assist in the development of robust and validated analytical methods for microplastics in drinking water that may be used to standardize data collection and analysis in the future.

iii. Per- and Polyfluoroalkyl Substances.

PFAS are a class of synthetic chemicals that are most commonly used to make products resistant to water, heat, and stains and are consequently found in industrial and consumer products like clothing, food packaging, cookware, cosmetics, carpeting, and fire-fighting foam (Cohen, 2020; USEPA, 2018). Over 4,000 PFAS have been manufactured and used globally since the 1940s (USEPA, 2019), and data are scarce for the majority of the PFAS, which would make evaluating PFAS individually for the draft CCL 6 impractical. The Agency is proposing to list a PFAS group to the draft CCL 6 inclusive of all PFAS that meet the structural definition developed for the final CCL 5 (87 FR 68060, USEPA, 2022a), excluding those that are subject to national drinking water regulations at the time of publication of final CCL 6 (National Primary Drinking Water Regulations, 40 CFR Part 141 Subpart Z - Control of Per- and Polyfluoroalkyl

Substances (PFAS), n.d.)). For the purposes of CCL, the structural definition of PFAS remains the same that was utilized in CCL 5 and includes chemicals that contain at least one of these three structures:

1. R-(CF2)-CF(R′)R″, where both the CF2 and CF moieties are saturated carbons, and none of the R groups can be hydrogen
2. R-CF2OCF2-R′, where both the CF2 moieties are saturated carbons, and none of the R groups can be hydrogen
3. CF3C(CF3)RR′, where all the carbons are saturated, and none of the R groups can be hydrogen

This proposal to list PFAS as a chemical group is responsive to public nominations and is consistent with the approach taken for CCL 5 and is in keeping with the Agency's commitment to better understand and ultimately reduce the potential risks caused by this broad class of chemicals. Including the group of PFAS on the draft CCL 6 demonstrates the Agency's commitment to prioritizing and building a strong foundation of science on PFAS.

iv. Pharmaceuticals.

For over a decade, public concern about the presence of pharmaceutical substances in sources of drinking water has been a recurring topic of discussion for the Agency's prioritization of contaminants under SDWA. Since 2012, the EPA has led a federal workgroup on pharmaceuticals in water alongside USDA, FDA, and USGS to exchange information on pharmaceuticals in the environment and to support the coordination of joint studies.

The EPA committed to understanding contaminants in drinking water and has identified pharmaceuticals as an Agency priority. This priority is further reinforced by feedback received through the public nominations process. For CCL 6, the Agency incorporated new data sources (Schaider et al., 2014 and Battaglin et al., 2018) that provided additional information about the occurrence of pharmaceutical products in water; for health data on pharmaceuticals, the EPA added a source used to help identify chemicals with estrogenic activity (USEPA, 2023b). The Agency also completed the *Human Health Benchmarks for Pharmaceuticals (HHB-Rx) in Drinking Water* (visit the EPA website for more information at https://www.epa.gov/sdwa/human-health-benchmarks). Human health benchmarks are non-enforceable drinking water levels that provide information about adverse health effects from drinking water exposure to contaminants that have no drinking water standards or health advisories. The benchmarks, based on potential health effects from exposure via drinking water, informed the screening of pharmaceuticals and identification of the top scoring pharmaceuticals. Furthermore, the application of the benchmarks for pharmaceuticals in the CCL screening process informed the EPA about the current research needs for this broad class of chemicals.

The Agency is proposing the inclusion of a pharmaceuticals group on the draft CCL 6 to further prioritize research and information needed to identify which specific pharmaceuticals are occurring in drinking water and may be of greatest public health

concern. For the purposes of the draft CCL 6, the EPA considers pharmaceuticals to include any substances defined as a "drug" under the Federal Food, Drug, And Cosmetic Act (1938).

B. Approach Used to Identify Microbial Candidates for the Draft CCL 6.

1. Building the Microbial Universe.

The EPA defines the CCL Microbial Universe as microbial contaminants known to cause human disease. For CCL 6, the EPA conducted a literature search for newly identified microbes and reviewed the public nominations for additional pathogens to add to the CCL 6 Microbial Universe. The full CCL 6 Microbial Universe list is available in Appendix B of the *Microbial Technical Support Document* (USEPA, 2026c).

2. Screening the Microbial Universe to a Preliminary Contaminant Candidate List (PCCL 6).

The EPA uses screening criteria to narrow the Microbial Universe to only those pathogens that have the potential to be transmitted through drinking water. The pathogens that are not excluded by any of the screening criteria are moved to the microbial PCCL 6. The screening criteria restricts the microbial PCCL 6 to human pathogens that may cause drinking water-related diseases resulting from ingestion, inhalation, or dermal contact with drinking water. In addition, any pathogen documented to cause disease transmitted through drinking water, regardless of the screening criteria, is also considered for the PCCL.

After applying the screening criteria to the CCL 6 Microbial Universe, 36 pathogens advanced to the PCCL 6. The screening criteria and results of the screening process are discussed in greater detail in Chapter 3 of the *Microbial Technical Support Document* (USEPA, 2026c).

3. Review of PCCL 6 Microbial Contaminants to Select a Draft CCL 6.

Each pathogen on the PCCL 6 is evaluated for their occurrence in water and their ability to produce adverse health effects in humans. The EPA used a scoring system to assign a numerical value to each pathogen on the PCCL 6. Each pathogen on the PCCL 6 was scored based upon protocols developed to consider waterborne disease outbreaks, occurrence, and health risks. For details on the three protocols used to score the PCCL 6 microbial contaminants and the process by which the scores are combined see Chapter 4 in the Microbial Support Document (USEPA, 2026c)

a. Selection of the Draft CCL 6 Microbes.

For CCL 6, the CCL selection process for listing placed emphasis on the PCCL 6 microbial contaminants with confirmed (versus suspected) outbreak(s) that have occurred in U.S. PWSs during the timeframe evaluated for CCL 6. This approach to select contaminants for the CCL 6 prioritizes the pathogens that provide the best opportunities to advance public health protection through potential regulation.

C. Summary of Nominated Candidates for the Draft CCL 6.

The EPA sought public nominations in a *Federal Register* notice on February 17, 2023 for chemicals, microbes, or other substances that are not currently regulated to be considered for possible inclusion in the CCL 6 (88 FR 10316, USEPA, 2023a).

The EPA received nominations for six chemicals and/or chemical groups (lithium, manganese, microplastics, perchlorate, PFAS, pharmaceutical waste (specifically estrogenic compounds)) and five microbes and/or microbial groups (*Legionella pneumophila*, *Listeria monocytogenes*, Nontuberculous Mycobacteria (NTM), pathogenic waterborne mycobacteria group, *Pseudomonas aeruginosa)*. All public nomination letters and supporting information can be viewed in the EPA docket at https://www.regulations.gov (Docket ID No. EPA-HQ-OW-2022-0946). A detailed summary of the nomination process, including how each nominated contaminant was considered for inclusion on the draft CCL 6, is provided in Section 3.6 of the *Chemical Technical Support Document* (USEPA, 2026a) and in Section 2.2 of the *Microbial Technical Support Document* (USEPA, 2026c).

D. Data Needs for the Draft CCL 6.

In previous CCLs, the SAB and other commenters have recommended additional prioritization of contaminants to communicate research needs and inform future regulatory decision-making. The EPA acknowledges that multiple contaminants on the draft CCL 6 (and considered in the PCCL 6) have data and information needs to fulfill in order for the Agency to make a regulatory determination in accordance with SDWA 1412

(b)(1)(A). By identifying additional research and information needs, the EPA is communicating to stakeholders both research priorities and gaps for these contaminants. The EPA provides summary tables in Chapter 5 of the *Chemical Technical Support Document* (USEPA, 2026a) and Chapter 6 in the *Microbial Technical Support Document* (USEPA, 2026c) identifying chemicals and microbial contaminants (respectively) categorized into four groups depending upon the availability of occurrence data and health assessments. This list is a starting point for identifying the data needs of the CCL 6 contaminants.

IV. Request for Comments.

The EPA is seeking comment and supporting data on the following:

A. The chemical and microbial contaminants selected for the draft CCL 6.

B. The data sources the EPA obtained and evaluated for identifying the CCL 6 Chemical Universe and the CCL 6 Microbial Universe, that are provided in the *Chemical Technical Support Document* (USEPA, 2026a) and *Microbial Technical Support Document* (USEPA, 2026c) located in the docket for this notice and also on the EPA's website for CCL 6 (https://www.epa.gov/ccl/draft-contaminant-candidate-list-6-ccl-6).

C. The process the EPA used to screen the CCL 6 Chemical Universe and the CCL 6 Microbial Universe and develop the PCCL 6, that are described in the *Chemical*

Technical Support Document (USEPA, 2026a) and *Microbial Technical Support Document* (USEPA, 2026c).

D. The process and supplemental data sources the EPA used for classification to select individual chemicals and microbes for the CCL 6 from the PCCL 6, that are described in the *Chemical Technical Support Document* (USEPA, 2026a) and *Microbial Technical Support Document* (USEPA, 2026c).

E. The listing of the disinfection byproducts group on the draft CCL 6.

F. The listing of the microplastics group on the draft CCL 6.

G. The listing of the PFAS group on the draft CCL 6.

H. The listing of the pharmaceuticals group on the draft CCL 6.

V. The EPA's Next Steps.

The EPA will evaluate comments received during the public comment period for this notice. The EPA also plans to consult with the EPA's SAB. The EPA will consider the public comments and the SAB input to prepare the final CCL 6.

VI. References.

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