

The Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)

General Information

What is the Unregulated Contaminant Monitoring Rule?

The 1996 amendments to the Safe Drinking Water Act (SDWA) require that once every five years, the U.S. Environmental Protection Agency (EPA) issue a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The Unregulated Contaminant Monitoring Rule (UCMR) provides EPA and other interested parties with scientifically valid data on the occurrence of contaminants in drinking water. This national survey is one of the primary sources of information on occurrence and levels of exposure that the Agency uses to develop regulatory decisions for contaminants in the public drinking water supply.

The "Revisions to the Unregulated Contaminant Monitoring Rule (UCMR 4) for Public Water Systems and Announcement of Public Meeting" was published in the *Federal Register* on December 20, 2016 (81 FR 92666). UCMR 4 monitoring will occur from 2018-2020 and includes monitoring for a total of 30 chemical contaminants: 10 cyanotoxins (nine cyanotoxins and one cyanotoxin group) and 20 additional contaminants (two metals, eight pesticides plus one pesticide manufacturing byproduct, three brominated haloacetic acid [HAA] disinfection byproducts groups, three alcohols, and three semivolatile organic chemicals [SVOCs]).

What contaminants are systems monitoring for under UCMR 4?

Under UCMR 4, PWSs will conduct sampling for Assessment Monitoring ("List 1") contaminants as shown in the table below. For additional information on these contaminants, please review the contaminant-specific [UCMR 4 Fact Sheets](#).

10 Cyanotoxins (Nine Cyanotoxins and One Cyanotoxin Group)

total microcystins	microcystin-LA	microcystin-RR	microcystin-LF	microcystin-YR
microcystin-LR	microcystin-LY	nodularin	cylindrospermopsin	anatoxin-a

20 Additional Contaminants

germanium	manganese	alpha-hexachlorocyclohexane	profenofos	chlorpyrifos
tebuconazole	dimethipin	total permethrin (cis- & trans-)	ethoprop	tribufos
oxyfluorfen	HAA5 ¹	HAA6Br ¹	HAA9 ¹	1-butanol
2-propen-1-ol	2-methoxyethanol	butylated hydroxyanisole	o-toluidine	quinoline

1. HAA5 (dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid); HAA6Br (bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, chlorodibromoacetic acid, monobromoacetic acid, tribromoacetic acid); HAA9 (bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, and trichloroacetic acid).

Which water systems will participate in UCMR 4?

Approximately 6,000 PWSs will participate in UCMR 4. All community water systems (CWSs) and non-transient non-community water systems (NTNCWSs) serving more than 10,000 people (i.e., large systems) are required to monitor:

- All large surface water (SW) and ground water under the direct influence of surface water (GWUDI) systems will monitor for cyanotoxins and the 20 additional contaminants.
- All large ground water systems will monitor for the 20 additional contaminants.

Of the CWSs and NTNCWSs serving 10,000 or fewer people (i.e., small systems):

- A nationally representative set of 800 randomly selected SW and GWUDI small systems will monitor for cyanotoxins.
- A different set of 800 randomly selected small systems will monitor for the 20 additional contaminants.

Note that any PWS that is not subject to HAA5 monitoring under the D/DBPRs (40 CFR 141.Subparts L and V) is not required to monitor for the UCMR 4 HAAs or associated indicators (total organic carbon (TOC) and bromide). Also, transient non-community water systems (TNCWSs) are not required to monitor under UCMR 4.

Where will samples be collected?

UCMR 4 samples will be collected at entry points to the distribution system (EPTDS) for all contaminant groups except for the HAAs, which will be taken in the distribution system. Sampling for the HAA indicators (TOC and bromide) will take place at a single source water influent for each treatment plant.

What does UCMR 4 participation involve?

All large systems and only small systems notified by their state or EPA, will collect samples and have them analyzed for UCMR 4 contaminants. As with previous UCMRs, large PWSs pay for their own testing. EPA pays for the analytical costs for the selected small systems.

All laboratories conducting analyses for UCMR 4 contaminants must receive [EPA UCMR approval](#) to perform those analyses.

How did EPA select the UCMR 4 contaminants?

The Contaminant Candidate List (CCL) was the primary source of priority contaminants considered for UCMR 4. The CCL is a list of contaminants that are not currently addressed by national primary drinking water regulations, are known or anticipated to occur at public water systems and may warrant regulation. The EPA selected the UCMR 4 contaminants using a stepwise prioritization process. The first step identified contaminants that were not monitored under UCMR 2 or UCMR 3; may have significant occurrence nationally; and have a completed, validated drinking water method. The next step focused on contaminants associated with one or more of the following considerations: an available health assessment to facilitate regulatory determinations; high public concern; critical health endpoints (e.g., likely or suggestive carcinogen); active use (e.g., pesticides); and/or an occurrence data gap. During the final step, EPA considered workgroup and stakeholder input; looked at cost-effectiveness of analytical methods (i.e., can a single method address multiple contaminants of interest); considered implementation factors (e.g., laboratory capacity); and further evaluated health, occurrence and persistence/mobility data to identify the list of 30 UCMR 4 contaminants.

What are the public health benefits of the UCMR program?

The UCMR program provides the EPA and other interested parties with nationally representative data on the occurrence of particular contaminants in drinking water, the number of people potentially being exposed and an estimate of the levels of that exposure. In accordance with SDWA, EPA will consider the occurrence data from UCMR 4 and other sources, along with the peer reviewed health effects assessments, to support a regulatory determination on whether to initiate the process to develop a national primary drinking water regulation.

Where can consumers find UCMR results?

CWSs are required to address their UCMR monitoring results in their annual Consumer Confidence Report (CCR) whenever unregulated contaminants are detected. CCRs are delivered to all billing customers each year by July 1. (The CCR Rule does not apply to non-community water systems). To obtain a copy of your CCR, you should contact your water supplier or you may find information for how to obtain a copy of the CCR in your water bill. Additional information about the CCR including details on reporting requirements can be found on the [CCR Homepage](#).

All PWSs are required to report their data to EPA as outlined in the UCMR. The analytical results from UCMR 4 (and previous UCMRs) are stored in the [National Contaminant Occurrence Database \(NCOD\)](#) for drinking water. For a summary of the NCOD results, tips for querying NCOD and health effects information (including reference concentrations), please refer to the UCMR 4 Data Summary document.

How can I learn more?

General information is available on the [UCMR](#) web page or by calling [the Safe Drinking Water Hotline](#) at 1-800-426-4791.