

## **2023 Finished Drinking Water Study**

For this 2023 study of finished drinking water, 113 water treatment plants were sampled for 31 different PFAS.

The list of PFAS included in the lab analyses is available under PFAS Descriptions below.

The results from this study represent a one-time sampling event and are not intended to represent the range of conditions that may be present at any system.

For questions relating to this study, email [PFAS@ky.gov](mailto:PFAS@ky.gov) or call 502-564-3410.

## **Spreadsheet Information**

Source:

GW: Groundwater

SW: Surface water

Flag: Laboratory flags are described under Lab Flag Descriptions below

The most common flag, U, indicates that the substance was not detected in the sample above the laboratory detection limit.

Eleven PFAS were detected during the study. The results for those eleven are included in the 2023 Finished Water spreadsheet.

HFPO-DA (Gen-X) is also included since it is a focus of EPA draft regulations and drinking water health advisory guidance, but it was not detected during this study.

Laboratory detection limits for finished water samples ranged between 0.68-0.78 nanograms/liter (ng/L) or parts per trillion (ppt).

Laboratory reporting limits for finished water samples ranged between 1.0-1.2 ng/L or ppt.

## **General Information**

The US EPA anticipates releasing final National Primary Drinking Water Regulations for six PFAS: PFOA, PFOS, HFPO-DA (commonly known as GenX), PFNA, PFHxS, and PFBS potentially by the end of 2023 or early in 2024.

In the meantime, the KY Department for Environmental Protection continues to take a variety of steps to address PFAS such as

- Securing grant funding from the US EPA to address PFAS in drinking water
- Evaluating the presence of PFAS in drinking water through sampling
- Communicating with drinking water systems regarding sampling results
- Collecting water and fish samples from lakes and streams across the state.

For more information on PFAS and US EPA's health advisories and draft regulations, click on the links below.

[US EPA PFAS Resources](#)

[Questions and Answers: Drinking Water Health Advisories for PFOA, PFOS, GenX Chemicals, and PFBS](#)

[2022 Drinking Water Health Advisories for GenX and PFBS](#)

[Drinking Water Health Advisories for PFOA and PFOS](#)

[Fact Sheet: EPA's Proposal to Limit PFAS in Drinking Water](#)

[Proposed PFAS National Primary Drinking Water Regulation Frequently Asked Questions and Answers](#)





## PFAS Descriptions

Analyte	Acronym	CAS Number
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid acid	11Cl-PF3OUdS	763051-92-9
1H,1H, 2H, 2H-perfluorohexane sulfonic acid	4:2 FTS	757124-72-4
1H,1H, 2H, 2H-perfluorooctane sulfonic acid	6:2 FTS	27619-97-2
1H,1H, 2H, 2H-perfluorodecane sulfonic acid	8:2 FTS	39108-34-4
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4
Hexafluoropropylene oxide dimer acid	HFPO-DA (Gen-X)	13252-13-6
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanoic acid	PFBA	375-22-4
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorononanesulfonic acid	PFNS	68259-12-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluoropentanesulfonic acid	PFPeS	2706-91-4
Perfluorotetradecanoic acid	PFTDA	376-06-7
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8

**Lab Flag Descriptions**

<b>Flag</b>	<b>Description</b>
A	Average Value
B	Analyte In Method or Reagent Blank
C	Calibration Curve Criteria Exceeded
D	Analyzed at a Higher Dilution
E	Exceeded Calibration Range
F	No Field Blank
H	Exceeded Prep Hold Time
I	Internal Standard Limits Exceeded
J	Estimated Value
K	Analyte in Trip or Field Blank
L	Exceeds MCL or Action Limit
M	Matrix Spike Limits Exceeded
N	Presumptive Identification
O	Lab Fortified Blank Limits Exceeded
P	Improper Preservative
Q	QC Limits Exceeded
R	Surrogate Limits Exceeded
S	Insufficient Sample
T	Exceeded Holding Time
U	Analyte Not Detected
V	Calibration Verification Limits Exceeded
W	Wrong Container
X	Verification Check Note
Y	Result < LOQ After Blank Subtraction
Z	Sample Preserved by Freezing