

In 2013, the Chelsea Water Treatment Plant was tested for PFAS as part of the Unregulated Contaminant Monitoring Rule, third round (UCMR3). The UCMR3 testing in 2013 showed no PFAS at the Chelsea Water Treatment Plant. (Note: ND = Not Detected. MRL = Minimum reporting level)

2013		Chelsea WTP	
compound	Units	Result	MRL
PFOS	ng/L	ND	40
PFOA	ng/L	ND	20
PFNA	ng/L	ND	20
PFHxS	ng/L	ND	30
PFBS	ng/L	ND	90

In 2017, BJWSA tested the Savannah River (our source), the Purrysburg Water Treatment Plant, and the Chelsea Water Treatment Plant. By 2017, the methods had improved since UCMR3 (from ~40 ng/L to 2 ng/L), and with the lower detection levels, PFAS was measured.

December 2017			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	2.0	4.4	4.5	4.7
PFOA	ng/L	2.0	4.4	4.2	4.3
PFHxS	ng/L	2.0	< 2.0	< 2.0	< 2.0
PFHpA	ng/L	2.0	< 2.0	< 2.0	< 2.0
PFBS	ng/L	2.0	3.1	3.4	3.0
GenX	ng/L	5	< 5	< 5.0	< 5.0

MRL = minimum reporting level

ng/L = nanograms per liter or parts per trillion

BJWSA tested for PFAS again in 2019 and found similar levels as in 2017.

December 2019			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	2.0	2.8	2.9	2.5
PFOA	ng/L	2.0	3.9	3.8	3.9
PFNA	ng/L	2.0	< 2.0	< 2.0	< 2.0
PFHpA	ng/L	2.0	< 2.0	< 2.0	< 2.0
PFBS	ng/L	2.0	3.0	3.0	3.6

GenX	ng/L	2.0	< 2.0	< 2.0	< 2.0
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MRL = minimum reporting level

ng/L = nanograms per liter or parts per trillion

BJWSA tested for PFAS again in 2022 and found slightly increased levels from 2019.

February 2022			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.2	4.1	4.1
PFOA	ng/L	1.9	6.2	4.8	4.6
PFNA	ng/L	1.9	< 1.9	< 1.9	< 1.8
PFHxS	ng/L	1.9	< 1.9	< 1.9	< 1.8
PFBS	ng/L	1.9	3.5	3.6	3.2
GenX	ng/L	1.9	< 1.9	< 1.9	< 1.8

MRL = minimum reporting level

ng/L = nanograms per liter or parts per trillion

In the spring of 2023, BJWSA began more frequent testing for PFAS. Based on the results below, the hazard index calculation (PFNA, PFHxS, PFBS, and GenX) is very low, less than 0.005, well under the proposed limit of 1.

April 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	5.9	5.2	4.8
PFOA	ng/L	1.9	4.4	5.2	5.1
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.4	3.9	3.6
GenX	ng/L	1.9	<1.9	<1.9	<1.9

May 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	6.2	7.0	5.0

PFOA	ng/L	1.9	5.7	5.8	4.7
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.5	3.9	3.0
GenX	ng/L	1.9	<1.9	<1.9	<1.9

June 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.7	4.8	5.3
PFOA	ng/L	1.9	4.1	4.2	4.6
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.9	3.0	2.8
GenX	ng/L	1.9	<1.9	<1.9	<1.9

July 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	11	7.0	5.7
PFOA	ng/L	1.9	4.9	6.2	5.5
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.7	3.8	3.0
GenX	ng/L	1.9	<1.9	<1.9	<1.9

August 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	5.4	6.4	5.9
PFOA	ng/L	1.9	4.7	5.4	5.2
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.0	3.6	2.9
GenX	ng/L	1.9	<1.9	<1.9	<1.9

September 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	5.3	5.0	6.4
PFOA	ng/L	1.9	4.0	4.2	4.2
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	<1.9	3.1	2.5
GenX	ng/L	1.9	<1.9	<1.9	<1.9

October 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.3	5.1	4.9
PFOA	ng/L	1.9	5.2	4.9	5.3
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.8	3.5	3.4
GenX	ng/L	1.9	<1.9	<1.9	<1.9

December 2023			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	3.8	4.2	3.9
PFOA	ng/L	1.9	4.6	5.1	4.7
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.7	4.4	3.9
GenX	ng/L	1.9	<1.9	<1.9	<1.9

January 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	3.7	4.3	3.9

PFOA	ng/L	1.9	5.0	5.5	5.4
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.0	3.9	3.5
GenX	ng/L	1.9	<1.9	<1.9	<1.9

February 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.3	4.0	3.9
PFOA	ng/L	1.9	3.9	4.6	4.9
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.4	3.1	3.6
GenX	ng/L	1.9	<1.9	<1.9	<1.9

March 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.1	4.5	4.3
PFOA	ng/L	1.9	4.8	4.0	3.9
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.8	2.4	2.8
GenX	ng/L	1.9	<1.9	<1.9	<1.9

Learn more about PFAS at <https://scdhec.gov/environment/polyfluoroalkyl-substances-pfas> and <https://www.epa.gov/pfas>.

April 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	9.2	5.6	6.1
PFOA	ng/L	1.9	5.4	5.1	4.6
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.9	2.8	2.6
GenX	ng/L	1.9	<1.9	<1.9	<1.9

May 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	5.2	4.6	5.0
PFOA	ng/L	1.9	3.6	4.4	3.6
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	<1.9	2.7	1.9
GenX	ng/L	1.9	<1.9	<1.9	<1.9

June 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.2	5.7	4.0
PFOA	ng/L	1.9	4.0	4.3	4.6
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.9	4.7	3.1
GenX	ng/L	1.9	<1.9	<1.9	<1.9

July 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	3.3	3.9	2.9
PFOA	ng/L	1.9	3.4	4.4	3.4
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.3	3.5	2.2
GenX	ng/L	1.9	<1.9	<1.9	<1.9

August 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.5	3.6	4.2
PFOA	ng/L	1.9	3.7	2.9	3.7
PFNA	ng/L	1.9	<2.0	<1.9	<1.9
PFHxS	ng/L	1.9	<2.0	<1.9	<1.9
PFBS	ng/L	1.9	2.5	2.1	2.4
GenX	ng/L	1.9	<2.0	<1.9	<1.9

September 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.3	4.9	4.7
PFOA	ng/L	1.9	3.6	4.7	3.9
PFNA	ng/L	1.9	<2.0	<1.9	<1.9
PFHxS	ng/L	1.9	<2.0	<1.9	<1.9
PFBS	ng/L	1.9	2.9	3.7	3.3
GenX	ng/L	1.9	<2.0	<1.9	<1.9

October 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	7.7	5.2	5.7
PFOA	ng/L	1.9	5.6	4.8	4.7
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.2	2.6	2.1
GenX	ng/L	1.9	<1.9	<1.9	<1.9

November 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	6.1	4.3	4.7
PFOA	ng/L	1.9	4.1	4.2	3.9
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	2.0	3.0	2.3
GenX	ng/L	1.9	<1.9	<1.9	<1.9

December 2024			Savannah River	Chelsea WTP	Purrysburg WTP
compound	Units	MRL	Result	Result	Result
PFOS	ng/L	1.9	4.8	5.4	4.6
PFOA	ng/L	1.9	4.7	4.3	4.5
PFNA	ng/L	1.9	<1.9	<1.9	<1.9
PFHxS	ng/L	1.9	<1.9	<1.9	<1.9
PFBS	ng/L	1.9	3.6	3.5	3.3
GenX	ng/L	1.9	<1.9	<1.9	<1.9