New Jersey American Water - Western System NJ0327001

2022 Data Table of Detected Contaminants

Contaminants not reported were not detected in the treated water supply

PRIMARY REGULATED SUBSTANCES

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DISINFECTANTS - Collected at the Surface Water Treatment Plant and Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MRDLG	MRDL	Minimum Chlorine Residual	Highest Level Detected	Range Detected	Typical Source
Entry Point Chlorine Residual (ppm)[1]	2022	Yes	4	4	TT ≥ 0.20	0.5[1]	0.50 to 1.15	Water additive used to control microbes.
Distribution System Chlorine Residual (ppm)[2]	2022	Yes	4	4	0.05	1.3	0.05 to 1.30	Water additive used to control microbes.

1 - Data represents the lowest residual entering the distribution system from our water treatment plant.

DISINFECTION BYPRODUCTS - Collected in the Distribution System

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Total Trihalomethanes (TTHMs) (ppb)	2022	Yes	NA	80	43.0	8.1-46.0	By-product of drinking water disinfection.
Haloacetic Acids (HAAs) (ppb)	2022	Yes	NA	60	14.9	ND-17.0	By-product of drinking water disinfection.

NOTE: Compliance is based on the running annual average at each location. The Highest Compliance Result reflects the highest average at any location and the Range Detected reflects all samples from this year used to calculate the running annual average.

DISINFECTION BYPRODUCTS - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source
Bromate (ppb)	2022	Yes	0	10	4.3	ND to 7	By-product of drinking water disinfection.

TREATMENT BYPRODUCTS PRECURSOR REMOVAL - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	% Removal Required and Lowest Quarterly Average Ratio	Range of % and Ratio Removal Achieved	Number of Quarters Out of Compliance	Typical Source
TOC - Total Organic Carbon (mg/L)	2022	Yes	NA	TT ≥ 35% Removal	35%	43% - 61%	0	Naturally present in the environment.
Actual / Required TOC Removal (Ratio)	2022	Yes	NA	TT: Running Annual Average ≥ 1.0	1.5	1.23 - 1.60	0	Naturally present in the environment.

PRIMARY REGULATED SUBSTANCES

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Single Measurement and Lowest Monthly % of Samples ≤ 0.3 NTU	Range Detected	Typical Source

Turbidity (NTU)[2]	2022	Yes	0	TT: Single result > 1 NTU	0.1	0.03 - 0.15	Soil runoff
	2022	Yes	NA	TT: At least 95% of samples ≤ 0.3 NTU	100%	NA	Soil runoff

2 - 100% of the turbidity readings were below the treatment technique requirement of 0.3 NTU. Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

OTHER REGULATED SUBSTANCES - Collected at the Treatment Plant

Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL/SMCL	Highest Compliance Result	Range Detected	Typical Source
Nitrate (ppm)	2022	Yes	10	10	2.1	ND to 2.10	Runoff from fertilizer use; industrial or domestic wastewater discharges; erosion of natural deposits.
Alpha Emitters (pCi/L)	2022	Yes	0	15	6.2	ND to 7.37	Erosion of natural deposits.
Combined Radium Ra 226 + Ra 228 (pCi/L)	2022	Yes	0	5	1.75	ND to 3.86	Erosion of natural deposits.
Perfluorooctanoic Acid (PFOA) (ppt)	2022	Yes	NA	14	4	ND to 4.0	Used in Teflons, fire fighting foams, cleaners, cosmetics, lubricants, paints, polishes, adhesives, photo films.
Perfluorooctanesulfonic Acid (PFOS) (ppt)	2022	Yes	NA	13	3.5	ND to 3.5	Manmade chemical; used in products for stain, grease, heat and water resistance

Unregulated Contaminants Monitoring (UCMR4) 2019				
Parameter	Units	Average Result	Range Detected	Typical Source
Manganese[4]	ppb	1.02	ND to 1.8	Naturally-occuring elemental metal; largely used in aluminum alloy production. Essential dietary element.
2-Methoxyethanol	ppb	0.24	ND to 0.47	Used as a solvent in varnishes, dyes, resins, airplane deicing solutions. It is also used in organometallic chemistry synthesis.
Bromochloroacetic Acid	ppb	1.32	ND to 2.8	By-product of drinking water disinfection
Bromodichloroacetic acid	ppb	0.97	ND to 2.5	By-product of drinking water disinfection
Chlorodibromoacetic acid	ppb	0.33	ND to 0.95	By-product of drinking water disinfection
Dibromoacetic Acid	ppb	0.42	ND to 1.5	By-product of drinking water disinfection
Dichloroacetic Acid	ppb	3.86	ND to 12	By-product of drinking water disinfection
Monobromoacetic Acid	ppb	0.01	ND to 0.34	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	7.50	0.55 to 23	By-product of drinking water disinfection
Total Haloacetic Acids - Br	ppb	3.05	ND to 6.9	By-product of drinking water disinfection
Total Haloacetic Acids-UCMR4	ppb	10.15	0.96 to 28	By-product of drinking water disinfection
Trichloroacetic Acid	ppb	3.22	ND to 11	By-product of drinking water disinfection

4 - Manganese is regulated as a secondary contaminant with a secondary maximum contaminant level of 50 ppb