

SWIFT Water™ - Water Quality Report for Bottled Water with a Best By date of 9NOV23

We invite you to taste the future of sustainable water management! HRSD's Sustainable Water Initiative for Tomorrow program, or SWIFT, is a holistic water management strategy that offers multiple benefits for the region today and for generations to come. At full implementation, SWIFT will be one of the world's largest groundwater recharge programs, delivering nearly 100 million gallons a day to the Potomac Aquifer. In addition to augmenting Virginia's groundwater supply, SWIFT supports Chesapeake Bay restoration efforts, protects the aquifer from saltwater intrusion, and may slow the impacts of observed sea level rise by decreasing the rate of land subsidence. Collectively, these benefits support a sustainable economic future for Eastern Virginia.

SWIFT represents an engineered water cycle, taking highly treated wastewater through additional layers of advanced water treatment to produce SWIFT Water™, water that meets all EPA drinking water requirements. SWIFT Water™ is rigorously monitored to ensure public health and aquifer protection, and each batch of bottled SWIFT Water™ undergoes this same testing. Your bottle of water represents our vision for the way valuable water resources should be managed: one small drop in the water cycle, effectively managed for the benefit of our environment and the communities we serve.

Similar to a Consumer Confidence Report provided by Community Water Systems, HRSD has prepared a report to document the water quality in each batch of bottled water. The reported levels of detected constituents in your bottle of water are included in the tables below.

INORGANIC SUBSTANCES

Constituent	Units	Detected Level	MCL	MCLG	Meets EPA and/or FDA Standards
Barium	mg/L	0.03	2	2	Yes
Fluoride	mg/L	0.9	4.0	4.0	Yes
Nickel	mg/L	0.002	0.1 (FDA)	N/A	Yes
Nitrate	mg/L	1.6	10	10	Yes
Total Nitrogen	mg/L	1.6	5 mg/L monthly average - EPA UIC SWIFT Regulatory Target	N/A	Yes
Chlorine (as Cl ₂)	mg/L	2.98	MRDL = 4.0	MRDLG = 4.0	Yes

TURBIDITY

Constituent	Units	Detected Level	MCL	MCLG	Meets EPA and/or FDA Standards
Turbidity	NTU	0.09	TT	N/A-EPA 5 NTU-FDA	Yes

DISINFECTION BY-PRODUCTS and ORGANIC SUBSTANCES

Constituent	Units	Detected Level	MCL	MCLG	Meets EPA and/or FDA Standards
Bromate	mg/L	0.0012	0.010	zero	Yes
Total Organic Carbon	mg/L	0.2	4 mg/L monthly average - EPA UIC SWIFT Regulatory Target	N/A	Yes
Haloacetic Acids (HAA)	mg/L	0.001	0.060	N/A	Yes
Total Trihalomethanes (TTHM)	mg/L	<0.001	0.080	N/A	Yes

RADIOLOGICAL SUBSTANCES

Constituent	Units	Result	MCL	MCLG	Meets EPA and/or FDA Standards
Beta particles and photon emitters	pCi/L	16	50	zero	Yes

Although the MCL for beta emitters is 4 mrem/yr, EPA considers 50 pCi/L to be the level of concern for beta particles. REM: The unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem" (mrem) is 0.001 of a REM.

MICROBIOLOGICALS

Constituent	Units	Result	MCL	MCLG	Meets EPA and/or FDA Standards
Total coliform	MPN/100 mL	Negative	No more than one positive sample per month	zero	Yes

SECONDARY and UNREGULATED MONITORED CONTAMINANTS

Constituent	Units	Result	SMCL	Meets EPA and/or FDA Standards
Aluminum	mg/L	0.02	0.05-0.2	Yes
Chloride	mg/L	174	250	Yes
pH	mg/L	7.1	6.5-8.5	Yes
Sodium	mg/L	210	N/A	N/A
Sulfate	mg/L	69	250	Yes
Total Dissolved Solids (TDS)	mg/L	640	500.0	No*

* TDS is not removed from SWIFT Water in order to match the TDS of the native groundwater in the Potomac Aquifer System which has TDS greater than 600 mg/L. Drinking water with an elevated TDS is not considered to present a risk to human health.

AN EXPLANATION OF WATER QUALITY DATA TABLES:

The following terms are presented in the Water Quality Data Tables.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfection Level (MRDL): The highest level of a disinfectant that is allowed in drinking water.

Maximum Residual Disinfection Level Goal (MRDLG): The level of a disinfectant in drinking water below which there is no known or expected risk to health. The MRDLG allows for a margin of safety.

Micrograms per liter (µg/L): Equivalent to 1 part per billion. This corresponds to 1 gallon of water in 1 billion gallons of water (comparable to 1 cent in ten million dollars).

Milligrams per liter (mg/L): Equivalent to 1 part per million. This corresponds to 1 gallon of water in 1 million gallons of water (comparable to 1 cent in ten thousand dollars).

Nanograms per liter (ng/L): Equivalent to 1 part per trillion. This corresponds to 1 gallon of water in 1 trillion gallons of water (comparable to 1 cent in 10 billion dollars).

Nephelometric Turbidity Units (NTU): Measure of suspended particles in water.

Not applicable: N/A

Picocuries per liter (pCi/L): Measure of radioactivity

Secondary Maximum Contaminant Level (SMCL): They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Underground Injection Control (UIC): The SWIFT Research Center is authorized to recharge the Potomac Aquifer through EPA's UIC Program, a program which protects the nation's underground sources of drinking water.



UNREGULATED COMPOUNDS - Indicators for Public Health Protection

Constituent	Units	Result	Threshold Value	Origin of Threshold Value
1,4-dioxane	ug/L	<0.06	1	California drinking water notification limit
17-β-estradiol	ng/L	<0.40	0.9	Footnote 1
N,N-Diethyl-meta-toluamide (DEET)	ng/L	<5	200,000	Minnesota Health Guidance Value
Ethinyl estradiol	ng/L	<0.9	280	Footnote 1
N-Nitrosodimethylamine (NDMA)	ng/L	<2	10	California drinking water notification limit
Perchlorate	ug/L	<0.50	6	California drinking water notification limit
Perfluorooctanoic acid (PFOA)	ng/L	<2.0	PFOA+PFOS: 70 ng/L	EPA Health Advisory
Perfluorooctane Sulfonate (PFOS)	ng/L	<2.0	PFOA+PFOS: 70 ng/L	EPA Health Advisory
tris(2-carboxyethyl) phosphine (TCEP)	ng/L	<10	5,000	Minnesota Health Guidance Value

*Monitoring Strategies for Constituents of Emerging Concern (CECs) in Recycled Water, Recommendations of a Science Advisory Panel, 2018: SCCWRP Technical Report 1032.

UNREGULATED COMPOUNDS - Indicators of Operational Performance

Constituent	Units	Result	Threshold Value
Cotinine	ng/L	<10	1,000
Primidone	ng/L	<5.0	10,000
Phenytoin (Dilantin)	ng/L	<20	2,000
Meprobamate	ng/L	<5.0	200,000
Atenolol	ng/L	<5.0	4,000
Carbamazepine	ng/L	<5.0	10,000
Estrone	ng/L	<2.0	320,000
Sucralose	ng/L	450	150,000,000
Triclosan	ng/L	<25	2,100,000

