CITY OF EVERETT 2023 Water Quality Analysis Results

Detected Regulated Contaminants

			EPA regulations		Everett water results		
Parameter	Major source	Units	ldeal MCLG level/goal	Maximum allowable (MCL)	Range or other	Average value or highest result	Comply?
Total coliform bacteria	Naturally present in the environment	% Positive	0	5% Positive per Month	None	0%	Yes
Total coliform bacteria monitoring tracks microbial quality in the water distribution system. Everett collects around 125 samples per month or 1,500 per year. No total coliforms were detected in 2023.							
Fluoride	Dental health additive	ppm	2	4	0.5–0.8	0.7	Yes
Fluoride is added to your water in carefully controlled levels for dental health.							
Residual disinfectant level (free chlorine)	Added as a drinking water disinfectant	ppm	4.0 (MRDLG)	4.0 (MRDL)	0.2–1.0	0.7	Yes
Haloacetic acids (5) (HAA5)	By-product of drinking water chlorination	ppb	N/A	60	23–42 ¹	40 ²	Yes
Total Trihalomethanes (TTHM)	By-product of drinking water chlorination	ppb	N/A	80	23–48 ¹	48 ²	Yes
Haloacetic acids and trihalomethanes form as by-products of the chlorination process that is used to kill or inactivate disease-causing microbes. The TTHM and HAA5 results are from eight locations in Everett, which are monitored to determine compliance with current regulations. ¹ Range of results taken from all eight locations. ² Highest locational running annual average of the eight sites that were monitored.							
Turbidity	Soil erosion	NTU	N/A	TT	100%	0.04	Yes
The values reported are the lowest monthly percentage of samples that met the EPA turbidity limit and the highest four-hour combined water turbidity measurement obtained during the year. The EPA 0.3 NTU. In 2023, no filtered water turbidity results exceeded 0.3NTU so the lowest percentage that met the EPA limit was 100 percent. The plant targets production of filtered water turbidities of 0.10 NTU or less.							

Detected Unregulated Contaminants

			Everett water results			
Parameter	Units	Ideal MCLG level/goal	Range detected	Average value		
Bromodichloromethane	ppb	0	1.1–2.3	1.6		
Chloroform (trichloromethane)	ppb	70	22–47	30		
Dichloroacetic acid	ppb	0	3–19	13		
Trichloroacetic acid	ppb	20	16–24	20		
These substances are disinfection by-products for which no MCL standard has been set, but which must be monitored to determine compliance with the USEPA Stage 2 Disinfection By-products Rule						

MCLs for Total Trihalomethanes and Haloacetic acids (5).

Lead, Copper and pH

			EPA regulations		Everett water results			
Parameter	Major source	Units	ldeal MCLG level/goal	Action level (AL)	90th % level	Homes exceeding the AL	Comply?	
Lead	Plumbing, erosion of natural deposits	ppb	0	15	2	0 of 108 (0%)	Yes	
Copper	Plumbing, erosion of natural deposits	ppm	1.3	1.3	0.093	0 of 108 (0%)	Yes	
USEPA and state regulations require water systems to monitor for the presence of lead and copper at household taps every three years. Lead and copper monitoring is conducted by Everett and many of the water systems that it supplies in the combined service area as a regional group. The above data was collected in 2021. The next required round of sampling will be in 2024. The 90 th percent level is the highest result obtained in 90 percent of the samples collected when the results are ranked in order from lowest to highest. In the past, the results for water tested before it enters household plumbing were even lower than the tap results. This indicates that there is virtually no lead or copper in the water, but household plumbing may contribute to lead and copper at the tap.								
рН	Soda ash is added to reduce water corrosivity by increasing pH and alkalinity	s.u.	Daily Avg 7.6	Min Daily Avg 7.3	Average 7.6	Minimum 7.1	Yes	
pH	Soda ash is added to reduce water corrosivity by increasing pH and alkalinity	s.u.	Daily Avg 7.6	Min Daily Avg 7.3	Average 7.6	Minimum 7.1	Yes	

The Washington State Department of Health requires Everett to operate corrosion control treatment at or above a minimum daily average pH of 7.4. Everett measures pH six times per day (once every four hours). The average daily pH cannot be below 7.4 for more than nine days every six months. In 2023, the average daily pH was below 7.4 for one day from the east clearwell discharge point.

The USEPA drinking water regulations require this statement be included with the lead and copper sampling results, regardless of the levels observed.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Everett Utilities Division is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Required Treatment Polymer Statement:

During water treatment, organic polymer coagulants are added to improve the coagulation and filtration processes that remove particulates from water. The particulates that are removed can include viruses, bacteria and other disease-causing organisms. The USEPA sets limits on the type and amount of polymer that a water system can add to the water. In addition to the EPA limits, the State of Washington requires that all polymers used be certified safe for potable water use by an independent testing organization (NSF International). During treatment, Everett adds only NSF approved polymers and the levels used are far below the safe limits set by the USEPA.

Required Definitions:

<u>Turbidity</u> – Turbidity is a measure of particulates suspended in water in nephelometric turbidity units (NTU) and is used to determine effectiveness of the treatment process. Particulates in water can include bacteria, viruses and protozoans that can cause disease.

<u>Maximum contaminant level goal (MCLG)</u> – 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.

<u>Maximum contaminant level (MCL)</u> – 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 water treatment technology.

<u>Maximum residual disinfectant level (MRDL)</u> – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

<u>Maximum residual disinfectant level goal (MRDLG)</u> – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

Action level (AL) – The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Parts per million (ppm)/ Parts per billion (ppb)</u> – A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of a contaminant per billion parts of water.

Not applicable (N/A) - Means EPA has not established MCLGs for these substances.

Voluntary Information:

		Everett water results			
Parameter	Units	Range detected	Average value		
Alkalinity ^{1,2}	ppm	13.0–23.1	16.3		
Aluminum ¹	ppm	0.006–0.036	0.02		
Arsenic ³	ppb	<0.1-0.2	0.1		
Calcium Hardness ^{1,2}	ppm	7.6–13.9	9.6		
pH ¹	s.u.	7.6–9.2	8.1		
Sodium ³	ppm	5.78–6.57	6.14		
Total Hardness ^{1,2}	ppm	9.9–15.7	12.2		
1 Results from samples collected from 26 locations in the Everett distribution system. 2 Hardness and alkalinity units are in ppm as CaCO ₃ (calcium carbonate equivalent units).					

³ Arsenic and Sodium were monitored at the treatment plant effluent.

Unregulated Contaminant Monitoring Rule 5 (UCMR5)

The City collected quarterly samples at the entry point to the water distribution system according to the Fifth Unregulated Contaminant Rule (UCMR5). These samples were tested for 29 per- and polyfluoroalkyl substances (PFAS) and lithium. No PFAS or lithium were detected. The full results for the UCMR5 are available at <u>everettwa.gov/WQsummary</u>.