

CITY OF EVERETT

2019 Water Quality Analysis Results

Detected Regulated Contaminants

Parameter	Major Source	Units	EPA Regulations		Everett Water Results		
			Ideal Level/Goal (MCLG)	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 more than 5 percent of the monthly tests can be positive for total coliforms. No total coliforms were detected in 2019.							
Fluoride	Dental health additive	ppm	2	4	0.3–0.7	0.7	Yes
Fluoride is added to your water in carefully controlled levels for dental health. The minimum value of 0.3 ppm was due to two maintenance-related feed outages that lasted no more than a day in duration each.							
Residual Disinfectant Level (free chlorine)	Added as a drinking water disinfectant	ppm	4.0 (MRDLG)	4.0 (MRDL)	0.2–1.2	0.7	Yes
Haloacetic Acids (5) (HAA5)	By-product of drinking water chlorination	ppb	N/A	60	22–42 ¹	38 ²	Yes
Total Trihalomethanes (TTHM)	By-product of drinking water chlorination	ppb	N/A	80	31–56 ¹	49 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%	0.07	Yes
Turbidity is a measure of the amount of particulates in water expressed in Nephelometric Turbidity Units (NTU). Particulates in water can include bacteria, viruses and protozoans that can cause disease. Turbidity measurements are used to determine the effectiveness of the treatment processes in removing these particulates. The EPA turbidity limit is 0.3 NTU. The values reported are the lowest monthly percentage of samples that met the EPA limit and the highest four-hour combined water turbidity measurement obtained during the year. In 2019, no filtered water turbidity results were above the EPA limit so the lowest percentage was 100 percent. The plant targets production of filtered water turbidities of 0.10 NTU or less.							

Detected Unregulated Contaminants

Parameter	Units	Ideal Level/Goal (MCLG)	Everett Water Results	
			Range Detected	Average Value
Bromodichloromethane	ppb	0	1.3–2.4	1.6
Chloroform (trichloromethane)	ppb	70	30–54	38
Dichloroacetic Acid	ppb	0	2–18	13
Trichloroacetic Acid	ppb	20	18–24	21
These substances are individual 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

Parameter	Major Source	Units	EPA Regulations		Everett Water Results		
			Ideal Level/Goal (MCLG)	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	0.141	0 of 108 (0%)	Yes
<p>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 2018. The next required round of sampling will be in 2021. The 90th% 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 and that household plumbing may contribute to lead and copper at the tap.</p>							
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 7.0	Yes
<p>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 2019, the average daily pH dropped below 7.4 for one day.</p>							

Required Lead Statement:

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 or at <http://www.epa.gov/safewater/lead>.

Required 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:

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 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 water treatment technology.

Maximum Residual Disinfectant Level (MRDL) – 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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.

Parts per Million (ppm)/ Parts per Billion (ppb) – 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:

Parameter	Units	Everett Water Results	
		Range Detected	Average Value
Alkalinity ^{1,2}	ppm	14.4–30.1	16.9
Aluminum ¹	ppm	0.008–0.033	0.02
Arsenic ³	ppb	0.1–0.2	0.1
Calcium Hardness ^{1,2}	ppm	7.6–14.1	9.6
pH ¹	s.u.	7.6–9.4	8.1
Sodium ³	ppm	5.7–6.4	6.1
Total Hardness ^{1,2}	ppm	10.8–16.3	12.3

¹ Results from samples collected from 26 locations in the Everett distribution system.
² Hardness and alkalinity units are in ppm as CaCO₃ (calcium carbonate equivalent units).
³ Arsenic and Sodium were monitored at the treatment plant effluent.