## City of Everett 2007 Water Quality Summary

## Table 1

## **Primary Standards**

(Mandatory Health-Related Standards)
Physical Parameters, Bacteria, Inorganics, Disinfection By-products, Radionuclides
Established by the Washingtion Department of Health and the USEPA

Unless otherwise noted, values listed are for samples collected after treatment and at the entry point to the water distribution system.

PARAMETER	UNITI	MAXHMUM	2007 RANGE OF RESULTS	•
Physical		LEVEL		A TOWN AVENIAGE NEORE
Turbidity (combined filter effluent)	NTU	Т	0.03 - 5.38	0.06
Asbestos <sup>1</sup>	MF/L >10μm	7		less than .093
Microbiological				1635 than ,095
Total coliform bacteria⁴	positive (present) or negative (absent)	5% positve per month	none	0.0%
Inorganic Chemicals				
Antimony	ppm	0.006	-	less than 0,0005
Arsenic	ppm	0.010	-	less than 0.0005
Barium	ppm	2	0.0039 - 0.0046	0.0042
Beryllium	ppm	0.004	_	less than 0.0005
Cadmium	ppm	0.005	-	less than 0.0005
Chromium	ppm	0.1	-	less than 0.0005
Copper <sup>3</sup>	ppm	1.3	< 0.020 - 0.363	0.072
Lead <sup>3</sup>	ppm	0.015	< 0.002 - 0.063	0.003
Mercury	ppm	0.002	-	less than 0.0001
Nickel	ppm	0.1	-	less than 0.0005
Selenium	ppm	0.05	-	less than 0.0005
Thallium	ppm	0.002		less than 0.0005
Cyanide	ppm	0.2		less than 0.04
Fluoride⁵	ppm	4.0	0.0 - 1.3	0.70
Nitrate (NO <sub>3</sub> )	ppm	10	0.021 - 0.138	0.080
Nitrite (NO <sub>2</sub> )	ppm	1	_	less than 0,002
Radionuclides				
Gross Alpha	pCi/L	15	-	less than 2.7
Gross Beta	pCi/L	50	-	less than 3.7
Radium-228	pCi/L	5	-	less than 0.5
Chlorine By-products (also called Disin	fection By-product	s or DBP's)		377 11211 010
Total Trihalomethanes (TTHM) <sup>2,6,7</sup>	ppm	0.080	0.027-0.051	0.040
Haloacetic Acids (5) 2,6,7  Sample collected in 2007 from a service su	ppm	0.060	0.013-0.036	0.026

Sample collected in 2007 from a service supplied by an asbestos concrete (AC) water main. Following an evalutation of the monitoring results, the state has issued a statewide monitoring waiver through 2010 for asbestos.

<sup>&</sup>lt;sup>2</sup> Samples collected from a location in the area of of longest residence time and three other locations in the Everett system.

<sup>&</sup>lt;sup>3</sup> Samples collected from 134 consumer taps collected by Everett and all of it's larger wholesale customer districts. The highest lead and copper tap sample result in 90% of the tap samples collected is listed. At least 90% of the consumer tap samples collected must be below the action limit. In 2006, no copper and three lead samples were above the action limits. Tap samples must be collected once every three years. The next round of regional monitoring is scheduled for collection during the summer of 2009.

<sup>&</sup>lt;sup>4</sup> Everett collected monthly total coliform bacteria samples at 120-125 locations in the water distribution system. No more than 5 percent per month (5%) can be coliform positive. In 2007, no bacteria were detected in the routine samples

<sup>&</sup>lt;sup>5</sup> Fluoride is monitored at the first tap downstream of the treatment plant. Fluoride also has a secondary MCL of 2.0 mg/L. Due to a nationwide fluoride chemical shortage during the last half of 2007 the City's plant ran out of chemical several times between July and December. As a result the average annual dosage dropped from 1.0 mg/L to 0.7mg/L.

<sup>&</sup>lt;sup>6</sup> The average TTHM and HAA5 values the fourth quarter running annual averages (RAA) of the quarterly results obtained at the four required sample locations.

<sup>&</sup>lt;sup>7</sup> Haloacetic Acids (5) or HAA5 = Sum of the concentrations of trichloroacetic acid, dichloroacetic acid, monochloroacetic acid, tribromoacetic acid, and dibromoacetic acid. There are five additional HAA compounds that are not regulated.

<sup>&</sup>lt;sup>8</sup> Due to conditions caused by record winter storms and a coagualtion upset, the water treatment plant exceeded the maximum turbidity standard of 1.0 NTU for 36 hours on March 9-10. The water leaving the plant reached a max of 2.8 NTU