

2011 ANNUAL ANALYSIS OF CEDAR & TOLT WATER SUPPLIES

Distribution Water Quality *(unless otherwise noted)*
 Samples Collected: May 24, 2011 *(unless otherwise noted)*

Cedar Distribution = South of the ship canal & lower elevations North of ship canal.

Tolt Distribution = Higher elevations North of the ship canal.

Water Quality Parameter	State Dept. of Health Maximum Contaminant Level	CEDAR	TOLT	Minimum Reporting Level
Primary Standards *	MCL			
Antimony	6 µg/L	ND	ND	0.8
Arsenic	10 µg/L	ND	ND	0.5
Asbestos \$	7 million fibers/L (>10um long)	ND (2009)	ND (2009)	0.2
Barium	2000 µg/L	1.8	1.8	0.2
Beryllium	4 µg/L	ND	ND	0.2
Bromate #	10 µg/L	ND (7/06/11)	ND(7/12/11)	5.0
Cadmium	5 µg/L	ND	ND	0.2
Chromium	100 µg/L	ND	ND	0.5
Cyanide	200 µg/L	ND	ND	10
Fluoride	4 mg/L	0.80	0.81	0.10
Haloacetic Acids(5), Total~	60 µg/L	22	25	1.0
Mercury	2 µg/L	ND	ND	0.2
Nickel	100 µg/L	ND	ND	0.5
Nitrate-Nitrogen	10 mg/L	0.085	0.109	0.01
Nitrite-Nitrogen	1 mg/L	ND	ND	0.002
Selenium	50 µg/L	ND	ND	0.8
Thallium	2 µg/L	ND	ND	0.2
Trihalomethanes, Total~	80 µg/L	33	34	0.5
Turbidity #	5 NTU for Cedar/ 0.30 NTU for Tolt	0.68	0.07	0.05
Secondary Standards **	SMCL			
Aluminum	50 - 200 µg/L	25	37	1.0
Chloride	250 mg/L	2.9	3.0	0.5
Color	15 std. units	ND	ND	5
Fluoride	2 mg/L	0.80	0.81	0.10
Iron	300 µg/L	64	39	6
Manganese	50 µg/L	3.6	0.8	0.5
pH, range ++	6.5 - 8.5 pH units, Target 8.2	7.75 - 8.34	8.15 - 8.64	NA
Silver	100 µg/L	ND	ND	0.8
Solids, Total Dissolved	500 mg/L	38.5	38.5	5.0
Specific Conductance	700 µmhos/cm	59.8	66.2	5.0
Sulfate	250 mg/L	1.6	1.4	1.0
Zinc	5000 µg/L	ND	ND	0.8
Other Parameters	Units			
Alkalinity, Total	mg/L (as CaCO ₃)	19.1	20.5	2.0
Bromide	µg/L	ND	ND	5
Calcium	mg/L (as CaCO ₃)	21.5	26.0	2.0
Copper, Source water	µg/L	0.5	ND	0.5
Hardness, Total	mg/L (as CaCO ₃)	24.6	27.7	2.0
Hardness, Total	grains/gal. (as CaCO ₃)	1.4	1.6	0.1
Lead, Source water	µg/L	ND	ND	0.2
Magnesium	mg/L	0.71	0.39	0.01
Oxygen, Dissolved	mg/L	14.4	19.0	0.5
Phosphate, soluble-reactive	µg/L	6	5	1
Potassium	mg/L	0.20	0.12	0.02
Silica, Reactive	mg/L	8.6	5.2	1.0
Sodium	mg/L	1.45	1.49	0.08
Temperature, normal annual range	deg. C.	4.9 - 23.2	3.8 - 21.4	NA
Total Organic Carbon #	mg/L	0.79	1.02	0.20
Residential Survey @	Action Level	Combined System		
2010 Lead Reduced Monitoring	15 µg/L	5.1		1.0
2010 Copper Reduced Monitoring	1300 µg/L	135		1.0

Primary and Secondary Standards were measured at the Intake to the distribution system after treatment.

* Health stds.: Supplier subject to public notification.

++ January-July 2011, 10-90th percentile

** Aesthetic stds.: Supplier not subject to public notification.

\$ Test results 9/2/2009.

~ Average of the last 4 quarters testing, through 6/11.

As measured at treatment plant.

ND = Not Detected at or above the Minimum Reporting Level

1 ppm = 1 mg/L = 1000 µg/L

@ Measured at 90th percentile of overnight standing residential samples from homes with copper pipes and lead solder. Next round 9/2013.

Seattle Public Utilities Water Quality Laboratory, 800 S. Stacy St., Seattle 98134 (206) 684-7834

http://www.seattle.gov/util/About_SPU/Water_System/Water_Quality/index.asp