



2007

WATER QUALITY REPORT

PWSID# 02950K



CONTINUING OUR COMMITMENT...

The City of Arlington is pleased to report that your drinking water is high quality and compliant with all state and federal drinking water laws. We are committed to delivering the best quality drinking water, and to that end, we make more than 16,000 water quality observations and tests every year. This edition of our annual water quality report summarizes only the key findings of testing completed from January through December 2007. We intend to maintain these exemplary results, and will rise to meet the challenges of source water protection, water treatment, and prevention of cross-connections, while continuing to serve the needs of all of our water users. For more information about this report, or for any questions relating to your drinking water, please call the Utilities Division at 360.403.3526.

WHERE DOES OUR WATER COME FROM?

Three primary sources supply water to the Arlington service area. Arlington produces most of its water from wells at two locations, Haller well field and the Airport Well. The Haller well field naturally filters Stillaguamish River water by drawing it through the riverbank. The Arlington Airport well draws groundwater from a deep aquifer. The origin of both these sources is precipitation that falls across the Stillaguamish Basin, and either runs off or infiltrates into the ground. The water we produce is blended with the water the City purchases from its third source—Public Utility District No. 1 of Snohomish County (PUD). The source of our purchased volume is surface water that collects within the City of Everett's Spada Reservoir near the headwaters of the Sultan River.

COMMUNITY PARTICIPATION

You are invited to participate in our public city council meetings and voice your concerns about your drinking water. Arlington City Council meets the first and third Monday of each month beginning at 7 p.m. at the Council Chambers, 110 E. Third Street, Arlington, WA (enter off of Olympic Avenue near City Hall). For meeting information, call City Hall at (360) 403- 3421, or visit our Website at www.ci.arlington.wa.us.

IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

WATER USE EFFICIENCY INFORMATION

The City re-affirmed on January 21, 2008 the water use efficiency goals adopted in the City's 2004 Water System Plan. This section reports our status with respect to reaching these goals.

GOAL 1. Reduce unaccounted-for water to 10 percent or less.

This supply-side goal is evaluated as a 3 year running average beginning in 2009. For 2007, we report just the 2007 data. The data below show we met our goal for 2007.

Total water into the system (gallons)	521,646,616
Total authorized, quantified uses (gallons)	496,516,300
Unauthorized and/or unquantified uses and leaks (gallons)	25,130,316
Unauthorized and/or unquantified uses and leaks (percent)	5%

GOAL 2. Achieve additional system-wide average water use reduction of 5 percent by the year 2008 and 10 percent by the year 2018, with 2002 as the base year.

This demand-side goal is first intended for evaluation in 2008. The interpolated data below show that through 2007 we are on track for meeting our 2008 goal.

Year	2002	2007	2008
Goal (gallons per day per connection)	n/a	257	254
Actual or Projected (gallons per day per connection)	268	253	est. 250

GOAL 3. Increase awareness among all water users of the value and importance of conserving water and of the methods available to achieve reductions in water use.

The City participates in a regional conservation program that advertises in newspapers and on buses, and provides indoor and outdoor conservation kits at no charge to interested water customers. The City staffs education booths at summer events. Conservation articles appear annually in the Arlington Update.

ARLINGTON PUD No. 1 WATER DEPARTMENT OF SNOHOMISH COUNTY

SUBSTANCE (UNITS)	GOAL (MCLG)*	HIGHEST LEVEL ALLOWED (MCL)*	HIGHEST LEVEL DETECTED	RANGE DETECTED OR OVERALL RESULTS	HIGHEST LEVEL DETECTED	RANGE DETECTED OR OVERALL RESULTS	SOURCE OF SUBSTANCE	COMPLIANT ?
REGULATED SUBSTANCES								
Fluoride (ppm)*	4	4	0.38	ND - 0.94	0.71	0.02 - 0.91	Water additive which promotes strong teeth.	Yes
Nitrate (ppm)*	10	10	0.56	ND - 0.56	0.08	0.021 - 0.138	Runoff from fertilizer use; leaching from septic tanks, sewage, animal wastes; erosion	Yes
Turbidity * (Turbidity Units)	N / A	Treatment Technique *	0.059	0.021 - 0.059	5.3	ND - 5.3	Soil run-off	No ³
Chlorine (ppm)*	MRDLG*=4	MRDL*=4	0.87	0.26 - 1.5	0.98	0.40 - 2.03	Water additive used to control microbes.	Yes
Haloacetic Acids (ppb)*	N / A	60	17.5	1.8 - 35.9	25.5	13.3 - 35.8	By-product of drinking water disinfection.	Yes
Total Trihalomethanes (ppb) *	N / A	80	23.6	5.4 - 49.5	40.2	27.3 - 51.2	By-product of drinking water disinfection.	Yes
SUBSTANCE (UNITS)	GOAL (MCLG)*	ACTION LEVEL	90TH PERCENTILE	SITES ABOVE ACTION LEVEL	90TH PERCENTILE	SITES ABOVE ACTION LEVEL	SOURCE OF SUBSTANCE	COMPLIANT ?
Copper (ppm)*	1.3	1.3	1.0	0 / 30	0.072	0 / 134	Corrosion of household plumbing systems.	Yes
Lead (ppb) *	0	15	6	0 / 30	3	3 / 134	Corrosion of household plumbing systems.	Yes

* See Definitions.

¹ Turbidity, a measure of the cloudiness of water, is monitored because it is a good indicator of the effectiveness of the filtration system.

² Lead and copper samples for PUD were collected in 2006, not 2007.

³ Beginning in the early morning of March 9th and ending by mid-day on March 10th of 2007, the Everett water treatment plant exceeded the state and federal turbidity treatment technique standard of 1.0 NTU for 36 hours. Turbidity leaving the filters reached a maximum of 5.3 NTU and the turbidity leaving the plant reached a maximum of 2.8 NTU. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Cold water temperatures, high raw water turbidity caused by prior severe winter storms, and an unforeseen treatment process disturbance, upset the coagulation process that is critical to effective filtration by the plant. During the event, the plant staff significantly increased the chlorine disinfection, which partially compensated for the loss of particle removal, and worked with the State Department of Health (DOH) to regain control of the process. Additional distribution system coliform bacteria monitoring was also conducted during and following the event. No bacteria were detected. As required, a public health notice describing the event was sent to all consumers within 30 days of the event. No boil water notice was required. Subsequent to the event, the plant is undergoing a comprehensive systematic third-party performance evaluation to identify and correct any operational or maintenance deficiencies that might have contributed to the failure. Several improvements to the coagulation control process at the treatment plant have also already been added.

HERE'S WHAT IT ALL MEANS

Action Level:

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level):

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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level):

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 (e.g. chlorine, chloramines, chlorine dioxide).

MRDLG (Maximum Residual Disinfectant Level Goal):

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.

N / A: Not applicable.

ND: Not detected.

NTU (Nephelometric Turbidity Units):

A measure of the clarity, cloudiness, or turbidity of water.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique):

A required process intended to reduce the level of a contaminant in drinking water.

90th Percentile:

Out of every 10 homes sampled, 9 had lead and copper concentrations at or below this level.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

Microbial contaminants, such as viruses & bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations & wildlife.

Inorganic contaminants – salt & minerals, which can be naturally-occurring or result from urban stormwater runoff, industrial/domestic wastewater discharge, oil/gas production, mining, farming.

Organic chemical contaminants, including synthetic & volatile organic chemicals, which are byproducts of industrial processes & petroleum production, & can also come from gas stations, urban stormwater runoff & septic systems.

Radioactive contaminants, which may be naturally-occurring or be the result of oil & gas productions & mining activities.

Pesticides & herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff & residential uses.

HOW IS MY WATER TREATED AND PURIFIED?

Groundwater drawn from our well field located near the Stillaguamish River is treated in several steps at Arlington's water treatment facility. First, raw (untreated) water is pumped from the well field to the treatment plant where a primary treatment chemical is added that causes small particles to stick together and form bigger particles called floc. Next, polymer is added to aid the filtering process and the water is passed through a clarifying filter where 60% to 70% of the floc is removed. The water then passes through a finishing filter where most of the remaining floc is taken out, and chlorine is added for disinfection. Finally, sodium hydroxide is added to adjust the pH level, making the water less corrosive to your pipes and plumbing fixtures. Water drawn from our well near the Arlington Airport does not require filtration, but we do add chlorine for disinfection. Drinking water purchased from Snohomish County PUD is treated at the City of Everett water treatment plant using a treatment process similar to the process used by Arlington. Everett adds fluoride to the water for enhanced dental protection.



HELPFUL INFORMATION:

To obtain help with billing related issues, stopping service or moving please contact Utility Billing at (360) 403-3421.

For help with water related repairs or fixing leaks, please contact the Utility Administration at (360) 403-3526 or the emergency pager (425) 258-0919. For leaks inside your house please call a local plumber.



PRSRT STD
U.S. POSTAGE
PAID
PERMIT NO. 178
SALEM, OR



2007 WATER QUALITY REPORT