

CITY OF ARLINGTON



Water Quality Report

JUNE 2000

Providing High Quality and Safe Drinking Water Is Arlington's Highest Priority!

The City of Arlington is pleased to provide you with our Drinking Water Quality Report for 1999. This report is prepared to inform our customers that the City's water meets or exceeds state and federal standards. This report describes where our water comes from, what it contains, how it compares to stringent water quality standards set by regulatory agencies, and what we are doing to protect and improve our water supply.

Where Does Arlington's Drinking Water Come From?

Arlington provides drinking water to two separate water systems, located in the Arlington and Island Crossing service areas. In the Arlington service area, the primary source of drinking water is groundwater drawn from four wells. Three of the wells are located in Haller Park near the Stillaguamish River; the fourth well is located at the Arlington Airport. In 1999, the City supplied 92% of the Arlington service area drinking water from the Haller Park wells. The remainder of the water supply came from the Airport well. Sometime this summer, the Arlington service area will also be supplied with water from a new wholesale connection to the Snohomish County PUD water system. The new connection was built by the City of Arlington in 1999. The Island Crossing service area receives 100% of its drinking water source from a wholesale connection with City of Marysville. Sources of water from Marysville include Edward Springs, the Stillaguamish Ranney Collector and several public wells.

About Arlington's Water Service Areas

Within the Arlington Service Area, the City of Arlington provides water to more than 3,300 customers, which includes residential, industrial, commercial, and public property connections. In the Island Crossing Service Area, the City of Arlington provides water to over 100 customers. Connections in the Island Crossing service area consist of residential and commercial connections.

Water Treatment

To provide our customers with the safest water, Arlington adds chlorine to the drinking water supply as a primary disinfectant. Chlorine is added to the water to destroy any harmful bacteria that may enter the water distribution system.

Lead and Copper Sampling At Your Home Water Tap

The EPA requires monitoring for the presence of lead and copper with the goal to minimize human exposure to lead and copper found in drinking water. Lead and copper are not detected in Arlington's water sources. However, our water is naturally corrosive and may cause lead and/or copper in your home plumbing to leach into your drinking water.

In 1993, the City of Arlington tested for the presence of lead and copper in water drawn from 40 household taps. At the 90th percentile level, the 40 household tap water samples tested exceeded the EPA action level of 15 parts per billion lead and 1.3 parts per million copper.

Corrosion Control Treatment

In 1997, the City of Arlington began to treat water in the Arlington service area with a blended phosphate solution to make it less corrosive to pipes and home plumbing. The phosphate solution has been successful in reducing the leaching of lead and copper into drinking water at most homes. However, some homes still have drinking water lead and copper levels that exceed the EPA action level.

A more effective method of corrosion control treatment (pH adjustment) will be used with the new water treatment plant. Under provisions of the federal Lead and Copper Rule, the City will collect water samples at household taps to evaluate the effectiveness of pH adjustment. The tap samples will be drawn approximately six months after the new water treatment plant has been operating.

The City of Marysville has collected lead and copper samples at household taps within the North Marysville service area, which supplies water to the Island Crossing service area. Those samples have not exceeded the action level for lead and copper in drinking water, and corrosion control treatment has not been required. The City of Arlington will collect lead and copper samples this year at household taps in the Island Crossing service area to assure lead and copper is not leaching into the drinking water.

ARLINGTON SERVICE AREA – HALLER WELLFIELD, AIRPORT WELL

CONTAMINANT	DATE TESTED	UNIT	MCL	MCLG	DETECTED LEVEL	RANGE	MAJOR SOURCES	COMPLIES?
Inorganic Contaminants								
Copper (at customer tap)	Jan. 99	ppm	AL=1.3	1.3	1.38	0.04-1.38	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	NO ²
Lead (at customer tap)	Jan. 99	ppb	AL=15	0	22	0-22	Corrosion of household plumbing systems; erosion of natural deposits	NO ²
Chloride	Jul. 99	ppm	250		21.4	nd-21.4		YES
Nitrate	Jul. 99	ppm	10	10	0.98	nd-0.98	Runoff from fertilizers; leaching from septic tanks, sewage; erosion of natural deposits	YES
Sodium	Jul. 99	ppm	20		6.1	nd-6.1		YES
Microbiological Contaminants								
Turbidity (treated water) ¹	Dec. 99	NTU	TT	N/A	3.1	0.11-3.1	Soil runoff	YES
Volatile Organic Contaminants								
TTHMs [Total Trihalomethanes]	Mar. 97	ppb	100	0	96	0-96	By-product of drinking water chlorination	YES
ISLAND CROSSING SERVICE AREA – WHOLESALE FROM NORTH MARYSVILLE SERVICE AREA								
CONTAMINANT	DATE TESTED	UNIT	MCL	MCLG	DETECTED LEVEL	RANGE	MAJOR SOURCES	COMPLIES?
Inorganic Contaminants								
Arsenic	Jan. 97	ppb	50	n/a	4	nd-4	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production wastes	YES
Barium	Jan. 97	ppm	2	2	0.02	nd-0.02	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	YES
Copper	Mar. 98	ppm	AL=1.3	1.3	0.04	nd-0.04	Leaching from wood preservatives	YES
Fluoride	Mar. 98	ppm	4	4	0.21	nd-0.21	Erosion of natural deposits; discharge from fertilizer & aluminum factories	YES
Lead	Jan. 97	ppb	AL=15	0	2.26	nd-2.26	Erosion of natural deposits	YES
Mercury (inorganic)	Mar. 98	ppb	2	2	0.37	nd-0.37	Erosion of natural deposits; discharge from refineries & factories; runoff from landfills; runoff from cropland	YES
Nitrate	Mar. 98	ppm	10	10	3.68	nd-3.68	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	YES
Microbiological Contaminants								
Turbidity	Mar. 98	NTU	TT	N/A	1.09	nd-1.09	Soil runoff	YES
Total Coliform	1999	Samples	5% pos.	0	5	0.60%	Naturally present in the environment	YES
Volatile Organic Contaminants								
Copper (at customer tap)	Nov. 96	ppm	AL=1.3	1.3	0.77		Corrosion of household plumbing systems	YES
Lead (at customer tap)	Nov. 96	ppb	AL=15	0	3		Corrosion of household plumbing systems	YES
TTHMs [Total Trihalomethanes]	Mar. 99	ppb	100	0	20.8	nd-20.8	By-product of drinking water chlorination	YES

The data presented in this table is from the most recent testing done in accordance with regulations.

¹ *Bilateral compliance agreement allows MCL of 1.0 NTU. Department of Health is notified when turbidity level exceeds 1.0 NTU.*

² *The City is in compliance with the federal Lead and Copper Rule, even though lead and copper levels at the customer tap exceed the action level.*

DEFINITIONS AND KEY TO TABLE

AL = Action Level: the concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which 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.

TT = Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water.

Variance and exemption: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

NTU = Nephelometric Turbidity Units

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (µg/L)

Why Is The City of Arlington Building A New Water Treatment Facility?

Water systems supplied with water from either surface water, or groundwater under the influence of surface water, must comply with provisions of the Surface Water Treatment Rule. Treatment techniques must be implemented to assure protection of the water supply from microorganisms such as cryptosporidium and giardia lamblia. The City's existing water treatment plant is not capable of providing the optimum type of treatment.

And, the existing water treatment plant is not large enough to produce water at a rate that fully utilizes our existing water rights. It is extremely difficult to increase or obtain new water rights from DOE, and it is much more cost effective to maximize the use of existing water sources than it is to develop new sources.

The project includes construction of the new water treatment facility and improvements to the Haller Park well field. For more information about the new water treatment facility, call the Water Department at 360.403.3502.

What Type of Treatment Will Be Provided?

To provide you the safest drinking water possible, the treatment plant will use coagulation and filtration to remove suspended particles that may contaminate the water. Chlorine will be added as a disinfectant to make sure the water is free of harmful microorganisms. And we will adjust the pH of the water so it is less corrosive to pipes and plumbing fixtures.

Is The Current Water Treatment Plant Still Operating Under A Treatment Variance From Department of Health?

Yes. Until the new water treatment facility is constructed, the City of Arlington will continue to operate the existing water treatment plant under the conditions prescribed in the bilateral compliance agreement. Information about the agreement can be obtained by calling us at 360.403.3505.



Cross Connection Control Program

The City implements a cross connection control program to protect our water system. A cross connection is a temporary or permanent connection between a potable (drinking) water system and any source or system containing nonpotable water or materials. An example is piping between a public water system and an auxiliary water system, cooling system, or irrigation system.

A cross connection can allow your drinking water to be contaminated if a backflow condition occurs. Backflow contamination is very serious and can result in illness or even death. Backflow is caused by either backsiphonage or backpressure. Backsiphonage happens when the pressure in the water main drops below the line pressure in your home, causing a "soda straw" effect. This effect can draw water from garden hoses, wash basins, boilers, lawn sprinklers, swimming pools, chemical sprayers, etc. into the water supply. Backpressure is caused by a downstream pressure that is greater than the potable water supply pressure. Increases in downstream pressure can be created by pumps, temperature increases in boilers, pressure washers, etc. Reductions in potable water supply pressure occur whenever the amount of water being used exceeds the amount of water being supplied, such as during water line flushing, fire fighting, or breaks in water mains.

The City requires customers with cross connections to install backflow prevention assemblies. These assemblies prevent contaminated water from flowing through a cross connection and into our water supply system. As required by Washington State law, a state certified backflow assembly tester must test these assemblies yearly. For more information about our cross connection program, please call 360.403.3505.

Protecting Your Home Against Cross Connections

A common source of cross connections in your home is the garden hose. A potentially hazardous cross connection occurs every time someone uses a garden hose sprayer to apply insecticides or herbicides to their lawn. Another cross connection occurs when someone uses their garden hose to clear a stoppage in their sewer line. Potentially hazardous conditions also happen when someone leaves a garden hose submerged while filling a pool, hot tub or container holding nonpotable material. Without a backflow prevention device between your hose and the hose bibb (outside faucet), the contents of the hose and anything it is connected to can backflow into the piping system and contaminate the drinking water supply.

It is easy to protect your home and the City's water supply from these hazards. Be aware of potential cross connections and avoid them whenever possible, and install and use appropriate backflow preventers. Each hose bibb at your home should have a hose bibb vacuum breaker installed, if one is not built into the hose bibb body. This is a simple, inexpensive device which can be purchased at any plumbing or hardware store. Installation is as easy as attaching your garden hose to the hose bibb.

For more information on how you can protect your home from cross connection contamination, contact the Arlington Water Department at 360.403.3505.

Help Conserve Water

Water conservation is something we all should practice. Except for the air we breathe, water is the single most important element in our lives. It's too precious to waste. Here are some simple suggestions that will help you save water, energy and money.

In your bathroom

1. Flush the toilet only when necessary and avoid using the toilet as a wastebasket.
2. Buy a water-saver toilet that uses only 1.6 gallons of water per flush.
3. Install a low-flow showerhead and bathroom faucet aerator.
4. Don't run water in the sink while shaving, brushing your teeth or lathering your face and hands.
5. Take shallow baths, shorter showers and consider bathing small children together.

In your kitchen

6. Clean vegetables or rinse dishes in a pan of water, not under a running faucet.
7. Keep a bottle of drinking water in the refrigerator to avoid running the tap to get a glass of cool water.
8. Use the short-cycle option and air-dry setting on your dishwasher.
9. Run only full loads in your dishwasher.
10. Install a kitchen faucet aerator.

With your laundry

11. Wash only with full loads and use water level adjustment settings.
12. Use cold water detergents for a more effective cold water wash.

In your yard

13. Don't water your lawn too much. Buy a timer attachment that connects between the faucet and hose, or set a kitchen timer to remind you to move a sprinkler.
14. Be sure you're not watering the driveway, sidewalks, or side of the house instead of the lawn.
15. Adjust your lawn mower to a higher setting. The grass blades grow longer and shade one another, helping to fight off heat and hold moisture longer.
16. Use a mulching lawn mower. It's healthier for your lawn and prevents yard waste.
17. Try the concept of Xeriscape™, which means "landscaping for water conservation." The idea is to use plants that require less water. You can also decorate creatively with objects that need no water at all, such as rocks, bricks, benches, gravel, and deck areas.
18. Consider installing drip irrigation for individual bushes, trees, flowers, and garden areas. Drip systems are designed to get water slowly and directly to the roots of plants where they need it most.

Outdoor water use

19. When washing your car, don't let the hose run. Instead, wet the car thoroughly, then turn off the hose while you wash the car with soapy water from a bucket. Use the hose again for a final rinse.
20. Sweep outside with a broom, not the hose. Just five minutes of hosing will waste 25 gallons of water.

Frequently Asked Questions

What if my water is cloudy?

Cloudiness usually results from water line construction or broken water mains and is caused by tiny air bubbles in the water. Generally, this cloudiness will disappear if you run your cold water tap for a few minutes. If you try this and the cloudiness persists, please call us.

What if my water tastes or smells like chlorine?

Chlorine is used by water utilities throughout the world to prevent disease-causing microorganisms from growing inside water lines. Chlorination of surface water and groundwater under the influence of surface water supplies is required by the Washington State Department of Health. There may be an odor of chlorine when you first turn on your tap, especially in the morning. However, that odor should rapidly dissipate. If your water has an objectionable taste or odor, please call us.

What if my water is rusty or discolored?

Rusty or discolored water is usually caused by corroded galvanized plumbing in your home. Galvanized pipe is made of iron which corrodes over time and the rust particles can turn your water pale yellow to dark brown. Although it is aesthetically unappealing, this discoloration is not harmful. Your water will generally clear after a few minutes of flushing.

What if my water has a purple or black color?

Purple or black colored water is usually caused by a buildup of manganese in the water distribution line. The manganese is stirred up in the distribution line when water is pulled through the line too fast, typically when a fire hydrant is operated. The

CONTINUED ON BACK PANEL

What Does This Table Mean?

The table shows the results of our water quality analyses. Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

What You Should Know About Detected Contaminants That Exceed The Action Level or Maximum Contaminant Level

Turbidity: Turbidity, the cloudy appearance of water caused by the presence of suspended particles, 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.

Lead: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than is 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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

Information From The Environmental Protection Agency (EPA)

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or by visiting the EPA's Office of Groundwater and Drinking Water Home Page.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

How Do I Get Involved In Decisions Affecting My Drinking Water?

The City of Arlington welcomes your interest in its water system. The Arlington City Council is the City's decision-making body. The City Council meets on the first and third Mondays of each month at 7:00 pm in the Arlington School District Board Room located at 315 N. French Avenue. For meeting information or scheduled agenda items, please call the City Clerk's office at 360.435.5785.



**IMPORTANT WATER QUALITY
INFORMATION INSIDE**

BULK RATE
U.S. Postage
PAID
Arlington, WA
Permit No. 77

Arlington Public Works Department
Water Utility Division
238 N. Olympic Avenue
Arlington, WA 98223



Frequently Asked Questions **CONTINUED**

color: should clear after running your cold water tap for a few minutes. If the color persists, please call us. We may need to flush the water distribution line in your area.

What if I'm extremely sensitive to chlorine?

If you are extremely sensitive to the taste or smell of chlorine, you can use a granular-activated carbon filter to remove it from tap water. These filters can be purchased as part of a water pitcher or as units that attach directly to the faucet. If you purchase a filter, make sure to follow the instructions and change filters on schedule.

Is fluoride added to my water?

No, the City of Arlington does not add fluoride to the water.

Is bottled water safer than tap water?

Not necessarily. Like tap water, the safety of bottled water depends on both the source of the water and the treatment it undergoes. Bottled water is regulated by the Food and Drug Administration (FDA), not the EPA as is tap water. If you are using bottled water for health purposes, you should research the product you are using to make sure it provides the benefits you want.

What is water hardness?

Hardness refers to dissolved minerals in the water (calcium and magnesium) that interfere with the sudsing action of soap. The harder the water, the less the sudsing action. The water you receive is very soft which means that dishwashing, clothes washing and other activities require less soap than other areas of the country.

IMPORTANT TELEPHONE NUMBERS

Water Department	360.403.3500	Northwest Drinking Water Operations	206.464.7961
Emergency Pager	425.258.0919	Safe Drinking Water Hotline	1.800.426.4791
Utility Billing Questions	360.435.5785	U.S. Environmental Protection Agency	202.260.2740