

Annual

Water Quality Report

1999

We are pleased to present a summary of the quality of water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence Report" to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to minimize. The City of Arlington Water Utility is committed to providing you with the safest and most reliable water supply.

What is the Source of Our Water?

Arlington's primary water source includes three shallow wells at Haller Park and one deep well near the airport. These two sources serve customers in the Arlington Service Area (north of 172nd Street, east of 43rd Avenue, south of the Stillaguamish River, and west of 88th Avenue). Customers in the Island Crossing Service Area (north of 180th Street, east of I-5, west of 43rd Avenue, and south of the Stillaguamish River) are served by a connection to Marysville's North Service Area system. Sources of water in the Island Crossing Service Area include Edward Springs, the Stillaguamish Ranney Collector and several public wells.

Important Health Information

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).

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 from 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.

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).

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
Lead (at customer tap)	Jan. 99	ppb	AL=15	0	22	0-22	Corrosion of household plumbing systems; erosion of natural deposits	NO
Manganese	Jun. 98	ppb		9,999	34	0-34		YES
Nitrate	Jun. 98	ppm	10	10	1.16	0-1.16	Runoff from fertilizers; leaching from septic tanks, sewage; erosion of natural deposits	YES
Sodium	Jun. 98	ppm	9,999	9,999	6.1	0-6.1		YES
Microbiological Contaminants								
Total Coliform ¹	Sep. 98	Samples	5% pos.	0	1		Naturally present in the environment	YES
Turbidity ²	Dec. 98	NTU	0.5	0	1.8		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	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;	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 ³	Feb. 98	Samples	5% pos.	0	1	nd-1	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

¹ 1 out of 89 samples taken in the Arlington service area tested positive. Repeat samples were taken & no coliform was detected.

² Bilateral compliance agreement allows MCL of 1.0 NTU. Department of Health is notified when turbidity level exceeds 1.0 NTU.

³ 1 out of 278 samples taken on the north end distribution in 1998 tested positive. Repeat samples were taken & no coliform was detected.

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

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)

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 most minute 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 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.

To reduce your exposure to lead and copper, follow these simple steps.

1. Always draw drinking water and cooking water from the cold water tap.
2. Never make baby formula with water from the hot water tap.
3. Use the first 4-6 ounces of water that has stood in your pipe for over six hours for something other than consumption.
4. Keep your kids away from paint chips or paint dust.
5. Make sure children always wash their hands before eating.
6. In homes 10 years or older, seek professional assistance in paint removal projects. (Do not remove the paint by sanding or using a heat gun).
7. Make sure your family's diet includes adequate amounts of calcium and iron (milk, yogurt, eggs, cheese, meat, spinach, and broccoli). This can greatly reduce the harm done by any lead ingested.
8. Dust, vacuum and shampoo carpets, and damp mop floors more frequently in homes suspected of containing lead.

Why Did the Water Department Receive a Treatment Variance From Department of Health?

In 1998 the Haller wellfield - our primary drinking water source - was designated by Department of Health (DOH) as "ground water under the influence of surface water". The new source water designation requires that we begin to meet water quality standards prescribed in the Surface Water Treatment Rule. Our existing water plant is not capable of meeting these standards, so DOH granted the water department a Bilateral Compliance Agreement which allows the water treatment plant to be operated within specific parameters that provide the best possible level of drinking water quality.

Items the City of Arlington has agreed to complete, and their current status, are:

1. Perform interim disinfection treatment, monitoring and reporting for the Haller wellfield.
Status: daily and monthly items are completed as required.
2. Notify the public that the Haller wellfield has been designated as groundwater under the direct influence of surface water.
Status: notification is published quarterly in the Arlington Times.
3. Conduct corrosion control pilot studies.
Status: corrosion control methods were evaluated in 1997.
4. Submit a project report and final corrosion control treatment recommendation.
Status: a corrosion control treatment recommendation was submitted and the approved method was implemented in March 1997.
5. Submit construction documents for a new water treatment facility.
Status: construction documents have been submitted and are currently being reviewed by DOH.
6. Construct a new water treatment facility.
Status: construction is expected to begin December 1999.
7. Monitor water quality parameters.
Status: water quality parameters are monitored as required.
8. Monitor tap water quality for lead and copper.
Status: tap water is monitored as required.

Additional information about the Bilateral Compliance Agreement can be obtained by contacting us at (360) 403-3500.

Customer Views Are Important to Us

Call the City of Arlington Water Department at (360) 403-3500 for information about the next opportunity for public participation in decisions about our drinking water. Opportunities are also displayed on our community television channel and the City Council agenda.

**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



Questions or Comments...

We'll be happy to answer any questions about Arlington Public Works Water Utility Division and our water quality. We can be reached at:

Telephone: (360) 403-3500
E-mail: waterquality@ci.arlington.wa.us
Mail: Arlington Public Works Department
Water Utility Division
238 N. Olympic Avenue
Arlington, WA 98223
Attn: Water Quality

DRINKING WATER PHONE NUMBERS:

City of Arlington	
Water Utility	(360) 403-3500
Water Emergencies	1-800-291-8360
Utility Billing Questions	(360) 435-5785
Northwest Drinking Water Operations	(206) 464-7961
Safe Drinking Water Hotline	1-800-426-4791
U.S. Environmental Protection Agency	(202) 260-2740