

Annual Drinking Water Quality Report for 2016  
City of Arlington, Oregon

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source comes from two deep wells that are fed by an underground aquifer. Well # 1 is located at the corner of Highway 19 and Main Street and has a depth of 600 feet. Well # 2 is located at the North end of 3<sup>rd</sup> Street and has a depth of 450 feet.

We're pleased to report that our drinking water is safe and meets federal and state requirements. This report shows our water quality *and* what it means.

If you have any questions about this report or concerning your water utility, please contact Tim Wetherell, Public Works Superintendent at (541) 454-2740. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Wednesday after the first Monday of each month at 6:30p.m. in the Council Chambers of the Municipal Building 500 W. First Street, Arlington.

The City of Arlington routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2016. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water including bottled drinking water may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years~ or a single penny in \$10,000,000.

*Action Level* - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

*Treatment Technique (17)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level*- The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCIs are set as close to the MCLGS as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - The "Goal" (MCLG) is 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.

<b>EPA 1 TEST RESULTS</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
8. Arsenic Tested 7/15/14	N	ND	ppb	n/a	10	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
10. Barium Tested 8/20/08	N	0.0065	ppm	2	2	Discharge of drilling wastes discharge from metal refineries erosion of natural deposits
14. Copper Tested 6/30/16	N	0.214	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives
16. Fluoride Tested 8/20/08	N	2.2	ppm	4	4	Erosion of natural deposits water additive which promotes strong teeth; discharge <i>from</i> fertilizer and aluminum factories
17. Lead Tested 6/30/16	N	2.0	ppb	0	AL~15	Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (as Nitrogen) Tested 4/19/16	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage; erosion of natural deposits
13. Chromium Tested 8/20/08	N	3.06	ppb	100	100	Discharge from steel and pulp mill, erosion from natural deposits.

<b>EPC 2 TEST RESULTS</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Inorganic Contaminants</b>						
8. Arsenic Tested 08/09/12	N	9.00	ppb	n/a	10	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
10. Barium Tested 09/03/09	N	0.061	ppm	2	2	Discharge of drilling wastes discharge from metal refineries erosion of natural deposits
14. Copper Tested 6/30/16	N	0.214	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives
16. Fluoride Tested 09/03/09	N	0.743	ppm	4	4	Erosion of natural deposits water additive which promotes strong teeth; discharge <i>from</i> fertilizer and aluminum factories
17. Lead Tested 6/30/16	N	2.0	ppb	0	AL~15	Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (as Nitrogen) Tested 4/19/16	N	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage; erosion of natural deposits

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations, and is linked to other health effects such as skin damage and circulatory problems. Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

All 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 the 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 at 1-800-426-4791

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office at (541) 454-2743 if you have questions. We at the City of Arlington work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

## **IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER ELEVATED FLUORIDE LEVELS DETECTED**

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l), of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system (City of Arlington) has a fluoride concentration of 2.2 in well #1. We are currently using it as a backup supply only. Well # 2 has a concentration of 0.742mg/l. It is our main source of water at this time.

Dental fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please call Public Works Superintendent Timothy Wetherell of the City of Arlington at 541-454-2740. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.