



2016 ANNUAL WATER QUALITY REPORT



Providing our customers with safe and reliable drinking water is a primary mission of the City of Fircrest Water Utility. This annual report is intended to provide current, factual information about your drinking water. This report includes details about where your water comes from, what it contains and how it compares to the stringent standards set by regulatory agencies.

All public water systems are required by the Environmental Protection Agency (EPA) to provide all of their water customers with an annual report on the quality of the drinking water provided.

WHERE DOES THE WATER COME FROM?

The City owns and operates the water system which consists of six ground wells and three reservoir tanks with a capacity of 1.8 million gallons. The water comes from two underground aquifers called the Vashon Advance Outwash and the Colvos Sand.

WELLHEAD PROTECTION PLAN

Preventing pollution is the first priority in protecting our groundwater supply. The objective is to reduce the risks of water supply contaminations by chemicals or other materials that might make the water supply unusable. Fircrest is completely dependent on groundwater. To protect the City's many wellheads, the focus is on human activity on the land above the water-bearing zones called aquifers. The City has developed a Wellhead Protection Plan that has been approved by the State Department of Health.

Do I need to take special precautions?

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Why are there contaminants in my water?

The sources of drinking water (both tap 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 can pick up substances resulting

from the presence of animals or human activity. 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 EPA's Safe Drinking Water Hotline at (1-800-426-4791) or from the EPA's Office of Ground Water website at: www.epa.gov/OGWDW.

The City worked together with WSDOH regarding the need and benefits of providing disinfection to resolve the concern of coliform bacteria in the water system. In addition, the City was successful in obtaining a grant to assist in the design of the disinfection system.

In order to assure the water system remains free of coliform bacteria, the City has implemented a disinfection system to the water system. This will provide an extra layer of protection to the miles of pipes that we have in our system and also our storage facilities.

As of September 16, 2016, the City adds chlorine at each well site to maintain a chlorine residual throughout the system. This addition of chlorine will provide that level of protection. This also provides compliance with the Washington State Department of Health. The addition of disinfection to the system is a great health benefit to the City of Fircrest.

WHERE CAN I LEARN MORE ABOUT THE QUALITY OF MY WATER?

To obtain more information on water quality issues contact any of the following agencies:

Fircrest Public Works
253-564-8900
www.cityoffircrest.net

US Environmental Protection Agency
Safe Drinking Water Hotline
800-426-4791
www.epa.gov/safewater

Washington State Department of Health
Northwest Regional Office
253-395-6750
www.doh.wa.gov/ehp/dw

The Fircrest City Council holds regular meetings on the 2nd and 4th Tuesday of each month, at 7:00 pm, in the City Hall Council Chambers, 115 Ramsdell Street, Fircrest, WA.

MONITORING RESULTS

Substance	Highest Level Allowed (MCL)	Highest Level Detected	Ideal Goals (MCLG)	Range of Level Detected Exceed AL	Meets Standards	Potential Source
Inorganic Chemicals (IOC's)						
Fluoride	2 ppm	1.7 ppm	4 ppm	0.2 - 1.7	Yes	Treatment Additive
Nitrites	10 ppm	3.7 ppm	10 ppm	1.9 - 3.7	Yes	Erosion of Natural Deposits
Lead	15 ppb	0.034 ppm	0	< 0.001 - 0.34	Yes	Household Plumbing
Copper	1.3 ppm	0.67 ppm	1.3 ppm	< 0.02 - 0.64	Yes	Household Plumbing
Microbiological Contaminants						
Coliform	5%	None	0	None	Yes	Naturally Present in Environment
Chlorine	4 ppb	0.79 ppm	4 ppb	0.01 - 0.79	Yes	Additive to control microbes
Inorganic Chemicals (IOC's)						
Tests were performed in 2013 on 28 inorganic chemicals for which none exceeded the MCL.						
Volatile Organic Chemicals (VOC's)						
Tests were performed in 2016 on 47 volatile organic chemicals for which none were detected.						
Synthetic Organic Chemicals (SOC's)						
Tests were performed in 2015 on 44 synthetic organic chemicals for which none were detected.						

DEFINITIONS:

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk of health. MCLGs allow for a margin of safety.

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

ppm – Parts per million **ppb** – Parts per billion

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

Microbial contaminants, such as viruses, parasites 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 water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

