Fairchild AFB

Consumer Confidence Report – 2017

Annual Water Quality Report

Is my water safe?

Your tap water is safe and meets all Environmental Protection Agency (EPA) and Washington drinking water health standards.

We are pleased to present this year's annual consumer confidence report as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

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/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Where does my water come from?

Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Fairchild AFB's drinking water comes primarily from four groundwater wells, drawing water from the underground Spokane Valley-Rathdrum Prairie and Hangman Creek Aquifers.

Source water assessment

Twenty-four commercial and industrial locations were evaluated as potential contamination sources to the primary water source. Based on the evaluation, the main well field's risk level is categorized as "low." Additionally, no commercial or industrial operations exist that would pose a risk to the water pumped from the auxiliary well field. If you require further information on the quality of our source water, a copy of the source water assessment, or wellhead protection plan, please contact 92d Civil Engineering Squadron, Operations Engineering (92 CES/CEOE) at (509) 247-5839.

Why are there contaminants in my drinking 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 Safe Drinking Water Hotline at (800) 426-4791.

How can I get involved?

This report was prepared by the 92d Aerospace Medicine Squadron's Bioenvironmental Engineering Flight. For additional information, or if you have any questions or concerns about your drinking water, please contact us at (509) 247-2391.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. Fluoride is also added to your water to promote healthy teeth.

Auxiliary & Emergency Water Sources

Auxiliary Well

Additional water is obtained from the West Plains Aquifer through a well located in Fairchild AFB when demand dictates. This source is often used in the summer when water consumption rises but may be used at other times as well. Water is disinfected with chlorine before being pumped into the distribution system for consumption. Water provided by the auxiliary source is safe to drink and meets all EPA and Washington drinking water health standards.

Spokane Water System

During water contingencies, Fairchild AFB can be supplied water by the City of Spokane through an interconnection. For information about Spokane's water quality or their current Consumer Confidence Report, contact the City of Spokane Water Department at (509) 625-7800 or visit https://my.spokanecity.org/publicworks/water/.

A few words about lead in drinking water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Fairchild AFB is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Water conservation!

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Your Water Quality

To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve drinking water's taste and have nutritional value at low levels. The tables below list all of the contaminants and added substances that we detected during the calendar year of this report as well as samples that were collected within the previous five years. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions near the end of this report.

WATER QUALITY DATA TABLE

Monitoring data below represents the water quality of the entire base water distribution system.

Contaminants (units)	MCLG	MCL	Range or Result	Sample Year	Violation		Typical Source
Inorganic Contaminants							
Nitrate [measured as Nitrogen] (ppm)	10	10	.92 – 1.4	2017	No		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfection By-Products							
Total Trihalomethanes (ppb)	NA	80	1.73	2017	No		By-product of drinking water disinfection
Contaminants (units)	**MCLG**	**AL**	**Result**	**Sample Year**	**# Samples Exceeding AL**	**Overall Exceeds AL**	**Typical Source**
Lead and Copper Monitoring Results							
Lead - action level at consumer taps (ppb)	0	15	11.3	2015	2	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	1.3	.54	2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Added Substances (units)	**MCLG**	**MCL**	**Range**	**Sample Year**	**Violation**		**Typical Source**
Continuous Fluoride Monitoring Results							
Fluoride (ppm)	4	4	.69 – .999	2017 (Monthly)	No		Added to promote healthy teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories

Unregulated Contaminant Monitoring Rule (UCMR) Results

UCMR contaminants are used to evaluate and prioritize contaminants on the Drinking Water Contaminant Candidate List, a list of contaminants EPA is considering for possible new drinking water standards. These contaminants do not have an EPA MCL but do have a health advisory (HA) level. EPA HA's identify the concentration in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure. Bioenvironmental Engineering conducts ongoing monitoring to ensure results are consistently below the HA.

Contaminants (units)	HA	Your Water	Sample Date	Typical Source
Perfluorooctanesulfonic acid (PFOS) (ppt)	70	2.1 – 4.2	2017	Fire retardant foam
Perfluorooctanoic acid (PFOA) (ppt)	70	ND	2017	Fire retardant foam

- Additionally, we collected 112 bacteriological samples in 2017. All samples were satisfactory.

Unit Descriptions	
Term	**Definition**
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
NA	not applicable
ND	not detected

Important Drinking Water Definitions	
Term	**Definition**
MCLG	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.
MCL	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.
HA	HA: Health Advisory: The concentration in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

For more information please contact:

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To view this report electronically, please visit the following URL in the Bioenvironmental Engineering SharePoint at:

https://eim.amc.af.mil/org/92mdg/AerospaceMedicineSquadron/SGPB/WaterEnvironmentalQuality/Water/Historical%20CCRs/FAFB%20CCR%202017.pdf