

Who Regulates Water Quality?

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and Washington State Department of Health (DOH) prescribe regulations which limit the amount of contaminants in water provided by public water systems such as Alger.

Other standards for water protection include:

- Assessing drinking water sources;
- Protecting wells;
- Making sure water is treated by qualified operators;
- Ensuring the integrity of water distribution systems;
- Conducting water quality monitoring; and
- Making information available to the public on the quality of their drinking water.

Source of Your Drinking Water

The District obtains water for Alger from an artesian well located east of Alger. This well draws water from an aquifer approximately 60 feet below the ground surface. The facility automatically pumps water out of the aquifer to a water storage tank located west of Interstate 5. Water then flows by gravity back to the community, based on water demands from the families that reside in Alger.

Chlorine as a Disinfectant

Chlorine is added on a continual basis to drinking water that is distributed to Alger. Although the taste and odor of this disinfectant is undesirable to some people, chlorine is added to eliminate harmful bacteria that may be found in water.

Chlorine is the best method of protection for water systems that are the size of Alger.

Source Water Protection

To achieve improved protection of public water supply sources and the health of Washington's citizens, the Washington State Department of Health has developed the Source Water Assessment Program (SWAP).

The SWAP program evaluates potential threats to the safety of our water supplies by assessing sources of contamination. The SWAP is designed to give you and your community more information about the source of your drinking water, and any threats to its long-term quality that we can identify and address through a pollution prevention approach.

To learn more about the SWAP, contact the Washington State Department of Health at (360) 236-3149 or visit www.doh.wa.gov/ehp/dw.

Questions?

For more information about your drinking water, please call Skagit PUD at (360) 424-7104. We welcome your comments and suggestions. We also invite you to attend Skagit PUD commission meetings.

The commissioners hold open meetings every Tuesday of the month at 4:30 p.m. in our Aqua Room located at 1415 Freeway Drive, Mount Vernon. You may also visit our Web site at www.SkagitPUD.org.



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Important Information Inside About Your Drinking Water

Alger Drinking Water Quality Report

Public Water System ID No. 01400K



Skagit Public Utility District proudly presents its annual water quality report for the Alger and the Lake Samish Road communities for your review. In this publication, you will learn where your water comes from, how it is treated, and the results of water quality monitoring conducted in 2008.

We are pleased to inform you that Alger's drinking water met or exceeded all state and federal drinking water standards in 2008.

What's in your drinking water ...

The test results summary table below contains actual measurements of water quality parameters that often change from day to day. Test results presented here represent an average of testing conducted throughout the year. Not listed are the test results for other compounds that indicated no presence at all. Skagit PUD has consistently received favorable results for contaminants such as chloroforms, benzene, nitrates, and many other compounds. These results were not included in this report, for the sake of simplicity and space.

Water Quality Monitoring Results In 2008 For Alger Water System					
Detected Compounds	Source	EPA Allowable Limits		Alger System	Violation
		Ideal Level/Goal MCLG	Maximum Allowable MCL	Range	
Regulated Substances					
Total Chlorine	Added as a drinking water disinfectant	4 ppm (MRDLG)	4 ppm (MRDL)	0.06 – 1.55 ppm	No
Total Coliform Bacteria	Naturally present in environment	0.0%	Can be present in 5% of samples	None Detected (0.0% of 12 Samples)	No
Arsenic	Erosion of natural deposits	0.0 ppb	10 ppb	6 ppb	No
Total Trihalomethanes	By-product of drinking water chlorination	n/a	80 ppb Average	16.1 ppb	No
Haloacetic Acids	By-product of drinking water chlorination	n/a	60 ppb Average	3.8 ppb	No
Secondary Regulated Compounds (Substances that cause changes in water's cosmetic or aesthetic qualities: taste, color and odor.)					
Sodium	Naturally present in environment	n/a	n/a	6.9 ppm	No

Water Quality Definitions

Total Coliforms: A group of non-pathogenic bacteria used in testing water to indicate the presence of pathogenic bacteria. They are naturally present in the environment. If coliforms were found in more samples than allowed, it would be a warning of potential problems.

Chloramines: Compounds used for disinfection; formed by the reaction of chlorine with ammonia. Chloramines extend the disinfecting power of chlorine and reduce the formation of trihalomethanes.

DBP: Disinfection By-Products. Compounds which are formed when water is treated with a disinfectant.

Haloacetic Acids: A disinfection by-product from chlorinating water that contains natural organic matter.

Trihalomethanes: A disinfection by-product from chlorinating water that contains natural organic matter. The most common by-product is chloroform.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG 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.

MRDL: Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the health benefits of the use of disinfectants to control microbial contaminants.

Turbidity: A measure of the cloudiness of water due to suspended particles.

NTU: Nephelometric Turbidity Units. A unit of measure for turbidity based on the amount of light that is reflected from the water.

ppm: Part per million. One part per million corresponds to one penny in \$10,000 or one minute in two years.

ppb: Part per billion. One part per billion corresponds to one penny in \$10,000,000 or one minute in 2000 years.

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

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

Safe Drinking Water: Understanding Potential Sources of Contaminants

DRINKING WATER, INCLUDING BOTTLED WATER, may reasonably be expected to contain at least small amounts of some contaminants. The presence of some 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 (1-800-426-4791) or at www.epa.gov/safewater/.

The sources of drinking water (both tap water and bottled water) include lakes, rivers, 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants in drinking water sources may include:

- Microbial contaminants, such as viruses and bacteria, which may come from septic systems, wildlife, and farm animals.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, 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.



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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, people 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 from their health care providers about drinking water.



EPA and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).