



2014
Drinking Water Quality
Report
City of Kenai
Public Water System

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to inform you about the quality 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. The Alaska Rural Water Association has provided a "Drinking Water Source Protection Plans" report to our water system. A copy of this report is available to you by contacting our office. Our water system managers utilize this report to protect our source water. We are committed to ensuring the quality of your water.

Our water source is ground water from the Beaver Creek Aquifer and is produced from four deep wells located near the Kenai Spur Highway and Beaver Loop Road.

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:

City of Kenai
Public Works Department
210 Fidalgo Avenue
Kenai, Alaska 99611
283- 8236

We want our community to be informed about their water system. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the first and third Wednesdays of each month at Kenai City Hall, 210 Fidalgo Avenue, Kenai, Alaska, starting at 7 p.m.

The City of Kenai Public Water Department 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 1 to December 31, 2014**. All sources of drinking water are subject to potential contamination by naturally occurring or man-made constituents. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of these contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. 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. 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).

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. City of Kenai 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>.

MCL's are set by the Environmental Protection Agency 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.

Please call our office if you have questions. City employees work diligently to provide top quality water to every home. We ask that all our customers help us to protect our water sources, which are the heart of our community, our way of life and our children's future.

To help you better understand the terms and abbreviations in the following table, we have provided the following definitions.

Definitions

(90th Percentile) 90th percentile means, the value of the 90th sample out of 100 samples. (i.e.) sample #90 out of 100 samples, sample #18 out of 20 samples.

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

(MCL) – Maximum Contaminant Level: The "Maximum Allowed" (MCL) is 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 "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.

(ND) – Not Detected.

(pCi/L) – Picocuries Per Liter: Picocuries per liter is a measure of the radioactivity in water.

(ppb) – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Results of Monitoring for Regulated Contaminants – 2014

Water test results for the 2014 compliance period that had any detectable level are listed in the table below, including the results from the most recent tests taken prior to 2014. All test results met the allowable limits, except for arsenic. However, approximately 90% of our water comes from well 2, which tests below the allowable limit.

Table of Contaminants – City of Kenai Water System

Contaminant	Date	Level	Measurement	MCLG	MCL	Source
Arsenic	5/28/14 6/13/14	Low 4.86 High 28.9	ppb	0	10	Erosion of Natural Deposits
Fluoride	5/28/14	465	ppb	4000.0	4000.0	Erosion of Natural Deposits
Barium	5/28/14	12.200	ppb	2000.0	2000.0	Erosion of Natural Deposits
Chromium	5/28/14	0.000	ppb	100	100	Erosion of Natural Deposits
Selenium	5/28/14	0.000	ppb	50	50	Erosion of Natural Deposits
Nickel	5/28/14	.271	ppb	100	100	Erosion of Natural Deposits
Alpha emitters	4/12/06	.0 to 4.1	pCi/L	0	15	Erosion of Natural Deposits
Beta/Photon emitters	4/12/06	3.0 to 7.9	pCi/L	0	50*	Decay of natural & Man-made Deposits
Combined Radium	4/12/06	.04 to .62	pCi/L	0	5	Erosion of Natural Deposits
Uranium	4/12/06	ND to 4.1	ppb	0	30	Erosion of Natural Deposits

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Water Distribution System

Contaminant	Date	Level	Measurement	MCLG	MCL	Source
Lead**	10/9/13	ND	ppb	0.0	15	House plumbing
Copper**	10/9/13	56.4	ppb	1,300	1,300	House plumbing
Trihalomethanes	9/10/14	44.9	ug/L	n/a	80	By-product of drinking water chlorination
Haloacetic Acids	9/10/14	15.7	ug/L	n/a	60	

**90th

The new Water Treatment Plant went online in June 2012. It has been successful in removing color from the water. The color is aesthetic only and does not affect the sanitation or the quality of the water. There may be times when the harmless color causing tannins that have accumulated in the water mains will be stirred up. If you see color, you can clear your water by running your tap. We continue to add sodium hypochlorite to our water as a disinfectant.

There are many regulations pertaining to sampling and monitoring of our water system. Because we had a waiver for Synthetic Organic Compounds (SOC), Other Organic Compounds (OOC) and for Asbestos, we did not test for them during this time period.

Arsenic

In January 2006, EPA lowered the maximum allowable level for arsenic in drinking water from 50 ppb to 10 ppb. Two of our wells exceed this limit. We use those wells only in the summer and only if the other wells cannot meet the increased water usage. If we use these wells we will mail notices to every customer. We are in the process of bringing additional wells online that are below the 10 ppb limit. 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 costs 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.

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