



**2016  
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 6 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, 2016**. 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. The 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

**(90<sup>th</sup> Percentile)** 90th percentile means, the value of the 90<sup>th</sup> 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 – 2016

Water test results for the 2016 compliance period that had any detectable level are listed in the table below, including the results from the most recent tests taken prior to 2016. All test results met the allowable limits.

Table of Contaminants – City of Kenai Water System

| Contaminant          | Date               | Level               | Measurement | MCLG   | MCL    | Source                               |
|----------------------|--------------------|---------------------|-------------|--------|--------|--------------------------------------|
| Arsenic              | 7/13/16<br>7/13/16 | Low 4.5<br>High 8.8 | 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            | 0.271               | ppb         | 100    | 100    | Erosion of Natural Deposits          |
| Alpha emitters       | 4/27/16            | .013 to .42         | pCi/L       | 0      | 15     | Erosion of Natural Deposits          |
| Beta/photon emitters | 12/9/15            | 6.1                 | pCi/L       | 0      | 50*    | Decay of natural & Man-made Deposits |
| Combined Radium      | 4/27/16            | .067 to .42         | pCi/L       | 0      | 5      | Erosion of Natural Deposits          |
| Uranium              | 5/28/14            | 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  | 8/12/15 | 21.3  | ug/L        | n/a   | 80    | By-product of drinking water chlorination |
| Haloacetic Acids | 8/15/16 | 16    | ug/L        | n/a   | 60    | By-product of drinking water chlorination |

\*\*90<sup>th</sup>

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) and Other Organic Compounds (OOC), we did not test for them during this time period. Each well is tested for Volatile Organic Compounds (VOC) every 3 years. The distribution system is tested for asbestos once every 9 year cycle.

### 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 that are not in use exceed this lower limit. In the unlikely event that we cannot meet the City's demand for water we will bring those wells online. If we do, we will mail notices to every water customer.

## CITY OF KENAI PUBLIC WATER SYSTEM



# 2016

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210 Fidalgo Avenue  
Kenai, AK 99611