

2017 Consumer Confidence Report

Barrow Utilities & Electric Co-op., Inc
City of Barrow / Browerville



Una maq̄pigaaq sivunikqaqtuk ikayuutunik suli ilitchugimagiksaanikun Utkeagvium iminagun. Mumiksagin naaga uqautigilugu kimun kaniqsilaruamun.

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) now requires that utilities issue an annual “Consumer Confidence” report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the contaminants our water testing and treatment are designed to remove. Barrow Utilities & Electric Co-op., Inc. is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water. **Please read this report carefully and, if you have any questions, please give us a call at 907-852-3176.**

Water Source

Barrow Utilities & Electric Co-op., Inc. is supplied by surface water from the **Isatkoak Reservoir** and is located on the Northeast side of the dam road. The Alaska Department of Environmental Conservation completed a Source Water Assessment for the Reservoir in 2003 to aid us in identifying and protecting against potential sources of contamination. The Executive Summary from the report is listed below:

Source Water Assessment for the Barrow Drinking Water System ADEC – Drinking Water Protection Program EXECUTIVE SUMMARY

“The Barrow Utilities protection area is approximately 4.1 square miles in size and received a susceptibility rating of “high.” A rating of high to very high is typical for all system with surface water intakes. Potential and existing sources of the following contaminants were evaluated for the Source Water Assessment: bacteria and viruses, nitrates and/or nitrites, heavy metals, cyanide, and other inorganic chemicals, synthetic organic chemicals, volatile organic chemicals, and other organic chemicals. Motor vehicle repair shops, above ground fuel tanks, roads, and residential areas are some potential sources of contaminants identified for the drinking water source. This evaluation included all available water sampling data submitted to ADEC by the system operator. The samples may have been collected from either raw water or post-treated water. Combining the susceptibility of the surface water source with the contaminant risks, this water system has received a vulnerability rating of “high” for each of the six contaminant categories, except for nitrates and nitrites, which received a vulnerability rating of “medium”. This assessment can be used as a foundation for local voluntary protection efforts as well as a basis for the continuous efforts on the part of the Barrow Utilities & Electric Cooperative to protect public health.”

To obtain a copy of the full source water assessment contact the DEC Drinking Water Program at 1-800-770-2137.

Important Health Information

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 Environmental Protection Agency's Safe Drinking Water Hotline.

Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/OGWDW

The sources of drinking water (both tap water 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) **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, or farming.

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

(D) **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.

(E) **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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. Barrow Utilities 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 two 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 (800-426-4791)** or at www.epa.gov/safewater/lead.

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 (800-426-4791)**.

About *Cryptosporidium*

During our testing, we found evidence that *Cryptosporidium* may be present in our source water. The parasite is common in surface water, very hard to kill, and even a well-run water system can contain some live parasites. This parasite can cause outbreaks of intestinal disease, but scientists have not yet determined the best testing methods, or the levels at which a public health danger occurs. We are not currently required to test for *Cryptosporidium* in our finished water, however, we ran quarterly samples through 1997 for a Federal research project and no *Cryptosporidium* were found in the water after the final filtration process. Based on current knowledge, no precaution about our drinking water is currently needed for the general public.

How to Read The Water Quality Table

Every regulated substance detected in BUECI's water is listed in the table, as well as the highest level allowed by regulation and the amount detected. Terms used in the Water Quality Table and in other parts of this report are defined here.

Maximum Contaminant Level (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 (MCLG): 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.

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

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

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

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

We are proud to report that your drinking water meets or exceeds all Federal and State drinking water standards.

Barrow Utilities & Electric Co-op., Inc. Water Quality Table (PWSID #: 320078)

Inorganic Contaminants	Date Tested	Units	MCLG	MCL	Detected ¹ Level	Range	Is this a violation	Major Sources
Fluoride	1/17 -12/17	ppm	4 ²	4	1.26	0.60 – 1.26	No	Water additive which promotes strong teeth
Lead	9/17	ppb	0	AL=15	1.00 ³	na	No	Corrosion of household plumbing
Copper	9/17	ppm	1.3	AL=1.3	0.031 ⁴	na	No	Corrosion of household plumbing
Microbiological Contaminants	Date Tested	Units	MCLG	MCL	Detected ¹ Level	Range	Is this a violation	Major Sources
Turbidity ⁵	1/17 -12/17	NTU	na	TT=0.5 NTU	0.050	0.013 – 0.050	No	Soil runoff
				TT=95% of samples<0.5 NTU	100%	na	No	
Disinfection By-products	Date Tested	Units	MCLG	MCL	Detected Level	Range	Is this a violation	Major Sources
Total Trihalomethanes	3/17 -12/17	ppb	na	80	4.30 ⁶	3.5 –5.5	No	By-product of drinking water chlorination
Total Haloacetic Acids	3/17 -12/17	ppb	na	60	.500	0.500 – 0.500	No	By-product of drinking water chlorination
Unregulated Contaminants	Date Tested	Units	MCLG	MCL	Detected ¹ Level	Range	Is this a violation	Major Sources
Chlorine	1/17 -12/17	ppm	MRDLG=4	MRDL=4	0.46	0.30 – 0.46 ⁷	No	Water additive used to control microbes
Distribution System Chlorine	1/17 -12/17	ppm	MRDLG=4	MRDL=4	0.43	0.26 – 0.43 ⁷	No	Water additive used to control microbes
Volatile Organic Contaminants	Date Tested	Units	MCLG	MCL	Detected ¹ Level	Range	Is this a violation	Major Sources
Xylenes (total)	1/17	ppm	0	10	0.0028	0.0022 – 0.0028	No	Runoff from roads, airport runway and petroleum spills.

Water Quality Table Footnotes

- 1 Single highest measurement, unless otherwise noted.
- 2 State of Alaska Drinking Water Regulations also list fluoride as a secondary contaminant with the MCL at 2 ppm.
- 3 Regulated at the customers tap. Results are reported as the 90th percentile, according to the Lead and Copper Rule. Of the 20 samples tested for lead, none were above the Action Level of 15 ppb.
- 4 Regulated at the customers tap. Results are reported as the 90th percentile, according to the Lead and Copper Rule. None of the samples tested for copper exceeded the current Action Level of 1.3 ppm.
- 5 100% off the samples tested were below the treatment technique level of 0.5 NTU. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtering system.
- 6 The highest annual rolling average.
- 7 State regulations require the chlorine concentration to be above 0.20 ppm at this sample location.

Compliance with Water Regulations

Barrow Utilities is required to monitor 5 Coliform (TCR) Samples per Month. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Total coliform tests are used to determine the adequacy of water treatment and the integrity of the distribution system. In August 2017, only 4 samples were taken. This also caused a Distribution System Chlorine violation. BUECI returned to compliance as soon as 5 samples were submitted in September on 9/19. Test results before and after August had satisfactory results.

Waivers

Under a waiver granted by the State Water Office our system does not have to monitor for inorganic and organic pesticides because previous tests have indicated that these substances do not occur in our source water. Our system is next scheduled to monitor for these contaminants after December 31, 2017.

For more information, call Barrow Utilities & Electric Co-op., Inc. at 907-852-3176.

Key To Table

- AL:** Action Level
- MCL:** Maximum Contaminant Level
- MCLG:** Maximum Contaminant Level Goal
- MRDL:** Maximum Residual Disinfectant Level
- MRDLG:** Maximum Residual Disinfectant Level Goal
- MRL:** Method Reporting Limit
- NTU:** Nephelometric Turbidity Units
- pCi/L:** Picocuries per liter(a measure of radioactivity)
- ppm:** parts per million or milligrams per liter (mg/L)
- ppb:** parts per billion or micrograms per liter (ug/L)
- TT:** Treatment Technique
- na:** not applicable

We encourage public interest and participation in our community's decision affecting drinking water. Regular meetings are held on the last Tuesday of each month at the BUECI conference room. The public is welcome.

PRSRT STD
US Postage
PAID
Permit # 14
Barrow, AK

BOXHOLDER

BUECI
P.O. Box 449
Barrow, AK

BUECI is a proud member of the:



American Water Works Association
Dedicated to Safe Drinking Water

Alaska Water / Wastewater Management Association

WEF

Water Environment Federation