

Annual Water Quality Report 2012

The Petersburg Water Utility is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of high quality drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water comes from two surface water sources, Cabin Creek (primary) and City Creek (backup). As of September 29, 2009 the Borough has been using Cabin Creek as the primary water source. The Cabin Creek Watershed holds 215 million gallons of water and the City Creek Watershed holds 52 million gallons of water. We have a Watershed Management Program available at our office that provides more information such as potential sources of contamination. Source Water Assessments were performed by the State of Alaska on our two watersheds in 2003 and are also available at our office.

We are pleased to report that our drinking water is safe and meets both Federal and State requirements. We want our customers to be informed about their water utility, so if you have any questions about this report or concerning your water utility, please contact Karl Hagerman at 772-4430 extension 35.

Monitoring Your Drinking Water

The Petersburg Water Utility routinely monitors for constituents in your drinking water according to Federal and State laws. In 2012 more than 2,300 separate tests were performed on water samples collected from various points within the distribution system and over 54000 tests, throughout the entire system. The tables contained in this report show the results of our monitoring for the period January 1st to December 31st, 2012.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. The presence of these constituents does not necessarily pose 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 (800-426-4791).

Customer Information

Some utility customers buy bottled water to avoid chlorinated water. Tap water can be de-chlorinated at home by filling a container (preferably glass) that is lightly covered and leaving it on the counter overnight before putting it in the refrigerator to cool for drinking.

PWU's mission is to provide high quality water to our customers. It is a pleasure to serve you and to keep you informed about the quality of your drinking water. Comments and questions are always welcome; contact Duane Powers, Operations Supervisor, at 772-4760. Landlords, businesses and schools are encouraged to share this report with their tenants, employees and students who may not otherwise receive a report. Additional copies are available free of charge.

Vulnerability

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 are available from the Safe Drinking Water Hotline (800-426-4791).

Acronym/Abbreviation Definition

AL	Action Level—The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.
AVG	Average
PWU	Petersburg Water Utility
CDC	Center of Disease Control and Prevention
DEC	Alaska Department of Environmental Conservation
EPA	U.S. Environmental Protection Agency
MCL	Maximum Contaminant Level—The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.
MRDL	Maximum Residual Disinfection Level
MRDLG	Maximum Residual Disinfection Level Goal
NTU	Nephelometric Turbidity Units
PPM	Parts per million or milligrams per liter
MGD	Million Gallons per Day
PPB	Parts per billion or micrograms per liter
Turbidity	Suspended material or cloudiness
TT	Treatment Technique— A required process intended to reduce the level of a contaminant in drinking water.
pCi/L	Radioactivity Concentration Unit



Petersburg Borough

ANNUAL WATER QUALITY REPORT 2012



Petersburg Borough

Water Utilities

P.O. Box 329

Petersburg, AK 99833

Phone: (907) 772-4760

Fax: (907) 772-4587

**WATER UTILITY YEAR END
STATISTICS**

Population served: 3,273

Total Customer Connections: 1106

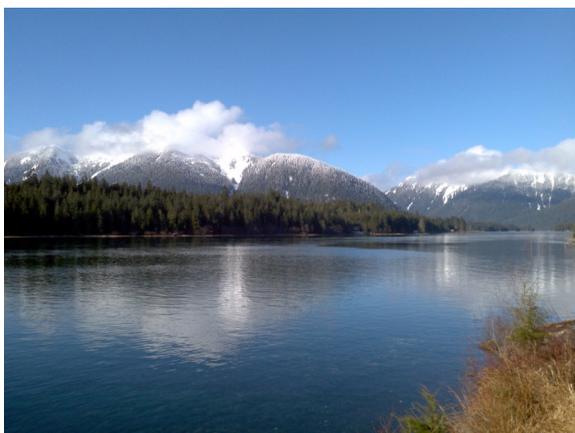
Consumption (Gallons/Month for household): 4,178

Miles of Main: 27.1

Annual Water Production (Million of Gallons): 236

Average Daily Production (Millions of Gallons): .647

Total Treated Water Storage: 2 Million Gallons



2012 ANNUAL TREATED DRINKING WATER QUALITY REPORT						
CHEMICAL	SYSTEM in VIOLATION	Maximum Contaminant Level	Maximum Contaminant level goal	UNITS	Contaminant Level Detected	SOURCES OF CONTAMINANT
INORGANIC						
Gross Alpha (2006)	NO	15	0	pCi/L	-0.69-1= .02 (avg.)	Radioactivity caused by Alpha particle emission
Radium 226 (2006)	NO	5	0	pCi/L	0.0-.1=.063 (avg.)	Natural occurring radioactive element
Radium 228 (2006)	NO	5	0	pCi/L	.33-.84=.63(avg.)	Natural occurring radioactive element
Barium (2010)	NO	2,000	2,000	Ppb	5.99	Erosion from natural deposits
Copper (2012)	NO	1300 (AL)	1300	Ppb	33.4	Corrosion of household plumbing systems. No sites above action level
Fluoride	NO	4	4	Ppm	0.6—0.9	Fluoride is added to the water to promote dental health
Selenium (2010)	NO	50	50	Ppb	<MRL	Erosion from natural deposits
Lead (2012)	NO	15 (AL)	0	Ppb	5.37	Corrosion of household plumbing systems. No sites above action level.
Nitrate/Nitrite	NO	10	10	Ppb	<MRL	Surface run off containing vegetation or agricultural pollutants
DISINFECTION BY-PRODUCTS						
Chloroform	NO	Not Regulated	N/A	Ppb	42.0 Max	Disinfection by-product
Total Trihalomethanes (TTHM)	NO	80	N/A	Ppb	15.7-42.6 23.5 avg	Disinfection by products
Total Haloacetic Acids	NO	60	N/A	Ppb	14.5-31.00 19.33 avg	Disinfection by product
Total Organic Carbon	NO	35% to 50% removal (TT)	35% to 50% removal (TT)	TT	72.1%-82.3% removal, 78.2% avg	Naturally present in the environment. TOC provides a medium for the formation of disinfection by products.
Turbidity	NO	95% of samples under 0.3 (TT)	N/A	NTU	1.15 NTU (Highest) 100% of samples <MCL	Soil run off. Turbidity has no health effects but can interfere with disinfection and provide a medium for microbial growth.
DISINFECTANTS						
<u>Chemical</u>		<u>MRDL</u>	<u>MRDLG</u>	<u>Units</u>	<u>PWU</u>	<u>Sources</u>
Chlorine	NO	4.0	4.0	Ppm	.40-.70 .55 avg	Water additive to control Microbes