Water Quality Data Table 2012

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report (2012). The presence of contaminants in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in 2012. The EPA and/or the State requires us to monitor for certain contaminants less than once per year because the concentrations of those contaminants does not change frequently. The City of Palmer operates under two waivers for sampling; one is an asbestos waiver, there has never been any piping that contains asbestos used within the City so we are not required to sample for it. We also have Synthetic Organic Chemicals (SOC) and Other Organic Chemicals (OOC) monitoring waivers which eliminate sampling for contaminants that have never been introduced to this area.

Contaminant and Type	MCLG or MRDLG	MCL TT, or MRDL	Your Water	Range		Sample Date	Violation Yes or No	Typical Source
				Low	High			
Disinfectants & Disinfectant by-products								
TTHMs [Total Trihalomethanes]	NA	80	4.17	NA		2012	No	By-product of drinking water disinfection
Chlorine Residual	NA	4.0	.4	.3	.6	2012	No	Drinking water disinfectant
Inorganic Contaminants								
Barium (ppm)	2	2	0.0471	0.0193	0.0471	2010	No	Erosion of natural deposits
Fluoride (ppm)	4	4	1.29	0.105	1.29	2010	No	Erosion of natural deposits, water additive that promotes strong teeth
Nitrate [measured as Nitrogen] (ppm)	10	10	1.1	0	1.1	2012	No	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Radioactive Contaminants								
Gross Alpha Emitters (pCi/L)	0	15	0.2	0	0.18	2012	No	Erosion of natural deposits
Uranium (ug/L)	0	30	0.2	NA		2012	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	6.39	NA		2012	Yes	Erosion of natural deposits

Contaminant and Type	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL Y or N	Typical Source
Inorganic Contaminants							
Lead-action level at consumer taps (ppb)	0	15	4.5	2010	0	No	Corrosion of household plumbing systems, erosion of natural deposits
Copper-action level at consumer taps (ppm)	1.3	1.3	0.205	2010	0	No	Corrosion of household plumbing systems, erosion of natural deposits

Additional Contaminants

In an effort to ensure the safest water possible, the State requires us to monitor some contaminants not required by Federal regulations. Of those contaminants only the one listed below was found in your water

Contaminant	State MCL	Your Water	Violation	Explanation and Comment
Nickel	NA	94.4 ug/L	No	The samples ranged from a low of 6.63 to a high of 94.4 ug/L

Violations and Exceedances

Radium (combined 226/228) Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. We are invovled in extending sampling for radon and we are involved in extending testing per ADEC instructions.

Unit Descriptions

Term	Definition
ug/L	Number of micrograms of substance per one Liter of water
ppm	Parts per million, or milligrams per liter (mg/L)
ppb	Parts per billion, or micrograms per liter (µ/L)
pCi/L	Picocuries per liter (measure of radioactivity)
N/A	Not Applicable
ND	Not Detected
NR	Monitoring not required, but recommended

Important Drinking Water Definitions

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.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as is feasible using the best available treatment technology.
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 treatment or other requirements which a water system must follow.
Variances & Exemptions	State or EPA permission not to meet anMCL or a treatment technique under certain conditions.
MRDLG	Maximum residual disinfection 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 benefits of use of disinfectants to control microbial contaminants
MRDL	Maximum residual disinfection 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.
MNR	Monitored Not Regulated.
MPL	State assigned Maximum Permissable Level.

City of Palmer
231 W. Evergreen Avenue
Palmer, AK 99645

Box holder
Palmer, AK 99645

Enclosed is your 2012 Annual Water Quality Report
For more information contact the City of Palmer
Department of Public Works at 745-3400

How is my water treated?

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Drinking water disinfection is considered to be one of the major public health advances of the twentieth century.

Help keep your drinking water safe!

Report any suspicious behavior/activities that you see around City reservoirs and water wells to the Palmer Police Department at 745-4811 or the Department of Public Works at 745-3400.

Hydrant Testing

The City of Palmer will be testing fire hydrants from May-September 2013. Slight discoloration of water is normal, sorry for the inconvenience!

Protection of drinking water is everyone's responsibility!

You can help protect your community's drinking water source in several ways:

· **Eliminate** excess use of lawn and garden fertilizers and pesticides–they contain hazardous chemicals that can reach your drinking water source.
· **Pick up** after your pets.
· **Dispose** of chemicals properly; take used motor oil to a recycling center.
· **Volunteer** in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
· **Organize** a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

2012 ANNUAL DRINKING WATER QUALITY REPORT

PUBLIC WATER SYSTEM ID # AK226020

Is my water safe?

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 provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional sources of water on the property
- Decorative pond

Where does your water come from?

Your water comes from three different groundwater wells which are numbered 1, 4, and 5. The State of Alaska Department of Environmental Conservation (ADEC) conducted source water assessments for all three wells. These assessments are available upon request from the Wasilla ADEC office.. Wells 4 and 5 are located at 950 E. Cope Industrial Way (latitude +61° 35.150' and longitude -149° 05.795'). Well 1 is located at 11971 E. Scott Road (latitude +61°36.466' and longitude -149°08.979'). The production of water is primarily through alternating operation of wells 4 and 5; though they are capable of simultaneous operation if required. Wells 4 and 5 provide 90% of your water. Well 1 runs as needed and supplies 10% of your water.

The well heads received a susceptibility of low and the well aquifer received susceptibility ratings ranging from low to very high depending on the well. Combining these scores produces an overall susceptibility of low to medium for the sources. In addition, this water system has received a vulnerability rating of medium for bacteria/viruses, medium to high for nitrates/nitrites, low to high for volatile organic chemicals, low to high for heavy metals, other organic chemicals, and for synthetic organic chemicals.

Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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 from humans or animals, microbial contaminants, agricultural operations, wildlife, inorganic contaminants, industrial or domestic wastewater discharges, oil and gas production, mining, pesticides and herbicides, or organic chemical contaminants. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Reporting suspicious vehicles or activities near your water supply will greatly help in protecting your water supply.

Water Conservation Tips

Did you know that the average Palmer household uses approximately 150 gallons of water per day or approximately 38 gallons per person per day? There are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.

Turn water off while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.

Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.

Run your washing machine and dishwasher only when they are full. You can save up to 1,000 gallons a month.

Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Capital Project Update

Southwest Extension Ph. 11a - Site work was completed in 2012 for a 1 million gallon reservoir and booster pumping station including installation of 1,500 feet of roadway, 3600 feet of 12-inch and 18-inch water main, and associated site work along with 20 acres of clearing and 240,000 CY of excavation along the north side of the UAA Mat-Su Campus. Total project cost was $1,859,783. With site work complete, the next phase of the project, which includes the 1 million gallon reservoir and booster pumping station, was publicly posted for bids. Construction is expected to begin in July 2013.

Sherrod Area Design - Project includes engineering services for design of approximately 7300 feet of road improvements near Sherrod Elementary School including curb and gutter, storm drainage, sidewalks where required, LED street lights, and pavement. The design also includes replacing approximately 7246 feet of aging steel water main with new ductile iron along with new fire hydrants.

A contract was awarded to HDL Engineering in May 2012. Geotechnical work (pavement and soil boring) to assist with project design began immediately after the award. Actual construction is anticipated to begin in late 2013 and continue in 2014.

Monitoring & Reporting of Compliance Data Violations

Violations include: Failure to submit CCR certification page to DEC. The 2011 CCR was also submitted late, which led to a violation. Once we were notified of these oversights, we corrected them immediately with the DEC.

Questions regarding anything you see on this report may be directed to:

John Berberich
(907)-863-0746
Email: jberberich@palmerak.org
www.cityofpalmer.org

Largest Water User

Our largest water user consumes over 70,000 gallons *per day*.

Information About Lead

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 Palmer 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.