



City of Palmer

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2008 ANNUAL DRINKING WATER QUALITY REPORT

PUBLIC WATER SYSTEM ID # AK2226020

We are pleased to present the 2008 Drinking Water Quality Report for the City of Palmer. This report is designed to keep you informed about the excellent water quality we have provided to you over the past year as well as inform you about upgrades to our water system throughout the City.

Capitol Projects

This year's construction season is in full swing. There are several projects going on around town, two of them planned, and one was in need of an immediate improvement. The Blueberry Area Water and Street Improvement project is being executed by Prosser-Dagg Construction Company (PDCC) of Palmer. They are replacing 50 year old water mains and fire hydrants as well as paving streets, adding curb, gutter, sidewalks and ramps. There will also be storm drains installed. This project is slated to be completed in October of 2009 and PDCC is on schedule at this point. Another project slated to be completed in the fall of 2009 is the Lucas Area Water and Street Improvements. This project is a continuation from 2008 and Twin Peaks Construction Company from Anchor Point is the contractor. There is also a waterline replacement project in progress on South Alaska Street. In the middle of June a 10" water line split 4' long and caused a large amount of water to come up through the cracks in the pavement. With all the water being forced out, a large sink hole was created and a fair amount of asphalt fell through the hole. The City of Palmer Public Works Department is working as quickly as possible to complete this portion of the project. We thank the residents and business owners of Palmer for being patient throughout this project. There are two more water and street improvement projects that are being designed this summer for Gulkana Street and S. Bonanza Street. More information will be provided as we move through the stages of these improvement projects. Southwest Extension Phase II is also underway, the preliminary design has been completed and the next stages are in progress. Construction should begin in 2010.

Water Sources

The State of Alaska Department of Environmental Conservation (ADEC) has provided us with source water assessments for wells 1, 4 and 5 and these are available upon request for viewing. The public water system for City of Palmer is a Class A, Community water system. The water system is located in Palmer and the sources are groundwater wells. The wellheads received a susceptibility of low and the aquifer received susceptibility ratings ranging from low to very high dependant on the well. Combining these scores produces a natural 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. Your water is supplied by three wells located in and just outside the city of Palmer. The production of water is primarily through alternating operation of wells 4 and 5; though they are capable of simultaneous operation if required. These two wells will normally supply 90% of your water. Well #1 runs as needed and supplies 10% of your water.

Water Treatment

We are fortunate to have a good clean water source at the city of Palmer. Water is disinfected with a chlorine solution and fluoride is added to assist in preventing dental diseases. After treatment the water is either directly discharged into our distribution system or pumped to one of our four storage tanks.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. 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 the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. The city of Palmer operates under two waivers for sampling. One is an asbestos waiver. There has never been any piping containing asbestos used within the city we are not required to sample for it. We also have an SOC/OOC waiver which eliminates 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			
<i>Inorganic</i>								
Barium	2	2	0.0466	0.0175	0.0466	2002	No	Discharge from drilling wastes; discharge from metal refineries, erosion of natural deposit
<i>Radioactive</i>								
Alpha Emitters	0	15	0	N/A	N/A	2005	No	Erosion of natural deposits
(pCi/L)								
Radium	0	5	0.54	N/A	N/A	2005	No	Erosion of natural deposits
(226/228) combined								
(pCi/L)								
Uranium	0	30	0.3	N/A	N/A	2005	No	Erosion of natural deposits
(ug/L)								
Contaminant and Type	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL Y or N	Typical Source	
<i>Inorganic</i>								
Copper action level at consumer taps (ppm)	1.3	1.3	0.209	2007	0	No	Corrosion of household plumbing systems, erosion of natural deposits	
Lead action level at consumer taps (ppm)	0	15	4.6	2007	0	No	Corrosion of household plumbing systems, erosion of natural deposits	
Arsenic (ppb)	0	10	Low: .357 High: 2.86	2007	0	No	Erosion of natural deposits	
Nitrate (ppm)	10	10	Low: .858 High: .920	2008	0	No	Erosion of natural deposits	

In 2007, we tested twenty (20) homes for lead and copper. The test result table reflects the highest level detected from all twenty homes. None of the samples exceeded the action level (AL) listed in the table. The next lead and copper testing will be done before the end of 2010; we will be required to test at least 20 homes depending on the population at the time of sampling.

Disinfectants & Disinfectant By-Products

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)

Contaminant	MCLP	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL Y or N	Typical Source
Haloacetic Acids (HAA5) (ppb)	N/A	60	7.6	2006	N/A	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	N/A	80	6.54	2006	N/A		By-product of drinking water disinfection

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	
Term	Definition
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 Permissible Level.

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).

**City Of Palmer
231 W. Evergreen
Palmer, AK 99645**

Monitoring Results

To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL (maximum contaminant level) for a lifetime to have a one-in-a-million chance of having the described health effect. The City of Palmer monitors the distribution system by doing bacterial samples eight times a month according to DEC regulations.

Questions?

If you have any questions about this report or concerning your water utility, please contact Carter Cole, Public Works Director at 745-3400 or John Berberich, Utilities Foreman at 863-0746. All test results are available to the public either through the City of Palmer Public Works Department at 745-3400, or through the Alaska Department of Environmental Conservation, 1700 E. Bogard Road, Building B, Suite 202, Wasilla or 376-5038.

Public Information Notice

To all residents of the City of Palmer:

The city is required under their National Pollutant Discharge Elimination System (NPDES) to develop a public information and education program to control the introduction of household hazardous material to the sewer system.

For example, some of the hazardous wastes found in homes are: acids, antifreeze, caustics, cleaners, disinfectants, floor wax, furniture stripper, herbicides, old medication, paint products, paint thinner, pcb's, pesticides, poisons, printing and photographic chemicals, solvents, transmission fluids, wood preservatives and many more.

To assist the city in keeping these items out of the sewer system it is requested that you contact the Central Landfill at 745-9838 for dates and times when you may bring hazardous wastes in for disposal.

Your cooperation in this matter will allow the city to operate its wastewater treatment facility in accordance with EPA requirements and the design of the facility.