



CITY OF PALMER

231 West Evergreen Avenue • Palmer, Alaska 99645
Phone (907) 745-3271

2004 ANNUAL DRINKING WATER QUALITY REPORT

We are pleased to present the 2004 Drinking Water Quality Report for the City of Palmer. This report is designed to keep you informed about the excellent water standards we have provided to you over the past year.

Capital Projects

During 2004 the water and sewer utilities expanded operations in several newly developed subdivisions within the service area boundaries. Construction of new mains included extensions to Helen Drive, North Bonanza Street, North Chugach Street and North Denali Street.

In 2005 there are again several large subdivisions that will be served by the water and sewer systems, as well as water main construction on Helen Drive and in Palmer West Subdivision. The Southwest Utility extensions that will provide water and sewer service to the area of Trunk Road and the Parks Highway will begin construction in 2005, with scheduled completion in summer 2006. Planning and design for water main replacement in a number of existing city streets will begin in 2005, with construction scheduled for 2006.

Water Sources

Your water is supplied by four wells located in and just outside the City of Palmer. The production of water is primarily through alternating operation of production wells No. 4 and No. 5; though they are capable of simultaneous operation if needed. These two wells will normally supply about 90% of your water. Then there is well No. 1 which supplies about 10% of your water. Well No. 3 is exercised during the summer, but is maintained mostly as a backup source of water. Our goal is, and has been, to provide to you a safe and dependable supply of drinking water.

The State of Alaska Department of Environmental Conservation (DEC) has provided us with a source water protection plan and is available upon request for viewing.

Treatment Conducted at the City of Palmer

We are fortunate to have a good clean water source here at the City of Palmer. This allows minimal treatment to be made.

Treatments conducted at our water wells are:

- Addition of chlorine to help protect against bacteria.
- Addition of fluoride 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.

Monitoring Information

The City of Palmer routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the following page shows the results of our monitoring for the period of January 1 to December 31, 2004, or the most recent test results. 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. All 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 the water poses a health risk.

Contaminants that may be in the water source prior to treatment include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring, or result from urban storm water runoff, wastewater discharges, and farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and domestic uses.
- **Radioactive contaminants**, which are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which can come from gas stations, storm water runoff, and septic systems.

For more information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Vulnerable Population - 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, infants, and some elderly can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The 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, 1-800-426-4791.

Table Definitions

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

- **Non-Detects (ND)** - laboratory analysis indicates the constituent is not present.
- **Parts per billion (ppb) or Micrograms per liter (mg/l)** - One part per one billion parts.
- **Action Level (AL)** – If the contaminant's concentration exceeds this level, other treatment or requirements will be administered.
- **Maximum Contaminant Level Goal (MCLG)** – In drinking water if a contaminant is below this level there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level (MCL)** – This is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Monitoring Results

TEST RESULTS							
CONTAMINANT	SAMPLE DATE	MCL VIOLATION	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION TO THE BEST OF OUR PRESENT KNOWLEDGE
Inorganic Contaminants							
Barium (Wells 1 & 3)	4/2/04	NO	46.6	ppb	2000	2000	Erosion of natural deposits
Barium (Well 4)	4/2/04	NO	17.5	ppb	2000	2000	
Barium (Well 5)	9/2/04	NO	20.3	ppb	2000	2000	
Nitrate levels							
(Well #1 & #3)	3/4/04	NO	ND	ppb	10,000	10,000	Run off from fertilizer used leaching from septic tanks, sewage
(Well# 4)	3/4/04	NO	ND	ppb	10,000	10,000	Erosion of natural deposits
(Well# 5)	2/4/04	NO	ND	ppb	10,000	10,000	Erosion of natural deposits
Lead and Copper							
Lead	12/2004	NO	7	ppb	0	AL=15**	Corrosion of household plumbing or erosion of natural deposits
Copper	12/2004	NO	285	ppb	1300	AL=1300**	

In 2004 we tested 20 homes for lead and copper. The test result table reflects the highest level detected from all 20 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 2007; we will be required to test 20 homes.

Discussion of 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. Since the MCL's are set by regulatory agencies at very stringent levels and because **we meet or exceed all of the federal and state water quality standards** as shown in the table, it can be determined that the potable water distributed by the City of Palmer is safe to drink.

City of Palmer
231 W. Evergreen Ave.
Palmer, AK 99645 - 6952

2004 Annual Drinking Water Quality Report

Questions?

If you have any questions about this report or concerning your water utility, please contact Greg Wickham, Public Works Superintendent at 745-3925 or John Berberich, Water/Sewer Operator at 745-2297. We want our valued customers to be informed about their water utility. All test results are available to the public either through the City of Palmer Public Works Department at 745-2297, 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.