The table below lists all of the drinking water contaminants that we detected during the calendar year of this report (2013). 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 and/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, so we are not required to sample for it. We also have a SOC/OOC waiver which eliminates sampling for contaminants that have never been introduced to this area.

### Water Quality Data Table 2013

<table>
<thead>
<tr>
<th>Contaminant and Type</th>
<th>MCLG or MRDLG</th>
<th>MCL TT or MDL</th>
<th>Your Water</th>
<th>Range</th>
<th>Sample Date</th>
<th>Violation Yes or No</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disinfectants &amp; Disinfectant by-products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>NA</td>
<td>80</td>
<td>4.17</td>
<td>2.63</td>
<td>6.59</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Chlorine Residual</td>
<td>NA</td>
<td>4.0</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Inorganic Contaminants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>2</td>
<td>2</td>
<td>0.0506</td>
<td>0.0208</td>
<td>0.0506</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>4</td>
<td>4</td>
<td>0.166</td>
<td>0</td>
<td>0.166</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Nitrate (measured as Nitrogen) (ppm)</td>
<td>10</td>
<td>10</td>
<td>0.987</td>
<td>0</td>
<td>0.987</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Radioactive Contaminants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radionuclides</td>
<td>226/228 (Bq/L)</td>
<td>0</td>
<td>5</td>
<td>1.8</td>
<td>NA</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Uranium (ppm)</td>
<td>30</td>
<td>30</td>
<td>0.003 ppm</td>
<td>NA</td>
<td>2013</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Additional Contaminants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead-action level at consumer tap (ppb)</td>
<td>0</td>
<td>15</td>
<td>0.006 MG/L</td>
<td>2013</td>
<td>20</td>
<td>No</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
<tr>
<td>Copper-action level at consumer tap (ppb)</td>
<td>1.3</td>
<td>1.3</td>
<td>0.132 MG/L</td>
<td>2013</td>
<td>20</td>
<td>No</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Violations and Exceedences

<table>
<thead>
<tr>
<th>Unit Descriptions</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ug/L</td>
<td>Number of micrograms of substance per one liter of water</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million, or micrograms per liter (μg/L)</td>
</tr>
<tr>
<td>ppb</td>
<td>Parts per billion, or micrograms per litre (μL)</td>
</tr>
<tr>
<td>pCi/L</td>
<td>Particle in curies per liter (measure of radioactivity)</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>ND</td>
<td>Not Detected</td>
</tr>
<tr>
<td>NR</td>
<td>Monitoring not required, but recommended</td>
</tr>
</tbody>
</table>

### 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.
- **Variations & Exclusions**: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **MRDLG**: Maximum residual disinfectant 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 disinfectant level. The highest level of a disinfectant allowed in drinking water. These are the levels of a disinfetctant deemed to be necessary for the control of microbial contaminants.
- **NDI**: Not Detected. Not Regulated.
- **MPL**: State assigned Maximum Permissible Level.

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**Stay up-to-date!**

- The City of Palmer has a Facebook page, a Twitter account, and a hotline (761-1358) that we use to share information about events, changes in services, project information, etc. Visit [www.cityofpalmer.org](http://www.cityofpalmer.org) for more information.

**Protected drinking water is everyone’s responsibility!**

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

- **Eliminate**
  - Eliminate excess use of lawn & garden fertilizers and pesticides. They contain hazardous chemicals that can reach your drinking water source.
- **Pick up**
  - Clean up after your pets.
- **Dispose**
  - Dispose of chemicals properly; take used motor oil to a recycling center.

**Volunteer**

- Palmer Soil & Water Conservation District is a local organization in Palmer, check them out at [www.palmersoilandwater.org](http://www.palmersoilandwater.org). Use EPA’s Adopt Your Watershed to locate groups in your community.

**Organize**

- 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.

**Help keep your drinking water safe!**

- Report any suspicious behavior/activities that you see around City reservoirs and water wells to the Palmer Police at 745-4011 or Public Works at 745-3400.

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Enclosed is your 2013 Annual Water Quality Report.

For more information, contact the City of Palmer's Utility Foreman, John Berberich, at 745-3400.

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

Box holder
Palmer, AK 99645

Help keep your drinking water safe!
2013 ANNUAL DRINKING WATER QUALITY REPORT

PALMER WATER SYSTEM ID # AK226020

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. 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/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 Drinking Water 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 of or pollution to the system. We are responsible for ensuring cross-connection control regulations and ensuring that no contaminants can enter 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 tanks not included)
- Additional sources of water on the property
- Decorative pond

Capital Project Update

Southwest Extension Ph. 2a - This project is located on Trunk Road on the north side of Mat-Su College. The scope of work for this project includes construction of a one million gallon welded steel water tank, pressure booster station, pumps, underground pipe, valves, fittings, landscaping, and a perimeter fence. The City Council awarded the project to Frawner Corporation on June 27, 2013. 4 bids were received through the City’s competitive bid process and Frawner submitted the lowest responsive, responsible bid at $3,307,420. The substantial completion date for the project is November 29, 2014.

Sherrod Area Water & Street Improvements - The scope of work for this project includes replacing water mains, construct water main tie-ins on Eagle Avenue and near the school district administration building; and make street improvements in conjunction with water system improvements on N-Gulkana St, E. Auklet Avenue, and E. Dolphin Avenue. The contract was awarded to Dirtworks Inc. on July 13, 2014 for $1,400,459.43 and construction started June 2, 2014. Thank you to all the resi-dents of that area for your patience and cooperation while we upgrade old deteriorating water lines. We anticipate construction wrapping up by October 31, 2014.

Monitoring & Reporting of Compliance Data Violations

The City of Palmer did not have any compliance violations in 2013.

The End of Fluoridation

In October 2011 the City Council voted unanimously to prohibit the addition of fluoride to the City water system. This comes after many residents came to the City Council with concerns about fluoride in the water supply. The City of Palmer Water System has a naturally occurring fluoride concentration of approximately 19 parts per million which was re-viewed and concluded that it was sufficient. Many other communities in Alaska have opted to quit adding fluoride to public water for vari-ous reasons, including health concerns and cost.

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 contami-nants 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.

Information About Lead

If present, elevated levels of lead can cause serious health problems, espe-cially 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 in your residence. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 sec-onds to 2 minutes before using water for drinking or cooking. If you are con-cerned 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 Hot-line or at http://www.epa.gov/safewater/lead.

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 ADEC office. Wells 4 and 5 are located at 950 E. Cope Industrial Way (Latitude +149°05′04.5″, Longitude -149°05′39.0″, Elevation 790’), and Wells 1 and 2 (Latitude +149°05′39.0″, Longitude -149°05′04.5″). The production of water is primarily through alternating operation of wells 1 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 quifer 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/nitrates, low to high for volatile organic chemicals, low to high for heavy metals, other organic chemicals, and for synthetic organic chemicals.

Water Conservation Tips

Did you know that the average Palmer household uses approximately 150 gal-lons of water per day, which works out to be ~38 gallons per person per day? There are many low and no-cost ways to con-serve water. Small changes can make a big difference – try one today!

Short showers

A 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.

Water saving showerhead

They’re inexpensive, easy to install, and can save you up to 10 gallons a month.

Full loads

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

Fix the leak

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.

About what you’re saving

Waterways and asphalt don’t need water. Adjust sprinklers so only the yard is wa-tered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.