The table below lists all of the drinking water contaminants that we detected during the calendar year of this report (2018). 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 an SOC/OOC waiver which eliminates sampling for contaminants that have never been introduced to the area.

### Water Quality Data Table 2018

<table>
<thead>
<tr>
<th>Contaminant and Type</th>
<th>MCLG or MDL</th>
<th>MCL, TT, or NRDL</th>
<th>Your Water</th>
<th>Range</th>
<th>Sample Date</th>
<th>Violation</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disinfectants &amp; Disinfectant by-products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine Residual (ppm)</td>
<td>NA</td>
<td>4.0</td>
<td>0.86</td>
<td>0.14</td>
<td>0.86</td>
<td>2018</td>
<td>No</td>
</tr>
<tr>
<td>TTCPs (Total Trichloroethylene (TCE))</td>
<td>NA</td>
<td>80</td>
<td>4</td>
<td>NA</td>
<td>4</td>
<td>2018</td>
<td>No</td>
</tr>
<tr>
<td><strong>Inorganic Contaminants</strong></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>0.0050</td>
<td>0.0208</td>
<td>0.0050</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>4</td>
<td>4</td>
<td>0.166</td>
<td>NA</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>0.529</td>
<td>0.000</td>
<td>0.529</td>
<td>2018</td>
<td>No</td>
</tr>
<tr>
<td><strong>Radioactive Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radium (combined 226/228Ra (g/L))</td>
<td>0</td>
<td>5</td>
<td>0.240</td>
<td>0.170</td>
<td>0.240</td>
<td>2017</td>
<td>No</td>
</tr>
<tr>
<td>Uranium (ppm)</td>
<td>0</td>
<td>30</td>
<td>0.0003</td>
<td>NA</td>
<td>0.0003</td>
<td>2013</td>
<td>No</td>
</tr>
<tr>
<td><strong>Inorganic Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead-0.01g level at consumer taps (ppb)</td>
<td>0</td>
<td>15</td>
<td>2.16</td>
<td>2016</td>
<td>0</td>
<td>No</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
<tr>
<td>Copper-0.01g level at consumer taps (ppb)</td>
<td>1.3</td>
<td>1.3</td>
<td>0.141</td>
<td>2016</td>
<td>0</td>
<td>No</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
<tr>
<td><strong>Additional Contaminants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contaminant</td>
<td>State MCL</td>
<td>Your Water</td>
<td>Violation</td>
<td>Explanation and Comment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrates</td>
<td>8.07 mg/L</td>
<td>No</td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Violations and Exceedances**

Failure to take one out of nine total coliform water samples in April 2018.

**Term Definitions**

- **ug/L**: Number of micrograms of substance per one liter of water.
- **ppb**: Parts per billion, or micrograms per liter (mg/L).
- **pCi/L**: Picocuries per liter (measures of radioactivity).
- **NA**: 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 MCLG as is feasible using the best available treatment technology.
- **TSC**: Treatment Desired: A required action intended to reduce the level of a contaminant in drinking water.
- **TCL**: Treatment Compliance Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Variances & Exclusions**: State or EPA permission not to meet an MCL 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 benefit 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.
- **MNP**: Monitored Not Regulated
- **RPL**: State assigned Maximum Permissible Level.

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**City of Palmer**

231 W. Evergreen Avenue
Palmer, AK 99645

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This is your 2018 City of Palmer Annual Water Quality Report. For more information, contact Alycia Anderson at the City of Palmer—745-3400.

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How is my drinking water treated?

Your water is treated by disinfection. Disinfection involves the injection of sodium hypochlorite into the water at the treatment facility. Sodium hypochlorite is used 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 20th century.

Protection of drinking water is everyone's responsibility!

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

- **Eliminate**
- **Pick up**
- **Volunteer**

**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

**Volunteer**

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

**Help keep your drinking water safe!**

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

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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.palmerak.org for more information.

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Help keep your drinking 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, and persons 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 and whether additional treatment steps are necessary. Cryptosporidium must be ingested to cause illness and it may be spread through means other than drinking water. Individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause illness. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of an infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the illness in a few weeks. However, immunocompromised individuals may experience severe illness. Our monitoring indicated the presence of these organisms in the water, and Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water.

Water Conservation Tips

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

- Turn off the faucet while brushing teeth.
- Only run the washing machine and dishwasher when you have a full load.
- Use low flow shower head and faucet aerators.
- Fix leaks.
- Install a dual flush or low flow toilet or put a conversion kit on the existing toilets.
- Adjust sprinklers so only the yard and garden are being watered. Water during the cooler times of the day to reduce evaporation.

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

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 ensuring that no contaminants can, under any flow conditions, enter the distribution system. We 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
- Watering trough

Cryptosporidium Monitoring

Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water, and Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water, and Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water, and Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water, and Cryptosporidium is a microbial pathogen found in water throughout the U.S. Although disinfection removes cryptosporidium the most commonly used methods cannot guarantee 100% removal. Our monitoring indicated the presence of these organisms in the water.

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 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 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 at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

Household Leaks

The City of Palmer will notify you when a leak is detected through your water meter to help prevent you from having a higher water bill. The most common cause is a leaking toilet. If you need assistance finding the leak, an experienced operator will come to your house to help locate it, free of charge!

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