Dear Resident,

This report is issued to educate you about the quality of drinking water that the City of Minneapolis produced in 2016. We take pride in the water we provide to our residents. We are happy to report that no contaminants were detected at levels that violated federal drinking water standards during 2016.

Attention: If you want help translating this information, call 3-1-1.

Spanish: Atención: Si desea recibir asistencia gratuita para traducir esta información, llame al 3-1-1.

Somali: Ogow: Haddii aad dooneyso in lagaca kaalmeyo tarjamadda macluumaadkani oo lacag la’aan wac 3-1-1.

Hmong: Ceeb toom: Yog koj xav tau kev pab dawb tbiais cov xov no, huu 3-1-1.

TTY: 612-673-2626

City of Minneapolis
2016 Drinking Water Report

The City of Minneapolis is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2016. The purpose of this report is to advance consumers’ understanding of drinking water and heighten awareness of the need to protect precious water resources.

Source of Water

The City of Minneapolis provides drinking water to its residents from a surface water source: surface water drawn from the Mississippi River.

The Minnesota Department of Health has made a determination as to how vulnerable our systems’ source(s) of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. Also, you can view it online at www.health.state.mn.us/divs/eh/water/swp/swa

Call 612-673-3000 if you have questions about the City of Minneapolis drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2016. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

Lead in Drinking Water

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 Minneapolis 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

For more information regarding lead in Minneapolis follow this link www.minneapolismn.gov/publicworks/water/wcmsp-188958#leadtesting

Compliance with National Primary Drinking Water Regulations

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 resulting from the presence of animals or from human activity.
## Minneapolis 2016 Monitoring Results

<table>
<thead>
<tr>
<th>Contaminant (units)</th>
<th>MCLG</th>
<th>MCL</th>
<th>Range (2016)</th>
<th>Average /Result*</th>
<th>Typical Source of Contaminant</th>
<th>Meets Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride (ppm)</td>
<td>4</td>
<td>4</td>
<td>[.66-.72]</td>
<td>.75</td>
<td>State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.</td>
<td>✔</td>
</tr>
<tr>
<td>Haloacetic Acids (HAAs) (ppb)</td>
<td>0</td>
<td>60</td>
<td>[2.7-55.4]</td>
<td>26.85</td>
<td>By-product of drinking water disinfection.</td>
<td>✔</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen) (ppm)</td>
<td>10.4</td>
<td>10.4</td>
<td>N/A</td>
<td>.52</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</td>
<td>✔</td>
</tr>
<tr>
<td>TTHM (Total Trihalomethanes) (ppb)</td>
<td>0</td>
<td>80</td>
<td>[8.7 - 33.3]</td>
<td>25.18</td>
<td>By-product of drinking water disinfection.</td>
<td>✔</td>
</tr>
<tr>
<td>Total Coliform Bacteria</td>
<td>0</td>
<td>&gt;5%</td>
<td>Present N/A</td>
<td>1% ♥</td>
<td>Naturally present in the environment.</td>
<td>✔</td>
</tr>
<tr>
<td>Turbidity (NTU)</td>
<td>N/A</td>
<td>TT</td>
<td>100% for the lowest monthly % of samples meeting the Turbidity limits</td>
<td>0.18 NTU Highest Single Measurement</td>
<td>Soil runoff.</td>
<td>✔</td>
</tr>
<tr>
<td>Chloramine (ppm)</td>
<td>4 MRDLG</td>
<td>4 MRDLG</td>
<td>[2.6 - 3.6 Lowest and Highest Monthly Average]</td>
<td>3.33 Highest Quarterly Average</td>
<td>Water additive used to control microbes.</td>
<td>✔</td>
</tr>
<tr>
<td>Total Organic Carbon</td>
<td>25% - 30%</td>
<td>Removal Required</td>
<td>Quarters below removal rate=0</td>
<td>55.2-64.2% Removal Achieved</td>
<td>Naturally present in the environment.</td>
<td>✔</td>
</tr>
<tr>
<td>Copper (ppm) (June 2015)</td>
<td>1.3</td>
<td>1.3 AL 90% Level .08</td>
<td>0 out of 54 sites over AL</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Lead (ppb) (June 2015)</td>
<td>0</td>
<td>15  AL 90% Level 1.6</td>
<td>0 out of 54 sites over AL</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Cryptosporidium in the river (oocysts/L)</td>
<td>N/A</td>
<td>N/A</td>
<td>nd-.3</td>
<td>N/A</td>
<td>Human and animal fecal waste. Results are from raw water.</td>
<td>✔</td>
</tr>
</tbody>
</table>

*TURBIDITY is a measure of the water clarity. We monitor it because it is a good indicator of the effectiveness of our filtration system.

*This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

3 OUT OF 2249 SAMPLES were positive for total coliforms. Follow-up sampling showed no contamination present.

**Notes:**
- **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 feasible using the best available treatment technology.
- **MRDL** - Maximum Residual Disinfectant Level.
- **MRDLG** - Maximum Residual Disinfectant Level Goal.
- **AL** - Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.
- **90TH PERCENTILE LEVEL** - This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.
- **PPM** - Parts per million, which can also be expressed as milligrams per liter (mg/l).
- **OOCYSTS/L** - Oocysts/Liter (a measurement of the number of Cryptosporidium (or Giardia) spores).
- **PPB** - Parts per billion, which can also be expressed as micrograms per liter (μg/l).
- **nd** - No Detection.
- **N/A** - Not Applicable (does not apply).
- **TT** - Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
- **AVERAGE RESULT** - This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

Results are from raw water.
Contaminants that may be present in source water include:

**MICROBIAL CONTAMINANTS**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**INORGANIC CONTAMINANTS**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**PESTICIDES AND HERBICIDES**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**ORGANIC CHEMICAL CONTAMINANTS**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**RADIOACTIVE CONTAMINANTS**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Safe Drinking Water Hotline at 1-800-426-4791.

Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

**SWITCH TO LOW-FLOW PLUMBING**

Newer toilets can save two gallons or more of water per flush, and low-flow shower heads can use 2.5 fewer gallons per minute than ordinary ones.

**LEAKS AND DRIPS ADD UP QUICKLY**

A slow drip from a tap can waste 15 to 20 gallons of water per day, and a leaky toilet can waste hundreds of gallons a day.

**SMARTER APPLIANCES USE LESS WATER**

When shopping for a new washing machine, pay attention to the “water factor” – the number of gallons of water needed for each cubic foot of laundry. The lower the number, the more water it saves.

**WASH WISELY**

Consider how appliances use water. A washing machine takes 27 to 51 gallons per cycle, so make sure you use the right load-size setting. A dishwasher uses 7 to 14 gallons no matter how many dishes are inside, so only run yours when it’s full.

**LAWN LESSONS**

A rain gauge can help you determine whether and how much your lawn, garden and trees need to be watered. A good rain can eliminate the need to water for a week. If you do need to water, doing so at night will reduce evaporation. And make sure the sprinkler isn’t watering the streets or sidewalks.

**Enjoy our tap water, but conserve**

The City has plenty of tap water for everyone to use. However, it’s important to conserve this water whenever possible. The less water you use, the less energy is used and the lower your utility bill will be. You can find links to conservation resources at:

http://www.dnr.state.mn.us/waters/watermgmt/section/appropriations/conservation.html

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