

**CITY OF MINNETRISTA  
2017 DRINKING WATER REPORT**

**Making Safe Drinking Water**

Your drinking water comes from a groundwater source: seven wells ranging from 253 to 785 feet deep, that draw water from the Mt. Simon, Tunnel City-Mt.Simon, Quaternary Buried Artesian and Tunnel City-Wonewoc aquifers.

Minnetrista works hard to provide you with safe and reliable drinking water that meets federal and state water quality requirements. The purpose of this report is to provide you with information on your drinking water and how to protect our precious water resources.

Contact Minnetrista City Hall, at 952-446-1660 or minnetrista@ci.minnetrista.mn.us if you have questions about Minnetrista's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

The U.S. Environmental Protection Agency sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water. This ensures that tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of certain contaminants in bottled water. Bottled water must provide the same public health protection as public tap 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 Safe Drinking Water Hotline at 1 800 426 4791.

**Minnetrista Monitoring Results**

This report contains our monitoring results from January 1 to December 31, 2017.

We work with the Minnesota Department of Health to test drinking water for more than 100 contaminants. It is not unusual to detect contaminants in small amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health.

Learn more by visiting the Minnesota Department of Health's webpage Basics of Monitoring and Testing of Drinking Water in Minnesota (<http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html>).

**How to Read the Water Quality Data Tables**

The tables below show the contaminants we found last year or the most recent time we sampled for that contaminant. They also show the levels of those contaminants and the Environmental Protection Agency's limits. Substances that we tested for but did not find are not included in the tables.

We sample for some contaminants less than once a year because their levels in water are not expected to change from year to year. If we found any of these contaminants the last time we sampled for them, we included them in the tables below with the detection date.

We may have done additional monitoring for contaminants that are not included in the Safe Drinking Water Act. To request a copy of these results, call the Minnesota Department of Health at 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

**Definitions**

- **AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **EPA:** Environmental Protection Agency
- **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.
- **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.
- **Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
- **MRDL (Maximum residual disinfectant 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.
- **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 the use of disinfectants to control microbial contaminants.
- **NA (Not applicable):** Does not apply.
- **NTU (Nephelometric Turbidity Units):** A measure of the cloudiness of the water (turbidity).
- **pCi/l (picocuries per liter):** A measure of radioactivity.
- **ppb (parts per billion):** One part per billion in water is like one drop in one billion drops of water, or about one drop in a swimming pool. ppb is the same as micrograms per liter (µg/l).
- **ppm (parts per million):** One part per million is like one drop in one million drops of water, or about one cup in a swimming pool. ppm is the same as milligrams per liter (mg/l).
- **PWSID:** Public water system identification.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **Variations and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Water Quality Data Tables**

<b>LEAD AND COPPER – Tested at customer taps.</b>						
Contaminant (Date, if sampled in previous year)	EPA's Action Level	EPA's Ideal Goal (MCLG)	90% of Results Were Less Than	Number of Homes with High Levels	Violation	Typical Sources
<b>Copper</b>	90% of homes less than 1.3 ppm	0 ppm	0.9 ppm	0 out of 19	NO	Corrosion of household plumbing.
<b>Lead</b>	90% of homes less than 15 ppb	0 ppb	0 ppb	0 out of 19	NO	Corrosion of household plumbing.

<b>INORGANIC &amp; ORGANIC CONTAMINANTS – Tested in drinking water.</b>						
Contaminant (Date, if sampled in previous year)	EPA's Limit (MCL)	EPA's Ideal Goal (MCLG)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
<b>Arsenic (07/28/16)</b>	10.4 ppb	0 ppb	1.91 ppb	N/A	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<b>1,4-Dichlorobenzene (p-Dichlorobenzene)</b>	7 ppb	7 ppb	0.22 ppb	0.00 - 0.22 ppb	NO	Discharge from chemical and agricultural chemical factories.
<b>Gross Alpha</b>	15.4 pCi/l	0 pCi/l	3.8 pCi/l	3.1 - 5.0 pCi/l	NO	Erosion of natural deposits.
<b>Combined Radium</b>	5.4 pCi/l	0 pCi/l	0.6 pCi/l	0.0 - 1.2 pCi/l	NO	Erosion of natural deposits.
<b>Barium</b>	2 ppm	2 ppm	0.05 ppm	N/A	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposit.

<b>Combined Radium</b>	5.4 pCi/l	0 pCi/l	3.3 pCi/l	N/A	NO	Erosion of natural deposits.
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<b>CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water.</b>						
Substance (Date, if sampled in previous year)	EPA's Limit (MCL or MRDL)	EPA's Ideal Goal (MCLG or MRDLG)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
<b>Total Trihalomethanes (TTHMs)</b>	80 ppb	N/A	27.6 ppb	N/A	NO	By-product of drinking water disinfection.
<b>Total Haloacetic Acids (HAA)</b>	60 ppb	N/A	12.7 ppb	N/A	NO	By-product of drinking water disinfection.
<b>Total Chlorine</b>	4.0 ppm	4.0 ppm	0.71 ppm	0.47 - 0.98 ppm	NO	Water additive used to control microbes.

Total HAA refers to HAA5

<b>OTHER SUBSTANCES – Tested in drinking water.</b>						
Substance (Date, if sampled in previous year)	EPA's Limit (MCL)	EPA's Ideal Goal (MCLG)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
<b>Fluoride</b>	4.0 ppm	4.0 ppm	0.53 ppm	0.29 - 0.57 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth.

**Potential Health Effects and Corrective Actions (If Applicable)**

**Fluoride:** If your drinking water fluoride levels are below the optimal concentration range of 0.7 to 1.2 ppm, please talk with your dentist about how you can protect your teeth and your family's teeth from tooth decay and cavities. For more information, visit: MDH Drinking Water Fluoridation (<http://www.health.state.mn.us/divs/eh/water/com/fluoride/index.html>). Fluoride is nature's cavity fighter, with small amounts present naturally in many drinking water sources. There is an overwhelming weight of credible, peer-reviewed, scientific evidence that fluoridation reduces tooth decay and cavities in children and adults, even when there is availability of fluoride from other sources, such as fluoride toothpaste and mouth rinses. Since studies show that optimal fluoride levels in drinking water benefit public health, municipal community water systems adjust the level of fluoride in the water to a concentration between 0.5 to 1.5 parts per million (ppm), with an optimal fluoridation goal between 0.7 and 1.2 ppm to protect your teeth. Fluoride levels below 2.0 ppm are not expected to increase the risk of a cosmetic condition known as enamel fluorosis.

**Copper:** During the year, we failed to provide lead results to persons served at the sites that were tested as required by the Lead and Copper Rule during the timeframe allowed. Results were provided to persons served at the sites that were tested late.

**Copper:** During the year, we failed to take a sample and/or submit information on Inorganic Contaminants during the required testing period(s) of 06/01/17 to 09/30/17. Because we did not monitor or failed to monitor completely during the compliance period(s), we did not know whether Lead or Copper was present in your drinking water, and we are unable to tell you whether your health was at risk during that time. 19 out of 20 required samples were submitted.

**Total Chlorine:** During the year, we failed to take the required number of Total Chlorine Residual samples during the required testing period(s) of July 2017. Because we did not monitor or failed to monitor completely during the compliance period(s), we did not know whether Chlorine was present in your drinking water, and we are unable to tell you whether your health was at risk during that time.

**Lead:** During the year, we failed to provide lead results to persons served at the sites that were tested as required by the Lead and Copper Rule during the timeframe allowed. Results were provided to persons served at the sites that were tested late.

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**Some People Are More Vulnerable to Contaminants in Drinking Water**

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. The developing fetus and therefore pregnant women may also be more vulnerable to contaminants in drinking water. These people and their caregivers 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 at 1-800-426-4791.

**Learn More about Your Drinking Water Drinking Water Sources**

Minnesota's primary drinking water sources are groundwater and surface water. Groundwater is the water found in aquifers beneath the surface of the land. Groundwater supplies 75 percent of Minnesota's drinking water. Surface water is the water in lakes, rivers, and streams above the surface of the land. Surface water supplies 25 percent of Minnesota's drinking water.

Contaminants can get in drinking water sources from the natural environment and from people's daily activities. There are five main types of contaminants in drinking water sources.

- **Microbial contaminants,** such as viruses, bacteria, and parasites. Sources include sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.
- **Inorganic contaminants** include salts and metals from natural sources (e.g. rock and soil), oil and gas production, mining and farming operations, urban stormwater runoff, and wastewater discharges.
- **Pesticides and herbicides** are chemicals used to reduce or kill unwanted plants and pests. Sources include agriculture, urban stormwater runoff, and commercial and residential properties.
- **Organic chemical contaminants** include synthetic and volatile organic compounds. Sources include industrial processes and petroleum production, gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants** such as radium, thorium, and uranium isotopes come from natural sources (e.g. radon gas from soils and rock), mining operations, and oil and gas production.

The Minnesota Department of Health provides information about your drinking water source(s) in a source water assessment, including:

- How Spring Park is protecting your drinking water source(s);
- Nearby threats to your drinking water sources;
- How easily water and pollution can move from the surface of the land into drinking water sources, based on natural geology and the way wells are constructed.

Find your source water assessment at Source Water Assessments ([www.health.state.mn.us/divs/eh/water/swp/swa/](http://www.health.state.mn.us/divs/eh/water/swp/swa/)) or call 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

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