City of Pine City
2018 Drinking Water Report

PWSID: 1580008

The City of Pine City is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2018. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. This report is not being distributed to water customers of the City, but is available on request by contacting City Hall at (320) 629-2575. It is also posted on the City's web page at *http://pinecity.govoffice.com.*

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 during normal business hours.

Making Safe Drinking Water

Your drinking water comes from a groundwater source: four wells ranging from 135 to 445 feet deep, that draw water from the Quaternary Buried Artesian, Hinckley-Fond Du Lac and Hinckley Sandstone aquifers.
Pine City 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 Maury Montbriand, Public Works Supervisor, at 612-390-4707 or ldunbar@pinecitygov.com if you have questions about Pine City'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.

Pine City Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2018.
We work with the Minnesota Department of Health to test drinking water for more than 100 contaminants. In recent years, we found one or more contaminants with levels above the Environmental Protection Agency's limits. We found some other contaminants in small amounts, but they were below the Environmental Protection Agency's limits.
Learn more by visiting the Minnesota Department of Health's webpage Basics of Monitoring and Testing of Drinking Water in Minnesota (https://www.health.state.mn.us/communities/environment/water/factsheet/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:

- **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)**: 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.
- **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
- **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 (ug/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).
- **N/A** (Not Applicable): Does not apply.
- **NTU (Nephelometric Turbidity Units)**: A measure of the cloudiness of the water (turbidity).
- **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.
- **PWSID**: Public water system identification.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

- **Variances and Exemptions**: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Contaminant	EPA'S Limit (MCL)	EPA's Ideal Goal (MCLG)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Source
Gross Alpha	15.4 pCi/l	0 pCi/l	4.6 pCi/l	N/A	No	Erosion of natural deposits.
Barium (10/5/16)	2 ppm	2 ppm	0.14 ppm	N/A	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Combined Radium	5.4 pCi/l	0 pCi/l	4.4 pCi/l	N/A	No	Erosion of natural deposits.
Total Haloacetic Acids (HAA)	60 ppb	N/A	36.8 ppb	12.90 – 58.70 ppb	No	By-product of drinking water disinfection.
Total trihalomethanes (TTHMs)	80 ppb	N/A	60.5 ppb	16.40 – 84.50 ppb	No	By-product of drinking water disinfection.
Total Chlorine	4.0 ppm	4.0 ppm	1.68 ppm	0.73 – 2.77 ppm	No	Water additive used to control microbes.

Total HAA refers to HAA5

Substance	EPA'S Limit (MCL)	EPA'S Ideal Goal (MCLG)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Source
Fluoride	4.0 ppm	4.0 ppm	0.92 ppm	0.84 – 0.94 ppm	No	Erosion of natural deposits; Water additive to promote strong teeth.

Contaminant	EPA'S Action Level	EPA'S Ideal Goal (MCLG)	90% of Results were less THAN	# of homes with High Levels	Violation	Typical Source
Lead (10/15/18)	90% of homes less than 15 ppb	0 ppb	3 ppb	0 out of 20	No	Corrosion of household plumbing.
Copper (10/15/18)	90% of homes less than 1.3 ppm	0 ppm	1.52 ppm	4 out of 20	Yes	Corrosion of household plumbing.

Potential Health Effects and Corrective Actions (If Applicable)

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Copper: We are in exceedance of the action level for copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. In response to this issue, we performed a corrosion control study and/or have taken actions to make the water less likely to absorb materials such as copper from your plumbing.

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 or 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 Pine City 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 (https://www.health.state.mn.us/communities/environment/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.

Lead in Drinking Water

You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. Coming in contact with lead can cause serious health problems for everyone. There is no safe level of lead. Babies, children under six years, and pregnant women are at the highest risk.

Lead is rarely in a drinking water source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Pine City provides high quality drinking water, but it cannot control the plumbing materials used in private buildings.

Read below to learn how you can protect yourself from lead in drinking water.

1. **Let the water run** for 30-60 seconds before using it for drinking or cooking if the water has not been turned on in over six hours. If you have a lead service line, you may need to let the water run longer. A service line is the underground pipe that brings water from the main water pipe under the street to your home.
    - You can find out if you have a lead service line by contacting your public water system, or you can check by following the steps at: https://www.mprnews.org/story/2016/06/24/npr-find-lead-pipes-in-your-home
    - The only way to know if lead has been reduced by letting it run is to check with a test. If letting the water run does not reduce lead, consider other options to reduce your exposure.
2. **Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.
3. **Test your water.** In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, arrange with a laboratory to test your tap water. Testing your water is important if young children or pregnant women drink your tap water.
    - Contact a Minnesota Department of Health accredited laboratory to get a sample container and instructions on how to submit a sample:
      Environmental Laboratory Accreditation Program (https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam)
      The Minnesota Department of Health can help you understand your test results.
4. **Treat your water** if a test shows your water has high levels of lead after you let the water run.
    - Read about water treatment units:
      Point-of-Use Water Treatment Units for Lead Reduction
      (https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html)

Learn more:

- Visit Lead in Drinking Water (https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html)
- Visit Basic Information about Lead in Drinking Water (http://www.epa.gov/safewater/lead)
- Call the EPA Safe Drinking Water Hotline at 1-800-426-4791.To learn about how to reduce your contact with lead from sources other than your drinking water, visit Lead Poisoning Prevention: Common Sources (https://www.health.state.mn.us/communities/environment/lead/sources.html).

Pine City works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.