

The City of Hibbing is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2019. 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 Hibbing provides drinking water to its residents from a groundwater source: nine wells ranging from 79 to 535 feet deep, that draw water from the Virginia Formation, Biwabik Iron-Formation, Quaternary Buried Artesian aquifer, and the Quaternary Water Table aquifers. 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% 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% of Minnesota's drinking water.

If you have questions about the City of Hibbing drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water, contact Corey Lubovich, Director of Utility Operations at 218-262-7725 or coreyl@hpuc.com.

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 regulate the amounts 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.

Hibbing Monitoring Results

HPU works 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 \(https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html\)](https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html).

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.

HPU samples 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 - Friday.

Key Abbreviations - Definitions

- 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.
- AL–Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.
- EPA: Environmental Protection Agency.
- 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.
- 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.
- N/A: Not Applicable (does not apply).
- Nd: No Detection.

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- NTU (Nephelometric Turbidity Units): A measure of the cloudiness of the water (turbidity).
- pCi/l (picocuries per liter): a measure of radioactivity.
- ppm: Parts per million, which can also be expressed as milligrams per liter (mg/l).
- ppb: Parts per billion, which can also be expressed as micrograms per liter (µg/l).
- PWSID: Public Water System Identification.
- TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
- Variances & Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Contaminant (units)	MCLG	MCL	Level Found		Violation	Typical Source of Contaminant
			Range	Average/Result*		
Arsenic (ppb)	0	10.4	N/A	1.49	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride (ppm)	4	4	.59-.63	.62	No	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.
Total Haloacetic Acids (HAA) (ppb)	N/A	60	.00-33.0	25.1	No	By-product of drinking water disinfection.
TTHM (Total trihalomethanes) (ppb)	N/A	80	23.0-59.7	49.1	No	By-product of drinking water disinfection.
Tetrachloroethylene (ppb)	0	5	.0 – 0.40	.4	No	Leaching from PVC pipes; Discharge from factories and dry cleaners.
Chlorine (ppm)	4	4	.04-.053	.31	No	Water additive used to control microbes.
Combined Radium	0 pCi/l	5.4 pCi/l		2 pCi/l	No	Erosion of natural deposits.

*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.

****Highest and Lowest Monthly Average.

*****Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Violation	Typical Source of Contaminant
Copper (ppm)	0	1.3	.82	3 out of 60	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	0	15	6.5	2 out of 60	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Fluoride: 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.

Monitoring Results – Unregulated Substances

In addition to testing drinking water for contaminants regulated under the Safe Drinking Water Act, we sometimes also monitor for contaminants that are not regulated. Unregulated contaminants do not have legal limits for drinking water.

Detection alone of a regulated or unregulated contaminant should not cause concern. The meaning of a detection should be determined considering current health effects information. We are often still learning about the health effects, so this information can change over time.

The following table shows the unregulated contaminants we detected last year, as well as human-health based guidance values for comparison, where available. The comparison values are based only on potential health impacts and do not consider our ability to measure contaminants at very low concentrations or the cost and technology of prevention and/or treatment. They may be set at levels that are

costly, challenging, or impossible for water systems to meet (for example, large-scale treatment technology may not exist for a given contaminant).

A person drinking water with a contaminant at or below the comparison value would be at little or no risk for harmful health effects. If the level of a contaminant is above the comparison value, people of a certain age or with special health conditions - like a fetus, infants, children, elderly, and people with impaired immunity – may need to take extra precautions. Because these contaminants are unregulated, EPA and MDH require no particular action based on detection of an unregulated contaminant. We are notifying you of the unregulated contaminants we have detected as a public education opportunity.

More information is available on MDH’s website: A-Z List of Contaminants in Water: <https://www.health.state.mn.us/communities/environment/water/contaminants/index.html> and Fourth Unregulated Contaminant Monitoring Rule (UCMR4) at <https://www.health.state.mn.us/communities/environment/water/com/ucmr4.html>

UNREGULATED CONTAMINANTS – Tested in drinking water.			
Contaminant	Comparison Value	Highest Average Result or Highest Single Test Result	Range of Detected Test Results
Sulfate	500 ppm	3.49 ppm	N/A
Manganese	100 ppb	35.5 ppb	2.78 - 35.50 ppb
Sodium*	20 ppm	31.1 ppm	N/A
Germanium	0 ppb	0.31 ppb	0.00 - 0.31 ppb
Group of 6 Haloacetic Acids (HAA6Br)	N/A	2.27 ppb	0.00 - 6.45 ppb
Group of 9 Haloacetic Acids (HAA9)	N/A	11.88 ppb	0.29 - 24.47 ppb

*Note that home water softening can increase the level of sodium in your water.

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 Hibbing 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.

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/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.

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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](http://www.health.state.mn.us/divs/eh/water/swp/swa/) (www.health.state.mn.us/divs/eh/water/swp/swa/) or call 651-201-4700 or 1-800-818-9318 from 8:00 a.m. to 4:30 p.m., Monday - Friday.

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. Hibbing 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: [Are your pipes made of lead? Here's a quick way to find out https://www.mprnews.org/story/2016/06/24/npr-find-lead-pipes-in-your-home](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 at: [Environmental Laboratory Accreditation Program at https://apps.health.state.mn.us/eldo/public/accreditedlabs/labsearch.seam](https://apps.health.state.mn.us/eldo/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 at: <http://www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html>

Learn more:

Visit [Lead in Drinking Water](http://www.health.state.mn.us/divs/eh/water/contaminants/lead.html#Protect) at <http://www.health.state.mn.us/divs/eh/water/contaminants/lead.html#Protect>

Visit [Basic Information about Lead in Drinking Water](http://www.epa.gov/safewater/lead) at <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](http://www.health.state.mn.us/divs/eh/lead/sources.html) at <http://www.health.state.mn.us/divs/eh/lead/sources.html>