



City of Fridley

2013 Drinking Water Quality Report

Water Monitoring

The City of Fridley (PWS ID 1020031) is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2013. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Your Drinking Water Meets Federal and State Standards

We are proud to report that no contaminants were detected at levels that violated state and federal drinking water standards. This special City of Fridley report includes details on results of recent water quality testing in 2013 and news relating to your City's water system.

What You Need to Know About Drinking Water Regulations

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791. Another helpful resource is the EPA's Ground Water and Drinking Water website at <http://water.epa.gov/drink/index.cfm>.

Trichloroethylene (TCE) and Fridley Drinking Water

Some recent concerns have been expressed whether higher cancer rates have a connection to the City of Fridley water supply. The cancer data provided by the Minnesota Department of Health does not indicate drinking water in Fridley as a source of environmental exposure.

The Minnesota Department of Health (MDH) regularly monitors water quality produced by City of Fridley wells and plants as part of the Federal Safe Drinking Water Act. The City of Fridley has never had a violation of these standards for cancer causing agents.

In 2013, the City of Fridley performed supplemental testing of source wells that have shown past presence of TCE and all plant distribution water. Test results showed no detectable concentration of TCE in any well or distributed water. The EPA Maximum Contaminant Level for TCE in drinking water is 5.0 parts per billion (ppb).

MDH summarized analysis of local concerns regarding cancer in its publication Community Concerns about Cancer in Fridley and Anoka County, Minnesota (<http://bit.ly/1pPBVam>). MDH also has several publications on their website relating generally to cancer, including Cancer and the Environment (<http://bit.ly/OjJuru>), which is written for people who are concerned about cancers that they have experienced themselves or in members of their family or community. See <http://www.health.state.mn.us> for additional documents and reports.

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Water Supply Sources All water supplied by the City of Fridley is treated groundwater. In 2013, the City operated 11 wells ranging in depth from 199 to 870 feet that draw water from the Quaternary Buried Artesian, Jordan-Mt. Simon, Mt. Simon, Prairie Du Chien-Jordan, and Prairie Du Chien Group aquifers. The Jordan and Mt. Simon formations are deep bedrock aquifers. Water in these units is located in the spaces between the rock or sand grains and in bedrock fractures. Artesian aquifers are shallower and store water amid glacial sand and gravel beneath a confining layer of clay or clay till.

A portion of Fridley's water is supplied to its system through an interconnection with the City of New Brighton. This water is treated groundwater sourced from wells in the Mt. Simon, Prairie Du Chien Group, Prairie Du Chien-Jordan, and Mt. Simon-Hinckley aquifers. The interconnection between the two cities provides a backup supply for both cities in the case of a severe emergency that interrupts water service in one of the communities. Before a water source is used for a drinking water supply, it is tested for contaminants. The test results for Fridley water (including water supplied from the New Brighton interconnect) are shown in the table in this report.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source 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.

The City of Fridley is currently implementing its wellhead protection plan. This plan is an effort to protect the groundwater resources that the City of Fridley depends on as its source of drinking water from contaminants. Activities underway in implementing this plan in coordination with the Anoka County Municipal Wellhead Protection Group include education of Fridley residents and businesses relating to what they can do to protect groundwater resources, and private well assessment and closure assistance. For more information on these efforts, see the Anoka County Municipal Wellhead Protection Group website at www.knowtheflow.us. If you know of sealed or unsealed wells on your property, we encourage you to take our well survey at <http://svy.mk/fridleywell>.

The City of Fridley, in cooperation with the Minnesota Department of Health, may have additional future financial assistance for certain residential property owners in sealing of unused wells. Please call Fridley Public Works at (763) 572-3566 for further information.

Wellhead Protection



Water System Update

Since our last water quality report, the City has completed projects to

repair and maintain its treatment and storage systems. These projects are made possible by funding from water rates that Fridley residents and businesses pay.

In early 2014, a water main segment was reconstructed on Matterhorn Drive, due to its history of failure. In addition, water main on Main Street in the city's North Industrial Area is being replaced to provide more consistent service to area businesses. Repairs to mains prone to fracturing will continue in 2015 in the Summit Manor and Plymouth neighborhoods, where some of the oldest city water mains exist. Water main repair projects are selected to repair or replace old water main where water main breaks are frequent, where difficult emergency repair conditions exist, and where the system pressure can be improved.

The City of Fridley continues working toward completion of a major rehabilitation of its Locke Park Water Filtration Plant in 2014 to keep the plant operating efficiently. Upgrades are proposed to include a new filter backwash basin, replacement filter media, and upgraded control system.

For additional information, contact the City of Fridley Engineering Division at (763) 572-3552.

Beware of Water Treatment Scams It is important you are made aware that false claims, deceptive sales pitches, or scare tactics have been used by some water treatment companies. Every person has a right to decide what is best for themselves and their family, and you may choose to install additional water treatment to further lower the levels of contaminants of emerging concern, chlorine, and other chemicals in your water. However, you should be extremely cautious about purchasing a water treatment system. If you are considering the purchase of a home water treatment system, the Minnesota Department of Health (MDH) provides recommendations that you should consider prior to purchasing a treatment system/device. You can find a link to the MDH recommendations at www.ci.fridley.mn.us/department-information/water-division.

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Results of Monitoring 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 2013. 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.)

Key to Abbreviations

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.
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).
nd:	No Detection.
N/A:	Not Applicable (does not apply).

Notes

The City of Fridley produces its own water, and supplements this supply with excess water produced by the City of New Brighton. Data for both systems' water is therefore provided.

***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.**

****Year when samples were taken, unless otherwise noted. When testing years differ for Fridley and New Brighton sources, (F) indicates year of Fridley testing and (NB) indicates year of New Brighton testing.**

*****Highest Quarterly Average.**

******Highest and Lowest Monthly Average.**

¹Four quarterly samples are required to determine an average compliance value for this contaminant. At the end of 2013, only one sample had been collected, therefore violation criteria could not be determined.

²Follow-up sampling showed no contamination present.

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Tested Substance (units)	Year Tested**	EPA Limit(s)	Fridley Level Found		New Brighton Level Found		Meets Federal and State Limits?	Typical Source of Substance in Drinking Water
			Average / Result*	Range of Detections	Average / Result*	Range of Detections		
Alpha Emitters (pCi/l)	2013	MCL: 15.4 MCLG: 0.0	12	N/A	4.6	nd - 4.6	Yes	Erosion of natural deposits.
Arsenic (ppb)	2011	MCL: 10 MCLG: 0	1.1	N/A	—	—	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2011(F) 2012(NB)	MCL: 2 MCLG: 2	0.12	N/A	0.04	N/A	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Combined Radium (pCi/L)	2013	MCL: 5.4 MCLG: 0	6.6	N/A	4.4	nd - 4.4	Yes ¹	Erosion of natural deposits.
Ethylbenzene (ppb)	2013	MCL: 700 MCLG: 700	—	—	1.5	nd - 1.5	Yes	Discharge from petroleum refineries.
Fluoride (ppm)	2013	MCL: 4 MCLG: 4	1.33	1.0 - 1.5	1.1	1.0 - 1.2	Yes	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.
Haloacetic Acids (HAA5) (ppb)	2013	MCL: 60 MCLG: 0	1.45	nd - 1.9	0.75	nd - 1.5	Yes	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	2012(F) 2013(NB)	MCL: 10.4 MCLG: 10.4	0.13	nd - 0.13	0.38	nd - 0.38	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total Trihalomethanes) (ppb)	2013	MCL: 80 MCLG: 0	1.43	0.1 - 1.8	5.45	nd - 10.9	Yes	By-product of drinking water disinfection.
Total Coliform Bacteria (positive samples)	2013	MCL: >1 MCLG: 0	—	—	1	N/A	Yes ²	Naturally present in the environment.
Xylenes (ppm)	2013	MCL: 10 MCLG: 10	—	—	0.01	nd - 0.01	Yes	Discharge from petroleum factories; Discharge from chemical factories.
Chlorine (ppm)	2013	MRDL: 4 MRDLG: 4	1.36***	1.0 - 1.5****	0.3***	0.2 - 0.3****	Yes	Water additive used to control microbes.
Copper (ppm)	2013	AL: 1.3 MCLG: 1.3	90% of samples were < 0.75	0 out of 30 sites tested > AL (1.3)	90% of samples were < 0.23	0 out of 30 sites tested > AL (1.3)	Yes	Corrosion of household plumbing systems; erosion of natural deposits.
Lead (ppb)	2013	AL: 15 MCLG: 0	90% of samples were < 4.8	1 out of 30 sites tested > AL (15)	90% of samples were < 2.6	1 out of 30 sites tested > AL (15)	Yes	Corrosion of household plumbing systems; erosion of natural deposits.

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Additional Information

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. 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 storm water 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.

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Additional Monitoring Monitoring for unregulated contaminants as required by U.S. Environmental Protection Agency rules (40 CFR 141.40) was conducted in 2013. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at (651) 201-4656.

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 Fridley 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>.

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 are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Call (763) 572-3566 if you would like to obtain a paper copy of this report, if you have questions relating to the City of Fridley's drinking water, or if you would like information about opportunities for public participation in decisions that may affect the quality of drinking water.