

# 2016 City of Edina Drinking Water Report

## The City of Edina 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 Edina provides drinking water to its residents from a groundwater source: 18 wells ranging from 381 to 1,080 feet deep that draw water from the Mt. Simon, Jordan and Prairie Du Chien-Jordan aquifers.

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](http://www.health.state.mn.us/divs/eh/water/swp/swa).

Call 952-826-0312 if you have questions about the City of Edina drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

### Results of Monitoring

The results contained in the following table indicate an exceedance of a federal standard. Some other 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.)

### 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 requirements that 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 five samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.

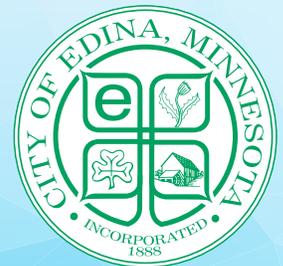
**pCi/l: PicoCuries per liter:** a measure of radioactivity.

**ppb: Parts per billion,** which can also be expressed as micrograms per liter ( $\mu\text{g/l}$ ).

**ppm: Parts per million,** which can also be expressed as milligrams per liter ( $\text{mg/l}$ ).

**nd: No Detection**

**N/A: Not Applicable** (does not apply)



Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2016)	Average/Result*	
Alpha Emitters (pCi/l)	0	15.4	4.4-6.5	6.5	Erosion of natural deposits.
Barium (ppm) (07/25/2013)	2	2	N/A	.14	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Combined Radium (pCi/l)	0	5.4	1.5-3.6	3.6	Erosion of natural deposits.
Fluoride (ppm)	4	4	.61-.67	.68	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)	0	60	2-2.8	2.8	Byproduct of drinking water disinfection.
TTHM (Total trihalomethanes) (ppb)	0	80	1.7-2.2	2.2	Byproduct of drinking water disinfection.
Vinyl Chloride (ppb)	0	2	nd-.3	.3	Leaching from PVC piping; Discharge from plastics factories.
cis-1,2-Dichloroethylene (ppb)	70	70	nd-5.9	5.45	Discharge from industrial chemical factories.
trans-1,2-Dichloroethylene (ppb)	100	100	nd-.15	.08	Discharge from industrial chemical factories.

\*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.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.4-1.1	.8	Water additive used to control microbes.

\*\*\*\*Lowest and Highest Monthly Average. \*\*\*\*\*Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90th Percentile Level	# sites over AL	Typical Source of Contaminant
Copper (ppm)	1.3	1.3	1.73*	5 out of 31	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	0	15	.89	0 out of 31	Corrosion of household plumbing systems; Erosion of natural deposits.

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. City of Edina 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

\*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.

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.

## 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 storm water 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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**.

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.**

# 2016 City of Minneapolis 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](http://www.health.state.mn.us/divs/eh/water/swp/swa).

Call 612-373-3000 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.

### 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 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.)

### 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 that 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.

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2016)	Average/Result*	
Cryptosporidium (oocysts/L)	N/A	N/A	nd-.3	N/A	Human and animal fecal waste.
Fluoride (ppm)	4	4	.66-.72	.75	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)	0	60	2.7-55.4	26.85	Byproduct of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.4	10.4	N/A	.52	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80	8.7-33.3	25.18	Byproduct of drinking water disinfection.

\*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.

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 (800-426-4791).

Contaminant (units)	MCLG	MCL	**	***	Typical Source of Contaminant
Turbidity (NTU)	N/A	TT	.....	.....	Soil runoff.

\*\*Lowest Monthly Percentage of Samples Meeting the Turbidity Limits. \*\*\*Highest Single Measurement.

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

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	2.6-3.6	3.33	Water additive used to control microbes.

\*\*\*\*Highest and Lowest Monthly Average. \*\*\*\*\*Highest Quarterly Average.

Contaminant	Unit	% Removal Required	% Removal Achieved	# of Quarters out of Compliance	Typical Source of Contaminant
Total Organic Carbon	% Removed	25-30%	55.2- 64.2%	0	Naturally present in the environment

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (06/25/2015)	1.3	1.3	.08	0 out of 54	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (06/25/2015)	0	15	1.6	0 out of 54	Corrosion of household plumbing systems; Erosion of natural deposits.

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. 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

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.

**Iron in the water is not pleasant looking and can have a “metallic” odor, but is still well within the safety standards set by the EPA.**

can remove iron stains from white laundry. It is best, though, to wait for the water to run clear before attempting to do laundry. Fixtures may also get discolored from iron.

*I used to get a postcard telling me when you're flushing the hydrants. How am I going to know when you are flushing?*

The costs of mass mailing are high. To save money, information is given to local media, posted on Edina TV, and online at [EdinaMN.gov](http://EdinaMN.gov).

Hydrant flushing is done the last week of April and first week of May. In the fall, it is done the second and third weeks of September.

*For more information, contact the Public Works Department, 952-826-0376 or [EdinaMN.gov/PublicWorks](http://EdinaMN.gov/PublicWorks).*

– Compiled by Susan Waack

## Frequently Asked Questions

***What is the hardness of Edina water and what level should I set my water softener to?***

Edina water has approximately 18 grains of hardness. Set your softener to obtain 3 to 4 grains of hardness.

***Why is my drinking water discolored?***

Iron particles in the City's water sometimes cause discoloration from very light yellow to orange to a reddish-brown. Very small quantities of iron particles can change water color.

Many different things cause rust-colored water. Our water source is ground water, which contains iron along with other minerals. Most Edina pipes are made of cast iron, which reacts with chlorine to create rust. Iron particles can become loose in the water during hydrant flushing, Fire Department tests, water main breaks, switching from one filter plant to another (causing the water to flow in a different direction) and street sweeping with hydrant water.

The City chemically treats all municipal supply wells and 11 of 18 are additionally filtered for iron and manganese removal. The seven unfiltered wells are used during summer as demand increases. Because of this, there may be times when you notice yellow or reddish discoloration from iron. While the water is safe to drink, a taste or odor may be noticed. Running your cold water for a minute or two will typically allow the water to clear.

***When my drinking water is discolored, is it safe to drink? To bathe in? To wash laundry? Will it permanently stain my fixtures?***

Iron in the water is not pleasant looking and can have a “metallic” odor, but it is still well within safety standards set by the Environmental Protection Agency. If you feel uncomfortable drinking it, let the water run until it is clear.

The iron can stain your laundry, especially whites. A free product called Rover, which you can get at Edina City Hall or at the Public Works & Park Maintenance Facility,