

# Joint Water Commission 2010 Water Quality Report

serving Crystal, Golden Valley, & New Hope



## Understanding Water Quality

The Joint Water Commission (JWC), serving the cities of Crystal, Golden Valley, and New Hope, provides drinking water to its residents through a contract with the City of Minneapolis for treated surface water from the Mississippi River.

The water you drink, both tap and bottled, 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 risk to health.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) limits the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) provides the same protection for public health by regulating the contaminants permitted in bottled water.

The JWC ensures the safety of its drinking water by:

- collecting monthly bacteriological samples from throughout its distribution system for testing to detect the presence of fecal chloroform.
- collecting 30 water quality parameter samples for bimonthly tests to determine if the Minneapolis Water Works (MWW) water treatment process is effective for corrosion inhibitors that keep lead present in older home/business water services from entering the water.
- collecting quarterly samples to test for haloacetic acids, trihalomethanes, and thallium. Haloacetic acids and trihalomethanes are by-products of drinking water chlorination and disinfection. Thallium is produced from ore processing sites and discharge from electronic, glass, and drug factories.

This Water Quality Report includes the result of monitoring done by the JWC on its drinking water between January 1 and December 31, 2010. Although the water the JWC provides its residents may meet drinking water standards, the Minnesota Department of Health has determined that the Mississippi River is potentially susceptible to contamination. If you wish to obtain the entire source water assessment of your drinking water, please call 651-201-4700 or 1-800-818-9318 (ext. 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 your local utility department (see back for contact information) if you have questions about your drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.



## Non-Native Speakers

Informacion importante. Si no la entiende, haga que alguien se la traduzca ahora.

Nov yog ntaub ntauv tseem ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.

# Results of Monitoring

No contaminants were detected at levels that violated federal drinking water standards. Some other contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled in 2010. If any of these contaminants were detected the last time they were sampled, they are included in the table along with the date that the detection occurred.)

Contaminant (units)	(MCLG)	MCL	Level Found		Typical Source Of Contaminant
			Range	Average Result*	
Fluoride (ppm)	4	4	.93–1.1	1.06	State-required additive; erosion of natural deposits; fertilizer, aluminum factory discharge
Haloacetic Acids (HAA5) (ppb)	0	60	8.4–22	24.1	Disinfection by-products
Nitrate (as Nitrogen) (ppm)	10.4	10.4	N/A	.36	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits
Total Trihalomethanes (TTHM) (ppb)	0	80	11.7–34.1	23.18	Disinfection by-products

*\*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.*

## Lead & Copper

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 Golden Valley is responsible for providing high quality drinking water, but it 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 two 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 at 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source Of Contaminant
Copper (ppm) 7/27/09	1.3	1.3	.08	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) 7/27/09	0	15	3	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits

## 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. ● **TT** (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water. ● **NTU** (Nephelometric Turbidity Unit): Used to measure clarity in drinking water. ● **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 five samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level. ● **ppb** (parts per billion): Can also be expressed as micrograms per liter (ug/l). ● **ppm** (parts per million): Can also be expressed as milligrams per liter (mg/l). ● **N/A** (Not applicable).

## Sodium and Sulfate

Some contaminants do not have Maximum Contaminant Levels (MCLs) established for them. These “unregulated contaminants” are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated contaminant are found, the response is the same as if an MCL has been exceeded; the water system must inform its customers and take other corrective actions. In the table that follows are the unregulated contaminants that were detected:

Contaminant (units)	Range	Average/Result	Typical Source of Contaminant
Sodium (ppm) 7/3/2008	N/A	9.9	Erosion of natural deposits
Sulfate (ppm) 7/3/2008	N/A	22.5	Erosion of natural deposits

## Turbidity

Turbidity is a measure of the clarity of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Contaminant (units)	MCLG	MCL	Lowest Monthly Percentage of Samples Meeting Turbidity Limits	Highest Single Measurement	Typical Source of Contaminant
Turbidity (NTU)	N/A	TT	99.8	0.33	Soil runoff

## Chlorine

Contaminant (units)	MRDLG	MRDL	Highest and Lowest Monthly Average	Highest Quarterly Average	Typical Source of Contaminant
Chlorine (ppm)	4	4	1.3–2.9	2.58	Water additive used to control microbes

## Contaminants

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and it can pick up substances resulting from the presence of animals or humans. These include:

**Microbial Contaminants:** viruses and bacteria from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic Contaminants:** salts and metals that occur naturally or come from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

**Pesticides and Herbicides:** from agricultural, urban storm water runoff, and residential uses.

**Organic Chemicals** (including synthetic and volatile organic chemicals): by-products from industrial processes and petroleum production and from gas stations, urban storm water run-off, and septic systems.

**Radioactive Contaminants:** can occur naturally or result from oil and gas production and mining activities.

Before water is used for a water supply, it is tested for contaminants and other water quality factors.

## Average Hardness of Water

The City of Minneapolis provides the JWC water that is softened to approximately 5 grains of hardness per gallon. While it is personal preference, most customers find it is unnecessary to soften the water further.

## Special Health Needs

Some people are more vulnerable to contaminants found in drinking water than the general population.

Immunocompromised persons, including those with cancer undergoing chemotherapy, those who have undergone organ transplants, those 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/Centers for Disease Control provide guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*. Call the EPA's Safe Drinking Water Hotline at 1-800-426-4791 for more details.

## For More Information

For additional information about the JWC or if you have questions about your water, visit [www.jwcontap.org](http://www.jwcontap.org) or contact your city's utilities supervisor.



**City of Golden Valley**  
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