



2009 Water Report For the year 2008

City Enforces Sprinkling Policy And Daytime Watering Ban See Page 3 for details



#### Your Drinking Water Is Certified Safe

- The City of Edina's goal is to provide you with high-quality, safe, reliable drinking water that surpasses state and federal requirements. Test results from monitoring done in 2008 show that the City is achieving that goal.
- The U.S. Environmental Protection Agency and the Minnesota Department of Health have identified many chemicals and other substances that might pose a risk to humans. When a contaminant is thought to pose a risk, these agencies set upper limits for safe human consumption.
- This special report contains the City's annual water quality report, which includes complete information on the monitoring done on Edina drinking water last year. Residents in Edina's Morningside Neighborhood who receive their water from the City of Minneapolis will find information detailing the quality of Minneapolis water on Pages 10-12.

Please review the report. If you have any questions or would like more information, contact the Edina Public Works Department, 952-826-0311.

#### s There Too Much Phosphorus In Your Lawn?

Edina homes are known for their lush green lawns, but some property owners might be using unnecessary fertilizer with phosphorus.

- Phosphorus is an element that is found naturally in plants and soil. It can also be found in lawn care fertilizers. Phosphorus is the "P" in the "NPK" rating on the package.
- In recent years, phosphorus overload into lakes, streams and wetlands in the Twin Cities area has become a serious problem. These excessive amounts of phosphorus in the water systems can lead to rapid growth of algae, creating algae blooms. Algae blooms reduce water quality, not only for aquatic plants and animals, but also for people who fish, boat and swim in local lakes.
- Studies done on the phosphorus content of soils in the metro area suggest it is at or near adequate levels to support healthy green lawns without added fertilizer in most areas. Homeowners can evaluate the soil for phosphorus to identify what nutrients are present and at what levels. This will promote the desired plant growth while maintaining the water quality of the surrounding lakes, rivers and wetlands.
- To find out the recommended phosphorus levels and what the levels are in your yard, buy a soil testing kit from any nursery. Prices range from a few dollars for a single test to about \$20 for a multiple-test kit. These kits will test phosphorus levels, as well as other important nutrients, and plant-growing characteristics such as soil pH and alkalinity. The University of Minnesota Extension Service can also test your soil.
- If soil testing indicates that fertilizing is necessary, only do so if the ground is adequately thawed. Fertilizer cannot be absorbed by dormant plants and may be washed overland into storm sewers, which drain into area lakes and streams.

For more information on soil testing by the University of Minnesota Extension Service, call 612-625-3101.



#### Follow City's Guidelines For Lawn-Watering

- To ensure an adequate water supply, the City of Edina has an odd-even sprinkling policy. Homes with even-numbered addresses may water their lawns before 11 a.m. or after 5 p.m. on evennumbered dates of the week. Homes with odd-numbered addresses may water before 11 a.m. or after 5 p.m. on oddnumbered dates. So, the family living at 5320 Kelsey Terrace could water their lawn on even-numbered dates — July 18, 20, 22 and so on.
- To ensure adequate water supply and promote water conservation, the City has a daytime irrigation ban. Watering is banned from 11 a.m. to 5 p.m. daily, reducing water wasted through evaporation and allowing pumps to refill water storage facilities for evening peak use.
- Permits are available to allow proper watering of new sod or seeded areas. Daily watering of new sod and seed is recommended for the first 14 days to establish root growth. After two weeks, normal watering should be sufficient for establishing a new lawn. The planting of new sod or seed during very dry times of the year is discouraged.
- Surcharges for violating the irrigation ban are determined based on the number of water restriction violations issued to the property owner in a three-year period. A written warning will be issued for a first offense. Second offense is \$50; third offense, \$100; fourth, \$200; and each additional offense, \$300.

# Water Smart!



- Residents who live in Edina's Morningside Neighborhood and receive their water from the City of Minneapolis or those with private wells are not affected. Morningside Neighborhood residents must adhere to any restrictions issued by Minneapolis.
- Utilities Superintendent Roger Glanzer reminds property owners that some automatic sprinkler systems must be reset at the end of months that have 31 days because there are two oddnumbered dates in a row.
- Glanzer points out that rain sensors can be purchased for automatic sprinkler systems. A rain sensor is a device that shuts off a sprinkler system if rain is detected. Quickly repairing or disabling broken water heads can also minimize utility bills.

Glanzer also offers the following tips for effective watering:

- Do your lawn sprinkling early in the morning, between 4 and 6 a.m., when water demand is low. After about 10 a.m., both heat and evaporation go up, robbing the lawn of moisture.
- Water your lawn when it needs it, rather than on a set schedule. One sign that a lawn needs water is when it lacks enough moisture to spring back after you walk on it. If it stays flat, it is time to water.
- Adjust lawn watering to the weather. Following a heavy rain, skip your regular watering day until the grass needs it again.
- Check sprinkler heads periodically to make sure they haven't shifted direction to spray water on the side of a building, parking lot or sidewalk instead of the lawn.
- Because the City is not using one of its seasonal wells this year, further water restrictions might be put into place if the weather becomes exceptionally dry for an extended period of time. Further restrictions could include an all-out watering ban.
- For more information, contact Glanzer, 952-826-0311.

#### City Reminds Residents Of Importance Of Sewer Back-Up Insurance

#### Homeowners Asked To Avoid Flushing Certain Items

- A February water main break affecting many homes on Wooddale Avenue was a costly reminder of the importance of insurance for sewer back-ups.
- Since 2002 when a very similar water main break occurred, the City has worked to educate residents about the importance of sewer back-up insurance, which oftentimes is not included in basic homeowner coverage. Despite the ongoing communication, some residents affected by the February water main break did not have insurance and others were under-insured. More than 20 property owners filed claims associated with the incident, but the City's insurance carrier denied them, finding that the City was not negligent.
- City officials are encouraging homeowners to check with their insurance agents to see if they have this important coverage.
- Some water main breaks are unavoidable. Others, though, are caused by blockages in the system. In addition to educating residents about the importance of sewer back-up insurance, staff is reminding residents not to flush certain items down the toilet or wash them down the drain.
- "As we all know, toilet paper and facial tissue is engineered to quickly break down when coming into contact with water. However, disposable woven or cloth-like cleaning aids do not breakdown readily," said Utility

Coordinator David Goergen. "Those items can quickly accumulate in both private and city sanitary sewer lines, causing sewage backups."

- Items not to be flushed include wet wipes, baby wipes, Swiffer sheets, paper towels and shop towels.
- In addition, materials such as grease, oil, gasoline and cleaning solvents should never be disposed of in the drain. Grease will harden and clog sanitary sewer lines. Petroleum products and solvents can release fumes causing oxygen-deficient or combustible atmospheres.

Small amounts of oil — less than one gallon per weekly pick up — may be placed in the trash inside paper towels, plastic bags tied off or the original container.

If you change your car or motor oil, it must be properly managed. Always put motor oil in a container with a cap or lid. Contact the retailer where your oil was purchased for information on the nearest collection site. By State law, any place that sells motor oil must post a sign listing a phone number for disposal options or the location of the nearest collection site. Some collection facilities may charge a fee, so call first.

Gas and fuels must be disposed of as household hazardous waste and dropped

off at the Hennepin County collection site in Bloomington or Brooklyn Park.

The South Hennepin Recycling and Problem Waste Drop-Off Center is located at 1400 W. 96th St., Bloomington. The Hennepin County Recycling Center and Transfer Station is located at 8100 Jefferson Highway in Brooklyn Park. For more information on disposal, contact the City's Health Department at 952-826-0370 or visit www.CityofEdina.com/Health.

### t's Our Watershed

Your watershed begins in your backyard and ends in the Gulf of Mexico, traveling to a local wetland to the Minnesota River and to the Mississippi River in between. Any pollutants we create or place in our back yard eventually arrive at the Gulf of Mexico.

Thinking on a scale this large may make you feel powerless in improving water quality. However, by thinking on a smaller scale, you can affect water quality within your local watershed.

### To improve water quality in your watershed:

- Sweep, bag and/or compost lawn clippings to prevent them from running into wetlands and lakes. Yard waste is one of the largest contributors to degrading water quality.
- Maintain a buffer strip of native vegetation around the wetland or lake in your back yard.
- Do not use phosphorus fertilizers. Fertilizers you use should have a middle number of "0" in the Nitrogen-Phosphorus-Potassium (NPK) rating.
- Clean up pet waste to prevent it from running into wetlands and lakes.
- Check your car fuel, oil and antifreeze for leaks and fix any leaks to prevent these chemicals from entering your local wetland.
- Wash your car on your lawn instead of your driveway to keep pollutants and detergents out of lakes and wetlands.

## Buffer Your Wetland

- A wetland buffer zone is the area around a wetland or lake that contains native trees, grasses and flowers. It is generally an area 16 to 20 feet wide around the shore, but it can be larger and can include plants growing in the water, too.
- As the term "buffer" implies, it acts to protect the wetland from an overload of nutrients and sediment. This vegetated buffer can hold more water and collect more nutrients than bare soil, mowed grass or cropland. The plants in the buffer zone act as a trap for nutrients and sediment, which are carried over the land during rainfalls.
- An added bonus to providing a buffer is increased habitat for wildlife.

### 2008 (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 Jan. 1 to Dec. 31, 2008.

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: 16 wells ranging from 380 to 1,080 feet deep, that draw water from the Mt. Simon, Jordan, and Prairie Du Chien-Jordan aquifers.
- 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. Also, you can view it online at www.health.state. mn.us/divs/eh/water/swp/swa.
- Call **952-826-0311** if you have questions about the City of Edina's 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 2008. 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 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 (μg/l).

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

#### nd: No Detection.

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

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	Contaminant (units)MCLGLevel FoundMCLGMCLRangeAverage/ (2008)Result*		Level Found			
Contaminant (units)			Typical Source of Contaminant			
Alpha Emitters (pCi/l)	0	15.4	nd-15.5	15.5√	Erosion of natural deposits.	
Barium (ppm)	2	2	N/A	.12	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	
Benzene (ppb)	0	5	nd2	.2	Discharge from factories; Leaching from gas storage tanks and landfills.	
Combined Radium (pCi/l)	0	5.4	nd5.5	5.5√	Erosion of natural deposits.	
Fluoride (ppm)	4	4	1-1.2	1.2	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	N/A	4.8	By-product of drinking water disinfection.	
TTHM (Total trihalomethanes) (ppb)	0	80	N/A	12.2	By-product of drinking water disinfection.	
Trichloroethylene (ppb)	0	5	nd4	.4	Discharge from metal degreasing sites and other factories.	
Vinyl Chloride (ppb)	0	2	nd-1.5	1.1	Leaching from PVC piping; Discharge from plastics factories.	
cis-1,2-Dichloroethylene (ppb)	70	70	.8-10	6.57	Discharge from industrial chemical factories.	
trans-1,2-Dichloroethylene (ppb)	100	100	nd5	.33	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.

√Four quarterly samples are required to determine an average compliance value for this contaminant. At the end of 2008, only one sample had been taken. As a result, there is not a violation for this contaminant.

Contaminant (units)	MRDLG	MRDL	****	****	Typical Source of Contaminant
Chlorine (ppm)	4	4	1.1-1.2	1.16	Water additive used to control microbes.

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

\*\*\*\*\*Highest Quarterly Average.

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Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (09/24/2007)	N/A	1.3	.62	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (09/24/2007)	N/A	15	4	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.

If present, infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. 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 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 or at http://www.epa.gov/safewater/lead. Some contaminants do not have Maximum Contaminant Levels 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:

Contominent (unite)	Level	Tunical Source of Contaminant		
contaminant (units)	Range (2008)	Average/Result	Typical Source of Contaminant	
Sodium (ppm)	6.4-20	20	Erosion of natural deposits.	
Sulfate (ppm)	4.1-45.1	45.1	Erosion of natural deposits.	

Monitoring for unregulated contaminants as required by U.S. Environmental Protection Agency rules (40 CFR 141.40) was conducted in 2008. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at **651-201-4656**.

#### 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 stormwater 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.
- 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** quidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 1-800-426-4791.

#### Edina Water Chemistry

Hardness = 17 grains per gallon
Iron = less than 1 part per million
PH = 7.6
Fluoride = 0.9 to 1.1 parts per million
Chlorine = 1 to 1.2 parts per million

## 2008 City of Minneapolis Drinking Water Report

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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 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. Also, you can view it online at www.health. state.mn.us/divs/eh/water/swp/swa.
- Call **612-661-4999** 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 2008. 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.)

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- 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**, which can also be expressed as micrograms per liter (μg/l).
- **ppm: Parts per million**, which can also be expressed as milligrams per liter (mg/l).

#### nd: No Detection.

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

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)	MCLG	MCL	**	***	Typical Source of Contaminant
	Turbidity (NTU)	N/A	TT			Soil runoff.
0	**Lowest Monthly Percentage of Samples Meeting the Turbidity Limits. ***Highest Single Measurement.					

	MCLC	MCI	Leve	l Found	Typical Source of Contaminant	
Contaminant (units)	MCLG	MCL	Range (2007)	Average/Result*		
Fluoride (ppm)	4	4	.26-1.1	1.01	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	nd-52.9	27.34	By-product of drinking water disinfection.	
Nitrate (as Nitrogen) (ppm)	10	10	N/A	.22	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	
TTHM (Total trihalomethanes) (ppb)	0	80	7-57.2	35.29	By-product of drinking water disinfection.	
Total Coliform Bacteria	0 present	>5% present	N/A	1%√	Naturally present in the environment.	

\*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.

 $\sqrt{Follow}\text{-up}$  sampling showed no contamination present.

Contaminant (units)	MCLG	MCL			Typical Source of Contaminant
Chlorine (ppm)	4	4	.5-3.2	2.84	Water additive used to control microbes.

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

\*\*\*\*\*Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (08/14/2006)	N/A	1.3	.12	0 out of 50	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (08/14/2006)	N/A	15	5	3 out of 50	Corrosion of household plumbing systems; Erosion of natural deposits.

Contominant (unita)	Level	Tuniant Course of Courtonninger		
contaminant (units)	Range (2008)	Average/Result	Typical Source of Contaminant	-
Sodium (ppm)	N/A	9.9	Erosion of natural deposits.	
Sulfate (ppm)	N/A	25.5	Erosion of natural deposits.	

Monitoring for unregulated contaminants as required by U.S. Environmental Protection Agency rules (40 CFR 141.40) was conducted in 2008. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at **651-201-4656**.

If present, infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. 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 guality 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 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 or at http://www. epa.gov/safewater/lead.

Some contaminants do not have Maximum Contaminant Levels 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. The table on the previous page shows the unregulated contaminants that were detected:

#### 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 stormwater 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.

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**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. Immunocompromised 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** quidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 1-800-426-4791.

### requently Asked Questions

#### **Q:** Why is my drinking water discolored?

A: Edina's water is sometimes discolored. Iron particles in the City's water can cause discoloration from very light yellow, to orange, to a reddish-brown. It takes very small quantities of iron particles to cause these variations in color. It can look like a lot, but it's not.

Many different things can cause this iron-colored water. Our water source is ground water, which contains some iron. Most of our pipes in Edina are made of cast iron. Cast iron and chlorine cause a chemical reaction — rust. The pressure of hydrant flushing is one way these iron particles can become loose in the water. When the Fire Department performs hydrant pressure tests, which is done at random intervals, it can cause the same effect. When there is a water main break, this can occur. When the City switches from one filter plant to another, it can cause the water to flow in a different direction and you can see the same effect. When the Street Department uses water from a hydrant to sweep the streets, it can occur, too. Sometimes, there is no reason that we can pinpoint — an area has a rust build-up that just breaks loose. At the end of a water line. the water tends to just "sit," causing a build-up of iron. Sometimes, these areas need to be flushed more often than the City-wide, twice-per-year flushing.

Q: When my drinking water is discolored, is it safe to drink? Is it safe for my newborn baby to drink? To bathe

### in? To wash laundry? Will it permanently stain my fixtures?

- A: Iron in the water is not pleasant looking and can have a "metallic" odor, but it is still well within the safety standards set by the Environmental Protection Agency. This extra iron is not harmful for adults or babies. If you feel uncomfortable drinking it, let the water run until it is clear. It is not going to harm your body in any way.
- You may want to wait to do laundry until the water is running clearer. The rust can stain your laundry. The City has a free product called Rover, which you can get at Edina City Hall or at the Public Works Facility to remove rust from white laundry. It is best, though, to wait for the water to run clear before attempting to do any laundry. Fixtures may get discolored from rust. Rover can also clean fixtures.



### Q: What causes my drain to run so slowly or back up? What can I do?

A: If it is running slowly, there is a partial block somewhere in the line that you need to have opened. If the drain backs up only while you're using water, then slowly drains away, you have a block in your sewer service line. If the water backs up into your home even though you're not using any water, it is probably a plug in the City's main sewer line. If you have any questions, call the Utility Department at 952-826-0375 and we will help you.

#### **Q:** Sometimes my water smells like bleach. Why? Is that harmful? What can I do to rid the water of that smell?

A: The City uses recommended amounts of chlorine to remove microorganisms from the water. Edina maintains its chlorine level between 1 and 1.5 parts per million. Some people are more sensitive to the odor of chlorine. We test the water every day to make sure the levels are within national regulation guidelines. This level of chlorine is not harmful, but may smell offensive to individuals. An easy solution is to keep a container of water stored in your refrigerator. The chlorine gas dissipates very quickly, leaving no odor.

### Q: My family from out-of-state says my water tastes different. Can that be true?

A: Yes. Whenever you go to other areas of the state or country, water can taste different because of different treatment processes or different minerals that might be contained in the water.

For more information, contact Utilities Superintendent Roger Glanzer, 952-826-0311 or rglanzer@ci.edina.mn.us.

#### **A**Day In The Life Of Edina Utilities Maintenance Worker Jim Halverson

By Marty Doll

#### While some may prefer to bury their nose

in the literary classics of Dickens or Shakespeare, others tend to find solace in things like the hard-to-believe Weekly World News or the local sports page. Edina Utilities Maintenance Worker Jim Halverson, however, is most at-home when reading something of an entirely different caliber water meters.

- In addition to his other duties in the City's Public Works Department, the 29-year public servant has spent a good portion of his career "reading" Edina's nearly 14,000 water meters multiple times per year. It's his job to make sure that every drop of the City's water supply is accounted — and paid — for.
- Halverson, who was born and raised in Edina and currently calls the City home, collects water usage data from each of the City's residential and commercial meters. The data is then transferred to the City's Utilities Department to be decoded in order for water users to be billed appropriately for their consumption. Since it would be impossible for Halverson to get through all 14,000 meters at once, the City is divided into three "cycles." Halverson reads one cycle each month on a sequential basis; each meter is read and billed every three months.

#### "Today, we can read about 5,400 meters [about one cycle] in two days," said Halverson. "It used to take three meter readers two to two-and-a-half weeks to complete an entire cycle."

- Halverson is referring to the technological advances made in meter reading over the years. What began as a tedious, door-to-door process of documenting water consumption has transitioned into a high-tech system using wireless transponders that can read meters up to 700 feet away. Today, Halverson needs only to drive his mobile unit up and down the City streets. A transponder in the unit sends out a signal that corresponds with each individual water meter. The transponder "wakes up" each meter and automatically collects the usage data, storing it on a laptop computer while Halverson cruises at a leisurely 20 mph.
- "I try to get as many [meters] as possible on the first run," said Halverson. "That way, I don't have to spend a lot of time going back to 'reread.""
- Halverson says that he is usually able to connect to about 97 percent of the cycle's meters on his first pass. After taking the data to the billing department, he is given a list of the



Edina Utilities Maintenance worker Jim Halverson spends some of his time on the job reading meters.

accounts that were missed. He then spends an additional two days out in the field rereading any missed meters.

- "I was told that with this system, 98 percent is the best you will get [on the first run]," said Halverson. "But, even with the 'rereads,' we are still able to get an entire cycle done within five days.
- According to Halverson, there are a few reasons why a meter might be missed on the first pass. First, the signal from the meter might take longer to get out of the house if it is tucked behind a furnace or a lot of duct work. The same holds true for many stucco houses, as the large amount of wire mesh used in construction tends to slow the signal.
- "By the time the signal gets out, I might be too far away to pick it up," said Halverson, who over the years has come to know which meters can cause headaches. "I make sure I spend extra time on the ones that have been trouble in the past so I get them the first time."

Another cause of a missed reading is a dead battery in the meter. Since the City's system was installed in the mid-90s, many of the batteries in the individual meters are starting to lose their juice. Halverson has recently begun the process of replacing them.

- "I like doing batteries. It gives me a chance to see the people and talk a little bit," said Halverson. "I kid with them when I leave that, 'I hope I don't see you again,' but you never know. Even a brand new battery could go out again tomorrow."
- Halverson said that residents are being notified by letter when the City will be in their neighborhood to replace water meter batteries. They are then asked to call to schedule a time for Halverson to come in and do the job, which he says only takes about 10 minutes.

#### As a full-fledged Utilities Maintenance

Worker, Halverson performs a variety of duties in addition to reading meters. As well as changing batteries, he spends a significant amount of time repairing and changing leaky meters, researching water main breaks, locating water mains for digs, working on the City's sewer cleaning "jet crew," and providing service to individuals whose high water bills have them looking for a cause. Being trained in all aspects of Public Works, Halverson is often asked to help out in a variety of other roles.

While technology has already greatly evolved meter-reading, Halverson says the next step will be to perform the task directly from City Hall. Some large cities already use this technology, which allows them to record and bill for water consumption from the comfort of their office desks. However, the cost of such technology has kept it out of reach for many smaller cities.

"Not while I'm here," said Halverson.

City of Edina 4801 West 50th Street Edina, MN 55424 www.CityofEdina.com

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### **Trivia Contest**

How much do you know about Edina's utility system and water quality? Read this Consumer Confidence Report thoroughly and send in your answers to the following questions. You could win a gift certificate to pay for part of your next utility bill or another great prize!

- What does the "P" stand for in the "NPK" rating on fertilizer?
  - A. Nitrogen
  - B. Phosphorus
  - C. Potassium
  - D. Photosynthesis
- **2.** When is the best time of day to water a lawn?
  - A. Between 4 and 6 a.m.
  - B. Between 11 a.m. and 5 p.m.
  - C. Between 10 a.m. and noon
  - D. Any time of the day is appropriate
- 3. What item can be safely flushed down a toilet?
  - A. Tissue
  - B. Baby Wipes
  - C. Grease
  - D. Paper Towels

- **4.** What should you <u>not</u> do to protect the watershed?
  - A. Clean up pet waste in the yard
  - B. Wash your car in the driveway
  - C. Bag grass clippings
  - D. Maintain a buffer between your yard and lake or wetland
- 5. What is Edina's chlorine level in water?
  - A. 4 to 4.5 million parts per million
  - B. 3 to 3.5 million parts per million
  - C. 2 to 2.5 million parts per million
  - D. 1 to 1.5 million parts per million

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Ν	ame

Street Address

Telephone Number \_

Mail your completed form to Edina Public Works – Utility Department, 5146 Eden Ave., Edina, MN 55436. Entries must be received by July 31, 2009.