# Water<br/>Quality<br/>ReportSavage's drinking water again<br/>meets state safety standards



# SAVAGE'S WATER SOURCE

The City of Savage provides drinking water to 27,600 customers. The water is drawn from the ground using five wells located throughout the community. The wells range from 152 to 1,029 feet in depth and access four aquifers, which are layers of rock through which water permeates. The aquifers supplying Savage with water via the wells are the Mt. Simon, Quaternary Buried Artesian, Prairie Du Chien Group and Franconia-Ironton-Galesville. The City also obtains water from the City of Burnsville. The connection allows the City of Savage to meet demands without adversely impacting the environment.

Water drawn from the wells is run through one of the City's two treatment plants for purification. It is then stored in a water tower or reservoir for future use. Water obtained from Burnsville is already treated and is also stored for future use.

The Minnesota Department of Health has determined that these drinking water sources are not particularly susceptible to contamination. 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 952-224-3440 if you have questions about the City's drinking water, or if you would like information about opportunities for public participation in decisions that may affect the quality of the water. • ne of the most important services provided by the City of Savage is the delivery of drinking water to the community. It's a role the City takes very seriously. In addition to ensuring that an adequate supply is always available, City staff carefully and regularly inspects the water to ensure it is of the bighest quality.

Over the past several years, new treatment technologies have been implemented to guarantee everyone served by the City has safe drinking water.

Numerous tests were conducted in 2009 in accordance with Minnesota Department of Health and Environmental Protection Agency requirements. Once again, Savage's water meets all state and federal standards. Test results listed on the following pages show that contaminant levels are below the maximum limits allowed. •

## INSIDE

- Test results
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- AutoPay program Reduce bills
- Wise water usage

### HEALTH considerations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons—such as infants, some elderly, individuals undergoing chemotherapy, persons who have undergone organ transplants, and people with HIV/AIDS or other immune system disorders—can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

Environmental Protection Agency/ Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 1-800-426-4791.

### 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 another requirement that a water system must follow.

**90th Percentile Level** - 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).

**ppb** - Parts per billion, which can also be expressed as micrograms per liter (ug/1).

**ppm** - Parts per million, which can also be expressed as milligrams per liter (mg/1).

nd - No detection

N/A - Not applicable (does not apply)

### AUTO payment program

The free AutoPay program provides water and sewer customers the option of paying bills through an automatic deduction from their bank accounts. Monthly statements detailing all charges continue to be mailed to customers enrolled in the program. AutoPay not only saves on stamps, but it also ensures payments are made on time. To enroll, call Utility Billing at 651-256-3304.AutoPay will take effect on the following billing cycle. ♦



# **REGULATED** substances

Substance (units)	Ideal Maximum MCLG	Maximum Allowed MCL	Amount Range (2009)	Average/ Result*	Typical Source of Substance	Meets Standard
Alpha Emitters (pCi/l) Test Dates: 4/21/09, 8/17/09, 11/18/09	0	15.4	5.2-8.7	8.7	Erosion of natural deposits.	1
Barium (ppm) Test Date: 7/19/07	2	2	N/A	.2	Discharge of drilling wastes and metal refineries; Erosion of natural deposits.	1
Combined Radium (pCi/l) Test Dates: 4/21/09, 8/17/09, 11/18/09	0	5.4	4.5-6.2	6.2**	Erosion of natural deposits.	1
Fluoride (ppm) Test Dates: 2/24/09 4/21/09, 8/17/09, 11/18/09	4	4	1.1–1.3	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.	1
Haloacetic Acids (HAA5) (ppb) Test Date: 8/17/09	0	60	N/A	2.5	By-product of drinking water disinfection.	1
Mercury (ppb) (inorganic) Test Date: 7/19/07	2	2	N/A	.05	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.	
Nitrate (as Nitrogen) (ppm) Test Date: 4/21/09	10	10	nd27	.27	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	1
TTHM (Total Trihalomethanes)(ppb) Test Date: 8/17/09	0	80	N/A	12.6	By-product of drinking water disinfection.	1
Total Coliform Bacteria Tested Daily	0	>1	N/A	1***	Naturally present in the environment.	1

\* 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 2009, only three samples had been taken. As a result, there is no violation for this contaminant. \*\*\*Follow-up sampling showed no contamination present.

Substance (units)	MRDLG	MRDL		Highest Quarterly Average	Typical Source of Substance	Meets Standard
Chlorine (ppm)*	4	4	.08-1.03	.45	Water additive used to control microbes.	1

# **TESTED** at the tap

Just as it picks up substances in the ground, water can absorb lead or copper that exists in the plumbing of a home or business. These substances are regulated, and tests are conducted for their presence every three years.

Substance (units)	MCLG	AL	90% Level	# Sites Over AL	Typical Source of Substance	Meets Standard
Copper (ppm)	N/A	1.3	.12	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.	~
Lead (ppb)	N/A	15	4	0 out of 30	Same as above.	$\checkmark$

#### Test Date: 8/16/07

If present, elevated levels of lead can cause serious bealth 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 Savage is responsible for providing bigh 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.

# UNREGULATED substances

Some substances do not have Maximum Contaminant Levels (MCL) 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 provider must inform its customers and take other corrective actions. The table that follows shows the unregulated contaminants that were detected:

Substance (units)	Amount Detected		Typical Source of Substance	Meets
	Range (2009)	Average/ Result		Standard
Sodium (ppm) Test Date: 7/19/07	N/A	39	Erosion of natural deposits.	1
Sulfate (ppm) Test Date: 7/19/07	N/A	38.3	Erosion of natural deposits.	1

Monitoring for unregulated contaminants as required by the U.S. Environmental Protection Agency rules (40 CFR 141.40) was conducted in 2009. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at 651-201-4656.



### restrictions promote WISE WATER USAGE

### Residents and business owners are reminded that outdoor watering restrictions are in effect throughout the year.

The restrictions are intended to conserve water by encouraging use at the most effective times of the day. Watering the lawn, washing the car, and other uses of water outdoors are not allowed between noon and 5 p.m. any day of the week.

Outdoor watering may occur before noon and after 5 p.m. according to an odd/even schedule determined by address number. Those with even-numbered addresses may water on even dates, while those with odd-numbered addresses may water on odd dates.

Landscaping, including newly seeded or sodded lawns, may be watered as needed (outside the hours of noon to 5 p.m.) for the first 30 days of installation. Those with private wells are exempt from the City's outdoor watering restrictions.

For more information on the City's water restrictions, utility fees or conservation tips, please visit www.cityofsavage.com.

# **SUBSTANCES** absorbed by water

Prior to being tapped for distribution, the City's drinking water moves through the ground, dissolving natural minerals and, in some cases, radioactive material that is in its path. In addition, the water may absorb substances resulting from the presence of animals or from human activity.

As a result, the following substances may be present in the water prior to treatment:

<u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

<u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses. Inorganic contaminants, such as salts and metals, which can be naturallyoccurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

<u>Organic chemical contaminants</u>, 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.

<u>Radioactive contaminants</u>, which can be naturally-occurring or be the result of oil and gas production and mining activities. •

# HOW TO CHECK FOR LEAKS

Follow these steps to identify a water leak and determine how much water is being lost:

- Locate the water meter It may be in the basement or utility room, or wherever the water line enters your home.
- Read the meter twice Read it first at night, after the day's water use has ended, and again in the morning before any water is used. Be aware that water softeners regenerate at night and water may be used in this process.

#### **Find the difference**—Subtract the first from the second reading to tell how much, if any, water leaked out overnight.

#### Do you suspect a leak?

Find it by checking pipes and fixtures. Put food dye in the toilet tank if you suspect a leak in that fixture. The dye will seep into the bowl if there is a leak.

Locate, mark and check shut-off valves regularly. Shut-off valves simplify repairs and save water in emergencies.

#### Thinking about remodeling?

If so, ask a plumber or plumbing supplier about water saving fixtures. Plan to insulate hot water pipes.

For more information, contact Savage Public Works at 952-224-3400.



Savage, Minn., 55378. For other City may be sent to 13770 Dakota Avenue, comments@ci.savage.mn.us. Mailed letters fax us at 952-224-3430, or e-mail us at this report, please call the above number, 3440. If you would like to comment on Utility Services Department at 952-224water treatment facility, please contact the Savage, or would like a tour of the City's learning more about the water quality in If you have questions, are interested in

website at www.cityolsavage.com. information and activities, visit our

Savage, MN 55378

6000 McColl Drive

turally Resourceful

City of Savage

Year? WHY DO I RECEIVE THIS REPORT цэеә

heighten awareness of the need to protect water resources. advance consumers' understanding of drinking water and about their drinking water. Specifically, the report aims to

Postal Customer

SAVAGE, MN

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occurred on the system from Jan. I to Dec 31, 2009. Information contained in the report covers monitoring that

Confidence Report Rule, is to provide information to customers customers. The goal of this provision, called the Consumer systems to deliver an annual water quality report to their the Act includes a provision that requires all community water Federal Safe Drinking Water Act. Amended by Congress in 1996, This report is being provided to you in accordance with the

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protect the public's health. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

which is regulated by the Food and Drug Administration, must also meet regulations intended to

of certain contaminants in water provided by public water systems. Bottled water,

To ensure tap water is safe to drink, the U.S. **Environmental Protection Agency (EPA)** prescribes regulations that limit the amount

contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.



### **REDUCE BILLS** by limiting consumption

How can you lower your water bill? It's as simple as reducing consumption. Examples include taking shorter showers, limiting the number of times a toilet is flushed, turning off the faucet while brushing your teeth, cleaning the driveway with a broom instead of a hose, and keeping a pitcher of water in the refrigerator instead of running the tap until the water gets cold enough to drink.

### Taking a few moments to think about using water wisely will not only have a positive impact on the environment, it will benefit your pocketbook as well.

### Suggestions for wiser water use:

- Fill your bathtub at a lower level (Savings of 20 gallons) Don't run the faucet while brushing your teeth, washing hands

- Install a half-flush device on your toilet (Savings of 1-3) gallons per flush)
- or dishes (Savings of 1-15 gallons)

• Run the dishwasher and washing machine only when they are full

Drinking water, including bottled water, may reasonably be

expected to contain at least small amounts of some