

# Water QUALITY

**W**e are pleased to present a summary of the quality of the water provided to you for the period January 1 to December 31, 2009. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and what risks our water testing and treatment are designed to prevent. Shakopee Public Utilities Commission is committed to providing you with the safest and most reliable water supply. Informed customers are our best allies in maintaining safe drinking water.

"Shakopee's drinking water meets and exceeds all state and federal regulations," says John Crooks, Utilities Manager.



**SHAKOPEE PUBLIC UTILITIES**  
"Lighting the Way - Yesterday, Today and Beyond"



## Water Source

Shakopee Public Utilities' water source is groundwater. Water is pumped from 18 wells in the city, 14 of these wells tap the Jordan Aquifer, two are completed in the Mt. Simon Aquifer, and two are currently completed in the Franconia/Iron-ton-Galesville Aquifer. The wells range from 218 to 800 feet deep.

The water provided to customers meets or exceeds all drinking water standards. The Minnesota Department of Health has determined that one or more of the sources of water is potentially susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-201-4670 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).

The water provided to customers meets or exceeds all drinking water standards.

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant	Meets EPA Standards
			Range (2009)	Average Result*		
Alpha Emitters (pCi/l)	0	15.4	nd - 6.10	3.40	Erosion of natural deposits	✓
Barium (ppm)	2.0	2.0	.0493 - .156	.16	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production facilities.	✓
Combined Radium (pCi/l)	0	5.4	nd - 2.45	2.45	Erosion of natural deposits.	✓
Fluoride (ppm)	4.0	4.0	1.1 - 1.2	1.13	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.	✓
Nitrate (as nitrogen) (ppm)	10.0	10.0	.69 - 9.6	9.6	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	✓
Nitrite (as nitrogen) (ppm)	1	1	N/A	.03	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.	✓
TTHM (total tri-halomethanes) (ppb)	0	80	N/A	9.6	By-product of drinking water disinfection.	✓
Haloacetic Acids (HAA5) (ppb)	0	60	N/A	2.2	By-product of drinking water disinfection.	✓
Total Coliform Bacteria	0	>1 Present	N/A	1**	By-product of drinking water disinfection	✓
Radon (pCi/l)			N/A	54.13	Erosion of natural deposits.	✓

\* 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 years.

\*\* Follow-up sampling showed no contamination present.

Radon is a radioactive gas which is naturally occurring in some groundwater. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, or washing dishes or clothes) and a stomach cancer risk when it is ingested. Because radon in indoor air poses a much greater health risk than radon in drinking water, an Alternative Maximum Contaminant Level (AMCL) of 4,000 picoCuries per liter may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools, and communities to reduce the radon threat from indoor air. For states without such a program, the Maximum Contaminant Level (MCL) of 300 pCi/l may apply. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.

## How to Read the Tables

It's easy! Our water is tested to assure it is safe and healthy. No contaminants were detected at levels violating federal drinking water standards. However, some contaminants were detected in trace amounts 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 2009. 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

**AL (Action Level):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirement that a water system must follow.

**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.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk of health. MCLGs allow for a margin of safety.

**MRDL: Maximum Residual Disinfectant Level**  
**MRDLG: Maximum Residual Disinfectant Level Goal**

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

**nd:** no detection

**pCi/l:** picocuries per liter (a measure of radioactivity)

**ppm:** parts per million or milligrams per liter (mg/l)

**ppb:** parts per billion or micrograms per liter (ug/l)

**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.

### Concerning

## NITRATE IN OUR WATER



Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. While we have not detected nitrates in the water supply higher than the drinking water standard, we currently test our water more often than required by the Minnesota Health Department to ensure that the water is below 10 ppm when it is delivered to our users. However, if you are caring for an infant, you should ask advice from your health care provider.

Contaminant (units)	MCLG	Action Level	90% Level	# Sites over AL	Typical Source of Contaminant
Lead (ppb) 08-14-07	N/A	15	4.0	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm) 08-14-07	N/A	1.3	.21	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits.

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 unregulated contaminants that were detected are in the table that follows:

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 Shakopee 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>.

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Contaminant (units)	Level Found		Typical Source of Contaminant
	Range (2009)	Average Result*	
Sodium (ppm)	8.6 - 33	33	Erosion of natural deposits
Sulfate (ppm)	11.1 - 23	23	Erosion of natural deposits

## 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.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.3 - 1.96	.96	Water additive to control microbes

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

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

## HEALTH Information

Some people may be more vulnerable to contaminants in drinking water than is 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 Safe Drinking Water Hotline (800) 426-4791.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 Safe Drinking Water Hotline at 800-426-4791.

The sources of drinking water (both tap and bottled) 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 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; (C) Pesticides and herbicides, which may come from a variety of sources, such as agriculture, storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems; (E) Radioactive contaminant, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## Sprinkling Restrictions are in Effect May 1 to October 1

To reduce peak demand on the water system and promote water conservation, SPU has adopted odd/even and time-of-day sprinkling restrictions.



### Check the calendar.

If your address ends in an odd number, you may only water your lawn on odd numbered days. If your address ends in an even number, you may only water your lawn on even numbered days.



### Check the time.

No sprinkling is allowed between 12 noon and 5:00 p.m.

Exceptions are allowed for new seed or sod. While new sod or seeded lawns do need watering more often, please keep in mind that they do not benefit from prolonged watering.

## Prevent Water Pollution – Protect Ground Water

Most groundwater starts out as rain; therefore, pollution prevention equals water protection. Some specific ways that you can protect groundwater include:

- ▶ **Use pesticides and fertilizers sparingly.**  
Follow label instructions for use and disposal of fertilizers and pesticides and use less toxic alternatives whenever possible
- ▶ **Dispose of leaves and grass clippings properly.**  
Compost yard waste or contact a privately operated compost site for yard waste disposal. For assistance, please call the Scott County Environmental Health Department 24-hour Information Line at 952-496-8787
- ▶ **Maintain your car to prevent leaking fluids.**  
Don't use water to wash away fluids. Clean up drips with an absorbent like kitty litter or sawdust and properly dispose of contaminated absorbent
- ▶ **Dispose of hazardous household waste (HHW) properly.**  
Don't dump HHW down the drain or on the ground. The Scott County HHW Facility will accept all household hazardous waste from Scott County residents at no charge. The Scott HHW Facility is located at 588 Country Trail East (MN Hwy 282), Spring Lake Township. For more information, call the Scott County HHW Facility at 952-496-8652



## National Primary Drinking Water Regulation Compliance

We'll be happy to answer any questions about Shakopee Public Utilities Commission and our water quality. Call John Crooks, Utilities Manager, at 952-445-1988.

Call us for information about the next opportunity for public participation in decisions about our drinking water.

Water quality data for community water systems throughout the United States is available at [www.waterdata.com](http://www.waterdata.com)

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