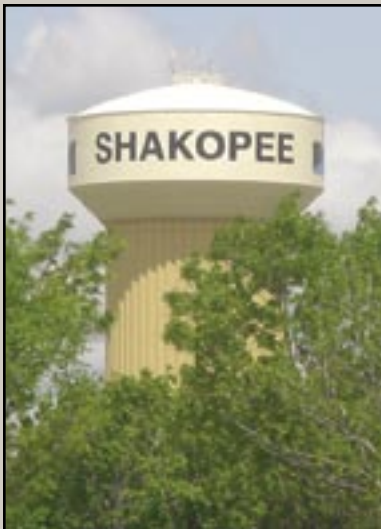


# CONSUMER CONFIDENCE REPORT

# 2005



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

**D**ear Customer: We are pleased to present a summary of the quality of the water provided to you for the period January 1 to December 31, 2005. 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.

Call us for information about the next opportunity for public participation in decisions about our drinking water. More information is available at [www.waterdata.com](http://www.waterdata.com)

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 limits on 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.

## WATER SOURCE



**S**hakopee Public Utilities' water source is groundwater. Water is pumped from 13 wells in the city. 9 of these wells tap the Jordan Aquifer, two are completed in the Mt. Simon Aquifer, and two are currently completed in the Franconia/Ironton-Galesville Aquifer. The wells range from 218 to 800 feet deep.

The water provided to customers may meet drinking water standards, but 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 on line at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa).

## How to Read the Tables

**I**t'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 2005. 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 Table

AL = Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

N/A = Not Applicable

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.



Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2005)	Average/Result*	
Alpha Emitter (pCi/l) 5-29-02	0	15.4	N/A	6.7	Erosion of natural deposits.
Barium (ppm) 6-10-04	2.0	2.0	N/A	.24	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Combined Radium (pCi/l) 5-29-02	0	5.4	N/A	3.8	Erosion of natural deposits.
Fluoride (ppm)	4.0	4.0	1.1-1.3	1.23	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	nd-7.0	7.0	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
TTHM (total trihalomethanes) (ppb)	0	80	N/A	7.0	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	0	60	N/A	4.0	By-product of drinking water disinfection.
Radon (pCi/l) 12-28-04	N/A	N/A	N/A	68	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.

**R**adon 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.

Contaminant (units)	MCLG	AL	90% Level	# Sites over AL	Typical Source of Contaminant
Lead (ppb) 8-30-04	N/A	15	6.0	1 out of 30	Corrosion of household plumbing systems; erosion of natural deposits.
Copper (ppm) 8-30-04	N/A	1.3	.20	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:

Contaminant (units)	Level Found		Typical Source of Contaminant
	Range (2005)	Average/Result*	
Sodium (ppm) 6-10-04	N/A	5.9	Erosion of natural deposits.
Sulfate (ppm) 6-10-04	N/A	18	Erosion of natural deposits.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.7-1.4	1.03	Water additive to control microbes

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

# The WATER CYCLE



# Water & Kids WORD SCRAMBLE

Did you know that the water you drank this morning might have been the same water a dinosaur drank millions of years ago? Or it may have been the same water that supported Columbus' ships on the sea. There is the same amount of water on Earth today as there has always been. The water keeps moving around in an endless cycle called **the water cycle**.

Water itself is the only substance that exists in liquid, gas and solid form - the keys to the water cycle. Here's how the cycle works:

Water evaporates from oceans, rivers and lakes (water in its liquid form) and rises into the atmosphere (water in its gas form) where it condenses to form clouds. Precipitation then falls to the earth in the form of rain (water in its liquid) or snow (water in its solid form) where it flows into oceans, rivers and lakes and the process begins again.

Unscramble the word in parentheses to complete each sentence.

1. All living things need \_\_\_\_\_ (tawer) to live.
2. When water evaporates, it travels into the air and becomes a \_\_\_\_\_ (dlocu).
3. Less than 1% of all the water on Earth is \_\_\_\_\_ (sefrh) water.
4. We \_\_\_\_\_ (ikrdn) water in the liquid form.
5. Check for leaky faucets and save hundreds of \_\_\_\_\_ (laglnos) of water each day.
6. Wash bikes and cars with a bucket and \_\_\_\_\_ (ngepos) instead of a running hose.
7. Ask your \_\_\_\_\_ (mfaiyl) to look for ways to save water.



## 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.

## 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, water superintendent, at 952-445-1988.

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.**