

# 2008 Annual Consumer Report

## Quality of Tap Water



**SOUTH MILWAUKEE WATER UTILITY'S  
DRINKING WATER MEETS OR SURPASSES**

**ALL FEDERAL AND STATE DRINKING WATER STANDARDS.**

*This is an annual report on the quality of water delivered by South Milwaukee Water Utility. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports" and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community. Please read this report carefully and, if you have questions, call the numbers listed below:*

*Providing this annual water quality report to our customers is an important part of our ongoing water quality efforts. If you have any questions about the Utility or this report, please call the Utility office at (414) 768-8070 or visit our web site at [www.ci.south-milwaukee.wi.us](http://www.ci.south-milwaukee.wi.us). Regular monthly meetings of the Water Utility Commission also provide opportunities for public participation and additional information. These meetings are scheduled on the second Tuesday of each month at the office of the Water Utility.*

**Douglas Fischer, Superintendent**  
South Milwaukee Water Utility

## Water Source

South Milwaukee Water Utility is supplied by surface water from Lake Michigan.

A source water assessment was required for all public water systems by May, 2003. This assessment identifies land areas that contribute water to each system, significant potential contaminant sources within those areas, and the susceptibility of the drinking water systems to contamination. A summary of the source water assessment for the South Milwaukee Water Utility is available at: <http://www.dnr.state.wi.us/org/water/dwg/swap/surface/southmilwaukee.pdf>.

## Educational Information

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 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 storm 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, stormwater runoff, and residential uses.
- 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 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, 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, which must provide the same protection for public health.

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).

## Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The CCR may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	Number of Contaminants
Disinfection Byproducts	2
Inorganic Contaminants	16
Microbiological Contaminants	1
Radioactive Contaminants	3
Synthetic Organic Contaminants including Pesticides and Herbicides	26
Unregulated Contaminants	34
Volatile Organic Contaminants	20

## Definition of Terms

Term	Definition
AL	Action Level
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MFL	Million fibers per liter mrem/year millirems per year (a measure of radiation)
NTU	Nephelometric Turbidity Units
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)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

## An Explanation of the Water-Quality Data Table

The chart in this report provides representative analytical results of water samples collected in 2008, unless otherwise dated, from our system. Please note the following definitions:

**AL:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

**Maximum Contaminant Level or MCL:** 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.

**Maximum Contaminant Level Goal or MCLG:** 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.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2008)	Violation	Typical Source of Contaminant
<b>Disinfection Byproducts</b>							
HAA5 (ppb)	60	60	14 (avg)	9-21		NO	
TTHM (ppb)	80	0	27.6	16.0-35.4		NO	By-product of drinking water chlorination
<b>Inorganic Contaminants</b>							
ANTIMONY TOTAL (ppb)	6	6	.2	.2		NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC	10	n/a	1	1		NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.020	.020		NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CADMIUM (ppb)	5	5	.3	.3		NO	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
CHROMIUM (ppb)	100	100	2	2		NO	Discharge from steel and pulp mills; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	.063	1 of 30 + action level		NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppb)	4	4	.8	.8		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	6.60	1 of 30 + action level		*	Corrosion of household plumbing systems; Erosion of natural deposits
NICKEL (ppb)	100		.8700	.8700		NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (N03-N) (ppm)	10	10	.25	.25		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SELENIUM	50	50	2	2		NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
SODIUM (ppm)			8.00	8.00		NO	
<b>Radioactive Contaminants</b>							
Gross Alpha, Excl. R & U (pCi/l)	15	0	.1	.0- .1	6/11/02	NO	Erosion of natural deposits
<b>Unregulated Contaminants</b>							
Bromodichloromethane (ppb)	n/a	n/a	9.18	6.30-11.00		NO	n/a
Bromoform (ppb)	n/a	n/a	.31	.21-.43		NO	n/a
Chloroform (ppb)	n/a	n/a	14.45	6.80-20.0		NO	n/a
Dibromochloromethane (ppb)	n/a	n/a	3.70	3.00-410		NO	n/a
Sulfate (ppm)	n/a	n/a	29.00	29.00		NO	n/a

\* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the number of sites or the actions taken to reduce these levels, please contact your water supply operator.

### NOTE:

Not listed are other compounds for which the water was tested but undetected. This information is available upon request at the Utility office. DNR record reveals an excellent history of sample and report submissions for 2008 with no violations.

### Unregulated Contaminants

South Milwaukee Water Utility tested raw water (lake water that hasn't been treated) once per month in 2008 for Cryptosporidium. During which time no Cryptosporidium found. South Milwaukee Water Utility did not test tap water for Cryptosporidium in 2008.



### Required Additional Health Information

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

### Concerning Lead in Our Water

The Utility is required periodically to test the drinking water in homes at 30 predetermined sites in the distribution system for lead and copper, which enters the drinking water by corrosion of home plumbing. For the last test year, 2008 and since the introduction of polyphosphates in 1994 the water supply complies with the lead and copper action levels.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that

lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by a qualified lab and flush your tap for 30 seconds to 2 minutes before using tap water.

Additional information is available from the **Safe Drinking Water Hot Line (800-426-4791)**.

### National Primary Drinking Water Regulation Compliance

We'll be happy to answer any questions about South Milwaukee Water Utility and our water quality. Call at (414) 768-8070. Learn more about the South Milwaukee Water Utility water system at ([www.ci.south-milwaukee.wi.us](http://www.ci.south-milwaukee.wi.us)).

