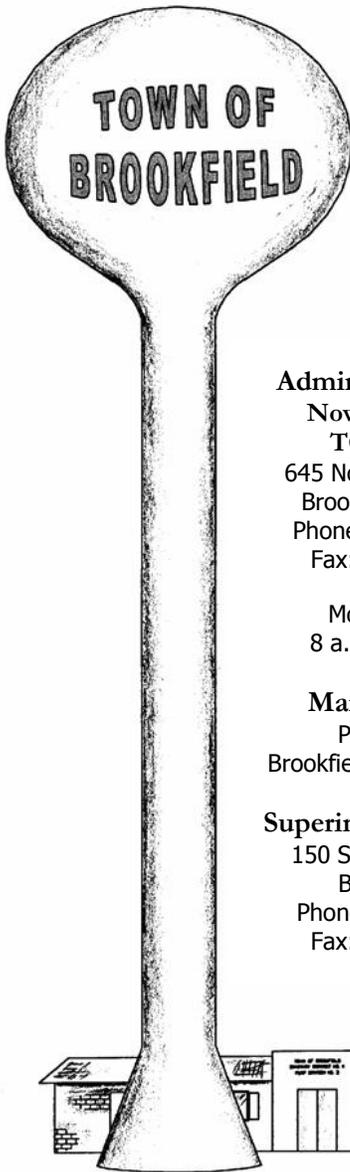


2012 Annual Water Quality Drinking Report

SANITARY DISTRICT NO. 4 — TOWN OF BROOKFIELD



Administrative Office:

Now located at the
TOWN HALL
645 North Janacek Road
Brookfield, Wisconsin
Phone: 262.798.8631
Fax: 262.796.0339

Monday - Friday
8 a.m. to 4:30 p.m.

Mailing Address:

P.O. Box 1296
Brookfield, WI 53008-1296

Superintendent's Office:

150 South Barker Road
Brookfield, WI
Phone: 262.798.8629
Fax: 262.798.8633

WATER SYSTEM INFORMATION

We are pleased to present this year's Annual Water Quality Report. This report is designed to inform you about the quality of water and the service we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water comes from the shallow dolomite aquifer. We have six wells and they all flow through filters to remove the iron that is predominating in the shallow aquifer. Because of the water quality, we are only required to add a little chlorine for disinfection and the water is ready for the distribution system. The Sanitary District's licensed operators are here to ensure the excellent water quality 24 hours a day, every day of the year. On an average day, the Sanitary District provides the Town of Brookfield with 700,000 gallons of water.

HEALTH INFORMATION

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).

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 systems 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 and other microbial contaminants are available from the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Sanitary District No. 4 is pleased that the drinking water provided to you is **safe** and **meets all** federal and state requirements. If you have any questions about this report, or concerning your water utility, please contact our superintendent, Terry Heidmann, at 262-798-8629. We want you, our valued customers, to be informed about their water utility. We encourage you to attend the Sanitary District meetings, which are generally held on the first and third Tuesdays of each month, beginning at 7:00 p.m. at the Town Hall, 645 North Janacek Road. Information, which includes our billing rates, is also available on the Town of Brookfield's website at <http://www.townofbrookfield.com/SD4.html>.

UTILITIES SUPERINTENDENT

Terry R. Heidmann

262.798.8629 (Direct Line)

Available for phone calls from
8:00 a.m. to 3:00 p.m.

SOURCES OF WATER

Source id	Source	Depth (in feet)
1	Groundwater	350
2	Groundwater	314
3	Groundwater	450

Source id	Source	Depth (in feet)
4	Groundwater	370
5	Groundwater	220
6	Groundwater	202

A summary of the source water assessment for Sanitary District No. 4 - Town of Brookfield is available at: [http://prodoasext.dnr.wi.gov/inter1/pws2\\$.startup](http://prodoasext.dnr.wi.gov/inter1/pws2$.startup)



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, 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, 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 shall provide the same protection for public health.

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	No. of Contaminants
Disinfection Byproducts	2
Inorganic Contaminants	16
Microbiological Contaminants	1
Radioactive Contaminants	3
Synthetic Organic Contaminants including Pesticides & Herbicides	23
Unregulated Contaminants	4
Volatile Organic Contaminants	20

PROUD MEMBER OF:

 American Water Works Association
The Authoritative Resource on Safe Water™



DISINFECTION BYPRODUCTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
HAA5 (ppb)	60	60	8	2 - 8	09/13/2011	NO	
TTHM (ppb)	80	0	34.6	15.6 - 34.6	09/13/2011	NO	By-product of drinking water chlorination

INORGANIC CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
ARSENIC (ppb)	10	n/a	3	2 - 3	02/09/2011	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.240	.180 - .240	02/09/2011	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	.26	0 of 20 results were above the action level	08/31/2011	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	.2	.1 - .2	02/09/2011	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	7.40	0 of 20 results were above the action level	08/31/2011	NO	Corrosion of household plumbing systems; Erosion of natural deposits
NICKEL (ppb)	100		5.6000	3.4000 - 5.6000	02/09/2011	NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
SELENIUM (ppb)	50	50	6	nd - 6	02/09/2011	NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
SODIUM (ppm)	n/a	n/a	97.00	61.00 - 97.00	02/09/2011	NO	n/a

RADIOACTIVE CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
COMBINED URANIUM (ug/l)	30	0	0.4	0.3 - 0.4	03/10/2009	NO	Erosion of natural deposits
GROSS ALPHA, EXCL. R & U (pCi/l)	15	0	4.3	3.3 - 4.3	03/10/2009	NO	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)	n/a	n/a	4.5	3.6 - 4.5	03/10/2009	NO	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)	5	0	1.8	.9 - 1.8	03/10/2009	NO	Erosion of natural deposits

UNREGULATED CONTAMINANTS

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2012)	Violation	Typical Source of Contaminant
BROMODICHLOROMETHANE (ppb)	n/a	n/a	9.40	4.00 - 9.40	09/13/2011	NO	n/a
BROMOFORM (ppb)	n/a	n/a	6.30	3.50-6.30	09/13/2011	NO	n/a
CHLOROFORM (ppb)	n/a	n/a	3.90	1.40 - 3.90	09/13/2011	NO	n/a
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	15.00	6.70 - 15.00	09/13/2011	NO	n/a
DIBROMOMETHANE (ppb)	n/a	n/a	.25	.25	05/07/2008	NO	n/a
SULFATE (ppm)	n/a	n/a	58.00	51.00 - 58.00	05/07/2008	NO	n/a
METHYLTERTBUTYLETHER (ppb)	n/a	n/a	1.10	.80 - 1.10	02/09/2011	NO	n/a

MONITORING AND REPORTING VIOLATIONS

Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending - Monitoring and reporting violations occur when a water system fails to collect and/or report results for State required drinking water sampling. "Sample location" refers to the distribution system, or an entry point or well number from which a sample is required to be taken
Nitrate	400	01/01/2012	09/30/2012 Nitrate samples that were missed include: Nitrate (N03-N)
Nitrate	200	01/01/2012	09/30/2012 Nitrate samples that were missed include: Nitrate (N03-N)
Nitrate	300	01/01/2012	09/30/2012 Nitrate samples that were missed include: Nitrate (N03-N)
Volatile Organic Contaminants	300	01/01/2012	09/30/2012 Volatile Organic Contaminants that were missed include: 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; 1,1-Dichloroethylene; 1,2,4-Trichlorobenzene; 1,2-Dichloroethane; 1,2-Dichloropropane; Benzene; Carbon Tetrachloride; Cis-1,2-Dichloroethylene; Dichloromethane; Ethylbenzene; Monochlorobenzene (Chlorobe.); O-Dichlorobenzene; P-Dichlorobenzene; Styrene; Tetrachloroethylene; Toluene; Trans-1,2-Dichloroethylene; Trichloroethylene; Vinyl Chloride; Xylenes, Total

The reported violation was not a Maximum Contaminant Level violation, but a Compliance violation, as the test results arrived in Madison late. All samples were "non-detect".

DEFINITION OF TERMS

TERM	DEFINITION
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 to health. MCLGs allow for a margin of safety.
MFL	million fibers per liter
MRDL	Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum residual disinfectant level goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
mrem/yr	millirems per year (a measure of radiation absorbed by the body)
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.