

Board of Water Commissioners

Everett C. Butler, Chairman
Donald K. Holland
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*Kenosha Water Utility
&
Board of Water Commissioners
Present the*

2005 Annual Drinking Water Quality Report

**The Kenosha Water Utility’s mission is
“Providing and Protecting Kenosha’s Greatest Natural Resource -- Water”**

The Kenosha Water Utility (KWU) provides water and wastewater service to more than 100,000 persons in the greater Kenosha metropolitan area, including the City of Kenosha, Village of Pleasant Prairie, Town of Somers and Town of Bristol. The Kenosha Water Utility also provides a monthly Household Hazardous Waste Collection Service for City of Kenosha residents.

The Kenosha Water Utility is a municipally-owned, fiscally independent public utility organized under authority of Section 66.0805 of the Wisconsin State Statutes and Chapter XXXII of the City of Kenosha Code of General Ordinances. It is solely financed by water and sewer service charges.

The management and operation of the Water Utility is under the direction of the General Manager, Edward St. Peter, who is appointed by a Board of Water Commissioners.

The Board is composed of six aldermen appointed under authority of Section 1.06H of the City of Kenosha Code of General Ordinances. The powers and duties of the Board of Water Commissioners include: establishing policy, adopting rules and regulations, adopting an annual budget, establishing water and sewer rates and fees and approving contracts and agreements.

The Kenosha Water Utility has three major operating locations:

- **Water Service Centre-Engineering-Water Distribution & Sanitary Sewer Collection - 4401 Green Bay Road**
- **O. Fred Nelson Water Production Plant - 100-51st Place**
- **Wastewater Treatment Plant - 7834-3rd Avenue**

Surface water from Lake Michigan has been Kenosha’s source of water since 1894. Lake Michigan water is valued for both its quality and quantity. The treated wastewater is discharged to Lake Michigan and the solids are hauled to a landfill.

Please note that the Water Utility provides 24-hour, 7-day-a-week emergency service, including Saturdays, Sundays and holidays.

Clip & Save

Kenosha Water Utility Emergency Phone Numbers

All Emergency Service (8:00 a.m.- 4:30 p.m. Monday-Friday)
262-653-4300

Emergency Water Service (after 4:30 p.m. & weekends)
262-653-4330

Emergency Sewer Service (after 4:30 p.m. & weekends)
262-653-4335

Kenosha Water Utility

**Household Hazardous Waste Program
Information 262-653-4300**

Location: 4401 Green Bay Road

Hours: 8:00 – 11:00 a.m.

When: 1st Saturday of each Month

“Method of Operation”

Kenosha’s raw water supply is obtained solely from Lake Michigan through two intakes: a 42” pipe and a 48” pipe extending 4,700 feet from the shoreline to a depth of 30 feet. The raw water enters a low-lift pump well (50 feet deep), and is then pumped to the 21.7 million gallons per day (MGD) Microfiltration Plant and 20 MGD Rapid-Sand Filtration Plant. The low-lift pump facility consists of five pumps with a total capacity of 50 MGD. The chemicals added to the 20 MGD Rapid-Sand Filtration Plant include chlorine, alum, and potassium permanganate.

The microfiltration facility, which is the largest of its kind in North America, uses an innovative process to remove micro-organisms such as cryptosporidium. There are 25 USFilter CMF membrane units. The 21.7 MGD membrane plant is integrated with the existing Sand Filter Plant to provide a total of 41.7 MGD capacity.

After the filtration processes, the water flows to a 2.5 million gallon finished water reservoir and chlorine contact tank. A closely controlled residual of chlorine is maintained to insure continuous safe water in the distribution system. A small amount of fluoride is added to prevent dental caries, and a corrosion control inhibitor is used to keep distribution system mains clean.

The high-pressure pump station pumps directly from the finished water reservoir into the distribution system at a pressure of approximately 80 psi. The high-pressure pump station consists of six vertical turbine pumps with a combined capacity of 48 MGD.

The Kenosha water distribution system has three pressure zones and eight storage reservoirs with a combined capacity of 16.7 million gallons. Remote booster pump stations control the pressure zones. The water distribution system consists of 339 miles of water main, 5,346 line valves, 3,059 fire hydrants and 28,504 active service connections. The Kenosha Water Utility service area is approximately 100 square miles.

“Exceptional Water Quality”

When you drink Kenosha tap water, you’re drinking clean, high quality water. Kenosha water meets or is better than all state and federal water quality requirements. At the Kenosha Water Utility we constantly work to improve our service and operating efficiency.

With the completion of upgrades to the rapid-sand filtration plant and the new microfiltration facilities, you can be confident in every drop of water that arrives at your tap. The finished water turbidity is consistently below 0.03 NTU. The standard the United States Environmental Protection Agency (EPA) set is 0.3 NTU. One hundred percent of the turbidity tests were below the limit. Kenosha’s water quality is 10 times better than the standard. The Kenosha Water Utility’s state certified laboratory tests Kenosha’s water over 10,000 times per year. The drinking water quality information in the table covers the period of January 2005 to December 2005.

Source Water Assessment

The 1996 amendments to the Safe Drinking Water Act require that states complete source water assessments for all public drinking water systems. The source water assessment for the Kenosha Water Utility has been completed per these requirements. A hard copy of the detailed assessment is available at any Kenosha Public Library.

Microbial testing

Giardia and cryptosporidium are two types of microscopic protozoa that can cause illness in humans. There may be various areas of contact with these parasites such as contaminated food, swimming pools, recreational waters, contaminated soil or a contaminated water supply. Kenosha Water Utility has taken steps to ensure these organisms do not pose a problem in the drinking water. The treatment plant has multiple barriers of protection such as enhanced chemical coagulation, filtration, disinfection, microfiltration and careful monitoring of turbidity to ensure the optimum removal of these organisms.

However, for people with compromised immune systems, the EPA and the U.S. Center for Disease Control (CDC) offer the following advisory statement: “Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with HIV/AIDS or other immune system disorders, persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, some elderly and some infants can be particularly at risk from infections. These people should seek advice 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 Safe Drinking Water Hotline (1-800-426-4791).”

What contaminants might be in water?

Contaminants that may be present in *untreated* water include microbial contaminants, inorganic contaminants, pesticides and herbicides, radioactive contaminants and organic chemical contaminants. However, MCL’s are set at very stringent levels for treated water and none of Kenosha’s water samples exceeded the standards set by regulatory agencies.

Drinking water, including bottled water, may reasonably be expected to contain very small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Drinking Water Hotline (1-800-426-4791).



O. Fred Nelson Water Production Plant

Results of Regulated and Unregulated Characteristics of Kenosha Water Quality

(The results meet or surpass all state and federal drinking water standards)

Additional information on water quality or unregulated contaminant monitoring may be obtained by contacting the Kenosha Water Utility laboratory at 262-653-4330

Parameter	Units	Highest Level Detected	Range/Comments	MCL	MCLG	Possible Sources in Water
Arsenic	ppb	1.1	1.1	50		erosion of natural deposits
Barium	ppm	0.02	0.02	2	2	erosion of natural deposits
Cadmium	ppb	1.1	1.1	5	5	erosion of natural deposits
Carbon tetrachloride	ppb	ND	ND	5	0	industrial activities
Chromium	ppb	1.1	1.1	100	100	erosion of natural deposits
Copper	ppm	0.11 (AL)	0 of 30 sites > AL	1.3 (AL)	1.3	corrosion of household plumbing materials
Fluoride	ppm	1.13	0.89 to 1.13	4	4	additive to reduce tooth decay
Gross Alpha	pCi/l	0.2 +/- 1.0	0.2*	15	0	erosion of natural deposits
Haloacetic acids	ppb	16.3	5.8 to 16.3	60		by-product of disinfection process
Lead	ppb	4.5 (AL)	0 of 30 sites > AL	16 (AL)	0	corrosion of household plumbing materials
Nickel	ppb	1.3	1.3			naturally present in the environment
Nitrate and Nitrite	ppm	0.41	0.41	10	10	runoff from fertilizers
Ortho-phosphate	ppm	0.26	0.09 to 0.26			additive to reduce corrosion
Sodium	ppm	9.7	9.7			naturally present in the environment
Sulfate	ppm	27	27			naturally present in the environment
Total Organic Carbon	ppm	3.9	ND to 3.9	TT		naturally present in the environment
Total Chlorine	ppm	1.40	1.01 to 1.40	4		water additive to control microbials
Total Coliform Bacteria	% positive samples	0	0	presence of coliform bacteria in less than 5% of monthly samples	0	naturally present in the environment
Total Hardness	ppm	138	128 to 138	500		
Total Trihalomethanes	ppb	36.6	12.1 to 36.6	80	0	by-product of disinfection process
Turbidity	NTU	0.035	0.016 to 0.035	less than 0.30		soil runoff
Alkalinity	ppm	106	97 to 106	Abbreviations		
Conductivity	µS/cm	309	248 to 309	NTU - Nephelometric Turbidity Units	µS/cm - microsiemens/centimeter	
pH	pH units	7.67	7.13 to 7.67	pCi/l - picocuries per liter	N.D. - not detected	
Temperature	Fahrenheit	74	33 to 74	ppb - parts per billion (µg/l)	* tested per DNR monitoring requirements	
				ppm - parts per million (mg/l)		

Definitions:

Treatment Technique (TT) -	A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL) -	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action levels are reported at the 90th percentile for homes at greatest risk.
Maximum Contaminant Level (MCL) -	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG) -	The level of a contaminant in drinking water below which there is no known or expected risk to health.

Customer Name _____ Daytime Phone _____

Mailing Address _____ City _____ State _____ Zip _____

Kenosha Water Utility Account # _____ (number is on the upper right side of the water bill)

I authorize the Kenosha Water Utility to instruct my financial institution to deduct my payments from the account listed above. If at any time I decide to discontinue this payment service, I will notify the Kenosha Water Utility.

Signature _____ Date _____

Mail to: Kenosha Water Utility, 4401 Green Bay Road, Kenosha, WI 53144

Don't forget to include a voided check

(cut out on dotted line)

Join the Automatic Water Bill Payment Plan
Save Time and Money

- **How does it work? It's Easy!** Just complete the above enrollment form, sign it and enclose a voided check and mail to the Kenosha Water Utility. Or go to www.directpaymentplan.com. There is no charge for this service.
- **When will it take effect?** Normally within 4-6 weeks. Look for notification on the bottom of your next water bill. It will say "Direct Debit --Do Not Pay"
- **How will my bill be paid?** On the due date shown on your bill, your amount due will automatically be deducted from your checking or savings account.
- **How can I be sure my bill has been paid?** The payment will appear on your checking or savings account statement.

Credit Card Payments

We are now accepting water bill payments using a major credit card. Accepted payment cards are MasterCard, Visa, American Express and Discover. We will not be able to take your payment at the Water Utility. To pay by credit card do one of the following:

- **Call 1-800-2paytax (1-800-272-9829)** or **Go to www.officialpayments.com**

You will be asked to provide your 13 digit water account number, which may be found in the Account Number field on your water bill. There will be a \$6.50 charge to process your payment by credit card. Maximum payment is \$500.00. If you have any questions call our Business Office at (262) 653-4300 between 8:00 AM and 4:30 PM, Monday – Friday.

If you own or live in a multiple unit dwelling served by a single water meter and would like to receive copies of this report for other tenants in the building, please call 262-653-4300. Copies are also available at any Kenosha Public Library.

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