

# 2016 Annual Drinking Water Quality Report for Kenilworth, IL

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your drinking water comes from, what it contains, how it compares to standards set by regulatory agencies and the efforts made by Kenilworth Public Works to provide safe drinking water. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

For more information regarding this report, please contact Patrick Brennan at 847-251-1666.

## **Do I need to take special precautions?**

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 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

Your water comes from Lake Michigan. Prior to delivery, it is treated at the treatment plant at the lakefront using the unit processes of coagulation, flocculation, sedimentation and filtration. In the treatment process, suspended matter (turbidity) is removed and the water is disinfected using chlorine to kill harmful bacteria and viruses that may be present. The water leaving the treatment plant meets all State and Federal drinking water standards.

## **Source water assessment and its availability**

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings (See: "How Can I get Involved?" below). This source water assessment has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessment, including Importance of Source Water, Susceptibility to Contamination Determination, and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>

Susceptibility is defined as the likelihood for the source water of a public water system to be contaminated at concentrations that would pose a concern. The Illinois EPA considers all surface water sources of community water supplies to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intakes with no protection, only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Kenilworth's intake is located far enough offshore that shoreline point sources of contamination are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to wet weather flows from the North Shore Channel. If the currents are flowing in a Northerly direction, contaminants from these flows could migrate to Kenilworth's intake and compromise water quality. Correlation between Northbrook's rainfall and Kenilworth's coliform data, combined with North Shore Channel discharge dates, show the potential effect of these flows on Kenilworth's water quality. In

addition, the proximity to a major shipping lane adds to the susceptibility should there be a spill near the intake.

Water supply officials from Kenilworth are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e., spills, tanker leaks, exotic species, etc.) is frequently discussed at the Association's quarterly meetings. Lake Michigan, as well as all the Great Lakes, has many different organizations and associations that are currently working to improve overall water quality. Since the predominant land use within Illinois' boundary of the Lake Michigan watershed is urban, most Lake Michigan watershed protection activities are aimed at protecting the source of our drinking water from urban contaminants.

### **Why are there contaminants in my drinking 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 (EPA) Safe Drinking Water Hotline (800-426-4791).

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:

- Microbial contaminants, such as viruses and bacteria, that 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 storm water 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; and
- 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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)

- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

### How can I get involved?

Decisions affecting the Kenilworth water system are made by the Village Board. Village Board meetings are typically held the third Monday of every month at the Village Hall, 419 Richmond Rd., Kenilworth, IL. Residents are encouraged to attend.

### For more information please contact:

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## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions on the last page of this report.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Max. Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	1.19	0.59	1.0	2016	No	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	NA	60	19.1	19.1	19.1	2016	No	By-product of drinking water disinfection.
TTHMs [Total Trihalomethanes] (ppb)	NA	80	32	31.7	31.7	2016	No	By-product of drinking water disinfection.

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				<u>Low</u>	<u>High</u>			
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.020	0.020	0.020	2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.7	0.668	0.668	2016	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.44	0.44	0.44	2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)	N/A	N/A	9	8.8	8.8	2016	No	Erosion of naturally occurring deposits; used in water softener regeneration

<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	0.3	100%	0.054	0.104	2016	No	Soil runoff
100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.258. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								

<b>Radioactive Contaminants</b>								
Radium (combined 226/228) (pCi/L)	0	5	1.0	0.995	0.995	2016	No	Erosion of natural deposits

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.337	2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead - action level at consumer taps (ppb)	0	15	10.7	2015	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

### Additional Information for Lead

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. Village of Kenilworth 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 2 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>.

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

**Note: No Water Quality Violations were recorded during 2016 for the Village of Kenilworth's Water System.**