



City of Kingsford Water Supply 2016 Annual Water Quality Report

The City of Kingsford Water Department is pleased to provide its customers with this past year's Annual Water Quality Report. Beginning in 1999 this report is made available to our customers every year for the Water Distribution Systems Water Quality for the previous year's test results. Our goal is to provide our customers with a safe and dependable supply of drinking water.

Last year tap water supplied by the Kingsford Water Distribution System met all U.S. Environmental Protection Agency (EPA) and State of Michigan Department of Environmental Quality (MDEQ) drinking water health standards.

This report is an overview of the water quality testing and results taken during the testing period ending in 2016. Included are details about where your water comes from, what it contains, and how it compares to EPA and MDEQ water quality standards. We are committed to providing quality water to our customers and providing you with this information.

Source Water Assessment Program.

In 2003 the Michigan Department of Environmental Quality performed a source water assessment of the City of Kingsford Wells. Under the provisions of the 1996 amendments to the Safe Drinking Water Act, the State of Michigan is required to develop and implement an assessment of all public source water supplies. City of Kingsford wells received a score of Moderately High. For Further information on this report you may contact Justin Wickman, Public Works Department at (906) 774-3070.

The Sources of Kingsford's Water.

The City of Kingsford Water Distribution System drinking water comes from five wells located in the northwest part of the city. The No. 1 well is 100 feet deep and can produce 750 gallons of water per minute. The No. 4 well is 70 feet deep and can produce 130 gallons of water per minute. The No. 5 well is 90 feet deep and can produce 800 gallons of water per minute. The No. 6 well is 150 feet deep and can produce 750 gallons of water per minute. The No. 7 well is 150 feet deep and can produce 1550 gallons of water per minute. The City of Kingsford Water Distribution System provides water to residences, businesses, and industry in the City of Kingsford along with the Skidmore and East Kingsford Areas of Breitung Township.

Drinking Water in General.

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 1 (800) 426-4791.

General Sources of Drinking Water.

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 Water before it is Treated.

1. Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
3. Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential use.
4. 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 storm water runoff, and septic systems.
5. 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, which limit the amount of certain contaminants in water provided by the 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.

Do you 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/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.

Water Quality Data Table

During the testing period ending in 2016, the Kingsford Water Supply was tested for over 140 contaminants including Automated Partial Chemicals, Volatile Organic Chemicals, Synthetic Organic Chemicals, Radiological Contaminants, Lead, Copper and Cyanide; also included in the required testing was the routine sampling and testing for Bacteriological Contaminants.

The table below lists all of the drinking water contaminants that we detected during the testing period ending in 2016. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of 2016. The Environmental Protection Agency and/or the State of Michigan Department of Environmental Quality require us to monitor for certain contaminants less than once per year because the concentration of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

Terms and Abbreviations used below:

MCLG: Maximum Contaminants 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: 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.

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

TT: Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water.

Contaminants	MCLG	MCL	Your Water	Range Low	High	Sample Date	Violation	Typical Source
Radiological Contaminants								
Gross Alpha (pCi/l)	0	15	1.13	1.01	1.24	07/15/14	No	Decay of natural and manmade deposits. Erosion of natural deposits.
Gross Beta (pCi/l)	0	50	0.1	0.0	0.64	07/06/11	No	
Radium 226	0	5.0	0.1	0.05	0.15	07/06/11	No	
Radium 228	0	comb.	0.41	0.0	0.95	07/06/11	No	
Inorganic Contaminants								
Nitrate (ppm)	0	10	0.96	0.41	1.50	07/15/16	No	Fertilizer runoff and natural Natural Natural Natural
Fluoride (ppm)	0	4.0	0.05	0.04	0.05	07/16/16	No	
Arsenic (ppm)	0.002	0.010	0.001	n/d	0.001	07/15/14	No	
Barium (ppm)	2.00	2.00	0.025	n/d	0.025	07/15/14	No	
Microbiological Contaminants								
Total Coliform (samples taken in 2015)	0	0	n/d	n/d	n/d	2016	No	Naturally present in the environment.
Unregulated Contaminants								
Sodium (ppm)	NR	NR	4.6	4.0	5.1	7/27/16	No	Erosion of natural deposits.
Lead/Copper at Consumer Tap								
	AL	MCLG	Your Water	Samples > AL #90%ile				
Lead (ppb)	15.0	0	2.4	0		06/16	No	Corrosion of household plumbing systems. Corrosion of household plumbing systems.
Copper (ppb)	1300	0	499	0		06/16	No	

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. The City of Kingsford 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>.

Units Description:

Ppm:	parts per million, or milligrams per liter (mg/l)	NA: Not Applicable
Ppb:	parts per billion, or micrograms per liter (ug/l)	NR: Not Regulated
PCi/l:	picocuries per liter (a measure of radioactivity)	n/d: Not Detected

A COPY OF THIS REPORT IS AVAILABLE AT THE KINGSFORD CITY HALL, 305 S. CARPENTER AVENUE AND THE PUBLIC WORKS FACILITY, 1500 CARTER DRIVE, KINGSFORD, MICHIGAN 49802 or the City of Kingsford web site located at <http://www.cityofkingsford.com/> "THIS REPORT WILL NOT BE MAILED TO EACH CUSTOMER"

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