

## Questions

*What precautions are being taken to protect our drinking water?*

The Mishawaka Utilities has two programs to further help protect our drinking water. Our *Backflow Program* works to prevent contaminants from being siphoned into our water system from industrial, commercial and irrigation activities due to low pressure conditions caused by transient water demands. In homes, outside faucets and irrigation systems may be sources of cross-connections. Mishawaka industrial, commercial and medical facilities are inspected to ensure that backflow preventors are installed and functional. Our *Wellhead Protection Program*, which is Federally mandated, is another means of protecting our water source. This program identifies and promotes inspections of critical areas that are sensitive to chemical spills and contamination. Routine inspections are made to these areas to protect our aquifer.

*Is a small pinhole leak that important to fix?*

Yes, did you know in just one hour a leak the size approximately 1/32" can loose 8 gallons of water. That would be equivalent to enough water to flush your toilet. In one month that would waste 6,006 gallons or the same amount of water as taking 200 showers.

This report is provided annually as a public service by Mishawaka Utilities so that our consumers may have confidence in the quality of our water.

If you have questions about this report, call our Water Division, Water Quality Department (574) 258-1652. Learn more about Mishawaka Utilities from our web site at [www.mishawakautilities.in.gov](http://www.mishawakautilities.in.gov).

Further information may be obtained from U.S. Environmental Protection Agency (EPA) Water Information at [www.epa.gov/safewater/](http://www.epa.gov/safewater/)

Safe Drinking Water Hotline  
800-426-4791

Mishawaka Utilities is a member of:  
American Water Works Association  
PWSID #: IN5271009

## Mishawaka Utilities Water Division



ANNUAL DRINKING WATER  
QUALITY REPORT

## HOW GOOD IS MISHAWAKA WATER?

Mishawaka Utilities is proud of your water system and is pleased to issue this Annual Drinking Water Quality Report for 2012. This brochure is a summary of the quality of our drinking water provided to our customers.

Mishawaka drinking water has exceeded the strict standards set forth by the United States Environmental Protection Agency and the Indiana Department of Environmental Management. In this report, you will find where your water comes from along with data about your water quality. You will also learn where you can receive more information about your drinking water.

The bottom line: *The water is safe to drink!* We encourage public interest and participation in our community's decisions affecting drinking water. Call us for information about the next opportunity for public participation in decisions about our drinking water.

## WHERE DOES MISHAWAKA'S WATER COME FROM?

Mishawaka Utilities pumps groundwater from twenty-two wells that tap the St. Joseph Aquifer, and transmits it to our treatment plants.

In 2011, the Mishawaka Utilities Water Division supplied to our customers an average of 7,510,000 gallons of water per day. Did you know it takes approximately 39,900 gallons of water to produce a new car and four tires? In one day we produce enough water to manufacture 192 cars.

## WHAT ARE WE DOING TO MAKE THINGS BETTER?

Mishawaka Utilities is constantly striving to improve the quality of drinking water delivered to Mishawaka residents. To keep a check on water quality, we contract an independent laboratory to test our water. The results of this analytical testing let us know if any problems occur, and how effective our water treatment is.

Mishawaka Utilities also has an interactive Web site to allow quick and easy access for our customers.



WATER  
FACT

WE TEST DRINKING WATER EVERY DAY OF THE YEAR, SEVEN DAYS A WEEK FOR AN AVERAGE OF OVER 50 DRINKING WATER SAMPLES TESTED EACH DAY TO HELP ENSURE THE QUALITY OF OUR DRINKING WATER.

## WHAT ELSE SHOULD I KNOW?

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) established regulations which 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.

WATER  
FACT

IN 2011 OUR CUSTOMERS CONSUMED AN AVERAGE OF 200 GALLONS PER DAY, PER PERSON.

WATER  
FACT

MISHAWAKA UTILITIES MAINTAINS OVER 294 MILES OF DISTRIBUTION PIPES WITHIN OUR WATER SYSTEM.

## WHERE DOES WATER COME FROM?

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:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) 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.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) 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.

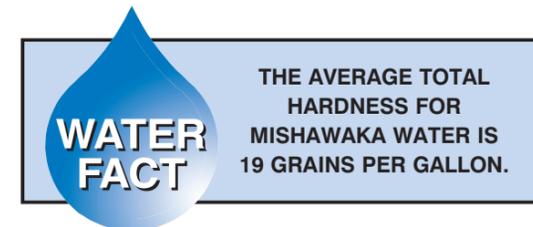
(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Testing for the above classes of contamination is performed in accordance with a testing schedule provided by IDEM in accordance with Federal regulations.

## IMPORTANT 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.

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.



## HOW TO READ THIS TABLE

It's easy! Our water is tested to assure that it is safe and healthy. The results of tests performed in 2011 or the most recent testing available are presented in the table.

The testing data presented in this current report represents the results from the last required testing date for that contaminant. Testing dates may vary depending on contaminant and requirements. The strictly regulated testing schedule is set and under the guidance of the EPA and IDEM. We test for numerous contaminants, but only **contaminants that are detected are reported.**

The column marked **GOAL** shows the Maximum Contaminant Level Goal or **MCLG**. This is 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.

The column marked **MAXIMUM ALLOWED** is the Maximum Contaminant Level or **MCL**. This is 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.

The column marked **DETECTED LEVEL** shows the results observed in our water during the most recent round of testing.

**SOURCE OF CONTAMINANTS** provides an explanation of the typical natural or man-made origins of the contaminant. Footnotes below the chart are provided to explain important details.

**ACTION LEVEL** is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

## THE WATER WE DRINK: SUMMARY OF WATER QUALITY DATA

INORGANIC CONTAMINANTS	DATE TESTED	IN COMPLIANCE	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Arsenic (ppm)	2011	Yes	0.0100	0.0100	0.0020	nd - 0.0020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium (ppm)	2011	Yes	2.000	2.000	0.230	0.072 - 0.230	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper <sup>1</sup> (ppm)	2011	Yes	1.3	AL=1.3	0.79		Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Fluoride <sup>2</sup> (ppm)	2011	Yes	4.00	4.00	1.10	1.00 - 1.10	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead <sup>3</sup> (ppb)	2011	Yes	0	AL:15	9.2		Corrosion of household plumbing systems; Erosion of natural deposits.
Nickel (ppb)	2011	Yes	n/a	100	0.0019	0.0016 - 0.0019	Naturally occurs in soils, groundwater and surface waters, often used in electroplating, stainless steel and alloy products.
Nitrate (ppm)	2011	Yes	10	10	1.0	nd - 1.0	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sulfate (ppm)	2011	Yes	n/a	n/a	71	35 - 71	Erosion of natural deposits.
Sodium (ppm)	2011	Yes	n/a	n/a	34	15 - 34	Erosion of natural deposits.
VOLATILE ORGANIC CONTAMINANTS							
	DATE TESTED	IN COMPLIANCE	MCLG	MCL	DETECTED LEVEL	RANGE	SOURCE OF CONTAMINANTS
TTHMs (ppb)	2011	Yes	n/a	100	19.9	13.0 - 48.8	By-product of drinking water chlorination.
HAA <sub>5</sub> (Total Haloacetic Acids) (ppb)	2011	Yes	n/a	60	8.0	4.9 - 20.4	By-product of drinking water disinfection.
SYNTHETIC ORGANIC CHEMICAL							
	DATE TESTED	IN COMPLIANCE	MCLG	MCL	DETECTED LEVEL	RANGE	SOURCE OF CONTAMINANTS
Atrazine (ppb)	2009	Yes	3	3	0.1	nd - 0.1	Runoff from herbicides used on row crops.
MICROBIOLOGICAL CONTAMINANTS							
	DATE TESTED	IN COMPLIANCE	MCLG	MCL	DETECTED LEVEL	RANGE	SOURCE OF CONTAMINANTS
Total Coliform (% of samples)	2011	Yes	No Detects	≥5%	Absent	No Detects	Naturally present in the environment.
RADIOACTIVE CONTAMINANTS							
	DATE TESTED	UNIT	MCLG	MCL	DETECTED LEVEL	RANGE	SOURCE OF CONTAMINANTS
Alpha emitters (pCi/L)	2010	Yes	0	5	3.9	<1.5 - 3.9	Erosion of natural deposits.
Beta/photon emitters (pCi/L)	2010	Yes	0	50	<3.0	<3.0	Decay of natural and man-made deposits.
Radium 228 (pCi/L)	2010	Yes	0	5	<0.6	<0.6	Erosion of natural deposits.
Uranium (mg/L)	2010	Yes	0	30 ug/L	<0.0005	<0.0005 - 0.001	Erosion of natural products.

### WATER QUALITY TABLE FOOTNOTES

- None of the samples tested had copper at a level that exceeded the Action Level of 1.3 ppm.
- We add fluoride at a concentration to yield a nominal 1 ppm in Mishawaka's water to promote strong teeth in children.
- One sample tested had lead at a level that exceeded the Action Level of 15 ppb.

### KEY TO TABLE

AL = Action Level  
MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
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)  
n/a = not applicable  
nd = none detected

*Important Information on 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 Mishawaka Utilities Water Division 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, (800-426-4791) or at <http://www.epa.gov/safewater/lead>.*