

## Questions

### Is there lead in my water?

Water that comes out of the treatment plants has no detectable lead; however, test results from some of the homes in our community show there can be low levels of lead and copper in their tap water, primarily caused by corrosion of household pipes, solder and faucets.

We have taken proactive measures to make adjustments in the water chemistry to minimize the amount of corrosion that could occur to protect our customers.

You can also protect yourself in the following ways:

- Use only cold water for cooking and drinking.
- Never cook or mix infant formula using hot water from the tap.
- Run your tap water for awhile before drinking, especially if the water has sat in your pipes for more than six hours.
- Run your water until the temperature is cold.
- Check your plumbing fixtures to see if they are "lead free". In 2014 a new law came into effect that limits the amount of lead in faucets and plumbing.

### How can I conserve water?

Here are just a few ways to conserve water:

- Check your toilet for leaks by putting a few drops of food coloring in your tank. If the color shows up in the toilet bowl without flushing, you have a wasteful leak that is costing you money and wasting water.
- Water trees and plants only once a week. Place a layer of mulch around trees and plants to retain water.
- Only water your lawn when necessary. If the grass springs back after you step on it, then it does not need to be watered.
- Shorten your shower by a minute or two and you'll save up to 150 gallons per month.
- Run your washer and dishwasher only when they are full. You can save up 1,000 gallons a month.

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.mishawaka.in.gov](http://www.mishawaka.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  
PWSID #: IN5271009  
is a member of:  
American Water Works Association

**WATER  
FACT**

IN 2017 OUR CUSTOMERS  
USED AN AVERAGE  
OF 200 GALLONS PER  
PERSON PER DAY.

# Mishawaka Utilities Water Division



**2018**

**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 2018. This brochure is a summary of the quality of our drinking water provided to our customers.

Mishawaka's 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.

## DO WE HAVE ENOUGH WATER?

Mishawaka sits on top of one of the most prolific aquifers in the United States, if not the world. The Saint Joseph Aquifer is an invaluable resource that we must protect. Through extensive testing every day of the year, we monitor the water that is pumped from this aquifer. Our Wellhead Protection team watches closely for any spills, dumping, or

unapproved and illegal wells. Mishawaka Utilities Water Division works every day to ensure our water resource will be available for generations to come. *'The average American household spends 47% of monthly utility cost on phone, internet, and cable services, and only 8% on water and wastewater service.'*

1. Source: Office of Water EPA 817-F-15-020 June 2015.

## 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.

**MISHAWAKA UTILITY WATER  
DIVISION MAINTAINS OVER  
315 MILES OF DISTRIBUTION  
PIPES WITHIN OUR  
WATER SYSTEM.**

**WATER  
FACT**

## 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.

## PREVENTING WINTER FREEZE UPS

Winter means colder temperatures and the chance of frozen pipes and meters. The colder the winter, the further down the frost line in the ground moves. If the temperatures should reach the low teens and subzero temperatures, it is recommended you run a small stream of water to prevent freeze ups. Letting a faucet drip during extreme cold weather can prevent a pipe from bursting. Opening a faucet will provide relief from the excessive pressure that builds between the faucet and the ice blockage when freezing occurs. If there is no excessive water pressure, there is no burst pipe, even if the water inside the pipe freezes.

About half of the other freeze ups we see are the customer's responsibility. If your line does freeze it could cost hundreds of dollars and in some cases thousands to get the water flowing again, and could take days to restore service.

Even as the temperature warms, the frost takes longer to melt in the ground. This is why we say just a small trickle of water flowing during the winter months, most notably from January through March will keep your pipes from freezing.

**PPM: 1 PART PER MILLION OR  
MILLIGRAMS PER LITER (MG/L)  
CORRESPONDS TO ONE MINUTE  
IN TWO YEARS OR A SINGLE  
PENNY IN \$10,000.  
1000 PPB = 1PPM  
PPB: 1 PART PER BILLION  
OR MICROGRAMS PER LITER  
(UG/L) CORRESPONDS TO  
ONE MINUTE IN 2,000 YEARS OR  
A SINGLE PENNY IN \$10,000,000.**

**WATER  
FACT**

## 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 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.

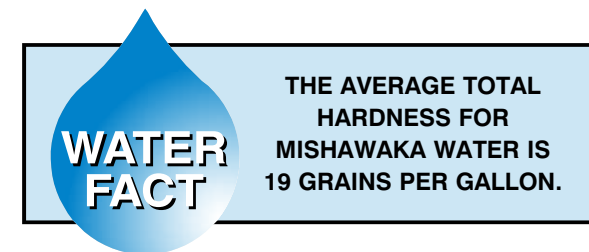
**(E) Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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

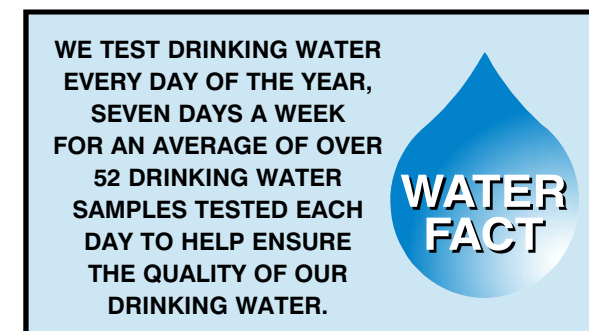
## IMPORTANT HEALTH INFORMATION

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.



**WATER FACT**  
THE AVERAGE TOTAL HARDNESS FOR MISHAWAKA WATER IS 19 GRAINS PER GALLON.



**WATER FACT**  
WE TEST DRINKING WATER EVERY DAY OF THE YEAR, SEVEN DAYS A WEEK FOR AN AVERAGE OF OVER 52 DRINKING WATER SAMPLES TESTED EACH DAY TO HELP ENSURE THE QUALITY OF OUR DRINKING WATER.

## HOW TO READ THIS TABLE

It's easy! Our water is tested to assure that it is safe to drink. The results of tests performed in 2017 or the most recent testing available are presented in the table.

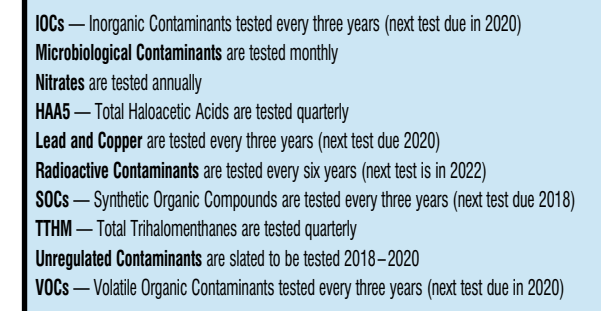
The testing data presented in this current report represents the results from the last required testing date for that contaminant. Testing dates may vary depending on contaminant and requirements. The strictly regulated testing schedule is set and under the guidance of the EPA and IDEM. We test for numerous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

**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.



**IOCs** — Inorganic Contaminants tested every three years (next test due in 2020)  
**Microbiological Contaminants** are tested monthly  
**Nitrates** are tested annually  
**HAA5** — Total Haloacetic Acids are tested quarterly  
**Lead and Copper** are tested every three years (next test due 2020)  
**Radioactive Contaminants** are tested every six years (next test is in 2022)  
**SOCs** — Synthetic Organic Compounds are tested every three years (next test due 2018)  
**TTHM** — Total Trihalomethanes are tested quarterly  
**Unregulated Contaminants** are slated to be tested 2018–2020  
**VOCs** — Volatile Organic Contaminants tested every three years (next test due in 2020)

## THE WATER WE DRINK: 2018 SUMMARY OF WATER QUALITY DATA

INORGANIC CONTAMINANTS	DATE TESTED	IN COMPLIANCE	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
<b>Arsenic (ppb)</b>	2017	Yes	0	10	0.0 - 0.0015	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Barium (ppm)</b>	2017	Yes	2	2	0.069 - 0.24	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Chromium (ppm)</b>	2017	Yes	0.1	0.1	0.0014 - 0.0017	Discharge from steel and pulp mills; erosion of natural deposits.
<b>Copper (ppm)</b>	2017	Yes	1.3	AL=1.3	No sites exceeded AL	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
<b>Fluoride (ppm) (natural)</b>	2017	Yes	4	4	0.60 - 0.80	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Lead (ppb)</b>	2017	Yes	0	AL:15	1 site at AL	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Nickel (ppb)</b>	2017	Yes	n/a	100	0.0 - 0.0011	Naturally occurs in soils, groundwater and surface waters, often used in electroplating, stainless steel and alloy products.
<b>Nitrate (ppm)</b>	2017	Yes	10	10	0.90 - 1.50	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Nitrate and Nitrate (ppm)</b>	2017	Yes	10	10	0.9 - 1.5	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits.
<b>Sulfate (ppm)</b>	2017	Yes	n/a	n/a	29 - 52	Erosion of natural deposits.
<b>Sodium (ppm)</b>	2017	Yes	n/a	n/a	21 - 42	Erosion of natural deposits.
DISINFECTION BY-PRODUCTS	DATE TESTED	IN COMPLIANCE	GOAL MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS
<b>Total Trihalomethanes (ppb)</b>	2017	Yes	n/a	80	8.8 - 34.4	By-product of drinking water chlorination.
<b>Total Haloacetic Acids (ppb)</b>	2017	Yes	n/a	60	3.6 - 14.3	By-product of drinking water chlorination.
MICROBIOLOGICAL CONTAMINANTS	DATE TESTED	IN COMPLIANCE	GOAL MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS
<b>Total Coliform (% of samples)</b>	2017	Yes	No Detects	≥5%	None Detected	Naturally present in the environment.
RADIOACTIVE CONTAMINANTS	DATE TESTED	IN COMPLIANCE	GOAL MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS
<b>Gross Alpha (pCi/L)</b>	2016	Yes	0	15	-0.277 - 1.96	Erosion of natural deposits.
<b>Radium – 228 (pCi/L)</b>	2016	Yes	0	5	0.498 - 01.71	Erosion of natural deposits.
UNREGULATED CONTAMINANTS*	DATE TESTED	FEDERAL REQUIREMENT	MCL	RANGE	SOURCE OF CONTAMINANTS	
<b>Chlorate (ug/L)</b>	2013	None Required	n/a	nd - 290	Agricultural defoliant or desiccant; disinfection by-product and used in production of chlorine dioxide.	
<b>Chromium, Hexavalent (ug/L)</b>	2013	None Required	n/a	nd - 0.04	Naturally occurring element; used in making steel and other alloys.	
<b>1,1-Dichloroethan (ug/L)</b>	2013	None Required	n/a	nd - 0.16	Halogenated alkane; used as a solvent.	
<b>1,4-Dioxane (ug/L)</b>	2013	None Required	n/a	nd - 0.07	Used in solvent or solvent stabilizer in manufacture of products.	
<b>Molybdenum (ug/L)</b>	2013	None Required	n/a	1.10 - 2.50	Naturally occurring element found in ores and present in plants, animals and bacterial.	
<b>Strontium (ug/L)</b>	2013	None Required	n/a	88.0 - 1.20	Naturally occurring element.	

### WATER QUALITY TABLE FOOTNOTES

- The EPA and Indiana Department of Environmental Management had mandated that Water Utilities report the monitoring results whenever unregulated contaminants are detected. In 2013 the Mishawaka Water Division tested our water and the above unregulated contaminants were detected. There is no federal requirement for health effect information for unregulated contaminants nor has the EPA set a Maximum Contaminant Level (MCL).

### 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>.*