

Questions

What is the sampling schedule for testing Mishawaka's water?

Regular sampling and testing of our water is important for the assurance of the quality of water. Our sampling schedule is as follows:

Daily — We test the following for each of our treatment plants and one distribution site: Chlorine residuals, pH, temperature, iron, manganese, fluoride, conductivity and hardness.

Monthly — We check a minimum of 50 samples throughout our water system for total coliform and E. coli bacteria.

Quarterly — We test for Trihalomethanes and Haloacetic Acids.

Yearly — We test for nitrates. The EPA establishes a schedule of yearly or alternate year testing for the following: Inorganics, Volatile Organic Contaminants, Synthetic Organic Chemicals and Lead and Copper.

Our daily testing is done by a team of highly trained, state-certified water treatment professionals. Our monthly, quarterly and yearly testing is done by independent certified chemists and technicians which follow precise procedures established by the U.S. EPA and the Indiana Department of Environmental Management.

What is the white substance in my ice cubes?

The white substance is a concentration of naturally occurring minerals that are dissolved in our water. These minerals are non-toxic and are mostly made up of the minerals that give our water its hardness.

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.

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

Safe Drinking Water Hotline
800-426-4791

Mishawaka Utilities
PWSID #: IN5271009
is a member of:

American Water Works Association

Facts About Our Cover
The cover is a picture of our Blair Hills Water Tower. It was constructed in 2003 and has the capacity of 1.5 million gallons of Water.

Mishawaka Utilities

2014 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 2014. 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.

WATER FACT

IN 2013 OUR CUSTOMERS CONSUMED AN AVERAGE OF 200 GALLONS PER DAY, PER PERSON.

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. A Wellhead Protection Program is in place.

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 305 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

The "Winter of 2013" was unrelenting as temperatures plunged below freezing numerous times without many of the usual freeze/thaw cycles. The frost line normally doesn't penetrate more than two to three feet. We observed frost down to over five feet. The problem was not unique to Mishawaka Utilities Water Division, it was seen throughout the whole Midwest and into the southern states. This type of weather affecting our distribution system has not been seen in twenty plus years and never to this severity.

Your water line is in danger of freezing when the frost line moves down this far. It is recommended you run a small stream of water in the winter 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 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. It doesn't take much, just a small trickle of water flowing during the winter months, most notably from January through March, should keep your water flowing.

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.



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



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.

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 2013 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.

THE WATER WE DRINK: SUMMARY OF WATER QUALITY DATA

INORGANIC CONTAMINANTS	DATE TESTED	IN COMPLIANCE	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Arsenic (ppm)	2011	Yes	0.0100	0.0100	nd - 0.0020	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Barium (ppm)	2011	Yes	2.000	2.000	0.072 - 0.230	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper¹ (ppm)	2011	Yes	1.3	AL=1.3		Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Fluoride² (ppm)	2011	Yes	4.00	4.00	1.00 - 1.10	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead³ (ppb)	2011	Yes	0	AL:15		Corrosion of household plumbing systems; Erosion of natural deposits.
Nickel (ppb)	2011	Yes	n/a	100	0.0016 - 0.0019	Naturally occurs in soils, groundwater and surface waters, often used in electroplating, stainless steel and alloy products.
Nitrate (ppm)	2013	Yes	10	10	nd - 1.6	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sulfate (ppm)	2011	Yes	n/a	n/a	35 - 71	Erosion of natural deposits.
Sodium (ppm)	2011	Yes	n/a	n/a	15 - 34	Erosion of natural deposits.
VOLATILE ORGANIC CONTAMINANTS						
DATE TESTED	IN COMPLIANCE	MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS	
TTHMs (ppb)	2013	Yes	n/a	100	8.2 - 32.2	By-product of drinking water chlorination.
HAAs (Total Haloacetic Acids) (ppb)	2013	Yes	n/a	60	1.2 - 14.5	By-product of drinking water chlorination.
MICROBIOLOGICAL CONTAMINANTS						
DATE TESTED	IN COMPLIANCE	MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS	
Total Coliform⁴ (% of samples)	2013	Yes	No Detects	≥5%	Naturally present in the environment.	
RADIOACTIVE CONTAMINANTS						
DATE TESTED	UNIT	MCLG	MCL	RANGE	SOURCE OF CONTAMINANTS	
Alpha emitters (pCi/L)	2010	Yes	0	5	<1.5 - 3.9	Erosion of natural deposits.
Beta/photon emitters (pCi/L)	2010	Yes	0	50	<3.0	Decay of natural and man-made deposits.
Radium 228 (pCi/L)	2010	Yes	0	5	<0.6	Erosion of natural deposits.
Uranium (mg/L)	2010	Yes	0	30 ug/L	<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.
- In 2013, none of the 600 samples tested positive.

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>.

THE WATER WE DRINK: SUMMARY OF WATER QUALITY DATA

UNREGULATED CONTAMINANTS

	DATE TESTED	MRL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Molybdenum (ug/L)	2013	1.0	1.10 - 2.50	Naturally-occurring element found in ores and present in plants, animals and bacterial.
Strontium (ug/L)	2013	0.3	88.0 - 120	Naturally-occurring element
Chlorate (ug/L)	2013	20	nd - 290	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine
1,4-Dioxane (ug/L)	2013	0.07	nd - 0.07	Used in solvent or solvent stabilizer in manufacture of products
1,1-Dichloroethane (ug/L)	2013	0.03	nd - 0.16	Halogenated alkane; used as a solvent
Chromium, Hexavalent (ug/L)	2013	0.03	nd - 0.04	Naturally-occurring element; used in making steel and other alloys

There is no federal requirement for health effect information for unregulated contaminants.

ug/L = one part per billion (100 drops of liquid in a railroad tanker car)

MRL = Minimum Reporting Level