

Argos Water Works

2018 Drinking Water Quality Report

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water and help you understand the efforts we make to continually improve the water treatment process and protect our water resources.

We are pleased to report that our drinking water is safe and meets federal and state requirements. Our water source is the Maxinkukee Morain Aquifer. Our wells are located at 114 S. First St.

If you have any questions about this report or concerning your water utility, please contact Joe Stone at 574-892-5717, Ext. 235. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Wednesday of each month (unless otherwise posted) starting at 7:30 PM in the Town Hall located at 201 W. Walnut St.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. The Argos Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of March 1st, 2017 to March 1st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose 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 at 1-800-426-4791.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Micrograms per Liter (ug/L) – One part per billion corresponds to one ounce in 7,350,000 gallons of water or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Maximum Contaminant Level Goal (MCLG) - 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.

Maximum Contaminant Level (MCL) -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.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health.

Picocuries per liter (pCi/L) – A measure of radioactivity.

Besides the detected constituents listed above, we also tested for total coliform twice a month which did not show up above the detection levels. As you can see, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

The sources of drinking water (both tap water and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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:

- Microbial contaminants, such as viruses and bacteria, which 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 storm 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, storm water runoff and residential uses.
- Organic chemicals, 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.
- Radioactive materials, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure 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.

MCL's are set at a very stringent level. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

TEST RESULTS ARE FROM 2009

Contaminant	Violation Y/N	Level Detected	Unit Measure	Contaminant	Violation Y/N	Level Detected	Unit Measure
Radioactive Contaminants							
Beta/photon emitters	N	3.5000	mrem/yr	Gross alpha excluding Radon & uranium	N	3.4000	pCi/L

TEST RESULTS ARE FROM 2017

Contaminant	Violation Y/N	Level Detected	Unit Measure	IOC (Cont.)	Violation Y/N	Level Detected	Unit Measure
Arsenic	N	0.0023	mg/L	Sodium	N	9.2000	mg/L
Cyanide	N	0.0050	mg/L				

TEST RESULTS ARE FROM 2018

Contaminant	Violation Y/N	Level Detected	Unit Measure
Nitrate	N	0.8360	mg/L

TEST RESULTS ARE FROM 2015

Trihalomethane (TTHMS)	Violation Y/N	Level Detected	Unit Measure	HAA5	Violation Y/N	Level Detected	Unit Measure
Total TTHMS	N	23.2000	ug/L	Total HAA5	N	18.3000	ug/L

TEST RESULTS FOR 2015 FOR LEAD / COPPER ARE AS FOLLOWS (MOST RECENT TESTING):

Lead / Copper	Lead Level	Copper Level	Unit Measure	Lead / Copper	Lead Level	Copper Level	Unit Measure
Location #1	0.0020	1.280	mg/L	Location #6	<0.0001	0.052	mg/L
Location #2	0.0040	0.163	mg/L	Location #7	0.0001	0.391	mg/L
Location #3	<0.0001	0.249	mg/L	Location #8	<0.0001	0.367	mg/L
Location #4	0.0001	0.063	mg/L	Location #9	0.0020	1.700	mg/L
Location #5	<0.0001	0.332	mg/L	Location #10	0.0020	0.032	mg/L

Additional health effects you should know about:

Copper is an essential nutrient, but some people who drink water containing Copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing Copper in excess of the action level over many years can suffer liver or kidney damage.

Lead at elevated levels 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. We are 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Inorganic Compounds	
Contaminant	Likely Sources
Arsenic	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics productions wastes.
Barium	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Beryllium	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.

Chromium	Discharge from steel and pulp mills; Erosion of natural deposits.
Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Disinfection Byproducts & Precursors	
Contaminant	Likely Sources
Total Haloacetic Acids	By-product of drinking water chlorination.
Total Trihalomethanes	By-product of drinking water chlorination.
Unregulated Contaminants	
Contaminant	Likely Sources
Sodium	Erosion of natural deposits; Leaching.

Compound ID#	Compound Name	Analysis Date	Method #	D.L. ug/L	Result ug/L	Compound ID#	Compound Name	Analysis Date	Method #	D.L. ug/L	Result ug/L
REGULATED CONTAMINANTS						UNREGULATED CONTAMINANTS					
All testing was below detectible level						2941	Chloroform	4/7/11	524.2	0.5	0.91

Compound ID#	Compound Name	Analysis Date	Method #	D.L. ug/L	Result ug/L	MCL ug/L	Compound ID#	Compound Name	Analysis Date	Method #	D.L. ug/L	Result ug/L
REGULATED CONTAMINANTS							UNREGULATED CONTAMINANTS					
2051	Alachlor (Lasso)	3/14/18	525.2	ug/L	0.10	2.00	2047	Aldicarb	2/18/12	531.1	ug/L	2.0
2050	Atrazine	3/14/18	525.2	ug/L	0.10	3.00	2044	Aldicarb Sulfone	2/18/12	531.1	ug/L	2.0
2306	Benzo(a)pyrene	3/14/18	525.2	ug/L	0.04	0.20	2043	Aldicarb Sulfoxide	2/18/12	531.1	ug/L	2.0
2046	Carbofuran	3/6/18	531.1	ug/L	1.00	40.00	2356	Aldrin	2/17/12	508.1	ug/L	0.1
2959	Chlordane (alpha & gamma)	3/15/18	508.1	ug/L	0.05	2.00	2076	Butachlor	2/09/12	525.2	ug/L	0.2
2105	2,4-D	3/14/18	515.2	ug/L	1.00	70.00	2021	Carbaryl	2/18/12	531.1	ug/L	2.0
2031	Dalapon	3/8/18	552.2	ug/L	5.00	200.00	2440	Dicamba	2/16/12	515.2	ug/L	1.0
2931	DBCP	3/8/18	504.1	ug/L	0.02	0.20	2070	Dieldrin	2/17/12	508.1	ug/L	1.0
2041	Dinoseb	3/14/18	515.2	ug/L	1.00	7.00	2066	3-Hydroxycarbofuran	2/18/12	531.1	ug/L	1.0
2063	2,3,7,8-TCDD (Dioxine)						2022	Methomyl	2/18/12	531.1	ug/L	1.0
2032	Diquat	3/14/18	549.2	ug/L	2.00	20.00	2045	Metolachlor	2/09/12	525.2	ug/L	0.1
2035	Di(2-ethylhexyl)adipate	3/14/18	525.2	ug/L	0.60	400.00	2595	Metribuzin	2/09/12	525.2	ug/L	0.1
2039	Di(2-ethylhexyl)phthalate	3/14/18	525.2	ug/L	1.80	6.00	2077	Propachlor	2/09/12	525.2	ug/L	0.2
2033	Endothall	3/14/18	548.1	ug/L	9.00	100.00						
2005	Endrin	3/15/18	508.1	ug/L	0.10	2.00						
2946	Ethylene Dibromide (EDB)	3/8/18	504.1	ng/L	10.00	50.00						
2034	Glyphosate (Round-up)		547.0	ug/L	70.00	700.00						
2065	Heptachlor	3/15/18	508.1	ug/L	0.20	0.40						
2067	Heptachlor Epoxide	3/15/18	508.1	ug/L	0.10	0.20						
2274	Hexachlorobenzene	3/15/18	508.1	ug/L	0.10	1.00						
2042	Hexachlorocyclopentadiene	3/14/18	525.2	ug/L	0.20	50.00						
2010	Lindane	3/15/18	508.1	ug/L	0.10	0.20						
2015	Methoxychlor	3/14/18	525.2	ug/L	0.10	40.00						
2036	Oxamyl (Vydate)	3/6/18	531.1	ug/L	1.00	200.00						
2326	Pantachlorophenol	3/14/18	515.2	ug/L	0.40	1.00						
2040	Picloram (Tordan)	3/14/18	515.2	ug/L	1.00	500.00						
2383	PCB's											
2037	Simazine	3/14/18	525.2	ug/L	0.10	4.00						
2110	2,4,5-TP (Silvex)	3/14/18	515.2	ug/L	1.00	50.00						
2020	Toxaphene	3/15/18	508.1	ug/L	1.00	3.00						

NOTICE: The water plant was in violation by not testing Fluoride during the appropriate time frame in 2017. The test was taken in early 2018 and was found to be within the acceptable levels.

We ask that all of the members of our community help us protect our water resources, now and for our children's future. Here are some household tips:

- Recycle used oil, automotive fluids, batteries and other products. Don't dispose of hazardous products in toilets, storm drains, wastewater systems, creeks, alleys or on the ground. Such disposal can pollute water above and below the ground.
- Reduce the amount of fertilizers, pesticides or other hazardous chemicals you use. Buy only what you need, so you don't have to dispose of leftovers. Read labels/follow all directions on household chemicals and other hazardous products used around your home. Please contact Marshall County Solid Waste @ 574-935-8618 for more information on how to dispose of those types of items.
- Check your car, boat, motorcycle, other machinery and equipment for leaks/spills. Place drip pans under leaking vehicles/equipment and make repairs as soon as possible. Clean up spilled fluids with an absorbent material, such as kitty litter or sand, and properly dispose of the material. Please, do not allow spills to soak into the ground or rinse spills into a nearby storm drain.
- Properly plug and abandon water wells that are no longer in use.
- Residents with private drinking water wells may incorporate the following drinking water protection tips:
 - ✓ Slope the area around the well so that surface water drains away from the well.
 - ✓ Do not locate any potential pollutant activity up slope or near the well.
 - ✓ Keep accurate records of any well maintenance, such as disinfection or sediment removal, that might require the use of chemicals in the well.
 - ✓ Use a Licensed Water Well Driller for any new well construction, modification or proper well abandonment.
 - ✓ Do not use wells for disposal of any chemicals, wash water or other materials.