

## **Annual Drinking Water Quality Report Avilla Water Department IN5257002**

This Annual Water Quality Report is for the period of January 1 thru December 31, 2018. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by Avilla Water Department is ground water from 3 wells at the south end of town about 130 feet deep.

For more information regarding this report contact Bill Ley at 260-897-2781. It is also available on our website – [www.avilla-in.org](http://www.avilla-in.org).

We encourage public interest and participation in our community's decisions affecting drinking water. Regular Town Council meetings are held on the third Wednesday of each month at 7:00 pm in Town Hall, 108 S. Main St. They are open to the public.

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 water 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, urban storm water runoff, and residential uses.
- 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.
- 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 public water systems. FDA regulations establish limits for contaminants in bottled water which provide the same protection for public health.

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 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 provider. EPA/CDC guidelines on

## Annual Drinking Water Quality Report Avilla Water Department IN5257002

appropriate means to limit the risk of infection by Cryptosporidium and other microbial contaminants are available from the Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily found in materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we 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 letting the water run for 30 seconds to 2 minutes before using it 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 <http://www.epa.gov/safewater/lead>.

### Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Action Level Goal (ALG):	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.
Maximum Contaminant Level Goal or 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 or 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 technology.
Maximum Residual Disinfectant Level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Maximum Residual Disinfectant Level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Avg:	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
ppm:	Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.
ppb:	Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.
na:	not applicable.

Lead and Copper

Date sampled	MCLG	Action Level	90 <sup>th</sup>	# sites over	Units Violation?	Likely Source of Contamination
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**Annual Drinking Water Quality Report  
Avilla Water Department IN5257002**

**Percentile**      **AL**

<b>Copper</b>	2018	1.3	1.3	0.096	0	ppm	N	Erosion of natural deposits; leaching of wood preservatives; corrosion of household plumbing systems.
<b>Lead</b>	2018	0	15	1	0	ppb	N	Corrosion of household plumbing systems; Erosion of Natural deposits.

Regulated Contaminates Detected

Disinfectants & Disinfection By-Products:

	Date Likely Source of Sampled	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation?
Chlorine Water additive used to control microbes	2018	1	1 – 1	4	4	ppm	N
Total Trihalo- By-product of drinking water chlorination. methanes (TTHMS)	2018	23	22.9- 22.9	na	80	ppb	N

Inorganic Contaminants:

Barium	2017	0.34	0.34 – 0.34	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits.
Arsenic	2017	1.3	1.3 - 1.3	2	2	ppb	N	Erosion of natural deposits.
Fluoride	2017	1.1	1.1 – 1.1	4	4	ppm	N	Erosion of natural deposits; water additive which promotes Strong teeth; discharge from fertilizer and aluminum factories.

**Annual Drinking Water Quality Report  
Avilla Water Department IN5257002**

Nitrate	2018	0.5	0.5 – 0.5		10	10	ppm	N
Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.								
Sodium	2017	20	20 – 20		na		ppm	N
Erosion of natural deposits.								
Organic Contaminants:								
Bromodichloromethane	2017	1.1	1.1 – 1.1		na	na	ppb	N
Disinfection by-product.								
Chloroform	2017	2	2 – 2		na	na	ppb	N
Disinfection by-product.								
Radioactive Contaminants:								
Combined Radium	2015	1.73	1.73 - 1.73	0	5	pCi/L	N	Erosion of Natural Deposits
226/228								
Gross alpha Excluding	2015	2.19	2.19 – 2.19		0	15	pCi/L	N Erosion of Natural
Deposits Radon & Uranium								
Uranium	2015	0.31	0.31 – 0.31		0	30	pCi/L	N Erosion of
Natural Deposits								

Bacteriological:

**Annual Drinking Water Quality Report**  
**Avilla Water Department IN5257002**

Coliform Bacteria  
Naturally present in the environment

2018 1 positive sample No positive E. coli or fecal coliform samples detected. N

Daily testing of Avilla's water in 2018 found iron in our finished water in the range of 0.01 to 1.1 parts per million. Iron comes from erosion of natural deposits in the earth. When our water comes out of the well it contains between 2 & 3 parts per million of iron. It is filtered to remove the iron to the levels mentioned above.

We add chlorine to our water to provide disinfection. When the water leaves the water treatment plant it contains chlorine of about 1 part per million. By the time it gets to the farthest points away from the plant the chlorine level is about 0.5 parts per million. Hint: think of 1 part per million as 1 inch in 16 miles. 1 part per billion is equivalent to 1 inch in 16,000 miles. We treat between 150,000 and 300,000 gallons of water every day.

Avilla's water is not softened before it enters your residence or business. The hardness of our water is 20 to 24 grains per gallon or 342 to 393 parts per million.

Did you know that we have about 13 miles of underground water mains in our town that provide water to our customers as well as fire protection? They range in size from 4" to 12". Some of them are PVC pipes. Others are cast iron or ductile iron.

Avilla has adopted a Wellhead Protection Plan for the area from which our water comes underground. The Plan identifies potential sources of contamination within the Protection Area and outlines procedures to protect our water if there should be a spill. The Plan was updated in 2015 (Phase 2). If you would like to review the plan, please call Bill Ley at 260-897-2781 or stop in at Avilla Town Hall, 108 S. Main Street.

Please help us keep your water safe. Dispose of hazardous substances including pharmaceuticals in an appropriate manner. Chemicals, paint and other hazardous materials may be taken to the Northeast Indiana Solid Waste District in Ashley, Indiana for proper disposal. They accept these and other recyclables at their facility east of Ashley on County Road 800S. Their number is 260-925-4857.

Thank you.

Avilla Water Department