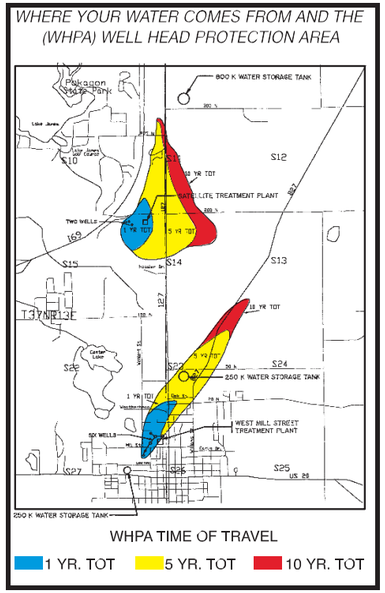
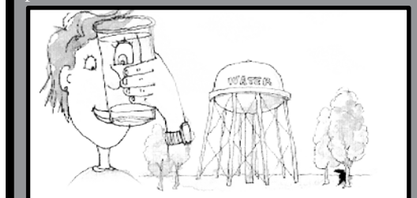


To report leaks and overflows:
Call 260-665-2121 24 hours a day.

Customer Service and Billing:
Call 260-665-3422 during the hours of 8:00 a.m.- 4:30 p.m.

WATER SECURITY AND YOU

Local drinking water and wastewater systems may be targets for terrorist and other would-be criminals wishing to disrupt and cause harm to your community water supplies or wastewater facilities.



Be observant. Notice and report suspicious activity around your local water utility.

Because utilities are often located in isolated areas, drinking water sources and wastewater collection systems may cover large areas that are difficult to secure and patrol. Residents can help by noticing and reporting any suspicious activity in and around local water utilities. Any residents interested in protecting their water resources and community can join together with law enforcement, neighborhood watch groups, water suppliers, wastewater operators, and other local public health officials. If you witness suspicious activities, report them to your local law enforcement authorities.

Examples of suspicious activity might include:

- People dumping or discharging material to a water reservoir.
- People climbing or cutting a utility fence.
- Unidentified truck or car parked or loitering near waterway or facilities for no apparent reason.
- Suspicious opening or tampering with manhole covers, buildings, or equipment.
- People climbing or on top of water tanks.
- People photographing or videotaping utility facilities, structures or equipment.
- Strangers hanging around locks or gates. Do not confront strangers. Instead, report suspicious activities to local authorities.

When reporting an incident:

- State the nature of the incident.
- Identify yourself and your location.
- Identify location of activity.
- Describe any vehicle involved (color, make, model, plate #).
- Describe the participants (how many, sex, race, color of hair, height, weight, clothing).

For emergencies, dial 911 or other local emergency numbers.

For more information on water security visit: www.epa.gov/safewater/security

2019 Annual Drinking Water Quality Report

Angola Water Works IN5276001

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Local Water vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Water Source:

Angola Water Works is supplied by groundwater pumped from the St. Joseph River Basin Aquifer System. We presently have ten wells supplying two treatment plants that range in depths from 80 to 244 feet. The treatment process through each treatment plant includes aeration, sedimentation, iron filtration and ion exchange softening, then we add chlorine for disinfectant and fluoride to promote strong teeth.

The water department produced 300,875,000 gallons of finished water to the distribution system for the year 2019.

Source water assessment and its availability.

Source Water Assessment:

The Indiana Department of Environmental Management is required under the 1996 amendments to the federal Safe Drinking Water Act to provide a source water assessment for the ground water wells serving your public water supply system. This assessment was completed using the information from our wellhead protection plan.

The wellhead protection plan summarizes hydrogeologic work completed to characterize the area geology and identifies the wellhead protection areas for your public water supply wells. The plan also identifies potential sources of contamination located within the wellhead protection areas. This source water assessment integrates the hydrogeologic and the contaminant source information from our wellhead protection plan and establishes a susceptibility rating for your public water supply system.

System Summary:

The City of Angola is located in northeast Indiana in Steuben County and serves a population of approximately 8,612. The city has two wellfields.

Geology/Hydrogeology:

The study area is located in the physiographic region known as the Northern Moraine and Lake Region. Specifically, the wellfields are located within the Auburn Morainal Complex. The production well areas consist of glacial deposits (end moraines, glacial till, and glacial lake deposits) ranging from 350 to 400 feet thick. The city draws its water from several discontinuous sand and gravel aquifers within these glacial deposits.

Well Fields:

Angola is supplied by nine (10) production wells, located in two different well fields. The wells use several discontinuous sand and gravel aquifers that are up to 70 feet thick. The aquifers are overlain by discontinuous clay layers that range in thickness from 10 to 40 feet.

Land Use/Potential Contaminant Sources:

The Angola Water Department Wellhead Protection Areas (WHPA) consist of transportation routes, industrial and commercial sites, and residential areas. According to the Wellhead Protection Plan, there are at least 40 potential sources of contamination within the WHPA.

Conclusion:

Based on the above information, your public water supply wells were identified as having medium geological sensitivity to contamination. Review of the potential source of contamination inventory developed for your local wellhead protection plan indicates several potential sources of contamination within your wellhead protection area. Your aquifer vulnerability to contamination has been determined to be moderate, given the presence of these sources within the wellhead protection area.

As your wells have medium geological sensitivity and moderate aquifer vulnerability, we conclude that your ground water system is moderately susceptible to contamination.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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.

Microbial contaminants, such as viruses and bacteria, that 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 stormwater 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 stormwater 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 stormwater 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 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.

How can I get involved?

We encourage public interest and participation in our community's decisions affecting drinking water.

The City of Angola Board of Works and Safety meetings are held at 6:30 p.m. on the 1st Monday of each month. Meeting are held at City Hall, 210 N. Public Sq. on the second floor in the City Council room.

Conservation Tips

Did you know that the average U.S. household uses approximately 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving; 3-5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

WATER QUALITY DATA TABLE

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

regulated contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TThm) *	8/20/2019	44.6	44.6	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
Haloacetic Acids (HAA5) *	8/20/2019	9.5	9.5	No goal for the total	60	ppb	N	By-product of drinking water chlorination.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	04/13/2017	0.055	<0.010-0.055	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	04/13/2017	1.01	0.848-1.01	4	4.0	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Chlorine	2017	1.6	0.5-1.6	4	4	ppm	N	Water additive used to control microbes.
Sodium	04/13/2017	176	156-176	n/a	n/a	ppm	N	Runoff/ leaching from natural deposits.
Arsenic	04/13/2017	<3.0	<3.0	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production waste.
Nitrate [Measured as Nitrogen]	04/08/2019	0.32	0 - 0.32	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Synthetic organic contaminants including pesticides and Herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination

coliform bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive monthly sample	0		0	N	Naturally present in the environment

lead and copper

Definitions:

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 contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

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. 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 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 or at http://www.epa.gov/safewater/lead.

Lead and Copper	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.14	0	ppm	N	Erosion of Natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	0.015	0.0067	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits

Unit Descriptions	
Term	**Definition**
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	**Definition**
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Comparisons

Think of one part per million as:
1 inch in 16 miles
1 minute in 2 years
1 cent in $10,000

Think of one part per billion as:
1 inch in 16,000 miles
1 second in 32 years
1 cent in $10 million

For more information please contact:

Thomas Selman
Address: 210 N. Public Sq., Angola, IN 46703
PH: 260-665-9363 • FX: 260-665-9164
tselman@angolain.org

STEPS OF OUR WATER TREATMENT

1. Aeration: This process is applied in which water is brought into contact with air for the purpose of changing the concentration of volatile substances contained in the water, which is useful in the improvement of taste and odor and for the oxidation of iron, manganese, hydrogen sulfide, and to a limited extent organic matter.
2. Filtration: Iron and manganese removal.
3. Water Hardness: The raw well water that we treat is supplied by ten wells that range from 18-31 gpg, being treated by the ion exchange water softeners, to an average of 5 gpg.
4. Ion Exchange Softening: The calcium and magnesium in the hard water are replaced by sodium from the exchanger.
5. Disinfection: A small amount of chlorine is added to kill any harmful bacteria or microorganisms that may be in the water.
6. Fluoridation: Fluoride is added to a recommended optimum concentration of 0.7 mg/l for the prevention of dental decay.

FOR YOUR INFORMATION

How will I know if there is a problem with my water:

- If the amount of any substances exceeds the MCL limits, you would be notified through newspapers, radio, and/or other means with notification on what appropriate actions you can take to protect your family's health.

Water utility customers looking for a source of independent information on drinking water-related issues may access the NSF International web site @ www.nsf.org to include helpful information on water-related topics, such as "Water Quality (CCR) Reports" and "Common Contaminates" and U.S. Environmental protection Agency's web site @ www.epa.gov/watrhome/

We encourage public interest and participation in our community's decisions affecting drinking water. Board of Works Meetings are held on the 1st Monday of the month at City Hall, 210 North Public Square at 6:30 p.m. The public is welcome.

Angola Water Works PWSID #: 5276001
Member of:
American Water Works Association (AWWA)
Alliance of Indiana Rural Water (AIRW)
Indiana Rural Water Association (IRWA)