

2020 ANNUAL DRINKING WATER QUALITY REPORT



City of Bloomington Utilities

Office of Water Quality

Mayor John Hamilton

Public Water System ID # IN 5253002

www.bloomington.in.gov/utilities



To ensure tap water is safe to drink, the United States Environmental Protection Agency (EPA) and the Indiana Department of Environmental Management (IDEM) prescribe regulations to limit the amount of certain contaminants in water provided by public water systems. This publication describes those guidelines for the City of Bloomington's drinking water. United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the 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 and Center for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants, as well as more general information about contaminants and their potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante sobre el agua potable. Tradúzcalo o pídale a alguien que se lo explique.

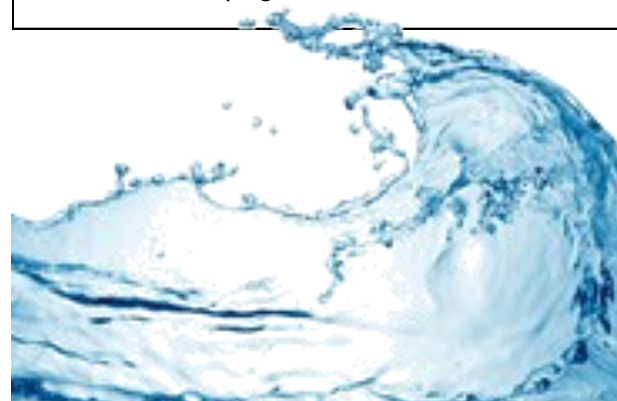
이 서류는 식수에 관한 중요한 정보를 담고 있으니, 필요하면 다른이에게 번역이나 낭독을 하게하여 내용을 숙지하시기 바랍니다.

Important Information about Lead in Water:

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 lead service lines and home plumbing. 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 the water for drinking and cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, test methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.



The City of Bloomington's Utilities Service Board (USB) meets every other Monday at 5:00 pm. USB meetings are open to the public and citizens are welcome to attend, observe, and record. For more information contact the Director's Office: 600 East Miller Drive Bloomington, Indiana 47401 (812) 349-3650

THE FACTS ON LEAKS

10
percent of homes have leaks that waste 90 gallons or more per day

A leaky faucet dripping at the rate of one drip per second can waste more than
3,000 gallons
per year

Did you know?

Minor water leaks account for nearly

1
trillion gallons
of wasted water each year and is equal to annual household water use in nearly



A shower leaking at
10 Drips
per minute wastes more than
500
gallons per year

11
million homes

Repair

leaks by checking faucet washers and gaskets for wear and replacing them if necessary



Replace old toilets with WaterSense models & save



13,000
gallons of water savings for the average family

Homeowners can save



10 percent on their water bills



epa.gov/watersense

Tyler Steury, Water Quality Coordinator
812-349-3655 (office)
812-339-1444 (24 hour/emergency)
wq@bloomington.in.gov

Your Drinking Water Source:

The source of the City of Bloomington's drinking water is surface water from Monroe Reservoir, located nine miles southeast of Bloomington. The City of Bloomington has received a copy of the Indiana-Monroe Reservoir Source Water Assessment. Federal guidelines require the State of Indiana to issue Source Water Assessments in order to identify significant or possible sources of contamination. Information concerning Monroe Reservoir's Source Water Assessment is available by contacting the City of Bloomington's Office of Water Quality. CBU participates in the EPA's Unregulated Contaminant Monitoring Rule program. Contact the Office of Water Quality for more information or copies of results related to this testing program.

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 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 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 byproducts of industrial processes and petroleum production, and can come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

2019 Table of Detected Contaminants

Substance	Highest Level Allowed (EPA's MCL*)	Highest Level Detected	Violation	Ideal Goals (EPA's MCLG's*)	Sources of Contamination
Microbiological Contaminants					
Total Organic Carbon (TOC)	minimum 35% removal	45.6% removal average ¹	No	None	Naturally present in the environment
Turbidity	Treatment Technique	0.30 turbidity units ²	No	None	Soil runoff
Radioactive Contaminants					
Gross alpha excluding radon and uranium ³	15 pCi/L*	1.16 pCi/L	No	0	Erosion of natural deposits
Radium-228 ³	5 pCi/L	0.162 pCi/L	No	0	Erosion of natural deposits
Inorganic Contaminants					
Barium	2 ppm*	0.012 ppm	No	2 ppm	Erosion of natural deposits
Copper	TT; Action Level* =	0.037 ppm ^{(90th Percentile)*, 4}	No	1.3 ppm	Corrosion of household plumbing systems;
Chloramines (as Chlorine)	4.0 ppm (MRDL)*	3.1 ppm ⁵	No	4 ppm (MRDLG)*	Water additive to control microbes
Fluoride	4 ppm	0.97 ppm ⁶	No	4 ppm	Water additive which promotes strong teeth
Lead	TT; Action Level =	4.9 ppb ^{(90th Percentile), 4}	No	0	Corrosion of household plumbing systems;
Organic Contaminants					
Total Trihalomethanes (TTHM)	80 ppb	52.9 ppb average ⁷	No	0	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	60 ppb	45.6 ppb average ⁸	No	0	By-product of drinking water chlorination
Atrazine	3 ppb	0.2 ppb	No	3 ppb	Runoff from herbicide used on row crops

Listed above are the 12 contaminants detected in Bloomington's drinking water during 2019. All are within allowable levels.
Not listed are the more than 65 primary contaminants that were tested for and not detected.

*DEFINITIONS:

90th Percentile - Ninety percent of samples had lower values than the value indicated.

Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

CFU/ml - Colony forming units per milliliter.

Colony Forming Unit - An area of visually distinct bacterial growth which may result from a single bacterium or pairs, clusters or chains of bacteria.

Locational Running Annual Average (LRAA) - Average of the four most recent quarterly samples, for each sample site, collected for reporting purposes.

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 Contaminant Level Goal (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (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.

Maximum Residual Disinfectant Level Goal (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 contamination.

pCi/L - Picouries per liter is a measure of radioactivity in water. A picocurie is 10^{-12} curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

ppm - parts per million. Equivalent to milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

ppb - parts per billion. Equivalent to micrograms per liter (ug/l) or one ounce in 7,350,000 gallons of water.

Total Organic Carbon (TOC) - a measurement of natural and man-made organic material in the water. TOC reacts with disinfectants to form disinfection by-products.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.



ADDITIONAL INFORMATION:

¹ Total Organic Carbon (TOC) removal percentages ranged from 36.6% to 53.2%.

² Turbidity levels ranged from 0.02 to 0.30 with an average of 0.03 turbidity units. The lowest level of compliance on a monthly basis was 100%.

³ Data listed are from 2015 and are the most recent testing done in accordance with regulations.

⁴ Three sites exceeded the Action Level for Lead. One site exceeded the Action Level for Copper.

⁵ Chloramine levels ranged from 0.78 to 3.1 ppm, with an average of 2.40 ppm.

⁶ Fluoride levels ranged from 0.33 to 0.97 ppm, with an average of 0.70 ppm.

⁷ Average listed is the greatest LRAA for any sample site during 2019. Total trihalomethane levels ranged from 26.4 to 61.5 ppb. Some people who drink water containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

⁸ Average listed is the greatest LRAA for any sample site during 2019. HAA5 levels ranged from 20.0 to 58.2 ppb. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

