

What are sources of contamination of drinking water?

The source 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 dis-solves 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 storm water run-off, 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 storm water run-off, 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 storm water run-off, and septic systems; (E) Radioactive contaminants, 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 regulation which limits the amount of certain contaminants in water provided by public water systems. FDA regulation establishes limits of 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 that water poses 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 (1-800-426-4791).

SYSTEM DESCRIPTION & GEOLOGY

The Village of Jeffersonville public water system serves approximately 1,450 residents. This system operates eight wells that pump a maximum of 300,000 gallons of water per day from a deep carbonate bedrock aquifer that is part of the Silurian Lockport Dolomite. The aquifer is covered by 40 to 80 feet of clay, which provides significant protection from contamination. Depth to the bottom of the confining layer is between 40 and 80 feet below the ground surface.

- no evidence suggests that ground water has been impacted by any significant levels of chemical contaminants from human activities.
- the presence of some significant potential contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is low. This likelihood can be minimized by implementing appropriate protective measures. An assessment was conducted of Jeffersonville's water and determined that our source has a low susceptibility to contamination.

This susceptibility analysis is subject to revision if new potential contaminant sources are sited within the protection area, or if water sampling indicates contamination by a manmade contaminating source.

1. The required Table of Detected Contaminants was inaccurate in the report. For each detected contaminant, the Table should show the level for each contaminant detected in the water, the Maximum Contaminant Level (MCL), the Maximum Contaminant Level Goal (MCLG), and the likely or known source of that contaminant.
 - a. The 2020 CCR reported a detection for total trihalomethanes (TTHM) of 57.8 ppb. The actual detections for this contaminant were 42.4 ppb and 73.2 ppb.
 - b. The 2020 CCR reported a detection for haloacetic acids (HAA5) of 4.651 and 7.558 ppb. The actual detections for this contaminant were 10.3 ppb and 14.2 ppb.
 - c. The barium and copper detections were reported in units of ppb. CCR units for barium and copper are ppm, so the detections should have been reported as 0.035 ppm for barium and 0.0985 ppm for copper.

**For a copy of the complete report, contact:
Bryan Riley – (740) 572-6142
Village Administrator**

Consumer Confidence Report

**Village of Jeffersonville
8 North Main St.
Jeffersonville, Ohio 43128
740-426-8881**

2021

PUBLIC PARTICIPATION

Jeffersonville has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, and how to participate in decisions concerning your drinking water system contacts.

Jeffersonville receives its drinking water from a series of wells around the village. We have a current, unconditional license to operate our water system.

The EPA conducted a source water assessment which is available by contacting the Village office in written form.

About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. Jeffersonville conducted sampling for contaminants (bacteria, inorganic, radiological, synthetic, organic, and volatile) during 2020. Samples were collected for contaminants, most of which were not detected in the Jeffersonville water supply. The Ohio EPA requires us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Listed below is information on those contaminants that were found in the Jeffersonville drinking 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 material and components associated with service lines and home plumbing. Jeffersonville 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 testing methods for lead in drinking water, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at www.epa.gov/safewater/lead.

While we do not hold regular meetings, customers are encouraged to Participate by contacting Bryan Riley / Village Administrator at (740) 426-8881.

Who needs to take special precautions?

Some people may be more vulnerable to con-taminants 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 provider. 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 (800-426-4701)."

Definitions of some terms contained within this report:

- 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 contaminant that is allowed in drinking water. MCLs are set as close to M CLGs as feasible using the best available treatment technology."
- Parts per Million (ppm) or Milligrams per liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little of 11.5 days.
- Parts per Billion or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31. 7 years.
- Maximum Residual Disinfectant Level Goal (MRDLG) The level of 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 Disinfectants 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 residual disinfectant below which there is no known or expected risk to health.
- Action Level (AL) - "The concentration of a contaminant which, if exceeded, triggers treatment or other require-ments which a water system must follow."
- Treatment Technique (TT)- "A required process intended to reduce the level of a contaminate in drinking water."

Water Quality Table

Inorganic Contaminants	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Disinfection Byproducts							
Total Trihalomethanes ppb	N/A	80	68.2	45.9-87.4	Yes	2021	Bi-products of drinking water chlorination
Haloacetic Acids ppb	N/A	60	14.4	13.1-20.0	No	2021	Bi-product of drinking water chlorination
Inorganic Contaminants							
Barium (ppm)	2	2	35.0	No	No	2020	Discharge of drilling water. Erosion of natural deposit.
Flouride ppm	0.20	0.20	1.6	-	No	2020	Erosion of natural deposit. Discharge from fertilizer and aluminum factons.
Nitrate	0	0	0.10	N/A	No	2020	
Lead and Copper							
Contaminants (Units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than		Violation	Year Sampled	Typical Source of Contaminants
Copper (ppm)	1.3	AL = 1.3	0.127	NA	No	2021	Corrosion of Plumbing Systems
Zero out of ten copper samples exceeded the Action Level of 1.3 ppm.							
Lead (ppb)	0	AL = 15	1.8	NA	No	2021	Corrosion of Plumbing Systems.
Zero out of ten samples were found to have lead levels in excess of the lead action level of 15 ppb.							
Volatile Organic Contaminants							
Bromoform ppb			1.6			2020	
Bromodichloro-methane ppb			13.6			2020	
Chloroform ppb			14.0			2020	
Residual Disinfectants							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	2.2	0.2/2.2	No	2010	Water additive used to control microbes.