

Jefferson Regional Water Authority

Consumer Confidence Report

2024



Jefferson Regional Water Authority Drinking Water Consumer Confidence Report for the Year 2023

The Jefferson Regional Water Authority 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, how to participate in decisions concerning your drinking water and water system contacts.

Source Water Information

The Jefferson Regional Water Authority receives its drinking water from a buried sand and gravel aquifer associated with the Great Miami River. The water is collected in wells located near the water treatment plant.

The Ohio EPA has conducted a source water assessment of Jefferson Regional Water Authority's source water. The assessment concluded that the aquifer supplying water to Jefferson Regional Water Authority's well field has a high susceptibility to contamination. This susceptibility is based on: The influence of surface water recharge to the aquifer; the presence of a relatively thin protective layer of clay overlaying the aquifer; the shallow depth of the aquifer; contamination plumes in Jefferson Regional Water Authority's well field protection area; the presence of significant potential contamination sources in the protection area; and the presence of contaminants in the treated water. Copies of the source water assessment report prepared for Jefferson Regional Water Authority are available by contacting Nicholas Johnson at 937-866-0002.

The Jefferson Regional Water Authority also has an emergency connection with Montgomery County Environmental Services. During 2023 we did not need to use this emergency connection. On average, this connection is used for approximately 3 days or less each year. This report does not contain information on the water quality received from the Montgomery County Environmental Services, but a copy of their consumer confidence report can be obtained by contacting Montgomery County Environmental Lab at 937-781-3020 or at www.mcoho.org/2023_Mongomery_County_Drinking_Water_Quality_Report.pdf.

What are sources of contamination to drinking water?

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.

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 runoff, 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 runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, 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 that tap water is safe to drink, USEPA 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 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Who needs 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 infection. 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Jefferson Regional Water Authority conducted sampling for iron, manganese, total coliform, total alkalinity, stability, chlorine, dissolved inorganic carbon, total hardness, pH, total dissolved solids, sulfate, Haloacetic acids, total tri-halomethane, synthetic organic chemicals, lead, and copper during 2023. Samples were collected for a total of 25 different contaminants, most of which were not detected in the Jefferson Regional Water Authority water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

TABLE OF DETECTED CONTAMINANTS

Contaminant (units)	MCLG or MRDL G	MCL or MRDL	Level Found	Range of Detections	Violation?	Year Sampled	Typical Source of Contaminants
Inorganic Contaminants							
Nitrate (ppm)	10	10	0.529	n/a	None	2023	Run-off from fertilizer use; Leaching from septic tanks; Erosion of natural deposits.
Antimony (ppb)	6	6	1.1	n/a	None	2021	Discharge from petroleum refineries; Ceramics; Electronics; Solder
Barium (ppm)	2	2	0.107	n/a	None	2021	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Thallium (ppb)	0.5	2	0.61	n/a	None	2021	Leaching from ore-processing sites; Discharge from electronic, drug, and glass factories.
Fluoride (ppm)	4	4	0.48	n/a	None	2021	Erosion of natural deposits; Discharge from fertilizer factories.
Residual Disinfectants and Disinfection Byproducts							
Total Chlorine (ppm)	4.0	4.0	1.455	1.3 to 1.75	None	2023	Water additive to control microbes
Total Tri-halomethanes (ppb)	n/a	80	2.5	ND to 5.0	None	2023	Byproduct from drinking water disinfection.
Total Haloacetic acids (ppb)	n/a	60	16.0	11.3 to 20.6	None	2023	Byproduct from drinking water disinfection.
Lead and Copper							
Contaminant (units)	Action Level (AL)	MCLG	Individual Results over the AL	90% of the test levels were less than	Violation?	Year Sampled	Typical Source of Contaminants
Lead (ppb)	15 ppb	0 ppb	0	2.2	None	2023	Corrosion of household plumbing; Erosion of natural deposits.
	0 out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	0 ppm	0	0.148	None	2023	Corrosion of household plumbing; Erosion of natural deposits.
	0 out of 20 samples were found to have copper levels in excess of the lead action level of 1.3 ppm.						

TABLE OF UNREGULATED CONTAMINANTS

Contaminants (Units)	Sample Year	Average Level Found	Range of Detections
PFPeA (ppb)	2023	0.0063	0.0057 to 0.0069
PFHxA (ppb)	2023	0.0034	0.0030 to 0.0038

Unregulated Contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of these contaminants in drinking water and whether future regulation is warranted. In Year 2023 Jefferson Regional Water Authority participated in the fifth year of the Unregulated Contaminant Monitoring Rule (UCMR). For a copy of the results please contact Nicholas Johnson at 937-866-0002.

Lead Educational Information

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. {Name of Water System} 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 lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

License to Operate (LTO) Status Information

In 2023 we had an unconditioned license to operate our water system.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Jefferson Regional Water Authority which meets on the second Thursday each month at 6:30 PM. The meetings are currently being held at the Wolf Creek Rod and Gun Club located at 6700 Derby Road. For more information on your drinking water contact Nicholas Johnson, JRWA Superintendent at 937-866-0002.

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 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. 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 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.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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 over 11.5 days.
- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- **n/a:** Not Applicable