
**Jefferson Regional Water Authority
Consumer Confidence Report
2017**



Jefferson Regional Water Authority
Drinking Water Consumer Confidence Report
For 2016

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 buried sand and gravel aquifers associated with the Great Miami River. This water is collected in wells located near the water treatment plant.

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 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 operation, 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 by-products 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.

Ohio EPA completed a study of the JRWA's source of drinking water to determine its susceptibility. According to this study, the aquifer (water-rich zone) that supplies water to Jefferson Regional Water Authority has a high susceptibility to contamination. This determination is based on the shallow depth (less than five feet below ground surface) of the aquifer, and the presence of significant potential contaminant sources in the protection area. This susceptibility rating means that under current existing conditions the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protection measures.

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).

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 bacteria; inorganic; radiological, and volatile organic contaminants during 2016. Samples were collected for 75 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

Listed below is information on those contaminants that were found in the Jefferson Regional Water Authority drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Fluoride	4 mg/l	4 mg/l	.056 mg/l	n/a	none	2015	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Barium	2 mg/l	2 mg/l	.0788 mg/l	n/a	none	2015	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate	10 mg/l	10 mg/l	.726 mg/l	n/a	none	2016	Runoff from fertilizer use, leaching from septic systems, erosion of natural deposits
Lead and Copper							
Contaminants (Units)	Action Level (AL)	Individual results over the AL	90% of test results were less than		Violation	Sample Year	Typical Source of Contaminants
Copper (ppm)	1.3	n/a	.184 ppm		none	2014	Erosion of natural deposits, leaching from wood preservatives; corrosion of household plumbing systems
0 out of 20 samples were found to have copper in excess of the copper AL of 1.3 ppm							
Lead (ppb)	15	n/a	2.65 ppb			2014	Corrosion of household plumbing system, erosion of natural deposits
0 out of 20 samples were found to have lead in excess of the lead AL of 15 ppb							
	MCLG	MCL	Level	Range of	Violation	Sample	Typical Source of

			Found	Detection		Year	Contaminants
Disinfection Byproducts Unregulated Contaminants							
Bromodichloromethane	n/a	n/a	.0037 mg/l	.00054 to .00689 mg/l	none	2016	Byproduct of drinking water chlorination
Bromoform	n/a	n/a	.00192 mg/l	n/a	none	2016	Byproduct of drinking water chlorination
Chloroform	n/a	n/a	.00464 mg/l	n/a	none	2016	Byproduct of drinking water chlorination
Dibromochloromethane	n/a	n/a	.00365 mg/l	.00071 to .00658 mg/l	none	2016	Byproduct of drinking water chlorination
Xylenes Total	n/a	n/a	.00172 mg/l	n/a	none	2015	Byproduct of drinking water chlorination
Residual Disinfectants							
Haloacetic Acid	0 ug/l	60.00 ug/l	6.394ug /l	n/a	none	2016	Chemical formed as a reaction between disinfectants and other impurities in water
Trihalomethane, Total	n/a	80.00 ug/l	20.03 ug/l	n/a	none	2016	Byproduct of drinking water chlorination
Chlorine Total	1.2 mg/l	4 mg/l	1.3 mg/l	1.0 to 2.0 mg/l	none	2016	Disinfection product used for bacteria removal

Jefferson Regional Water Authority is in violation of Ohio Administrative Code Rule (OAC) 3745-81-24 for failing to monitor your drinking water during the 2014 Annual Monitoring period and/or report results for the following contaminants: VOLATILE ORGANIC CHEMICALS (VOC).

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2014 Annual time period we did not monitor for the following contaminants and therefore cannot be sure of the quality of our drinking water during that time: VOLATILE ORGANIC CHEMICALS (VOC).

Jefferson Regional Water Authority has taken the necessary steps to correct this violation and will take the steps to ensure that adequate monitoring will be performed in the future.

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. Jefferson Regional Water Authority 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 <http://www.epa.gov/safewater/lead>.

We have a current, unconditional license to operate our water system.

How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the Jefferson Regional Water Authority Trustee Board which meets the second Thursday of every month at 7:30 pm at the Jefferson Township Administration Building at the intersection of Third and One Business Place.

For more information on your drinking water contact Robert White, JRWA Superintendent at (937)866-0002, or by email to: officemanager@swohio.twcbc.com

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.

Parts per Million (ppm) or Milligrams per Liter (mg/l)

Parts per Billion (ppb) or Micrograms per Liter (ug/l) are units of measure

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 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.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment of other requirements which a water system must follow.