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**Jefferson Regional  
Water Authority  
Consumer Confidence Report  
2018**



# Jefferson Regional Water Authority Drinking Water Consumer Confidence Report For 2017

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.

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

The Jefferson Regional Water Authority also has an emergency connection with Montgomery County Environmental Services. During 2017 we used about 400,000 gallons from this connection over 3 days. On average, this connection is used for approximately 3 days each year. This report does not contain information on the water quality received from Montgomery County Environmental Services, but a copy of their consumer confidence report can be obtained by contacting Jim Davis at 937-781-3016.

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 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.

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 bacteria, nitrate, synthetic organic compounds, volatile organic compounds, disinfectant byproducts, iron, manganese, lead and copper, during 2017. Samples were collected for a total of 84 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**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Disinfectant Byproducts</b>							
Total Trihalomethanes	0 ppb	80 ppb	22.87 ppb	16.81 to 22.87 ppb	None	2017	Byproduct of drinking water chlorination
Total Haloacetic acids	0 ppb	60 ppb	7.084 ppb	4.544 to 7.084 ppb	None	2017	Chemical formed as a reaction between disinfectants and other impurities
Barium	2 mg/L	2 mg/L	0.0788 mg/L	n/a	None	2015	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	4 mg/L	4 mg/L	0.056 mg/L	n/a	None	2015	Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
<b>Inorganic Contaminants</b>							
Nitrate as N	0 mg/L	10 mg/L	0.711 mg/L	n/a	None	2017	Run-off from fertilizer use, leaching from septic systems, erosion of natural deposits
<b>Residual Disinfectants</b>							
Total Chlorine	2 mg/L	4 mg/L	1.4 mg/L	1.1 to 1.6 mg/L	None	2017	Water additive to control microbes
<b>Unregulated Contaminants</b>							
Bromo-dichloromethane	n/a	n/a	0.068 mg/L	0.058 to 0.079 mg/L	n/a	2017	Byproduct of drinking water chlorination
Bromoform	n/a	n/a	0.019 mg/L	0.017 to 0.021 mg/L	n/a	2017	Byproduct of drinking water chlorination
Chloroform	n/a	n/a	0.042 mg/L	0.033 to 0.05 mg/L	n/a	2017	Byproduct of drinking water chlorination
Dibromo-chloromethane	n/a	n/a	0.07 mg/L	0.06 to 0.79 mg/L	n/a	2017	Byproduct of drinking water chlorination
Bromochloro-acetic acid	n/a	n/a	0.033 mg/L	0.03 to 0.037 mg/L	n/a	2017	Byproduct of drinking water chlorination
Dibromoacetic acid	n/a	n/a	0.027 mg/L	0.024 to 0.03 mg/L	n/a	2017	Byproduct of drinking water chlorination
Dichloroacetic acid	n/a	n/a	0.025 mg/L	0.021 to 0.028 mg/L	n/a	2017	Byproduct of drinking water chlorination
<b>Lead and Copper</b>							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	None	<2.0 µg/L	None	2017	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing	
	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	None	0.102 ppm	None	2017	Corrosion of household plumbing; erosion of natural deposits	
	0 out of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

## **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 at <http://www.epa.gov/safewater/lead>.

## **Revised Total Coliform Rule (RTCR) Information**

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

## **License to Operate (LTO) Status Information**

In 2017 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 on the second Thursday of each month at 7:30 PM. The meetings are held at the Jefferson Township Administration Building located at the intersection of W. Third St. and One Business Place. For more information on your drinking water contact Robert White, JRWA Superintendent, at 937-866-0002 or by e-mail to: [officemanager@swohio.twcbc.com](mailto: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.

- 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 ( $\mu\text{g/L}$ ) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.