



CITY OF  
**Trenton**  
OHIO

## 2017 Water Quality Report

The City of Trenton Water Department provides a dependable supply of high quality drinking water to its residents and adjoining areas of Butler County. Trenton's water meets or exceeds all federal and state drinking water standards and we are pleased to report we had no violations. We have a current, unconditioned license to operate our public water system.

### Source and Susceptibility of Trenton's water?

The City of Trenton's drinking water comes from a sand and gravel aquifer (underground source of water) that is susceptible to contamination. The City has identified 18 potential contaminant sources within the wellhead protection area. These sources include septic systems, storm water wells, agricultural activities, gravel pits, underground storage tanks, and some commercial sources. The area has historically been used for agriculture, but the current land use is predominately residential with some commercial establishments. Nitrates have been detected at elevated levels, confirming the sensitive nature of the aquifer. **The City of Trenton has placed a priority on protecting its ground water through the development of a wellhead/source water protection plan.** This is important because once water is contaminated, it may remain so for a long time. It is difficult and expensive to locate and remove the contamination. It may require decades of treatment before the water is restored to drinking water quality. In some cases, the contamination may never be completely removed. In 2017, the City of Trenton pumped 415 million gallons of groundwater from the aquifer. Groundwater is the cleanest, most reliable, and often the least expensive source of water. During emergency conditions only, the City of Trenton has a backup connection to Southwest Regional Water where potable water can be purchased.

### Help Protect Trenton's Water Source!

We ask that our customers help us protect our water source **by not dumping pollutants into storm drains.**



<b>Mayor</b>	Calvin Woodrey
<b>City Manager</b>	John J. Jones
<b>Service Director</b>	Rob Leichman
<b>Operator in Charge</b>	David Combs
<b>Utility Operator</b>	Mike McSorley
<b>Lab Technicians</b>	Curt Short, Darrin Winkler, Cody Truster

### WHO NEED TO TAKE SPECIAL PRECAUTIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

**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. **The City of Trenton 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 have concerns 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 or at <http://www.epa.gov/safewater/lead>.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

## What are the Contamination Sources to Drinking Water?

The sources of drinking water both tap water and bottled water includes rivers, lakes, streams, 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.

To ensure that tap water is safe to drink, the EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants in bottled water does not necessarily indicate the water poses a health risk.

- A.) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations & wildlife.
- B.) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm 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 storm-water runoff and residential uses.
- D.) Organic chemical contaminants, including synthetic and volatile organics, 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.

Contaminates	MCLG	MCL	Average Level Detected	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>BACTERIOLOGICAL</b>							
Total Coliform Bacteria	5% monthly samples	5% monthly samples	0	0 Positive/120 Negative	None	2017	Naturally present in the environment
<b>INORGANIC CONTAMINANTS</b>							
Nitrate (mg/l)	10	10	3.12	BDL to 4.61	None	2017	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
Fluoride (mg/l)	4	4	0.934	0.32 to 1.4	None	2017	Erosion of natural deposits: Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (mg/l)	0.015	0.015	0.0019 90 <sup>th</sup> %=0.00384	BDL to 0.0179	None	2017	Corrosion of lead solder and brass faucets and fixtures
Copper (mg/l)	1.3	1.3	0.114 90 <sup>th</sup> %= 0.172	0.0181 to 0.245	None	2017	Corrosion of household and building pipes
Barium (mg/l)	2	2	0.0557	0.0557	None	2017	Erosion of natural deposits: Certain manufacturing processes
<b>ORGANIC CONTAMINANTS</b>							
Synthetic Organic Chemicals (SOC) Group 1 (atrazine, alachlor, simazine) and Group 4 (di(2-ethyl)hexladiate, endothall, di(2-ethylhexl)phthalate, benzoa)pyrene)							
(ug/l)	N/A	N/A	BLD	BLD	None	2017	Herbicides Runoff
<b>Volatile Organic Chemical (VOC)/ Disinfection Byproducts</b>							
Total Trihalomethane (ug/l)	N/A	80	8.99	8.1 to 9.88	None	2017	By-products of drinking water chlorination
Bromoform (ug/l)	N/R	N/R	0.695	0.6 to 0.79	None	2017	Component of total Trihalomethane
Chloroform (ug/l)	N/R	N/R	2.9	2.75 to 3.05	None	2017	Component of total Trihalomethane
Dibromo-Chloromethane(ug/l)	N/R	N/R	2.44	2.13 to 2.75	None	2017	Component of total Trihalomethane
Bromodichloromethane	N/R	N/R	2.955	2.62 to 3.29	None	2017	Component of total Trihalomethane
Haloacetic Acids (ug/l)	N/A	60	2.4045	2.13 to 2.679	None	2017	By-product of drinking water chlorination
<b>DISINFECTION</b>							
Free Chlorine (mg/l)	4	4	0.969	0.4 to 1.5	None	2017	Water Additive to control microbes
<b>MISCELLANEOUS NON-REGULATED</b>							
Hardness (mg/l) (grains)	N/A	N/A	149 (mg/l) 8.7 grains	124 to 206	None	2017	Erosion of natural deposits
Hardness before treatment	N/A	N/A	380 (mg/l) 22.2 grains	N/A	N/A	2017	Erosion of natural deposits
Sodium (mg/l)	N/A	N/A	136.9	134 to 164	None	2017	Component used in softening process

## Notes For Chart

NA – NR: *Not applicable - Not regulated*

**MCLG:** *Maximum Contaminant Level Goal*

The level of a contaminant in drinking water below which there is no know or expected risk to health. MCLGs allow for a margin of safety.

**MCL:** *Maximum Contaminant Level*

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.

**mg/l or ppm:** *Milligrams per Liter of Parts per Million*

A unit of concentration equal to one part per million. A part per million corresponds to one second in a little over 11.5 days.

**ug/l or ppb:** *Micrograms per Liter or Parts per Billion*

A unit of concentration equal to one part per billion. A part per billion corresponds to one second in 31.7 years.

**BLD:** Below Detectable Level

**<** *Symbol:* A symbol which means less than.

For example, a result of <5 means that the lowest level that could be detected was 5, and the contaminant in that sample was not detected.

This report includes water quality monitoring results for 2017. It lists the substances of most concern in our water. However, we test for more than what is reported. If you have questions about this report or concerning your water utility, please contact David Combs, Operator-In-Charge at 513-988-5771.

We encourage public interest and participation in our community's decisions affecting drinking water. Regular meetings of the City Council are on the 1<sup>st</sup> and 3<sup>rd</sup> Thursday of each month starting at 7:30 held at the Governmental Services Center. The public is welcome.