



## 2016 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. Our top priority is to continue providing a safe, adequate supply of drinking water to the community.

### What is the source of Trenton's water?

In 2016 the City of Trenton pumped 444 million gallons of groundwater from 2 aquifers. The Northeast well field pumps from the Great Miami Valley Buried Aquifer and the Home Avenue well field pumps from the Trenton Buried Valley Aquifer. Groundwater is the cleanest, most reliable, and often the least expensive source of water. It usually requires less treatment than surface water and the supply is less sensitive to drought conditions. Protecting this resource makes good sense, both environmentally and economically. **The City of Trenton has developed and adopted a wellhead protection program.** This is important because groundwater moves very slowly. Once it is contaminated, it may remain so for a long time, as 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 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. Any water entering a storm drain in Trenton may enter directly into the ground water.** Please help us protect our water source which is the heart of our community, our way of life, and our children's future.



<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 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 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	2016	Naturally present in the environment
<b>INORGANIC CONTAMINANTS</b>							
Nitrate (mg/l)	10	10	4.09	3.41 to 4.6	None	2016	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits
Fluoride (mg/l)	4	4	0.93	0.32 to 1.51	None	2016	Erosion of natural deposits: Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
* Lead (mg/l)	0.015	0.015	0.0035	0.0021 to 0.0064	None	2014	Corrosion of lead solder and brass faucets and fixtures
* Copper (mg/l)	1.3	1.3	0.145	0.037 to 0.253	None	2014	Corrosion of household and building pipes
*Barium (mg/l)	2	2	0.0629	0.0629	None	2014	Erosion of natural deposits: Certain manufacturing processes
<b>ORGANIC CONTAMINANTS</b>							
Synthetic Organic Chemicals (SOC) Group 2 (pentachlorophenol, picloram, oxamyl, carbofuran, 2,4-D)							
(ug/l)	N/A	N/A	1.06	0.4 to 2	None	2016	Herbicides Runoff
<b>Volatile Organic Chemical (VOC)</b>							
Total Trihalomethane (ug/l)	N/A	80	13.02	10.32 to 15.72	None	2016	By-products of drinking water chlorination
Bromoform (ug/l)	N/R	N/R	0.83	0.66 to 1	None	2016	Component of total Trihalomethane
Chloroform (ug/l)	N/R	N/R	4.62	3.76 to 5.47	None	2016	Component of total Trihalomethane
Dibromo-Chloromethane(ug/l)	N/R	N/R	3.16	2.47 to 3.85	None	2016	Component of total Trihalomethane
Unregulated Contaminant							
Haloacetic Acids (ug/l)	N/A	60	1.41	0 to 2.82	None	2016	By-product of drinking water chlorination
<b>DISINFECTION</b>							
Free Chlorine (mg/l)	4	4	0.85	0.4 to 1.5	None	2016	Water Additive to control microbes
<b>MISCELLANEOUS NON-REGULATED</b>							
Hardness (mg/l) (grains)	N/A	N/A	154 (mg/l) 9 grains	108 to 344	None	2016	Erosion of natural deposits
Hardness before treatment	N/A	N/A	380 (mg/l) 22.2 grains	N/A	N/A	2016	Erosion of natural deposits
Sodium (mg/l)	N/A	N/A	136.5	62.3 to 158	None	2016	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. MCKGs 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.

**<** **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.

**\*\*** **Symbol:** Contaminant tested every 3 years.

This report includes water quality monitoring results for 2014 and 2016. 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.