



# 2017 ANNUAL DRINKING WATER QUALITY REPORT

BOROUGH OF WEST READING

PWSID# 3060078

If you have any questions concerning this report or require more information, please contact Borough Hall at 610-374-8273.



# 2017 Annual Drinking Water Quality Report

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information to keep you informed.

*Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.*

## Source of Drinking Water Contaminants

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:

- microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- pesticides and herbicides, which may come from a variety of sources such as agriculture,

urban stormwater runoff, and residential uses;

- 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 stormwater runoff, and septic systems;
- radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

## Where Does Our Drinking Water Come From?

We purchase our water from Western Berks Water Authority. They draw water from the Tulpehocken Creek, just downstream from Blue Marsh Dam. The watershed comprises approximately 175 square miles of agricultural, wooded and suburban areas. The watershed extends north to the southern slope of the Blue Mountains beyond Strausstown and Shartlesville and west to the Myerstown area.

A *Source Water Assessment*, completed by the PA Department of Environmental Protection, has found that our source is potentially most susceptible to:

1. Nitrate and pesticide contamination from agricultural runoff.
2. Bacterial and chemical contamination from discharges of sewage treatment plants and industrial sources.
3. Contamination from roadway accidents and runoff from urban areas and industrial facilities.

The Western Berks Water Authority is concerned about protecting its water source. Current treatment processes ensure that raw water taken from the Tulpehocken Creek becomes finished water that meets all Federal and State drinking water standards. A copy of the Source Water Assessment Summary Report is available for review online at

[www.westreadingborough.com](http://www.westreadingborough.com) or by calling Borough Hall.

## Drinking Water May Contain Contaminants

In order to ensure that tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 Environmental Protection Agency's *Safe Drinking Water Hotline* (800-426-4791).

## Do I need 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 infections. 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* (800-426-4791).

## How can I get involved?

We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. Our Infrastructure Committee meets at 6:00 p.m. on the second Wednesday of every month at Borough Hall.

## 2017 Test Results

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2017. The State allows 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 is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

<b>Chemical Contaminants</b>								
Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	MRDL=4	MRDL=4	2.98	2.56 - 2.98	ppm	2017	N	Water additive used to control microbes.
Fluoride	2*	4	0.44	0.43 – 0.44	ppm	2017	N	Water additive which promotes strong teeth.
Nitrate	10	10	4.81	4.29 – 4.81	ppm	2017	N	Runoff from fertilizer use.
HAA5	60	N/A	33.4	11.0 – 33.4	ppb	2017	N	By-product of drinking water chlorination.
TTHM	80	N/A	33.2	12.6 – 33.2	ppb	2017	N	By-product of drinking water chlorination.
Barium	2	2	0.042	0.042 – 0.043	ppm	2017	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	100	100	1	1	ppb	2017	N	Discharge from steel and pulp mills; Erosion of natural deposits.

\*EPA's MCL for fluoride is 4ppm. However, Pennsylvania has set a lower MCL to better protect human health.

<b>Entry Point Disinfectant Residual</b>							
Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Chlorine	0.2	1.0	1.0 - 3.6	ppm	2017	N	Water additive used to control microbes.

<b>Lead and Copper</b>							
Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	Testing was not required during 2017.				Corrosion of household plumbing.
Copper	1.3	1.3					Corrosion of household plumbing.

\*Please see information about Lead and Copper testing on Page 4.

<b>Microbial (related to Assessments/Corrective Actions regarding TC positive results)</b>					
Contaminants	TT	MCLG	Assessments/Corrective Actions	Violation Y/N	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement.	N/A	See description under "Source of Drinking Water Contaminants" above.	N	Naturally present in the environment.

<b>Microbial (related to E. coli)</b>					
Contaminants	MCL	MCLG	Positive Sample(s)	Violation Y/N	Sources of Contamination
E. coli	Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.	0	0	N	Human and animal fecal waste.
Contaminants	TT	MCLG	Assessments/Corrective Actions	Violation Y/N	Sources of Contamination
E. coli	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement.	N/A	See description under “Source of Drinking Water Contaminants” above.	N	Human and animal fecal waste.

Turbidity						
Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Y/N	Sources of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.168	2017	N	Soil runoff.
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	2017	N	

<b>Total Organic Carbon (TOC)</b>					
Contaminant	Range of % Removal Required	Range of % Removal Achieved	Number of Quarters Out of Compliance	Violation Y/N	Sources of Contamination
TOC	15% - 25%	29.5 – 56.8%	0	N	Naturally present in the environment.

## Definitions

**pCi/L** - Picocuries per liter (a measure of radioactivity)

**ppb** – Parts per billion, or micrograms per liter (µg/L)

**ppm** – Parts per million, or milligrams per liter (mg/L)

**ppq** – Parts per quadrillion, or pictograms per liter

**ppt** – Parts per trillion, or nanograms per liter

**Mrem/year** - Millirems per year (a measure of radiation absorbed by the body).



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

**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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

## More Definitions

### **Maximum Residual Disinfectant Level Goal (MRDLG)**

– The level of a 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.

**Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.

### **Minimum Residual Disinfectant Level (MinRDL)**

– The minimum level of residual disinfectant required at the entry point to the distribution system.

**Level 1 Assessment** – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment** – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## Lead and Copper Testing

The testing for lead and copper is required to be completed every three years. Testing was completed in 2016, and will be tested again during 2019. Should you wish to view the 2016 test results please contact our office or visit our website:

[www.westreadingborough.com](http://www.westreadingborough.com)

### **Information about Lead**

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 Borough of West Reading 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 or at <http://www.epa.gov/safewater/lead>.

## Other Violations

During the fourth quarter of 2017, Western Berks Water Authority (WBWA) failed to monitor and report for Nitrate and Nitrite through their contract lab. During that period, WBWA tested for both analytes daily using an approved method in the lab at the treatment facility and detected ranges for Nitrate from 2.5 to 6.1 ppm and for Nitrite from 0.000 to 0.012 ppm. Both sets of results are well below the MCLs for Nitrate (10 ppm) and Nitrite (1 ppm).

