

## WARWICK TOWNSHIP WATER & SEWER AUTHORITY



### 2013 Annual Water Quality Report

Warwick Township Water & Sewer Authority (WTWSA) is committed to providing our customers with the highest quality of water. We are pleased to provide you with our Consumer Confidence Report for the year 2013, which contains valuable information about your drinking water.

This report summarizes the water quality provided to you by WTWSA. We are pleased to report that our water had no violations and meets or exceeds all federal and state requirements.

Our constant goal is to provide to you a safe, dependable supply of water.

Our water system is designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customer's plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers should properly operate and maintain internal plumbing systems. You can obtain additional information from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

#### ***SOURCE OF WATER – PSWID #1090127***

WTWSA water is surface water purchased from Aqua PA through multiple interconnections. In the summer of 2013, WTWSA completed an interconnection with the North Wales Water Authority (NWWA) to supply a cost effective and redundant supply of water to Warwick Township.

#### ***STANDARDS AND TESTING***

In order to ensure quality and potability of our treated water, WTWSA, NWWA and Aqua PA monitor for all regulated constituents as required by Federal and State laws, in addition to monitoring for unregulated substances, such as radon and microbial pathogens.

This report shows the actual water quality monitoring results for the year 2013 and is designed to inform our customers about the excellent water delivered to you over the past year. Although these results represent only the data of the detected substances, your water is tested for many other substances that were not detected and therefore not shown on this report.

#### ***QUESTIONS***

We want our customers to be informed about their water quality. If you have any questions about your water quality or the information in this report, please contact Dan Ervin, Superintendent, at 215-343-3584 during normal business hours (Monday-Thursday 8:00 a.m. to 4:00 p.m. and Friday 7:00 a.m. to 3:00 p.m.). To learn more about WTWSA, attend any of our regularly scheduled meetings usually the fourth Monday of the month at 7:00 p.m. in the WTWSA Meeting Room, 1733 Township Greene, Jamison PA.

## THE FUTURE

The WTWSA thanks you for the opportunity of providing your family with quality water. The Authority is proud of the outstanding water and service it provides to its customers by our State licensed water works operators. Executive Director Michael Sullivan wishes to assure you that the Board of Directors has taken the necessary steps to guarantee a safe and plentiful water supply for you, well into the future. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien.

WTWSA purchases 100% of your drinking water from Aqua Pennsylvania, Inc. and NWWA. Aqua, NWWA and WTWSA regularly test for more than 80 contaminants that are regulated by the U.S. Environmental Protection Agency (EPA). To monitor and ensure water quality, Aqua also tests for at least another 80 parameters. WTWSA encourages actions by individuals to protect water quality, including the responsible use of lawn care chemicals and the proper disposal of household hazardous waste, unused pharmaceuticals and health care products.

Your drinking water is routinely monitored for constituents according to Federal and State laws. The following table shows detected contaminants during 2013. It shows the weighted average as well as minimum and maximum observed levels. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

### CHEMICAL CONTAMINANTS

WTWSA Treated Water	Concentration			Ideal Goal	Federal/State Standard	
Contaminants	Average	Minimum	Maximum	MCLG	MCL	Major Sources in Drinking Water
Total Coliform Bacteria, % positive samples each month	0%	0%	15.79%	0%	5% of monthly samples	Naturally present in the environment
Turbidity, % meeting plant performance level	100%	99.5%	100%	NA	TT	Soil Runoff
<b>Inorganic</b>						
Barium, ppm 2013	.06	0	0.16	2.0	2.0	Erosion of natural deposits
Chromium, ppb 2013	5.0	3.0	9.0	100	100	Discharge from steel & pulp mills; erosion of natural deposits
Fluoride, ppm 2013	0	0	0.50	2.0	2.0	Erosion of natural deposits; water additive to promote strong teeth
Nitrate, ppm 2013	3.4	1.0	5.0	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium, ppb 2013	1.0	0	2.0	50	50	Erosion of natural deposits

Lead And Copper	90 <sup>th</sup> Percentile	Total # of Samples	Samples Exceeding Action Level	Ideal Goal	Federal/State Standard	
Compound				MCLG	Action Level	Major Sources in Drinking Water
Copper, ppm, 2013	0.39	30	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead, ppb, 2013	2.4	30	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

WTWSA Treated Water Radiological	Concentration			Ideal Goal	Federal/State Standard	Major Sources in Drinking Water
	Average	Minimum	Maximum	MCLG	MCL	
Uranium, ppb 2013	ND	ND	7.6	0	30	Erosion of natural deposits
Combined radium, pCi/L 2013	0.2	ND	1.4	0	5	Erosion of natural deposits

WTWSA Treated Water Disinfectants & Disinfection Byproducts	Concentration			Ideal Goal	Federal/State Standard	Major Sources in Drinking Water
	Average	Minimum	Maximum	MCLG	MCL	
Chlorine, ppm, 2013	NA	0.04	.75	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Haloacetic acids, ppb, 2013	14.0	0	51.0	NA	60	Byproduct of drinking water chlorination
Total Trihalomethanes, ppb 2013	42.2	24.4	83.1	NA	80	Byproduct of drinking water chlorination

Based on WTWSA 2013 sampling and analysis records, the water supplied by WTWSA complies with the drinking water standards established by EPA and DEP with the exception of three (3) positive samples for total coliform in August. However, in this case, nine (9) follow-up check samples were collected and analyzed for total coliform, all of which were negative. Coliform bacteria are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Total coliform were found in more samples than allowed, which was a warning of potential problems. The negative check samples verified no harmful bacteria were present in the water.

#### NOTES:

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

**Disinfection Byproducts Rule (DBP):** Beginning in 2003 under the DBP rule, haloacetic acids were regulated for the first time at 60 ppb, and the standard for total trihalomethanes was lowered to 80 ppb. Compliance with the MCL is based on running annual averages.

**Fluoride:** Fluoride may help prevent tooth decay if administered properly to children, but can be harmful in excess. Customers of the Warwick Township Water & Sewer Authority receive water primarily from unfluoridated supplies. This information may be helpful to you, your pediatrician or dentist in determining whether fluoride supplements or treatments are appropriate.

**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. Some levels are based on a running annual average.

**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 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 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.

**ND:** Not detected.

**NA:** Not applicable

**Nitrate:** Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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.

**NTU:** Nephelometric turbidity unit (cloudiness of water).

**ppb:** A unit of concentration equal to one part per billion.

**pCi/L, Picocuries/Liter:** A unit of measure for radio-active contaminants in water.

**ppm:** A unit of concentration equal to one part per million.

**PWSID:** Public water supply identification number.

**Radioactive Contaminants:** Three types of contaminants are regulated – beta/photon emitters, alpha emitters, and combined radium. EPA considers a level of concern for beta/photon emitters to be equivalent to 50 pCi/L. Radon is not regulated in drinking water.

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

**Turbidity:** Monitored as a measure of treatment efficiency for removal of particles. Plant performance level 0.3 NTU.

**Unregulated Contaminant Monitoring Rule:** During 2004, monitoring was conducted for a series of unregulated compounds. This is a federal program and results were reported to USEPA. None of these compounds were detected.

**The following information is mandated by the EPA for inclusion in this report:**

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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminations 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, stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial process and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Radon is not regulated in drinking water. It is a radioactive gas that you can't see, taste, or smell. Radon can move up through the ground and into a home. Radon can also get into indoor air when released from tap water. Compared to radon entering a home through soil, radon entering a home through tap water will in most cases be a small source of radon in indoor air.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminations 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 (EPA) Safe Drinking Water Hotline (800-426-4791).

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 some 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).

Warwick Township Water & Sewer Authority  
1733 Township Greene: P.O. Box 315  
Jamison, PA 18929  
215-343-3584  
wtwsa.org