



Annual Drinking Water Quality Report for 2016 City of Taneytown

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The City of Taneytown – Public Works Department would like to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day and to help you understand the efforts we make to continually improve the water treatment process and protect our water resources. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water.

Our water is supplied by eight wells located throughout the City, which draw from the New Oxford aquifer (or Formation). Each well has its own chlorine disinfection treatment system. The finished (treated) water from each well is pumped into a distribution piping system, which includes two storage tanks.

We have a Source Water Assessment Plan available from our office that provides more information such as potential sources of contamination. This plan is also available from Maryland Department of the Environment (MDE) or at the Carroll County Public Library.

We are pleased to report that our drinking water meets federal and state requirements.

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 for 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 microbiological contaminants are available from the Environmental Protection Agency's Safe Drinking Water (SDW) Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact the City Office at 410-751-1100 between the hours of 8 a.m. and 4:30 p.m. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Council meetings. They are held on the second Monday of each month at 7:30 p.m. at the City Office.

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 land or through the ground, it can dissolve naturally-occurring minerals and, in some cases, radioactive materials, 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, which 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 byproducts 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.

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the SDW Hotline at 1-800-426-4791.

The City of Taneytown routinely monitors for contaminants in your drinking water according to Federal and State laws. The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2016. In this table, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

Range – indicates lowest level to highest level of contaminant detected.

N/A - not applicable.

Parts per million (ppm) or Milligrams per liter (mg/l) - or one ounce in 7,350 gallons of water.

Parts per billion (ppb) or Micrograms per liter - or one ounce in 7,350,000 gallons of water.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

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 (MCL) - The "Maximum Allowed" is 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.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is 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 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 or 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.

Contaminant	Violation Yes/No	Level Detected	Unit Measure -ment	MCLG	MCL	Likely Source of contamination

Inorganic Contamina	nts					
Barium	No	ND-0.19 (range)	Ppm	2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Fluoride	No	ND-0.14 (range)	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (2014)	No	<5.0 (90% percentile)	ppm	0	15 (Action level)	Corrosion of household plumbing systems; erosion of natural deposits
Copper (2014)	No	0.25 (90% percentile)	ppm	1.3	1.3 (Action level)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Nitrate (measured as Nitrogen)	No	1.2-4.39 (range)	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	No	ND-3.0 (range)	ppb	0	10	Erosion of natural deposits; runoff from glass and electronics production wastes
Chromium	No	ND- 3.7 (range)	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits

Disinfectants and Disi	nfection By	-Products				
Chlorine	No	0.8-1.1	ppm	MRDLG	MRDL	Water additive used to control
(distribution)		(range)		4.0	4.0	microbes.
Total Trihalomethanes	No	3.6	ppb	n/a	80	By-product of drinking water
(TTHM) Volatile Organic Cont	aminants					chlorination
1,1 –	No	ND-3.56	ppb	7	7	Discharge from industrial
Dichloroethylene	110	(range)	PPO	, ,	,	chemical factories
1,1 Dichloroethane	No	ND-0.60 (range)	ppb	7	7	Discharge from pharmaceutical and chemical factories
Total Trihalomethanes (TTHM)	No	3.6	ppb	n/a	80	By-product of drinking water chlorination
Radioactive Contamin	ants					
Adjusted Gross Alpha Activity (2015)	No	4.7-11.5 (range)	pCi/L	0	15	Erosion of natural deposits
Combined Radium 226/228 (2015)	No	0.11-2.1 (range)	pCi/L	0	5	Erosion of natural deposits
Uranium (2015)	No	3.49-6.53 (range)	pCi/L	0	30	Erosion of natural deposits
Synthetic Organic Cor	ntaminants	including Pes	ticides and	Herbicides		
DI (2-ethylhexyl) Pahthalate	No	ND-2.2 (range)	ppb	0	6	Discharge from rubber and chemical factories
Unregulated Contamin	nants					
Sodium (2015)	No	19-30 (range)	ppm	n/a	n/a	Erosion from natural deposits
Hardness	No	250 (average system wide)	ppm	n/a	n/a	Erosion from natural deposits

Note: Test results are for 2016 unless otherwise indicated; all contaminants are not required to be tested for on an annual basis.

Regulatory compliance with some MCLs are based on running annual average of samples.

Hardness: Water is a strong solvent that dissolves varying amounts of mineral substances. Calcium and magnesium are the principle mineral contaminants that cause water to be "hard." (17.1 ppm = 1 grain). While not a health concern, high levels of hardness can cause other issues such as spots on dishes and the need to use extra soap for bathing, dishes, laundry, and hot water scaling.

<u>Arsenic:</u> While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

<u>Lead</u>: 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 Taneytown 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 drinking 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 EPA SDW Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

<u>Nitrates:</u> Levels above 10 ppm in drinking water 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 activities. If you are caring for an infant you should ask advice from your health care provider.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Please call our office at 410-751-1100 if you have questions. We at the City of Taneytown work around the clock to provide top quality water at every tap. We ask that all our consumers, who are the heart of our community, help us protect our water because our way of life and our children's future depends on it.

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