THE TOWN OF POOLESVILLE 2015 Water Quality Report

Dear Residents,

The Town of Poolesville is pleased to inform you that once again Poolesville's drinking water meets or exceeds the U.S. Environmental Protection Agency (EPA) standards for safety and quality.

While we did incur violations this year due to suspected lab errors and personnel turn-over, we have made the necessary adjustments and are now back in full compliance.

Poolesville delivers a safe and reliable water supply to approximately 5,500 residents and several businesses. The system consists of about twenty miles of ductile iron water pipe and two storage tanks. Our system does not contain any lead mains nor service lines.

This report includes details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Each year, we test the water for several different contaminants. Many of these tests did not detect even a trace amount of contaminants in our water. This report shows only the detectable results of our monitoring for the period of January 1 – December 31, 2015. The report is not published until June as the final analysis and MDE review must occur prior to release.

We hope that you find the information in this Water Quality Report useful in illustrating our commitment to provide our community with a safe and reliable water supply.

For more information, you may contact me at 301-428-8927 or attend a Commissioner's meeting every first and third Monday at Poolesville Town Hall, 19721 Beall Street.

Sincerely,

D. Wade Yost
Town Manager

Important health information from the U.S. EPA

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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).

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. We 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.

Poolesville's water source

Poolesville relies entirely upon groundwater and is withdrawn from 12 wells. Town. State permits allow an annual average daily withdrawal of 650,000 gallons per day (GPD) and a maximum monthly average of 910,000 GPD. These wells are drilled from 285 to 800 feet deep into the New Oxford Formation Aquifer. Groundwater is derived from rainwater, creek and riverbed percolation. As the water travels downward through the soils, many of the impurities are removed. Our groundwater quality is very good and requires chlorine, as mandated by the Safe Water Drinking Act. In comparison, surface water as found in most municipalities around us, must contend with pollution, algae blooms and wastewater discharges.

Definitions Used in this Report

PPM or MG/L	Parts per million, or milligrams per liter (mg/L). 1 ppm is the same as one drop in 10 gallons of water
PPB	Parts per billion, or micrograms per liter (µg/L). 1 ppb is the same as one drop in 10,000 gallons of water.
ND	Not detected (by a test procedure)
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which no health risk is known or expected. MCLGs ensure a margin of safety for sensitive individuals.
MCL	Maximum Contaminant Level: 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.
AL	Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
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 o f the use of disinfectants to control microbial contaminants.

Why are contaminants in my drinking water?

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 can pick up substances resulting from the presence of animals or from human activity, including:

- 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;
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities;
- Microbial contaminants, such as viruses and bacteria, that may come from wastewater treatment plants, septic systems, agricultural livestock operations and wildlife;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses; and
- 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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

The MDE requires certain health effects language for some contaminants even though a violation may not exist.

- **Nitrate:** Infants who drink water containing nitrates in excess of the MCL could become seriously ill and, if not treated, may die. Symptoms include shortness of breath and blue baby syndrome.
- **Radon:** Radon has been detected in all samples tested. There is no Federal regulation for drinking water. However, exposure to air transmitted radon over a long period of time may cause adverse health effects.
- **Alpha Emitters: (Uranium, Radium)** Alpha Emitters have the potential to cause an increased risk of cancer if consumed in excess of the MCL over a lifetime.

In order to ensure that tap water is safe to drink, the USEPA and Maryland Department of the Environment (MDE) impose testing requirements and regulations that limit the amount of certain contaminants in water provided by public water systems. Although Poolesville in conjunction with the MDE sample for several different contaminants, only those present are listed in the following tables. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The MDE requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Notification Violation

We failed to provide lead & copper results to all residential sample sites within the 30 day period required. All results were in compliance with the exception of one and that resident was notified.

How does our water system work?

The operation of our system is based on the water level in the water tanks, which provide the water pressure for your home. When the water level in the tanks drops to a preset elevation, all twelve wells are automatically turned on. The wells pump water into our distribution pipes and to the water tanks. Once the water tanks are full, the wells shut down. This process takes about 8 to 12 hours depending on the actual use during the filling process. Many residents have wells located near their homes, but for the most part, everyone receives a blended mix of water from each of the wells.

Water Quality Data

Disinfectants and Disinfection By-Products

Substances	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Major Sources in Drinking Water
Residual Chlorine	0.8	0 - 0.8	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Haloacetic acids	5	0 - 11.65	No Goal	60	ppb	No	Disinfection byproduct
Trihalomethanes	12	3.42 - 14.8	No Goal	80	ppb	No	Disinfection byproduct
Coliform Bacteria	0	0	n/a	n/a	n/a	No	Naturally present in the environment

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Sources of Contamination
Highest single measurement	**1 NTU**	**0.18 NTU**	**No**	**Soil runoff**
Lowest monthly % meeting limit	**0.3 NTU**	**100%**	**No**	**Soil runoff**

Lead & Copper

Substances	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Major Sources in Drinking Water
Lead (ppb)	0	1.3	-5	1	ppb	No	Corrosion of household plumbing systems
Copper ppm)	1.3	No	0.7	0	ppm	No	Corrosion of household plumbing systems

Inorganic Contaminants

Substances	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Major Sources in Drinking Water
Barium	0.987	0.1 - 0.987	2	2	ppm	No	Discharge from drilling wastes; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	5	0.74 - 5.4	10	10	ppm	No	Runoff from fertilizer; leaching from septic tanks, sewage, erosion of natural deposits.
Arsenic	0.0018	0 - 0.0018	0	0.01	ppm	No	Erosion of natural deposits; Runoff from orchards, glass and electronic production wastes.

Radioactive Contaminants

Substances	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Major Sources in Drinking Water
Combined Radium 226/228	1.22	0 - 1.22	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	24	0 - 64.8	0	15	pCi/L	Yes*	Erosion of natural deposits.
Uranium	21.9	0 - 21.9	0	30	Ug/l	No	Erosion of natural deposits.

*** This violation was corrected and the system is now in compliance**

Unregulated Contaminants

Substances	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Major Sources in Drinking Water
Radon	1727	395 - 1727	n/a	n/a	pCi/L	No	Erosion of natural deposits.
Nickel	.006	0 - .006	n/a	n/a	ppm	No	Erosion of natural deposits.
Sodium	24.3	11.8 - 24.3	n/a	n/a	ppm		Erosion of natural deposits.

Violations

Violation Type	Violation Begin	Violation End	Violation Explanation
Gross Alpha MCL, Average	04/01/2015	09/30/2015	Water samples showed that the amount of this contaminant in our drinking water was above its standard (maximum contaminant level) for the period indicated.
Monitoring, Gross Alpha, Haloacetic Acids & Total Trihalomethanes (TTHM)	01/01/2015	03/31/2015	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during this period.

Some people who drink water containing gross alpha, haloacetic acids or TTHM in excess of the MCL over many years may have an increased risk of getting cancer. TTHM in excess of the MCL over many years may cause liver, kidney or central nervous system problems.

Presorted Standard
U.S. Postage
PAID
ECRWSS
Poolesville, MD 20837
Permit No. 1663

Resident
Poolesville, Maryland 20837