

# DRINKING WATER QUALITY ANNUAL REPORT

## For January – September 2015

### Potomac Farms Waterworks

#### PWSID# 6107550

#### INTRODUCTION

This Annual Drinking Water Quality Report for January through September 2015 is designed to inform you about the quality of drinking water delivered by your former water system, Seaboard Water Company. The goal is always to provide you with a safe and dependable supply of drinking water, and want you to understand the efforts made to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH). Beginning October 1, 2015 Loudoun Water began serving drinking water to the former Potomac Farms Waterworks distribution system from its Central System, therefore this report is only based on water quality data acquired prior to the switch over. A link to the electronic version of the 2015 Loudoun Water Central System Annual Report will be included in your next billing cycle mailing. The 2015 Loudoun Water Central System Annual Report will include water quality data pertaining to the drinking water being delivered to your home since October 1, 2015.

Do you

- have questions about this report?
- want additional information about any aspect of your drinking water ?
- want to know how to participate in decisions that may affect the quality of your drinking water?

If yes, please contact Loudoun Water at (571) 291-7880.

#### GENERAL INFORMATION

The sources of drinking water (both tap and bottled) 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 materials and can pick up substances resulting from the presence of animals or from human activity. Water from surface sources is treated to make it safe to drink while groundwater may or may not have any treatment.

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 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.

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

All drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's 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 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## SOURCES AND TREATMENT OF YOUR DRINKING WATER

The source of your drinking water was groundwater. The groundwater well was located near the Southern portion of Potomac Farms and is approximately 350 feet deep.

Your drinking water was treated with chlorine disinfection.

VDH conducted a source water assessment of the system during 2002. The source was determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within the last 5 years. The report is available by contacting Loudoun Water at (571) 291-7880.

## DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next few pages shows the most recent results of monitoring. In the tables and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

*Maximum Contaminant Level Goal or 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 or 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.

*Treatment Technique:* A required process intended to reduce the level of a contaminant in drinking water.

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

*Maximum residual disinfectant level goal or 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.

*Non-detect (ND)* - Lab analysis indicates that the contaminant is below the detection limit

*Parts per million (ppm)* - One part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb)* - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt)* - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Picocuries per liter (pCi/L)* - A measure of the radioactivity in water.

## **CONTAMINANT MONITORING**

We constantly monitor for various contaminants in the water supply to meet all state and federal regulatory requirements. The tables that follow list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently, and the data presented in this report are from the most recent testing done in accordance with state requirements. Even though some of our data may be more than one year old, it is accurate.

MCLs are set at very stringent levels by the EPA. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

## TABLE OF DETECTED CONTAMINANTS

### I. Microbiological Contaminants -

Contaminant	MCLG	MCL	No. of Samples Indicating Presence of Bacteria	Violation (Y/N)	Sampling Year	Typical Source of Contamination
Total coliform bacteria	0	Presence in more than 1 sample each month.	None	No	2015	Naturally present in the environment.
Fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive, and one is also fecal positive.	None	No	2015	Human and animal fecal waste.

### II. Lead and Copper Contaminants -

Contaminant	Units of Measurement	Action level	MCLG	90 <sup>th</sup> Percentile Value	Action Level Exceedance (Y/N)	Sampling Year	# of Sampling Sites Exceeding Action level	Typical Source of Contamination
Lead	ppb	15	0	ND	No	2015	0	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	0.064	No	2015	0	Corrosion of household plumbing systems.

### III. Other Chemical and Radiological Contaminants -

Contaminant	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Sampling Year	Typical Source of Contamination
Gross Beta	pCi/L	0	50	1.3	No	2015	Decay of natural and man-made deposits
Gross Alpha	pCi/L	0	15	3.3	No	2015	Decay of natural and man-made deposits
Nitrate-Nitrite	ppm	10	10	2.12	No	2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic	ppb	N/A	10	2	No	2015	Erosion of natural deposits
Barium	ppm	2	2	0.013	No	2015	Erosion of natural deposits; Discharge of drilling wastes
TTHM's (total trihalomethanes)	ppb	N/A	80	6.3	No	2015	By-product of drinking water chlorination.
Chlorine Residual	ppm	(MRDL) 4	(MRDLG) 4	0.46 Range 0.24 – 0.78	No	2015	Water additive used to control microbes.

## VIOLATION INFORMATION

The waterworks received no violations in 2015.

## ADDITIONAL HEALTH INFORMATION

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. Seaboard Water Company was 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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 at <http://www.epa.gov/safewater/lead> or (800) 426-4791.

This Drinking Water Quality Report was prepared by:

**Loudoun Water with the assistance of the Virginia Department of Health, Office of Drinking Water.**