Annual Drinking Water Quality Report 2017
Facilities and Engineering Service
VAMC Perry Point
June 2018
PWID# 0070017

Facilities and Engineering Service is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services delivered to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

This report shows our water quality and what it means.

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).

Facilities and Engineering wants to keep you informed of the excellent water and services provided to you over the past year. Our goal is and always has been to provide a safe and dependable supply of drinking water. Our water source is the Susquehanna River and is treated by rapid sand filters. Fully staffed of State Certified operators ensure good water quality. We are pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report concerning your water utility, please contact James Willen, Filter Plant Operator at 410-642-2411, extension 5918**.** We want our valued residents to be informed about their water utility.

Perry Point VAMC Water Filtration Plant routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the periods of January 1st to December 31st, 2017. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms Facilities and Engineering Service provided the following definitions

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

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

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

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Contaminant Level (MCL) - the “Maximum Allowed” (MCL) 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"(MCLG) 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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity (2017)	N	0.138	NTU	N/A	TT	Soil runoff
Inorganic Contaminants						
Nitrate (as Nitrogen) (2017)	N	0.66	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Copper (distribution) (2015)	N	0.22	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (distribution) (2015)	N	8	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Barium (2017)	N	0.023	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (2017)	N	1.4	ppm	4	4	Water Additive used to control microbes
Synthetic Organic Contaminants including Pesticides and Herbicides						
Dalapon (2017)	N	1.23	ppb	200	200	Runoff from herbicide used on rights of way
Volatile Organic Contaminants						
Stage 2 Disinfection Byproducts: January 1 – December 30, 2017						
TTHM (Distribution) [Total trihalomethanes] (2017) **Range and Highest Locational Running Average (LRAA)	N	31.7-106.3 67	ppb	0	80	By-product of drinking water disinfection
HAA5 (Haloacetic acids) (distribution) (2017) Range and Highest Locational Running Average (LRAA)	Y	Range 29-155 68	ppb	0	60	By-product of drinking water disinfection
Unregulated Contaminants						
Sodium (2014)	N	33.6	ppm	N/A	N/A	Erosion of natural products
Chloroform (2014)	N	42.6	ppb	N/A	N/A	By-product of chlorine disinfection
Bromodichloromethane (2014)	N	10.1	ppb	N/A	N/A	By-product of chlorine disinfection
pH, range (2014)	N	6.8				
Dibromochloromethane (2014)	N	1.1	ppb	N/A	N/A	By-product of drinking water chlorination

National Secondary Drinking Water Standards. EPA recommends secondary standards to water systems but does not require systems to comply. However, States may choose to adopt them as enforceable Standards.						
*Aluminum (2012)	N	0.28	ppm	0	0.05 to 0.2	Colored water

Note: All test results are for 2017 unless otherwise noted. Not all contaminants are required to be tested for annually.

Total Organic Carbon The percentage of Total Organic Carbon (TOC) removed was measured each month and the system met all TOC removal requirements set. In 2014, we were granted approval for Step 2 TOC removal requirements, which more accurately apply to our source water characteristics.

On November 29, 2017, the Perry Point Water Treatment Plant received a notice of Violation from the Maryland Department of the Environment (MDE) because the contracted lab failed to submit monthly Total Organic Carbon (TOC) test results to MDE before expiration of a 28-day hold-time from samples taken in October 2017. The lab did not notify the VAMHCS. However, the contracted lab notified MDE, who subsequently notified the VAMHCS. Had the VAMHCS been notified earlier, a re-sampling would have been completed and the results submitted before expiration of the 28-day limit.

It is important to emphasize that the Notice of Violation is not related to quality of the water, but is the result of the testing lab not submitting sampling results as required.

Subsequent monthly testing has showed the Perry Point water treatment plant is within regulatory limits: Raw water TOC - 2.8mg/L; Finished water -1.6mg/L; 56.8% TOC removal was achieved when only 25% TOC removal was required. Results were delivered to MDE as required, demonstrating the VAMHCS is in compliance with the MDE Water Safety Program.

The Perry Point VAMC Water Treatment system was in violation of the Maximum Contaminant Level for Total Haloacetic acids (HAA5) during the following periods:

- January – March 2017
- April – June 2017
- July – September 2017
- October – December 2017

Some people who drink water containing haloacetic acid in excess of the MCL over many years may have an increased risk of getting cancer.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs).Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Status of New Water Treatment Plant Project - NRM Project No. 512A5-13-329 Potable Water System Improvements: project construction began April 2017. Projected completion date will be approximately October 2018. The new Water Treatment Plant will utilize plate settlers, membrane filtration, along with chlorine dioxide for primary disinfection. This should improve the levels of disinfection byproducts such as Haloacetic acid (HAA5) and Total Trihalomethane (TTHM).

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. Perry Point VA Medical Center 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 Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and

radioactive substances. 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. For more information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean quality water. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers.

Facilities and Engineering Service works around the clock to provide top quality water to every tap. 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.