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# 2019 WATER QUALITY REPORT

## Easton Meets all Water Quality Standards & Requirements

Since 1914, Easton Utilities has been dedicated to providing clean, clear, healthy water in plentiful supply. On a schedule established by the Maryland Department of the Environment, Easton Utilities carefully monitors your water quality with a comprehensive series of tests.

In 2018, Easton's water passed all of those tests and meets all standards and requirements. This summary report outlines your water quality and the ways in which it is tested.

Este informe contiene información importante sobre el agua que usted bebe. El informe completo está disponible en español en línea en [eastonutilities.com](http://eastonutilities.com).



## Where does my water come from?

Easton Utilities pumps your water from naturally filtered underground aquifers (water-bearing sands) through five wells that are 1,000 to 1,200 feet deep. We then treat the water as required and pump it into the distribution system. The water that comes out of your tap includes water from each of these wells. There is no one well that provides all of your water. Three wells are drilled 1,000 feet into the Magothy Aquifer. The final two wells are 1,200 feet deep drilled into the Upper Patapsco Aquifer.

## What are the advantages of underground water sources?

The great advantage of a groundwater water supply is that it requires minimal treatment. Before your water reaches your home or office, it passes through a vast reservoir of sand that filters it to a far greater degree than a standard water treatment facility provides. When we pump this naturally filtered water from the ground, it already meets most water quality standards without any additional treatment. We treat your water with some chlorine to make sure that while it passes through the pipeline to your home or office it maintains its quality. As your water passes through the sand, some minerals leach into it. Most of these minerals are harmless. However, Easton's wells No. 11 and No. 12 have an elevated level of naturally occurring iron. Other substances are also present in small concentrations. (See table on page 4). This is common to most water systems.

## What does the Water Quality Table tell me?

The table on page 4 includes the results of our water quality analysis. Every regulated contaminant detected in the water, even in the most minute traces, is listed. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, and the usual sources of contamination.

### **Maximum Contaminant Level (MCL):**

The highest level of a contaminant federal regulations allow in drinking water. Using the best available treatment technology, MCLs are set as close to Maximum Contaminant Level Goals (MCLG) as possible.

### **Maximum Contaminant Level Goal (MCLG):**

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

## What are the health impacts of drinking water?

Water is an essential part of a healthy lifestyle and the water in Easton is among the cleanest and healthiest that you will find. However, drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As long as they occur below EPA's standards, they don't pose a significant threat to health, although children with severely compromised immune systems may have special needs. The presence of contaminants does not necessarily pose a health risk. More information about contaminants and potential health risks is available by calling the U. S. Environmental Protection Agency's Safe Drinking Water Hotline, (800) 426-4791. The sources of drinking water (both tap 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 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:

**(A)** Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock and wildlife.

**(B)** Inorganic compounds, 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.

**(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 the by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

**(E)** Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.

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

## What should immuno-compromised people know about water?

Some people may be more vulnerable to contaminants in drinking water than others. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, those who have had organ transplants, those with HIV/AIDS or other immune system disorders, some elderly and infants may be at risk from infections.

If you are immuno-compromised, seek advice about drinking water from your health care provider. EPA/ Centers for Disease Control guidelines on how to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline, (800) 426-4791.

## How big are these concentrations?

The concentrations recorded in this report are quite small. One part per million (ppm) is the ratio of a substance's quantity to each 1 million parts of water. Put in perspective, it is the same as 1 inch in 16 miles, 1 minute in 2 years or 1 cent in \$10,000. One part per billion is the same as one drop in 10,000 gallons of water.

## Are these the only tests that are performed on my water?

Easton Utilities conducted analyses for 125 different contaminants at each of the water sources. In addition, we conducted tests for the presence of coliform bacteria at 15 locations on a monthly basis and disinfectant (chlorine) residual at 20 locations every week. The table shows contaminants that were at levels large enough to be measurable. Other contaminants were at concentrations below the detectable level.

## What about lead in the water?

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. Easton Utilities 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 (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## What about the fluoride level?

Easton Utilities does not add fluoride to its water. Some of our wells have low levels of fluoride that occur naturally. The water from the wells with fluoride is blended with the water from wells that do not have fluoride, reducing the fluoride concentration in the distribution system.

## What causes discolored water that sometimes comes from my tap?

Easton Utilities takes a series of proactive steps to make sure that your water is clean and clear. As water passes through the distribution system, iron-oxide (rust) is deposited on the walls of the pipes. Sudden changes in the velocity of the water can slough this material off the pipe causing discolored water. We operate the water system to keep flows as steady as possible. In addition, a systemwide water main flushing program is conducted in the spring and summer each year to remove some of the build-up on the pipe walls and to reduce the impact of flow disturbance on the quality of your water.

## What about sodium levels?

There is no known health impact from the ingestion of sodium. However, many people are given sodium-restricted diets. If you are on a sodium-restricted diet, please advise your physician that the water supply in Easton has a sodium content exceeding 20 parts per million.

## What is being done about the iron level?

Iron does not pose a health risk, but can cause some aesthetic problems such as staining of plumbing fixtures or discolored water. Only Wells No. 11 and 12 have shown an elevated iron level. We treat water from these wells with lime in order to adjust pH, use chlorine to oxidize the iron and then filter out the iron-oxide. Testing shows that the average iron level is less than 0.10 milligrams

per liter after the treatment process—one third the recommended 0.30 mg/L level to prevent aesthetic problems.

## Why is chlorine added to the water?

The State of Maryland requires that all public water systems employ disinfectants to prevent the possibility of contamination after water has been pumped through the distribution system. In Easton, we use chlorine and strive to keep concentrations between 0.4 and 0.7 ppm.

## Should our water be softened?

Water hardness is a measure of calcium and magnesium in water. Easton's water is less than 50 ppm and is considered soft. The most dramatic effect of soft water is that it lathers easily. If you are considering additional water treatment, softening should not be necessary.

## Who operates the water system?

Easton Utilities employs fully certified and State-licensed Water Treatment Plant and Water Distribution Operators. In addition, Easton Utilities has three professional engineers on staff who are available to the water department for consultation on planning, design and other technical questions.

# What are Easton's water plans for the future?

Easton Utilities invests significantly in system enhancements and routine maintenance. We plan to bring a new well and treatment plant into service in the next few years to serve our capacity needs and to decommission older, less efficient facilities. In 2019 we will repaint the Clifton water storage tank and we will replace aging water mains during town street renewal projects.

Easton Utilities is dedicated to providing premium water service at reasonable rates. We are proud of our continued record of consistently meeting all water quality standards and requirements. If you have any questions about this or any of your utility services, please call us at (410) 822-6110.

Easton Utilities Public Water System Identification Number is MD0200003

## Definitions for chart below:

**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 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.

**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 (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.

**Lead and Copper - Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**mg/L or ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**pCi/L:** Picocuries per liter is a unit for measuring radioactive concentrations. The curie (Ci) unit is the activity of 1 gram of pure radium 226. Pico is a scientific notation term which means  $1 \times 10^{-12}$ .

**NA:** not applicable.

**MDE:** Maryland Dept. of the Environment.

## Regulated Contaminants

Lead and Copper	Date(s) Sampled	MCLG (Goal)	Action Level	90th Percentile	# Sites Major Over AL*	Units	Violation	Likely Source of Contamination
Copper	8/29/2017	1.3	1.3	0.23	0	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	8/29/2017	0	0.015	0	0	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

\*30 sites sampled in Easton every 3 years

Disinfectants and Disinfection By-Products	Date(s) Sampled	Highest Level* Detected	Range of Levels Detected	MCLG (Goal)	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2018	0.7	0.4 - 0.7	MRDLG = 4	MRDL = 4	ppm	NO	Water additive used to control microbes
Haloacetic Acids (HAA5)	2018	2	0 - 3.67	No goal for the total	60	ppb	NO	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	7	0 - 9.6	No goal for the total	80	ppb	NO	By-product of drinking water disinfection

\*Not all sample results may have been used by MDE 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.

Inorganic Contaminants	Date(s) Sampled	Highest Level* Detected	Range of Levels Detected	MCLG (Goal)	MCL	Units	Violation	Likely Source of Contamination
Chromium	2018	2.4	0 - 2.4	100	100	ppb	NO	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2018	0.7	0.2 - 0.7	4	4	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories

Radioactive Contaminants	Date(s) Sampled	Highest Level* Detected	Range of Levels Detected	MCLG (Goal)	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon emitters	4/12/2017	6.4	6.4 - 6.4	0	50	pCi/L	NO	Decay of natural and man-made deposits

## Unregulated Contaminants

	Date(s) Sampled	Highest Level* Detected	Range of Levels Detected	MCLG (Goal)	MCL	Units	Violation	Likely Source of Contamination
Calcium	3/2013	4.9	3.0 - 4.9	NA	NA	ppm	NO	Erosion of natural deposits; water additive for corrosion control
Chloride	3/2013	14.7	0.5 - 14.7	NA	NA	ppm	NO	Erosion of natural deposits
Chlorate	1/2014	78	0 - 78	NA	NA	ppb	NO	Erosion of natural deposits
Hardness	3/2013	22.1	15.3 - 22.1	NA	NA	ppm	NO	Erosion of natural deposits
Iron	2018	0.20	0.01 - 0.20	NA	NA	ppm	NO	Erosion of natural deposits
Magnesium	3/2013	2.4	1.4 - 2.4	NA	NA	ppm	NO	Erosion of natural deposits
Nickel	10/2015	0.0045	0 - 0.0045	NA	NA	ppm	NO	Erosion of natural deposits
Sodium	10/2015	150	26 - 150	NA	NA	ppm	NO	Erosion of natural deposits
Strontium	1/2014	220	160 - 220	NA	NA	ppb	NO	Erosion of natural deposits
Sulfate	10/2012	18	13 - 18	NA	NA	ppm	NO	Erosion of natural deposits

All water, including bottled water, may reasonably be expected to have to contain at least small amounts of certain contaminants. For any contaminant that is detectable at any level, the EPA requires water systems to report specific information. The chart above indicates the contaminants found in the Easton water system, the level detected, and the amount relative to EPA standards and goals. Of the contaminants detected, none are at levels that exceed EPA standards or goals.