

Important Information About Your Drinking Water

We're pleased to present to you the Annual Water Quality Report for 2021. This report is designed to inform you about the water quality and services we deliver to you every day. Maryland Environmental Service (MES), an Agency of the State of Maryland, operates the water treatment facility and prepared this report on behalf of the Pond at Church Hill.

The Environmental Protection Agency (EPA) regulates Public Water Systems and the contaminants found in water through the implementation of the Safe Drinking Water Act (SDWA). The SDWA sets regulations and guidelines for how public water systems operate and identifies several hundred drinking water contaminants, establishes monitoring frequencies and limitations. The Maryland Department of the Environment (MDE) is responsible for the enforcement of the SDWA and routinely complete Sanitary Surveys as part of there ongoing inspection and monitoring program. MES provides safe dependable operations of the water system and is dedicated to consistently providing high quality drinking water that meets or exceeds the SDWA standards.

If you have any questions about this report or have questions concerning your water utility, please contact **Jay Janney at 410-729-8350**, e-mail **jjanney@menv.com**.

For More Information:

For the opportunity to ask more questions or participate in decisions that may affect your drinking water quality, please contact Marion Grien with **the**Pond at Church Hill at 410-758-8489.

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he Pond at Church Hill water works consists of two drilled wells in the Aquia formation. After the water is pumped out of the well disinfectant is added to protect against microbial contaminants. The Maryland Department of the Environment has performed an assessment of the source water. A copy of the results is available. Call Maryland Environmental Service at 410-729-8350.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 (1-800-426-4791).

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Definitions:

- ♦ 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.
- ◆ **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 required process intended to reduce the level of a contaminant in drinking water
- ◆ **Turbidity** Relates to a condition where suspended particles are present in the water. Turbidity measurements are a way to describe the level of "cloudiness" of the water.
- ◆ pCi/I Picocuries per liter. A measure of radiation.
- ◆ ppb parts per billion or micrograms per liter
- ppm parts per million or milligrams per liter
- ppt parts per trillion or nanograms per liter



Special points of interest:

The water at the Pond at Church Hill is tested for over 120 different compounds.

The Pond at Church Hill Drinking Water met all of the State and Federal requirements

Drinking Water, including bottled water, may reasonably be expected to contain at least small amounts of some compounds. The presence of these compounds does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's (EPA's) Safe Drinking Water Act Hotline (1-800-426-4791)**

Fluoride Information:

Federal regulations require that fluoride, which occurs naturally in your water supply, not exceed a concentration of 4.0 mg/l (4000 ppb) In drinking water. This is an enforceable standard called a Maximum Contaminant Level (MCL), and it has been established to protect the public health. Exposure to drinking water levels above 4.0 mg/l for many years may result, in some cases, of crippling skeletal fluorosis, which is a serious bone disorder.

Federal law required that we notify you when monitoring indicates that the fluoride in your drinking water exceeds 2.0 mg/l (2000 ppb). This is intended to alert families about dental problems that might affect children under nine years of age. The fluoride concentration of your water exceeds this federal guideline.

Fluoride in children's drinking water at levels of approximately 1 mg/l reduces the number of cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/l may develop fluorosis. Dental fluorosis, in its moderate and severe forms, is a brown staining and/or pitting of the *permanent* teeth. Because dental fluorosis occurs only when *developing* teeth (before they erupt from the gums) are exposed to elevated levels of fluoride, households without children are not expected to be affected by this level of fluoride. Families with children under the age of nine are encouraged to seek other sources of drinking water for their children to avoid the possibility of staining and pitting.

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Contaminant	Highest Level Allowed (EPA's MCL)	Highest Level Detected	Ideal Goal (EPA's MCLG)		
Regulated at the Treatment Plant					
Gross Beta (2017 Testing)	50 pCi/l	4.3 pCi/l	0 pCi/l		
Typical source of contaminant: Erosion of natural deposits					
Fluoride (2019 Testing)	4000 ppb	200 ppb	4000 ppb		
Typical Source of Contamination: Additive which promotes strong teeth (Range: 0 - 200 ppb)					
Barium (2019 Testing)	2000 ppb	180 ppb	2000 ppb		
Typical Source of Contamination: Erosion of natural deposits (Range: 180 ppb - 180 ppb)			b)		
Regulated in the Distribution System					
Chlorine	4 ppm	1.31 ppm *	4 ppm		
Water additive used to control microbes. *Annual Rolling Average (Range (1.29 - 1.36)					
Total Trihalomethanes (TTHM) (2020 Testing)	80 ppb	3.8 ppb	n/a		
Typical Source of Contamination: By-product of drinking water chlorination					
Haloacetic Acids (HAA5) (2020 Testing)	60 ppb	1.4 ppb	n/a		
Typical Source of Contamination: By-product of drinking water chlorination					
Regulated in the Distribution System	Action Level	90th percentile	Ideal Goal		
Copper (2020 Testing)	1300 ppb	15.4 ppb	1300 ppb		
Typical Source of Contamination: Corrosion of household plumbing fixtures and systems					
Lead (2020 Testing)	15 ppb	0 ppb	0 ppb		
Typical Source of Contamination: Corrosion of househ	old plumbing fixtures and	d systems			

The table above lists all the drinking water contaminants that were detected during the 2021 calendar year. The presence of these compounds in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 – December 31, 2021. The State 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.

Sources of 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, in some cases radioactive material, and can pick up substances resulting from the presence of animals or from human

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

Lead Prevention

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 Pond at Church Hill 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.

Important information about Gross Beta Emitters:

Beta emitters are naturally occurring radiations in soil, air and water. These emitters generally occur when certain elements decay or break down in the environment. The emitters enter drinking water through various methods including the erosion of natural deposits. There are no immediate health risk from consuming water that contains gross beta, however some people who drink water containing beta emitters in excess of the MCL over many years may have an increased risk of getting cancer. Currently, the highest level of gross beta detected is well below the treatment technique of 50 pCi/l.

Contaminants That May Be Present in Source Water:

Microbial contaminants, such as viruses and bacteria, which may come from sewage 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. 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. 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.

If you have any questions about this report or your drinking water, please call Jay Janney at 410-729-8350 or email your request to <u>jianney@menv.com</u>.



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Polyfluoroalkyl Substances

PFAS – short for per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

Currently, there are no federal regulations (i.e. Maximum Contaminant Levels (MCLs)) for PFAS in drinking water. However, the U.S. Environmental Protection Agency (EPA) has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water. While not an enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. *The combined PFOA and PFAS concentration from samples taken from your water system was non-detect or 0 ppt.* MDE anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website: mde.maryland.gov".

Water Conservation

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference—try one today and soon it will become second nature.

- ♦ Check for water leaks by the reading your water meter before and after a two hour period when no water is being used in your home. If the reading changes then there is probably a leak in your home.
- ◆ Take a shower! Filling up a bathtub can use up to 70 gallons of water while a shower generally uses 10 to 25 gallons. Taking shorter showers saves even more water.
- ◆ Make sure your washing machine and dishwasher are fully loaded before running.
- ◆ Are you in the market for a new water fixture such as a faucet, shower-head or toilet? Consider a WaterSense labled fixture and reduce your water use by 30% percent or more versus standard flow fixtures. Visit www.epa.gov/watersense for more information on water efficiency products and methods.

Source: http://www.epa.gov/watersense & http://eartheasy.com

