

Fahrney-Keedy Home and Village *2021 Drinking Water* *Quality Report*



Important Information Concerning 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 Fahrney-Keedy Home and Village.

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 their 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 attend the Resident Council/Village Meetings that occur each month for Independent living residents (first Monday), In-house residents (last Friday) and the Nursing Staff (first Friday).

The water for Fahrney-Keedy Home and Village comes from three wells. The underground source of the well water is called the Tomstown formation. After the water is pumped out of the wells, it is filtered through a membrane filtration system. The membrane filtration system is capable of removing harmful viruses and bacteria. Finally a disinfectant is added to the filtered water to protect against microbial contamination. 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**.

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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 (1-800-426-4791)**.

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.

Fahrney-Keedy Home and Village Treated Water Quality Report 2021

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.
- ◆ **NTU - Nephelometric Turbidity Units.** Units of measurement used to report the level of turbidity or “cloudiness” in the water.
- ◆ **pCi/l** - 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:

- In July 2010 a state of the art membrane filtration system went online for Fahrney-Keedy Home and Village.
- The water at Fahrney-Keedy Home and Village is tested for over 120 different compounds.
- 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)**.

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.

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Contaminant	Highest Level Allowed (EPA's MCL)	Highest Level Detected	Ideal Goal (EPA's MCLG)
Regulated at the Treatment Plant			
Nitrate	10 ppm	6.2 ppm	10 ppm
Typical Source of Contamination: Runoff from fertilizer		(Range 2.1 to 6.2)	
Combined Radium (226 & 228) (2018 Testing)	5 pCi/l	1.1 pCi/l	n/a
Typical Source of Contamination: Erosion of natural deposits			
Fluoride (2019 Testing)	4000 ppb	260 ppb	4000 ppb
Typical Source of Contamination: Additive which promotes strong teeth		(Range: 0 - 260 ppb)	
Barium (2019 Testing)	2000 ppb	19 ppb	2000 ppb
Typical Source of Contamination: Erosion of natural deposits		(Range 14 to 19)	
Regulated in the Distribution System			
Total Trihalomethanes (TTHM) (2021 Testing)	80 ppb	19.5 ppb	n/a
Haloacetic Acids (HAA5) (2021 Testing)	60 ppb	4.9 ppb	n/a
Typical Source of Contamination: Byproduct of drinking water disinfection			
Chlorine	4 ppm	1.18 ppm*	4 ppm
Source: Water additive to control microbes.		(Range: 1.08 - 1.34 ppm)	
* Annual Rolling Average			
Regulated in the Distribution System			
	Action Level	90th percentile	Ideal Goal
Copper (2021 Testing)	1300 ppb	390 ppb	1300 ppb
Lead (2021 Testing)	15 ppb	53.5 ppb*	0 ppb
Typical Source of Contamination: Corrosion of household plumbing fixtures and systems			
* Two (2) of the five (5) collected samples exceeded the action level for lead and were high enough to exceed the 90th percentile. Additional monitoring will occur in 2022. Please see the Lead Prevention statement on page 4 for more information.			
Tested at the Treatment Plant			
Turbidity	TT=filtration	0.15 NTU*	n/a
Turbidity cannot exceed 1.0 NTU and must be < or = to 0.3 NTU in at least 95% of the measurements taken each month.			
* Maximum reading. The water plant met the turbidity limits 100% of the time. Turbidity monthly readings ranged from (0.02 NTU to 0.15 NTU)			

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 activity.

What is Membrane Filtration?

In 2010, a state of the art Membrane Filtration system went online at Fahrney Keedy Home and Village. This modern water filtration system has continued to provide significant performance and cost advantages, which ensures safe, reliable water day after day.

Membrane Filtration systems create a physical barrier to prevent Cryptosporidium, Giardia, bacteria, turbidity, and suspended solids without the need for chemical pretreatment. The photograph to the right shows one of the Membrane Filtration units at the Fahrney-Keedy Home and Village. There are two Membrane Filtration units each capable of filtering 43 gallons per minute.



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 Fahrney Keedy Home and Village 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>.

NITRATE:

Nitrate (measured as Nitrogen) in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask for advice from your health care provider.

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 jjanney@menv.com.



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, showerhead or toilet? Consider a WaterSense labeled 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>

