Turkey Hill Water Company Inc.
Drinking Water Quality Report for Calendar Year 2023
Public Water System ID (PWSID) MD0080048

This is our Annual Water Quality Report (also known as the Consumer Confidence Report) for the period of January 1 through December 31, 2023. This report is intended to provide you with important information about your drinking water and the efforts made by our water system to provide you with safe drinking water. As you know, the water company is both owned and operated by our community.

Note: This report has several sections containing specific wording required by State or Federal regulators. These sections must be included in every Annual Water Quality Report issued in Maryland. The intent of such mandatory sections and language is not to unnecessarily cause concern but to better inform consumers about the quality of the water being delivered to their homes.

For more information regarding this report please contact Frank Valenta, Certified Water Treatment Operator and your neighbor, at 240-210-6067 or pyro101@verizon.net.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Sources of Drinking Water

In general, there are many sources for 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. Drinking water, including bottled waters, 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 about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

The specific source of the drinking water provided to you by the Turkey Hill Water Company is ground (well) water from the Upper Patapsco aquifer. Our well is 988 feet deep and provides our community about 51 gallons of water per minute when pumping. Our community draws about 2.5 million gallons of water out of the ground each year (about 150 gallons per day for each household). The State of Maryland regulates (via a permit/allocation process) how much water we can take out of the ground each month.

Source Water Information: In 2023, the water provided by Turkey Hill Water Company came from the following deep well source:

Source Water (well) Name	Permit Number	Type Water	Location
TURKEY HILL 3 CH920969	CH920969	Ground Water	9334 Winkler Ln, La Plata, MD 20646

Source Water Assessment: The Maryland Department of the Environment's Water Supply Program has conducted a Source Water Assessment for 57 community water systems in Charles County, including the Turkey Hill water system. This assessment is available to you at: https://mde.maryland.gov/programs/water/water_supply/source_water_assessment_program/pages/by_county.aspx.

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 and livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming, or erosion of natural deposits in the ground.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water 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 storm water 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 (a microscopic parasite often associated with contaminated water) and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

A word about Lead Contaminants: 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. Turkey Hill Water Company is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing

components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Turkey Hill Water Company (Frank Valenta, 240-210-6067, pyro101@verizon.net). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

In our most recent water samplings at both the well and in about 10% of the homes in our community, we have not detected the presence of lead. That means that the level of lead, if there is any, is below detection limits of the required EPA analysis technique. As noted above, improper or pre-1982 plumbing with high lead solder within individual homes could introduce lead into your household water.

Definitions

The following listing contains scientific terms and measures which may occur in this report. Some of these likely require explanation.

Avg:	Average. Regulatory compliance with some MCLs is based on running annual average of monthly samples.
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 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 (AL): ……..	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Level 1 Assessment: ……	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
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.
Level 2 Assessment: ……	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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.

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
NA or n/a:	Not applicable.
ND:	Not Detected (at the resolution level of the analysis)
MDE:	Maryland Department of the Environment, a state regulatory agency
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - a concentration of one ounce in 7,350,000 gallons of water
ppm:	milligrams per liter or parts per million - a concentration of one ounce in 7,350 gallons of water.
ppt:	one part per trillion – equivalent to travelling 1 inch in 16 million mile journey
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

The following tables list the various contaminates for which we tested and were detected. These tables present our CY2023 testing results as well as prior years' results (for contaminates previously detected but not tested for in CY2023). **Contaminates for which we tested but were not detected are not listed in this report.**

2023 Regulated Contaminants Detected

Disinfectants

Disinfectants and disinfection by-products	Date Sampled	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	Daily in 2023	1.32	0.43-1.32	MRDLG = 4	MRDLG = 4	ppm	No	Water additive used to control microbes.

Coliform Bacteria

Maximum Contamination Level Goal (MCLG)	Total Coliform Maximum Contamination Level	Highest Number of Positives	Fecal Coliform or E. Coli Maximum Contamination Level	Total No. of Positives E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive Monthly Sample	1		0	N	Naturally present in the environment

Prior Year Results (latest available results for contaminates detected but not tested for in 2023)

Lead and Copper Rule

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Lead and Copper	Likely Source of Contamination
Copper	2022	1.3	1.3	0.23	0	ppm	Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Based on testing and analysis, we did not detected lead (at the required minimum resolution levels) in the water we provide to the community. But sometimes, individual homes may have lead pipes or fixtures if the homes were built before 1982 or if a homeowner did improper DYI installations/repairs of household plumbing, e.g., used high lead solder or plumbing components containing lead or alloys with lead.

For this reason, we are required to test for lead (and copper) in our water at the actual point of use – i.e., within individual homes in our community. In September 2022 we tested for lead and copper in over 10% of the community we serve (5 out of 47 homes). The results of those tests show that water drawn from point of use locations in those homes had no detectable lead. All of the lead results were below the analysis resolution limit of 0.005 mg/L. The MCL/SMCL for lead is 0.015 mg/L. The presence of copper in the household water (which was detected at acceptable levels and is shown in the above table) was part of that testing.

Regulated Contaminants

Disinfectants and Disinfection ByProducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	8/5/2020	3.9	3.9 - 3.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	8/5/2020	5.3	5.3 - 5.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	12/12/2022	0.024	0.024 - 0.024	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	12/12/2022	2	2-2	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	12/12/2022	1.32	1.32 - 1.32	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	7/17/2020	5.1	5.1 - 5.1	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	7/17/2020	0.7	0.7 - 0.7	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	7/17/2020	7	7 - 7	0	15	pCi/L	N	Erosion of natural deposits.

Unregulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Goal MCLG	MCL	Units	Violation	Likely Source of Contamination
Sodium	2019	102	102-102	n/a	Not Defined	ppm	N	Dissolved deposits in the ground and our proximity to the Bay. See the below note.

A Note about Sodium (an Unregulated Contaminant) in Our Drinking Water: Based on our testing in 2019 and in previous years, we know that our water is naturally high in sodium (around 100 ppm or 100 mg/L). The presence of sodium in our water is likely attributable to either (or both) the characteristics of our aquifer (salt deposits in the ground), or (likely) our proximity to the Chesapeake Bay and Atlantic coast, where salt water can be drawn into heavily used aquifers. To assure our water is free from harmful pathogens, we also required to add a small amount of a sodium compound (sodium hypochlorite) to our water to function as a disinfectant.

Sodium is an unregulated contaminant which is not subject to any proposed or promulgated national primary drinking regulation by EPA. We test for sodium and provide the data so that those who are restricting sodium from their diets for medical reasons will know the level of sodium in our water. To put our sodium levels into perspective, a person drinking about a half-gallon of our tap water per day (or consuming food made with water) could add up to about 250 mg of sodium to their daily intake. Although FDA reports that most American adults tend to consume between 4,000 and 6,000 mg of sodium/day, the FDA recommends that all Americans limit their intake of sodium to no more than

2,400 mg/day. If you check the nutritional label on your food, you will see that nearly everything we eat or drink contains sodium. Eight ounces of skim milk has 130 mg of sodium; most regular canned soups or baked beans have 750 - 1000 mg of sodium per serving; one serving (¾ cup) of Honey Nut Cheerios has 160 mg sodium (and that's not including an additional 130 mg if you have the Cheerios with a cup of skim milk!), etc..

Sodium is an essential nutrient, but we have no trouble getting all the sodium our body needs (which is about 500mg/day per the current research) by just eating a regular diet with no added salt. Additional information about sodium in drinking water can be found at http://www.epa.gov/safewater/contaminants/unregulated/sodium.html. If you have concerns about sodium, please discuss them with your health care provider.

PFAS – or per- and 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.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5th Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.

Violations: We had no MDE violations in 2023 - meaning that our water company met all water quality, testing, monitoring, and reporting requirements imposed on us by the State and EPA.

Additional Information: Your drinking water is monitored every day for the presence of residual ("free") chlorine to assure the water is properly disinfected (as required by State and Federal regulations). We also have our water analyzed for coliform monthly, and we have it analyzed for nitrates/nitrites once a year. All monitoring showed the residual chlorine to be at required levels and none of the testing results detected any confirmed coliform or nitrates/nitrites. We also monitor for many metals, inorganics, VOCs, SOCs, disinfection by-products,

PFAS, and radioactivity in our water per a multi-year schedule dictated by State and Federal regulators. Anything detected is reported to you on a yearly basis in our report (or more frequently, if appropriate/required).

This report has several sections containing wording required by State or Federal regulators. Such language is intended to be included in every Annual Water Quality Report issued in Maryland. The intent of such mandatory sections is not to unnecessarily cause concern but to better inform consumers about the quality of water delivered to their homes.

Turkey Hill Water Company currently has one fully certified water treatment operator (Frank Valenta, 240-210-6067), one certified operator in training (Seth Bacon), and two certified water samplers (Warren Ricks and Frank Valenta). Warren and Frank have each been servicing our water system for some 45+ years! Please feel free to contact any of us if you have any questions about the water, our water company, or this report.

Community Feedback/Participation

We are currently planning to have our regular Fall Stakeholders Meeting of the entire community in September or October to discuss any water company concerns you may have, to provide operational/financial/administrative information about the operations of our water company, and to elect a new Board of Directors (more info to come on this later). Please consider volunteering to be on our Board of Directors. As a community owned and operated water company, we invite you to bring any of your concern forward and to fully participate in the major decisions facing our water company. In past years, the annual meeting has been in the form of a community picnic, but, depending on the local situation, weather, and health department recommendations concerning larger gatherings, there is always a chance it may be conducted as a Zoom meeting.

Our Board of Directors generally has several meetings during the year to conduct water company business. Because of space limitations (since BoD meetings are generally conducted at night in a Board Member's home), the BoD meetings are generally not open to the community. If you have an issue to bring up with the Water Company or want copies of the minutes of a BoD meeting, please contact one of the Board Members.

Our water company mailing address is: Turkey Hill Water Co., Inc. 9334 Winkler Lane, La Plata, MD 20646-2851.

This report was prepared by Frank Valenta, who can be contacted at (cell) 240-210-6067 with any questions about its content or any water related questions or concerns.