



Annual Drinking Water Quality Report for 2022
Delmar Utility Commission
100 South Pennsylvania Avenue
Delmar, Maryland 21875
MD PWS ID# 0220001
PWS ID# DE0000567
April 2023

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is **ground water. We have two wells that draw from the Manokin Aquifer.**

The Department of Natural Resources and Environmental Control in conjunction with the Division of Public Health has conducted source water assessments for nearly all community water systems in Delaware. Contact the Delmar Town Hall at 410-896-2777 or 302-846-2664 regarding how to obtain a copy of this assessment or go to <http://delawaresourcewater.org/assessments/>. Overall, the drinking water supply system exceeds drinking water standards for metals; has a high susceptibility to petroleum hydrocarbons; a moderate susceptibility to nutrients; and a low susceptibility to other inorganic substances, other organic substances, pathogens, PCBs, and pesticides.

The Maryland Department of the Environment's Water Supply Program completed a Source Water Assessment for the Town of Delmar. A copy of that assessment can be reviewed at City Hall. For more information call 1-800-633-6101.

https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx

If you have any questions about this report or concerning your water utility, please contact the **Town Manager Jeff Fleetwood, at 410-896-2777 or 302-846-2664 between 8:00 a.m. and 4:30 p.m. Monday through Friday.** We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held **the first Monday of every month at 6:30 p.m. at the Delmar Town Hall, 100 S. Pennsylvania Avenue, Delmar, Maryland.**

Public Health, Office of Drinking Water and Delmar Utility Commission routinely monitor for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st **2022.**

In this table, you will find many terms and abbreviations with which you might not be familiar. To help you better understand these terms, we have provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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.

Parts per trillion (ppt) or Nanogram per liter- one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

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

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is the highest level of a contaminant 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.

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.

TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Disinfectants & Disinfection By-Products						
Chlorine as (Cl ₂) Delaware Maryland (2022)	N	0.97-1.14 0.9-1.3	ppm	4	4	Water additive used to control microbes
Haloacetic Acids (HAA) Delaware Maryland (2022)	N	0 1	ppb	n/a	60	By-product of drinking water disinfection
TTHM Total trihalomethanes] Delaware Maryland (2022)	N	13.99 5	ppb	0	80	By-product of drinking water chlorination
Inorganic Contaminants						
Barium Delaware Maryland (2022)	N	0.15813 *(2019) 0.113	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium Delaware Maryland (2020)	N	0 1	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride Delaware Maryland (2020)	N	0.44 – 1.01 0.4	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) Delaware Maryland (2022)	N	3 – 3.5 3.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
Xylenes Delaware	N	0 - 0.00063	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories
Radioactive Contaminants						
Combined Radium 226/228 (2021) Maryland	N	0.5	pCi/L	0	5	Erosion of natural deposits

Regulated Contaminants Lead And Copper						
Copper (Distribution) (2021)	N	0.06	ppm	1.3	1.3	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (Distribution) (2021)	N	1.2	ppb	0	15	Corrosion of household plumbing systems; Erosion of natural deposits
Unregulated Contaminants						
PFHxS (10/2022)	N	1.34	Ppt	N/A	N/A	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
PFOS (10/2022)	N	1.8	Ppt	N/A	N/A	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
PFOA (10/2022)	N	1.46	Ppt	N/A	N/A	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
Secondary Contaminants						
CONTAMINANT	Level Detected	Average	Unit Measurement	MCLG		
Sodium (Na) Delaware	17.11		ppm	n/a		
Alkalinity (Alk) Delaware	20.1		ppm	n/a		
pH Delaware	*(2018) 7.46		ppm	6.5 – 8.5		

Chloride (Cl) Delaware	12.9-14.7	13.57	ppm	
Sulfate Delaware	5.5 -10.7	9.55	ppm	

*The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

All other contaminants were ND in compliance with the Safe Drinking Water Act.

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. Delmar 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 Delmar at 410-896-2777.

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>.

PFAS – or 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.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA and PFOS concentrations from samples taken from our water system in 2022 were 1.8 parts per trillion (ppt) and 1.46 ppt, respectively. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs or Hazard Index. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is drinkable at these levels.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

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. In order to

insure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottled water, which must provide the same protection for public health.

- 1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.
- 2) Inorganic contaminants, such as salts and metals can be naturally[occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming.
- 3) Pesticides and herbicides, which may come from a variety of sources, such as agricultural, urban storm water runoff, and residential uses.
- 4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- 5) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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. 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.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

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 (800-426-4791).

The Maryland Rural Water Association's State Circuit Rider assisted with the completion of this report.

Please call our office if you have questions.