



Annual Drinking Water Quality Report 2024

Somerset County Sanitary District, Inc.

TOWN OF PRINCESS ANNE

PWSID 0190002

January 1, 2024 thru December 31, 2024



We are pleased to report that our drinking water is safe and meets federal and state requirements.

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

The following report is provided in compliance with federal regulations and outlines the quality of our drinking water. If you have any questions or if you want to learn more, please contact Superintendent Rich Padgett at 410-651-0268 x 3502 or rpadgette@somersetmd.us. The Somerset County Sanitary Commission monthly meeting schedule can be found at www.somersetmd.us. Our drinking water is ground water. It is drawn from eight (8) wells in the Manokin Aquifer and one (1) well in the Patapsco Aquifer. A source water assessment was performed by the Maryland Department of the Environment (MDE) and is available on their website, mde.maryland.gov. The Sanitary District monitors the drinking water monthly for bacterial contamination using Total and Fecal Coliform. **No Bacterial Contamination was detected in the year 2024.** The Sanitary District monitors the drinking water daily for pH, Free Chlorine, Total Chlorine, Total Iron and Total Phosphate to ensure water quality. The Sanitary District encourages you to share this report with other people who drink Princess Anne water.

The EPA and MDE have determined that your water IS SAFE.



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 may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. Contaminants that may be present in source water include: 1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; 2. 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, or farming; 3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; 4. 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; or 5. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons 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 microbiological contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.

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. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. If you are concerned about lead in your drinking water. Contact the Somerset County Sanitary District at 410-651-3831. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>. **An initial inventory of service line pipe materials located within our service area was required to be submitted to the Maryland Department of the Environment (MDE) by October 16, 2024. Our initial inventory was submitted to MDE on October 15, 2024, and is available upon request.**

Fluoride in excess can cause tooth discoloration (dental fluorosis) and brittle bones (skeletal fluorosis)

Trihalomethanes (TTHMs) & Haloacetic Acids (HAA5s)- Byproducts of drinking water disinfection combining with natural organics in water supply. High levels have been linked to cancer and reproductive problems.

PFAS - refers to a large group of more than 4,000 human-made chemicals. The use of Polyfluoroalkyl substances (PFAS) have led to PFAS entering the environment and the water supply. The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2024. The results are available at MDE’s website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

Definitions

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) - One ppt is comparable to one drop in a swimming pool covering the area of a football field 43 ft. deep.

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

Action Level (A.L.) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water.

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 “Goal” (MCLG) level of a contaminant in drinking water below which there is no known or expected risk to health.

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 drinking water disinfectant allowed in drinking water.

Millirems per year (mrem/yr and/or mrem) - measure of radiation absorbed by the body.

LRAA – Locational Running Annual Average – Regulatory compliance calculated for TTHMs and HAA5s based on running annual average samples taken at a specific site for TTHMs and HAA5s.

Treatment Technique or TT: - A required process intended to reduce the level of a contaminant in drinking water.

Lead and Copper	Level Detected 90th percentile	Unit of Measure	Action Level	MCLG	Likely Source of Contamination
1. Lead Sampled 09/26/2023	3 Range 1 - 11	ppb	15	0	Corrosion of household plumbing systems and/or erosion of natural deposits
2. Copper Sampled 09/26/2023	0.16 Range .0025 - 0.29	ppm	1.3	1.3	Erosion of natural deposits; leaching from wood preservatives; and/or corrosion of household plumbing systems.
Disinfectants and Disinfectant Byproducts	Level Detected	Unit of Measure	MRDL or MCL	MRDLG or MCL	Likely Source of Contamination
1. Chlorine Sampled 2024	Highest 0.6 Range 0.4 - 0.6	ppm	MRDL 4	MRDLG 4	Water additive to control microbes
2. Trihalomethanes (TTHM) Sampled 2024	LRAA 83 Range 2.1-74.5	ppb	MCL 80	MCLG No Goal	By-product of disinfection using chlorine when natural and/or manmade organic compounds are present in drinking water.
3. Haloacetic Acids (HAA5) Sampled 2024	LRAA 9 Range 0.0 – 5.1	ppb	MCL 60	MCLG No Goal	By-product of disinfection when organic compounds are present in drinking water.
Radioactive Contaminants	Level Detected	Unit of Measure	MCL	MCLG	Likely Source of Contamination
1. Beta/Photon Sampled 2024	Highest 6.5 Range 5-6.5	pCi/L	50	0	Decay of natural and man-made deposits
Inorganic Contaminants	Level Detected	Unit of Measure	MCL	MCLG	Likely Source of Contamination
1. Barium Sampled 2023	Highest 0.0078 Range 0-.0078	ppm	2	2	Discharge from drilling, metal finishing and processing
2. Fluoride Sampled 2024	Highest 0.40 Range 0.2-0.4	ppm	4.0	4.0	Erosion of natural deposits
3. Nitrate (measured as Nitrogen) Sampled 2024	Highest 1.0 Range 0.0 – 1.0	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Detected Unregulated Contaminants: Princess Anne Water System

Inorganic Contaminants	Level Detected	Unit of Measure	MCL	MCLG	Likely Source of Contamination
Polyfluoroalkyl substances	Level Detected	Unit of Measure	MCL	MCLG	Likely Source of Contamination
1.(PFOA) & (PFOS) Sampled 2024	<1	ppb	Proposed 4	Proposed 4	Waste from the use and manufacture of products including stain/water-resistant fabrics & carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams.
2. Lithium Sampled 2024	Average 9.63 Range ND –14.4	ppb	60	0	Lithium is naturally occurring, also found in medicine & foods.