

WORCESTER COUNTY  
DEPARTMENT OF PUBLIC WORKS  
WATER & WASTEWATER DIVISION  
1000 SHORE LANE  
BERLIN MD 21811

**IMPORTANT NOTICE**  
Consumer Confidence Report

**OCEAN PINES SERVICE AREA**  
**2022 ANNUAL DRINKING WATER QUALITY REPORT**  
PWSID# 023-0005

The Water & Wastewater Division of the Worcester County Department of Public Works is responsible for the provision of the safest possible drinking water to its customers in the Ocean Pines Service Area. During the period from January 1 to December 31, 2021 we conducted tests for many drinking water contaminants and tested at least 10 times every month for Total Coliform and Fecal Coliform Bacteria as required by Federal and State law. Over the 12-month period, we detected only 8 contaminants and all of them were found to be significantly below established standards.

This brochure is a snapshot of the quality of the water that was provided to you in 2021. Included are details about the source of your water, what your water contains, and how your water compares with the standards established by the Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE). If you have any questions about this report or need additional information concerning the drinking water being supplied to you, please call Joe Serman at 410-641-5251 ext. 2413 between 7:30 a.m. and 4:00 p.m. any weekday.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer who are 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 risks of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Your water comes from five wells sunk about 100 feet into an underground source of water called the Pleistocene Aquifer. These wells are located on the north side of Ocean Pines on land owned by the County. The well sites are inspected daily by State licensed County personnel. After the water comes out of the well, we adjust its pH and disinfect it to protect you against microbial contaminants. A source water assessment was performed by MDE and is available on their web site; [www.mde.maryland.gov](http://www.mde.maryland.gov)

The Ocean Pines Water and Wastewater Advisory Board meets on a regular basis in the conference room of the Water and Wastewater Division at 1000 Shore Lane in Ocean Pines. Please call (410) 641-5251 for dates and times of meetings. You are invited to attend any or all of these meetings.

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. Worcester County 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>.

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.

Contaminants that may be present in the water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wild life.
- *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.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- *Radioactive contaminants*, which are naturally-occurring or can be the result of oil and gas production and mining activities.
- *Organic chemical contaminants*, including synthetic and volatile chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791)

PFAS – Short for per and polyfluoroalkyl substances – refers to a large group of more than 4000 human-made chemicals that have been used since the 1940's 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 (MCL) ) 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 PFOS concentration from samples taken from our water systems was 3.7 parts per trillion. 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](http://mde.maryland.gov)

## OCEAN PINES WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2021 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this 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. Some of the data, though representative of the water quality, is more than one year old.

### **Terms & abbreviations used below:**

- **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 (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **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.
- **Maximum residual disinfectant level goal or 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.
- **Maximum residual disinfectant level or 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.
- **Avg:** Regulatory compliance with some MCLs are based on running average of monthly samples.
- **ppb:** parts per billion or micrograms per liter, or one ounce in 7,350,000 gallons of water • **ppm:** parts per million or milligrams per liter, or one ounce in 7,350 gallons of water • **pCi/l:** picocuries per liter (a measure of radiation)
- **na:** not applicable.
- **Treatment Technique or TT:** A required process intended to reduce the level of a contaminant 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.
- **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 E.coli MCL violation has occurred and / or why total coliform bacteria have been found in our water system on multiple occasions.

## TEST RESULTS OF REGULATED CONTAMINANTS DETECTED

LEAD AND COPPER	Date sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites over AL	Units	Violation	Likely source of contamination.
Copper	2020	1.3	1.3	0.057	0	ppm	N	Erosion of natural deposits, leaching from wood preservatives, or corrosion of household plumbing systems.
Lead	2020	0	15	2.1	0	ppb	N	Erosion of natural deposits, or corrosion of household plumbing systems

INORGANIC CONTAMINANTS	Collection date	Highest level detected	Range of levels detected	MCLG	MCL	Units	Violation	LIKELY SOURCE OF CONTAMINATION
Nitrate *	2021	3	0-3.01	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>								
Haloacetic Acids (HAA5)	2021	3.0	<2.0 – 4.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2021	14.0	1.3 – 20.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection
Chlorine	2021	0.8	0.7 – 0.8	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.
<b>SYNTHETIC ORGANIC CONTAMINATES</b>								
Ethylene dibromide	2021	10	10 - 10	0	50	ppt	N	Discharge from petroleum refineries

\* Nitrate 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 advice from your health care Provider

## TEST RESULTS OF UN-REGULATED CONTAMINANTS DETECTED

Non regulated Contaminant	Collection Date	Highest Level detected	Range of Levels Detected	MCL	Health Advisory Level	Units	Violation	Likely source of Contamination
PFOA / PFOS	2021	3.77	ND – 3.77	na	70	ppt	N	Manufacture of stain and water resistant fabrics, Carpeting, cleaning products, food packaging, And firefighting foam.