

IMPORTANT NOTICE
Consumer Confidence Report

OCEAN PINES SERVICE AREA
2010 ANNUAL DRINKING WATER QUALITY REPORT

INTRODUCTION

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, 2009 we conducted tests for over 175 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 10 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 2009. 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 Jeff Hudson at 410-641-5251 between 7:30 a.m. and 4:00 p.m. any weekday.

**OUR WATER IS SAFE,
HOWEVER**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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).

SOURCE OF WATER

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.

INFORMATION

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. The meetings for the remainder of this year are scheduled to begin at 11:00 a.m. on the following dates: May 11, June 8, July 13, August 10, September 14, October 12, November 9, and December 14. You are invited to attend any or all of these meetings.

GENERAL

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 and residential uses.
- *Radioactive contaminants*, which are naturally-occurring.
- *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 tanks.

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).

OCEAN PINES WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2009 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, 2009. 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.
- **ppb:** parts per billion or micrograms per liter • **ppm:** parts per million or milligrams per liter • **pCi/l:** picocuries per liter (a measure of radiation)

TEST RESULTS

	CONTAMINANT	VIOLATION Y/N	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
INORGANIC CONTAMINANTS	Copper	N	.226	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, test date 12/31/08.
	Lead	N	.005	ppm	0	AL=15	Corrosion of household plumbing system, test date 12/31/08
	Nitrate	N	Well 2 1.73 Well 3 2.15 Well 4 3.69 Well 5 <1.0 Well 10 1.60	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage, erosion of natural deposits. Test Date 11/2/09
	Barium	N	Well 2 .047 Well 3 .037 Well 4 .065 Well 5 .043 Well 10 .03	Ppm	2	2	Erosion of natural deposits Test date 6/1/09
ORGANIC CONTAMINANTS	Di(Ethylhexyl) Phthalate	N	Well 2 1.0 Well 4 1.4 Well 5 1.2 Well 10 1.8 Well 3 0.51	ppb	0	6	Discharge from Chemical Factories. Test date 9/21/06 for wells 2,4,5,10. Test date for Well 3, 11/10/08
VOLATILE ORGANIC CONTAMINANTS	TTHM (Total Trihalomethanes)	N	16.0	ppb	0	80	By-product of drinking water disinfection Test Date 6/26/09
	HAA5 (Haloacetic acids)	N	3.2	ppb	0	60	
NON-REGULATED CONTAMINANTS	Sodium	N	48.0	ppm	0	na	Sodium is a natural element in groundwater. The water supplied in the Ocean Pines Service Area often has a sodium content in excess of 20 ppm, which exceeds the intake level recommended for individuals on physician supervised restricted diets. Concerned individuals should take this information to their physicians for personal advice. Test date 6/1/09
	MTBE (Methyl-butyl-ether)	N	Well 5 4.3	ppm	na	20	MTBE comes from leaking underground storage tanks. Test date 11/23/09
RADIONUCLIDES	Gross Beta	N	Well 3 3.0	pCi/L	0	50	Decay of natural and man-Deposits. Test date 10/23/08
	Gross Alpha	N	Well 4 6.0	pCi/L	0	15	Erosion of natural deposits Test date 10/23/08
	* Radon-222	N	Well 2 <.8 Well 5 .2	pCi/L	0	200 proposed	Decay of natural deposits Test date 3/23/05

- We constantly monitor the water supply for various constituents. We have detected radon in the finished water supply of Three out of Five Wells. There is
- No Federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects.

RIVER RUN WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2009 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, 2009. 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.

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- **ppb:** parts per billion or micrograms per liter • **ppm:** parts per million or milligrams per liter • **pCi/l:** picocuries per liter (a measure of radiation)

TEST RESULTS

	CONTAMINANT	VIOLATION Y/N	LEVEL DETECTED	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
INORGANIC CONTAMINANTS	Copper	N	.226	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, test date 12/31/08.
	Lead	N	.005	ppm	0	AL=15	Corrosion of household plumbing system, test date 12/31/08
	Nitrate	N	Well 2 1.73 Well 3 2.15 Well 4 3.69 Well 5 <1.0 Well 10 1.60	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage, erosion of natural deposits. Test Date 11/2/09
	Barium	N	Well 2 .047 Well 3 .037 Well 4 .065 Well 5 .043 Well 10 .03	Ppm	2	2	Erosion of natural deposits Test date 6/1/09
ORGANIC CONTAMINANTS	Di(Ethylhexyl) Phthalate	N	Well 2 1.0 Well 4 1.4 Well 5 1.2 Well 10 1.8 Well 3 0.51	ppb	0	6	Discharge from Chemical Factories. Test date 9/21/06 for wells 2,4,5,10. Test date for Well 3, 11/10/08
VOLATILE ORGANIC CONTAMINANTS	TTHM (Total Trihalomethanes)	N	16.0	ppb	0	80	By-product of drinking water disinfection Test Date 6/26/09
	HAA5 (Haloacetic acids)	N	3.2	ppb	0	60	
NON-REGULATED CONTAMINANTS	Sodium	N	48.0	ppm	0	na	Sodium is a natural element in groundwater. The water supplied in the Ocean Pines Service Area often has a sodium content in excess of 20 ppm, which exceeds the intake level recommended for individuals on physician supervised restricted diets. Concerned individuals should take this information to their physicians for personal advice. Test date 6/1/09
	MTBE (Methyl-butyl-ether)	N	Well 5 4.3	ppm	na	20	MTBE comes from leaking underground storage tanks. Test date 11/23/09
RADIONUCLIDES	Gross Beta	N	Well 3 3.0	pCi/L	0	50	Decay of natural and man-Deposits. Test date 10/23/08
	Gross Alpha	N	Well 4 6.0	pCi/L	0	15	Erosion of natural deposits Test date 10/23/08
	* Radon-222	N	Well 2 <.8 Well 5 .2	pCi/L	0	200 proposed	Decay of natural deposits Test date 3/23/05

- We constantly monitor the water supply for various constituents. We have detected radon in the finished water supply of Three out of Five Wells. There is
- No Federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects.

WHITE HORSE CAMPGROUND WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2009 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, 2009. 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.

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INORGANIC CONTAMINANTS	Copper	N	.226	ppm	1.3	AL=1.3	Corrosion of household plumbing systems, test date 12/31/08.
	Lead	N	.005	ppm	0	AL=15	Corrosion of household plumbing system, test date 12/31/08
	Nitrate	N	Well 2 1.73 Well 3 2.15 Well 4 3.69 Well 5 <1.0 Well 10 1.60	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks sewage, erosion of natural deposits. Test Date 11/2/09
	Barium	N	Well 2 .047 Well 3 .037 Well 4 .065 Well 5 .043 Well 10 .03	Ppm	2	2	Erosion of natural deposits Test date 6/1/09
ORGANIC CONTAMINANTS	Di(Ethylhexyl) Phthalate	N	Well 2 1.0 Well 4 1.4 Well 5 1.2 Well 10 1.8 Well 3 0.51	ppb	0	6	Discharge from Chemical Factories. Test date 9/21/06 for wells 2,4,5,10. Test date for Well 3, 11/10/08
VOLATILE ORGANIC CONTAMINANTS	TTHM (Total Trihalomethanes)	N	16.0	ppb	0	80	By-product of drinking water disinfection Test Date 6/26/09
	HAA5 (Haloacetic acids)	N	3.2	ppb	0	60	
NON-REGULATED CONTAMINANTS	Sodium	N	48.0	ppm	0	na	Sodium is a natural element in groundwater. The water supplied in the Ocean Pines Service Area often has a sodium content in excess of 20 ppm, which exceeds the intake level recommended for individuals on physician supervised restricted diets. Concerned individuals should take this information to their physicians for personal advice. Test date 6/1/09
	MTBE (Methyl-butyl-ether)	N	Well 5 4.3	ppm	na	20	MTBE comes from leaking underground storage tanks. Test date 11/23/09
RADIONUCLIDES	Gross Beta	N	Well 3 3.0	pCi/L	0	50	Decay of natural and man-Deposits. Test date 10/23/08
	Gross Alpha	N	Well 4 6.0	pCi/L	0	15	Erosion of natural deposits Test date 10/23/08
	* Radon-222	N	Well 2 <.8 Well 5 .2	pCi/L	0	200 proposed	Decay of natural deposits Test date 3/23/05

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