

# 2002 WATER QUALITY REPORT FOR THE ELK RIDGE WATER SYSTEM

## Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Washington County Water and Sewer Department vigilantly safeguards its water supplies and once again we are proud to report that our water system has never violated a maximum contaminant level or any other water quality standard. However, a monitoring violation did occur in 2002 when the VOC sample required by the 2002 monitoring schedule was not collected. On February 19, 2003, a makeup sample was collected and the results indicated that no VOCs were detectable.

## Do I need to take special precautions?

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/Centers for Disease Control (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).

## Where does my water come from?

The Elk Ridge Water System utilized Well No. 5 during 2002 as its water source. The water for this system receives iron removal, manganese removal, pH adjustment and chlorination prior to entering the distribution system.

## Source water assessment and its availability

The Maryland Department of the Environment has developed and the Environmental Protection Agency has approved its plan for the development of Source Water Assessments. MDE completed a draft Source Water Assessment for the Elk Ridge Water System in June 2002. MDE is currently preparing the final Assessment and anticipates its completion in 2003.

## Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

## How can I get involved?

The Washington County Water and Sewer Department has an Advisory Board that meets on a monthly basis. For information on attending a meeting, please contact our main office at (240) 313-2600.

## Results of voluntary monitoring

The Washington County Water and Sewer Department conducts routine testing on your water system that is not included in the Water Quality Table. A list of parameters and their results for 2002 are located in the Table of Results of Customer Interest below.

**TABLE OF RESULTS OF CUSTOMER INTEREST**

PARAMETERS	LEVEL/RANGE DETECTED	UNIT OF MEASUREMENT
pH	6.9 to 8.2	Standard Unit
Chlorine	0.20 to 2.20	ppm
Turbidity	0 to 0.5	NTU
Hardness	51 to 86	ppm
Alkalinity	55 to 109	ppm
Manganese	.002 to .059	ppm
Iron	0.0 to 0.17	ppm

# Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of 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 in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminants	MCLG	MCL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Inorganic Contaminants</b>								
Fluoride (ppm)	4	4	0.12	NA		----	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.2	NA		----	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	MNR	MNR	25.6	NA		----	No	Erosion of natural deposits; Leaching
<b>Radioactive contaminants</b>								
Beta/photon emitters (pCi/L)	NA	NA	4	NA		10/12/1999	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radon (pCi/L)	MNR	MNR	1435	NA		10/12/1999	No	Radon is a naturally-occurring radioactive gas that emits ionizing radiation

Contaminant(s) (units)	MCLG	A	Your Water	# of Samples > AL	Sample Date	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper (ppm)	1.3	1.3	0.23	0	12/31/2001	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

### Units Description:

NA: Not applicable

ND: Not detected

NR: Not reported

MNR: Monitoring not required, but recommended.

ppm: parts per million, or milligrams per liter (mg/L)

pCi/L: picocuries per liter (a measure of radioactivity)

### **Important Drinking Water**

**MCLG:** Maximum Contaminant Level Goal: 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.

**MCL:** Maximum Contaminant Level: 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.

**AL:** Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MRDLG:** Maximum residual disinfection level goal. 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.

**MRDL:** Maximum residual disinfectant level. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

## **Results of radon monitoring**

On October 12, 1999, the Maryland Department of the Environment tested for radon in the Elk Ridge Water System. The result of this test was 1,435 pCi/L. Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air-containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

## **What Levels of Radon in my water should I be concerned about?**

There are currently no federally enforced drinking water standards for Radon. EPA is proposing to regulate radon in drinking water from community water supplies (water systems that serve 25 or more year-round residents). EPA proposed the rule in October 1999 and plans to finalize it in the fall of 2003.

EPA is proposing to require community water suppliers to provide water with radon levels no higher than 4,000 pCi/L, which contributes about 0.4 pCi/L to the air in your home. This requirement assumes that the State is also taking action to reduce levels in indoor air by developing EPA approved enhanced State radon indoor air programs. (Called Multimedia Mitigation Programs). This is because most of the Radon you breathe comes from the soil under your home. This option gives the States flexibility to focus on the greatest problems. By encouraging the public to fix radon in indoor air problems and homes that keep radon from entering.

For States that choose not to develop enhanced indoor programs, community water systems in that State will be required to reduce radon in drinking water to 300 pCi/L. This amount contributes 0.03 pCi/L of radon in the air of your home. Even if a State does not develop enhanced indoor air program, water systems may choose to develop their own local indoor radon program and meet a radon standard for drinking water of 4,000 pCi/L.

EPA has set up this option, under the framework specified in the 1996 Amendments to the Safe Drinking Water Act, so that the overall risks from exposure to radon, both through air and water are reduced.

For more information on the Washington County Water and Sewer Department, please visit our website at [www.wc-link.org/wcwsd](http://www.wc-link.org/wcwsd).

**For more information  
Elk Ridge Water System  
Phone: 240-313-2600**

**Attn: William H. Dean, Jr.**