

# 1998 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 system has never violated a maximum contaminant level or any other water quality standard.

## 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 Water Drinking Hotline (800-426-4791).

## Where does my water come from?

The Elk Ridge Water System utilized three wells during 1998 as its water source. Two of the wells were utilized from January 1998 through March 1998 with the third well going into service in April 1998. Currently, the third well is the primary source of water with the remaining wells being used as a backup 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

Maryland Department of the Environment is currently working with the Environmental Protection Agency to establish a program for the development and completion of Source Water Assessment. We will continue to keep you updated on the development of the assessment in this section of the Water Quality Report.

## 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 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 (301) 791-3083.

## Lead and Copper Monitoring Violation

The Washington County Water and Sewer Department conducts routine testing on your water system that is not included in the Water Quality Data Table. A list of these parameters and their results for 1998 are located in the Table of Test Results of Customer Interest.

# 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 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.

## Important Drinking Water Definitions:

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.

Contaminants (units)	MCLG	Your MCL	Range Water	Sample Low	High	Date	Violation	Typical Source
<b>Inorganic Contaminants</b>								
Beryllium (ppb)	4	4	1	NA		---	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Fluoride (ppm)	4	4	0.17	NA		---	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium (ppb)	MNR	MNR	29100	NA		---	No	Erosion of natural deposits; Leaching
<b>Radioactive contaminants</b>								
Beta/photon emitters (pCi/L)	NA	NA	1.6	NA		7/17/95	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles
<b>Synthetic organic contaminants including pesticides and herbicides</b>								
Di (2-ethylhexyl) phthalate	0	6	0.6	NA		---	No	Discharge from rubber and (ppb) chemical factories
<b>Unregulated Contaminants</b>								
Bromodichloromethane (ppb)	MNR	MNR	1	NA		7/11/97	No	
Bromoform (ppb)	MNR	MNR	6	NA		7/11/97	No	
Chloroform (ppb)	MNR	MNR	1.5	NA		---	No	
Sulfate (ppm)	MNR	MNR	9.4	NA		---	No	
<b>Volatile Organic Contaminants</b>								
Ethylbenzene (ppb)	700	700	1.2	NA		---	No	Discharge from petroleum refineries
Xylenes (ppm)	10	10	0.0051	0.0023	0.0051	---	No	Discharge from petroleum factories; Discharge from chemical factories

Contaminant(s) (units)	MCLG	AL	Your Water	# of Samples > AL	Sample Date	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper (ppm)	1.3	1.3	0.42	0		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 - one part per million corresponds to one minute in 2 years or a single penny in \$10,000.

ppb: Parts per billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

pCi/L: picocuries per liter - picocuries per liter is a measure of the radioactivity in water

NTU: Nephelometric Turbidity Unit - nephelometric unit is a measure of the clarity of water.

Turbidity in excess of 5 NTU is just noticeable to the average person.

### TABLE OF TEST RESULTS OF CUSTOMER INTEREST

PARAMETER	LEVEL / RANGE DETECTED	UNIT OF MEASUREMENT
pH	6.8 TO 9.7	Standard Unit
Chlorine	0.2 TO 3.0	ppm
Turbidity	0.0 to 2.3	NTU
Hardness	7 TO 120	ppm
Alkalinity	84 TO 140	ppm
Iron	0.0 TO 2.3	ppm
Manganese	0.01 TO 0.30	ppm

### TABLE OF ADDITIONAL TESTING RESULTS OF UNREGULATED CONTAMINANTS COMPLETED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT

CONTAMINANT	LEVEL DETECTED	UNIT OF MEASUREMENT
Dibromochloromethane *	1	ppb
Calcium	40	ppm
Magnesium	0.335	ppm
Zinc	0.1	ppm

\* Dibromochloromethane is an unregulated contaminant for this system. This contaminant is typically produced as a result of chlorination by a water treatment facility.