



**2007**

**Annual Drinking Water Quality Report**

**Clifton Community - MD0080009**

**Charles County, Maryland**

**Prepared by the Department of Utilities**

We are pleased to present this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring that the quality of your water meets all local, State, and Federal standards and regulations.

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 risk of infection by microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The source of the drinking water for your system is the Patapsco Aquifer. An aquifer is a sort of underground reservoir or deposit of water, that is tapped by drilling wells and pumping the water to the surface for distribution. The earth between the surface (where sources of contamination occur) and this underground aquifer help to purify the water before it actually reaches the aquifer. This makes it easier for us to treat the water supply before we pump it into your water distribution system.

We are pleased to report that the drinking water in your system is safe and meets Federal and State requirements. The following report is provided in compliance with Federal regulations and will be provided annually. This report outlines the quality of our finished drinking water and what that quality means. If you have any questions concerning this report or any aspect of your water utility, please contact Michelle Cutler, Water Operations Superintendent, at 301-609-5603.

The Department of Utilities routinely monitors the Clifton community water system for contaminants in your drinking water according to Federal and State laws. The table on the following pages show the results of our monitoring for the period of January 1, thru December 31, 2007. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

## Definitions

In this report, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to 1 minute in 2 years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter (ug/L)* - one part per billion corresponds to 1 minute in 2,000 years, or a single penny in \$10,000,000.

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

*Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is 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.

*Maximum Contaminant Level Goal* - The "Goal"(MCLG) is 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.

*pCi/L* - Picocuries per liter - (a measurement of radioactivity.)

### Non-Detected Contaminants

Following is a list of potential drinking water substances that the Department of Utilities is required to test for, but which have not been detected in the water supply in the past year:

#### RESULTS FROM CLIFFTON SYSTEM:

CONTAMINANT	LEVEL DETECTED
Fecal Coliform, E.coli, and Total Coliform (Distribution system)	0
Nitrate ( St. Anne's)	0

### Violation

On Monday Sept. 24, 2007 the Maryland Department of the Environment informed the Department of Utilities that the average Gross Alpha results for Cliffton Well #2 were 16 pCi/L . The MCL for Gross Alpha is 15 pCi/L; the decision was made for Cliffton Well #2 to be placed out of service.

SUBSTANCES	LEVEL DETECTED	UNIT OF MEASUREMENT	MCL	MCLG	LIKELY SOURCE OF CONTAMINATION
GROSS ALPHA: (Well #2)	16	pCi/L	15	0	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.

### **Detected Contaminants NOT in Violation of the MCL for Clifton System**

In addition to these un-detected substances that were subject to testing, the Department of Utilities did find some regulated substances present in the water system at levels below the maximum allowable level (MCL) which is determined safe by the EPA. These substances are shown below, along with the MCL and MCLG for each one detected.

<b>SUBSTANCES</b>	<b>LEVEL DETECTED</b>	<b>UNIT OF MEASUREMENT</b>	<b>MCL</b>	<b>MCLG</b>	<b>LIKELY SOURCE OF CONTAMINATION</b>
TTHM (Distribution System)	1.6	ug/L	80	0	Bi-product of drinking water disinfection.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the 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 at 1-800-426-4791.

The presence of some contaminants in drinking water is unavoidable, but we make every effort to keep our water at or below the levels specified by law as being safe for consumption. Our Water Operations Section staff consists of 12 licensed operators who have a combined experience of more than 150 years among them. Together, they have attended more than 700 hours of continuing education training in the past year in an effort to keep up-to-date with the latest in water treatment techniques to provide you with the best quality water possible. The provision of quality water is an ongoing effort for the Department of Utilities and its staff and one that we are continuously trying to improve upon.

The Maryland Department of the Environment (MDE) conducted a source water assessment for community water systems, including Clifton, within Charles County during calendar years 2003 and 2004. Components of the assessment included delineation of areas that contribute to each water source, identification of potential sources of contamination within the areas, and determination of the susceptibility of each water supply to contamination.

**Usted puede obtener esta informacion en espanol por llamando Departamento de Utilidades 301-609-7400.**

Department of Utilities' staff work diligently to provide top quality water and excellent customer service. All customers are urged to participate in protecting this valuable resource and practice conservation to ensure a sustainable water supply for our Community.

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