# ANNUAL DRINKING WATER QUALITY REPORT FOR 2009

Water Supply Program
JUN 24 2010
RECEIVED

KENT COUNTY DEPARTMENT
WATER & WASTEWATER

FAIRLEE SUBDISTRICT

PUBLIC WATER SYSTEM IDENTIFICATION NUMBER
(PWSID) 0140003

May 1, 2010

We are pleased to provide our customers with our ***Annual Water Quality Report***. This report is also available at our office, located on the second floor of the Kent County Public Works Complex, 709 Morgnec Road, Suite 201, Chestertown, MD or on our new Web Page at www.kentcounty.com; click on ***Government***, then ***Water & Waste Department.*** This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you, the customer, 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 the quality of your water. Our water sources for the Fairlee/Georgetown Sub district are two (2) groundwater wells, located at the Fairlee Water Treatment Plant, and draw from the Upper ***Patapsco Aquifer within*** the ***Potomac Group*** formation.

I am pleased to report our drinking water is safe and meets all **Federal and State requirements for safe drinking water**.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This plan is also available at the Kent County Public Library or from Maryland Department of the Environment. The susceptibility analysis for the Fairlee/Georgetown Subdistrict water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. It has been determined from recent evaluations completed by the Maryland Department of the Environment that the Fairlee/Georgetown District water supply is not susceptible to microbiological contaminants and / or additional inorganic / volatile / synthetic, and radiological compounds.

If you should have any questions regarding this report or concerning your water utility, please contact Mr. Karl H. Weed at (410) -778-3287. In addition, any resident may obtain a copy at the main office Monday thru Friday during normal business hours.

The tables below show the results for the various contaminants that were detected during the monitoring period from January 1 through December 31, 2009 unless other indicated.

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

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

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

**Maximum Contaminant Level (MCL)** - is the Maximum Allowed 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 (MCLG)** - The Goal 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.

**Pico curies per liter (pCi/l)** - Pico curies per liter are a measure of radioactivity in a liter of water.

| TEST RESULTS | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters (2002) | N | 6 | pCi/1 | 0 | 50 | Decay of natural and man-made deposits |
| Alpha emitters (2002) | N | 2 | pCi/1 | 0 | 15 | Erosion of natural deposits |
| **Inorganic Contaminants** | | | | | | |
| Copper (2008) | N | 0.12 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Barium (2006) | N | 0.12 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride (2009) | N | 0.2 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| **Volatile Organic Contaminants** | | | | | | |
| TTHM (Distribution) (2009) [Total trihalomethanes] | N | 10.65 | ppb | 0 | 80 | By-product of drinking water chlorination |
| HAA5 Haloacetic Acid (Distribution) | N | 4.43 | ppb | 0 | 60 | By-product of drinking water chlorination |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate (2006) | N | 1.0 | ppb | 0 | 6 | Discharge from rubber and chemical factories |
| **Unregulated Contaminants** | | | | | | |
| Sodium (2009) | N | 30.9 | ppm | N/A | N/A | Erosion of natural deposits |
| Chloroform | N | 1.3 | ppb | N/A | N/A | By-product of disinfection |
| Bromodichloromethane | N | 0.9 | ppb | N/A | N/A | By-product of disinfection |
| Dibromochloromethane | N | 1.1 | ppb | N/A | N/A | By-product of disinfection |

Note: Test results are for year 2009 unless otherwise noted; not all tests are required annually.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We at the Department of Water & Wastewater are committed to providing our users with a safe and dependable water supply. We have four Maryland certified operators on staff that provides around the clock service to insure our water supply meets all EPA and State requirements. In order to keep up with the new regulations, technologies and remain board certified these operators are required to attend, at a minimum, 30 hours of training before they can renew their license every three years. If you should have any questions regarding this report or like to visit the water treatment plant in your district, please do not hesitate to call Mr. Karl H. Weed at (410) 778-3287.

***Security Statement:*** Due to the events of September 11, 2001 the Kent County Department of Water and Wastewater has provided a increase in the security of all the facilities within the Park such as, improved lighting around all the buildings and grounds, have requested increased patrols by local law enforcement agencies, ensuring employees have proper identifications, provided employee training in safeguarding our water systems, and protection against terrorist acts, and improving the security of our water sources by providing security locks on all well heads, and operator evaluations, testing, and water quality assurances of all the facilities.

***Drought Evaluations:*** To ensure a consistent supply of fresh, clean, and safe drinking water to our consumers, the Department has performed several evaluations of the facilities source waters to ensure the production wells have a safe yield and / or supply of natural water. The Department does encourage that all consumers practice conservation on a routine basis, and to report any major leaks, or needed repairs to the appropriate departments as soon as possible.

***Lead Statement (Not Present):*** 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 services lines and home pluming. Kent County Department of Water and Wastewater Services is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When you water has been sitter 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.