

ANNUAL DRINKING WATER QUALITY REPORT FOR 2011

KENT COUNTY DEPARTMENT OF WATER & WASTEWATER

WORTON SUBDISTRICT

PUBLIC WATER SYSTEM IDENTIFICATION NUMBER
(PWSID) 0140007

May 1, 2012

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, Suite 201, of the Kent County Public Works Complex at 709 Morgnec Rd. 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 source for the *Worton Subdistrict* are two (2) groundwater wells, well #5 , and well #6, located at the Worton Water Treatment Plant site, and the newly completed 250,000 gallon Butlertown Water Storage Tower which enhances domestic pressure and volume as well as increasing fire suppression capabilities. All sources are drawn from the *Magothy Aquifer*.

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)

Source Water Assessment: 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 Worton 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 evaluations completed by Maryland Department of the Environment (MDE) that the Worton water supply is not susceptible to microbiological contaminants and additional inorganic / volatile / synthetic and / or radiological compounds.

If you should have any questions regarding this report or concerning your water utility, please contact Mr. Andrew T. Riggi at (410) 778-3287. You may also schedule to attend any of the Kent County Commissioners Meetings held on Tuesdays to voice any comments or concerns you might have. Their meetings are held in the Commissioners hearing room located on the first floor in the Government Center located at 400 High Street. You can call the Commissioners office at 410-778-7435, to receive a copy of the agenda and schedule a time to discuss any issues you might have.

The tables below show the results for the various contaminants that were detected during the monitoring period from January 1 through December 31, 2010 unless otherwise indicated.

In this report, you will find many terms and abbreviations with which you might not be familiar. 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
Inorganic Contaminants						
Copper (2011)	N	0.2	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (2011)	N	0.29	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (2011)	N	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Barium (2011)	N	0.1	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Volatile Organic Contaminants						
TTHM (Distribution) [Total trihalomethanes] (2010)	N	4.00	ppb	0	80	By-product of drinking water chlorination
Ethylbenzene (2011)	N	0.5	ppb	700	700	Discharge from petroleum refineries
HAA5 Haloacetic Acid (Distribution) (2010)	N	0.89	ppb	0	60	By-product of drinking water chlorination
Synthetic Organic Contaminants including Pesticides and Herbicides						
Di(2-ethylhexyl) phthalate (2008)	N	0.06	ppb	0	6	Discharge from rubber and chemical factories
Radiological Contaminants						
Combined Radium (2007)	N	<1.7	pCi/l	0	5	Erosion of natural minerals
Gross Beta (2007)	N	35	pCi/l	0	50	Erosion of natural minerals
Gross Alpha (2007)	N	7	pCi/l	0	15	Erosion of natural minerals
Unregulated Contaminants						
Sodium (2011)	N	10.5	ppm	N/A	N/A	Erosion of natural deposits
Chloroform (2011)	N	0.6	ppb	N/A	N/A	By-product of disinfection

Note: Test results are for year 2011 unless otherwise noted; not all tests are required annually.

As you can see by the table, our system had no violations. We are 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 don't hesitate to call Mr. Andrew T. Riggi at 410 - 778- 3287.

Security Statement:

Due to the events of September 11, 2001 the Kent County Department of Water and Wastewater has provided an increase in the security of all the facilities within the County. These changes include:

- improved lighting around all the buildings and grounds
- request for increased patrols by local law enforcement agencies
- ensuring employees have proper identification
- providing employee training in safeguarding our water systems and protection against terrorist acts
- improving the security of our water sources by providing security locks on all well heads
- increased operator evaluations and testing
- 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 plumbing. 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>.

NOTE: As can be seen by results listed in the above tables, lead, which is tested for triennial (every 3 years) in accordance with Federal and State regulations in Worton's distribution system, was not detected in samples collected in 2008.