



CHARLES COUNTY MARYLAND

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2011
Annual Drinking Water Quality Report
Mariellen Park Community – MD0080028
Charles County, Maryland
Prepared by the Department of Public Works
Utilities Division

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.

Usted puede obtener esta información en español, llamando al Departamento de Obras Públicas División de Utlidades en 301-609-7400.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer who are undergoing chemotherapy, persons who have undergone organ transplants, people with Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (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. Environmental Protection Agency/Center for Disease Control (EPA/CDC) guidelines on appropriate means to lessen the risk of infection by microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

The source of the drinking water for the Mariellen Park system is the Patapsco Aquifer. An aquifer is an 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 and the underground aquifer helps to purify the water, making it easier for us to treat the water supply before we pump it into your water distribution system. The Mariellen Park system is served by 2 wells.

We are pleased to report the drinking water in your system is safe and meets all 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 Sam Simanovsky, Chief of Operations and Maintenance, at 301-609-7400.

The Department of Public Works, Utilities Division, routinely monitors the Mariellen Park system for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1 thru December 31, 2011. 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.

To help you better understand these terms used in the table we have provided the following definitions:

- Non-Detects (ND) – The laboratory analysis indicates the contaminant 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 \$10,000.00.
- Parts per billion (ppb) or Micrograms per liter (µg/L) – One part per billion corresponds to 1 minute in 2,000 years or a single penny in \$10,000,000.00.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.
- Maximum Contaminant Level (MCL) – 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 (MCLG) – 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.
- Picocuries per liter (pCi/L) – A measure of the radioactivity in water.

Mariellen Park System

Test Results / Mariellen Park Well						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Beta emitters (2008)	N	5	pCi/L	0	50	Decay of natural and man-made deposits
Inorganic Contaminants						
Barium (2010)	N	0.1	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (2010)	N	1.02	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead Distribution (2011)	N	0	ppm	0	AL= 0.015	Corrosion of household plumbing systems, erosion of natural deposits
Copper Distribution (2011)	N	0.37	ppm	1.3	AL= 1.3	Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
Nitrate (2011)	N	<1	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
TTHMs [Total Trihalomethanes] Distribution (2009)	N	0.97	ppb	0	80	By-product of drinking water chlorination
HAA5s Haloacetic Acids Distribution (2009)	N	0.82	ppb	0	60	By product of drinking water chlorination

Test Results / Mariellen Park Well Continuation						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Synthetic Organic Contaminants Including Pesticides and Herbicides						
Di (2-Ethylhexyl) Phthalate (2010)	N	0.67	ppb	0	6	Discharge from rubber and chemical factories
Unregulated Contaminants						
Bromodichloromethane (2008)	N	0.5	ppb	N/A	N/A	By-product of drinking water chlorination
Bromomethane (2010)	N	1.1	ppb	N/A	N/A	N/A
Chloroform (2010)	N	1	ppb	N/A	N/A	By-product of drinking water chlorination
Sodium (2010)	N	87.4	ppm	N/A	N/A	Erosion of natural deposits

Note: The table identifies the year a contaminant was tested. The results of testing for contaminants which are not regulated are listed in the Unregulated Contaminants section.

“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 service lines and home plumbing. Charles County Department of Public Works, Utilities Division, is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting 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’s Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.”

Nitrates in drinking water at levels above 10 ppm are a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for a short period of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

Note: Lead and copper are tested for tri-annually (every 3 years) in accordance with Federal and State regulations. Lead and copper results were sent to the Maryland Department of the Environment several weeks late for the Mariellen system. However all lead and copper results were normal (below MCL), and there were no negative effects on the integrity of the potable water system.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. 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 EPA’s Safe Drink Water Hotline at 1-800-426-4791.

MCLs 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. 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.

Conservation Tips

Did you know that the average U.S household uses approximately 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving- 3 to 5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce your next water bill.

The staff of the Department of Public Works, Utilities Division, works diligently to provide top quality water and excellent customer service. All customers are urged to protect our valuable water resources and practice conservation to ensure a sustainable water supply for our community.

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