

June 1, 2011

2011 Annual Drinking Water Quality Report

Prospect Bay Water Treatment Facility

Grasonville, Maryland

MDE Public Water System ID No. 170009

This report is required by the federal Safe Water Drinking Act Amendment of 1996 and is designed to educate you about the quality of the water we deliver to you every day. We are pleased to inform you that your drinking water is safe and meets all federal and state requirements. 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 the quality of your water.

The Sanitary District routinely monitors for constituents in your drinking water according to Federal and State laws. **Your water is supplied by the Prospect Bay water treatment facility that utilizes groundwater from two 10-inch wells 360 feet deep into the Aquia Greensand aquifer.** The enclosed table indicates the results of our monitoring for the period of January 1 to December 31, 2010. All drinking water, including bottled drinking water, may be reasonably expected to contain at least a small amount of some constituents. It's important to remember that the presence of these constituents does not necessarily pose 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 Sanitary District's water staff consists of nine personnel with a combined experience of 60 years. Each operator is required to obtain 30 hours of formal training every 3 years in water treatment and water distribution operations.

We want our customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact me at the above number. Major decisions affecting the water utility are made by the County Commissioners, sitting as the Sanitary Commission. Should you wish to attend, the Sanitary Commission meets the second Tuesday at 9:00 a.m. in their meeting room located at 107 North Liberty Street, Centreville, Maryland.

Enclosed you will find a notice of violation from the Maryland Department of Environment. The violation was a result of our water operator recording the date an arsenic sample was taken in the incorrect location on a chain of custody form. While technically a violation, at no time were you at risk nor did we omit any monitoring of the water as required by law.

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/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 (1-800-426-4791).

(Please note EPA mandates the previous paragraph. Cryptosporidium is a microbe found in some surface water supplies such as rivers or reservoirs. It is not found in groundwater, which is where all of our water supplies originate.)

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

Non-Detect - laboratory analysis indicates that the constituent is not present.

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

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. Also equivalent to micrograms per liter ($\mu\text{g/l}$).

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

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.

Maximum Contaminant Level (MCL) - The 'Maximum Allowed' 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.

In our continuing effort to maintain a safe and dependable water supply it is often necessary to make improvements in your water system. The costs of these improvements, as well as the cost to retain experienced staff, are reflected in the small annual rate increases you may experience every July.

Very truly yours,

Alan L. Quimby, P.E.
Chief Sanitary Engineer

TEST RESULTS

2010 Prospect Bay Water Treatment Plant

REGULATED CONTAMINENTS

Contaminant	Units	Level Detected	MCL	MCLG	Likely Sources
Gross Beta ¹	µrem/y	880	4000	0	Natural Deposits
Arsenic	ppb	<5	10	0	Natural Deposits
Copper	ppb	1270	AL=1300	1300	Plumbing Corrosion
Di(2-ethylhexyl) phthalate ²	ppb	1	6	0	Discharge from rubber or chemical factories
Fluoride	ppb	1020	4000	4000	Natural Deposits
Nitrate	ppb	Non Detect	10,000	10,000	Fertilizer Runoff
Haloacetic Acids ³	ppb	Non Detect	60	none	Disinfection Byproducts
Trihalomethanes ³	ppb	1	100	none	Disinfection Byproducts

UNREGULATED (but detected) CONTAMINENTS

Contaminant	Units	Level Detected
Iron	ppb	130
Chloride	ppm	1.8
Sodium	ppm	26
Sulfate	ppm	2

1. Gross Beta, and Radon are a measure of naturally occurring radioactive contaminants.
2. The Maryland Department of the Environment (MDE) tests for Volatile Organic Compounds (VOC) and Synthetic Organic Compounds (SOC).

Test Sample Dates: (full test results available upon request)

Arsenic – **July 23, 2010**

Inorganics – June 10, 2008

³Disinfection Byproducts – May 13, 2009

Lead & Copper – December 31, 2009

Nitrate & Nitrite – **June 7, 2010**

Radioactives – April 1, 2008

VOC/SOC – January 15, 2003, April 18, 2005

Bold indicates new results for this year's report; most contaminants are not required to be tested annually.