ANNE ARUNDEL COUNTY
MARYLAND

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Water is a precious resource.
Please use it wisely!

2000 Drinking Water Quality Report

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MESSAGE FROM THE COUNTY EXECUTIVE

May, 2001

Dear Anne Arundel County Drinking Water Customers,

It is my great pleasure to bring you the 2000 Drinking Water Quality Report for your public water system. The employees of the Anne Arundel County Department of Public Works deliver 11 billion gallons of safe, healthful and quality drinking water to 90,000 homes and businesses annually. As you will see as you read this report, their dedication and professionalism is reflected in each and every drop of drinking water that flows from your taps.

I hope that you are as proud as I am that Anne Arundel County employs some of the top water professionals in the country. For the third year in a row, a team of highly trained technicians from your Department of Public Works finished among the top three in a national Top Ops competition sponsored by the American Water Works Association (AWWA).

Anne Arundel's public water is also the best tasting in the Chesapeake region, according to the AWWA's regional chapter. The chapter, which includes more than 70 water utilities from around the Mid-Atlantic, held a taste competition at the U.S. Naval Academy last June. In the end, the glass of water from the Crofton Meadows II Water Treatment Plant won out.

Of course, our drinking water is just one reason why Anne Arundel County citizens have such an excellent standard of living. The Department of Public Works and I are proud to present this report to you. We hope that you will take what you read here as a tangible sign of our commitment to you.

Sincerely,

Janet S. Owens
County Executive

2000 Drinking Water Quality Report

Anne Arundel County Department of Public Works

A Commitment to Excellence...

The Department of Public Works, Bureau of Utility Operations is proud to present the 2000 Drinking Water Quality Report to our water customers in Anne Arundel County. Twenty-four hours a day, seven days a week, our employees are dedicated to bringing our customers the highest quality water that meets all state and federal requirements.

Why do we produce and distribute this report?

This report is the result of a 1996 amendment to the Safe Drinking Water Act giving the Environmental Protection Agency (EPA) the authority to require an annual water quality report from each community water system. The report is a summary of information that had already been collected by the water system, only now it is delivered to all customers on an annual basis in a single report. The report is intended to be a means for consumers of water to be able to make informed decisions regarding their drinking water.

How is the water tested?

Our state certified laboratory located at the Water Operations Administration building in Millersville regularly analyzes the water to ensure superior quality drinking water is consistently delivered to our customers. Additionally, certain complex water quality analyses are performed by the State of Maryland or by private laboratories. This report provides the results of many tests throughout the year which measure for both regulated and unregulated contaminants. In 2000 we collected over 12,700 samples and performed more than 46,300 analyses for approximately 135 parameters. The table in this report lists contaminants found in the finished water during the calendar year 2000.

Crofton Meadows II WTP

What about contaminants and health risks?

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. To ensure that tap water is safe to drink, EPA sets limits on the amount of certain contaminants in water provided by public water systems. The table in this report lists each substance found in our water, the highest level detected and the highest levels allowed by EPA.

What should immuno-compromised people be aware of?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 for 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 microbial contaminants are available from the EPA Safe Drinking Water Hotline (1-800-426-4791).

Shipley Water Tank

What are the sources of drinking water contaminants?

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from waste treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Where does the drinking water come from and how is it treated?

In 2000 Anne Arundel County distributed over 11 billion gallons of water to about 330,000 consumers. Over 8 billion gallons of this water were treated and distributed after being taken from deep wells throughout the county. Almost 3 billion gallons were purchased from Baltimore City.

As indicated on the map in this report, there are eight water service areas in the County. The Airport Square/Baltimore City 1, Glen Burnie/Baltimore City 1, and Pasadena/Baltimore City 2 areas are supplied with water purchased from Baltimore City as well as water which is produced in Anne Arundel County. The other five areas, Broadneck, Crofton/Odenton, Broad Creek, Herald Harbor, and Gibson Island, are supplied with water produced in the County only. The source of water for Baltimore City is reservoirs. The source of water for the County is groundwater, from numerous wells in the Patuxent and Patapsco aquifers. These aquifers are underground sand layers through which water travels at a slow rate from the recharge area to the wells. Wells which tap into the Patapsco Aquifer range from a minimum of 221 feet to over 1000 feet deep. Wells which tap into the Patuxent Aquifer range from a minimum of 474 to over 1000 feet deep.

Our treatment facilities typically treat source water by using the following processes: aeration for oxidation; chlorine addition for disinfection; lime addition for pH adjustment; sedimentation for iron and particle removal; filtration for iron and particle removal, and fluoride addition to prevent tooth decay. After treatment, the water is pumped through over 1,100 miles of pipeline comprising the distribution system.

What about radium in the public water system?

Radium is a naturally occurring substance which can, if exposed to acidic conditions (low pH), leach into the groundwater. Radium has been detected in some of the groundwater in various areas of the County, particularly in the Pasadena, Millersville, and Crownsville areas. As in past years, the County monitored the public water system for radium content. All of the analysis results were below the maximum contaminant level set by EPA.

Should I be concerned about radon?

Radon is a naturally occurring radioactive gas that may cause cancer, and may be found in drinking water and indoor air. You should test your house and fix it if you find a level of 4 pCi/l or higher (in the air). Some states and water suppliers are now working on programs that will reduce your exposure to radon both in air and drinking water. For more information, call EPA's Radon Hotline (800-SOS-RADON) or visit the web site (http://www.epa.gov/iaq/radon). Previous testing has indicated that radon is not present at high levels in the County's drinking water, and should not cause concern.

What is cryptosporidium and should I be concerned about it?

Cryptosporidium is a microscopic organism that, when ingested, can result in diarrhea, fever or other gastronomical symptoms. Cryptosporidium can be found in surface water but is rarely found in water from aquifers. Since cryptosporidium can be present in water from surface reservoirs, such as water from Baltimore City, the City monitors its' raw water sources for cryptosporidium. Sampling and analysis of the City's two primary water sources revealed that no viable organisms were present. The City's protected water supply reservoirs help prevent these organisms from entering the water supply.

What are we doing to improve our water system?

Each year, the County initiates and completes many Capital Projects to expand and improve the drinking water system. Improvements are made at the treatment and storage facilities, as well as in the water distribution system. Among the many projects completed in 2000 are the following: a new well was drilled in the Glen Burnie area; the Linthicum elevated storage tank was rehabilitated and repainted; new water booster pumping stations were added in Millersville and the Arundel Mills Mall area, and the treatment processes at a water treatment plant in Harundale were enhanced.

Public Participation

All capital projects which include improvements and/or additions to the water supply system are included in the annual budget presented by the County Executive to the County Council each spring. Public hearings are advertised and conducted throughout the County. Public comment is welcome. Copies of the budget are available for review from the County Council offices and at local branches of the County library. The County also maintains a "Ten Year Master Plan for Water Supply and Sewage Systems." This plan can be reviewed at any branch of the County library or at the Department of Planning and Code Enforcement at 2664 Riva Road, Annapolis, or by contacting the Long Range Planning Section at 410-222-7432.

Important Phone Numbers

24 Hour Emergency Hotline	410-222-8400
(From South County)	410-451-4118
Billing Office	410-222-1144
DPW Customer Relations	410-222-7582
General Information	410-222-7500

For more information about the Department of Public Works or to contact us by email, visit our web site at:
www.aadpw.org

"Este Informe contiene information muy importante. Traduscalo o hable con un amigo quien lo entienda bien."