2004 ANNUAL DRINKING WATER REPORT

TOWN OF CHESAPEAKE BEACH
CALVERT COUNTY - MARYLAND
PWSID 0040003

The Town of Chesapeake Beach is pleased to present to its water system customer this year's Annual Quality Water Report. This report is designed to inform you about the quality 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 the quality of your water.

Water is supplied to the Town system from a deep well, which is located south of Harbor Road down the hill from Beach School. The well is drilled to the Aquia aquifer which is a 100 foot thick layer of sand that is located about 500' below ground level. The Aquia is a safe and reliable source of our public drinking water for now and the future. Our water is pumped to the surface by a 500 gallon per minute submersible well pump where it is treated with chlorine as required by the State and a polyphosphate chemical for the control of iron prior to being sent to the distribution system. Water is stored in a 150,000 gallon elevated tank located on Old Bayside Road and is distributed to users by a network of 12", 10", 8", 6" and 4" lines.

The Town is pleased to report that our drinking water is safe and meets Federal and State requirements. This report provides information on the quality of the Town's water and what it means to the users. The Town is required by federal regulations under the Safe Drinking Water Act to provide users of its water system an annual report.

WATER QUALITY MONITORING: The Town routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows our test results. 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 constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.
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 - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Action Level – The "Action Level" (A.L.) is the level of concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

TEST RESULTS							
Contaminant	Test Date	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants							
Beta/photon emitters	4/24/02	N	8	PCi/l	0	50	Decay of natural and man-made deposits
Alpha emitters	4/24/02	N	1	PCi/1	0	15	Erosion of natural deposits
Combined radium (Radon)	6/12/98	N	195	PCi/1	0	300	Erosion of natural deposits
Inorganic Contaminants							
Arsenic	3/31/04	N	2	Ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride	3/31/04	N	0.21	Ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Copper	12/31/02	N	0.46	Ppm	AL=1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits

OTHER CONTAMINANTS: There are many more constituents that the Town must test for in their water supply. Only those detected are shown in the Table above. If you want a complete list of constituents that the Town does testing for but has not detected (ND), please contact the Town Hall staff at the phone numbers at the end of this report.

ABOUT RADON: We constantly monitor the water supply for various constituents. We have detected radon in the finished water supply in a sample tested in 1998. There is no federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects.

ABOUT ARSENIC: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

SUMMARY OF RESULTS: 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 constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

ABOUT POTENTIAL CONTAMINATION: 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.

ABOUT MCL's: MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

AT RISK USERS: 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 (800-426-4791).

BROWN WATER: The water supply aquifers in this region contain small amounts of iron that can build up in the distribution pipes and occasionally end up at the customers tap in the form of very brownish or rust appearing water. The Town is continuing efforts to improve the operation of its system through the addition of chemicals and system flushing to reduce the occurrences of brown water. Anyone experiencing brown water that soils clothing can obtain from Town Hall at no cost a cleaning product that can remove iron related stains. Iron in the Town's water supply does not pose any health risk.

FUTURE EXPANSION OF THE TOWN WATER SYSTEM: To better serve customers of the Town water system, a new well and elevated storage tank is being added to the system. These new facilities will be in service sometime in the year 2005.

FINAL NOTE: The Town of Chesapeake Beach appreciates the opportunity to provide its water system customers with clean and quality water this past year. Mayor Donovan wants everyone to know that Town staff works very hard to provide safe and dependable water to every tap and that all customers should help protect our water sources and use it in a wise and efficient manner.

Questions about the Town's water supply and system can be directed to Town staff located in Town Hall. Please call them at (410) 257-2230 or (301) 855-8398 or send written questions to Town of Chesapeake Beach, P.O. Box 400, Chesapeake Beach, Maryland 20732. The Town Council meets on the third Thursday of every month beginning at 8:00 PM and welcomes your comments or questions about the water system at their meetings.

Calvert County Water & Sewerage Division
Summit/Highlands 0040026

2004 Annual Water-Quality Report

Dear Customer:

We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. The Calvert County Water & Sewerage Division is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

Overview

In 2004 the Summit/Highlands water system enjoyed another year of perfect compliance with all applicable drinking water standards. We continued our relationship with the American Waterworks Association to insure continued excellence.

Water Source

The Summit/Highlands water system is supplied by four wells in the Aquia Aquifer. The water is chlorinated to insure bacteriological purity. Otherwise we do not treat the water as it meets drinking water standards naturally.

An Explanation of the Water Quality Data Table

The table shows the results of our water quality analysis. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our finds, and a key to units of measurement. Definitions of MCL and MCLG are important.

Maximum Contaminant Level or MCL: 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 or MCLG: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Key to Table

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
pCi/L = picocuries per liter (a measure of radioactivity)
ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (ug/L)

WELL 01

Substance	Date Tested	Unit	MCL	MCLG	Level Detected	Possible Sources	Violation
Barium	**06/18/04**	**ppm**	**2.0**	**2.0**	**0.1**	**Erosion of natural deposits**	**NO**
Fluoride	**06/18/04**	**ppm**	****SMCL 2.0**	**-**	**0.2**	**Erosion of natural deposits**	**NO**

Total Trihalomethanes	**09/01/04**	**ppb**	**80**	**-**	**7.0**	**By product of drinking water disinfection**	**NO**
Haloacetic Acids	**09/01/04**	**ppb**	**60**	**-**	**2.7**	**By product of drinking water disinfection**	**NO**

WELL 02

Substance	Date Tested	Unit	MCL	MCLG	Level Detected	Possible Sources	Violation
Barium	**09/01/04**	**ppm**	**2.0**	**2.0**	**0.1**	**Erosion of natural deposits**	**NO**
Fluoride	**09/01/04**	**ppm**	****SMCL 2.0**	**-**	**0.2**	**Erosion of natural deposits**	**NO**
Sodium	**09/01/04**	**ppm**	***DWEL 20**	**-**	**5.1**	**N/A**	**NO**
Iron	**09/01/04**	**ppm**	****SMCL 0.3**	**0.3**	**0.5**	**N/A**	**NO**
Copper	**12/31/02**	**ppm**	**AL=1.3**	**1.3**	**0.5**	**Corrosion of household plumbing systems**	**NO**
Gross Beta	**10/31/02**	**pCi/L**	**50**	**0**	**7.0**	**Decay of natural and manmade products**	**NO**

**SMCL: Secondary Maximum Contaminant Level. Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects, such as taste, odor or color.

*DWEL: Drinking Water Equivalent Level. A lifetime exposure concentration protective of adverse, non-cancer health effects, that assumes all the exposure to a contaminant is from a drinking water source.
**Iron is a secondary contaminant. Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects, such as taste, odor, or color.

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provide by public water systems. FDA regulations establish limits for contaminants in bottled water.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water 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 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:
(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is 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 are available from the Safe drinking Water Hotline (800-426-4791).

Source Water Assessment

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted Source Water Assessments for thirty-six community water systems in Calvert County, including the Summit/Highlands water system. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination, and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Summit/Highlands water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The susceptibility of the water supply to Radon, a naturally occurring element, will depend upon the final MCL that is adopted for this contaminant.

National Primary Drinking Water Regulation Compliance

This report was prepared using CCR builder and technical assistance provided by the American Water Works Association. We'll be happy to answer any questions about Calvert County Water & Sewerage Division and the water quality in the Summit/Highlands system. Call Barry King at (410) 535-1600 ext. 2329 between 8:00 – 4:00.