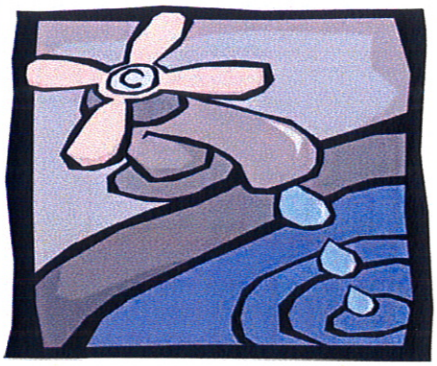

# Chesapeake Beach
# *2009 Annual Drinking Water Quality Report*

**PWSID#: 004-0003**

**Is my water safe?**

Last year, as in years past, your tap water met all EPA and state drinking water health standards. Chesapeake Beach is pleased to provide this annual water quality report for calendar year 2008. 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. Chesapeake Beach routinely monitors for contaminants in your drinking water. We vigilantly safeguard our water supplies and once again we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

**Do I need to take special precautions?**

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

**Where does my water come from and what are the potential sources of contamination?**

Your drinking water is supplied by four wells. The source of Chesapeake Beach's water supply is the Aquia aquifer, which is located 500 feet below ground. The susceptibility analysis for The Town of Chesapeake Beach's water supply is based on a review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. For more information on the source of your water, the significant potential sources of contamination, and susceptibility analysis, contact the Maryland Source Water Assessment Program at the Maryland Department of the Environment at (410) 631-3714 or visit on the web www.mde.state.md.us/health/swap/

**Why may there be contaminants in my drinking 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 Environmental Protection Agency's (EPA) 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, 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:

1. Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
4. 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 storm water runoff, and septic systems.
5. 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

**Lead**

If present, elevated levels of lead can cause serious health problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Chesapeake Beach 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 Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

**Copper**

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson 's disease should consult their personal doctor.

**Fluoride**

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease including pain and tenderness of the bones. Fluoride in water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

**Arsenic**
Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

# Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected in your water. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, may be up to five years old.

| Contaminants (units) | MCLG | MCL | Your Water | Range Low | Range High | Sample Date | Violation | Typical Source | Plant ID |
|---|---|---|---|---|---|---|---|---|---|
| **Disinfectants & Disinfections By-Products** | | | | | | | | | |
| Haloacetic Acids HAA5 (ppb) | NA | 60 | 0.54 | NA | NA | 09/25/08 | No | Byproduct of chlorination | Dist. |
| Total Trihalomethanes (ppb) | NA | 100 | 2.62 | NA | NA | 09/25/08 | No | Same as above | Dist. |
| **Inorganic Contaminants** | | | | | | | | | |
| Copper (ppm) | 1.3 | 1.3AL | 0.12 | NA | NA | 12/31/08 | No | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. | Dist. |
| Arsenic (ppb) | NA | 10 | 1.4 | NA | NA | 04/09/07 | No | Erosion of natural products; runoff from orchards; runoff from glass and electronics production wastes | 01 |
| Fluoride (ppm) | 4 | 4 | 0.19 | NA | NA | 04/09/07 | No | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. | 01 |
| Fluoride (ppm) | 4 | 4 | 0.2 | NA | NA | 04/09/07 | No | Same as above. | 04 |
| **Radioactive Contaminants** | | | | | | | | | |
| Radon(pCi/L) | NA | NA | 88 | NA | NA | 12/18/07 | No | Erosion of natural deposits | 04 |
| Beta photon emitters (pCi/L) | 0 | 50* | 7 | NA | NA | 09/29/06 | No | Decay of natural and man-made deposits | 04 |
| **Synthetic Organic Contaminants** | | | | | | | | | |
| Di(2-ethylhexyl)phthalate (ppb) | 0 | 6 | 0.6 | NA | NA | 12/18/07 | No | Discharge from rubber and chemical factories | 04 |
| **Unregulated Contaminants** | | | | | | | | | |
| Chloroform (ppb) | not regulated | | 1.9 | NA | NA | 09/25/08 | No | EPA regulations require us to monitor this contaminant while EPA considers setting a limit on it. | 01 |
| Chloroform (ppb) | not regulated | | 1 | NA | NA | 12/18/07 | No | Same as above | 04 |
| Bromodichloromethane (ppb) | not regulated | | 0.7 | NA | NA | 09/25/08 | No | Same as above | 01 |

Dist.: Water from the system's distribution.
*EPA considers 50pCi/l to be the level of concern for beta particles

**Important Drinking Water Definitions:**

MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risks for safety. MCGL allows for margin of safety.

MCL: Maximum Contaminant Level. 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.

AL: Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Units of Measurement & Conversions:**

NA: Not applicable
ppm: parts per million, or milligrams per liter (mg/L)
pCi/L: picocuries per liter (a measure of radioactivity)
ppb: parts per billion, or micrograms per liter (µg/L)

**If you want to learn more you are encouraged to attend any town meeting held on the third Thursday of every month at 8:00 pm at the Town Hall. For additional information or questions contact:**

**The Town of Chesapeake Beach**
**P.O. Box 400**
**Chesapeake Beach, MD**
**(410)-257-2230 or (301)-855-8398**

Prepared by: Water Testing Labs of Maryland, Inc.
For more information on contaminants in drinking water and its effects go to www.wtlmd.com