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## Introduction:

It is our pleasure to provide you with our 2009 Water Quality Report. This annual report is a summary of last year's water quality produced at the Accident Water Treatment Plant. Included are details about where your water comes from, water quality tests results, how they compare to standards set by the US Environmental Protection Agency (USEPA) and answers to frequently asked questions about drinking water. The Water Quality Data table on the back shows all of the contaminants detected in Accident's drinking water between January 1 and December 31, 2009 unless dated otherwise. We are committed to providing you with information because informed customers are our best allies. We hope you find this report informative and helpful. Please contact us with any questions or comments.

## Where Does Your Drinking Water Originate:

The Accident Water System obtains all of its raw water from two separate wells (ground water). Each well is 300 feet deep and obtains water from the Hampshire aquifer, which is an unconfined, sandy-shale aquifer. Only one well is in operation at any given time, supplying the entire distribution system. Excess capacity is pumped to the town's water storage tank. Water from both wells is blended together in the storage tank. The Source Water Protection Area (SWPA) is approximately 184 acres and is irregular in shape.

## How is Your Water Treated:

The raw water obtained from the two wells is combined and disinfected with chlorine to kill harmful bacteria and viruses.

## Source Water Assessment:

The Town of Accident has received from the Maryland Department of the Environment, Water Management Administration, Water Supply Program, a Final Source Water Assessment for the Accident Water System. This report is available for your review upon request to the Town of Accident 301-746- 6346. The assessment determined that the Accident Water supply is highly susceptible to radon 222. The system has a moderate susceptibility to volatile organic compounds, and has a low susceptibility to synthetic organic compounds, inorganic compounds, other radionuclides, and microbiological contamination.

## General Drinking Water Information:

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, 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, inorganic contaminants, pesticides and herbicides, organic chemical contaminants and radioactive contaminants. To ensure tap water is safe to drink, the EPA prescribes regulations that 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.

Drinking water, including bottled water, may be reasonably 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 Safe Drinking Water Hotline at (800-426-4791).

## The Bottom Line:

Some individuals may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised individuals 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 may be particularly at risk from infections. Those individuals should seek advice about drinking water from their health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## For More Information:

Please contact the Town of Accident at 301-746-6346 or 301-746-8144 for additional information regarding the data in this report. The Town of Accident holds regularly scheduled meetings the first Monday of every month at 7:30 PM in the Town Hall.

## Lead Statement:

"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. The Department of Utilities 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 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,"

# WATER QUALITY DATA TABLE

| Regulated Contaminants | Units | Distribution System | South St. Well #1 | Bittenger St. Well #2 | MCL | MCLG | Sample Date | Typical Sources of Contaminant |
|---|---|---|---|---|---|---|---|---|
| Arsenic | ppb | | 3 | 10.6** | 10 | n/a | See Foot Note | erosion of natural deposits |
| Nitrates | ppm | | 1.7 | 1.2 | 10 | 10 | Sep-09 | run-off from fertilizer and leaching from septic tanks |
| Alpha emitters | pCi / l | | | 3.4 | 15 | 0 | Oct-09 | erosion of natural deposits |
| Beta emitters*** | pCi/l | | | 2.1 | 50 | 0 | Apr-09 | erosion of natural deposits |
| Barium* | ppm | | 0.14 | 0.4 | 2 | 2 | Aug-07 | erosion of natural deposits; discharge of drilling waste |
| TTHMs | ppb | 21.5 | | | 80 | n/a | Sep-07 | by-product of drinking water chlorination |
| Haloacetic Acids | ppb | 1.28 | | | 60 | n/a | Sep-07 | by-product of drinking water disinfection |
| Lead | ppb | 7 | | | AL = 15 | 0 | Dec-08 | corrosion of household plumbing systems |
| Copper | ppm | 0.859 | | | AL = 1.3 | 1.3 | Dec-08 | corrosion of household plumbing systems |
| **Unregulated Contaminants** | | | | | | | | |
| Sodium | ppm | | 6.4 | 17.6 | not regulated | | Aug-07 | |

*The Maryland Dept. of the Environment requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old.

***EPA considers 50 pCi/l to be the level of concern for beta particles

**Unregulated contaminants** are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and weather future regulation is warranted.

****Violations:** The MCL for Arsenic has been set by the USEPA at 10ppb. For the Accident-Bittenger well, Arsenic compliance is based on an annual average of samples taken quarterly. The average value of the quarterly samples (10.6 ppb) is shown in the table above. For the Accident-Bittenger well, the range of results for the average shown are from 8.9 to 12.0 ppb. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage of problems with their circulatory system, and may have an increased risk of getting cancer. The town continues to monitor the well and is reviewing options for treatment.

## Terms and Units Defined:

**NTU – Nephelometric Turbidity Unit:** Turbidity is a measure of the cloudiness of the water.
**TT - Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
**AL - Action Level:** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
**ppm - parts per million:** Corresponds to one penny in $10,000.
**ppb - parts per billion:** Corresponds to one penny in $10,000,000.
**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 best available treatment technology.
**MCLG- Maximum Contaminant Level Goal:** 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.
**pCi/l - picocuries per liter:** A measure of radioactivity.
**N/A** – Not applicable