# Bamberg Board of Public Works

# 2010 Annual Drinking Water Quality Report

***We're pleased to report that your water is safe and meets all federal and state requirements.***

The Safe Drinking Water Act requires all public water systems to issue an annual report to their customers. We're pleased to present to you this year's Annual Water Quality 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. Our water sources for the 2010 monitoring period includes one well located on Calhoun Street, south of Log Branch Road. The water from this well comes into water treatment plant #1 through a common header. The two main sources of water for monitoring period 2010 were Well #8, on Bridge Street, and Well #9, on Log Branch Road. The water from both these wells is treated at facilities adjacent to the respective wells.

Source Water Assessment Plans (SWAP) have been completed by SC DHEC. SWAP, among other things, identify potential sources of contamination to drinking water supplies. A copy of our Source Water Assessment Plan may obtained at the Board of Public Works office or online at:

http://www.scdhec.net/water/pubs/bambergswp/0510001r.pdf

A susceptibility matrix is used to rank the susceptibility of source water to a potential contaminant source within a Source Water Protection Area. The matrix assigns a ranking of high, moderate or low susceptibility to each Potential Contaminant Source (PCS) on the basis of location of the public supply system and the contaminant of interest. Of the 56 PCSs identified in the initial inventory, our system had no PCSs with a high susceptibility ranking, 34 PCSs with a moderate susceptibility ranking, and 22 PCSs with a low susceptibility ranking.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land or underground, it can pick up substances or contaminants. Contaminants that may be present in source water include microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants and radioactive contaminants.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

The Bamberg Board of Public Works routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2010. Some constituents do not require annual testing, therefore, the most recent results have been reported. No

Quality On Tap!

Our Commitment Our Profession

**S.C. D.H.E.C. System #0510001**

# What's in the Water?

## *Monitoring Period of Jan 1 – Dec 31, 2010*

| Constituent (units) | MCLG | MCL | Highest Level Detected | Range of Detections | Violation Yes/No | Year Sampled | Source of Constituent |
|---|---|---|---|---|---|---|---|
| Barium (ppm) | 2 | 2 | 0.11 | 0.095 - 0.11 | No | 2010 | Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries. |
| Chlorine (ppm) | MRDLG = 4 | MRDL = 4 | 0.99 | 0.29 - 1.06 | No | 2010 | Water additive used to control microbes. |
| Fluoride (ppm) | 4 | 4 | 0.11 | 0 - 0.11 | No | 2010 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Haloacetic Acids (HAA5) (ppb) | 0 | 60 | 3.61 | 0 -3.61 | No | 2009 | By-product of drinking water chlorination. |
| Not all sample results may have been used for calculatng the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. | | | | | | | |
| TTHM (Total Trihalomethanes) (ppb) | 0 | 80 | 43.89 | 0 - 43.89 | No | 2009 | By-product of drinking water chlorination. |
| Not all sample results may have been used for calculatng the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. | | | | | | | |
| Combined Radium 226/228 (pCi/L) | 0 | 5 | 1.2 | 1.2 - 1.2 | No | 2007 | Erosion of natural deposits |
| Gross alpha excluding radon and uranium (pCi/L) | 0 | 15 | 1.1 | 1.1 - 1.1 | No | 2007 | Erosion of natural deposits |

| Constituent (units) | Action Level | 90th Percentile | # of Sites Over Action Level | Violation Yes/No | Year Sampled | Source of Constituent |
|---|---|---|---|---|---|---|
| Copper (ppm) | 1.3 | 0.58 | 0 | No | 2008 | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |

**VIOLATIONS**

Disninfectants and Disinfection Byproducts Rule 2

The Stage 2 DBP rule builds upon earlier rules that addressed disinfection byproducts to improve your drinking water quality and provide additional public health protection from disinfection byproducts.

| Violation Type | Violation Begin | Violation End | Violation Explanation |
|---|---|---|---|
| FAILURE TO SUBMIT IDSE/SUBTPT V PLAN (DBP2) | 7/2/2010 | | We failed to submit our initial distribution system (IDSE) report to our regulator. The IDSE report is needed to determine the best locations to use for sampling disinfection byproducts. |

## What's <u>NOT</u> in the Water?

Total Coliform Bacteria * Fecal coliform and E.coli * Turbidity * Antimony * Arsenic * Beryllium * Asbestos Cadmium * Chromium * Cyanide * Mercury (inorganic) * Nitrite (as Nitrogen) * Nitrate * 1,1-Dichloroethylene Selenium * Thallium * 2,4,5-TP (Silvex) * Acrylamide * Alachlor * Atrazine * Benzo(a) pyrene (PAH) Carbofuran * Chlordane * Dalapon * Di(2-ethylhexyl)adipate * Di(2-ethylhexyl)phthalate * Dibromochloropropane Dinoseb * Diquat * Dioxin (2,3,7,8-TCDD) * Endrin *Epichlorohydrin * Ethylene dibromide * Endothall Glyphosphate * Heptaclor * Heptaclor epoxide * Hexachlorobenzene * Hexachlorocyclopentadiene * Lead * Lindane Methoxychlor * Oxymyl (Vydate) * PCBs (Polychlorinated biphenyls) * Pentachlorophenol * Tetrachloroethylene Picloram * Simazine Toxaphene * Benzene * Carbon Tetrachloride * Chlorobenzene * o-Dichlorobenzene p-Dichlorobenzene * 1,2 Dichloroethane * trans-1,2– Dichloroethylene * Dichloromethane * 1,2-Dichloropropane Ethylbenzene * Styrene * 1,2,4-Trichlorobenzene * 1,1,1-Trichloroethane * 1,1,2-Trichloroethane * Trichloroethylene 2,4-D * Alpha Emitters * Trichlorofluoromethane * Toluene * Vinyl Chloride * Xylenes * cis-1,2– Dichloroethylene

**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:**

*na* - *not applicable*

*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.

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

*Maximum Contaminant Level* - The "Maximum Allowed" (MCL) 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.

*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. MCLGs allow for a margin of safety.

*Maximum Residual Disinfectant Level (MRDL)* – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum Residual Disinfectant Level Goal (MRDLG)* – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

*Avg*. - Regulatory compliance with some MCL's are based on the running annual average of monthly samples.

**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.**

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.

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 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).

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 Bamberg Board of Public Works 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 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 Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

# ***URGENT NOTICE***

**The emergency number for the Bamberg Board of Public Works is 245-5128. This is the only number you should dial to report an emergency for the Bamberg Board of Public Works such as power outages, water leaks , etc. 245-5128 is the 24 hour emergency number for the Bamberg Board of Public Works.**

## DO NOT DIAL 911,

**or 803-245-3000, to report power outages, water leaks or other Bamberg Board of Public Works related issues.**

811®

**Know what's below.**
**Call before you dig.**

For more information, contact:

**Bamberg Board of Public Works**
**P.O. Box 1180**
**2340 Main Highway**
**Bamberg, SC 29003**
**245-5128**
**www.bambergsc.com**

Regularly scheduled public meetings:

**Municipal Complex**
**2340 Main Highway**
**Bamberg, SC 29003**
**Last Monday of each month**
**5:15 p.m.**