

# 2014 Drinking Water Quality Report

Town of Eastville

P.O. Box 747

Eastville, Virginia 23347

## **INTRODUCTION**

This Annual Drinking Water Quality Report for Calendar Year 2014 is designed to inform you about your drinking water quality. Our goal is to provide you with safe and dependable drinking water, and we want you to understand the efforts we take to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH).

Este informe contiene informacion importante acerca de su agua potable. Raga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

If you have any questions about this report, or would like additional information about any aspect of your drinking water, please contact: Patrick T. Christman 757-678-2771

If you would like to make comment on this report, our meeting schedule is as follows:

Town meetings are held the 1<sup>st</sup> Monday of every month, 7:00p.m., at Eastville Town Hall conference room, all persons are welcome.

## **GENERAL INFORMATION**

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water may come from septic systems, discharges from domestic or industrial waste water treatment facilities, agricultural and farming activities, urban storm water runoff, residential uses, and many other types of activities. Water from the surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

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 sewage 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 water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and septic systems;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

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 water poses a health risk. More information can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-826-4791).

Some people may be 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 see 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).

## **SOURCE and TREATMENT OF YOUR DRINKING WATER**

The source of your drinking water is groundwater as described below:

A main well and auxiliary back up well. The main well has a depth of 165 feet and derives its water from the Chesapeake Aquifer. It has a rated capacity of 110 gallons per minute and is controlled by a solid-state pressure sensing equipment for increased reliability.

The auxiliary well has a depth of 155 feet; it derives its water from the Chesapeake Aquifer and has a capacity of 90 gallons per minute.

Our drinking water supply is not treated with chemicals, additives, or softeners.

The Virginia Department of Health conducted a Source Water Assessment of the Town of Eastville Waterworks in 2002. The wells were determined to be of low susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the Source Water Assessment area, an inventory of known Land Use Activities utilized at Land use activity Sites in Zone 1, Susceptibility Explanation Chart, and Definitions of Key Terms. The report is available by contacting your waterworks system owner/operator at the phone number or address included in the Annual Water Quality Report.

## **DEFINITIONS**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The tables on the next pages show the results of our monitoring for the period of January 1, 2010 to December 31, 2014. In the table and elsewhere in this report definitions are provided to help you better understand these terms:

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

*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.

*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 a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for margin of safety.

## **WATER QUALITY RESULTS**

### **Town of Eastville Waterworks: Lead Results**

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. Town of Eastville 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 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 at (800-426-4791) or <http://www.epa.gov/safewater/lead>. The Lead results were below the detectable limits of 2.0 ppb during the 2013 sampling year.

### Town of Eastville Waterworks: Copper Results

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 the personal doctor.

#### Regulated Contaminants

Contaminant	MCL	MCLG	Your Water	Range Low - High	Sample Year	Violation	Typical Source of Contamination
Copper (ppm)	AL = 1.3	0	0.072	ND – 0.118	2014	No	Corrosion of household plumbing; Leaching from wood preservatives

### Town of Eastville Waterworks: Other Results

The results of testing this year indicate that all contaminants tested are below the maximum contaminant levels as set forth by the US EPA for Metals, Inorganics, and VOC.

### Town of Eastville Waterworks: Bacteriological Results

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these waters can cause short-term effects, such as diarrhea, cramps, nausea, headaches, and other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

#### Bacteriological Contaminants

Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation	Typical Source of Contamination
<b>Total Coliform</b>	1 positive sample/month	0	1 of 9 positive samples	N/A	November	Yes	Naturally present in the environment
<b>Fecal Coliform or E. coli bacteria</b>		0	0	N/A		No	Human or animal fecal waste
<b>Total Coliform</b>	1 positive sample/month	0	1 of 6 positive samples	N/A	October	Yes	Naturally present in the environment
<b>Fecal Coliform or E. coli bacteria</b>		0	0	N/A		No	Human or animal fecal waste
<b>Total Coliform</b>	1 positive sample/month	0	1 of 6 positive samples	N/A	March	Yes	Naturally present in the environment
<b>Fecal Coliform or E. coli bacteria</b>		0	0	N/A		No	Human or animal fecal waste

## **MCL VIOLATION INFORMATION**

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Because of the presence of Total Coliforms in the March, October, and November 2014 tests, the Town of Eastville did increased samples in April, November, and December of 2014 to make sure that the Town did not have a problem with its water system. These samples were absent of Total Coliforms so the Town did not have to do any other corrective actions.

Water samples collected and analyzed during the month of November 2014 exceeded the PMCL. Of nine samples collected in November 2014, one indicated the presence of total coliform bacteria.

Water samples collected and analyzed during the month of October 2014 exceeded the PMCL. Of six samples collected in October 2014, one indicated the presence of total coliform bacteria.

Water samples collected and analyzed during the month of March 2014 exceeded the PMCL. Of six samples collected in March 2014, one indicated the presence of total coliform bacteria.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples was a warning of potential problems.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

## **ADDITIONAL INFORMATION**

The state allows us to monitor for some contaminants less often than once per year because the concentrations of these contaminants do not frequently occur. Some of our data, through accurate, is more than a year old.

Other drinking water constituents you may be interested in are as follows:

Total Hardness: 76 mg/l

PH: 7.52

Sodium: 9.92 mg/l

There is presently no established standard for sodium in drinking water. Water containing more than 270 mg/l of sodium should not be used as drinking water by those persons whose physician has placed them on moderately restricted sodium diets. Water containing more than 20 mg/l should not be used as drinking water by those persons whose physician has placed them on severely restricted sodium diets. For information purposes only, we wish to point out that the analysis of this sample indicates that our water system has a sodium content of 9.92 mg/l.

Water acquires its hardness from dissolving mineral-bearing materials of the soil. It is the concentration of calcium and magnesium salts in water. Excessive hardness consumes soap before lather is formed and causes scale to build up in boilers, water heaters, and pipes. Hardness < 60 ppm is considered soft. Hardness > 121 ppm is considered hard.

The U.S. Environmental Protection Agency sets MCLs at very stringent levels. In developing the standards, the EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten thousand to one-in-a-million chance of having the described health effect for other contaminants.

This Drinking Water Quality Report was prepared by:  
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