

TOWN OF SALTVILLE  
CROSS CONNECTION CONTROL  
June 2009

A "cross connection" is an unprotected actual or potential piping or plumbing arrangement between a customer's residential piping system and the public water system through which a substance other than potable water could flow back into the public system. If water pressure in the street becomes lower than normal, water can flow backwards. Water may travel from your piping system or from a hose connected to your piping system backward to your outlets or into the piping in your street.

The most common problems in a home are commode flush tank valves submerged in the tank, the connection of hoses or other devices to hose bibs, and the use of frost-proof yard hydrants. Most homes can be adequately protected by applying an approved vacuum breaker on all hose bibs and through the installation of an anti-siphon flush valve in the commode tank.

Hoses left submerged in swimming pools, animal watering troughs, or having chemical sprayers attached to them are conditions that can be extremely hazardous. Other potential hazards can apply if hoses are left lying on the ground where contaminants such as fertilizer, garden chemicals, or other liquids can be siphoned into the hose and into the home.

Frost-proof yard hydrants drain into the ground when turned off. The drain hole underground could allow contamination to be siphoned into the home. An approved backflow device installed on the line feeding the hydrants will provide adequate protection but is expensive. An alternative is to just plug the drain hole, install a hose bib vacuum breaker, and winterize or eliminate the hydrant.

All inside and outside hose bibs except those for washing machines will require vacuum breakers.

***WARNING***, vacuum breakers may prevent the hose bib from draining. This could allow the hose bib to freeze. Please read the manufactures recommendation for winterizing or purchase the frost-proof type wall hydrants.

Under Public Law 99-339, the Safe Drinking Water Act Amendments of 1986, the waterworks owner has the primary responsibility for preventing substances from an unknown, questionable, or nonpotable source from entering the public water supply.

The consumer, home owner or resident, has the primary responsibility of preventing pollutants or contaminants from entering the residential piping system and back flowing into the public water supply system.

Our first step in implementing the Cross Connection Control Program is to survey our customers. Your cooperation is needed in order to reduce the chance of contaminating our water system. You are asked to complete and return the survey form within 30 days.

Thank you in advance for your cooperation.

Please contact the following if you have questions: Tina Price at 276-496-5030, Ext 22

TOWN OF SALTVILLE  
CROSS CONNECTION CONTROL QUESTIONNAIRE

Resident Name:
Address:
Home Telephone:
Work Telephone:
Date :

What type of cross-connection device is on your waterline?

Type Installed \_\_\_\_\_ Size \_\_\_\_\_  
Unknown \_\_\_\_\_ None \_\_\_\_\_

Please check any item that may apply to your premises:

- outside hose bibs
- swimming pool
- animal watering trough
- shampoo bowl/sink
- private well
- darkroom/photo development equipment
- frost-proof yard hydrant
- Jacuzzi
- dry cleaning equipment
- cistern to collect rain water
- lawn irrigation or sprinkler system
- fire protection sprinkler system
- mop sink/laundry sink with threaded spigot
- baptismal pool
- dye vat
- steam or hot water heating system
- carbonated drink machine
- fish pond
- booster pump
- solar heating system
- hot tub
- dialysis equipment
- water storage tank
- commode tank flush valves submerged in the tank
- sink or bath tub outlet pipe below the rim of the fixture
- water filter, water softener or other water treatment device
- hand held kitchen sink or shower spray head

Please return this form to:

Town of Saltville  
P.O. Box 730  
Saltville, Virginia 24370  
276-496-5030

We will contact you to determine the most cost effective means to provide you and the community protection from cross connections and backflow.

# **Annual Drinking Water Quality Report**

## **Town of Saltville**

### **INTRODUCTION**

This Annual Drinking Water Quality Report for calendar year 2008 is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make 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).

If you have questions about this report, please contact:

276-496-5342 Ext. 4

If you want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact:

Steve Johnson, Town Manager at 276-496-5342 Ext. 32

The times and location of regularly scheduled board meetings are as follows:

The second Tuesday of every month at 7:00 pm at Saltville Town Hall.

### **GENERAL INFORMATION**

Drinking water, including bottled drinking 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 (800-426-4791).

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).

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: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (iii) pesticides and herbicides, which may come from a variety of sources

such as agriculture, urban stormwater runoff, and residential uses; (iv) 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 stormwater runoff, and septic systems; (v) 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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

The Town of Saltville gets its water from two different sources. These include the Cardwell Town Well, which is located in the Poor Valley area and the No. 10 Well, which is located in the Broady Bottom area. The Cardwell Town Well is approximately 450 feet deep and draws groundwater from the Tonoloway Limestone aquifer. The No. 10 Well is approximately 1,050 feet deep and draws groundwater from the Honaker Formation aquifer. Treatment of raw water from these sources consists of chlorination and fluoridation to make the water safe to drink.

## **SOURCE WATER ASSEMENT**

The Virginia Department of Health conducted a source water assessment of our system during 2002. The two well sources were determined to be of highly susceptible 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 of concern, and documentation of any known contamination within the last 5 years. The report is available by contacting Tina at the phone number or address given elsewhere in this drinking water quality report.

## **DEFINITIONS**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2008. In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

*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 a margin of safety.

*Non-detects (ND)* - lab analysis indicates that the contaminant 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.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

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

*Treatment Technique (TT)* - a required process intended to reduce the level of a contaminant in drinking water.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

*Maximum Residual Disinfectant Level Goal or MRDLG* – the level of 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.

*Maximum Residual Disinfectant Level or 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.

**Regulated Contaminants**

Contaminant (units)	MCLG	MCL	Level Detected	Violation (Y/N)	Range	Date of Sample	Typical Source of Contamination
Nitrate (ppm)	10	10	1.1	N	0.49 – 1.1	2008	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	0.99	N	0.93 – 0.99	11/26/07	Water additive which promotes strong teeth
Alpha Emitters (pCi/l)	0	15	2	N	0.2 – 2	2008	Erosion of Natural Deposits
Combined Radium (pCi/l)	0	5	2.8	N	0.7 – 2.8	2008	Erosion of Natural Deposits
Chlorine (ppm)	MRDLG = 4	MRDL = 4	1	N	1.0 – 1.0	2008	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	NA	80	0.7	N	ND – 0.7	2006	By-product of drinking water disinfection

**Lead and Copper Contaminants**

Contaminant (units)	MCLG	Action Level	90 <sup>th</sup> Percentile	Date of Sampling	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead (ppb)	0	AL = 15	1.8	2008	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	0.6939	2008	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

The water quality results are from testing done in 2008. However, the state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

MCL's are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards 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.

### **Additional Information for Lead**

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 **Town of Saltville** 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 15 to 30 seconds or until it becomes cold or reaches a steady temperature 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 or at <http://www.epa.gov/safewater/lead>.

### **VIOLATION INFORMATION**

Your water system did not have any violations during the year.