

# 2018 Annual Drinking Water Quality Report

## South Mountain Water System PWSID# 1195940

### **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

### **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?**

The Town of Pound receives and treats surface water from the North Fork Reservoir. The Pound reservoir and Treatment plant are both located on the North Fork of the Pound River. Feel free to visit the Water plant or call to make arrangements for a group tour.

### **Description of Water Treatment Process**

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through filters that remove even smaller particles. A small amount of chlorine is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

### **Source water assessment and its availability**

The Virginia Department of Health conducted a source water assessment of our watershed during 2001. The North Fork Reservoir was determined to be of HIGH 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 and an inventory of known land use activities of concern. The report is available by contacting the representative at the phone number given elsewhere in this drinking water quality report.

### **Why are there 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: **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 stormwater 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 stormwater 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 stormwater runoff, and septic systems; and 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.

### **How can I get involved?**

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

**Date:** 2nd Tuesday of each month    **Time:** 6:00 PM    **Location:** Wise County PSA Office  
5622 Industrial Park Rd, Wise, VA 24293

The Town of Pound Council Members normally meet at 6:00 pm on the third Thursday of each month at the Town Hall. If you have any comments or suggestions, please contact the Town Hall for the next scheduled Council Meeting. The Customer's input is always welcome. For additional information call (276) 679 -1520.

### **Other Information**

In 2016, the Town of Pound began monitoring for Cryptosporidium in the source water (before treatment) as required by EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). Cryptosporidium is a microscopic parasite found in surface water throughout the United States. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Under the LT2ESWTR, the average Cryptosporidium concentration determines if additional treatment measures are needed. Twenty-four samples were required for analysis over a two-year period and the average Cryptosporidium concentration was 0 oocysts per liter for the samples collected. Based on the Cryptosporidium monitoring results and the current performance of the treatment plant, we anticipate meeting the future treatment requirements of the LT2ESWTR.

### **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. South Mountain Water System - WCPSA 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 or at <http://www.epa.gov/safewater/lead>.

# Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. 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 vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	0.74	0.4	1.2	2018	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	62	41	89	2018	Yes	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	67	48	73	2018	No	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.024	NA	NA	2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.7	NA	NA	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Microbiological Contaminants</b>								
Turbidity (NTU)	NA	0.3	0.14	NA	NA	2018	No	Soil runoff
100 % of the samples were below the TT value of .3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.2. Any measurement in excess of 1.0 is a violation unless otherwise approved by the state.								
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source	
<b>Inorganic Contaminants</b>								
Copper - action level at consumer taps (ppm)	1.3	1.3	0.22	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
<b>Inorganic Contaminants</b>								
Lead - action level at consumer taps (ppb)	0	15	7	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

## Violations and Exceedances

### Haloacetic Acids (HAA5)

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. The HAA5 Locational Running Annual Average (LRAA) exceeded the MCL of 60 mg/L in the second and third quarters of 2018. The first exceedance was caused by high Second Quarter 2018 detection from April through June 2018. The second exceedance was caused by high Third Quarter 2018 detection from July through September 2018. The slightly elevated levels caused the LRAA of results to exceed the MCL, resulting in a violation being issued for the final two quarters of 2018 (July through September and October through December). No action on your part is necessary at this time. We are working with the Health Department to determine why the HAA5s are elevated while also flushing the distribution system to reduce the HAA5 levels. Quarterly samples continue to be taken.

## Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
Arsenic (ppb)	0	10	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Xylenes (ppm)	10	10	ND	No	Discharge from petroleum factories; Discharge from chemical factories

## Unit Descriptions

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

## Important Drinking Water Definitions

Term	Definition
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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

**Important Drinking Water Definitions**

	microbial contaminants.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
LRAA	LRAA: Locational Running Annual Average. The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**For more information please contact:**

Bobby Reynolds, Jr. *Wise County PSA*  
Address: P.O. Box 3388  
Wise, VA 24273  
Phone: 276-762-0159

You may also contact:

Mr. Allen Bateman - *Pound Water Treatment Plant*  
(276) 796-4834

**IF YOU DESIRE A PAPER COPY YOU CAN RECEIVE ONE AT THE WISE COUNTY PUBLIC SERVICE AUTHORITY'S OFFICE.**