

***Annual Drinking Water Quality  
Report***  
**Town of Pound**  
**PWSID # 1195650**

This Annual Drinking Water Quality Report for calendar year **2018** 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:**

Allen Bateman, Mayor; P.O. Box 880, Pound, VA 24279 276-796-4834

The times and location of regularly scheduled board meetings are as follows:  
Town of Pound Council meets the 3rd Tuesday of each month in the Town Hall.

**GENERAL INFORMATION**

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: (1) Microbial contaminants, such as viruses and bacteria, which 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. (5) 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 which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

## **SOURCES OF YOUR DRINKING WATER**

The source of your drinking water is surface water from North Fork of the Pound River Lake which is treated by the Town of Pound Water Treatment Plant. The Virginia Department of Health and the Town of Pound conducted a source water assessment of our system during 2002. The North Fork of the Pound River Lake 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 Allen Bateman at the phone number given elsewhere in this drinking water quality report.

## **DEFINITIONS**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The tables on the next two pages shows the results of our monitoring for the period January 1<sup>st</sup> to December 31<sup>st</sup>, 2018. In the tables 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. *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.

*Level 1 assessment* - a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

*Level 2 assessment* - a very detailed study of the waterworks to identify potential problems and determine (if possible) why an *E. coli* PMCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## WATER QUALITY RESULTS

### Regulated Contaminants

Contaminant (units)	MCLG	MCL	Level Detected	Violation (Y/N)	Range	Date of Sample	Typical Source of Contamination
Trihalomethanes ( ppb )	N/A	80	52	N	19 - 72	2018	By-product of drinking water disinfection
Haloacetic Acids (ppb)	NA	60	65	Y	22 - 84	2018	By-product of drinking water disinfection
Barium (ppm)	2	2	0.038	N	N/A	2018	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	4.0	4.0	0.89	N	0.3 – 1.2	2018	Water additives to control microbes
Turbidity (NTU)	N/A	TT, 1 NTU max	0.28	N	N/A	2018	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.
		TT, <0.3 NTU 95% of time	100 %	N	N/A		
Total Organic Carbon	NA	TT, MET when > or = 1	1.0	N	1.0 – 1.1	2018	Naturally present in the environment
Fluoride (ppm)	4	4	0.74	N	0.54-0.74	2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

### Lead and Copper Contaminants

Contaminant (units)	MCLG	Action Level	90 <sup>th</sup> Percentile Level Detected	Date of Sampling	# of Sampling Sites Exceeding Action Level	Typical Source of Contamination
Lead (ppb)	0	AL= 15	7	2017	0	Corrosion of household plumbing system; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	0.22	2017	0	Corrosion of household plumbing system; Erosion of natural deposits

The water quality results in the above tables are from testing done in 2018. 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 HEALTH INFORMATION**

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 Pound 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 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 of at <http://www.epa.gov/safewater/lead>.

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 are required for analysis over a two-year period. During 2018, the average Cryptosporidium concentration was 0 oocysts per liter for the 12 samples collected. Based on the Cryptosporidium monitoring results so far and the current performance of the treatment plant, we anticipate meeting the future treatment requirements of the LT2ESWTR.

## **Violations and Exceedances**

### **FAILURE TO REPORT BY 10TH DAY OF MONTH**

On January 25, 2018 the Town of Pound was issued a Notice of Violation (NOV) for failing to submit the September 2017 monthly operational reports to the Virginia Department of Health Office of Drinking Water (VDH ODW) by the the 10<sup>th</sup> day of the following Month (October 10, 2017). The report was submitted to VDH ODW after the deadline and there was no effect on the quality of your drinking water.

### **FAILURE SUBMIT OEL REPORT FOR HAA5**

On January 25, 2018 the Town of Pound was issued a Notice of Violation (NOV) for failing to submit the Operational Evaluation Limit (OEL) report to the Virginia Department of Health Office of Drinking Water (VDH ODW) in last quarter (October-December 2017) reporting period. The OEL is used to predict Disinfection By-Products (TTHM & HAA5) results for the next compliance period (which would have been January – March 2018). Failure to submit the report by the reporting deadline resulted in no threat to the quality of your drinking water.

### **MCL, LRAA; TOTAL HALOACETIC ACIDS (HAA5)**

On February 23, 2018 the Town of Pound was issued a Notice of Violation (NOV) for exceeding the MCL Locational Running Annual Average (LRAA) for Total HAA5 during the Fourth Quarter (October – December) of 2017. This exceedance was caused by high detection of Total HAA5 in both the Second (April – June) and Third (July – September) Quarters of 2017. Some people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer. The Town is working with the Health Department Office of Drinking Water (ODW) to determine the cause of the high detection values. System treatment and distribution system practices, including storage tank operations, excess storage capacity and treatment changes or problems that may contribute to TTHM formation are being examined while flushing of the distribution system to reduce existing levels is being carried out.

## Violations and Exceedances

### **MCL, LRAA; TOTAL HALOACETIC ACIDS (HAA5)**

On April 2, 2018 the Town of Pound was issued a Notice of Violation (NOV) for exceeding the MCL Locational Running Annual Average (LRAA) for Total HAA5 during the Fourth Quarter (October – December) of 2017. This exceedance was caused by high detection of Total HAA5 in both the Second (April – June) and Third (July – September) Quarters of 2017. Some people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer. The Town is working with the Health Department Office of Drinking Water (ODW) to determine the cause of the high detection values. System treatment and distribution system practices, including storage tank operations, excess storage capacity and treatment changes or problems that may contribute to TTHM formation are being examined while flushing of the distribution system to reduce existing levels is being carried out.