

Annual Drinking Water Quality Report for 2018

Town of Hurt

PWS ID No. 5143246

INTRODUCTION

This Annual Drinking Water Quality Report for the 2018 calendar year 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, 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:

The Honorable Gary Poindexter
(434) 608-0554

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

1st Tuesday of each month at 7:00 p.m. – Council Chambers, Municipal Building
533 Pocket Road, Hurt, VA

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants in source water may be naturally occurring substances, or may come from septic systems, discharges from domestic or industrial wastewater treatment facilities, agricultural and farming activities, urban stormwater runoff, residential uses, and many other types of activities. Water from surface sources is treated to make it drinkable while groundwater may or may not have any treatment.

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 stormwater 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 stormwater runoff, and residential uses.
- **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.
- **Radioactive contaminants**, which can be naturally-occurring or the result of oil / gas production & 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.

All 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 about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

VULNERABLE POPULATIONS

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).

SOURCE(S) AND TREATMENT OF YOUR DRINKING WATER

The source of your drinking water is water purchased from the Town of Altavista water supply. The Town of Altavista's sources of water include surface supplies from the Staunton River and Reed Creek. Two groundwater (spring) sources, McMinnis Spring and Reynolds Spring, also supplement the Town's water supply, but the water delivered to the Town of Hurt is pumped directly from Altavista's water treatment plant.

Treatment of the raw surface water sources consist of chemical addition, coagulation, flocculation, settling, filtration, fluoridation, corrosion control, and chlorination. All of these processes work together to remove the physical, chemical, and biological contaminants to make the water safe for drinking.

A source water assessment for the Town of Altavista's, our water supplier, was conducted in 2002 by the Virginia Department of Health. The river 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, 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 your water system representative, Mayor Gary Poindexter at (434) 608-0554.

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 350 gallons of water per day? Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving; 3-5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

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 this monitoring for the period of January 1st through December 31st, 2018. 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:

Non-detects (ND) - lab analysis indicates the contaminant is not detectable, based on the limits of the analytical equipment used.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or one penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (µg/l) - one part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.

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

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

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - 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.

Maximum Contaminant Level Goal (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.

Maximum Contaminant Level (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 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.

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.

Variances / exemptions - state or EPA permission not to meet an MCL or a treatment technique under certain conditions.

WATER QUALITY RESULTS

We routinely monitor for various contaminants in the water supply to meet all regulatory requirements. The table lists only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment.

Town of Hurt

Lead and Copper						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found / Range	Violation	Date of Sample	Typical Source of Contamination
Copper (ppm)	1.3	AL = 1.3	0.1 (90 th Percentile) Range: 0.02 to 0.11 Of the ten samples collected; none exceeded the Action Level	No	September 2017	Corrosion of household plumbing systems
Lead (ppb)	0	AL = 15	9 (90 th Percentile) Range: ND- 106 Of the ten samples collected; ONE exceeded the Action Level	No	September 2017	Corrosion of household plumbing systems
Disinfection Byproducts						
Contaminant / Unit of Measurement	MCLG	MCL	Level Found / Range	Violation	Date of Sample	Typical Source of Contamination
HAA5s (Total Haloacetic Acids) (ppb)	N/A	60	Highest Level: 61 Range: 57-69	Yes	Quarterly 2018	By-product of drinking water disinfection
TTHM (Total Trihalomethanes) (ppb)	N/A	80	Highest Level: 76 Range: 44-96	No	Quarterly 2018	By-product of drinking water disinfection
Chlorine (ppm)	MRDL G = 4	MRDL = 4	Avg: 1.3 Range: 0.08-1.99	No	Tested Monthly 2018	Water additive used to control microbes

Town of Altavista

Contaminant/Unit of Measurement	MCLG	MCL	Level Found / Range	Violation	Date of Sample	Typical Source of Contamination
Fluoride – ppm	4	4	0.70 Range: .12 – 1.23	No	Tested Daily	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate-Nitrite – ppm (as Nitrogen)	10	10	0.48 Range: ND – 0.48	No	November 2018	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium	2	2	0.0268	No	December 2017	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Turbidity- NTU	NA	TT=1 MAX TT=<0.3 in 95% of monthly samples	0.07 100% Less than .30	No	Tested Continuously at Water Plant	Soil Runoff
Gross Alpha – pCi/l	0	15	<0.35 Range: .35 - <0.94	No	April 2017	Erosion of Natural Deposits
Combined Radium- pCi-l	0	5	<1.1 Range: <.9 - <1.1	No	April 2017	Erosion of Natural Deposits
Total Organic Carbon (TOC) – ppm	NA	TT Ratio >1.0 or Alternate Compliance	Lowest Ratio: 1.0 Range: 1.0– 1.23	No	Tested Monthly	Naturally present in the environment

Some results are from previous years as sampling for these contaminants are done less frequently than annually. 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 results, though representative, are more than one year old.

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 Hurt* 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>.

Additional Information That You May Be Interested in:

The U.S. Environmental Protection Agency sets MCLs at very stringent levels. 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-one-million chance of having the described health effect for other contaminants.

VIOLATION INFORMATION

The Town of Hurt water system is required to collect routine water samples for bacteriological and chemical analyses to ensure water quality. The Towns Water System exceeded the Primary Maximum Contaminant Level (PMCL) for a Total Haloacetic Acids (HAA5s) in the fourth quarter of 2018 with the locational running annual average (LRAA) of 0.061mg/L. The PMCL for HAA5s is a LRAA of 0.060mg/L. There is not an immediate risk. If there had been, you would have been notified immediately. However, some people who drink water containing HAA5s in excess of the PMCL over many years may have increased risk of getting cancer. TTHM & HAA5 compounds are formed when trace amounts of naturally occurring organic compounds in the raw water source combine with chlorine that is used to disinfect the treated water. The level dropped in the first quarter of 2019 testing bringing the system back in to compliance. We will continue to monitor as required by VDH.