

Annual Drinking Water Quality Report Jonesville Water Treatment Plant

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year **2023** 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:

Brian S. Bush (276) 346-0020

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:

Jerry Harris, Mayor (276) 346-1151

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

The second Tuesday of each month at 6:00 P.M. in the mayor's office, at Cumberland Bowl Park, Jonesville, Virginia

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 storm water 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 storm water 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 storm water 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. Immune-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) OF YOUR DRINKING WATER

The source of your drinking water is groundwater under the direct influence of surface water as described below:

Springs – Wynn and Slem Spring located on Mill Hollow Rd.

The Virginia Department of Health, Office of Drinking Water conducted a source water assessment of our system during May of 2002. The Wynn Spring and the Slem Springs were 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 with the last 5 years. The report is available by contacting Town Hall at the phone number or address given elsewhere in this drinking water quality report. The report may also be available at your local library

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 1st to December 31st, 2023. 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 (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 (MRDL)-The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

WATER QUALITY RESULTS

Microbiological Contaminants

| Contaminant | MCLG | MCL | No. of Samples Indicating Presence of Bacteria | Violation (Y/N) | Month of Sampling | Typical Source of Contamination |
|-------------------------|--------------------|-----------------------------|--|-----------------|-------------------|---------------------------------------|
| Total Coliform Bacteria | 0 positive samples | More than 1 positive sample | 0 | N | none | Naturally present in the environment. |

Regulated Contaminants

| Contaminant (units) | MCLG | MCL | Level Detected | Violation (Y/N) | Date of Sample | Range | Typical Source of Contamination |
|------------------------------------|----------|--|----------------|-----------------|----------------|---------|--|
| Nitrate/Nitrite (PPM) | 10 | 10 | 1.50 | N | 2/13/23 | NA | Farm runoff, fertilizers |
| Combined Radium (pCi/l) | 0 | 5 | .636 | N | 3/02/22 | NA | Erosion of Natural Deposits |
| Barium (mg/l) | 2.0 | <u>2.0</u> | 0.048 | N | 4/13/22 | NA | Discharge of drilling wastes; discharge of metal refineries; Erosion of natural deposits |
| Turbidity* (NTU) | N/A | TT, 1.0 max TT, ≤ 0.3 (95% of the time) | Max 100% | N | Daily 2023 | .06-.06 | Surface runoff |
| Chlorine (PPM) | MRDLG =4 | MRDL = 4 | 1.3 | N | 2023 | 1.2-1.5 | Water additive used to control microbes |
| Total Trihalomethane (PPB) | N/A | 80 | .0003 | N | 8/16/23 | N/A | By-product of drinking water disinfection |
| Haloacetic Acids HAA5(PPB) | N/A | 60 | ND | N | 8/16/23 | N/A | By-product of drinking water disinfection |
| Total Organic Carbon Removal Ratio | N/A | TT, met when ≥1 | 1.0 | N | 2023 | N/A | Naturally present in the environment |

*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our treatment and filtration system.

Lead and Copper Contaminants

| Contaminant (units) | MCLG | Action Level | 90 th Percentile | Date of Sampling | # Of Sampling Sites Exceeding Action Level | Typical Source of Contamination |
|---------------------|------|--------------|-----------------------------|------------------|--|--|
| Lead (PPB) | 0 | 15 | 2 | 9/23 | None | Corrosion of household plumbing systems; erosion of natural deposits |
| Copper (PPM) | 1.3 | 1.3 | 0.098 | 9/23 | None | Corrosion of household plumbing systems; erosion of natural deposits |

The state allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of the data, though representative, 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.

VIOLATION INFORMATION: NOTICE OF ALLEGED VIOLATIONS: 1. It is alleged that the Town of Jonesville may have not had a licensed operator available at all times. 2. Town is not enforcing a cross-connection control program (CCCP). There does not appear to be a designated individual who is responsible for ensuring that the plan is adhered to by consumers served by the Town of Jonesville. 3. Failure to Provide Public Notification for use of unlicensed operator & Failure to Submit Public Notice Certification. 4. The Town has not completed the testing and certification of the RPZ backflow preventer at the water treatment plant.

ADDITIONAL HEALTH INFORMATION

Certain contaminants (such as, arsenic, nitrate, and lead), if present in your drinking water, may be of special concern to consumers. **None** of those contaminants are present at levels of concern that must be reported. If present elevated levels of lead can cause serious health problems, especially in pregnant women and children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Jonesville 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 (800-426-4791) or at www.epa.gov/safewater/lead.

ADDITIONAL INFORMATION ABOUT YOUR WATERWORKS:

The Mayor and Town Council as well as the staff of the Jonesville Water Treatment Plant continue to strive to bring clean safe drinking water to the residents of the Town of Jonesville as well as the surrounding communities.

Other Information - Sodium

There is presently no established standard for sodium in drinking water. Water containing more than 270 ppm of sodium should not be used as drinking water by those persons whose physician has placed them on a moderately restricted sodium diet. Water containing more than 20 ppm should not be used as drinking water by those persons whose physician has placed them on a severely restricted sodium diet. For informational purposes, **we wish to point out that the results of our most recent sampling (2023) indicate that your water has a sodium content of 1.01 ppm.**

This report will not be mailed paper copies available at Town Hall on request.