2022 Consumer Confidence Drinking Water Quality Report

Town of Chase City
PWSID NO. 5117200

INTRODUCTION

This Consumer Confidence Drinking Water Quality Report for calendar year 2022 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 or 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:

Donald Long, Public Works Superintendent at (434) 372-3220

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

Second Monday of each month at 7:00 p.m.

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. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ trans-plants, 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 and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of 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 limit the amount of certain contaminants in bottled water which must provide the same protection for public health.

SOURCE(S) OF YOUR DRINKING WATER
The source of your drinking water is surfaced water as described below.

On July, 20, 2012 well water was replaced with surface water from the Roanoke River Service Authority (RRSA).

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and Stater regulations.

The following table shows the results of our monitoring for the period of January 1st to December 31st, 2022. 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 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 (ppd) 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 (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 – MCLG – the level a contaminant in drinking water below which there is no know or expected risk to health. MCLGs allow for a margin of safety.

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

< - is a symbol meaning less than.

"*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 line and home plumbing. The Town of Chase City 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 and 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 http://www.epa.gov/safewater/lead."

WATER QUALITY RESULTS – TOWN OF CHASE CITY – REGULATED CONTAMINANTS

			Lead and Copper			
Contamination/Unit of Measurement	MCLG	MCL	Level Found/Range	Violation	Date of Sample	Typical Source of Contamination
Lead (Ppb)	0	AL=15	<2 (90th percentile) Range = All ND - Of the 10 samples collected none exceeded the AL.	No	September 21, 2022	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (Ppm)	1.3	AL=1.3	0.03 (90th percantile) Range = ND - 0.04 - Of the 10 sampels collected none exceeded the AL.	No	September 21, 2022	Corrosion of household plumbing systems; Erosion of natural deposits
HAA5 - Total Haloacetic Acids (Ppb)	N/A	60	24 / Range 16-33	No	Quarterly	By product of Drinking Water Disinfection
TTHM Total Trihalomethanes (Ppb)	N/A	80	35 / Range 26-42	No	Quarterly	By product of Drinking Water Disinfection
Chlorine (ppm)	4	4	.03 / 0 - 1.35	No	Monthly	Drinking Water Disinfection

Sodium

The sodium concentration of 12.9 mg/L in our treated water as measured in a sample collected in January 2022 by the Roanoke River Service Authority is below the EPA –recommended optimal level of less than 20 mg/L of sodium in drinking water. The level is established for those individuals on a "strict" sodium intake diet.

A Source Water Assessment of our system has been conducted by the Virginia Department of Health. The lake/river was determined to be of high susceptibility to contamination using the criteria developed by the state in its approved 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. Additional information is available by contacting your water system representative at the phone number and address given elsewhere in this drinking quality report.

WATER QUALITY RESULTS- ROANOKE RIVER SERVICE AUTHORITY – REGULATED CONTAMINANTS

			Results of Water Quality Analysis			
	N/A=Not Applicable TT=Treatment Technique ND=Non Detects					
Containment & Unit of Measurement	MCLG	MCL	Level Detected and/or Range	Violation	Testing Frequency or Samplet Date	Sources of Substances or Compound
Turbidity - (NTU) *See Footnote #1	N/A	TT-1 NTU Max	0.10 Max. Range: 0.03-0.10	No	Tested Continuously at plant	Soil Runoff
		TT = at least 95% of the monthly samples <0.3 NTU	100%		Tested Continuously at plant	
Fluoride - (ppm)	4	4	Avg. = 0.78 Range: 0.69 – 0.88	No	Tested Daily on finised water at the plant once per shift	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories; desired level 0.9
Total Organic Carbon (TOC) See footnote #2	N/A	TT=Based on the %of TOC removed during the treatment process; ratio must be greater thatn or equal to 1.00	Lowest Running Qtr. Avg. 1.57 Range 1.97 - 2.32	No	Tested monthly on raw and treated water	Naturally present in environment
Nitrate - Nitrite (ppm)	10	10	0.12	No	January 2022 Annually	Runoff from ferilzier use; leaching from septic tanks,
Barium (ppm)	2	2	0.016	No	Tested Annually	Erosion of natural deposits.

*footnote #1: *Turbidity* is a measure of the cloudiness of the water and is used because it is a good indicator of how well the filtration system is functioning at the Water Treatment Plant. Turbidity sample results were taken at the Water Treatment Plant.

*footnote #2: Total organic carbon (TOC) has no health effect. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and Haloacetic Acids (HAAs). Drinking water containing these produces in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous systems effects, and may lead to an increased risk of getting cancer.

The Roanoke River Service Authority serves 92 customers, as well as, the Towns of South Hill, La Crosse, Brodnax, Chase City, Boydton and portions of Bracey area as well as the Counties of Mecklenburg and Brunswick. During the calendar year 2020 RRSA supplied a total of 463,330,569 gallons of water to all water systems listed above.

We regularly monitor for various contaminants in the water supply to meet all 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 not present o were below the detection limits of the lab equipment.

Most of the results in the table are from testing done in 2022. However, the state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently.

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 one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

Did any monitoring, reporting, or other violations occur during the year: (X) Yes () No

VIOLATION INFORMATION: The Town of Chase City incurred two Failure to Monitor Violation in January 2022. A failure to monitor for bacteriological containments occurred in January 2022. A second failure to monitor for disinfection byproducts (TTHM and HAA5) occurred in August 2022.

Bacteriological sampling is conducted monthly and subsequent bacteriological results have all been satisfactory.

Disinfection byproducts are sampled quarterly, and these results have also been satisfactory.

The health effects of not sampling are unknown.

This Consumer Confidence Drinking Water Quality Report was presented by:

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