Annual Drinking Water Quality Report

Town of Montross, Virginia

INTRODUCTION

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, 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:

Patricia K. Lewis, Town Manager @ (804) 493-9623

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

Town Council meeting on the 4th Tuesday of each month at 7:30 P.M. at the Town Hall

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. 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).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, stream, 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 agricultural, 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 results 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 in water 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.

SOURCE and TREATMENT OF YOUR DRINKING WATER

The source of your drinking water is groundwater as described below:

Well #2 is located off Kings Highway behind Montross Vintage. Well #3 is located off Kings Highway adjacent to the Washington and Lee High School. The only treatment provided is chlorination, which is to prevent bacteriological growth in the distribution system.

The Virginia Department of Health conducted a source water assessment of our system during **2001**. Well No. 2 and Well No. 3 received **low** rating of susceptibility to contamination, using criteria developed by the State in its EPA-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 from the date of the assessment. The report is available by contacting Ms. Lewis at the phone number or address 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 page show the results of our monitoring. 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:

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 (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, 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.

 $Maximum\ Residual\ Disinfectant\ level\ (MRDL)$ — 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.

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.

WATER QUALITY RESULTS

I. Lead and Copper Contaminants

17 Dead and Copper Contaminants										
Contaminant	Units of	Action	MCLG	Results of samples	Action Level	Month of	# of Sampling	Typical Source of Contamination		
	Measurement	Level		for the 90 th	Exceedance	Sampling	Sites Exceeding			
				Percentile Value	(Y/N)		Action level			
								Corrosion of household plumbing systems;		
Copper	ppm	1.3	1.3	0.093	N	9/17	0	Erosion of natural deposits; Leaching from		
								wood preservatives		
Lead	ppb	15	0	< 2	N	9/17	0	Corrosion of household plumbing systems;		
								Erosion of natural deposits		

Lead Education Statement:

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. Town of Montross 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 cooking or drinking. 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 at http://www.epa.gov/safewater/lead.

II. Other Chemical and Radiological Contaminants

Contaminant	Units of	MCLG	MCL	Level	Violation	Range of Detection	Month of	Typical Source of Contamination
	Measurement			Detected	(Y/N)	at Sampling Points	Sampling	
Fluoride	ppm	4	4	2.32	N	2.31 – 2.32	5/18	Erosion of natural deposits; water additives that promote strong teeth; discharge from fertilizer and aluminum factories.
Barium	ppm	2	2	0.022	N	0.012 - 0.021	5/18	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
HAA5's (Halo Acetic Acids)	Ppb	N/A	60	1.2	N	N/A	8/17	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes)	ppb	N/A	80	5.9	N	N/A	8/17	By-product of drinking water chlorination
Gross Beta (1)	pCi/l	0	50	6.1	N	5.6-6.1	2/14	Decay of natural and man-made deposits

⁽¹⁾ The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

III. Disinfectants

Disinfectant	Units of Measurement	MRDLG	MRDL	Level Detected (Annual Average)	Violation (Y/N)	Range of Detection at Sampling Points	Sampling Year	Typical Source
Chlorine	ppm	4	4	0. 36	N	0.05 - 0.61	2018	Water additive used to control microbes

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list 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.

Some of the water quality results reported in the tables are from testing done prior to this calendar year. Because the concentrations of these contaminants do not change frequently, the state allows us to monitor for some contaminants less than once per year. 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.

VIOLATION INFORMATION

Your water system did not have any violations during the year.

FLUORIDE PUBLIC NOTICE

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your water system has an average fluoride concentration of 2.32 mg/l.

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please call Patricia K. Lewis, Town Manager, at (804) 493-9623. Some home water treatment units are available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

SPECIAL NOTICE OF THE AVAILABILITY OF UNREGULATED CONTAMINANT MONITORING RESULTS

The Safe Drinking Water Act (SDWA), as amended in 1996, requires the U.S. Environmental Protection Agency to establish a program to monitor unregulated contaminants and to publish a list of contaminants to be monitored. In fulfillment of this requirement, EPA published the Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR) for public water systems, which included lists of contaminants to be monitored. The intent of this monitoring was to gather occurrence data for these contaminants. EPA randomly selected Town of Montross and many other waterworks to participate in this monitoring program. We are pleased to announce that so far the test results have not shown any detection of the unregulated contaminants. The test results are available at the Town office. To obtain a copy or to review the test results, please contact Ms. Lewis at the phone number or address given elsewhere in this drinking water quality report.

This Drinking Water Quality Report was prepared for:

Patricia K. Lewis, Town Manager
15869 Kings Highway
Montross, VA 22520
(804) 493-9623