

Annual Drinking Water Quality Report ***Pounding Mill***

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year 2022 is designed to provide you with valuable information about your drinking water quality. We are committed to providing 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 meets all 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:

Mr. Gary Hepler, Assistant Director of Public Works - (540) 863-6650
--

GENERAL INFORMATION

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Substances (referred to as contaminants) in source water 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.

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 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 AND TREATMENT OF YOUR DRINKING WATER

Your drinking water is supplied by water purchased from the City of Covington. The City of Covington drinking water is surface water obtained from the Jackson River and is treated at the City's Jackson River Water Treatment Plant. The treatment plant includes coagulation, sedimentation, filtration, chlorination and fluoridation. Water is distributed throughout the system by booster pumping stations, storage tanks and distribution piping.

Groundwater may be obtained from a local spring during emergencies. Should it be necessary to draw water from the spring, chlorine disinfection will be used for treatment. After treatment, the water will be pumped into the system, filling the two atmospheric storage tanks and then out to the distribution system.

SOURCE WATER ASSESSMENTS

A source water assessment of the spring has been completed by VDH. The assessment determined that the spring may be susceptible to contamination because it is located in an area that promotes migration of contaminants from land use activities of concern. More specific information may be obtained by contacting the water system representative listed above.

A source water assessment for the Jackson River Water Treatment Plant was completed by the VDH. This assessment

determined that the water source (Jackson River) may be susceptible to contamination. All surface water sources (rivers, reservoirs) are exposed to a wide array of contaminants of varying concentrations and changing hydrologic, hydraulic, and atmospheric conditions that promote migration of contaminants from land use activities of concern within the assessment area. More specific information may be obtained by contacting the water system representative listed above.

QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The tables that follow show the results of our monitoring for the period of January 1, 2022 through December 31, 2022.

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 concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

DEFINITIONS

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:

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 (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 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 contamination.

Nephelometric Turbidity Unit (NTU) - A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Non-detects (ND): The substance was not found by laboratory analysis.

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g/L}$): One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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.

Picocuries per liter (pCi/L): A measure of the radioactivity in water.

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

WATER QUALITY RESULTS

PWSID 2005600 – Pounding Mill

(Covington Water) TURBIDITY ¹							
Contaminant (Unit)	MCLG	MCL	Level Found	Lowest Monthly % < 0.3 NTU	Violation	Date	Typical Source of Contamination
Turbidity (NTU)	NA	TT	0.17	All monthly samples were < 0.3 NTU 100 % of the time	No	Daily	Soil Runoff

(Covington Water) TOTAL ORGANIC CARBON							
Contaminant	MCLG	MCL	Level Range		Violation	Date	Typical Source of Contamination
Total Organic Carbon	NA	TT	ND to 1.2		No	Monthly	Naturally present in the environment

Microbiological Contaminants (Emergency Spring)

Contaminant	MCLG	MCL	No. of Samples Indicating Presence of Bacteria	Violation (Y/N)	Month of Sampling	Typical Source of Contamination
<i>E. coli</i>	0	1 routine sample and a repeat sample are total coliform positive, and 1 is also <i>E. coli</i>	2	N	5/22 & 10/22	Human and animal fecal waste

LEAD AND COPPER

Contaminant (Unit)	MCLG	MCL	90 th percentile	Exceedance	Date	Typical Source of Contamination
Lead (ppb)	0	AL=15	3.0 No samples exceeded the AL	No	2021	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.27 No samples exceeded the AL	No	2021	Corrosion of household plumbing systems; Erosion of natural deposits

DISINFECTION BYPRODUCTS

Contaminant (Unit)	MCLG	MCL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Total Trihalomethanes (ppb)	NA	80	39 (24 – 56)	No	2022	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	47 (27 – 47)	No	2022	By-product of drinking water chlorination

DISINFECTION RESIDUAL

Contaminant (Unit)	MRDLG	MRDL	Level Found (Range)	Violation	Date	Typical Source of Contamination
Chlorine (ppm)	4	4	1.06 (0.29 - 1.06)	No	Monthly	Water additive used to control microbes

(Covington Water) INORGANIC CONTAMINANTS

Contaminant (Unit)	MCLG	MCL	Level Found	Violation	Date	Typical Source of Contamination
Barium (ppm)	2	2	0.038	No	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.83 (0.45 to 0.83)	No	Monthly	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.06	No	2022	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

UNREGULATED CONTAMINANT

Contaminant (Unit)	MCLG	MCL	Level Found	Exceedance	Date	Typical Source of Contamination
Sodium (ppm)	NA	NA	3.1	NA	2022	Erosion of natural deposits; De-icing salt runoff; Water softeners

RADIOLOGICAL CONTAMINANTS

Contaminant (Unit)	MCLG	MCL	Level Found	Violation	Date	Typical Source of Contamination
Beta emitters (pCi/L)	0	50*	0.9	No	2017	Decay of natural and man-made deposits
Combined Radium (pCi/L)	0	5	1.4	No	2017	Erosion of natural deposits

1 Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of our water quality and the effectiveness of the filtration process.

* The MCL for beta particles is 4 mrem/yr. EPA considers 50 pCi/L to be the level of concern for beta particles.

RESULTS INFORMATION

We constantly 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.

Maximum Contaminant Levels (MCLs) 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.

Sodium - There is presently no established standard for sodium in drinking water. An EPA advisory recommends water containing 30 to 60 mg/L should not be used as drinking water due to esthetics such as taste and color. Water containing more than 20 mg/L should not be used by persons whose physician has placed them on severely restricted sodium diets.

LEAD 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 Pounding Mill Water System 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 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 <http://www.epa.gov/safewater/lead>.

E. Coli Information

Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and headaches. *Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.*

We had two routine raw water samples collected during the year 2022 that indicated presence of E. coli bacteria. The VDH requires that we collect raw water samples to assess raw water quality. Additionally, disinfection and filtration treatment is provided to your water. Please note that no E. coli bacteria was detected in the treated water served to you. This indicates that disinfection and filtration treatment appears to be properly functioning and is eliminating the E. coli bacteria.

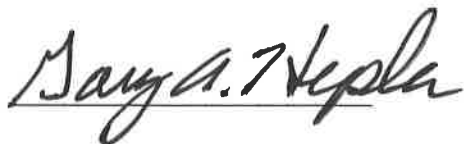
VIOLATION INFORMATION

Water Quality Violations – None

Monitoring and Reporting Violations -- None

This Drinking Water Quality Report was prepared by the Alleghany County Department of Public Works with the assistance and approval of the Virginia Department of Health. Please call if you have questions.

Signature:



Date:

05.08.23