Annual Drinking Water Quality Report

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www.rockvillemd.gov/waterquality

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Dear Valued Customer,

The City of Rockville is proud to present this report of our city's drinking water source, treatment, distribution, safety and quality. Once again, Rockville's drinking water met or exceeded all federal water quality regulation limits. Rockville's water system serves 70% of the city, or approximately 13,500 accounts and 52,000 community members. The Washington Suburban Sanitary Commission serves the remainder of the city.

At our Potomac River water treatment plant, operators monitor water quality to ensure effective treatment, chlorination and corrosion control measures to prevent lead and copper in distribution pipes from leaching into drinking water. Thousands of daily, monthly, quarterly and annual water quality and laboratory tests help determine the treatment necessary to provide safe, reliable drinking water.

Upgrades to the treatment plant are completed, with replacement of aged electrical systems and components that provide primary power and updates to the main building roof, HVAC and occupied operational areas, which had been unimproved since 1958. The plant is undergoing network security and cybersecurity improvements as well as a chemical feed project to replace chlorine gas with sodium hypochlorite (liquid chlorine). These improvement projects will enhance system security, reliability and community safety and provide safer workspace for employees.

The plant received the Ten-Year Directors Award from the American Water Works Association for a utility committed to providing a reliable source of high-quality drinking water for the community.

As part of recent Lead and Copper Rule Revisions by the U.S. Environmental Protection Agency, Rockville is inventorying all water service line materials on public and private property. The city will prepare a lead service line replacement plan and review corrosion control treatments based on rule revisions. Learn more at www.rockvillemd.gov/LCRR.

We welcome you to learn more at www.rockvillemd.gov/water. We thank you for your continued support of our mission to maintain a reliable water system to provide safe and high-quality drinking water to our customers.

Craig L. Simoneau, Director of Public Works, City of Rockville

City of Rockville Public Works

Is my water safe?

The City of Rockville's drinking water is safe, as set forth in the Environmental Protection Agency (EPA) regulations and adopted and enforced by the Maryland Department of the Environment (MDE). For the 2024 calendar year, the city's water met or exceeded all water quality requirements.

The Water Quality Data Table shown on page 2 of this report lists all the drinking water contaminants that were detected. None of these contaminants exceeded the drinking water standards. This report will help to inform you about the quality of your water and includes details about where your water comes from, what it contains and how it compares to standards set by state and federal regulatory agencies.

Why are contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain 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 EPA Safe Drinking Water hotline at 1-800-426-4791.

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 can pick up substances resulting from the presence of animals or from human activity, including:

- 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.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.
- Microbial contaminants, such as viruses and bacteria that may come from wastewater treatment plants, septic systems, agricultural livestock operations and wildlife.
- 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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Water Quality Data: WATER TREATMENT PLANT PERFORMANCE

DETECTED REGULATED CONTAMINANTS	MCLG OR MRDLG	MCL, TT OR MRDL	HIGHEST LEVEL DETECTED	RANGE LOW	RANGE HIGH	IS THIS A VIOLATION?	LIKELY SOURCE OF CONTAMINATION
Turbidity (NTU)	NA	TT=1.0	0.18	0.01	0.26	No	Soil runoff.
Lowest monthly % meeting limit	NA	TT=0.3	NA	100%	NA	No	Soil runoff.
Residual Chlorine (ppm)	4	TT>0.2	1.32	Met all TT requirements.		No	Water additive to control microbes.
Total Organic Carbon	NA monthly	TT	Measured	Met all TT requirements.		No	Naturally present in the environment.
E.Coli	0.0	*	3	0	3	No	Human and animal fecal waste

* A routine sample and a repeat sample are Total Coliform positive, and one is also Fecal Positive/E.coli positive

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful. waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.During the past year we were required to conduct __1__ Level 1 assessments. __1___ Level 1 assessments were completed. In addition, we were required to take ___0__ corrective actions and we completed __0___ corrective actions.

E.coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. Although E.coli was detected in the sample, there was not a violation of the E.coli MCL

INORGANIC CONTAMINANTS	MCLG	MCL	HIGHEST LEVEL DETECTED OR AVERAGE	RANGE LOW	RANGE HIGH	IS THIS A VIOLATION?	LIKELY SOURCE OF CONTAMINATION
Barium (ppm)	2	2	0.037	0.03	0.03	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	4	4	0.56	0.41	0.64	No	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (ppm), measured as nitrogen	10	10	ND	1.3	1.3	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES							
Atrazine (ppb)	3	3	ND	NA	NA	No	Runoff from herbicide used on row crops.

Water Quality Data: WATER DISTRIBUTION SYSTEM

DISINFECTANTS & DISINFECTION BYPRODUCTS	MCLG OR MRDLG	MCL	RANGE LOW	RANGE HIGH	LRAA	IS THIS A VIOLATION?	LIKELY SOURCE OF CONTAMINATION
Residual Chlorine (ppm), measured as free chlorine	4.0	4.0	0.76	1.32	N/A	No	Water additive to control microbes.
Total Trihalomethanes (TTHM) (ppb)	NA	80	20.6	122	69	No	Byproduct of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	NA	60	2.3	44	24	No	Byproduct of drinking water disinfection.

METALS AT CONSUMER TAPS	MCLG	ACTION LEVEL	90TH PERCENTILE	NO. OF SITES OVER ACTION LEVEL	RANGE LOW	RANGE HIGH	UNITS	IS THIS A VIOLATION?	LIKELY SOURCE OF CONTAMINATION
Copper (ppm) (2024 test)	1.3	1.3	0.100	0	0.015	0.560	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb)	0	15	<1	0	<1	4.0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

UNREGULATED CONTAMINANTS	AVERAGE	RANGE LOW	RANGE HIGH	MCL
PFAO	2.07	1.5	2.6	4.0
PFOS	2.00	1.2	3.19	4.0
PFHxS	1.13	0	1.9	10.0
HFPO-DA (GenX)	0.00	0.00	0.00	10.0
PFNA	0.27	0	0.57	10.0
PFBA	1.42	0	2.8	10.0
Hazard Index Calculation	0.14	0	0.25	1.0 (unitless)

For more information, please contact: James Boone, acting water treatment plant superintendent, at 240-314-8561 or jboone@rockvillemd.gov.
This Drinking Water Quality Report is available on the city's website and posted online at www.rockvillemd.gov/waterquality. Paper copies are also available in City of Rockville facilities, including City Hall and recreation centers. If you would prefer a paper copy of the Drinking Water Quality Report mailed to your home, please call 240-314-8500. Please share this information with all other people who drink City of Rockville water, especially those who may not have received this notice directly, (e.g., in apartments, nursing homes, schools and businesses). You can do this by printing and posting this report in a public place and/or by distributing copies or the web address. Visit www.rockvillemd.gov/AgendaCenter for upcoming meetings of the Mayor and Council. The city provides numerous opportunities for public participation. For more details, visit www.rockvillemd.gov/mayorcouncil.

This report is required by the United States Environmental Protection Agency and the Maryland Department of the Environment.

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Definitions Used in This Report

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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 Goal or 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 or 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.

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

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Avg: Average. Regulatory compliance with some MCLs are based on a running annual average of monthly samples.

LRAA: Locational Running Annual Average

mrem: millirems per year (a measure of radiation absorbed by the body)

ppt:
ppb: Parts per billion or micrograms per liter (ug/L). Equivalent to one ounce in 7,350,000 gallons of water.

ppm: Parts per million or milligrams per liter (mg/L). Equivalent to one ounce in 7,350 gallons of water.

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

NA: not applicable.

Where does my water come from?

Our primary source of water is the Potomac River. When Rockville's water plant is not operating because of necessary improvements or maintenance activities, or in cases of regional drought, Rockville purchases water from the Washington Suburban Sanitary Commission (WSSC). In 2024, Rockville purchase about 5.6 million gallons of water (approximately 0.34% of our annual production) from WSSC, which also receives its water from the Potomac River. You can find their water quality report at https://www.wsscwater.com/waterquality

Source water assessment and its availability

MDE performed a source water assessment of the Potomac River as it applies to the Rockville water plant. The 2002 report may be obtained online or by contacting the Water Supply Program at MDE, 1800 Washington Blvd., Baltimore, MD 21230. You can also call 410-537-3589. For more information on the Maryland Source Water Protection Program, go to https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx.

Do I need to take special precautions?

Some people may be more vulnerable than the general population to contaminants in drinking water. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and some elderly and infants can be at risk from infections. These people should seek advice from their health care providers about drinking water. EPA and the Centers for Disease Control (CDC) issue guidelines on appropriate measures to reduce the risk of infection by cryptosporidium and other microbial contaminants. Call the EPA Safe Drinking Water hotline at 1-800-426-4791 for more information.

Additional information about lead

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 City of Rockville is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact James Boone, acting water treatment plant superintendent, at 240-314-8561 or jboone@rockvillemd.gov. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

How is my water treated?

The City of Rockville's water treatment plant was put into service in 1958 and, at that time, was capable of producing 4 million gallons per day (MGD) of treated water. The plant was upgraded in 1967 to increase production to 8 million gallons per day. In the mid-1990s, and in 2017, additional upgrades to the plant were made to meet EPA and MDE regulations. Since then, an average of 5 million gallons per day of raw (untreated) water is withdrawn from the Potomac River, treated at the plant and distributed to the city's water customers. Once at the plant, the water is put through a six-step treatment process to ensure it meets Safe Drinking Water Act standards. Once treated, the water is sent through a series of underground water lines and water storage tanks and to your faucet.

The river water is treated to remove suspended sediments, algae, parasites, pathogens and other contaminants through the following processes:

Screen

Water from the Potomac River is pumped through a screen to remove large debris such as sticks, leaves and rocks. If algae blooms are present in the raw water withdrawn from the river, it is treated with potassium permanganate.

Coagulation

Water is treated with chemical compounds that make small suspended particles stick together and settle out of the water. This particle conglomerate is removed from the water prior to filtration.

Sedimentation

Water is passed through a settling basin or clarifier, allowing time for mud, sand, metals and other sediment to settle out.

Filtration

Water is passed through a dual media (sand and anthracite) filter, which removes many remaining contaminants.

Disinfection

Chlorine is added to the water to kill and/or inactivate any remaining pathogens. Fluoride is added to prevent tooth decay and a corrosion inhibitor is added to preserve the pipes that deliver the water to homes and businesses.

To Homes and Businesses

The treated water is stored in two storage tanks and is gravity-fed to houses and businesses when needed. The water is sampled at the plant, in the distribution system and at the tap in homes and businesses for lead, copper, other potentially harmful contaminants, bacteria and residual chlorine.

Visit www.rockvillemd.gov/waterquality for an in-depth diagram of the water treatment process.

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

이 보고서에는 귀하의 식수에 대한 중요한 내용이 실려있습니다. 그러므로 이 보고서를 이해할 수 있는 사람한테 번역해 달라고 부탁하시기 바랍니다.

此報告包含有關您的飲用水的重要資訊。請人幫您翻譯出來，或請能看懂此報告的人將內容說給您聽。

В этом сообщении содержится важная информация о воде, которую вы пьёте. Попросите кого-нибудь перевести для вас это сообщение или поговорите с человеком, который понимает его содержание.