## NOTICE TO CUSTOMERS OF RAPIDAN SERVICE AUTHORITY'S WILDERNESS WATER SYSTEM

# Levels of Haloacetic Acids Above Drinking Water Standards

In keeping with National Primary Drinking Water Regulations, we are obliged to inform you that we may be in violation of state regulations because drinking water being served to our customers in the Wilderness water system did not comply with the Primary Maximum Contaminant Level (MCL) for Haloacetic Acids in the 4<sup>th</sup> Quarter of 2024.

Compliance with the MCL for Haloacetic Acids is based on an average of the prior four quarters of test results for each testing location. This one-year average value is called the Locational Running Annual Average (LRAA). To comply with the Haloacetic Acid MCL, an LRAA must not exceed 60 parts per billion (ppb).

In the Wilderness water system, there are four approved testing locations: Ramsay Rd (DS001), Flat Run Rd at Locust Grove Middle School (DS002), Wilderness Shores Way (DS003), and Route 3 at Germanna Community College (DS004). The testing results received from the 1<sup>st</sup> Quarter through 4<sup>th</sup> Quarter of 2024 show that the LRAA at one of the four sample sites exceeded the MCL for Haloacetic Acids. As shown in the table below, none of the test results from the 4<sup>th</sup> Quarter of 2024 exceeded 60 ppb; however, **the LRAA at site DS004 was 62 ppb**.

Sample Location	1 <sup>st</sup> Quarter 2024	2 <sup>nd</sup> Quarter 2024	3 <sup>rd</sup> Quarter 2024	4 <sup>th</sup> Quarter 2024	Locational Running Annual Average (LRAA)
DS001	53	72	56	46	57
DS002	57	58	31	54	50
DS003	35	52	33	36	39
DS004	76	73	39	60	62

## What are Haloacetic Acids?

Drinking water is disinfected to kill bacteria and viruses that cause serious illnesses and, in some cases, death. Disinfecting drinking water with chlorine has dramatically lowered rates of infectious diseases like typhoid, hepatitis, and cholera since its first use in 1908. Your waterworks and the vast majority of other waterworks across the world still use chlorine to protect consumers from disease.

Haloacetic Acids are a group of chemicals called disinfection byproducts - one of more than 90 contaminants monitored in your drinking water on a regular basis. They are created during the water treatment, storage, and distribution process when naturally occurring organic matter from your source water (the Rapidan River) comes in contact with the chlorine used to disinfect your drinking water. There are several factors which influence the formation of these contaminants, including organics content, chlorine concentration, pH, and temperature.

The Environmental Protection Agency (EPA) Stage 1 Disinfection Byproducts Rule to regulate Haloacetic Acids went into effect for small surface water and ground water systems in December 2003. An MCL of 60 ppb was established by the EPA Agency to protect individuals against the adverse effects of long-term ingestion of water containing high levels of disinfection byproducts. Additionally, a margin of safety was built into the standard to protect the most at-risk subgroups

of the population (i.e., elderly, children, pregnant women, people with compromised immune systems) and those who consume significantly more water than two liters per day. **The EPA used conservative assumptions in establishing the MCL, such as consumption of two liters of water per day from the same source over a 70-year lifetime.** 

According to information provided by the Virginia Department of Health, Haloacetic Acids may be a problem if someone is exposed to high levels over a long period of time; however, there is no evidence that Haloacetic Acids cause any acute effects. Research - even after 40 years - is not conclusive but suggests that the risks associated with DBP exposure are cumulative. Prolonged, chronic exposure to high concentrations **may** increase disease risk; however, **the levels in your water are not chronically elevated and there are no known acute health effects from these levels of Haloacetic Acids in your drinking water.** You do not need to use an alternative (e.g., bottled) water supply. However, if you have specific health concerns, consult your doctor. This is not an immediate risk. If it had been, you would have been notified immediately. Animal studies suggest that people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer.

## What is being done about this?

Rapidan Service Authority is working to resolve the elevated results. The RSA Board has made this issue a priority and directed the study, design, and installation of Granular Activated Carbon (GAC) filtration in addition to changes to the treatment process to improve organics removal. GAC filtration will not only help address the Haloacetic Acids but can also be effective in preventing odor related situations, like what recently occurred. While this is underway, RSA will continue moving toward design and construction of a new treatment plant with modern technology, in accordance with the Orange County Water Supply Plan, Germanna-Wilderness Area Plan, and RSA's Germanna-Wilderness Water Improvement Plan.

### **Frequently Asked Questions**

### Q: Does this mean levels are high at my home?

*A:* RSA performs testing at four approved sites throughout the distribution system. Elevated results at one site do not suggest that levels are high across the entire system.

### Q: Can I reduce levels at my home?

*A:* Some point-of-use or point-of-entry filtration devices (carbon filters, reverse osmosis filters) are rated to remove Haloacetic Acids. Such devices must be labeled as compliant with NSF/ANSI Standards 42 and/or 53. Many common pitcher filters and refrigerator filters carry this rating and will remove Haloacetic Acids. Boiling or ultraviolet light treatment are not effective.

For more information, please contact Rapidan Service Authority at (540) 972-2133. Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. This notice is being sent to you by Rapidan Service Authority.

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