

## PFAS Fact Sheet

### Testing Your Water

Virginia and U.S. Environmental Protection Agency (EPA) require Massanutten Public Service Corporation to test the drinking water we distribute regularly to make sure that it meets State and Federal requirements.

Massanutten Public Service Corporation collects numerous water samples from locations throughout the community to monitor the quality of water as it travels to your tap.

### What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. They were used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g., cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields and in a number of industrial processes. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) have been the most extensively produced and studied of these chemicals. Both PFOA and PFOS, two of the most commonly studied PFAS, are persistent in the environment and in the human body. Over time both chemicals have become widely distributed in the environment and have accumulated in the blood of humans, wildlife, and fish.

### How can I be exposed to PFAS?

PFAS have been used worldwide in industry and consumer products since the 1950s; they are released into the environment (air, water, soil, etc.) when other products are made, used, or discarded. PFAS are very stable and persist in the environment for long periods of time. People can be exposed to these chemicals in house dust, indoor and outdoor air, food, and drinking water.

### What is an advisory level?

A Health advisory level (HAL) is the amount below which no harm is expected from these chemicals, according to the EPA. This health advisory level offers a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOA and PFOS in drinking water. The HALs are calculated based on the drinking water intake of lactating women, who drink more water than other people and can pass these chemicals along to nursing infants through breastmilk. The EPA has set separate and combined HALs for PFOA and PFOS of 70 parts per trillion (ppt).

### How can PFAS affect my health?

PFAS are found in a wide range of consumer products that people use daily such as cookware, pizza boxes and stain repellants. Most people have been exposed to PFAS. Certain PFAS can accumulate and stay in the human body for long periods of time. As a result, as people get exposed to PFAS from different sources over time, the level of PFAS in their bodies may increase to the point where they suffer from adverse health effects. There is evidence that exposure to PFAS can lead to adverse health outcomes in humans. The most-studied PFAS chemicals are PFOA and PFOS. Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in

laboratory animals. Both chemicals have caused tumors in animals. The most consistent findings are increased cholesterol levels among exposed populations, with more limited findings related to:

- low infant birth weights,
- effects on the immune system,
- cancer (for PFOA), and
- thyroid hormone disruption (for PFOS).

To learn more about potential health effects of PFAS, visit <https://www.epa.gov/pfas/basic-information-pfas> or contact <https://www.vdh.virginia.gov/>

### **What are PFAS levels in the U.S. population?**

Most people in the United States and in other industrialized countries have measurable amounts of PFAS in their blood. The CDC estimates that the average blood concentrations of PFOA and PFOS are 2,100 ppt and 6,300 ppt respectively.

### **Are my pets at risk?**

The health effects on animals are likely to be similar to the effects on people. However, animals and humans do not always process chemicals the same way. Contact your veterinarian if you have questions about PFAS and your pet's health.

### **What is Massanutten Public Service Corporation doing?**

**No Detect and Below HAL** – As part of our ongoing efforts to ensure the highest standards of water quality, we are closely monitoring PFAS concentrations to confirm that they remain significantly lower than the EPA's lifetime health advisory levels.

We are currently assessing PFAS treatment options and developing contingency procedures. This proactive approach will allow Massanutten Public Service Corporation to respond quickly and effectively, should PFAS concentrations increase to levels of concern.

We will also send our customers information concerning any detected levels in the water via a letter and a link on our website located at <https://www.uiwater.com/virginia-m>.

**Above HAL** – Massanutten Public Service Corporation will be working with environmental and health regulatory bodies and our customers to determine the best solution for our customers and will be contacting them directly.

### **Should I be concerned about these test results?**

**No Detect and Below HAL**- Testing for PFAS was completed as a proactive measure to ensure the levels did not exceed the EPA's Health Advisory Level.

**Above HAL** – The HAL is based on EPA's determination that a lifetime exposure can cause human health effects. The level of 70 ppt provides Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water. The Company will continue to monitor the HAL in your community. The Company will communicate to our customers our plans to remedy the HAL levels.

**I have a question that wasn't answered here. What should I do?**

If you have additional questions or concerns, please feel free to contact Massanutzen Public Service Corporation at (866)928-2325 or email us at [PFASquestions@corix.com](mailto:PFASquestions@corix.com).

**Where can I get more information?**

EPA

<https://www.epa.gov/chemical-research/research-andpolyfluoroalkyl-substances-pfas>

National Toxicology Program:

<https://ntp.niehs.nih.gov/pubhealth/hat/noms/pfoa/index.html>

Centers for Disease Control and Prevention

[https://www.cdc.gov/biomonitoring/PFOA\\_FactSheet.html](https://www.cdc.gov/biomonitoring/PFOA_FactSheet.html)