

## SHENANDOAH HOMEOWNERS INC

c/o Rainbow Water District  
1550 N. 42<sup>nd</sup> Street  
PO Box 8 (for mail)  
Springfield, OR 97477

Shenandoah contracted with Rainbow Water District for assistance in October 2019. Shenandoah residents read meters and keep the books, and Rainbow provides the licensed staff to operate the system and perform maintenance and repairs. For bill questions, contact Maryna Thorland at 541-988-0415. For water quality concerns, call the Rainbow office on 42<sup>nd</sup> Street at 541-746-1676. (This number rings 24/7 to Rainbow's answering service dispatcher.)

# *2022 Annual Drinking Water Quality Report*

## (Summarizing our water quality data from 2021)

Shenandoah Homeowners Inc. strives to provide top quality water to every home and we are pleased to present you with our annual report. Our goal is to inform and educate you about your water and water utility, and the need for all of us to work together to protect our drinking water sources. Your Board's constant goal is to provide all of us with a safe and dependable supply of drinking water. We are investing in our water system to provide improve operations and provide greater reliability, and we appreciate your support. We are all working together to protect our water resources to serve our community well into the future.

### **Where does our water come from?**

Our water comes from one well which draws from an underground aquifer and pumps water to a hilltop storage tank. The reservoir both stores water and maintains pressure in the piping system as water use fluctuates throughout the day.

### **How is our water treated? Is our water safe?**

*Our drinking water meets or exceeds all federal and state water quality standards.* Groundwater stored below ground receives some natural filtration as it flows through the earth. Because we do not add chlorine to disinfect and provide protection from bacteria, we have some risk of contamination in the event of a broken pipe or other loss of system integrity on the public system side of the backflow devices. We sample the water at our well and system monitoring points on a regular basis, to look for harmful chemicals or bacteria and verify that the water system is operating properly.

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. The system is normally under positive pressure, making it difficult for contamination to enter the water system. Boil water notices may occur when bacteria is detected following piping repairs that introduce contamination into the system, or as a precaution when the system loses pressure and may have allowed contamination to enter piping at leaky joints. When this happens we temporarily add a low-strength chlorine solution for some disinfection, and flush water to clean the pipes before sampling to confirm bacteria is not present. No bacteria was detected in 2021.

The Oregon Health Authority inspects water systems every 3-5 years. Our last survey was on December 4, 2018 with our prior operator, and only one deficiency was noted. A required vent screen was missing on the well and was promptly replaced. We should be inspected again after 2021, with Rainbow's licensed operators available to provide support.

### **What if I have questions about my water?**

If you have questions about your water bill, call Maryna Thorland at 541-988-0415. If you have any questions about this report or anything else concerning our water system, please call Rainbow Superintendent Jamie Porter at 541-746-1676 or Board President Dean Rees at 541-359-9677. An annual membership meeting is usually held in September.

### **Shenandoah Water System Fast Facts**

Average flow, gallons per day: 6,000 (winter) and 30,000 (summer)

System size: 33 connections serving about 84 people

Supply/Storage: 1 well with 30,000 gallons in 1 reservoir

Your monthly water bill payments are our only source of revenue for operations and maintenance of the water system.

Shenandoah Homeowners Inc. was incorporated August 11, 1965.

### **About our water source:**

A *Source Water Assessment* that evaluates risks to our groundwater was completed for our system by the Oregon Health Authority and Oregon Department of Environmental Quality in August 2000. As part of this study, we learned more about the groundwater aquifer that supplies our well. A copy of this report is available from the Rainbow office at 1550 N. 42<sup>nd</sup> Avenue in Springfield.

### **Here is what the Environmental Protection Agency (EPA) says about drinking water contaminants:**

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

Drinking water sources (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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Shenandoah's water system is supplied entirely by groundwater wells during normal operations.

To ensure safe drinking water, the EPA regulates the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water to provide the same protection for public health.

### **Contaminants that may be present in source water may include:**

*Microbial contaminants*, such as viruses and bacteria, may come from wildlife or septic systems. *Radioactive contaminants* can occur naturally. *Inorganic contaminants*, such as salts and metals, can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming. *Organic chemical contaminants*, including synthetic and volatile organic chemicals, are byproducts of industrial processes, and can come from septic systems, gas stations, and urban stormwater runoff. *Pesticides and herbicides* may come from a variety of sources such as farming, urban stormwater runoff and home or business use.

Some people may be more vulnerable than others to contaminants in drinking water. Immuno-compromised persons such as organ transplant patients, persons undergoing chemotherapy for cancer, people with HIV/AIDS or other immune system disorders, infants and some elderly, can be particularly at risk from infections. These people should seek advice about drinking water from their personal health care providers. Call 1-800-426-4791 (the Safe Drinking Water Hotline) for EPA & Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants, and for more information about water contaminants and their potential health effects.

### **A note about lead in the water:**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is mainly from materials and components associated with service lines and home plumbing. Shenandoah Homeowners Inc. is responsible for providing high quality drinking water, but we 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 (1-800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## **FAQs – Frequently Asked Questions about Shenandoah's Water**

Q. *Can I track my water use? How do I know if I have a water leak?*

A. You may read your water meter at any time. Your water meter is near the road, housed in a meter box with a lid. If you lift the lid and look inside, you will see your meter. Flip the lid on your meter open to see a display. To check for a leak, make sure you are not using any water and look at the meter. Record the digits on the display, then read the meter 5-10 minutes to see if the numbers have changed. Call the Rainbow office with questions and we can explain how to check for leaks and what to look for.

Q. Where does my water come from? Is it used efficiently?

A. All of Shenandoah's water comes from a deep well, with the groundwater naturally filtered as it is pumped from the ground. We are currently not required to provide any additional treatment. Most of the water that we pump out of the ground is delivered through piping to your home. Pumped water that is lost and not billed to produce revenue may be the result of leaks or flushing to improve water quality. On your side of the meter, you can improve the efficiency of water you purchase by promptly fixing leaks and not overwatering your lawn. If you think there is a leak on the street side of the meter, please let us know!

Q. What is a backflow device, and why do I need to get it tested?

A. Water should flow from Shenandoah's piping system to you, and never in the opposite direction. A backflow device is installed between the public and private systems to protect against possible cross-connections. Backflow devices are required for items such as irrigation (sprinkler) systems, boilers, swimming pools, and rooftop solar water heaters. To ensure that the device is functioning properly and only allowing flow in one direction, Shenandoah coordinates annual testing of these devices.

# SHENANDOAH HOMEOWNERS CONSUMER CONFIDENCE REPORT DATA

## TESTING AT WELLFIELD ENTRY POINT "A" TO THE DISTRIBUTION SYSTEM (2021 or most recent results)

Chemical	Category	Source AA Well #1	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Nitrate (as Nitrogen)	Regulated Inorganic	ND (7/13/2021)	Yes	10 ppm	10 ppm	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits
Arsenic	Regulated Inorganic	3.78 ppb (2/19/2019)	Yes	10 ppb	0 ppb	Erosion of natural deposits
Chromium Nickel	Regulated Inorganic	2.04 ppb (2/19/19) 3.02 ppb (2/19/19)	Yes	100 ppb	100 ppb	Erosion of natural deposits
Inorganic Compounds	Regulated Inorganic	ND unless listed separately (2/19/19)	Yes	varies	varies	Erosion of natural deposits
Synthetic Organics	Regulated SOCs	ND (2/19/2019)	Yes	varies	varies	Byproducts of industrial processes
Volatile Organics	Regulated VOCs	ND (2/19/2019)	Yes	varies	varies	Byproducts of industrial processes
Combined Radium Combined Uranium Gross Alpha	Regulated Radionuclides	ND (9/29/16) ND (2/19/19) 4.80 pCi/L (9/29/16)	Yes	5 pCi/L 30 ppb 15 pCi/L	0 pCi/L 0 ppb 0 pCi/L	Erosion of natural deposits
Sodium**	UNREGULATED Inorganic	18.2 ppm (2/19/2019)	Yes	No MCL. 20 ppm is advisory only.	n/a	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits

## TESTING AT ROUTINE DISTRIBUTION SYSTEM LOCATIONS (2021 or most recent results)

Chemical	Contaminant Category	Distribution System Sample Results	In Compliance?	Federal Limit*	Federal Goal*	Likely Source of Contamination
Total Coliform Bacteria	Regulated Microbiological	0% positive *** (0 positive of 12 routine samples collected in 2021)	Yes	no more than 1 positive sample per month	0	Naturally present in the environment
Fecal Coliform and E. Coli Bacteria	Regulated Microbiological	0.0% *** (12 routine samples collected in 2021)	Yes	no positive samples	0	Human and animal fecal waste
Chlorine	Disinfectant	System is not chlorinated	Yes	4 ppm	4 ppm	Water additive used to control microbes
Asbestos	Regulated Inorganics	ND (2/19/2019)	Yes	7 MFL (million fibers per Liter)	7 MFL (million fibers per Liter)	Decay of asbestos cement in water mains; erosion of natural deposits
Copper	Regulated Inorganics	ND (2019) 90th percentile summary is 0 ppm	Yes 0 sites > AL	Action Level = 1.3 ppm	0	Corrosion of household plumbing systems
Lead	Regulated Inorganics	ND (2019) 90th percentile summary is 0 ppb	Yes 0 sites > AL	Action Level = 15 ppb	0	Corrosion of household plumbing systems, erosion of natural deposits

**Definitions:** Not Detected (ND) indicates the contaminant was not detected at levels above the laboratory's reporting capability.

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

**Maximum Contaminant Level (MCL)** is 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)** is 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)** is 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)** is 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.

One **Part Per Million (ppm)** corresponds to one penny in \$10,000 or about one minute in 2 years. Measurements in ppm indicate only one milligram of contaminant per liter of water. One **Part Per Billion (ppb)** corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years. It takes 1,000 parts per billion to equal one part per million. **Picocuries Per Liter (pCi/L)** is a measurement of radioactivity, a trillion times smaller than one Curie.

**Running Annual Average (RAA)** is computed using monthly or quarterly results and is a value used to determine compliance.

**Notes** - Some contaminants are monitored less than once per year. Data shown are the most recent monitoring done in compliance with regulations.

\* Federal Limits may be either the MCL or the MRDL. Federal Goals may be either the MCLG or MRDLG. Maximum contaminant levels (MCLs) are the highest levels of chemicals that the EPA has determined to be acceptable for life-long consumption. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated chemicals, a person would have to drink 2 liters (about 8 glasses) of water every day at the MCL for a lifetime to have a one-in-a-million chance of having the undesirable health effects.

\*\* Sodium is not a regulated contaminant, but we show the results of sodium testing for all water sources since some source water contains an amount of sodium which people with high blood pressure may wish to know about.

\*\*\* There was also no coliform detected in one source water assessment sample collected at the well.