



Rivergrove Water Information

Rivergrove Water District

“Should I install a home water treatment device?”

This is a personal choice. The devices are not needed to make the water meet federal, state, or provincial drinking water safety standards. In fact, if not properly maintained, the devices may actually cause water quality problems.

Some people do, however, complain about their drinking water, particularly its taste. If taste is important to you, you might consider a home treatment unit. Home treatment units, called point-of-use (POU) systems, can be located in several places in the home: countertop, faucet-mounted, under-sink cold tap, under-sink line bypass, or at the point of entry into the house.

Treatment units fall into 6 general categories:

1. Particulate filters that remove particles of different sizes.
2. Adsorption “filters” (most are not really filters) containing activated carbon that removes chlorine, taste and odor, and other organic compounds. Some units can remove chlorine reaction products, some solvents such as cleaning fluid, and pesticides. Microbes do grow in these units (but these usually are not germs) and this may be concern to some. Use of silver-containing activated carbon to prevent the growth of these microbes has not been shown to be uniformly effective or very long lasting. Most adsorption filters remove very little copper and lead. Certain special “filters” will remove dissolved lead but unfortunately, manufacturers’ claims may be inaccurate so check their claims with independent organizations.
3. Oxidation-filtration systems that change iron (red water problems), manganese (black water problems), or hydrogen sulfide (rotten egg odor) into a form that can be filtered out of the water before it enters the home. These

are frequently used for private sources of water such as a private well.

3. Water softening systems that trade (exchange) nontoxic chemicals that cause hardness for other nontoxic chemicals that do not cause hardness. These units have a limited ability to make this exchange and must be regenerated periodically with salt.
4. Reverse osmosis units that remove hardness; chemicals such as nitrates, sodium, dissolved metals, and other minerals; and some organic chemicals. If the unit is sensitive to chlorine, a chlorine-removal step is usually included prior to the reverse osmosis unit. They do allow some organic chemicals to pass into the treated water. Therefore, these systems may be followed by adsorption units to remove organic compounds. Reverse osmosis units usually produce relatively small volumes of water.
5. Distillation units that boil water and condense the steam to create distilled water. These units remove organic and inorganic compounds (nitrates, chlorine, sodium, dissolved metals, etc.). Some organic chemicals may pass through the unit with the steam and contaminate the distilled water unless the unit is designed to avoid this problem.

All units require maintenance, should be purchased from a reputable dealer, and should be tested and validated against accepted performance standards like those used by the NSF International and the Water Quality Association (WQA). You should investigate claims made for any unit. A 1991 study by the US General Accounting Office (GAO) reported that some companies selling these home treatment units make fraudulent claims, without regard to the public.

“I bought a water filter for my house, and after 6 months, when I went to change it, the filter was covered with gunk. Is my drinking water really OK with all that stuff in it?”

It is hard to imagine how much water went through that filter in 6 months to produce that layer of “gunk”, but let’s do a little figuring. Suppose every 8 ounces of water (236 milliliters; equivalent to a glass of water) has 10 particles in it (not much) that can be removed by your filter. This equates to 160 particles in 1 gallon (3.8 liters). An average family of four uses about 200 gallons (760 liters) per day which is a little under 40,000 gallons (150,000 liters) in 6 months. This means that your filter caught almost 6.5 million particles by the time you changed it, surely enough to make an impressive looking film on your filter. To answer to your question: yes, your water is OK and it probably has very few particles, too few to be of any harm to you.



“Should I install a water softener in my home?”

If you are bothered by a sticky, gummy, soapy curd deposit in your bathtub or by the buildup of white deposits (called scale) on your cooking pots and coffee maker, a water softener can help with these problems. Find out how hard your water is by calling your local drinking water supplier and asking, “What is the hardness of my drinking water?”. The higher the hardness number, the more a water softener will help. If it is more than 120 milligrams per liter (sometimes called 120 parts per million or 7 grains per gallon), then you might consider a water softener to reduce the formation of scale in your hot water system and to make washing easier.

A water softener replaces nontoxic hardness minerals with sodium or potassium. The amounts of these elements are relatively insignificant in comparison to what you get in food and should not be a problem unless your doctor has put you on a special restrictive diet.

Whether to put the softener on your main water line or just the hot water line is a complicated issue. Softening only the hot water has some advantageous relating to regeneration, a process by which the softening materials inside the softener can be used repeatedly.

Water softeners are regenerated with salt. After the salt is used, it goes down the drain and into the environment, so less salt used, the better. Using less salt also saves you money. By softening only hot water, the softener needs regeneration less often. Less water going through the unit means less salt being used. Additionally, regenerating a softener after a selected amount of water has gone through it rather than using a timer is better as this prevents wasting salt by regenerating too soon or using the softener after it has stopped softening.

Finally, some people think bathing in completely soft water (both hot and cold water softened) is unpleasant – it feels like the soap will not rinse off you. You may be surprised to learn, however, that rinsing is more complete with soft water than hard water.

On the other hand, softening only hot water has 2 disadvantages. If you wash your clothes in cold water, you will not get the benefit of soft water, but you can buy products to add to your wash if needed. More importantly, if your water is very hard (>240 milligrams per liter), when you mix hot and

cold water together, the water will still be hard so you will not see much benefit from the softener. Thus, a single answer for everyone is not possible.

Concern has been expressed by some whether installation of a water softener may raise the lead and copper content of drinking water in homes that are experiencing problems. Difficulties are not expected in this regard. The US Environmental Protection Agency (EPA) is conducting research to investigate these matters.



Rivergrove Water Quality 2022

	<u>WELL #1</u>	<u>WELL #2</u>
PHYSICALS:		
pH	6.4	6.3
Total Solids	247 ppm	213 ppm
NUTRIENTS:		
Nitrite	ND	ND
Nitrate	1.79 ppm	2.55 ppm
ANIONS/CATIONS:		
Chloride	29 ppm	13 ppm
Fluoride	0.11 ppm	0.10 ppm
Sulfate	ND	ND
Hardness	148 mg/L	140 mg/L
Silica	57 ppm	57 ppm
Sodium	8.8 ppm	8.0 ppm
METALS:		
Aluminum	ND	ND
Arsenic	ND	ND
Barium	ND	ND
Cadmium	ND	ND
Total Chromium	--	ND
Lead	0.0070 ppm	0.0070 ppm
Mercury	ND	ND
Nickel	ND	ND
Selenium	ND	ND
Copper	0.5470 ppm	0.5470 ppm
Iron	ND	ND
Manganese	ND	ND
Zinc	ND	ND
ORGANICS:		
Chloroform	ND	ND
Bromodichloromethane	ND	ND
Bromoform	ND	ND

Dealing with Moderately Hard to Hard Water “Turtle Wax Your Toilet”

Rivergrove Water is from groundwater and is classified as moderately hard to hard. The water has dissolved minerals, mostly calcium and magnesium, which tend to leave a whitish scale on plumbing fixtures.



This is both good and bad for our customers. The minerals in the water are good for you. Also, if the water is a little hard, good plumbing pipes and fixtures will not leach bad chemicals such as lead and copper into your drinking water.

The bad news is that we get calls from customers about hard water stains and how to deal with them. See some tips and suggestions below. Note, Rivergrove Water does not endorse any of the products mentioned. These are products that some of our customers have told us worked for them. Maybe they will help you too.

1. **Softening only hot water.** Using a water softener is your personal choice, but to keep in good minerals for drinking and cooking, only soften your hot water which will help with bathing, cleaning, etc. Most of the time, when water is softened, there is an exchange of calcium ions for sodium ions which subsequently adds salt to your water.
2. **Using “A-Maz Water Stain Remover”.** This can help remove hard water stains. We have heard from our customers that you need to really scrub during the first cleaning then use weekly.
3. **“Turtle Wax Your Toilet”.** This is a unique solution offered by former engineer and former Board member, Don Murray. If you have new toilets or plumbing fixtures, here is his suggestion:



“Turtle Wax claims it lasts up to 12 months, but I do not know how long the wax actually lasts. When you first apply the wax, you will see the water “bead” or buckle up from the surface tension at the water’s edge. This will go away in a few days, but I think the protection lasts longer. I have been re-applying the wax about every 6 weeks. I have seen a dramatic reduction in staining and my fixtures are very easy to clean. There does not seem to be a wax buildup after more than 2 years of using this product.

I just clean the toilet, flush, shut off the water supply and flush again. Sometimes I sponge out any leftover water. Let dry. Apply the wax and let dry. Turn back on the water and flush.

I forgot to mention that I also wax my bathroom sink and the inside of my glass shower door. I am just WAXy!”