



Maintaining Your Water Treatment



This booklet series describes what private well owners can do to maintain clean, safe drinking water from their well to protect their health. This is booklet 5 in a series of 6.

Your Well Water series titles:

- 1 Is It Safe to Drink?
- 2 Fixing Bacterial Quality
- 3 Understanding Chemical Quality
- 4 Water Treatment Options
- 5 Maintaining Your Water Treatment
- 6 Real Estate Transactions

Your water treatment system will need regular maintenance to keep it working effectively. Table 1 on page 4 lists some of the maintenance required for various systems.

Ask the company you bought your system from about:

- how to maintain the system
- the system's warranty
- what servicing they provide
- what they will do if the treatment system does not work as it should

Test your water regularly

To know that your water treatment system is working properly, you will need to test your water regularly. Test your water for bacterial quality every 6 months. Test for chemical quality every 2 years. Test more frequently if you notice changes to your water quality, such as changes in taste or odour, increased cloudiness (turbidity), staining, or hardness.

Test both the treated and untreated water, and compare the results.

You should also inspect your well each year. See our publications *A Guide for Private Well Owners* and *Before You Construct a Water Well* for more information.

If you have a septic system on your property, it also needs regular maintenance. A faulty septic system can cause bacteria to enter your well water or that of your neighbours. We recommend that you have the septic system pumped and inspected every 3 years.

Testing and Inspection Log

The best time to test for bacteria in your well water is after heavy rains. Spring and fall would be good times to schedule this test.

Year 1	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Inspect well	Results	
Year 2	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Chemical analysis	Untreated water results	Treated water results
			Inspect well	Results	
Year 3	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Inspect well	Results	
			Pump & inspect septic system	Results	

Year 4	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Chemical analysis	Untreated water results	Treated water results
			Inspect well	Results	
Year 5	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Inspect well	Results	
Year 6	Month 6	Date	Bacterial test	Untreated water results	Treated water results
	Month 12	Date	Bacterial test	Untreated water results	Treated water results
			Inspect well	Results	
			Pump & inspect septic system	Results	

Table 1 – Operation and Maintenance Requirements for Various Treatment Systems

Treatment Technology	Operation and Maintenance Requirements
Activated Alumina¹	<ul style="list-style-type: none"> • Replace spent cartridges. • Replace particulate pre-filters, if used. • Backwash periodically. • Clean and maintain storage tank, if used.
Adsorption Media	<ul style="list-style-type: none"> • Replace media.
Aeration	<ul style="list-style-type: none"> • Replace particulate pre-filters. • Replace air filters for fan intake and for exhaust. • Maintain fan, motors, and repressurization pumps. • Replace post-treatment GAC polishing filters. • Clean and maintain storage tank.
Anion Exchange	<ul style="list-style-type: none"> • Replace spent resin cartridges. • Replace particulate pre-filters, if used. • Regenerate regularly and backwash periodically. • Replace salt used for resin regeneration. • Clean and maintain storage tank, if used.
Cation Exchange	<ul style="list-style-type: none"> • Replace spent resin cartridges. • Replace particulate pre-filters, if used. • Regenerate regularly and backwash periodically. • Replace salt used for resin regeneration. • Clean and maintain storage tank, if used.
Distillation	<ul style="list-style-type: none"> • Clean boiling chamber frequently. • Replace particulate pre-filters, if used. • Replace post-treatment GAC polishing filters. • Clean and maintain storage tank.
Granular Activated Carbon	<ul style="list-style-type: none"> • Replace spent cartridges. • Replace particulate pre-filters, if used. • Clean and maintain storage tank, if used.
Manganese Green Sand	<ul style="list-style-type: none"> • Backwash periodically. • Regenerate the media.
Ozonation	<ul style="list-style-type: none"> • Replace pre-filters, if used. • Clean and maintain ozone generator, treatment tank, and storage tank. • Maintain repressurization pumps, if used.
pH Adjustment	<ul style="list-style-type: none"> • Add chemical or replenish media
Reverse Osmosis	<ul style="list-style-type: none"> • Replace exhausted membranes, particulate pre-filters, and post- treatment GAC polishing filters. • Clean and maintain storage tank. • Maintain (re)pressurization pumps, if used.
Ultraviolet Light	<ul style="list-style-type: none"> • Replace UV bulbs. • Clean bulb housing.

1. The regeneration process for activated alumina is complex. It requires the use of strong caustics and acids. Storing these in your home presents potential health risks. To avoid these risks, we recommend that you choose a point-of-entry activated alumina system that requires replacement of media over one that requires regeneration of media.

This booklet series describes what private well owners can do to maintain clean, safe drinking water from their well to protect their health. This is booklet 5 in a series of 6.

Your Well Water series titles:

- 1 Is It Safe to Drink?
- 2 Fixing Bacterial Quality
- 3 Understanding Chemical Quality
- 4 Water Treatment Options
- 5 Maintaining Your Water Treatment
- 6 Real Estate Transactions

This information has been prepared by Nova Scotia Environment.
For further information about protecting your well water, please contact us at

Nova Scotia Environment

P.O. Box 442
5151 Terminal Road, 5th Floor
Halifax, NS B3J 2P8

(902) 424-3600 or toll free: 1-877-9ENVIRO (1-877-936-8476)

Fax: (902) 424-0503

www.gov.ns.ca/nse/water

