



## **What you need to know about your water softener**

If your well water tests high in hardness (greater than 200 parts per million or ppm), iron (greater than 0.3 ppm) or manganese (greater than 0.5 ppm) you may want to install water treatment such as a softener.

**How it works:** The resin in the softener tank provides a site for ions of iron, manganese and hardness chemicals to be “exchanged” for ions of sodium or potassium, depending on the type of softener you have. A softener is not a “filter”. If your water is not “clear” it is recommended that you install a filter before the softener.

**Potassium versus Sodium systems:** All softeners can use either one, in comparable amounts and with comparable results. Obviously, a sodium system adds more sodium to the water and a potassium system adds potassium to the water.

**How much sodium is added to the drinking water?** Approximately 7.0 ppm for every 17.1 ppm of hardness removed.

**How much sodium is too much?** The current Connecticut guideline for sodium is 100 ppm. Sodium levels are primarily an issue for those on a low salt diet for medical reasons.

**Regeneration rates and volumes:** a standard 30,000 grain (1 cubic foot) softener uses between 70 and 120 gallons of water for a complete regeneration over approximately 2 hours with the fastest rate being 2.0 to 2.4 gallons per minute.

**Regeneration frequency:** A fully regenerated softener can treat a tremendous amount of water. For example, a household using 300 gallons per day with 4 grains of hardness (86.4 ppm), using a standard 30,000 grain unit, can go 25 days between regeneration cycles. For this reason, it is recommended to use a metered control cycle which operates based on the number of gallons used rather than to set the unit to regenerate every so many days.

**PLEASE NOTE:** If you have a septic system, the softener backwash must not discharge into the septic tank. The salts will corrode the concrete and upset the water balance in the tank. This can lead to early septic system failure. It is required that you install a small, separate plastic leaching gallery to handle the softener backwash. This separate leaching field will be sized based on the volume of discharge expected per backwash cycle from your unit. Please call CCHD to discuss, or if you have any questions about your system.

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