Hard Water in Fountain Valley?

What is Hard Water?

Hard water is becoming one of the most common water quality concerns reported by residents in Fountain Valley. Water that is considered to be “hard” is high in dissolved calcium and magnesium. As the concentration of the dissolved minerals increase, the water becomes harder.

Is Hard Water Safe to Drink?

Yes, hard water is safe to drink and to use for cooking and cleaning and is not a health risk. The California Department of Public Health and the US Environmental Protection Agency do not consider hard water a health issue and there are no standards or limits set for hardness, it is simply an aesthetic concern.

Why is There an Increase in Hard Water in Fountain Valley?

Approximately 32% of Fountain Valley water comes from the Metropolitan Water District of Southern California (MWDSC) which has two sources for water, the Colorado River and the State Water Project from northern California. Due to water quality challenges and allocations, water from the State Water Project is set at a target of 35% at the Diemer Treatment Plant in which Fountain Valley receives its water from.

The remaining 65% of our import water is Colorado River water which is classified as very hard water. MWDSC is able to blend the moderately hard water imported from northern California with Colorado River water before treatment and in turn lower the hardness of the water delivered to Fountain Valley. Higher amounts of State Project water in the blend cause water quality issues so the balancing of the right blend results in a slightly higher water hardness rather than a lower water quality.

Fountain Valley local water supplies of groundwater provide approximately 68% of Fountain Valley’s water. Generally, Fountain Valley well water is not as hard as the Colorado River water but still contains hardness because of the naturally occurring calcium and magnesium in the underground aquifers. While hardness levels can vary throughout Fountain Valley due to blending with local groundwater supplies, water hardness in Fountain Valley averaged over 12 grains per gallon during 2011 and thus would be considered very hard water. Throughout the year the hardness levels in the water are varying between 3 and 22 grains per gallon with an annual average between 11 and 14 grains per gallon. Therefore the water you receive during the winter months may be slightly harder than what you receive during the summer due to producing more well water during the summer months.

What are Signs of Hard Water in My Home?

- White/chalky deposits on plumbing, tubs, sinks, fixtures, pots and pans
- Increased difficulty in cleaning and laundering tasks
- Decreased efficiency of water heaters
- White spots on glassware
- White spots on your car after washing
- Soap scum on bathtubs, shower tiles, and basins
- It is more difficult to remove soap when washing or bathing

Is There Anything I Can Do to Remove Hardness?

The two most common processes to remove calcium and magnesium from the water are (1) reverse osmosis filtration, and (2) ion exchange. Reverse osmosis filtration units can handle only small volumes of water and are usually installed at the kitchen sink. Ion exchange units can treat large volumes of water and are typically installed to treat either all of the water entering the residence or just the hot water supply.

An alternative to a system softener or hot water softener is to use liquid and powdered softeners. These can be added to dishwashers or laundry machines on a per load basis to soften the water, reduce the amount of soap or detergent, and reduce spotting on dishware.

For a list of state certified water treatment devices, please go to the California Department of Public Health at www.cdph.ca.gov.