

HOME WATER TREATMENT INEFFICIENCIES

Treating high quality drinking water a second time can be inefficient when home treatment systems are designed, plumbed and set up incorrectly. They decrease water efficiency, increase maintenance and monthly utility bill costs.

Water Conditioners

- ▶ A water conditioner may have a reverse flow or backwash cycle. This cleaning cycle flushes debris from the filter media with clean potable water into the sewer line, directly increasing home water use.

Reverse Osmosis

- ▶ Reverse osmosis systems only have an average of 15% efficiency. If 100 gallons of tap water are used to feed the system, only 15 gallons of product water is generated while 85 gallons goes unused as waste water.

Self-Regenerating Water Softeners

- ▶ **NOTE:** Self-Regenerating Water Softeners are prohibited in the IRWD service area.

Self-regenerative water softeners have four to five different cleaning/regenerating cycles. During an 80 minute cleaning process, an average of 115 gallons of brine discharge water is sent out the drain line.



- ▲ Facilities such as our Baker Water Treatment Plant in Lake Forest provide clean, safe drinking water, making additional home water treatment unnecessary.



RESOURCE LINKS:

Additional Home Water Treatment Information

- ▶ rightscapenow.com/how-do-i/understand-home-water-treatment-options

Salt Free Water Conditioning Alternatives

- ▶ lacs.org/services/wastewater/scvchloridecompliance/automatic_water_softeners/alternatives.asp

California Health and Safety Code

- ▶ HSC-Division 104-Part 12-Chapter 5-Water Softeners [116775-116795]

IRWD Water Quality Report

- ▶ irwd.com/services/water-quality-report

NEED MORE INFORMATION?

Call IRWD's Water Efficiency Department, at **949-453-5581**



15600 Sand Canyon Avenue, Irvine, California 92618

949-453-5300 ▶ irwd.com

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RESIDENTIAL WATER TREATMENT DEVICES

UNDERSTANDING HOME WATER TREATMENT



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UNDERSTANDING HOME WATER TREATMENT



HOME WATER TREATMENT: WHAT IS IT?

Home water treatment is just what it sounds like – water treated by a homeowner, using a privately purchased and maintained system.

Homeowners have the option to install a point-of-use water-treatment device for all or specific areas of indoor plumbing. Centralized and decentralized water treatment systems may include: water softeners, water conditioners, reverse osmosis systems or multiple-stage filters. As water treatment system users, homeowners are responsible for the cost, maintenance, service, safety of their device, and the quality of the water the device produces.



▲ Typical point-of-use and decentralized home water treatment devices. Left to right: water conditioner, exchangeable water softener, and reverse osmosis system

WHY ARE WATER TREATMENT DEVICES INSTALLED?

Installing a treatment system or a filter may improve the aesthetic qualities of water, such as taste, odor or color.



UNDERSTANDING IRWD WATER QUALITY

IRWD treats drinking water to the Safe Drinking Water Act, Code of Federal Regulation set by the United States Environmental Protection Agency and the Division of Drinking Water regulated by the State Water Resources Control Board.

Through these strict reporting and regulatory compliance codes, IRWD prides itself on providing high quality drinking water in an efficient, cost effective, and environmentally sensitive manner.



ARE THERE REGULATIONS FOR INSTALLING HOME TREATMENT DEVICES?

The California Health and Safety Code requires all softening or conditioning devices:

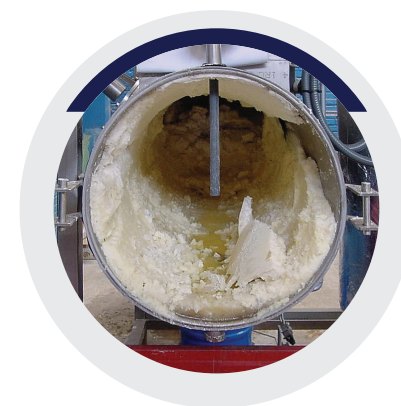
- ▶ Be installed with an appliance that activates regeneration by demand control.
- ▶ Include installation of conservation devices on all fixtures using softened or conditioned water such as faucet flow restrictors, shower head restrictors, and high efficiency toilets.
- ▶ Include installation of a separate piping system so that treated (softened or conditioned) water is not carried to the outside of the house.
- ▶ Have a salt efficiency rating of no less than 4,000 grains of hardness removed per pound of salt during regeneration, for self-regenerating water softeners.

SELF-REGENERATIVE WATER SOFTENERS ARE PROHIBITED

IRWD treats wastewater to produce recycled water for use in non-potable applications like landscaping, agricultural irrigation, dual plumbed building toilet flushing, commercial cooling towers and industrial concrete and compost production.

Self-Regenerative Water Softeners are a centralized household water treatment device. California regulates these devices due to the high synthetic salt brine expelled in the waste line after the automatic resin regeneration process. Regulating high salinity waste water safeguards IRWD's recycled water treatment plants, provides high quality recycled water to customers and keeps the IRWD mission possible.

State regulatory requirements have been enacted to ensure water efficiency standards are met. Check with a water treatment system installer to verify all state regulatory requirements have been followed before and after installation.



Synthetic salt brine ▲ from water softeners can damage pipes and water recycling equipment.



Irvine Ranch
WATER DISTRICT