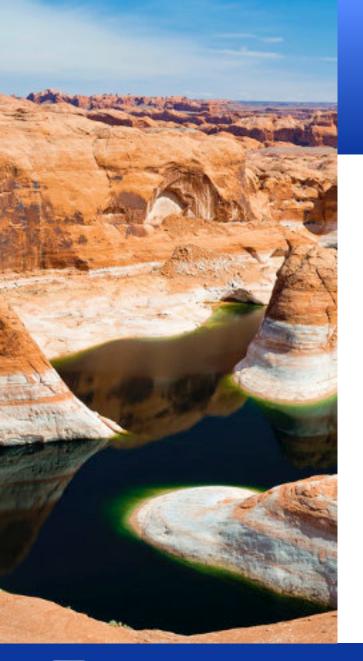
Water Softener Sustainability Professional/Arizona (WSSP-A) Certificate Program

Module 4 Installation and Maintenance

Arizona Water Quality Association



Continuing Education for Customers

- ✓ users and installers need to know the best ways to mount and operate equipment
- ✓ important that staff be well versed on environmental realities



Continuing Education for Customers

- ✓ encourage purchase of efficiency rated water softener: DIR (demand initiated regeneration) softener
- explain available technological improvements to achieve higher efficiencies...
 - **Twin Alternating Tank**: allow for one tank to be in service while the other regenerates, therefore, the full capacity of the resin can be used
 - **Proportional Brining**: a concept where they system will control the salt and water used during regeneration to the specific capacity of the resin that was exhausted
 - Sensor Technology: triggers regeneration by measuring the quality of the product water

The primary purpose of the WSSP-A program is to demonstrate to possible customers that you have the knowledge to understand and understanding to help them make good choices.





Proper Installation

- \checkmark install in a way that **maximizes efficiency**
- check and follow any applicable plumbing codes and ordinances
- must comply with all state and local laws and regulations



Proper Installation

- ✓ ask the customer about the intended use for any water
- ✓ consider **sizing** to install equipment appropriately
- ✓ remember to use a nearby drain that can handle the rated drain flow
- check the appropriate code for requirement of an anti-siphon device or air gap on the drain line





Don't install a product and simply leave behind an instruction manual. The owner needs to know operation and regeneration basics.

Why bags of salt are necessary:

- creates a brine solution, which recharges the resin beds
- ✓ control valve on the softener regulates how &
 when brine is created

Homeowner should feel comfortable with the operation of their system.

The installers or repair technician should help the owner determine the best settings

- ✓ assume an average person uses **70 75 gallons** of water per day
- ✓ hardness level must be measured



- ✓ familiarize the owner with the concepts of grains per gallon
- ✓ after hardness has been tested, explain the results to the customer
- recommended to set all softeners to remove a minimum of 3,350 grains of hardness per 1 lb. of salt while using no more than 5 gallons of water per 1,000 grains in regeneration



- ✓ make sure customer understands settings should be occasionally revisited to achieve the ideal level of softness and efficiency
- ✓ encourage use of vacation settings to avoid needless
 regeneration





Explaining the Role of Softeners

- ✓ staff should be knowledgeable about the purposes of softeners to educate without scaring buyers away from fully utilizing the products
- ✓ provide physical examples of objects that were subjected to un-softened water
- ✓ encourage homeowners to see their softener as an enabling technology



Explaining the Role of Softeners

Water Softening Benefits:

- ✓ better shampoo lather, less spots on dishes, and reducing film on shower walls
- ✓ softened water helps protect showerheads & faucets from reduced water flow
- ✓ dishwashers and clothes washers remain free from scale build up



Explaining the Role of Softeners

Water Softening Benefits continued:

- ✓ use less detergent in your wash machine and a colder water setting
- ✓ softened water can mean cutting dish detergent by up to 70%
- ✓ water heaters will last longer and remain efficient



Explaining the Role of Softeners

For more information and to learn about the independent studies that have shown many of these facts, homeowners should visit **wqa.org** and look for *"Benefits of Good Water Quality."*





Talking in the Home About the Environment

Certified professionals speaking with some passion can have a strong impact on consumer decisions.

Talking in the Home About the Environment

A few points:

- ✓ sources of drinkable water have become limited over the years
- ✓ salinity is a measurable problem in many areas as it enters the soil
- ✓ salinity **stresses** plants and crops, and decreases productivity
- ✓ proper settings and high efficiency devices are important





Review

- $\checkmark\,$ proper sizing and application is the 1st step
- ✓ proper installation is crucial
- ✓ studying relevant codes and statues
- ✓ determining softened water usage
- ✓ owner needs to understand the best way to set their softener for maximum efficiency
- ✓ installer or service technician can talk about the positive aspects of softeners and the importance of protecting the environment



Learn More

- Arizona Water Quality Association http://azwqa.org
- ✓ Water Quality Association http://wqa.org
- CASS study http://www.usbr.gov/lc/phoenix/programs/cass/cass.html
- ✓ HDR report http://watereuse.org/files/s/docs/Peter_Newell.pdf

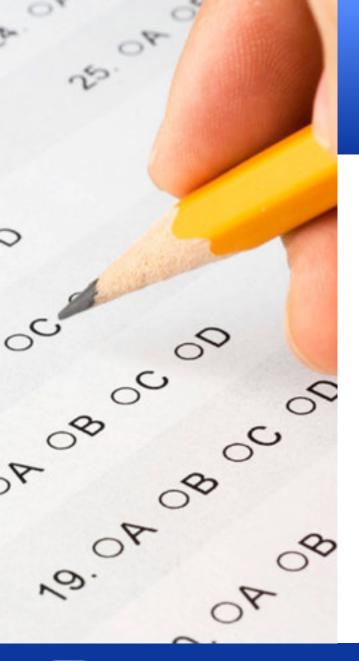
✓ Battelle study -

http://wqa.org/Portals/0/WQRF/ResearchStudy_WaterSoftenersEnvironmentalIm pact-ExecSummary.pdf

✓ Madison study -

http://www.madsewer.org/Portals/0/ProgramInitiatives/ChlorideReduction/Water %20Softener%20Study%20Final%20Report%20111615.pdf







Take the quiz for Module 4...





Product of:

Arizona Water Quality Association

Content by:

JHoffman Consulting

Graphics & Design by:

John Kieken - Website Setup dot net

