



**Summary of Substantive Changes
between the 2014 and the 2015 editions of
NSF/ANSI 44 “Residential Cation Exchange Water Softeners”**

Presented to the IAPMO Standards Review Committee on May 16, 2015

General: The changes to this standard may have an impact on currently listed products. The substantive changes are:

- Added additional requirements for multiple, sequential treatment technologies (see Section 1.4 and Annex C)
- Clarified the number of test samples needed for products that have a very low holding volume, reduced the volume of exposure water required and specified a maximum number of samples to be exposed for small volume fittings that occur infrequently in the path of the water (see Section 4.2.3)
- Increased the hydrostatic pressure test limits for a number of pressure vessel systems and added a hydrostatic pressure test limit for valves and controls (see Table 5)

Section 1, General: Added additional requirements for multiple, sequential treatment technologies as follows:

[1.4 Treatment train](#)

[A system that contains multiple, sequential treatment technologies for a performance claim under this Standard shall meet the applicable requirements as described in Annex G.](#)

Section 4.2.3, System exposure procedure: Clarified the number of test samples needed for products that have a very low holding volume, reduced the volume of exposure water required and specified a maximum number of samples to be exposed for small volume fittings that occur infrequently in the path of the water as follows:

4.2.3.3 A minimum sample volume of 2 L shall be collected at each sample point. If the water-holding volume of the product is greater than 2 L, the entire volume shall be collected in a suitable collection vessel, and a 2-L subsample obtained from this volume. If the water-holding volume of the product is less than 2 L, sufficient products shall be exposed to provide the required 2 L volume of extractant water.. [The maximum number of samples exposed shall not exceed 16 with 125 mL of extractant water drawn from each sample. If the components with a water-holding volume that is less than 250 mL and is able to be identified as one that will only occur once in the flow path of dispensed treated water \(such as diverters, faucets, RO shutoff valves, or specialty components\) then a volume of 250 mL shall be drawn from each sample using a maximum number of 8 samples.](#)



Table 5, Structural integrity testing requirements: Increased the potential hydrostatic pressure test limits, from 2.4 to 3 X maximum working pressure, for a number of pressure vessel systems and added a hydrostatic pressure test limit and cyclic pressure test for valves and controls as follows:

Hydrostatic pressure test; Second column in table:

~~2,070 kPa (300 psig) or 2.4 x maximum working pressure, whichever is greater~~

3 x maximum working pressure or 2,070 kPa (300 psig)

Valves and Controls; Last row in table:

3 x maximum working pressure or 2,070 kPa (300 psig)

The following normative annex was added

[Annex C](#)

[Evaluation methods for systems with multiple technologies - treatment train](#)