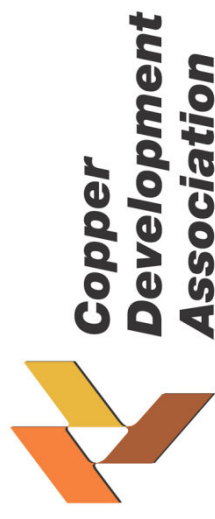



Drinking Water Legislation and Regulations - USA

17 September 2009



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- Background information
 - ANSI/NSF Standards
 - California Lead-Free Plumbing Law
 - Compliance Issues

U.S. Market

- 50 – 60 million faucets per year
- 50,000 – 70,000 tonnes of copper
- Over 35% of all products and components are imported

National Regulations

- Safe Drinking Water Act
- Action Level = 15 µg/L
- Maximum lead allowed = 8%
- Products must comply with a performance based standard – ANSI/NSF Standard 61

ANSI/NSF Standard 61

- Products covered in Section 9 include kitchen, bar, and lavatory faucets, ; drinking fountains; water coolers; and supply stops
- Products covered in Section 8 include pipe, fittings and in-line devices such as water meters and gate valves
- Excluded products include bath and shower valves, bidets, drains, backflow preventers

ANSI/NSF Standard 61

- Included in most state plumbing codes
- Is the basis for health effects requirements in other standards
- Is widely accepted and adopted by manufacturers

ANSI/NSF Standard 61, Annex F

On July 1, 2012

- for all section 9 devices other than supply stops, flexible plumbing connectors, and miscellaneous components, reduce the Q (&R) Statistic criteria from 11 to 5
- supply stops, flexible plumbing connectors, and miscellaneous components reduce the Q (&R) Statistic criteria from 11 to 3 for.
- Section 8 devices: reduce acceptance criteria from 15 µg/L to 5 µg/L

California Lead-Free Plumbing Law

Effective January 1, 2010...“lead free” means:

- Not more than 0.2% lead for solder and flux
- Not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures.

Products Covered

This includes:

- kitchen faucets
- bathroom faucets
- any other end-use devices intended to convey or dispense water for human consumption through drinking or cooking

Exclusions

Excludes:

- Service saddles
- Backflow preventers for non-potable services
- Water distribution main gate valves that are two inches in diameter and above
- Any pipes, pipe or plumbing fittings, or fixtures where the water is not intended for human consumption through drinking or cooking

SB1334 (Calderon)

Effective January 1, 2010

- All pipe, pipe or plumbing fittings or fixtures, solder, or flux shall be certified by an independent American National Standard Institute (ANSI) accredited third party, including, but not limited to, NSF International
- Certification...shall, at a minimum, include testing of materials in accordance with the protocols used by the DTSC...

SB1395 (Corbett)

Effective January 1, 2010

- California Department of Toxic Substance Control (DTSC) is authorized to take up to 75 samples per year.
- Samples will be taken at places readily available to the public – retail and wholesale outlets
- DTSC will determine test methods and protocols
- DTSC intends to post results on the internet

Compliance Strategies

- Use only materials (copper alloys or competitive materials) that have a lead content $\leq 0.25\%$
- Calculate Weighted Average Lead Content (WLC): and then select materials to insure that $WLC \leq 0.25\%$

Linings and Coatings

- G.4.1 Use of liners: When lead-bearing surfaces have been excluded from water contact by use of a rigid liner (e.g. plastic sleeve) and sealed with a permanent barrier, the lead content of the liner shall be used.
- G.4.2 Use of coatings: When coatings are used, the lead content of the coated substrate shall be used in the calculation of weighted average lead content.

Acid Washing

- G.4.3 Use of lead removal technologies: For components where the wetted surface areas have been treated with a lead removal technology, the percent lead composition shall be based on the material used to manufacture the component prior to application of the surface treatment.



Thank You!

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