The Road to Q 1µg

How plumbing manufacturers can deliver drinking water fixtures to meet AB 2060 (Holden), California’s lead testing legislation
Reducing lead in drinking water is critical to ensure the safety of our communities and children. As California works to gradually replace the service lines that are the primary source of lead in water, plumbing manufacturers are preparing to produce drinking water fixtures that will meet the proposed update to the NSF 61 (2020) standard and fulfill the requirements proposed by AB 2060 [Holden].

PMI is advocating in support of updating NSF 61 to include a mandatory test statistic Q or R value of 1µg or less for Section 9 endpoint devices including faucets and drinking fountains. The updated standard will reduce the amount of lead that is permitted to be released during product testing from 5µg to 1µg, the maximum amount that would be allowable under AB 2060.

As shown by our timetable, PMI is requesting that AB 2060 establish an effective date of Jan. 1, 2024. This aggressive product development and production schedule will enable plumbing manufacturers to supply the marketplace with sufficient product quantities and choices while assuring consumer safety and satisfaction.

**Meeting a Q Value of 1µg**

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**NSF 61 (2020) development process**

- NSF 61 (2020) published and includes optional testing, certification and marking requirements for endpoint devices to meet a test statistic Q of 1µg of lead.
- A test statistic Q of 1µg of lead becomes mandatory in NSF 61 on Jan. 1, 2024.

**Plan & allocate resources**

- Recertify and/or redesign existing products
- Design new products
- Manufacture, test and certify products
- Update product specifications, packaging and websites
- Product distribution and sales

Beginning with the publication of NSF 61 (2020), the approximate volume of product to the marketplace with 100% being compliant with CA AB 2060 on Jan. 1, 2024.

**Plumbing manufacturers have a long history of innovation in reducing the necessity of lead in fixtures**

Members of Plumbing Manufacturers International (PMI), producers of 90% of the plumbing products in the United States, have a long history of innovation in reducing the necessity of lead in fixtures. Recent innovations include the use of non-lead brasses and the lining of water flow areas in faucets with material that shields water from direct contact with lead.
Much of this innovation stems from collaboration, and PMI has been working with NSF International and stakeholders including the Honorable Assemblymember Chris Holden as the author of AB 2060, Environmental Defense Fund and Environmental Working Group.

Together, we can achieve our mutual objective – ensuring that licensed child day care centers and the general public are able to purchase replacement faucets and drinking fountains that comply with AB 2060 by meeting the new NSF 61 (2020) standard.

The updated NSF 61 standard – a win-win for California and manufacturers

Updating and meeting NSF 61 will result in Q 1µg compliant products in California. This win-win approach also gives plumbing manufacturers the necessary three-year timeframe during which to develop, certify and manufacture products.

Three years is the timeframe historically given to manufacturers, certification bodies, distributors, and retailers when mandatory changes to manufacturing and/or certification processes occur. Serving as a precedent in this matter is AB 1953 (Chan, Chapter 853, Statutes of 2006), which significantly lowered the amount of lead content in products used to convey or dispense water for human consumption.

PMI’s timetable gives manufacturers the option and incentive to place products on the market before Jan. 1, 2024

Manufacturers will have the incentive to develop and market products to gain advantage in a competitive marketplace. Products certified before Jan. 1, 2024, will be available for purchase, giving child day care centers and the general public access to devices meeting the new standard as soon as possible.

The updated NSF 61 standard also will eventually result in more stringent lead testing requirements beyond California as well, as plumbing codes used throughout the United States require NSF 61 certification.

Where does the lead come from?

Many municipal water systems and the homes and other buildings they serve have been around for a long time, long before the dangers of lead were identified.

According to the “10 Policies to Prevent and Respond to Childhood Lead Exposure” Health Impact Project report from the Pew Charitable Trust and Robert Wood Johnson Foundation, the average age of a school in 2017 was 44 years. As a result, lead may still be present in the service lines connecting the water main to your home or school, in the solder used to connect pipes, and in older brass faucets and valves located in kitchens and baths. The report’s top recommendation includes the action of replacing lead service lines that provide drinking water to homes and “other places children frequent.”

A study by the American Water Works Association (AWWA) and the U.S. Environmental Protection Agency (EPA), “Contribution of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues,” concluded that 50% to 75% of the amount of lead measured at the tap originated from lead in service lines, 20% to 35% from on-premise piping, and only 1% to 3% from faucets and immediate connective piping. Because this study was published in 2008, prior to the 2014 Reduction in Lead in Water Act, the percentage coming from faucets is now likely lower.
The road to Q 1µg will require extensive work and spur significant innovation

Once NSF 61 is updated and published, the road to Q 1µg will require extensive product design, testing, certification, manufacturing and more. As shown in the timetable, plumbing manufacturers have already begun to plan and allocate resources in anticipation of the updated NSF 61 being published later in 2020. Once the standard is published, manufacturers will have the option of submitting products for testing, certification and marking under the new standard. This optional period will last until Jan. 1, 2024, when the more stringent test requirement for Section 9 devices becomes mandatory.

The update of NSF 61 also will usher in a period of significant innovation within the plumbing manufacturing industry. Manufacturers will work to recertify and/or redesign existing products and design, test and certify new products to meet the standard. This “concept to shelves” period will then transition into manufacturing, packaging, marketing, distributing and selling the new Q 1µg products. According to information obtained from the California Energy Commission’s MAEDBS database, more than 50,000 models of residential lavatory and kitchen faucets will need to be recertified and/or redesigned to meet the more stringent test requirements. The 50,000 figure does not include other types of endpoint devices such as drinking fountains and water dispensers.