Summary of Substantive Changes
between the 2019 and 2020 editions of
NSF/ANSI/CAN 61 "Drinking Water System Components - Health Effects"

Presented to the IAPMO Standards Review Committee on September 15, 2020

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

- Added optional, more stringent requirements for lead release for an additional level of protection (see Section 9.5.1)
- Changed requirements for flux preparation in normative Annex N to use a hot plate instead of a muffle furnace, and extended the exposure time to 90 seconds (see Annex N-1.3.2.5)
- Added instructions for calculating normalization for endpoint devices, components, and materials that were inadvertently removed in the previous edition of the standard (see Annex N-1.8.9.2)

Section 9.2, Definitions: A definition was added as follows:
9.2.4 consumer-facing: *The manner in which a product label feature is experienced, directed, or seen by a customer*

Section 9.5, Evaluation of normalized contaminant concentrations: Added optional, more stringent requirements for lead release for an additional level of protection as follows:
9.5.1.1 Optional lower lead requirements
The following are optional evaluation criteria available for endpoint devices to demonstrate compliance with a lower lead leaching criteria. Product shall also comply with the full requirements of NSF/ANSI/CAN 61 to be deemed compliant to this Section.
9.5.1.1.1 Evaluation requirements
For endpoint devices other than supply stops, flexible plumbing connectors, and miscellaneous components, the test statistics Q or R calculated in accordance with Section N-1.8.9 shall not exceed 1 µg. For supply stops, flexible plumbing connectors, and miscellaneous components, the lead test statistic Q shall not exceed 0.5 µg.
9.5.1.1.2 Product labeling requirements
Attested compliance of product to the lower lead leaching criteria of this Section shall be noted in the certification listing. Consumer-facing product packaging or labeling shall also indicate this compliance by identifying the standard and Q level attested according to Section 9.5.1.1.1 (e.g., "NSF/ANSI/CAN 61: Q ≤ 1" or "NSF/ANSI/CAN 61: Q ≤ 0.5").

Annex N-1.3.2.5, Fluxes: Changed requirements for flux preparation in normative Annex N to use a hot plate instead of a muffle furnace, and extended the exposure time to 90 seconds as follows:

N-1.3.2.5 Fluxes

Fluxes shall be prepared by applying a thin film to a copper sheet of the appropriate size as described in Section N-1.3.1. The copper sheet shall then be placed ~~in a muffle furnace~~ on a hot plate that has been heated to 300 °C (572 °F) ± 15 °C. The copper sheet (with flux) shall be allowed to heat ~~until the flux flows (approximately 30 to 60 s)~~ for 90 ± 5 s. The copper sheet shall be allowed to cool prior to exposure.

NOTE — Placement of aluminum foil over the hot plate is recommended to minimize the potential for contamination during sample preparation. The foil should be placed carefully to not create creases or folds that might interfere with the heat transfer.

Annex N-1.8.9.2 Calculations: Instructions for calculating normalization for endpoint devices, components, and materials were inadvertently removed in the previous edition of the standard. The instructions have been added as follow:

N-1.8.9.2 Calculations

The test statistic depends upon the log-dosage mean and standard deviation. These values are derived as follows. Calculate the natural log-transformed value Yij = ln(Xij) of the original data values. For each of the products tested, calculate the product dosage Di across the nine measured days, where:

Table 3.1, Material-specific analyses: The table was revised to modify the minimum analysis requirements for several materials and added a footnote to the table.