



MEMORANDUM

TO: Joint Committee on Drinking Water Additives – System Components

FROM: France Lemieux, Chairperson

DATE: December 1, 2014

SUBJECT: Proposed revision to NSF/ANSI 61 – *Drinking water system components- Health effects* (61i119r2)

Draft 2 of NSF/ANSI 61 issue 119, is being forwarded on behalf of the DWA Task Group on Lead to the Joint Committee for balloting. Please review the changes proposed to these standards and **submit your ballot by December 22, 2014** via the NSF Online Workspace.

Purpose

The proposed revision incorporates a minimum sample size for in-line devices evaluated under section 8 of NSF/ANSI 61 and limits the maximum lead release allowed for individual units during testing.

Revision 2 clarifies that the triplicate sampling for lead release is only required with the pH 10 exposure water.

Please note that if you do not return a vote for this revision 2 ballot, your original vote will remain in effect.

Background

At the 2013 DWA JC meeting, it was explained that a recommendation of the Water Research Foundation project “*Is NSF 61 Relevant for Chloraminating Facilities?*” is that the standard would be improved by mandating a sample size greater than one for in-line devices under section 8. A subtask group on section 8 variability was established under the DWA Task Group on Lead to consider the recommendation and propose revision(s) as needed to address it. The group shared its suggested approach to continue to use the current section 8 protocol. A minimum of triplicate analysis would be specified as a measure to address the potential variability in lead release from brass and bronze alloys if the test representative holds less than or equal to 2 L and has a dry weight less than or equal to 15 kg (33 lbs). The standard would also allow a greater number of samples to be evaluated if requested by the manufacturer, but would add a requirement that no individual unit can exceed 15 ug/L. Please see the original issue paper (DWA-61-2013-10) and the 2013 DWA-SC JC meeting summary excerpt under the referenced items for additional information.

If you have any questions about the technical content of the ballot, you may contact me in care of:

Chairperson, Joint Committee
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[Note – the changes are seen below using strikeout for removal of old text and gray highlights to show the suggested text. **Changes for revision 2 are highlighted in yellow.** ONLY the highlighted text is within the scope of this ballot.]

NSF/ANSI Standard for Drinking Water System Components – Health Effects

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8 Mechanical devices

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8.4 In-line devices, components, and materials

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8.4.1 Brass or bronze containing in-line devices

The evaluation of brass or bronze containing in-line devices for contaminants other than lead shall require exposure of at least one sample in accordance with 8.4.

The evaluation of brass or bronze containing in-line devices for **contaminants other than lead under the pH 10 condition** shall be exposed in at least triplicate (more if specified by the manufacturer) if the test representative holds less than or equal to 2 L and has a dry weight less than or equal to 15 kg (33 lbs). If specified by the manufacturer, the test representative holds more than 2 L or has a dry weight in excess of 15 kg (33 lbs) may be exposed in a quantity greater than 1.

Reason: Research has shown that between the pH 5 and pH 10 test waters of the standards, that the pH 10 the most critical of the two when evaluating for lead release from brass or bronze.

The extraction waters from triplicate exposures shall be either combined to one sample for all contaminant analysis or shall be analyzed individually and results averaged. If more than three samples are exposed, the waters from each sample shall be analyzed individually for lead and results averaged. Averaging of results shall be performed prior to normalization. When one or more of the individual results is found to be non-detectable, the reporting limit shall be used to represent the unit results when averaging.

The normalized average result for lead shall be less than or equal to the TAC (5 ug/L). In addition, the normalized lead results of individual units exposed shall not exceed 15 ug/L.

Note: With this procedure, the average result is used when determining compliance with the standard for all contaminants. It also assures no individual unit exposed exceeds the standards lead criteria in effect prior to July 1, 2012 for in-line devices (15 ug/L).

Reason: A minimum of triplicate analysis is added to the standard as a measure to address the potential variability in lead release from brass and bronze alloys. It also allows a greater number of samples to be evaluated if requested by the manufacturer, but adds a requirement that no individual unit can exceed 15 ug/L.