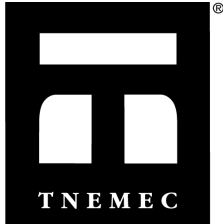


T N E M E T E C H



SUBJECT

NSF 61/NSF 600 Extraction Requirement Changes

PURPOSE

To provide an explanation of the changes to NSF/ANSI/CAN Standard 61 and outline the requirements of NSF/ANSI/CAN 600.

GENERAL

There are significant changes that will affect coating products certified to meet the NSF/ANSI/CAN 61: *Drinking Water System Components – Health Effects* standard (NSF 61). This standard includes requirements for organic solvents among a number of other chemical extraction limitations. The maximum contaminant levels (MCLs) were drastically lowered for xylene, ethylbenzene, and toluene as part of the changes to the 2018 version of the standard. These changes will effectively eliminate most solvent based coatings, commonly used for potable water service, from being certified to the standard. While the current version of the standard specifies these new MCLs, certifying bodies such as NSF have some discretion on the implementation time frame. NSF has informed industry that they will make these changes effective January 1, 2023 to allow industry time to prepare.

At the same time the MCL changes for xylene, ethylbenzene and toluene were implemented, the extraction requirements used by both the NSF/ANSI/CAN 60: *Drinking Water Treatment Chemicals - Health Effects* (NSF 60) and NSF 61 standards were moved to a separate standard NSF/ANSI/CAN 600: *Health Effects Evaluation and Criteria in Drinking Water* (NSF 600). This was done to increase the accessibility of the health criteria and create a single source (NSF 600) for the multiple drinking water standards that reference the criteria, including, NSF 60 and NSF 61.

A comprehensive review was made to identify Tnemec products that will meet the NSF 600 extraction requirements for xylene, ethylbenzene, and toluene that are effective January 1, 2023. Tnemec is labeling these products with a combined NSF 61 and NSF 600 mark to allow users to quickly identify Tnemec products that will meet the more stringent criteria. The product data sheets for these products will include special qualification statements indicating NSF 600 compliance and NSF is including the following statement to the NSF online listing notes:

“Meets the health effects requirements of NSF/ANSI/CAN 600 according to the requirements of NSF/ANSI/CAN 61”



Certified to
NSF/ANSI/CAN 61
NSF/ANSI/CAN 600

Please reference the appendix for more information on the new NSF/ANSI/CAN Standard 61-2018 edition.

Appendix:



Memorandum

To: NSF/ANSI/CAN 61 and NSF/ANSI 14 Certified and Applied Clients

From: Theresa Bellish, General Manager, Water Systems

Date: April 10, 2019

Re: New NSF/ANSI/CAN Standard 61-2018 Edition

A new edition of NSF/ANSI/CAN Standard 61-2018 has recently published. A PDF copy is available via your [NSF Connect account](#) or by contacting your Account Manager. Unless otherwise noted, all changes have been implemented immediately by NSF International.

This edition of the Standard is the first to be designated as a National Standard of Canada in compliance with the requirements and guidance set out by the Standards Council of Canada (SCC). You will receive information about the updated NSF Certification Marks that will be available for download and/or purchase in the upcoming weeks.

This version of NSF/ANSI/CAN 61 contains the following changes:

1. **Issue 138:** This revision clarifies which test water is to be used when triplicate exposures are required for brass or bronze containing in-line devices evaluated under section 8.4.1 of the standard. Previously, triplicate exposures were to be performed using the pH 10 test water, but that requirement needed to be updated now that there are two tables directing which test waters are to be used (Tables B3a and B3b). When testing is being performed under the original test water selection table (B3a), the pH 10 test water is to be used for the triplicate exposures. When the new exposure water selection table is used (B3b) the pH 8 test water is to be used.

2. **Issue 140:** Language has been updated in Annex B to specify that lead and other USEPA regulated metallic contaminants shall be excluded from multiple time point analysis. This language already existed in the standard, but it has been updated to specify USEPA regulated metallic contaminants and has been moved from note format to a normative paragraph format.

3. **Issue 141 of NSF 61 and Issues 1 & 2 of NSF 600:** These revisions removed

Annexes A and D from NSF/ANSI/CAN 61 and resulted in the first edition of NSF/ANSI/CAN 600– *Health effects evaluation and criteria for chemicals in drinking water*. This new standard creates a single reference source for the toxicological review and evaluation procedures of treatment chemicals added to drinking water and those substances imparted to drinking water through contact with drinking water system components, as well as the current drinking water criteria. A PDF of NSF/ANSI/CAN 600 is available for you to download from your [NSF Connect account](#).

These issues also contained several updates to pass/fail criteria. Those updates and the implementation periods for products to comply can be found in the table below.

| Compound | Previous Criteria in ppb (TAC/SPAC) | New Criteria in ppb (TAC/SPAC) | Implementation Deadline |
|---|-------------------------------------|--------------------------------|----------------------------------|
| Benzo(a)pyrene | 0.2/0.02 | 0.04/0.004 | Immediate |
| Perfluorooctanoic acid (PFOA) & Perfluorooctanesulfonic acid (PFOS) | 3/0.3 | 0.07/0.007 (Total) | Products must comply by 1/1/2020 |
| Triphenylphosphine Oxide | 3/0.3 | 1/0.1 | Products must comply by 1/1/2020 |
| Total Xylenes | 10,000/1000 | 90/9 | Products must comply by 1/1/2023 |
| Toluene | 1000/100 | 60/6 | Products must comply by 1/1/2023 |
| Ethylbenzene | 700/70 | 140/14 | Products must comply by 1/1/2023 |

NSF International
789 N. Dixboro Road, Ann Arbor, MI 48105 USA