TO: Joint Committee on Food Equipment

FROM: Michael Perez, Chair of the Joint Committee

DATE: October 10, 2020

SUBJECT: Proposed revision to NSF/ANSI 18 – *Manual Food and Beverage Dispensing Equipment* (18i18r1)

Revision 1 of NSF/ANSI 18, issue 18 is being forwarded to the Joint Committee for consideration. Please review the proposal and submit your ballot by October 24, 2020 via the NSF Online Workspace <www.standards.nsf.org>.

When adding comments, please identify the section number/name for your comment and add all comments under one comment number where possible. If you need additional space, please upload a word or pdf version of your comments online via the browse function.

**Purpose**

This ballot is to affirm the proposed revised language for NSF/ANSI 18, regarding changing the terms IPC and in-place cleaning to CIP.

**Background**

In late May 2018, NSF International received a letter from the Conference for Food Protection (CFP) requesting terminology in the NSF/ANSI suite of Food Equipment Standards be updated to be consistent with the FDA Food Code. Specifically, the letter requested replacing the term *in-place cleaning* with *CIP*.

The issue, submitted as *Issue Paper FE-2018-14*, was successfully balloted to Standard 170, *Glossary of Food Equipment Terminology* as 170i24r2 between March and July 2019 and was published in August 2019:

>CIP: A method of cleaning and sanitizing equipment surfaces in place by mechanically circulating or passing a detergent solution, water rinse, and sanitizing solution onto or over the surfaces. Equipment designed for manual cleaning such as band saws, slicers, or mixers are not intended for CIP.

This terminology change in NSF/ANSI 170 also requires changes to portions of other food equipment standards, including NSF/ANSI 18. The proposed terminology revisions to NSF/ANSI 18 are presented here for your consideration.
If you have any questions about the technical content of the ballot, you may contact me in care of:

Michael Perez  
Chair, Joint Committee on Food Equipment  
c/o Allan Rose  
Joint Committee Secretariat  
NSF International  
Tel: (734) 827-3817  
Email: arose@nsf.org
5 Design and construction

5.1.3 Food zones shall be readily accessible and easily cleanable or shall be designed for in-place cleaning CIP when a readily accessible design is not feasible.

5.1.4 Food zones for which in-place cleaning CIP is intended shall be designed and manufactured so that cleaning and sanitizing solutions may be circulated or passed throughout the fixed system. The design shall ensure that cleaning and sanitizing solutions contact all food contact surfaces. The system shall be self-draining or capable of being completely evacuated. Equipment and appurtenances designed for in-place cleaning CIP shall have a section of the cleaned area accessible for inspection or shall provide for other acceptable inspection methods. The manufacturer shall provide written instructions for the cleaning and sanitizing of all food zone surfaces for which in-place cleaning CIP is intended. The type and concentration of sanitizing agent recommended in the instructions by the manufacturer shall comply with 40 CFR §180.940.

NOTE — In-place cleaning CIP procedures are not required for oil distribution systems that only circulate fresh, edible oil throughout the fixed system.

5.22 Food dispensing pumps

The entire pump assembly shall be easily cleanable. The assembly includes all valves and springs. Food dispensing pumps designed as a closed system may be cleaned by way of an in-place cleaning (IPC) or CIP method.

6 Performance

6.1 Cleaning and sanitization procedures

6.1.1 Performance requirement

Cleaning and sanitization procedures recommended by the manufacturer shall effectively clean and sanitize food contact surfaces.
NOTE — This requirement applies to manual cleaning and sanitizing procedures and to in-place cleaning (CIP) and sanitizing procedures recommended by the manufacturer.

6.1.2.2 The equipment shall be operated so that food contact surfaces are exposed to the *E. coli* suspension. The equipment shall then be cleaned in place according to the manufacturer's instructions and refilled with sterile buffered dilution water (SBDW). The SBDW shall be dispensed and five 100 mL samples shall be collected at intervals from the start of the dispensing until the unit is empty. When adequate sample volumes cannot be realized, more SBDW shall be added accordingly. The equipment shall then be operated so that food contact surfaces intended for in-place cleaning (CIP) are exposed to the SBDW. Sufficient SBDW shall then be dispensed. The challenge organisms present in each sample shall be collected and enumerated using the Standard Total Coliform Membrane Filter Procedure in accordance with APHA's *Standard Methods for the Examination of Water and Wastewater*.

6.4.1.2.1.2 Dynamic barrier test

NOTE — The mixing chambers in these devices are designed to have a liquid flush system to be used for either product dilution or in-place cleaning (CIP) of the mixing chamber.

Annex A
(normative)

Methods for preparing and analyzing in-place cleaning (CIP) bacteria surrogate

A.1 Summary

*E. coli* is used as the challenge organism for the in-place cleaning (CIP) test. Presented in this annex are the methods used for suspension preparation, controls, and analysis of the challenge organism.

*Rationale: The Conference for Food Protection has requested considerations be made for modifying NSF/ANSI Standards cleaning terminology to align with the terminology used in the FDA Food Code. The term in-place cleaning currently used in the NSF Standards is requested to be replaced with the term CIP used in the FDA Food Code. The concept of CIP as defined in the Food Code is currently being applied in the NSF/ANSI Standards under the different term in-place cleaning. The alignment of terminology will provide consistency in the industry.*