TO: Joint Committee on Food Equipment

FROM: Michael Perez, Chair of the Joint Committee

DATE: March 12, 2024

SUBJECT: Proposed revision to NSF/ANSI 12 – *Automatic Ice Making Equipment* (12i10r4)

Revision 4 of NSF/ANSI 12, issue 10 is presented to the Joint Committee on Food Equipment (JCFE) for consideration. Please review the proposed new language and **submit your ballot by April 2, 2024** via the NSF Online Workspace <www.standards.nsf.org>. Log in at https:///standards.nsf.org/kps.

When adding comments, please include the section number for your comment and add all comments under one comment number whenever possible. If additional space is needed, you may upload a MS Word or .PDF version of your comments directly to the NSF Online Workspace.

Purpose

This ballot is to affirm new language regarding the use of indicators to manage cleaning cycles in Sections 5 and 7 of Standard 12.

Background

An information paper was presented to the JCFE during its annual face-to-face meeting in August 2016. This information paper was followed several months later with issue paper FE-2016-07. The specific suggestion was for the JCFE to create a Task Group (TG) for Standard 12 and discuss equipment cleanability. Separately, field inspection reports made available to NSF indicated that of the equipment inspected, many food zone surfaces had not been properly cleaned and sanitized. The supposition made was that the problems were due to inadequate access to food zone surfaces and inadequate test protocols.

Since a Standard 12 TG already existed, JCFE agreed it made sense for this smaller focused ad hoc working group to discuss options in detail. Since then, the TG has met 11 times and during many of these meetings discussed this issue with great attention, the details of which are located in the meeting summaries that are included as supporting documents.

Following much discourse the TG found:

- The manufacturer's instructions for cleaning and sanitizing are more than adequate; and
- The test protocol in NSF/ANSI 12 already addressed issues outlined in the issue paper.

The TG also noted, that much of field inspection information provided to NSF was for dirty ice bins and improper storage of non-food items such as cleaning chemicals around ice bins.

However, the TG did find that adding an indicator signaling users when it was time to initiate the next cleaning cycle is needed. It was also agreed that such an indicator would be of value to local health officials.

During a TG meeting, a smaller ad hoc group was formed to draft language for the standard. Revision 2 language was sent as a straw ballot to the entire TG resulting in a **5 : 5 : 0 (Yes : No : Abstain)** and 6 comments.

During a TG meeting on March 21, 2023 the topic was again discussed in detail with a revision 3 straw ballot yielding a vote of **8 : 1 : 0 (yes : no : abstain)** and 2 comments. The TG met February 13, 2024 for more discussion on this topic. Revision 4 language was motioned to the full JCFE as an approval ballot.

This revision 4 ballot represents the language developed and is presented now for your consideration.

Special thanks to the Standard 12 TG chair Stephen Schaefer for leading this effort.

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
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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by grey highlighting. Rationale Statements are in *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF International Standard/
American National Standard –

NSF/ANSI 12 Automatic Ice Making Equipment

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5 Design and construction

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5.1 General sanitation

5.1.1 Equipment shall be designed and manufactured to prevent the harborage of vermin and the accumulation of dirt and debris, and to permit the inspection, maintenance, servicing, and cleaning of the equipment and its components.

5.1.2 Equipment shall be designed and manufactured so that water intended for ice production may be added, or processed, or finished, or any combination of the three, so that ice may be dispensed, or removed, or served, or any combination of the three, in a sanitary manner.

5.1.3 Food zones shall be readily accessible and easily cleanable or shall be designed for in-place cleaning. Units may be located behind removable access panels, since daily cleaning is not required.

5.1.4 Food zones for which in-place cleaning 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 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 is intended. The type and concentration of sanitizing agent recommended in the instructions by the manufacturer shall:

— comply with 40 CFR § 180.940[3]; or

— be registered with the US EPA Office of Pesticides Program, Antimicrobials Division as a food contact sanitizer; and

— if produced by a device, as defined per 40 CFR § 152.500[3], be demonstrable to be efficacious per US EPA *Pesticide Assessment Guidelines, Subdivision G: Product Performance*. The device shall maintain a US EPA site manufacturing device establishment number; and

— if produced by a device, as defined per 40 CFR §152.500[3], have in place and readily discernable to the operator a monitor or indicating device that reports that the device is producing adequate amounts of sanitizing agent during the sanitization operation.

Example: a corona discharge monitor for ozone-producing devices.

5.1.5 Ice Making Equipment shall be designed and manufactured with an indicator to signify when the equipment is ready for the next cleaning process, whether by hand or CIP. The indicator shall:

— be triggered to indicate a cleaning cycle interval which must be specified in the manufacturer operational instructions, and

— be evident and obvious at the machine

5.1.~~5~~6 Splash zone surfaces shall be accessible and easily cleanable.

5.1.~~6~~7 Non-food zone surfaces shall be accessible and cleanable.

5.1.~~7~~8 Unexposed non-food zone surfaces shall be accessible or closed.

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5.29 Instruction plate

Automatic ice making equipment shall have a permanently attached plate or label that clearly and legibly states the manufacturer's recommended cleaning and sanitization procedures in accordance with section 7. The plate or label shall be visible on the ice making compartment panel or in the ice making compartment when ~~the ice making compartment panel is removed~~ accessing the ice making compartment for cleaning.

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7 Installation, operation, and maintenance instructions

The manufacturer shall provide instructions for installation, operation, and maintenance of the equipment. ~~The manual~~ These instructions shall include: ~~the manufacturers' recommended cleaning and sanitization procedures.~~

— detailed procedures for cleaning and sanitizing the ice making equipment, associated storage bins and all other accessories necessary for the production, transport and storage of potable ice, and

— the recommended frequency for cleaning and sanitizing the ice making equipment, associated storage bins and all other accessories necessary for the production, transport and storage of potable ice.

***Rationale**: This issue was originally presented during the 2016 JC Face to Face as an information paper. Since that time the TG has met and discussed in great detail over many hours, the details of which are available within the many meeting summaries. Through this discussion, the group determined many things about Ice machine cleanability and decided this language revision best addresses the gaps seen in the manner this equipment is used and misused in the field.*