Joint Committee on Food Equipment
Meeting Summary
NSF Headquarters, Ann Arbor Michigan
August 22 – 23, 2018

Opening Remarks

M.Perez welcomed the Joint Committee (JC) members and observers and thanked them for their contributions. Following opening remarks, A.Rose conducted roll call. Once the attendance was recorded A.Rose read the NSF Antitrust Statement and turned the meeting over to the Chair. Twenty-seven of the 33 voting members (82%) were present representing a quorum. Once quorum was established, the meeting was called to order at 1:00 pm.

M.Perez reviewed Robert's Rules of Order and Meeting Conduct emphasizing group participation and allowing everyone to be heard. Only voting members may make a motion, second a motion and vote on a motion. However all attendees may participate in a discussion. There were no questions at the end of his discussion.

Tab A – Agenda, 2017 Meeting summary and Review of Membership

Review of August 23-24, 2017 Meeting Summary

M.Perez reviewed the August 23-24, 2017 Meeting Summary and opened the floor for suggested changes. There were none so he called for a motion:

Motion, J.Scanlon:	To accept the August 23-24, 2017 Meeting Summary
Second:	M.Nashan
Further discussion:	None
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstain
Motion:	Carries

Review of Agenda

M.Perez reviewed the agenda for this meeting and opened the floor for suggested changes. There were none so Michael called for a motion:

Motion by T.Johnson:	To accept the agenda for this year's meeting
Second:	R.Brandt
Further discussion:	J.Brady indicated he and B.Glynn have a pending new Issue Paper, which has yet to be submitted. Time permitting, he'd like to submit this issue document for consideration. B.Glynn indicated the issue paper will be sent to A.Rose today.
Vote:	Twenty-seven in favor, Zero opposed, Zero Abstain
Motion:	Carries

Review of Membership

M.Perez acknowledged the new JCFE members since the previous meeting, S.Dye (PUBLIC HEALTH/REGULATORY) and T.Webb (USER). He then highlighted the increased emphasis placed on member participation, detailing the improved voting record, and the fact there were 17 members with a perfect 100% participation with respect to the 15 approval ballots issues since the previous meeting.

He added that the list of these individuals published in the meeting packet was missing 2 members, S.Burton-Zick and S.Schaefer, and we wants the record to show they too had perfect voting records.

He further acknowledged that the new members S.Dye and T.Webb also have perfect voting records although they were not eligible for the entire 15 ballots since the previous meeting.

M.Perez asked if there were any further comments; there were none

Tab B – JC 101

M.Perez indicated the first presentation was entitled JC 101, and introduced J.Evans, the Director of NSF Standards and presenter of the material. J.Evans thanked the Chair and members, and conducted the presentation:

Stds process review Food JC 8-22-18.pptx

Upon completion, M.Perez thanked J.Evans and opened the floor for comments and questions.

Bill asked if the presentation will be made available, and J.Evans acknowledged it would be. Sara asked for a bit more detail about what defines an observer on the JC, and J.Evans explained the differences, emphasizing that an observer can participating in nearly everything the same way, but does not have the privilege or responsibility of voting on approval ballots. She further explained that observers on the JC can be voting members on Task Groups (TG), and are allowed to express opinions in the same open forum.

M.Perez asked if there were any further comments; there were none

Tab C – 2017 Action Items, and List of Issue Papers Received and Assigned since previous meeting

M Perez reported that 7 of the 8 action items from the 2017 JCFE meeting are complete:

2017 JCFE MEETING ACTION ITEMS:

Standard 2
The JC recommends issue paper FE-2017-12 – Update regarding Dinnerware be sent to Standard 2 TG, and put the withdrawal of Standard 36 on hold until FE-2017-12 is resolved.

Complete per TG meetings on 2017-10-03 & 2018-01-23, and J.Brady 2018-02-05 email

Standard 4
The JC recommends the Standard 4 TG Chair reach out to the Issue Proponent for clarification (FE2016-16 – Velocity Location Measurement).

Complete 2018-02-12

Standard 37
The JC recommends item one on Issue Paper FE-2017-07 – Location of Definitions be accepted, and the Chair will exercise prerogative and send this directly to approval ballot once the documents are prepared.

Issue not urgent and will be addressed during the 5 year publication cycle

Standard 6
The JC recommends the Issue Proponent rewrite FE-2017-09 as discussed during this meeting and send revised language to the Dispensing Equipment TG for discussion

Complete; FE-2017-14 received 2017-08-28

Standard 8
The JC recommends to send proposed language for Issue Paper FE-2017-11 directly to JC Approval Ballot

Complete; published in July 2018

Standard 7
The JC recommends to send proposed language for Issue Paper FE-2017-13 to the Standard 7 TG for discussion

Sent to TG, introduced during October 17 Teleconference; Discussion underway

Standard 3
The JC recommends to send Information Paper regarding Cutlery Cleaning to the Standard 3 TG for discussion

Complete; sent to TG on 2017-08-24

New Information Paper – Marking on Solid Surfacing
The JC recommends that NSF consider modifying the certification policy to include this type of information.

Possible modification of certification policy pending the adoption of new language for solid surfacing in Standards 51 and 170

M.Perez then presented the list of issue papers received & assigned since August 2017, as well as a list of Standards published since that same time.

Issue Papers Received and Assigned Since 2017 JCFE Meeting

Issue Document/Title	TG Assigned
FE-2017-14 – Increase Lockout Time	Standard 6
FE-2017-15 – Section 5.34.4.4, Heads of Fasteners	Standard 8
FE-2017-16 – Sealant Cross Reference Fix	Standard 2
FE-2018-01 – Clarity to Section 5.2.1.3	Standard 2
FE-2018-02 – Backflow Prevention Boilerplate	Standard 2
FE-2018-03 – Organic Coatings, Heated Splash Zones A	Standard 51
FE-2018-04 – Organic Coatings, Heated Splash Zones B	Standard 51
FE-2018-06 – Backflow Prevention Boilerplate	Standard 4

Yellow Highlights indicate balloted, completed and published language

Standards Published Since 2017 JCFE Meeting

2 – Food Equipment
8 – Commercial Powered Food Preparation Equipment
51 – Food Equipment Materials
170 – Glossary of Food Equipment Terminology

36 – Dinnerware – Withdrawn shortly after language published in Standard 2. Current Standard 36 Certifications valid through 2018

M.Perez asked if there were any further comments; there were none

Tab D – Task Group Updates

Tab D1 – Standard 2 (report included in the 2018 meeting packet)
J.Brady is the TG chair, confirming the TG met 3 times since the 2017 JC F2F (face-to-face meeting). He detailed the 4 issues discussed indicating all were completed and published.

M.Perez opened the floor for comments; there were none.

Tab D2 – Standard 3 (report included in the 2018 meeting packet)
J.Hipp is the TG chair, confirming the TG met 2 times since the 2017 JC F2F. He detailed the timing of the 4 open issues, and M.Perez opened the floor for comments.

D.Melaragno asked for additional information regarding the rinseability test, and J.Hipp explained in greater detail the history of the issue, and that it's all about developing a method for measuring high efficiency, low water flow machines. He finished by saying the group will have to look at all the listed models with lower water flow, and develop an approach for evaluating these once the method is finalized, so as not to exclude any machines unnecessarily.

J.Leonard asked if there are any plans to look at the cutlery cleaning system again in the future now that the issue paper has been withdrawn. A.Rose said this is unknown, explaining the challenges that the manufacturer is having with how the food code is written. Said that he had spoken with the Issue Proponent recently and although the company hasn't given up, they need to sort out a game plan first.

M.Perez asked if there were any other comments; there were none.

Tab D3 – Standard 4 (report included in the 2018 meeting packet)
J.Brania is the TG chair, confirming the TG met 2 times since the 2017 JC F2F and briefly went over the open issues. M.Perez opened the floor for comments.

M.Perez asked how the certification of microwaves is accomplished, and if there is any conflict now that J.Brania has withdrawn the issue paper about enclosed spaces. M.Kohler indicated that there is no conflict as the current performance requirements are followed and if the microwaves in question meet the current standard, then enclosed spaces do not conflict.

M.Perez asked if there were any other comments; there were none.

Tab D4 – Standards 6 and 18 (report included in the 2018 meeting packet)
R.Brandt is the TG chair, confirming the TG met 2 times since the 2017 JC F2F, and provided a brief update regarding the 3 issues discussed. A.Rose added that Standard 6 is due for republication by the end of December 2018. M.Perez opened the floor for comments.

T.Johnson asked M.Kohler to further explain what needs to be changed with the performance test. M.Kohler confirmed that Kevin Smith (CPHC Member) asked NSF to look into whether the current microbiological test method would be appropriate for the test. M.Kohler confirmed with the lab that indeed the methodology was acceptable for the newly proposed 92 days.

M.Perez asked if there were any other comments; there were none.

Tab D5 – Standard 7 (report included in the 2018 meeting packet)
T.Gagliardi is the TG chair, confirming the TG met just 1 time since the 2017 JC F2F because the Standard had recently been published and the group decided to focus efforts elsewhere. He confirmed the TG is scheduled to meet next on September 25, and provided a brief summary of the open issues.

M.Perez opened the floor for comments; there were none.

Tab D6 – Standard 12 (report included in the 2018 meeting packet)
M.Perez is the new TG chair and thanked S.Burton-Zick for her efforts over the last couple years as acting TG chair. He confirmed the group met 2 times since the 2017 JC F2F, and provided a brief update regarding the 2 open issues.

M.Perez opened the floor for comments; there were none.

Tab D7 – Standard 25 (report included in the 2018 meeting packet)
D.Negandhi is the TG chair, confirming the group met 1 time since the 2017 JC F2F, and explained the one open issue facing the TG, specifically to synchronize the NAMA vending machine standard with NSF 25 so NAMA standards can be retired.

M.Perez opened the floor for comments and there was none, so he asked if it has been decided to ballot each section independently or all at once. D.Negandhi confirmed that each section sent to straw ballot thus far has each section separated, but the limited number of suggested revisions perceived would suggest that these sections can be combined into one ballot once it is sent to the JC as an approval ballot

M.Perez asked if there were any other comments; there were none.

Tab D8 – Standard 51 (report included in the 2018 meeting packet)
B.Sickles is the TG chair, and explained that the group met 3 times since the 2017 JC F2F, and is scheduled to meet next on October 16, 2018. He provided a brief update regarding the open issues, adding that 2 issues were completed and standard 51 published in May 2018.

M.Perez opened the floor for comments and questions.

Regarding the open issue of solid surfacing materials, Massoud asked what the negative vote was about at the CPHC. B.Sickles said it appears from the comment that the negative voter was a bit disconnected from the intent of the language so we may only need a brief discussion to clear this up. When this occurred, the Standard (170 in this case) was being published and there was no time to clear it up because the publication deadline was looming.

M.Perez asked if there were any other comments; there were none.

Tab D9 – TGs for Standards having no action since 2017 F2F (report included in the 2018 meeting packet)

M.Perez reported on the active TGs that have had no teleconferences since the previous F2F meeting, and asked if there were any comments; there were none.

Tab E – FDA Presentation – Girvin Liggans, Ph.D, REHS, DAAS
G.Liggans presented the highlights regarding the 2017 update of the Food Code, confirming that his presentation today was not available to share, however questions asked outside this meeting can be directed here:

Email: retailfoodpolicyteam@fda.hhs.gov
Website: http://www.fda.gov/RetailFoodProtection

M.Perez opened the floor for comments and questions.

J.Brady asked M.Kohler how the new definition change in vending machines affects Standards 25 or 170. M.Kohler and Larry confirmed it doesn't, as the new Food Code definition is already the updated one in both NSF Standards.

T.Jumalon asked a question about the addition of the new term "*intact meat*", and if G.Liggans could explain how this relates to Gyro meat. G/Liggans stated the new definition:

> **"Intact Meat"** means a cut of whole muscle(s) meat that has not undergone comminution, injection, mechanical tenderization, or reconstruction.

Then he added that Gyro meat is not considered a whole meat roast, thus it's not "*intact meat*". T.Jumalon agreed, and added the way it's handled is like a whole muscle roast, to which E.Todd

asked how the operator is supposed to know whether a piece of meat is "*intact*" or not. G.Liggans provided another example of injected muscle, and said that it will be spelled out on the label such that if the label does not specifically state "*Not Intact*" then the meat is considered "*intact*"

Then the question was asked to explain the rationale surrounding the change in raw animal foods being cooked for 15 seconds to "*165°F or above for < 1 second (instantaneous)*". Girvin confirmed this was updated based on current USDA data, adding that marking instructions in the Food Code have been likewise update to avoid confusion.

L.Rodriguez asked when the supplement would officially be out, and G.Liggans said 2019-2020.

T.Johnson asked if there was any discussion about allergens, and more specifically is it likely they are going to eventually be treated like pathogens. G.Liggans said these are tricky, as there are a number of extenuating things going on. For instance, is it practical to have 100% allergen free restaurants? There is actually a lot being discussed and no telling where it will end up.

J.Hipp asked G.Liggans to expound on a subject not within the presentation but was raised by the CFP recently, specifically regarding the updates to the cleaning agent and temperature requirements for Dishwashers. G.Liggans indicated the question raised by the CFP is regarding wash water, and basically that the temperature must be 120ºF or as specified on manufacturers label. This poses a problem because by trying to make the equipment standard relying on chemical label, it now has to vary depending on the label of wash water chemical. M.Kohler added this is one of the points trying to align with the food code and having no conflict. In this case, there are specific requirements for Standard 3 and they meet the current code. With this potential update in the code, we will need to decide how the Standard will evolve.

T.Johnson asked where 120ºF comes from, and G.Liggans indicated this is a historical value, which has been in existence for a long time. The chemical suppliers would argue that higher temperature works better, but that's not to say 120ºF doesn't work at all. There are some municipalities looking for water/energy conservation and now we're asking a different question: is 120ºF good enough.

M.Perez asked if there were any other comments; there were none.

Tab F – New Issue Papers and Interpretation Requests

With a few extra minutes remaining in today's meeting schedule, M.Perez decided to skip to 2 straightforward Issue Papers he submitted to finish up the day's meetings, specifically Tabs F2 and F3. Tab F1 would begin the discussion at tomorrow's meeting.

Tab F2 – New Issue Paper FE-2018-08 – Change of NOTE in 5.2.1 of Standard 8

M.Perez is the issue proponent and presented his paper and supporting documents. He added that research suggests when the FE Standards became ANSI Certified about 20 years ago, there

were several NOTEs in various previous publications of FE Standards that were erroneously carried over as NOTEs in the ANSI publications. M.Perez reminded the group that by ANSI definition, NOTEs call out Informative sections within the Normative portion of a Standard. In the case of this particular NOTE, the language is Normative and should be presented without the use of the term "NOTE".

Recommendation is to send this directly to JC Approval Ballot:

5.2 Internal angles and corners

5.2.1 Internal ~~corners or~~ angles or corners of less than 135° in a food zone shall be smooth and have a minimum continuous radii of 1/8 in (0.13 in, 3.2 mm).

~~NOTE – Lesser radii may be used where necessary to ensure the proper functioning of parts (such as sealing ring grooves, saw guides, hles and grooves) provided they are easily cleanable.~~

5.2.1.1 Lesser radii may be used where necessary to ensure the proper functioning of parts such as:

- sealing ring grooves
- saw guides
- holes
- grooves

M.Perez opened the floor for comments

Motion by J.Hipp:	Send directly to JC Approval Ballot.
Second:	D.Negandhi
Further discussion:	J.Leonard asked M.Perez to explain the rationale of moving the word 'corners' to be after the word 'angles'. M.Perez said this was simply to match the alphabetical ordering within the title of the section itself.
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstain
Motion:	Carries

Action item: A.Rose to send directly to JC Approval Ballot

Tab F3 – New Issue Paper FE-2018-09 – Change of NOTE in 5.4.2 of Standard 21

M.Perez is the issue proponent and presented his paper and supporting documents. He indicated that much the same as the issue paper just discussed (FE-2018-08), the NOTE in this section is also Normative in nature so the term 'NOTE' should be removed and this language given its own section number.

Recommendation is to send this directly to JC Approval Ballot:

5.4 Cover requirements

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5.4.2 Thermoplastic refuse containers used primarily outdoors shall have a cover that, when in place, prevents water from entering the container opening.

~~NOTE — Thermoplastic refuse containers used primarily indoors are exempt from this requirement. Covers with swinging-closure mechanisms are acceptable for indoor use.~~

5.4.2.1 Thermoplastic refuse containers used primarily indoors are exempt from this requirement. Covers with swinging-closure mechanisms are acceptable for indoor use.

Opened the floor for comments

Motion by D.Negandhi:	Send directly to JC Approval Ballot.
Second:	R.Brandt
Further discussion:	D.Melaragno asked if there are labeling requirements for swinging covers. K.Fall indicated there are no specific requirements to label, and the intent is that it's obvious for indoor versus outdoor equipment. J.Leonard followed up with the question of how the user would know this. M.Perez indicated this was a good question but not germane to the issue on the floor adding the intent is that this is an exemption and the removal of the word 'NOTE is appropriate.
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstain
Motion:	Carries

Action item: A.Rose to send directly to JC Approval Ballot

M.Perez asked if there were any other items of existing business not listed on the agenda; none were brought to the floor and the meeting was adjourned for the day.

M.Perez reconvened the meeting at 8:00 am on August 23rd.

Tab F1 – New Issue Paper FE-2018-07 – Glass in Bi-Metal Thermometers

E.Halberg as proxy for F.Chan presented issue paper and supporting documents regarding the use of Glass in Bi-Metal Thermometers

FE-2018-07 - Glass in Bi-Metal Thermometers.pdf

M.Perez opened the floor for comments

M.Perez asked E.Halberg if the suggestion was to change the Standard, and if so how. Eric said yes; the current test is too rigid and there are no thermometers in the market that will pass the breakage test. To this Massoud asked if no thermometers can currently pass, how are they certified and M.Kohler confirmed the standards are for glass in general, and specifications that glass suppliers must meet. That is typically as far as the testing goes. Thus, the requirements are satisfied regarding the raw material specifications of the glass.

Motion, by S.Schaefer:	Send issue to 51 TG for review
Second:	J.Hipp
Discussion:	Returning to the raw material question, J.Petersen asked if this applies to probe thermometers or others; mike confirmed it applies to glass anywhere and J.Hipp read ~~off~~ the pertinent section of Standard 51:

4.1.1 Glass and glass-like materials

Glass and glass-like materials, including porcelain, porcelain enamels, and ceramic coatings, shall not be used on surfaces intended for direct food contact that are also subject to impact by hard objects during use (e.g., countertops, tabletops, cutting boards, cooking surfaces) except as permitted in 4.2.4.1.

4.1.1.1 Glass and glass-like materials may be used on grated cooking surfaces.

4.1.1.2 When used on splash zone and food zone non-direct food contact surfaces that may be subject to impact by hard objects during use, glass and glass-like coatings shall meet the impact resistance requirements in 10.3.

4.1.1.3 When used on direct food contact surfaces that are not subject to impact, glass and glass-like coatings shall meet the impact resistance requirements in 10.4. Glass-like coatings shall yield an adherence rating of 3 or better when tested according to ASTM B 916.

4.1.1.4 Glass, other than light fixtures, that may be subject to contact during use and routine maintenance and cleaning shall conform:

— to the impact test in ANSI Z97.1 for Class A glass; or
— to the impact test within ANSI/UL 197; or
— to the impact test within BS857:1967.

And asked if those performance requirements not applicable to thermometers, to which mike indicated those

are for glass like coatings, not to safety glass. J.Hipp suggested the TG consider a rewrite discussion based on the use. M.Nashan suggested that all the other glass standards referenced have nothing to do with this application.

J.Brania then referenced the video presented by E.Halberg stating that in general, there are a number of consistency challenges with duplicating this in other labs so if the TG agrees to develop a method here, it will require some work on the method development. J.Brady suggested that there are tens of thousands of these instruments in the field and have been there for many years, and has anyone here seen an issue? A couple regulators indicated that they have seen instances where broken thermometer glass has occurred, thus there may be a need to update the language.

Vote: Twenty-six in favor, Zero Opposed, B.Sickles Abstained
Motion: Carries

Action item: A.Rose to send to TG on Food Equipment Materials

Tab F4 – New Issue Paper FE-2018-10 – Food Shields

J.Murray is the issue proponent and presented his paper, supporting documents and video presentation.

FE-2018-10 - Food Shields.pdf

M.Perez opened the floor for comments

M.Samarya-Timm asked if there are studies comparing microbial load derived from respiratory sources versus from user's hands. T.Gagliardi reminded the group that the last time they dug into this topic, a myriad of work was completed, and the video here still presents failures of user execution. He added that in his opinion, it's a no win situation because hand contact is an issue and much as the perception of the value of the 'sneeze guard'. J.Murray agreed this was a burdensome issue, but simply trying to find a better middle ground. T.Jumalon said the obvious fix would be to make the food well less deep, to which J.Murray indicated the customer of the equipment dictates that part largely, and they don't want to have to fill up small food wells every few minutes.

M.Perez reminded the group that for further discussion, there has to be a motion on the floor.

Motion by M.Nashan:	To send to a task group
Second:	K.Northcutt
Discussion	P.Matus suggested that what is being proposed was discussed for 3 years in the TG already, thus this will all be regurgitated. J.Murray said he understood, adding he has several large customers complaining about what steps are being taken to affect a change. It's an inconvenience for him as well because all his equipment is current with the standard so it would be a lot of money and time to change as well. M.Nashan said he hears the same requests from his customers, but it has to be practical and usable. T.Johnson agreed this has all been discussed before but enough time has passed where a new discussion is warranted. J.Peterson said that several years ago, this subject came up and we questioned as a group how many documented cases were due to respiratory versus hands. This also needs to be front of mind this time if this goes to TG. J.Brania said that sometime a long time ago, it was decided that a full size pan 12" x 20" was correct. Why not offer a 16" pan. Then the food would also be fresher because it was replenished more often. M.Kohler added we've talked about a risk assessment before, but in the long run, this is simply a quality thing not a wholesomeness thing. T.Gagliardi reminded the group that the problem with risk based methods here is the time of '*infection'* of one person to another is not long enough to establish connection epidemiologically. S.Burton-Zick suggested there's nothing wrong with the current language. These same end users are making adjustments to the equipment after the regulator evaluates and it's defeating the purpose. T.Gagliardi called the motion to question. J.Brady asked for the friendly amendment to be specific about which TG to send to, specifically to the food shields TG.
Vote:	Seventeen in favor, Seven Opposed, Three Abstained
Motion:	Carries

Action item: A.Rose to send to TG on Food Shields

Tab F5 – New Issue Paper FE-2018-11 – Change of NOTE in Section 5.2.2 of Standard 5

J.Wallace is the issue proponent and presented his paper and supporting documents. He indicated this and his next issue paper were essentially the same in that he is looking to update the two "NOTEs" in the Standard, per the discussion held early about "NOTEs" being informative and not normative.

FE-2018-11 - Change of NOTE in 5.2.2.pdf

M.Perez opened the floor for comments

Motion by T.Johnson:	Send it to task group on Standard 5
Second:	M.Nashan
Discussion:	J.Wallace indicated his intent was to have this go directly to ballot like the other "NOTEs" as this is very straightforward. Tony agreed adding that section 5.2.2 is in conflict with what the NOTE states. J.Brady suggested this language may have been pulled directly from the back of the Standard for suggested installation procedures, and he read off the statement from Standard 2. M.Kohler confirmed Section 5.2.2 is referring to underneath the water heater, and the NOTE is referring to service connections on the side of the machine.
Vote:	Thirteen in favor, Seven Opposed, Seven abstentions
Motion:	Carries

Action item: A.Rose to send to TG on Standard 5

Tab F6 – New Issue Paper FE-2018-12 – Change of NOTE in Section 7 of Standard 5

J.Wallace is the issue proponent and presented his paper and supporting documents. He explained that the recommendation on this one is to merge the NOTE into the product literature paragraph, unlike the previous NOTE being removed utterly.

FE-2018-12 - Change of NOTE in 7.pdf

M.Perez opened the floor for comments

Motion by J.Leonard:	Send language directly to JC ballot
Second:	T.Gagliardi
Discussion:	None
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstention
Motion:	Carries

Action item: A.Rose to send directly to JC ballot

Tab F7 – New Issue Paper FE-2018-13 – Potable Water Definition

J.Brady is the issue proponent and presented his paper and supporting documents. He explained how this topic came up during a Standard 12 TG meeting, and after conducting some research learned the term is used somewhat differently in 11 different standards.

FE-2018-13 - Potable Water Definition.pdf

M.Perez opened the floor for comments

Motion by J.Scanlon:	Send to Standard 12 TG for review
Second:	T.Gagliardi
Discussion:	B.Corrao asked how the definition would work, and is there one already elsewhere. J.Brady indicated there isn't currently a definition and the intent would be for it to apply to all standards. E.Todd indicated the World Health Organization lists additional hazards than listed in this draft language. J.Leonard asked if this will apply to other NSF standards, and M.Kohler said just food equipment. J.Peterson read ~~off~~ Merriam Webster definition, adding what is this group seeking beyond that. M.Perez confirmed that at this point there is no definition in Standard 170 so one should be created that fits all FE Standards. L.Eils suggested the EPA has this defined already and is probably close.
Vote:	Twenty-six in favor, Zero Opposed, One Abstention
Motion:	Carries

Action item: A.Rose to send to Standard 12 Task Group

Tab F8 – New Issue Paper FE-2018-14 – ICP Changed to CIP

M.Kohler is the issue proponent and presented his paper and supporting documents, explaining the background related to the Conference for Food Protection (CFP).

FE-2018-14 - ICP changed to CIP, including support documents.pdf

M.Perez opened the floor for comments

Motion by T.Johnson:	Send this language to the TG on Food Equipment Materials
Second:	J.Brady
Discussion:	T.Johnson suggested it's important to understand that CIP (clean-in-place) is a subset of IPC (in-place-cleaning), IPC is visual and CIP is not. This JC should be careful not to get rid of the concept of IPC. M.Kohler confirmed the intent here

	is generally to change many of these used terms to CIP, but there will be places where manual IPC is needed. T.Johnson further explained the difference of CIP versus IPC, mainly that CIP is a plumbed process and IPC is not. There was various questions about the semantics of the terms and the following example seemed to clear this up. A large mixing bowl, too heavy to move easily, receives manual IPC, whereas soft serve ice cream equipment, which has inaccessible internal parts is plumbed and cleaned using CIP.
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstentions
Motion:	Carries

Action item: A.Rose to send to TG on Food Equipment Fabrication

Tab F9 – Request for Interpretation – Tubing
Tab F10 – New Issue Paper FE-2018-15 – Tubing in Cappuccino Machines

M.Perez presented the RFI, explained the intent as discussed by the requester. Following discussion with M.Kohler, it was decided that an Issue Paper proposing revised language would add clarity to the language.

Perez-Trivedi - Cappuccino Machine Milk Supply Tubing RFI; 2018-07-30, including RFI.pdf
FE-2018-15 - Tubing in Cappuccino Machines.pdf

M.Perez opened the floor for comments

Motion by M.Kohler:	Send this language to Standard 4 TG
Second	B.Glynn
Discussion:	B.Poton explained the background of the RFI for his colleague not in attendance, specifically concerning the piece of tubing outside the refrigeration portion of the equipment. B.Glynn asked how this fits with other milk dispensing equipment. M.Kohler confirmed that falls under Standard 20 and is covered there. He added that as far as the 'pull back' is concerned, there isn't anything defined for that yet, but could be discussed during the TG calls
Vote:	Twenty-seven in favor, Zero Opposed, Zero Abstentions
Motion:	Carries

Action item: A.Rose to send to TG on Hot Food Equipment

Tab F11 – New Issue Paper FE-2018-16 – New Biofilm Cleaning Standard

T.Johnson is the issue proponent and presented his paper and supporting documents, explaining that he's not certain if a new standard is best, or language within an existing standard would suffice. The real ask here is a TG be developed for Biofilm discussion

FE-2018-16 - New Biofilm Cleaning Standard.pdf

M.Perez opened the floor for comments

E.Todd said it's not just food where this exists, this would include water as well. J.Brady asked if there was a clear idea would the primary equipment would be for this, to which T.Johnson suggested any plumbed system without visible inspection and cleaning possibilities. This would include several standards like 4, 7, 12, 18, or any that would depend on surfaces you cannot see. B.Corrao asked for citation of specific equipment, and T.Johnson said that right now the performance testing is completed on virgin equipment, and not taking well into account what's happening in the field.

M.Perez indicated that separately and prior to T.Johnson submitted this paper, he initiated a dialog with Dr. Paul Sturman, a microbiologist specializing in biofilms. They are discussing developing language to address biofilms to the cleaning and sanitizing test protocol of Standard 12. Dr. Sturman indicated the challenge culture already used in the Standard~~s~~ 12 adequate, and he suggests that simply updating the test protocol would be a great approach.

FE-2018-16a - Standard 12 Ice Machine Cleanability - Biofilms.pdf

He confirmed that Dr. Sturman and he were working to drafting an issue paper.

M.Kohler said the discussion is surrounding water, and it's important to consider other machines that don't use just water like soft serve ice cream machines. M.Perez said that was a great point we'll have to develop the thinking around this.

T.Johnson suggested beginning with ice machines, the said he would like to withdraw his issue paper because he was unaware about the great work already being done prior to submitting his general issue paper. M.Perez invited T.Johnson to join the effort to draft an issue paper, which was accepted.

Action item: A.Rose to withdraw Issue Paper

Tab G – CFP Presentation – Derek Deland

D.Deland presented specifics regarding the Conference for Food Protection, and its role in promoting retail food safety.

CFP Presentation for 2018 FE JC.pptx

M.Perez opened the floor for comments; there were none.

Tab H – Other New Business

Per the motion on day 1 regarding the possible new agenda items, M.Perez confirmed that B.Glynn had submitted 2 new issue papers and is ready to present them here today. B.Glynn explained the background for both was with respect to comments she provided on the retiring of Standard 36 – dinnerware. The intent for which is to discuss what if any specifics in 36 should be updated into Standard 2.

Tab H1 – New Issue Paper FE-2018-17 – Glass in Food Zone

B.Glynn presented her issue paper and supporting documents, explaining this first paper is for incorporating test protocols for types of breakable dinnerware.

FE-2018-17 - Glass in Food Zone.pdf

Motion by T.Johnson:	Send this to the TG on Food Equipment Fabrication
Second:	S. Schaefer
Discussion:	T.Johnson asked is there currently an impact test for dinnerware, and if not should one be created. B.Glynn explained what they do at Starbucks, and the thought for developing specific methods for testing in Standard 2. The problem now is that there is no consistent method so we've cobbled together various methods used elsewhere. B.Corrao asked how this relates to health and safety, and B.Glynn said there is a potential for breakage close to ice bins, so dinnerware needs to be durable. M.Kohler confirmed there currently are no ceramic glassware standards in the FE suite, however some time back he put in an Issue Paper to include glassware. At that time the JC refused. J.Brady called up and read off the IP submitted by M.Kohler in 2000.

Excerpt:

Standard 36—Dinnerware

Mike Kohler (NSF International) gave an overview of the scope of the current Standard 36. There is a note in the Standard regarding the exclusion of glassware. He asked the Joint Committee if the scope should be expanded to include chinaware and glassware.

M. Elliot thought there might be a concern about the glazes used in making the chinaware and glassware. K. Northcutt asked if flatware is or could be included in Standard 36 as well. M. Whybark replied that flatware is covered by Standard 2. Mr. Perez then asked why glassware and chinaware were excluded from Standard 36. To which M. Whybark replied that those items had been excluded because they could not pass the impact test.

M. Kohler added that there is now glassware available which is capable of driving nails into two by fours. M. Schwartz questioned why regulators have not expressed a need for this. J. Hipp expressed concern that if we included these items to be covered by that standard that only new glassware might be able to meet the standard. Mr. Schwartz viewed it as an effort from manufacturers to try to get the NSF Mark for marketing purposes.

Jim Brady stated that he would feel safer if glassware had some type of testing. ***Mr. Schwartz made a motion that NSF should stay away from adding glassware and chinaware to Standard 36 unless there is a request from the regulatory sector to add it to the standard. The motion carried.*** *Glassware and chinaware will not be added to Standard 36 unless a need from the regulatory sector is later expressed.*

T.Jumalon then asked what the purpose would be for adding this to Standard 2. B.Glynn said she is hearing from manufacturers that NSF does not require testing, and it would be easier for her as a user if there was somewhere to point to for testing. M.Samarya-Timm indicated that as a regulator and user of the ceramic cups, she sees value in updating the performance testing to include this, adding it would set the bar above and beyond the food code. T.Jumalon said he doesn't see how putting something in a standard gives any power to regulators. The ownership needs to be placed on the users. B.Glynn provided an example of lead in dishware and how some years back that was not surprising to find lead in wine glasses. J.Murray suggested this sounds like a quality measurement, not public safety. J.Leonard.

Vote: Twenty-four in favor, Three Opposed, Zero Abstentions
Motion: Carries

Action item: A.Rose to send to TG on Food Equipment Fabrication

Tab H2 – New Issue Paper FE-2018-18 – Dinnerware versus Tableware

B.Glynn presented her issue paper and supporting documents, explaining this second paper is regarding the terms dinnerware and tableware.

FE-2018-18 - Dinnerware versus Tableware.pdf

Motion by T.Johnson: Send this to the TG on Food Equipment Fabrication
Second: J.Scanlon
Discussion: J.Hipp indicated that *tableware* is not defined in 170, so we'll have to develop that as well. M.Kohler confirmed that

	tableware was in the Food Code and includes flatware, so we may have to keep that in mind as well.
Vote:	Twenty-five in favor, Zero Opposed, Two Abstentions
Motion:	Carries

Action item: A.Rose to send to TG on Food Equipment Fabrication

Tab I – Meeting Wrap Up

M.Perez thanked everyone for attending, and NSF for hosting the meeting. Confirmed the next proposed date for a Face-to-Face meeting is August 21-22, 2019. A doodle poll will be going out in the weeks ahead to establish.

M.Perez asked if there was any other new business. M. Samarya-Timm suggested the JC should seek additional gender equity. M.Perez acknowledged the comment.

M.Perez then publicly thanked Roger Coffman who retired from the JC earlier in 2018 and not currently attending. He further recognized the many years of service Roger had contributed and appreciative of the excellent participation. M.Perez then indicated that K.Northcutt (present) is announcing now that this would be his last meeting as well, and thanked K.Northcutt for his many years of service. K.Northcutt also gave thanks to the group and to NSF for the opportunity to participate and wish everyone the best of luck.

M.Perez asked if there were any further comments; there were none.

Motion by R.Brandt:	To adjourn
Second:	J.Scanlon
Discussion:	none
Vote:	Twenty-Seven in favor, Zero Opposed, Zero Abstentions
Motion:	carries

LIST ACTION ITEMS:

Tab F2 – New Issue Paper FE-2018-08 – Change of NOTE in 5.2.1 of Standard 8
A.Rose to send directly to JC Approval Ballot

Tab F3 – New Issue Paper FE-2018-09 – Change of NOTE in 5.4.2 of Standard 21
A.Rose to send directly to JC Approval Ballot

Tab F1 – New Issue Paper FE-2018-07 – Glass in Bi-Metal Thermometers
A.Rose to send to TG on Food Equipment Materials

Tab F4 – New Issue Paper FE-2018-10 – Food Shields
A.Rose to send to TG on Food Shields

Tab F5 – New Issue Paper FE-2018-11 – Change of NOTE in Section 5.2.2 of Standard 5
A.Rose to send to TG on Standard 5

Tab F6 – New Issue Paper FE-2018-12 – Change of NOTE in Section 7 of Standard 5
A.Rose to send directly to JC ballot

Tab F7 – New Issue Paper FE-2018-13 – Potable Water Definition
A.Rose to send to Standard 12 Task Group

Tab F8 – New Issue Paper FE-2018-14 – ICP Changed to CIP
A.Rose to send to TG on Food Equipment Fabrication

Tab F10 – New Issue Paper FE-2018-15 – Tubing in Cappuccino Machines
A.Rose to send to TG on Hot Food Equipment

Tab F11 – New Issue Paper FE-2018-16 – New Biofilm Cleaning Standard
A.Rose to withdraw Issue Paper

Tab H1 – New Issue Paper FE-2018-17 – Glass in Food Zone
A.Rose to send to TG on Food Equipment Fabrication

Tab H2 – New Issue Paper FE-2018-18 – Dinnerware versus Tableware
A.Rose to send to TG on Food Equipment Fabrication

Joint Committee on Food Equipment
Meeting Summary
NSF Headquarters, Ann Arbor Michigan
August 22 – 23, 2018

Joint Committee Members in Attendance

Name	Company / organization	Interest category
Bhatt, Swati	Los Angeles County	Regulatory
Bortolotti, Stefano	Carpigiani	Industry
Brady, Jim	Wawa, Inc.	User
Brandt, Rex	Taylor Company	Industry
** Brania, Jonathan	Underwriters Laboratories, Inc.	User
Burton-Zick, Sara	DuPage County Health Department	Regulatory
Dyer, Randy, PhD	Nestle	User
Gagliardi, Tony	Consultant - Public Health / Regulatory	User
Glynn, Beth	Starbucks Coffee Company	User
Hall, Jon	Glastender, Inc.	Industry
Hipp, Joel	Hobart Corporation	Industry
Johnson, Tom	Qlean Tech Enterprises, LLC	User
Jumalon, Thomas, REHS	Wake County Environmental Services	Regulatory
Kohler, Mike	NSF International	User
Leonard, James, MPH, LEHP	Princess Cruises	User
Liggans, Girvin, PhD	Food and Drug Administration	Regulatory
Maxon, Gary	The Delfield Company	Industry
Negandhi, Dipak, PE, CFSP-	Manitowoc Foodservice	Industry
Neshan, Massoud	Southern CaseArts	Industry
Northcutt, Kirk	Auto-Chlor System	Industry
[1] Perez, Michael	Baring Industries	User
Peterson Jr., James	C.i.i. Food Service Design	User
Rodriguez, Luis, MS	CDC Vessel Sanitation Program	Regulatory
[2] Rose, Allan, MS	NSF International	General Interest
Samarya-Timm, Michéle	Somerset County Department of Health	Regulatory
Scanlon, John	Hatco Corporation	Industry
Schaefer, Stephen	Hoshizaki America, Inc.	Industry
Sickles, Willard, PE	InterMetro Industries Corporation	Industry
Webb, Timothy	Navy and Marine Corps Public Health	Regulatory

[1] – JC Chair

[2] – JC Secretariat

** - participation via teleconference

Joint Committee Members NOT in Attendance

Name	Company / organization	Interest category
Brasseur, Eric	Little Caesars Enterprises	User
Dye, Shayna	Sauk County Health Department	Regulatory
Hurst, Bryan, REHS, CP-FS	Lincoln-Lancaster County Health	Regulatory
Klouse, Paul, REHS, CP-FS	Southern Nevada Health District	Regulatory
McNeil, Thomas, RS	U.S. Army	User
Tackitt, Steve	Barry-Eaton District Health Department	Regulatory

Observing Attendees

Company	Name	Interest Category	Role
Manitowoc Foodservice	Cheryl Appell	Industry	Observer
NSF International	Sarah Krol	General Interest	Observer
NSF International	Derek Deland	General Interest	Observer
NSF International	Liz Gray	General Interest	Observer
NSF International	Kelli Fall	General Interest	Observer
NSF International	Sara Risley	General Interest	Observer
NSF International	Orsi Dezsi	General Interest	Observer
NSF International	Amanda Zeoli	General Interest	Observer
NSF International	Kaylyn Brunskole	General Interest	Observer
NSF International	Tyler Acree	General Interest	Observer
NSF International	Audra Bildeaux	General Interest	Observer
NSF International	DeMarrio Boles	General Interest	Observer
Michigan State University	Ewen Todd	Public Health	Observer
NAMA	Larry Eils	General Interest	Observer
Stone Spectrum	Joshua Spencer	Industry	Observer
Versa-Gard	Pep Matus	Industry	Observer
A.O. Smith Water Products	Joe Wallace	Industry	Observer
Dairy Queen	Brent Miller	User	Observer
Dunkin' Brands	Patrick Nolan	User	Observer
Traulsen & Co	Chris Boryca	Industry	Observer
NAFEM	Charlie Souhrada	General Interest	Observer
Lancer	Kathy Magee	Industry	Observer
Vita-Mix	Nick Mazzino	Industry	Observer

Auto-Chlor	John Hockaday	Industry	Observer
J.M. Smucker Company	Bob Corrao	User	Observer
Hamilton Beach	Arron Bryant	Industry	Observer
A.O. Smith Water Products	Joe Wallace	General Interest	Observer
Cornelius, Inc.	Syed Rizvi	Industry	Observer
Cornelius, Inc.	Syed Rizvi	Industry	Observer
Structural Concepts	Jon Murray	Industry	Observer
Structural Concepts	Matt Vidro	Industry	Observer
Intertek	Lee Moomaw	User	Observer
Intertek	Nicholas Unger	User	Observer
Intertek	Danielle Melaragno	User	Observer
Intertek	Bernard Poton	User	Observer