Task Group on Food Equipment Materials
Teleconference Meeting Summary
May 31, 2017

Participating Members:
Willard Sickles (InterMetro Industries Corp.)
Steve Tackitt (Barry-Eaton District Health Dept)
Swati Bhatt (Los Angeles County)
Sara Burton-Zick (DuPage County Health Dept.)
Michéle Samarya-Timm (Somerset County Dept. of Health)

Mike Kohler (NSF International)
Michael Perez (Baring Industries)
Dipak Negandhi (Manitowoc Foodservice)
Burl Finkelstein (Kason Industries)

Absent Members:
Jeff Wright (Ferro Corp)
Andreas Helm (German FE trade association HKI)
Jonathan Brania (Underwriters Laboratories, Inc.)

Joshua Spencer (Stone Spectrum)
Stephen Schaefer (Hoshizaki America, Inc)

Participating observers:
Al Rose (NSF International)
Kelli Fall (NSF International)
Joel Hipp (Hobart Corp.)

Tony Gagliardi (consultant – public health)
Joe Wallace (A.O. Smith Water Products)
Danielle Melaragno (Intertek)

Supplemental Materials Referenced
2) NSF 51-2014 revisions - solid surfacing.doc
3) 35i8r1 - NEMA LD3 - MKedits.docx
4) NEMA LD3 Section 3.13.pdf
5) NEMA LD3 Section 3.8.pdf
6) NEMA LD3 Section 3.6.pdf
7) NEMA LD3 Section 3.4.pdf
8) FE-2016-5 - NEMA LD3.pdf
9) FE-2016-23a - VARIUS_blade_coated_20161026.pdf
10) FE-2016-23 - Non-stick Coatings on Blades.pdf

Discussion

W.Sickles welcomed everyone and called the meeting to order. A.Rose read the anti-trust statement and took attendance. Nine of the 14 voting members were present (64%) which represented a quorum. W.Sickles briefly went over the agenda, stating the group would switch up the last 2 agenda items and spend about 20 minutes on each.

**Topic #1 – Issue FE-2016-5 – NEMA LD3 – Standard 35**

W.Sickles reminded the group of the very brief summary during the previous teleconference and asked M.Kohler to provide a detailed update. M.Kohler explained that Standard 35 references the NEMA LD3 standard for testing these laminate materials, most of which was last updated using the NEMA LD3 2000 version. Another version was released in 2005 with some subtle formatting changes. This Issue Paper language is suggesting updating to add clarity matching these, as well as updates the format in NSF/ANSI 35 for clarity.
Section 4.2 Stain resistance
M.Kohler explained there are references to stain resistance testing, describing the basic steps involved. He added that the older version of NEMA, the reagents were described using alpha characters, and in more recent by numbers. This update clears up these differences and further elaborates and clarifies the format. He confirmed that the proposed language does not change in the procedure itself.

Section 4.3 High temperature resistance
M.Kohler confirmed there is no difference in language, just format updating

Section 4.4 Wear resistance
Same as Section 4.3

Section 4.5 Ball impact resistance
Same as Section 4.3

M.Kohler confirmed these are all very straightforward changes, and W.Sickles opened the floor for comments and questions.

W.Sickles said there were two editing issues he found:
1) The word ‘undergo’ in Section 4.3 is capitalized and shouldn’t be
2) The header on the ballot refers to standard 37 and should be 35

There were no other comments so W.Sickles called for a motion:

<table>
<thead>
<tr>
<th>Motion, D.Negandhi:</th>
<th>Send this language to JC Approval Ballot</th>
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</thead>
<tbody>
<tr>
<td>Second:</td>
<td>S.Tackitt</td>
</tr>
<tr>
<td>Discussion:</td>
<td>none</td>
</tr>
<tr>
<td>Vote:</td>
<td>all in favor</td>
</tr>
<tr>
<td>Motion:</td>
<td>carries</td>
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</tbody>
</table>

Action item:
1) A.Rose to prep documents and execute Approval Ballot

**Topic #2 – Issue FE-2015-6 – Solid Surfacing Materials**
M.Kohler confirmed this issue originally came from Josh, who is not present today, adding that after a few teleconferences, he was tasked with developing draft language to include solid surfacing materials to address the concerns described in the issue paper and discussed by this group. He recapped the discussion from the previous teleconference, specifically the application of the language to be suitable in food zones. Confirming he added a new section 4.2.6:
4.2.6 Solid Surfacing Materials

4.2.6.1 Solid surfacing materials shall meet food zone requirements.

4.2.6.2 Solid surfacing materials shall be composed of uniform materials throughout without layers.

**Rationale:** Food zone requirements are being applied to all solid surfacing applications to avoid potential misuse in the field. If they all meet food zone requirements they will be suitable in food and splash zones without the need to choose the correct product for the given application. A requirement for the materials to be a solid throughout eliminates the possibility of multilayered product which are more prone to separation and failure.

Regarding 4.2.6.2, this was not part of the original requested issue, but has been a related issue in the past. He explained that sometimes lighter filler material is added and there can be concern of exposure if it wears through.

Next he explained the addition of the word *solid surfacing* to section 4.2.4:

4.2.4 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, solid surfacing, cutting boards, cooking surfaces) except as permitted in 4.2.4.1.

**Rationale:** Clarifies that this requirement is applicable to solid surfacing materials.

Then, given that this new word is added, a new definition is required:

3.xxx solid surfacing material: Sheet material composed of uniform mixtures of food zone ingredients commonly used in the construction of countertops, tabletops, or other equipment surfaces.

M.Kohler confirmed he received a call from Josh late last week, and he agreed with the language. S.Burton-Zick added that she too spoke with Josh and was very complimentary of the language. S.Tackitt acknowledged he liked the simplicity of this language as it’s very understandable.

M.Perez asked if the term *solid surfacing materials* includes items like quartz. M.Kohler said his objective was to keep this language generic, adding a brief explanation regarding uniform mixtures. M.Perez followed up by asking whether the term *solid surfacing material* would be better served in the heading of 4.2.4, as this is a base material not an end product. M.Kohler agreed, but added the purpose of section 4.2.4 is to state that glass and glass-like materials shouldn’t be used, and that this material is most commonly used for countertops, but not the only place. S.Burton-Zick said that as a regulator we can live with this material as a work surface. In commercial kitchens, however, it is preferred to distinguish between this and Stainless Steel; suggested to leave the comment as is.
J.Hipp suggested that some of these materials may just be different color variants of the same material, adding it would be preferred removing the term *without layers* in 4.2.6.2, so as not to confuse. Layers of different colors might be interpreted as such. M.Kohler confirmed he was good with that.

### 4.2.6.2 Solid surfacing materials shall be composed of uniform materials throughout *without layers*.

Also made change to rationale to read:

**Rationale:** Food zone requirements are being applied to all solid surfacing applications to avoid potential misuse in the field. If they all meet food zone requirements they will be suitable in food and splash zones without the need to choose the correct product for the given application. A requirement for the materials to be a solid throughout eliminates the possibility of multilayered, dissimilar materials product which are more prone to separation and failure.

This led to a few minutes of discussion regarding where the rationale statements would be useful for publishing separately. M.Kohler indicated this is a good example of when a ‘note’ can be used, which is technically not part of the standard. The group quickly constructed a note for this standard which read:

**Note:** multiple ingredients and color combinations are considered uniform materials

This then led to several minutes of back and forth discussion regarding color variations, with several amendments made. In the end, the group agreed ultimately to go back to the original one off change and add NO note:

### 4.2.6.2 Solid surfacing materials shall be composed of uniform materials throughout *without layers*.

With the language set, the discussion then turned to labeling with S.Burton-Zick recalling a previous brief discussion regarding markings on the back side of the finished product. She ultimately asked if NSF would include this in the Standard, or somewhere else. M.Kohler confirmed this is a policy item not a Standards one, adding there are different items depending on different types of material. In some cases, material is certified in pellet form and there’s no way to mark that, however, the paperwork is there.

It was suggested that there may be cases where manufacturers would want to use labeling to get around these requirements; if that’s not ok, the TG should add a statement of specificity. M.Kohler confirmed the intent is to have this material meet all food zone requirements, and this is covered well in the definition. What is being referred to here, is the difference between the material and the finished product. The group finished with some discussion regarding the labeling aspect and possible scenarios for manufacturers.

W.Sickles called for a motion:

**Motion, S.Burton-Zick**
Send this language to straw ballot with this Task Group

**Second:**
M.Samarya-Timm

**Discussion:**
None
Vote: all in favor
Motion: Carries

Action item:
1) A. Rose to prep documents for straw ballot with this group

**Topic #3 – Issue FE-2016-23 – Non-stick Coating of Blades**

W. Sickles confirmed this topic was only briefly discussed during the previous teleconference and asked M. Kohler to recap. M. Kohler said the current standard has a restriction on organic coatings, specifically that in food zones they can’t be used with chopping and cutting. He added the intent of the current language is meant for items like cutting boards. The intent of this Issue Paper is to add language to allow the application of these materials on blades which are not at a perpendicular angle, such as those cutting bread and cheese.

M. Kohler then read off the proposed changes to Section 6.2, including the addition of a new section 6.2.1.8:

6.2 Organic coatings
   6.2.1 Food zones
      6.2.1.1 Organic coatings may **shall** be used on food zone surfaces.
      6.2.1.1.1 Organic coatings may not be used on food zone surfaces that are designed in purpose to be subject to cutting and chopping actions **except as permitted in 6.2.1.8**.
      6.2.1.2 Coated surfaces used in direct food contact shall have substrate materials that conform to the requirements of 4.
      6.2.1.3 Organic coatings used on food zone direct food contact surfaces shall meet the abrasion resistance requirements in 9.1.
      6.2.1.4 Organic coatings used on food zone direct food contact surfaces shall meet the impact resistance requirements in 10.1.
      6.2.1.4.1 The impact resistance requirements in 10.2 shall apply to organic coatings used on food zone direct food contact surfaces that are:
          – internal to a unit, machine, or component;
          – not subject to impact or wear by internal parts or mechanisms or by operators; and
          – not designed to be removed during routine cleaning or maintenance.
      6.2.1.5 Organic coatings used on food zone direct food contact surfaces shall meet the heat resistance requirements in 11.
      6.2.1.6 Organic coatings used on food zone direct food contact surfaces shall meet the adhesion requirements in 12.1.
      6.2.1.7 Fluoropolymer coatings and other non-stick coatings used on heated food zones shall be exempt from impact resistance, abrasion resistance, adhesion ability, and heat resistance performance tests.
6.2.1.8 Fluoropolymer coatings and other non-stick coatings may be used on blades of powered slicing equipment. All food zone direct food contact coating requirements shall apply.

6.2.1.89 Organic coatings used on food zone non-direct food contact surfaces shall meet the abrasion resistance requirements in 9.2.

6.2.1.910 Organic coatings used on food zone non-direct food contact surfaces shall meet the impact resistance requirements in 10.1.

6.2.1.1011 Organic coatings used on heated food zone non-direct food contact surfaces shall meet the heat resistance requirements in 11.

**Rationale:** Non-stick coatings reduce the amount of friction generated in the cutting action thus providing better abrasion resistance than other organic coatings. Since the use of the coating on blades is restricted to powered-slicing equipment any potential substrate exposure would be routinely self-polished during normal use. All organic coatings in a food zone are required to meet the requirements section 4 in addition to 6.2, therefore, any minor erosion of the coating would not introduce any health risks. Non-stick coatings used these applications improve the cleanability and sanitation of the blade.

M.Kohler confirmed he thought it best to add a section similar to these non-stick food coatings to be used in heated food zones. This language, however, is specific to blades being self-polishing during application, such that the concern of pockets being added to the equipment are not of concern.

D.Negandhi asked if this would include the slicing of bone, or other hard material. M.Kohler said this request came from manufacturers of equipment used to slice bread, or maybe cheese. D.Negandhi suggested that meat bones would be an issue, and W.Sickles agreed this was a good point because a band saw could be argued to contain a blade. S.Burton-Zick said this was a “slippery slope” as the intended use is specific, but it could be used for other items.

M.Kohler confirmed this is specifically addressing organic coatings, adding there are many types of coatings, and the intent here is specific to organic coatings, which have various heat, abrasion, and other tests performed that must be met. M.Kohler then explained the phrase ‘*routinely self-polished during normal use*’, in the rationale statement. Such that if it wears through, the base material is still food safe.

As time was running out, W.Sickles called for a motion:

**Motion, S.Burton-Zick:** send current language to straw ballot with this group
**Second:** D.Negandhi
**Discussion:** none
**Vote:** all in favor
**Motion:** Carries

**Action item:**

1) A.Rose to prep documents for straw ballot with this group

Meeting adjourned