NSF 426 Environmental Leadership Standard for Servers (ELSS) Joint Committee
Meeting Summary
September 15, 2014, 11:00 am – 1:00 pm eastern

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Action Items
- **Criterion 9.1.5.** Rifer will research manufacturer roadmaps to determine if criterion should specify 5 vs. 7 years.
- **Criterion 9.2.1.** TG 9/10 will work on language further to reflect intent.
- **Criteria 9.1.3 & 9.4.1.** TG 9/10 will create a required criterion that calculates recyclability using IEC TR62635 methodology and consider 2 optional criteria, one with a recyclability threshold (95% or 90%) and the other demonstrating cost/time associated with recyclability.

Meeting Summary

**Agenda & Antitrust Statement**
The Joint Committee (JC) Chair, Matthew Realff, welcomed the committee. Susan Cruden, NSF Secretariat, took attendance and read the antitrust statement. Realff reviewed the meeting agenda.

**Approval of May F2F Minutes**
The JC had no comments or revisions to the July 22nd meeting summary. Wayne Rifer motioned to approve the minutes; Dmitry Nikolayev seconded. The minutes were approved by affirmation.

**Nominations for JC Vice Chair**
Realff explained that the NSF operating procedures allow for JCs to have a Vice Chair. The role of the Vice Chair is to assume the responsibilities of the Chair when the Chair is absent, and to provide input to the Chair as needed. The Vice Chair must be a JC member and is voted in by a simple majority. Realff would like to fill the Vice Chair position since he might not be available for the September 30 JC meeting. Realff asked for nominations for Vice Chair.

Holly Elwood nominated Cate Berard. Berard accepted nomination. Rifer seconded.

**Vote by verbal affirmation. None opposed.**

Realff welcomed Berard as Vice Chair. An email will be sent to remainder of JC to confirm vote since there was not quorum.

**Section 9 – Design for Repair, Re-use and Recycling: Review TG Recommendations**
Realff asked Rifer, TG 9/10 Chair, to lead this discussion.

**Criterion 9.1.5 Functionality Testing Software Tools**
Rifer presented the TG recommendation for the prerequisite. Bill Baxter asked if the TG had checked roadmaps of manufacturers that specify the duration of product support following the end of production. Rifer was not sure what the basis was for 7 years, but the TG had discussed both 5 years and 7 years and had decided on 7 years. Baxter asked that the JC mark this for review. Realff suggested asking manufacturers on TG.

**Action Item:**
- Rifer will research manufacturer roadmaps to determine if the criterion should specify 5 vs. 7 years.

**Motion:** Elwood motioned to accept 9.1.5 to go into the draft standard with agreement that the duration of product support will be checked into further.
**Seconded:** Berard
**Objections:** None
**Abstentions:** None
Motion passed unanimously.

**Criterion 9.2.1 (formerly 9.2.2) Material Incompatible with Recycling**
Rifer presented the TG recommendation for the criterion, and asked Berard to comment. Berard explained that the TG wanted to eliminate and combine criteria to reduce optional points.

The JC discussed the intent and wording of the second bullet on treated plastics. Berard explained that the intent is to ensure that any treatment of the plastic does not degrade the quality of the plastic. The language was edited to include IZOD testing of “treated” vs. “non-treated” plastics. There was still a question of whether the testing should be performed on material that has undergone treatment in a recycling process. The criterion should be consistent with the standards for computers and imaging equipment.

Elwood suggested a few minor edits for clarity, including adding “reduction” to the title.

**Action Item**
- TG 9/10 will work on language in the second bullet to clarify and further to reflect intent.

**Criterion 9.2.1 Single Recyclable Plastic in Each Plastic Part**
Rifer introduced this criterion and the TG recommendation to delete the criterion.

**Motion:** Elwood moved to delete the original 9.2.1
**Seconded:** Nikolayev
**Objections:** None
**Abstentions:** None
Motion passed unanimously.

**Criterion 9.1.3 Minimum 95% Recyclability Rate & Criterion 9.4.1 Product Reusability/Recyclability Rate**
Rifer presented the TG recommendation for prerequisite criterion 9.1.3. The JC started its review and discussion of this criterion on the last call, made some modifications as seen in track changes, and
requested additional time to review. Rifer also introduced optional criterion 9.4.1, which takes this concept further.

The JC discussed the following:

- What is the goal of the criterion – to do the calculation or reach the threshold? Is the greater intention to increase recyclability of product, or to develop methodology and get data? Rifer explained that the criterion requires the manufacturer perform calculation of recyclability of product according to their-own methodology; and that it achieve the 95% recyclability rate. There is an optional criterion (9.4.1) that goes further in specifying methodology for calculating recyclability in product, and beyond current practice. a.

- A suggestion was made to delete the prerequisite and have just the optional criterion.

- Dillon noted that TG 12 has a proposed “achievement” criterion. Rifer noted that TG 9 is focused on manufacturer design and what is theoretically recyclable.

- Bill Hoffman cautioned about allowing manufacturer to define recyclability; IEC is not perfect, but at least provides some boundaries on what qualifies. Tying to cost or time for disassembly is valuable, but even more slippery.

- Walter Jager indicated that he supports use of IEC TR62635 methodology; use of own methodology is highly variable, lacks accountability & often isn’t based on actual recycling practices. IEC allows for distinction between recyclability and recovery. After adding prescriptive methodology, you’ll get more than going from 90 to 95%. For servers, 95% might be okay given high metals.

- The JC discussed direction for the TG and agreed on the following:
  - Required criterion that calculates recyclability rate using IEC TR62635 methodology (could add more detail, if desired)
  - Optional criterion specifying threshold of 90 or 95% referencing IEC TR62635 methodology in required criterion.
  - Another optional criterion with cost & time, and economics, etc.; including the options for the 2nd bullet (the JC was not in agreement about whether to keep or remove the 2nd bullet).

**Action Item:**

- TG 9/10 will create a required criterion that calculates recyclability using IEC TR62635 methodology and consider 2 optional criteria, one with a recyclability threshold (95% or 90%) and the other demonstrating cost/time associated with recyclability.

**Criterion 9.3.1 Product Marked to Identify Components with Special Handling Needs**

Rifer presented a modification to this criterion, which was approved by JC straw ballot in June. He explained that the primary modification would add marking by a QR code, which would access a database of information from the manufacturer. When the JC had approved the criterion moving to straw ballot during the May meeting, there was a contingency that Brian Martin would further research the criterion internally to make sure that folks in his company can live with this criterion, and he would notify Rifer if there is an issue with the criterion as written. The new sentence in the first paragraph addresses Seagate’s concerns.
The JC discussed the following:

- Elwood requested more information on the utility QR codes to recyclers, and a better understanding of the size of QR codes. Berard noted that the QR code can be size of postage stamp or smaller, and that the benefit of a QR code is that it provides database with so much more information than can be conveyed on a label on the product.

- It was noted that the criterion was also revised such that it specifies that the label or QR code is on the component and not the product. Rifer indicated that this revision was request by a recycler and was not part of the contingency agreement. There was concern about this revision, and the process of adding it. Realff suggested that the JC consider going back to original language for first set of changes (marking on the component versus the product).

- Elwood requested that items not be added to the agenda at the last minute to allow JC members adequate time to review and get feedback if needed.

- There was further discussion about the capacity of the recycling community to use QR codes. It was noted that a lot of recyclers don’t necessarily have the capability right now, however QR readers are free, available applications for use by smart phone. This is not a specialty barcode reader. Elwood noted that there is additional work needed to make sure they recycling community is aware of QR codes and how to access the data.

Motion: Nikolayev motioned to approve the addition of the last sentence in the first paragraph (with other proposed changes redacted)
Second: Rifer
Objections: none
Abstentions: None
Motion passed unanimously.

Wrap Up and Action Items
- Discussion of Section 12 will be tabled until the next call on 9/30.
- JC Straw Ballot of today’s Motion will be bundled with motions from the 7/22 JC meeting and the upcoming meeting on 9/30.
- F2F meeting on November 5 and 6 either hosted by Seagate in Cupertino or will be in Ann Arbor at NSF. Additional details should be available this week.

The meeting adjourned at 12:58.

Meeting Attendees

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<th>Company</th>
<th>Name</th>
<th>Interest Category</th>
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<td>NSF</td>
<td>Stacy Blazik</td>
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<td>Consultant - User</td>
<td>William Baxter</td>
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<td>US Department of Energy</td>
<td>Cate Berard</td>
<td>Public Health /</td>
<td>Member</td>
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<td>Green Electronics Council</td>
<td>Pamela Brody-Heine</td>
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<td>Ralph Buoniconti</td>
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<td>Sandra Cannon</td>
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<td>Dillon Environmental Associates</td>
<td>Patty Dillon</td>
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<td>Holly Elwood</td>
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<td>Lynn Rubinstein</td>
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