SPECIAL CONDITION: Electronics

Version: SCElec/2018-02-23

BACKGROUND

**Definition:** Electronics include circuit boards, displays, and related wires and connectors (as defined in HPD Open Standard 1.0). Electronics comprising 10% or less of the product by weight are included in this Special Condition; if electronics comprise greater than 10% of the product by weight, they must be inventoried separately. The electronic components must be fully enclosed and sealed, there can be no possible exposure to the components during the use phase, and there must be a guaranteed take-back program.

**Why is this a Special Condition:** A content inventory can be created in theory with current HPD methods but it is not practical to do so and/or the value of trying to create a complete inventory is questionable. Electronic parts often include hazardous materials. However, electronics are highly complex mixtures of materials and substances with a long and complicated supply chain, and they might comprise only a small part of the overall product. Inventorying them at the level expected for other contents may be difficult or impossible for a product manufacturer.

**Scope:** Cases, housings, and other identifiable elements must be inventoried as a separate material on the HPD.

**Harmonization:** This Special Condition has been harmonized with the following:

- International Living Future Institute, *Declare Manufacturer’s Guide*, May 2017 (“Small electrical components do not require CASRN reporting, but the manufacturer must verify that these components are RoHS compliant”, Page 6)
- Cradle to Cradle, *Product Standard Version 3.1*, January 2016 (An electronic component or part can be considered an Externally Managed Component (EMC) if the supplier has indicated, to the best of their knowledge, that the electronic component or part “is a sealed component that is manufactured in a way that prohibits the migration of chemicals and materials from the component”. An EMC is “exempt from the general requirement of full characterization to the 100 ppm level because it is managed in a technical nutrient cycle as part of a supplier or manufacturer commercialized nutrient management program”, Sections 3.4.1 and 1.3.1.3).

**GUIDANCE/INSTRUCTIONS:**

Special Conditions instructions for specific data fields follow; *if there are no instructions for a data field, the requirements of the HPD Open Standard should be followed.* If the HPD Open Standard and Special Conditions instructions are followed, the HPD will not be barred from qualifying for the LEED v4 Material Disclosure and Optimization, Material Ingredients credit, Option 1.

*Data field auto-fills if using HPD Online Builder*

<table>
<thead>
<tr>
<th>HPD 2.1.1 Data Field</th>
<th>Special Condition Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION 1: SUMMARY</td>
<td></td>
</tr>
</tbody>
</table>
### Special Condition, Electronics

<table>
<thead>
<tr>
<th>Content in Descending Order of Quantity*</th>
<th>Materials and Substances must be listed by the Material Name if applicable and/or Substance Name as instructed in Section 2.</th>
</tr>
</thead>
</table>
| Characterized Screened Identified*     | • “Yes” should be checked if all Standard requirements are met.  
• “Yes ex/SC” should be checked to indicate all substances were characterized, screened and/or identified as required except one or more Special Condition (SC) substances were screened and identified according to SC guidance. The following is printed below the options for each item as appropriate:  
  o “% weight and role provided for all substances except Special Conditions (SC) which were characterized according to SC guidance”  
  o “All substances screened using Priority Hazard Lists with results disclosed except Special Conditions (SC) which were screened according to SC guidance”  
  o “All substances disclosed by Name (Specific or Generic) and Identifier except Special Conditions (SC) which were identified according to SC guidance” |
| Inventory and Screening Notes*         | • If the only content not characterized, identified, and/or screened is covered by the Special Condition, Inventory and Screening Notes should include the following notes:  
  o “Special conditions applied: [Electronics].”  
  o [LEED v4] “Yes ex/SC “ result is due only to materials and substances for which Special Conditions were applied. Thus "Yes ex/SC“ does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1. |

### SECTION 2: CONTENT IN DESCENDING ORDER OF QUANTITY

**Materials** – instructions apply only to Nested Materials Inventory format

<table>
<thead>
<tr>
<th>Material Name</th>
<th>Enter “Electronics”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Notes</td>
<td>Enter “SpecialConditionApplied:Electronics”</td>
</tr>
</tbody>
</table>

**Substances** – instructions apply to both Nested Materials and Basic Inventory formats

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Enter component name or part name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID (Identifier):</td>
<td>Enter “SC:Electronics”</td>
</tr>
</tbody>
</table>
| Substance Notes | • Enter the most recent Special Condition version nomenclature with date, available on the Emerging Best Practices web page (e.g., Version = SCBioMats/2017-10-05).  
• Enter a brief description of the component or part (including its function). |
Special Condition, Electronics

- Indicate if the component or part is compliant with the most recent EU RoHS directive without any exemption or with [fill in] exemptions\(^1\).
- Include a statement that the component is included in a takeback program.

### Hazards and Agency(ies) with Warnings

Enter “Hazard Screening not performed”

### SECTION 3: CERTIFICATIONS AND COMPLIANCE

No changes to requirements for Special Conditions

### SECTION 4: ACCESSORIES

No changes to requirements for Special Conditions

### SECTION 5: GENERAL NOTES

No changes to requirements for Special Conditions

### SECTION 6: REFERENCES

No changes to requirements for Special Conditions

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