

# EPA Environmentally Preferable Purchasing Program Guidelines Pilot Assessment Summary- June 22, 2017

## Product Category: Furniture

| View more about the EPA Recommended Standards and Ecolabels and the Guidelines on which they are based.                                                 | Applicable Federal Requirements                                                                    |                                                                                          | Section II: Environmental/Human Health Hotspots |                                                                                         |                           |                         |                               |           |                         |                           |                                                               |                                                  |                                                 |                           |                                                                                                                                                          |                    | Section I: Process for Developing Standards | Section III: Conformity Assessment | Section IV: Ecolabel Management | Product Availability Information |                                        |                                                                                                                               |
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|                                                                                                                                                         |                                                                                                    |                                                                                          | Guidelines II.1 per Life Cycle Stage            |                                                                                         |                           |                         |                               |           |                         |                           |                                                               |                                                  |                                                 |                           | Approaches to Chemicals                                                                                                                                  |                    |                                             |                                    |                                 |                                  |                                        |                                                                                                                               |
|                                                                                                                                                         |                                                                                                    |                                                                                          | Pre- Extraction/ Raw Materials Hotspot(s)       |                                                                                         | Manufacturing Hotspot(s)  |                         |                               |           | Installation Hotspot(s) |                           |                                                               | End of Life Hotspot(s)                           |                                                 |                           |                                                                                                                                                          |                    |                                             |                                    |                                 |                                  |                                        |                                                                                                                               |
|                                                                                                                                                         | Addresses LifeCycle Stage                                                                          | Not Currently Assessed                                                                   | Addresses LifeCycle Stage                       | Energy Use, Fossil Fuel Use, Global Warming Potential, and/ or Greenhouse Gas Emissions | Ozone Depletion Potential | Criteria Air Pollutants | Pollution Discharges to Water | Water Use | Waste Generation        | Addresses LifeCycle Stage | ANSI/ BIFMA X7.1 Standard for Formaldehyde and TVOC Emissions | CDPH Standard Method 1.1- 2010 for VOC Emissions | TB 117-2013- CA furniture flammability standard | Addresses LifeCycle Stage | Solid Waste Generation (e.g. design for disassembly, product take-back programs, remanufactured/ repurpose capabilities, or minimizing disposal impacts) | II.5 Toxic Hazards |                                             |                                    |                                 |                                  | II.6 Disclosure of Chemical Substances | II.7 Public Disclosure of Chemical Substances of Concern                                                                      |
| Baseline                                                                                                                                                |                                                                                                    |                                                                                          |                                                 |                                                                                         |                           |                         |                               |           |                         |                           |                                                               |                                                  |                                                 |                           |                                                                                                                                                          |                    | Leadership                                  |                                    |                                 | Baseline                         |                                        |                                                                                                                               |
| How the Standard/ Ecolabel Meets the Hotspot:<br>✓=Required criterion<br>✓O= Optional criterion<br>- Does not meet<br>OK: Meets more stringent criteria | <br>Bio-Preferred | <br>CPG |                                                 |                                                                                         |                           |                         |                               |           |                         |                           |                                                               |                                                  |                                                 |                           |                                                                                                                                                          |                    |                                             |                                    |                                 |                                  |                                        |                                                                                                                               |
| Recommended Multi-Attribute Standards and Ecolabels:                                                                                                    |                                                                                                    |                                                                                          |                                                 |                                                                                         |                           |                         |                               |           |                         |                           |                                                               |                                                  |                                                 |                           |                                                                                                                                                          |                    |                                             |                                    |                                 |                                  |                                        |                                                                                                                               |
| <a href="#">ANSI/ BIFMA e3 -2014e Furniture Sustainability Standard – level® certified</a>                                                              | ✓                                                                                                  | -                                                                                        | YES                                             | YES                                                                                     | ✓                         | ✓O                      | ✓O                            | ✓O        | ✓O                      | ✓O                        | YES                                                           | ✓O                                               | ✓O                                              | -                         | YES                                                                                                                                                      | ✓                  | ✓                                           | -                                  | ✓                               | ✓                                | ✓                                      | <a href="https://level.ecomedes.com/">https:// level.ecomedes.com/</a>                                                        |
| <a href="#">Cradle to Cradle Certified™ Product Standard</a>                                                                                            | -                                                                                                  | -                                                                                        | YES                                             | YES                                                                                     | ✓                         | ✓O                      | ✓O                            | ✓         | ✓                       | ✓O                        | YES                                                           | ✓                                                | ✓                                               | -                         | YES                                                                                                                                                      | ✓                  | ✓                                           | -                                  | ✓                               | ✓                                | ✓                                      | <a href="http://www.c2ccertified.org/products/registry">http://www.c2ccertified.org/products/registry</a>                     |
| <a href="#">Good Environmental Choice Australia (GECA) Furniture, Fittings, and Foam</a>                                                                | -                                                                                                  | ✓                                                                                        | YES                                             | YES                                                                                     | -                         | ✓                       | -                             | ✓         | -                       | -                         | YES                                                           | ✓                                                | ✓                                               | -                         | YES                                                                                                                                                      | ✓                  | ✓                                           | -                                  | -                               | ✓                                | ✓                                      | <a href="http://www.geca.org.au/products/search/">http://www.geca.org.au/products/search/</a>                                 |
| <a href="#">International Living Futures: Living Product Challenge<sup>SM</sup> 1.0</a>                                                                 | -                                                                                                  | -                                                                                        | YES                                             | YES                                                                                     | ✓                         | -                       | -                             | ✓         | ✓                       | ✓                         | YES                                                           | ✓                                                | ✓                                               | -                         | YES                                                                                                                                                      | ✓                  | -                                           | -                                  | -                               | -                                | -                                      | <a href="http://living-future.org/lpc">http://living-future.org/lpc</a>                                                       |
| <a href="#">Sustainable Furnishings Council Exemplary</a>                                                                                               | -                                                                                                  | -                                                                                        | YES                                             | YES                                                                                     | ✓                         | -                       | -                             | -         | -                       | -                         | YES                                                           | ✓O                                               | -                                               | -                         | N/A                                                                                                                                                      | ✓                  | ✓                                           | -                                  | -                               | -                                | -                                      | <a href="https://sustainablefurnishings.org/company-search">https://sustainablefurnishings.org/company-search</a>             |
| <a href="#">Sustainable Materials Rating Technology (SMaRT)</a>                                                                                         | ✓                                                                                                  | -                                                                                        | YES                                             | YES                                                                                     | ✓O                        | -                       | ✓                             | -         | -                       | -                         | YES                                                           | OK                                               | ✓O                                              | -                         | YES                                                                                                                                                      | ✓O                 | ✓                                           | -                                  | -                               | ✓                                | -                                      | <a href="http://mts.sustainableproducts.com/SMaRT_Certified.html">http://mts.sustainableproducts.com/SMaRT_Certified.html</a> |

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| <a href="#">View more about the EPA Recommended Standards and Ecolabels and the Guidelines on which they are based.</a>                                    | Applicable Federal Requirements                                                                 |                                                                                       | Section II: Environmental/Human Health Hotspots |                                                                                        |                           |                         |                               |                           |                         |                                                               |                                                  |                                                 |                                                                                                                                                          |                    |                                        |                                                          |                                                       | Section I: Process for Developing Standards       | Section III: Conformity Assessment             | Section IV: Ecolabel Management       | Product Availability Information |                                                                                                                                                                                                                                                           |
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|                                                                                                                                                            |                                                                                                 |                                                                                       | Guidelines II.1 per Life Cycle Stage            |                                                                                        |                           |                         |                               |                           |                         |                                                               |                                                  |                                                 |                                                                                                                                                          |                    | Approaches to Chemicals                |                                                          |                                                       |                                                   |                                                |                                       |                                  |                                                                                                                                                                                                                                                           |
|                                                                                                                                                            |                                                                                                 |                                                                                       | Pre- Extraction/<br>Raw Materials Hotspot(s)    |                                                                                        | Manufacturing Hotspot(s)  |                         |                               |                           | Installation Hotspot(s) |                                                               |                                                  | End of Life Hotspot(s)                          |                                                                                                                                                          |                    |                                        |                                                          |                                                       |                                                   |                                                |                                       |                                  |                                                                                                                                                                                                                                                           |
|                                                                                                                                                            | Addresses LifeCycle Stage                                                                       |                                                                                       | Addresses LifeCycle Stage                       | Baseline                                                                               | Leadership                |                         |                               | Addresses LifeCycle Stage | Baseline                | Leadership                                                    | Addresses LifeCycle Stage                        | Baseline                                        | Leadership                                                                                                                                               |                    |                                        |                                                          |                                                       |                                                   |                                                |                                       |                                  |                                                                                                                                                                                                                                                           |
| How the Standard/<br>Ecolabel Meets the Hotspot:<br>✓=Required criterion<br>✓O= Optional criterion<br>- Does not meet<br>OK: Meets more stringent criteria |  Bio-Preferred |  CPG | Not Currently Assessed                          | Energy Use, Fossil Fuel Use, Global Warming Potential, and/or Greenhouse Gas Emissions | Ozone Depletion Potential | Criteria Air Pollutants | Pollution Discharges to Water | Water Use                 | Waste Generation        | ANSI/ BIFMA X7.1 Standard for Formaldehyde and TVOC Emissions | CDPH Standard Method 1.1- 2010 for VOC Emissions | TB 117-2013- CA furniture flammability standard | Solid Waste Generation (e.g. design for disassembly, product take-back programs, remanufactured/ repurpose capabilities, or minimizing disposal impacts) | II.5 Toxic Hazards | II.6 Disclosure of Chemical Substances | II.7 Public Disclosure of Chemical Substances of Concern | Confirmed Voluntary Consensus Standard per OMB A-119? | Accredited or conforming CAB is confirmed by EPA? | Best practices in ecolabel program management? | Link to product registry if available |                                  |                                                                                                                                                                                                                                                           |
| <a href="#">TUV Rheinland® Green Product Mark</a>                                                                                                          | -                                                                                               | -                                                                                     | N/A                                             | YES                                                                                    | ✓                         | -                       | -                             | -                         | -                       | -                                                             | YES                                              | ✓                                               | ✓                                                                                                                                                        | -                  | N/A                                    | ✓                                                        | -                                                     | -                                                 | ✓                                              | ✓                                     | ✓                                | <a href="https://www.certipedia.com/search?utf8=%E2%9C%93&amp;locale=en&amp;q=green+product&amp;certificate_type=Green+Product">https://www.certipedia.com/search?utf8=%E2%9C%93&amp;locale=en&amp;q=green+product&amp;certificate_type=Green+Product</a> |

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| <a href="#">View more about the EPA Recommended Standards and Ecolabels and the Guidelines on which they are based.</a>      | Applicable Federal Requirements                                                                                                                         |                                                                                                 | Section II: Environmental/Human Health Hotspots                                       |                           |                          |                           |                                                   |                                                |                                       |           |                           |                        |                                                               |                           |                                                  |                                                 |                                                                                                                                                          | Section I: Process for Developing Standards | Section III: Conformity Assessment     | Section IV: Ecolabel Management                          | Product Availability Information |   |   |                                                                                                    |                                                                                                                                                                       |
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|                                                                                                                              |                                                                                                                                                         |                                                                                                 | Guidelines II.1 per Life Cycle Stage                                                  |                           |                          |                           |                                                   |                                                |                                       |           |                           |                        |                                                               |                           |                                                  | Approaches to Chemicals                         |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
|                                                                                                                              |                                                                                                                                                         |                                                                                                 | Pre- Extraction/ Raw Materials Hotspot(s)                                             |                           | Manufacturing Hotspot(s) |                           |                                                   |                                                | Installation Hotspot(s)               |           |                           | End of Life Hotspot(s) |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
|                                                                                                                              | How the Standard/ Ecolabel Meets the Hotspot:<br>✓=Required criterion<br>✓O= Optional criterion<br>- Does not meet<br>OK: Meets more stringent criteria |  Bio-Preferred |  CPG | Addresses LifeCycle Stage | Not Currently Assessed   | Addresses LifeCycle Stage | Baseline                                          | Leadership                                     |                                       |           | Addresses LifeCycle Stage | Baseline               | Leadership                                                    | Addresses LifeCycle Stage | Baseline                                         | Leadership                                      |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
| Energy Use, Fossil Fuel Use, Global Warming Potential, and/ or Greenhouse Gas Emissions                                      |                                                                                                                                                         |                                                                                                 |                                                                                       |                           |                          |                           | Ozone Depletion Potential                         | Criteria Air Pollutants                        | Pollution Discharges to Water         | Water Use |                           | Waste Generation       | ANSI/ BIFMA X7.1 Standard for Formaldehyde and TVOC Emissions |                           | CDPH Standard Method 1.1- 2010 for VOC Emissions | TB 117-2013- CA furniture flammability standard | Solid Waste Generation (e.g. design for disassembly, product take-back programs, remanufactured/ repurpose capabilities, or minimizing disposal impacts) | II.5 Toxic Hazards                          | II.6 Disclosure of Chemical Substances | II.7 Public Disclosure of Chemical Substances of Concern |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
| Confirmed Voluntary Consensus Standard per OMB A-119?                                                                        |                                                                                                                                                         |                                                                                                 |                                                                                       |                           |                          |                           | Accredited or conforming CAB is confirmed by EPA? | Best practices in ecolabel program management? | Link to product registry if available |           |                           |                        |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
|                                                                                                                              |                                                                                                                                                         |                                                                                                 |                                                                                       |                           |                          |                           |                                                   |                                                |                                       |           |                           |                        |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
| Recommended Single Attribute/ Single Material Standards and Ecolabels:                                                       |                                                                                                                                                         |                                                                                                 |                                                                                       |                           |                          |                           |                                                   |                                                |                                       |           |                           |                        |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                                             |                                        |                                                          |                                  |   |   |                                                                                                    |                                                                                                                                                                       |
| <a href="#">Association for Contract Textiles NSF/ ANSI 336: Sustainability Assessment for Commercial Furnishings Fabric</a> | ✓                                                                                                                                                       | -                                                                                               | YES                                                                                   |                           | YES                      | ✓                         | -                                                 | -                                              | -                                     | -         | -                         | YES                    | OK                                                            | ✓O                        | -                                                | YES                                             | ✓O                                                                                                                                                       | ✓                                           | ✓                                      | -                                                        | ✓                                | ✓ | - | No directory of certified products available at this time.                                         |                                                                                                                                                                       |
| <a href="#">International Living Futures: Declare</a>                                                                        | N/A                                                                                                                                                     | N/A                                                                                             | N/A                                                                                   |                           | N/A                      |                           |                                                   |                                                |                                       |           |                           |                        | YES                                                           | ✓                         | ✓                                                | -                                               | N/A                                                                                                                                                      |                                             | ✓                                      | ✓                                                        | -                                | - | - | <a href="http://www.living-future.org/declare-products">www.living-future.org/declare-products</a> |                                                                                                                                                                       |
| <a href="#">Global Recycled Standard, v3</a>                                                                                 | -                                                                                                                                                       | -                                                                                               | YES                                                                                   |                           | YES                      | ✓                         | ✓                                                 | -                                              | -                                     | -         | -                         | -                      | N/A                                                           |                           |                                                  |                                                 | N/A                                                                                                                                                      |                                             | ✓                                      | -                                                        | -                                | ✓ | ✓ | ✓                                                                                                  | <a href="http://textileexchange.org/wp-content/uploads/2016/05/GRS-Combined-List.pdf">http://textileexchange.org/wp-content/uploads/2016/05/GRS-Combined-List.pdf</a> |
| <a href="#">SCS Indoor Advantage™ for Furniture</a>                                                                          | N/A                                                                                                                                                     | N/A                                                                                             | N/A                                                                                   |                           | N/A                      |                           |                                                   |                                                |                                       |           |                           |                        | YES                                                           | ✓                         | ✓O                                               | -                                               | N/A                                                                                                                                                      |                                             | -                                      | -                                                        | -                                | ✓ | ✓ | ✓                                                                                                  | <a href="https://www.scsglobalservices.com/certified-green-products-guide">https://www.scsglobalservices.com/certified-green-products-guide</a>                       |

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| <a href="#">View more about the EPA Recommended Standards and the Guidelines on which they are based.</a>                                                      | Applicable Federal Requirements                                                                    |                                                                                          | Section II: Environmental/Human Health Hotspots |                           |                          |                               |           |                           |                         |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                    | Section I: Process for Developing Standards | Section III: Conformity Assessment                       | Section IV: Ecolabel Management | Product Availability Information |   |   |   |   |                            |
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|                                                                                                                                                                |                                                                                                    |                                                                                          | Guidelines II.1 per Life Cycle Stage            |                           |                          |                               |           |                           |                         |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                    |                                             |                                                          |                                 |                                  |   |   |   |   |                            |
|                                                                                                                                                                |                                                                                                    |                                                                                          | Pre- Extraction/ Raw Materials Hotspot(s)       |                           | Manufacturing Hotspot(s) |                               |           |                           | Installation Hotspot(s) |                                                               |                           | End of Life Hotspot(s)                           |                                                 | Approaches to Chemicals                                                                                                                                  |                    |                                             |                                                          |                                 |                                  |   |   |   |   |                            |
|                                                                                                                                                                | Addresses LifeCycle Stage                                                                          | Not Currently Assessed                                                                   | Addresses LifeCycle Stage                       | Baseline                  | Leadership               |                               |           | Addresses LifeCycle Stage | Baseline                | Leadership                                                    | Addresses LifeCycle Stage | Baseline                                         | Leadership                                      |                                                                                                                                                          |                    |                                             |                                                          |                                 |                                  |   |   |   |   |                            |
| Energy Use, Fossil Fuel Use, Global Warming Potential, and/ or Greenhouse Gas Emissions                                                                        |                                                                                                    |                                                                                          |                                                 | Ozone Depletion Potential | Criteria Air Pollutants  | Pollution Discharges to Water | Water Use |                           | Waste Generation        | ANSI/ BIFMA X7.1 Standard for Formaldehyde and TVOC Emissions |                           | CDPH Standard Method 1.1- 2010 for VOC Emissions | TB 117-2013- CA furniture flammability standard | Solid Waste Generation (e.g. design for disassembly, product take-back programs, remanufactured/ repurpose capabilities, or minimizing disposal impacts) | II.5 Toxic Hazards | II.6 Disclosure of Chemical Substances      | II.7 Public Disclosure of Chemical Substances of Concern |                                 |                                  |   |   |   |   |                            |
| <b>How the Standard/ Ecolabel Meets the Hotspot:</b><br>✓=Required criterion<br>✓O= Optional criterion<br>- Does not meet<br>OK: Meets more stringent criteria | <br>Bio-Preferred | <br>CPG |                                                 |                           |                          |                               |           |                           |                         |                                                               |                           |                                                  |                                                 |                                                                                                                                                          |                    |                                             |                                                          |                                 |                                  |   |   |   |   |                            |
| <a href="#">UL 2818 GREENGUARD Certification Program for Chemical Emissions For Building Materials</a>                                                         | N/A                                                                                                | N/A                                                                                      | N/A                                             |                           | N/A                      |                               |           |                           |                         |                                                               |                           | YES                                              | ✓                                               | ✓                                                                                                                                                        | -                  | N/A                                         |                                                          | -                               | -                                | - | ✓ | ✓ | ✓ | <a href="#">ul.com/spg</a> |

### Specification(s):

In addition to the Applicable Federal Program requirements and the Non-Federal Standards/Ecolabels, EPA Recommends the following specifications for furniture, where applicable:

**Hazardous Flame Retardants** : Upholstered products shall meet Technical Bulletin 117-2013 (California's furniture flammability standard) and must comply with the labeling requirements of California Senate Bill 1019, which was passed on September 30, 2014, and requires a label indicating whether the product contains or does not contain added Flame Retardants.

**Indoor Air Quality/VOC Emissions** : Products shall meet ANSI/BIFMA X7.1 Standard for Formaldehyde and TVOC Emissions, or equivalent.

Note: Beginning December 2017, products shall instead meet the emissions requirements of BIFMA e3 criterion 7.6.2, or equivalent.