Guidance for the Cradle to Cradle Certified™ Product Standard, Version 3.1

Last Revision: May 2023

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TABLE OF CONTENTS

GUIDANCE FOR THE CRADLE TO CRADLE CERTIFIED™ PRODUCT STANDARD, VERSION 3.1 REVISION HISTORY

REVISION DATE	SECTION	TYPE OF CHANGE	AUTHORIZED BY
September 29, 2016	Initial Release		S. Klosterhaus
May 2017	1.3	Clarified requirements in designating materials as either technical or biological nutrients.	S. Klosterhaus
May 2017	2.1	Added definition of what counts as a single product variation.	S. Klosterhaus
May 2017	2.1	Added additional products that are not eligible for certification: specific medical products, certain animal skins or pelts, and unoptimizable materials.	S. Klosterhaus
May 2017	3.1	Bleaching agents added to the scope of plant-based materials as subject to review at any level	S. Klosterhaus
May 2017	3.3	Clarified that, to comply with toxic metal thresholds, averaging results among several batches is permissible for BN materials with post-consumer recycled content	S. Klosterhaus
May 2017	3.4	Corrected to reference in the standard (3.3 instead of 3.1) in regard to the definition of "intentionally added" chemicals.	S. Klosterhaus
May 2017	3.4, 3.6	Clarified that only Cr(VI) be considered for metal plating processes when determining chemicals required for a complete assessment.	S. Klosterhaus
May 2017	3.9	Clarified that TLV/MAK values (i.e. point 3c) take precedent over detection limit (i.e. point 3a) in determining allowable thresholds for VOCs.	S. Klosterhaus
May 2017	3.9	Corrected link to the California Department of Public Health's (CDPH) Standard Method v1.1-2010	S. Klosterhaus
May 2017	4.1	Clarified definition of biodegradability, what materials may be assumed to be biodegradable, and what tests are required to verify biodegradability.	S. Klosterhaus

May 2017	4.1	Clarified definition of how compostability is determined, what materials may be assumed to be compostable.	S. Klosterhaus
May 2017	4.1	Clarified the scope of the definition of recycled content	S. Klosterhaus
May 2017	4.1	Expanded the scope of exempt products to include all wet-applied products.	S. Klosterhaus
May 2017	4.1	Clarified the scope of exempt coatings used on metals in the requirement that wet-applied materials be classified as biological nutrients.	S. Klosterhaus
May 2017	4.2	Clarified when compostability testing is required.	S. Klosterhaus
May 2017	5.3	Updated reference to Green-e national standard, which determines the eligibility of certain renewable fuels.	S. Klosterhaus
May 2017	5.5	Clarified requirement to reflect “embodied emissions” instead of “embodied energy”.	S. Klosterhaus
May 2017	7.4	Added ZQ Merino Wool, and BES 6001 Framework Standard for Responsible Sourcing to list of approved programs. Also, added a specification to the RSPO Palm Oil Certification.	S. Klosterhaus
March 2018	1.3	Clarified requirements in designating materials as technical or biological nutrients**.**	S. Klosterhaus
March 2018	1.3	Clarified the definition of “sealed” as part of the EMC requirements.	S. Klosterhaus
March 2018	2.1	Clarified that products that lead to or include animal abuse are out of scope for certification	S. Klosterhaus
March 2018	6.5	Clarified that GREY ratings due to missing toxicity information are only allowable for the Silver level Water Stewardship requirement.	S. Klosterhaus
March 2018	6.5	Clarified that process chemicals may be assessed as mixtures and assigned material level ratings	S. Klosterhaus
September 2018	2.1 & 7.4	Removed ZQ Merino. (This was mistakenly added at a prior update before it had been fully approved.)	S. Klosterhaus
September 2018	3.5	Added a section that clarifies how to assess bleaching chemistry. This includes introduction of standard detection limits for AOX and the most toxic dioxin.	S. Klosterhaus
September 2018	3.6	Clarified that for the cases listed in this section, percentage assessed must be calculated at the chemical level.	S. Klosterhaus

September 2018	3.9	Clarified scope of VOC testing	S. Klosterhaus
September 2018	4.2	Clarified that a nutrient management strategy is not required for products made of a discrete list of common materials for which recycling infrastructure is readily available in markets for which the product is sold.	S. Klosterhaus
September 2018	5.3	Updated references to recommended offset registries.	S. Klosterhaus
September 2018	6.2	Updated a US reference for characterizing local and business specific water issues.	S. Klosterhaus
March 2019	2.1	Added two compliance paths for addressing animal welfare concerns applicable to wool and similar materials.	S. Klosterhaus
October 2020	3.3	Corrected a typo in the banned list for biological nutrients	S. Klosterhaus
October 2020	3.6	Clarified the allowable methods for determining percentage assessed for products containing materials that are Cradle to Cradle Certified or have a Material Health certificate.	S. Klosterhaus
October 2020	3.8	Clarified that any known CMRs subject to review must be included in the assessment results at the Silver level.	S. Klosterhaus
October 2020	4.1	Clarified that the MR Score for single-material Biological Nutrient products that are dry powders may be determined using the process for wall paints and other wet-applied products.	S. Klosterhaus
October 2020	5.3	Clarified when and what percentage of renewable electricity available on the standard grid may be claimed.	S. Klosterhaus
October 2020	7.4	Added Better Cotton Initiative to the list of recognized standards.	S. Klosterhaus
May 2023	7.2	Added an alternative compliance pathway for achieving the supplier code of conduct requirement.	S. Klosterhaus
May 2023	7.4	Added several standards for achieving the material-specific or issue-specific audit requirement.	S. Klosterhaus

1 OVERVIEW OF THE GUIDANCE DOCUMENT

1.1 PURPOSE AND CONTENT

The purpose of this document is to serve as guidance to the Cradle to Cradle Certified Product Standard, Version 3.1 (the 'standard'). This guidance provides clarification and further interpretation of the original intent of a number of the requirements in Version 3.1 of the standard document. Information in this document supersedes any conflicting information that may be present in the full standard document.

1.2 SUPPORTING DOCUMENTS

The following documents are to be used in conjunction with this guidance document:

- Cradle to Cradle Certified™ Product Standard, Version 3.1
- Cradle to Cradle Certified™ Material Health Assessment Methodology
- Any additional supporting standard documents and guidance posted on the C2CPII website

Visit the Cradle to Cradle Products Innovation Institute website to download the standard documents and obtain the most current information regarding the product standard (http://www.c2ccertified.org/product_certification/c2ccertified_product_standard).

1.3 DOCUMENT ORGANIZATION

Beginning with Section 2 of this document, guidance is organized following the sections of the original standard document. Section sub-headings without any additional guidance have been omitted from this document.

Effective Material Cycles

Background: The standard delineates what types of products may be considered Biological or Technical Nutrients.

Interpretation: Certain products MUST be designated as biological nutrients. These include

- Any formulated products that are wet-applied by the end-user or consumer, or any coatings, finishes, or liquids applied to biological materials (e.g. wool, bioplastics, cotton, paper, etc.). Exceptions to this rule are coatings intended exclusively for metal materials.
- Materials that, in their intended application, make it either impractical or impossible to cycle via TN cycling pathways (e.g. toilet paper, paper towels, tissues, sanitary napkins, etc.).
- Products such as tires, brake pads, or shoe soles that are intended to abrade in use also must be assessed as biological nutrients (even if they are designed as technical nutrients).

Externally Managed Components (EMCs)

Background: The standard delineates what defines an EMC and the requirements for how they must be assessed. The intent of these requirements is for the supplier to attest that the sub-assembly is a sealed component manufactured in a way that prevents the migration of chemicals and materials from the component.

Interpretation: “Sealed" is intended to mean that the EMC portion of the product is not available for oral, dermal, or inhalation exposure to occur during use or likely unintended use. Use includes any maintenance that may need to occur during use of the product. Any components or materials that are available for exposure to occur, such as the housing, any external wiring, etc. may not be considered part of the EMC and must be assessed per the traditional methodology.

2 OVERVIEW OF THE STANDARD

2.1 PRODUCT SCOPE

Definition of a Product, Product Variation

Background: The standard states that “materials and sub-assemblies can be considered “products” for certification purposes.”

Interpretation: Although the certification covers a wide range of products, including items like materials and sub-assemblies that are not intended for supply to the general public, the general definition of a product as described in the product grouping policy must still be fulfilled: "... any physical item that can be routinely and individually purchased from the applicant by other entities.” Applicants may not certify items which they sell exclusively as parts of other products and not individually.

Additional Product Types Excluded from the Product Scope

Background: The standard presents a list of products that are excluded from certification to “create a threshold to prevent unreasonable products from entering the system and to protect the positive values around products, as well as their usefulness.”

Interpretation: The following product types have been added to this list. They include:

1. Fur, skins, or pelts from vertebrates killed specifically to harvest materials (e.g. fox, mink, beaver, and ermine fur, skin, or pelts). Leather, skins, or pelts from vertebrates used in meat production are allowed (e.g. rabbit fur, cow, and sheep skins obtained during meat production).
2. Products that are comprised of chemicals whose toxicity is intrinsically tied to the product’s core functionality thus rendering the product non-optimizable (e.g. biocides or raw chemicals that are x-assessed in their intended use)

The following product type is also excluded from the product scope because it is intended to have a specific physiological impact and the Cradle to Cradle Certified Material Health Assessment Methodology is not designed for the purpose of evaluating such intentional impacts:

3. Products that are classified as medical products according to the following definition:

(a) Any substance or combination of substances presented as having properties for treating or preventing disease; or

(b) Any substance or combination of substances which may be used in or administered to human beings and/or animals either with a view to restoring, correcting, or modifying physiological functions by exerting a pharmacological, immunological or metabolic action, or to making a medical diagnosis. This also includes substances that are marketed for this purpose (even if there is little evidence for medical benefit).

Clarification on products related to animals that are out of scope for certification

Background: The standard presents a list of products that are excluded from certification to "create a threshold to prevent unreasonable products from entering the system and to protect the positive values around products, as well as their usefulness."

Interpretation: This is intended to include products that lead to or include animal abuse.

All animals used by people are covered by the Treaty of Amsterdam and Treaty of Lisbon statements that animals must be considered as sentient beings. This means that the animals are not just goods, or products, or possessions, but have some intrinsic value and must be treated accordingly.

Products leading to or including animal abuse include the following in the context of animal material:

1. Material from vertebrates that are raised primarily or only for their fur, skins, pelts, etc. (e.g. fox, mink, beaver, and ermine fur).
2. Material from unsustainable fisheries.

This interpretation applies when the certified product is made entirely of animal material (e.g. a wool yarn), and also when animal material is used as an input to a certified product (e.g. a wool textile may be used as upholstery for a certified furniture product; shark cartilage as an input to a personal care product.)

The following animal-related products may be considered in-scope:

1. Material from animals that do not have to be killed in order to harvest the material (e.g. wool, mohair)
2. Material that is a by-product from the meat industry (e.g. leather, rabbit fur, sheepskin, chicken, duck, and goose feathers)
3. Silk
4. Material that is a by-product of processing Marine Stewardship Council (MSC) certified seafood (i.e. portions of the certified seafood product that are unusable as food).

For in scope materials #1 & #2, the applicant must have a policy in place that forbids animal abuse at all facilities where the animals are raised and/or slaughtered, including facilities in the supply chain, as relevant. The policy must include language that:

1. Addresses the five freedoms.
2. Includes specific positions on any practices of high concern relevant to the material type in question. The following must be addressed as indicated. Additional issues may be added at

a later date based on the list of pre-approved certifications below and other applicable references.
    a. Wool: mulesing is unacceptable
    b. Down, angora (rabbit), and mohair (goat): live plucking is unacceptable
    c. Down/feathers: force feeding is unacceptable
    d. Rabbit: small cage size and crowding is of high concern and must be addressed.
    e. Cattle, goat, sheep: Use of electric prods is unacceptable
3. Includes provisions to immediately address cases where it becomes known that animal abuse is occurring, for example, a provision to immediately cease doing business with affected suppliers until the issue is resolved.

In addition, the applicant must demonstrate that a mechanism is in place that aims to ensure adherence to the policy. At a minimum, the mechanism must include:

1. Regular on site surveillance of all relevant facilities by individuals knowledgeable of animal health and welfare issues. During site visits, the responsible individual must check that the five freedoms are being addressed and that there is no evidence of the prohibited practices listed above. Self-declarations from the farm or individuals hired by the farm are not sufficient. The following are acceptable:
    a. Direct visits by the applicant or an intermediary hired by the applicant such as a veterinarian.
    b. Third party audits by approved certification bodies.
2. A method of tracking material from farm to certified product (i.e. a method to track the chain of custody) in any case where the farm is not the final manufacturing stage.

ALTERNATIVE for in scope material types #1 & 2 (i.e. material from animals that do not have to be killed in order to harvest the material and for by-products) that are certified organic: Applicant has a policy in place and is demonstrating continuous improvement towards implementing a monitoring mechanism **and/or** is actively working to influence and improve on how organic agriculture standards address and verify animal welfare. (NOTE: certified organic cannot be assumed to fully address animal welfare concerns. This alternative is provided because Cradle to Cradle Certified encourages the use of organic material and recognizes that it is currently a very high bar to ask for both an organic and a fully functioning mechanism or welfare certification at the Basic level of certification.)

ALTERNATIVE for in scope material type #1 (i.e. material from animals that do not have to be killed in order to harvest the material): Applicant has a policy in place and is demonstrating continuous improvement towards implementing a monitoring mechanism. (NOTE: this option is provided in recognition of the fact that it is currently often impossible to trace wool back to the farm level, and that current certification holders using wool will need additional time to fully comply with this interpretation.)

Although not currently required, existing third-party certification programs that address all of the required points listed above are highly recommended and the preferred method of ensuring that abuse does not occur. If an appropriate certification is in place, proof of certification may be provided instead of documentation demonstrating that a policy and mechanism, as described above, are in place.

Pre-approved certifications:

- Animal Welfare Approved (applies when material coming directly from the farm will be Cradle to Cradle certified. Standards do not include chain of custody requirements.)
- Down Pass 2017
- Global Traceable Down Standard
- IDFL when certifying to one of the approved programs (note: IDFL is a third-party certification body not a standard)
- Responsible Down Standard
- Responsible Wool Standard

3 MATERIAL HEALTH

3.1 GENERIC MATERIAL TYPE AND INPUTS SUBJECT TO REVIEW

Clarifying scope of materials subject to review at any concentration level to include bleaching agents for plant-based materials

Background: The standard states the following materials as subject to review at any concentration: finishes (coatings, plating, paints), blowing agents, textile auxiliaries, paper bleaching agents, and plating chemistry are subject to review at any concentration level when the part these are relevant to is itself present at ⩾0.01% in the product.

Interpretation: Included in the list of materials that are subject to review at any concentration are bleaching agents used in processing of plant-based materials such as cotton.

NOTE: Also see section 3.4 below for additional interpretations relevant to materials subject to review at any level.

3.3 DETERMINING ABSENCE OF BANNED LIST CHEMICALS

Determining Toxic Metal Thresholds of BN Materials Containing Post-Consumer Recycled Content

Background: The standard states specific thresholds for toxic metals in BN materials as follows: 2 ppm for cadmium, 90 ppm for lead, 100 ppm for chromium, 1 ppm for mercury, and 10 ppm for arsenic. However, it does not state a method for testing for these thresholds when the BN contains post-consumer recycled content.

Interpretation: Solid BN materials with post-consumer content may comply with toxic metal thresholds by testing for concentrations that are on average, among several batches of product, below the specified toxic-metal thresholds for any given period time where the material is supplied for use in a certified product. This is provided that any exceedances in individual batches

are due to variable unintended and unavoidable contamination of the post-consumer recycled content stream.

Correction to the Banned List of Chemicals

Background: The banned list of chemicals for biological nutrients (Table A-2 in the Section 15 Appendix) includes Benzo(g,h,l)perylene (CAS 191-24-2).

Interpretation: The correct spelling is: Benzo(g,h,i)perylene. This has been corrected in the Banned List of Chemicals Form.

3.4 COLLECTION OF MATERIAL COMPOSITION DATA

Chemicals Subject to Review at Any Concentration – Textile Auxiliaries and Leather Tanning Agents

Background: In this section, the standard states that "Chemicals subject to review are limited to intentionally added inputs (see Section 3.1 for definition of intentionally added)."

Interpretation: The standard is referring to the incorrect section. This passage was intended to reference section 3.3 instead.

Background: The standard states that the chemicals subject to review in each material are those present at a concentration ⩾ 0.01% (⩾ 100 ppm), and those subject to review at any concentration.

Chemicals subject to review at any concentration are: lead, mercury, hexavalent chromium, cadmium, pigments, dyes and other colorants, phthalates, halogenated organics, scarce elements, metal plating agents, textile auxiliaries, blowing agents, and paper bleaching agents. These chemicals are subject to review even if they do not remain in the final product.

Interpretation: The term 'textile auxiliaries' is to be replaced with 'textile dye auxiliaries' here and in other sections of the standard where this concept is discussed. A textile dye auxiliary is any substance used in the dye bath (i.e. during the dying step). A textile auxiliary is defined as any process chemical used during the dyeing or finishing of a textile. Textile auxiliaries that are not dye auxiliaries need only be included in the review if they are present at a concentration ⩾ 0.01% (⩾ 100 ppm) within the textile material. They will also be considered in the Water Stewardship category at the Silver level if they are present in effluent as part of the product's final manufacturing stage.

Interpretation: Leather-tanning agents shall be added to the list of chemicals subject to review at any concentration.

Chemicals Subject to Review at Any Concentration – Process Chemicals and Chromium in Metal Plating

Background: The standard states that the concentration of process chemicals that include metal plating agents, in addition to textile auxiliaries, blowing agents, and paper bleaching agents, must be collected regardless of the concentration in the material.

Interpretation: When the standard states that "metal plating agents" are subject to review, this is intended to mean that Cr(VI) must be assessed when used as a metal plating agent, regardless of the chrome speciation in the final product. If Cr(VI) is used in the plating process of a material subject to review in a product, this means the product is limited to the Bronze level in Material Health (since Cr(VI) is a CMR).

However, other substances that may be used in the plating process do not have to be assessed if they comprise < 100 ppm of the material in the finished product.

NOTE: Also see section 3.1 above for additional interpretations relevant to materials subject to review at any level.

3.5 MATERIAL ASSESSMENTS

Assessment of Bleaching Chemistry

Background:

1. Bleaching chemistry is subject to review at any level for all biological nutrient materials per the Standard Material Health requirements.
2. When chlorine based bleaching including Elemental Chlorine Free (ECF) bleaching (which is based on chlorine dioxide) are used to manufacture bleached pulp, halogenated organics form and are typically present in effluent above detection limits.
3. Per the Water Stewardship requirements for assessing product relevant chemicals including process chemicals: "If the exposure is via effluent, the assessment must be conducted on the primary hydrolyzed or reacted form of the parent chemical that would appear in the effluent." This is noted in the context of assessing chemicals used during the final manufacturing stage.
4. Halogenated organic substances are always x-assessed when subject to review, including when they are (or are not) in the product and/or when detectible in effluent.
5. Substances with RED hazard flags that are potentially entering the effluent must be below detection in effluent to receive a c-assessment in that context as noted in the Exposure Assessment Methodology.
6. The result: Halogenated organics, typically measured as AOX in pulp & paper effluent, have to be below detection in effluent, otherwise exposure must be assumed plausible and an x-assessment assigned.

Interpretation:

The following applies in all cases, including to bleaching chemicals when subject to review at any level and when bleaching chemistry is assessed for the Material Health and Water Stewardship

requirements: If the exposure is via effluent, the assessment must be conducted on the primary hydrolyzed **or final reacted form(s)** of the parent chemical that would appear in the effluent.

In the context of chlorine based bleaching of biological nutrients, it must be assumed that AOX and the most toxic dioxin (2,3,7,8-TCDD) are 'final reacted forms' potentially present in the effluent unless a closed loop system is in place.

If AOX and 2,3,7,8-TCDD are present below detection in effluent at the bleaching plant(s), and exposure is otherwise not plausible based on application of the Exposure Assessment Methodology to all use/life cycle phases, then a c-assessment for chlorine based bleaching agents is possible.

The following detection limits apply unless the applicant's permits require lower limits in which case the permit limits must be used.

- AOX: 20 ppb. This is the detection limit for US EPA test method 1650, required for use in demonstrating compliance with the US effluent guidelines for pulp and paper. Note that in the EU there are several possible test methods with ISO 9562 being common. The detection limit for ISO 9562 is 10 ppb.
- 2,3,7,8-TCDD: 10 pg/L. This is based on the US EPA test method 1613.

3.6 DETERMINING PERCENTAGE ASSESSED

Percentage Assessed at the Chemical Level

Background: The standard requires that materials in a product be assessed using the ABC-X rating system. In most cases, an increasing percent of homogeneous materials by weight must be assessed as certification level increases. However, an increasing percent of chemicals by weight may be used in some cases as detailed below. Exception #2 below is a new interpretation added to the standard via this guidance document.

Interpretation: The total percentage of the product assessed equals the sum of the individual percentages by weight of each homogeneous material (that meet the requirements detailed in the full standard document), with two exceptions as described below. For products in category #1 below, and if applying the exception described in #2, the percentages for each chemical by weight **must** be used in determining the percentage of the product assessed.

1. The product is a single-material product. For this purpose, a product is considered a single-material product if it is composed of:
    a. A single homogeneous material, or
    b. A single homogeneous material that is at least 95% of the final product by weight and 5% or less of other materials that are either a coating, finish, print, paint, ink, other surface treatment, film, or interlayer.
2. The product contains at least one homogeneous material that makes up more than 25% of the product by weight and this material contains one or more GREY substances whose assessment is infeasible due to missing toxicity data or formulation information that the assessor is unable to obtain due to a supplier's refusal to share the information. For a

product to qualify for this exception, this homogenous material must itself be at least 95% assessed based on the weight fraction of the individual assessed chemical substances in the material.

Ensuring Absence of CMRs at the Silver Level when Reporting Percentage Assessed at the Chemical Level

Background: If reporting percentage assessed based on the weight of chemicals per one of the exceptions described in the section above and applying at the Silver level, it is necessary to perform additional due diligence to ensure that carcinogens, mutagens, and reproductive toxicants (CMRs) are not present.

Interpretation: In order for a substance to count towards the percentage assessed at the Silver level, it must not be GREY and one of the following is required:

- It is part of a homogenous material in which all of the substances subject to review have been identified (i.e., no GREY ingredients due to lack of formulation data) and none received a single chemical risk score of 'x' as a result of being a CMR (other chemicals may still be GREY due to missing toxicity data and thus not count toward the percentage assessed), OR
- It is part of a homogenous material for which the material supplier or other party with knowledge of the chemical composition of the material has signed a declaration stating that CMRs are not present in the material.

These conditions also apply when the product itself is a single homogenous material. This means that in order for any substances in a single homogenous material product to count towards the percentage assessed at the Silver level, the substance(s) must not be GREY, and either all substances subject to review must be identified, or CMR declarations must be obtained from suppliers of unidentified mixtures.

Determining Percentage Assessed for Products Containing Materials that are Cradle to Cradle Certified or have a Material Health Certificate

Background: The standard requires that materials in a product be assessed using the ABC-X rating system. An increasing percentage of homogeneous materials by weight, or chemicals by weight in the case of single homogenous material products (also see interpretation above), must be assessed as the achievement level increases. In some (but not all) cases, materials that are Cradle to Cradle Certified or have Material Health Certificates may count towards the percentage assessed for another product.

Interpretation: For single homogeneous materials (and any other materials for which percentage assessed has been determined at the chemical level per the interpretation above) that are Cradle to Cradle Certified and/or have a Material Health Certificate:

- If the material is at the Gold level in Material Health, it may be assumed to be 100% C-assessed. Materials at the Gold level in Material Health may be used in products certified at any achievement level.

- If the material is at the Bronze or Silver level in Material Health, it may not be assumed that the material is ABC-X assessed. This is because the percentage assessed requirements are 75% and 95% of chemicals by weight at Bronze and Silver level respectively for single homogeneous materials. This means that an overall ABC-X rating for the material is unlikely to have been assigned. For the material to be counted towards the percentage assessed in another product, it will be necessary to obtain an ABC-X assessment rating applicable to the relevant exposure scenarios (or based only on hazard ratings) from the relevant assessor.

- If the material is at the Bronze level in Material Health, it must also be assumed to contain carcinogens, mutagens, and reproductive toxicants (CMRs) - and therefore may only be used in another Bronze level certified product - unless information to the contrary is obtained.

Percentage Assessed for Biological Nutrients

Background: At the Bronze level and above, complete formulation information needs to have been collected for 100% of BN materials that are released directly into the biosphere as a part of their intended use (e.g., cosmetics, personal care, soaps, detergents, paint, etc.).

Interpretation: Cosmetics, personal care, soaps, detergents, paint, etc., includes all wet applied products and all other liquid products that may be released directly to the biosphere during use.

Determining Percentage Assessed – Process Chemicals and Chromium in Metal Plating

See Section 3.4 above.

3.7 MATERIAL OPTIMIZATION STRATEGY

X and GREY Materials Must be Included in the Strategy

Background: The 'Standard Requirement' portion of section 3.7 of the standard states that: 'A phase-out or optimization strategy has been developed for those materials with an X rating.'

Interpretation: The optimization strategy must also include a plan for phase out or complete assessment of any GREY rated materials or chemicals. This is stated in the Methods portion of section 3.7 of the standard: 'All X (problematic) and Grey (data missing) materials are to be included in the optimization plan.'

3.8 DETERMINING ABSENCE OF CMR SUBSTANCES

CMRs Subject to Review and Assessment

Background: The standard requires the following at Silver level: "The product has been at least 95% assessed (by weight) using ABC-X ratings." and "The product does not contain substances known or suspected to cause cancer, birth defects, genetic damage, or reproductive harm (CMRs) in a form that may result in plausible exposure." Per Section 3.8 of the standard "This requirement shall be

interpreted to mean that the 95% or more of the materials in the product that have been assessed as A, B, C, or X do not contain known or suspected CMRs in a form that will result in plausible exposure to humans or the environment during the product scenarios evaluated." The standard also states that if "a CMR is in a material, or is one of the chemical types that are subject to review at any concentration in the product, it is subject to review." In addition, "if the assessor determined that plausible exposure to the CMR may occur as a result of its use in the material, the material receives an X assessment and is not permitted for use in a Silver-certified product."

Interpretation: For the Silver level, if the applicant and/or assessor are aware of a CMR that is subject to review within a material and product, the CMR and the material must be included in the assessment results. If exposure to the CMR is deemed plausible, the product is not eligible for certification at the Silver level. This is true in all cases, including when the CMR is present in a material that would not need to be assessed to achieve the Silver level 95% assessed requirement. In other words, it is not allowable to purposely 'hide' CMRs in the last 5% of the product that may remain unassessed at the Silver level.

Ensuring Absence of CMRs at the Silver Level when Reporting Percentage Assessed at the Chemical Level

See Section 3.6 above regarding conditions applying at the Silver level when determining percentage assessed based on the weight of assessed chemicals instead of assessed homogeneous materials.

3.9 VOLATILE ORGANIC CHEMICAL (VOC) EMISSIONS TESTING

Scope

Background: The standard states that a product designed for indoor use, or one that could potentially impact indoor air quality, must meet the Cradle to Cradle Certified™ VOC emissions standards. The intent of the requirement is to ensure that VOCs are not being emitted from products used indoors or products that impact the concentration of VOCs in the indoor environment. Indoor-use products are those with intended or likely unintended use scenarios in interior spaces (i.e., inside a building). Due to the short duration of exposure, consumable indoor products fully designed as biological nutrients (e.g., detergents, personal care products, toilet paper) are not subject to the VOC emissions testing requirement. Furthermore, VOC tests are not required for products that are sold exclusively as material inputs for other products (rather than being sold to the general public).

Interpretation: Testing to demonstrate compliance with the Cradle to Cradle Certified™ VOC emissions standards is required for products that are:

- permanently installed in indoor rooms, e.g. floors, walls, ceilings and insulation material, or
- used to install the above-mentioned products permanently, e.g. adhesives and sealants, or
- permanently applied to surfaces in indoor rooms, e.g. paints and coatings, or
- used as permanent or long-term equipment of indoor rooms, e.g. all kinds of furniture.

Testing is **not required** for products with "intended or likely unintended use scenarios in interior spaces" that are not permanently installed as described in the bullets above (e.g. testing is not required for clothing, bed sheets, towels, kitchenware, etc.)

7-Day Time Point

Background: The standard states that: 'The time point used is 7 days for VOCs and IVOCs'.

Interpretation: The test duration can be longer than 7 days (up to 14 days) but the testing has to either include a measurement or interpolation to the day 7 concentrations (or earlier), which need to meet the thresholds indicated in the standard.

Testing Requirements for Product Groups

Interpretation: For product groups it is acceptable for the assessor to select and have tested a single representative product (for example the one with the highest number of inputs) if it can reasonably be expected that no other product in the group will perform less well.

VOC Emission Limits Related to Whether or Not a TLV or MAK Value is Known for the VOC of Relevance

Background: The standard currently dictates that individual VOCs that would receive an x assessment must be < (0.01) x [the lower of the TLV or MAK value]. It also states that carcinogens, endocrine disruptors, mutagens, reproductive toxins, or teratogens must be below detection limits (detection limits must be < 9.0 µg/m3 for formaldehyde and < 2µg/m3 for all other chemicals). It is, however, unclear which limit (i.e. 0.01xTLV/MAK or detection limit) takes precedence for carcinogens, endocrine disruptors, mutagens, reproductive toxins, or teratogens.

Interpretation:

VOCs that are considered known or suspected carcinogens, endocrine disruptors, mutagens, reproductive toxins, or teratogens, and have no known TLV or MAK value, are restricted to levels below 2 µg/m^3 (detection limits must be < 2µg/m^3). If the TLV or MAK value of an individual VOC that would receive an x assessment (regardless of whether it is a suspected carcinogen, endocrine disruptor, mutagen, reproductive toxin, or teratogen) is known, then it is restricted to levels below (0.01) x [the lower of the TLV or MAK value].

Formaldehyde is still restricted to levels below 9.0 µg/m^3.

Updated Link to California Department of Public Health's (CDPH) Standard Method v1.1-2010

Background: The standard provides a link (in blue) in referencing VOC levels in the following sentence: "The VOCs with established Chronic Reference Exposure Levels (CRELs) listed in the California Department of Public Health's (CDPH) Standard Method v1.1-2010 must be included in emissions testing. CREL values are continuously updated by the California Office of Environmental Health Hazard Assessment (see http://oehha.ca.gov/air/allrels.html)."

Interpretation: The correct, updated link is the following: California Department of Public Health's (CDPH) Standard Method v1.1-2010

4 MATERIAL REUTILIZATION

4.1 MATERIAL REUTILIZATION SCORE

Determination of the Biodegradability of a Chemical or Material Counting Toward the MR Score

Background: The standard currently states that the biodegradability of a chemical or material is determined as follows: The OECD defines the appropriate testing methods for determining ready and inherent biodegradability. The entire material needs to be biodegradable in order to be counted as biodegradable in the Material Reutilization score. If making biodegradability claims for materials that are not commonly known to be biodegradable, testing should be done according to these, or comparable methods. Biodegradability of the material must be considered under the conditions of the material's intended end-of-use scenario.

Interpretation: For this purpose, commonly known biodegradable substances are defined as: Manufactured items consisting of chemically unmodified natural organic substances with additives that are < 1% by weight and a, b, or c-assessed for the biodegradation or composting exposure scenario may be assumed to be biodegradable. Note that dyeing does not chemically modify a material. Compostable materials (see next section for definition of compostable) may be assumed to be biodegradable as long as the intended end-of-use scenario involves industrial or home composting. However, biodegradable materials may not be assumed to be compostable unless also listed as commonly known to be compostable in the following section.

In order to determine biodegradability of materials not commonly known to be biodegradable, the following certification programs **or the tests that lead to each respective certification** may be used to verify biodegradability (i.e. certification is not necessarily required as long as the relevant test(s) have been carried out and demonstrate that the material is biodegradable). If there are multiple intended end-of-use scenarios, all of those must be addressed by the relevant tests or certification programs.

End-of-Use Environment	Certification Program	Primary Basis (additional relevant tests are listed within program documentation)
Soil	Vinçotte: OK biodegradable SOIL	EN 13432, EN 14995 (adapted for soil conditions)
Freshwater	Vinçotte: OK biodegradable WATER	EN 13432, EN 14995 (adapted for freshwater conditions)

Freshwater	SCS: Biodegradability Standard	OECD 301A-F, OECD 310

Additional biodegradability programs or standards may be added to this list. Requests to add additional programs must include the following:

- A link to the program's website
- A list of the product types within scope
- A summary of any ecotoxicity requirements included
- The relevant end-of-use environment
- The national or international biodegradability standard(s) on which the program is based

Additional tests not necessarily associated with a verified certification program may also be used. These include the following: OECD 306, OECD 311 and OECD 302b.

Determination of the Compostability of a Chemical or Material Counting Toward the MR Score

Background: The standard currently states that a compostable material is a material capable of undergoing biological decomposition in a compost site as part of an available program, such that the material is not visually distinguishable and breaks down into carbon dioxide, water, inorganic compounds, and biomass at a rate consistent with known compostable materials. In addition, the standard states that if making claims on the compostable nature of materials that are not commonly known to be compostable, testing is required according to the appropriate ASTM, ISO, CEN, or DIN standard (e.g., ASTM D6400-04 for plastics).

Interpretation: For this purpose, commonly known to be compostable materials are: Untreated/raw plant and animal matter without additives or colorants. Plain white or brown paper with less than 1% additives that is not colored, coated, shiny, laminated, made with wet strengtheners, or printed with inks is also commonly known to be compostable (see OK Compost's Certification Scheme for "Products made of compostable materials" for some additional exceptions for paper). For commonly known to be biodegradable materials (defined above), proof of biodegradation is not required as part of the compostability tests, but proof of disintegration and compost quality are required. See the relevant compostability standard for further information (OK Compost's Certification Scheme for "Products made of compostable materials" AND Requirements of the EN 13432 Standard).

In order to determine compostability of materials not commonly known to be compostable, the following certification programs or the tests that lead to each respective certification may be used to verify compostability:

End-of-Use Environment	Certification Program	Primary Basis (additional relevant tests are listed within program documentation)

Industrial composting	European Bioplastics: Seedling	EN 13432 (secondarily, ASTM D 6400, EN 14995, ISO 17088)
Industrial composting	DIN-Geprüft: Industrial Compostable	EN 13432 (secondarily, ASTM D 6400, EN 14995, ISO 17088, ISO 18606, AS 4736)
Industrial composting	BPI	ASTM D6400, ASTM D6868
Industrial composting	Vinçotte: OK Compost	EN 13432, EN 14995
Home composting	Vinçotte: OK Compost Home	EN 13432, EN 14995 (adapted for home composting conditions)
Home composting	Association for Organics Recycling: Home Compostable Certification	EN 13432, EN 14995 (adapted for home composting conditions)

Other compostability programs or standards may be added to this list. See the biodegradability section above for requirements to add additional programs to the list.

Scope of the Definition of Recycled Content Toward MR Score

Background: The standard currently defines post-consumer recycled content as "materials that have been collected for recycling after consumer use"

Interpretation: "Recycled content" in this definition is interpreted to include content that comes from reuse, refurbishment or remanufacturing as well as typical recycling collection and processing. Reuse is defined as the use of the same product or material components in a different application or by a different user without the need for reprocessing or improvement. Refurbishment is defined as the renovation or upgrade of a material or product, without the need for part replacement. Remanufacturing is defined as the renovation or upgrade of a material or product in which parts and components are replaced before re-entering the market.

Special Considerations for Calculating the MR Score for Products Containing Water

Background: The standard currently states that with the exception of paints (see next section), water weight must be excluded from the product weight when calculating the Material Reutilization score

Interpretation: This exemption applies more generally to all wet-applied products, not just to paints.

Special Considerations for Calculating the MR Score for Paint and Other Wet-Applied Products: Coatings Used on Metals

Background: The standard currently states that general purpose and wall paints and other wet-applied products must be regarded as Biological Nutrients, and are thus assessed based on their safety when released into the biosphere (by erosion, washing, leaching, burning, or similar processes) and their biodegradability.

Interpretation: An exception to this rule are coatings intended exclusively for application on metals – those can be classified as Technical Nutrients and do not need to have the MR score calculated as specified for other wet-applied products.

Special Considerations for Calculating the MR Score for Paint and Other Wet-Applied Products: Dry Powders that are Biological Nutrients

Background: The standard provides a process for evaluating the Material Reutilization score for paint and other wet-applied products, which must be assessed as Biological Nutrients. The standard notes that because such products are formulated single-material products, the percent biodegradable is not based on the percent of biodegradable homogeneous materials (as for multiple-material products). Instead, the '% biodegradable content' for the MR score is based on the individual product ingredients. In addition, the percent weight of benign minerals commonly found in surface soils and sediments may be considered 'cyclable'.

Interpretation: The Material Reutilization score for single-material Biological Nutrient products that are dry powders may also be determined using the process for wall paints and other wet-applied products.

4.2 NUTRIENT MANAGEMENT STRATEGY

Evidence for Compostability Required If Composting is Primary End-of-use Strategy

Background: The standard currently states that the method of recovering, reusing, recycling, or composting individual materials within the product and the product overall must be addressed within the nutrient management strategy.

Interpretation: If composting in standard industrial composting facilities or at home is the only or primary end-of-use strategy, then compostability testing related to the intended end-of-use scenario must have been completed for materials that are not commonly known to be compostable to ensure that the strategy is viable. With the exception of some paper as described in section 4.1, chemically modified manufactured items of natural origin containing additives or colorants (e.g. wool and cotton textiles) may not be assumed to be compostable under standard home or industrial composting conditions. However, they may be assumed to be biodegradable in some cases as described in section 4.1 (biodegradability does not ensure compostability).

For products that are commonly known to be biodegradable, but are not commonly known to be compostable and also have not been tested for compostability (or cannot pass composting tests due to the length of time for adequate disintegration or resulting compost quality), the nutrient management strategy may be based on biodegradation and/or recycling. In this case, a strategy that does not depend on existing composting facilities or on home composting will be required.

Alternative Compliance for Reporting a Nutrient Management Strategy for Common Material Types

Background: The standard currently requires that a company complete the development of a "nutrient management" strategy for the product that includes scope, timeline, and budget. Documentation required is a strategy outline and narrative addressing these points.

Interpretation: Recycling infrastructure is widely available in the EU and US for some product and material types. When this is the case, it may be assumed that a nutrient management strategy is already in place. Specifically, this may be assumed when the product is a) a basic material used as an input for recyclable products or b) typically recycled via municipal systems (bottle, can, food tub) with no special disassembly required **AND** is comprised mostly (i.e. labels, fasteners, lids, and other small components may be excluded) of one of the following materials:

- Glass
- Paper
- Aluminum
- Steel
- Polyester Terephthalate [PET] (and not any modified derivatives such as PET-G)
- High Density Polyethylene [HDPE]
- Polypropylene [PP]

A nutrient management strategy, as described by the standard, is required in all other cases.

5 RENEWABLE ENERGY AND CARBON MANAGEMENT

5.1 QUANTIFYING ELECTRICITY USE AND EMISSIONS

Reporting Emissions from On-Site Generated Electricity

Background: The standard requires that two mutually exclusive quantities relevant to the final manufacturing stage of the product be reported: electricity use and greenhouse gas emissions.

Interpretation: Greenhouse gas emissions resulting from production of electricity on-site are to be reported in the greenhouse gas emissions category.

5.3 USING RENEWABLE ELECTRICITY AND ADDRESSING GREENHOUSE GAS EMISSIONS

Claiming the Percentage of Renewable Electricity Available on the Electrical Grid and Allocation to the Applicant Product

Background: The standard states that renewable electricity that is already a standard part of the grid mix does not count toward the requirements to use renewable electricity unless the applicant is participating in a voluntary green pricing program or the applicant has verified that their utility is delivering renewable electricity that may be claimed by the utility customer without being double-counted elsewhere in the system. The standard also requires that electricity and greenhouse gas emissions be allocated to the applicant product(s).

Interpretation: In locations where there are no voluntary green power pricing programs available and there is only one electricity mix option, the average percentage of renewable electricity on the grid may be counted by the applicant. In locations where voluntary renewable electricity purchasing options do exist, but the applicant is not participating in the voluntary market, the amount of renewable electricity in the residual mix[1] may be counted by the applicant. In these cases (and when there are no other sources of renewable electricity e.g. on-site produced renewable electricity with renewable attributes retained by the applicant), the percentage of renewable electricity used to manufacture the product is the same as the average percentage of renewable electricity available via the standard grid mix or in the residual mix as applicable.

Carry Over of Excess RECs and Offsets

Background: The standard states that "If it is determined that excess offsets or RECs were purchased in the prior year due to use of estimates, the excess may be credited toward the amount to be purchased at the next re-application."

Interpretation: RECs intended for a given certification period may be purchased up to a year prior to the beginning of that certification period. Excess RECs that were originally intended for any given 2-year certification period may be applied to the 2-year certification period following it, but not to any subsequent certification periods.

Updated Reference to Green-e National Standard

Background: The standard states that "Eligibility of renewable fuels for this purpose is determined based on the definitions in Section II.A 5 in Appendix D of the Green-e National Standard. Renewable fuels that are not covered by the types (woody waste, agricultural crop residue, animal and other organic waste, certain energy crops, landfill gas and wastewater methane) and definitions in Section II.A 5 in the Green-e National Standard may be eligible, subject to a case-by-case review by C2CPII.

Interpretation: The link has since changed and is corrected in the above statement.

Updated References to Offset Registries

Background: The standard provides a partial list of recommended offset registries.

- Clean Development Mechanism https://offset.climateneutralnow.org/

[1] https://www.aib-net.org/facts/european-residual-mix
https://www.green-e.org/residual-mix

- Climate, Community, and Biodiversity http://www.climate-standards.org
- Verified Carbon Standard http://www.vcsprojectdatabase.org/#/home
- Gold Standard https://www.goldstandard.org/
- Green-e Climate (see endorsed program) https://www.green-e.org/

Interpretation: Several web links have changed and are corrected above. The home web page is provided.

5.5 ADDRESSING EMBODIED ENERGY USE WITH OFFSETS OR OTHER PROJECTS

All "Embodied Energy" References Should be Changed to "Embodied Emissions"

Background: The current standard requires that "At least 5% of the embodied energy associated with this product from Cradle to Gate is covered by offsets or otherwise addressed (e.g., through projects with suppliers, product re-design, savings during the use phase, etc.)" Two other phrases in this section also contain the term "embodied energy".

Interpretation: References to "embodied energy" within this section should be replaced with reference to "embodied emissions."

6 WATER STEWARDSHIP

6.2 LOCAL AND BUSINESS-SPECIFIC WATER ISSUES

Reporting on Scarcity/Stress Level

Interpretation: To address Required Documentation item #4 of the water issues characterization (scarcity/stress level), applicants may report any reasonable water stress metric (e.g. baseline water stress, annual renewable water supply per person, etc.), from any source (Global Water Tool, Aquaduct, etc.). Applicants may also report risk levels for more than one metric if they choose. Exclusive use of metrics unrelated to water quantity is not permitted, since the intended issue to investigate is scarcity.

Surf Your Watershed Reference No Longer Available

Background: Surf Your Watershed is a suggested reference for characterizing local and business specific water issues in the US. This reference was available on the US Environmental Protection Agency (EPA) website.

Interpretation: Per the US EPA's website, a replacement application is currently in development, with an expected released date of Fall 2018. This EPA site lists other references that may be used in the interim**:** https://www.epa.gov/waterdata/surf-your-watershed

Watershed information can also be found on the US Geological Survey's (USGS), Science In Your Watershed web site https://water.usgs.gov/wsc/map_index.html and water use by state may be found at the USGS National Water Information System site: https://waterdata.usgs.gov/nwis/wu

6.3 WATER STEWARDSHIP INTENTIONS

High Risk Issues

Background: An action plan to address local and business specific water issues that have been identified per standard section 6.2 is required. Specifically, a plan to address high or very high risk/opportunity categories (Social Hotspot Database) and red ratings (WBCSD Global Water Tool) is required.

Interpretation: Applicants are required to provide a positive impact strategy for any "high" risk issues identified, unless the Global Water Tool is used. In the latter case, a strategy will only be required for "extremely high" risks (since the standard only requires a strategy for "red" ratings outputted by the Global Water Tool). To override a reported high risk from a non-Global Water Tool source, an applicant can report a comparable Global Water Tool result and that result must not be red.

Plan to Address Scarcity

Interpretation: For all identified problems except scarcity, a plausible explanation for why an identified issue is unrelated to the activities of the applicant is acceptable in lieu of an action plan to address the issue. An action plan to address high risk on water quantity (i.e. water scarcity) is required in all cases where water is used at the final manufacturing stage facility. For example, if sanitary water is used but the manufacturing process itself does not require any water, an action plan would still be required.

A list of measures that can be implemented to increase efficient use of water can be found in Appendix A of the U.S. EPA Water Conservation Plan Guidelines.

6.4 WATER AUDIT

Alternative to Facility Wide Water Audit

Background: A facility wide water audit is required. The intent of the requirement is to assist manufacturers with understanding the amount of water used to manufacture the product and identify opportunities for reduction in use. A specific list of metrics to report on is detailed in the standard's Methods section and also within a supporting Water Audit form.

Interpretation: Metrics and supporting documentation other than those listed in the standard and supporting Water Audit form are acceptable as long as the outcome of the data collection and analysis meets the intent of the requirement (i.e., to increase the manufacturer's understanding of

the amount of water used to manufacture the product). For example, a cradle to gate water use life cycle assessment (LCA) would be accepted in place of a facility wide water audit.

6.5 CHARACTERIZING AND ASSESSING PRODUCT-RELATED PROCESS CHEMICALS IN EFFLUENT

Water Recovery

Background: At the Silver level and above, "Product-related process chemicals in effluent are characterized and assessed, or product-related process chemicals are not discharged to water systems because wastewater is kept flowing in systems of nutrient recovery."

Interpretation: The term 'nutrient recovery' in the requirement above is referring to water recovery as opposed to chemical recovery. Product-related process chemicals present in any effluent that is discharged are required to be optimized. In other words, even if wastewater is treated prior to leaving the facility as effluent, product-related chemicals remaining in the effluent must still be characterized, assessed, and optimized (per standard section 6.7) due to the presence of low concentrations of these chemicals'.

Clarification of permissible ways to assess for process chemicals

Background: If the manufacturing process involves process chemicals with the potential to enter final manufacturing stage effluent, the standard requires complete characterization and assessment of these chemicals. It is mentioned that one method for complete characterization and assessment is assigning a single chemical risk rating (abc-x) for each substance used as product-related process chemical or part of a processing mixture (where grey is only allowed if there is missing toxicity data).

Interpretation: As is the case for any homogeneous material or mixture in a product for the Material Health assessment methodology, process chemicals that are formulated mixtures may also be assessed using material-level ABC-X assessments to meet the requirement of full assessment and characterization of process chemicals. This means that if a chemical is identified in a formulated mixture as x, the whole formulated mixture may count as assessed and X.

Required Documentation

Background: As part of the required documentation for this requirement, the assessor must identify the single chemical risk rating (as a,b,c, or x) for each chemical identified. The single chemical risk rating considers the chemical's hazards and exposure to the chemical via effluent. GREY single chemical risk ratings are permissible if the GREY rating is due to missing toxicity data rather than missing formulation information.

Interpretation: The last sentence of this documentation requirement only applies for the Silver level Water Stewardship requirement, not to the Gold level Water Stewardship requirement described in section 6.7 of the standard. At the Silver level, GREY single chemical risk ratings are permissible if the GREY rating is due to missing toxicity data rather than missing formulation

information. At the Gold level, all substances must have received a single chemical risk rating of a, b, or c (GREY is not permissible).

6.6 SUPPLY CHAIN WATER ISSUES AND STRATEGY

Eligible Tier 1 Suppliers

Background: To fulfill the Silver-level supply chain option, applicants must complete one of the three Basic-level water issues investigation options for at least 20% of the tier 1 suppliers.

Interpretation: Only suppliers for which the given investigation option is applicable are eligible to help fulfill the requirement. In other words, only suppliers that have a facility (and are therefore able to complete a water audit) are eligible to contribute toward fulfillment of the water audit option, and only suppliers that have a discharge permit (and therefore can report on whether there was a violation) are eligible to contribute toward the discharge permit option.

7 SOCIAL FAIRNESS

7.2 MANAGEMENT PROCEDURES TO ADDRESS HIGH RISK ISSUES AND OPPORTUNITIES

Alternative Compliance Pathway for the Required Supply Chain Code of Conduct

Background: For tier 1 suppliers in high risk locations providing >1% of product inputs combined (by value), the following must be provided: (a) Existing audit, remediation, and management procedures designed to identify and protect basic human rights of workers within the company's supply chain, or (b) A proposed plan for monitoring and addressing potential issues if the applicant does not have an existing audit and management process.

At a minimum, the management procedures must include a draft supply chain code of conduct to be integrated into supplier contracts, that prohibits child and forced labor, requires that a living wage be paid, and allows for unannounced audits. Child labor and living wage are to be defined according to the ILO and UN. Ideally, the plan will include all major points of the UN Declaration of Human Rights, UN Global Compact, and the ILO Core Conventions and Recommendations.

Alternative Compliance Pathway: As an alternative to the supply chain code of conduct requirement noted above, a draft (or final) supply chain code of conduct that meets the Version 4.0 Section 8.2 Human Rights Policy requirements is accepted. See the Cradle to Cradle Certified Product Standard Version 4.0 and the Version 4.0 User Guidance for additional information. It is recommended to also review the Version 4.0 Gold level requirements in Version 4.0 Section 8.6 Management Systems, which includes additional requirements applicable to supplier codes of conduct.

7.4 MATERIAL-SPECIFIC OR ISSUE-SPECIFIC AUDIT

Additions to List of Approved Programs

Background: A material-specific and/or issue-related audit or certification relevant to a minimum of 25% of the product material by weight is required. A list of pre-approved programs is provided in the standard.

Interpretation: The following have been added to the list of approved programs:

1. Certain statewide professional logger certification programs if it can be shown that the material is supplied directly by a currently certified logger (includes: Pro Logger – North Carolina, Master Logger - Kentucky and Tennessee, and SHARP Logger – Virginia).
2. RSPO Certified Sustainable Palm Oil tracked through the Identity Preserved, Segregated or Mass Balance supply chain certification systems.
3. SustainaWOOL™ under the following conditions:
    a. The wool is sourced only from companies/farmers that are designated as having Ceased Mulesing (CM) or source Non Mulesed (NM) wool. Wool from sheep that have received Pain Relief (PR) treatment may not receive credit as mulesing is still used among these companies/farmers.
    b. A National Wool Declaration (NWD) must be provided. This information will have been collected as part of the SustainaWOOL program.
4. BES 6001 Framework Standard for Responsible Sourcing
5. Better Cotton Initiative (BCI).
6. ISO 45001
7. Sedex Members Ethical Trade Audit (SMETA)
8. COSMOS Organic Standard
9. Responsible Wool Standard
10. Responsible Down Standard

Requesting Additions to List of Approved Programs

Background: Assessors may request additions to the list of approved programs by providing C2CPII with the name of the proposed program and the following details:

1. A summary of the program and how it addresses fundamental human rights and other social fairness issues;
2. A list of any ecolabels/standards (other than C2C) or government programs that reward for use of materials certified under the program; and
3. A summary of any major criticism the program has received from NGOs or governments.

Interpretation: The following is also required and must be verified by the assessor:

4. Accessibility to the program is open to anyone who qualifies to apply. Programs that are administered/overseen by manufacturers allow competitors to join the initiative.