

Process for Development of the Cradle to Cradle Certified™ Product Standard



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1. Introduction

The vision of the Cradle to Cradle Products Innovation Institute (C2CPPI) is a prosperous economy where safe materials are intelligently cycled and manufactured in ways that positively impact people and planet. C2CPPI's mission is to implement this vision through the development and improvement of the Cradle to Cradle Certified™ Product Standard, which provides designers and manufacturers with a framework for continually improving what products are made of and how they are made.

This document defines the development and implementation process and procedures for the Cradle to Cradle Certified Product Standard and related certification standards developed by C2CPPI. This document will be updated on an as-needed basis as the Cradle to Cradle Certified Products Program evolves to ensure that the standard remains the benchmark for leadership in the design and manufacture of environmentally sustainable products.

2. What is Cradle to Cradle Certified?

2.1 History and Background

In 2005, MBDC created the Cradle to Cradle Certified Products Program to acknowledge the high levels of sustainability achieved by its clients in developing products based on Cradle to Cradle® design principles, and to inspire others to optimize their products and “rethink the way they make things.” MBDC released version 1.0 of the Cradle to Cradle Certified Product Standard in 2005 and version 2.0 in 2008.

In 2010, William McDonough and Dr. Michael Braungart created C2CPPI, a 501(c)(3) nonprofit organization, to scale Cradle to Cradle certification globally. In 2012, C2CPPI took over administration of the Cradle to Cradle Certified Products Program from MBDC and began to independently certify products. Following the release of version 3.0 of the standard, which was developed by MBDC and launched by C2CPPI in January 2013, C2CPPI took over development and maintenance of the Cradle to Cradle Certified Product Standard. C2CPPI is now established as a fully independent nonprofit organization with ownership of the Cradle to Cradle Certified Products Program and exclusive authority over the development of the standard and the administration of certification.

In 2015, C2CPPI developed and launched the Material Health Certificate Standard, a derivative standard consisting of the requirements in the Material Health category of the Cradle to Cradle Certified Product Standard only. A product that has been verified to meet the Material Health Certificate Standard requirements is eligible to receive a Material Health Certificate, also issued by C2CPPI.

2.2 The Cradle to Cradle Certified Product Standard

The Cradle to Cradle Certified Product Standard is a continual improvement requirement framework that serves as a guideline and assessment mechanism for the design and manufacture of environmentally sustainable products.

The standard includes requirements in five key, performance categories based on the Cradle to Cradle® design principles – Material Health, Material Reutilization, Renewable Energy and Carbon Management, Water Stewardship, and Social Fairness – in addition to a small number of general requirements. Within each category there are five possible levels of achievement: Basic, Bronze, Silver, Gold, and Platinum.

To receive certification, a product must meet all of the requirements within a desired achievement level in each of the five categories, in addition to the general requirements. The lowest level achieved in each of the five categories represents the product's overall certification level.

2.3 Supporting Tools

C2CPII develops and maintains tools to support implementation of the Cradle to Cradle Certified Product Standard, including User Guidance, Material Health assessment methodologies, and other standard reference documents. These tools are meant to educate and provide the necessary information for the certification community to have a robust understanding of the standard. These supporting tools are regularly updated to reflect the improvements made to the standard.

User Guidance

The Cradle to Cradle Certified Product Standard User Guidance is a manual that guides a Cradle to Cradle Certified project from application and registration to certification of a product, and serves as a tool for implementation of the standard. The guidance includes the process for achieving Cradle to Cradle certification, detailed information for fulfilling each standard requirement, and other standard implementation resources. For each standard requirement, the guidance provides: intended outcome(s), applicable achievement level(s), a detailed description of the requirement and compliance pathways, and verification requirements. Where applicable the guidance also contains related requirements, requirement implementation discussion and recommendations, calculation methods and formulas, documentation guidance, examples, product type-specific considerations, regional variations, resources, and definitions.

Note: For v3.1 of the standard, the above information is included primarily in the standard document itself, as well as the main standard guidance document and separate methodology documents. Beginning with v4.0, all of this information will be in the User Guidance, as described above.

Material Health Assessment Methodologies

The Material Health assessment methodologies describe the processes used to assign an A, B, C, X, or GREY rating to each homogeneous material subject to review in a product applying for Cradle to Cradle certification. These methodologies include the main Material Health Assessment Methodology, customized assessment methodologies for certain material and substance types, and other supplementary methodologies used to assign assessment ratings.

Standard Reference Documents

Standard reference documents include the Basic Level Restricted Substances List and other large sets of reference information needed to implement specific standard requirements. Standard reference documents contain information that is anticipated to be updated on a more frequent basis than the standard itself due to the need to align with international regulations (e.g. the RSL) and the evolving availability of programs, technologies, processes, or best practices.

3. How Cradle to Cradle Certified is Developed

3.1 Overview

Since its launch in 2005, the Cradle to Cradle Certified Product Standard has been evolving to address a greater understanding of the environmental and human health impacts of the design, manufacturing, use, reuse, and disposal of materials, advances in best practices and technology, and its application to a wider variety of product and material types. Ongoing improvements to the standard are developed by C2CPH staff in conjunction with C2CPH volunteer committees, external subject matter experts, and the C2CPH Certification Standards Board, as detailed in this document. Updates to the standard requirements and development of new versions of the standard are subject to review and approval by the C2CPH Certification Standards Board and the C2CPH Board of Directors. The development process is based on principles of transparency, openness, and inclusiveness.

3.2 Consensus Approach

Development of the Cradle to Cradle Certified Product Standard is led by C2CPH in conjunction with C2CPH volunteer committees. Standard development follows a structure that includes a balanced representation of stakeholders and management of conflicts of interest to ensure that the development process is transparent and consensus-based. The C2CPH committee structure balances market needs and constraints with technical rigor in the development and improvement of the standard requirements to ensure the quality and integrity of the Cradle to Cradle Certified Products Program. The appeal procedures that are implemented by C2CPH further support the consensus process and ensure the fair treatment of affected stakeholders. All of these measures are essential to protecting and enhancing the integrity and value of the Cradle to Cradle Certified Product Standard.

3.3 Global Approach

The Cradle to Cradle Certified Product Standard requirements are developed to apply to products in a globally consistent manner. C2CPH staff strive to maintain a global lens in all technical development work, regularly seeking and responding to insight from international practitioners where possible. C2CPH staff, volunteer committees, external subject matter experts, and the Certification Standards Board will consider international usability and relevance during development and review of technical proposals and other work. C2CPH maintains its commitment to assemble diverse and inclusive committees that welcome and reflect the global constituencies they serve.

3.4 Guiding Principles

The C2CPH Certification Standards Board developed the following Guiding Principles for the Cradle to Cradle Certified Product Standard to serve as a guide in the standard requirement development process:

1. Fully manifest the vision and integrity of the Cradle to Cradle principles to ensure that application of the standard to products, services, and products as services measurably and significantly improves the condition of the earth's environment, economy, and quality of life for all people.
2. Seek to ensure the standard represents thought leadership and serves as the design guide for safe and circular products and systems for a circular economy.
3. Make adherence to the standard technically and economically feasible for a wide range of participants.
4. Avoid ambiguity and inconsistencies by basing the standard on metrics that can be uniformly understood, assessed, and audited.
5. Always strive for simplicity and clarity in the structure, language, and content of the standard.
6. Seek to fully leverage respected scientific networks and professional resources to ensure the standard reflects the most current and relevant scientific thinking and practice.
7. Attempt to harmonize with globally recognized standards, systems, and practices wherever relevant and possible in order to amplify recognition and adoption of the standard.

3.5 Standard Development

The Cradle to Cradle Certified Product Standard is updated through continuous improvement, which involves a regular development cycle for comprehensive revisions to the standard.

There are two basic types of development of the Cradle to Cradle Certified Product Standard:

1. Implementation and Maintenance of the Current Version

Implementation and Maintenance of the Current Version includes the following types of improvements:

- Correction, clarification, and interpretation of the language in existing standard requirements and supporting documents,
- Creation of modified compliance paths for existing requirements in order to meet the needs of new product types that would otherwise be unable to utilize the standard, and
- Updates to the standard requirements through the modification, removal, or addition of a limited number of requirements

2. Development of the Next Version

Development of the Next Version is the comprehensive improvement phase of standard development through a periodic evaluation and revision process. This phase includes multiple avenues for stakeholder input and final approval by the C2CPII Certification Standards Board and C2CPII Board of Directors.

Each distinct type of standard development is described below.

Implementation & Maintenance of Current Version

Implementation and Maintenance of the Current Version of the standard includes two primary types of activity:

1. Addenda

Addenda are changes to existing standard requirements and supporting documents that include both substantive and non-substantive changes. These changes are meant to clarify, correct, interpret, and provide alternative language to aid in the implementation of the standard. A request for addenda may come from C2CPII staff or committees and may be applied to the current version of the standard as needed subject to the required approvals outlined herein. Certification requires adherence to all current addenda available at time of registration.

Substantive Changes to existing standard requirements and supporting documents include interpretations and alternative compliance paths that may substantively change the way a given, existing requirement is achieved or meant to be achieved.

- Interpretations define or expand upon existing content.
- Alternative Compliance Paths provide additional options to content that address unique product needs and advancements in science and technology.

All proposed substantive changes must be brought to the appropriate C2CPII committee for review and approval. Substantive changes will go into effect immediately, but will be subject to comment in the next available public comment period.

Non-substantive Changes to existing standard requirements and supporting documents include:

- Grammatical and typographical changes that further refine or correct unclear wording and do not substantively change the way a given requirement is meant to be interpreted.
- Spelling, grammar, and punctuation changes, as well as language rearrangement and/or reformatting.
- Corrections that fix unintentional inaccuracies, errors, and/or omissions in content.

Non-substantive changes do not need approval or input from C2CPII committees.

Note: In v3.1 of the standard, these types of changes are communicated as updates in the standard guidance document. Beginning with v4.0, addenda to the standard document itself will be used.

2. Updates

Updates include substantive changes to standard requirements that are part of the regular evolution of the Cradle to Cradle Certified Product Standard. Updates to the standard may be initiated by C2CPII staff or C2CPII Certification Standards Board. At its discretion, the CSB may seek input from the Technical Advisory Groups or other C2CPII committees. Updates cannot be integrated into standard requirements unless approved by the C2CPII Certification Standards Board. To be considered an update to standard requirements, a change must meet any of the following criteria:

- Creation of one or more new requirements
- Removal of one or more existing requirements
- Modifications to existing requirement language as part of deliberate, next version improvements
- Revision of the applicable achievement level of an existing requirement

Updates to the standard may be piloted for testing and refinement prior to implementation.

Updates will be available for public comment prior to implementation and will result in an incremental version number change to the standard (e.g. version 4.0 to 4.1).

Development of the Next Version

The Cradle to Cradle Certified Product Standard will be updated on a regular development cycle. The C2CPH Certification Standards Board will review the need for standard revisions at least every three years and will make recommendations to the C2CPH Board of Directors on a proposed scope and timeline for updating the standard based on the analysis of certification adoption/achievement data, available science and market trends.

Development of the Next Version allows program stakeholders and the public to provide ideas for improvement of the standard from the beginning of the next development process. Feedback is requested to help shape improvements to the standard and allow for openness and transparency. The C2CPH committee structure provides opportunities for stakeholder participation through technical advisory groups, the Certification Standards Board, the C2CPH Stakeholder Advisory Council, and public comment period(s) on draft versions of the standard.

Development of the Next Version follows the process outlined in Appendix 1.

3.6 Proposals for a Change to Standard Requirements

The process for proposals from any stakeholder to progress through the Cradle to Cradle Certified Product Standard development process consists of the following steps:

1. Proposals for a change to the standard may be submitted by any C2CPH stakeholder at any time. C2CPH staff shall maintain a record of all such proposals received.
2. Requirements for all proposals to change a standard requirement are as follows:
 - Proposals shall be expressed in terms of actual edits to existing standard language. Multiple proposals for change from the same person/organization for each standard requirement shall be permitted.
 - Proposals for change must be specific.
 - The rationale and technical justification for each proposal for change must be provided and must be technical in nature.
3. All proposals for change received shall be reviewed and considered by the Certification Standards Board, with the following exceptions:
 - Staff will notify submitters of proposals for change that do not meet the proposal requirements above and provide an opportunity for them to resubmit. If the submitters do not re-submit their proposals for change in compliance with the requirements, staff will eliminate each such proposal for change.

- If C2CPH staff determines the proposal for change qualifies as an addenda to the standard requirement and does not need to be reviewed by the Certification Standards Board.
4. The Certification Standards Board, at its discretion and in conjunction with staff, may initiate a review process for the proposed change that warrants further consideration for inclusion in the standard. The Certification Standards Board may engage Technical Advisory Groups and other C2CPH committees as necessary during this evaluation.
 5. If the Certification Standards Board approves the proposal (or a modified version of it) for inclusion in a draft update or the draft next version of the standard and no public comment is underway, the proposal will be incorporated in the draft update or the draft next version of the standard when the next public comment cycle begins or at a later time determined by the Certification Standards Board.

3.7 Piloting of Draft Standard Requirements or Methodologies

At C2CPH's discretion, draft standard requirements or supporting methodologies may be piloted via a volunteer pilot program to test new or revised requirement language, alternative compliance paths, and/or new and innovative assessment procedures. The pilot process allows C2CPH to groundtruth the feasibility and efficacy of draft requirements or methodologies and receive market feedback and general comments on them. The pilot process also facilitates refinement of requirement and methodology language and user guidance, which allows for its continuous improvement.

C2CPH, with recommendations from the Certification Standards Board, will determine which requirements and methodologies will be pilot tested. The Certification Standards Board shall approve the draft standard requirements before they are piloted.

The pilot process to be used is determined by C2CPH. Pilot testing of draft standard requirements may be concurrent with the public comment process.

3.8 Appeals

Appeals to Cradle to Cradle Certified Product Standard content shall follow the Appeals Procedures in Appendix 2.

4. Cradle to Cradle Certified Committees

4.1 Overview

C2CPH committees, working in conjunction with C2CPH staff, are the primary means by which the organization develops the Cradle to Cradle Certified Product Standard. C2CPH stakeholders are an essential part of the standard's development, relying on volunteers to provide the technical and market expertise necessary to create a robust leadership tool for the design and manufacture of environmentally sustainable products. The C2CPH committee structure is developed to provide opportunities for C2CPH stakeholder involvement and to utilize their relevant expertise.

4.2 Committee Structure

The C2CPH Certification Standards Board (CSB) is a standing committee of the C2CPH Board of Directors responsible for the oversight of the *Cradle to Cradle Certified™* Product Standard. The CSB is the main governance body for the Standard. The C2CPH Certification Standards Board Charter is provided in Appendix 3.

Technical Advisory Groups are 'standing committees' of the CSB tasked to address specific topics related to development of the standard. Technical Advisory Groups advise and make recommendations to the CSB and C2CPH staff regarding best practices and technical aspects of current and proposed standard methodologies and requirements, as well as their application and feasibility in the marketplace. Technical Advisory Groups may propose working groups to work on specific standard requirements or issues as part of Cradle to Cradle Certified continuous improvement.

Working Groups are any configuration of individuals from Technical Advisory Groups, C2CPH staff, external experts, stakeholders, or other interested individuals convened by the CSB in order to more effectively enact the Guiding Principles for the Cradle to Cradle Certified Product Standard. Any Working Group would be formed on an ad hoc basis by the CSB, and only as necessary for a specific purpose and amount of time set by the CSB.

4.3 Policies and Procedures for Committees

All volunteers who serve on a C2CPH committee are required to read and agree to abide by C2CPH's Code of Conduct for Officers, Directors, and Advisors. This includes an acknowledgement of the C2CPH antitrust, anti-harassment, and conflict of interest policies.

5. Modifications to this Document

All modifications, revisions, or updates to this document must be approved by the C2CPII Board of Directors. Appendices may be approved as separate documents and must follow the approval process outlined in each appendix.

Appendix 1: Development Process for the Next Version

1 Purpose

This appendix addresses the structure and procedures for developing the next version of the Cradle to Cradle Certified Product Standard.

The structure and procedures delineated in this appendix are to be informed at all times by *The Guiding Principles for the Cradle to Cradle Certified Product Standard*, adopted by the C2CPH Certification Standards Board on July 23, 2013 and revised on February 11, 2019.

2 Definitions

2.1 Technical Advisory Group: A team of qualified technical experts tasked by the CSB to address specific topics related to revision of the standard.

2.2 Certification Standards Board (CSB): The body that provides oversight of the Cradle to Cradle Certified Product Standard, as delineated in the C2CPH CSB Charter. The CSB's primary responsibilities focus on maintenance and revision of the standard.

2.3 Cradle to Cradle Certified Product Standard (the 'standard'): The governing standard that serves as the basis for all Cradle to Cradle product certifications.

2.4 C2CPH Vice President, Science and Certification: C2CPH staff member who leads the technical and scientific work related to Cradle to Cradle certification. The Vice President, Science and Certification is a permanent non-voting member and chair of the CSB.

2.5 C2CPH Staff: Employees or interns of C2CPH.

2.6 Deliverable: The response to a request by any participating entity in the standard revision process. Examples of deliverables would be work product, research findings, reference documents, schedules, timelines, or answers to specific questions.

2.7 External Expert: An individual whose expertise is sought to inform particular aspects of the revision process. This person is not a member of C2CPH staff, CSB, or Technical Advisory Group.

2.8 Stakeholder: An entity affected by the Cradle to Cradle Certified Product Standard. Stakeholders may include current and aspiring certification holders, Cradle to Cradle Certified assessors, NGOs, governments, specifiers, and other consumers, and may be redefined from time to time.

2.9 Stakeholder Advisory Council: The body that advises C2CPH Board of Directors, CSB, and staff on market and implementation issues related to the Cradle to Cradle Certified Products Program and general C2CPH strategies for the growth of Cradle to Cradle Certified products in the marketplace. A responsibility of the Stakeholder Advisory Council is to provide input and feedback on proposed changes to the Cradle to Cradle Certified Product Standard.

2.10 Working Group: Any configuration of individuals from Technical Advisory Groups, C2CPH Staff, external experts, stakeholders, or other interested individuals convened by the CSB in order to more effectively enact *The Guiding Principles for the Cradle to Cradle Certified Product Standard*. Any Working Group would be formed on an ad hoc basis by the CSB, and only as necessary for a specific purpose. Lacking sufficient reason to do so, the CSB may elect not to form any Working Groups during the standard revision process.

2.11 Work Product: A specific type of deliverable limited to draft versions of any part of the standard, or public facing communication, such as responses to public comments, clarifications, updates, press releases, or educational materials.

3 Applicability

This document applies to the Cradle to Cradle Products Innovation Institute (C2CPH), the C2CPH Certification Standards Board (CSB), and stakeholders in the process for development of the next version of Cradle to Cradle Certified Product Standard.

4 Structure and Roles

4.1 C2CPH Vice President, Science and Certification

4.1.1 Shall be ultimately responsible for the oversight and direction of the standard revision process.

4.1.2 Shall assign C2CPH staff to appropriate roles in the standard revision process.

4.1.3 Shall ensure deliverables and deadlines are met.

4.1.4 May participate in any Technical Advisory Group (on a non-voting basis) or revision activity.

4.1.5 Shall keep C2CPH CEO, President, and Board of Directors apprised of all activities related to the revision process.

4.1.6 Shall at all times be fully aware of, and address when appropriate, human and material resource requirements for the timely successful revision of the standard.

4.1.7 Shall oversee the public comment process.

4.1.8 Shall communicate with stakeholders, the public, or other interested parties on behalf of C2CPII regarding the revision of the standard.

4.1.9 Shall be responsible for the development and delivery of educational materials and presentations regarding the revision of the standard.

4.2 C2CPII Staff (other than the Vice President, Science and Certification)

4.2.1 Shall support the Vice President, Science and Certification and CSB in all aspects of the standard's revision.

4.2.2 Shall guide development of work products to ensure consistency of language and format in draft versions of the standard.

4.2.3 Shall create and maintain a central repository of records of CSB and Technical Advisory Group activities and work products.

4.2.4 Shall participate in writing and maintaining the current definitive draft version of the standard throughout the revision process.

4.2.5 Shall serve on assigned Advisory Groups (on a non-voting basis).

4.2.6 Where appropriate and as assigned, shall serve as liaison to CSB, stakeholders, Technical Advisory Groups, and public.

4.2.7 Shall administer and manage public comments and C2CPII responses.

4.2.8 Shall participate, as assigned, in the development and delivery of educational materials and presentations regarding the revision of the standard.

4.3 Certification Standards Board

4.3.1 Shall hold meetings frequently enough to ensure deliverables are met and standard revision is completed within the established timeframe.

4.3.2 Shall provide expert input to the standard revision process.

4.3.3 Shall evaluate the quality and progress of work conducted in the standard revision process.

4.3.4 Individual members of the CSB may serve on appropriate Technical Advisory Groups.

4.3.5 Shall delineate size, scope of responsibility, and composition of Technical Advisory Groups and, if indicated, any Working Groups.

4.3.6 Shall participate in recruiting Technical Advisory Group members.

4.3.7 Shall hold final authority for approval of individual members of a Technical Advisory Group, provided the composition of the Technical Advisory Group meets the criteria established in section 4.4 of this document.

4.3.8 Shall provide guidance and assistance in identifying and recruiting External Experts.

4.3.9 Shall support the public comment process.

4.3.10 Shall be balanced so that no one interested class of stakeholders predominates.

4.4 Technical Advisory Groups

4.4.1 Shall be comprised of individuals sufficient in number and expertise to address the scope of responsibility assigned by the CSB.

4.4.2 Shall advise and make recommendations to the CSB and C2CPH staff regarding best practices and technical aspects of current and proposed standard methodologies and requirements, as well as their application and feasibility in the marketplace.

4.4.3 Composition of any Technical Advisory Group shall include at least one C2CPH staff member on a nonvoting basis and may include one or more CSB members. Further, the CSB shall strive for a balance of representation from stakeholder groups and global geographic regions to the extent possible based on qualified applicants.

4.4.4 Shall hold a sufficient number of meetings at appropriate times to complete assigned tasks and meet established deadlines.

4.5 External Experts

4.5.1 Shall be appointed on an ad hoc basis to inform the standard revision process on specific matters requiring additional input beyond the expertise of the C2CPH, CSB, and Technical Advisory Groups.

4.5.2 May, by mutual agreement with the CSB, become a Technical Advisory Group member.

4.6 Stakeholders

4.6.1 May respond to any CSB, C2CPII, or Technical Advisory Group request for input regarding any aspect of the standard revision process.

4.6.2 May submit proposals for change to standard requirements.

4.6.3 May provide input during all public comment periods designated within the standard revision process.

4.6.4 Upon request, shall receive any public communication during the course of the standard revision process.

4.6.5 Shall have access to all publicly available documents relating to the standard revision process.

5 Procedures

5.1 Formation of Advisory Groups

5.1.1 The CSB shall form Technical Advisory Groups. The CSB may also dissolve Technical Advisory Groups at its discretion.

5.1.2 Technical Advisory Groups shall be formed for each of the main categories delineated in the current version of the standard. The CSB may elect not to form a Technical Advisory Group for a category if it determines it unnecessary to do so. Additional Technical Advisory Groups may be formed at the discretion of the CSB at any time during the standard revision process to address issues as they may arise. Throughout the process, the CSB may also form ad hoc task teams consisting of Technical Advisory Group members, CSB members, C2CPII staff, or External Experts to address specific issues.

5.1.3 The CSB shall establish clear objectives for each Technical Advisory Group.

5.1.4 The CSB shall determine the size, qualifications, and composition of each Technical Advisory Group.

5.1.5 The CSB shall identify and recruit qualified members for the Technical Advisory Groups via a public call for applications.

5.1.6 The CSB may further divide Technical Advisory Groups into sub-groups, or any other configuration deemed necessary to improve the efficiency and efficacy of the process.

5.2 Technical Advisory Group Meetings, Schedules, and Deliverables

5.2.1 C2CPH shall develop a uniform meeting structure for the Technical Advisory Groups. This structure should be designed to make maximum effective use of members' time, and achieve the Technical Advisory Group's objectives.

5.2.2 C2CPH shall determine deliverables and timelines based on the objectives established by the CSB for each Technical Advisory Group.

5.2.3 C2CPH shall oversee and maintain the Technical Advisory Groups' schedules.

5.3 Change Proposal Development

5.3.1 The CSB, C2CPH staff, Technical Advisory Groups, and/or External Experts shall develop proposals for changes to the standard. (Note: any stakeholder may submit a change proposal to C2CPH for consideration).

5.3.2 C2CPH staff shall comment on and present the proposed changes for CSB consideration. Additional feedback may be sought from Technical Advisory Groups, External Experts, the Stakeholder Advisory Council, and/or other Stakeholders to inform review by the CSB. A supermajority vote (i.e., two thirds) of CSB members participating in the meeting during which the proposed changes are voted on shall be required for approval.

5.3.3 If not approved at this stage, a Technical Advisory Group, External Expert, and/or C2CPH staff as designated by the CSB may make revisions and resubmit the proposal to the CSB. At its discretion the CSB may also withdraw the proposal from consideration.

5.3.4 Once a proposal for changes is approved by the CSB, C2CPH staff shall produce a draft of that portion of the standard defined by the scope of that proposal. To the greatest extent possible, this draft should be consistent in language and format with the entire standard.

5.4 Initial Draft Revised Standard Development

5.4.1 C2CPH staff shall review the draft portion of the standard to ensure clarity, consistency, and thoroughness. This phase may require additional communication between C2CPH staff and the CSB or C2CPH staff and the Technical Advisory Group or its leadership.

5.4.2 Each draft portion is inserted into the initial draft version of the standard.

5.4.3 The initial draft version of the revised standard is deemed complete and ready for public comment when the CSB has approved all portions. At the discretion of the CSB, the initial draft version of the revised standard may or may not include introductory material, definitions, annexes, and supporting documents that will ultimately comprise the complete standard.

5.5 Initial Public Comment Period (60 Days)

5.5.1 C2CPH shall determine the start date, extent of outreach, and avenues of communication during the public comment period. The CSB and C2CPH may also identify and solicit comments from specific individuals or stakeholder groups.

5.5.2 Notice of the public comment period shall be posted on the C2CPH website and distributed to subscribers to the C2CPH email contact list.

5.5.3 C2CPH shall determine if a need exists for further education of the public and stakeholders during this period. C2CPH staff shall develop and execute any such educational activity.

5.5.4 C2CPH shall ensure sufficient human and technical resources are in place to manage the public comment process.

5.5.5 Once the provisions of 6.5.1 - 6.5.4 are in place, the CSB approved draft of the revised standard requirements shall be posted on the C2CPH website for an initial 60-day public comment period.

5.5.6 C2CPH shall designate appropriate spokespersons to communicate with the public regarding the revision during the comment period.

5.6 Responses to Initial Public Comments

5.6.1 C2CPH staff will consolidate and organize the comments.

5.6.2 C2CPH staff shall draft responses to the comments in consultation with the CSB, and with Technical Advisory Groups and External Experts as needed for further clarification and accuracy of the responses.

5.6.3 The final version of the responses shall be posted by C2CPH staff to the website.

5.7 Changes to Initial Draft Revised Standard

5.7.1 Based on review of the comments and where deemed appropriate, the CSB shall approve of any changes to the draft standard and direct C2CPH staff to make the indicated changes. A supermajority vote of CSB members participating in the meeting during which the changes are voted on shall be required for approval.

5.7.2 C2CPH staff shall incorporate all approved changes into the current iteration of the draft standard.

5.7.3 The completed current iteration of the draft standard is reviewed by the CSB.

5.7.4 The CSB approves the current iteration of the draft standard. A supermajority vote of CSB members participating in the meeting during which the draft standard is voted on shall be required for approval.

5.7.5 Once approved by the CSB, the current iteration of the draft revised standard is deemed ready for an additional public comment period, if the CSB determines an additional public comment period will occur.

5.7.6 Additional public comment period(s) shall occur if the CSB determines substantive, unresolved issues persist after the first or previous public comment period, major changes were made to the initial draft version of the revised standard following the first or previous public comment period, or insufficient feedback was received during the first or previous public comment period.

5.7.7 The CSB shall determine the scope of any additional public comment period. At a minimum, the scope shall cover those changes made to the initial or previous draft version of the revised standard.

5.8 Additional Public Comment Period(s)

5.8.1 At its discretion, the CSB shall determine whether an additional public comment period shall occur, based on the extent of changes to the previous draft standard following the last public comment period.

5.8.2 C2CPH shall determine the start date, duration, extent of outreach, and avenues of communication during any additional public comment period. If indicated, the CSB and C2CPH staff shall also identify and solicit comments by specific individuals and/or stakeholder groups.

5.8.3 Notice of the public comment period shall be posted on the C2CPH website and distributed to subscribers to the C2CPH email contact list.

5.8.4 C2CPH shall determine if a need exists for further education during the additional public comment period. C2CPH staff shall develop and execute any such educational activity.

5.8.5 C2CPH shall ensure sufficient human and technical resources are in place to manage the additional public comment process.

5.8.6 The CSB approved draft of the revised standard shall be posted on the C2CPH website for the additional public comment period.

5.8.7 C2CPH shall designate appropriate spokespersons to communicate with the public regarding the revision during the additional comment period(s).

5.9 Responses to Additional Round(s) of Public Comments

5.9.1 C2CPII staff will consolidate and organize the comments.

5.9.2 C2CPII staff shall draft responses to the comments in consultation with the CSB, and with Technical Advisory Groups and External Experts as needed for further clarification and accuracy of the responses.

5.9.3 The final version of the responses shall be posted by C2CPII staff to the website.

5.10 Final Revised Standard Development and Completion of the Revision Process

5.10.1 Based on review of the comments and where deemed appropriate, the CSB shall approve of any changes to the draft standard and direct C2CPII staff to make the indicated changes. A supermajority vote of CSB members participating in the meeting during which the changes are voted on shall be required for approval.

5.10.2 C2CPII staff shall incorporate all approved changes into the current iteration of the draft standard.

5.10.3 The completed current iteration of the draft standard is reviewed by the CSB.

5.10.4 The CSB approves the current iteration of the draft standard. A supermajority vote of CSB members participating in the meeting during which the draft standard is voted on shall be required for approval.

5.10.5 Once approved by the CSB, the current iteration of the draft revised standard is deemed to be the final version, subject to approval for release by the C2CPII Board of Directors.

5.10.6 The C2CPII Board of Directors shall ensure that the development of the final draft standard has provided due process and fair consideration of stakeholder perspectives prior to approving the release of the new standard. If approved, the final version of the revised standard shall be prepared for public release.

5.10.7 C2CPII determines the effective date for implementation of the latest current version of the standard.

5.10.8 The latest current version of the standard shall be posted on the C2CPII website at least 90 days prior to the effective date, but may be available for voluntary use upon release.

5.10.9 C2CPII shall determine an appropriate course of action to best communicate the latest current version of the standard to all stakeholders and the public.

5.11 Meetings with Stakeholders

5.11.1 Any stakeholder may request, either in groups or singly, a meeting with C2CPH's VP, Science and Certification, or other staff as designated by C2CPH's CEO, to discuss and address concerns at any point during the above-described process.

5.11.2 At the discretion of C2CPH, C2CPH may invite stakeholders, either in groups or singly, to meet with staff to discuss and address concerns at any point during the above-described process.

6 Documentation Management and Security

6.1 C2CPH shall be responsible for building a document and data management system to house all records derived from the standard revision process.

6.1.1 CSB Meeting Minutes

6.1.2 CSB Directives

6.1.3 CSB and C2CPH public communications

6.1.4 All correspondence, public or private, relating to the standard revision process.

6.1.5 Technical Advisory Group meeting minutes

6.1.6 Technical Advisory Group work products

6.1.7 External documents utilized for reference

6.1.8 Draft versions of the revised standard

6.1.9 Stakeholder input

6.1.10 External Expert input

6.1.11 Public documents having a bearing on the process

6.1.12 Public Comments

6.1.13 Responses to public comments

6.1.14 These records shall be stored in a manner that ensures the most current working version of any document is the only version available at any given time.

6.1.15 All documents shall be readily available for access by the appropriate entities.

6.1.16 C2CPH shall ensure the security of all documents. A system shall be in place to ensure only authorized entities have the appropriate range of access to documents.

Appendix 2: Appeals

A. Lodging An Appeal

An appeal may be lodged on procedural grounds. Any C2CPII stakeholder may lodge an appeal on procedural grounds. C2CPII stakeholders agree to follow the procedures set out in this or subsequent updates to this document. An appeal on only procedural grounds is permitted to be lodged by any party with a direct and material interest and who has been or will be adversely affected by actions or inactions by C2CPII procedures with regard to the development, approval, revision, reaffirmation, or withdrawal of the Cradle to Cradle Certified Product Standard.

Time for lodging an Appeal: Appeals must be presented within thirty calendar days after announcement of the release of new standard versions or requirements. The filing of an appeal shall not delay the implementation of the new standard version or requirements unless otherwise determined by C2CPII in its sole discretion.

Process for Lodging an Appeal: A notice of appeal must be submitted in writing to C2CPII's Vice President of Science and Certification. Each appeal shall be accompanied by a filing fee of \$1000 or otherwise in accordance with a fee schedule published by C2CPII. This fee may be waived or reduced upon sufficient evidence of hardship. Parties wishing to request a fee waiver shall provide such request and supporting materials to the C2CPII Board of Directors along with their notice of intent to appeal. Such fee shall be returned in the event that the C2CPII Board of Directors returns a resolution or final determination favorable to the appellant.

B. Form of Appeal

Procedural appeals must describe, in writing and with specificity, and attaching supporting documentation as appropriate:

- The date or occasion of any alleged process irregularity;
- Written objections raised or comments made contemporaneously or reasonably following the process irregularity;
- The adverse impact on C2CPII stakeholders or the general public; and
- How the adverse impact of the process irregularity is material or substantial.

C. Waiver

The Notice of Appeal must demonstrate that written objections or comments reasonably articulating the procedural concerns that inform the basis for the appeal were made as soon as reasonably apparent during the development process and prior to publication of the new standard version or requirements on the C2CPII website, and in the case of procedural concerns, that such objections are made within 10 (ten) calendar days of such action or inaction taking place. Emailed objections or comments to C2CPII staff are among the forms of written documentation deemed adequate to satisfy this requirement. Objections and comments need

not be comprehensive or exhaustive; however, failure to make any objection or comment during the development process and prior to publication will be deemed a waiver of the right to appeal. Promptly, and no later than 30 calendar days after receipt of the written request for appeal, C2CPII shall respond in writing to the appellant, acknowledging the appeal.

D. Interim Dispute Resolution Process

C2CPII's acknowledgement of receipt of appeal begins a 60-day, mandatory dispute resolution process. The appellant and C2CPII representatives approved by the C2CPII President and CEO will, in good faith, meet to discuss the basis for the appeal and options for resolution. If a resolution is agreed upon, the agreement will be memorialized, filing fee returned, and the appeal process concluded. If either party concludes that resolution is not possible, the appeal shall continue after the end of the 60 day dispute resolution period, or such earlier time as the parties may agree.

E. Appeals Panel and Hearing

The parties will have a maximum period of 20 calendar days to agree on a panel of individuals to hear the appeal. It is recommended that each party select a representative and those two representatives agree upon a third, although any approach upon which the parties agree is acceptable. If the parties cannot reach agreement on the composition of the Appeals Panel within 10 calendar days, the C2CPII Board of Directors will appoint three individuals with appropriate qualifications related to the appeal and with no vested interest in the outcome of the appeal to the Appeals Panel. Further, no individual may serve on the Appeals Panel who (i) is a current employee or board member of either C2CPII or the appellant, or (ii) who participated with respect to the procedural or substantive issue that is the basis for the appeal. The three parties appointed to hear the appeal shall certify that they have no direct or perceived interest in the outcome of the appeal.

After the Appeals Panel is agreed upon or selected, the parties will have five days to request a hearing or allow the Appeals Panel to proceed without a hearing. The Appeals Panel will issue a hearing management protocol to govern timelines and procedures to hear and conclude the appeal in accordance with generally accepted due procedures. The appellant has the burden of proof.

The Appeals Panel must complete the hearing or review of the appeal on the basis of the written filings, and issue its decision, as soon as practicable, and in no event, in more than 180 days from the selection or appointment of the Appeals Panel unless mutually extended by the parties. The Appeals Panel may be convened in person or by teleconference at the discretion of the Appeals Panel. There is no right to appear before such Panel, though the Panel may allow appearance by the appellant or other persons at the invitation of and in the sole discretion of the Appeals Panel. If the Appeals Panel finds merit in the appeal, it may recommend that all or some portion of the process be repeated, or provide for further procedures to correct the nonconforming procedural action or inaction. The Appeals Panel decision may be appealed to

the C2CPII Board of Directors, which may consider the appeal in its discretion. If the Board of Directors declines to hear the appeal, the decision of the Appeals Panel is final. If the Board of Directors hears the appeal, its decision is final.

The Appeals Panel has authority to impose any remedy supported by and necessitated by the evidence presented, except that it shall impose the most narrowly tailored remedy sufficient to resolve the appeal. By way of example, appeals related to a single requirement or policy, for example, may impose a remedy specific to that single requirement or policy, but may not extend beyond the single requirement or policy. No monetary penalty shall be imposed by the Appeals Panel except, to the extent that the appeal is upheld and within the discretion of the Appeal Panel, refunding of the appeal fee.

Appendix 3: C2CPII Certification Standards Board Charter

Approved by C2CPII Board of Directors on 31 January 2019

CHARTER OF CRADLE TO CRADLE PRODUCTS INNOVATION INSTITUTE CERTIFICATION STANDARDS BOARD (the “CSB”)

ARTICLE I

PURPOSE, AUTHORITY, RESPONSIBILITIES

Section 1.1. Purpose. The purpose of the CSB is to provide oversight of the *Cradle to Cradle Certified™* Product Standard (the “Standard”) of the Cradle to Cradle Products Innovation Institute (“C2CPII”). The CSB is the main governance board for the Standard. At its discretion and subject to approval of the C2CPII’s Board of Directors, the CSB will review the Standard’s requirements and make revisions, additions, and or changes, as it deems appropriate and necessary to maintain the integrity and viability of the Standard.

Section 1.2. Authority. All decisions rendered by the CSB will be final subject only to the review and consideration by the C2CPII Board of Directors at its discretion.

Section 1.3. Responsibility. CSB Members shall be responsible for all of the following:

- Review and approval of any revisions and/or amendments to the Standard.
- Providing recommendations to C2CPII’s President, Vice President, Science and Certification, and/or Board of Directors with regard to the operation of the Cradle to Cradle Certified Products Program and the Standard.
- Providing recommendations to C2CPII’s Vice President, Science and Certification with regard to technical/scientific aspects of the Standard.

ARTICLE II

GOVERNANCE, MEMBERSHIP

Section 2.1. Governance. The CSB shall be governed in accordance with this Charter as well as policies and procedures that are consistent with and not in conflict with C2CPH's Articles of Incorporation and By- Laws.

Section 2.2 Number and Composition. The CSB will have not less than seven (7) nor more than eleven (11) voting members as determined from time to time by the CSB, and ratified by the C2CPH Board of Directors, comprised and appointed as follows:

- One (1) nonvoting member representing and appointed by C2CPH, who shall be C2CPH's Vice President, Science and Certification and serve ad infinitum.
- Seven (7) to eleven (11) voting members appointed by the C2CPH Board of Directors who are stakeholders invested in the broad acceptance and wide adoption of the Standard in the global marketplace. These stakeholders may include Cradle to Cradle Certified accredited assessors, independent consultants, Cradle to Cradle certification holders, members of government agencies, environmental organizations, standards making bodies, academia, or related entities. It is the intention that no single stakeholder group will represent a majority of the CSB.

Section 2.3. Terms of Office. With the exception of the C2CPH Vice President, Science and Certification, members shall serve terms of three (3) years. Members shall serve without compensation. Travel and per diem meeting expenses may be covered by the C2CPH, in its sole discretion, upon request by the Member and submittal of appropriate documentation.

Section 2.4. Resignation. Members of the CSB may resign at any time by written notice thereof given to the Chairperson. Such resignation shall take effect at the time specified therefor; and, unless otherwise specified with respect thereto, the acceptance of such resignation shall not be necessary to make it effective.

Section 2.5. Removal of Members. Any member may be removed, either with or without cause, at any time, by the C2CPH Board of Directors.

Section 2.6 Filling of Vacancies. In case of any vacancy caused by death, removal or resignation, the vacancy shall be filled by the C2CPH Board of Directors. The CSB may make nominations to the C2CPH Board of Directors of candidates for any vacancies to be filled by the C2CPH Board of Directors.

ARTICLE III

MEETINGS

Section 3.1. Regular Meetings. The CSB shall meet at least three (3) times per year with advance notice at such places and at such times as determined by the Chair.

Section 3.2. Special Meetings. Special meetings in addition to regularly scheduled meetings may be held at such places and as such times as the Chair may determine.

Section 3.3. Attendance at Meetings by Electronic Means. Members of the CSB may participate in any regular or special meeting of the CSB by means of a conference telephone or similar communications equipment that allows all persons participating in the meeting to hear each other at the same time. Participation by a Member by such electronic means shall constitute presence in person at any such meeting of the CSB.

Section 3.4. Quorum and Manner of Acting. Except as otherwise provided herein or pursuant to the License Agreement, a majority of voting Members of the CSB shall constitute a quorum for the transaction of business. An act of a majority of the Members present at any such meeting at which a quorum is present shall be an act of the CSB.

ARTICLE IV

OFFICERS, STAFF SUPPORT, COMMITTEES/WORKGROUPS

Section 4.1. Officers. Officers of the CSB shall consist only of a Chair.

Section 4.2. Chair. The C2CPII Vice President, Science and Certification shall serve as the Chair of the CSB. The Chair shall preside at all meetings of the CSB at which she or he is present. As Chair, the Vice President, Science and Certification shall be responsible for preparing meeting agendas and supporting materials, including action and information items for review, consideration or action by the CSB.

Section 4.3. Honorary Advisors. Each of the Founders of the Institute, Michael Braungart and William McDonough, shall serve as Honorary Advisors to the CSB. CSB shall regularly consult with the Honorary Advisors, and shall, *inter alia*, invite comment from the Honorary Advisors on any update of the Standard prior to public publication of such updated Standard.

Section 4.. Staff Support. C2CPII staff shall provide staff support to the CSB under direction of the C2CPII President and Vice President, Science and Certification. This support shall include the following:

- Preparation of action items, with accompanying background information and clearly identified issues, staff recommendations and, where appropriate, alternatives for consideration.
- Preparation of information items intended to further inform Members as to current information with regard to the administration and implementation of the Cradle to Cradle Certified Products Program and Standard.
- Documentation and record keeping of all minutes and decisions by the CSB.
- As requested by the Chair and/or CSB Members, publication of CSB decisions on the C2CP II website.

Section 4.5. Committees/Workgroups. At the discretion of the Chair, and with concurrence of a majority of the CSB Members present, the CSB may establish ad-hoc program and/or science advisory working groups in support of the CSB's activities. Members of these working groups shall be appointed by the Chair with advice and consent of the CSB Members.

Article V.

MISCELLANEOUS

Section 5.1. Indemnification. The C2CP II shall to the fullest extent now or hereafter permitted by the C2CP II Articles of Incorporation and California law, indemnify any person made, or threatened to be made, a party to any action or proceeding by reason of the fact that he or she is a Member of the CSB, against judgments, fines, amounts paid in settlement and reasonable expenses, including attorney's fees. Any person who at any time after adoption of these By-Laws serves or has served as a Member of the CSB shall be deemed to be doing or to have done so in reliance upon, and as consideration for, the right of indemnification provided herein.

Section 5.2. Amendments. This Charter may be amended or altered, in any particular, and a new charter, not inconsistent with any provisions of the C2CP II Articles of Incorporation and By-Laws, may be adopted (i) by affirmative vote of a super majority (two thirds) of the Members of the CSB then in office, (ii) by affirmative vote of a super majority of the Members in attendance at a meeting in which a quorum was present and acting throughout, or (iii) by vote of the C2CP II Board of Directors. In the event of amendment or alteration taken by the CSB, such amendment or alteration must be ratified and approved by the C2CP II Board of Directors to be effective.