LABELING sustainability

A Process Summary for The Verification of Type III
Environmental Product Declarations

Introduction

This process as defined herein is for the procedures performed by a verification body for validating an Environmental Product Declaration (EPD) in accordance with the guidelines outlined in the ISO 14025:2006 The terminology used in this documentation is in accordance with ISO 14040, ISO 14044, ISO 14025, and ISO 21930. Consult these standards for any questions regarding the use of such terminology.

In this process description the "Verifier" shall refer to the person performing the EPD verification in compliance with the Labeling Sustainability's General Program Instructions; in compliance with all processes and procedures to complete the EPD process; and thus, publish it to the EPD System for which Labeling Sustainability is the program operator. The "Practioner" refers to the party who performed the original LCA study either as an initial study Practioner or a third-party LCA verifier.

Verification Description

The verification process shall include, but is not limited to, 1). Accessing the data collected in the Life Cycle Analysis as performed as the basis of the EPD, including all calculations used in the LCA; 2). Adherence to the Project Category Rules (PCR) defined methodology for calculating impacts for all LCA-based calculations; 3). All environmental performance information as existing in the EPD and4). All additional environmental information is included in the EPD as defined by the PCR.

In cases where the EPD is based on a previously verified LCA study, the LCA calculations are not subject to review if that study was third-party verified and less than 3 years old. Their compliance with the PCR and all other reported environmental information is not exempt from verification and all applicable procedures shall be followed.

When multiple products are considered for verification under the same EPD the Practioner may use a sampling method as part of the LCA study. The sampling method must be declared as part of the EPD and verified by a third party. If the EPD is a renewed verification and changes in the background data of the EPD may have occurred, the verification and declaration of the EPD should focus on a variation that is +/- 10% from the original reported data.

Verification Procedure

The verification procedure is broken into two parts: document review and verification. Document review is an analysis of all documents, data, and information included in the EPD. This includes the underlying LCA study, and any additional documents included as part of the EPD to determine environmental impacts. All business data deemed as confidential will remain confidential during the verification and reporting process. The Verifier shall not disseminate or otherwise retain for use any information disclosed to them as part of the EPD process, without permission from the organization.

Document Review

The main objectives for the document review process are 1). to determine adherence with the LCA and EPD in accordance with the General Program Instructions and valid Project Category Rules; 2). Verify the procedures for updating the information in the CA and EPD and: 3). to verify the processes and procedures for product-related conformity with any/all applicable environmental laws.

Document Contents

The EPD shall contain the information as required by ISO 14025:2006 Section 7.2 Declaration Content. For ease of use the information, as it appears in the ISO 14025:2006, is as follows (International Standards Organization, 2006):

1. Identification and description of the organization making the declaration;
2. Description of the product;
3. Product identification (e.g. model number);
4. Name of the program and the program operator's address and, if relevant, logo and website;
5. PCR identification;
6. Date of publication and period of validity;
7. Data from LCA, LCI or information modules (see 7.2.2):
8. Additional environmental information (se 7.2.3):
9. Content declaration covering material and substances to be declared (e.g information about product content including specification of materials and substances that can adversely affect human health and the environment, in all stages of the life cycle);
10. Information on which stages are not considered, if the declaration is not based on an LCA covering all life cycle stages;
11. Statement that environmental declarations from different programs may not be comparable;
12. Information on where explanatory material may be obtained.
13. Does not apply to proprietary information relating to materials and substances covered by intellectual property rights or similar legal restrictions. It may also not be appropriate for declarations concerning intangible products.

Validation

Validation focuses of the validity of the information and data included in both the LCA study and the EPD. In this phase the verifier conducts a sample which focuses in particular on the processes and activities with the greatest impact on the environmental impacts. The main validation process objectives are:

Assess the accuracy of information contained in the LCA study and the subsequent EPD. Default environmental impacts for use in EPDs are included in Appendix A.

Review the procedures established for updating the information in the LCA and EPD

- Analyze compliance with processes and environmental product-related laws
- When examining the organization, the Verifier shall consider the following criteria:
    - The product type, complexity of the processes associated with the LCA study and EPD
    - Presence of a certified Environmental Management System
    - The presentation of information and relevant data sources
    - Specific requirements as outlined in the Project Category Rules

The Verifier shall perform either an "at desk" or "on site" verification based on the Verifier's complete understanding of the manufacturing processes. As a substitute for an "on site" review the Manufacturer may elect to send video to the Verifier to make clear any unclear processes in the manufacturing process. Other technological adaptations may be accepted by the Verifier such as Video Facetime and other video applications. The complete understanding of the manufacturing process is mandatory for the Verifier and the manufacturer must make all attempts to make those processes clear.

Validation Procedure for Product Specific EPDs

1. Life Cycle Analysis study and adherence to the Project Category Rules. The Verifier shall verify the LCA was performed in accordance with ISO 14040, ISO 14044, and the Project Category Rules. The Methods section specifically follows these guidelines and subsequently the impact assessment calculations have been conducted accordingly to these standards.
2. When verifying the LCA against the PCR the Verifier shall compare the way in which the Functional Unit was defined to the description of the Functional Unit in the PCR.
3. All efforts shall be made by the Verifier to determine the validity of the data used and the calculations were made in a correct way based on the inventory analysis results and factors.

Sample checks are to be used by the Verifier to check the unit processes and the information modules vs. the PCR modules. The verifier shall choose sampling for the impact categories with the highest overall footprint in the LCA.

The Verifier shall check the EPD information specifically focusing on:

- presentation of the Background information to ensure that it is in a clear and understandable way,
- the overall presentation of the material is credible and there is cross references to supplementary material to further explain material that may be confusing,
- and the EPD follows the correct layout.

The Verifier shall perform due diligence to ensure that the product and the manufacturing of it follow any relevant environmental legislation to the region/country/global production of the product. This includes raw material extraction.

The Verifier shall specifically be concerned with materials and chemical substances related to pollution permits included in the EPD.

No mention shall be made by the Verifier or the Program Operator as to the legality of the product, its manufacturing process, or its supply chain.

EPD Verification Report

The Verifier shall provide a transparent process by which to verify the EPD. A complete checklist can be downloaded from labelingsustainability.com for the verification process. The product of the verification process is a verification report in English. The report shall primarily adhere to confidentiality while keeping documents about the verification process. The final report shall be included in the EPD registration request when submitted to Labeling Sustainability.

Verification Responsibilities of The EPD Owner/Company

The company shall perform the verification step to fully comply with the steps to publish their EPD in the Labeling Sustainability EPD system as per ISO 14025. As part of the follow up during the EPD verification process the company shall provide the verifier the ability to view the manufacturing process to ensure that they have not changed since the initial LCA process if more than 1 year has passed since the completion of the LCA and the verification of the EPD. This is not a redo of the LCA but a visual check of the processes. A prearranged site visit shall be arranged by the company. In lieu of a site visit it can also be deemed acceptable by the verifier to use facetime or video conferencing software to view the current manufacturing practices. Al arrangements shall be made in advance between the company and the verifier.

In order to begin the EPD process the following documents must be presented to the verifier in English:

- A copy of the LCA/LCI study in English. Included in this shall be a description of the LCA/LCI calculations detailed
- Enough for the verifier to examine their compliance with LCA/LCI methodologies as defined by ISO 14040 and the defining PCRs.
- A copy or reference link to the Product Category Rules (PCRs)
- A declaration from the company that they are aware of the EPD process and have in place a system to notify the verifier if there are any changes in manufacturing during the validity period of the EPD. The process shall be defined and give a specific time period for notifying the verifier of any changes that is not greater than 90 days from the manufacturing change. This includes both raw material changes as well as manufacturing processes. This document shall be signed by the company and submitted with all documentation in English or translated by a credible source.

Updates During Surveillance and Corrections Due to The Verification of an Existing EPD

The threshold for determining a product has changed if one of the environmental indicators has worsened by more than 10% compared with the data in the most current version of the EPD. A notification of changes in the declaration will be issued by the verifier to the program operator stating the changes and revisions made to the existing EPD. Those changes will also be registered by the verifier. There is not a charge for updating of existing EPDs; it is included in the registration/yearly fees.

Final Documents for EPD Registration

To register the EPD with the Program Operator, Labeling Sustainability, the company shall submit the following:

1. The verified EPD complete with the verifier's signature
2. The signed disclosure form that is the manufacturer's intent to publish the EPD on Labeling Sustainability's website where it will be publicly available for viewing and download.
3. The registration payment of ($US) $500. This is an annual fee and must be paid to keep the EPD in good standing and registered.

Appendix A: Default Environmental Impact Categories for Use in EPDs

The potential environmental impact is calculated using characterization methods that associate the sale of a pollutant emission to selected so-called characterization/conversion factors. Based on this background data and conversion factors the potential environmental impact can be calculated.

In addition, ISO 14025 lists the following as minimum impacts required. Type Ill environmental declaration shall, according to the selected option), include the relevant data from LCA-studies, LCI-studies and/or information modules. These may include, but are not limited to, the following categories derived from the life cycle stages or additional environmental information. These data shall be clearly separated in the following three categories (International Standards Organization,2006):

1. Data from life cycle inventory analysis (LCI), according to the PCR, including

    - consumption of resources, including energy, water and renewable resources, and
    - emissions to air. water and soil:

2. Indicator results of life cycle impact assessment (LCIA), if applied, including

    - climate change,
    - depletion of the stratospheric ozone layer,
    - acidification of land and water sources,
    - eutrophication.
    - formation of photochemical oxidants,
    - depletion of fossil energy resources, and
    - depletion of mineral resources;

3. Other data such as quantities and types of waste produced (hazardous and non-hazardous waste).

For a complete list of how these requirements translate in impact factors please consult the PCR.

References

International Standards Organization. (2006). Environmental labels and declarations - Type Ill environmental declarations - Principles and procedures. Geneva: ISO

Signature Page

I, _____, hereby certify that I have read and fully understand the process and procedures as outlined in this guide for the validation of an Environmental Product Declaration (EPD). I fully commit to following this procedure as outlined and in accordance with ISO 14025:2006. If there are any omissions or discrepancies in this procedure guide I will consult the ISO 14025:2006 standard to ensure that my document validation and verification of data is complete and in full compliance with this standard.

_____

Full Name (Printed and then Signed)

_____

Date

_____

Denice Viktoria Staaf, Labeling Sustainability

_____

Date Accepted

Email a scanned copy of this signature page to **support@labelingsustainability.com**