

Appendix A: HPD Format, HPD Open Standard 2.1.1

The HPD Open Standard consists of:

- The HPD Open Standard Format (HPD Format) that presents a consistent structural framework for the presentation of data elements required for a Health Product Declaration.
- The HPD Open Standard Instructions (HPD Instructions) that define the terms and requirements for the data elements included in the Standard Format, including Appendices.
- Best Practices Guidance that is cited in the HPD Instructions and is available on the HPDC website.

The Format in the Standard establishes requirements for graphic layout for reporting results. To be compliant with the Standard, HPDs must be presented in this Format.

The HPD 2.1.1 Format includes new data fields and also has variations based on:

- Inventory method and threshold level chosen
- Responses to “Characterized,” “Screened,” and “Identified” in the Summary.

Variations Based on Inventory Method

The Format has three primary variations based on the inventory method and threshold level chosen (these variations also exist in HPD 2.1):

- Basic Inventory with product level threshold
- Nested Inventory with product level threshold
- Nested Inventory with material level threshold

Each method is defined in the Standard Instructions as follows:

2.1.2.0 Inventory Reporting Methods

Methods for organizing and reporting information about substances in an HPD.

There are two methods for creating a content inventory:

- *Nested Materials Inventory Method.* Lists all materials and then lists substances within each material above the reportable threshold. This method provides material level information in a useful context that aligns with other product inventory, screening, and optimization programs.
- *Basic Inventory Method.* Provides a single list of substances above the reportable threshold in the product. This method does not provide material level information.

2.1.2.1 Threshold: Disclosed Per Material or Per Product

Concentration(s) above which the manufacturer or supplier itemizes substances present within the material or product, as applicable.

- Per Material: a threshold is defined for each material
- Per Product: a threshold is defined for the entire product

A Basic Inventory has a per product threshold; a Nested Materials Inventory can have a single per product threshold or multiple per material thresholds. In

Section 1, Summary, a single threshold must be indicated for the Basic and the Nested Materials Inventory with a per product threshold; multiple thresholds can be indicated for Nested Materials Inventory with material level thresholds, based on the thresholds for each material indicated in Section 2.

More detailed requirements are provided in Instructions, see 2.1 HPD Open Standard Format Section 1: Summary and 2.2 HPD Open Standard Format Section 2: Content in Descending Order of Quantity. Required format for each is provided in:

- Appendix A-1: Basic Inventory with product threshold
- Appendix A-2: Nested Inventory with product threshold
- Appendix A-3: Nested Inventory with material threshold

Variations Based on Responses to “Characterized,” “Screened,” “Identified”

In the HPD Open Standard 2.0 and 2.1, responses to Characterized, Screened, and Identified data fields were either “Yes” or “No” and the data field was defined briefly below the response.

HPD Open Standard 2.1.1 introduces the use of “Special Conditions” for certain materials and substances that cannot be reported using the existing requirements [see Best Practices for Special Conditions, link]. This change enables many manufacturers to create compliant HPDs, reporting best available information, and these HPDs are not disqualified from LEED Material Ingredients credit submittals if they follow the Special Conditions guidance. The change also introduces new complexity to reporting Characterized, Screened, and Identified, since the Special Conditions guidance outlines different requirements for data fields on which these summary descriptors are based.

For example, a biological material or geological material might not have a CAS RN that can be used to identify and screen the material. In another example, mixed recycled content might not have a CAS RN and might contain variable content in each batch. Since screening cannot be performed using the CAS RN, the HPD cannot report hazards as required. Instead, the Special Conditions guidance provides requirements for reporting on available information in the Notes section of the HPD.

A simple “Yes” or “No” response to Characterized, Screened, and Identified is not sufficient to reflect the application of a Special Condition. Therefore, a third alternative was added: “Yes Except Special Condition.” And, language is added to Inventory and Screening Notes: *[LEED v4] “Yes ex/SC ” result is due only to materials and substances for which Special Conditions were applied. Thus “Yes ex/SC” does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.*

In HPD 2.1.1, responses for Characterized, Screened, and Identified can be “Yes,” “No,” and “Yes Ex/SC” and different explanatory text accompanies each response. See Instructions Section 2.1.2.3 Characterized, Screened, Identified and examples below.

Required Format for Variations of Characterized, Screened, and Identified:

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided except SC substances characterized according to SC guidance

Screened Yes Ex/SC Yes No
Screened using Priority Hazard Lists with results disclosed except SC substances screened according to SC guidance.

Identified Yes Ex/SC Yes No
Disclosed by Name (Specific or Generic) and Identifier except SC substances identified according to SC guidance

SC=Special Condition (See Notes)

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role provided for all substances

Screened Yes Ex/SC Yes No
Screened using Priority Hazard Lists with results disclosed

Identified Yes Ex/SC Yes No
Disclosed by Name (Specific or Generic) and Identifier

SC=Special Condition (See Notes)

All Substances Above the Threshold Indicated Are:

Characterized Yes Ex/SC Yes No
% weight and role not provided for all substances and/or one or more SC did not follow guidance

Screened Yes Ex/SC Yes No
One or more not screened using Priority Hazard Lists with results disclosed and/or one or more SC did not follow guidance

Identified Yes Ex/SC Yes No
One or more not disclosed by Name (Specific or Generic) and Identifier and/or one or more SC did not follow guidance

SC=Special Condition (See Notes)