

Best Practices for Hazard Screening

PLEASE NOTE: Appendix C of the HPD Open Standard is now included, beginning with version 2.1.1, in this document. The content of Appendix C has been expanded and appears in Section 1: “Background to Hazard Screening.”

Best Practices for Hazard Screening includes:

1. Background information on Hazard Screening and its use in the HPD Open Standard, including:
 - a. Definitions
 - b. Hazard Screening in the HPD Open Standard
 - i. Overall GreenScreen® Hazard Score: GreenScreen Benchmark score and/or GreenScreen List Translator™ score, and
 - ii. Hazard Warnings using HPD Priority Hazard Lists
2. “Harmonized Method for Hazard Screening” and Supplemental Guidance for Applying the Harmonized Method to Non-GreenScreen Lists.
3. Requirements for Hazard Screening in HPDs.

These Best Practices supplement the information and requirements presented in the HPD Open Standard Instructions and Format. This document has been prepared in collaboration with Clean Production Action to ensure harmonization with its GreenScreen for Safer Chemicals Program.

1. Background on Hazard Screening (includes “Appendix C” content)

Hazard Screening is a fundamental element of a completed Health Product Declaration. The reporting of the product content inventory and the associated hazards forms the heart of the HPD. The hazard screening reporting specified in the HPD Open Standard is principally based on GreenScreen®, a comprehensive hazard assessment method designed to identify chemicals of concern and safer alternatives, which was developed by Clean Production Action, with whom HPDC works on a collaborative basis to advance practices in hazard screening and assessment.

The HPD Open Standard establishes the following practical boundaries related to reporting Hazard Screening information, in an effort to make creation of an HPD feasible for most products and manufacturers:

- The HPD Open Standard specifies how a manufacturer should report the product’s chemical contents (including residuals and impurities) and related hazards at a snapshot in time – “as delivered to the jobsite.” The HPD does not require systematic reporting of this data in upstream and downstream life cycle stages.
- The HPD Open Standard is not, itself, a *method* for Hazard Screening. The HPD Open Standard specifies how a manufacturer should *report* the results of Hazard Screening (and other health information associated with the product).
- Hazard Screening is intended to provide “alerts” and warnings about potential human and environmental health hazards and is the first step in any further assessment or evaluation. While hazard screening can identify contents that are known chemicals of concern, it does not

provide a definitive judgment about health-related attributes of a product nor is it sufficient to identify contents of a product that are “safer” chemicals.

The purpose of including Hazard Screening data in the HPD Open Standard is to facilitate further analysis of environmental and health information about products, and is available to all users of HPDs in a manner that is accurate, reliable and consistent across products and product categories. Hazard Screening is an evolving discipline. By including the specific aspects of how Hazard Screening is implemented in the HPD Open Standard in our Emerging Best Practices section, HPDC acknowledges and supports the continued development of the methods in this field and the work of the community of practice to evolve a consensus around these methods. This consensus is what is reflected in the HPD Open Standard and the following Best Practices for Hazard Screening.

Definitions

Hazard: the inherent capacity of a substance to cause an adverse effect to health or the environment. “Hazard” is distinct from but related to “risk” and/or “exposure.” Hazard Screening is a first and necessary step in studies of risk and/ or exposure.

Hazard Level: A chemical is classified as Very High (vH), High (H), Moderate (M), Low (L), Very Low (vL), or as a Range (e.g., H-M, or M-L) based on GreenScreen Hazard Criteria. The hazard criteria incorporate potency and/or certainty of the science associating a chemical with a hazard (See GreenScreen for Safer Chemicals - Hazard Assessment Guidance for more information on hazard level).

[https://www.greenscreenchemicals.org/static/ee_images/uploads/resources/1_GreenScreen_Guidance_v13_2016_3_8.pdf]

Hazard List: List of chemicals and/or chemical groups published by a scientific body associating the chemicals with one or more specific hazards based on a standardized scientific review.

Hazard Warning: a specific characterization of the level and type of hazard by a scientific body, such as “Likely carcinogen” or “Very toxic to aquatic life.”

Hazard Type: general term referring to GreenScreen hazard endpoints (including human health effects, such as cancer and reproductive toxicity; ecological effects, such as aquatic toxicity; environmental fate such as persistence and bioaccumulation; and physicochemical properties, such as flammability and reactivity mechanisms), plus global warming and ozone depletion.

Hazard Screening: a specified method for associating substances with specific warnings, hazard endpoints, hazard levels, and a GreenScreen score. The GreenScreen score summarizes the overall hazard of the substance and may be either a Green Screen List Translator score or a GreenScreen Benchmark score. The screening process uses pre-selected hazard lists, defined by the method employed, that are issued by a wide variety of agencies and organizations worldwide, including U.S. government agencies at the federal, state, and local levels; government agencies in Canada, Germany, Australia, Japan, and other countries; and international organizations, such as the EC/ EU, International Agency for Research on Cancer, and United Nations Environment Programme (UNEP), and professional organizations such as the Association of Occupational and Environmental Clinics (AOEC). The HPD Open Standard incorporates the GreenScreen Specified Lists developed by Clean Production Action that meet HPDC’s criteria, in addition to a few other lists. A complete list of Hazard Lists used in the HPD Open Standard can be found in the HPD Open Standard Appendix D Priority List Sources.

Hazard Screening in the HPD Open Standard

Hazard Screening for an HPD has two component parts:

1. An overall GreenScreen hazard score -- either a List Translator score from a GreenScreen® List Translator screening or, if a published Benchmark score from a GreenScreen for Safer Chemicals (GreenScreen) assessment is available, as defined below, the Benchmark score is reported instead of the List Translator score.
2. Hazard Warnings based on the HPD Priority Hazard Lists.

Both components are reported for each substance in the product content inventory; information on these components is presented below

Overall GreenScreen Hazard Score: GreenScreen Benchmark score and GreenScreen List Translator score¹

The HPD Open Standard provides for reporting scores produced by two GreenScreen hazard assessment tools: GreenScreen List Translator™ with List Translator scores and GreenScreen for Safer Chemicals (GreenScreen) assessment with Benchmark scores. GreenScreen was developed by and is a project of Clean Production Action, a non-profit organization that designs and delivers strategic solutions for green chemicals, sustainable materials and environmentally preferable products. GreenScreen is a comprehensive hazard assessment method designed to identify chemicals of concern and safer alternatives. GreenScreen hazard assessment tools are transparent, systematic and scientifically robust tools designed to identify chemicals of high concern and safer alternatives.

GreenScreen List Translator is a streamlined assessment designed to identify known hazardous chemicals, as evaluated and listed by scientific bodies. While GreenScreen List Translator provides an effective way to screen out known hazardous chemicals, a GreenScreen assessment is required to identify safer alternatives. The determination of GreenScreen List Translator scores and GreenScreen Benchmark scores can only be done by organizations or individuals trained and licensed by Clean Production Action.²

GreenScreen Specified Lists

Many of the hazard lists used in the GreenScreen List Translator and GreenScreen assessment methods – GreenScreen Specified Lists – are dynamic, changing over time as more chemicals are evaluated and listed by the scientific bodies. Clean Production Action, HPDC, Healthy Building Network, and toxnot PBC are collaborating on policies to ensure harmonized GreenScreen List Translator results for the same chemical. Clean Production Action published two policies to date, one on *updating* GreenScreen Specified Lists in GreenScreen List Translator Automated Tools and another on *defining members of chemical groups*. HPDC Hazard Screening policy harmonizes with these policies (“Harmonized Method for Hazard Screening”).

GreenScreen Specified Lists includes two types of lists³:

¹ This section was developed in collaboration with Clean Production Action; additional information on the GreenScreen for Safer Chemicals program, including GreenScreen List Translator and GreenScreen assessments can be found on CPA’s website.

² <https://www.greenscreenchemicals.org/assess/gs-professionals>

³ https://www.cleanproduction.org/static/ee_images/uploads/resources/GreenScreen_v1.3_Release_-_A_Dive_into_GreenScreen_List_Translator_-_3-24-16_FINAL.pdf

- Authoritative lists – Listing is based on a comprehensive expert review by a recognized authoritative body, and results in a classification with a higher level of confidence
- Screening lists – Listing results in a classification with a lower level of confidence because at least one of the following is true:
 - the list was developed using a less comprehensive review
 - The list was compiled by an organization that is not considered to be authoritative
 - The list was developed using predominantly or exclusively estimated data
 - the list was developed to identify chemicals for further review and/or testing

Authoritative lists and screening lists are both further described as:

- A sublists which translate to a single hazard classification for a single endpoint or only one possible List Translator Score,
- B sublists which are based on multiple endpoints or translate to a range of hazard level classifications or address only a specific form of the substance or specific exposure route.

GreenScreen List Translator Method and List Translator Scores

List Translator Method: Clean Production Action developed an abbreviated version of the GreenScreen assessment method called the GreenScreen List Translator™, which provides a “list of lists” approach to identify chemicals of high concern. It does this by scoring chemicals based on information from over 40 hazard lists developed by scientific bodies convened by international, national and state government agencies, intergovernmental agencies, and NGOs. Its outputs include hazard levels for hazard endpoints appearing on one or more lists, and a score. The score is required to be reported in a completed HPD.

The hazard type and the hazard level for all GreenScreen Specified Lists are defined by the GreenScreen Hazard Criteria and GreenScreen List Translator map [link]. In the GreenScreen List Translator map, the hazard endpoint(s) define hazard type and the GreenScreen hazard criteria are used to define the hazard level(s). More information on the method for determining the score and the structure of the scores produced can be found on GreenScreen website [<https://www.greenscreenchemicals.org/learn/greenscreen-list-translator>].

List Translator Scores: List Translator scores answer the question of whether a chemical is a known, listed chemical of high concern, and do not provide information on whether the chemical is a “safer” chemical. List Translator scores are:

- LT-1: Chemicals that meet the chemical of high concern scoring criteria based on high confidence data (presence on Authoritative A lists) are assigned a score of LT-1.
- LT-P1: Chemicals that possibly meet the chemical of high concern scoring criteria but the data is less definitive or lower confidence (i.e., presence on an Authoritative B list or Screening List) are assigned a score of LT-P1.
- LT-UNK: Chemicals that appear on one or more of the GreenScreen Specified Lists but do not meet the chemical of high concern scoring criteria are assigned a score of LT-UNK.
- NoGSLT: Chemicals that do not appear on any of the GreenScreen Specified Lists are assigned a score of NoGSLT.

A score of LT-UNK or NoGSLT should be treated as unknown hazard and not a safer chemical. Only a more comprehensive hazard assessment such as a GreenScreen for Safer Chemicals assessment can identify safer chemicals.

GreenScreen Assessments and GreenScreen Benchmark Scores

GreenScreen Assessment Method: GreenScreen for Safer Chemicals is a comprehensive hazard assessment methodology developed by Clean Production Action to identify chemicals of concern and safer alternatives. A high degree of scientific expertise is required to conduct a high quality GreenScreen Assessment, and assessments are typically performed by toxicology consulting firms known as Licensed GreenScreen Profilers. More information on the assessment method can be found on the GreenScreen website [<https://www.greenscreenchemicals.org/learn/full-greenscreen-method>].

GreenScreen Assessment Benchmark Scores: There are five possible GreenScreen Benchmark scores.

- Benchmark-1 (BM-1): Avoid - Chemical of High Concern
- Benchmark-2 (BM-2): Use but Search for Safer Substitutes
- Benchmark-3 (BM-3): Use but Still Opportunity for Improvement
- Benchmark-4 (BM-4): Prefer - Safer Chemical
- Benchmark-U (BM-U): Unspecified due to Insufficient Data

Reporting of GreenScreen® Benchmark Scores in the HPD Open Standard: Some GreenScreen assessment reports have been made publicly available by their respective assessors – “published for public use” as defined below in Requirements for Hazard Screening in HPDs. When available for a substance, the HPD Open Standard specifies that a public GreenScreen Benchmark score will be reported in lieu of the List Translator score. Private GreenScreen assessment scores cannot be reported in lieu of the List Translator score. If a private GreenScreen assessment has been done for a reported substance, the existence of this assessment, and the Licensed GreenScreen® Profiler who created the assessment, may be noted in the Substance Notes section. However, the reporting of the score or any other content of a private assessment is not permitted under terms of the license agreement between the assessor (GreenScreen Licensed Profiler) and their client. GreenScreen Terms of Use prevent scores from being published without transparent information to substantiate the score.

Hazard Warnings using HPD Priority Hazard Lists

The second component of Hazard Screening in an HPD – Hazard Warnings – identifies the applicable warnings, the hazard types they represent, and the agencies that issued the warnings for each substance listed on the HPD

The purpose of the hazard warning information in the HPD is to provide a fuller picture of the known hazard associations for each reported substance, complementary to the GreenScreen List Translator or GreenScreen Benchmark score. As noted above, a “hazard warning” is a specific characterization of the hazard by a scientific body, such as “Likely carcinogen” or “Very toxic to aquatic life.” It is possible for a substance to have multiple hazard warnings associated with it.

Hazard Warnings are produced by screening each substance against all HPD Priority Hazard Lists using requirements in the HPD Open Standard and Best Practices for Hazard Screening to determine if the substance has any associated HPD Priority List Warnings.

Process for Selecting HPD Priority Hazard Lists

HPD Priority Hazard Lists are selected by the HPDC Technical Committee and the lists become part of the HPD Open Standard. Lists are reviewed and revisions are made, if determined appropriate, with each revision of the HPD Open Standard; revisions can also be made as needed between Standard revisions. The Technical Committee has established a standing Hazards Technical Sub-Group to review current lists and identify changes, and/or additional lists if needed. This Technical Sub-Group also reviews Hazard Screening procedures and recommends clarifications and revisions as needed. This Sub-Group is

composed of experts in hazard lists and sources; Hazard Screening methods, data sources, and issues (e.g., chemical classes); fields of materials science, toxicology, industrial hygiene, chemistry and/or others relevant to Hazard Screening; and/ or hazard screening and assessment tools. Organizations in the Hazard Screening “ecosystem” are also invited to participate.

Criteria for Selecting Lists

Selection of HPD Priority Hazard Lists is based primarily on Clean Production Action’s GreenScreen Specified Lists, as described earlier in this document. The selection process incorporates use of outputs from the GreenScreen List Translator, based on the following criteria:

- *All GreenScreen Specified Lists that may result in a List Translator score of LT-1 or LT-P1*
- *All GreenScreen Specified Lists that, when evaluated with the GreenScreen Hazard Criteria, result in a hazard level or range as follows and a score of LT-UNK:*
 - Very High, High, or Moderate for GreenScreen Group 1 human health effects (Carcinogenicity, Mutagenicity/Genotoxicity, Reproductive Toxicity, Developmental Toxicity, Developmental Neurotoxicity, and Endocrine Activity).
 - Very High or High for all other human health effects (Systemic Toxicity/ Organ Effects including Immune System effects, Neurotoxicity, Respiratory Sensitization, and Skin Sensitization) plus Ecotoxicity, Flammability, and Reactivity.

HPDC Priority Hazard Lists include a sub-set of GreenScreen Specified Lists and do not include GreenScreen Specified Lists that address lower hazard levels or lists which cover ranges that include Low. Requiring reporting of only higher hazard levels is intended to enable users to focus on those that are of greatest concern and avoid “information overload.” The Hazards Technical Sub-Group reviews the selection of lists during each revision of the HPD Open Standard.

HPDC Priority Hazard Lists also include lists that are not currently included in the GreenScreen Specified Lists. These additional lists have been included to address human and environmental health issues not presently covered by the GreenScreen Specified Lists. These issues include ozone depletion, global warming, and other priorities. These additions recognize that health impacts of products and their contents can go beyond those directly exposed to the substance and include environmental impacts with health ramifications. The Hazards Technical Sub-Group reviews the need for including additional lists beyond those used in the GreenScreen method during each revision of the HPD Open Standard.

Are there automated tools available for conducting Hazard Screening?

There are several approaches for performing Hazard Screening for an HPD:

- The HPD Builder online system for HPD creation utilizes an automated Hazard Screening tool, the Pharos Chemical and Material Library [<https://www.pharosproject.net/>], that is fully compliant with the requirements of the HPD Open Standard. After the creator of the HPD enters the name and identifier of each substance, Hazard Screening is automatically performed through the Pharos Chemical and Materials Library database.
- If an HPD is created manually, Hazard Screening can be performed using a fully- or partially automated tool that has achieved compliance with requirements of the HPD Open Standard. At present there are three such tools: the Chemical Hazard Data Commons [<https://healthybuilding.net/content/data-commons>], the Pharos Project, and the toxnot PBC tool [<https://toxnot.com/>]. In this situation results must be manually entered.

- If the HPD is created using any other automated or partially-automated tool not listed above, the creator of the HPD must ensure that the tool meets all HPD Open Standard requirements for Hazard Screening, including compliance with the “Harmonized Method for Hazard Screening”. (For more information on requirements for tool compliance, see Best Practices for Tools – link.)

Can Hazard Screening be conducted manually?

The use of an automated tool for Hazard Screening is strongly recommended by HPDC. Ensuring compliance with the Hazard Screening requirements of the HPD Open Standard, including compliance with the Harmonized Method for Hazard Screening, through a manual analysis of lists would be a difficult task, and the potential for error is high. Furthermore, verification of non-automated Hazard Screening results is required, as described below. The determination of GreenScreen List Translator scores and Benchmark scores can only be done by organizations or individuals trained and licensed by Clean Production Action.⁴

2. “Harmonized Method for Hazard Screening”

The Harmonized Method for Hazard Screening (“Harmonized Method”) is a joint effort of Clean Production Action, HPDC, Healthy Building Network, and toxnot PBC. This Harmonized Method has been reviewed and approved by the HPDC Technical Committee, and is reflected in the Hazard Screening section of the HPD Open Standard and in these Best Practices for Hazard Screening. This harmonized method provides specific requirements that are intended to ensure consistency in results of GreenScreen List Translator, GreenScreen assessments, and HPD Priority Warning Lists. The Harmonized Method is an evolving document. It contains:

- *GreenScreen List Translator Map* – The GreenScreen List Translator methodology is published in Section IV of the GreenScreen for Safer Chemicals Hazard Assessment Guidance v1.4 (January 2018) [<https://www.greenscreenchemicals.org/method/method-documents>]. Annex 11 contains the GreenScreen Specified Lists™ and Annex 12 contains the GreenScreen List Translator™ Map. The GreenScreen List Translator map translates each hazard warning on each GreenScreen Specified lists to hazard endpoint(s), hazard level(s) or range(s) using GreenScreen Hazard Criteria,, and a List Translator score using the List Translator Scoring Algorithm.
- *GreenScreen List Translator® Automator List Update Policy* – This policy establishes a schedule for required updating of GreenScreen List Translator Specified Lists and HPD Priority Warning Lists. [<https://www.greenscreenchemicals.org/method/method-documents>]
- *Resolving Challenges with Chemical Groups in Automation of List Translator™* [<https://www.greenscreenchemicals.org/resources/entry/greenscreen-resolving-challenges-with-automation>] – This policy establishes a method for addressing chemical groups that are found on some GreenScreen List Translator Specified Lists and HPD Priority Hazard Lists.
- *GreenScreen(R) for Safer Chemicals Chemical Group Policy* - This policy defines the chemical groups, their associations with GreenScreen Specified Lists and their members. [<https://www.greenscreenchemicals.org/method/method-documents>]

In addition, HPDC issues supplemental guidance to address issues not covered by the Harmonized Method. This guidance includes:

⁴ <https://www.greenscreenchemicals.org/assess/gs-professionals>

- Guidance on Applying the Harmonized Method for Hazard Screening to Non-GreenScreen HPD Priority Hazard Lists – Since HPD Priority Hazard Lists contain a few lists not included in the GreenScreen Specified Lists, this guidance is needed to ensure application of the Harmonized Method to these HPD Priority Hazard Lists.

3. Requirements for Hazard Screening in HPDs

Best Practices for Hazard Screening present additional details on requirements for compliance with the HPD Open Standard (see also HPD Open Standard sections 2.2.2.4, 2.2.2.8, 2.2.2.9):

1. Hazard Screening must comply with the Harmonized Method for Hazard Screening and supplemental HPDC guidance.

The Harmonized Method for Hazard Screening (“Harmonized Method”) is a joint effort of Clean Production Action, HPDC, Healthy Building Network, and toxnot PBC. In addition, HPDC issues supplemental guidance to address issues not covered by the Harmonized Method.

2. All guidance and requirements from Clean Production Action for use of the GreenScreen List Translator methodology must be followed.

GreenScreen List Translator scores must be derived in compliance with CPA’s List Translator methodology by organizations or individuals trained and licensed by Clean Production Action.⁵ Method and requirements can be found here <https://www.greenscreenchemicals.org/learn/greenscreen-list-translator>

To ensure consistency among GreenScreen List Translator scores presented in an HPD, methods must also comply with the Harmonized Method described above.

A published Benchmark score or a List Translator score⁶ is reported for each substance [see Section 2.2.2.4]. If there is a published GreenScreen assessment, the resultant Benchmark score must be reported instead of the List Translator score. “Published” is defined as *published for public use*. GreenScreen assessments that meet this requirement can be found in the Pharos Chemicals and Materials Library or Data Commons.

Benchmark scores from private GreenScreen assessments are not reported in the GreenScreen (GS) data field [Section 2.2.2.4]. The existence of a private certified GreenScreen assessment conducted by a Licensed GreenScreen Profiler may be cited in the Substance Notes [2.2.2.9]. Include in the citation: the name of the Licensed GreenScreen Profiler and the date of the assessment (for example: “This substance was assessed by Licensed GreenScreen Profiler xxxx on March 3, 2015.”)

3. All HPD Priority Hazard Lists must be included as the basis for determining Hazard Warnings; no other lists may be included.

⁵ <https://www.greenscreenchemicals.org/assess/gs-professionals>

⁶ GreenScreen List Translator™ Automators are licensed by Clean Production Action and listed at <https://www.greenscreenchemicals.org/learn/greenscreen-list-translator>

Appendix D: HPD Priority List Sources of the HPD Open Standard provides a complete list of Source Lists that must be included in hazard warning determination, based on the criteria described in Appendix C of the HPD Open Standard. All Lists must be included. No additional lists may be included unless/until they are approved by HPDC; recommendations for the inclusion of additional lists may be submitted to HPDC for consideration. This will ensure the required consistency among HPDs created by different methods and tools.

4. The HPD Priority Hazard Lists must be updated according to required schedules.

The HPD Priority Hazard Lists are updated on different schedules by the organizations or agencies that created and maintain them. Updating can occur as frequently as several times per month or as infrequently as once per year. Clean Production Action developed an updating policy for GreenScreen List Translator to ensure consistency in scoring. HPDC has adopted the GreenScreen Updating Schedule as its official updating policy to ensure consistency among HPDs developed via different tools and to harmonize with GreenScreen. Updating requirements are included in the Harmonized Method for Hazard Screening. HPDC has supplemented this policy to address Priority Hazard Lists that are not included in GreenScreen. To be considered “current,” Tools used for Hazard Screening must comply with this schedule.

The CPA GreenScreen updating policy can be found here [\[https://www.greenscreenchemicals.org/method/method-document\]](https://www.greenscreenchemicals.org/method/method-document).

The HPDC Supplemental Guidance on Updating can be found [here](#).

5. Screening tools must address chemical groups according to required methods.

Hazard lists typically identify individual chemicals associated with a specific hazard and provide CAS RNs to uniquely identify them. The challenge is that some lists also identify entire *classes or groups of chemicals* as associated with the hazard. Clean Production Action, in close partnership with the Healthy Building Network and toxnot PBC, has developed a published policy as an interim solution to define chemical groups and group members, and work toward harmonized GreenScreen List Translator scores for chemical groups. A significant portion of the content used in this CPA policy was developed by the Data Commons Chemical Group Population Project run by the Healthy Building Network’s Chemical Hazard Data Commons.

The Clean Production Action policy can be found here [\[https://www.greenscreenchemicals.org/method/method-documents\]](https://www.greenscreenchemicals.org/method/method-documents).

To ensure consistency in Hazard Screening when different methods or tools are used to create an HPD, in addition to this CPA policy, the procedures outlined in the Harmonized Method for Hazard Screening, and all HPDC Supplemental Guidance must also be followed. HPDC Supplemental Guidance on Chemical Groups can be found [here](#).

6. Hazard Screening may be performed manually or through the use of an automated tool, but both approaches must comply with requirements listed above.

Due to the complexity of the databases and methods involved, HPDC strongly recommends the use of an automated tool for this purpose to ensure the Hazard Screening is accurate, systematic, and efficient. If an automated tool is used, enter name of tool (e.g., Pharos Chemical and Material Library); if one or more of the HPD Priority Hazard Lists was accessed and checked manually, enter “manual.”



To be “published” in the HPD Repository, an HPD Standard-compliant tool must be used or the Hazard Screening must be verified as required in the current version of the HPDC Quality Control Protocol and Procedure for Published HPDs [here](#).

HPDs created for internal use by manufacturers do not need to meet these requirements unless/until they are submitted for publication.