THE CHEMICAL FOOTPRINT PROJECT

Guidance for Using the CFP Assessment Tool

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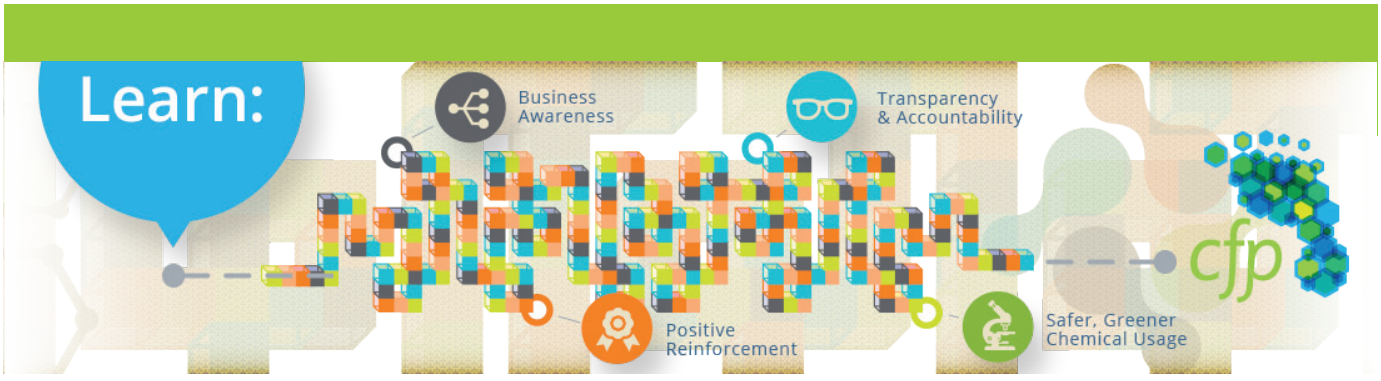
the chemical
footprint project™



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Guidance for Using the CFP Assessment Tool

Sally Edwards, Sc.D.
Tim Greiner, MSM, MCP
Mark Rossi, Ph.D.

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The Chemical Footprint Project (CFP) is a project of Clean Production Action.

The founding organizations of the CFP are Clean Production Action,
Lowell Center for Sustainable Production at the University of Massachusetts Lowell,
and Pure Strategies.

ACKNOWLEDGMENTS

The Chemical Footprint Project (CFP) envisions a world where chemicals are healthy for people and the environment; where disease rates for cancer, infertility, asthma, and learning disabilities are falling rapidly; and where governments and markets reward healthy products. To achieve this vision the Chemical Footprint Project was created to track, disseminate and benchmark corporate progress to safer chemicals in products, manufacturing, and supply chains.

The CFP and this *Guidance for Using the CFP Assessment Tool* emerged from over a decade of work from dedicated individuals committed to creating a systemic approach to evaluating and benchmarking corporate performance to safer chemicals. We wish to acknowledge those who played a leading role in this work.

We are truly grateful for the strategic and technical expertise provided by the members of the CFP Steering and Technical Committees who did their best to ensure the questions and response options are clear and true to business practices: Susan Baker, Constantina Bichta, Tara Brown, Sara Cederberg, Jeremy Cote, Beth Eckl, Sonja Haider, Ronald Hart, Leah Kolicko, Barbara Kyle, Mary Ellen Leciejewski, Richard Liroff, Vanessa Lochner, Brian Martin, Roger McFadden, Monica Nakielski, Christine Naughton, Joe Rinkevich, Anne Robertson, Annie Schmidt, Joyce Taylor, Sarah Vogel, and Howard Williams.

The members of the BizNGO Chemicals Work Group were instrumental in providing the foundation upon which the CFP builds. In addition, we thank the pre-pilot and pilot companies and their staff who waded through various iterations of the Assessment Tool, providing us with valuable feedback that enabled improvements in the questions and response options. Note that advice and feedback should not be construed as support for the final product.

We know that the tool still has its flaws, for which we take full responsibility. Being practitioners of the ethos, “don’t let the perfect be the enemy of the good,” we look forward to correcting imperfections in the Assessment Tool in future iterations.

In producing the report, we tip our hat to David Gerratt of DG Communications for both his continuous patience and creativity in design. And we are pleased to thank Ellen Goldberg and Andrea Dow of Clean Production Action for their behind the scenes work editing and shepherding the document to completion.

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Introduction

Increasingly, purchasers and investors want to understand how companies manage chemicals in their products and supply chains. Are companies using chemicals of high concern to human health or the environment in their products or manufacturing? Are they using safer alternatives? What actions are companies taking to systematically reduce chemicals of greatest concern and use safer alternatives? How can companies that have developed systems for chemicals management, reduced chemicals of high concern and implemented safer alternatives be identified and rewarded?

The lack of an independent, third-party metric to publicly benchmark corporate progress in reducing chemicals of high concern makes it difficult for investors and purchasers to identify and reward good performance. Furthermore, the lack of a common metric means that companies that demonstrate superior performance are not recognized for this achievement and those seeking to improve their performance do not have a clear way to measure their progress and identify their most significant improvement opportunities.

The Chemical Footprint Project aims to meet this need. For investors, it supplies a key piece of information that has been missing in evaluating corporate sustainability. For retailers, it provides a credible, third-party approach for driving chemicals management into the value chain. For brands, it provides a means for assessing chemicals management and benchmarking progress as well as an opportunity to be recognized as a leader. For purchasers, it helps to identify chemical management leaders in specific product categories of interest. For the public, it means that chemicals of high concern are reduced in consumer products, leading to lower exposures and improved health outcomes.

Similar to carbon footprinting, chemical footprinting can apply to any business sector. The launch of the Chemical Footprint Project focuses on business sectors that are active in managing chemicals in their products and supply chains, including: building products, consumer packaged goods, medical devices, electronics, automotive, apparel and footwear, and toys. Companies can participate by registering and logging onto www.chemicalfootprint.org to access the Assessment Tool. Responders have the option of choosing whether to publicly share their participation and their answers to the questions in the Assessment Tool. Although third-party verification is not a requirement for participation, responders receive additional points if data are independently validated.

The Chemical Footprint Project will publically profile top performers. The results will provide valuable data to investors, retailers, and other organizations seeking to understand best practices in chemicals management. In addition, participants in the Chemical Footprint Project can share their results with customers and investors who are seeking to source products from companies that are leaders in using safer chemicals. The Assessment Tool is designed to measure continuous improvement in chemicals management. Any company can use it to benchmark its chemicals management program, understand its progress over time, and determine its position relative to other companies.

We recommend using this guidance to understand more about the questions being asked, the available response options, and examples of practices that align with the response options.

This guidance document details the questions and response options of the four Assessment Tool elements:

Management Strategy: measures the scope of corporate chemical policies and their integration into business strategy, accountability, and employee incentives for safer chemical use, as well as support of initiatives and public policies for safer chemicals.

Chemical Inventory: measures a company's level of knowledge about the chemicals in its products, components, and manufacturing processes; and its systems for managing chemical data and ensuring supplier compliance with its reporting requirements.

Footprint Measurement: measures whether goal setting activities are set to reduce chemicals of high concern, whether the firm has established a baseline corporate Chemical Footprint as well as progress in reducing chemicals of high concern, and the degree to which safer alternatives are assessed, identified and used.

Public Disclosure and Verification: measures whether a company publicly releases information on the chemicals in its products and used in its manufacturing, whether it discloses participation in the Chemical Footprint Project and its answers to the Assessment Tool questions, and whether the answers have been independently verified by a third party.

For each question this guidance document provides the response options and describes the intent of the question. Additionally, when needed, this guidance provides a further explanation of what is being evaluated and relevant examples. The Assessment Tool includes 20 questions that are scored on a scale of 0 to 100, with 100 representing best performance.

Steps to using the Assessment Tool:

- Educate yourself about the Assessment Tool by participating in a Chemical Footprint Project webinar and reading this guidance document.
- Go to www.chemicalfootprint.org to apply to use the online Assessment Tool. The online tool is available to businesses that plan to fully complete the questions and receive a score on their overall performance.
- Go online, answer the questions, and provide supporting documentation. Click "Submit Completed Assessment" after answering all the questions.
- Receive a review of your answers from the Chemical Footprint Project and provide additional supporting documentation as needed.
- Receive a final score from the Chemical Footprint Project.

Note that all information submitted online is treated as confidential business information by the Chemical Footprint Project unless otherwise indicated by a responder. Responders have the option to:

- allow the Chemical Footprint Project to post answers and/or a score publicly,
- share results with selected companies or purchasers only,
- list their company as participating in the online Assessment Tool but not share their answers or score, or
- remain anonymous about participation in the online Assessment Tool.

The data from all responders will be anonymized, collated and analyzed in a report. We look forward to your participation in the Chemical Footprint Project. For answers to any of your questions please contact us at: moreinfo@chemicalfootprint.org.

What follows in this guidance document are the list of 20 questions, then each question, its response options and intent, and when appropriate an explanation of the question and examples of practices that align with the response options.

The Assessment Tool: 20 Questions

The structure of this guidance document follows the four elements of the Assessment Tool: management strategy, chemical inventory, footprint measurement, and public disclosure and verification. Below are the 20 questions followed by the detailed sections of this guidance document.

Management Strategy (20 points)

M1. Does your company have a chemicals policy that aims to avoid chemicals of high concern (CoHCs)? (4 points)

M2. Does your company have a chemicals policy that in addition to avoiding chemicals of high concern includes a preference for the use of safer alternatives? (4 points)

M3. Is reducing CoHCs and/or advancing safer alternatives beyond regulatory requirements integrated into your company's business strategy? (4 points)

M4. How does your company engage in the following types of public policy initiatives to promote the use of safer chemicals? (4 points)

M5. What job responsibilities and incentives does your company have in place to ensure implementation of your chemicals policy? (4 points)

Chemical Inventory (30 points)

I1. What steps has your company taken to manage legally restricted CoHCs? (5 points)

I2. What actions does your company take to develop a Beyond Restricted Substances List and determine their presence in your products? (5 points)

I3. What chemical information does your company collect from suppliers? (5 points)

I4. For what percentage of products sold by your company do you collect chemical ingredient information? (5 points)

I5. What capabilities does your company have for managing data on chemical ingredients in its products? (5 points)

I6. How does your company assure conformance with your chemicals policy? (5)

Footprint Measurement (30 points)

F1. Has your company set goals for reducing CoHCs in the products you sell and measured progress against these goals? (6 points)

F2. How does your company measure its baseline chemical footprint? (6 points)

F3. Over the past two years how much have intentionally added CoHCs in your products changed? (6 points)

F4. How does your company assess the hazards of chemicals in its products beyond regulatory requirements? (6 points)

F5. How does your company encourage the use of safer alternatives to CoHCs? (6 points)

Public Disclosure and Verification (20 points)

D1. What information beyond legal requirements does your company disclose about the chemical ingredients in its products? (8 points)

D2. Does your company agree to publicly disclose that it participated in completing the Assessment Tool? (4 points)

D3. Does your company agree to publicly disclose its responses to the questions in the Assessment Tool? (4 points)

D4. Have any of your company's responses to the questions in the Assessment Tool been verified by an independent, third party? (4 points)

Management Strategy (M) (20 POINTS)

M1 Does your company have a chemicals policy that aims to avoid chemicals of high concern (CoHCs)? (4 points)

Response Options

Check all that apply. (N/A = Not Applicable)

Our company:

a. Products: has a chemicals policy on CoHCs that is applicable to our products
b. Products: if yes to "a," our policy for products is publicly available on our website
c. Manufacturing: has manufacturing operations (if no, skip to "g")
d. Manufacturing: if yes to "c," has a chemicals policy on CoHCs that is applicable to our manufacturing operations
e. Manufacturing: if no to "c," N/A—my company has no manufacturing operations
f. Manufacturing: if yes to "c," our chemicals policy for manufacturing is publicly available on our website
g. Supply Chains: has a chemicals policy on CoHCs applicable to our supply chains
h. Supply Chains: if yes to "g," our policy for supply chains is publicly available on our website
i. Packaging: has a chemicals policy on CoHCs applicable to our primary packaging
j. Packaging: if yes to "h," our policy for packaging is publicly available on our website

Intent

This question seeks to understand the scope—products, manufacturing, supply chains, and packaging— of your company's chemicals policy concerning CoHCs and whether it is publicly available.

Explanation

A chemicals policy encompasses how a company manages chemicals in its materials, products, supply chains, and operations beyond what is required by regulation. Some organizations use terms like "materials policy" or "chemicals guidance" for statements that are equivalent to a chemicals policy. A chemicals policy is distinct from a company's overall sustainability policy in that it provides specific guidance related to chemicals management. To achieve points for this question, your company's policy must go beyond regulatory compliance and specify actions on chemicals of concern beyond those that are restricted or prohibited by law. This could mean including an emerging set of chemicals of special concern, chemicals likely to be regulated, or classes of chemicals of concern to your customers. For example, a chemicals policy may specify that chemicals that are allergens, aquatic toxicants, or respiratory sensitizers are to be avoided. Some far-reaching policies aspire to eliminate all chemicals of concern. A chemicals policy may also encourage transparency of chemical ingredient information throughout the value chain to enable informed decision making. In addition, a chemicals policy may identify the process by which a company assesses alternatives to chemicals it seeks to reduce or eliminate.

In answering this question, note that: if your company does not manufacture products, you may select N/A. In addition, please note whether you share your chemicals policy publicly. Finally, check all that apply.

Examples

For "a": Dignity Health, a non-profit health care organization that operates hospitals in 17 states, has created an Environmentally Preferable Purchasing Policy that specifies the avoidance of: persistent, bioaccumulative and toxic compounds, Bisphenol A (BPA), carcinogens, mutagens, reproductive toxicants, halogenated flame retardants, chlorine-containing flame retardants, latex, mercury, phthalates (e.g., di-2-ethylhexyl phthalate or DEHP),

polyvinyl chloride (PVC), volatile organic compounds, and semi-volatile organic compounds.

For "a", "c", "e", and "g" see Levi Strauss & Co.'s (LS&Co.) chemicals sustainability statement, which references its "Restricted Substances List" and "Commitment to Zero Discharge of Hazardous Chemicals:"

- The "RSL applies to all materials, parts, chemicals, components, packaging and other goods (including sundries), that are sourced or supplied for direct or eventual use in products to be labeled and/or distributed by LS&CO. This listing includes, but is not limited to, finished products, including apparel, non-apparel, footwear, accessories, packaging and other products."
- The Commitment to Zero Discharge of Hazardous Chemicals policy commits the company to "zero discharge of hazardous chemicals for all its products across all pathways of release in our supply chains by 2020."

For further examples of corporate chemicals policies see the following websites: BizNGO, Green Chemistry and Commerce Council, and the Investor Environmental Health Network.

File Upload

For the online assessment tool, responders must upload a file that provides your company's chemicals policy. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Management Strategy (M) (20 POINTS)

M2. Does your company have a chemicals policy that in addition to avoiding chemicals of high concern includes a preference for the use of safer alternatives? (4 points)

Response Options

a. Products: has a chemicals policy preferring safer alternatives that is applicable to our products
b. Products: if yes to "a," our policy is publicly available on our website
c. Manufacturing: has a chemicals policy preferring safer alternatives that is applicable to our manufacturing operations
d. Manufacturing: Not applicable (we have no manufacturing operations)
e. Manufacturing: if yes to "c," our policy for manufacturing is publicly available on our website
f. Supply Chains: has chemicals policy preferring safer alternatives that is applicable to our supply chains
g. Supply Chains: if yes to "f," our policy for supply chains is publicly available on our website
h. Packaging: has a chemicals policy preferring safer alternatives that is applicable to our primary packaging
i. Packaging: if yes to "h," our policy for packaging is publicly available on our website

Intent

This question seeks to understand the scope—products, manufacturing, supply chain, packaging—of your company's chemicals policy in regards to a preference for safer alternatives to hazardous chemicals and whether it is publicly available.

Explanation

The Chemical Footprint Project defines a safer alternative as a chemical that due to its inherent chemical and physical properties, exhibits a lower propensity to persist in the environment, accumulate in organisms and induce adverse effects in humans or animals, and delivers the functional performance required. A safer alternative can also include eliminating the need for the chemical through material change, product re-design, or product replacement; or eliminating the chemical by altering the functional demands for the product through changes in consumer demand, workplace organization, or product use.

Please note whether your policy focuses on chemicals in your products, manufacturing operations, supply chains, and/or primary packaging. In addition, please note whether you share your chemicals policy publicly. See M1 guidance for more information about a chemicals policy.

In answering this question, note that you can check all that apply.

Examples

For an example of "a" and "e" see Walmart's "Policy on Sustainable Chemistry" and its companion "Implementation Guide for Policy on Sustainable Chemistry in Consumables," especially Section II B: Advancing Safer Formulations in Products" which aims at "advancing safer formulated products and promoting informed substitution" based on the Commons Principles for Alternatives Assessment.

For further examples of corporate chemicals policies see the following websites: BizNGO, Green Chemistry and Commerce Council, and the Investor Environmental Health Network.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation describing how your company's chemicals policy addresses any of the response options. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Management Strategy (M) (CONTINUED)

M3. Is reducing CoHCs and/or advancing safer alternatives beyond regulatory requirements integrated into your company's business strategy? (4 points)

Response Options

Check all that apply. Our company integrates reducing CoHCs and/or advancing safer alternatives beyond regulatory requirements into business strategy as follows:

a. has a process for setting goals/planning for safer chemicals use and measuring progress towards these goals that is part of our overall business strategy
b. reports to business customers on progress towards these goals
c. reports publicly on progress towards these goals
d. none of the above

Intent

This question inquires about whether your company integrates into its business strategy an approach for addressing human health and environmental impacts of chemicals beyond regulatory requirements. This integration can occur as part of product design, the product development process, supplier selection, and/or manufacturing processes. Integration is most effective when CoHCs are identified and a strategy for reduction and elimination of CoHCs and use of safer alternatives is developed that includes specified deadlines. It is important that suppliers are informed of these requirements.

Explanation

Please note whether your strategy addresses product design, product development, procurement, and/or manufacturing. In answering this question, note that you can check all that apply.

Examples

Nike, Inc. has integrated the development of a "more sustainable palette of materials and chemistries" into its business strategy through product design, product development, and procurement. Nike acknowledges that its greatest impacts emerge from the production of the materials it uses in its products. Nike focuses its business strategy on integrating its preference for greener chemistries into product design, where it has the greatest impact and opportunity for change. Nike's strategy would likely meet the criteria for response options "a," "b," and "c." See Nike's *Sustainable Business Performance Summary* for FY 2012/2013.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation of how reducing CoHCs and/or advancing safer alternatives beyond regulatory requirements are integrated into your company's business strategy. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

M4 How does your company engage in the following types of public policy initiatives to promote the use of safer chemicals? (4 points)

Response Options

Check all that apply. Our company engages in initiatives that clearly promote the:

a. collection and publication of data on the inherent hazard characteristics of chemicals
b. prioritization of chemicals for reduction based on their inherent hazards
c. reduction in the use of CoHCs
d. development and use of safer alternatives
e. public disclosure of CoHCs or other chemical ingredients in products

Intent

This question evaluates your company's engagement in public policies (laws, regulations, and programs) to: collect and publish data on chemical hazards, prioritize chemicals for reduction based on their inherent hazard, reduce the use of CoHCs, develop and use safer alternatives, and disclose information on CoHCs in products.

Explanation

To receive credit for this question your company must be engaged in a public policy initiative that aligns with the "a-e" response options listed above. Note that because some public policies encompass multiple response options, support for one public policy such as the California Safer Consumer Product Regulations would receive credit for response options: "b," "c," "d," and possibly "e." Specific policy examples by response option include:

a. Collection and publication of data on the inherent hazard characteristics of chemicals. This includes supporting the development and/or implementation of:
   - The Interstate Chemicals Clearinghouse's (IC2's) Chemical Hazard Assessment Database,
   - The US EPA's Toxics Release Inventory (TRI) Chemical Hazard Information Profiles, and
   - The Organization for Economic Cooperation and Development's (OECD's) eChemPortal database.

   Note: support for the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) does not qualify as an acceptable response because the GHS is primarily designed for compliance with existing regulations.

b. Prioritization of chemicals for reduction based on their hazards. This includes supporting the development or implementation of public initiatives to identify and prioritize chemicals for reduced use based on their hazards. Generically this includes policies and programs that advance: pollution prevention, toxics use reduction, and cleaner production. For example, this would include supporting the implementation of the:
   - California Safer Consumer Products Regulations,
   - Massachusetts Toxics Use Reduction Act, and
   - UNIDO-UNEP Cleaner Production Programs.

c. Reduction in the use of CoHCs. This means supporting the development or implementation of public initiatives that define a clear path to reducing the use of CoHCs in products, manufacturing, supply chains, or packaging. Generically this includes policies and programs that restrict the use of chemicals, including in products, manufacturing, agriculture, packaging, or as by-products from industrial processes. For example, this would include publicly supporting the development or implementation of chemical restrictions that align with:

Management Strategy (M) (CONTINUED)

- Various state, provincial, city, and local restrictions, including those restrictions detailed in the Interstate Chemicals Clearinghouse—State Chemicals Policy Database and Safer States policy database.
- Sweden's initiative to restrict hazardous plasticizers in everyday products,
- Stockholm Convention on Persistent Organic Pollutants (POPS), or
- EU REACH Directive.

For an extensive list of public policies that restrict chemicals, see the OECD Substitution and Alternatives Assessment Toolbox—Regulations and Restrictions website.

d. Development and use of safer alternatives. This means supporting the development or implementation of public initiatives to use alternatives that are inherently less hazardous than the chemicals they replace. For example:
   - Various state programs listed in the Interstate Chemicals Clearinghouse—State Chemicals Policy Database and Safer States policy database,
   - US EPA Safer Choice program, or
   - Sweden Kemi – toxic-free everyday environment.

e. Public disclosure of CoHCs or other chemical ingredients in products. This means supporting the development or implementation of public initiatives to disclose CoHCs or other chemical ingredients in products. For example, this would include supporting the development or implementation of:
   - Various state chemical ingredient disclosure policies listed in the Interstate Chemicals Clearinghouse's State Chemicals Policy Database and Safer States policy database, or The United Nations Environment Programme's Chemicals in Products Project.

Note that you can check all that apply.

Examples

At the corporate level, Seventh Generation's "toxin free campaign" is an example of a how company can support public policies that advance: "a," "b,", "c", and "d." Specifically, Seventh Generation states that it advocates for legislation that: enables public "access to information regarding the safety of chemicals" ("a"); allows the US EPA "to take fast action on the worst chemicals" and protects "the most vulnerable among us" ("b" and "c"); and requires that the "federal government invest in developing safer alternatives to toxic chemicals" ("d").

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation on how your company's activities support any of the options "a–e." This may include: information on your website or in printed material about how your organization supports the development and use of safer chemicals, organizations of which your company is an active member, principles or programs onto which you have signed, testimony you have provided, etc. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

M5. What job responsibilities and incentives does your company have in place to ensure implementation of your chemicals policy? (4 points)

Response Options

Check all that apply. Our company:

a. works with employees and/or labor representatives to implement our chemicals policy
b. provides financial and other incentives to employees for successful implementation of our chemicals policy
c. assigns a member of senior management responsibility for implementing our chemicals policy
d. links compensation of senior management to successful implementation of our chemicals policy
e. has Board level oversight and engagement in the implementation of our chemicals policy

Intent

The purpose of this question is to evaluate whether the implementation of your chemicals policy is clearly delineated in the work responsibilities and compensation of your company's employees, senior management, and/or Board members.

Explanation

Implementation of a chemicals policy includes setting objectives and targets, tracking and reporting on performance, assurance, and review and revision activities. To implement such changes, it is essential that employees are knowledgeable about their company's chemicals policy, engaged in its implementation, and rewarded for their participation in the change process. In addition, a systematic transition toward the use of safer chemicals and products requires support and accountability at high levels of an organization. When a member of the executive team of an organization is responsible for reducing the use of chemicals of high concern and his/her compensation is linked to meeting this goal, he/she will engage other members of the company to help achieve this objective. Board level oversight signals high level interest in implementation of a chemicals policy. Note that you can check all that apply.

The Occupational Safety and Health Administration has prepared Transitioning to Safer Chemicals: A Tool Kit for Employers and Workers, which provides information for implementing a chemicals policy in a workplace.

Examples

Dignity Health's Comprehensive Chemicals Policy addresses response option "a" by integrating its chemicals policy implementation into the organization's "operations councils and hospital safety committees."

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation for the answer(s). Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Chemical Inventory (I) (30 POINTS)

I1. What steps has your company taken to manage legally restricted CoHCs? (5 points)

Response Options

Check all that apply in "a-e" or answer only "f." Our company:

a. has a Restricted Substances List or equivalent
b. delineates requirements for complying with our Restricted Substances List in contracts with suppliers
c. trains suppliers about how to comply with our Restricted Substances List
d. updates our list at minimum on an annual basis
e. publicly discloses its Restricted Substances List
f. has default procedures that have eliminated the need for a Restricted Substances List

Intent

This question seeks to understand whether your company has a Restricted Substances List and if yes the procedures in place for implementing it.

Explanation

To make the transition from the use of CoHCs to safer chemicals, an organization must have knowledge about the chemicals in its raw materials, manufacturing processes, and products. Many companies do not have this knowledge and it can be a significant undertaking to collect and analyze this information.

Following the development of a chemicals policy, many companies begin to create a system for chemicals management by delineating a Restricted Substances List (RSL). The CFP defines a Restricted Substances List (RSL) as: chemicals that are currently restricted or banned in finished products because of a regulation or law; that is, legally restricted substances. Requiring suppliers to assure that products or components do not contain chemicals on a Restricted Substances List is a first and significant step in a transition to safer chemicals use. To ensure compliance with this list it is essential that suppliers understand its requirements and are trained in how to comply. In addition, it is important that this list be updated on an annual basis, at a minimum, as new scientific evidence may result in additional chemicals of concern being legally restricted. Note that you can check all that apply for "a-e" or "f."

Examples

The American Apparel & Footwear Association's (AAFA) Restricted Substances List (RSL) identifies chemicals that are restricted or banned in finished home textile, apparel, and footwear products anywhere in the world. In each case, the RSL identifies the most restrictive regulation. The AAFA updates its Restricted Substances List on a regular basis. This tool is useful for assuring environmental compliance with global regulations and may also be used to call attention to substances that may be of concern in this industry sector but are not yet widely regulated.

Leading brands in the apparel and footwear industry that participate in the Apparel & Footwear International RSL Management Group (AFIRM) have published an RSL Supplier Implementation Toolkit to assist suppliers in complying with the RSL.

Companies that adopt the AAFA RSL, integrate it into contracts, train suppliers, and post it publicly meet response options "a-e." Some companies, such as Benetton Group, take all of these steps and go further with their RSL to include chemicals not legally restricted (see I2). Benetton Group's RSL, for example, includes both legally restricted and beyond legally restricted chemicals and can use that list to answer both I1 and I2.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation of your Restricted Substances List and describes how your suppliers are trained about the use of this list. This documentation must verify that requirements are specified in your contracts. If your Restricted Substances List is publicly available, please provide the URL in your documentation. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Chemical Inventory (I) (CONTINUED)

I2. What actions does your company take to develop a Beyond Restricted Substances List and determine their presence in your products? (5 points)

Response Options

Check all that apply. Our company:

a. reviews various sources of chemical hazard information to identify chemicals of concern beyond our Restricted Substances List

b. engages external stakeholders such as non-governmental organizations (NGOs), business customers and consumers in the development of our Beyond Restricted Substances List

c. collects data on chemicals in our products and evaluates against our Beyond Restricted Substances List or hazard criteria

d. updates our Beyond Restricted Substances List at minimum on an annual basis

e. publicly discloses its Beyond Restricted Substances List

Intent

This question seeks to understand the extent to which your company takes action beyond legal requirements to identify chemicals of concern to human health or the environment in your products.

Explanation

A company may develop a Beyond Restricted Substances List in several ways. It may review lists that have been created by NGOs, such as ChemSec, which has developed the SIN List. The chemicals on the SIN List have been identified by ChemSec as Substances of Very High Concern based on the criteria established by the EU REACH chemicals regulation. Another example is the "Hazardous 100+ List" developed by the US NGO Safer Chemicals, Healthy Families. Some companies may review the State of California's Proposition 65 List of chemicals to identify additional chemicals of concern. Companies may also review "green" product standards such as those identified by ecolabelling organizations to identify chemicals that are restricted in these products. If resources allow, a company may employ a toxicologist to keep abreast of the latest scientific literature on chemicals of concern in consumer products. A company may also engage stakeholders such as its business customers and environmental health NGOs in developing its Beyond Restricted Substances List. It is important that a Beyond Restricted Substances List be updated on an annual basis, at a minimum, as new scientific evidence may reveal additional chemicals of concern.

Once a company has created a Beyond Restricted Substances List it will want to evaluate its products against this list. A company may conduct research to better understand which of these chemicals are likely to be in its products and may also conduct product testing. A company may ask suppliers to report directly on whether these chemicals are contained in products or it may ask suppliers to report this information to a third party service provider as a way to protect confidential business information. Supplier reporting is addressed in question I3. Note that you can check all that apply.

Examples

As noted in I1, Benetton Group's RSL includes both legally restricted and beyond restricted substances. Assuming the Benetton Group updates its list annually, it would meet response options: "a," "c," "d," and "e." It's unclear whether Benetton Group engages stakeholders in the development of its Beyond Restricted Substances List—response option "b."

The cosmetics company, Beautycounter, has an extensive Beyond Restricted Substances List that it calls "The Never List." The Never List would meet response options: "a," "c," "d," and "e." It's unclear whether Beautycounter engages stakeholders and meets the criteria for response option "b."

File Upload

For the online assessment tool, responders must upload a file that provides your company's Beyond Restricted Substances List and provides an explanation of how this list is determined. If your company's Beyond Restricted Substances List is publicly available, please include a link to it in your documentation. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Chemical Inventory (I) (CONTINUED)

I3. What chemical information does your company collect from suppliers? (5 points)

Response Options

Check all that apply. Our company:

a. requires suppliers to provide chemical information as delineated in our Restricted Substances List

b. requires suppliers to provide chemical information as delineated in our Beyond Restricted Substances List

c. requests suppliers to provide chemical ingredient information

d. requires suppliers to provide chemical ingredient information

Intent

To implement a chemicals management system companies need to collect information from suppliers, either directly or through a third party, on chemical ingredients. This question seeks to understand the scope of a company's efforts to collect chemical information, from Restricted Substances List chemicals to all chemicals in products.

Explanation

Requirements for sharing chemical information should be specified in contract agreements. The first step in this process will be to receive assurance from suppliers that chemicals on a Restricted Substances List are not in the products they provide. If a company has created a Beyond Restricted Substances List it will need to determine whether these chemicals are in its products. A company may ask suppliers to report directly on whether these chemicals are contained in products or it may utilize a third party service provider to collect this information as a way to protect confidential business information. For example, a supplier will provide a list of chemical ingredients to a third party that will evaluate whether a product contains any chemicals on either the Restricted Substances List or Beyond Restricted Substances List, but will not reveal the full list of ingredients to the company requesting the information.

Some companies ask their suppliers to provide complete information about the chemical ingredients in their products. Some companies refer to this "full materials disclosure" or full materials declaration." When full materials disclosure is required, suppliers will often utilize a third party service provider to protect their confidential business information. For the CFP, the phrase chemical ingredient information is synonymous with full materials disclosure. The CFP defines chemical ingredient information for formulated products and articles as follows:

- For formulated products: a company knows 100% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 100 ppm or higher in the formulation.
- For articles: company knows 95% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

Response Option "c" indicates that a company *requests* that suppliers provide chemical ingredient information, whereas Response Option "d" indicates that a company *requires* suppliers to provide chemical ingredient information. A company may initially request this information and then after a trial period clearly specify these requirements in its supplier contracts. Note that you can check all that apply.

Examples

Two examples of companies meeting Response Option "d" are:

- Walmart Stores, Inc., which requires its suppliers of formulated consumable products to report their full product formulations to The Wercs through WERCSmart.
- Seagate Technology PLC, which requires its suppliers to disclose by CAS number and concentration (or mass) every constituent substance in every homogeneous material.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation for the answer(s). Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt

Chemical Inventory (I) (CONTINUED)

I4. For what percentage of products sold by your company do you collect chemical ingredient information? (5 points)

Response Options

I4a. Formulated Products:

i. N/A because your company does not sell formulated products

ii. _____ if applicable, for what percentage of formulated products sold by your company is chemical ingredient information collected?

I4b. Articles:

i. N/A because your company does not sell articles

ii. _____ if applicable, for what percentage of articles sold by your company is chemical ingredient information collected?

Intent

This question seeks to understand the scope of your company's data collection on chemical ingredient information as reported in Response Option I3.c. or I3.d. to determine whether your company collects chemical ingredient information for all of its products or for only certain products.

Explanation

Please report using either mass or sales as a measurement unit. You may also report using product categories, but this measurement unit is less preferred. Note that it is important to follow the CFP's definitions of chemical ingredient information for formulated products and articles:

- For formulated products: a company knows 100% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 100 ppm or higher in the formulation.
- For articles: company knows 95% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

A hypothetical answer for a company that sells only articles is, "our company collects 100% of chemical ingredient information for our products by sales. This means that we know, for all of our products sold, 95% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material."

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation for the answer(s). Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

I5. What capabilities does your company have for managing data on chemical ingredients in its products? (5 points)

Response Options

Check all that apply. Our company has:

a. an internal named point(s) of contact or outside contractor who communicates with suppliers concerning our chemical information requirements

b. a data system (either internal or third party) to manage an inventory of chemicals in products

c. a data system (either internal or third party) that links our inventory of chemicals in products to chemical hazard information

d. a data system for generating reports on chemical/material ingredient declarations to customers

Intent

This question asks about your company's capabilities for interacting with tier one suppliers and managing chemical ingredient data, and your communications with your customers (either business-to-business or business-to-consumer) about these data.

Explanation

Setting up a management system is an important next step after determining what chemicals may be of concern in your company's products and requesting data from suppliers on these substances. Identifying a point of contact for chemical hazard communication requirements will facilitate the reporting process. While these systems can be managed internally some companies prefer to use a third party service provider to collect and manage chemical ingredient data to protect a supplier's confidential business information. These electronic management systems can generate reports that are tailored to specific customer requests. Note that you can check all that apply.

Examples

Seagate Technology PLC uses a third party to work with suppliers in collecting chemical/material ingredient information, and has developed its own internal data management system to collect ingredient information and provide reports to its business customers on material ingredient disclosures. For I5, Seagate's data collection system meets the requirements of Response Options "a," "b," and "d." It is unclear whether Seagate links its material inventory with hazard data as required in Response Option "c." A template for Response Option "c" is the Health Product Declaration form.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation of your company's system to manage chemicals data. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Chemical Inventory (I) (CONTINUED)

I6. How does your company assure conformance with your chemicals policy? (5 points)

Response Options

Check all that apply. Our company:

a. has an audit program to verify supplier submitted data

b. requires suppliers to test parts in third-party approved labs and provide results

c. trains suppliers on how to comply with reporting requirements

d. routinely tests parts, components, or products to assure conformance with reporting requirements

Intent

This question inquires about the measures your company takes to ensure that suppliers are accurately reporting on their claims regarding chemicals in products, especially CoHCs. It seeks to understand the level of certainty that your company achieves to verify supplier compliance with your chemical information requirements.

Explanation

A first step many companies take is to review the reporting forms submitted by suppliers. Many companies also require their suppliers to test parts in an approved laboratory and provide these results. Some companies offer training programs to their suppliers to help ensure compliance with reporting. Many companies also conduct their own routine testing of parts, components and products or contract with a third party to do so. Companies may also compare submissions by different suppliers to identify discrepancies.

If your company avoids all CoHCs in its products and as impurities, please describe how you assure that these chemicals are not in the products you sell. Supporting documentation should be included.

Note that you can check all that apply.

Examples

As part of its Restricted Substances List program and through the Zero Discharge of Hazardous Chemicals initiative Levi Strauss & Co. (LS&Co.) is likely to meet the following response options:

- Response Option “a” by auditing its suppliers,
- Response Option “b” by requiring suppliers test products at LS&Co. approved laboratories,
- Response Option “c” by training its suppliers, and
- Response Option “d” by routinely testing its own products.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation of how your company assures conformance with its reporting requirements. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Footprint Measurement (F) (30 POINTS)

F1. Has your company set goals for reducing CoHCs in the products you sell and measured progress against these goals? (6 points)

Response Options

Check all that apply in "a-d" or answer only "e." Our company:

a. has set goal(s) for reducing CoHCs by count or mass

b. publicly discloses the goal(s) (at minimum includes percentage reduction and time period)

c. publicly discloses specific CoHC(s) included in the goal(s)

d. publicly reports annually on progress towards meeting goals

e. has no CoHCs in our products and publicly discloses this information

Intent

This question inquires about the specific goals that your company has set for reducing CoHCs in products you sell and the extent to which your company publicly discloses these goals.

Explanation

Having a formal process for setting goals and measuring and reporting on progress toward these goals provides accountability to your company's stakeholders and shareholders. Ideally, a regular process for reviewing goals and progress occurs at least annually and is part of the reporting of key performance indicators.

In addition to setting these goals, publicly sharing these goals, and reporting on progress towards meeting them is an additional means of ensuring accountability. Supporting documentation for this question should identify the chemicals for which you have set a goal to reduce or eliminate, your reduction goals and the progress you have made toward reaching these goals. For "a," "b," "c,", and "d," check all that apply. *If your company does not use CoHCs in its products and publicly discloses this information, check "e" and receive full credit for this question.*

Example

LS&Co. as part of its Commitment to Zero Discharge of Hazardous Chemicals has set a goal of eliminating the discharge of hazardous chemicals by 2020 (note "zero discharge" is defined to include both chemicals in products as well as in manufacturing). LS&Co, issues progress reports on meeting its goal, especially for specific chemical compounds.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation describing your company's goals and provide examples of public disclosure of goals including goals for reducing specific chemicals of high concern, and annual progress reports. If you checked "e" please include a link to where this information is publicly disclosed. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Footprint Measurement (F) (CONTINUED)

F2 How does your company measure its baseline chemical footprint? (6 points)

Response Options

Provide answers for one of the following three options: 1) "a-b,"2) "c," or 3) "d." Our company:

a. had intentionally added CoHCs in its products for fiscal year (FY) 2014 = ___ CoHCs by count FY 2014 and/or

b. had intentionally added CoHCs in its products in FY 2014 = ___ CoHCs by mass (kg) for FY 2014, or

c. had intentionally added CoHCs in its products in FY 2014 and cannot calculate count or mass of CoHCs, or

d. had no intentionally added CoHCs in its products in FY 2014

_____ if "a," enter CoHCs by count FY 2014

_____ if "b," enter CoHCs by mass (kg) for FY 2014

Intent

This question inquires about your company's total use of CoHCs sold in products, either by count or by mass. To calculate your company's chemical footprint you will need to have a system in place to collect and evaluate chemicals data that you (or a third party) receive from your suppliers. If you ask suppliers to provide information on all intentionally added chemicals, you will be able to count the chemicals of high concern in your products.

Explanation

The CFP defines chemical footprint as the total mass of chemicals of high concern (CoHCs) in products sold by a company, used in its manufacturing operations and by its suppliers, and contained in packaging. For 2015, we are asking companies to measure CoHCs in products sold by a company.

To measure your company's chemical footprint, you will need to know the chemical inputs into your products and whether any of those chemicals are on the California Candidate Chemicals List. For 2015, the Chemical Footprint Project is using the California Candidate Chemical List as the source for identifying CoHCs. Thus the count of CoHCs (F2.a.) is the number of chemicals that are intentionally added to your products and are on the California Candidate Chemicals List. Similarly, the mass of CoHCs (F2.b.) is the mass of California Candidate Chemicals in your products. In summary, measuring your chemical footprint according to F2 requires aligning your list of chemicals of concern with the California Candidate Chemicals List.

Chemical footprinting builds from materials accounting, especially at the manufacturing level. In Massachusetts, for example, companies that comply with the Toxics Use Reduction Act (TURA) must perform materials accounting for their facility that includes: the total amount, and amount per unit of product, of each regulated toxic chemical.

Total count is the number of CoHCs intentionally added across all products. For example, "across all product lines our company's products contained 3 intentionally added CoHCs in FY 2014. Note: count is the total of individual CoHCs added up across all products. For example, one product category contains methylene chloride, another product category contains DEHP, and a third product category contains cadmium. Therefore our CoHC count for 2014 = 3 CoHCs."

Total mass is the amount of CoHCs intentionally added to products. For example, "all of our company's products contained 1,255,476 kilograms of intentionally added CoHCs." To determine the total mass of chemicals of high concern, you will need to determine the total mass of CoHCs in your products. Specifically:

> Total mass of CoHCs = Sum the mass of CoHCs for all (P) parts in a product times the (S) sales of that product for all (N) products.
>
> Where:
> p is the pth part in a product
> P is the total number of parts in product n
> n is the nth product
> N is the total number of products
> Sn is the annual number of product sales for product n

$$\left\{\sum_{i}^{N} S_n \sum_{i}^{P} [(\text{mass CoHC in part p in product n}) (\text{mass of part p in product n})]\right\}$$

Example

The Commonwealth of Massachusetts exemplifies how companies can measure their chemical footprints. Because of the data collected for the TURA program, the State of Massachusetts is able to calculate changes in toxic chemical use including in manufacturing and shipped in product. For example, from the years 1990 to 2005, Massachusetts companies reduced:

- toxic chemicals used by 40% and
- toxic chemicals shipped in product by 41%.

The TURA program exemplifies the type of material flow measurements required to measure the CFP's definition of chemical footprint.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation describing how you calculate your company's baseline chemical footprint. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Footprint Measurement (F) (CONTINUED)

F3. Over the past two years how much have intentionally added CoHCs in your products changed? (6 points)

Response Options

Provide answers for one of the following three options: 1) "a-b,"2) "c," or 3) "d." Our company's:

a. count of intentionally added CoHCs in products: FY 2014 minus FY 2013 = ___ CoHCs by count and/or

b. mass of intentionally added CoHCs in products: FY 2014 minus FY 2013 = ___ CoHCs by mass (kg), or

c. products contain intentionally added CoHCs and we cannot calculate changes in CoHCs by count or mass for the reporting years of FY 2013 and FY 2014, or

d. products did not contain intentionally added CoHCs for FY 2013 and FY 2014

_____ enter the count of intentionally added CoHCs in products: FY 2014 minus FY 2013 = _____ CoHCs by count

_____ enter the mass of intentionally added CoHCs in products: FY 2014 minus FY 2013 = _____ CoHCs by mass (kg)

Intent

This question asks for a quantitative measurement of changes in intentionally added CoHCs in your company's products over the past two reporting years.

Explanation

To calculate count, start with the individual CoHCs intentionally added to products in FY 2014 and subtract FY 2013 intentionally added CoHCs. For example:

- In FY 2014 our products contained 11 intentionally added CoHCs, whereas in FY 2013 our products contained 12 intentionally added CoHCs: 11 (FY 2014) – 12 (FY 2013) = -1 (reduced CoHC by count).
- In FY 2014 our products contained 11 intentionally added CoHCs, whereas in FY 2013 our products contained 11 intentionally added CoHCs: 11 (FY 2014) – 11 (FY 2013) = 0 (no change in CoHCs by count).
- In FY 2014 our products contained 12 intentionally added CoHCs, whereas in FY 2013 our products contained 11 intentionally added CoHCs: 12 (FY 2014) – 11 (FY 2013) = 1 (increased CoHC by count).

To calculate mass, start with the kg of CoHCs intentionally added to products in FY 2014 and subtract FY 2013 intentionally added CoHCs by kg. For example:

- In FY 2014 our products contained 9,000 kg intentionally added CoHCs, whereas in FY 2013 our products contained 10,000 kg intentionally added CoHCs: 9,000 kg (FY 2014) – 10,000 kg (FY 2013) = -1,000 kg (reduced CoHC by mass).
- In FY 2014 our products contained 10,000 kg intentionally added CoHCs, whereas in FY 2013 our products contained 10,000 kg intentionally added CoHCs: 10,000 kg (FY 2014) – 10,000 kg (FY 2013) = 0 kg (no change in CoHC by mass).
- In FY 2014 our products contained 10,000 kg intentionally added CoHCs, whereas in FY 2013 our products contained 9,000 kg intentionally added CoHCs: 10,000 kg (FY 2014) – 9,000 kg (FY 2013) = 1,000 kg (increased CoHC by mass).

Note: points are given for answering the question, not for the type of answer. In other words, companies will receive points for answering this question and will not be penalized for increased use of CoHCs.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation on your progress reducing chemicals of high concern in the products you sell. Please provide a list of the CoHCs that your company has reduced or eliminated and mass reduced in kg per chemical. If your company does not use CoHCs in its products, please provide documentation. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Footprint Measurement (F) (CONTINUED)

F4. How does your company assess the hazards of chemicals in its products beyond regulatory requirements? (6 points)

Response Options

Check all that apply. Our company:

a. uses a system or tool (internal or third party) to evaluate chemical hazards. Identify the system or tool:

_____

b. asks suppliers to provide their evaluations of chemical hazards in the products they sell to us

Intent

This question inquires about how your company assesses chemical hazards in your products beyond regulatory requirements. Many companies begin by reviewing Safety Data Sheets and/or evaluating CAS numbers against authoritative lists of chemical hazards. Safety Data Sheets often do not contain a complete ingredient listing because of confidential business information. Authoritative lists are often not up to date with new scientific evidence of chemical hazards. To conduct a thorough evaluation it is necessary to go beyond these lists and conduct a hazard evaluation of chemicals for which data are incomplete and therefore may not be listed.

Explanation

To evaluate chemical hazards, companies often use an evaluation tool if there is sufficient expertise in-house or hire a qualified third party such as a certified toxicologist to conduct a review. To conduct a thorough evaluation, it is expected that the tool or qualified third party will at a minimum evaluate the following hazard endpoints; carcinogenicity, mutagenicity, reproductive toxicity, persistence, bioaccumulation, aquatic toxicity (chronic and acute), and endocrine disruption. There are a number of evaluation tools available and third party service providers that provide this service. The Organization for Economic Cooperation and Development's (OECD's) Substitution and Alternatives Assessment Toolbox includes a filterable inventory of chemical hazard assessment tools, data sources, and service providers to help organizations identify tools most relevant to their substitution and alternatives assessment goals.

To gather additional information on chemical hazards, companies may request that their suppliers evaluate chemicals and provide the results of these reviews. Suppliers may do these evaluations in-house if there is sufficient expertise, or may engage a qualified third party to conduct a review. Note that you can check all that apply.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation identifying the system or tool or third party provider that your company uses. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

F5. How does your company encourage the use of safer alternatives to CoHCs? (6 points)

Response Options

Check all that apply in "a–f" or answer only "g." Our company:

a. has developed a definition for a safer alternative that is consistent with the CFP definition and we include such criteria in our business processes
b. communicates about and asks suppliers to use our company's criteria for a safer alternative
c. rewards suppliers that use safer alternatives
d. has integrated our company's criteria for a safer alternative into our product development process (e.g., through our design and safety processes)
e. has established a goal and is tracking progress to improve the profile of chemicals across our products, consistent with our company's criteria for a safer alternative
f. publicly discloses our company's definition for a safer alternative and our approach to integrating it into our business practices
g. does not have CoHCs in its products and consistently seeks to avoid any chemical of concern

Intent

This question inquires about how your company encourages the use of safer alternatives to chemicals of concern. The Chemical Footprint Project defines a safer alternative as a chemical that due to its inherent chemical and physical properties exhibits a lower propensity to persist in the environment, accumulate in organisms, and induce adverse effects in humans or animals than chemicals in current use. In addition, the alternative must deliver the needed functional performance. A safer alternative may eliminate the need for the chemical through material change, product re-design, or product replacement; or by altering the functional demands for the product through changes in consumer demand, workplace organization, or product use.

Explanation

To encourage the use of safer alternatives, it is important that a company has defined this term and communicated its meaning and criteria to its suppliers. The CFP encourages companies to define safer alternative in a manner that is consistent with the definition above. It is also important that criteria for safer alternatives are integrated into the product development process. Goal setting and tracking progress in regard to adoption of safer alternatives is also key. In addition, public disclosure of your company's definition of safer alternatives and your approach to implementation indicates that your company takes improved chemicals management seriously.

The search for safer alternatives is an iterative process and often requires the use of alternatives assessment methods to compare chemical hazards, evaluate trade-offs, and determine whether a safer alternative is technically feasible and commercially available. The OECD's Substitution and Alternatives Assessment Toolbox includes a filterable inventory of chemical hazard assessment tools, data sources, and service providers to help organizations identify tools most relevant to their substitution and alternatives assessment goals.

Some companies develop lists of preferred chemicals or provide positive criteria for chemicals (for example, biodegrades readily). Including requirements for safer alternatives in contracts can motivate suppliers to seek

Footprint Measurement (F) (CONTINUED)

out safer chemicals and materials. If these alternatives are not commercially available, these requirements can stimulate green chemistry research and development. Green chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. Green chemistry applies across the life cycle of a chemical product, including its design, manufacture, and use and includes 12 fundamental principles.

Note that you can check all that apply.

Example

Nike, Inc.'s "Green Chemistry Program" meets Response Options "a," "b," "c," "d," and "f." Specifically, Nike:

- "encourages all suppliers to use the Principles of Green Chemistry to inspire innovation. Designing and producing materials around these principles can be used at any stage in the supply chain to improve sustainability as well as protect the consumer, employee, and the community/environment" and
- asks that suppliers voluntarily: "Commit to self-evaluate the use of toxic chemicals in their facility" and "Validate their chemical greening efforts for materials or processes."

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation of your company's efforts to encourage the use of safer chemicals. Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Public Disclosure and Verification (D) (20 POINTS)

D1. What information beyond legal requirements does your company disclose about the chemical ingredients in its products? (8 points)

Response Options

Response options for D1 are divided into two parts: D1.a. for formulated products and D1.b. for articles. Answer all that apply.

D1.a. Enter the percentages for all that apply. For formulated products, our company publicly discloses:

N/A. we do not sell formulated products

i. chemical identity beyond legal requirements for _____ percentage of sales at the SKU level

ii. all intentionally added chemicals with the exception of fragrances (for which our company provides a separate list distinct from the SKU) for _____ percentage of sales at the SKU level

iii. all intentionally added chemicals including fragrances, flavors, and preservatives in products for _____ percentage of sales at the SKU level

D1.b. Enter the percentages for all that apply. For articles, our company publicly discloses:

N/A. we do not sell articles

i. generic material content for 95% by mass of chemicals in products for _____ percentage of sales at the SKU level

ii. chemical identity for 95% by mass of chemicals in products for _____ percentage of sales at the SKU level

Intent

Increasingly, stakeholders want to know the chemical ingredients in products. This question inquires about public disclosure of chemical ingredient information in formulated products and articles that your company sells. For many formulated products, companies are legally required to disclose certain chemical ingredients. This question seeks to understand how far beyond legal reporting requirements companies are progressing in terms of disclosing to the public, either on websites or packaging, chemical ingredient information about their products.

Explanation

To receive points for this question disclosure must be at the SKU level on packaging or on your company's website. For formulated products:

- D1.a.i.: note this response option is not available for companies in the beauty care, personal care, and residential laundry and cleaning product sectors. All other companies selling formulated products may receive points for ingredient disclosure beyond legal requirements at the SKU either on package or website. For example, companies in the building product sector providing Health Product Declarations for their formulated products would receive points here.
- D1.a.ii.: this response option is for companies unable to disclose fragrance ingredients on package or websites by SKU. To receive points for D1.a.ii. a company must disclose all ingredients, with the exception of fragrances, by SKU and must disclose a separate list of fragrances used in its products on its website. In other words, fragrances may be disclosed separately from the SKU, but the list of fragrances must be only fragrances in your products. For example, points will not be given for simply providing the International Fragrance Association (IFRA) list on your company website. All ingredients must be named according

Public Disclosure and Verification (D) (20 POINTS)

to industry standards, specifically: the International Nomenclature Cosmetic Ingredient (INCI) name, the International Union of Pure and Applied Chemistry (IUPAC) name, Chemical Abstract Service (CAS) name, or Consumer Specialty Products Association (CSPA) Dictionary name. Generic names, such as "fragrance," "perfume," "flavor," or "preservative" are not accepted as disclosure. For example, see SC Johnson's disclosure of its fragrance palette.

- D1.a.iii.: this response option is disclosure of all ingredients, including fragrances, by SKU on package or website. Ingredients must be named according to industry standards, specifically: the International Nomenclature Cosmetic Ingredient (INCI) name, the International Union of Pure and Applied Chemistry (IUPAC) name, Chemical Abstract Service (CAS) name, or Consumer Specialty Products Association (CSPA) Dictionary name. Generic names, such as "fragrance," "perfume," "flavor," or "preservative" are not accepted as disclosure. For example, see Seventh Generation's formulated products, which include full ingredient disclosure by product.

For articles:

- D1.b.i.: to receive points for this response option a company must disclose generic material content for 100% by mass of chemicals in products. Generic material content is defined as the general name of a material, such as steel, nylon fabric, adhesive, or type of plastic (e.g., polyethylene terephthalate (PET)). CAS# is not required.
- For example, see Construction Specialties' disclosure of generic ingredient content on its products.
- D1.b.ii.: to receive points for this response option companies must disclose chemical names for 95% by mass of chemicals in a product. For example, see Seagate's disclosure of chemical ingredient for its hard drive.

Please provide the percentage of sales for which this information is disclosed. If your company sells both formulated products and articles, please answer both parts of this question.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation on whether this information is disclosed on packaging or on your company's web site. In addition, please explain how chemicals covered by non-disclosure agreements (NDAs) are disclosed. For example, are they disclosed separately from the products with which they are associated? Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

D2. Does your company agree to publicly disclose that it participated in completing the Assessment Tool? (4 points)

Response Options

Our company agrees to be publicly listed as having fully completed the Assessment Tool. Answer "a" or "b:"

a. Yes ____

b. No ____

Note answering "yes" only means that your company will be listed publicly as participating in and completing the Assessment Tool. Your answers and your score *will not* be shared publicly.

Intent

CFP wants to give credit to those companies that fully participate in and complete the Assessment Tool, without revealing data on the answers and final score.

D3. Does your company agree to publicly disclose its responses to the questions in the Assessment Tool? (4 points)

Response Options

Our company agrees to share its answers publicly. Answer "a" or "b:"

a. Yes ____

b. No ____

Note answering "yes" only means that your answers will be listed publicly, but your score will not be shared publicly. You must answer "yes" to D2 to be able to answer "yes" to D3.

Intent

CFP wants to give credit to those companies that fully participate in and complete the Assessment Tool, and are willing to share their answers with the public.

Public Disclosure and Verification (D) (20 POINTS)

D4. Have any of your company's responses to the questions in the Assessment Tool been verified by an independent, third party? (8 points)

Response Options

Check only one response option. Our company's response options have been verified by an independent third party for:

a. none to one of our response options
b. two to four of our response options
c. at least eight of our response options
d. at least twelve of our response options
e. all response options except D2, D3, and D4

Intent

A concern shared among all parts of the value chain and outside stakeholders is that company answers to the CFP Assessment Tool are not independently verified. CFP will perform quality assurance and quality control review of responses based on information provided by companies as well based upon publicly available information. CFP will not perform an independent, third party review of all responses by a company. CFP encourages third party verification of responses and provides points through D4 to companies that undertake this effort.

Explanation

To receive points for D4 you must attach a verification or assurance statement from an independent, third party verifying the authenticity for each response option for which you claim credit. The verification must clearly relate to each response option in the CFP Assessment Tool.

For a detailed explanation of how to comply with Question D4, see the Addendum on page 42.

File Upload

For the online assessment tool, responders must upload a file that provides supporting documentation for the answer(s). Acceptable file extensions are: doc|docx|xls|xlsx|txt|pdf|ppt.

Appendix A

Chemicals in Products: Terms, Definitions, Examples, and Scope

Term	Definition	Example(s)	Scope
Beyond Restricted Substances List	Hazardous chemicals identified by a company for management, reduction, elimination, or avoidance beyond regulations; that is, beyond legally restricted and reportable substances.	Prop 65, SIN List, Hazardous 100+, etc.	Broader than **Restricted Substances List** and narrower than **Chemical Ingredient Information**
Chemical of Concern	A chemical that is of moderate to high concern for ecotoxicity or human toxicity, but is not a CoHC.	GreenScreen Benchmark 3	Broader than CoHCs and narrower than chemical ingredient information.
Chemical of High Concern (CoHC)	A chemical that meets any of the following criteria: • Carcinogens, mutagens and reproductive toxicants (CMRs);* • persistent, bioaccumulative and toxic substances (PBTs); • any other chemical for which there is scientific evidence of probable serious effects to human health or the environment that give rise to an equivalent level of concern (for example, an endocrine disruptor or neurotoxicant); or is • a chemical whose breakdown products results in a CoHC that meets any of the above criteria.	California Candidate Chemicals List, European Union Substances of Very High Concern, GreenScreen Benchmark 1	~2,300 chemicals listed on California Candidate Chemicals List
Chemical Ingredient Information	For formulated products: a company knows 100% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 100 ppm or higher in the formulation. For articles: company knows 95% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.	Seagate requirement for Full Materials Disclosure, Health Product Declaration, etc.	Broadest number of chemicals
Restricted Substances List	Chemicals that are currently restricted or banned in finished products because of a regulation or law; that is, legally restricted substances.	American Apparel & Footwear Association	Chemicals restricted by a government

* CMRs that meet CoHC criteria include: Globally Harmonized System (GHS) for the Classification and Labeling of Chemicals Category 1A (Known) or 1B (Presumed) for any route of exposure

Appendix B

Chemical Footprint Project—Criteria for Determining Chemicals of High Concern

The Chemical Footprint Project (CFP) defines a chemical of high concern (CoHC) in alignment with adverse health effects specified in REACH and determined by GHS Categories. Substances that meet the following GHS categories are CoHCs in the CFP:

- Carcinogenicity (C): GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
- Mutagenicity/Genotoxity (M): GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
- Reproductive Toxicity (R): GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
- Systemic Toxicity/Organ Effects: GHS Category 1 Single Exposure for any route of exposure or GHS Category 2 Single Exposure for any route of exposure

Note: The GHS does not have criteria for persistence and bioaccumulation.

Health Endpoints	GHS Information Source	GHS Category
Acute Aquatic Toxicity (AA)	GHS Criteria & Guidance	GHS Category 1, ≤1; GHS Category 2, >1 to 10
Carcinogenicity (C)	GHS Criteria & Guidance	GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
Chronic Aquatic Toxicity (CA)	GHS Criteria & Guidance, Guidance Value (mg/L)	≤1; >0.1 to 1.0
Developmental Toxicity (D)	GHS Criteria & Guidance (Note: GHS Reproductive Toxicity includes both reproductive and developmental effects, while the GreenScreen separates them into two distinct hazard endpoints. This classification must be based on reproductive effects alone.)	GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
Mutagenicity/Genotoxity (M)	GHS Criteria & Guidance	GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
Neurotoxicity (N)	GHS Criteria Systematic Toxicity/Organ Effects using US EPA Risk Assessment Guidance to define applicable neurotoxic effects.	GHS Category 1 Single Exposure for any route of exposure; GHS Category 2 Single Exposure for any route of exposure
Reproductive Toxicity (R)	GHS Criteria & Guidance (Note: GHS Reproductive Toxicity includes both reproductive and developmental effects, while the GreenScreen separates them into two distinct hazard endpoints. This classification must be based on reproductive effects alone.)	GHS Category 1A (Known) or 1B (Presumed) for any route of exposure
Systemic Toxicity/ Organ Effects (ST)	GHS Criteria & Guidance	GHS Category 1 Single Exposure for any route of exposure; GHS Category 2 Single Exposure for any route of exposure

Appendix C

Glossary of Terms[1]

Alternatives Assessment—A process for identifying, comparing and selecting safer alternatives to chemicals of concern (including those in materials, processes or technologies) on the basis of their hazards, performance, and economic viability. A primary goal of Alternatives Assessment is to reduce risk to humans and the environment by identifying safer choices.

Article—An object which during production is given a special shape, surface or design which determines its function to a greater degree than its chemical composition.[2]

Beyond Restricted Substances List—Hazardous chemicals identified by a company for management, reduction, elimination, or avoidance beyond legal requirements; that is, beyond legally restricted and reportable substances.

Brand—The originator of the final product and owner of any associated label/trademark. "Brand" includes a retailer's private label/private brand products.

Chemical (see also Substance)—

- **In product (Chemistry)**—Chemicals that are intended to be part of the finished product. An example is a durable water repellent chemical formulation that is applied to a textile. Another example is a chemical plasticizer added to a plastic product or component.
- **Management Process**—A task or function towards a defined goal or objective. The combination of related processes comprises a management system.
- **Management System**—The set of procedures an organization needs to follow in order to meet its objectives (reference: ISO). A "chemicals management system" describes the set of procedures an organization needs to follow to meet its chemicals management objectives.
- **Manufacturer**—The company that manufactures the chemical product/substance.
- **Process (Chemistry)**—Any chemical or substance used in a process to make a product.
- **Product**—Synonymous with chemical and chemical substance.
- **Substance**—Synonymous with chemical product and chemical.
- **Supplier**—The company that sells the chemical product (may or may not be the manufacturer of the chemical; may be a formulator).
- **Safer (Chemistry)**—a chemical that due to its inherent chemical and physical properties, exhibits a lower propensity to persist in the environment, accumulate in organisms and induce adverse effects in humans or animals.

Chemical Footprint—the total mass of chemicals of high concern (CoHCs) in products sold by a company, used in its manufacturing operations and by its suppliers, and contained in packaging.

Chemical Footprinting—The process of assessing progress toward the use of safer chemicals and away from chemicals of high concern to human health or the environment.

Chemical Hazard Assessment—The process of determining whether a chemical is capable of causing adverse effects to humans and the environment and the circumstances under which these effects may occur.

Chemical Ingredient Information—

- **For Formulated Products**—A company knows 100% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 100 parts per million (ppm) or higher in the formulation.
- **For Articles**—A company knows 95% of the intentionally added substances by mass and any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

1 Adapted from the OIA Chemicals Management Framework Glossary: http://outdoorindustry.org/responsibility/chemicals/cmpilot.html

2 http://www.reach-compliance.eu/english/REACH-ME/engine/sources/definitions.html

Chemical of Concern—A chemical that is of moderate to high concern for ecotoxicity or human toxicity, but is not a Chemical of High Concern (CoHC).

Chemical of High Concern (CoHC)—a chemical that meets any of the following criteria:

- Carcinogenic, mutagenic, or toxic to reproduction (CMR);
- Persistent, bioaccumulative and toxic substance (PBT);
- Any other chemical for which there is scientific evidence of probable serious effects to human health or the environment that give rise to an equivalent level of concern (for example, an endocrine disruptor or neurotoxicant); or
- A chemical whose breakdown products result in a CoHC that meets any of the above criteria.

See Appendix B for additional information on criteria used to determine a Chemical of High Concern. For the 2015 reporting period, the CFP specifies a CoHC as any chemical on the California Candidate Chemicals List. See: https://dtsc.ca.gov/SCP/ChemList.cfm.

Chemicals in Products—Refer to chemicals that are intended or anticipated to be part of the finished product. Examples include dyes, silicone finishes, screen printing, inks, labels, a durable water repellent chemical formulation, or a chemical plasticizer added to a plastic product or component.

Chemicals Policy—A statement of how a company manages chemicals in its materials, supply chains, products, and operations beyond what is required by regulation.

Component—Substance intentionally added to form a preparation.[3]

Disclosure—synonymous with "public disclosure," meaning that information is available to the general public through means such as print media, Internet/web sites, in annual progress and sustainability reports, at investor and stakeholder meetings, or on packaging.

Endpoint—a discrete, measured parameter or outcome in a study (e.g., toxicological or environmental fate).

Environmental—

- **Impact**—Effects on the environment from exposure to the release of chemicals to water, soil, or the atmosphere. These effects may be positive or negative and may come from individual or cumulative releases of chemicals.
- **Exposure**—Medium (e.g., water, air, dust) by which a substance is released into the environment and route (oral, dermal, inhalation) by which an organism may come in contact with a substance.

Final Product—Refers to a consumer-ready product (e.g., a shirt for sale to a consumer).

Formulator—A manufacturer of a preparation or a mixture of chemical substances. These can be gaseous, liquid, or solid preparations (paints, liquid cleaning products, adhesives, etc.). The products that formulators make can be intermediate or finished products sold to another formulator, a fabricator, a distributor, retailer, or consumer.

Formulated product—A preparation or mixture of chemical substances that can be gaseous, liquid, or solid (e.g., paints, liquid cleaning products, adhesives, coatings, cosmetics, detergents, dyes, inks, lubricants). Can be an intermediate product sold to another formulator, fabricator, or distributor or final product sold to a consumer or retailer. (see also Chemical product, Chemical substance).

Generic Material Content—The general name of a material, such as steel, nylon fabric, adhesive, or type of plastic (e.g., polyethylene terephthalate (PET)). CAS# is not required.

Global Harmonized System of Classification and Labelling of Chemicals (GHS)—an international system for standardizing and harmonizing the classification and labelling of chemicals.

Green Chemistry—The design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances. See The 12 principles of Green Chemistry http://www.epa.gov/sciencematters/june2011/principles.htm. See also **Sustainable Chemistry**.

3 http://www.reach-compliance.eu/english/REACH-ME/engine/sources/definitions.html

GreenScreen® for Safer Chemicals—A method for comparative Chemical Hazard Assessment (CHA) that can be used for identifying chemicals of high concern and safer alternatives. The GreenScreen® tool considers 18 human and environmental health endpoints and can be used to evaluate the hazard of a single chemical or mixtures and polymeric materials. GreenScreen® uses a set of four benchmarks to screen out chemicals that are associated with adverse health and environmental impacts. Chemicals that do not pass through Benchmark 1 are deemed Chemicals of High Concern and should be avoided; chemicals at Benchmark 2 are categorized as usable, but efforts should be taken to find safer alternatives; Benchmark 3 chemicals are those with an improved environmental health and safety profile but could still be improved; and chemicals that pass through all four benchmarks are considered safer chemicals and are therefore preferred.

GreenScreen® List Translator—An abbreviated version of the full GreenScreen® method that can be automated. It is based on the hazard lists that inform the GreenScreen® method. The GreenScreen® List Translator maps authoritative and screening hazard lists, including GHS country classifications, to GreenScreen® hazard classifications. The GreenScreen® List Translator can be accessed through Healthy Building Network's Pharos Chemical and Material Library, a fee-for-service database.

Hazard (Chemical)—Inherent property of a substance having the potential to cause adverse effects when an organism, system, or population is exposed, based on its chemical or physical characteristics.[4]

Hazard Assessment—The process of determining under what exposure conditions (e.g., substance amount, frequency and route of exposure) a substance can cause adverse effects in a living system. Toxicology studies are used to identify the potential hazards of a substance by a specific exposure route (e.g., oral, dermal, inhalation) and the dose (amount) of substance required to cause an adverse effect.

Homogenous Material—A material: 1) with a uniform composition throughout; or 2) that consists of a combination of materials, that cannot be disjointed or separated into different materials by mechanical actions such as unscrewing, cutting, crushing, grinding or abrasive processes. Examples of homogeneous materials include a plastic cover to a computer screen, a copper wire inside a cable, and the solder part of a solder joint. [5]

Impurity—An unintended constituent present in a substance as manufactured. It may, for example, originate from the starting materials or be the result of secondary or incomplete reactions during the production process. While it is present in the final substance it was not intentionally added. In most cases impurities constitute less than 10% of the substance.[6]

Life Cycle—The stages of a system that begin with the acquisition of raw materials and includes bulk material processing, engineered materials production, manufacture and assembly, use, retirement, and disposal of residuals produced in each stage.

Manufacturer—Entity that makes a good through a process involving raw materials, components, or assemblies, typically with different operations divided among different workers. Commonly used interchangeably with producer.

Mass—The quantity of matter in a sample, and the sum of the masses of the components of a sample is equal to the mass of the whole sample. The mass of a particular object is a fixed quantity, but acceleration due to gravity, and therefore weight, varies with location.

Non-disclosure Agreement (NDA)—a legal contract between at least two parties that is designed to protect intellectual property (IP)/trade secret information/ confidential business information (CBI).

4 http://www.oecdsaatoolbox.org/Home/Glossary

5 http://ec.europa.eu/environment/waste/rohs_eee/pdf/faq.pdf

6 http://www.reach-compliance.eu/english/REACH-ME/engine/sources/definitions.html

Non-governmental Organizations (NGOs)—Community/environmental/public interest organizations, excludingindustry or trade associations. Examples of NGOs specific to chemicals include:

- BizNGO Working Group
- BlueGreen Alliance
- Campaign for Safe Cosmetics
- ChemSec
- Health Care Without Harm
- Healthy Building Network
- Safer Chemicals Healthy Families Coalition

Persistence—Attribute of a substance that describes the length of time that the substance remains in a particular environment before it is physically removed or chemically or biologically transformed. (IUPAC)

Persistent, bioaccumulative and toxic substance (PBT)—Chemical that is toxic, persists in the environment and bioaccumulates in food chains and, thus, poses risks to human health and ecosystems.[7]

Point of Contact—is a person or a department serving as the coordinator or focal point of information concerning chemical information and management systems for a company. Assigning a point of contact is critical where getting information is time-sensitive, accuracy is important, and when good customer relations need to be maintained.

Preferred—

- **Substances List**—A list of substances that have been assessed for their human and environmental health attributes, safety, environmental impacts and performance properties and recommended for use.
- **Chemical (Chemistry)**—a chemical or substance which has been assessed for its human and environmental health attributes, safety, environmental impacts and performance properties and recommended for use.

Preparation—A mixture or solution composed of two or more substances.

Product—

- **Chemistry**—The chemicals in a final product, their hazard characteristics, the potential for exposure to these chemicals and possible harm.
- **Final**—Refers to a consumer-ready product (e.g., a shirt for sale to a consumer).
- **Formulated**—Describes a chemical product that is a physical mixture of other chemical products.
- **Intermediate**—Refers to any item such as components and/or materials and/or substances used to make a final product. An intermediate product is not used by a consumer. An example of an intermediate product is dyed fabric made by a dye house and sold to a cut and sew factory to be made into a garment for a consumer.

Public Disclosure—Information that is available to the general public through means such as print media, Internet/websites, in annual progress and sustainability reports, and at investor and stakeholder meetings or on packaging.

Public policy—A system of laws, regulatory measures, courses of action, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives.

REACH—The European Union's Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals that entered into force in June 2007. REACH makes industry responsible for assessing and managing the risks posed by chemicals and providing appropriate safety information to users.

Restricted Substances List (RSL)—Chemicals that are currently restricted or banned in finished products because of a regulation or law; that is, legally restricted substances.

Restriction—Means any condition for or prohibition of the manufacture, use or placing on the market.[8]

Retailer—The seller and re-seller of finished product to the end consumer. Some retailers also make private label/store brand products.

7 http://www.reach-compliance.eu/english/REACH-ME/engine/sources/definitions.html

8 http://www.reach-compliance.eu/english/REACH-ME/engine/sources/definitions.html

Risk Assessment—A process that characterizes the nature and magnitude of health risks to humans (e.g., residents, workers, recreational visitors) and ecological receptors (e.g., birds, fish, wildlife) from chemical contaminants and other stressors that may be present in the environment.

Safer Chemical—A chemical that, due to its inherent chemical and physical properties, exhibits a lower propensity to persist in the environment, accumulate in organisms and induce adverse effects in humans or animals.

Safer Alternative—A chemical that due to its inherent chemical and physical properties exhibits a lower propensity to persist in the environment, accumulate in organisms, and induce adverse effects in humans or animals than chemicals in current use. In addition, the alternative must deliver the needed functional performance. A safer alternative may eliminate the need for the chemical through material change, product re-design, or product replacement; or by altering the functional demands for the product through changes in consumer demand, workplace organization, or product use.

Supplier—Any actor in the supply chain that provides intermediate and/or final products and/or supporting services to brands and/or retailers. This includes: materials, assembly, and finished product suppliers.

Sustainable Chemistry—The design, manufacture and use of efficient, effective, safe and more environmentally benign chemical products and processes.[9]

Third Party—An independent person/entity involved in a project, including chemical assessments, that is not biased to the results of the work nor has any vested interest in the outcome of the work.

Toxic Substance—Any chemical or mixture that may be harmful to the environment and to human health if inhaled, swallowed, or absorbed through the skin.

Very Bioaccumulative and Toxic (vBT)—A substance that exhibits high levels of bioaccumulation AND is toxic to human health or the environment.

Very Persistent, Very Bioaccumulative—A substance that exhibits high levels of both persistence AND bioaccumulation potential.

Very Persistent and Toxic (vPT)—A substance that exhibits high levels of persistence AND is toxic to human health or the environment.

9 http://www.suschem.org/about-suschem/vision-and-mission-sustainable-chemistry.aspx

Addendum

Guidelines for the CFP Assessment Tool Question D4—Verification

Added July 22, 2015

In the Public Disclosure and Verification section of the Assessment Tool, Question D4 asks:

D4. Have any of your company's responses to the questions in the Assessment Tool been verified by an independent, third party? (8 points)

Response Options

Check only one response option. Our company's response options have been verified by an independent third party for:

a. none to one of our response options
b. two to four of our response options
c. at least eight of our response options
d. at least twelve of our response options
e. all response options except D2, D3, and D4

This addendum to the *Guidance for Using the CFP Assessment Tool* provides guidelines on how to demonstrate verification of response options to Question D4. The addendum draws upon verification procedures used by other organizations, such as the Global Reporting Initiative (GRI) and the Carbon Disclosure Project (CDP). These organizations identify high level principles, define specific guidelines, and either refer directly to, or specifically approve international assurance standards such as the International Auditing and Assurance Standards Board's (IAASB) ISEA 3000, an international framework for assurance engagements, and AccountAbility's AA1000AS Assurance Standard, designed to confirm the accuracy and quality of sustainability performance and reporting.

Before contracting with a third party for verification of response options to the Assessment Tool questions, the CFP recommends sharing this addendum with potential contractors and asking whether they comply with the guidelines. This documentation, along with the verification results, should be shared with the CFP when responding to Question D4. The CFP will not disclose the documentation or the verification results without permission from responders.

Guidelines for the CFP Assessment Tool Question D4—Verification

Guideline	Description
Independence	There should be unambiguous separation of responsibilities for preparation of the chemicals management verification report from those who are ultimately accountable for the data. Use of third-party organizations is required to perform this verification.
Competence & Ethics	Verification practitioners should be clearly competent in both verification and chemicals management practices. The verifying company should have consistent and documented verification project standards that are required to be used for all verification projects. The verifying company and its practitioners should be subject to a code of ethics consistent with or as demanding as the International Ethics Standards Board for Accountants' (IESBA) Code of Ethics for Professional Accountants related to assurance engagements, and including standards for integrity, objectivity, professional competence, and due care.
Subject Matter	The chemicals management data content should be relevant to the end users of the information and should be capable of being objectively measured.
Criteria	The verifying company should use a documented and consistent methodology for performing the verification procedures, and should demonstrate to the responder company how its methodology meets the CFP Verification Guidelines.
Quality Control	The verifying company's quality control structure should be consistent with International Standard on Quality Control's ISQC 1 guidelines, designed to maintain a high level of quality of verification work. The ISQC Quality Control system includes guidelines on: • leadership responsibilities for quality within the company; • ethical requirements; • requirements whether to accept, continue, or discontinue an engagement; • human resources management; • how to be sure engagements are performed appropriately; and • monitoring the quality control system to maintain its adequacy and effective operation
Sufficient and appropriate evidence	The verifying company should determine to what extent the information is being reported in a reasonable and balanced manner, and whether the available data are sufficient to make that determination.
Results Report	The verifying company should produce a Results Report for the intended audience with its assessment of the veracity of the chemicals management information reviewed. The intended audience for the report may range from purely internal resources, to external stakeholders, to the general public. The Results Report should be shared with the CFP to confirm performance of the verification work.

ABOUT THE AUTHORS

Sally Edwards, Sc.D.

Dr. Sally Edwards directs the Sustainable Products Initiative at the Lowell Center for Sustainable Production, University of Massachusetts Lowell. This Initiative promotes the development of safer and greener products through engaging stakeholders, conducting research, and providing information that can spark innovative, environmentally sound solutions. Sally also facilitates the Green Chemistry and Commerce Council's Retailer Leadership Council (RLC). The RLC's mission is to promote safer chemicals, materials and products across retail supply chains.

Dr. Edwards has over 25 years of experience in environmental health, including 14 years at the US Environmental Protection Agency in Massachusetts and Alaska. She is an Adjunct Professor at the University of Massachusetts Lowell and provides consulting services to businesses and organizations. Sally holds an MS in Environmental Health Science from Harvard University and a BA in Human Biology from Stanford University. She completed her doctorate in Work Environment at the University of Massachusetts Lowell. Her book, *Beyond Child's Play: Sustainable Product Design in the Global Doll-Making Industry*, was published in 2009.

Tim Greiner, MSM, MCP

Timothy J. Greiner, Pure Strategies' co-founder and managing director, specializes in building environmental and social integrity into products, brands, and businesses. Mr. Greiner consults with domestic and overseas manufacturers, socially responsible business, and environmental advocacy groups.

Tim is currently working on building sustainability into corporate and brand strategy and sits on several Sustainability Consortium committees. Current and former clients include Seventh Generation, The North Face, Timberland, Stonyfield Farm, US EPA, NRDC, Walmart, Millipore, and Dell.

Tim holds a bachelor's degree in Materials Science Engineering from Rensselaer Polytechnic Institute and masters' degrees in Environmental Policy and Business from the Massachusetts Institute of Technology. He is a founding member of the Massachusetts Toxics Use Reduction Planners Association and a former board member and president. He is also founder of the Cape Ann Climate Change Network and is a Research Associate at the Lowell Center for Sustainable Production. Tim has work experience in industry as a Process Engineer for Fairchild Semiconductor. He also worked for the Massachusetts Office of Technical Assistance (OTA) as Project Director and Chief Engineer.

Mark S. Rossi, Ph.D.

Dr. Mark Rossi develops innovative programs, tools and networks to advance the use of safer chemicals and sustainable materials. Mark founded BizNGO in 2006 to bring thought leaders together to define best business practices in selecting safer alternatives to toxic chemicals and unsustainable materials. The BizNGO community is now over 1,000 individuals. Mark led the development of BizNGO's visionary Principles for Safer Chemicals. He also co-founded the Sustainable Biomaterials Collaborative (SBC) to spur the introduction and use of biomaterials that are sustainable from cradle to cradle. With SBC, Mark co-authored its Guidelines for Sustainable Bioplastics and co-led the creation of the BioSpecs—Environmentally Preferable Purchasing Specifications for Compostable Biobased Food Service Ware). Mark is the co-author of CPA's Green Screen for Safer Chemicals. He also co-authored CPA's Plastics Scorecard, a tool for benchmarking plastics based on green chemistry principles and closed loop systems.

Mark is a leader in the alternatives assessment field, starting with co-authoring the Lowell Center Framework for Alternatives Assessment in 2006. In 2001, he co-founded CleanMed, which is now the leading conference for greening health care. Mark serves on the Steering Committee of Health Care Without Harm, is a member of the Massachusetts Toxics Use Reduction Act Advisory Committee and is a Research Fellow at the University of Massachusetts Lowell Center for Sustainable Production. He is the co-author of many articles and reports on alternatives assessment, pollution prevention and technology innovation. Mark earned his doctorate in Environmental Policy from the Massachusetts Institute of Technology.

The Chemical Footprint Project (CFP) is a project of Clean Production Action. The founding organizations of the CFP are Clean Production Action, Lowell Center for Sustainable Production at the University of Massachusetts Lowell, and Pure Strategies.

Clean Production Action is an environmental organization that advances safer alternatives to toxic chemicals through its GreenScreen® and BizNGO programs. BizNGO is a unique collaboration of businesses and NGOs working together to promote safer chemicals and drive innovation into and across supply chains and government regulations.
www.cleanproduction.org

The Lowell Center for Sustainable Production is a research institute that works collaboratively with citizens, workers, businesses, and governments to create healthy work environments, viable businesses, and thriving communities that support sustainable production and consumption.
www.sustainableproduction.org

Pure Strategies is a leading sustainability consultancy that helps companies improve environmental and social performance through green product design and production, sustainable materials, strong community relationships, and transparent measures of progress.
www.purestrategies.com

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