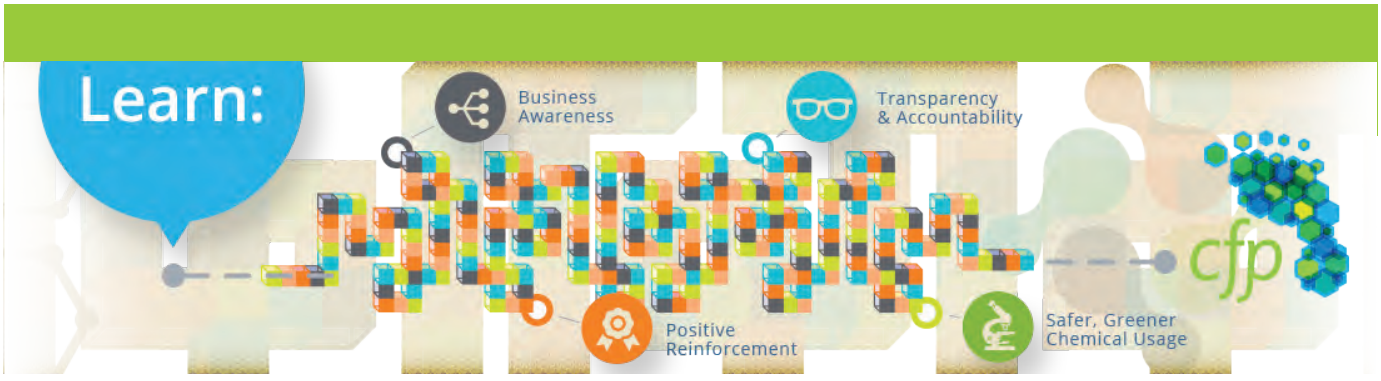
THE CHEMICAL FOOTPRINT PROJECT SURVEY

2017 Guidance Document

the chemical footprint project™



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

CLEAN PRODUCTION ACTION

Lowell Center for Sustainable Production
UNIVERSITY OF MASSACHUSETTS LOWELL

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ACKNOWLEDGMENTS

The Chemical Footprint Project (CFP) envisions a world where chemicals are healthy for people and the environment; where chemically related disease rates for cancer, infertility, asthma, and learning disabilities are low; and where consumer, government, and business demand drives the widespread supply of safer products. To achieve this vision the Chemical Footprint Project was created to benchmark and share data on corporate progress to safer chemicals in products, manufacturing, and supply chains.

CFP and this *2017 Guidance Document* emerged from over a decade of work by many individuals committed to creating a systemic approach to evaluating and benchmarking corporate performance in chemicals management. We wish to acknowledge everyone who has played a role in advancing this work.

We are grateful for the expertise provided by the members of the CFP Technical Committee who helped to craft questions and response options that are clear and true to business practices. We also thank the CFP Steering Committee that continues to provide strategic guidance: Susan Baker, Constantina Bichta, Jeremy Cote, Beth Eckl, Sonja Haider, Ronald Hart, Leah Kolicko, Mary Ellen Leciejewski, Richard Liroff, Vanessa Lochner, Roger McFadden, Monica Nakielski, Christine Naughton, Anne Robertson, and Sarah Vogel.

In addition, the members of the BizNGO Chemicals Work Group continue to provide valuable input into the CFP. We are also grateful to 2016 Survey responders for their thoughtful feedback and suggestions to improve clarity and usability.

We recognize that the tool still has 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 continuing to improve the Survey 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. For her work in getting the Survey online, we thank Bree Rodrigues of eBree Design for her patience and attention to detail. We also thank Ellen Goldberg and Alison Poor of Clean Production Action for their behind the scenes work in editing and shepherding the document to completion.

CONTENTS

Guidance for Completing the CFP Survey

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 the use of chemicals of high concern, and implemented safer alternatives be identified and rewarded?

The Chemical Footprint Project sets a new standard for evaluating and comparing companies on their policies, programs, and practices for managing chemicals. It assesses companies on their overall progress in avoiding chemicals that may cause adverse health effects such as cancer, birth defects, and learning disabilities, and their use of safer alternatives. The Chemical Footprint Project adds the "H" of human Health to Environmental, Social, and Governance (ESG) factors, thereby filling a critical missing gap in current tools to evaluate corporate sustainability.

Many investors, retailers, health care organizations, governments, and NGOs have become signatories to the Chemical Footprint Project, indicating their interest in having access to data on corporate chemicals management. Current signatories to the Chemical Footprint Project include investors and institutional purchasers with over $2.3 trillion in assets under management and $600 billion in purchasing power.

The Chemical Footprint Project was launched in 2015 with 24 companies completing the Survey. These companies varied by business sector, product type, firm size, and whether they are publicly traded or privately held. The findings provide the first ever evaluation of the current landscape of chemicals management among a diverse set of companies selling formulated products and articles, based on a common set of questions and scoring developed by an independent third party.

Similar to carbon footprinting, chemical footprinting can apply to any industry sector. Business sectors that are active in managing chemicals in their products and supply chains including building products, consumer packaged goods, medical devices, electronics, apparel and footwear, and toys are especially encouraged to complete the Survey. Companies can participate by registering and logging onto www.chemicalfootprint.org to access the Survey. Responders have the option of choosing whether to share publicly their participation, answers and scores related to the Survey. Although third-party verification is not a requirement for participation, responders receive additional points if data are independently validated.

The Chemical Footprint Project publicly profiles top performers with their permission. The results 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 seek to source products from, or invest in, companies that are leaders in using safer chemicals. The Survey measures 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.

This guidance document provides additional information on the questions and response options contained in the online Survey. We recommend using the guidance to understand more about the questions and response

options, and to learn of examples of practices that align with the response options.

The Survey includes four elements:

Management Strategy: measures the scope of corporate chemical policies and their integration into business strategy, accountability and 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 a company sets goals to reduce chemicals of high concern, whether the firm has established a baseline corporate Chemical Footprint and measured progress in reducing chemicals of high concern, and whether 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 its answers to the Survey questions and score, and whether its answers have been independently verified by a third party.

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

For 2017, four pre-questions have been added to the beginning of the Survey. These questions are for analytical purposes only, will not impact scores, and will be held confidential. If a company chooses to disclose its Survey responses in question D2, note that this disclosure does not include responses to the pre-questions.

Steps to completing the Survey:

- Educate yourself about the Survey by participating in a webinar and reading this guidance document.
- Go to www.chemicalfootprint.org to apply to complete the online Survey. 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 be sure to provide supporting documentation. Click "complete" after answering all 20 questions.

The CFP Survey asks responders three questions about disclosing their participation and results (see table below).

Please note that scores and responses to the Survey will be made public unless a company specifically requests that its score and/or responses remain confidential. Data from responders will be collated and analyzed in an annual report that highlights leaders and identifies best practices and opportunities for improvement. Leaders will be highlighted with permission in the CFP 2018 Annual 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.

CFP Survey Participation Disclosure Questions

Survey Section	Question	Disclosure Format
Responder Profile (before Survey)	Do you give permission to share your participation? (0 points)	Company name listed as participant in CFP 2018 Annual Report.
Public Disclosure & Verification	D2. Does your company agree to publicly disclose its responses its responses to the CFP Survey? (3 points)	CFP responses posted on CFP website.
Public Disclosure & Verification	D3. Does your company agree to publicly disclose its score on the CFP website? (5 points)	CFP score posted on CFP website.

The Chemical Footprint Project Survey Questions

This guidance document is organized according to the pre-questions and the four elements of the Survey: management strategy, chemical inventory, footprint measurement, and public disclosure and verification. The four pre-questions and 20 Survey questions are listed below, followed by five sections that provide additional detail on each question and response option.

PRE-QUESTIONS

Pre-question 1
How large is your company? (0 points)

Pre-question 2
Indicate the scope of your product portfolio for which you are reporting. (0 points)

Pre-question 3
Within the scope for which you are reporting, what type(s) of products does your company produce or sell? (0 points)

Pre-question 4
Within the scope for which you are reporting, what is your six digit GICS code? (0 points)

MANAGEMENT STRATEGY

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 CoHCs, includes an explicit preference for the use of safer alternatives? (4 points)

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

M4. How does your company advocate externally for the use of safer chemicals? (4 points)

M5. What means of accountability does your company have in place to ensure implementation of your chemicals policy? (4 points)

CHEMICAL INVENTORY

I1. What is the scope of chemicals of concern you restrict in your products and manufacturing processes? (5 points)

I2. What actions does your company take to assure that its list of restricted substances beyond compliance is current and implemented effectively? (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 full chemical ingredient information? (5 points)

I5. What capabilities does your company have for managing data on chemical ingredients in its products? In documentation, include a description of your data system. (5 points)

I6. How does your company ensure compliance with your chemicals policy? (5 points)

FOOTPRINT MEASUREMENT

F1. Has your company set goals for reducing CoHCs in the products you sell and measured progress toward these goals? (5 points)

F2. How does your company measure its baseline chemical footprint? (8 points)

F3. Over the past two years how much have intentionally added CoHCs in your products changed? (8 points)

F4. How does your company assess the hazards of chemicals in its products beyond regulatory requirements? In documentation, include a description of your hazard assessment system or tool. (3 points)

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

PUBLIC DISCLOSURE AND VERIFICATION

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

D2. Does your company agree to publicly disclose its responses its responses to the CFP Survey? (3 points)

D3. Does your company agree to publicly disclose its score on the CFP website? (5 points)

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

Key Terms and Definitions

A full glossary is provided in Appendix C.

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.

For 2017, the Chemical Footprint Project addresses a more limited scope and asks participating companies to calculate either the total mass or count of chemicals of high concern (CoHCs) in their products. Alternately, companies are given the option to calculate their chemical footprint based on a relatively short list of chemicals, the European Union's Candidate List of Substances of Very High Concern for Authorization (EU Candidate SVHC List). We are not asking companies to determine CoHCs used in their manufacturing operations and by their suppliers, and contained in packaging, though this information may be requested in the future.

For more details on how to calculate a chemical footprint, see page 28.

Full Chemical Ingredient Information:

For formulated products: a company knows:

- 100% of the intentionally added substances by mass and
- any likely 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 likely impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

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.

Using this definition, the Chemical Footprint Project compiled the CFP CoHC List from 14 lists of hazardous chemicals developed by governments and other authoritative bodies. The CFP CoHC List includes any chemical or chemical group that meets any combination of the CFP criteria for a CoHC on any of the 14 lists. Substances on these lists that could not plausibly be an intentionally added ingredient of a product were excluded from the CFP CoHC List (e.g., viruses, alcoholic beverages). The source lists and links to their websites can be found in Appendix D.

While each source list is dynamic, to simplify reporting the CFP CoHC List is static. For 2017, CFP has not made changes to the CFP CoHC List from the 2016 Survey. An updated list for the CFP 2018 Survey will be available in the first quarter of 2018 to give responders adequate time to incorporate any changes before the CFP 2018 Survey is released in the fourth quarter of 2018.

The CFP CoHC list aligns with the approach used by GreenScreen® for Safer Chemicals to identify CoHCs, known as "List Translator-1" chemicals (LT-1s).

Restricted Substances List (RSL)
A list of chemicals restricted by a company in products, parts, or components from its suppliers. A RSL may include only chemicals that are currently restricted by regulation. It may also include chemicals that are not yet legally restricted but have been identified as being of concern because of scientific evidence that they may cause harm to human health or the environment.

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

Pre-Questions

The pre-questions are included for analytical purposes only. Responses to the pre-questions do not impact scores and will be held confidential by the Chemical Footprint Project. If you choose in question D2 to make your CFP Survey responses public, note that pre-question responses will not be included in this disclosure.

The pre-questions must be answered before you may proceed to the CFP Survey. Please be careful when answering the pre-questions, as you will not be able to return to them. If you find you have made a mistake in your pre-question responses, please contact more info@chemicalfootprint.org for assistance in correcting it.

PRE-QUESTION 1

What size is your company?

a. If your company is publicly traded, provide FY 2016 revenue: _____

b. If your company is privately held, check one of the following:

   i. FY 2016 revenue greater than $50 billion

   ii. FY 2016 revenue greater than $5 billion and less than or equal to $50 billion

   iii. FY 2016 revenue greater than $0.5 billion and less than or equal to $5 billion

   iv. FY 2016 revenue less than or equal to $0.5 billion

PRE-QUESTION 2

Indicate the scope of your product portfolio for which you are reporting:

Choose one:

a. All product lines

b. Select product lines or divisions.

   i. Indicate which product lines or divisions:

   _____

   ii. What value of product portfolio by sales does this scope represent?

   – FY 2016 revenue greater than $50 billion

   – FY 2016 revenue greater than $5 billion and less than or equal to $50 billion

   – FY 2016 revenue greater than $0.5 billion and less than or equal to $5 billion

   – FY 2016 revenue less than or equal to $0.5 billion

Explanation:

The Chemical Footprint Project Survey is intended to provide a corporate-wide measure of chemicals management. However, as an initial step, some responders choose to report on a subset of their company's products.

PRE-QUESTION 3

Within the scope for which you are reporting, what type(s) of products does your company produce or sell?

Check one:

a. Formulated products

b. Articles

c. Both formulated products and articles

Explanation:

A "formulated product" is 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). A formulated product can be an intermediate product sold to another formulator, fabricator, or distributor or a final product sold to a consumer or retailer.

An "article" is 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.

PRE-QUESTION 4

Within the scope for which you are reporting, what is your six digit GICS code?

Explanation:

Please choose as many GICS codes as apply for the scope of your product portfolio for which you are reporting.

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. 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 a chemicals policy on CoHCs that is applicable to our manufacturing operations
d. *manufacturing: if* yes to "c," our chemicals policy for manufacturing is publicly available on our website
e. *manufacturing:* not applicable; we have no manufacturing operations.
f. *supply chains:* has a chemicals policy on CoHCs 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 on CoHCs applicable to our primary packaging
i. *packaging:* if yes to "h," our policy for packaging is publicly available on our website
j. has no established policy at this time.

Intent

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

Explanation

A chemicals policy encompasses how a company manages chemicals in its materials, products, supply chains, and manufacturing operations, beyond what is required by regulation. Some organizations use terms such as "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.

If your company does not manufacture products, please select option M1e. This will adjust scoring, allowing you to achieve the full possible four points.

In addition, please note whether you share your chemicals policy publicly. Finally, check all that apply.

Examples

The BizNGO Chemicals Work Group has developed the BizNGO Model Chemicals Policy for Brands and Manufacturers, which includes both a policy template and examples of how companies are addressing different aspects. Please note that questions M1 and M2 of this survey do not require that all six sections of the BizNGO Model Chemicals Policy be included in a single document to qualify as a corporate chemicals policy. Corporate chemicals policies should include, at a minimum, the first two sections of the Model Chemicals Policy: Statement of Intent and Scope.

The Environmental Defense Fund has developed the EDF Model Chemicals Policy for Retailers of Formulated Products, which served as the basis for developing the BizNGO Model Chemicals Policy for Brands and Manufacturers.

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.

Supporting Documentation

Please provide a narrative summary of how your company's chemicals policy addresses each of the relevant response options. Provide a copy of and/or a link to your *chemicals policy*. If policies are embedded within a larger document, note the page number(s) you would like to be considered as relevant documentation.

File Upload

Please upload supporting documentation. Multiple documents should be combined into a single PDF. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Management Strategy (M) (CONTINUED)

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)

Renspose Options

Check all that apply. Our company:

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:* if yes to "c," our policy for manufacturing is publicly available on our website
e. *manufacturing:* not applicable; we have no manufacturing operations
f. *supply chains:* has a 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
j. has no established policy at this time

Intent

This question builds on M1. It seeks to understand your company's chemicals policy, again with regard to scope—products, manufacturing, supply chain, and/or packaging—and whether it is publicly available, as well as whether it includes a preference for safer alternatives to hazardous chemicals. Without imbedding a preference for safer chemicals in its policy, companies may successfully eliminate a chemical of concern, only to replace it with another chemical of equal or greater concern.

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.

To receive credit, your company's chemicals policy must explicitly state a preference for safer alternatives or for an approach that reduces or eliminates the use and generation of hazardous substances. 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

The BizNGO Chemicals Work Group has developed the BizNGO Model Chemicals Policy for Brands and Manufacturers, which includes both a policy template and examples of how companies are addressing different aspects. Please note that questions M1 and M2 of this survey do not require that all six sections of the BizNGO Model Chemicals Policy be included in a single document to qualify as a corporate chemicals policy. Corporate chemicals policies should include, at a minimum, the first two sections of the Model Chemicals Policy: Statement of Intent and Scope.

The Environmental Defense Fund has developed the EDF Model Chemicals Policy for Retailers of Formulated Products, which served as the basis for developing the BizNGO Model Chemicals Policy for Brands and Manufacturers.

For an example of "a" see Dignity Health's Comprehensive Chemicals Policy that specifies that supply chain management will:

- Avoid identified chemicals of concern;
- Disclose processes that use chemicals of concern even if the chemicals used in the processes are not part of the end product; and
- Substitute safer alternatives identified through hazard analysis.

Beautycounter's mission is "to get safer products into the hands of everyone," accompanied by a rigorous ingredient screening process.

For "a," "c," and "f," Standard Textile's Environmental Code of Practice provides an excellent example of a policy that outlines requirements for the use of safer chemicals in materials used in or for the manufacturing of all Standard Textile products.

For examples of "a" and "f" 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 for "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.

Supporting Documentation

Please provide a narrative summary of how your company's chemicals policy addresses each of the relevant response options. Provide a copy of and/or a links to your chemicals policy. If policies are embedded within a larger document, note the page number(s) you would like to be considered as relevant documentation.

File Upload

Please upload supporting documentation. Multiple documents should be combined into a single PDF. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

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

Choose one:

a. Yes

b. No

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, communication with suppliers, vendors, and customers, manufacturing processes, etc. 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 and vendors are informed of these requirements.

Explanation

If you select "yes," please provide a narrative response documenting your company's efforts in the following areas as applicable:

- vendor or supplier communication
- customer communication (business-to-business)
- consumer communication
- regulatory risk reduction
- reputation risk reduction
- growth strategy
- new product development
- redesign of current products

Responses should indicate how extensive each of these efforts is across the company's product portfolio.

Example

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.

Supporting Documentation

If your response is "yes," along with a narrative response, provide links to or copies of any relevant company documents.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

M4. How does your company advocate externally for the use of safer chemicals? (4 points)

Response Options

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

a. prioritization of chemicals for reduction based on their inherent hazards
b. reduction in the use of CoHCs
c. development and adoption of safer alternatives, including green chemistry solutions
d. public disclosure of CoHCs or other chemical ingredients in products
e. none of the above

Intent

This question evaluates your company's engagement in external initiatives that promote collecting and publishing 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 an external initiative that aligns with the "a–d" response options listed above. Note that because some programs encompass multiple response options, support for one external initiative could receive credit for multiple response options. For example, a company that publicly supports the California Safer Consumer Product Regulations or actively participates in the Green Chemistry & Commerce Council or BizNGO would receive credit for response options: "a," "b," "c," and possibly "d." Specific examples by response option include:

Option a. Prioritization of chemicals for reduction based on their inherent hazard. This includes supporting the development or implementation of initiatives and programs 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.

Option b. Reduction in the use of CoHCs. This means supporting the development or implementation of 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:

- 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 policies that restrict chemicals, see the OECD Substitution and Alternatives Toolbox—Regulations and Restrictions website.

Management Strategy (M) (CONTINUED)

Option c. Development and use of safer alternatives. This means supporting the development or implementation of 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.

Option d. 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 California's Cleaning Product Right to Know Act of 2017, as well as 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.

Example

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: allows the US EPA "to take fast action on the worst chemicals" and protects "the most vulnerable among us" ("a" and "b"); and requires that the "federal government invest in developing safer alternatives to toxic chemicals" ("c"); and enables public "access to information regarding the safety of chemicals" ("d").

Walmart's public support of the EPA Safer Choice Program in its Sustainable Chemistry Policy is an example of corporate support for an external initiative advancing "a," "b," "c," and "d" outside public policy.

Supporting Documentation

Please provide a narrative summary of how your company's activities support any of the options "a–e." In addition, please provide supporting documentation. 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.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

M5. What means of accountability does your company have in place to ensure implementation of your chemicals policy? (4 points)

Response Options

Check all that apply. Our company:

a. delineates chemicals management responsibilities in job descriptions and individual annual performance metrics

b. assigns member(s) of senior management responsibility for meeting chemical policy goals and objectives

c. has financial incentives for senior management to meet corporate sustainability goals. These goals include reducing the use of some or all CoHCs.

d. has board level engagement in the implementation of our chemicals policy

e. none of the above

Intent

The purpose of this question is to evaluate whether the implementation of your chemicals policy is clearly delineated in the work responsibilities 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, he/she will engage other members of the company to help achieve this objective. Board level visibility to chemical policy goals and progress toward those goals signals high level interest in implementation of a chemicals policy.

Note that you can check all response options that apply.

Example

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."

Supporting Documentation

Please provide a narrative summary for any checked item. Include the title and description of responsibilities for the highest ranking person in the company responsible for chemicals management.

File Upload

Please upload supporting documentation.

Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Chemical Inventory (I) (30 POINTS)

I1. What is the scope of chemicals of concern you restrict in your products and manufacturing processes? (5 points)

Response Options

Choose one of response options "a–d," if applicable, option "e" or choose "f." Our company:

a. Uses our RSL(s) to manage legal compliance within each market where it operates. Our RSL(s) include(s) only chemicals that are legally restricted in each market.

b. Uses a single RSL that reflects the strictest regulation in all of the countries or markets in which the brand operates and sells products (e.g., regulations that apply to manufacturing, marketing, and sales locations).

c. Uses a single RSL that reflects the strictest regulation in all locations worldwide.

d. Uses a single RSL that includes limits or bans of chemicals beyond what is covered in the most restrictive global regulations, or it includes chemicals that may not be subject to regulation but which the registrant has voluntarily chosen to limit or ban from its products.

e. In addition to our RSL(s), above, our company has developed an mRSL

f. None of the above

Intent

This question seeks to understand the scope of chemicals restricted in your products and manufacturing processes beyond legal requirements.

Explanation

The CFP defines a restricted substances list (RSL) as a list of chemicals restricted by a company in products, parts, or components from its suppliers. A RSL may include only chemicals that are currently restricted by regulation. It may also include chemicals that are not yet legally restricted but have been identified as being of concern because of scientific evidence that they may cause harm to human health or the environment.

Option a: The scope of an RSL, at minimum, includes chemicals that are currently restricted or banned in finished products because of a regulation or law; that is, legally restricted substances. Because jurisdictions have different chemical restrictions, a company may maintain separate RSLs for each jurisdiction where it operates. Select option "a" if your RSL(s) do(es) not include restrictions on chemicals that go beyond legal compliance for any jurisdiction where you operate. Requiring suppliers to assure that products or components do not contain chemicals on an RSL designed for legal compliance is a first and significant step in a transition to safer chemicals use.

Option b: A company may develop a single RSL that meets the most stringent legal restrictions for all jurisdictions where it operates. As a result, the RSL will likely include restrictions that are beyond legal compliance for some jurisdictions with less stringent regulations.

Option c: Some companies adopt an RSL for all substances legally restricted by any jurisdiction, even though they may not sell or operate in that jurisdiction.

Option d: A company may take additional actions to identify chemicals of concern in addition to those that are legally restricted. For example, a company may decide to identify and begin to restrict chemicals designated by the International Agency for Research on Cancer (IARC) as known or probable human carcinogens, even if there are no current legal restrictions on those substances for its products. The types of hazard characteristics that are of concern—for example, endocrine

disruption, skin sensitization, respiratory sensitization, or ecotoxicity—will vary depending on a product category.

Once a company has created an RSL goes beyond compliance, 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.

Option e: In addition to an RSL, which restricts chemicals of concern in products, parts, or components, a company may also develop a manufacturing restricted substances list (mRSL). An mRSL is a list of chemicals banned from intentional use in facilities that process materials, components and/or products. An mRSL establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities.

Choose one response option, "a–d" to describe your RSL and, if you have an mRSL, option "e," or choose "f".

Examples

Option a: RSLs designed to achieve only legal compliance typically relate to specific products and/or sectors, such as the European Union's Restriction of Hazardous Chemicals (RoHS) Directive, which restricts chemicals used in electronics.

Option c: 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.

Option d: A company may expand its RSL beyond legally restricted chemicals 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 RSL. It is important that an RSL be updated on an annual basis at minimum, as new scientific evidence may reveal additional chemicals of concern.

Benetton Group's RSL includes both legally restricted and chemicals that are of concern, but not legally restricted.

The cosmetics company, Beautycounter, has an extensive Beyond Restricted Substances List that it calls "The Never List."

Option e: The ZDHC MRSL V1.1 is a list of chemical substances banned from intentional use in facilities that process textile materials and trim parts in apparel and footwear. The MRSL establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities.

Supporting Documentation

Please provide a copy and/or a link to your RSL and, if available, mRSL.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Chemical Inventory (I) (CONTINUED)

I2. What actions does your company take to ensure that its list of restricted substances beyond compliance is current and implemented effectively? (5 points)

Response Options

Check all that apply. Our company:

a. delineates requirements for complying with our RSL/mRSL in contracts with suppliers

b. trains suppliers about how to comply with our RSL/mRSL

c. updates our RSL/mRSL at minimum on an annual basis

d. engages external stakeholders such as non-governmental organizations (NGOs), business customers, and consumers in the development of our RSL/mRSL.

e. publicly discloses our RSL/mRSL

f. None of the above

Intent

This question seeks to understand the measures your company takes to regularly update and effectively implement restrictions beyond compliance for hazardous chemicals. Note that if your company maintains an RSL that does not go beyond compliance (indicated by selecting response option I1a), you will not receive points for this question.

Explanation

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.

Examples

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.

Supporting Documentation

Please describe how your suppliers are trained about the use of this list. Provide supporting documentation to verify that requirements are specified in your contracts.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.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."

Supporting Documentation

Please provide documentation that supports your answer to this question.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Chemical Inventory (I) (CONTINUED)

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

Response Options

Choose one of the following. Our company:

a. requires suppliers to confirm that they comply with our RSL.

b. requires suppliers to confirm that they comply with our RSL and to provide information on chemicals on our Watch List, which includes 1–50 chemicals.

c. requires suppliers to confirm that they comply with our RSL and to provide information on chemicals on our Watch List, which includes more than 50 chemicals.

d. requests that suppliers to provide full chemical ingredient information.

e. requires suppliers to provide full chemical ingredient information.

f. does none of the above.

Intent

This question seeks to understand the scope of information collected from your suppliers on chemicals in products, parts, and components.

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 listed on an RSL are not in the products they provide. 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.

Beyond compliance with an RSL, companies may ask about the presence of chemicals on a Watch List. CFP defines a Watch List as a list of chemicals of concern that your company does not currently prohibit, but is considering prohibiting in the future due to scientific evidence that a chemical may cause harm to human health or the environment. Sources for developing a Watch List are similar to those for developing an RSL beyond regulatory compliance, as described above.

A company 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 Watch List. It is important that an Watch List be updated on an annual basis at minimum, as new scientific evidence may reveal additional chemicals of concern.

Some companies ask their suppliers to provide complete information about the chemical ingredients in their products. Some companies refer to this as "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 full chemical ingredient information is synonymous with full materials disclosure. The CFP defines full 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 likely impurities that are both a CoHC and present at 100 ppm or higher in the formulation.
- **For articles:** a company knows 95% of the intentionally added substances by mass and any likely impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

In answering this question, choose one response option, "a–f".

Supporting Documentation

Please provide documentation that supports your answer to this question.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Chemical Inventory (I) (CONTINUED)

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

Response Options

Answer all that apply.

I4a. *formulated products:* For what percentage of formulated products sold by your company is full chemical ingredient information collected? _____ percent

I4b. *articles:* For what percentage of articles sold by your company is full chemical ingredient information collected? _____ percent

Intent

This question seeks to understand the scope of your company's data collection on full chemical ingredient information. It is available only if, in question I3, you have checked response options "d" or "e."

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 use the CFP's definitions of full chemical ingredient information for formulated products and articles:

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

Supporting Documentation

Please provide documentation that supports your answer to this question.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

I5. What capabilities does your company have for managing data on chemical ingredients in itsproducts? In your documentation, please include a description of your data system. (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

e. none of the above

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

Implementing a data 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.

Example

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."

A template for response option "c" is the Health Product Declaration form.

Supporting Documentation

Please provide a narrative description of your company's system to manage chemicals data.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Chemical Inventory (I) (CONTINUED)

I6. How does your company ensure conformance with your chemicals requirements? (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
e. none of the above

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 ensure that these chemicals are not in the products you sell. You must include supporting documentation to receive points for this question.

Note that you can check all that apply.

Example

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:

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

Supporting Documentation

Please provide a narrative summary of how your company assures conformance with its reporting requirements.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Footprint Measurement (F) (30 POINTS)

F1. Has your company set goals for reducing CoHCs in the products you sell and measured progresstoward these goals? (4 points)

Response Options

Check all that apply in "a-d" or answer only "e" or "f." 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, OR
e. has no CoHCs in our products and publicly discloses this information, OR
f. none of the above

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 and your reduction goals. For "a," "b," "c,", and "d," check all that apply. ***If your company does not use CoHCs, as defined by the CFP CoHC list, in its products and publicly discloses this information, check "e" and provide supporting documentation to receive full credit for this question.***

Examples

GOJO, manufacturer of Purell Advanced Hand Sanitizer, set a goal in 2015 to reduce its chemical footprint by 50 percent by 2020.

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.

Supporting Documentation

Please describe your 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 documentation and a link to where this information is publicly disclosed.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Footprint Measurement (F) (CONTINUED)

F2 How does your company measure its baseline chemical footprint? (8 points)

The full reference list for calculating chemical footprint by count (option a) and mass (option b) or for determining that your company's products do not contain CoHCs (option d) is the CFP CoHC list.

Alternately, your company may choose to calculate its chemical footprint by count (option a) and mass (option b) by referencing a subset of the CFP CoHC List, specifically the European Union's list of 169 Candidate Substances of Very High Concern for Authorization.

Note that your maximum possible score will depend on both the scope of your calculation (mass and count, count only, or no CoHCs) and the reference list used.

The lists can be found on the CFP website in two locations. Without logging in as a responder, see https://www.chemicalfootprint.org/assess/cfp-tool-guidance-document-request. Logging in as a responder, see https://www.chemicalfootprint.org/assessment-tool.

Our company:

a. Had intentionally added CoHCs/SVHCs in its products for fiscal year 2016 = _____ CoHCs/SVHCs by count and/or
b. Had intentionally added CoHCs in its products for FY 2016 = _____ CoHCs/SVHCs by mass (kg), or
c. Had no intentionally added CoHCs in its products for FY 2016 or
d. Is unable to answer this question at this time.

_____ Enter the count of intentionally added CoHCs/SVHCs for FY 2016

_____ Enter the mass (kg) of intentionally added CoHCs for FY 2016

Please indicate which reference list you are using:

_____ CFP CoHC List

_____ EU Candidate SVHC List

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 your suppliers to provide information on all intentionally added chemicals, you will be able to identify the chemicals of high concern in your products by count and/or mass.

Explanation

The CFP defines chemical footprint as the total mass CoHCs in products sold by a company, used in its manufacturing operations and by its suppliers, and contained in packaging.

The Chemical Footprint Project compiled the CFP CoHC List from 14 lists of hazardous chemicals developed by governments and other authoritative bodies. The CFP CoHC List includes any chemical or chemical group that meets any combination of the CFP criteria for a CoHC on any of the 14 lists. Substances on these lists that could not plausibly be an intentionally added ingredient of a product were excluded from the CFP CoHC List (e.g., viruses, alcoholic beverages). The source lists and links to their websites can be found in Appendix D.

For 2017, we are asking companies to determine the total mass/count of chemicals of high concern in **the products they sell**. We are not asking companies to determine CoHCs used in their manufacturing operations

and by their suppliers, or contained in packaging, though this information may be requested in the future.

For 2017, we are offering several options for calculating a chemical footprint with maximum point values that increase with the complexity and completeness of the calculation. Responders may choose from the following options:

- **Reference list:** Companies may choose to measure their chemical footprint against the CFP CoHC List or a shorter list that is a subset of the CoHC list—the European Union's Candidate Substances of Very High Concern (169 chemicals).
- **Count or mass:** Companies may choose to measure CoHCs in their products by either count or by mass.

Maximum Points for Calculating Chemical Footprint

Reference List	Mass & Count	Count only	No CoHCs
Option 1: CFP CoHC List	8 points	6 points	8 points
Option 2: EU Candidate SVHC List	4 points	2 points	n/a

To measure your company's chemical footprint, you will need to know the chemical inputs into your products and choose either the CFP CoHC List or the EU Candidate SVHC List as a reference to identify which of those chemicals are CoHCs. Thus the count of CoHCs (F2.a.) is the number of chemicals that are intentionally added to your products and are on your chosen reference list. Similarly, the mass of CoHCs (F2.b.) is the mass of chemicals in your products listed on your chosen reference list. In summary, measuring your chemical footprint according to F2 requires aligning your list of chemicals of concern with either the CFP CoHC List or the EU Candidate SVHC List.

Total count is the number of CoHCs intentionally added across all products. For example, "across all product lines our company's products contained three intentionally added CoHCs in FY 2016. 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 2016 = three 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

CFP sets threshold levels for calculating chemical footprint as follows:

For formulated products: a company includes:
- 100% of the intentionally added CoHCs by mass and
- any likely impurities that are both a CoHC and present at 100 parts per million (ppm) or higher in the formulation.

For articles: a company includes:
- 95% of the intentionally added CoHCs by mass and
- any impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

The chemical composition of cotton, down, wood, wood fiber, and wool are exempt from inclusion in calculating the chemical footprint of your company's products. However, all treatments, including dyes, finishes, pigments, etc., must be included.

Supporting Documentation

Please describe a narrative summary of how you calculate your company's baseline chemical footprint.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Footprint Measurement (F) (CONTINUED)

F3. Over the past two years how much have intentionally added CoHCs in your products changed? (8 points)

Response Options

Choose either response option "a," options "a" and "b" or option "c" or option "d". Our company's:

a. Difference in the number of intentionally added CoHCs/SVHCs in products: FY 2016 minus FY 2015 = ____ CoHCs/SVHCs by count and/or

b. Difference in the mass of intentionally added CoHCs in products: FY 2016 minus FY 2015 = ____ CoHCs/SVHCs by mass (kg), or

c. Products did not contain intentionally added CoHCs for FY 2015 and FY 2016, or

d. Is unable to answer this question at this time

____ Enter the difference in the number of intentionally added CoHCs/SVHCs in products

____ Enter the difference in the mass (kg) of intentionally added CoHCs in products

Please indicate the reference list used:

_____ CFP 2016 CoHC List

_____ EU Candidate SVHC List

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

As with the calculation for chemical footprint in F2, in 2017 there are several options for calculating the change in chemical footprint. Companies may choose from the following options:

- **Reference list:** Companies may choose whether to measure the change in their chemical footprint against the CFP CoHC List or the shorter list that is a subset of the CFP CoHC List (the European Union's Candidate Substances of Very High Concern that includes 169 chemicals).
- **Count or mass:** Companies may choose to measure the change in CoHCs/SVHCs in their products by either count or by mass.

Maximum Points for Calculating Change in Chemical Footprint

Reference List	Mass & Count	Count only	No CoHCs
Option 1: CFP CoHC List	8 points	6 points	8 points
Option 2: EU Candidate SVHC List	4 points	2 points	n/a

To calculate the change in your chemical footprint, first select either the CFP COHC List or the EU Candidate SVHC List to use as your reference list.

To calculate count, start with the individual chemicals on your reference list intentionally added to products in FY 2016 and subtract FY 2015 intentionally added chemicals on your reference list. For example:

- In FY 2016 our products contained 11 intentionally added CoHCs or SVHCs, whereas in FY 2015 our products contained 12 intentionally added CoHCs or SVHCs: 11 (FY 2016) – 12 (FY 2015) = –1 (reduced CoHC or SVHC by count).

- In FY 2016 our products contained 11 intentionally added CoHCs, whereas in FY 2014 our products contained 11 intentionally added CoHCs: 11 (FY 2016) – 11 (FY 2015) = 0 (no change in CoHCs by count).
- In FY 2016 our products contained 12 intentionally added CoHCs, whereas in FY 2014 our products contained 11 intentionally added CoHCs: 12 (FY 2016) – 11 (FY 2015) = 1 (increased CoHC by count).

To calculate mass, start with the kg of CoHCs intentionally added to products in FY 2016 and subtract FY 2015 intentionally added CoHCs by kg. For example:

- In FY 2016 our products contained 9,000 kg intentionally added CoHCs, whereas in FY 2015 our products contained 10,000 kg intentionally added CoHCs: 9,000 kg (FY 2015) – 10,000 kg (FY 2015) = -1,000 kg (reduced CoHC by mass).
- In FY 2016 our products contained 10,000 kg intentionally added CoHCs, whereas in FY 2015 our products contained 10,000 kg intentionally added CoHCs: 10,000 kg (FY 2016) – 10,000 kg (FY 2015) = 0 kg (no change in CoHC by mass).
- In FY 2016 our products contained 10,000 kg intentionally added CoHCs, whereas in FY 2015 our prod5cts contained 9,000 kg intentionally added CoHCs: 10,000 kg (FY 2016) – 9,000 kg (FY 2014) = 1,000 kg (increased CoHC by mass).

CFP sets threshold levels for calculating chemical footprint as follows:

For formulated products: a company includes:
- 100% of the intentionally added CoHCs by mass and
- any likely impurities that are both a CoHC and present at 100 parts per million (ppm) or higher in the formulation.

For articles: a company includes:
- 95% of the intentionally added CoHCs by mass and
- any likely impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

Note: points are given for responding to the question, not for the answer. Therefore, companies will receive points for answering this question and will not be penalized if the calculation shows increased use of CoHCs.

Supporting Documentation

Please share your progress on 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.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Footprint Measurement (F) (CONTINUED)

F4. How does your company assess the hazards of chemicals in its products beyond regulatoryrequirements? In supporting documentation, please include a description of your hazard assessment system or tool. (3 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
c. does not currently assess the hazards of chemicals in its products beyond regulatory requirements.

Intent

This question inquires about how your company assesses chemical hazards in your products beyond regulatory requirements and substances included on authoritative lists. Many companies begin by reviewing Safety Data Sheets and/or evaluating CAS numbers against authoritative lists of hazardous chemicals. However, Safety Data Sheets have their limitation because they often do not contain a complete ingredient listing because of confidential business information. Authoritative lists of hazardous chemicals are often not up to date, as it takes time to add chemicals of concern when new scientific evidence becomes available. To conduct a thorough evaluation it is necessary to go beyond Safety Data Sheet or lists and conduct a hazard evaluation of chemicals for which data are confidential or incomplete and therefore may not be listed. Appendix B details the criteria CFP uses to identify CoHCs that may not be on an authoritative list.

Explanation

Companies often use in-house expertise or hire a qualified third party such as a certified toxicologist to conduct a review of chemical hazards. To conduct a thorough evaluation, it is expected that an in-house expert 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. ***Please note that the use of Safety Data Sheets alone is insufficient to receive credit for this question.***

An in-house expert or qualified third party may use GreenScreen® for Safer Chemicals or another similar tool to conduct a comprehensive assessment of chemical hazards. Answer all that apply.

Examples

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 Surveybox includes a filterable inventory of chemical hazard Surveys, 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.

Supporting Documentation

Identify and describe the system or tool or third party provider that your company uses.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

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" or "h." 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. If your company's products do not contain CoHCs, please describe in documentation how it ensures that the safest chemicals available are used.

h. none of the above

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 Surveybox includes a filterable inventory of chemical hazard Surveys, data sources, and service providers to help organizations identify tools most relevant to their substitution and alternatives assessment goals.

Footprint Measurement (F) (CONTINUED)

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 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.

If your company's products do not contain CoHCs, select option "g" and attach a narrative summary describing how it ensures that the safest chemicals available are used.

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."

Supporting Documentation

Provide a narrative summary of your company's efforts to encourage the use of safer chemicals.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Public Disclosure and Verification (D) (20 POINTS)

D1. What information 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:

i. Chemical identity beyond legal requirements for ____ percentage of sales at the SKU level

ii. All intentionally added chemicals including fragrances, flavors, and preservatives in products for ____ percentage of sales at the SKU level

iii. We do not publicly disclose information about chemical ingredients in our formulated products beyond legal requirements.

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

i. Generic material content for 95% by mass of chemicals in products for ____ percentage of sales or spend at the SKU level

ii. Chemical identity for 95% by mass of chemicals in products for ____ percentage of sales or spend (e.g., Health Product Declaration)

iii. We do not publicly disclose information about chemicals in our articles beyond legal requirements.

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 chemical ingredient information about their products, either on their websites or packaging.

Explanation

Similar to Question I4, possible response options for this question will be determined by your response to Pre-question 3, which asks whether, for the scope of your product portfolio you are reporting on, your company sells formulated products, articles, or both. The type of product sold will not impact your score. 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.**: Companies selling formulated products may receive points for ingredient disclosure beyond legal requirements at the SKU level either on the 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 disclosure of all ingredients, including fragrances, by SKU, on package or website. Ingredients should 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)

Public Disclosure and Verification (D) (CONTINUED)

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. Beautycounter also lists all ingredients for all of its products on its website.

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.

Supporting Documentation

Please provide information on whether this information is disclosed on packaging or on your company's website. 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? Demonstrate how your disclosure goes beyond legal requirements.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

D2. Does your company agree to publicly disclose its responses to the CFP Survey? (3 points)

Response Options

Our company agrees to disclose its score publicly on the CFP website. Answer "a" or "b:"

a. Yes ____

b. No ____

Intent

CFP gives credit to companies that fully participate in and complete the Survey and share their answers with the public.

Explanation

If you select "yes," your 2017–2018 CFP responses, not including responses to the four pre-questions, will be posted on the CFP website at www.chemicalfootprint.org/results.

D3. Does your company agree to publicly disclose its score on the CFP website? (5 points)

Response Options

Our company agrees to disclose its score publicly on the CFP website. Answer "a" or "b:"

a. Yes ____

b. No ____

Intent

CFP gives credit to companies that fully participate in and complete the Survey and share their scores with the public.

Explanation

If you select "yes," your 2017–2018 CFP score will be posted on the CFP website at www.chemicalfootprint.org/results.

Public Disclosure and Verification (D) (CONTINUED)

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

Stakeholders have expressed concern that company answers to the CFP Survey are not independently verified. CFP will perform quality assurance and quality control review of responses based on information provided by companies as well as 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 to companies that undertake this effort.

Explanation

To receive points for D4 you must attach an 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 Survey.

CFP verification procedures draw on those 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 Survey questions, CFP recommends sharing this Guidance Document with poten-tial contractors and determining whether they comply with the guidelines in the table below. The documentation outlined in Table 1 (p. 39), along with the verification results, should be shared with the CFP when responding to Question D4. CFP will not disclose the documentation or the verification results without permission from responders.

Choose one response option, "a–d".

Supporting Documentation

Provide document with third party verification statement.

File Upload

Please upload supporting documentation. Acceptable file extensions are: doc|docx|xls|xlsx|mpp|txt|pdf|jpg|jpeg|ppt|mp3.

Guidelines for the CFP Survey 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.

Appendix A

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

Term	Definition	Example(s)	Scope
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 full 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.	Chemical Footprint Project Chemicals of High Concern List	~2,100 chemicals and chemical groups that meet the CFP definition of CoHC as of July 1, 2016.
Full Chemical Ingredient Information	**For formulated products**: a company knows 100% of the intentionally added substances by mass and any likely impurities that are both a CoHC and present at 100 ppm or higher in the formulation. **For articles:** a company knows 95% of the intentionally added substances by mass and any likely 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	A list of chemicals restricted by a company in products, parts, or components from its suppliers. A RSL may include only chemicals that are currently restricted by regulation. It may also include chemicals that are not yet legally restricted but have been identified as being of concern because of scientific evidence that they may cause harm to human health or the environment.	American Apparel & Footwear Association	At minimum, legally restricted chemicals. May also include chemicals of concern not yet legally restricted.

* 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]

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. Understanding the challenge of calculating a chemical footprint, for 2016, the Chemical Footprint Project asks participating companies to calculate either the total mass or count of chemicals of high concern (CoHCs) in the products they sell. Alternately, companies are given the option to calculate their chemical footprint based on a relatively short list of chemicals, the European Union's Candidate List of Substances of Very High Concern for Authorization (EU Candidate SVHC List). We are not asking companies to determine CoHCs used in their manufacturing operations and by their suppliers, and contained in packaging, though this information may be requested in the future.

For more details on how to calculate a chemical footprint, see page 30.

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.

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

2 See 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—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.

Using this definition, the Chemical Footprint Project compiled the CFP CoHC List from 14 lists of hazardous chemicals developed by governments and other authoritative bodies. The CFP CoHC List includes any chemical or chemical group that meets any combination of the CFP criteria for a CoHC on any of the 14 lists. Substances on these lists that could not plausibly be an intentionally added ingredient of a product were excluded from the CFP CoHC List (e.g., viruses, alcoholic beverages). The source lists and links to their websites can be found in Appendix D.

While each source list is dynamic, to simplify reporting the CFP CoHC List is static. For 2017, CFP has not made changes to the CFP CoHC List from the 2016 Survey. An updated list for the CFP 2018 Survey will be available in the first quarter of 2018 to give responders adequate time to incorporate any changes before the CFP 2018 Survey is released in the fourth quarter of 2018.

The CFP CoHC list aligns with the approach used by GreenScreen® for Safer Chemicals to identify CoHCs, known as "List Translator-1" chemicals (LT-1s).

Chemicals in products—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—A consumer-ready product (e.g., a shirt for sale to a consumer).

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

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).

Full Chemical Ingredient Information—

For formulated products—A company knows:

- 100% of the intentionally added substances by mass and
- Any likely 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 likely impurities that are both a CoHC and present at 1000 ppm or higher in a homogeneous material.

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 Labeling 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**.

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. GreenScreen® 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.

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

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.

Manufacturing Restricted Substances List (mRSL)—A list of chemicals banned from intentional use in facilities that process materials, components and/or products. An mRSL establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities.[7]

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).

Non-governmental Organizations (NGOs)—Community, environmental, and/or public interest organizations, excluding industry 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)—A chemical that is toxic, persists in the environment and bioaccumulates in food chains and, thus, poses risks to human health and ecosystems.[8]

Point of Contact—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 envi-

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

7 Adapted from ZDHC: http://www.roadmaptozero.com/programme/manufacturing-restricted-substances-list-mrsl-conformity-guidance

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

ronmental 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**—Defers 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/web sites, 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)—A list of chemicals restricted by a company in products, parts, or components from its suppliers. A RSL may include only chemicals that are currently restricted by regulation. It may also include chemicals that are not yet legally restricted but have been identified as being of concern because of scientific evidence that they may cause harm to human health or the environment.

Restriction—Any condition for or prohibition of the manufacture, use or placing on the market.[9]

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

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.[10]

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

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

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.

Watch List—A list of chemicals of concern that a company does not currently prohibit, but is considering prohibiting in the future due to scientific evidence that a chemical may cause harm to human health or the environment.

Appendix D

Source Lists for the Chemical Footprint Project Chemicals of High Concern List

ID	Abbreviation	List Name	Sublist(s)	URL and/or Reference[1]
1	CA EPA—Prop 65	State of California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act Of 1986) Chemicals Known to the State to Cause Cancer or Reproductive Toxicity	n/a	Prop 65 descriptive information is at the first link below. The second link provides the current list of substances.
				http://oehha.ca.gov/proposition-65/about-proposition-65
				http://oehha.ca.gov/proposition-65/proposition-65-list
2	EU—Candidate SVHC List	European Union Candidate List of Substances of Very High Concern for Authorization.	n/a	The Candidate List of Substances of Very High Concern Subject to Authorisation (Annex XIV of the REACH Regulation) is found at the first link. Additional information on authorisation can be found at the second link.
				https://echa.europa.eu/candidate-list-table
				http://echa.europa.eu/regulations/reach/authorisation
3	EU—Annex VI CMRs	European Union List of Chemicals and their Harmonized (assigned) GHS Hazard Classifications.	Carcinogen Category 1A—Known human Carcinogen based on human evidence	ECHA CLP database: check box for "harmonized classifications" to avoid confusion with self-reported registrant data. Results listed in Table 3.1 (first link). Also available in the CLP regulation (second link).
			Carcinogen Category 1B—Presumed Carcinogen based on animal evidence	http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
			Mutagen—Category 1B	http://echa.europa.eu/regulations/clp/legislation
			Reproductive Toxicity—Category 1A	
			Reproductive Toxicity—Category 1B	
4	IARC	International Agency for Research on Cancer (IARC), Substances Reviewed in IARC Monographs and Supplements.	Group 1—Agent is Carcinogenic to humans	Lists provided at the link below reference the relevant IARC monograph volume or supplement. Substances may be listed by CAS number, name or collectively as a substance group.
			Group 2A—Agent is probably Carcinogenic to humans	http://monographs.iarc.fr/ENG/Classification/index.php

ID	Abbreviation	List Name	Sublist(s)	URL and/or Reference[1]
5	MAK	MAK Commission of Germany; Occupational Toxicants and MAK Values: Annual Thresholds and Classifications for the Workplace	Carcinogen Group 1—Substances that cause cancer in man	The German Research Foundation's (DFG) Permanent Senate Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area ("MAK Commission") is at the first link. MAK Commission classification categories are available via PDFs at Wiley (second link, updated annually):
			Carcinogen Group 2—Considered to be carcinogenic for man	http://www.dfg.de/en/dfg_profile/statutory_bodies/senate/health_hazards/index.html
				http://onlinelibrary.wiley.com/book/10.1002/3527600418/homepage/access_to_the_list_of_mak_and_bat_values.htm
6	OSPAR—Priority PBTs & EDs & equivalent concern	OSPAR Convention For The Protection of the Marine Environment of the North-East Atlantic, List of Chemicals for Priority Action and List of Substances of Possible Concern	PBT [Persistence, Bioaccumulation, and any of the following: Acute Aquatic Toxicity, Chronic Aquatic Toxicity, Carcinogenicity, Mutagenicity, Reproductive Toxicity, Developmental Toxicity, Systemic Toxicity/Organ Effects repeated exposure]	The first link contains an overview of the OSPAR hazardous substances program. The List of Chemicals for Priority Action (as a Microsoft Word document) appears at the second link. A List of Substances of Possible Concern (as a webpage) appears at the third link.
				http://www.ospar.org/work-areas/hasec/chemicals/overview
				http://www.ospar.org/work-areas/hasec/chemicals/priority-action
				http://www.ospar.org/work-areas/hasec/chemicals/possible-concern/list
7	UNEP Stockholm Conv—Persistent Organic Pollutants	United Nations Environment Programme (UNEP), Stockholm Convention Secretariat Stockholm Convention on Persistent Organic Pollutants (POPs)	PBT [Persistence, Bioaccumulation and any of the following: Ecotoxicity and/or Human Toxicity (Human Health Effects)]	The main Stockholm Convention website is at the first link below. The current POP chemicals are listed on the webpage at the second link below.
				http://chm.pops.int/
				http://chm.pops.int/TheConvention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx
8	US CDC—Occupational Carcinogens	National Institute of Occupational Safety and Health Carcinogen List	Occupational Carcinogen	NIOSH's carcinogen policy is described at the first link below. The current occupational carcinogen list is at the second link
				http://www.cdc.gov/niosh/topics/cancer/policy.html
				http://www.cdc.gov/niosh/topics/cancer/npotocca.html

Source Lists for the Chemical Footprint Project Chemicals of High Concern List

(CONTINUED)

ID	Abbreviation	List Name	Sublist(s)	URL and/or Reference[1]
9	US EPA—IRIS Carcinogens	Integrated Risk Information System (IRIS) Database—Results from four separate cancer guideline regimes: 1986, 1996, 1999, and 2005.	A (Human carcinogen), 1986	US EPA Integrated Risk Information System home page, including a search function by chemical, CASRN, or key word. Advanced search by substance ID (second link).
			B1 (Probable human carcinogen-based on limited evidence of carcinogenicity in humans), 1986	https://www.epa.gov/iris
			B2 (Probable human carcinogen-based on sufficient evidence of carcinogenicity in animals), 1986	
			Carcinogenic to humans, 1999	
			Known/likely human carcinogen, 1996	
			Likely to be carcinogenic to humans, 1999	
10	US EPA—Priority PBTs (NWMP)	US Environmental Protection Agency (EPA), National Waste Minimization Program, Priority Chemicals	PBT [Persistence, Bioaccumulation and any of the following: Ecotox and/or Human Toxicity (Human Health Effects)]	The National Waste Minimization Program Priority Chemicals List can be found at the link below. Additional descriptive information is included in list footnotes.
				https://www.dtsc.ca.gov/SCP/upload/1-L-US-EPA_NWM.pdf
11	US EPA—Priority PBTs (PPT)	EPA's Persistent Bioaccumulative and Toxic (PBT) Chemical Program, PBTs identified for the PBT Strategy, "EPA Priority PBTs"	PBT [Persistence, Bioaccumulation and any of the following: Ecotoxicity, Carcinogenicity, Mutagenicity, Reproductive Toxicity, Developmental Toxicity, Neurotoxicity, Other	The EPA PBT Program is descibed at the first link. The second link contains a list of the Priority PBTs.
				https://www3.epa.gov/region9/waste/p2/projects/pbts.html
				https://web.archive.org/web/20150417210522/http://www.epa.gov/opptintr/pbt/pubs/cheminfo.htm
12	US EPA—Toxics Release Inventory PBTs	US Environmental Protection Agency (EPA), Toxics Release Inventory (TRI) Program, "TRI PBT Chemical List"	PBT [Persistence, Bioaccumulation, and Acute Aquatic Toxicity]	The main EPA TRI website is at the first link below. The current TRI-PBTs are listed on the webpage at the second link.
				http://www2.epa.gov/toxics-release-inventory-tri-program
				http://www2.epa.gov/toxics-release-inventory-tri-program/persistent-bioaccumulative-toxic-pbt-chemicals-covered-tri

ID	Abbreviation	List Name	Sublist(s)	URL and/or Reference[1]
13	US NIH—Report on Carcinogens	US National Institutes of Health, National Institute of Environmental Health Sciences, National Toxicology Program (NTP), Report on Carcinogens (RoC)	Known (or reasonable anticipated) to be a human Carcinogen	The Report on Carcinogens (RoC) is prepared by the National Toxicology Program (NTP) on behalf of the Secretary, Health and Human Services (description at the first link). The latest RoC edition is available at the second link.
				http://ntp.niehs.nih.gov/pubhealth/roc/index.html
				http://ntp.niehs.nih.gov/pubhealth/roc/roc12/index.html
14	US NIH—Reproductive & Developmental Monographs	US National Institutes of Health, National Institute of Environmental Health Sciences, National Toxicology Program (NTP) Studies on Reproductive and Developmental Toxicity	n/a	The NIEHS Office of Health Assessment and Translation (OHAT) can be found at the first link. Reports and monographs from NTP studies (ongoing and completed) can be found at the second link.
				http://www.niehs.nih.gov/research/atniehs/dntp/assoc/ohat/index.cfm
				http://ntp.niehs.nih.gov/pubhealth/hat/noms/index.html

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Cheri has worked with Clean Production Action on a consulting basis since 2008, joining the staff full-time in 2015. She works closely with governments, non-profits, and businesses to reduce hazards in products using both market and public policy based strategies. Other consulting clients included Lowell Center for Sustainable Production and Washington State Department of Ecology. As a Senior Project Manager for TechLaw, she helped establish Northwest Green Chemistry. Cheri received her Bachelor of Science (BS) from Cornell University and Master in City Planning (MCP) from MIT.

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Sally has many years of experience engaging a wide range of stakeholders to promote the environmental health of communities and develop safer and greener products. She is a co-founder of the Chemical Footprint Project and works actively with the Green Chemistry & Commerce Council to advance the use of green chemistry in product design and development. Sally holds an MS in Environmental Health Science from Harvard University and a BA in Human Biology from Stanford University. She completed her doctorate 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.

Mark S. Rossi, PhD, Executive Director, Clean Production Action
Part of the Clean Production Action team since 2004, Mark has the unique ability to bring together diverse groups and achieve innovative outcomes. In 2006, he founded BizNGO, a collaboration of organizations who work together to advance safer chemicals and sustainable materials. Mark is the co-author of GreenScreen® for Safer Chemicals. Launched in 2007, GreenScreen® is now the gold standard in hazard assessment tools. In 2014, he co-founded the Chemical Footprint Project. Mark's career includes stints at Tellus Institute, the Toxics Use Reduction Institute, and Health Care Without Harm. His doctorate is in Environmental Policy from MIT.

Tim Greiner, MSM, MCP, Co-Founder and Managing Director, Pure Strategies
Tim specializes in building environmental and social integrity into products, brands, and businesses. He consults with manufacturers, socially responsible business, and environmental advocacy groups. Tim is building sustainability into corporate and brand strategy. Current and former clients include Seventh Generation, The North Face, Timberland, Stonyfield Farm, US EPA, NRDC, Walmart, Millipore, and Dell. Tim holds a BS in Materials Science Engineering from Rensselaer Polytechnic Institute and an MCP and Master in Science Management (MSM) from MIT. Prior to co-founding Pure Strategies he worked as a Process Engineer for Fairchild Semiconductor and Project Director and Chief Engineer for the Massachusetts Office of Technical Assistance.

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