



Green Chemistry & Commerce Council

Moving Business Toward Safer Alternatives

A GC3 Retailer Webinar Series



December 10, 2012

The Guide to Safer Chemicals: How Retailers Can Improve Chemicals Management

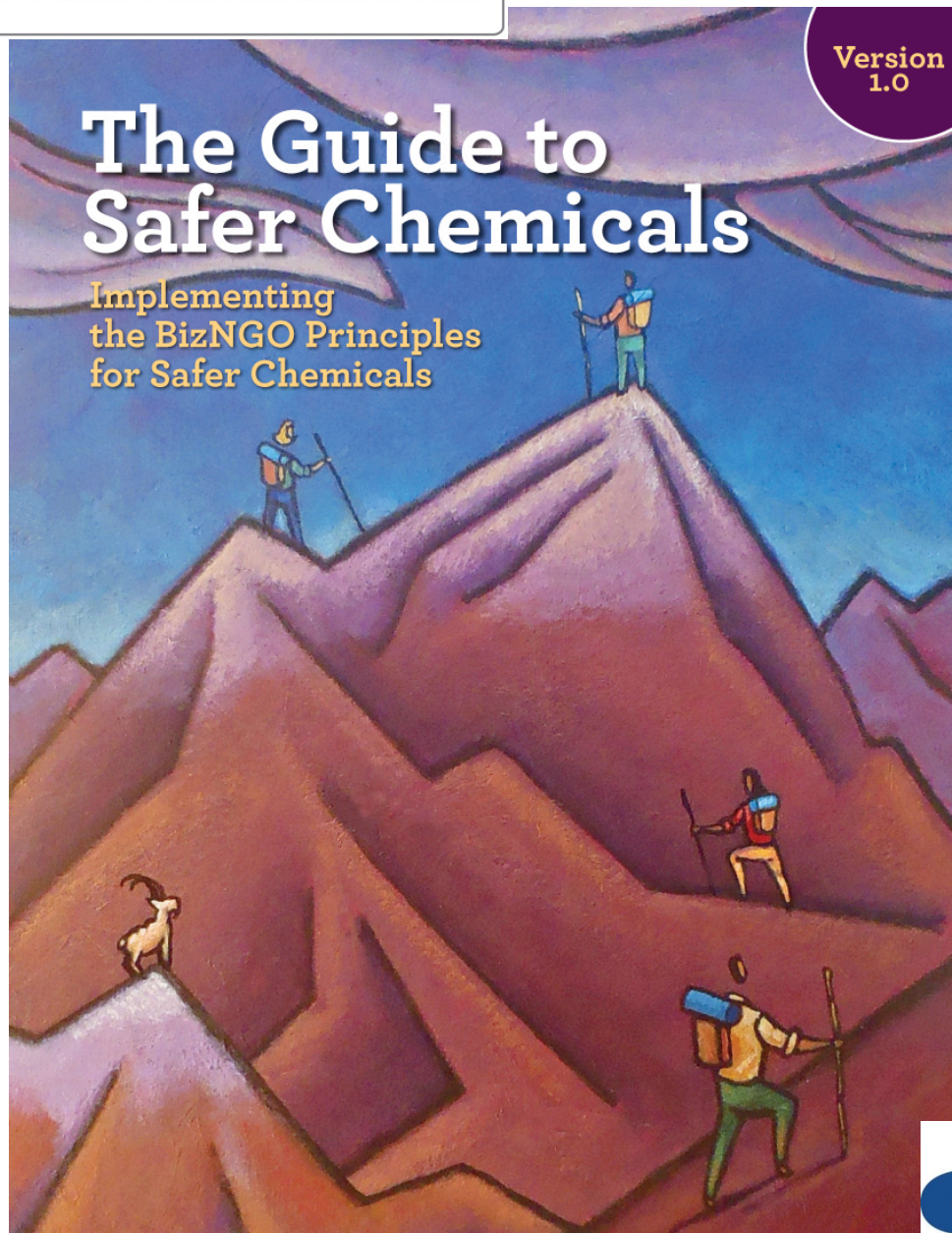


Mark Rossi, Co-Director of Clean Production Action

Webinar Discussion Instructions



- Due to the number of participants on the Webinar, all lines will be muted.
- If you wish to ask a question, please type your question in the Q&A box located in the drop down control panel at the top of the screen
- All questions will be answered at the end of the presentation.



*GC3 Retailer
Webinar Series*

Mark Rossi
December 10, 2012

BizNGO Principles for Safer Chemicals

Endorsers include ...

- American Sustainable Business Council
- Brooks Sports
- Construction Specialties, Inc.
- Dignity Health
- Forbo Flooring Systems
- HDR
- Health Care Without Harm
- Hewlett-Packard Company
- Hospira, Inc.
- Kaiser Permanente
- Method
- Naturepedic
- Novation
- Perkins+Will
- Practice Greenhealth
- Premier, Inc.
- Seventh Generation
- Shaw Industries
- Staples, Inc.
- Whole Foods Market, Inc.

1. Know and disclose product chemistry

2. Assess and avoid hazards

3. Commit to continuous improvement

4. Support public policies and industry standards

Using The Guide



- **Measure internal performance, identify areas for improvement, and track progress**
- **Benchmark performance**
- **Use externally to explain and report on corporate performance and progress**
- **Use to create your own chemical management system**

The Guide to Safer Chemicals

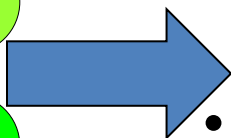
It is a Living Resource!

1. Know and disclose product chemistry

2. Assess and avoid hazards

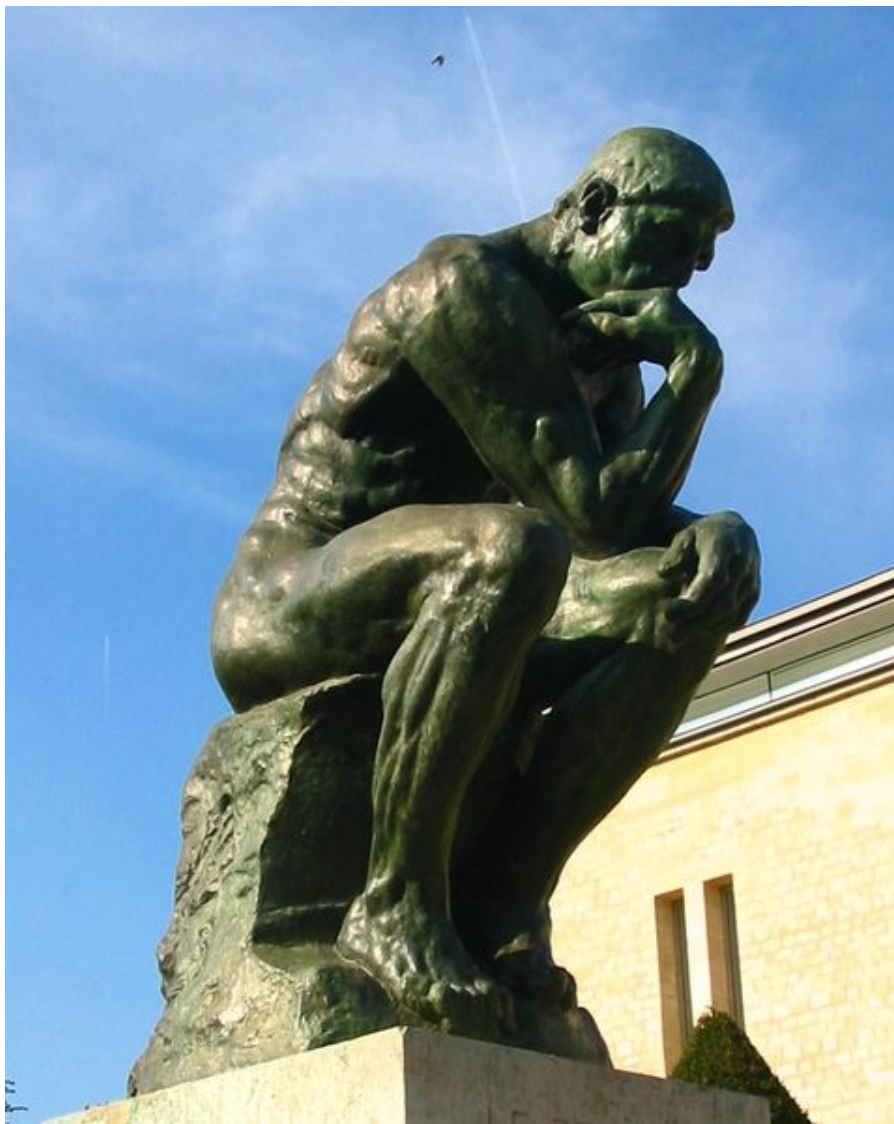
3. Commit to continuous improvement

4. Support public policies and industry standards



- Marks pathways to safer chemicals
- Sets relative benchmarks for each Principle
- Specifies actions for each benchmark
- Presents examples of tools & business practices
- Suggests steps for downstream users

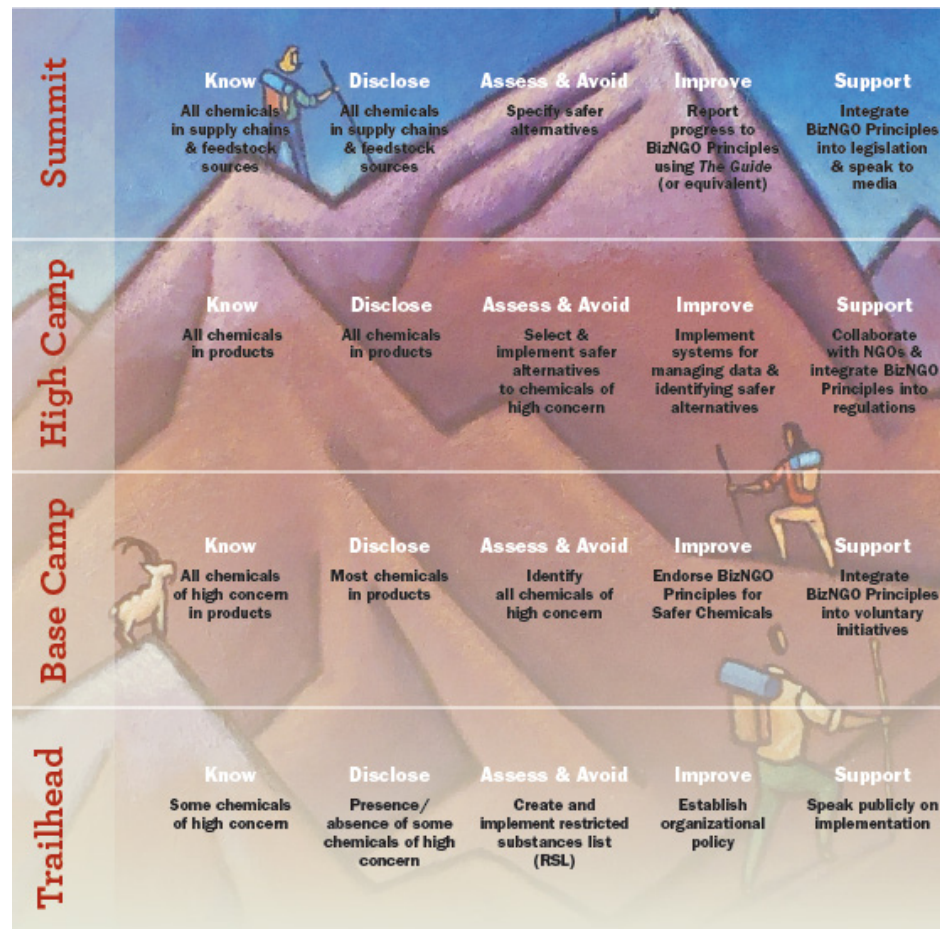
The Logic



- Products
 - Know
 - Assess
 - Avoid
 - Disclose
- Organization
 - Improve
 - Support

The Ideal

- Products and their Life Cycles
 - Know all chemicals
 - Assess
 - identify chemicals of high concern
 - prioritize chemicals of high concern reduction/elimination
 - Avoid all chemicals of high concern
 - Disclose to the public
- Organization
 - Improve: set goals + publicly report progress towards them
 - Support public policies + voluntary initiatives that advance the above work



Getting Started in Retail



Green Cleaning:

Purchase 90 percent Green Seal or EcoLogo certified cleaning products in these four categories: carpet, window, all purpose, and bathroom.

DEHP/PVC Reduction:

Eliminate DEHP/PVC from at least one product line*.

Healthy Interiors:

Ensure that 25 percent of the annual volume of freestanding furniture and medical furnishings**, purchases based on cost, eliminate the intentional use of halogenated flame retardants, formaldehyde, perfluorinated compounds and PVC (also known as vinyl)."

*1. Breast Pumps, 2. Enteral Nutrition Products, 3. Parenteral Infusion Devices and Sets, 4. General Urological (irrigation/urology sets and solutions, urinary catheters), 5. Exam Gloves, 6. Umbilical Vessel Catheters, and 7. Vascular Catheters.

** This includes exam tables, patient recliners, mattresses, foams, panel fabrics, cubicle curtains, window coverings, fabric upholstery, and built-in or modular casework

- Assess
 - What are the priority products? For example,
 - Children's products,

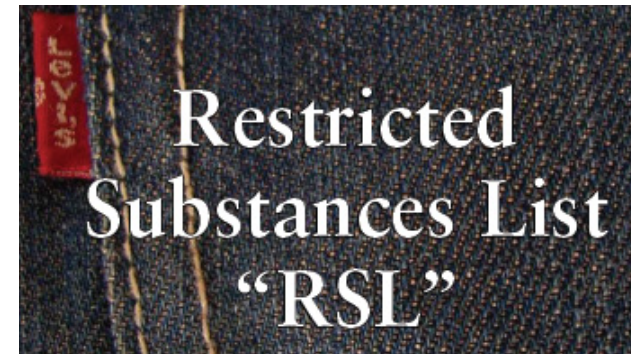
disinfectants, cleaning agents, etc.
priority chemicals substances List –
for example,
halogens: Bromine, fluorine
phthalates
BPA (BPA)
styrene

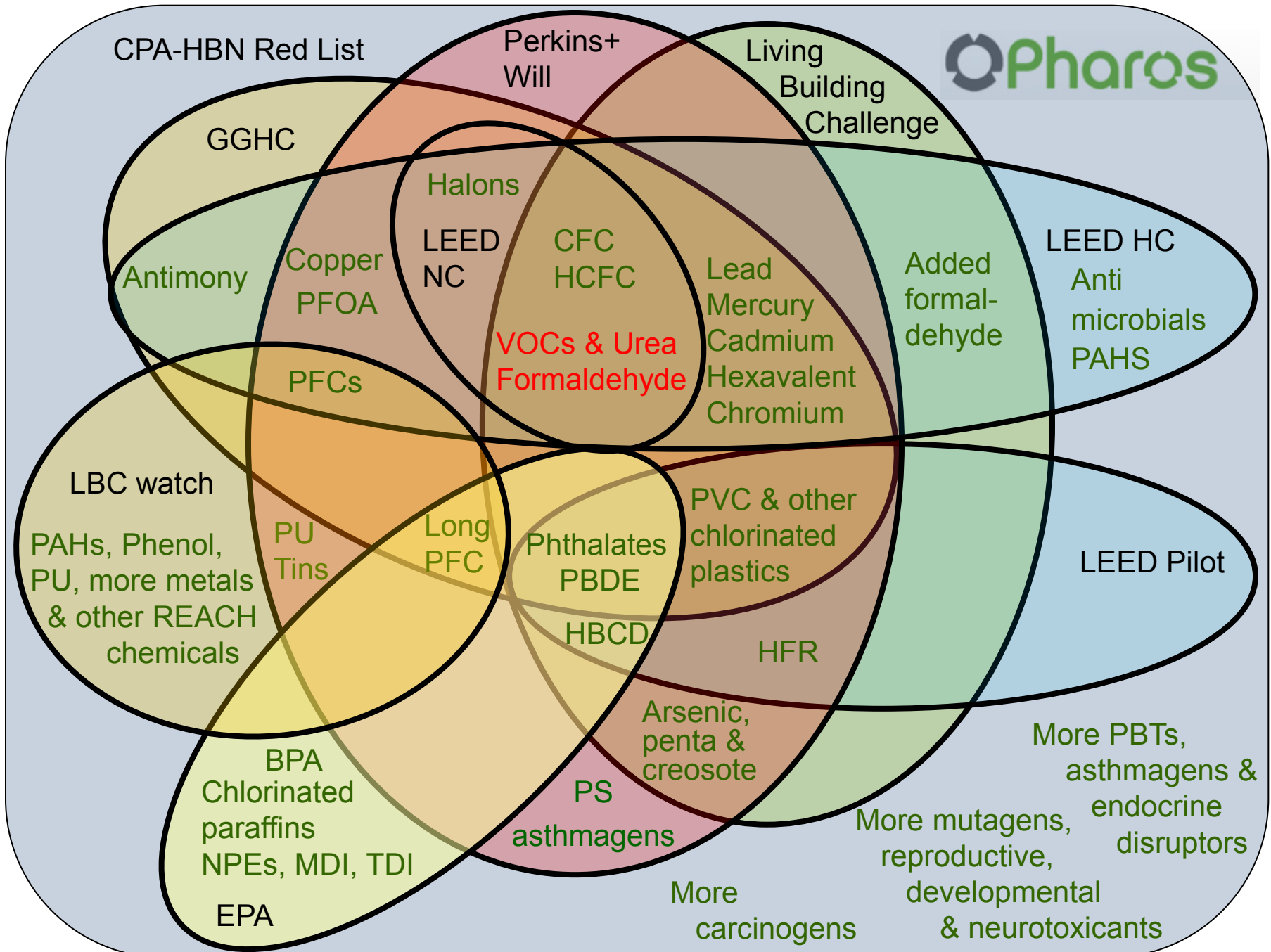
Working with Suppliers -- RSLs

- Know – RSL Chemicals
 - Intentionally added?
 - Contaminants?
- Assess
 - Set RSL thresholds
- Avoid
 - No RSL chemicals (or below thresholds)



Restricted Substances List (RSL)



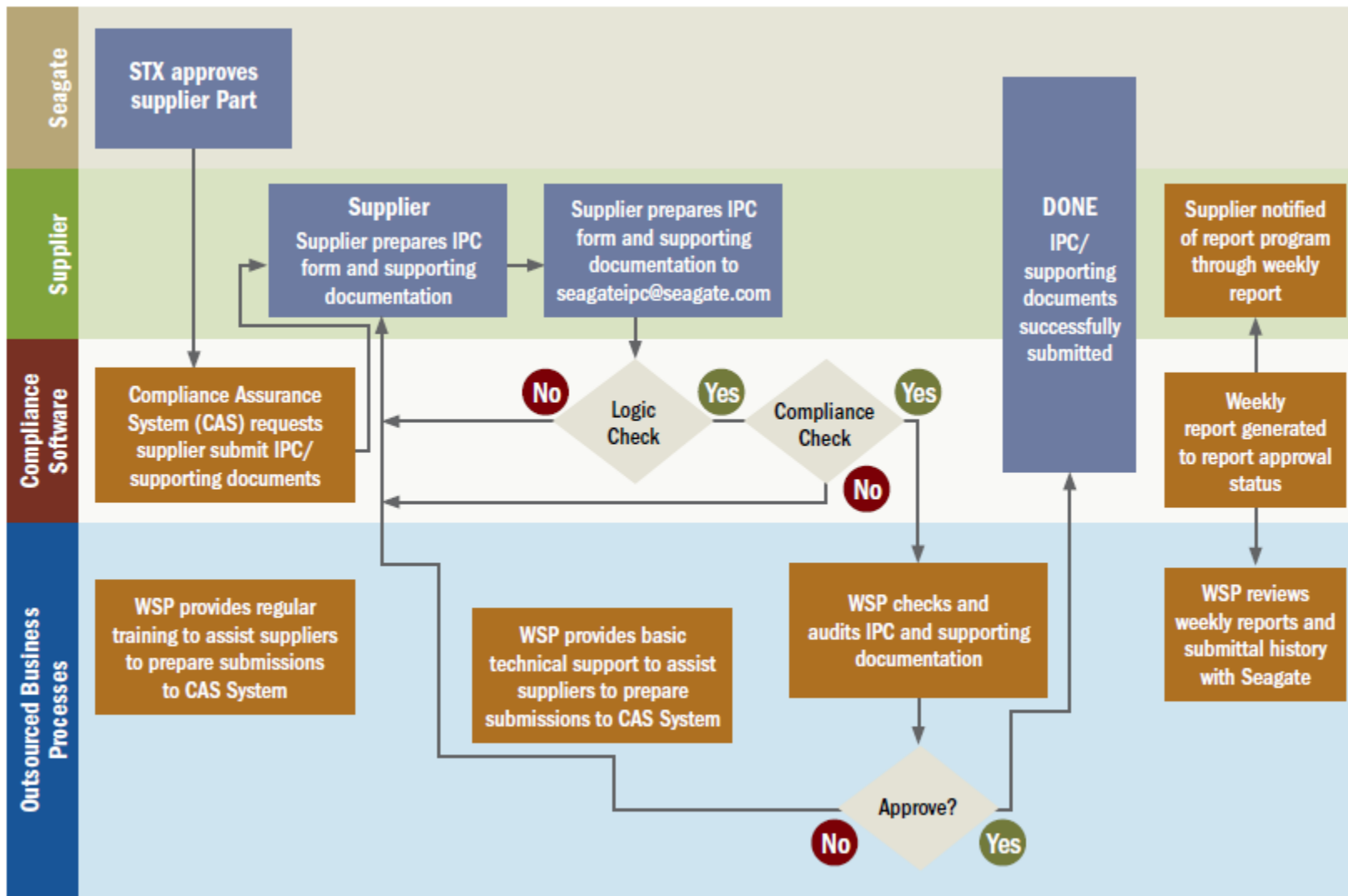


Working with Suppliers – Beyond RSLs

- Know – all chemicals in products/processes
- Assess
 - Evaluate whether chemicals of high concern in products/processes
 - Agree upon method for evaluating alternatives / identifying safer chemicals
- Avoid
 - Specify safer alternatives



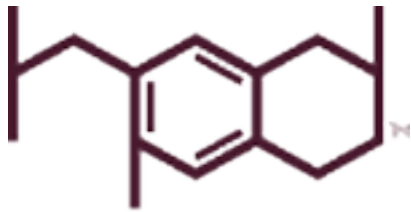
Seagate System for Collecting Full Chemical & Material Disclosure from Suppliers



Source: Courtesy of Seagate

PRINCIPLE #1A

Know Chemicals across the Life Cycle of Products



Health Product
Declaration
Collaborative

Name
Product ID
Website
Manufacturer
Address
Address Line 2
City, State, Code
Description

MasterFormat

Contact Name
Title
Phone
Email



Release Date	<input type="checkbox"/> Self-declared	
Expiry Date	<input type="checkbox"/> Second Party	Certifier
HPD URL	<input type="checkbox"/> Third Party	Certificate #

SUMMARY

The content of this product was assessed for health hazard warnings as required using

Residuals Disclosure	Full Disclosure of Intentional Ingredients	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<input type="checkbox"/> Measured 100 ppm (ideal)	Full Disclosure of Known Hazards	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<input type="checkbox"/> Measured 1000 ppm	Disclosure Notes		
<input type="checkbox"/> As per MSDS (1,000 & 10,000 ppm)			
<input type="checkbox"/> Predicted by process chemistry			
<input type="checkbox"/> Not disclosed			
<input type="checkbox"/> Other			

Contents in Descending Order of Quantity (if the area below is full, refer to the following pages for additional listings)

Hazards

<input type="checkbox"/> PBT <i>(Persistent and Bioaccumulative Toxic)</i>	<input type="checkbox"/> Development	<input type="checkbox"/> Neurotoxicity	<input type="checkbox"/> Land toxicity	<input type="checkbox"/> Multiple
<input type="checkbox"/> Cancer	<input type="checkbox"/> Reproductive	<input type="checkbox"/> Mammal	<input type="checkbox"/> Physical hazard	<input type="checkbox"/> Unknown
<input type="checkbox"/> Gene mutation	<input type="checkbox"/> Endocrine	<input type="checkbox"/> Skin or Eye	<input type="checkbox"/> Global warming	
	<input type="checkbox"/> Respiratory	<input type="checkbox"/> Aquatic toxicity	<input type="checkbox"/> Ozone depletion	

Total VOC Content

Material (g/l)	Does the product contain exempt VOCs?	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Regulatory (g/l)	Are there VOC-free tints available?	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Content Notes				

PRINCIPLE #1A

Know Chemicals across the Life Cycle of Products

Whole Foods Market Eco-Scale for Cleaning Products

Criterion	Red—Not for sale at Whole Foods	Orange	Yellow	Green
Transparency	Fails any of the "Orange" criteria	Full disclosure of ingredients on packaging	Full disclosure of ingredients on packaging	Full disclosure of ingredients on packaging
Compliance		Third party verified	Third party verified	Third party verified
Ingredient hazards		No significant environmental or safety concerns	No moderate environmental or safety concerns	No moderate environmental or safety concerns
Formaldehyde-donors		None	None	None
Phosphates, chlorine, or synthetic colors		None	None	None
Animal testing		None	None	None
Natural fragrances			100%	100%
Surfactants that have the potential to contain nitrosamines and other impurities			No DEA, MEA, or TEA	No DEA, MEA, or TEA
Synthetic, petroleum-derived thickeners from non-renewable sources			None	None
Plant- and mineral-derived ingredients only				Yes
Petroleum-derived ingredients				None

Assess & Avoid Hazards



Materials

Phasing out BFRs and PVC

Assessing alternative materials

When replacing substances of concern, we seek to identify alternatives with a reduced risk of potential human impacts that also meet our performance

*BizNGO Chemical
Alternatives
Assessment Protocol*



RØADMAP TO ZERO DISCHARGE OF HAZARDOUS CHEMICALS

PRINCIPLE #1A

Know Chemicals across the Life Cycle

- Comprehensive inventory of chemicals in textile manufacturing

PRINCIPLE #2

Assess & Avoid Hazards

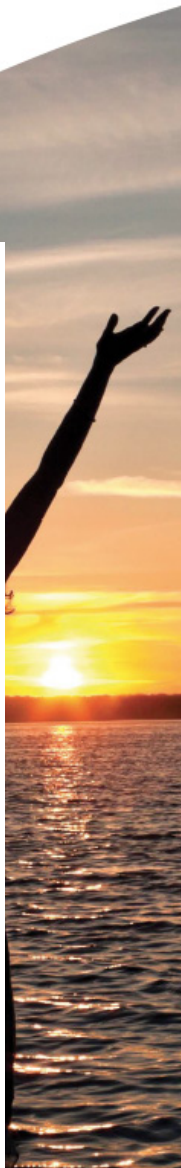
- Identify and agree to screening tool for chemical hazards
- Establish a plan to evaluate the chemical inventory by intrinsic hazard and establish a sector wide list of hazardous chemicals



Sustaining Our Healing Ministry

Principle	Benchmark	Strengths	Opportunities for Improvement
#1 Know and Disclose Product Chemistry	Trailhead	Dignity Health is already requesting that suppliers/ GPO request data for a handful of chemicals of high concern.	Dignity Health could, with its GPO, ask if suppliers: <ul style="list-style-type: none"> • know all chemical ingredients in their product (beyond MSDS) • publicly disclose all ingredients.
#2 Assess and Avoid Hazards	Trailhead	Dignity Health is already purchasing safer alternatives for a handful of chemicals and has established internal and external (with GPO) protocols for environmentally preferable procurement.	Expand target chemicals for elimination/ reduction <ul style="list-style-type: none"> • Ask IT firms if they evaluate product content using Green Screen; many are already doing this. • Other easy actions for Dignity Health to address are halogenated chemicals in electronics and RoHS chemicals in all electronic products.
#3 Commit to Continuous Improvement	Base Camp	Solid foundation in place for implementing comprehensive safer chemicals program across the organization.	<ul style="list-style-type: none"> • Set clear goals for knowing chemicals in products and moving away from chemicals of high concern in products • Publicly report on goals and progress towards them.
#4 Support Public Policies and Standards	Summit	Very active in advocacy work and collaborating with NGOs.	<ul style="list-style-type: none"> • Set annual priorities and report on activities.

Source: Dignity Health, FY2011 Social Resiliency Report

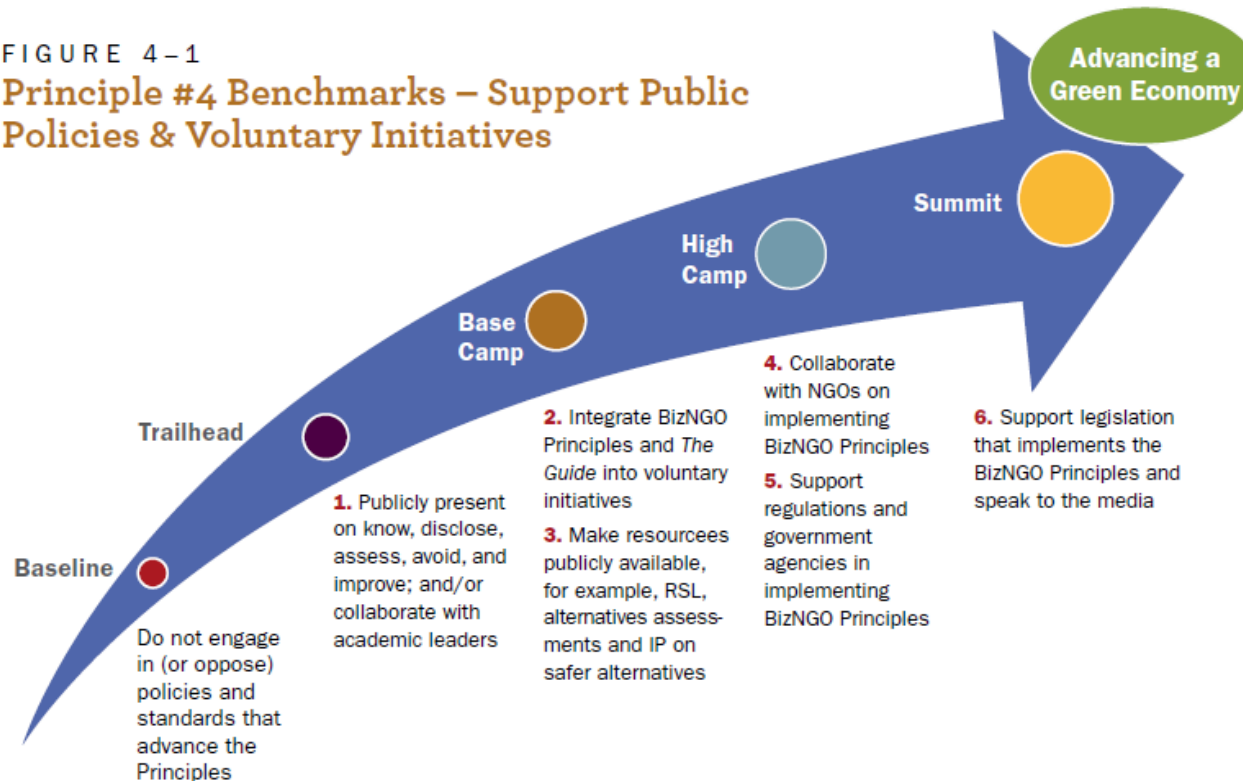


Support Public Policies and Voluntary Initiatives

- Outdoor Industry Association + Sustainable Apparel Coalition
- USGBC LEEDv4
- The Sustainability Consortium
- California Safer Consumer Product Regulations

FIGURE 4-1

Principle #4 Benchmarks – Support Public Policies & Voluntary Initiatives



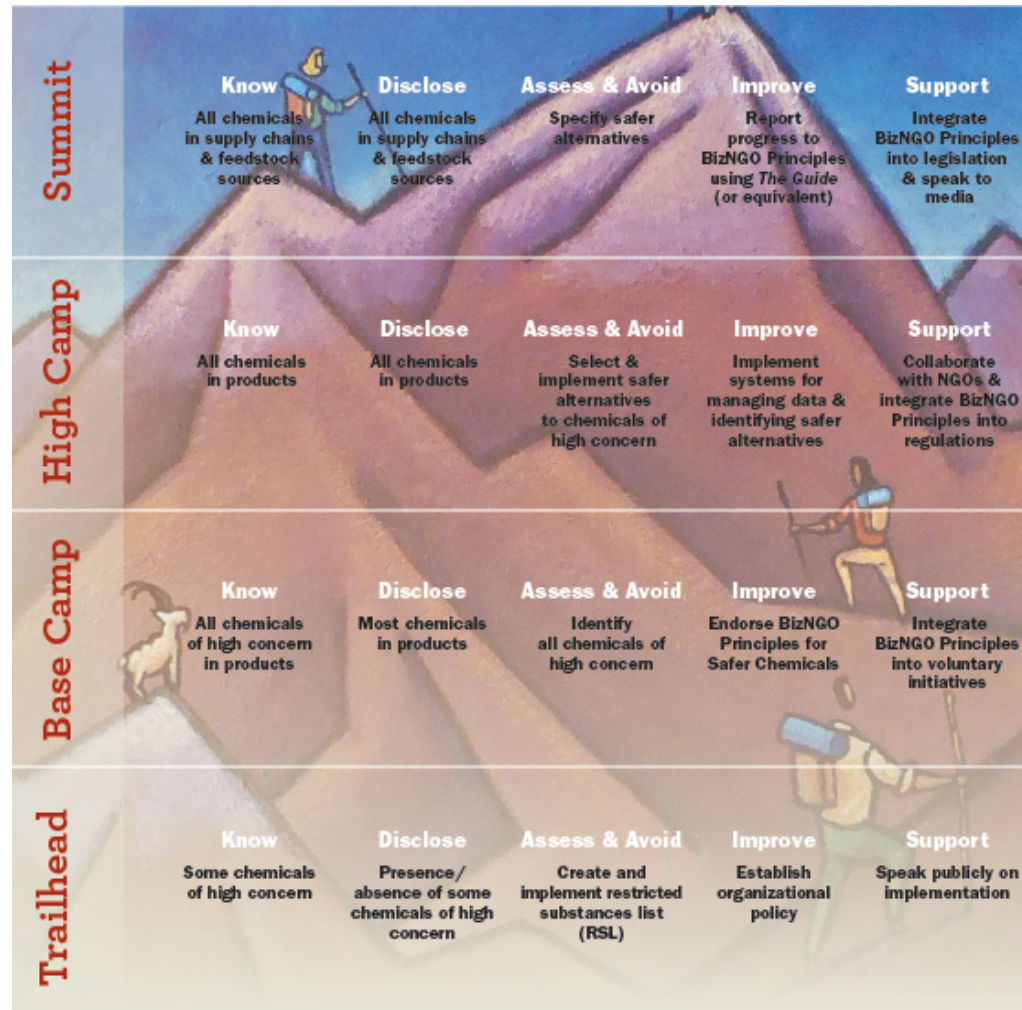
Conclusions



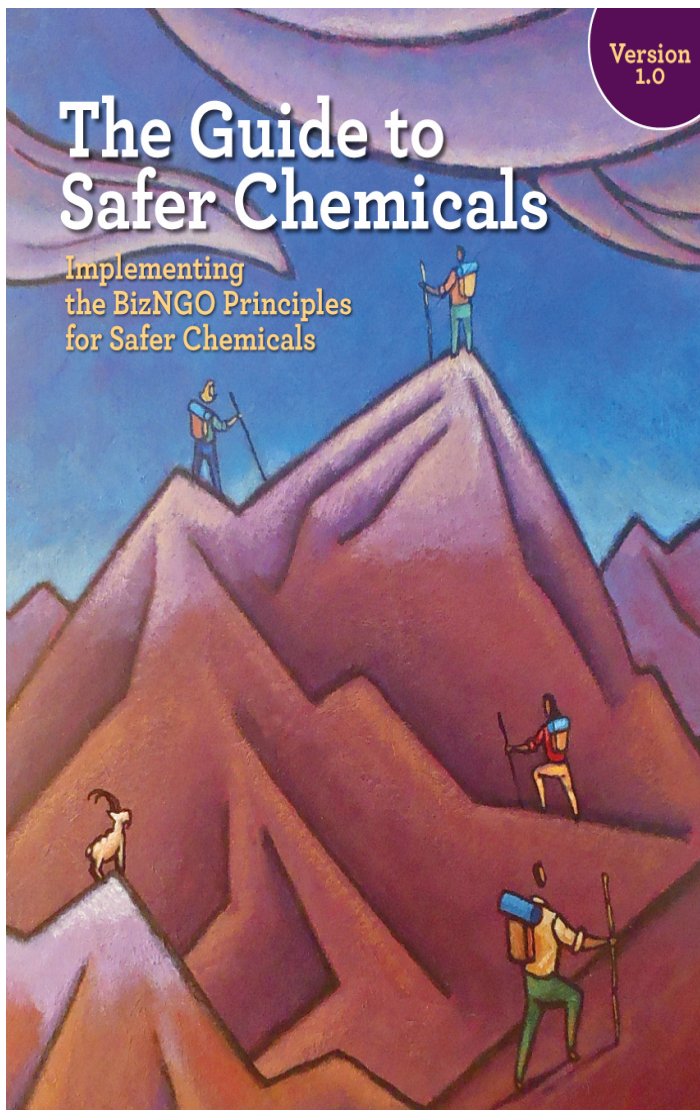
- List of chemicals of high concern facilitates rapid screening of chemicals – best to have broad list based upon clear criteria
- Beyond Trailhead requires systems
- Chemical hazard facilitates:
 - setting priorities
 - communicating with suppliers
 - selecting safer alternatives
- Collective voice of downstream users is critical to growing the global movement to safer alternatives

Next Steps for *The Guide*

- An evolving resource of business practices – let us know where your work fits in
- Use *The Guide* for comprehensive chemicals management trainings in combination with GreenScreen
- Pilot *The Guide* with BizNGO
- Publicly report on performance in relationship to the benchmarks
- Sector benchmarking



Acknowledgments

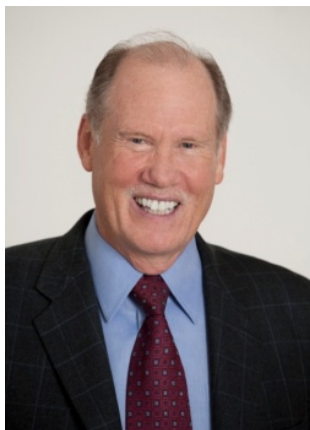


- Cheri Peele, Cheri Peele Group
- Beverley Thorpe,
Clean Production Action
- BizNGO Chemicals Work Group

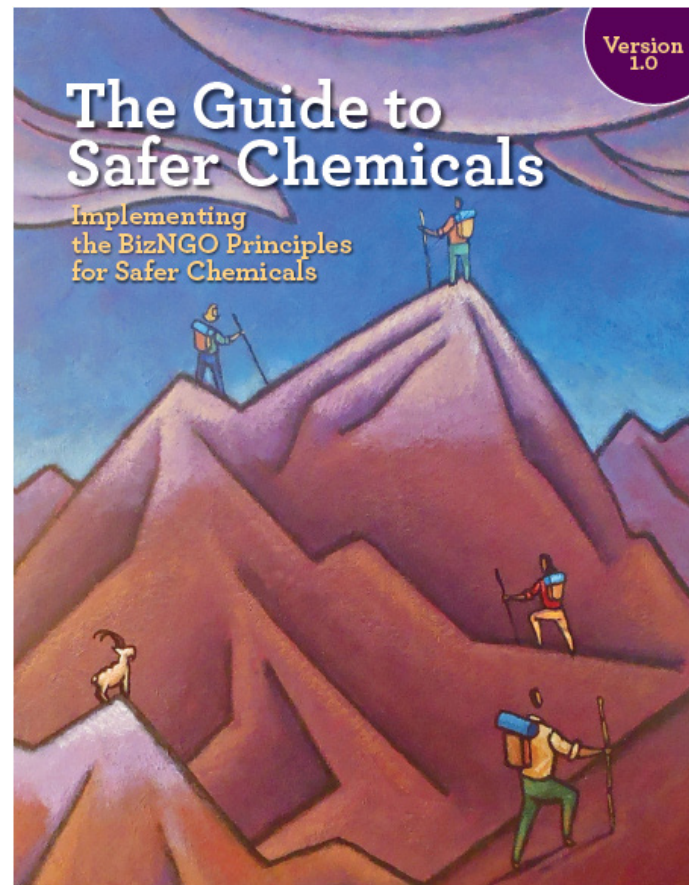
www.bizngo.org/guide.php

Green Chemistry Commerce Council (GC3) Webinar
Introducing BizNGO Guide to Safer Chemicals
Implementing the BizNGO Principles of Safer Chemicals
December 10, 2012

How Retailers Can Use BizNGO Guide to Safer Chemicals



Roger McFadden,
Vice President, Senior Scientist
Staples, Inc.



STAPLES

easy on the planet

Chemicals are a key element of the global economy and a retailer's supply chain



- The introduction of new chemicals over the past few decades has provided significant value to product designers.
- New chemicals have helped improve the quality, efficiency and convenience in our workplaces, homes and communities.

BUT... not all chemicals are created equal

They may have different:

- Hazard traits
- Human health & ecotoxicity endpoints
- Exposure routes
- Degradation & combustion by-products
- Pollution potential



Staples Adopted

BizNGO Guiding Principles for Safer Chemicals



1. Know and understand product chemistry
2. Assess and avoid hazards
3. Commit to continuous improvement
4. Support industry standards, policies and best practices that help guide us to safer chemicals and alternatives

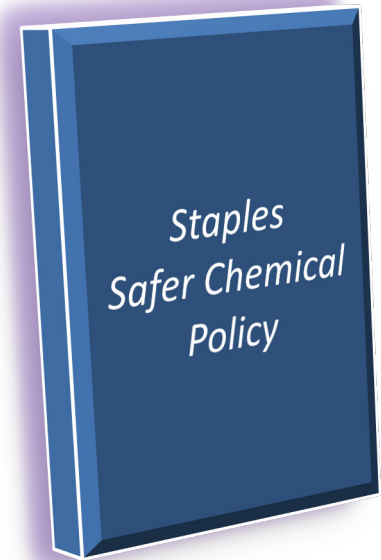
Staples Chemical Policy

Responds to Consumer Expectation for Safer Products

Staples seeks to offer customers products that are inherently safer for human and environmental health and that address environmental impacts throughout their lifecycle.

Staples Chemical Policy Will:

- Request product chemistry and hazard endpoint data from suppliers;
- Prioritize chemicals of high concern for elimination;
- Create collaboration with suppliers to:
 - Avoid chemicals of concern
 - Substitute safer alternatives
- Develop a scorecard with suppliers to measure progress and evaluate results.



Why Staples Supports the Use of the Guide

- Pragmatic tool to help implement the principles for safer chemicals
- Open and inclusive process used to create the Guide – Input from a wide range of stakeholders including downstream users and businesses.
- Proactively responds to the growing supply chain demand for more ingredient disclosure and transparency.
- Creates common language and communication across the supply chain –merchant-to-supplier, business-to-business, business-to-customer etc.

“The BizNGO Guide to Safer Chemicals is a much-needed, pragmatic guide for how businesses can start on the path to safer chemicals. We welcome this much needed resource to the chemicals element of the sustainability equation.”

Roger McFadden,
Vice President, Senior Scientist
Staples

Everyone Wins With Safer Chemicals

- Creates shared value for consumer, community and company.
- Suppliers are able to leverage their innovation & differentiation
- Chemicals of concern become obsolete as they are replaced with safer alternatives
- Helps protect human health
- Helps protect natural and built environment both now and in the future.



The audio recording and slides shown during this presentation will be available to GC3 Members on the GC3 Website:

<http://www.greenchemistryandcommerce.org>

Non- GC3 Member Attendees who would like to view these slides please contact Sarah Shields at sarah_shields@uml.edu



SAVE THE DATE!

GC³ | **Green Chemistry & Commerce Council**

8th Annual **MAY 8-10•2013**
Innovators Roundtable

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