Green Chemistry Commerce Council (GC3) Retailer Summit Panel May 7, 2013

Staples' Commitment to Make an Orderly Transition to Safer Chemicals, Materials and Products

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



Chemicals are a key element of materials, products and processes in our supply chains

- 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.... all chemicals are not created equal



- Different hazard traits
- Different human health & ecotoxicity endpoints
- Different exposure routes
- Different degradation & combustion by-products
- Different pollution potential



Effective "chemicals in products" policy Helps safeguard our organization and brand



- Eliminates or reduces risk to brand.
- Creates shared value for consumer, community and company.
- Rewards suppliers for innovative solutions.
- Helps protect human health
- Helps protect natural and built environment both now and in the future.



Staples is Committed to Finding Safer Alternatives and Announces a "Race to the Top" Initiative

- Staples announced a new corporate strategy to drive sustainability innovation in product manufacturing, packaging and distribution by challenging its key suppliers to join it in a "Race to The Top."
- Staples calls on <u>suppliers</u> to compete not only in terms of product quality, cost and features, but in finding innovative solutions for product manufacturing, packaging, and distribution which reduce impacts on the planet.
- Staples is committed to collaborating with its suppliers and chemical makers to identify, specify, use and offer safer alternatives.



Innovation Intervention Excellence



Staples Chemical Policy Primary Objective

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



Overarching Goals of Staples Chemicals Policy

- Respond to customer and consumer demand for safer chemicals, materials and products.
- Be proactive and ask suppliers to be more transparent about chemicals in products
- Avoid product based pollution
- Avoid hazard at product design stage
- Promote products that are made using green chemistry principles
- Make an orderly transition to safer materials.





Staples' Strategy and Policy for Transitioning to Safer Chemicals

- Endorsed the BizNGO Principles for Safer Chemicals.
- Announced Staples "Race to the Top" Chemicals Management Strategy
- Developed and published a Staples "Bad Actors" RSL.
- Prepared a Staples "Chemicals in Products" Policy" currently being implemented

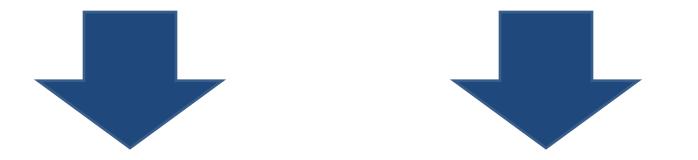


Staples Chemicals Policy Key Elements

- Requests product chemistry and hazard endpoint data from suppliers;
- Prioritizes chemicals of high concern for elimination;
- Creates collaboration with suppliers to:
 - Avoid chemicals of concern
 - Substitute safer alternatives
- Develops a scorecard with suppliers to measure progress and evaluate results.



We challenge our suppliers to take a precautionary approach and be guided by the following principle:



When there is credible evidence that a chemical in a product may result in harm to human and/or environmental health, we should strive to eliminate the chemical and replace it with a quality, affordable, safer and more sustainable alternative. We challenge our suppliers to consider *chemicals of high concern* in products to be:



Pollutants

Contaminants

Defects

We challenge our suppliers to consider direct and indirect chemical exposure to vulnerable sub-populations including:

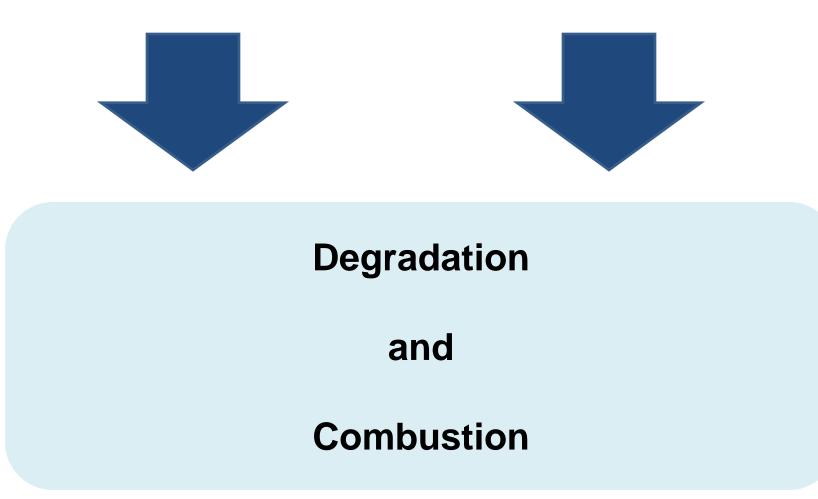


Children

Women of Child-Bearing Age

Workers

We challenge our suppliers to consider life cycle impacts of chemicals including harmful by-products of:



We challenge our suppliers to consider life-cycle cost of a product containing chemicals of concern including:



Initial cost of the product

Cost of handling and use

Cost of recycling or disposal

BizNGO Principles for Safer Chemicals Endorse and Implement



The Business-NGO Working Group promotes the creation and adoption of safer chemicals and sustainable materials in a way that supports market transitions to a healthy economy, healthy environment, and healthy people.

BizNGO Endorsers

Businesses American Sustainable Business Council Brooks Sports Construction Specialties, Inc. Earthbound Farm Green Harvest Technologies Hewlett-Packard Hospira IHS Method Naturepedic Organic Valley Perkins+Will Pure Strategies Q Collection Seventh Generation Staples, Inc. Sustainable Research Group True Textiles, Inc. Whole Foods

Health Care Organizations

Catholic Healthcare West Health Care Without Harm Kaiser Permanente Practice Greenhealth Premier

NGOs and Investors As You Sow

Basel Action Network Boston Common Asset Management, LLC Breast Cancer Fund Center for Environmental Health ChemSec Clean New York Clean Production Action Clean Water Action Commonweal Dominican Sisters of Hope Ecology Center Electronics Take Back Coalition Environmental Health Fund Environmental Health Strategy Center General Council, Adrian Dominicar Sisters Healthy Building Network Inhance Investment Management Inc. Institute for Agriculture and Trade Policy Institute for Local Self-Reliance Mercy Investment Program Natural Resources Defense Council Northwest Coalition for Responsible Investment Rose Foundation for Communities and the Environment Sisters of Mercy, Regional Community of Detroit Charitable Trust Sisters of St. Francis of Philadelphia Washington Toxics Coalition en's Voices for the Earth

Principles for Safer Chemicals emand for products made from greener chemicals is growing rapidly, Consumers,

investors and governments want chemicals that have low to no toxicity and degrade into innocuous substances in the environment.1 Leading businesses are seeking to capture these emerging market opportunities by redesigning their products and catalyzing change in their supply chains.

To advance an economy where the production and use of chemicals are healthy for humans, as well as for our global environment and its non-human inhabitants, responsible companies and their supply chains should adopt and implement the following four principles for safer chemicals:

1. Know and disclose product chemistry. Manufacturers will identify the substances associated with and used in a product across its lifecycle and will increase as appropriate the transparency of the chemical constituents in their products, including the public disclosure of chemicals of high concern.² Buyers will request product chemistry data from their suppliers.

2. Assess and avoid hazards. Manufacturers will determine the hazard characteristics of chemical constituents and formulations in their products, use chemicals with inherently low hazard potential, prioritize chemicals of high concern for elimination, minimize exposure when hazards cannot be prevented, and redesign products and processes to avoid the use and/or generation of hazardous chemicals. Buyers will work with their suppliers to achieve this principle.

3. Commit to continuous improvement. Establish corporate governance structures, policies and practices that create a framework for the regular review of product and process chemistry, and that promote the use of chemicals, processes, and products with inherently lower hazard notential.

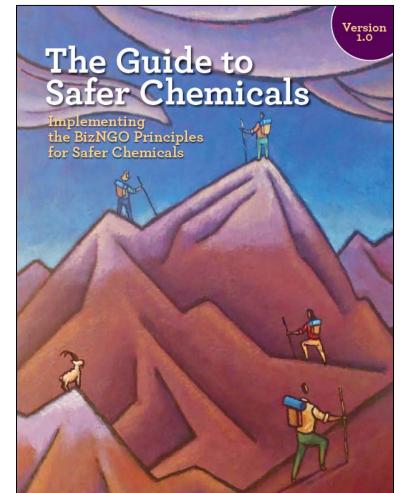
4. Support public policies and industry standards that: advance the implementation of the above three principles, ensure that comprehensive hazard data are available for chemicals on the market, take action to eliminate or reduce known hazards and promote a greener economy, including support for green chemistry research and education.

These principles are key features of an effective strategy for promoting, developing and using chemicals that are environmentally preferable across their entire lifecycle.

1 These are two of the 12 Principles of Green Chemistry defined by Paul Anastas and John Warner in: Green Chemistry: Theory and Practice 1999 (Oxford University Press: New York).

2 "Chemicals of high concern" include solutions that have the following properties: 1) persistent, bioaccumulative and toxic (PBT), 2) very benittent and very indications and toxic (PBT), 2) is an integrated to a solution of the PBD, 3) very persistent and toxic (PBT), 3) very bioaccumulative and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and toxic (PBT), 3) reactions are indicated as a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and a solution of the PBD, 3) very persistent and 3) very persistent

For further information, contact Mark Rossi, Chair, Business-NGO Working Group www.bizngo.org · Mark@CleanProduction.org · 781.391.6743



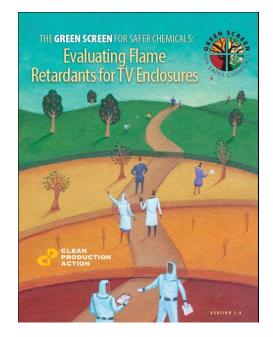


http://www.bizngo.org/pdf/GuideToSaferChemicals-v1_2.pdf

Green Screen for Safer Chemicals: Comparative Hazard Assessment Tool

A Decision Making Tool to Help Companies Identify Safer Chemical







Health Product Declaration

Better way to communicate chemical information

Sample Health Product Declaration - 9/26/2011 draft

1) Product Description

Name & IDs	Tuff Stuff X42, product SKU SB4353		MasterFormat	09 96 00 (MF10)			
Manufacturer	Ajax Manufacturing		Declaration date	June 9, 2011			
Description	High performance coating designed for painting bath stall walls and other wet surfaces.						

2) Product Contents Disclosure

Disclosure level 94 percent of intentionally added content s fully disclosed (100 percent is ideal).									
Name		CAS RN	%	Health Hazard Warnings		Nano			
1 Phenyl Glycidyl Ether 122-60		122-60-1	55%	Cancer and Male reproductive toxicity (CA Prop 65) R37 Irritating to respiratory system and R53 May cause long-term adverse effects in the aquatic environment (EC Risk)	N	N			
2	2 Alkyl (C12, C14) Glycidyl Ether 68609-97-2 21% Irritating to skin and May cause sensitization by skin contact. (EC Risk) Full Green Screen assessed at Benchmark 2 by ChemService on 6/6/2011. Report is at www.ChemService.com/GS54345					N			
3 Bis(2-(dimethylamino)ethyl) ether		3033-62-3	8%	No warnings found	N	N			
4	Polyethylene	9002-88-4	7%	No warnings found	PC	N			
			3%	Category 1 Evidence of endocrine disruption activity (EC Endocrine) Very toxic to aquatic organisms and possible risk of impaired fertility (EC Risk)	N	N			
6	Acme Zap-It Antimicrobial	Content not disclosed	3%	Not available	N	N			
7	Silver	7440-22-4	2%	No warnings found	N	Y			
8	Distillate Fuel Oils, Light	13463-41-7	1%	No warnings found	N	N			
All known residuals disclosed to		Lowest r	equirement	s (ideal) X 100 ppm 1000 ppm As required on MSDS Not disclosed					
9 Formaldehyde 50-00-0 <1000 ppm Group 1: Agent is carcinogenic to humans (IARC) and other cancer warnings (see notes) 9 Formaldehyde 50-00-0 group 1: Agent is carcinogenic to humans (IARC) and other cancer warnings (see notes) 9 Generally accepted asthmagen (AOEC) R23: Toxic by inhalation and R24: Toxic in contact with skin and R25: Toxic if swallowed and R34: Causes burns and R43: May cause sensitization by skin contact.(EC Risk)						N			
The manufacturer affirms that all known material contents were screened Pharos Chemical and Material Library from the Healthy Screening date June 6, 2011									
for chemicals of concern and health warning listings using: Building Network									
Hazard warnings associated with each ingredient must be listed for all chemicals listed on any of the Health Product Declaration (HPD) Priority lists found at <u>www.healthproductdeclaration.org/priority/ists</u> . RC = Recycled Content: PC-Post Consumer PI = Post industrial Nano = comprised of nanoscale particles or nanotechnology									
	Total Volatile Organic Compound Content (TVOC) Material VOC 50 g/l Regulatory VOC 30 g/l Total VOC incl. EPA exempt compounds 60 g/l								
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Managing Chemical Risk Lessons Learned

- Knowing is better than not knowing.
- Action is better than inaction.
- Eliminating chemical hazard is better than managing exposure.
- Transparency/disclosure is better than vagueness or obscurity.
- Orderly proactive transition is better than abrupt reaction.



Thank You!

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

roger.mcfadden@staples.com

