The Guide to Safer Chemicals
Implementing the BizNGO Principles for Safer Chemicals

Great Lakes Green Chemistry Network

May 8, 2013

a project of Clean Production Action
Our mission is to design and deliver strategic solutions for green chemicals, sustainable materials and environmentally preferable products.
Healthy Business Strategies for Transforming the Toxic Chemical Economy
Endorsers include …
- American Sustainable Business Council
- Brooks Sports
- Construction Specialties, Inc.
- Dignity Health
- Forbo Flooring Systems
- Haworth
- HDR
- 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 & Disclose
2. Assess & Avoid Hazards
3. Commit to Continuous Improvement
4. Support Policies & Standards
The Guide to Safer Chemicals

1. Know & Disclose
2. Assess & Avoid Hazards
3. Commit to Continuous Improvement
4. Support Policies & Standards

www.bizngo.org/guide.php
Know

Chemicals in supply chains & feedstock sources

Know

All chemicals in products

Know

All chemicals of concern in products

Know

All chemicals of concern in products

Know

Some chemicals of concern in products or supply chains

Trailhead is beyond compliance
Standardized Environmental Questions for Medical Products
Know all ingredients

PGH Standardized Qs - future consideration

Latex
PVC
Mercury
BPA
Phthalates
HFRs
Prop 65 chemicals

Mind the Store – Haz 100+
Know
All chemicals in supply chains & feedstock sources

Know
All chemicals in products

Know
All chemicals of high concern in products

Seagate

Standardized Environmental Questions for Medical Products

PRACTICE Greenhealth

Standardized Environmental Questions for Medical Products
Disclose

All chemicals in supply chains & feedstock sources

Disclose

All chemicals in products

Disclose

Most chemicals in products

Disclose

Presence/absence of some chemicals of high concern

Health Product Declaration

Clorox

Construction Specialties™

BizNGO

NON-TOXIC PLASTIC • NO PHthalates • NO Bisphenol A
Assess & Avoid Hazards

Benchmark 1
Avoid – Chemical of High Concern

Benchmark 2
Use but Search for Safer Substitutes

Benchmark 3
Use but Still Opportunity for Improvement

Benchmark 4
Prefer – Safer Chemical

Assess & Avoid Hazards

Summit
Assess & Avoid
Specify safer alternatives

High Camp
Assess & Avoid
Select & implement safer alternatives to chemicals of high concern

Base Camp
Assess & Avoid
Identify all chemicals of high concern

Trailhead
Assess & Avoid
Create and implement restricted substances list (RSL)
HP Uses GreenScreen™ to Choose Alternatives to Substances of Concern

- Select alternatives that won’t be restricted in the future
  - E.g., Low toxicity
- Helps articulate materials goals to suppliers
  - Not simply saying what HP doesn’t want
  - Defining what HP does want in its products

<table>
<thead>
<tr>
<th>Common Name</th>
<th>CAS #</th>
<th>Full Name</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>none</td>
<td>Design material out, dematerialize</td>
<td>4</td>
</tr>
<tr>
<td>Substance 0</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>4</td>
</tr>
<tr>
<td>Use but still opportunity for improvement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance 1</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>3</td>
</tr>
<tr>
<td>Substance 2</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>3</td>
</tr>
<tr>
<td>Use but search for alternatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance 3</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>2</td>
</tr>
<tr>
<td>Substance 4</td>
<td>#####-##</td>
<td>Chemical name</td>
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<tr>
<td>Substance 5</td>
<td>#####-##</td>
<td>Chemical name</td>
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<tr>
<td>Substance 6</td>
<td>#####-##</td>
<td>Chemical name</td>
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</tr>
<tr>
<td>DO NOT USE</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Substance 7</td>
<td>#####-##</td>
<td>Chemical name</td>
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<tr>
<td>Substance 8</td>
<td>#####-##</td>
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<tr>
<td>Substance 9</td>
<td>#####-##</td>
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<td>Substance 10</td>
<td>#####-##</td>
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<td>Substance 11</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>1</td>
</tr>
<tr>
<td>Substance 12</td>
<td>#####-##</td>
<td>Chemical name</td>
<td>1</td>
</tr>
<tr>
<td>Criterion</td>
<td>Red—Not for sale at Whole Foods</td>
<td>Orange</td>
<td>Yellow</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Transparency</td>
<td>Fails any of the “Orange” criteria</td>
<td>Full disclosure of ingredients on packaging</td>
<td>Full disclosure of ingredients on packaging</td>
</tr>
<tr>
<td>Compliance</td>
<td></td>
<td>Third party verified</td>
<td>Third party verified</td>
</tr>
<tr>
<td>Ingredient hazards</td>
<td></td>
<td>No significant environmental or safety concerns</td>
<td>No moderate environmental or safety concerns</td>
</tr>
<tr>
<td>Formaldehyde-donors</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Phosphates, chlorine, or synthetic colors</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Animal testing</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Natural fragrances</td>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Surfactants that have the potential to contain nitrosamines and other impurities</td>
<td></td>
<td>No DEA, MEA, or TEA</td>
<td>No DEA, MEA, or TEA</td>
</tr>
<tr>
<td>Synthetic, petroleum-derived thickeners from non-renewable sources</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Plant- and mineral-derived ingredients only</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Petroleum-derived ingredients</td>
<td></td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Source: Whole Foods Market Eco-Scale Rating for Household Cleaning Products
Whole Foods Eco-Scale Mapped to BizNGO Guide

Summit

Know
All chemicals in supply chains & feedstock sources

Disclose
All chemicals in supply chains & feedstock sources

Assess & Avoid
Specify safer alternatives

High Camp

Know
All chemicals in products

Disclose
All chemicals in products

Assess & Avoid
Select & implement safer alternatives to chemicals of high concern

Base Camp

Know
All chemicals of high concern in products

Disclose
Most chemicals in products

Assess & Avoid
Identify all chemicals of high concern

Trailhead

Know
Some chemicals of high concern

Disclose
Presence/absence of some chemicals of high concern

Assess & Avoid
Create and implement restricted substances list (RSL)
ROADMAP TO ZERO DISCHARGE OF HAZARDOUS CHEMICALS

**Summit**
- **Know**
  - All chemicals in supply chains & feedstock sources
- **Assess & Avoid**
  - Specify safer alternatives

**High Camp**
- **Know**
  - All chemicals in products
- **Assess & Avoid**
  - Select & implement safer alternatives to chemicals of high concern

**Base Camp**
- **Know**
  - All chemicals of high concern in products
- **Assess & Avoid**
  - Identify all chemicals of high concern

**Trailhead**
- **Know**
  - Some chemicals of high concern
- **Assess & Avoid**
  - Create and implement restricted substances list (RSL)
Sustaining Our Healing Ministry

**Continuous Improvement**

**Figures 3-1**

**Dignity Health Pilot of Beta Version of The Guide**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Benchmark</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Know and Disclose Product Chemistry</td>
<td>Trailhead</td>
<td>Dignity Health is a GPO requesting that shortlist GPO request data for high concern.</td>
</tr>
<tr>
<td>#2 Assess and Avoid Hazards</td>
<td>Trailhead</td>
<td>Dignity Health is a GPO requesting that shortlist GPO request data for high concern.</td>
</tr>
<tr>
<td>#3 Commit to Continuous Improvement</td>
<td>Base Camp</td>
<td>Dignity Health is a GPO implementing core chemicals program for organization.</td>
</tr>
<tr>
<td>#4 Support Public Policies and Standards</td>
<td>Summit</td>
<td>Very active in advocating collaborating with.</td>
</tr>
</tbody>
</table>
Support Policies & Standards

Examples of business-advocacy organization collaborations specific to chemicals:

- BizNGO—including video on the BizNGO Principles
- Health Care Without Harm
- Safer Chemicals Healthy Families Coalition
- Campaign for Safe Cosmetics Campaign
- Healthy Building Network—Pharos and Health

Product Declaration Form

Sincerely,

January 11, 2013

Governor Jerry Brown
C/o State Capitol, Suite 1173
Sacramento, CA 95814

Dear Governor Brown,

We represent the many companies that support regulations, called for by the Department of Toxic Substances Control.

Roger McFadden
Staples

Rachelle Wenger
Dignity Health

Peter Syrett & Robin Guenther
Perkins+Will

Ryan Williams
Method

Howard Williams
Innovation Specialties

Kathy Gerwig
Kaiser Permanente

Martin Wolf & Chris Miller
Seventh Generation

Gary Cohen
Health Care Without Harm

David Levine
American Sustainable Business Council

Janet Nudelman
Breast Cancer Fund

Tom Lent
Healthy Building Network
Working with Suppliers -- RSLs

- **Know** – RSL Chemicals
  - Intentionally added
  - Contaminants
- **Assess**
  - Set RSL thresholds
- **Avoid**
  - No RSL chemicals (or below thresholds)
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
• Prefer
  – Specify safer alternatives
Making Chemicals Management Easier

- Someone needs to know chemicals in products
- Need common criteria for chemicals of concern
- Need list of chemicals of concern
- Need common criteria for safer alternatives
- TOOLS & SYSTEMS make implementation easier
The Guide

- Is a reference document of best practices

- Enables
  - benchmarking tools & initiatives
  - measuring internal performance, identifying areas for improvement, and tracking progress

- Can be used
  - to create chemical management system
  - externally to explain and report on corporate performance and progress
Thank You!

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Co-Director, Clean Production Action
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t) 781.391.6743 x101

www.bizngo.org/guide.php