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
Each Chapter has this structure …

• Ideal
• Intent
• Context
• Benchmarks: actions & examples
• Vignettes

A critical element in the implementation of a safer alternatives program is the frameworks and tools that organizations use to inform their identification of chemicals of high concern, evaluation of alternatives, and the selection and implementation of safer alternatives.
**PRINCIPLE #2**

**Assess & Avoid Hazards**

**Baseline**
Comply with laws & regulations

**Trailhead**
1. Create & implement a restricted substances list (RSL) for chemicals of high concern (for example, SIN List)
2. Establish & implement program to identify all chemicals of high concern in products or processes (for example, using GreenScreen List Translator)
3. Establish & implement program to evaluate alternatives to chemicals of high concern (for example, using BizNGO Alternatives Assessment Protocol & GreenScreen)

**Base Camp**
4. Select & implement safer alternatives to chemicals of high concern in products or processes

**High Camp**
5. Specify safer alternatives, including green chemistries
6. Select & implement safer alternatives to all chemicals of high concern in products, processes, & feedstocks

**Summit**
Safer Substitutes
Assess & Avoid
Specify safer alternatives

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

Assess & Avoid
Identify all chemicals of high concern

Assess & Avoid
Create and implement restricted substances list (RSL)
Trailhead - Create and Implement Restricted Substances List (RSL) – some chemicals beyond compliance

Restricted Substances List (RSL)

PRINCIPLE #2
Assess & Avoid Hazards
Base Camp – Identify all chemicals of high concern

Example -- Joint Roadmap towards Zero Discharge of Hazardous Chemicals (ZDHC)

- 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

(adidas Group, C&A, H&M, Levi Strauss & Co., Li Ning, Nike, Puma)
PS asthmagens
Lead
Mercury
Cadmium
Hexavalent Chromium
CFC
HCFC
VOCs & Urea
Formaldehyde
Arsenic, penta & creosote
HFR
PVC & other chlorinated plastics
 Added formaldehyde
Phthalates
PBDE
HBCD
HFR
HBCD
PAHS
GHC
PFCs
Long PFC
Inhalants
Inhalants
PFOA
Antimony
Copper
PAHs, Phenol, PU, more metals & other REACH chemicals
PAHs, Phenol, PU, more metals & other REACH chemicals
PAHs, Phenol, PU, more metals & other REACH chemicals
BPA
Chlorinated paraffins
NPEs, MDI, TDI
EPA
LBC watch
LEED Pilot
LEED HC
Anti microbial
PFA
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PFA
PFA
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More PBTs, asthmagens & endocrine disruptors
More mutagens, reproductive, developmental & neurotoxicants
More carcinogens
Healthy Building Network © 2011
High Camp – Select & Implement Safer Alternatives

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 health and environmental impacts that also meet our performance and cost criteria.
BizNGO Chemical Alternatives Assessment Protocol

1. Characterize End Uses and Function

2. Identify Alternatives: Are there potential alternatives, including chemicals, materials, products or new designs?

3. Assess Chemical Hazards
   Evaluate human and environmental health impacts of chemicals and deselect options of greatest concern

4. Apply Life Cycle Thinking
   Is there potential for significant life cycle or exposure concerns?

5. Select and Implement Safer Alternative

Principle #2: 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
Summit – Specify Safer Alternatives, including green chemistries

• Nike Green Chemistry Program
  – Specify green chemistries

• HP
  – Prefer chemistries that meet highest GreenScreen Benchmark
Conclusions

• Beyond Trailhead requires systems
• List of chemicals of high concern facilitates rapid screening of chemicals – best to have broad list based upon clear criteria
• 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?

- An evolving resource of business practices – let us know where your work fits in *The Guide’s* benchmarks

- 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

- Other?
Acknowledgments

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

www.bizngo.org/guide.php