Staples’ Commitment to Transitioning to Safer Chemicals
Preventing Product Based Pollution

“Race to the Top” Towards More Sustainable Products and Packaging

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Trends impacting supply chain management of chemicals of concern

- Rising role of social media
- Emerging foreign and domestic chemical legislation
- Growing customer demand for more transparency and disclosure
- Bio-monitoring studies; science and medical discoveries
Transparency Trends

• Growing supply chain demand for more ingredient disclosure and transparency.

• Rising market awareness and expectations related to potential health risks of chemical ingredients in products.

• Expanding corporate governance policies with emphasis on chemicals in the supply chain – hazard assessments and extended producer responsibility.

• New and revised local, state, federal and international chemical related regulations requiring more transparency.

• Increasing number of product makers are responding by going beyond compliance and voluntarily listing all ingredients on their product labels and safety data sheets.
Growing demand for greater transparency across many institutions and industries
Growing demand for greater transparency by NGOs and Consumer Advocates
Growing State Level Support for Green Chemistry

State of Oregon

EXECUTIVE ORDER NO. 23-85
FOSTERING ENVIROMENTALLY-FRIENDLY PURCHASING AND PRODUCT DESIGN
Emerging market opportunities driven by consumer demand and changing regulations in the U.S. and abroad are creating a shift in products that are designed to be safe for people and the environment. Building materials, electronic apparel and cleaning products are just some of the products that are increasingly being designed to eliminate or significantly reduce the use of toxic materials. Businesses that use safer, cleaner alternatives to toxic chemicals and processes will be in the best position to capture this growing market.

By encouraging the design and use of chemicals and materials that are benign by design and more sustainable throughout their lifecycles, Oregon and its business community will boost our state economy and lower the cost of health care in the future. Scientists studies show that chemical exposures can lead to or contribute to chronic diseases.

Oregon universities are already recognized leaders in green chemistry research and education. We are also home to a number of businesses that are early adopters of green chemistry. As an added benefit, Oregon’s agricultural and forest resources can serve as feedstocks for non-toxic, bio-based chemicals and products, supporting the creation and retention of jobs in rural Oregon, and economic development for rural counties.

By fostering the development of the next generation of green materials, Oregon has the opportunity to demonstrate national leadership and a commitment to the quality of life for Oregonians. Ultimately, successful implementation of the Oregon Clean Economy Act will ensure that Oregon is able to meet its climate and sustainability goals.

State of California

California Green Chemistry Initiative

State of Michigan

EXECUTIVE DIRECTIVE No. 2006-6
PROTECTION OF GREEN CHEMISTRY FOR SUSTAINABLE ECONOMIC DEVELOPMENT AND PROTECTION OF PUBLIC HEALTH
WHEREAS, Section 21 of Article IV of the Michigan Constitution of 1835 vests the people of the State of Michigan with the right to a healthful environment, and WHEREAS, Section 31 of Article IV of the Michigan Constitution of 1835 declares that the public health and general welfare of the people of the State of Michigan are matters of primary public concern,
WHEREAS, for use to persons and entities of Michigan residents of hazardous substances that cause harmful human health and our environment should be reduced.
WHEREAS, “green chemicals” is the design of chemical products and processes that eliminate the use and generation of hazardous substances.
WHEREAS, “green chemistry” can be an effective approach to pollution prevention because it applies innovative scientific solutions to real-world environmental situations.
WHEREAS, the State of Michigan will promote the use of green technologies that address the need to reduce the use of hazardous substances and to provide sustainable economic development in Michigan.
NOW, THEREFORE, the Governor of Michigan, in exercise of the power and authority vested in the Governor by the Michigan Constitution of 1835, does hereby:

I. DEFINITIONS

As used in this Directive:
B. “Green Chemistry” means the design, development and use of safer chemicals and products that reduce human exposure to hazardous substances while promoting high quality products through reduced energy and water consumption processes.
C. “Green Economy” means the following:

1. Prevent waste: Design chemical systems to prevent waste, leaving no waste to be treated or cleaned up.
2. Design safer chemicals and products: Design chemical products to be fully effective, have little or no toxicity.
3. Design non-hazardous chemical substances: Design systems that can generate substances with little or no toxicity to humans or the environment.
4. Use renewable feedstocks: Use non-hazardous chemicals that are renewable rather than depleting.
5. Safe substitutes: Reduce the use of hazardous substances where reasonable and feasible through substitution.
6. Minimize releases: Where there can be no reasonable substitute, minimize the amounts and frequency of releases.
7. Maximize energy efficiency: Design systems to maximize the use of natural forms of energy.
8. Use safe substitutes and replacement compounds: Avoid using by-products or co-products or any hazardous substitutes or raw materials.

II. IMPLEMENTATION

A. Implementation of this Directive is the responsibility of the Department of Environmental Quality in consultation with local, state, and federal partners.

III. ENFORCEMENT

A. The provisions of this Directive shall be enforced by the Department of Environmental Quality.

IV. DOCTRINE OF PUBLIC WELFARE

A. This Directive is in furtherance of Michigan’s historic doctrine of public welfare, as set forth in Section 31 of Article IV of the Michigan Constitution of 1835, and in accordance with the principles established by the Michigan Constitution of 1835, as amended.

B. This Directive is not intended to conflict with any other laws or Executive Directives of Michigan.
Growing customer demand for assistance to help them achieve:

- Identify & transition to safer alternatives
- Prevent pollution
- Avoid toxins
- Reduce emissions
- Eliminate waste
- Conserve energy
- Lower total life-cycle costs
- Eliminate product duplication
- Green their supply chain
- Measure and report success

Each of these requires greater transparency, collaboration and communication throughout the chain supply.
“Race To The Top”
Supply Chain Strategy
Towards More Sustainable Products and Packaging
Preventing Product Based Pollution

Our Commitment To Collaborate With Our Suppliers To
Eliminate Product-Based Pollution and Make an Orderly
Transition to Safer Alternatives and Reduced Packaging
Staples and Other Retailers are Part of a Large Complex Multi-Tier Supply Chain

>100,000 products
>10,000 chemicals
>1,000 suppliers
Chemicals are a key element of a retailer’s supply chain and the global economy

- 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
Diverse and Different

• Hazard traits

• Human health & ecotoxicity endpoints

• Exposure routes

• Degradation & combustion by-products

• Pollution potential
Wide Range of Business Approaches

Basic Compliance → Value Creation?

- **Traditional Business**
  - Don’t get in legal trouble
  - Legal Compliance
    - Led by Legal Risk Aversion
    - Most Businesses

- **Social Responsibility**
  - Be a good corporate citizen
  - Social Responsibility
    - Environmental Protection, Philanthropy
    - Led by CSR, PR or HR
    - Separate from the business
    - Growing Number of Businesses

- **Sustainability Leadership**
  - Tap into new sources of value
  - Business Value from Smaller Footprint and Safer Alternatives
    - Driven from the top
    - Led by line management
    - Integrated into the business
Business case for an Orderly Transition to Safer Alternatives

• Assures compliance with:
  o Chemical regulations
  o Pollution prevention/control regulations
  o Worker safety regulations
  o Transportation regulations
  o Environmental regulations
  o Waste management
  o Chemical exposure control

• Creates value for customer, community and company
  o Stays ahead of regulations
  o Prevents and controls pollution
  o Eliminates chemical hazards
  o Promotes wellness
  o Lowers life cycle costs
  o Builds credibility
  o Attracts and retains the right associates
Staples
Primary Chemical Policy Objective

Staples seeks to offer customers products that are inherently safer for human and environmental health and that address environmental impacts throughout their lifecycle.
Staples “Race to the Top”
Corporate Strategy to Drive Sustainability Innovation

• **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 **suppliers** 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 scientists are **meeting with traditional and non-traditional chemical and materials manufacturers** to learn more about their safer alternatives with the objective to **develop a preferred materials list** to share with product suppliers.
Chemical Policy Supports
Staples Sustainability Commitment to

• Operate our business in a sustainable manner;

• Make it easy for our customers and associates to make a difference for the environment;

• Offer safer and sustainable products to help maintain a clean, safe and healthy workplace and environment.
Staples Supports
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 and encourage public ingredient disclosure throughout the supply chain
Overarching Goals of Staples Chemicals Policy

• Be proactive and ask suppliers to be more transparent about chemicals in products

• Avoid product based pollution

• Avoid hazard at product design stage

• Make an orderly transition to safer materials.

• Avoid and/or recover costs associated with regulatory non-compliance

• Avoid and/or recover costs associated with product based pollution
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 to measure progress and evaluate results.

“You never change something by fighting with the existing reality. To change something, build a new model that makes the existing model obsolete.”

Buckminster Fuller
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 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:

- Degradation
- Combustion
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
We challenge our chemical suppliers that claim chemicals of concern as trade secrets or to place at least equal value on their customer’s need and/or right to:

- Know
- Understand
- Decide
We are asking our suppliers to:

– Be aware of and demonstrate compliance with all regulations for chemicals used to make a product and for chemicals that ultimately end up in a product sold or offered to Staples;

– Know, understand and comply with all regulations that govern your product or chemicals in your product or making of your product;

– View legal compliance as a fundamental business requirement.
We are asking our suppliers to:

- Be aware of and demonstrate compliance with Staples Chemicals Policy and “Bad Actor” Restricted Substances List for chemicals used in the production of or contained in a product sold or offered to Staples;

- View the Staples RSL as a way to create a dialog with its suppliers and the supply chain.
We are asking our suppliers to:

– Know, disclose and verify chemistry in their product and all processes used to make that product;

– Build knowledge of the materials, chemicals and the processes suppliers or their manufacturers use in making their product;

– View transparency as an important way to build credibility throughout the supply chain.
We are asking our suppliers to:

- Assess chemicals in their product and chemicals used for production of a product;

- Report the potential human health and environmental hazards of chemicals in their product to Staples;

- Eliminate and avoid chemicals of concern and substitute safer chemical and/or non-chemical alternatives.
SAFER ALTERNATIVES ASSESSMENT (SAA)

We are asking our suppliers to:

– Conduct SAA on chemicals and materials being considered to replace chemicals of concern;

– Avoid regrettable substitutions;

– Consider human health and environmental impacts in addition to function, quality, performance and cost of a product;

– Use this process to determine which chemicals should undergo safety and / or risk assessment or green chemistry challenges.
We are asking our suppliers to:

– Demonstrate that appropriate process controls are in place to ensure the lowest possible impacts to the environment and a safer workplace for chemicals of concern where safer alternatives do not yet exist;

– *Use this process to be sure the workplace is safe, consumer products are safe and the environment is unharmed*;

– Identify opportunities for improvement and share an improvement plan including a reasonable time line.
We are asking our suppliers to:

- Collaboratively with Staples generate and publish a preferred substances list;

- Contribute to the development of a positive list of chemicals, materials and products and view it as a worthwhile objective.
We are asking our suppliers to:

– Apply green chemistry and green engineering principles into their product design or product re-design;

– Challenge their suppliers to implement and reward green chemistry and green engineering innovation;

– Take a collaborative and innovative approach with the objective of identifying needs or gaps and design or re-design safer molecules and chemicals.
Green Chemistry Challenge as a Solution

Green chemistry is the design of chemical products and processes that **reduce** or **eliminate** the use or generation of hazardous substances.

Green chemistry applies across the life cycle of a chemical product, including its design, manufacture and use.

*Source: www.epa.gov/greenchemistry/*
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.
Organizations, Tools and Resources

- Green Screen – Clean Production Action
- CleanGredients – GreenBlue Institute
- Safer Chemicals Guiding Principles – BizNGO Working Group
- Green Chemistry Commerce Council (GC3)
- EPA Design for the Environment Program
- Lowell Center for Sustainable Production
- GreenWercs Database
"There are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction."

*John F. Kennedy*

*35th president of the United States*
Thank You

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