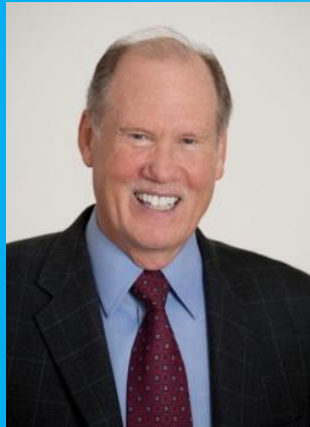


2012 National Training Conference

Toxics Release Inventory and Environmental Conditions in Communities

April 12, 2012

STAPLES®



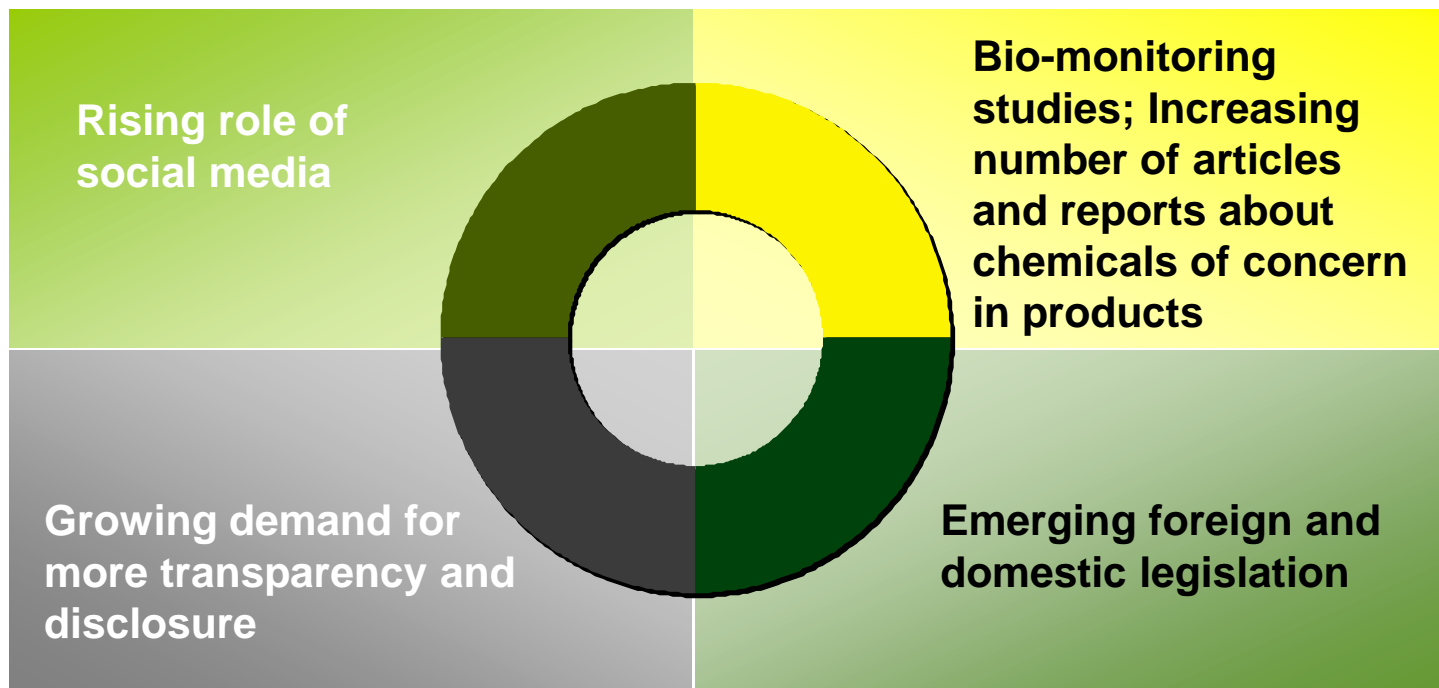
***Understanding the Past
and Promoting a Sustainable Future***
Preventing Product Based Pollution

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



that was easy:

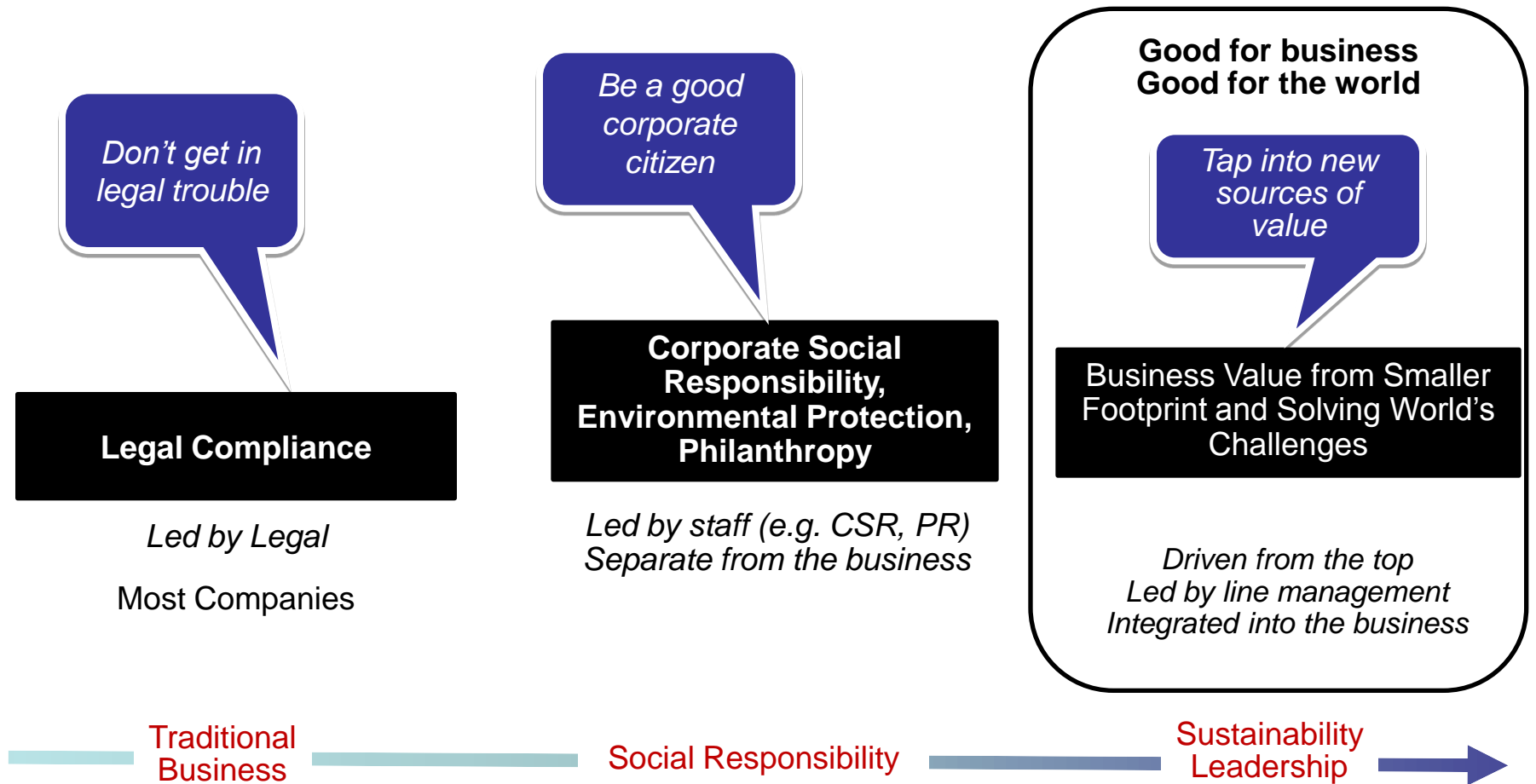
Trends impacting chemicals management and product based pollution



Green Goes Mainstream



Businesses approach chemicals management and pollution prevention in different ways



Typical Supply Chain for Large Retailer or B2B Distributor



>100,000 products

>10,000 chemicals

>1,000 suppliers

Business customers are identifying one or more of the following as value and asking suppliers to provide products and information that help them:

Identify and 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

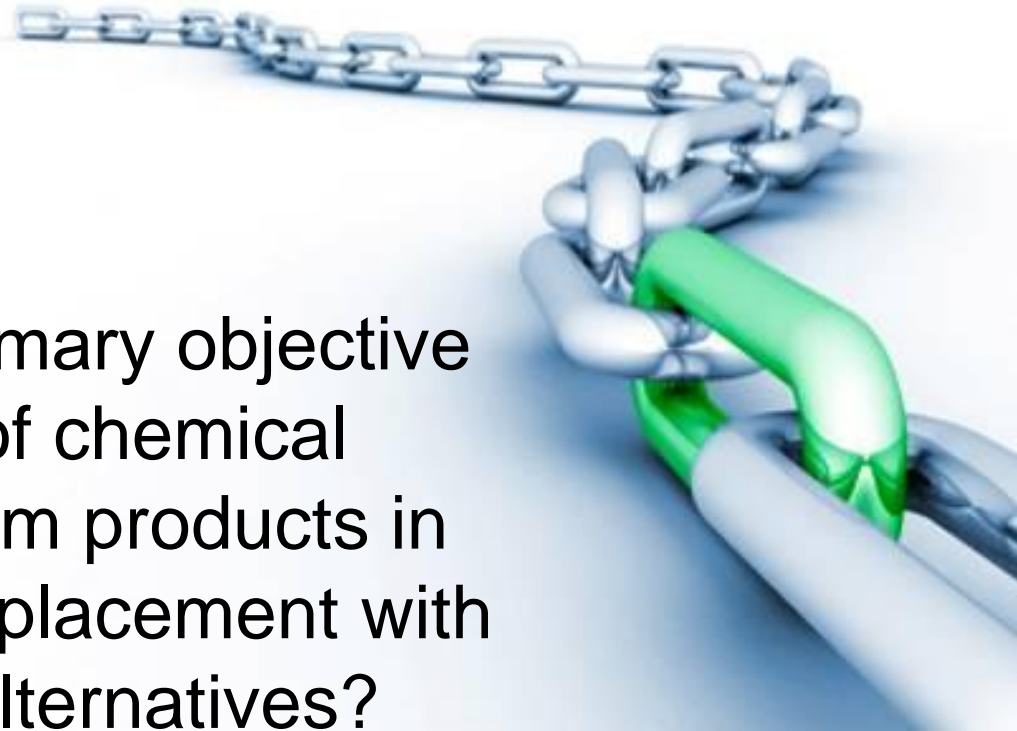


Each of these objectives requires more transparency and communication throughout the chain supply

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

What if a businesses' primary objective became the elimination of chemical hazards and pollution from products in their supply chain and replacement with safer more sustainable alternatives?



What if businesses considered toxins and chemicals of concern in products to be:

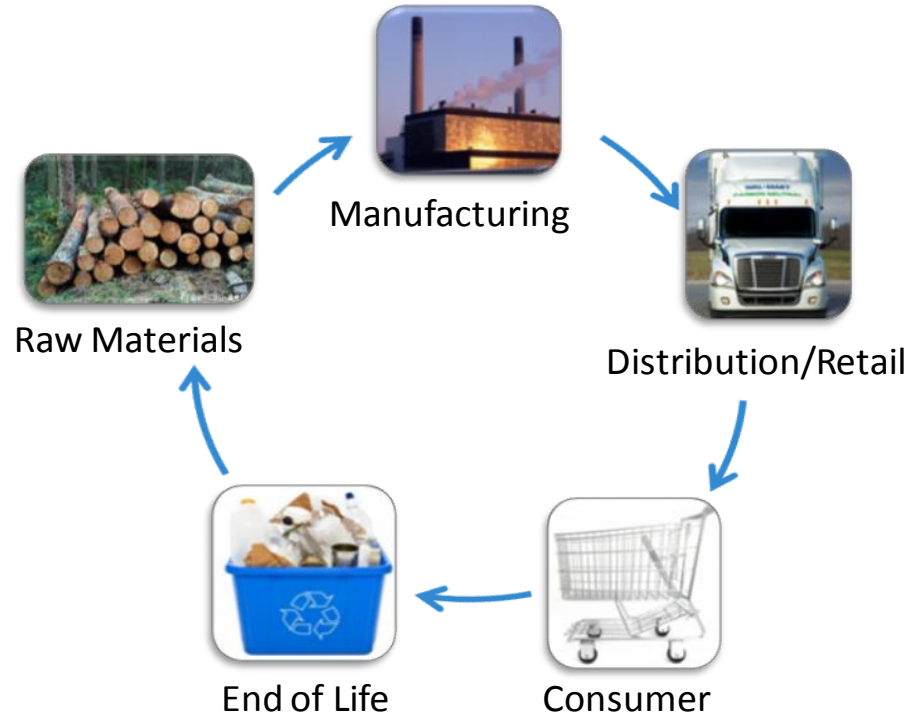
- Pollutants
- Contaminants
- Defects

Impact of Product Based Pollution

- Risk to human health and/or well-being
- Harm to the natural and built environments
- Damage to business reputation and brand
- Decreased ROI for businesses
- Higher consumer product prices
- Increased costs to communities and taxpayers

Value of framing chemicals of concern as product based pollution

- Engages proven pollution prevention tools and strategies.
- Helps businesses view pollution from a life cycle perspective.
- Challenges businesses to take a closer look at chemicals, materials and products in their supply chain.
- Inspires businesses that they can go beyond compliance and encourage suppliers to identify or design safer alternatives.



What if businesses applied a modern day Hippocratic Protocol?

- Fundamental product design objective will be **“To do no harm”**
- Priority on **pollution prevention** at product design stage
- Make **hazard elimination** a top priority in product design

What if businesses took a precautionary approach and were guided by the following?

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.

What if businesses considered direct and indirect exposure on vulnerable sub-populations such as children when they designed or selected chemicals and products ?

“Children and workers are two groups within the population who are particularly vulnerable to toxic hazards in the environment. ... It is imperative that we develop policies that will protect the health of our children now and in the future. ... Primary prevention of occupational disease requires elimination or reduction of hazardous exposures.”

Landrigan P and Garg A. *Vulnerable Populations*.
In: McCally M, editor, *Life Support: The Environment and Human Health*, Cambridge, MA:
The MIT Press, 2002



What if businesses that claim chemicals of concern in their products as trade secrets or confidential business information placed at least equal value on their customer's:

- Right-to-Know
- Right-to-Choose



There is only one boss. The customer. And he or she can fire everybody in the company from the chairman on down, simply by spending their money somewhere else.

Sam Walton

What if businesses considered the true life-cycle cost of a product containing chemicals of concern rather than only the initial price tag of a product?

- 1. Initial cost of the product**
- 2. Cost of use and product handling**
- 3. Cost of disposal**



Implementing Pollution Prevention and Green Chemistry Principles at Product Design Stage Yields Shared Value

- Prevents chemical hazards from entering our indoor air and outdoor environment;
- Eliminates the impact of chemicals in our waste streams;
- Prevents toxic chemical exposure to our children and vulnerable sub-populations;
- Communicates a “walk the talk” image to the communities.



The Values of Transitioning to “Safer Alternatives”

- Assures compliance
 - Pollution prevention/control
 - Worker safety regulations
 - Transportation regulations
 - Environmental regulations
 - Waste management
 - Chemical exposure control
- Creates value
 - Improve productivity
 - Lowers costs
 - Build trust and credibility
 - Stay ahead of regulations
 - Be viewed as a trusted supplier or advisor
 - Eliminate chemical hazard



- Eliminates exposure to chemical hazards
- Prevents pollution
- Promotes wellness
- Encourages extended producer responsibility
- Attracts and retains associates with an environmental conscience

“The **choice**, after all, **is ours to make**. If, having endured much, we have at last **asserted our ‘right to know’**, and if knowing, we have concluded that we are being asked to take senseless and frightening risks, then we should no longer accept the counsel of those who tell us that we must fill our worlds with poisonous chemicals; we should look about and **see what other course is open to us.**”

Rachel Carson, *Silent Spring*, New York, NY: Fawcett World Library, 1962

Thank You

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