Advancing Safer Chemistry in Government Procurement

RPN Webinar

April 4, 2013

Questions?

Submit questions by typing them into the Questions box in your GoToWebinar application.

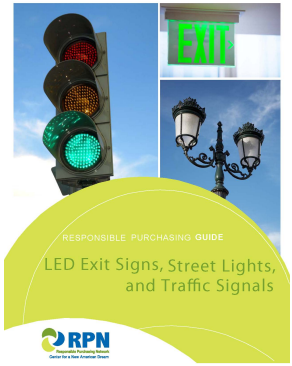
We will compile and answer them during the Q&A at the end of the webinar.

Who is RPN?

International Network

- State and local governments
- Federal agencies
- Colleges and universities
- School districts
- Businesses
- Nonprofit organizations
- Faith-based organizations

RPN Resources



- *Responsible Purchasing Guides* for 15 product categories

- Webinars on "green" procurement issues
- Newsletter highlighting "green" purchasing activities and resources

- Sustainable purchasing policies and specifications

- *Model Responsible Purchasing Report*
- Calculators and other tools

Webinars

Previous

- Purchasing for Climate Protection
- Compostable Food Service Ware
- Office Supplies Roundtable
- Green Tissue Products
- Public Procurement of Energy Efficient Products
- EPA's Design for Environment Program

In the works

- Green Lighting
- Rechargeable Batteries
- New EPEAT Standard for Imaging Equipment
- Recycled and Low-VOC Paint
- Green Purchasing Policies

… and many more!

Presenters

- **Joel Tickner**, Toxics Use Reduction Institute at the Lowell Center for Sustainable Production (Moderator)
- **Beth Meer**, NYS Department of Environmental Conservation
- **Dana Arnold**, US GSA
- **Ed Rau**, National Institutes of Health

OVERVIEW:
Addressing Safer Chemistry through Government Purchasing

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March 14, 2013

Overview

- Federal, state and local policies are increasingly requiring government agencies to purchase less-toxic products, sometimes based on lists of restricted substances.

- Procurement officers face a number of challenges that inhibit their ability to purchase less-toxic goods and services, including limited expertise, conflicting definitions of "low-toxicity" and competing considerations in purchasing

- This webinar provides an overview of specific state and federal initiatives to address toxicity in purchasing decisions, highlighting lessons learned and opportunities for more effective collaboration in the future.

Drivers of safer chemicals and products

- New science on chemical problems
- Legislation on chemicals reduction and sustainable purchasing
  - Europe
  - States
- Consumer Pressure – more informed consumers with a greater range of tools/information at their disposal
- Market pressure from leaders – brands, retailers

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release October 5, 2009

EXECUTIVE ORDER

- - - - - - -

FEDERAL LEADERSHIP IN ENVIRONMENTAL, ENERGY, AND ECONOMIC PERFORMANCE

By the authority vested in me as President by the Constitution and the laws of the United States of America, and to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas emissions a priority for Federal agencies, it is hereby ordered as follows:

(h) advance sustainable acquisition to ensure that 95 percent of new contract actions including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements;

Poll Question #1

Has your jurisdiction or organization adopted any policies promoting the purchase of low-toxicity goods or services?

VOTE NOW

State and local purchasing regulations specifying safer chemicals

- 120+ enacted since 2000.
- Focus: Mercury, cleaning chemicals, pesticides, dioxins, PBTs, art supplies, treated lumber, electronics, pollution prevention, sustainability, recycling
- http://www.newmoa.org/prevention/ic2/projects/chempolicy/

City of Buffalo PBT Purchasing Ordinance 2004

WHEREAS: Potential adverse environmental and health effects from PBTs may be reduced through purchasing decisions that reduce or eliminate products that result in the creation or release of PBTs; and less toxic options exist for many products,

NOW, THEREFORE, BE IT RESOLVED:

That the City of Buffalo considers persistent pollution prevention a high priority for action to reduce risk to public and environmental health, and intends by this resolution to encourage the reduction of pollution from PBTs; and

BE IT FURTHER RESOLVED:

That the City of Buffalo encourages elimination of PBTs through its procurement practices wherever possible and urges the Purchasing Department and other appropriate Departments of the City of Buffalo to consider the presence of PBTs in making purchasing decisions by:

a) Developing and applying criteria that differentiate products containing PBTs and those that result in release of PBTs during production or disposal from those that do not; and

b) Developing an implementation plan with reduction targets for considering these criteria along with other environmental, social, and economic factors when purchasing products in city departments, offices and agencies in order to reduce pollution from PBTs. Within one year of passage of this Resolution, the City will report on their progress and will achieve an Implementation Plan for the purchase of products on behalf of City departments, offices, and agencies by six months thereafter. The Implementation Plan shall include identification and analysis of City uses of PBT-generating products, and purchasing shall be prioritized based on PBT-reduction opportunity, technical and economic feasibility, and protection of human health and the environment.

b) Items to be considered in the development of the implementation plan will be determined by identifying and analyzing City uses of products containing chemicals identified on the EPA PBT priority list or products that result in the generation of such PBTs during their manufacture. Implementation plan actions will be prioritized based on reduction opportunity potential, technical feasibility, economic feasibility, and protection of human health and the environment. The use of an alternative product should be considered economically feasible if its cost, including cost of application, is within 110% of the full costs of the product of concern. In assessing economic feasibility, long-term public health and environmental implications should be considered, as well as the opportunity to stimulate development of alternatives. By encouraging the development of new products, the City's purchasing policies may encourage market transformation and drive costs down below the 110% threshold.

San Francisco, Environmentally Preferable Purchasing Ordinance, 2005

CHAPTER 2: ENVIRONMENTALLY PREFERABLE PURCHASING ORDINANCE

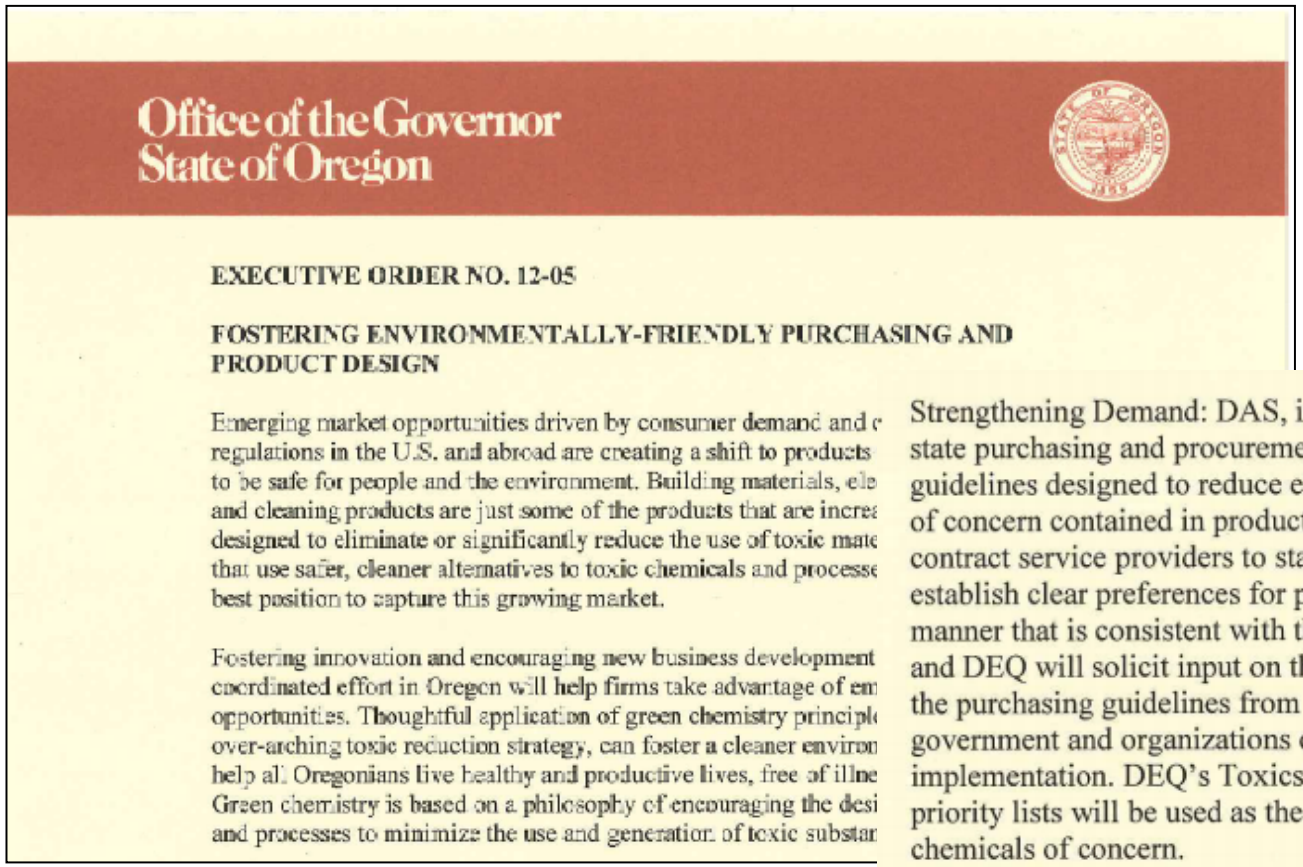
SEC. 200. FINDINGS.

A. Under this Chapter, the City and County of San Francisco wishes to exercise its power to make economic decisions involving its own funds as a participant in the marketplace and to conduct its own business as a municipal corporation to ensure that purchases of commodities and expenditures of public money are made in a manner consistent with its human health and environmental policies.

B. The results of a three year pilot study implementing environmentally preferable purchasing for City departments demonstrated the feasibility of developing relevant human health and environmental selection criteria for products used to maintain City buildings and vehicle fleets. The pilot program further demonstrated that products meeting these criteria are available, cost competitive, and effective at meeting the City's performance standards. It is the City's intention that ultimately there will be environmentally preferable alternatives for each commodity regularly purchased by the City.

C. The Precautionary Principle calls for full disclosure by manufacturers and suppliers so the most protective standard can be applied in the comparison of potential alternatives. Only the full disclosure of ingredients and impacts of the products and services will allow the City to make informed and protective decisions. For example, suppliers of pesticides should disclose the "inert" ingredients in products used on City property instead of limiting disclosure to the legal requirement of "active" ingredients which may make up less than 1% of the product.

D. The Precautionary Principle calls for a participatory and transparent process in the



Office of the Governor
State of Oregon

EXECUTIVE ORDER NO. 12-05

FOSTERING ENVIRONMENTALLY-FRIENDLY PURCHASING AND PRODUCT DESIGN

Emerging market opportunities driven by consumer demand and c
regulations in the U.S. and abroad are creating a shift to products
to be safe for people and the environment. Building materials, ele
and cleaning products are just some of the products that are increa
designed to eliminate or significantly reduce the use of toxic mate
that use safer, cleaner alternatives to toxic chemicals and processe
best position to capture this growing market.

Fostering innovation and encouraging new business development
coordinated effort in Oregon will help firms take advantage of em
opportunities. Thoughtful application of green chemistry principl
over-arching toxic reduction strategy, can foster a cleaner environ
help all Oregonians live healthy and productive lives, free of illne
Green chemistry is based on a philosophy of encouraging the desi
and processes to minimize the use and generation of toxic substar

Strengthening Demand: DAS, in consultation with DEQ, will revise state purchasing and procurement practices to include specific guidelines designed to reduce effectively the amount of toxic chemicals of concern contained in products used by state agencies, as well as by contract service providers to state agencies. The guidelines will establish clear preferences for products designed and manufactured in a manner that is consistent with the principles of green chemistry. DAS and DEQ will solicit input on the development and implementation of the purchasing guidelines from experts identified from within state government and organizations outside of state government prior to implementation. DEQ's Toxics Focus List and other state-based toxics priority lists will be used as the initial basis for determining toxic chemicals of concern.

By December 31, 2012, DAS and other state agencies will begin implementation of revised purchasing and procurement guidelines on a pilot basis for cleaning products using, to the extent practicable and relevant for chemicals of concern, third-party product certification programs that have been established to reduce toxic chemicals in products. DAS also may develop a chemical disclosure form for use by each bidder or proposer providing cleaning products to a state agency as part of this pilot program. In developing and implementing the use of such a form, DAS will assure that the form does not require disclosure of proprietary information.

By July 1, 2013, DAS, in consultation with DEQ, will complete a plan for revising purchasing guidelines that effectively reduce the amount of toxic chemicals of concern for other product categories including but

http://www.oregon.gov/gov/docs/executive_orders/eo_12-05.pdf

Industry Tools and Examples

- Tools to assess and prioritize chemicals and products
- Restricted Substances Lists
- Product design strategies to eliminate chemicals of concern
- Ingredient disclosure
- Chemical use policies
- Software industry developing tools – WERCs, Actio, Chemical Compliance Systems, 3E, SciVera

www.greenchemistryandcommerce.org

GreenWERCS Chemical Screening Tool

- Analyzes the composition of individual products from ingredient data entered by manufacturers
- Identify and reduce chemically hazardous products
- Helps make informed decisions based on:
  - Chemicals harmful to human health
  - Chemicals harmful to the environment
  - Sustainability goals

Need for processes and tools to thoughtfully weigh alternatives

- Goal: avoid unintended consequences and support “informed substitution”
- Responsibility to ensure that sustainable purchasing does not shift risks
- Ecolabels, standards and certifications provide these but only for a small number of product categories and chemical types
- Alternatives assessment is becoming recognized as a tool to thoughtfully evaluate alternatives but is beyond the reach of most purchasers.

Chemicals & Nanomaterials

Regrettable, if predictable: Bisphenol S mimics estrogen just like its better-studied cousin, bisphenol A

By [redacted] on [redacted] | Published: January 17, 2013

Richard Denison, Ph.D., is a Senior Scientist.

A rule of thumb in chemistry is that chemicals that look alike will more often than not act alike. (If it looks like a duck … .) Indeed, when chemical companies are faced with testing requirements for one of their chemicals, they routinely argue that they should be allowed to submit test data on a structurally related chemical instead.

So when it was revealed that companies making products (such as thermal receipt paper) that contain the estrogen-mimicking compound bisphenol A (BPA) were switching to another chemical called bisphenol S (BPS), many scientists' eyebrows quickly arched.

Take a look at these two chemical structures:

It doesn't take a chemist to see they're close cousins. The one on the left is BPA, and the one on the right is BPS. If there's reason to worry about exposure to one, odds are there's also reason to worry about exposure to the other.

Now a new peer-reviewed paper in *Environmental Health Perspectives* (Viñas and Watson, 2013) confirms suspicions that BPS, too, is an estrogen-mimicking chemical. (Two earlier papers published by Japanese researchers in 2002 and 2005 found similar results.)

The new paper reports that BPS, like BPA, acts at low doses and, at least in studies conducted on cultured cells, alters cell proliferation and accelerates cell death at doses similar to those to which the human population is exposed. (If anything, exposure to BPS may be even more widespread than exposure to BPA: testing of urine samples collected from residents of Albany, NY found BPS in 87% of the samples, compared to a 93% occurrence for BPA in CDC biomonitoring.)

Questions to think about

- How to address broader range of chemicals and product categories than is currently addressed through ecolabels and certifications?
- How to incorporate toxicity concerns when other sustainability attributes often dominate or may pose trade-offs (energy, recycled content)?
- Are there examples in place of agencies that have implemented approaches to purchasing less-toxic products through prioritized lists of chemicals of concern? What have been the results?

Opportunities

- Consolidated lists of chemicals of concern and criteria for higher and lower concern and priority product/functional use categories
- Build more efficient and rapid models for specs for green contracts
- Support adoption of safer chemicals/products and develop case examples to make the case
- Develop rapid computerized screening approaches for catalog contracting that screen out ineligible products
- Collaboration with environmental agencies to obtain critical data on safer options

For more information

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GREEN CHEMISTRY

in
New York State Procurement

Beth Meer

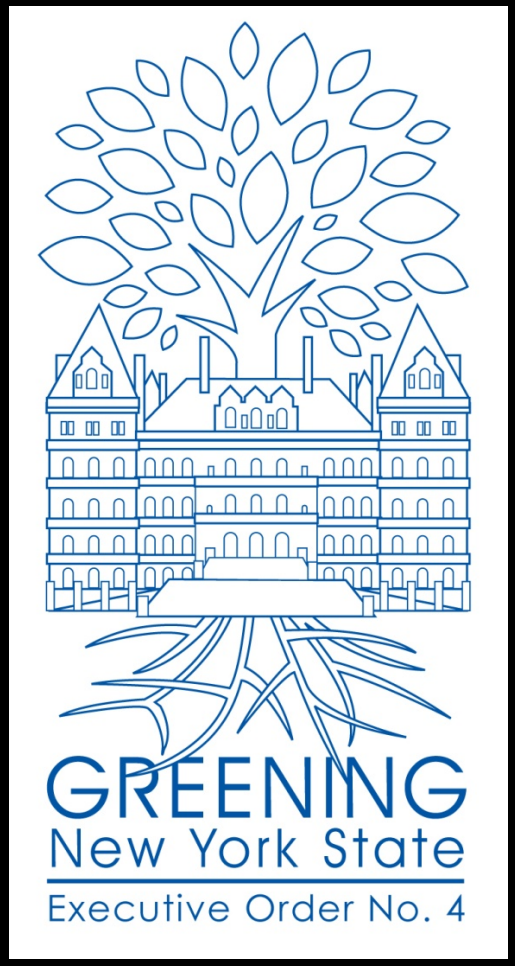
NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

Commissioner's Designee to Co-Chair the EO 4 Interagency Committee on Sustainability and Green Procurement

By the Numbers

- 16,000 facilities
- 17,000 vehicles
- 815,000 tons of waste
- Utility bill $600 M
- Approximately $8 B in purchases

NYS Green Chemistry in Purchasing Policies



- NYS Green Cleaning Law (2005)
- EO 4, Green Procurement and Agency Sustainability, (2008)
- Policy statement
  on the Consideration of Chemicals in the Development of Green Specifications (2010)

EO 4 Criteria for *Green Purchasing*

- Protect public health and the environment, esp. children
- Reduce waste; use durable, reused, or reman content
- Recycle and compost; make content easy to reuse, reman, recycle or compost; use recycled content
- Reduce toxic chemical use; prevent pollution
- Reduce greenhouse gases; use renewable energy
- Manage resources sustainably; conserve water
- Minimize adverse impacts throughout life cycle; support product stewardship
- Minimize volume and toxicity of packaging

Poll Question #2

Have you issued low-toxicity specifications for any of the following product categories?

VOTE NOW

How Criteria are Used in Purchasing

- Green specifications
- New green contracts & aggregate buys
- Green Products on existing contracts

EO 4 Green Specifications and Reducing Toxics Use

- 28 green specifications covering 63 products adopted

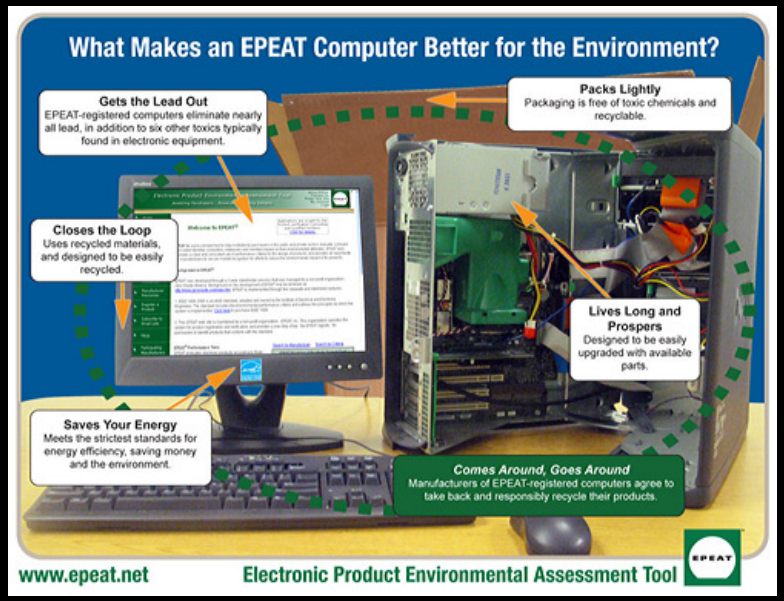
  Paper, Computers, cleaning products, pest management (indoor & outdoor), lubricating oil, printing and ink, lamps

- 7 tentatively approved

  Carpet

- 19 under development

  Furniture, lamps, mulch, fleet vehicle maintenance, pavement sealer, paint



http://www.ogs.ny.gov/EO/4/Default.asp

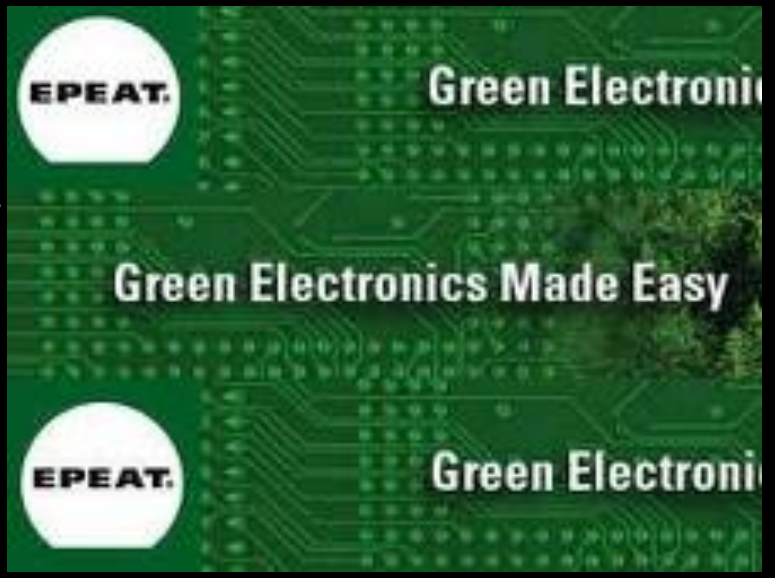
100% recycled, PCF Paper

- Statewide contracts for paper issued Summer 2008:
  - 100% recycled, processed chlorine free
  - Copy and janitorial

- FY 08-09
  - 22% of copy paper, 34% of janitorial paper = $4.5 M
- FY 09-10
  - 49% of copy paper, 75% of janitorial paper = $13.4 M
- Significantly fewer complaints

Green Computer Aggregate Buy

- FY 08-09 met highest environmental standard in the country (EPEAT Gold +7)
- Savings have steadily increased each year: $130 million saved off contract price FY 08-09
- Will save $16 million in energy use over life of computers
- Avoided 5 million lbs of solid waste
- Reduced toxic chemical use by 30,852 lbs



Green Cleaning Law: Background

- Enacted 2005; effective September 2006
- All public & private, primary & secondary schools must purchase and use green cleaning products

Green Cleaning Success Story

In 2011, Carl Thurnau, Director of Facilities, NYSED reports successful adoption of green cleaning products and practices:

- At first, many complaints re cost and efficacy
- Now, no complaints from schools
- No complaints from parents
- Widespread use of green cleaning products and practices - Public schools in substantial compliance with law

Green Cleaning Success Story

Based on 3 years of experience, survey by SED and OGS in 2010 found:

- Green cleaning products do not cost more than traditional cleaning products.
- Green cleaning products cost the same or less, and work as effectively, as their traditional counterparts.

2009-10 EO 4 Report:

- 83% of agencies use green cleaning products all or most of the time

Green Cleaning Contract

- OGS green cleaning website lists 1700 products that meet Green Seal or Ecologo as required by NYS law and EO 4
- Multi-state contract issued in May 2010 (led by MA) has 18 contractors (9 operative in NYS) and more than 200 products.
- Available for use by agencies, school districts and municipalities.

Pest Management by New York State Agencies

- Standard is IPM indoors and non-chemical outdoors
- 70% Use IPM all or most of the time for indoor
- 43% Use Non-Chemical all or most of the time for turf and ornamentals

Green Product Costs in General

In general, green products are competitively priced and perform well:

- Cheaper: traffic safety equip, glass beads, toner s
- Same: janitorial paper, computers, cleaning products, ink
- Good payback: vehicles, appliances
- Somewhat volatile: copy paper, oil (within 10%)

EO 4 Policy Statement on Chemicals

When developing specifications, the Interagency Committee will consider chemicals that pose potential health and environmental impacts, including:

- EPA Haz Waste Min List (PBTs, Heavy metals, some pesticides)
- National Toxicology Program, known and reasonably anticipated carcinogens
- Chemicals for which a Chemical Action Plan has been issued under TSCA (eg. chems of emerging concern, like endocrine disruptors, BPA)

In general, we Look for existing standards and certifications that address these chemicals.

EO 4 Policy Statement on Chemicals

- Use it to screen and develop specifications
- We do not perform alternatives assessments
- Look for existing standards
- Need 1/3 market to require
- Drive market through encouragements

Challenges

- Spec development product by product
- Driving market to ensure low cost
- Getting green specs into contracts
- Making choice of green product less confusing, more automatic

- FY 09-10 agency reports show high participation and low costs, but lingering concerns regarding:
  - The time needed to test, monitor and select products
    - Lack of green floor finishes and strippers
    - Ongoing confusion about disinfectants

Solutions

- Share alternatives assessments among states
- Build robust standards; increase competition among certifiers?
- Issue more green state contracts
- Market green products already on contract
- Green the ‘market basket’
- Screen out ineligible products; cut incentives

As products and practices become more widespread , comfort levels should increase

Contact Info

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U.S. General Services Administration

Federal Acquisition Service

Sustainability, Executive Orders, and Chemicals Management

Dana Arnold
General Services Administration

April 4, 2013

"Sustainable"

To create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans.

Executive Order 13423 Goal for Chemicals

- **Reduce the quantity of toxic and hazardous chemicals and materials purchased, used, and disposed**

Executive Order 13514 P2 Goal

Ensure that the agency (i) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency

(ii) increases diversion of solid waste as appropriate

(iii) maintains cost-effective waste prevention and recycling programs in its facilities

Trends in Agency Reduction Plans

- **Identify chemicals or products to be addressed either agency-wide or specific to a sub-agency, bureau, or operating division**
  - **Often cited chemicals: mercury, PCBs, CFCs, lead**
  - **EPA Priority Chemicals List**
  - **Janitorial cleaning chemicals**
- **Develop reduction policies for identified chemicals**
  - **Pollution prevention opportunity assessments**
  - **Audits**
- **Use of HAZMAT pharmacies**
  - **Used at many U.S. Coast Guard installations**
  - **EPA (laboratories) and others use automated inventory systems**

Examples

- Laboratory chemicals
- Mercury-containing devices
- PCB-containing equipment
- Cleaning products
- Integrated pest management
- Process or equipment changes, such as aqueous parts washers for solvent-based parts washers

Sustainable Facilities Tool

Log On

Search

LEARN | PLAN | EXPLORE | PROCURE | SHARE | MY PROJECTS

Building sustainable practices one decision at a time

Plan

Incorporate sustainability into your project from the start. Learn steps to follow to incorporate sustainability as part of your plan.

Start Planning Your Sustainable Project

Learn

Discover basic concepts, define terms, and link to web-based knowledge sets to support your understanding of sustainable workplace principles.

Start Learning!

Explore

Explore whole building systems and interior spaces for sustainable guidance, tips and materials to incorporate in your projects. Use the comparison features to understand the most sustainable materials.

Explore Workspaces

Explore Building Systems

Share

Let others learn from the knowledge you've gained by greening your space! Contribute to the repository of case studies.Ask and answer questions in the forum. Get involved!

Share My Story

Sustainable Building Q&A

Procure

Find the environmental requirements of your next purchase with the Green Products Compilation (GPC). Search, sort, and identify sustainable products and their associated guidance to facilitate green purchasing decisions.

Green Products Compilation

Sustainable Guidance for your Role

The Sustainable Facilities Tool offers useful

Explore Systems, Spaces and Materials

Green Purchasing

The Green Products Compilation

Green Products Compilation

Find the environmental requirements of your next purchase

Search

Products | Services

Appliances

Commercial and residential appliances, such as clothes washers, ovens, and refrigerators.

23 PRODUCTS

Building Finishes

Building interior products that provide finishing touches, such as carpeting, wallboards, paint and stains, and signage.

25 PRODUCTS

Building Furnishings

Products used inside buildings, such as furniture, ice and vending machines, and water coolers.

5 PRODUCTS

Cafeteria Products

Products used in the operation and maintenance of cafeterias, including tableware, appliances, and grease traps.

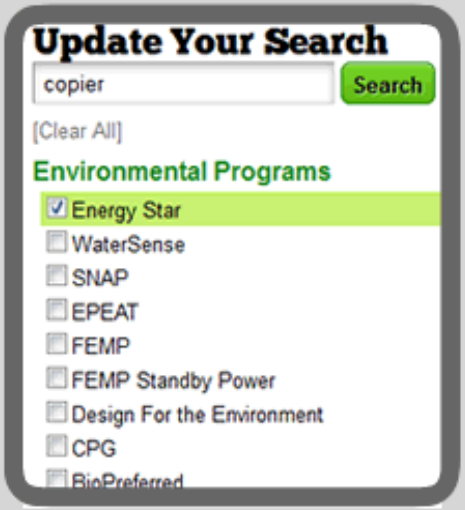
26 PRODUCTS

Cleaning Products

Institutional, industrial, and miscellaneous other cleaning products.

34 PRODUCTS

Or Search for a Specific Product



Find out about Environmental Programs

Learn More

Download GPC Data

Sustainable Facilities Tool

Log On

Search

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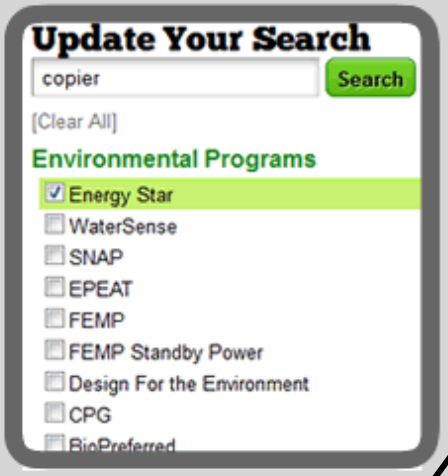


Find out about Environmental Programs

Learn More

Cleaning Products
Construction Materials
Contracted Printing Services
Doors and Windows
HVAC/Mechanical
Landscaping
Lighting and Ceiling Fans
Lube, Oil, Hydraulic Fluid, & Grease
Miscellaneous
Non-Paper Office Products
Office Electronics
Paper Office Products
Park and Recreation
Personal Care
Plumbing Systems
Refrigeration & AC
Renewable Energy
Roadway Construction

Adhesive and Mastic Removers +

Last Updated: 2/8/2013 1:18:28 PM

Air Fresheners and Deodorizers +

Last Updated: 9/4/2012 1:46:11 PM

Animal Cleaning Products +

Last Updated: 12/27/2012 2:37:38 PM

Asphalt and Tar Removers +

Last Updated: 9/4/2012 1:47:23 PM

Bathroom and Spa Cleaners -

Last Updated: 2/20/2013 8:51:54 AM

Procurement Info *i*

\+ 74% minimum biobased content

BioPreferred *

Design For the Environment

Where to Buy *i*

Schedule 51 V SIN 105 001

Schedule 51 V SIN 105 002

Buy on GSA Advantage!

AbilityOne

GSA Global Supply

Legal Requirements *i*

FAR Subpart 23.7 Contracting for Environmentally Preferable Products and Services

FAR Subpart 23.4 Use of Recovered Materials and Biobased Products

FAR Subpart 23.1 Sustainable Acquisition Policy

Additional Guidance

BioPreferred maintains an electronic product catalog listing products that either 1. are eligible for preferred federal procurement, or 2. have earned the USDA Certified Biobased Product Label.

* - Federal agencies are required to purchase products as designated or specified under this program.

Creating Sustainable Acquisition Tools

- Linking the Green Products Compilation to acquisition planning tools
- Using third party standards and labels (e.g., EPEAT)
- Linking the GPC to purchasing systems
- Limiting what can be purchased

For More Information

www.sftool.gov/greenprocurement

Dana Arnold
dana.arnold@gsa.gov

Innovations for Sustainable Acquisition:

- Overview of Tools Under Development

Edward H. Rau

Chair, DHHS Sustainability Innovations Working Group

Division of Environmental Protection, ORFDO
National Institutes of Health
U.S. Department of Health and Human Services

Disruptive Innovations to Enable the New Order

(Executive Order 13514)

"Federal agencies shall… leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products and services."

- To meet this directive we have major challenges to overcome - we don't define sustainable products and services very well or have efficient, easy to use purchasing tools to ensure that we buy them.
- **A missed opportunity to apply hundreds of $billions in federal purchasing power to transform markets.**
- Implementation will require ***Disruptive Innovations***[1] – those that *create a new market* by applying a different set of *values (sustainable acquisition)*, which ultimately *(and unexpectedly)* overtakes an existing market.

[1]Clayton Christensen (1997) *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business *School* Press, ISBN 978-0-87584-585-2.

New Toxics Reduction Mandates

- Existing statutes provide only general guidance:
  -- Pollution Prevention Act (PPA)
  -- Resource Conservation and Recovery Act (RCRA)
- E.O. 13514 requires purchase of less toxic materials
- Federal Acquisition Regulation (FAR) Interim Rule (May 31, 2011) implements EO, requiring:
  -- Agencies to purchase less-toxic products
  -- Reduction of greenhouse gases in the supply chain
  -- Contracts to comply with agency Environmental Management Systems (EMSs), which often focus on hazardous substances.
- 45 CFR 74.44 – Federal grantees are now required to purchase products and services that “protect the environment”.

Two Tool Kits for Disruptive Innovation

THIS WEBINAR

- Overview of tools for reducing procurement of products *and services* containing or emitting toxic or environmentally damaging chemicals – *Substances of Concern*
- Will be incorporated into the new Sustainable Acquisition (SA) Tools

CONCURRENT PROJECT

- Development of advanced transaction-based, user friendly purchasing tools.
- Enable transition from single attribute Environmentally Preferable Purchasing (EPP) to multi-attribute sustainable acquisition

Toxicity Reduction Tools - Needs

- Health and environmental benefits of avoiding products containing Substances of Concern (SoCs)
- Tools and ecolabels to help procure less toxic products – just like those for other sustainability attributes (e.g., recycled content and energy efficiency)
- A process at National Institutes of Health to apply the knowledge gained from research programs to our own procurement systems.

Challenges to implementing requirements

- FAR doesn't define the terms "*toxicity*", "*less toxic*", "*non-toxic*" or "*alternatives*".
- Toxicity and ingredient data for objective comparison and selection of products and services is usually difficult to obtain.
- What is the priority of toxicity reduction versus other sustainability attributes: environmental, economic and product effectiveness?
- Vast array of products purchased – about 15,000 different products purchased by NIH each year.

Solution: An Interim List Based Approach

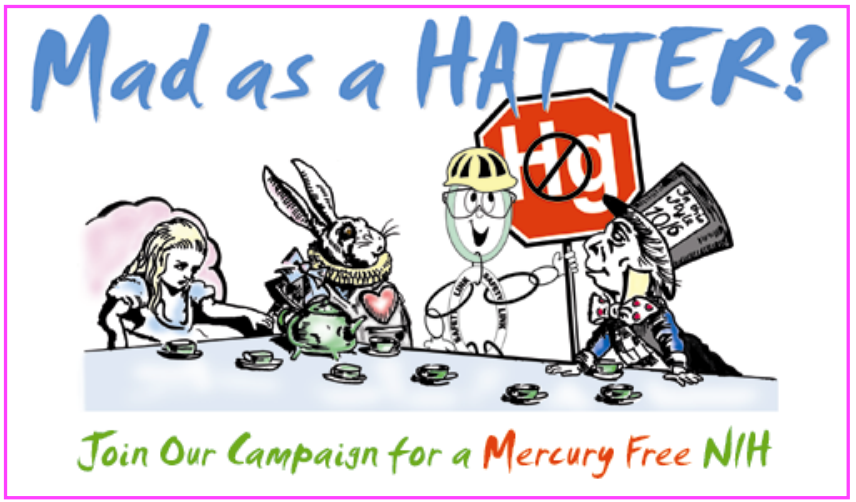
- Current strategy: promote the purchase of less-toxic products by:
  - (1) developing lists of SoCs to avoid
  - (2) providing general guidance
- Later – use specific restrictions on products containing them.
- Most feasible approach for rapid deployment
- Initial SoCs based on established lists and human exposure data from biomonitoring studies.
- EMSs can require suppliers to disclose listed SoCs in products/ services offered.
- Avoids need to conduct complex, resource-intensive approaches to evaluation and selection of less-toxic products and services for each product type.

Three SoC Listing Criteria

1. **Must have Significant Use in NIH Facilities (e.g., Building Materials) or Mission Activities**
2. **Poses Excessive Hazard or Risk to:**
   - Health, Safety or Security
   - Environment
   - Research Mission
   - Regulatory Compliance
   - Meeting other Sustainability Goals, e.g. preventing resource depletion, promoting environmental justice
3. **Suitable, Use-Specific Alternatives Must be Available**

Why doesn't the SoC Reduction Initiative use ecolabels?

- No federally recognized labels designate compliance with "non-toxic" or "less toxic" requirements.
- Existing certification programs do not include all SoC criteria.
- Few if any organizations apply ecolabels to biomedical products.
- We are considering use of logos or recommending development of new ecolabels such as those on the right for mercury-free products.
- The purchasing tools under development can easily incorporate future use of approved ecolabels.



First Tools - NIH's Interim List

- Objectives:
  - Improve both purchaser and supplier awareness of the *Substances of Concern*, products that contain them, where they are used and requirements to purchase less hazardous products.
  - Provide general guidance on availability of alternatives and other reduction methods for these substances.
  - Serve as checklist of chemicals for which disclosure may be required.
  - Post specific restrictions issued by our EMS and regulatory agencies.
- Interim data set includes about 50 groups of chemicals, 350 use-based substance listings.

Short Term Action Plan

- Establish formal processes to list substances and issue specific restrictions where alternatives to products and services containing/ emitting SoCs are available.
- Begin to integrate and activate SoC monitoring and controls in our Purchasing Online Tracking System (POTS):
  - Adding keywords for screening products (chemical names, uses, CAS#)
  - Begin tracking all purchases of chemicals listed as SoCs
  - Prohibit purchase of restricted products such as mercury thermometers
- In collaboration with GSA new biomedical product categories, designated products and less toxic alternatives will be added to GSA's Green Product Compilation for government-wide access.

What is the Green Product Compilation?

- Various federal agencies – USDA, EPA, DOE issue single attribute requirements e.g., biobased content, energy efficiency etc. for specific items (designated products).
- Some designations refer to ecolabels like Water Sense, EPEAT or Energy Star.
- All of these are compiled in the GPC and arranged by product categories such as Construction Materials, Plumbing Systems etc.
- The GPC is part of the Sustainable Facilities tool: http://sftool.gov/ in the tab “Procure” http://sftool.gov/GreenProcurement
- A GPC app for smart phones is available.

Long Term Plan: Complete the Tools

Next steps in tools development will require extensive interagency and private sector collaboration to:

- Clarify regulations and priority of SoC reduction in the multi-attribute framework of Sustainable Acquisition.
- Foster translational research to develop protocols for comparative toxicology and apply them to selection of healthier, more sustainable products and services.
- Develop an interagency database of products, services and sustainability attributes (including but not limited to SoC content) to support automated acquisition tools – a massive, complex undertaking.
- **Put Federal procurement on Detox!**

Status Update (March 2013)

- The SoC Reduction Initiative is now in place and on the NIH Environmental Management System website: www.nems.nih.gov
- Interim data set will be reconfigured and optimized for integration with purchasing tools (pending funding).
- Working with GSA Sustainability in Procurement program fellows to add a new category for biomedical products and the first toxicity related product designations to the Green Products Compilation.

NIH Substances of Concern Reduction Initiative

Contact Information

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Opportunities for Collaboration

Visit the new Sustainable Supply Chain Community of Practice Website on Data.gov--

Bringing together government, industry, associations, non-profits and academic institutions to achieve more sustainable supply chains.

And be a champion!

Website:
http://www.data.gov/supplychain/community/supplychain

A Quick Look at…
Sustainable Acquisition Tools

- In close collaboration with GSA we have an ongoing effort to develop *real tools* to enable sustainable acquisition by purchasers.

Poll Question #3

Does your agency or organization use centralized electronic systems for placing and tracking procurement transactions?

VOTE NOW

Specifications for the New Tools

Defined by Feedback from Purchasers

- They want a "One-Stop-Shopping" source
  - For micropurchases with credit cards to
  - Major contract awards
- Transaction based
- Paperless
- All requirements automatically accessed and matched to the item being purchased at time of transaction input by the user without searching for guidance and preferred sources.
- Minimal or no training requirements.

Specifications for the New Tools

Meeting Needs of Management

- Priorities, items to be covered and action(s) to be triggered by a match on requirements or guidance that can be set by the agency:
  - Track only
  - Provide guidance or
  - Block or require justification for non-compliant items
- Seamless tracking of all purchases, sustainability attributes and financial information
- Data compilation and reporting for data calls in real time by standardized or customized queries.

Design Platform and Transferability

- Where possible, build on existing procurement systems and data bases.
- Incorporate federal requirements and provisions for an agency's specific mission related products, services and Environmental Management System (EMS) requirements.
- No proprietary or licensed components.
- All products to be transferable.
- Meet today's needs - release product elements as they are available; develop incrementally.

We've Already Got Our First Products!

- The new, user friendly compilation of all federal requirements – GSA Green Product Compilation (GPC) http://sftool.gov/GreenProcurement
- NIH Purchasing Online Tracking System (POTS) with full GPC and SoC integration capability
- Application Program Interface (API) – allows GPC integration with other electronic systems.
- BookMarklet – GPC compliance tracking on smart phones without electronic purchasing system interface.

Sustainable Acquisition Tools

Information and Contacts

- More information on the POTS system is available on this website: http://intra.ninds.nih.gov/pots.asp
- POTS is transferable through a simple Material Transfer Agreement (MTA) from the NIH Tech Transfer Office.
- Information on the API and Bookmarklet tools is available from Noblis.

Contacts

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GPC API & Bookmarklet
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New Resource:
Purchasing for Healthy Schools

Coalition *for* Healthier Schools

...providing the national platform and
the forum for environmental health at school, since 2001...

Coordinated by Healthy Schools Network

Healthy Purchasing for Healthy Schools

A Guidance Memo

Green Cleaning + Five More Product Categories to Help Make Schools Healthier

Maintaining a healthy learning environment is an important part of ensuring that students receive the best possible education experience. Even the best curriculum and educators cannot succeed when students cannot concentrate, are absent from school or are uncomfortable in the classroom. One way to improve the health of the school indoor environment is to minimize the amount of toxic chemicals in products used in schools. Reducing toxic chemicals in products used in schools benefits children, teachers and custodial staff, particularly those with asthma and environmental sensitivities.

New Resource:
Purchasing for Healthy Schools

Green Cleaning + Five Product Categories Covered in Guidance Memo

- **Cleaning Supplies:** *Take simple steps to prevent dirt and grime and purchase less toxic and cost-effective cleaning supplies.*
- **Office Equipment:** *Choose EPEAT-registered computers, monitors, printers and copiers to significantly reduce chemical hazards and lower energy costs.*
- **Interior Wall and Ceiling Paints:** *Certified low-toxicity latex paints and coatings are better for indoor air quality, easy to clean up and cost effective.*
- **Office Supplies:** *Purchase PVC-free office supplies with high recycled content and minimal packaging to eliminate toxic exposures and reduce waste.*
- **Art Supplies:** *As a first step, identify art supplies labeled "AP" by the Art & Creative Materials Institute (ACMI), then further screen product Material Safety Data Sheets (MSDS). Avoid PVC, asbestos and other toxic chemicals.*
- **Furniture:** *Prevent exposure to formaldehyde and highly toxic flame retardants by purchasing furniture made of whole wood, glass, metal or chrome. Avoid furniture containing polyurethane foam because it also often contains highly toxic flame retardants.*

Questions?
Comments?

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