Green Purchasing In Tough Economic Times

Going Green Affordably

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Strategies to Keep Green Affordable

Price Is ALWAYS An Important Concern

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Keeping Green Affordable

- Price Preferences
- Lifecycle Costing
- Best Value Purchasing
- Cooperative Purchasing

Price Preference

- •Express a willingness to pay more for products or services with desired environmental attributes.
- Being used by a number of U.S. communities, including:
 - Chatham County, North Carolina (up to 15%)
 - Cincinnati, Ohio (up to 3%)
 - Jackson County, Missouri (up to 15%)
 - •Kalamazoo County, Michigan (up to 10%)
 - •Kansas City, Missouri (up to 15%)
 - •San Diego County, California (up to 5%)
 - •Vermont 5% for recycled-content products.
 - •Washington 10% for EPA-designated recycled-content products

Price Preference

- Some price preferences are limited to recycled-content products only:
 - Hendersonville, North Carolina (up to 15%)
 - •Indiana (up to 15%)
 - •King County, Washington (up to 10% for re-refined oil; up to 15% for paper)
 - Minnesota (up to 10%)
 - •Morro Bay, California (up to 10%)
 - •New Jersey (up to 15%)
 - •Oregon (up to 5%)
 - Pasquotank County, North Carolina (up to 10%)
 - •Phoenix, Arizona (up to 10% and up to 15% for paper)

- San Mateo County, California (up to 10%)
- •Santa Barbara, California (up to 12% for paper)
- Santa Clarita, California (up to 10%)
- Ventura County, California (up to 10% for paper)
- •Vermont (up to 5%)
- Washington (up to 10%)

29 states have price preferences for recycled-content paper

Operating Theory

Every purchase has hidden human health, environmental, and social implications.

Corollary One

A "green" product that doesn't work as well if not better than a traditional product is **not** a green product.

Corollary Two

A "green" product that is significantly more expensive than a traditional product is **not** a green product.

Going Green Can Save Money

- •Lee County, Florida, eliminated hazardous waste production in its fleet maintenance facilities and is saving \$17,000 annually.
- •Cape May, New Jersey, saved \$45,000 over five years by adopting integrated pest management practices.
- •Santa Monica, California, switched to green cleaning products eliminating 3,200 pounds of hazardous materials and reducing cleaning costs five percent.
- •Phoenix, Arizona, rated 5,800 chemical products based on their toxicity and potential for environmental harm.

Aberdeen Proving Ground

- •Paints meeting the standard are on average \$1.76 less expensive per gallon.
- Saves \$25,000 annually in avoided disposal costs.
- •Re-Nu-It facility reduces paint purchases by \$10,000 annually.
- Total savings: \$60,000 a year.

Paint Resources



EPA's *Painting the Town Green* (EPA742-R-99-005) November 1999

www.epa.gov/oppt/epp/pdfs/paint.pdf

EcoLogo

www.ecologo.org

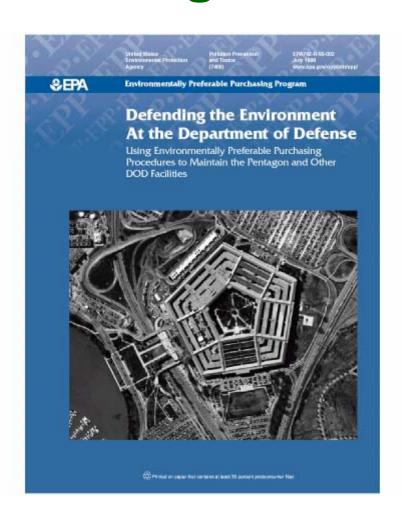
Green Seal

www.greenseal.org

Pentagon Renovation

- Decrease energy consumption 55 to 60 percent.
- •Reduce water consumption by 31 million gallons, a 25 percent savings.
- Double the recycling rate.
- •Improve indoor air quality.
- •Increase worker productivity 6 percent, a \$72 million annual savings.

Pentagon Renovation



Find it in the resources section of:

www.newdream.org/procure

Long Fed Gov History

- 12759 Federal Energy
 Management (April 17, 1991)
- 12843 Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances (April 21, 1993)
- 12845 Requiring Agencies to Purchase Energy Efficient Computer Equipment (April 21, 1993)
- 12056 Endoral Camplianas with

Long Fed Gov History

- 13031 Federal Alternative Fueled Vehicle Leadership (December 13, 1996)
- 13101 Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition (September 16, 1998)
- 13123 Greening the Government Through Energy Efficient

Long Fed Gov History

- 13221—Energy Efficient Standby Power Devices (July 31, 2001)
- 13423- Strengthening Federal Environmental, Energy, and Transportation Management (January 24, 2007)
- 13514—Federal Leadership in Environmental, Energy, and Economic Performance (October 5, 2000)

Policy Directives

- •Office of Federal Procurement Policy Letter 92-4 on Procurement of Environmentally-Sound and Energy-Efficient Products and Services (March 20, 1997)
- Presidential Memorandum on Environmentally and Economically Beneficial Practices on Federal Landscaped Grounds
- •Federal Acquisition Regulation (FAR) amendments

It's Everywhere in the FAR

Part 7--Acquisition Planning

Part 10--Market Research

Part 11--Describing Agency Needs

Part 12--Commercial Item

Part 15--Contracting by Negotiation

Part 23--Environmental, Conservation, Occupational Safety, and Drug-Free Workplace

Part 36--Construction and Architect-Engineer Contracts

Part 42--Contract Administration

Part 52--Solicitation Provisions and Contract Clauses

FAR Requirements

Federal Agencies are required to:

- •"[I]mplement cost-effective contracting preference programs favoring the acquisition of environmentally preferable and energy-efficient products and services." {FAR 23.704(a)}
- •"[P]repare product descriptions to achieve maximum practicable use of recovered materials, other materials that are environmentally preferable, and products that are energy-efficient." {FAR 11.101(b)}.

More FAR Requirements

- •Obtain products from within the upper 25 percent of the most energy-efficient products or products that are at least 10 percent more efficient than the minimum Federal energy-efficiency standards.
- •Eliminate or reduce hazardous waste generation and the need for special handling, storage, treatment, and disposal.
- •Promote the use of nonhazardous and postconsumer recycledcontent materials.
- •Examine lifecycle costs, not just initial costs, when comparing prices.
- •Consider cost-effective waste reduction opportunities when creating plans, drawings, specifications, standards, and other product descriptions.

GSA Sustainability Plan

- "GSA will continually reassess its operations to wring out waste, eliminate pollution, and
- •GSA will Green its Supply Chain
- •GSA CHIMANA Zaro Environmentals
- •GSA will Use its Influe (1) ether the Environmental Impact of the Federal Government.

Federal Green Purchasing The Federal government has several related green

The Federal government has several related green purchasing programs:

- "Buy Recycled" aka Comprehensive Procurement Guidelines (CPG)
- Energy Star and energy-efficient products
- WaterSense and water-efficiency products
- Alternative fuel vehicles and alternative fuels
- Biobased
- Non-ozone depleting substances
- Environmentally Preferable Purchasing (EPP)

Buy Recycled (CPG)

The Comprehensive Procurement Guidelines (CPG) Program:

- Established by RCRA Section 6002
- •Run by the U.S. Environmental Protection Agency (EPA)
- Identifies recycled-content products
- Recommends recycled-content percentages



CPG Product Categories

- Paper and Paper Products
- Vehicles
- Construction
- Transportation
- Parks and Recreation
- Landscaping
- Non-Paper Office Products
- Miscellaneous



www.epa.gov/cpg

Energy Star

There are more than 40 categories of energyefficient products broken into the following major groupings:

- Appliances
- Heating and Cooling
- Home Electronics
- Office Equipment

- Lighting
- Commercial Food Services
- Other



Water Sense

- •EPA program to identify water efficient products.
- •Covers products like toilets, urinals, sinks, and irrigation systems.
- •All products must be *certified* by an independent third-party.

www.epa.gov/watersense



Biobased Products

- •The 2002 Farm Bill included extensive requirements for federal agencies to buy biobased products.
- •The U.S. Department of Agriculture has established a biopreferred program similar to EPA's "Buy Recycled" (CPG) program.

<www.biopreferred.gov>

And...to get right to the list of designated products, check out: www.biopreferred.gov/ProposedAndFinalItemDesignations.aspx>

Alternative Fuel & Vehicles

- •The Energy Policy Act requires federal agencies to purchase alternative fueled vehicles and fuels.
- •Extensive information is available at:
- <www.eere.energy.gov/afdc/index.html>

Non-Ozone Depleting Chemicals

- •The Clean Air Act prohibits purchases of ozone depleting substances.
- •EPA maintains a list of alternatives at:

<www.epa.gov/spdpublc/snap/substitutes.html>



EPP Program

- •EPA's Environmentally Preferable Purchasing Program encourages purchasers to examine multiple environmental attributes when making purchasing decisions.
- The EPP Program maintains an extensive list of resources at:

<www.epa.gov/oppt/epp>

Pest Control

Saving Money Going Green

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Pest Management

- •Every year, the United States uses 4.5 billion pounds of chemicals to control insects, rodents, and weeds.
- •These activities are regulated under CERCLA, CWA, CAA, EPCRA, FIFRA, and ESA.

Integrated Pest Management

- Cape May County, New Jersey
- Chatham County, North Carolina
- Massachusetts
- King County, Washington
- Monroe County, Indiana
- Portland, Oregon
- San Francisco, California
- Santa Monica, California

IPM in San Francisco

- •IPM ordinance passed in 1996.
- Established a citywide IPM coordinator.
- Pest control contractors required to use less toxic approaches first.
- •If needed, contractors must select from a list of 45 reduced-risk pesticides.
- •One-time exemptions available from IPM coordinator.

IPM in San Francisco

- San Francisco's Recreation and Parks
 Department reduced pesticide use by 60 percent.
- •In 1999, 72 percent of pesticide contractor visits required no pesticide applications.

IPM Cost Comparison

| Base Case "Cover Spray" Application | | | | |
|--|----------------|------------|----------------------|---------------|
| | Base Date Cost | Occurrence | Discount Factor (3%) | Present Value |
| Investment Cost | \$5,000 | Base Year | 1.00 | \$5,000 |
| Pesticides | \$7,970 | Annual | 14.88 | \$118,573 |
| Monitoring | \$0 | Annual | 14.88 | \$0 |
| Other Labor | \$2,500 | Annual | 14.88 | \$37,194 |
| Total | | | | \$160,707 |
| Alternative – Integrated Pest Management | | | | |
| Investment Cost | \$10,000 | Base Year | 1.00 | \$10,000 |
| Pesticides | \$3,583 | Annual | 14.88 | \$53,306 |
| Monitoring | \$2,642 | Annual | 14.88 | \$39,306 |
| Other Labor | \$2,500 | Annual | 14.88 | \$37,194 |
| Total | | | | \$139,806 |

Other IPM Success Stories

- •Monroe County, Indiana, decreased pest control costs by 35 percent and pesticide use by 90 percent.
- •Santa Monica, California, reduced pest control costs by 30 percent and pest complaints have decreased.
- •Cape May County, New Jersey, saved \$45,000 over five years.

IPM Resources

EPA has an extensive list of resources at

http://www.epa.gov/pesticides/ipm/

Saving More than Energy

Energy Efficiency and More

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Energy Star





www.energystar.gov

- •Founded 1992 by U.S. Government
- •Focuses on a single issue energy efficiency

EcoLogo Certified

Photocopiers

Fax Machines



Greener Computers



www.epeat.net

IEEE 1680 Performance

- Environmentally Sensitive Materials
- Materials Selection
- Design for End of Life
- Product Longevity/Life Cycle Extension
- Energy Conservation
- End of Life Management
- Corporate Performance

IEEE 1680 Tiers



Bronze- Meets the 23 mandatory criteria

Silver – Meets 23 mandatory criteria and at least 50 percent of the optional criteria

Gold – Meets 23 mandatory criteria and at least 75 percent of the optional criteria

Recommended Contract Language

- "Products purchased under this contract must provide demonstrable proof of meeting the Energy Star standard. The Energy Star standard
- 18 Pavailats partchased under this contract meust sprovide dëmonstrable proof of meeting the IEEE 1680 standard. A summary of the IEEE 1680 standard is available at

Recommended Contract Language