

# WHY BUY GREEN?



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# GREEN PRODUCTS DEFINED

- Any good(s) or service(s) with a reduced negative effect on human health and the environment, when compared to that of the standard good or service which may be in use.
- A comparison of such may include:
  - Raw material acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, disposal, energy efficiency, recycled content resource use, transportation, and durability

# IS BUYING GREEN NJ LEGAL?

Yes – According to New Jersey Local Public Contracts Law

- NJ Enacted P.L. 2007, c 332, in 2007 which amended the LPCL (C.40A:11-9)
  - Requires Purchasing Agents to obtain “Green Purchasing” training
  - “Green Purchasing” defined as:
    - The means of procuring products, commodities or services that have a lesser or reduced negative effect on human health and the environment when compared with competing commodities or services
  - Items considered in this comparison may include but are not limited to:
    - Raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, disposal, energy efficiency, recycled content resource use, transportation, durability

# DOES GREEN PURCHASING COST MORE?

## Comparison Example of Soap to Clean Vehicles

- **Currently used product:** **\$1.25/gallon**  
Mixes at **2 parts water to 1 part soap**, is delivered in 55-gallon non-returnable drums, and requires 20-25 minutes of labor to mix it.
- **New product:** **\$ 2.00/gallon**  
Mixes at **30 parts water to 1 part soap**, is pumped directly into a bulk storage tank provided at no cost by the vendor, self-mixing mechanism inside tank means no additional labor is needed.

## SOAP COST COMPARISON

COST	CURRENT PRODUCT	SUBSTITUTE PRODUCT
Price of Concentrate	\$1.25/gallon	\$2.00/gallon
Price/gallon	1:2 ratio = \$0.625/gallon	1:30 = \$0.067/gallon
Cost of 1 year supply (42,900 gallons)	\$26,812.50	\$2,874.30
Cost of local unit labor to prepare soap	390 drums x 25 minutes	N/A
@ \$21 per hour =	\$3,412.50	N/A
Cost of Waste Disposal	2 tons @ \$151/ton = \$302	\$0
<b>TOTAL ANNUAL COST</b>	<b>\$30,527.00</b>	<b>\$2,874.30</b>

# GREEN PURCHASING, MEANS?

- Think of Green Purchasing as a consideration of a products environmental attributes. How products are specified, what their compounds include, how they get delivered, etc.

Is there a green consideration for the following?

- Toxicity
- Re-usability
- Recycled Content
- Reduced packaging
- Rebuilt or Re-manufactured Products
- ADD ON a big consideration for Energy Efficiency

# ENERGY STAR

- Voluntary partnership between USEPA and the US Department of Energy
- Promotes energy efficient products through product labeling and consumer education
- Products that carry the Energy Star label use less energy and reduce both energy costs and environmental impacts
- For a list of Energy Star products and guidelines to purchase, go to <http://www.energystar.gov/>

# ENERGY STAR GUIDELINES TO PURCHASE BY

- Air Conditioners
- Appliances
- Ballasts
- Boilers
- Chillers
- Computers
- Copiers
- Electric Motors
- Exit Signs
- Fax Machines
- Fluorescent Lighting
- Furnaces
- Heat Pumps
- High Intensity Discharge Lighting (HID)
- Monitors
- Printers
- Roofing
- Scanners
- Transformers
- Vending Machines



# WHAT ABOUT THE LIGHT\$?

**Imagine a fifteen-foot high ladder**



When you have LED lightbulbs the need to change them is reduced dramatically.

They can last for over a decade, which means the janitorial staff goes up and down the ladder far less frequently!

LED lighting uses a reduced amount of electricity, so much so that the savings is measurable in a fairly short time!

How do I know that?

# GREEN GOVERNMENT SAVE\$

- Safety concerns, enhanced recycling, waste prevention, and environmentally responsible purchasing offer a variety of advantages to the operation of a local NJ Government such as:
  - Increased worker safety
  - Increased awareness of environmental issues
  - Enhanced communication between and among local units
  - Opportunities for resource conservation
  - Long term reductions in purchasing and labor costs
  - Providing a safer environment for the public

# POLICY CONSIDERATIONS

- Defining the duties for implementing a Green Purchasing Policy
  - Who will ensure that purchasing procedures do not discriminate against environmentally responsible products?
  - Who will designate products and services as environmentally responsible?
  - Who will establish recycled content standards?
  - Who will develop specifications for the procurement and use of environmentally responsible products?

# BUYING GREEN TO PREVENT WASTE

Waste preventing products can include, but are not limited to:

- \* Durable goods
- \* Reusable items
- \* Rechargeable batteries
- \* Refillable containers
- \* Achieve the same performance as their more wasteful counterparts (like the earlier soap analogy)
- \* Striving to reduce waste quantities and costs

# WHAT TO RECYCLE

## PAPER

- Highgrade office paper (white bond, computer printer, copier, printer, letterhead)
- Mixed paper (newspapers, magazines, catalogs, phone books, colored paper, glossy paper, folders, envelopes, paper bags, paperboard)
- Corrugated cardboard

## BOTTLES, CANS & FOIL

- Glass bottles & jars
- Metal cans
- Small metal items (composed of more than 50% metal. ex. binder clips)
- Plastic bottles & jugs
- Aluminum foil & foil products (tins, trays)
- Tabletop milk & juice cartons/juice boxes
- Bulk metal (ex. window frames, filing cabinets)

# TRY TO REDUCE TOXICITY

Protect employees by reducing or eliminating the purchase of products if ingredients are:

**HIGHLY TOXIC**

**CARCINOGENIC**

***FLAMMABLE***

which may:

**Cause Skin Irritation**

**Cause Respiratory Problems**

**Cause Allergic Reactions**

# DEFINING TOXIC HAZZARDS

**HIGHLY TOXIC** – containing poisonous substances

- ◊ **CARCINOGENIC** - substance that can cause cancer
- **FLAMMABLE** - capable of being set on fire and of burning quickly

# INDUSTRIAL TOXIC CHEMICALS

- 1.1.1-trichloroethane
- Benzene
- Cadmium
- Carbon tetrachloride
- Chloroform
- Chromium
- Cyanide
- Lead
- Mercury
- Methyl ethyl ketone
- Methyl isobutyl ketone
- Methylene chloride
- Nickel
- Tetrachloroethylene
- Toluene
- Trichloroethylene
- Xylenes



# SAFETY DATA SHEETS (MSDS)

- Essential tool for evaluating products or their ingredients
- Prepared by the product's manufacturer
- Provides basic information on the products:
  - Ingredients
  - Hazardous characteristics
  - Health and safety impacts
  - Information on how to respond to spills, accidental contact and other exposures

# CREATE A SAFER WORKPLACE

REDUCING TOXINS AT THE WORKPLACE IS LOGICAL!

- Reduced liability exposure
- Reduced workers compensation claims
- Reduce worker absences due to illness or injury
- Reduce costs

Talk with staff who use toxic products daily, have them test and select substitutes to see if the tasks can be handled with less toxic goods. Be sure they understand the reasons for phasing out the current product and to gauge their satisfaction with the new product.

# MOVING GREENLY FORWARD

- Will help reduce the environmental impact of products and services commonly used by local units, and can have a positive impact on the bottom line, in hard and soft costs.

The Side Effects of Green Purchasing to consider:

- Increased safety for staff and the public
- Reduce toxicity to employees, the public and the environment
- Contain recycled material
- Conserve energy
- Prevent waste
- Reduce costs

# Q&A – AS NEEDED

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