CABARRUS COUNTY:
GREEN PURCHASING PLAN

Kalpana Vallabhaneni, Kelly Koriakin, Greg Righter, Carmen Davis, Israel
Goals and Objectives

- Cabarrus County’s Purchasing Program
  - Analyze
  - Revise
  - Improve
Cabarrus County
Cabarrus County
Environmentally Preferable Products

- "Cradle to Cradle" approach
- What makes a product 'green'

![Image of eco-friendly products and life cycle diagram]
Green Certification Programs

[Logos for Green Seal, FSC, and Energy Star]
Current Purchasing
Basket of Goods

- Filler paper
- Post its
- Pens
- Legal pads
- Toner

- File folders
- Envelopes
- Paper towels
- Wirebound notebook
- Clipboard
Current Purchasing

Staples

OfficeMax

OfficeDepot
“Easy on the Planet”
- Buying Green
- Third-party certifications
- Save Energy
- Greener State of Mind
- Easy To Use
Company: Office Depot

- Greener Office
  - Has varying shades of green depending on how environmentally friendly the product is
  - Easy to use links and guides
  - Discusses third-party certifications

Here's Your Guide to Buying Green
Company: Office Max

- Journey Into a Land of Green
  - “Audio and visual feast”
  - Hard to find green products
  - Not much advice for going green
  - No links
Purchasing: Recommendations

- If required to purchase all office supplies from one supplier, go with Staples
- If multiple sources can be used, buy best item as presented
- When shopping online, Staples and OfficeDepot offer comparable sites. OfficeMax is the lesser of the three
Janitorial Supplies
Long-term, binding contract

1975- emphasize worker and environmental safety

Examples of their new technology:
- Smart Sac
- Liquescent
- Action Pacs
Buckeye International Timeline

**1975**
Buckeye emphasizes worker and environmental safety through better products and packaging.

**1975**
Buckeye introduces the Action Pac, the first recyclable bag-in-a-box in the industry.

**1987**
Green Seal Established in Washington, D.C.

**1989**
Buckeye removes butyl from all product formulations.

**1993**
What to avoid:

<table>
<thead>
<tr>
<th>Product:</th>
<th>What to avoid in the ingredients:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol Cans</td>
<td>Dimethyl ether,</td>
</tr>
<tr>
<td></td>
<td>liquefied petroleum gas (LPG),</td>
</tr>
<tr>
<td></td>
<td>Toulene</td>
</tr>
<tr>
<td>Deodorizers</td>
<td>Cresols</td>
</tr>
<tr>
<td></td>
<td>Formaldehyde</td>
</tr>
<tr>
<td></td>
<td>Naphthalene</td>
</tr>
<tr>
<td></td>
<td>Phenol</td>
</tr>
<tr>
<td></td>
<td>Xylene</td>
</tr>
<tr>
<td>Disinfectants</td>
<td>Ammonia</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
</tr>
<tr>
<td></td>
<td>Cresols</td>
</tr>
<tr>
<td></td>
<td>Formaldehyde</td>
</tr>
<tr>
<td></td>
<td>Methylene chloride</td>
</tr>
<tr>
<td></td>
<td>naphthalene</td>
</tr>
<tr>
<td>Floor Cleaner/ Stripper</td>
<td>2-butoxyethanol</td>
</tr>
<tr>
<td></td>
<td>ethanolamine</td>
</tr>
<tr>
<td></td>
<td>potassium hydroxide</td>
</tr>
<tr>
<td></td>
<td>sodium hydroxide</td>
</tr>
<tr>
<td>Toilet Bowl/Urinal Cleaner</td>
<td>Hydrochloric acid</td>
</tr>
<tr>
<td></td>
<td>perchloroethylene</td>
</tr>
<tr>
<td></td>
<td>Phosphoric acid</td>
</tr>
</tbody>
</table>
Buckeye International
Certified Green Products

- TRUE 7®
  - pH neutral
  - Safe on all floor finishes
  - Ideal for autoscrubbers or mop buckets

- TENACITY®
  - Multi-use/multi-dilutions
  - Deep cleaner
  - Excellent for top scrubbing

- RAM®
  - Powerful degreaser
  - Multi-dilutions
  - Aggressive spray & wipe applications

- STAR SPRAY® CONCENTRATE
  - Formulated without alcohol, butyl, or ammonia
  - Safe on all glass & Plexiglas®
  - Great light-duty cleaner

- VERDE®
  - Formulated without Zinc and Ammonia
  - Exceptional high gloss
  - Outstanding durability

- PENETRATE®
  - Powerful stripper
  - Low pH - Non DOT corrosive
  - No harsh odor

- MARAUDER®
  - Multi-use/multi-dilutions
  - Turbo power with H₂O₂
  - Cleans & whitens grout
  - Outstanding deodorizer

- BUCKEYE GREEN LIGHT®
  - Super concentrated
  - Easy-to-use packaging
  - “measuring chamber”
  - Superior cleaner
Current Options versus Green Option from Buckeye International

<table>
<thead>
<tr>
<th></th>
<th>Current Option</th>
<th>Green Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Finish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Light</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detergent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Star Spray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand Soap</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Price per Item ($)
Janitorial: Recommendations

- When possible, eliminate toxic, flammable, and carcinogenic products
- Buy products with the smallest percent of hazardous material
  - Located on MSDS
- Reduce amount of product used
- Make a need based cleaning schedule
- Properly dispose of chemicals
Office Supplies
Office Supplies: Common Purchases
Office Supplies: Quantifying

- Methods

- Environmental Impact Calculators
  - Environmental Paper Network-Paper Calculator
    - Version 3.2

RESULTS
Office Supplies: Paper

Percentage Decrease of Environmental Impacts when Switching from 0% Recycled Content Paper

- Wood Use (tons):
  - 30% Recycled Paper: 30.56
  - 50% Recycled Paper: 16.63
  - 100% Recycled Paper: 10.02

- Net Energy (Million BTU's):
  - 30% Recycled Paper: 10.02
  - 50% Recycled Paper: 11.08
  - 100% Recycled Paper: 18.47

- Greenhouse Gases (pounds CO2 equiv.):
  - 30% Recycled Paper: 0.00
  - 50% Recycled Paper: 0.00
  - 100% Recycled Paper: 0.00

- Water Consumption (Gallons):
  - 30% Recycled Paper: 14.73
  - 50% Recycled Paper: 24.54
  - 100% Recycled Paper: 49.09

- Solid Waste (pounds):
  - 30% Recycled Paper: 11.72
  - 50% Recycled Paper: 19.54
  - 100% Recycled Paper: 39.08
Office Supplies: Paper

TREES SAVED - 0% to 30% Recycled content paper
Office Supplies: Paper

Price Comparison of Paper with Different % Recycled Content

Percentage Increase in Price when Switching from 0% Recycled Content Paper
Office Supplies: Toner
Office Supplies: Toner

- The other option
Office Supplies: Recommendations

- Paper
- Toner
- Office Supplies
  - 3rd Party Certifications

What's the plan?
Survey
Survey

For which County department do you work?

In an average month, how many times do you purchase office supplies for your department?

In an average month, how many dollars do you spend on office supplies for your department?

Please list the three office supply items you purchase most frequently.

Where do you usually purchase office supplies for your department? Check all that apply.

- Online from Office Max
- In-store from Office Max
- Online from Staples
- In-store from Staples
- Online from a chain retailer (other than previously listed)
- In-store from a chain retailer (other than previously listed)
- Online from a local retailer
- In-store from a local retailer

If you selected a local or chain retailer other than Office Max or Staples, please specify.
Employees unaware of product 'green' status (i.e. certifications)

Consideration for making purchasing decisions: majority= saving money

30% recycled content for paper

Positive recycling culture
Purchasing Survey: Recommendations

- Increase number of bins
- Increase awareness/knowledge
- Increase purchasing options
Conclusion
Questions??

- Green Company Initiatives
- Green Janitorial Products
- Sustainable Office Supply Products
- Survey Analysis
Works Cited

- Buckeye International, Inc.
  http://buckeyeinternational.com/
Acknowledgements

- Kevin Grant
- Elizabeth Shay