

# 5 Wrap-Up

## 5.1 Environmentally Preferable Purchasing

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**In This Section** - With what we have covered so far you will be able to evaluate your highest risk work areas, select the janitorial products that are safe for your workers to use, and decrease the impact that your work has both on building occupants and on the environment in general.

As a next step you may want to set up a program to purchase safer and environmentally preferable products for all of your work areas. In the pages that follow, we share some ideas and lessons learned in the City of Santa Monica, State of Massachusetts, and other agencies that have put such programs in place.

In addition, we highlight places to get more information about janitorial product safety and setting up purchasing programs.

**Ask For A Product Review** - If you are either located in or do janitorial work in Santa Clara County or the City of Richmond you may ask the project team to do a free review of your products. Call (925) 283-8121, or FAX the enclosed request form to (925) 283-8121.

In addition, you may request free samples of the environmentally preferable products that were demonstrated in today's workshop.

## **5.1 Environmentally Preferable Purchasing**

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Purchasing of environmentally preferable (EP) products inevitably involves a process of behavior change. End users such as mechanics, custodians, and office staff have been using traditional products for many years, and are often satisfied with their results. When environmental managers suggest a switch to EP products, they are usually met with resistance simply because any change is difficult, and it is human nature to resist change. Yet behaviors can be changed, and attitudes towards new products and systems improved. Behavior change involves much more than just issuing a carefully-worded policy statement or telling janitors to switch product "A" for product "B".

A careful review of EP purchasing efforts across the country reveals a common approach in programs that have successfully changed purchasing behaviors. Listed below are the four common elements in these programs:

**Management Support**  
Purchasing Agents  
Environmental Staff  
**Training of End Users**

We call this the "Sandwich Approach" to environmental purchasing. All elements must be in place or the "sandwich" will fall apart.

### **Obtain Management Support**

Support from decision-level management is important if the program is to be successful. For small pilot projects, support from the facility manager of a single building may be adequate. For larger programs support from city administrators or elected officials may be required. Support at this level is imperative if busy managers and staff are to give sufficient time to implement the change.

### **Train End Users**

No matter how well worded the policy or how effective the product, if the people implementing the change do not believe in the program, all efforts are doomed to fail. Attitudes like "if it doesn't smell like bleach it won't clean" or "if its got Environmental on the label it must be weak, and will result in more effort on my part to get the job done" must be addressed head on. These attitudes can also result in

overuse of product, a practice which is potentially harmful to the user and is not good for the environment.

End users must be trained by a credible source, not by the environmental staff at their agency, who probably have never cleaned a public restroom. In addition, including these end-users early on in product selection and testing will turn skeptics into stake-holders. End users often become the best trainers, and should be used as models of success when approaching new departments.

## **Involve Purchasing Agents**

In all large institutions, purchasing is done according to a complex and detailed set of regulations and policies. Bid processes are accountable to public scrutiny, and budgets are carefully guarded by elected officials and civil servants. Purchasing agents are skilled in locating almost any commodity, and are well trained in the evaluation of lowest cost bids.

Purchasing agents are usually not trained to develop environmental criteria or to read a material safety data sheet to evaluate the human health impacts of various product ingredients. However, these agents are critical to the success of any institutional purchasing program. They assure that the bid process goes smoothly, and can help with the enforcement of EP purchasing policies by rejecting requests for products that do not have the required approval of an environmental office.

## **Involve Environmental Staff**

One of the most challenging and time-consuming aspects of EP Purchasing is defining what is meant by Environmentally Preferable. Unfortunately no universal definition exists for any product category, and each locality may find it has a unique set of priorities regarding human health and environmental protection. The environmental staff must provide the technical expertise and work with end users to determine product specifications. Purchasing agents and end-users do not have the time to develop technical specifications, and such details are rarely spelled out in the policy issued by top management. The environmental staff must become the accountable member of the team whose job it is to facilitate all elements of the "sandwich".

## **Set Up The Purchasing System**

Once the “sandwich” is set in place, the purchasing process is ready to begin. There are five key steps in this process of procuring EP products and services:

- Step 1: Establish Desired Goals
- Step 2: Design an Effective Bid Process
- Step 3: Review and Score Vendor Responses
- Step 4: Test Product Effectiveness
- Step 5: Award Purchase Order(s)

Adopted from a forthcoming article in Pollution Prevention Review, by Thomas Barron, Debbie Raphael, and Lara Sutherland.

## 5.2 Where To Get More Information

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There are a number of places to go for more information about reducing the use of janitorial chemicals. We suggest that you visit our web site:

<http://www.westp2net.org/Janitorial/jp4.htm>

We also suggest that you consider the following books:

Berry, Michael, Protecting The Built Environment: Cleaning For Health, Cleaning Management Institute, 1994. Call (518) 783-1281.

Bishop, Jeff, et al., More Answers Than You Have Questions About Carpet Cleaning, Volume II, Clean Care Seminars, 1997. Call (334) 983-8730.

Daugherty, Jack, Assessment of Chemical Exposures, Lewis Publishers, 1997.

In addition, we recommend that you join an industry trade association and subscribe to trade publications. Examples include:

Services (BSCAI)	(800) 368-3414
CleanFax	(518) 783-1281
Cleaning & Maint. Distribution	(518) 783-1281
Contracting Profits	FAX (413) 637-4343
Maintenance Solutions	FAX (413) 637-4343

If you use e-mail, you can join electronic discussion forums such as the Cleaning & Maintenance Email Forum by contacting the list manager at:

<ELam@ntpinc.com>

## 5.3 Concluding Thoughts

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Environmentally preferable purchasing is an important step toward reducing the impacts of building maintenance products upon the janitorial user, building occupant, and the environment in general. We have outlined our experiences with specifying, evaluating, and testing products that meet these goals.

We conclude by highlighting three major problem areas that need to be addressed jointly by environmental professionals, janitorial product suppliers, and the specialty chemicals manufacturing industry.

We invite you to become involved. Tell your suppliers, congress people, and anyone else who will listen what your opinions are.

### **We Need Better MSDSs**

To be at all useful for making health and environmental decisions, material safety data sheets need to voluntarily list all ingredients in the product, not just those mandated by regulations. The relative quantity of each ingredient also needs to be stated, although providing a range such as “15% to 20%” is sufficient for most purposes.

In addition, printed MSDSs need to be clearly written, well organized, and legible. About a tenth of all MSDSs we have evaluated either cannot be read because of small or distorted type, or are hard to use because some of the information is in non-standard locations.

Finally, we encourage all product suppliers to publish their MSDSs on the internet. Direct and instant access is far better than waiting weeks or months to receive a requested data sheet.

### **We Need Better Technical Information**

We suggest that vendors begin providing more information to janitors who wish to use their products. For example, we think that product literature should emphasize:

- How to store, mix, and use products;
- How to avoid incompatibilities with other products;
- How to easily access the supplier's customer service system with health, safety, and environmental questions; and
- How to properly dispose of unused product, wastes, and containers.

## **We Need Better Product Labels**

We encourage nation-wide development of standard janitorial product labels like those now being used for food packaging. Key information to display includes explicit identification of dangers that the product poses, a list of toxic ingredients, recommended personal protective equipment, and guidance for proper emergency response. Containers should also explain where to get more information.

Adopted from a forthcoming article in [Pollution Prevention Review](#) by Thomas Barron, Debbie Raphael, and Lara Sutherland.