Massachusetts MA EPP Environmentally Preferable Products Procurement Program

EPP Buyer Update

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The Convenience Factor

New Recycling Program Boosts Cartridge Collection

In FY2004, purchasing remanufactured toner cartridges saved the state $429,000 (30-50% savings per cartridge) and prevented:

- Enough waste to fill 28 loaded garbage trucks,
- An energy equivalent of 343 barrels of oil.

Toner cartridges are relatively simple to recycle, but not all state agencies have been taking advantage of this cost saving characteristic. Why? Some say it's a hassle to repackage and ship back to the seller; others aren't sure where to send them.

In the fall of 2005, the Bureau of State Office Buildings (BSB) decided to make cartridge recycling more convenient for all occupants of the 21-storey McCormack Building at One Ashburton Place. "Recycling toner cartridges is easy now," says Susan Egidio, Clerk IV for the Operational Services Division (OSD), "I just put the used cartridge in its original box or a bag and place it in the green recycling bin in the hall outside our office door. It's much easier than going all the way to the mail facility to do that."

The new program is the result of a partnership effort between the BSB, OSD's EPP Program, G.A. Blanco & Sons (an OFF16 contractor) and their cartridge remanufacturer, Page After Page™ (PAP) of Shrewsbury, MA. As a result of a short RFP issued by the EPP Program and BSB, Blanco and PAP provided **free of charge** green 65-gallon wheeled carts (one for each floor of the building) and a weekly collection service to pick up the "empties." The EPP Program produced promotional posters to explain the program to building occupants and signs for the bins.

"We have been collecting the cartridges every Friday since the middle of October", states Frank Topinka, President of PAP, "and we average about 25 cartridges per week. If a cartridge is damaged, we send it to a facility that will recycle the materials. Otherwise, we remanufacture the cartridge into a high quality product and market it through G.A. Blanco on the contract. **We even rebate the state one dollar per cartridge.**"

According to Solomon Lai, BSB Administrator, the building occupants, who are already used to placing paper into blue recycling containers, are now using the new green ones for cartridges. "I have noticed that several are full by the end of the week and I have had no complaints from the maintenance staff… I am now asking PAP to provide me with a report that tallies the number of cartridges collected on each floor, so that we can follow-up with those floors that may not be recycling as much as they should." **Contact the EPP Program for a copy of the recycling program RFP to make cartridge recycling convenient in your building!**

EPP Issues in the Media

ABC's "20/20" Reports on Electronics Recycling

On January 6, 2006, ABC's "20/20" show featured a report on the environmental and data-security issues associated with the end-of-life management of computers. This report is available for viewing and reading online.

The report states that Americans buy $125 billion worth of consumer electronics (e.g. computers, monitors, cell phones, etc.) and asks the question: what happens to the hundreds of millions of the items that Americans throw out? The answers are troubling: some of them end up in the garbage releasing toxic chemicals into the environment; also, much of the old equipment is shipped off to the developing countries and is disassembled in ways that are unsafe for the environment and workers. To make matters worse, many of the discarded computers still have the owners' personal records and documents stored on their hard drives. In addition to the information provided by the show, here is some information you might find useful:

If you work for a state agency, start with contacting the State Surplus Property Office to see if other agencies would like to reuse the computers. If no new home is found for the equipment, use the statewide contract for electronics recycling (FAC26) or the take-back services provided by ITC16 (IT Hardware) contractors.

As a consumer, don't throw out used computers. We recommend that you use the take-back services provided by major computer vendors as those tend to follow U.S. EPA's guidelines for recycling. Alternatively, since the disposal of CRT monitors in Massachusetts is restricted, consult the www.earth911.com website (enter your zip code) to see your town/city disposal guidelines and fees. You may also contact your local DPW to see if a local electronics collection event will be planned or if other options are available.

Microfiber Mops: A Better Way to Clean

Since late 1990's, microfiber products have been entering the cleaning marketplace. EPP cleaning product suppliers on statewide contract GRO16 now carry a wide variety of microfiber products as well: from polishing cloths to mops. This article will discuss the use of microfiber mops in institutional environments. What makes microfiber mops good a alternative for conventional cotton loop mops?

- **Microfibers effectively hold water, so you can clean longer.** Made of strong, lint-free polyester and nylon fibers about 1/16 the thickness of the human hair, microfiber mops can hold six times their weight in water.
- **You achieve higher cleaning efficiency.** Microfibers are positively charged and thus attract negatively charged dust. Being incredibly thin, microfibers can penetrate microscopic surface pores of most flooring materials.
- **Less heavy lifting for custodial staff.** Microfiber mops are lighter and more ergonomic than conventional cotton loop mops. Since you do not place the dirty mop back into the cleaning solution but just replace it with a clean one, there is no need to repeatedly return to the sink to dispose of the contaminated solution and replenish the bucket. There is also no need to use the mop bucket wringer.
- **Building occupants are happier.** Cleaning with microfiber mops is more effective, quieter and faster.

Effective cleaning with a microfiber mop may require changes in the cleaning process. The new process does not allow for soiled mop heads to go back into the cleaning solution, which eliminates cross contamination – and allows you to clean longer with less water and cleaning chemicals:

1. Soak several microfiber pads in cleaning solution.
2. Take one pad out of the solution, hand-wring and drop it on the floor.
3. Microfiber pad easily attaches to Velcro on the mop head.
4. You are now ready to mop.
5. Remove the used microfiber pad and put it in a laundry bag to be washed later.
6. Repeat the process with a fresh microfiber pad.
7. Once finished, launder used microfiber pads.

Microfiber Mops vs. Standard Cotton Mops

Microfiber Mops	Cotton Mops
• Light and ergonomic • Prevents dirty mop heads from contaminating cleaning solution • Dense, durable fibers reach into surface pores • Cost effective	• Large, heavy mop head • Requires frequent changing of cleaning solution • High chemical and water use • Labor intensive

Results of the UCDMC cotton mop vs. microfiber mop cleaning cost analysis.

	Cost per 100 rooms of using	
	Microfiber Mops	Cotton Mops
Mop Costs	$1.74 to $3.48	$.11 to $.41
Labor Costs	$436	$480
Chemical Costs	$0.50	$11.55
Water Use	5 gallons	105 gallons
Electricity Usage	$30	$5
Total Costs	$468 to $470 /day	$497 /day

A case study published by the U.S. Environmental Protection Agency details a microfiber mop trial conducted at University of California Davis Medical Center (UCDMC) in Sacramento, CA. The trial compared cleaning ability, ease of use, and cost effectiveness between microfiber mops and conventional loop mops. Within a year of initial microfiber testing, UCDMC determined that there were measurable economic benefits in using them, and began a complete phase out of conventional loop mops in 2000. Economic benefits included: 60 % lifetime cost savings for mops, 95% reduction in chemical costs associated with mopping tasks, and 20% labor savings per day.

Microfiber mop heads certainly stand up to the durability test. Although vendors only guarantee microfiber mop heads for 500 washings, UCDMC typical used their microfiber mop heads for over 1,000 washings (compared to 55 and 200 washings respectively for conventional cotton mops).

Microfiber mops do have their limitations, of course. In hospitals, they should not be used to mop areas with high amounts of blood or other body fluids or greasy, high-traffic kitchen areas. It is also important that microfiber mop heads not be laundered in industrial washers and dryers because the excessive heat is damaging to the material. They should be washed in standard commercial washer and dryers with controlled heat settings and with a standard laundry detergent.

Microfiber products are certainly not limited to mops. Cleaning and polishing cloths, cleaning mitts and other products are also available and help to achieve high cleaning efficiency with reduced use of water and chemicals. Contact GRO16 contractors for information on those products!

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