

# 4 . . . . . Waste Prevention

Although recycling reduces waste disposal, it does not reduce waste generation. This means that you are still generating a waste material that needs to be managed in some way. Waste prevention means preventing waste before it is generated. This can be done by reducing packaging material, reducing the use of toxic materials, incorporating more reusable supplies into your business practices, or changing procedures to produce less waste. This section offers tips and ideas for preventing waste generation in various business operations and activities.

## OFFICES

Every business has an office of some sort. It may be small enough that it's only you and a desk, or it may be the primary focus of your business with hundreds of employees working in cubicles or offices every day. In either case, you can reduce the quantity of waste you generate with a few simple steps.

- *Copy your documents double-sided.* Paper use can be reduced by up to 30 percent by setting the copier to the duplex mode. If your copier doesn't have this capability, consider it an important feature when purchasing new equipment. For small copy jobs, you can feed the a page back through to copy on the other side. Make a sign for the copier indicating which direction a sheet should be fed so the second side prints correctly. This cuts down on mistakes and misprints. If you take copy jobs to a copy shop, always request that they be copied double sided.
- *Reuse paper that you can't reduce.* If your office still generates a lot of waste paper, consider several opportunities for reusing it before you recycle it. Paper used only on one side can be turned over and used as scrap paper, note pads, or to print drafts and incoming faxes. Designate a paper tray or an entire printer to use for printing internal drafts on one-sided scrap paper.
- *Communicate electronically.* When you need to send a memo to colleagues, supervisors, customers, or clients, consider sending your message via e-mail. And remember, when you receive an e-mail, resist the urge to print it out. Save it if there is vital information, save attached files, and if there are a few small bits of important information, jot them down on a piece of scrap paper, instead of using a whole new sheet of paper.

## GREEN STARS

### ConocoPhillips Alaska

- Installed a computerized purchasing system that has eliminated much of the paperwork associated with invoicing, tracking, and payments.
- Phased out several company-wide publications, reducing paper use.

### Anchorage Water and Wastewater Utility, Engineering Division

- Purchases double-sided copiers.
- Recycles all of its toner cartridges through a local cartridge refurbishing company.

- *Use reusable mugs, plates, and cutlery in the office.* You probably use reusable plates and cups at home, and don't you practically live at the office sometimes? Shouldn't you use the real stuff in the office too? Keep a few mugs, a set of cutlery, a plate and a bowl at your desk. This is all you really need for those take-out lunches, office birthday parties, and all of that coffee.

- *Start an office supply reuse program.* Whenever anyone cleans out their office or relocates, all sorts of office supplies are discarded. Consider setting aside space in the supply room or designating an empty cabinet for supplies that can be reused, such as pens, pencils, file folders, hanging folders, binder clips, 3-ring binders, partially used notepads and tablets, and anything else that could have a second life. The program will save you money at both ends – purchasing costs will be reduced, as will disposal costs.

### GREEN STARS

#### **Sadler's Home Furnishings**

- Donates old furniture picked up during new-furniture deliveries to charities.

#### **BP**

- Hosts an annual Declutter Day for employees to clean out offices. Paper is recycled and reusable supplies are organized for redistribution throughout the year.
- Donates furniture, carpet, and equipment to local nonprofit organizations.

#### **U.S. Fish and Wildlife Service**

#### **National Biological Service**

- Donated more than \$300,000 worth of old computers to Seward Junior/Senior High School and Wendler Junior High School.

- *Start a subscription library and get off mailing lists.* If your office receives multiple subscriptions to the same magazine, journal, or supply catalog, consider canceling several subscriptions and keeping one copy of each in a "library." If you get a constant stream of advertising mail, request to be removed from mailing lists. By reducing advertising mail, you are not only reducing paper waste, but you are reducing the wasted time necessary to sort and distribute mail at your business, the cost to handle the material as waste, and the cost to dispose or recycle it. Visit this King County, WA, web site for detailed information about getting off mailing lists: <http://dnr.metrokc.gov/swd/nwpc/bizjunkmail.htm>.

## FACILITIES MANAGEMENT

- *Lease furniture and equipment.* Leasing furniture for your office, rather than purchasing and discarding items every few years, reduces the significant cost of disposing of bulk items. Leasing also reduces the cost of acquiring updated equipment on a regular basis. Ever-changing technologies make it more efficient to lease equipment, such as photocopiers, printers, and fax machines, rather than discarding old models to get the newest features in a new model. See Chapter 11 for a list of companies in the Anchorage area that lease furniture and equipment.

- *Refurbish and reuse or donate used furniture and electronic equipment.* If a new look for your business is part of the plan, consider refurbishing and recovering existing furniture, equipment, and displays or donating used furniture, equipment, and displays to a non-profit organization as an alternative to discarding it. See Chapter 11 for a list of non-profit organizations that will accept used furniture and equipment. The Alaska Materials Exchange offers a way to get rid of unwanted, but usable items. Visit [www.state.ak.us/dec/dec\\_pub.htm](http://www.state.ak.us/dec/dec_pub.htm) and click on Alaska Materials Exchange to download the most recent catalog. Green Star's web site offers an electronics exchange page to get rid of or obtain used computers, peripherals, and other electronics. Visit [www.greenstarinc.org](http://www.greenstarinc.org).
- *Compost yard waste.* Your landscaping waste can contribute significantly to your waste stream. The leaves, grass, and other cuttings that you collect during the summer months can be composted on-site if you have space or they can be sent to the Anchorage Regional Composting Facility (see Appendix C and Chapter 11 for more information). While you're at it, you can purchase compost from the composting facility for landscaping improvements and annual maintenance.

### GREEN STARS

#### People Mover

- Offers dishes for use by employees instead of disposables and asks that office and maintenance employees use their own reusable coffee mugs.

#### Kaladi Brothers Coffee

- Donates burlap coffee bags to a wire rope company that uses the bags to ship their products to customers.

### FOOD SERVICE

- *Donate edible leftover food to a food bank or local charity.* Any food service establishment, no matter how efficient, will occasionally have leftover food. This food doesn't need to be waste. Needy organizations around Anchorage would be grateful to receive donations of edible leftover food. Consider planning for food donation the next time you plan a special event for your organization. See Chapter 11 for details about donation organizations.
- *Work with suppliers to reduce packaging waste.* Your suppliers may be able to work with you to incorporate reusable shipping crates into your delivery route; reduce the quantity of packaging they use, such as stretch wrap around palletized boxes; or consolidate deliveries to reduce the amount of packaging. Since food items are often delivered daily, you have an ideal situation for returning reusable crates and racks used for dairy, bakery, meat, and produce deliveries.
- *Use reusable serviceware.* Whenever possible, use reusables. Rely on disposables only for take-out and ask customers if they are needed. Dishwashing labor costs may soon be offset by the reduced purchasing costs associated with replenishing supplies of disposable plates, cups, bowls, and cutlery. Waste hauling costs and storage needs will be decreased substantially as well.

## WAREHOUSING

- *Develop a pallet management system.* Instead of discarding pallets after one use, work with suppliers or other businesses to reuse pallets. You also may be able to implement a pallet take-back program with your suppliers so that they take back an equal number of pallets for reuse as they deliver. See Appendix C for a list of local companies that reuse or recycle pallets and wood waste. If pallets are damaged, you can take them to the Regional Composting Facility for a small fee.
- *Reduce shipping and receiving materials.* These wastes typically include cardboard boxes, pallets, shrink and stretch wrap, tape, and strapping. Shipping and receiving wastes make up nearly one-third of the total U.S. municipal solid waste stream and typically account for much of the waste generated by businesses. To reduce this large waste stream, start by assessing all packaging components to see if any can be eliminated. Eliminate multiple packaging where possible (e.g., avoiding use of both strapping and shrink wrap where only one is actually required). Another idea is to ship products in padded vehicles to reduce the amount of packaging needed. You also can replace a number of smaller packages with a single, large, more efficient package size. Find the optimum mix of primary, secondary, and transport packaging to achieve an overall packaging reduction. Make sure that you match product size to container size to reduce packaging requirements and consolidate outgoing materials to reduce box use and packaging needs.
- *Reuse shipping and receiving materials.* Some reuse ideas include using shredded waste paper for cushioning material as an alternative to purchasing packing peanuts; donating pallet wood for reuse by employees or local community organizations; and substituting durable, reusable plastic pallets for wooden pallets. Waste exchanges are one of the most efficient material reuse methods. Materials can be exchanged between divisions within a company or between different companies. In a waste exchange, unneeded shipping and receiving materials are transferred to other agencies or businesses that currently purchase these materials. The materials can be either new or used. See Chapter 11 for more information about Alaska's materials exchange and Green Star's on-line electronics exchange.



### GREEN STARS

#### Corporate Express

- Reuses packing peanuts and boxes for shipments to customers.
- Prints a message on all of its shipping boxes asking customers to return them to Corporate Express for reuse.

## VEHICLE MAINTENANCE

Vehicle maintenance may bring to mind air emissions, but vehicle maintenance activities also can generate large quantities of solid and hazardous waste.

- *Improve housekeeping.* Housekeeping improvements can improve operating efficiency as well as reduce waste. Some examples of housekeeping improvements include checking tanks, valves, and dispensing equipment for leaks; using drip pans under vehicles; and checking parts washers to ensure that lids are closed to reduce solvent loss through evaporation. One of the largest waste streams associated with vehicle maintenance is absorbents. Oil-saturated absorbents, such as kitty litter or corn husks, are potentially hazardous waste, making them expensive to dispose. Consider using reusable absorbents, such as hydrophobic mops or pads that can be wrung out and reused.
- *Improve fluids management.* If your operation is large enough, rather than using quarts of oil and jugs of antifreeze, consider installing an overhead fluid distribution system and bulk storage containers. This allows you to purchase fluids in the largest, least expensive quantities; and reduces spills, the need for absorbents, potential for groundwater contamination, and packaging waste.
- *Reevaluate preventive maintenance schedules.* If you maintain a fleet, the vehicles are probably maintained on a regular schedule. Numerous businesses and agencies across the U.S. have reevaluated preventive maintenance schedules and extended them based on successful tests. Consider testing oil periodically using standard engine oil sampling kits to determine if you could extend the maintenance schedule. This would reduce the purchase of oil and filters, and reduce the quantity of used oil and the number of spent filters that needs to be managed.

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 • *Did You Know...*  
 • Almost nine times more oil (94 million gallons) is dumped on the ground, poured into sewers, or discarded in landfills annually than was spilled from the Exxon Valdez in Prince William Sound (11 million gallons).  
 • One quart of oil can pollute more than 250,000 gallons of water.  
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**GREEN STARS**

**U.S. Air Force, Elmendorf Air Force Base**

- Switched from polypropylene pads to cellulose absorbents for petroleum spill clean-up. The cellulose absorbents are manufactured from food and paper byproducts and come in pads or pellets that are easily burned in energy recovery units. They also absorb eight times their weight, meaning less absorbent material is needed. The polypropylene pads were a large portion of their waste stream.
- Aerospace Ground Equipment shops use an oil tester to check the life of the engine oil before changing it. Instead of changing oil every six months on seasonal-use equipment, oil changes are based on running-time hours.

**U.S. Army, Fort Richardson**

- Has a material exchange system in place to purchase and reissue materials and equipment through the Equipment and Supply Department.
- Participates in the Army Oil Analysis Program where oil from vehicles is tested every 90 days or 50 hours of usage for signs of engine wear, breakdown, or contamination. This program allows oil to be safely used in a vehicle for longer periods of time by requiring oil changes only when the oil can no longer provide adequate lubrication.