

What Is Waste Prevention?

There are more than 60,000 wholesalers in New York City. Forty-five percent of New York City's wholesalers deal in durable goods and 55 percent deal in non-durable goods. New York City's durable goods wholesaling industry employs approximately 246,000 people; and the City's non-durable goods wholesalers employ more than 331,000 people. The wholesaling industry is a major contributor to New York City's economy, with sales of almost \$170 billion annually.

The variety of products moved through the City by wholesalers is enormous and the competition

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Incorporating reusable totes into your distribution system can reduce both purchasing and disposal costs.

Donate Your Way to Cost Savings



Food for Survival collects donated food from Hunts Point Terminal Produce Market and hundreds of other donors throughout the City.

Businesses throughout the City effectively reduce the cost to manage and dispose of unneeded items by donating usable material and edible food to receiving organizations. Donors

also are eligible for tax deductions when donating items to not-for-profit organizations.

Wholesalers managing thousands of tons of food, each year donate hundreds of tons of nutritious, edible food to edible food collection programs in the City. Still, despite the fact that hundreds of food wholesalers participate in various donation programs, there are many more food wholesalers not taking advantage of this cost-effective method of reducing the quantity of edible food destined for disposal and the opportunity to join forces to help hungry New Yorkers.

According to Julia Erickson, Executive Director at City Harvest, "In 1998, City Harvest picked up 10 million pounds of food. This is estimated at only 20 percent of all the food that is wasted in our City."

In 1998, Hunts Point Terminal Produce Market in the Bronx, a NYC WasteLe\$\$ partner, donated six million pounds of edible produce to Food For Survival. The produce donated is no longer saleable because of its limited shelf life; however, at

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Stop, Look and Calculate: It May Be Time to Rebid

You may find money hidden in your trash compactor or dumpster if you have not reviewed your waste carting invoices recently. Although exorbitant waste carting costs were reduced and capped when the New York City Trade Waste Commission (TWC) established the "Carting Customer's Bill of Rights," there may be opportunities for you to reduce your costs further, says Eugene DiToro, an Inspector with the TWC.

Simply analyzing your invoices and observing occasional pick-ups may highlight the fact that you are paying more than necessary to have your

waste collected. By ensuring that you are charged only for the quantity of waste and recyclables that you put out for collection, waste prevention efforts that decrease the quantity of materials generated will pay off by reducing your carting costs.

During a NYC WasteLe\$\$ seminar, Inspector DiToro offered wholesalers tips for working with their waste carters. He stressed that the key to successful waste management is to review your waste carting contract to ensure that your trash is being collected in the most economical way to best suit your

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Spotlight On: Waste Prevention

The New Bottom Line: Leading the Nation to a New Sustainable Growth Economy

What do DuPont, Texas Industries, Interface Carpets, Intel, the George Washington University Business School, Anheuser-Busch, and Baxter International have in common? These organizations are part of a rapidly growing global movement, attracting large and small businesses of all types, that not only recognizes but races in hot pursuit of a new bottom line. That new bottom line measures the sustainability of business enterprise; sustainability achieved through direct and deliberate efforts to minimize waste.

Proponents of this movement are searching for new and better ways to eliminate practices that waste natural resources and human capital. In so doing they are enhancing their stature in both the business and consumer communities, and they are increasing their profits in the process.

This new and growing breed of business leaders recognizes environmental, social, and financial efficiency as factors influencing profit, and as inroads to strengthened consumer confidence and growth in market share. As Craig Barrett, CEO and president of Intel, stated recently, "Business is on the 'front line' in making sustainable development a reality. Companies need to take a hard look at how they make their products and deliver their services."

This new hard look is what will ultimately determine which businesses will prosper in the new economy, an economy that increasingly recognizes the ultimate limits of our natural and human resources and values and conserves them accordingly. This way of thinking has thus given rise to a new set of metrics that reflects the new bottom line.

Nowhere are the potential gains of conservation, reuse, and waste prevention more evident than in densely populated urban centers, such as New York City. Here, in a city of eight million, the gains to be realized by even modest behavioral changes are enormous simply because of the population scale. Here business leaders have enormous potential to initiate and fuel trends that can spur literally millions of other enterprises, as well as consumers, to adopt sustainable growth practices such as waste prevention.

Across the country, industry leaders are adopting the new sustainable growth paradigm. DuPont's sulfur products business minimizes chemical waste and reduces worker and consumer hazard through their acid handling and recovery services. Through this service, customers are freed from having to own or handle the chemical substances, and the acids can be treated for reuse by DuPont when the customers' needs are met.

Meanwhile Texas Industries is conserving natural resources by producing steel from recycled scrap and cement from steel mill slag, thereby eliminating two waste streams and at the same time conserving virgin materials. In the area of carpet products, Interface Carpet is enjoying enormous public recognition and customer loyalty based on their strategy of leasing of flooring systems to customers, thereby eliminating consumer disposal of end-of-life car-

pet. Rather, Interface collects the used carpet for reprocessing and reuse.

Intel has adopted a corporate policy mandating a Design-for-the-Environment strategy to achieve 50 percent reduction in volatile organic compound emissions per product unit, a substantial achievement against their new bottom line accounting. In the academic arena, more and more colleges and universities are developing curricula to train their students in the new math of the bottom line.

For example, The George Washington University Business School encourages emerging business leaders to think and plan in terms of the sustainable growth metrics, as conveyed through courses in International Environmental Policy and Management, Environmental Ethics, Environmental Policy, and Environmental Values and Strategies. Students also can sign up for a course on eco-tourism to study the business crossroads of the natural environment and the tourist economy.

Such thinking also is valuable to business leaders trading in products as wide ranging as computer hardware to beer and pretzels. For example, Compaq has reduced waste and packaging costs dramatically through their recent introduction of a

reusable shipping container that can be reused for as many as fifty round trips.

Anheuser-Busch, also mindful of the costs and wastes generated by packaging material, has formed an alliance with a local mail service to divert packaging waste from disposal to reuse. Baxter International, a manufacturer of medical products found that by reducing packaging by one million pounds they could reduce costs by \$1.3 million. The company is now en route to realizing its corporate goal of 20 percent packaging reduction over ten years, by 2005.

The efforts of these companies and scores of other manufacturers, service enterprises, schools, stores, and consumer groups are raising the bar for waste prevention. They are the leaders of today and charting the way for the economy of the future. These businesses will enjoy a powerful competitive advantage as waste carting costs are likely to rise in the future.

You as a business leader have a choice. You can plan for, and capitalize on opportunities to lead by example, charting the way for constructive change ... or you can wait until the quantities of waste and the costs of waste management force your hand. ■

What is Waste Prevention?

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is intense. And yet, resourceful owners and managers are finding practical ways to improve profit margins to keep wholesaling operations in New York City — without raising prices, without cutting salaries, and without compromising product quality.

Their secret is found in a common message: "All waste is lost profit." In the case of the City's wholesaling industry, the potential for savings is tremendous, especially considering that a 1990 study by The New York City Department of Sanitation estimates that the City's wholesale sector generates approximately 378,000 tons of solid waste per year. This is approximately 9.4 percent of the City's total commercial waste stream.

So what is waste prevention in the context of operating and managing a wholesale operation? In this business, waste prevention means reviewing and changing those practices that result in wasted packaging materials and damaged products. It means implementing systems that eliminate waste cardboard, wood, food, metal and textiles; conserve energy; and reduce toxicity.

"We have worked on several initiatives to tackle our largest waste streams," says Myra Gordon, Administrative Assistant at Hunts Point Terminal Produce Market. "Almost 80 percent of our waste was produce or wood, so we looked at ways to reduce these through chipping, dewatering, refurbishing, and composting."

In many cases, wastes can be eliminated by finding other businesses that can use materials that would otherwise be discarded. Local waste exchanges can help facilitate this process. Your scrap material may be another company's feedstock. Other methods include using reusable shipping containers for shipping products, reevaluating cleaning and maintenance procedures, streamlining purchasing, and working with suppliers to create more efficient shipping practices.

Waste prevention is as much about what you buy as it is about what you throw away. It also is about when you buy, and how you use what you buy. Keep an eye on what fills your dumpster each day or over a week, and ask yourself if... and how... that wasted material could have been prevented. You also can review the type and amount of packaging waste that you pay to dispose each month, and ask yourself if you could specify alternative packaging that would help you to reduce waste and therefore lower your trash bill.

Essentially, waste prevention is inventorying the waste in your operation and taking deliberate steps to eliminate it. In this issue of *NYC WasteLeSS*, we present strategies and success stories of waste prevention; reducing waste at its source, before it is even generated. Preventing waste saves money, saves time, and conserves resources. It makes good business sense. ■

Toxicity Reduction Prevents Waste

Some cleaning products and degreasers commonly used in machine maintenance operations and routine cleaning can pose health hazards to your staff, and to those who handle your waste after it is removed. Paints and paint thinners can also contain harmful substances. When compared to these traditional products that serve the same purpose, environmentally preferable cleaning and degreasing products have a reduced impact on human health and the environment.

Take a close look at the products used in your operations and maintenance shops to identify opportunities to consider testing and switching to alternative products. Look on your shelves, review material safety data sheets (MSDSs), and talk to staff. You may be surprised at what you find. For example, the machine degreaser you are purchasing may contain toluene, CFCs, petroleum distillates and aromatic solvents.

Are Your Employees Informed?

Material safety data sheets (MSDSs) are mandatory information sheets that accompany all potentially toxic products and materials. The Occupational Safety and Health Administration (OSHA) requires that MSDSs be readily available to all staff using or handling the materials. Each MSDS contains pertinent information about the material's or product's ingredients, its harmful characteristics, and how to respond to spills, accidental contact, and other exposure. An MSDS can provide life-saving information, as well as data about using the product safely and most effectively.

These products can be replaced by alternatives that offer the same performance standards. One such replacement product is Enviro Solutions Heavy Duty Degreaser. This degreaser is biodegradable and essentially non-toxic according to Workplace Hazardous Materials Information System regulations. Don't stop after you look at the more obvious mechanical activities at your facility. For example, look at the products used to clean the employee common areas.

When considering switching to a reduced-toxicity cleaner or degreaser, check the labels of your current products to see whether they contain any of the chemicals listed in the adjoining box, *Targeting Toxics*. This list is not comprehensive, but includes some of the more common, toxic chemicals found in cleaning products and degreasers.

When environmentally preferable products were first introduced, as with any new product, some were not as effective as the products they were meant

to replace. However, based on approximately thirty years of research, many environmentally preferable cleaning and maintenance products now meet all of the same standards as traditional products. In addition, most vendors will ship samples so that you can test the effectiveness of the product before making a purchasing decision.

While you may not be able to find environmentally preferable cleaning and maintenance supplies for all your needs, alternatives to traditional cleaning and maintenance supplies are available. Every day, new products are introduced to the market that have eliminated constituents of concern such as 1,1,1-trichloroethane, toluene, and methyl ethyl ketone.

CLEANING GREEN

Environmental Attributes To Consider When Selecting Products

- Irritation potential
- Chronic health risks
- Time to ultimate biodegradation
- Bioconcentration factor
- Percentage of volatile organic compounds
- Presence of ozone depleters
- Potential exposure to the concentrated cleaning solution
- Flammability
- Presence of cosmetic additives
- Energy needs
- Amount of product packaging

Source: Cleaning Products Pilot Project, U.S. EPA, 1997

Consider the following benefits of using environmentally preferable cleaning and degreasing products:

- May be less expensive than traditional cleaning supplies.
- May help reduce worker exposure to harmful chemicals, reduce the number of sick days taken by workers, increase worker productivity, reduce workers' compensation claims, and improve compliance with OSHA regulations.
- May reduce the quantity of toxins going down your drain, which may help you to comply with wastewater treatment permit requirements.
- May help to reduce customer exposure to certain chemicals, thus reducing the potential for adverse reactions and associated liability.

Many web sites highlight environmentally preferable cleaning supplies, with product descriptions and information on the environmentally preferable substitute for particular hazardous chemicals. ■

TARGETING TOXICS

Common Toxic Chemicals Found in Cleaning Products and Degreasers Targeted by the U.S. EPA for Reduction or Elimination

● Acetone	● Aluminum oxide	● Ammonia
● Benzene	● Carbon Tetrachloride	● Chloroform
● 1,2-Dichloroethane	● Ethyl benzene	● Ethylene glycol
● Freon 113	● Glycol ethers	● Hydrochloric acid
● Lye	● Methyl ethyl ketone	● Methyl isobutyl ketone
● Methanol	● Methylene chloride	● Naphtha
● Phenol	● Sodium hydroxide	● Sulfuric acid
● Tetrachloroethylene	● Toluene	● Trichloroethylene
● 1,1,1-trichloroethane	● Xylene	



Low-VOC paints are available from several major manufacturers.



FOR MORE INFORMATION:

- Defense Logistics Agency
www.dscr.dla.mil/products/epa/eppcat.htm
Although the DIA site was designed for military customers, its information is valuable and accessible to the commercial sector, as well. You can request a hard copy of the list of product substitutes by calling (800) 345-6333.
- Joint Service Pollution Prevention Technical Library
<http://enviro.nfesc.navy.mil/p2library>
This site offers anyone information about less toxic alternative products and services.
- New York State Department of Environmental Conservation, Pollution Prevention Unit
Environmental Compliance and Pollution Prevention Guide for Small Quantity Generators
This guide offers a straightforward summary of regulations for air, water, and hazardous waste. Call (800) 462-6553 or visit www.dec.state.ny.us.
- U.S. General Services Administration
Commercial Cleaning Supplies
This catalog lists hundreds of commercially available, environmentally preferable cleaning supplies. Call (800) 241-7246.

Green Seal, an independent, nonprofit organization that promotes the manufacture and sale of environmentally responsible consumer products, sets environmental standards and awards a "Green Seal of Approval" to products that cause less harm to the environment than other similar products.

Green Seal-recommended 'green cleaners' must satisfy the following criteria: non-toxic to humans and aquatic life; pass specific aquatic toxicity tests; phosphate and phosphonate concentrations must be less than 0.5% by weight; biodegradable; work optimally when diluted with cold water; and packaged as a concentrate in recyclable/refillable containers with post-consumer recycled content. For more information, visit Green Seal's web site at www.greenseal.org, or call (202) 872-6400.

How Do We Begin?

Guidance for Starting a Waste Prevention Program

Improving your business' efficiency, reducing operating costs, increasing production — these are all goals of wholesalers. A key component to these goals is identifying methods of minimizing solid waste generation. Generation of solid waste also wastes resources, labor, and money. How do you begin the process of identifying and implementing waste prevention initiatives? Here are strategies to consider as you develop a plan for your operation.

- **Issue an environmental mission statement.** Create a policy statement issued by upper management that conveys the objective of institutionalizing waste prevention practices and behaviors into the operation's standard practices.
- **Establish a waste prevention and recycling committee.** Identify representatives from all sectors within your business, including upper management, line workers, drivers, administrators, and foremen, to serve on the waste prevention and recycling committee. The committee coordinator should be an individual who has a good understanding of the many facets of waste prevention and business operations, and who is capable of evaluating and reporting on the progress of the waste prevention program.
- **Review your business' operations and activities.** Conduct waste assessments of all operational areas and activities. Look at what is purchased, how it is stored, how it is used, and how it is discarded. Identify major waste generating activities and areas.
- **Identify cost-effective, feasible waste preventing opportunities.** Review the findings of your waste assessment. Ask your employees if there are ways that these waste generating activities could be altered or eliminated. You may find there are several ideas for reducing each waste stream. Some may be behavioral changes, while others may involve changes in technologies and equipment. Determine what changes are feasible and will reduce costs in your facility.
- **Develop a waste prevention and recycling plan.** Develop a plan based on the results of reviewing and analyzing operations and activities. Choose the most effective recommendations and develop a timeline and a matrix of responsibility to ensure that each recommendation is implemented. The plan can recommend waste preventing changes to practices and procedures and methods for measuring the results.
- **Communicate findings to employees.** Share the appropriate information with all relevant parties in the your organization. Communicating program details, information about new procedures, and success stories helps to ensure full, continuous participation of everyone. This can involve training and instructions, as well as general information about positive changes in the facility.
- **Implement a waste prevention program.** Begin implementing the new programs and making the selected changes within your operations. Ensure that all key representatives are aware of the new practices and have an opportunity to provide constructive feedback on the impact of the implemented program.
- **Evaluate performance and provide feedback.** Revisit each of the recommended changes and new

programs to determine if the initiative is reducing the waste stream, if there are any unpredicted impacts to other operational areas of the business, and to determine if the change is reducing costs. Programs require maintenance and adjustments to be successful. Provide feedback to the committee and management. Keep employees in the feedback loop where appropriate. This should include positive feedback, such as praise and awards, as well as suggestions for improving the programs.

Opportunity is the Key

Taking a look at your operations is the key to identifying potential for change and improvement. Ice-Cap, Inc., an air conditioning, heating, and refrigeration equipment assembler, fabricator, and distributor, participated in a waste assessment as part of Long Island City Business Development Corporation's Industrial Waste Recycling and Prevention (INWRAP) program. During the assessment, the team found that Ice-Cap was purchasing more corrugated cartons than they needed. Because the company lacks adequate storage space in its 18,750-square-foot facility, it had been recycling the new surplus cartons that it could not store. INWRAP identified five types of cartons that could be purchased in smaller quantities from a different vendor, with the same quality and specifications, for less money and with recycled content. Implementation of the recommendation is estimated to reduce Ice-Cap's container purchasing by 2 tons per year, saving \$3,400 and achieving a source reduction rate of 33 percent for this material.

INWRAP also identified waste prevention

opportunities for wood crates and metal drums. Four shipping firms were identified in the area that would pick up crates, and several local firms that would reuse unlined 55-gallon drums. Approximately 50 percent of the crating and all of the drums were in reusable condition. Donating these materials for reuse is estimated to enable Ice-Cap to save \$1,980 annually in reduced disposal costs or 25 percent of its annual waste carting costs.

The company initiated these recommendations between July 1997 and September 1998, saving more than \$5,500 in reduced disposal and purchasing costs. This is in addition to about \$2,200 in revenue generated annually from the sale of baled corrugated cardboard.

Ice-Cap's experiences with assessing its waste stream is typical of numerous New York City businesses that have taken advantage of the opportunities available to prevent waste and reduce costs. Below are some additional waste prevention ideas that may be appropriate in your operations.

Purchasing

Looking at purchasing activities may be the most effective way to affect disposal activities in your operations. Purchasing ties to every step along the way, including what materials come into your facility, how often and in what form materials come in and go out, as well as what and how much is discarded. Your opportunities to positively affect waste through purchasing include buying certain materials in bulk quantities and using reusable shipping containers. If your storage capacity is sufficient, purchasing larger quantities and storing materials in storage tanks or storage areas can eliminate the need for plastic pails, drums, and pallets, as well as secondary packaging materials, such as stretch wrap and strapping.

Work with manufacturers, suppliers, and other distributors to reduce packaging waste through the use of reusable and returnable packaging. Reusable shipping containers, pallets, drums, crates, pails, and boxes all will reduce disposal and purchasing costs.

Taking a look at your operations from the perspective of waste generation is the first step toward making changes that will benefit your bottom line. Follow through with the help of local development corporations, trade associations, local and state government, and one of the most valuable resources; your own employees. ■

American Recycling & Manufacturing Co. (ARM) of Rochester, New York, offers manufacturers in the Northeast its CLOSED LOOP program, an innovative packaging system that reduces costs, increases efficiency, and contributes to a sustainable environment. ARM helps the manufacturer work with the company's distributors and customers to procure less wasteful packaging. Reusable packaging components, such as plastic trays, slip sheets, totes, boxes, and pallets, are designed for the manufacturer, or standard components can be used if applicable.

ARM recovers the packaging components from the manufacturer's distributor or customer, at their sites, at no cost to the distributor or customer. The packaging materials are then either returned to the manufacturer for reuse, or are sold to other firms for reuse. The original manufacturer realizes the profits from the sale. ARM also will design packaging components to be used by both the manufacturers and the customer. Any components that can not be reused are recycled.

John Baker, manager of ARM's CLOSED LOOP division, says, "The advantages to the manufacturer are obvious. The company can meet its environmental goals, save on disposal costs, and may even be able to make some money back, all while performing in an environmentally responsible manner."



- National Wood Pallet and Container Association (703) 527-4617
- Industrial Waste Recycling and Prevention (INWRAP) Program - (718) 786-5300
- NYC WasteLe\$\$ - www.nywasteless.com
Visit the waste prevention tips for the wholesale sector
- New York State Department of Environmental Conservation
www.dec.state.ny.us/website/ppu/eppgsblg.pdf
To view NYDEC's pollution prevention guidance for small business and local government.

Stop, Look & Calculate: Time to Rebid continued from page 1

operation. If you are paying a flat fee, take a look at the number of pick-ups and determine if a "per pull" system might be more economical.

If you are currently charged on a per pull basis, check to see that you are not paying for compactors and containers to be removed when they are less than full. Your waste prevention efforts will only pay off financially if you reduce the cost of waste disposal by reducing the number of pulls you pay for.

Six Simple Steps That Can Save You Money

- Ensure that your compactor is operational, has working gauges, and that staff checks gauges prior to pulls to make sure compactors and dumpsters are full.
- Confirm that your trash bills comply with the TWC's maximum legal rates for removal of waste.
- Request a waste stream survey by your carter to help you establish a baseline waste generation rate.
- Monitor your containers to ensure that recyclables are not being discarded with general trash.
- Reduce the frequency of pick-ups as recycling and waste prevention activities reduce the quantity of waste discarded.
- Ensure that your carter has not incorrectly classified your open dumpsters as construction and demolition (C&D) debris, for which there are no maximum rates. Waste from normal daily activities should not be considered C&D waste.

If you have a trash compactor, you are paying the higher rate charged for compacted waste. Consider what type of waste you discard in your compactor. Is it waste that can be compacted? For some materials that can be compacted significantly, a compactor may be much more economical than a dumpster, but many businesses find that they are paying for a compaction ratio that is not possible to achieve. For example, food waste is not easily compacted. Therefore, collecting food waste in a dumpster instead of a compactor may be less expensive. However, you also must consider the odor and vector

TRADE WASTE COMMISSION MAXIMUM RATES

Rate	Service
\$30.19	per cubic yard for compacted trash
\$12.20	per cubic yard for loose trash
\$2.66	for 55-gallon trash bags > 80% full
\$1.45	for 30-gallon trash bags > 80% full

problems caused by food waste and weigh the advantages and disadvantages of collecting in an open container versus a sealed compactor.



What would your waste carter charge you for this container of waste?

Spotlight on Lighting

When Doug Sheppard breaks out his sample products, he is in the spotlight, quite literally. Nothing makes a stronger impression than seeing a new product in action. Sheppard, President of Advanced Energy & Lighting, Inc. in New York City, presented the newest in lighting technologies at a series of *NYC WasteLeSS* seminars for New York City businesses.

Sheppard's company, Advanced Energy & Lighting, specializes in delivering energy efficient system designs that are reliable and affordable. "Customers are always amazed that they often have more light when the retrofit is complete, but the overall wattage of the fixtures is less," says Sheppard.



Doug Sheppard, of Advanced Energy & Lighting, Inc., demonstrates several new lighting technologies at a *NYC WasteLeSS* seminar.

One New York City business switched from a flat fee to a "per pull" system and discovered that its carter was billing based on loose waste prices. However, the business had both compactors and open-top dumpsters. To make the billing uniform, the carter elected to charge the loose waste price by converting the compacted waste volumes to a loose waste volume using a conversion ratio.

Not only did these converted volumes create a higher price, but the carter used conversion ratios that were unreasonable (2:1 or 3:1 are standard), making the volumes and, therefore, the price even higher. Using the business's waste volumes and TWC's maximum prices as an example, the business estimated that they were being overcharged almost \$10,000 per month — a significant cost to the company.

For more information, contact the New York City Trade Waste Commission at (212) 676-6275. ■

Among Sheppard's samples were LED exit signs, several small compact fluorescent lamps, and an induction lamp that can last for up to 30 years. This lamp gives off 6,000 lumens using only 85 watts. He described the additional benefit with many of the new fixtures in that most manufacturers offer a two-year maintenance warranty on lamps and ballasts.

In addition to the nuts and bolts of lamps and fixtures, Sheppard also described studies conducted by the U.S. Department of Energy and the Rocky Mountain Institute that found by improving lighting, workers are more comfortable and more productive. For example, Boeing's retrofitting project in which more than one million square feet of space in the hangar-sized assembly plants received new lighting, reduced its lighting electricity use by up to 90 percent, with a two-year payback period and reduced product defects at the same time. ■



FOR MORE
INFORMATION:

- For more information about increasing productivity through energy efficient design, contact the Rocky Mountain Institute at (970) 927-3851, and ask for *Greening the Building and the Bottom Line*.
- For more information about lighting options for New York City businesses, contact Doug Sheppard of Advanced Energy & Lighting, Inc. at (212) 589-4313.

FEEDBACK ... Tell Us What's On Your Mind. We would like to hear from you. Please take a few minutes to let us know: (1) if you find the information provided in *NYC WasteLeSS* useful (2) what waste prevention, recycling, and energy efficiency topics you would like to learn more about and (3) any other thoughts and comments, including your own waste prevention, recycling, and energy conservation success stories. Simply write to us at *NYC WasteLeSS*, NYC Department of Sanitation, 44 Beaver Street, 6th Floor, New York, NY 10004, or you may fax information and comments to us at (212) 837-8255 (attention: *NYC WasteLeSS*). Thank you for your input.

Waste Prevention in Your Office

Look around you. Are there opportunities to reduce the waste in your offices? It is likely that there are opportunities for waste prevention in every office of every business in the City of New York. Waste prevention measures take many forms, involve staff from every level of an organization, and can be initiated within all operational area offices.

It is no longer newsworthy to discuss the cost-saving, waste prevention initiatives that most offices already have in place, such as using reusable mugs and double siding photocopies. These initiatives are considered the "low hanging fruit." They are easy to implement and do not require extensive training or significant resources. The easy-to-implement initiatives offer an almost immediate payback to your organization.

Implementing the more innovative waste prevention programs in your office may require coordination among various parts of the organization. However, implementing waste preventing practices beyond double-sided photocopying will result in savings through both reduced purchasing costs and avoided disposal costs. Consider the following when developing a waste prevention plan that meets the needs of staff in all offices of your operation.

- **Lease office furniture and equipment.** Leasing office furniture, rather than purchasing and discarding it 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. In addition, if a new look for your office is part of the plan, consider refurbishing and recovering existing furniture or donating used furniture to a non-profit organization as an alternative to discarding it.

Did you know that at current New York City maximum carting rates, it costs about \$12 to throw away an office chair and \$24 to throw away a desk? How about file cabinets and bookcases at \$8 each? That's almost \$50 for the discard of one employee work station. Consider donating office furniture and equipment to avoid these disposal costs.

- **Get off mailing lists.** Request to be removed from mailing lists to eliminate unwanted advertising mail by contacting the Direct Marketing Association at the following address:

**Mail Preference Service (MPS)
Direct Marketing Association
P. O. Box 9008
Farmingdale, NY 11735-9008**

You also can visit the Direct Marketing Association's web site at www.the-dma.org to obtain an electronic form requesting to be removed from mailing lists. Remember, not all companies use MPS to purge their mailing lists; therefore, you may

continue to receive some companies' promotions. In this instance, contact the company directly and ask to be placed on the company's do-not-mail list.

- **Buy products in the largest size you can use.** Purchasing supplies in the largest size you can use cuts down on packaging waste and your waste stream. Consider consolidating purchases so that you are getting larger shipments once a month or quarterly instead of smaller ones daily or weekly. If your supplier is delivering single items in larger shipping boxes, ask that they wait until they have your full order ready before sending the shipment. You can help your supplier by coordinating orders so that you are requesting multiple items for each shipment. This will reduce the amount of transport packaging, such as cardboard, plastic film, and strapping, that must be managed or discarded.
- **Reuse packaging.** Consider reusing scrap paper, packaging materials, pallets, bags, containers, and mail supplies for shipping products and other materials. Collecting shipping materials and reusing them eliminates the cost of disposal of often bulky materials, and also eliminates the purchase of new materials such as plastic bubble wrap, new pallets, and other costly shipping materials.
- **Start a Reuse Room.** You can set aside a supply cabinet, a corner of your supply room, or an entire room dedicated solely to reusable equipment and supplies. By establishing an area where reusable items, such as file folders, disks, binders, staplers, and notebooks, can be "brought and borrowed" staff will use new supplies at a much slower rate. Ask staff to check the Reuse Room before visiting the supply room for new items.
- **Donate or sell useable waste materials.** Several nonprofit organizations and waste exchanges are featured in this newsletter. You will find that there are users for an astounding array of left over goods. You can donate computers and office furniture, as well as smaller items like desk accessories, white boards, and paper products.
- **Make your building environmentally smart.** If you are considering any refurbishing, remodeling or construction projects, contact Eco Smart Healthy Properties, LLC, in Manhattan. Eco Smart's Building Center showcases environmentally and technologically advanced building and office products, such as furniture, textiles, lighting, and carpeting, by more than 300 manufacturers. Contact them at (212) 430-4000.
- **Start a subscription library.** Often several people in an office receive the same magazines and journals. To cut down on paper waste, reduce the number of subscriptions and create a central library area so that all staff have access to magazines, catalogs, journals, and daily newspapers.
- **Survey your vendors.** Your vendors and suppliers may be more willing to make changes than you think. They also may have some creative and practical ideas about reducing waste. Distribute a simple survey asking for their ideas and gauging their willingness to make changes and improvements to the distribution system already in place. You may be able to work with them to implement a packaging

takeback program, using reusable shipping containers, and many other ideas.

- **Go paperless.** Businesses have made tremendous progress in reducing the amount of paper needed to operate successfully. Manufacturers keep equipment maintenance schedules updated using computers rather than paper printouts. Linking terminals using a network system allows everyone to view the same documents. Numerous other businesses have put necessary forms on-line to be printed as needed or not printed at all. Records are stored electronically instead of in warehouses full of boxes of paper. Shipping to and from wholesalers and retailers is tracked using computerized scanning systems. Consider these and other paperless strategies in your business to cut down on paper purchases, and storage and disposal costs.
- **Buy recycled.** Ask your office supplies sales representatives to provide a list of all of the items carried by their company that have recycled content. If the stores or companies with whom you do business do not have such a list, consider switching suppliers. Make every effort to purchase office supplies that are made of recycled-content materials. Office paper, file folders, desk accessories, trash and recycling bins, and laser toner cartridges all are widely available at competitive prices with recycled content. ■

Did You Know?

Wholesaler Recognizing the Value of Waste

Everything has a value, even waste. FADA Industries, located in Long Island City, New York, learned this when they joined Long Island City Business Development Corporation's Industrial Waste Recycling and Prevention (INWRAP) program. FADA imports and distributes watches to stores such as Caldor and K-Mart. Through INWRAP, the company identified cost-saving reuse opportunities for three of its packaging components — corrugated containers, plastic watch boxes, and polystyrene watch packaging. In 1998, FADA was able to divert from the waste stream about 65 percent of these three materials (almost 15 percent of the company's total waste stream). Some of the corrugated containers and plastic watch boxes were donated to a nonprofit organization, reducing disposal costs for FADA, as well as providing a tax write-off. A company that resells consumer merchandise packaging purchased a large quantity of the watch boxes and packaging. In 1998, more than nine tons each of corrugated containers and plastic watch boxes were diverted from the waste stream for savings of more than \$1,800. Also, plastic watch boxes were sold for more than \$1,000. In addition, approximately seven tons of polystyrene watch packaging was sold, producing revenues of more than \$1,200. These savings represent about one-quarter of FADA's annual waste disposal costs.

How Electric Energy Market Deregulation Affects Your Business

Following in the footsteps of the telecommunications industry, the electric utility industry in New York, and specifically Con Edison, will undergo a deregulation process over the next few years. At a series of *NYC WasteLeSS* seminars, Ron Slosberg, of SAIC Energy Solutions Division, explained the impact that these changes will have on wholesalers in the City. In New York City, Con Edison is implementing a phased approach to deregulation. Phase III of the deregulation process is in effect as of April 2000 and systemwide by the end of 2001. Resulting from this change, energy service companies (ESCOs) will emerge and customers will have the option of selecting an electricity commodity provider or remaining with Con Edison.

Slosberg assured wholesalers that energy deregulation will not affect the energy system's reliability, but it will provide customers with an opportunity to save money. The first step to getting the best energy deal for your business is to select an ESCO and negotiate an agreement that will reduce your electricity costs. The ESCO will be responsible for providing electricity to Con Edison who in turn delivers the electricity to you.

As a customer, you will receive a bill from Con Edison and your selected ESCO. Whether or not you will save money depends on the ESCO price versus the 'shopping credit' or commodity component. Rate reductions apply to all customers. An ESCO offer may include other services that will benefit your business, such as completion of an energy audit to identify cost reduction opportunities, bill aggregation, and energy project implementation assistance.

Energy customers who decide to buy energy on the open market from a service provider may want to do some research prior to selecting a supplier. Consider the company's background and shop around to compare prices and services of various ESCOs. Also, consider the terms of agreement, available customer service features, and the billing and payment options provided by each potential supplier.

Con Edison's new role begins to move the

Numerous public programs are available to encourage consumers to implement energy efficiency in their buildings. These programs provide technical assistance and financial incentives to help customers identify and install energy efficient equipment. The New York State Energy Research and Development Authority (NYSERDA) has developed various Energy Smart Programs. These include the Flexible Technical Assistance, New Construction, Standard Performance Contract, and Building Commissioning programs. In addition, NYSERDA funds a variety of technology research and development projects. All of these programs are focused on reducing energy consumption while improving the operation of energy systems. For more information regarding these programs visit www.nyserdera.org/engyser.html.



The upcoming deregulation of the electric utility industry will provide wholesalers with an opportunity to save money.

company out of the electric generation business and into delivering electricity supplied by the ESCOs. One important note, Con Edison will continue to provide and maintain transmission and delivery services and systems and will respond to emergencies.

Small wholesalers that don't consume significant electricity may find the greatest savings by joining forces with other businesses to purchase electricity in greater amounts. Slosberg suggested that businesses join together and identify an aggregator to help them save money as a result of increased buying power. The aggregator's role will be to organize a group of electricity customers, enroll group members through an

ESCO and leverage the groups buying power. Check with your local development corporation, trade association or business organizations to determine if there is an effort under way to join together to purchase electricity. ■



FOR MORE
INFORMATION:

- For further information or assistance, contact NYSERDA at (518) 862-1090 or your local Con Edison utility representative.

Joining EPA's WasteWise Program

The U.S. Environmental Protection Agency's WasteWise program can provide a framework for your waste prevention program and other waste reduction efforts. WasteWise is a free, voluntary partnership program that encourages organizations to reduce waste through waste prevention, recycling, and buying or manufacturing products with recycled content. WasteWise provides partners with technical assistance, publications, and public recognition opportunities. WasteWise partners saved an estimated \$26 million in avoided disposal costs in 1997, and avoided paper purchasing costs for all the program's partners in 1997 could be as high as \$60 million, according to the Fourth Year WasteWise Progress Report, published by U.S. EPA in September 1998. ■



FOR MORE
INFORMATION:

- Visit the WasteWise Web site at www.epa.gov/wastewise or call the WasteWise helpline at (800) 372-9473 for a free information packet.



Lorraine Graves, an Environmental Specialist with the U.S. Environmental Protection Agency, Region II, explains the benefits of the WasteWise program at a *NYC WasteLeSS* seminar.

Donate Your Way to Cost Savings → continued from page 1

the time of donation, the produce is nutritionally viable for at least another 48 hours.

In addition to removing edible food from the waste stream, wholesalers buying new office furniture, shelving, and equipment are reducing the quantity of waste carted for disposal. Usable items may find a new life at a local non-profit, school or other organization in need. Wholesalers across the City benefit in several ways: (1) eliminating the cost of disposing of unwanted items (2) reducing the burden on landfill capacity and (3) spreading goodwill and enhancing their positive public image.

Each year, many non-profit organizations in the City facilitate the exchange of usable, high-quality items between wholesalers and receiving organizations. According to Susan Glass, Director of Materials

for the Arts (MFA), 514 tons of materials, worth an estimated \$3 million, were donated through the organization during New York City's fiscal year 1999. MFA, a program sponsored by the New York City Department of Cultural Affairs in partnership with the Department of Sanitation and the Board of Education, makes the items available to a variety of groups. These include New York City-based, non-profit cultural organizations; health, social and community service organizations; schools; and City agencies.

The next time you are about to discard edible food or usable material goods, consider contacting one of the many charitable organizations throughout the City. Many organizations offer guidelines, donation packaging and tax advantages. Save money while helping others. ■



FOR MORE INFORMATION:

Food Donations:

- City Harvest, Inc. - (212) 463-0456, fresh, prepared, and packaged foods.
- Food for Survival Food Bank - (718) 991-4300, canned and packaged foods.
- Island Harvest (Long Island) - (516) 294-8528, fresh, prepared, and packaged foods.

Materials Donations:

- Good Will Industries of Greater New York, Inc. - (718) 728-5400, accepts clothing furniture, and furnishings.
- Helping Hand Community Center - (212) 722-0400, accepts anything and will pick up.
- Materials for the Arts - (212) 255-5924, accepts almost anything in usable condition with at least one week notice and will pick up.
- New York WaSteMatch - (212) 240-6920, helps identify potential users of waste materials.

- NYC Stuff Exchange (contact the Sanitation Action Center at (212) 219-8090 for more information), toll-free telephone system with listings of reuse outlets in the City.
- Salvation Army - (212) 337-7200, accepts clothing, furniture, and furnishings.
- St. Vincent de Paul Society - (718) 292-9090, accepts clothing, furniture, furnishings.
- United Way of New York City - (212) 973-3800, accepts office furnishings and equipment.
- Wilson Major Morris Community Center - (212) 234-4661, accepts almost anything and has limited collection service.

For additional organizations and ideas, contact the Sanitation Action Center at (212) 219-8090 and request a copy of *Reuse It, Repair It, Rent It - But Don't Throw It Away!* ■



Chairs await collection by Materials for the Arts, a non-profit organization that makes hundreds of tons of donated goods available to cultural, health, community, and educational organizations.

Fear of Liability Not Necessary

New York City food wholesalers that donate food in good faith are protected, under Federal law, by The Bill Emerson Good Samaritan Food Donation Act. In 1981, New York State enacted Article 4-D, Section 71-Z, "Liability for Canned, Perishable Food or Farm Products Distributed Free of Charge." Many collection organizations also have implemented safe food

handling procedures to further protect donors and recipients. Fear of liability is no longer an issue for those who wish to