

Introducing Recycling

Since the establishment of the mandatory commercial recycling program in 1992 (Local Law 87), many New York City manufacturers have been recycling.

This second issue of the *NYC WasteLe\$\$* newsletter addresses recycling and provides manufacturers with technical information and resources to enhance and expand their current recycling programs.

The Fresh Kills Landfill, which has provided a low-cost waste disposal option for New York City for years, is now scheduled to close by December 31, 2001. After that date, all non-recycled residential and institutional solid waste generated in New York City will be exported.

Commercial waste already is shipped out of the City and the additional residential waste is likely to increase waste disposal and transportation costs for everyone in the City.

Recycling can benefit New York City manufacturers by reducing carting costs, generating revenue, and streamlining operations. This newsletter shares the recycling successes of *NYC WasteLe\$\$* partners and other businesses in New York City and across the country.

For more information about recycling, visit the *NYC WasteLe\$\$* Web site at: www.nycwasteless.com

Eagle Electric Recycles



Runners (right) that hold the product (switch plate above) in the manufacturing process are reground and fed back into the process at a ratio of 25% regrind (top) to 75% virgin plastic resin.

Eagle Electric Manufacturing Company, one of the largest manufacturing employers in New York City, with 1,500 employees in the corporate offices and on the production floor, was an eager participant in the *NYC WasteLe\$\$* project. Eagle Electric is the second largest producer of residential wiring devices in the world. Its three facilities in Long Island City house metal forming, plating, plastic molding, and packaging operations, as well as warehousing and administrative offices.

Eagle Electric's largest waste streams, identified during the *NYC WasteLe\$\$* assessment, are plastic scrap, used oils, scrap metal, corrugated cardboard, pallets, and office paper. Eagle Electric considers recovery of materials for reuse and recycling a common sense approach to waste management that saves money and conserves resources. The company's comprehensive waste management program includes recovery of a variety of materials.

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What To Do With Difficult-to-Recycle Materials

Besides the standard recyclable materials that are required in recycling programs across New York City, such as mixed paper, beverage containers, and corrugated cardboard, many manufacturers generate large quantities of other, not-so-easy-to-recycle materials. Some common, difficult-to-recycle materials include plastic film, barrels and buckets, pallets, fluorescent lamps, and computers/electronics, to name a few.



Wood pallets gain a new life after being refurbished

Some manufacturers may generate enough of these materials to make it worthwhile for a recycler or broker to collect them. Others may need to create cooperatives with other, similar businesses to generate sufficient quantities of certain recyclable materials before a broker would be interested in accepting it. The requirements vary greatly, so call several vendors before deciding on one or giving up altogether. Here are a few resources for recycling these difficult-to-recycle materials.

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NYC
WasteLe\$\$

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Spotlight On: Recycling

Next Issue Spotlight On:
Waste Prevention

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 WasteLe\$\$* 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 WasteLe\$\$*, 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 WasteLe\$\$*). Thank you for your input.

Recycling Resources

Local, state, and national organizations offer recycling information and assistance to businesses. The following are just a few of the on-line resources, publications, and organization contacts available to help you get a recycling program up and running, identify markets for recyclables, and locate recycled-content products.

New York City Department of Sanitation

www.ci.nyc.ny.us/strongest

The NYC Department of Sanitation's Recycling Program page offers information and publications about commercial, institutional, and residential recycling, including instructions for preparing and separating recyclables, collection schedules, and drop-off sites. DOS publications about recycling are available on the DOS Web site or by calling the Sanitation Action Center at (212) 219-8090.

U.S. EPA's Comprehensive Procurement Guidelines (CPGs)

www.epa.gov/epaoswer/non-hw/procure/index.htm
RCRA Hotline (800) 424-9346

EPA's CPG site introduces the government's buy-recycled program including the materials listed in the procurement guidelines, levels of recycled content required, and lists of product and material suppliers.

U.S. EPA's Jobs Through Recycling Program

www.epa.gov/epaoswer/non-hw/recycle/jtr
In Region 2 (NY, NJ, PR, VI) contact Barbara Belasco at (212) 637-4182

The Jobs Through Recycling (JTR) program brings together the economic development and recycling communities through grants, networking, and information sharing. JTR builds recycling expertise within economic development agencies and places business development tools -- technical assistance, financing, and marketing -- in the hands of recycling professionals.

Empire State Development, Environmental Management Investment Group

One Commerce Plaza

Albany, NY 12245

(518) 486-6291

www.empire.state.ny.us/environment/

EMIG invests in projects that produce measurable waste prevention, reuse and recycling results. Projects should enable New York State businesses and institutions to capture the economic benefits associated with waste prevention, including increased productivity and competitiveness, job creation and retention, and increased recycling capacity. Program funds support capital investments, technical assistance, and research, development and demonstration.

Recycling Requirements For Manufacturing Facilities

Recycling isn't just a good idea; it's the law in New York City. Local Law 87 of 1992 requires all commercial establishments to recycle certain materials, based on the nature of the business.

All Manufacturing Facilities must recycle:

- Corrugated cardboard • High-grade office paper
- Newspaper • Phone books
- Catalogs and Magazines • Bulk metal
- Textiles (if more than 10% of your waste)

Food and Beverage Service Establishments must recycle:

- Corrugated cardboard • Bulk metal
- Metal cans • Glass bottles and jars
- Plastic bottles and jugs
- Aluminum foil wrap and trays

Cafeterias within manufacturing operations and all other food or on-premises beverage service establishments licensed by the NYC Department of Health or the New York State Liquor Authority are

required to separate for recycling the materials listed above. In addition, building owners/managers are required to keep recyclables that have been sorted by tenants and vendors separated and post signs in maintenance areas so that employees are aware of the recycling program rules and can maintain a clean recycling stream.

According to the City's Trade Waste Commission, which regulates waste carting and sets maximum carting rates, commingling bagged recyclables and bagged waste in compactors is not an acceptable practice for your cartier to request. Recyclables must be separated at the source, which means by the business generating the waste. For more information, the Trade Waste Commission can be contacted at (212) 676-6275.

Visit the NYC Department of Sanitation's Web site for more information about New York City's commercial recycling requirements at www.ci.nyc.ny.us/html/dos/html/bw_comm/ or call the Sanitation Action Center at (212) 219-8090. ■

New York State Energy Research and Development Authority

Corporate Plaza West

286 Washington Avenue Extension

Albany, NY 12203-6399

(518) 862-1090 ext.3218 (Tom Fiesinger)

www.nyserda.org

The Environmental Research and Development program funds municipal, industrial, and utility end-users of technologies; businesses that perform waste management and pollution control activities; and industries that develop, manufacture, and commercialize new, energy efficient waste management and pollution control products and processes.

Long Island City Business Development Corporation

Industrial Waste Recycling and Prevention

(INWRAP) program

29-10 Thomson Avenue, 9th Floor

Long Island City, NY 11101

(718) 786-5300

email: INWRAP@hotmail.com

INWRAP was created to help companies in northern Brooklyn and western Queens to implement non-hazardous materials management, waste reduction, and recycling programs.

East Williamsburg Valley Industrial Development Corporation

Waste Assessment and Reduction Program (WARP)

11-29 Catherine Street

Brooklyn, NY 11211

(718) 388-7287

WARP provides assistance to Brooklyn businesses in waste prevention and recycling efforts. The program is funded through grants from the Empire State Development Corporation and the New York Community Trust and shared savings fees collected from program participants.

Industrial Technology Assistance Corporation (ITAC)

253 Broadway, Room 302

New York, NY 10007

(212) 240-6920

email: info@itac.org

www.itac.org

ITAC is the Technology Development Organization for New York City and an affiliate of the New York Manufacturing Extension Partnership, a cooperative program of Empire State Development Corporation's Science & Technology Foundation and the National Institute of Standards and Technology (NIST). Its mission is to strengthen the economy of New York City by improving the performance of small to mid-sized firms that produce technical and manufactured products.

Bathgate Industrial Park Local Development Corporation

4201 Third Ave.

Bronx, NY 10457

(718) 901-1977

www.bronxview.com/bathgate

Bathgate LDC is a full-service local development corporation with the overall goal of promoting economic development in the Bathgate/East Tremont neighborhoods of the Bronx through initiatives such as the Industrial Development program.

Recycler's World

Recycler's World Help Line: (519) 767-2913

www.recycle.net/recycle

Recycler's World was established as a world-wide trading site for information related to secondary or recyclable commodities, by-products, used & surplus items or materials. The New York Recycling Directory was established to promote trade in the recycling industry in the State of New York.

Eagle Electric ► continued from page 1

- Scrap plastic is generated by compression and injection molding operations. Eagle Electric regrinds reject parts and runners and feeds back to the press a mixture of 75 percent virgin plastic and 25 percent regrind.

- Each year, Eagle Electric generates as much as 100 tons of urea scrap. In the early 1990s, Eagle Electric staff worked with Long Island City Business Development Corporation's INWRAP program to determine the recyclability of this plastic. Currently, urea scrap is sold for reuse as a blast medium for paint removal, generating more than \$69,000 in annual revenue. In addition, more than six tons of phenolic scrap and 2.5 tons of phenolic flash are returned to the manufacturer for reprocessing, eliminating an additional eight tons of waste.

- Eagle Electric generates more than 9,000 scrap wooden pallets annually. Eagle Electric sold more than 5,000 pallets to a pallet recycler for \$1.00 each, avoiding 10 tons of waste and generating \$5,200 in revenue. The company's waste carter collected an additional 3,900 broken pallets and chipped them for use as mulch. This allowed Eagle Electric to avoid the cost of disposing of the broken pallets.

- Corrugated cardboard is diverted, flattened, stored in wheeled containers, consolidated at the loading dock and collected at no charge by the waste carter. Eagle Electric operations generate approximately 67 tons of corrugated cardboard for recycling, annually.

- High-grade white paper from administrative offices is diverted to cardboard cartons near each line printer. At the end of the work day, porters empty the cartons into canvas hampers, which are collected by the waste carter about every two weeks. In 1997, Eagle Electric recycled more than 21.5 tons of high-grade white paper. In addition, Eagle Electric estimates that its 178 office workers annually generate an additional 23 tons of mixed paper. Management plans to launch a desk-side mixed paper recycling program in the near future.

- Through sales to a local scrap dealer, Eagle Electric annually recycles more than 1,500 tons of scrap metal, primarily steel and brass. ■



WasteWise partners receive technical assistance, as well as public recognition for their successes.

Manufacturers Turn Scraps Into Cash

Martin Greenfield Clothiers, located in Brooklyn, is a manufacturer of hand-tailored custom suits and clothing. The company participated in the Waste Assessment and Reduction Program (WARP) sponsored by the East Williamsburg Valley Industrial Development Corporation. Through the WARP assessment, Martin Greenfield instituted a recycling program for its cashmere, wool, mixed cutting room scraps, and cardboard waste. Todd Greenfield, a principal in the firm, described the results of the program — a one-third reduction in the number of trash pickups needed, from 23.5 yards per week to 15 yards, and savings of approximately \$4,000 per year. "We're an Old World sort of operation, and we do everything with craftsmanship," Greenfield stated. "We're sensitive to environmental issues and we're happy to have the opportunity to recycle materials if somebody else can use them. It saves me money and it saves [trash] volume."

The Greenpoint Manufacturing and Design Center (GMDC) is housed in the former Chelsea Fiber Mills Complex in Brooklyn. The 400,000 square foot, eight building mill complex is now home to a cooperative of 72 tenants, which are all woodworking businesses or artists. David Sweeny, the Chief Executive Officer of the complex, described the Center's recycling program, which has focused on two waste streams — sawdust/particulate and solid wood/trim block.

Of special interest is the innovative recycling program developed for the solid wood/trim block waste. Large recycling bins were given to each tenant. The tenants were asked to place their highest quality wood waste in the bins. The full bins were collected and the wood sorted and stacked in an area known as The Wood Center. The Wood Center, an on-site factory outlet open to the public on weekends and by appointment, sold the scrap materials at a greatly reduced rate. Prices varied depending on the quality and size of the wood. Mr. Sweeny reports that materials were purchased by a variety of users such as schools, day care centers, hobbyists, do-it-yourself renovators, and artists. The Wood Center generated between \$25,000 and \$45,000 per year in sales, and sold between four and five tons of wood annually. Greenpoint now has so much demand for manufacturing space that GMDC suspended The Wood Center operations until expansion space can be found. ■

Recycling — A Good Way to Be WasteWise

Recycling is hot — and your business can benefit from it. Recycling includes the whole process of collecting recyclables, using recovered material in the manufacture of new products, and purchasing recycled-content products. It can save you money while conserving resources. In 1994, the U.S. Environmental Protection Agency (U.S. EPA) established the WasteWise program to champion businesses that implement and measure successful recycling and waste prevention programs.

In 1997, WasteWise's 700 partners collected more than 6.8 million tons of recyclables, purchased nearly \$3 billion in recycled-content products, and used nearly two million tons of recovered material in their manufacturing processes. In addition, businesses and institutions across the country saved an estimated \$218 million in avoided disposal fees by recycling.

Source: U.S. Environmental Protection Agency WasteWise Program

Innovative manufacturers are finding ways to improve their recycling programs and many WasteWise partners have achieved significant success. In 1996, Topper Plastics, Inc. recycled 1.3 tons of cardboard and 300 pounds of plastic. DuPont Merck recycled more than 100 tons of mixed and high-grade paper, 267 tons of lead, and five tons of wood.

Manufacturers can join WasteWise and tailor their program to meet the basic requirements: expanding or improving internal recycling operations, implementing three significant waste reduction programs and making a commitment to increase the number of items containing recycled material purchased by your company.

U.S. EPA's WasteWise program can help you with your recycling collection program and other waste reduction efforts. The WasteWise program is a free, voluntary partnership program. WasteWise provides partners with technical assistance, publications, and public recognition opportunities. 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. ■

Recycling Resources (continued)

National Recycling Coalition

1727 King Street
Alexandria VA. 22314
Phone: (703) 683-9025
Fax: (703) 683-9026

www.nrc-recycle.org

NRC is a national voice for the recycling organizations throughout the U. S. and around the world. The NRC was created to increase awareness of recycling and to provide information and assistance to businesses, public officials, and the general public.

Northeast Recycling Council

193 Main Street, Suite 401
Brattleboro, VT. 05301
Phone: 802-254-3636
Fax: 802-254-5870

www.nerc.org

NERC's mission is to ensure the long-term viability of recycling in the Northeast while maximizing its full environmental and economic benefits. The site offers a Green Procurement List Serve, business forums, and recycling cooperatives.

Global Recycling Network

www.grn.com

The Global Recycling Network is dedicated to recycling-related information. It offers markets, and allows access to Chicago Board of Trade for recyclable commodities.

Publications:

Economic Development Commentary, Mid-America Economic Development Council, National Council for Urban Economic Development, National Association of Installation Developers.

Recycling for Profit: The New Green Frontier. David Biddle. Harvard Review, November-December 1993. Reprint Number 93601.

Difficult-to-Recycle continued from page 1

Plastic Film

AAA Polymer, Inc.
Brooklyn, NY
(718) 389-2498

Accepts both shrink and stretch wrap. Will only accept post-consumer plastic film by the truckload. The film must be both clean and dry. Charge dependent on quantity.

Harmon Associates Corporation

Jericho, NY
(516) 997-3400

Accepts all types of plastic film. Needs to be baled. Will provide a baler and pick up bales if quantities generated are sufficient.

Kaiser Overseas, Inc.

New York, NY
(212) 466-6000

Accepts both shrink and stretch wrap. Accepts any clear, clean film. Service is free. Film is converted into pellets and recycled into new film.

Recycled Polymer Association

New York, NY
(212) 463-8622

Accepts both shrink and stretch wrap. Accepts any clear, clean film. Service is free. Film is converted into pellets and recycled into new film.

Waste Management, Inc.

Brooklyn, NY
(718) 387-2794

Accepts shrink wrap. Requires large quantities.

Fluorescent Lamps

Below are several companies that offer lamp recycling services. Some vendors will pick up lamps, while others require you to ship spent lamps. Contact the individual vendors for more information.

American Lamp Recycling

Fishkill, NY
(800) 315-6262

Full Circle Ballast Recyclers

Bronx, NY
(718) 328-4667

Global Recycling Technologies, Inc.

Rahway, NJ
(732) 388-3005

Mercury Waste Solutions

Albany, NY
(800) 741-3343

Pallets

Pallets are a major waste management concern for manufacturers. The following vendors accept both damaged and usable wood pallets. Check with individual vendors for requirements; some require full truckloads, some pay for good pallets and charge to take broken pallets, and some will pick up pallets.

American Pallet Recycling

Dear Park, NY
(516) 667-6688

Franchise Reconditioning Co.

Brooklyn, NY
(718) 342-6965

Hunts Point Pallet Company

Bronx, NY
(718) 589-8343

Lou's Pallets

Staten Island, NY
(718) 727-5013

Nationwide Recycling

Queens, NY
(718) 526-0100

Pallets-R-Us

Wyandanch, NY
(516) 643-1167

Paul's Pallets

Bronx, NY
(718) 842-3530

Russo Whitlock Services, Inc.

Bronx, NY
(718) 842-4666

Buckets/Barrels/Drums

Plastic buckets, barrels, and drums from cleaning supplies, vehicle fluids, and food service products can be recycled or refurbished for reuse. Below are several vendors who will accept them for recycling and one that refurbishes.

AAM Container (Refurbish)

Brooklyn, NY
(718) 381-3575

Mema & Son, Inc.

Brooklyn, NY
(718) 388-4171

National Drum & Barrel Corp.

Brooklyn, NY
(718) 388-5810

Drum Service of Richmond

Staten Island, NY
(718) 494-0255

BFL, Inc.

Brooklyn, NY
(718) 497-4000

Waste Management, Inc.

Brooklyn, NY
(718) 533-5360



Numerous companies now recycle or reuse the fast-increasing quantity of electronics scrap generated in New York City.

Computers/Electronics

Management of computer/electronic waste is becoming more critical as previous generations of computers become obsolete at an ever-increasing rate. A staggering number of computers, monitors, and other electronics are discarded daily as newer, cheaper models become available.

Many discarded computers can be used by others. Some have been scavenged for parts and are worthless except for the value of their materials, such as scrap metal, precious metals, and plastic. Below is a list of some vendors and organizations in the Northeast region that either accept computer components for recycling or accept reusable computers for donation and reuse.

Recycling

Alco Refiners

Wheatley Heights, NY
(516) 491-3041

Mainframe computers and PCs, but no monitors.

Colt Recovery Group

Electronics Processing Assoc.
Rahway, NJ
(732) 382-4000

Electronic/computer products.

RCR & R

Rochester, NY
(716) 546-6620

Electronic/computer equipment.

Reused Goods

Freeport, NY
(516) 223-2522

Electronic/computer equipment.

Reuse:

Computers for Africa Project

New York, NY
(212) 608-2150

PCs and laptops, preferably Radio Shack PCs and Toshiba 1000 laptops.

Electronic Resource Recovery

Newburgh, NY
(914) 561-1900

PCs; 486 or better with multimedia capabilities.

Materials for the Arts

New York, NY
(212) 255-5924

Accepts only working equipment not in need of repair and PCs 486 or better.

Nonprofit Computing Inc.

New York, NY
(212) 759-2368

Most working office equipment.

HELPLINE

New York Wa\$teMatch can help identify recycling markets for your hard-to-recycle materials.

Contact information:
NY Wa\$teMatch
c/o Industrial Technology Assistance Corp.
Phil Vos, Operations Coordinator
253 Broadway, Room 302
New York, NY 10007
Ph. (212) 240-6966
Fax (212) 240-6879
Email: wastematch@itac.org
URL: www.wastematch.org

Look for more details about Wa\$teMatch and its successes in the upcoming Waste Prevention issue.

Did You Know?

Nike, one of the world's largest manufacturers of athletic shoes and clothing, keeps millions of shoes out of landfills each year through its unique Reuse-A-Shoe recycling program. Nike has collection centers for used athletic shoes in twenty locations around the country, including New York City, as well as many more around the world. The collection centers are located at NikeTown stores and in the stores of specified Nike retailers. Customers donate the shoes and all brands of athletic shoes are accepted. The old sneakers, along with factory rejects, are recycled into carpet padding, athletic surfaces and new Nike products.

Bill Malloch, Nike's Director of Reuse-A-Shoe, says that the company is wholly committed to the long term effort of environmentally sensitive management of the lifecycle of its products. About Reuse-A-Shoe, Malloch stated, "We want to have an economically sound recycling program. We're actually now going to start designing shoes so that we can take them apart by component at the end and reuse the components where possible."

The recycled raw materials from the shoes are separated into three categories: outsole rubber, midsole foam, and inner lining, which are collectively referred to as Nike Grind. The use of Nike Grind is licensed to corporate partners such as Connor, a flooring manufacturer, and Surface America, a leading manufacturer of playground surfacing.

Nike works with its corporate partners and non-profit organizations to donate playgrounds and athletic surfaces made from the recycled materials in metropolitan areas throughout the country. There are four such projects in New York City, including basketball courts, a playground, and soccer fields.

Nike's corporate commitment to recycling extends beyond the Reuse-A-Shoe program. As Malloch stated "Consumers don't want to buy a 'green' product. They want to buy the brand that they know and want, and they want that particular brand to be green. If you make all your shoes that way, it becomes an attribute of the entire brand." All Nike shoes are packaged in a folded design box made from 100 percent post-consumer corrugated cardboard, which is again recyclable. Nike also uses 50 percent recycled-content office paper throughout its U. S. operations. For more information on Nike's Recycling programs or Reuse-A-Shoe, call 1-800-352-NIKE.

NYC WasteLe\$\$ Program
P.O. Box 156
Bowling Green Station
New York, NY 10274-0156

Bulk Rate
U.S. Postage
PAID
Brooklyn, NY
Permit #2189