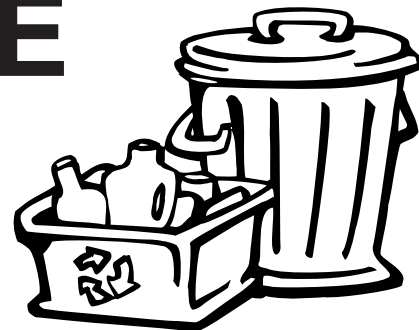




REUSABLE NEWS



National Recycling Rate Reaches 27 Percent

In 1996, America's enthusiasm for recycling spurred the creation of 2,000 new curbside recycling programs and 1,000 new drop-off centers. Combined with existing programs, these new recycling opportunities helped divert almost 57 million tons (or more than 27 percent) of the 209.7 million tons of municipal solid waste (MSW) generated in the United States. Paper and paper-board comprised the lion's share of MSW recovered, accounting for nearly 33 million tons.



These findings, reported in EPA's *Characterization of Municipal Solid Waste in the United States: 1997 Update*, indicate a continued trend away from landfilling and incineration. In fact, Americans landfilled 4 million fewer tons of waste in 1996 than in 1995. Since 1994, the amount of waste generated per person per day has declined 4 percent to 4.3 pounds, and the discard rate has declined more than 8 percent to 3.2 pounds per person per day.

(Continued on page 5)

Workshop Puts Recycling on the National Agenda

A veritable "Who's Who" in recycling gathered in Washington, DC, on May 19 through 21, 1998, for *Recycling: Looking Toward the Next Century*, a brainstorming workshop designed to generate broad policy recommendations for the upcoming National Recycling Summit planned for November 1998. The workshop, sponsored by the White House Council on Environmental Quality, brought together more than 100 representatives from private, public, and governmental organizations to help chart a course for the future of recycling in the United States.

The first day of the workshop was devoted to roundtable discussions focusing on the current and future state of recycling. Fran McPoland, the Federal Environmental Executive, opened the discussions by saying, "Today is the beginning of a dialogue to study ways to stabilize markets for recovered materials and to achieve the economic and environmental benefits of recycling."

David Gardiner, Assistant Administrator for EPA's Office of Policy, kicked off the roundtable by focusing on the overall environmental benefits and impacts of recycling and detailing the link between recycling and climate change. Barbara Stevens (EcoData) followed with a brief history of recycling collection over the past 25 years, which helped attendees understand how far recycling has come in recent years. Jerry Powell (*Resource Recycling*) and Chaz Miller (National Solid Waste Management Association) spoke about the status of recycling by touching on topics such as recovery rates for recyclable materials and the current state of recycling markets. Will Ferretti (National Recycling Coalition) looked ahead and focused on opportunities for the future, such as achieving operational efficiency in processing, sustainable development, and economic development. Other speakers presented case studies that focused on specific commodities such as recovered paper.

The second and third days of the workshop were devoted to breakout sessions on the following topics: buying recycled; financial incentives and disincentives; technology initiatives; product stewardship and design; community and economic development; and information, education, and public awareness.

(Continued on page 2)



Deconstruction: An Alternative to Demolition

To reduce waste and cut the costs associated with building demolition, more and more companies are turning to deconstruction. Deconstruction is the selective dismantling or removal of materials from buildings to be sold for reuse or recycling. Although the process is not new, many demolition firms want to know under what conditions deconstruction is a cost-effective alternative to demolition.

To help answer this question, EPA and the National Association of Home Builders-Research Center (NAHB-RC) conducted a pilot project at Riverdale Village, a four-unit public housing project in an urban area of Baltimore County, Maryland. Deconstruction workers salvaged common building materials such as brick, framing lumber, hardwood flooring, windows, doors, and assorted fixtures. The project succeeded in diverting 96.5 tons of construction materials. Salvaged items were sold at an onsite sale and earned a total of \$2,440. Unsold items were donated to a construction material reuse organization in Baltimore.

Robin Snyder of EPA's Urban and Economic Development Division says that increasing reuse of the deconstruction materials is a matter of educating consumers. "Once they understand the deconstruction process and concept, they will want to buy these construction materials," she notes. On some deconstruction sites, according to Snyder, the

salvage rate is as high as 90 percent (at the Baltimore site, approximately 76 percent of materials were salvaged). Results of deconstruction projects so far indicate that the practice is a cost-effective alternative to demolition, costing an estimated 30 to 50 percent less than demolition.

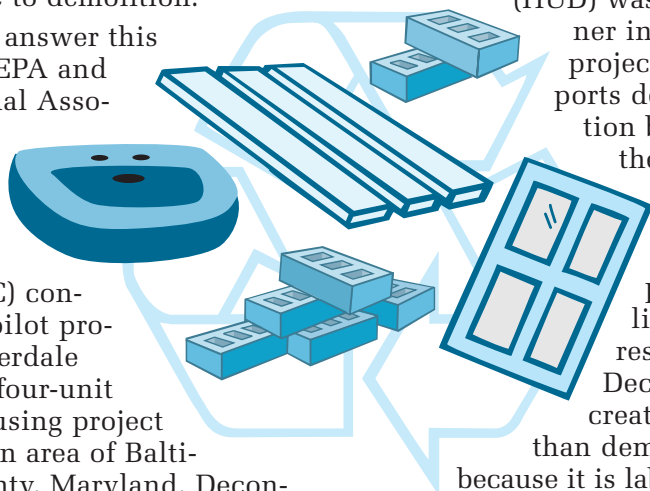
As the owner of Riverdale Village, the U.S. Department of Housing and Urban Development (HUD) was a key partner in the pilot project. HUD supports deconstruction because of the employment opportunities it can provide public housing residents.

Deconstruction creates more jobs than demolition because it is labor-intensive and relies primarily on the use of hand tools and "people power" to take buildings apart. It also presents an opportunity to teach job skills to people currently unemployed.

Federally funded deconstruction projects are slated to start on Aberdeen Proving Ground in Maryland and at a U.S. Navy testing facility in White Oak, Maryland. In the White Oak project, public housing residents will help deconstruct six buildings.

For more information about the Baltimore and other deconstruction projects, contact Robin Snyder at 202 260-8331 or via e-mail at <snyder.robinsnyder@epamail.epa.gov>. The Baltimore case study is available on the Internet at <www.smartgrowth.org/pdf/deconstruction.pdf>.

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Satellite Forum Provides Interactive Training

Calculating an accurate recycling rate can raise many questions for communities. What materials should be counted as recyclables? Where can reliable data be found? To aid state and local governments in their efforts to measure recycling, EPA created a standard measurement method that produces an accurate recycling rate useful for planning and market development purposes.

To help governments implement this method, EPA held a live satellite forum on June 3, 1998, at more than 150 sites around the country. The cornerstone of EPA's outreach effort regarding recycling measurement, the 2-hour forum provided the technical training that is essential for states to use this measurement method. A panel of recycling measurement experts, including representatives from Washington and Pennsylvania, as well as EPA's Hope Pillsbury, answered viewers' questions.

For more information, visit the Recycling Measurement Web site at <www.epa.gov/recycle.measure> or call the RCRA Hotline at 800 424-9346 to request a copy of *Measuring Recycling: A Guide for State and Local Governments* (EPA530-R-97-011).

Recycling Workshop

(Continued from page 1)

A final summary of the workshop is available on the Office of the Federal Environmental Executive Web site at <www.ofee.gov>.

America Recycles Day: Building on Last Year's Success

The results are in, and organizers have declared the first annual America Recycles Day (ARD) "a smashing success!" Based on last year's outstanding media coverage and community results, this year's America Recycles Day (November 15, 1998) promises to accomplish even more in encouraging Americans to buy recycled.

Last year, ARD generated about 176 million media impressions, from national news reports on NBC's *Today Show* and National Public Radio to local coverage in 2,000 newspaper articles. These messages drew the nation's attention to recycling. An estimated 3,000 local events promoted the buy-recycled message, encouraging participants to sign a pledge card to start or enhance their recycling efforts. About 750,000 people took the pledge. The America Recycles Day Web site received some of these pledges, contributing to its 1

million visitors during the heart of the campaign.

Results from communities



reflect ARD's success in galvanizing widespread, public support for recycling. The city of Long Beach, California, posted a 12 percent increase in the amount of recyclables collected in its curbside program during the month following America Recycles Day. This was the largest increase in the program's 5-year history. The city of Sarasota, Florida, enjoyed similar success, reporting an 18 percent increase in the amount of recyclables collected over 1 month. This level of attention and improvement has prompted even nonparticipating states to take notice. For 13 years, Oregon designated 1 week in October as Recycling Week. After last year, however, the state decided to alter tradition to take advantage of the national coverage in November.




On the heels of these accomplishments, organizer Kevin Tuerff believes the next ARD will bring a sharper focus and even



greater results. This year's sponsors include EPA, the U.S. Postal Service,

Steel Recycling Institute, Home Depot, 100% Recycled Paperboard Alliance, Union Camp Corporation, Browning-Ferris Industries, and the Remanufacturing Industries Council International. National cochairs Will Ferretti of the National Recycling Coalition and Fran McPoland, the Federal Environmental Executive, will encourage all 50 states and 3 territories to promote the buy-recycled message. With more time to organize than last year, states can improve the quality and quantity of their results. They began planning an estimated 5,000 local events at the state organizers' training on May 6 and 7, 1998.

For more information about ARD, contact Kevin Tuerff at Tuerff-Davis EnviroMedia at 512 476-4ENV (4368). 

Last Year's Lucky Winner

While moving out of his old house in El Paso, Texas, Sgt. Robert Portillo came across a lottery ticket. His first instinct was to throw it away, declaring, "I've never won anything in my life!" He discovered, however, that the ticket was a winner. Two weeks after Portillo pocketed \$2 from his winning ticket, he received the second prize of his life—a dream home, built on 15 acres of central Texas land.

Portillo was the lucky winner of the American Green Dream House,

constructed of recycled-content materials. He was one of 750,000 who filled out an America Recycles Day pledge card and earned a chance at winning the house. Sgt. Portillo has shown a strong commitment to recycling and source reduction, pledging to reduce the number of plastic bags he takes from the grocery store and recycle his used oil and aluminum cans.

Although Sgt. Portillo is currently posted in South Korea, he will return home on a brief leave in August, when he will receive the keys to his new ranch. He will settle into the home after completing his assignment.



Sgt. Portillo is already recycling on the Texas land where his dream home will be built

EPA's Green Space: The New Ronald Reagan Building

The federal government's newly constructed Ronald Reagan Building is as "green" as some of its occupants. This Washington, DC, building is the second largest federal complex in the nation and will be home to



more than 1,000 EPA employees by 2001. Other tenants include the U.S. Customs Service, the U.S. Agency for International Development, the International Cultural and Trade Center, and the Woodrow Wilson International Center for Scholars.

Because EPA discovered it would be a tenant of the new building 2 years after design and construction began, the Agency's efforts to incorporate "green" construction practices were largely focused on the interior space. EPA worked with the U.S. General Services Administration (GSA), for example, to identify a variety of recycled-content construction materials. These materials included steel, aluminum, gypsum wallboard, roofing felt, ceramic and stoneware tile, and concrete containing 25 percent coal fly ash. EPA selected office furniture made with recycled materials, which was shipped using recycled packaging. Additionally, under a "take-back" or "cradle-to-cradle" program, the office panel partitions used in the building can be returned to the manufacturer and made into new partitions when they wear out. EPA also found carpeting suppliers willing to accept worn carpeting in the future for recycling or energy reclamation.



EPA and GSA learned a lot about "green buildings" from this project. They realized that environmentally friendly technology and products are available and that the federal government—the largest individual purchaser of goods and services in the country—can be a strong force for sustainability.

Leonard Weiser, GSA project executive, said, "One of the most interesting things I rediscovered during this project is that there

New Public Service Announcements!

"Buy Smart, Waste Less, Save More"

As far as waste prevention goes, the above slogan says it all. Created by The Advertising Council and the Environmental Defense Fund (EDF), this slogan is the tag line for a new national waste prevention public service announcement (PSA) campaign.


For nearly a decade, EPA has supported a highly successful national PSA campaign to promote recycling and the use of recycled materials. This campaign, produced by the Advertising Council and EDF, began in 1988 with the now-famous slogan, "If You're Not Recycling, You're Throwing It All

Away." In 1994, the campaign built consumer demand for recycled products and packaging, using messages such as "Complete the Circle: Buy Recycled." Since 1988, the campaign has generated more than \$222 million in donated advertising space. In 1996, donated ad placement exceeded \$42.4 million.

The need for a new waste prevention campaign is clear. While the collection of recyclables and purchases of recycled products have increased substantially since the ad campaign began, the amount of waste generated by U.S. residents continues to present environmental challenges and to reflect a poor use of natural and economic resources. By focusing on waste prevention, sponsors hope the new campaign will call attention to ways individual citi-

zens can reduce waste generation. The campaign is intended to educate and motivate the public on the importance of reducing waste by 'pre-cycling:' thinking ahead when they buy in order to prevent waste at the source. Campaign messages will continue to reinforce the positive behaviors of recycling and buying recycled.

The PSAs are being developed for distribution this summer and fall to television and radio stations, newspapers, and magazines nationally. The 1998 distributions will reach approximately 9,500 media outlets each. Copies of the PSA are available on videotape, compact disk, and audio tape. Reproduction-quality newspaper and magazine ads also are available.

For more information, contact Roberta Desmond at EDF at 212 505-0606, Ext. 371. 



simply is no 'list of best things'—sustainable products or otherwise—to be incorporated in a project. The needs are different each time, and they have to be worked out in the context of that specific project.”

For more information about the Ronald Reagan Building, contact Fred Clements, Reagan Building contractor, at 202 863-3915. 🗑️

National Recycling Rate

(Continued from page 1)

The report also indicates that source reduction might be having an effect on the generation of wastepaper products. Since 1990, the generation of nondurable wastepaper items (e.g., newspaper, office paper, and mail) has been about constant, compared to increases in previous years.

To receive a copy of the executive summary for the 1997 characterization report (EPA530-S-98-007) or the full report (EPA530-R-98-007), contact the RCRA Hotline at 800 424-9346. A copy also is available on EPA's Web site at <www.epa.gov/epaoswer/non-hw/muncpl/msw97.htm>. 🗑️

Building-Related C&D Characterization Report Helps Set Record Straight

Previous estimates of construction and demolition (C&D) debris in the United States appear to be low, according to a new EPA report, *Characterization of Building-Related Construction and Demolition Debris in the United States*. This first-edition report indicates that approximately 136 million tons of building-related C&D debris was generated in 1996, a markedly higher amount than previously recorded. Due to insufficient data, this figure does not include estimates for the generation of road, bridge, and land clearing debris. As a result, the actual tonnage of C&D debris generated in the United States might be even higher than the report suggests.

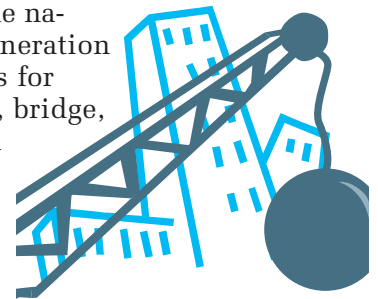
According to the report, building demolitions are the largest source of C&D debris, accounting for 48 percent of the waste stream (or 65 million tons per year). Renovations account for 44 percent (or 60 million tons per year), and construction sites generate 8 percent (or 11 million tons per year). The specific composition within each of these debris categories varies greatly and depends on the type of activity. Wood, for example, is typically the largest component of debris generated at construction and renovation sites, whereas concrete is often the largest component of building demolition site waste. In general, building debris consists of wood, drywall, metals, plastics, roofing, rubble, brick, and glass.

While many management strategies exist for these materials, C&D recycling is steadily gaining ground as a cost-effective means of managing C&D debris. Preliminary estimates indicate that approximately 1,800 C&D recycling facilities exist in the

United States, including over 1,000 asphalt and concrete crushing facilities, 500 wood waste processors, and 300 mixed-waste facilities. Asphalt, concrete, and metal recycling are well established; the report estimates that as much as 50 million tons of pavement is recycled nationwide, primarily into roads. Recycling of drywall, asphalt roofing shingles, and carpeting and carpet padding are areas of potential growth. The emerging field of deconstruction, or reuse of C&D debris, (see related article on page 2) also shows real promise for diverting these materials from disposal.

To obtain the data for the report, EPA drew from a variety of sources including national Census Bureau data on construction industry project activity and data from point source waste assessments (i.e., waste sampling and weighing at a variety of construction and demolition sites). When more data becomes available, EPA will update the report to include national generation estimates for roadway, bridge, and land clearing debris.

Major contributors to this report include Franklin Associates; National Association of Home Builders-Research Center; Gershman, Brickner, and Bratton, Inc.; and the U.S. Department of Commerce Bureau of the Census. To receive a copy of the document (EPA530-R-98-010), call the RCRA Hotline at 800 424-9346. A copy of the document also is available on the Internet at <www.epa.gov/osw>. 🗑️



RESOURCES



Managing Organics

Organic materials, including food scraps, yard trimmings, and paper, comprise up to 85 percent of the national MSW stream. Effectively managing these materials can significantly reduce the amount of MSW disposed of each year. A recent EPA report, *Organic Materials Management Strategies*, highlights seven effective organic materials management strategies: grasscycling, backyard composting, yard trimmings composting, onsite institutional composting, commercial composting, mixed waste composting, and residential source-separated composting.

The report provides a description of each strategy, a comparative analysis of its benefits and costs, and an estimate of the percentage of the organic waste stream each strategy could divert. Backyard composting programs, for example, could divert 29 million tons from the national waste stream annually by encouraging residents to compost food scraps and yard trimmings rather than dispose of them. Also included in the report are an overview of organic materials in the national waste stream and a review of compost markets and end uses.

For a copy of this report, contact the RCRA Hotline at 800 424-9346 and ask for publication number EPA530-R-97-003. The report also is available on the Internet at <www.epa.gov/epaoswer/osw/publicat.htm>. For more information about the report, contact Jean Schwab of EPA at 703 308-8669.

Compost Up Close

Compost helps bioremediate 14,000 tons of soil contaminated with explosives. Plant diseases are suppressed by compost. Compost is proven to filter contaminants from storm water.

No, these aren't headlines of the future. They're results of studies described in a new EPA report, *An Analysis of Composting as an Environmental Remediation Technology*, that documents the use of compost to manage hazardous waste streams. The report presents the findings of research conducted on the beneficial uses of compost. This research highlights compost's role in remediating soil, water, and air contaminated with toxic compounds; suppressing plant diseases and pests; and reclaiming Brownfields (abandoned industrial sites). Numerous photographs, tables, and figures illustrate the key findings, and a comprehensive bibliography is included as well.

To receive a copy of the report, contact the RCRA Hotline at 800 424-9346 and request document number EPA530-R-98-008.

Communicating the 3Rs

Do you need help promoting your internal waste reduction program to employees in your office or department? If so, a new guide from the Canadian government can help. *Choose to Reduce: Guide to Communicating the 3Rs* is designed to help government agencies better communicate the goals of their existing waste reduction programs. The guide provides a set of adaptable communications tools for effectively reaching a reduction program's target audience. Details on when and how to implement each tool allow readers to develop the specific publicity strategies that best

encourage participation in waste reduction programs. Other highlights include a plan for developing a comprehensive communications program and an annotated bibliography of relevant resources. For more information or to order a copy, contact Plan-it Green, Inc., at 613 247-9810.



This section features several non-EPA Web sites that might be of interest to our readers. These sites contain a wealth of solid waste news, conference announcements, product information, and resource lists. Stay tuned for descriptions of other helpful sites in future issues.

Waste Prevention World

www.ciwmb.ca.gov/mrt/wpw/wpmain.htm

This site from the California Integrated Waste Management Board provides information on waste reduction at home, the office, and outdoors (e.g., through composting and landscaping practices). For recycling and waste reduction coordinators, it includes tips for conducting outreach campaigns, pay-as-you-throw resources, and clip art for use in public outreach materials.

Solid Waste Online

www.solidwaste.com/

This site bills itself as a "virtual community and marketplace for professionals and vendors in the solid waste industry." It provides access to solid waste news, analysis of regulatory and legislative issues, and product information. It also enables visitors to participate in discussion forums, view event calendars, and peruse informative case studies.

Global Recycling Network

www.grn.com

This site offers a wide range of recycling information including company and association directories, recycled product information, recycling-related publications and online resources, a calendar of events, and employment opportunities. In addition, this site houses the Chicago Board of Trade Recyclables Exchange, an Internet-based marketplace for buying and selling recyclable materials internationally.

Solid Waste and Recycling

www.solidwastemag.com

Solid Waste and Recycling is a Canadian magazine on solid waste collection, hauling, processing, and disposal. The magazine's site provides access to back issues of the magazine, which cover topics such as recycling, composting, landfill technologies, and collection and hauling equipment. The site also includes a buyer's guide with information on solid waste products (e.g., balers and compactors) and services (e.g., battery recycling and composting systems). News on upcoming industry events is provided as well.

Recycler's World

www.recycle.net

Recycler's World was established as a worldwide source of information on recyclable commodities. It lists recyclers for various materials including automotive parts, batteries, wood, and textiles. It also includes lists of recycling-related associations and publications as well as other helpful solid waste web sites.



EPA Publications Now Available on CD-ROM

EPA's Office of Solid Waste is taking its source reduction message to heart by releasing a collection of its most popular publications in CD-ROM form. Designed to expand public awareness of and access to solid and hazardous waste programs, the CD-ROM will conserve paper and reduce reproduction and distribution costs. It also will enable users to easily locate specific information by electronically searching individual documents or all 90 documents on the disk.

Publications contained on the CD include environmental fact sheets, educational materials, characterization studies, and technical reports. The publications are in portable document format (PDF) and can be accessed on Windows 3.1 (or

higher), Macintosh, and Unix environments using Adobe™ Acrobat™. Copies are available through the National Center for Environmental Publications and Information (NCEPI) while supplies last.

To request a copy, contact NCEPI by phone at 800 490-9198, by e-mail at <ncepi.mail@epa.gov>, or via the Internet at <www.epa.gov/ncepi-hom/>. Many solid waste publications are already available on EPA's Web site at <www.epa.gov/osw/>.

Measuring Source Reduction

Companion software to EPA's *Source Reduction Program Potential Manual* is now available. *ReduceIt* is a valuable new tool for community solid waste managers. Like the manual, *ReduceIt* helps managers measure the source reduction potential for their communities. The software contains worksheets, a built-in help system, and printable reports that allow users to work through the manual's formulas with ease. Solid waste managers simply plug in the data applicable to their community, and *ReduceIt* estimates the possible tonnage of waste diverted and the potential net savings. *ReduceIt* is a Windows-based (3.1 or higher) software application that will run on any IBM-compatible personal computer with at least 2 megabytes of available memory.

To order the *Source Reduction Program Potential Manual* and/or *ReduceIt*, call the RCRA Hotline at 800 424-9346 and ask for document number EPA530-R-97-002.

News from WasteWise



Electronic Reporting Goes Live


Being a WasteWise partner is easier than ever. In an effort to save paper, time, and postage, EPA created a system for partners to submit annual reporting forms with just a click of the mouse.

WasteWise partners agree to establish waste reduction goals and track and record the results of their WasteWise efforts. In the past, partners submitted these data to EPA through the mail. Now, by using the WasteWise Web site, partners can simply key in their figures and send the information electronically.

EPA's Jeff Tumarkin expressed the Agency's enthusiasm about the new process, "We are very pleased that our partners may now submit their voluntary waste reduction goals and annual accomplishments electronically. This capability will simplify the whole reporting process. We also are excited because, through the implementation of electronic reporting, we are contributing to a reduction in the use of office paper!" The electronic system has already been used by more than 30 percent of the program's partners.

WasteWise partners should have received a letter, enclosed with

their copy of the *Third Year Progress Report*, that contains their User ID and instructions for using the electronic reporting system.


For more information, contact the WasteWise Helpline at 800 EPA-WISE (372-9473) or access the WasteWise Web site at www.epa.gov/wastewise/. 

1998 Forums

The Mid-Atlantic WasteWise Forum, drawing 19 partners and 17 prospective partners, provided an excellent opportunity to focus on waste reduction. Highlights from the March 4, 1998, event, which convened in Philadelphia, Pennsylvania (at EPA's Region 3 offices), included a network session hosted by Thomas Jefferson University Hospital, a local WasteWise partner, as well as a tour of the hospital. The network meeting allowed partners to discuss common WasteWise implementation problems such as the removal of wood pallets. The city of Philadelphia and Thomas Jefferson University shared their success in working with suppliers to develop a take back program on

pallets, which is now written into their contracts. In addition, keynote speaker Yasmin Reyes shared The Dupont Merck Pharmaceutical Company's success in implementing its WasteWise program, particularly in the area of employee motivation, and Bell Atlantic's Maureen Burke informed prospective partners on the many benefits of WasteWise membership.

Regional forums are an effective way for current partners to share experiences and for prospective partners to learn about the WasteWise program. Recent events included another forum in Dallas, Texas, on June 3, and two partner network meetings in Northern California on April 30 and New York City on May 11.

For more information, contact the WasteWise Helpline at 800 EPA-WISE (372-9473) or access the WasteWise Web site at www.epa.gov/wastewise/. 



This issue of **Reusable News** also is available on the Internet. Access this and other EPA publications through the World Wide Web, at www.epa.gov/epaoswer/non-hw/recycle/reuse.htm.



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