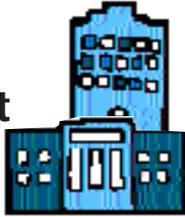




REUSABLE NEWS



WasteWi\$e Welcomes Government Partners



In its biggest expansion since the program began in 1994, EPA's WasteWi\$e program is seeking to partner with tribal, state, and local governments. For years, these governments have actively worked with their communities to find ways to reduce, reuse, and recycle. Now, WasteWi\$e is challenging these organizations to look for innovative ways to reduce waste in their own operations. Reducing waste saves governments money by lowering purchasing and disposal costs, and benefits the environment by conserving our natural resources.



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EPA Awards \$1.4 Million To States

EPA's Jobs Through Recycling (JTR) program has awarded \$1.4 million in grants to five states and two multistate organizations. These grants will support a variety of initiatives aimed at expanding economic development efforts and creating jobs in recycling industries.

"This year's grants will further support successful state efforts and spearhead projects with states who are just establishing market development programs," says John Leigh, JTR's program manager.

These grants will support numerous innovative recycling ventures. Awardees include the states of Colorado, Georgia, Hawaii, Minnesota, New Hampshire; the Pacific Northwest Economic Region; and the Northeast Recycling Council (NERC). Some of the initiatives include:

- New Hampshire will establish a revolving loan fund for recycling businesses, a large-scale food composting facility, and an association for recycling businesses.
- NERC will conduct a 2-year program designed to maximize the impacts of recycling investment forums, events that bring together recycling businesses and investors. The program will assist firms in preparing for the forums, refine efforts to market the forums, and gain additional exposure for forum participants. Two investment forums will be held.
- Minnesota will develop processing capacity and local recycle/reuse market capacity for polyethylene terephthalate plastics, waste paint, and glass.

(Continued on page 2)



WasteWi\$e Welcomes Government Partners

(Continued from page 1)

Just like the 500 current WasteWi\$e business partners, governmental partners will set goals for waste prevention, recycling, and buying recycled products; track their progress toward meeting those goals; and update EPA on their accomplishments.

Governments can join in entirety or just sign up the individual departments or facilities particularly interested in expanding their waste reduction activities. Governments that join by September 1, 1997, will be honored as charter partners at a special WasteWi\$e event, to be held on

September 21, 1997, in conjunction with the National Recycling Coalition Congress in Orlando, Florida.

Initially, WasteWi\$e will focus its efforts on information exchange, technical assistance, and recognition for its government partners. Beginning in 1998, WasteWi\$e plans new outreach efforts, including satellite teleconferences, to help governments provide waste prevention information to local businesses.

"Businesses who have participated in the WasteWi\$e program have seen firsthand the cost and environmental benefits offered through waste prevention. Now, these same resources are available to state and local governments to help cut their own internal costs,"

says Ken Brown of Minnesota's Office of Waste Management.

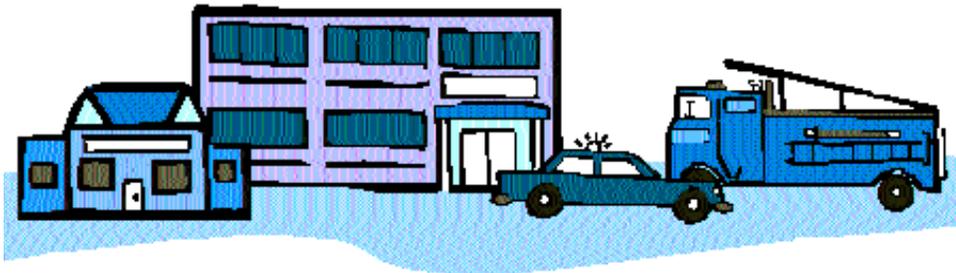
To join WasteWi\$e, or for more information about the program and its services, call the WasteWi\$e Helpline at 800 EPA-WISE. 

EPA Awards \$1.4 Million to States

(Continued from page 1)

States welcome EPA's recognition and involvement in market development and job creation. "EPA's continuing support plays a significant role in enhancing the recycling market infrastructure. Minnesota is pleased to be continuing its work at developing recycling markets and enhancing the state's economic growth," said Chris Cloutier of the Minnesota Office of Environmental Assistance.

For more information about the JTR program, contact John Leigh of EPA at 703 308-7896. 



EPA Joins Effort for "America Recycles Day"

A national media campaign, local special events, and a contest with the grand prize of "The American Green Dream Home" are all part of the celebration for the first annual "America Recycles Day," to be held on November 15, 1997. The celebration's focus is "Keep Recycling Working: Buy Recycled."

More than 10 national organizations, including EPA, are helping organize the event. Fran McPoland, Federal Environmental Executive, and Bill Heenan, president of the Steel Recycling Institute, are the national event cochairs. Vice President Gore is the honorary chair. Special events on November 15 will range from recycling fairs and school

plays to used motor oil and household hazardous waste collection events. In addition, event participants will have the opportunity to enter a contest to win "The American Green Dream Home," a house constructed of recycled-content and earth-friendly products. The winner will be chosen from a random drawing of individuals who pledge to recycle and shop for recycled products.

More than 25 states have already signed up to participate in "America Recycles Day" and its efforts to increase media attention and public support for recycling, buying recycled products, and reducing waste.

For more information about the event, contact Kevin Tuerff of Tuerff-Davis EnviroMedia at 512 476-4ENV. 



MSW Generation Dropped In 1995



As a nation, we threw away less and recycled more in 1995 than in 1994, according to EPA's *Characterization of Municipal Solid Waste in the United States: 1996 Update*. The amount of municipal solid waste (MSW) generated fell from 209 to 208 million tons between 1994 and 1995, and the nation's recycling rate rose from 25 to 27 percent. During that same period, per capita MSW generation (the amount of MSW generated per person) also dropped from 4.4 to 4.3 pounds per day.

EPA's latest annual MSW characterization report takes a close look at the practices at the top of the waste management hierarchy: source reduction and recycling (including composting). The report includes case studies that illustrate the impact of source reduction on several product categories. It describes, for example, how newspaper publishers reduced the weight of their newsprint. In 1985, a pound of newsprint contained 93 pages; in 1995, a pound of newsprint contained 118 pages. The report also quantifies the number of curbside recycling programs in the United States—7,000 in 1995—as well as the number of drop-off centers for recyclables—9,000 in 35 states. In addition, an estimated 3,300 yard trimmings composting programs (not backyard composting) existed in 1995, the majority of which were in the Northeast and Midwest.

For a free copy of the report and/or the executive summary, contact the RCRA Hotline at 800 424-9346. The full report also is available on the Internet at (<http://www.epa.gov/epaoswer/non-hw/recycle.htm#docs>). 

Did You Know?

The official Chardonnay of the National Hockey League's 1997 All-Star Game was sold in bottles reclaimed from the waste stream. The bottles were washed and sterilized by Ever-Green Glass, Inc. of Stockton, California, before being filled with wine. Each bottle included an apologetic note on the back label: "Sorry for the scratches on our bottle. We really do recycle." 



Sharing Responsibility for Products' Impacts

You've probably heard terms like "product life cycle" and "product responsibility" bandied about lately. But what do these terms mean exactly? And what do they have to do with the environment? A new EPA resource can help explain.

EPA, in conjunction with the President's Council on Sustainable Development, recently published the proceedings of a workshop on extended product responsibility (EPR), held at the White House Conference Center in Washington, DC, in October 1996. EPR holds that all people involved in the design, manufacture, distribution, use, and disposal of a product (the product life cycle) share responsibility for a product's environmental effects. For product manufacturers, sharing responsibility for products can mean making more efficient use of resources; working with suppliers to obtain more environmentally appropriate product inputs; making products more reusable, repairable, and durable; and helping to ensure that products are repaired, reused, or recycled rather than disposed of. For consumers, sharing responsibility means buying and using products responsibly and, where possible, recycling rather than disposing of them.

The workshop proceedings present background information about EPR, how the concept originated, and how it's being implemented in the United States and abroad. It also summarizes the 11 case studies presented at the workshop by representatives of U.S. companies currently implementing EPR. The proceedings also describe workshop discussions about future EPR implementation in the United States.

For a copy of the 180-page proceedings, contact EPA's RCRA Hotline at 800 424-9346. 

EPA Closes the Circle

On May 5, 1997, EPA's Municipal and Industrial Solid Waste Division (MISWD) received a 1997 White House Closing the Circle Award for Environmental Innovation. At the award ceremony, held in Washington, DC, Federal Environmental Executive Fran



MISWD has worked with other federal agencies to show how compost can be used to enhance the survival and growth of tree

McPoland recognized MISWD employees Dr. Rosalie Green, Dr. George Garland, and Terry Grist for projects demonstrating the innovative uses of compost. During the past 3 years,

seedlings, treat compacted and eroded turf, restore wildlife habitat, and prevent erosion on steep embankments. MISWD also sponsored a federal agency workshop that presented information on using compost to bioremediate contaminated soils, treat contaminated stormwater runoff, reduce volatile organic compound emissions, and reclaim mining sites. See the box below for more information about innovative uses of compost. 

Innovative Uses of Compost

Compost isn't just for mulching plants in small gardens anymore. Today, uses of compost are as varied as the users. Military facilities, commercial growers, and landscapers all use compost for large-scale projects designed to enhance the quality of their soil. Compost also can be used to bioremediate contaminated soils, restore wetlands, and prevent erosion. Some innovative uses of compost include:

- The Umatilla Army Depot in Hermiston, Oregon, used composting to **convert 15,000 tons of soil contaminated with TNT and RDX explosives** into uncontaminated soil rich in organic humus. By using compost instead of incineration, Umatilla saved approximately \$2.6 million.
- Workers at Seymour Johnson Air Force Base near Goldsboro, North Carolina, **bioremediate tons of petroleum contaminated soils** with compost technology each year. Compared to the costs of hauling, incinerating, and purchasing clean soil, bioremediation with compost is projected to save the base \$200,000 per year.
- Researchers from New Mexico State University applied compost

to **treat chili crops infested with root rot**. The fields treated with compost had larger plants with greener foliage and showed double the yields of fields left untreated.

- Dr. Donald Hey, an expert in flood plain management, tested the value of using compost to **restore 37 acres of wetlands** in a project on the banks of the Des Plaines River in Illinois. Within 2 years, flood storage—the ability of the soil to absorb flood waters—and water quality had improved significantly.
- The U.S. Army Golf Course Operations Division at Fort George Meade, Maryland, began a project to **reduce compaction and erosion** of turf in heavy traffic areas on two of its courses in 1995. By the end of the first year, healthy turf grass covered most areas with no sign of compaction or erosion. The golf course superintendent anticipates saving \$50,000 per year in maintenance costs as a result.
- A patented stormwater filtration and bioremediation system uses a tailor-made compost to **treat stormwater runoff**. The compost is

formulated to remove over 90 percent of all solids, 85 percent of oil and grease, and up to 98 percent of heavy metals.

- Dr. Rufus Chaney, of the U.S. Department of Agriculture, used compost to **remediate soils contaminated with zinc** from the operation of a smelter near Burle Palmerton, Pennsylvania. The land, which had been barren for years, now supports a growth of fescue and bluegrass.
- Dr. Michael Cole, an expert in the degradation of organic contaminants in soil, **remediated soil containing 3,500 parts per million (ppm) of Dicamba herbicide** to a level of 0 ppm in 50 days.

EPA is currently developing five fact sheets and a booklet about these innovations. For more information, contact Dr. George Garland of EPA at 703 308-7272.



True Stories: Pay-As-You-Throw Communities Share Their Experiences

Looking for more information about pay-as-you-throw (PAYT)? If so, you're not alone. MSW planners are finding PAYT programs to be an increasingly viable waste management alternative. Under this option, residents are asked to pay for trash services based on the amount thrown away.

But before stepping up to the plate themselves, many planners want to hear real-world ideas and outcomes from peers who have implemented programs of their own. Fortunately, more and more communities have switched to PAYT over the past few years. Along the way, they've identified many different strategies for making it work. And, as a new EPA booklet of their stories shows, they have some compelling results to show for it.

Pay-As-You-Throw Success Stories includes program histories from nine pioneering PAYT communities. For example, before city planners in San Jose, California, adopted their program in 1993, they conducted a 3-year planning and research effort on a set of MSW program changes (dubbed Recycling Plus) that featured PAYT. The work paid off. "The volume of recyclables and yard trimmings collected more than doubled the levels recorded before Recycling Plus," reported Jo Zientek, the city's supervising environmental services specialist. Waste prevention also took hold: nearly 90 percent of San Jose's households went from an average set-out of three cans to a single 32-gallon can.

Environmental Impacts

This kind of waste reduction translates into real environmental benefits. Less waste means energy

is saved and landfill space is preserved. Moreover, residents in PAYT communities like San Jose tend to support these programs. "Residents reported wide satisfaction with the program and its results," said Zientek, pointing to 80 percent approval in 1993 and 90 percent in 1996.

Equity Impacts

Why are residents so supportive? PAYT is considered by many to be a fair way to pay for waste collection and disposal services, and it allows individuals to take control of the amount they pay for trash services. Recycling Coordinator Gina Hawkins reported that in Gainesville, Florida, "The distribution of system costs is more equitable. Residents make the choice of level of service delivery based on their individual waste generation habits." Most choose to reduce. "The results from the first year of our program were amazing. The amount of solid waste collected decreased 18 percent, and the recyclables recovered increased 25 percent," said Hawkins.

Economic Impacts

But for many communities, the real kicker is the economic benefits of less waste. In 1990, with Dover, New Hampshire, residents generating 11,000 tons of trash each year and the cost of waste collection and disposal escalating rapidly, planners had to act decisively. "In September 1991, the city began curbside collection of recyclables, and a month later the bag-and-tag program was implemented," explained Gary Gilmore, city councilor in Dover. "Last year, we produced just

3,900 tons of waste. In 1990, our budget for solid waste was about \$1.2 million. Next year's budget (including trash and recycling) is approximately \$878,000."

Thanks to solid planning combined with some important innovations, these kinds of environmental, equity, and economic benefits are being achieved by growing numbers of PAYT communities.

In addition to *Pay-As-You-Throw Success Stories*, EPA has several other products, including fact sheets and a comprehensive tool kit for local solid waste planners interested in bringing PAYT to their communities. To learn more about EPA's free PAYT products, call the Pay-As-You-Throw Helpline toll free at 888 EPA-PAYT (888 372-7298).



Agencies' Recycled Paper Purchases Stack Up

Did you know that federal agencies purchased almost 19.4 billion sheets of recycled-content copier paper in fiscal year 1996? The bad news is that these purchases represent only 20 percent of the total copier paper purchased by government agencies from the U.S. General Services Administration (GSA) and the U.S. Government Printing Office (GPO). At the Second Paper Summit, held on May 13, 1997, in Washington, DC, Federal Environmental Executive Fran McPoland presented a federal agency "scorecard" in complying with Executive Order 12873. The Order requires agencies to buy copier paper containing at least 20 percent postconsumer fiber. McPoland praised successes but also challenged agencies to improve their performance.

Several important announcements at the meeting indicate that policy is turning into practice. The U.S. Department of Defense (DOD), which buys 2.2 million cartons of copier paper a year (more than half the paper used by the federal government), has instructed that all orders be filled with paper complying with Executive Order 12873 postconsumer fiber levels, so long as the price is equal to or less than virgin paper. GSA, the primary copier paper supplier to DOD, has been offering recycled paper at 5 cents per carton less than virgin since October 1996, and indicated that it will continue to do so until September 30, 1997. Several other agencies, including the Departments of Justice and Energy and the U.S. Postal Service, have followed DOD's lead; and others are considering doing so. In addition, many agencies' headquarters offices are placing phone calls to noncompliant field offices to reinforce the buy recycled requirement.

In addition to automatically filling copier paper orders with recycled paper regardless of the type of paper specified, GSA will include a promotional flyer with each carton to educate buyers and users about Executive Order 12873 requirements. This new practice solves what has been a major implementation barrier—the difficulty conveying and enforcing the government's buy recycled policy to thousands of individuals who make paper purchasing decisions. The Federal Environmental Executive, DOD, and several other agencies also called upon GSA and GPO to discontinue stocking virgin paper altogether. GPO announced that it will begin offering colored paper with recycled content in July 1997.

For more information about the Paper Summit and federal agency compliance with Executive Order 12873, contact the Office of the Federal Environmental Executive at 202 260-1297 (mcpoland.fran@epamail.epa.gov). For information about recycled paper requirements, contact the RCRA Hotline at 800 424-9346 for a copy of the fact sheet *1996 Buy-Recycled Series, Paper Products*, document number EPA530-F-96-014. 



RESOL

Greenhouse Gas Study Affirms Waste Management Hierarchy

A new draft EPA study concludes that waste management options at the top of EPA's hierarchy can substantially reduce the amount of greenhouse gases (GHGs) emitted into the atmosphere. The *Greenhouse Gas Emissions from Municipal Waste Management* study calculates the net GHG emissions over the life span of 10 materials. These materials—newspaper, office paper, corrugated cardboard, aluminum, steel, three plastic resins (high density polyethylene, low density polyethylene, and polyethylene terephthalate), food scraps, and yard trimmings—comprise over 50 percent of the municipal solid waste stream. The study calculates the net GHG emissions associated with the raw material acquisition, manufacturing, use, and disposal of each material. It also compares the emissions resulting from each element on EPA's waste management hierarchy: source reduction, recycling, combustion, and landfilling.

The study concludes that source reduction yields the greatest reduction in GHG emissions, followed by recycling (including composting) and disposal.

For additional information or to obtain a copy of the draft report, call the RCRA Hotline at 800 424-9346 or send an e-mail to (hotwaste@erg.com).





Electronics Reuse and Recycling Directory

Dust off that old computer monitor, record player, or VCR sitting in the basement or the back of a closet. EPA has just published a directory to make it easier to find a new home for old electronics. The *Electronics Reuse and Recycling Directory* lists numerous companies and organizations that accept a variety of consumer electronics for reuse.

Available in print and via EPA's Internet Public Access Server, the directory lists more than 200 contacts, including original equipment manufacturers, that take back electronic products for reuse or recycling. These contacts include scrap dealers that utilize certain materials or components; businesses that dismantle, repair, or refurbish electronic items; community and charitable organizations that donate used goods to those in need; and materials exchanges that link buyers and sellers of electronic products.

For a copy of the *Electronics Reuse and Recycling Directory*, call the RCRA Hotline at 800 424-9346 and request document number EPA530-B-97-001. The directory is also available via the Internet at (<http://www.epa.gov/epaoswer/non-hw/recycle.htm#docs>).

Why Do We Recycle?

In *Why Do We Recycle? Markets, Values, and Public Policy*, Frank Ackerman describes the environmental, economic, and social forces that motivate people to recycle. He contends that the current tendency to measure recycling's success solely in terms of economic costs and benefits is narrow and short-sighted. Acker-

man states that recycling addresses long-term environmental problems and satisfies social and ecological values that cannot be translated into dollars and cents.

Ackerman discusses topics such as the history of recycling; market incentives; and costs and benefits of municipal recycling programs, packaging policies (including Germany's "Green Dot" program), container deposit legislation, organic waste reduction, and the relationship between material use and sustainability.

To order a copy of *Why Do We Recycle?*, contact Island Press at 800 828-1302 (\$29.95 hardcover, \$16.95 paperback).

A Scholarly Look at Waste

Two recent papers published by Yale's Program on Solid Waste Policy provide an in-depth look at plastics recycling and the effect of Americans' time use on residential solid waste programs. In *Back to Basics? The Viability of Plastics Recycling by Tertiary Processes*, T. Randall Curlee and Sujit Das of Oak Ridge National Laboratory use a life-cycle approach to evaluate the costs and benefits of various alternatives to plastics recycling. *No Time to Waste: Time Use and the Generation of Residential Solid Waste*, by Geoffrey Godbey of Pennsylvania State University, explores the relationship between a faster pace of life and our "disposable" society.

The papers, funded with support from EPA, are commissioned by experts in various fields and then edited by Yale. For more information on ordering these and other papers, write to: Working Papers/Program on Solid Waste Policy, Yale School of Forestry and Environmental Studies,

205 Prospect Street, New Haven, CT 06511-2106, or send an e-mail to (pswp@yale.edu). Abstracts of the papers are also available online at (<http://www.yale.edu/pswp/>).

Source Reduction Made Easier

To help local governments implement source reduction programs, the National Recycling Coalition's (NRC's) Source Reduction Forum has published *Making Source Reduction and Reuse Work in Your Community: A Manual for Local Governments*. (Source reduction, also called waste prevention, means reducing the amount or toxicity of waste before it is generated.) The 70-page manual draws upon the experiences of more than 90 communities to present lessons learned and strategies for implementing local source reduction programs such as grasscycling, backyard composting, and materials exchanges. It also includes 22 case studies of innovative and cost-effective local government source reduction programs. The report was developed with financial support from EPA.

Some key strategies the report identifies include (1) developing an effective education and outreach program, (2) forming partnerships with local companies, (3) integrating source reduction with existing recycling programs, and (4) enlisting support from state governments.

To receive a free copy of the report's executive summary, write to the NRC at 1727 King Street, Suite 105, Alexandria, VA 22314-2720; or call 703 683-9025. A full copy of the report can be obtained by sending \$20 (nonmembers) or \$10 (members) to Source Reduction Forum, National Recycling Coalition, P.O. Box 79453, Baltimore, MD 21279-0453.

WasteWi\$e Homepage Receives a Facelift

The WasteWi\$e homepage now sports a brand new look. As of mid-June 1997, companies can sign up to participate in the program on line as well as view copies of the latest WasteWi\$e publications. Since its renovation, the improved WasteWi\$e Web site has received over 1,000 visitors. It offers users the following categories for learning more about the program:

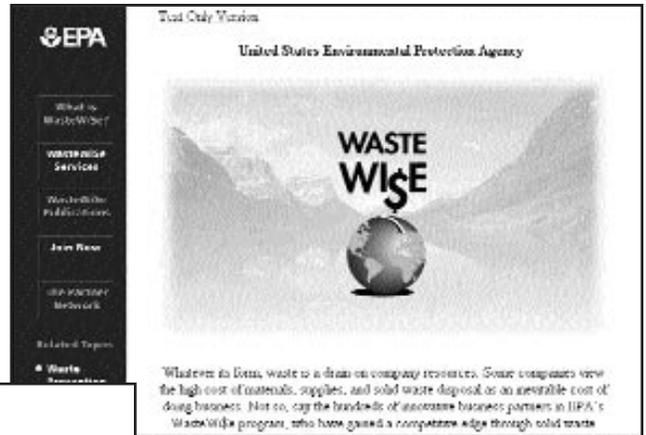
- **What is WasteWi\$e?** Includes a description of both the partner and endorser programs, highlights program results, lists current members, and answers frequently asked questions.
- **WasteWi\$e Services.** Provides a description of the services and benefits WasteWi\$e offers to partners, including the toll-free WasteWi\$e helpline (800 EPA-WISE), customized technical assistance, and recognition ceremonies.
- **WasteWi\$e Publications.** Offers PDF and ASCII versions of publications about the program and its results. These publications include fact sheets on reducing waste, setting up recycling collection programs, and buying recycled products; WasteWi\$e progress

reports; and issues of the *WasteWi\$e Update* newsletter.

- **Join Now.** Allows visitors to sign up for the program by filling out the Partner or Endorser Registration Form on line and submitting it electronically.



- **The Partner Network.** Exclusively for partners, provides program news and valuable technical information.



The site also provides more information about waste prevention, recycling collection, and purchase or manufacture of recycled products, including sample WasteWi\$e goals and results in these areas. Links to the EPA and OSWER homepages are also provided. Visit the site at (www.epa.gov/epaoswer/non-hw/reduce/wstewise/index.htm).



This issue of *Reusable News* is also available on the Internet. To access this and other EPA publications through the World Wide Web, type: <http://www.epa.gov/epaoswer/non-hw/recycle/reuse.htm>

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