

# REUSABLE NEWS



# 1990 Report Characterizes the Nation's MSW Stream

Waste characterization, which analyzes the quantity and composition of waste and establishes trends in waste management, is an important first step in solving the nation's garbage problem. Information about the

Materials Discarded into the Municipal Waste Stream (By weight)\*

Yard - 17.6%
Paper - 40%
Glass- 7.0%
Food - 7.4%
Plastic - 8.0%
Metal - 8.5%
Other -11.6%

\*Numbers do not add to 100% due to rounding.

makeup of the waste stream can help establish and measure progress toward waste management goals, and support planning at the national, state, and local levels. In addition, waste characterization can alert decision-makers to source reduction and recycling opportunities, as well as to special waste management options.

EPA recently released the latest in a series of reports characterizing the nation's municipal solid waste (MSW) stream. The anxiously awaited report, Characterization of Municipal Solid Waste in the United States: 1990 Update, presents information from 1960 to 1988 on waste generation, disposal,

combustion, and recovery through composting and recycling. It also projects figures for waste generation into the next century.

The data confirm that we are producing an ever-growing quantity of garbage with each passing year and that traditional management practices are changing in response to the load. In less than three decades, waste generation in this country has doubled, from 88 million tons in 1960 to nearly 180 million tons in 1988, or 4 pounds of waste per person per day. In 1986, EPA had predicted that U.S. garbage generation would not reach 4 pounds per person per day until the year 2000. EPA now projects that by 2000, we will produce 216 million tons per year, or close to 4 1/2 pounds per person per day.

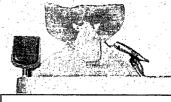
The report also presents a breakdown of the materials and products found in the MSW stream by weight. In 1988, paper and paperboard made up the largest proportion of our waste by weight at 40 percent, with yard wastes the second largest component at almost 18 percent. Glass, metals, plastics, and food wastes each composed between 7 and 9 percent of total MSW by weight. Percentages of these materials have shifted over the years, with glass decreasing, paper increasing slightly, and plastics and aluminum increasing substantially.

The broad categories of materials in MSW are made up of many individual products. In 1988, containers and packaging were the largest single product category generated in MSW by weight, at roughly 32 percent of the total. Nondurable goods (such as newspapers and disposable food service items) were second at 28 percent of the total.

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See page 4 for highlights from EPA's First United States Conference on Municipal Solid Waste Management.

## Solutions for the 90s

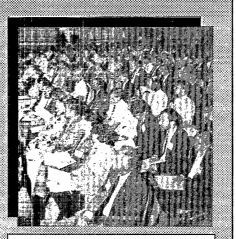
■PA's First United States Conference on Municipal Solid Waste Management was held in Washington, DC, on June 13 to 16. Over 800 people (including representatives from all levels of government, solid waste management agencies, interest groups, and industry) attended the conference, which was hailed a success by attendees. Almost all of the 43 sessions were filled throughout the 3-day conference.



EPA Administrator William Reilly and Conference Coordinator Susan Mann review the conference's agenda.



EPA's "Garbage Gremlin," and educational performer, networks with attendees over breakfast.



Attendees came from as far away as Taiwan; 43 states, 10 foreign countries, and 4 Canadian provinces were represented at the conference.

# Upcoming Conferences

Recycle '90, the Governor's Symposium on Recycling and Recycled Products, will provide information on purchasing and implementing programs to promote the use of recycled products. This symposium, to be held September 17-18, 1990, in Albuquerque, New Mexico, is targeted toward personnel from federal, state, and local governments and government agencies in the Southwest, particulary those who must conform with EPA purchasing guidelines. Recycle '90 is jointly sponsored by EPA; New Mexico Energy, Minerals, and Natural Resources; and the New Mexico General Services Department. For more information, call Exposition Management, Inc. at (505) 242-7374.

PA is holding its annual Household Hazardous Waste Management Conference in San Francisco, California, November 5-7, 1990. The conference will focus on developing goals for household hazardous waste management programs, and will include "how to" sessions, case studies of 1-day and permanent collection facilities, and discussions of product evaluation and labeling. For more information, contact the Governmental Refuse Collection and Disposal Association at (800)-456-4723.

#### Pennsylvania State Government Finds Recycling Works

Recycling fever has struck Pennsylvanians from state government on down. More than 2.6 million citizens in 205 communities currently participate in the state's recycling program. By the time it is in full swing, it will be the largest mandatory state recycling program in the nation, with over 8 million people participating.

Not only does the state government advocate recycling, but it is also leading the way by example. In 1989, state workers recycled more than 3,000 tons of wastepaper (double the amount recycled in 1988). The state plans to

double or even triple the amount of non-paper materials recycled this year, which is expected to add approximately \$2 million in state revenues and save at least \$5 million in avoided disposal costs.

The state government is also actively working to stimulate markets for recycled materials. By 1991, 25 percent of the paper purchased by the Pennsylvania Department of General Services for state agencies will have some recycled content. The Pennsylvania Bulletin, the newspaper of the state government, is now printed on 100 per-

cent recycled newsprint, which amounts to roughly 71,500,000 pages of recycled paper per year. Alternative uses for recycled products are being investigated by the Pennsylvania Energy Office; some examples include making cellulose insulation and animal bedding from old newspaper.

Pennsylvania's Lieutenant Governor, Mark Singel, is confident that his state will meet and even exceed the goal of reducing its solid waste by 25 percent in this decade. His reasoning is simple: "Recycling Works!"

#### Old News Is Good News for ONP Recyclers

n some areas of the country, tons of old newspapers (ONP) collected for recycling are stacking up in warehouses or ending up in landfills because the demand for recycled newsprint has not kept pace with the supply. This "glut" caused prices for old newsprint to plummet and sparked concern among municipalities and states that are having a difficult time finding markets for their ONP.

To discuss potential solutions to this problem, including ways to strengthen long-term markets for this commodity, EPA convened an Old Newsprint Focus Group last March. The focus group consisted of over 30 representatives from publishing companies; newsprint mills; trade associations; waste management companies; public interest groups; marketing experts; and all levels of government, including representatives from Canada.

The Focus Group agreed that the future for ONP recycling looks bright. One indicator is that paper mills are expanding or adding deinking capacity to take advantage of the steady supply of old newspapers. Industry efforts to bolster demand for ONP have been encouraged, in part, by pending federal and state legislative initiatives that would mandate recycling of ONP.

To help balance ONP supply with demand, the group recommended that before launching a newspaper recycling project, program coordinators should consider all potential ONP markets, including new or existing newsprint mills, export markets, and alternative uses such as tissue paper. paperboard, cellulose insulation. animal bedding, or hydromulch applications. Program coordinators need to accurately estimate the quantities of newspaper supply, assess demand for the material, and convey quality specifications to those involved in source separation. A successful recycling program is dependent on available markets for recovered materials.



### Hot Off the Hotline...



**Question**:I have heard a lot about buying products that are "friendly to the environment." I am curious to know whether degradable plastic garbage bags are considered "environmentally friendly."

Answer: "Degradable" plastics have generated quite a bit of debate. Claims have been made that degradable plastic bags will reduce the landfill capacity problems that many communities are facing. Research has shown that many items traditionally considered degradable, including paper and vegetables, degrade very slowly in landfill environments. It is unlikely, therefore, that degradable plastic bags, which generally must be exposed to light or microorganisms in the appropriate environment to achieve any kind of breakdown, will degrade quickly enough to affect landfill capacity. Our landfills will last much longer if we reduce the amount of waste we produce and recycle as much as possible of what remains.



The following publications are available at no charge from the EPA RCRA/Superfund Hotline. Call (800) 424-9346 Monday through Friday, 8:30 a.m. to 7:30 p.m. EST.

Be An Environmentally Alert Consumer (EPA/530-SW-90-034A). A pamphlet describing practical steps that consumers can take to reduce the amount and toxicity of the trash they generate.

Characterization of Municipal Waste Combustion Ash, Ash Extracts, and Leachates - Executive Summary (EPA/530-SW-90-029B) and Fact Sheet (EPA/530-SW-90-029C). Summaries of a report characterizing MSW combustion ash and how it behaves in the environment. A copy of the complete report (NTIS PB 90 187154) is available from the National Technical Information Service. Call (703) 487-4650.

Characterization of Municipal Waste in the United States: Update 1990 - Executive Summary (EPA/530-SW-90-042A) and Fact Sheet (EPA/530-SW-90-042B). Summaries of the latest in a series of reports characterizing the MSW stream, including estimates of quantities of waste generated, recovered for recycling and composting, combusted, and disposed of in landfills. A copy of the complete report (NTIS PB 90 215112) is available from the National Technical Information Service. Call (703) 487-4650.

Decision-maker's Guide to Solid Waste Management (Volume I) (EPA/530-SW-89-072). A guidebook designed to help decision-makers understand and evaluate their current waste management problems.

Sites for Our Solid Waste: A Guidebook for Effective Public Involvement (EPA/530-SW-90-019). A guidebook to help officials develop a facility siting strategy that involves the community. Apamphlet entitled Siting Our Solid Waste: Making Public Involvement Work (EPA/530-SW-90-020) is also available.

Recycle Today! Educational Materials for Grades K-12 (EPA/530-SW-90-025). A pamphlet announcing the availability of EPA's educational materials on recycling and other MSW issues. The materials include a curriculum, a teacher's handbook, a poster, and a comic book.

### 1990 Report Characterizes Nation's MSW Stream

(Continued from page 1)

Yard wastes made up approximately 18 percent, and durable goods (such as furniture and tires) were 14 percent of total generation in 1988.

In this report, EPA characterizes the MSW stream by volume for the first time. Such information can be valuable for determining landfill capacity because the volume of a particular material in the waste stream may be considerably different from its weight. For example, plastics, which compose only 9 percent of the waste stream by weight, make up 20

percentofits volume. Paper, on the other hand, makes up 40 percent of the waste stream by weight, and approximately 34 percent by volume. Plastics and paper together account for over one-half the volume of MSW discarded to landfills.

Materials recovery through recycling or composting has increased, from 7 percent of MSW in 1960 to over 13 percent in 1988. The long-term future of materials recovery, however, is difficult to predict. Many factors may influence recycling and composting over the next 5 years, includ-

ing changing regulations; technology; and federal, state, and regional efforts. This report estimates that MSW recovery rates will rise to between 20 and 28 percent of the waste stream by 1995. EPA believes, however, that with changes in attitudes and activities related to recycling, the nation could achieve even higher rates of recovery.

The report also shows that combustion has increased in recent years, while the percentage of waste disposed of in landfills has decreased slightly. New waste combustion facilities are being designed with better, higher efficiency pollution control equipment and, increasingly, to utilize waste-to-energy recovery methods. Combustion of MSW has risen from 10 percent in 1980 to 14 percent in 1988, and EPA projects a continued increase in reliance on combustion over the next decade. Landfilling, on the other hand, decreased from 81 percent in 1980 to 73 percent in 1988.

The mention of publications, products, or organizations in this newsletter does not constitute endorsement or approval for use by the U.S. Environmental Protection Agency.

### **DID YOU KNOW...**



IF YOU'RE NOT RECYCLING YOU'RE THROWING IT ALL AWAY. The Environmental Defense Fund (EDF) was a winner of one of the 10th Annual Buccaneer Awards for outstanding public service advertising. The Buccaneer Awards are sponsored by PIRATES, the Public Interest Radio and Television Society. The winning entry, a television public service announcement promoting recycling, was sponsored by EDF and created by Deutsch Inc. for the Advertising Council. EPA was a major sponsor of funding for the announcement.

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