Most of us use a paper product every day. That's because paper products make up about 71 million tons (or 29 percent) of the municipal waste stream, according to the Environmental Protection Agency (EPA). The good news is that more and more Americans are recycling paper. In fact, upwards of 63 percent (45 million tons) is recycled annually. When you break that number down by population, roughly 334 pounds of paper is recycled for every person in the United States.

### Corrugated Cardboard

Currently, about 70 percent of cardboard-boxes shipped commercially are recovered for recycling.

Many of the boxes are themselves made of recycled materials or lumber industry byproducts like sawdust and wood chips.

When recycled, cardboard is used to make chipboard like cereal boxes, paperboard, paper towels, tissues and printing or writing paper. It's also made into more corrugated cardboard.

#### How It's Recycled:

- 1. The cardboard is re-pulped and the fibers are separated and bleached. This is a chemical process involving hydrogen peroxide, sodium silicate, and sodium hydroxide.
- 2. The fibers are screened and cleaned to eliminate contaminants.
- 3. The fibers are washed to remove leftover ink.
- 4. Fibers are pressed and rolled into paper.
- 5. he rolls of paper are then converted into boxes or made into new products.

# Magazines

Magazines are made from paper that's been buffed and coated to achieve a glossy appearance. Next, the paper is covered with a white clay that makes color photographs look more brilliant. The shiny appearance does not contaminate the paper at all. About 45 percent of sub-content-3 are being recycled today.

About 45 percent of magazines are being recycled today.

Recycled magazines are used to make newspaper, tissues, writing paper and paperboard.

Recycling just one ton of paper saves enough energy to power the average American home for six months, so don't be afraid to recycle your old magazines. It's the right thing to do.

#### **A Common Misconception**

Some consumers think glossy paper can't be recycled. That may have been true in the early days of recycling, but no longer. With today's recycling technology, nearly all community recycling programs accept glossy magazines and catalogs for recycling.

## Office Paper

Just over 45% of office paper is recovered for recycling today.

High-grade papers, such as white computer paper, bond, and letterhead, can be turned back into office paper if it's kept separate from other waste paper. It can also be used to produce tissue paper, paperboard, stationery, magazines and other paper products.

Lower-grade papers, such as newsprint, colored paper, file stock and ground wood papers, are made into cardboard, tissues, newspaper and toilet paper.

Office Tip

If your company generates a large amount of waste paper, consider talking to your local recycling company about whether or not you should sort high-grade papers from lower-grade.

### Newspapers

More than 73% of all newspapers in the United States are collected and recycled.

The average newspaper today is made of a high amount of recycled fiber. Twenty years ago, newsprint contained only about 10% recycled fiber.

Recycled newspapers can be made into cereal boxes, egg cartons, pencil barrels, grocery bags, tissue paper and many other products, including new newspapers.

Newspaper is a fine insulator. Using recycled newspapers to produce cellulose insulation is widespread.

#### Newspapers, Wilderness Restoration and Roadside Planting

Every year natural disasters destroy countless acres of wilderness. The United States Forest Service uses "hydro-mulching," also called "hydro-seeding," to help restore damaged areas. It's a planting process that's been practiced in the United States since the 1950s - and it all starts with newspapers.

Recycled newspapers are made into a fiber mulch and mixed with grass seed, fertilizer, green dye, and water to create a "slurry" that can be pumped over broad areas by pressure sprayers, airplanes or helicopters. This process is called "hydro-mulching." It stabilizes roadside dirt for erosion control and is used to reseed grass over broad areas. Highway departments also use it to beautify roadsides by planting wildflower, tree, and shrub seeds.

### Paperboard

Once used mainly for products such as breakfast cereal boxes, paperboard is now being used for many other kinds of packaging.

Recycled paperboard is made from 100 percent recovered fiber, which may include newspaper, magazines, corrugated boxboard, paperboard folding cartons, and telephone books.

One side of the recycled paperboard is usually gray in color.

Like glossy magazines, recycled paperboard often includes a coating to improve its printing surface and provide protection from fingerprints. It's still perfectly recyclable.

There are more than 80 recycled-paper mills in North America.

#### **Recycle Clean Paperboard**

Be sure the paperboard you have is clean and free of food waste. Then recycle it.

### Paper Cardboard Dairy and Juice Cartons

Also called "gable-top cartons," these are the non-plastic milk and juice cartons you see in the refrigerated section of the supermarket.

Known in the industry as "poly-coated paperboard containers," the cartons are made of about 80% high-quality paper fiber, a renewable resource, and 20% polyethylene, a type of plastic that keeps the paper from getting wet.

America consumes enormous quantities of milk and juice, requiring tremendous outlays of energy to produce, ship and landfill the cartons. Only a fraction of these are recycled.

Waste Management, Tropicana Products, Dean Foods and select carton manufacturers have launched a program in which residents can recycle these containers in regular recycling bins at no additional charge. This program began in Florida and has been expanded to communities across the country.

#### After Pick-Up, What Happens?

Poly-coated paperboard containers undergo a process known as "hydro-pulping." Bales of containers are first reduced to pulp, which separates the polyethylene from the paper fiber.

The fiber is used to make other paper products such as tissue and paper towels.

The polyethylene is used in furniture, to generate energy, or reduced even further into paraffin, which "blends" the cartons so the non-paper and paper layers separate. The recovered paper fibers can be recycled into items such as tissue and paper towels.

Sometimes dairy and juice cartons are recycled as "mixed paper," a process that does not use hydro-pulping but instead follows the regular paper-making process.

### **Unsolictied Direct Mail**

You may think of it as "junk mail," or you may welcome the flyers, catalogs, and coupons that appear in your mailbox. Either way, it's important to recycle them.

"Mixed paper" is the term used to define the many kinds of paper products that can be collected and recycled from our daily mail.

While Americans are recycling more paper each year, our recycle rate for direct mail remains low.

According to the U.S. Environmental Protection Agency, direct mail accounts for 2.4 percent (by weight) of the total municipal solid waste generated in this country each year.

According to the U.S. Postal Service 2005 Household Diary Study, 85% of U.S. households usually read some or all of the advertising mail they receive. Many advertisers are now placing a "Recycle Please" reminder on the direct mail pieces they create.

#### Phone Books

Every year, new phone books and business directories arrive at your door. Are you careful to recycle your old ones?

The pages in a phone book are 100% recyclable and are often used to make new phone books.

There are enough phone books created each year to measure 106,700 miles when lined up end to end. This means they would circle around the earth about 4.28 times!

By recycling just 500 books, we could save between 17 and 31 trees, 7,000 gallons of water, 463 gallons of oil, 587 pounds of air pollution, 3.06 cubic yards of landfill space and 4,077 kilowatt hours of energy according to the American Forest & Paper Association.

In many places, you can simply drop the phone book into your recycling bin and leave it curbside for pickup. Call your municipality for more information.