



O K L A H O M A  
DEPARTMENT OF ENVIRONMENTAL QUALITY

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# Fact Sheet

## DEQ Challenges You!

Information provided by the Canadian County Solid Waste Disposal Authority

Office workers in the United States throw away more than 12 million tons of paper every year. Because paper comprises nearly 40% of all trash, the Department of Environmental Quality (DEQ) challenges all organizations, agencies and businesses in Oklahoma to take a leadership role by responding to our paper trash challenge.

**\*Remember:** Recycling only works if a demand exists for products made from recycled materials.

To close the recycling loop in the work place, make a three step voluntary commitment to:

- Collect office paper for recycling
- Purchase recycled paper products\*
- Begin an education program for employees or members of the community.

To reduce office waste; use both sides of paper when copying, send messages

with e-mail and share files to reduce waste and use less paper.

If you have any questions DEQ would welcome the opportunity to assist Oklahoma schools, hospitals, and businesses develop waste reduction and recycling programs. Contact our Public Information and Education Department at (405) 271-7353 for more information.

### PAPER RECYCLING NO-NO'S



The following items can ruin your recycling efforts if they are included in an office paper collection. Keep these products OUT of the recycling bin:

- paper cups and plates
- napkins
- paper towels
- tissues
- sanitary products
- shrink wrap
- food and food wrappers
- polystyrene aka Styrofoam
- carbon paper
- plastic coated items

## Facts

- About 10 million fewer tons of paper went to U.S. landfills in 1994 than in 1987, despite the fact that paper consumption increased significantly during this time.
- Paper makes up more than 35% of the world's commercial wood harvest.
- At least 40% of the U.S. waste stream is paper; that's about 88 million tons a year. We recycle between 25-30% of our paper.
- Every day Americans buy about 62 million newspapers and throw away around 44 million of them.
- Nonrecyclable paper can be used as a carbon source for your compost pile.



## Recycled vs. Recyclable

Buyers should be aware of misleading labels which say "recyclable." Remember, recyclable does not equal recycled.

### The Meaning of Chasing Arrows

**RECYCLABLE:** Generally, the clear chasing arrow recycling symbol means it has the potential to be recycled. It does not necessarily mean the product has recycled content.



**RECYCLED CONTENT:** Generally, the dark chasing arrow recycling symbol means the product is made from recycled material.



### Look for post-consumer content

Recycled products with a large percentage of post-consumer content provide the greatest environmental benefit. They contain consumer waste which completed its original purpose and would have been landfilled otherwise. Pre-consumer waste, on the other hand, is scrap waste. It has always been recovered during the manufacturing process, so it does NOT divert waste from the landfill. When you buy recycled products ask for those with post-consumer content.

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**Paper Grade and Accepted Materials (Materials accepted change frequently. Check with vendor for specifics.)**

**To prepare clean, dry paper for recycling...**

**Recycled materials are used for...**

**The fact is...**

**Newspaper**

Most recycling vendors accept slick inserts. Some even accept magazines and catalogs.

Store loose in brown paper bags, box or recycling bin.

More newsprint, grocery bags, egg cartons, paperboard, animal bedding, meat trays, wallboard facing, hydromulch, insulation.

If we recycled just half of our newsprint every year we'd need 3200 fewer garbage trucks to collect our trash.

**Cardboard**

Some vendors accept draft paper sacks and even chipboard (paper cartons like cereal boxes).

Unwaxed. No food contamination. Break down and flatten. Pizza boxes can be used as a carbon source for composting.

New cardboard and paperboard.

Americans use enough cardboard every year to make a bale as big as a football field and as high as the World Trade Center.

**Computer printout**

Continuous paper printed on an impact printer. Stark white with blue, green or brown bars. Does not include laser printed paper.

This is the highest grade of paper; you can get top dollar if it is recycled separately and is free of contaminants. (Check the front for a list.)

Generally remanufactured into more high-grade paper.

White paper has already been bleached. There's not much ink to be removed (compared with newspapers). As a result, only 25% as much bleach is used for paper made with recycled fiber.

**White office paper**

Copy machine, laser copies, typing paper, envelopes, calculator tape, white legal pads, notebook paper, etc.

Frequently can generate revenue if it is recycled separately and is free of contaminants. (Check the front for a list.)

Generally remanufactured into more high-grade paper. Sometimes made into newsprint, printing/writing paper, tissue, recycled paperboard.

Americans throw away about 85% of their office paper. Recycling writing and printing paper saves 33% of the energy needed to make paper from trees.

**Mixed paper**

Colored paper, junk mail, post-its, construction paper, file folders, manila envelopes, etc. Some vendors accept phone books, hard and soft back books, magazines and catalogs.

Usually generates no cash revenue, but is a great long-term environmental investment. Remember, no tissue, food wrappers, paper plates, cups or napkins. Check the front for complete list of contaminants.

Animal bedding, meat trays, wallboard facing, hydromulch, insulation, floor sweep, cat litter.

Every time a ton of paper is recycled 7000 gallons of water is saved.

*Check with your vendor or recycler to see what is acceptable .*



**How is paper made?**

- A pulp "soup" is concocted by boiling wood chips, water and chemicals together in an industrial-size blender. This separates wood fibers from the lignin, the "glue" that holds the wood together. Then the fibers beat into something that looks like oatmeal.
- Next, the mix is bleached, often repeatedly, with chlorine (unless it's brown paper like cardboard.) A few companies are starting to use less toxic alternatives to chlorine.
- Starch is added to make the fibers bond together. The paper is dried on a moving screen and then wound onto a giant spool.

**How is it recycled?**

- Back in the blender, shredded bales of paper are mixed with warm water, heated and mashed into pulp.
- Paper clips and string are strained out and any ink is dissolved with solvent and removed. Then it's bleached again, but less bleach is required, since the pulp has already been whitened once.
- Paper can be recycled up to 7 times, depending on how long the fibers are to begin with. Varying amounts of virgin fiber are added to strengthen paper.

**Is all paper recycled the same way?**

- There are special considerations for each type of paper, but basically it's the same process for all of them. For example, glossy paper requires special handling, while environmentally friendly "minimum impact" recycled paper skips the ink-dissolving and bleaching stages.