

STAYING IN THE LOOP



A Newsletter for Partners in Washtenaw County's Waste Reduction Program - Spring 2002

2002 PARTNERS

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OTHER: Ann Arbor News • Ann Arbor Transportation Authority • Colonial Square Cooperative • DTE Energy • Klave's Marina Inc. • *Pfizer Global Research and Development • *St. Joseph Mercy Hospital • Marsha Traxler, RN, RPP • Tel Systems/Thalner Electronics Labs, Inc. • University of Michigan Hospitals and Health Centers • The Village Cooperative Homes, Inc.

*charter member

Paper Recycling - How It's Done

Have you ever wondered what happens to the paper you place in your recycling bin? What processes it goes through to be recycled? Or what types of products it is recycled into?

Collection and Sorting

The paper products you place in your recycling bin, once collected by your hauler, are transported to a paper sorting facility. For those businesses in downtown Ann Arbor, this material is collected by Recycle Ann Arbor and sorted at the City of Ann Arbor Materials Recovery Facility (MRF). Most Material Recovery Facilities employ sorters who hand separate the different types of paper products. Typically the paper products are separated into the following categories: office paper, newspaper, corrugated cardboard, and mixed paper. During the sorting process, contaminants (non-recyclable materials) are also removed. Once separated, these materials are baled, sold and shipped to a paper recycling

facility. Paper bales on average weigh approximately 1000 lbs.

Of the recovered paper, 75% is shipped and remanufactured in the United States, while the remaining 25% is shipped over seas.

Where Does Recycle Ann Arbor Ship its Sorted Paper?

Old News Paper (ONP) #8:

- Graphic Packaging (previously James River/Fort James), Kalamazoo, MI
- Georgia Pacific Mill, Kalamazoo, MI
- Bowater, Calhoun, TN
- Donahue, Niagara Falls, Canada

Old Corrugated Containers (OCC) (cardboard):

- Packaging Corporation of America, Filer City, MI

Mixed Paper (glossy paper, catalogs, window envelopes, junk mail):

- Carastar Paper Sales, Inc., Rittman, OH

Office Paper:

- Georgia Pacific Mill, Kalamazoo, MI

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Waste Knot Award Partner Spotlight: Pfizer Global Research and Development

Pfizer Global Research and Development (PGRD) Ann Arbor Laboratories has been involved in the Waste Knot Awards program since the program's start up in 1998. PGRD Ann Arbor, as part of the larger research based and global pharmaceutical company, has really demonstrated its commitment to the environment. In Pfizer's formal Business Conduct document it states, "Consistent with Pfizer's mission of improving the health and well-being of people worldwide, Pfizer has long considered effective management of the natural and workplace environment to be one of our highest corporate priorities."

PGRD Ann Arbor has initiated some extraordinary environmental practices. An electronic chemical inventory system has been put in place to reduce the waste caused by over ordering materials. The glass bottles from the chemicals that are purchased are monitored using a handheld barcode reader to insure that the bottles are either reused or recycled. Further, the PGRD Ann Arbor's waste minimiza-

tion document states that reusable and recycled materials should be purchased whenever possible, thereby helping to close the recycling loop.

Employees play a large part in PGRD's waste reduction and recycling program. A Waste Minimization Committee, consisting of volunteers from throughout the facility, meet to discuss the recycling program and make suggestions for how the program could grow and improve. Employees are encouraged to develop new waste reduction ideas. In fact, colleague recognition awards, prizes, and gift certificates are given to those employees who are able to develop new waste reduction and recycling initiatives.

As a Charter Waste Knot Partner and a Community Partner for Clean Streams, PGRD Ann Arbor is an outstanding environmental steward. Mike Lemon, Environmental Director for the Ann Arbor facility, states, "From policies on business conduct that deal with continuous improvement in our environmental performance, to corporate guidelines on waste management and waste minimization that also stress purchasing recycled/reusable/recovered materials, to ISO 14001 registration, PGRD Ann Arbor has shown its commitment to effective environmental management."

Thank you Pfizer Global Research and Development Ann Arbor!

(continued from PAPER RECYCLING, front page)

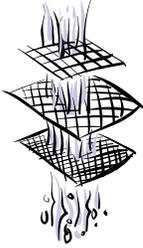


Repulping

Once the sorted paper bales reach the manufacturer, they are put through a set of recycling processes. Initially, the sorted bales are soaked in large vats of water and chemicals in a machine similar to a giant blender. This machine is referred to as a pulper and creates pulp by separating the paper products into fibers.

Screening

Following pulping, the pulp mix is diluted with water and forced through a cleaning system, a series of screens to remove impurities. In this process, large and small contaminants are removed including plastic, paper clips, staples, coatings, additives, fillers and loose ink particles. The pulp is pressed to remove water and dissolved inks and is fed into a kneading machine. During kneading, pulp fibers rub against each other, further loosening the inks. At this point, many recyclers add chemicals to brighten the paper fibers. Lastly, the fibers are sent through a last fine screening process, removing any remaining small contaminants.



Deinking

While the screening process helps remove loose ink, much still remains. All ink must be removed before the paper can be made into new products. To accomplish this, the fibers are placed through a deinking process in the last cleaning stage. In this process, the pulp enters a flotation device where calcium soap and other chemicals are added and air bubbles are blown into the mixture. The soap separates the ink from the paper and the air bubbles float the remaining ink to the surface. At this point, the ink is easily skimmed off, leaving only ink-free pulp.

Manufacturing New Products

The deinked pulp is then sent to the stock preparation area, where it is treated and loaded into the headbox of a paper machine. The cleaned paper pulp is added to virgin fibers to create new paper products. Each type of recovered paper product is produced into varying new products. Here is a list of types of new products typically made from each of the recovered and sorted post-consumer paper products collected in Ann Arbor.



Recovered Material

Old News Paper (ONP) #8

Manufactured New Product*

Newspaper, wallboard, insulation, packaging material, animal bedding, tissue

Old Corrugated

Containers (OCC)

New cardboard and paperboard cereal boxes

Mixed Paper

Paperboard packaging, such as cereal and cake mix boxes, brown paper towels, paper towel rolls

Office Paper

Office paper, tissue paper, toilet paper, and paper towels

*These are not exhaustive lists

Once produced, the manufacturer ships the new products to warehouses or stores for resale.

Paper cannot be recycled indefinitely. Studies have shown that paper can be recycled only up to eight times before the fibers in the paper become too short and weak to be reused. Even so, recycling paper invariably reduces natural resource consumption, the amount of paper landfilled, and the energy needed to produce these products. Even though collecting, sorting, baling, and transporting recovered paper are all expensive processes, the benefits of recycling paper certainly outweigh the drawbacks.

Sources: *The Institute of Paper Science and Technology* <http://www.ipst.edu> and *Georgia Pacific* <http://www.gp.com>

Using Less and Buying Green- What YOU Can Do!

It is somewhat inevitable. We all use paper – and lots of it! Nearly one third of the municipal waste stream is comprised of paper and that number is continually growing. A typical business office generates an average of 1.5 pounds of waste paper per employee per day with the average American using 700 pounds per year! You may be thinking-what can I do? Although it is important to recycle and reuse paper whenever possible, to make the most impact on the amount of waste paper we produce, we must start at the beginning and take source reduction into consideration. This does not mean that we must stop the use of paper altogether to help the environment, but we should use less and buy “green” to help reduce our ecological footprint. Make a difference in your workplace by using these five steps to make your paper usage easier on the environment and to start your own waste paper management plan!

1. Use less paper! The less paper your office uses, the less you will need to buy, store, file, or recycle.

- Use routing slips to share documents and publications rather than copying them.
- Copy and print on both sides of a page.
- Make the most of your computers and other forms of electronic communication.
- Collect and reuse paper that is blank on one side.

2. Michigan now recycles approximately 16% of solid waste from homes and businesses, and this number should be increasing!

- Recycle more kinds of material. An office that recycles white paper can also recycle newspapers, magazines, and corrugated boxes.
- Buy paper that you can recycle. Avoid deeply colored papers, such as neon colors, which use dyes that are hard to remove.
- Join with other businesses in the area so that recycling collectors can give you better services at a lower cost.

3. Help build the demand for recycled paper at home and in office recycling programs.

- Buy paper with the highest percentage of “post-consumer” recycled content you can find that also meets your price and performance needs.
- Look for post-consumer recycled content in corrugated boxes, file folders, envelopes, tissue, and toweling.
- Shop around. Look for brands of competitively priced recycled paper, which perform just as well as paper made directly from trees.

(continued on back page)

Direct all of your questions, comments, and suggestions to:



Kathy Cencer, (734) 994-2398
Washtenaw County Solid Waste Program
P.O. Box 8645, Ann Arbor MI 48107-8645

We welcome any ideas you may have for articles or features.

Our Offices Have Moved

In February, the Washtenaw County Division of Public Works, including the Solid Waste Program, moved from the downtown Ann Arbor offices to a new location on Zeeb Road. Our offices are now located at 705 N. Zeeb Rd., Ann Arbor in the Western County Service Center (just north from Exit 169 on I-94).

Promoting Waste Knot Winners!

Ads highlighting all of the 2002 Waste Knot winners will be placed in several Washtenaw County newspapers, including the Ann Arbor News, the Ann Arbor Observer, and the Heritage Newspapers (Chelsea Standard/Dexter Leader, Manchester Chronicle, Milan News Leader, and Saline Reporter). Keep an eye out for these upcoming advertisements.

Also, the 2002 Waste Knot Banner, similar to the one made last year, displays the names of all winners along with photographs of some of our partners. If you would like to display the banner at your business, please call Kathy Cencer at (734) 994-2398.

Environmental Excellence Awards

Washtenaw County also oversees the Environmental Excellence Awards Program. This program aims to recognize Washtenaw County businesses and non-profit organizations that practice environmentally sound behavior in the following three areas:

- Water quality protection
- Waste reduction and recycling
- Pollution prevention

Check out the county's web site at www.ewashtenaw.org for a listing of this year's Environmental Excellence Award winners.

Solid Waste Plan Update

The County has officially begun the process of trying to meet the waste diversion objectives outlined in the County's Solid Waste Management Plan Update of 1999. The Commercial/Industrial Task Force (CITF), an appointed body, is developing programs to help the commercial/industrial sector reach the specified waste diversion and recycling goals. The primary goals of the CITF are to decrease commercial/industrial waste generation rates, and increase commercial/industrial recovery rates. For information about the CITF, please contact Kathy Cencer at (734) 994-2398.

Recycle Your Electronics!

Does your business have old computers and electronics that you don't know what to do with? If so, you have several options. If the components are in working condition, many can be donated or sold to businesses within Washtenaw County. If this is not the case, you can bring them to the Ann Arbor Drop-Off Station located at 2950 East Ellsworth Road (just west of the Platt & Ellsworth Road intersection) where they will recycle your electronics for a small fee. The hours of operation are as follows:

Monday - Friday, 10:00 a.m. - 7:00 p.m.*
 Saturday, 9:00 a.m. - 5:00 p.m.

*November to March open weekdays from 10:00 a.m. - 5:00 p.m.

Computer and electronic equipment can also be recycled through a partnership with the Washtenaw County Public Works Division. For more information on how you can recycle your computers with the County, call Jeff Krcmarik at (734) 994-2398.

For more detailed information about these options, visit our website at <http://www.co.washtenaw.mi.us/depts/eis/eistrea1.htm> or call Jeff Krcmarik at (734) 994-2398.

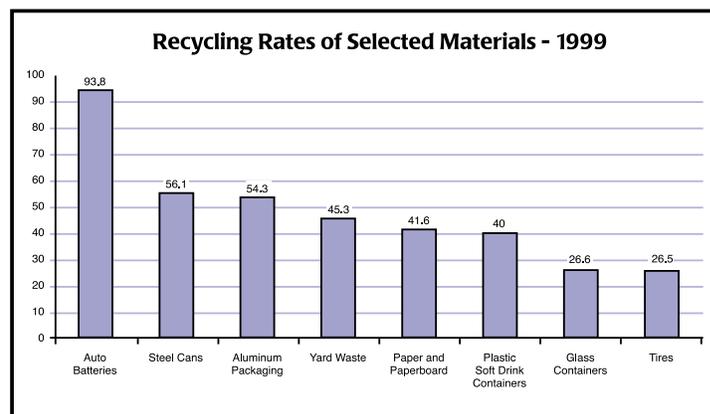
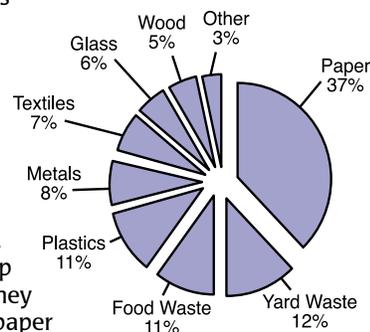
Paper Recycling Facts - What you Need to Know

In 1999, U.S. residents, businesses, and institutions produced more than 230 million tons of MSW. According to 1999 EPA data, paper constitutes the single largest component of this waste stream. Even though paper recycling rates have grown considerably in the last decade, less than half of all U.S. paper is recycled.

Why Recycle Paper?

Each person in the U.S. uses approximately 749 lbs of paper per year. Annually, Americans throw away enough office and writing paper to build a wall 12 feet high stretching from Los Angeles to New York. Even though trees are a renewable resource, increases in U.S. paper use, coupled with the demand for pulp wood worldwide, have created a situation in which pulp trees are used more quickly than they are replaced. Reprocessing used paper reduces the demand for these virgin resources, and reduces energy needs for harvesting and wood manufacturing processes. In fact, making paper from recycled stock requires 64 percent less energy than using wood pulp. Additionally, one ton of recycled paper saves 3.3 cubic yards of landfill space, requires 42% less water to process than virgin paper, saves approximately 17 trees, and requires less bleaching than virgin paper resulting in less water pollution. Overall, the benefits of paper recycling include:

1999 Total Waste Generation - 230 Million Tons (before recycling)



- Reducing the need for landfill space
- Reducing many air and water pollutant emissions
- Saving energy
- Reducing greenhouse gas emissions (These emissions are produced through the energy consumption needed for manufacturing processes and the release of methane from decomposing materials in landfills. The less energy and landfill space required, the fewer greenhouse gas emissions.)
- Conserving resources
- Stimulating the development of greener technologies

Sources: United States Environment Protection Agency www.epa.gov and The Federation of Earth Science Information Partners <http://www.esipfed.org/>

(continued from BUYING GREEN, page 2)

4. The paper making process, especially bleached white paper, requires large amounts of water, chemicals, and energy and produces air and water pollution. **It is possible to lessen these impacts!** Paper made with cleaner manufacturing processes will meet your needs, shouldn't cost more, and is available today!

- Buy unbleached paper whenever possible.
- Whenever possible, buy paper made using a totally chlorine free (TCF) process.
- If TCF paper made from these pulps is not yet available, ask your supplier when it will be. In the meantime, buy paper that contains kraft pulp made without using any chlorine gas, but with "extended delignification," "oxygen delignification," or "ozone bleaching."

5. **Remember that not all paper can be 100% recycled**, so no matter how good you are at "buying recycled," some paper you purchase will probably contain some virgin fiber (fiber from trees).

- Educate yourself. Take time to learn more about forest issues.
- Ask your paper suppliers about the forest management practices used to produce the paper they offer.
- Many paper companies issue a report specifically on their forestry practices each year. Request a copy!

Information taken from the Environmental Alliance for Innovation, a project of the Environmental Defense Fund and the Pew Charitable Trusts. <http://www.environmentaldefense.org/alliance/greenerpaper.html>

Calendar of Events May-August 2002

- Regular HHW Collections occur every Saturday -

May

Waste Knot Award Ceremony - May 2

Master Business Recycler Training - May 2

City of Ann Arbor **Material Recovery Facility (MRF) Open House** - May 11

Environmental Excellence Award Ceremony - May 14 at the Sustainable Washtenaw Full Group meeting

City of Ann Arbor **MRF Open House** - May 14

Household Hazardous Waste (HHW) Special Collection - May 18 at Lincoln High School near Ypsilanti

Michigan Recycling Coalition Annual Conference - May 20-22 at the Marriott Centerpoint in Pontiac

June

Department of Environmental Quality's (DEQ's) Regulations 101: Navigating Through the Environmental, Safety, and Health Regulatory Maze Workshops - See <http://www.deq.state.mi.us/workshops/> for dates and locations

City of Ann Arbor MRF Open House - June 8 and 11

City of Ann Arbor 2nd Annual Green Fair - June 28

July

Comcast Huron River Day - July 14, 2002



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