

STAYING IN THE LOOP



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

2002 WASTE KNOT PARTNERS

Join the ranks of the 90 businesses in Washtenaw County that participate in the Waste Knot Program including:

BUSINESS OFFICES: Ann Arbor Architects Collaborative • Ann Arbor Area Board of Realtors • Ann Arbor Area Chamber of Commerce • Barr Engineering Co. • Black & Veatch • Bowen & Barber, L.L.C. • Carl O. Hueter A.I.A. • Cimulus, Inc. • Cybernet Systems Corp. • David W. Osler Associates, Inc. • Dobson-McOmber Agency, Inc. • Domino's Farm Corporation • Hobbs & Black Associates, Inc. • John D. Erdevig, Attorney at Law • Manchester & Associates, Attorneys at Law • Moore Power Marketing • Quinn Evans | Architects • Swisher Commercial • The Traverse Group Inc. • West Pole, Inc.

AUTO MAINTENANCE/REPAIR:
C&T Collision, Inc. • G. E. Wacker, Inc.

CONSTRUCTION/DEMOLITION:
Cardea Construction Co.

GOVERNMENT/SCHOOLS: Ardis Renaissance Academy • Federal Correctional Institution • Great Lakes Science Center • Rudolf Steiner School of Ann Arbor • Saline District Library • St. Francis of Assisi Catholic School & Parish • Ypsilanti Community Utilities Authority

MANUFACTURING: AEC Manchester Stamping • Chelsea Milling Company • Data Optics, Inc. • Eaton Corporation • Elastizell Corporation of America • JAC Products, Inc. • Kaiser Optical Systems, Inc. • Malloy Inc. • McNaughton & Gunn, Inc. • NSK Corporation • Nustep Inc. • SoloHill Engineering • Visteon Automotive Systems - Rawsonville Plant • Visteon Automotive Systems - Saline Plant • Visteon Automotive Systems - Spring St. Plant

NON-PROFIT ORGANIZATIONS: *Great Lakes Natural Resource Center (NWF) • High/Scope Education Research Foundation • National Kidney Foundation of Michigan • NSF International • NEW Center • The Scrap Box • The Women's Center of America

RESTAURANTS: *Arbor Brewing Company • Del Rio Bar, • *Dominick's • Leopold Brothers of Ann Arbor • Mark's Midtown Coney Island • Northside Grill • Seva Restaurant • Zingerman's Delicatessen

RETAIL/WHOLESALE: American Sign Shop • *Dixboro General Store • Forma Fine Crafts • *King's Keyboard House • Maggie's Organics/Clean Clothes, Inc., • *Materials Unlimited • *People's Food Coop & Café Verde • Saline Picture Frame Co. • Sunblossom Solar Gifts • *Timbuktu Station • Vault of Midnight, Inc. • Whole Foods Market

SERVICE: Arbor Psychological Consultants, P.C. • Arbor Springs Water Company, Inc. • Coach's Catastrophe Cleaning Services • Davie's House in Georgetown • Design My Wedding • Electronics Service Center, Inc. • Larime Photographic Inc. • Master Tech Appliance Service Inc. • Mikan Corporation • Organizational Designs, Inc. • Parcel Plus • Weber's Inn

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

*charter member

COMPUTER RECYCLING

As technology continues to rapidly improve, it often seems that computers and related equipment are out of date before all of the packaging is even removed. In fact, the estimated life span for a computer today is three years and shrinking. As a result, schools, businesses, and organizations that rely heavily on computers are forced to periodically upgrade their equipment. When old computers are replaced with new, proper disposal of old computers can be a confusing task. As Waste Knot Partners, it is important to be aware of the dangers associated with computers and other electronics, and of the options available for safe disposal.



The first thing that should be considered when finding disposal options for electronic

equipment is whether or not someone else can reuse it. If the equipment is not too outdated and in good condition, a local school or non-profit organization can be contacted to accept it for reuse. Also, the Recycle Ann Arbor Reuse Center (662-6288) accepts computers and computer related equipment for resale if it is five years old or less and in good condition.

If reuse is not an option for the equipment, then proper disposal is necessary. Luckily, the Washtenaw County Regional Drop Off Station accepts computers, computer related equipment and other electronics for recycling and proper disposal. They charge a modest fee, depending on the type of equipment you are disposing of. Up to 98% of the materials comprising modern computers are recyclable. By recycling your computer, you are preventing valuable resources from entering your waste stream. You are also preventing hazardous materials such as lead, cadmium, mercury and dioxin from potentially contaminating the environment.

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Waste Knot Award Partner Spotlight: Chelsea Milling Company

Chelsea Milling Company of Chelsea, MI, steps into the spotlight for Fall 2002. Chelsea Milling is best known for their famous "Jiffy Mix"

and has been a Waste Knot Partner since 1999. They have been recognized for their recycling efforts in "Bakery Production and Marketing," an industry publication, and received a 2002 Washtenaw County Environmental Excellence Award for Excellence in Waste Reduction and Recycling.

Manufacturing more than a million boxes of mix per day, Chelsea Milling has the potential to generate a lot of waste. Thanks to the company's environmental ethics, they have been able to overcome this potential. People at the Chelsea Milling Company have been recycling since 1983 and are continuously finding new ways to do so. Knowing how

important it is to reduce the waste sent to landfills, Chelsea Milling worked hard with suppliers to eliminate the plastic lining from the inside of bags, thereby making the bags recyclable. Chelsea Milling has also developed a way to collect mix that has fallen on the floor; that mix is sold to a company that cleans and recycles the waste into animal feed. These efforts have greatly reduced the amount of their waste sent to landfills - from 180 yards per week to 90 yards per month!

Currently, Chelsea Milling's main goal is trying to eliminate the need to recycle by not producing any waste at all. One way that they are trying to accomplish this is through a new system of bulk storage of mix ingredients.

Through finding new ways to recycle and reduce waste, Chelsea Milling Company has shown their promise and dedication to help protect the environment.

Thank you Chelsea Milling Company!

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What happens to the equipment when you leave it at the Drop-Off Station?

The electronics that are collected at the Washtenaw County Regional Drop-Off Station are sent to UNICOR Federal Prison Industries in Elkton, Ohio. UNICOR currently employs 130 inmates in the electronics remanufacturing process. CPUs, monitors, scanners, printers, and other electronics collected at the Drop-Off Station are shrink wrapped and palletized before being sent to the facility. When they arrive, the material is unwrapped and tested for reusability. Equipment that is still usable is donated to area non-profit organizations and schools. Units that are unusable are broken down piece-by-piece for recycling. Individual circuit boards and processing chips are separated. Both can contain precious metals such as gold and palladium. Cathode ray tubes (CRTs), found in monitors and televisions, are separated from their casing and circuitry. CRTs are made from lead-containing glass. Different CRT manufacturers use varying levels of lead in their product. The glass resulting from the demanufacturing process is separated according to lead content and then marketed back to the manufacturers for use in new products. Wiring and cords are also collected and recycled, as much of the wiring in computers is composed of valuable metals such as copper. The steel and plastic used in the computer's casing are separated into bins for recycling. Through their efforts, UNICOR has recycled 250 million tons of material since 1997!

October is Energy Awareness Month!



For the 23rd year, October will be celebrated as Energy Awareness Month. "Energy awareness" means being aware of the amount and type of energy that we and those around us use. Although it is important to be aware of energy use at all times throughout the year, October marks the beginning of the four or more months of highest annual energy use. Setting October aside for energy awareness allows for a focus on conservation before winter begins.

The U.S. Department of Energy has declared this year's theme to be "Conserve Now or Pay Later - working to save America's energy and environmental future." This year, emphasis is being placed on increasing the national energy supply through energy efficiency. The Department of Energy is also stressing the importance of conserving energy for security reasons.

If your organization would like informational materials regarding energy awareness, visit the Federal Energy Management Program's website at www.eren.doe.gov/femp/newsevents/energy_aware.html or contact the Energy Efficiency and Renewable Energy Clearing House at 1-800-DOE-EREC.

Seventeen Energy Saving Tips from the SLAC (Stanford Linear Accelerator Center)

1. Turn equipment and lights off after hours.
2. Keep your exterior and freight doors closed as much as possible.
3. Turn off fluorescent lights when leaving an area for more than 5 minutes. Turn off incandescent lights when leaving areas for any period of time.

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Computer Recycling Facts

The following components of electronic equipment are considered to be hazardous waste:

- cathode ray tubes in computer monitors and televisions,
- circuit boards,
- batteries and mercury switches.

According to the National Safety Council's Environmental Health Center, there will be 315 million obsolete computers in the United States by 2004. This will amount to:

- 1.2 billion pounds of lead,
- 2 million pounds of cadmium, and
- 400,000 pounds of mercury.

Materials found in computer components, including heavy metals such as **lead**, **mercury** and **cadmium**, can potentially contaminate our soil, ground water, surface water and air.

Mercury, lead, and cadmium exposure can:

- Be dangerous for unborn children,
- Increase blood pressure,
- Cause anemia, and
- Permanently damage the brain, kidneys, lungs, reproductive system, and/or nervous system.

For more information, visit www.ewashtenaw.org/government/departments/environment_infrastructure/ei_comprec.html

Washtenaw County Regional Drop-Off Station Computer Recycling Fees

ITEM	DISPOSAL FEE
Computer monitors (CRT), TVs up to 25"	\$7.50 each
TVs, Monitors, and CRT's over 25 inches	\$15.00 each
Home/office printers, CPUs, stereo components ...	\$4.00 each
Misc. cables, mouse, keyboards, peripherals up to one 1'x2'x3' box.....	FREE*
Additional cables and peripherals.....	\$4.00 per 1'x2'x3' box**
Home Computer (CRT, CPU, keyboard, mouse, cables)	\$9.00
Complete home/office system (consisting of CRT, printer, CPU, mouse, keyboard, cables)	\$15.00

*When accompanied by monitor, CPU, or printer.

**Approximate size of desktop CPU.

Other considerations:

- Please call the Drop-Off Station at (734) 971-7400 if you have more than 10 complete systems in your vehicle to drop off.
- Mainframe computers, printers or other equipment larger than one Gaylord-sized box (4'x4'x4') will not be accepted.

For more information, visit www.recycleannarbor.org.

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



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.

Reusing Packing Materials

You may already know that packing materials can create unnecessary waste in landfills and generate hazardous emissions caused by the improper burning of certain plastics. What you may not know is how items such as packing peanuts, Styrofoam™ sheets, or bubble wrap can be reduced, reused, and even recycled.

To reduce packing waste, encourage your suppliers to use a more recyclable packing material in shipments to your facility. If your supplier cannot accommodate this request, search for another supplier who can or pick shipments up from your supplier so that packing materials are not needed.

Packing materials can also be reused. You can collect packing peanuts sent to you and reuse them in outgoing shipments to your customers. A variety of mailing service stores also accept packing materials for reuse.

Easy recycling options for foam packing materials are few and far between (the Washtenaw County Regional Drop Off Station does accept Styrofoam™ for recycling). Therefore, consider using alternative packing material when sending out shipments to your customers. Crumpled or shredded paper, gelatin or cornstarch based packing peanuts, and real air popped popcorn (unbuttered and unsalted of course!) all make excellent alternatives to traditional Styrofoam™ packing peanuts. Be creative in your packaging!

For places that accept packing materials for reuse or recycling, please visit our website at www.ewashtenaw.org/government/departments/environment_infrastructure/ei_eistrea2.html#packing.



The Wonders of Tyvek!

You may have noticed envelopes coming through your office that have a plastic feel to them. These envelopes are made of Tyvek®, a material created by DuPont. Tyvek® is a lightweight, water-resistant, rip-resistant material made from very fine, high-density polyethylene fibers that are bonded together by heat and pressure. Tyvek® envelopes, which are commonly used by FedEx and the U.S. Postal Service, contain 25% recycled material, primarily recycled milk and water containers. Tyvek® can be recycled through a nationwide program managed by DuPont. For information on how to participate in the Tyvek® recycling program, visit www.tyvekenvelopes.com/vers_recycle.html.

Vermicomposting

Worm composting or vermicomposting is the process of using worms to recycle food scraps and other organic materials. The worms eat and digest the food scraps, resulting in a nutrient-rich soil that can be used in your garden, landscaping, and plants. Worm bins are easy to make and can be kept in the office, in a classroom, or at home. For more information on how to start your own worm bin, visit www.wormwoman.com.



Roll towels, and paper towels, and hand dryers – oh my!

One of the most common questions that businesses have about waste reduction refers to hand drying in the bathroom. A question that often comes up is which hand drying device is the best for the environment: roll towels, disposable paper towels, or electric hand dryers? Although the jury is still out on this question, there are a number of factors to consider when deciding on the hand drying equipment your business will provide.

Roll towels have decreased in popularity over the last twenty years primarily due to bacterial concerns. However, many suppliers now claim that roll towels are longer, with more clean area for hand drying and are laundered more often, thereby reducing the opportunity for bacterial contamination.

There are some environmental benefits to installing roll towels in restrooms. First, they create little waste. The only time a roll towel needs to be recycled or thrown away is when it becomes tattered or ripped. Additionally, fewer of these towels need to be made because they are reused. This means that in the long run, fewer resources are used in their creation. Unfortunately, there are also disadvantages to the use of these towels. They must be laundered often to keep them sanitary. This can lead to high water and cleaning chemical usage. Also, people may be unwilling to use them due to germ concerns and instead find a disposable paper product to dry their hands with.

Paper towels are a very popular means of hand drying. They work quickly, can be cheap to buy, and have some environmental advantages. First, recycled-content paper towels use fewer trees in their manufacture and help support the paper recycling market. Second, there is no electricity requirement associated with use, as with warm-air hand dryers. Finally, they do not need to be washed like roll towels do, thereby reducing water and chemical demands.



Unfortunately, there are also many environmental costs associated with these towels. First, they are not recyclable and must be put into the trash. This leads to less available landfill space and increased fuel usage by garbage trucks. Plus, their use can lead to increased waste hauling costs for your business (if more garbage is created, then a more frequent garbage collection is needed). Sadly, most paper towels on the market do not contain recycled content materials meaning that more virgin trees were used to make them. Finally, many towels are bleached white, leading to increased chemical usage and pollution.

Warm-air hand dryers are often found in restrooms these days. These dryers use warm air to help evaporate water from hands. The largest environmental benefit associated with dryers is that they do not create paper waste in the bathrooms. This lack of garbage leads to more available landfill space and decreased pollution from garbage trucks. Plus, this is a very sanitary means of hand drying. The main disadvantage to their use is that they require electricity to work, meaning increased fossil fuel usage and electricity costs for businesses. Some of these problems, however, can be overcome by using solar powered or energy efficient dryers.

Although there is still no consensus as to which method of hand drying is the most environmentally-friendly, the information presented above can hopefully help guide you in deciding which method is right for your business.

(continued from 17 ENERGY-SAVING TIPS, page two)

4. In areas with sufficient day lighting, turn off lights.
5. Use task lighting and turn off general lighting where it is feasible to maintain sufficient lighting levels for safety and productivity.
6. Turn off printers when not in use.
7. Turn off monitors when not in use.
8. If available, use lap top computers; they use up to 90% less energy than a standard computer.
9. Ensure personal appliances, such as coffee pots, are turned off, especially in the afternoon; heat coffee in a microwave.
10. Close window blinds to shade your rooms from direct sunlight.
11. Ensure that ventilation grilles are not blocked.
12. Where feasible, schedule high electrical energy use processes during off-peak periods.
13. When appropriate, use e-mail instead of sending memos and faxing documents.
14. When acceptable, use double-sided printing.
15. Try not to use copiers during peak demand period; turn off selected copiers; ensure power saver switch on copiers is enabled.
16. Choose ENERGY STAR® products whenever possible.
17. Turn off redundant refrigerators.



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Printed on 100% recycled,
50% postconsumer recycled paper

Calendar of Events

Regular Household Hazardous Waste (HHW) Collections -
Every Saturday morning, 9 a.m.-Noon

September

National Recycling Coalition Conference - September 8-11
City of Ann Arbor MRF Open House, The MRF turns Seven
- September 10 and 14
National Pollution Prevention Week - September 16-22
Household Hazardous Waste Collections: Chelsea -
September 21
Michigan Recycling Coalition's America Recycles Day
"Workshop in a Can" - September 26. Visit
www.michiganrecycles.org/a_events_ARDworkshop.shtml
for more info.

October

Energy Awareness Month - "Conserve Energy - Save Now
or Pay Later"
MRC "Falling Into Recycling" Hot Topics Roundtable event
- October 7
City of Ann Arbor MRF Open House, Mask Making
Workshop - October 8 and 12

November

America Recycles Day - November 15
City of Ann Arbor MRF Open House - November 9 and 12
DEQ Waste Reduction & Energy Efficiency Conference -
November 20
Buy Nothing Day - November 29
Use Less Stuff Day - November 29

