



Waste Reduction and Recycling Opportunities for...

CONSTRUCTION AND DEMOLITION DEBRIS

FACT SHEET #5 from the Washtenaw County Dept. of Environment & Infrastructure Services - Public Works Division

Why reduce waste and recycle?

Washtenaw County has taken a close look at the types of waste being generated by area businesses. We've found that a lot of material is being dumped as a waste rather than utilized as a **resource**. The state of Michigan agrees, and actually requires through state law that 25% of waste generated by residences and businesses be prevented from landfill or incinerator disposal. In Washtenaw County, this means diverting nearly 75,000 tons of waste per year! This is a big job to tackle, and one that we cannot do alone. So we're asking for your help.

How can I help?

You can help by establishing a waste reduction and recycling program within your business. You've already taken the first step by reading this brochure! Take a look around your business. What kinds of things are being thrown away? Can any of them be separated out for recycling? Are any of them "Target Materials"?

What are "Target Materials"?

Washtenaw County has developed a series of "Targeted Materials Listings" for commercial businesses. The listings are specific to particular business sectors. For example, items commonly generated for recycling in restaurants may differ greatly from those generated in offices. Page two will provide to you the materials which should be targeted for recycling in the C&D industry.

Reconstructing the C&D Business

Each day, construction and demolition (C&D) companies throughout Washtenaw County toss valuable materials into the trash. Many materials, such as cardboard, wood, concrete and bricks, could be easily recovered for recycling. Washtenaw County is committed to making a difference in our business community. Please read on to find out how waste generation and recycling could work for your organization.

Local Contractor Builds On Modest Beginnings



Let's face it, reusing and recycling construction and demolition (C&D) waste is easier said than done. Contractors are aware of the vast amount of waste generated in their industry, and are eager to recycle the waste they generate in order to cut disposal costs. However, space limitations and the cost of material transport have challenged their efforts.

C&D waste typically contains a combination of several salvageable materials. Some windows, for example, are made up of glass and aluminum. Aluminum can easily be recycled. Unfortunately, disassembling the window is expensive and labor-intensive. Drywall can also be recycled, although hauling costs far outweigh the material value.

Nonetheless, some contractors are taking steps to separate and recycle the waste they generate. **J.C. Beal Construction, Inc.**, for example, arranges for a separate roll-off container for cardboard, steel, concrete, brick, and wood, materials that would normally go to landfills. Cardboard and metal are easy to recycle, since the materials are in demand and processing plants are easily accessible. Brick and concrete are crushed and used for filler, and wood is shredded and used as fuel. Although the owners of J. C. Beal Construction, Inc. have encountered the same problems other contractors face, they would like to recycle more and continue to find better alternatives for materials that are normally sent to landfills.

What if I need more information?

There are many sources of additional information for recycling in the C&D industry. Please contact Washtenaw County Public Works at 994-2398 and ask to speak to the Solid Waste Coordinator. Additional printed materials, contact names, and case studies may be available to suit your particular needs.

THREE EASY STEPS TO A "GREEN" BUSINESS

STEP 1: Identify Your Target Materials

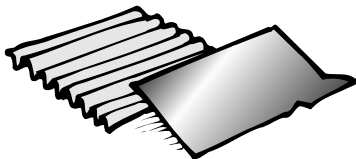
The following items should be included in your "Green Business" Management Plan. Your program should address these items at a minimum. There are likely many other materials which could be included, and we encourage you to investigate your options for those items as well.

Target Materials for C & D Recycling:

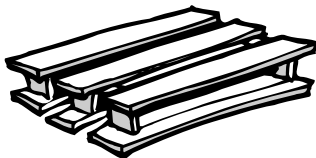
Cardboard



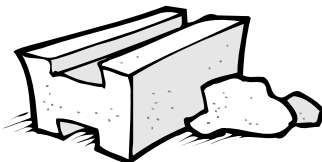
Metals



Pallets/Wood



Concrete



Bricks



STEP 2: Consider Waste Reduction Alternatives

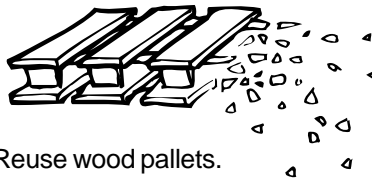
The best way to manage your waste is to not create it at all! Consider these ideas:

WOOD:

Salvage and reuse old lumber. It is also possible to purchase salvaged lumber throughout the area.

Hardwood floors from older homes may be salvaged, refinished, and reused as flooring or furniture.

Purchase manufactured wood such as press board, plywood, and wafer board cut to the proper dimensions because they are already made out of recycled wood fibers and chips.



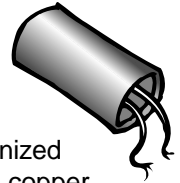
Reuse wood pallets. Those that are not in usable condition may be dismantled and used as firewood or shredded for boiler fuel or landscaping mulch. Offer pallets to the general public where they may be used for projects at home.

CARDBOARD:

Reuse cardboard boxes or separate them from the waste stream for recycling.

METALS:

Recycle metals such as copper and galvanized pipe, aluminum and copper electrical wiring, steel beams, iron enforcement bars, cast iron bath tubs, and other scrap metals. Most metal processors will accept and often pay you for these metals. Non-ferrous metals such as copper and aluminum, are valuable metals.



FIXTURES:

Refurbish and reuse materials such as doors and bathroom fixtures in old buildings instead of replacing them with new ones.



CONCRETE, BRICKS, and OTHER:

Reuse good quality old bricks, blocks and tiles.

STEP 3: Establish a Recycling Program

Each business is unique and has different needs to fulfill in a recycling program. Consider which items on the target materials list you would like to recycle.

There are many options for starting a recycling program. A good place to start is to talk with a person who is currently handling your waste removal, and ask what recycling services are available.

Building a New Future for “Unrecyclable” Materials



Does your company generate large quantities of drywall and asphalt shingles? Many construction and demolition companies have expressed their frustrations and are searching for solutions for recycling these materials. Moreover, many companies in the United States are finding viable solutions. Not much progress has been made in Southeast Michigan, but the market outlook may be changing. Researchers for the National Association for American Homebuilders say that drywall can be recycled easily if a construction site is located near a drywall processing plant who has the capability to reprocess the material. Otherwise, many companies find it is more cost effective to dispose of the drywall in a landfill than to pay high transportation costs to send the material to the closest processing plant.

Asphalt shingles are another material that is becoming more easily recyclable. Several companies in the United States are successfully recycling asphalt. ReClaim Inc., in Tampa, Florida, uses cast-off asphalt generated from shingles and asphalt roofs to manufacture road paving products. The recycled asphalt is used for a variety of projects including filling potholes and paving park sidewalks. Many in the construction and demolition industry believe recycling C&D materials has a promising future. Don't be surprised if drywall and asphalt shingles recycling becomes available in the not so distant future.

How Can I Recycle More?

Washtenaw County is asking you to consider developing recycling programs for the “Targeted Materials” listed on page 2. There are, however, many other items in the waste stream which can be recycled.

Many kinds of **glass** are also generated in the C&D industry, and many can be recycled. There are several drop-off centers throughout the County where these items can be taken for recycling. Contact DPW at (313) 994-2398 for information on the center located nearest you.

Additional materials, such as **drywall** and **shingles**, may also be recyclable, depending on the quality and quantity of materials you are generating. (See article at left.)

Need Assistance?

A network of knowledgeable solid waste managers has been assembled throughout the County and is available to advise you on how to start a program. Please contact the DPW at **994-2398** for the name of an expert in your area.

FYI:

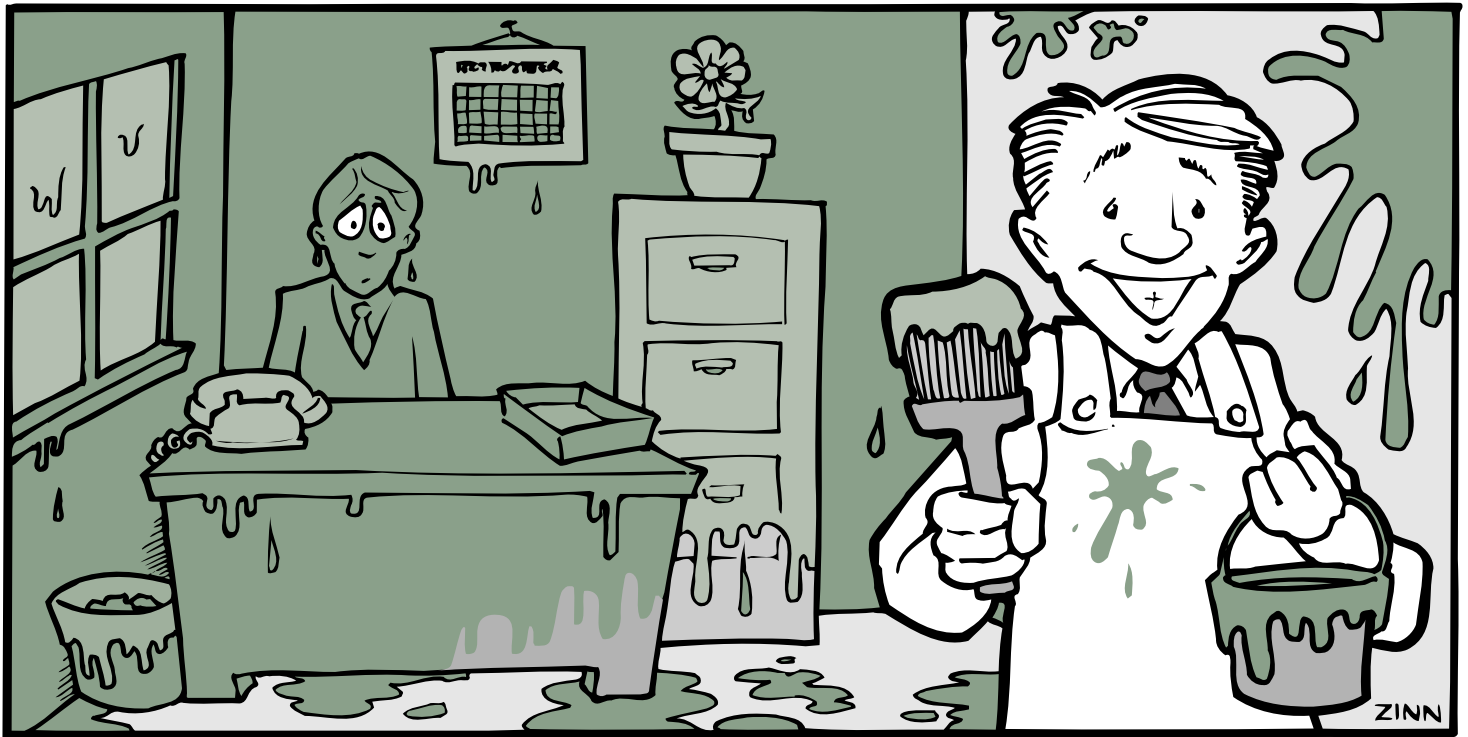
- 60 to 80% of construction waste is cardboard, wood and drywall.
- About 13.7 million tons of wood waste were generated in 1993. 9.6% was recovered through recycling.
- About 17.1 million tons of metal waste were generated in 1993. Metals have an overall recovery rate of 30.4%.
- Approximately 77.8 million tons of paper and paperboard waste were generated in 1993. Paper has an overall recovery rate of 34%.

Recycling Haulers Servicing Washtenaw County

Action Disposal & Recycling	313-485-4666
Browning Ferris Industries, Inc. (BFI)	313-729-8200
Calvert's Roll-Off Container	313-994-5256
City Environmental Services, Inc.	313-292-0800
Daily Recycling of Michigan	313-654-9800
Dinverno, Inc.	313-892-3535
Laidlaw Waste Systems	313-292-5100
Liberty Landfill, Hauling Operations Dept	517-787-1177
Mister Rubbish	800-971-7490
Regulated Resource Recovery	810-654-9800
Recycle Ann Arbor	313-971-9676
Tiger Rose Trucking	810-437-9210

This listing represents a partial listing of haulers who have indicated an interest in servicing businesses in Washtenaw County. This listing should not be construed as an endorsement of any particular company or program. If your company would like to be added to the listing, please contact the DPW at 994-2398.

There's more than one way to have a green business...



...look inside for other options.



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