



REDUCE, REUSE AND RECYCLE

At Your Facility

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WASTE MANAGEMENT HIERARCHY

- Waste Reduction
- Reuse
- Recycling
- Beneficial Use
- Waste Conversion
- Proper Waste Disposal



WHAT'S THE LAW?



- The Mississippi Multi-Media Waste Minimization Act of 1990 established a goal to reduce solid waste in Mississippi by 25%.

- Mississippi Code Annotated, Section 49-31-5 states:

"The Legislature declares it to be the policy of the State of Mississippi that the generation of waste should be reduced or eliminated at the source, whenever feasible; waste that is generated should be recycled or reused whenever feasible; waste that cannot be reduced or recycled should be treated in an environmentally safe manner; and disposal or other permitted release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner."





SOURCE REDUCTION AND REUSE

• Reduce

- Re-examine ordering and processing practices.
- Order supplies based on how much is needed, will be used/sold.
- Eliminate duplicate orders or orders of unnecessary items.
- Streamline processes to reduce byproducts.

• Reuse

- Reuse available materials rather than buying new (pallets and other shipping containers, industrial byproducts, etc.)
- Donate/sell unused supplies, byproducts.
- Encourage employees to use reusable drink containers, coffee cups, plates and utensils when possible.

WHY RECYCLE?

- Saves landfill space
- Reduces disposal costs
- Preserves our natural resources
- Reduces the potential for pollution
- Conserves energy
- Creates jobs and stimulates the local economy
- Improves reputation with customers
- Shows commitment to environmental compliance

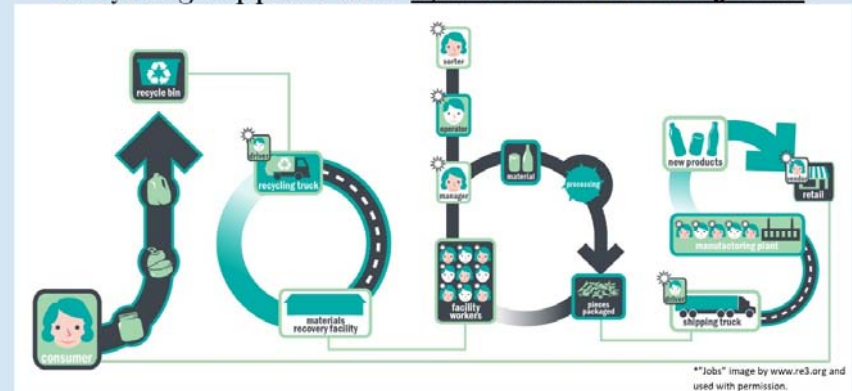


STATE OF RECYCLING

- Challenges
 - Plastics affected by low fuel prices
 - Mixed paper and others affected by China ban
 - Light weight packaging, more materials to equal same weight
- Good News!
 - Commodity values will rebound
 - Corporate Investment
 - Materials put back into manufacturing

Did you know?

Recycling supports over **5,000 MISSISSIPPI JOBS!**



And We Can Do Better!

100 NEW JOBS can be created by recycling just 1% more of the over 4 million tons of solid waste disposed of annually in our state.

WHERE TO START?

1. Identify a recycling leader/team.
2. Get to know your trash.
3. Explore your options.
4. Decide what to collect.
5. Develop a collection plan.
6. Educate employees.
7. Monitor, measure and modify as needed.



1. IDENTIFY A RECYCLING LEADER

- Assign a point person or group to develop and lead the facility's recycling program.
- Consider staff member(s) who have...
 - An interest and passion for recycling.
 - A positive attitude and good relationship with fellow employees.
 - Enough time to devote to the recycling program.



2A. GET TO KNOW YOUR TRASH

- What kinds of materials make up the facility's wastes?
 - Paper
 - Plastics
 - Metals
 - Glass
 - Electronics
 - Other wastes
- Where does this waste originate?
 - Offices
 - Kitchen/Breakroom
 - Processing/Manufacturing
 - Shipping/Storage
 - Landscaping
 - Building Maintenance



2B. GET TO KNOW YOUR TRASH

- Who is collecting the facility's wastes?
- How much does this collection cost?
- How often are wastes collected and what size are the dumpsters?
- Can costs, service events and dumpster sizes be reduced through recycling?



3. EXPLORE YOUR OPTIONS

- Identify recycling businesses or programs in your area that your facility can partner or contract with.
 - Check MDEQ's State Recycling Directory, listings (www.mdeq.ms.gov/recycling).
 - Reach out to your City or County Public Works or Solid Waste Department for information on recycling collection in the area.
 - Talk with your waste contractor (see step 2B).
 - Contact local businesses and find out who is collecting their recyclables.
 - Search the internet or phone directory for local recycling facilities.
 - Contact your State Recycling Coordinator.



DETERMINING LOCAL OPTIONS

- Local Government Programs
 - Curbside
 - Drop-off
- Current Waste Contractor
- Local Private Recyclers
 - Mixed material recyclers
 - Single material recyclers
 - Scrap metal dealers
 - Cardboard/paper collection companies
- Waste Exchange –SWIX, TN Materials Marketplace



4. DECIDE WHAT TO COLLECT

- What wastes do you generate that could be recycled?
- What materials will your recycler/local program collect?
- What is easiest and most convenient for your staff?



RECYCLABLE MATERIALS

- Paper
- Plastics
- Metals
- Glass
- Organics
- Electronics
- Other Special Materials



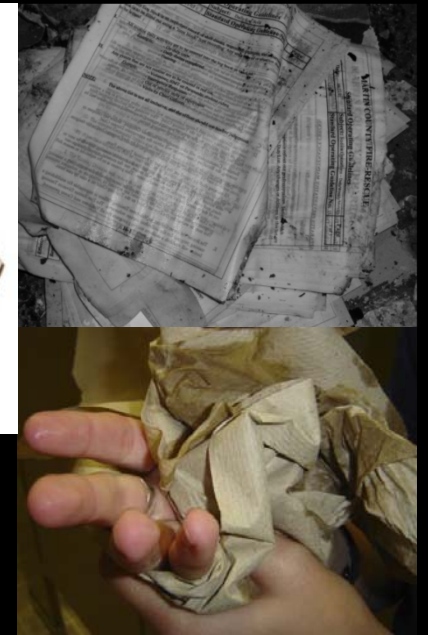


RECYCLABLE PAPER TYPES

- Corrugated Cardboard
- White office paper/computer paper
- Shredded documents (white/mixed)
- Mixed paper (mailings, circulars, magazines, newsprint, craft paper, etc.)
- Paper Board (cereal boxes, food cartons, paper towel rolls,).
- Other paper products (milk cartons)

NON-RECYCLABLE PAPER TYPES

- Soiled/Wet Paper Materials – napkins, paper towels, coffee filters, pizza boxes
- Waxed Paper/waxed cardboard
- Metallic Papers





RECYCLABLE PLASTICS

- **#1 – PETE** (Polyethylene Terephthalate) water bottles, soda bottles, peanut butter jars, mayonnaise jars,
- **#2 – HDPE** (High Density Polyethylene)– milk jugs, detergent bottles, shampoos, personal care products, some bulky rigids (drums, carts, baskets, totes, crates, etc.)
- **#3 – PVC** -(Polyvinyl Chloride) – food trays, shrink wrap, certain piping,
- **#4 – LDPE** (Low Density Polyethylene) – plastic shopping bags, sandwich bags, etc.
- **#5 – PP** - (Polypropylene) margarine tubs, yogurt cups, tupperware, some bulky rigids
- **#6 – PS** (Polystyrene) – packaging peanuts and other packaging materials, drink cups, clam shell lunch plates,
- **#7 – OTHER** – BPA (polycarbonates, melamine, bisphenol A,) protective coatings, electronics, compact discs/DVDs, some plastic food containers and cups,

RECYCLABLE METALS

- Ferrous Metals – metal products made from iron ore
- Non-ferrous metals – metal products not made from iron ore –aluminum, copper, lead, nickel, tin, titanium and zinc, and alloys such as brass.



RECYCLABLE GLASS

- **Clear Glass**-food jars, some soda drink bottles
- **Amber/Brown Glass**-mostly beer, wine and liquor bottles
- **Green Glass**-mostly wine bottles
- **Other "non-container" glass** – auto glass, structural windows, mirrors, etc.



OTHER RECYCLABLE MATERIALS

- Electronics (televisions, computers, cell phones, printers, copiers, etc.)-
 - Local government, MDEQ sponsored E-waste collection events
 - University refurbishment/collection programs
 - Some private recyclers
 - R2 Certified E-waste recyclers



OTHER RECYCLABLE MATERIAL (CON'D)

- **Printer ink cartridges/copier toner-**
 - Office supply stores
 - Recycling mail back
 - Private recyclers
- **Batteries (alkaline, lithium ion; cell phone, lap top, car batteries, etc.)-**
 - Interstate battery and similar retailers
 - Some private recyclers
 - Household hazardous waste centers/events



ORGANICS RECYCLING

Materials for Mulching/Chipping

- Untreated wood wastes
- Landscape woody debris

Materials for Composting

- Grass clippings
- Leaves
- Hedge trimmings
- Small limbs
- Dead plants (non-diseased)



5. DEVELOP A COLLECTION PLAN

- Design with quantity and quality in mind
- Establish points of collection
- Determine the type of collection containers
- Movement and handling
- Interim storage area
- Materials pickup schedule



6. EDUCATE EMPLOYEES

- Recycling at your facility should be easy and convenient!
 - Clear communication
 - Simple guidelines
 - Assemblies
 - Contests/Rewards system
 - Posters/Displays
 - Staff Training
 - Ongoing communication/encouragement



Did you know?

It takes 700 years for a plastic bottle to decompose in a landfill.

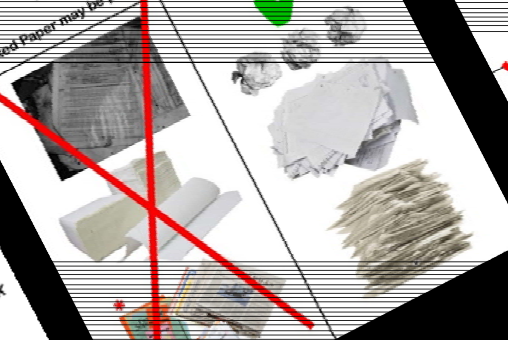
Recycle Plastic Bottles

IT'S ALL
YOU. RECYCLE.

MDEQ Downtown Offices Recycling Guide			
Material Collected	Collection Bin/Area Label	Items Accepted/Not Accepted	Bin/Area Location(s)
Paper & Paper Goods	"White Paper Only"	<ul style="list-style-type: none"> Computer paper and any paper that is white in color regardless of thickness or type, except for copper paper packaging. NO non-white or colored paper, napkins or paper towels, or wet or soiled paper. 	Rolling carts are located on each floor of the Amite and State St. Buildings. Smaller bins located near large printers/copiers. Small desksize blue bins can be used for white paper, but color/mixed must be removed before placing in larger bins.
	"Mixed Paper"	<ul style="list-style-type: none"> All recyclable paper including: <ul style="list-style-type: none"> Newspaper, magazines, colored paper, paper packaging. Books (hard back and paperback, binding included), phone books, binders (plastic and metal parts included). Small paperboard (e.g. frozen food and cereal boxes, integral backing, boxes must be broken down and flattened). NO napkins or paper towels, wet or soiled paper, or food remnants. 	Rolling carts are located on each floor of the Amite and State St. Buildings. Small desksize bins can be used for mixed paper.
	"Cardboard/Paperboard"	<ul style="list-style-type: none"> Cardboard and large paperboard (boxes must be broken down and flattened). NO soiled items or food remnants. 	An area is designated to stack cardboard/large paperboard on each floor of Amite Street and in carts under the building. Bin located on 3 rd floor of 700 Building.
Plastics	No label Plastic bag in shredding machine	<ul style="list-style-type: none"> Shredded Paper only. 	Once full, bags should be moved to the bin storage area under the Amite St. Building, 1 st floor of the 700 Building.
	"Plastic/Plastic Bottle"	<ul style="list-style-type: none"> Plastic beverage containers with the #1 or #2 symbol (empty, with caps/lids left on) includes: <ul style="list-style-type: none"> plastic water and soda bottles detergent/bleach bottles, milk jugs, some microwave food trays Plastic film including shrink wrap and bubble wrap rolls. NO grocery bags* or other plastic bags. NO styrofoam. 	<ul style="list-style-type: none"> Bins are available in most large and small breakroom areas in the Amite St. and 700 buildings. From side "plastic" bins in the breakroom have "plastic" bins in the same area as the "white paper" and "mixed paper" bins. *Plastic grocery bags can be recycled at area retailers such as Walmart, Target and Kroger.
Metals	"Aluminum/Steel Cans"	<ul style="list-style-type: none"> Aluminum drink cans (empty), clean aluminum foil. Steel canned goods/food cans (empty and rinsed), aerosol cans (empty). 	Bins are available in the large and small breakroom areas in the Amite St. and 700 buildings. Additional bins are located on each floor in the same area as the "white paper" and "mixed paper" bins.
Special Materials	"Printer/Copier Cartridges"	<ul style="list-style-type: none"> Printer and Copier Cartridges of all types and sizes with or without repackage. 	Bins are available on each floor in the "orange" rooms at Amite St. and on the 2 nd and 5 th floors of the 700 building.
	"Batteries"	<ul style="list-style-type: none"> Batteries of all types and sizes including lithium ion, alkaline, cell phone batteries, and laptop batteries. 	Bins are available in the 2 nd floor triage room at the Amite St. Building and in Office 400 on the 4 th floor of the 700 Building.

White Paper Only
Accepted Here: Computer paper and any paper white in color.
Thank You for Recycling!!!

*Mixed Paper may be placed in the mixed paper bin.



Aluminum/Steel Cans
Accepted Here: Drink Cans, Canned Goods, Aluminum Foil, Aerosol Cans.
Thank You for Recycling!!!

*Mixed Paper may be placed in the mixed paper bin.



Plastics/Plastic Bottles
Accepted Here: #1 and #2 Plastics, Shrink Wrap, Bubble Wrap.
Thank You for Recycling!!!

*Grocery bags can be returned to retailer (Wal-Mart, Kroger, etc.).



SHINE ON. RECYCLE.



Recycle Cardboard

Did you know?

Recycling cardboard takes 24% less energy and produces 50% less sulfur dioxide than making cardboard from raw materials.



7. MONITOR, MEASURE AND MODIFY AS NEEDED

- **Monitor**

- Recycling containers for improper materials or trash in the bins
- Recycling conditions with your recycler

- **Measure Success**

- Amount of recyclables collected
- Reduction in waste
- Reduction in waste collection events

- **Modify**

- Increased communication to staff, recycler (signage, meetings, etc.)
- Additional or larger bins needed
- Collection of additional materials for recycling





OTHER WASTES AND WASTE ISSUES

- Structural/Building Wastes –
Potentially Hazardous
 - Cleaning supplies
 - Fluorescent light bulbs
 - Lead paint debris
 - Asbestos
 - Other renovation wastes (paint cans, sheetrock, carpet, thermostats, etc.)
 - Oil-based paints
 - Used oil



THANK YOU!

ANY QUESTIONS?



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