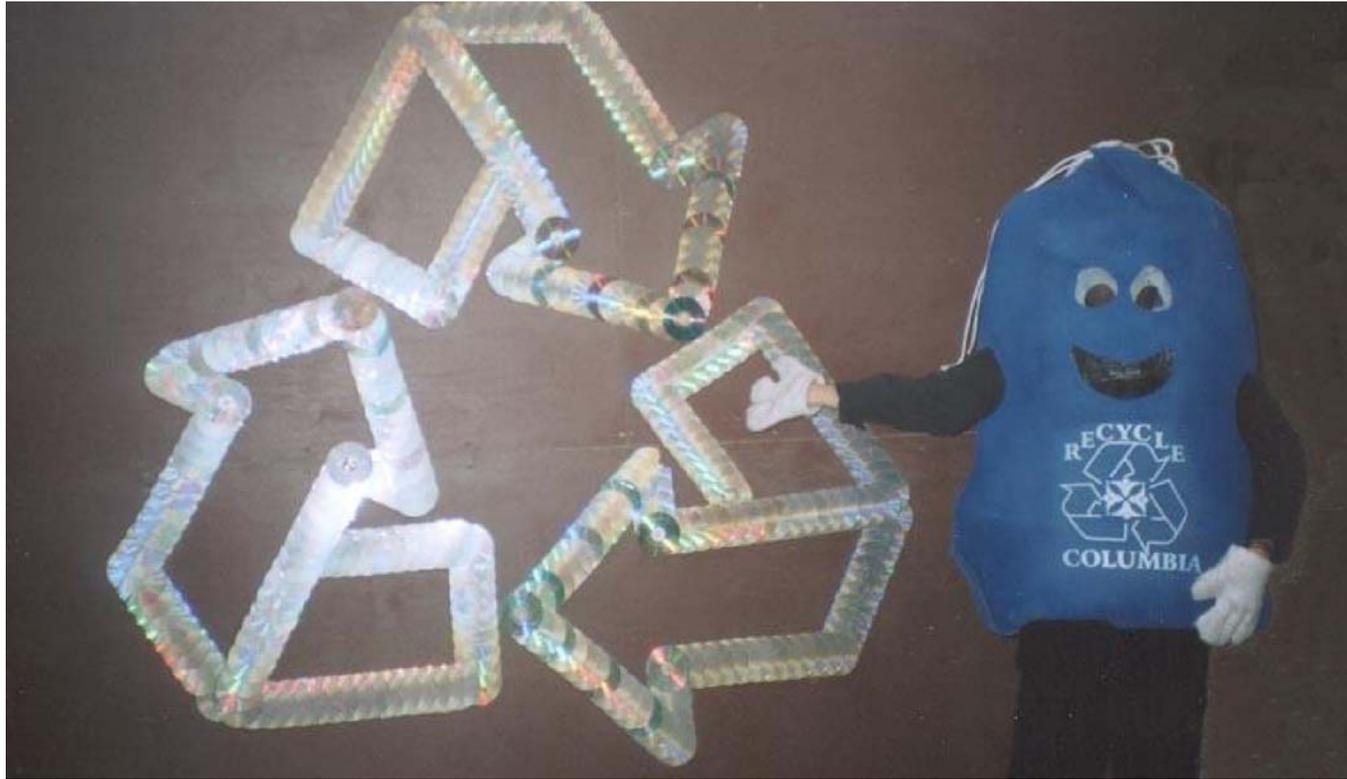


A Tour of the Material Recovery Facility



March 2009



Hello, I'm the City of Columbia's recycling mascot, Mr. Bag-it!

My job is to encourage you to reduce, reuse, and recycle for the benefit of Columbia and our planet.

I appreciate your interest in recycling and invite you to join me in a cyber tour of our City's Material Recovery Center. The Material Recovery Center (MRF--pronounced "MURF" for short) processes your recyclable materials collected from drop-off bins and curbsides.

Recycling Collected at Your Curb

If the City collects your trash at the curb, you can set your recyclables out on the same day.



Make sure there is a clear distinction between what is your trash and what is your recycling. It will be helpful to your refuse collector if you allow space between your black trash bags and your recyclable materials when you set them at the curb.

Recyclable materials include containers and bottles placed into the blue recycling bags and fiber materials (newspapers, catalogs, phone books, office paper, cardboard, etc.) placed in a paper bag or cardboard box.

Tie Your Recycling Bags

It is very important to tie your blue recycling bag tightly with a knot. When glass falls out of the bag, it breaks and gets embedded in the cardboard and paper. No one wants to buy cardboard with glass sprinkled through it!

Remember to put your newspapers and fibers in a paper bag or box to recycle instead of plastic bags – plastic bags create problems during processing.

You are the first step in the recycling process, and it is very important that you separate and sort your materials correctly.



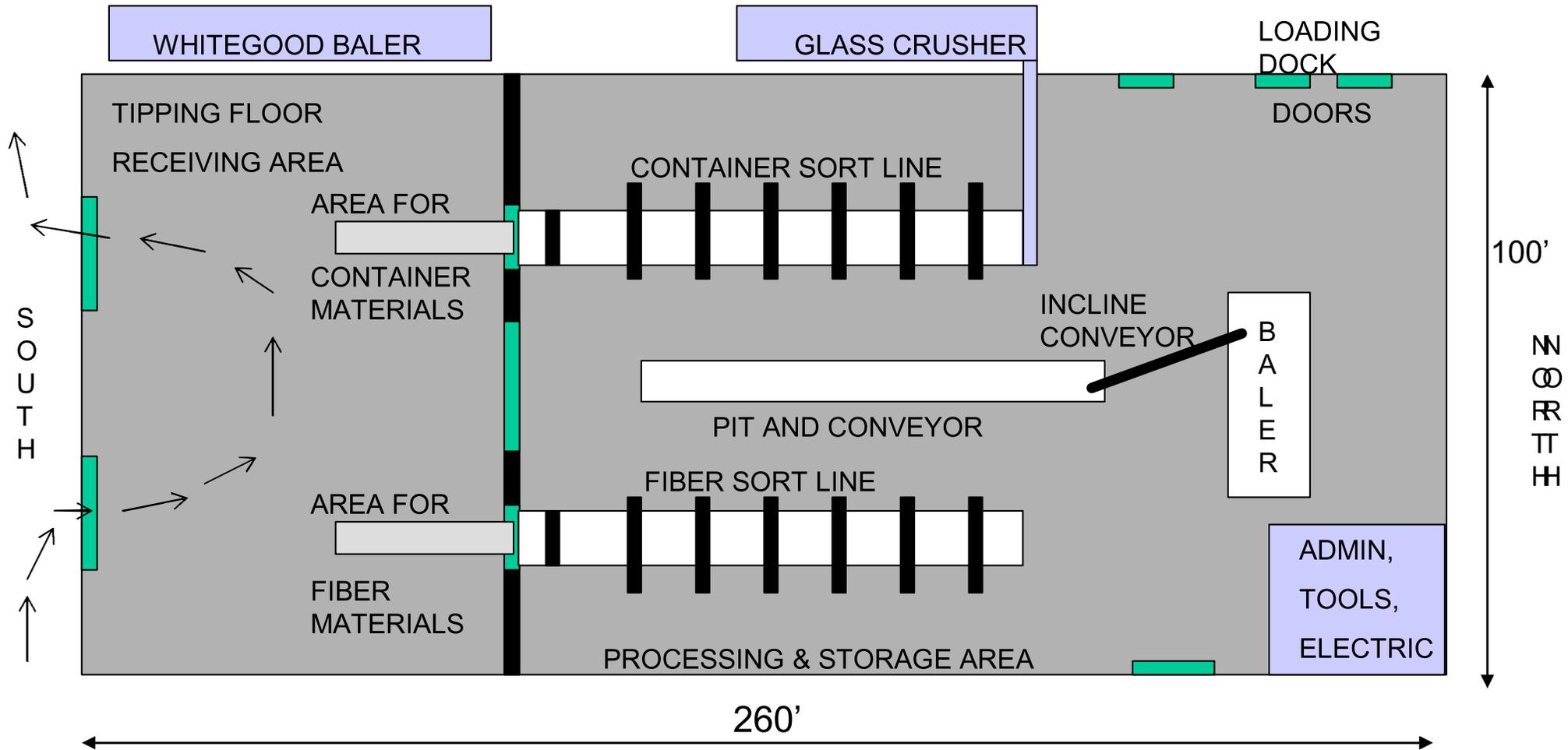
CLOSE FILLED BAG SECURELY, TIE A KNOT

The Material Recovery Facility (MRF)

The materials are brought to the Material Recovery Facility located near the landfill. Now, let's go inside and see what happens to the cans and paper materials you have sent to be recycled.



Floor Plan of the MRF



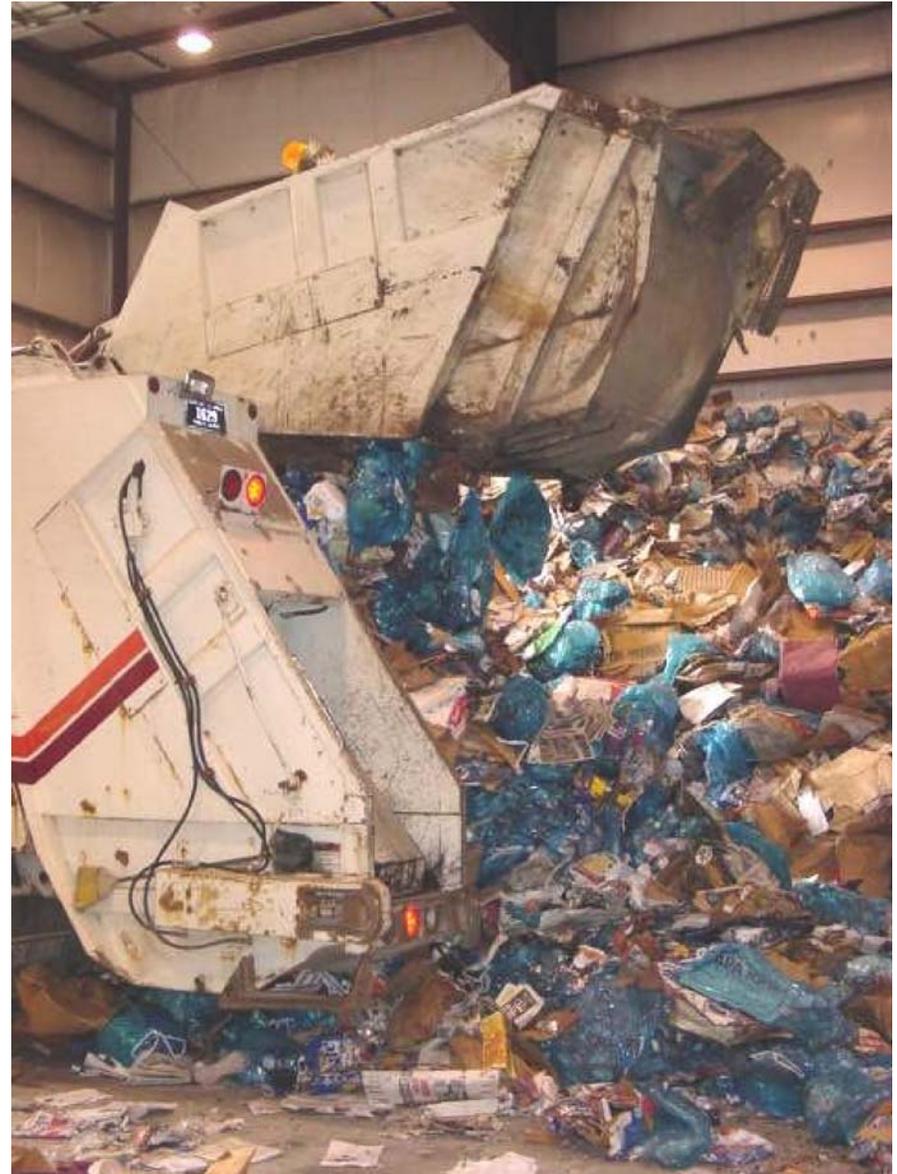
This is the floor plan of the MRF. The trucks drive to the south end of the building to drop off their load in the receiving area. Trash and non-recyclable materials are removed from the recycling process. The clean "recyclable" materials are sorted and ride up the inclined conveyor into the baler. The baler crushes them together and wraps wire bands around each bale to bind it together. After baling, the bales are stored in stacks for shipment.

Recyclables Dropped on Tipping Floor

Arriving trucks dump everything out onto the tipping floor.

From here, the containers go in one direction and the fiber materials in another.

Let's follow the containers first.



Tipping Floor / Containers



Here are piles of containers ready to be sent up the conveyor.

The bags are broken open so the materials can be sorted.

The conveyor carries them up and through the opening to the sorting line.

Container Sort Line

The containers pass by City staff who toss them down into holding bins. A magnet in the box between the staff collects the steel food cans and tosses them down into one of the bins.

The glass rides down the conveyor to the glass crusher where it is sized uniformly for beneficial use.



Glass Crusher

Our Newest Piece
of Equipment



Much of the equipment in our MRF was purchased through grants from the Mid-Missouri Solid Waste Management District and the Missouri Department of Natural Resources. The crushed glass will be used in City Public Works projects or in joint ventures with general public companies. Using the glass in Columbia will save money and shipping fees.

The Fiber Screener



Here we return to the tipping floor area to look at the fiber screener. It sorts loose cans and bottles out of the cardboard and paper. The fiber material rides up the conveyor and through an opening into the next room.

Fiber Sort Line



Similar to the container sorting line, the fiber sorting line carries the materials in front of City staff who toss it down into the bins below.

Here is another look at the fiber sort line in action.



Fibers That Cannot Be Recycled



Fiber materials frequently contain materials that are **NOT** recyclable.

We cannot recycle paper towels, paper tissues, glittery or metallic giftwrap, carbon paper, wax coated paper or wax coated boxes.

PLEASE, take the plastic bag off the newspaper before you recycle it and take the pizza out of the box before you recycle it.

The Moving Floor



When a bin is full, the materials travel along the moving floor where they are carried up the inclined conveyor and dropped down into the baler.

The Baler



This is the baler. It crushes our recyclables into a tight heavy bale and wraps it with wire. Once the bale has been formed, the machine shoves it onto the floor to be collected with a Bobcat and stacked, ready for shipment.

Baled Recyclables



Cardboard Bales



Bales of Aluminum



Bales of Plastic

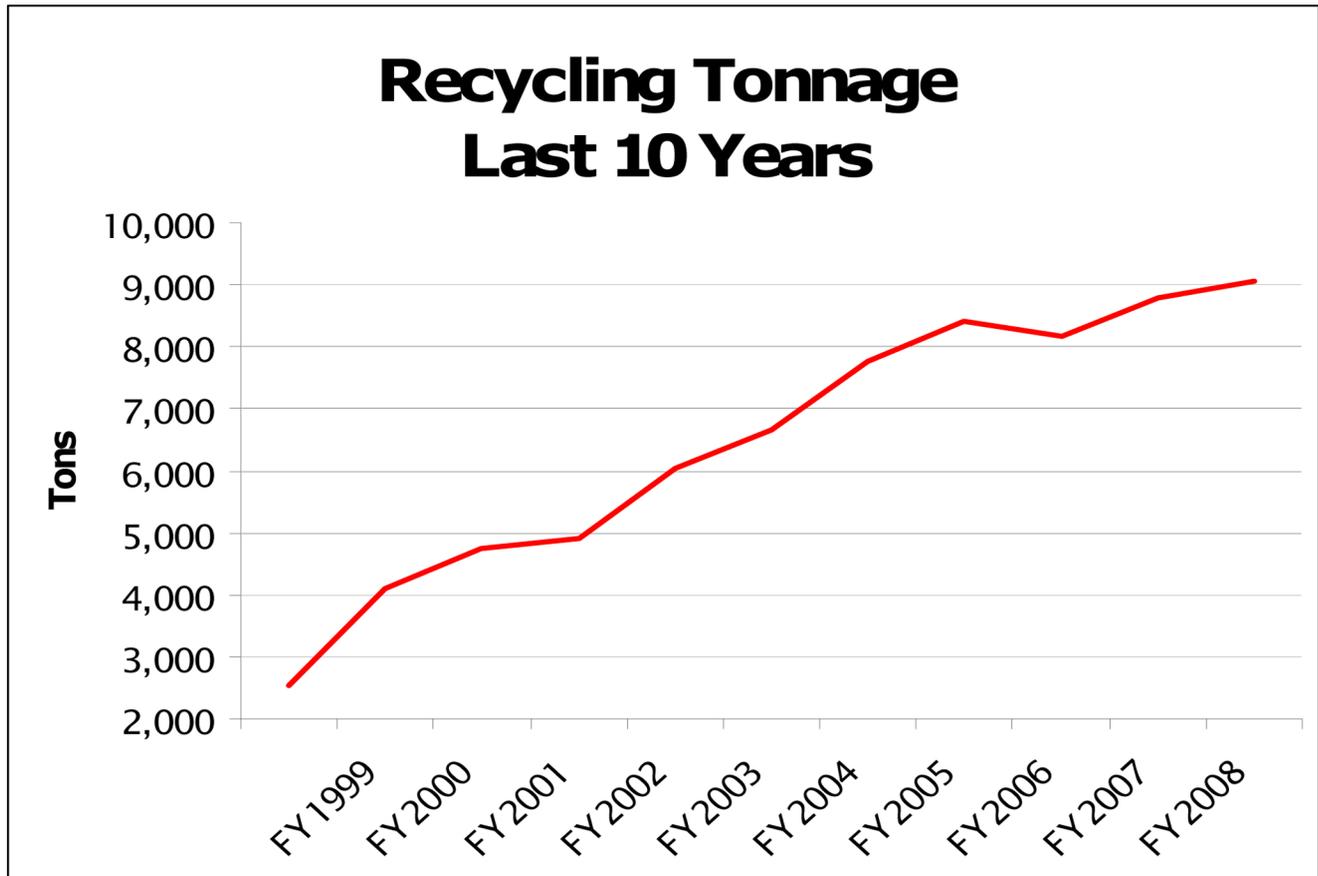
Bales Ready for Market



These bales are waiting for shipment to a buyer. There are many more steps in the process of getting these materials remanufactured into new products. Someday you may buy a package of paper or new carpet made from these materials. The bales will wait until there is a full semi-truck load and then we will sell the load, ship it, and begin collecting more bales.

Remember, if you are not buying recycled materials, you are not recycling! Look for the words "contains recycled content".

Recycling Tonnage Last 10 Years



As you can see, our recycling program is convenient and efficient.

While the City has done the planning and preparation, this program would not be possible without dedicated citizens like you who recycle correctly.



Well, thanks for joining me on this cyber tour of the MRF. I hope you enjoyed it and learned something new. Come see me at the Earth Day festival and we can celebrate it together!

Thank You For Visiting Us!