

May 1, 2018

Our group joined others in touring Waste Pro's Material Recovery Facility (MRF, pronounced "murf"). The visitors were greeted by Sean Jennings, Waste Pro's Division Manager, and Harold Patton, Sarasota MRF Manager.

The 15th Street facility is equipped to handle "single stream" recycling. This means that a resident can comingle recyclables, such as plastics, aluminum cans, papers. Trucks transfer the comingled waste to the floor of the facility where a front loader moves the waste onto 2 story high conveyor system. The conveyor begins a sorting process that relies on both high tech equipment and manual labor.

The process begins with the conveyor's early pre-sort stage which uses laborers to separate large boxes and to pull out contaminants. Contaminants in recycling refers to anything that will make material unrecyclable-- plastic bags, plastic toys, or plastic coated cardboard, for instance.

After the pre-sort stage, the materials go through a gross beater, which rotates heavy materials to the bottom, and does further sorting. The plastic bottles and aluminum eventually go through an optical sorter. An optical scanner identifies aluminum cans, for example, which go over a roller which flips them over the other materials below.

At the end of the process, the materials are sorted and compressed into separate bales, and the bales are lined up in categories. These categories include: aluminum cans, cardboard, mixed paper, colored hard plastics (such as detergent or fabric softener bottles), PET (the plastics with a #1), a "3 to 7 plastics" (the plastics numbered 3, 4, 5 6, and 7), steel cans. At various critical points in this process, workers stand on the line sorting out the items that don't belong.

Some of the bales can be incinerated and used for power. The recycled plastic (#2) is valuable as it can be used for decking and building materials.

How can we do our part? The most helpful thing would be to know what can and can't be recycled:

Materials that can be recycled include: Paper, Cardboard, Newspapers, Aluminum, including aluminum foil, Steel and plastic containers.

Materials that can't be recycled and can destroy a batch are:

- **Plastic Bags.** Plastic bags can't go in city recycling. If you tie up other recyclables like newspapers, bottles and cans in a plastic bag, the whole bag gets thrown out-- you've just taken recyclables and turned it into trash.

Keep all plastic bags, baggies, dry cleaner bags, packing material plastic out of recycling.

- **Waxed Cardboard: Keep these out, including:**
 - Juice and milk containers;
 - Six pack holders that beer comes in which is waxed cardboard;
 - Envelopes that have bubble wrap glued inside.

The wax or plastic can't be separated from the paper so the entire item becomes trash.

- **Styrofoam not recyclable**
- **Hard Plastic like toys are not recyclable.**
- **Organics - keep food and drink out of all your recyclables. It just gunks up the works and lowers the quality of any recycling bale.**
- **Pool Chemical containers Although they are in plastic, the chemicals make that plastic dangerous in recycling lines. Keep them out.**
- **Batteries- keep all batteries out-- backups for computers, car batteries, small batteries.**
- **Propane Tanks of any size- whether large or smaller such as camping stoves or torches.**

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Bales used to be routinely sent to China, which previously handled half of the world's recycling. As of January, 2018, China enacted new restrictions to stop the importation of lower quality plastics (plastic water bottles, bags and plastic straws)

Because of China's new restrictions, the industry is figuring out the best way to handle these materials, with government and private efforts about funding new infrastructure for recycling materials. Without those efforts, more plastic will end up in the oceans.