

15 SEPTEMBER 2014

Single Stream Mixed Curbside Residential Recycling Myth Busters

3 Main Rules of Recycling:

1. Recycle all bottles, cans, and paper products
2. Keep items clean and dry
3. NO plastic bags

What ALWAYS goes in curbside mixed recycling cart:



Plastic bottles, jars, jugs and tubs

Plastic Bottles & Containers



Tin, aluminum, steel cans

Metal Cans



Paper, newspaper, paperboard, cardboard, magazines

Paper



Flatten all boxes (do not bundle/tie up)

Flattened Cardboard & Paperboard

NO LIQUIDS

NO



FOOD WASTE



PLASTIC BAGS



POLYSTYRENE FOAM CUPS
& CONTAINERS

MYTH: Most Americans recycle all they can

FACT: False

Research shows convenience and commitment are required for maximum recycling. For instance, is there more than one location in a household to store recyclables? If not, recyclables in areas other than the kitchen get thrown away. Additionally, is there only one committed recycler in a household (usually the person who picks up after everyone)? If so, studies indicate making this a family/partner affair where everyone participates, allows the most recycling of the right materials.

MYTH: The Recycling Arrows (Mobius) on a container means it is recyclable at a MRF.

FACT: Only in some cases.

Manufacturers strive to get eco-friendly information on their product labels. It sells. The FTC requires that a product have at least 60% access to local programs (like MRF processing) across the U.S. to include the Mobius on their products. However, the Mobius is not a reliable indicator of whether something gets recycled. There are thousands of plastic products and packaging, and each one has its own unique chemical recipe. The number only tells us what the primary ingredient is in the plastic recipe. Many plastics cannot be made into new products at this time.



MYTH: It doesn't matter if something belongs in the recycling the hauler will sort everything anyway

FACT: False

There are increasing amounts of non-recyclables sent to Materials Recovery Facilities, and every single one of them must be removed by hand by trained staff and/or mechanically sorted, or they end up contaminating high value recyclables. Non-recyclable garbage placed into recycling containers increases the cost of the recycling process and will increase the cost of garbage and recycling collection service. Similarly, recyclable items placed into garbage containers are usually hauled to a landfill. Recyclables in a landfill cannot be recovered effectively. Even if further processing takes place, the full value is lost. The right thing to do is to put the all the right recyclables in the recycling container and non-recyclables into the garbage containers. Recyclables with the greatest impact are all bottles, cans, and paper.

Plastic FAQs. Are these recyclable in my curbside mixed recycling program?

MYTH: All plastics can be recycled.
FACT: False.
 Not all plastics can be successfully recycled. At this time, only some plastics can be made into new things. Recycle plastics by shape: bottles, jars, jugs and tubs.

Item	Answer	More Information
Plastic bottle caps/lids 	Yes. After bottles are empty, plastic caps should be placed back on bottles.	<p>“Until recently the plastics recycling industry was not able to effectively recycle bottles with caps on so the message to remove the cap was created. But recycling collection and processing technology has improved and demand for the recyclable material has increased and this allows for the updated caps-on recycling message and process.” Association of Post Consumer Plastic Recyclers: http://www.plasticsrecycling.org/faqs/caps-on-faqs</p>
Plastic bags 	No. Do not put loose plastic bags or bagged recyclables into cart – empty recyclables into cart.	<p>Plastic bags are not accepted in most curbside recycling programs (they get tangled in the MRF equipment, breaking or stopping machinery.) (See KAB Sept 15, 2014 campaign). Empty plastic bags should go back to a participating retail outlet or grocery store for recycling. For more information, visit: http://recycleyourplastics.org/Main/Plastic-bags-film.html.olc OR http://www.plasticfilmrecycling.org/s01/s01dropoff.html</p>
Plastic film 	No.	<p>Plastic stretch wrap, bubble wrap, and other plastic films get tangled in the MRF equipment, breaking or stopping machinery (See KAB Sept 15, 2014 campaign). There are also different types of plastic film that are not compatible with each other and hard to tell apart for MRF workers, and even harder to sell if mixed together. Plastic film should go back to a participating retail outlet or grocery store for recycling. For more information, visit: http://recycleyourplastics.org/Main/Plastic-bags-film.html OR http://www.plasticfilmrecycling.org/s01/s01dropoff.html</p>

Item	Answer	More Information
<p>Clamshell packaging</p> 	<p>No.</p>	<p>The plastic “to go” containers or containers holding berries, apples, bakery items, etc., are not consistently made of high-value plastic, are difficult to recycle and are usually contaminated with food when disposed. See more at: http://oregonstate.edu/sustainability/blog/2014/01/recycling-mythbusters-plastic-recyclables</p>
<p>Plastic eatery: utensils, plates and cups</p> 	<p>No.</p>	<p>Plastic straws, utensils, including “compostable” utensils, plastic plates and plastic cups come in such a wide variety of non-usable, low-grade plastics that it is impossible to identify and separate the recyclables from the non-recyclable look-alikes (Same as the clamshells). Fast food packaging, like utensils, are complicated and are not readily recovered through modern MRFs, or by secondary processors who buy MRF bales.</p>
<p>Chip bags, nutritional bar or candy wrappers</p> 	<p>No.</p>	<p>There is no real end market for this often hybrid material. “...there are only a few niche markets for it. The only recycling program at this time is done via direct mail-in to www.terracycle.net. Visit Terracycle’s website to find out how you can participate.</p>

Paper/Cardboard FAQs. Are these recyclable in my curbside mixed recycling program?

Item	Answer	More Information
<p>Cartons</p> 	<p>Varies by jurisdiction</p>	<p>Juice boxes (no pouches), milk and juice cartons (emptied and rinsed, no pouches or straws) are recyclable in some states where the Carton Council subsidizes the processing. Look up participation via the following website http://www.recyclecartons.com/</p>
<p>Pizza boxes (without food or paper liners/doilies)</p> 	<p>Yes.</p>	<p>Clean pizza boxes (without food or paper liners/doilies) are acceptable. At one point, pizza boxes were made with a wax coating that made them not acceptable. The new pizza boxes (often with a paper doily serving as a moisture barrier) are high-potential recyclables and should be included in curbside recycling materials.</p>
<p>Single serve hot beverage cups</p> 	<p>No.</p>	<p>Hot paper cups are usually soiled when disposed and have a plastic or waxed coating that does not break down during the re-pulping process at paper mills. The plastic lids typically used on these cups are not recyclable either (even if they have the recycling symbol on them).</p>
<p>Napkins, paper towels, tissues</p> 	<p>No.</p>	<p>Napkins, paper towels and tissues are made of low-grade fiber, and are usually soiled when disposed. They are not recyclable in single stream residential MRFs. The cardboard tube in the middle of the roll of paper towels or toilet tissue can be recycled.</p>

<p>Shredded paper</p> 	<p>No.</p>	<p>Shredded paper is recyclable when there are large source separated quantities of the material, directly baled, and not run over a sorting system. This is an option for commercial customers and mobile shredding companies, but does not work well for residential single-stream MRFs. Because of its size and elasticity, it does not separate easily from other materials, i.e. it cross-contaminates bottles and cans. It also blinds many of the technologies from working correctly in a MRF and lessens glass quality. Many municipal programs require its inclusion, but small amount of shredded paper actually makes it back to market through MRFs.</p>
<p>Paper cups, plates</p> 	<p>No.</p>	<p>Paper cups and plates are usually soiled when disposed and have a plastic or waxed coating that does not break down during the re-pulping process at paper mills. The plastic lids typically used on these cups are not recyclable either (even if they have the recycling symbol on them).</p>

Other—Rule of Thumb

Item	Answer	More Information
<p>Aerosol Cans</p> 	<p>Varies by jurisdiction</p>	<p>99% of recycling programs accept empty/dry aerosol cans. Aerosol cans without the caps are recyclable if they are empty/dry. If they are not, then they could fall into these other areas. Some incipient fires are caused in baler chambers from trace amounts of can chemicals, and cans have been known to become projectiles when densified/baled if propellant is still present. Risk for occupational exposure to chemicals comes from employee non-compliance with safety rules, and in general, is minimal. Susan Epps and ANSI have done research back to 1998 on the subject. WM facilities and commodity vendors accept steel, mixed metal, and aluminum aerosol packages. Multi-material aerosol packages are not recyclable (nozzle excluded, however the nozzle does not get recycled). There is no grey area here from a processor standpoint, however, some Cities still list aerosols on the no-recycle list and we are then required to use those rules for that particular program.</p>



- No polystyrene
- No coat hangers - take back to cleaners
- No cords and wires
- No shoes, clothing - donate to local charity
- No reusable pots, pans
- No household items, i.e. small appliances, flower pots, picture frames...
- No drinking glass, dishes, ceramic
- No needles
- No batteries, bulbs, helium tanks, containers of automotive chemicals
- No glossy or sticky paper (photographs, labels, yellow stickies)

Frequently Asked Questions:

1. How clean is “clean”?

Use a spatula to scrape cans and jars, i.e. peanut butter, syrup, salad dressing, oil, etc. or jugs, i.e. bleach, hh non-toxic chemical cleaners, etc. There is no need to rinse - just empty and clean. With some of our severe drought areas, rinsing makes no sense at all.

2. What happens to the plastics collected in curbside programs that accept all 1-7 plastics?

We find that simple instructions to customers results in much more recyclables material collected - even if we also get more material that has no markets. Plastics are an excellent example of this. By allowing customer to recycle all 1-7 plastics, we see a significant increase in the amount of 1's and 2's collected in local recycling programs. These plastics make up the largest portion of the plastics stream and have the most value - which makes it worthwhile to collect some non-recyclable material in order to get more of the highly recyclable PET and HDPE.

After sorting the 1's (PET) and 2's (HDPE) and sometimes the 4's (polyethylene) and 5's (polypropylene) from curbside recyclables at recycling facilities, the remaining plastics are generally baled together and sold to companies who sort them again for the remaining valuable materials, that were missed the first time. The unrecyclable plastic is ultimately discarded. This discarded plastic makes up less than 1% of the total material collected for recycling in typical curbside recycling programs.