



# Mixed Recycling (MRF) Acceptance Criteria

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## GENERAL

1. **Fees:** See current Fee schedule at [www.rirrc.org/about/accepted-materials-pricing](http://www.rirrc.org/about/accepted-materials-pricing) for pricing.
2. **Material Segregation:** Materials must arrive segregated, or upon arrival be segregated by the customer, according to the acceptance criteria listed in this document.
3. **Small Vehicle Loads:** Residents and small contractors can deliver Mixed Recycling to the Small Vehicle Area (SVA) without an appointment (unless otherwise noted under that material's acceptance criteria) during normal operating hours ([www.rirrc.org/about/location-hours](http://www.rirrc.org/about/location-hours)).
4. **Municipal and Commercial Customer Loads:** Municipal and commercial customers can deliver Mixed Recycling directly to Resource Recovery without an appointment (unless otherwise noted under that material's acceptance criteria) during normal operating hours ([www.rirrc.org/about/location-hours](http://www.rirrc.org/about/location-hours)).
5. **Acceptable Items:** Loads must only contain acceptable items as defined below.
6. **Contaminants:** Loads containing more than 10% by weight or volume of contaminants as defined below will be subject to a disposal fee and any equipment and/or rejection charges.
7. **Prohibitive items:** Loads containing any percentage of prohibitive items as listed under a specific material's acceptance criteria are subject to any of the following: immediate rejection, a disposal fee, equipment and/or rejection charges.
8. **For local municipal drop-off options for Mixed Recycling visit:** <http://atoz.rirrc.org/items/extra-recycling>

## SPECIFICATIONS

**Delivery** - Must be delivered to the Materials Recycling Facility (municipal and commercial loads) or Small Vehicle Area (individual residents and small contractors). All acceptable Mixed Recycling materials can arrive mixed together. Mixed Recycling delivered in mixed waste loads with other materials, and not segregated by the customer, will be charged as solid waste.

**Preparation** - Resource Recovery expects customers to treat unprocessed comingled recyclables as a commodity during collection and delivery to the MRF to allow for proper sortation when processed through the MRF facility. Materials received in a condition inconsistent with the **moisture** and **compaction** standards below, or otherwise found objectionable by Resource Recovery staff, may be rejected as these issues contribute to cross-contamination, loss of quality recyclables, processing inefficiencies and higher residue rates. Rejected loads will be recoded as solid waste and the customer will be subject to the appropriate fee and other surcharges including equipment usage fees.

**Excessive Moisture:** Customers shall ensure that recyclables are delivered to the MRF free of excess moisture. Loads that are determined to be too wet or contain an excessive amount of

snow, ice or frozen material to process shall be subject to rejection. Such determination shall be made by Resource Recovery and shall be binding.

**Excessive Compaction:** While balancing the utilization of the hauling vehicle’s maximum load capacity, the customer shall prevent the excessive compaction of material to be delivered to the MRF. Loads that have been subject to excessive compaction cannot be sorted properly causing excess residue and/or contamination. Resource Recovery recommends a 2.5:1 maximum compaction ratio to reduce MRF residue and preserve commodity values. Using data from the 2016 EPA Volume to Weight conversion table, single family comingled recyclables average 126 pounds per cubic yard (e.g. a vehicle with 30 yards capacity should not exceed 5 tons of residential single stream material). Loads that are found to be excessively compacted and unsuitable for processing may be subject to rejection. Such determination shall be made by Resource Recovery and shall be binding.

**No Bagging/Bundling:** All materials must arrive loose (i.e. not be in plastic bags, leaf and lawn bags, cardboard boxes or bundled together). Materials received in bags will be treated as solid waste and disposed of as residue regardless of the recyclability of the items within the bags.

**Acceptable** – Materials must be (1) commingled plastic, glass, metal, and paper/cardboard items that follow the acceptance criteria outlined below, by material type, (2) dedicated loads of acceptable material types, (dedicated loads of glass may be accepted with advance notice and permission from RIRRC), (3) no more than 50% glass by weight in any mixed load, (4) free from excessive moisture, (5) loose, and (6) free from excessive compaction.

**Contaminants** - These items either (1) do not fit the general acceptance criteria or (2) fit it, but are not accepted by our buyer(s). No more than 10% of these are allowed in any load:

	Acceptable	Contaminants
Plastic	<p><b>Plastic items must be empty containers that never held flammable liquid, 5 gallons in size or smaller.</b> Examples of items that fit the criteria, and are accepted, include:</p> <ul style="list-style-type: none"> <li>• Jars (e.g. peanut butter, mayo)</li> <li>• Jugs (e.g. milk, juice, detergent)</li> <li>• Tubs (e.g. ice cream, margarine)</li> <li>• Bottles (e.g. soda, shampoo)</li> <li>• Cups (e.g. iced coffee)</li> <li>• Clamshells (i.e. clear plastic take-out containers)</li> <li>• Cartons (i.e. plastic egg cartons)</li> <li>• Blister packaging (i.e. containers molded into the shape of the consumer product it holds)</li> </ul>	<ul style="list-style-type: none"> <li>• Any plastic item that is not a container (e.g. hangers, toys, VHS tapes, shelving)</li> <li>• <i>(Any plastic container that held hazardous liquid - see Prohibitives below.)</i></li> <li>• Any plastic container larger than 5 gallons in size (e.g. large plastic storage totes)</li> <li>• Containers that aren’t empty</li> <li>• Hybrid items made up of near equal parts of different materials or 3+ different materials (e.g. foil-plastic juice pouches, snack bags, candy wrappers, yogurt tops)</li> <li>• Styrofoam containers (e.g. cups, take-out containers, coolers, etc.)</li> <li>• Compostable containers (labeled “compostable,” “biodegradable” or “PLA”)</li> <li>• Containers that crinkle or tear easily (e.g. plant plug trays)</li> <li>• Containers that shatter (e.g. CD cases)</li> <li>• Plastic film (plastic bags, bubble wrap,</li> </ul>

	Acceptable	Contaminants
		shrink wrap
<b>Metal</b>	<p><b>Metal items must be empty cans/lids or clean foil.</b> Examples of items that fit the criteria, and are accepted, include:</p> <ul style="list-style-type: none"> <li>• Aluminum beverage cans/bottles</li> <li>• Aluminum cat food cans</li> <li>• Steel/tin food cans</li> <li>• Aerosol cans (depressed nozzle results in no product/air/noise)</li> <li>• Aluminum foil</li> <li>• Aluminum pie plates and serving dishes</li> </ul>	<ul style="list-style-type: none"> <li>• Any metal items that aren't cans/lids or foil (e.g. wire hangers, pots, pans)</li> <li>• Cans that aren't empty</li> <li>• Foil that is not clean</li> <li>• Hybrid items made up of near equal parts of different materials or 3+ different materials (e.g. juice pouches, snack bags, candy wrappers, yogurt tops)</li> </ul>
<b>Glass</b>	<p><b>Glass items must be empty bottles or jars.</b> Examples of items that fit the criteria, and are accepted, include:</p> <ul style="list-style-type: none"> <li>• Drink bottles (e.g. soda, juice, tea, beer, wine)</li> <li>• Food jars (e.g. sauce, jam/jelly, condiments, baby food)</li> </ul>	<ul style="list-style-type: none"> <li>• Any glass items that aren't bottles or jars (e.g. lightbulbs, windows, drinking glasses, bowls, ceramics)</li> <li>• Glass bottles and jars that aren't empty</li> <li>• Hybrid items made up of near equal parts of different materials or 3+ different materials (e.g. ½ glass ½ plastic pepper grinder)</li> <li>• <i>Though broken glass bottles and jars are accepted, Resource Recovery continues to advise those cities, towns, businesses, or institutions with manual collection to refrain from putting broken glass bottles or jars in their recycling for the protection of custodial staff and curbside haulers.</i></li> </ul>
<b>Paper/ Cardboard/ Cartons</b>	<p><b>Paper and cardboard must be (1) reasonably clean, dry, and flat (some grease on cardboard pizza boxes is OK); (2) in pieces no larger than 3' x 5'; Cartons must be (1) empty and (2) not crushed completely flat.</b> Examples of items that fit the criteria, and are accepted, include:</p> <ul style="list-style-type: none"> <li>• Books (soft-covered or with hard cover removed)</li> <li>• Cartons - Gabletop (e.g. milk, creamer, juice)</li> <li>• Cartons - Aseptic (e.g. soy milk, broth, juice boxes)</li> <li>• Corrugated cardboard (up to 3' x 5', flattened)</li> </ul>	<ul style="list-style-type: none"> <li>• Paper/Cardboard that isn't clean (some grease on cardboard pizza boxes OK)</li> <li>• Paper/Cardboard that isn't reasonably dry</li> <li>• Cardboard pieces larger than 3' x 5' should be cut down to size</li> <li>• Hybrid items made up of near equal part of different materials or 3+ different materials (e.g. photographs, cigarette packs, bubble wrap padded envelopes, nut canisters, three ring binders)</li> <li>• Sanitary paper (e.g. napkins, tissues, or paper towels)</li> <li>• Shredded paper</li> <li>• Wet-strength cardboard (e.g. soda boxes, six-pack carriers, frozen food boxes, paper coffee beverage/soup cups, soap or</li> </ul>

	Acceptable	Contaminants
	<ul style="list-style-type: none"> <li>• Egg cartons</li> <li>• Envelopes</li> <li>• 100% paper gift bags with handles removed</li> <li>• Magazines / catalogs</li> <li>• Newspaper</li> <li>• Notebooks</li> <li>• Office paper</li> <li>• Paperboard boxes (e.g. food boxes, shoe boxes)</li> <li>• Paper towel inner tubes</li> <li>• Wrapping paper</li> </ul>	<ul style="list-style-type: none"> <li>laundry detergent boxes)</li> <li>• Wax coated or wire reinforced cardboard (e.g. boxes used to transport fresh produce)</li> </ul>

**Other contaminants:**

- Textiles: e.g. clothing, towels, blankets, sheets, linens, luggage, backpacks, tote bags and footwear

**Prohibitive items** - These items (1) clearly do not fit the acceptance criteria and (2) cause major problems for our system, workers, and/or our buyer(s). Loads containing any percentage of these items will be subject to immediate rejection:

- Aren't loose (i.e. any bagged materials, including bagged recycling and bagged municipal or commercial solid waste, any materials that are excessively compacted.)
- Aren't empty (i.e. any container still containing hazardous waste, pressurized contents, or unknown contents)
- Aren't reasonably dry (i.e. material that has been coated by liquids such as paint, petroleum or chemicals)
- Aren't: (1) plastic containers that never carried flammable liquid, (2) metal cans/lids or foil, (3) glass bottles or jars, (3) paper, cardboard, or cartons, for example:
  - Organics: e.g. food waste, cooking oil-soaked materials, pet waste, human waste, deceased animals, and yard waste such as leaves, branches, stones, mulch, dirt / potting soil, grass clippings, flowers, plants and weeds
  - Construction and demolition debris: e.g. windows, siding, tile, gutters, shingles, pipe, drywall concrete, brick, gravel, wood, sawdust, dirt, sand
  - Medical/biological waste: e.g. hypodermic needles, auto-injection pens and lancets, intravenous (IV) tubing and bags, oxygen respiration tubing and masks, soiled diapers/changing pads
  - Explosives/flammables/combustibles: e.g. firearms, ammunition, fireworks, cylinders/tanks including but not limited to propane/acetylene/oxygen/helium, and containers labeled as having one time contained flammable fluids such as automotive fluid containers; chemical containers; gasoline/petroleum product cans or containers; paint product cans or buckets; paint/stripper/thinner/varnish containers; pesticide/herbicide/insecticide containers).
  - Items that wrap / can be tied in a knot: e.g. string, twine, rope, cables, chain, wire, hose, tubing, electrical cords, Christmas tree lights, fishing line and nets

- Bulky/special waste: e.g. electronic items like printers and laptops, appliances like A/C units and microwaves, furniture, exercise equipment
- Dangerous ferrous and non-ferrous scrap metal: e.g. sheet metal, pipe, auto parts-such as brake rotors/brake drums, wheels, structural steel such as rebar, angle iron, channel steel, tools, knives, razor blades, saw blades, drill bits, nails/screws
- Lithium Batteries/Lithium Ion Batteries: Loose or installed in a device.