Projecting Impact of Foodservice Packaging on Common MRF Commodity Bales

Background
The following charts illustrate the estimated proportions of various types of foodservice packaging materials in each material stream, and the estimated quantities that would land in existing material bale types if those foodservice packaging items were sorted by material recovery facilities (MRFs) into commonly produced bales based on their material composition. These calculations are based on:

- data supplied by the industry and other outside resources on FSP generation;
- estimates on the average weights of targeted FSP materials (cups, containers, boxes and paper bags);
- data supplied by RRS on existing material stream volumes per population;
- a hypothetical FSP recovery rate of 10 percent (intended as a mid-range target);
- assumptions about which items will/will not be accepted;
- assumptions about which bales will be targeted by the MRF (not all MRFs will sort a given material to the same bale); and
- assumptions about how the item will be handled by existing MRF sorting equipment (e.g. cup sleeves will flow with cups). Note that some items (e.g. PET cups and containers; paper cups and cup sleeves) may be directed to different bales depending on the MRF and its end markets. These have been included in the projections for more than one bale type to illustrate the projected maximum impact in either sorting scenario.

Identify targeted items: cups, containers, boxes, paper bags

In a city of 250K people, approx. 3,000 tons of target FSP are generated

A 10% recovery rate would mean 300 tons would enter a MRF annually

Projected impact on bale composition is x%
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**FSP Impacts on a PET Bottle Bale**

- Existing Material: 99.1%
- Plastic Beverage Cups - PET: 0.9%
- Food Containers - PET: 0.5%

**FSP Impacts on a Mixed Plastics Bale**

- Existing Material: 95.6%
- Plastic Beverage Cups - PS (Rigid): 0.9%
- Food Containers - PS (Rigid): 1.0%
- Plastic Beverage Cups - PP: 1.1%
- Food Containers - PP: 0.3%
- Plastic Beverage Cups - PET: 0.5%
- Food Containers - PET: 0.5%

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**FSP Impacts on an OCC Bale**

- **OCC**
  - 99.1%
  - 0.9%
  - 0.3%
  - 0.5%

**Existing Material**
- Pizza Boxes - Corrugated
- Carry Out Bags - Kraft

**FSP Impacts on a Grade 52 Bale**

- **Existing Material**
- Hot Beverage Cups - Polycoated carton board
- Cold Beverage Cups - Polycoated carton board
- Food Containers - Polycoated carton board Double sided
- Food Containers - Polycoated carton board Single sided
- Hot Paper Cup Sleeves OCC
- Hot Paper Cup Sleeves Clay Coated

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FSP Impacts on a Mixed Paper Bale

96.7% Existing Material
3.2% Other Materials

- Hot Beverage Cups - Polycoated carton board
- Hot Beverage Cups - “Other” coated carton board
- Cold Beverage Cups - “Other” coated carton board
- Food Containers Plycoated cartonboard Single sided
- Beverage Carriers - Molded Pulp
- Pizza Boxes - Clay-coated cartonboard
- Hot Paper Cup Sleeves Clay Coated

- Hot Beverage Cups - Polycoated carton board
- Cold Beverage Cups - Polycoated carton board
- Food Containers Plycoated cartonboard Double sided
- Food Containers - Clay - coated carton board
- Beverage Carriers - Clay-coated cartonboard
- Hot Paper Cup Sleeves OCC

Additional Questions?
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