



Bale Rate Study

Public & Industry Workshop – February 17, 2016



Introduction

Mike Miller - Chief

Operations Branch

Division of Recycling



Agenda

- Purpose
- Method
- Findings
- Discussion
- Future Implication
- Questions & Comments



Purpose

- Increase accuracy of CRV/lb. rates for curbside (CS), collection programs (CP), and community service programs (SP)
- Improve survey methods to yield more accurate rates
- Provide appropriate compensation closer to pay point
- Obtain recommendations from industry stakeholders to better account for contamination in bales



Method

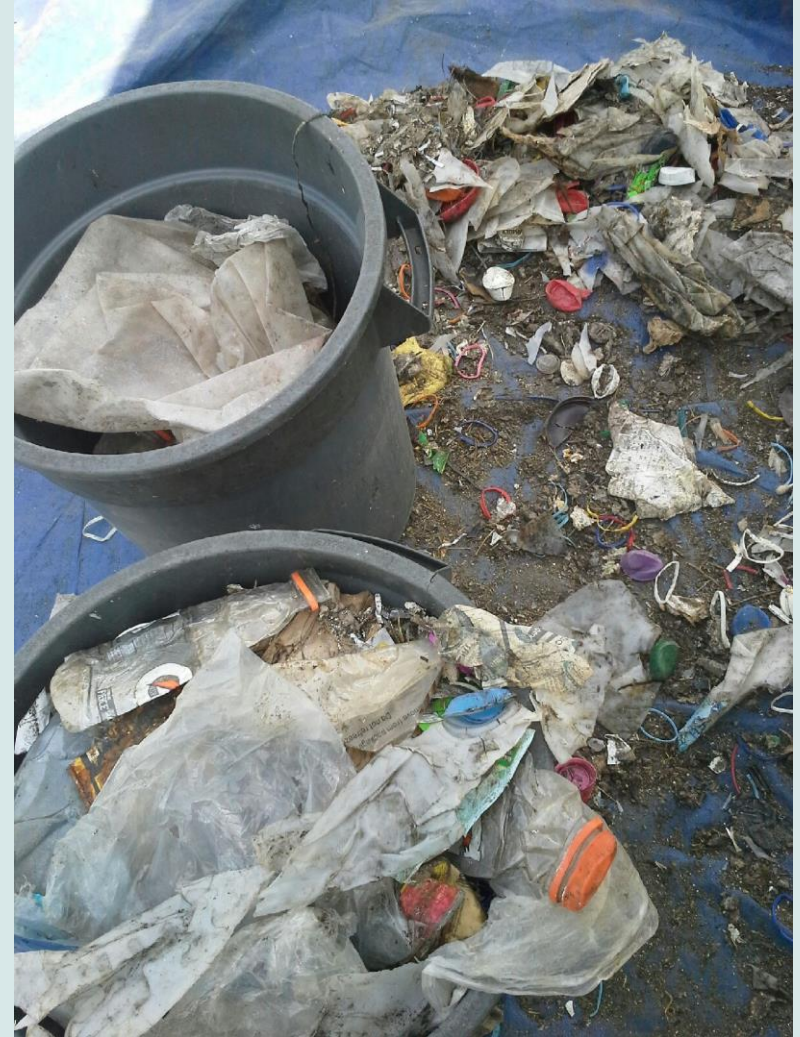
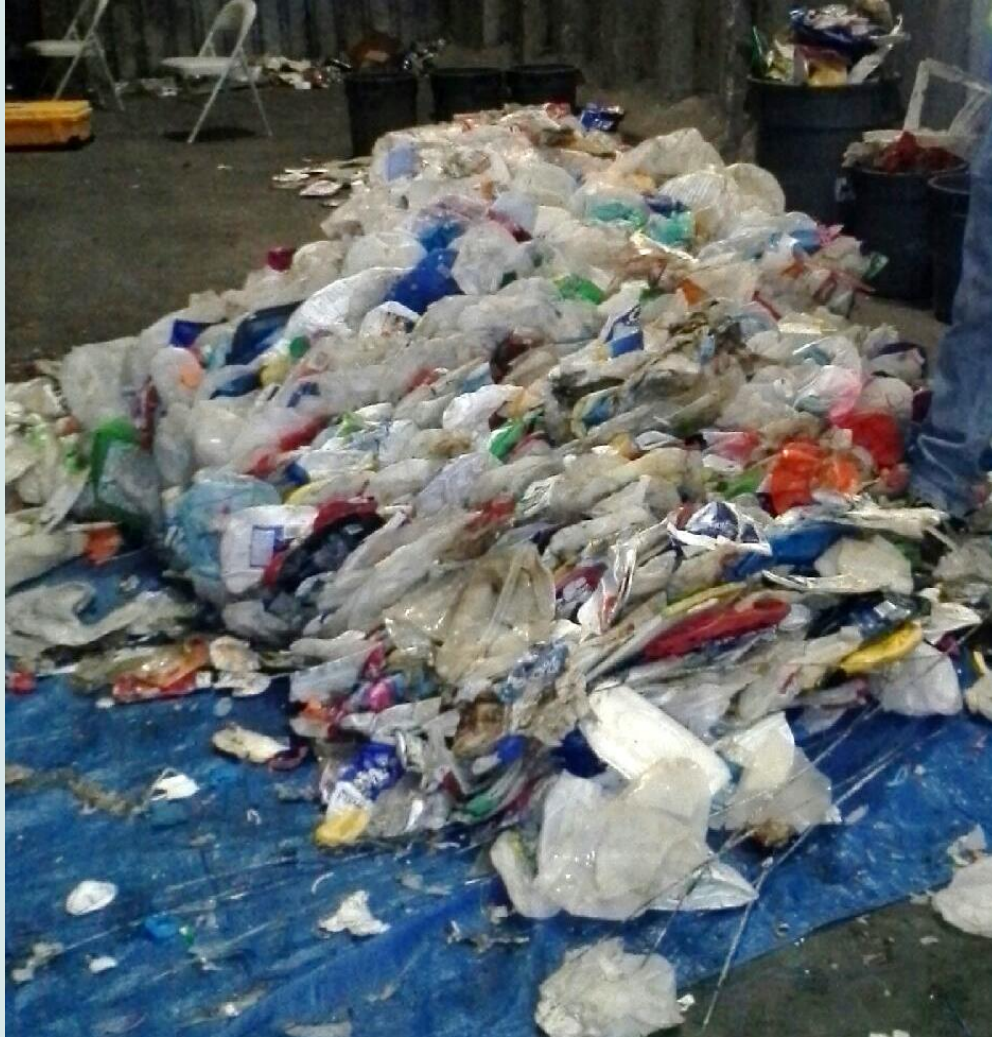
- Exploratory study to identify extent of contamination in bales
- Selected 11 random facilities from 2016 rate survey sample that bale material on-site, 42 bales in total.
- Bale selection for PET and HDPE from random bales from CS, CP and SP programs only
- “Bale” selection for aluminum from material obtained right before baling



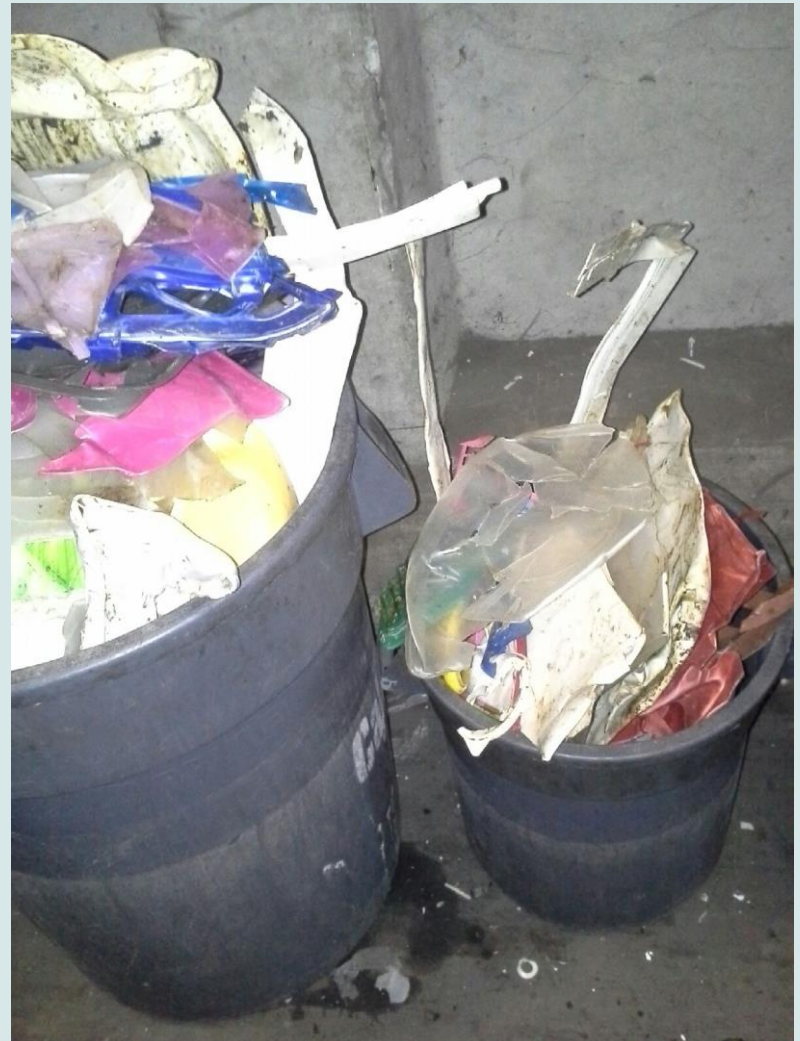
Method – Data Collection

- Bales placed on tarp and disassembled
- Material sorted by category/type e.g. PET, HDPE, dirt and debris, baling wire, etc.
- Beverage container material types sorted by CRV and non-CRV
- Record weight and count of material in each category

Method



Method



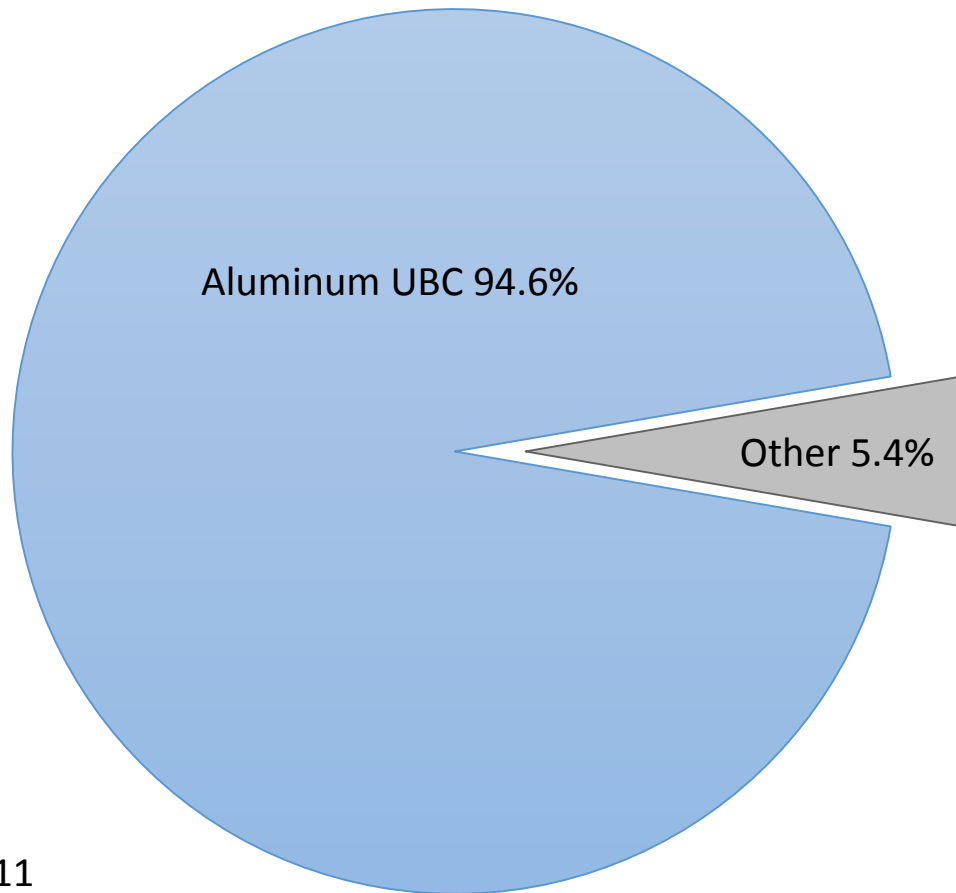
Method



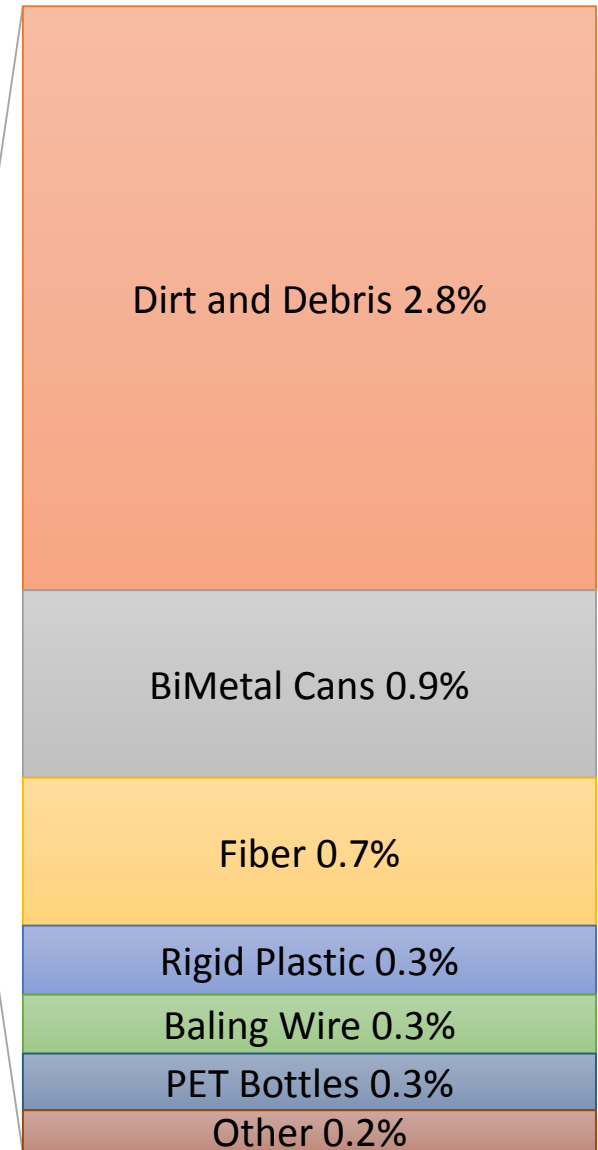


Findings

Aluminum UBC Bale Composition (% by weight)

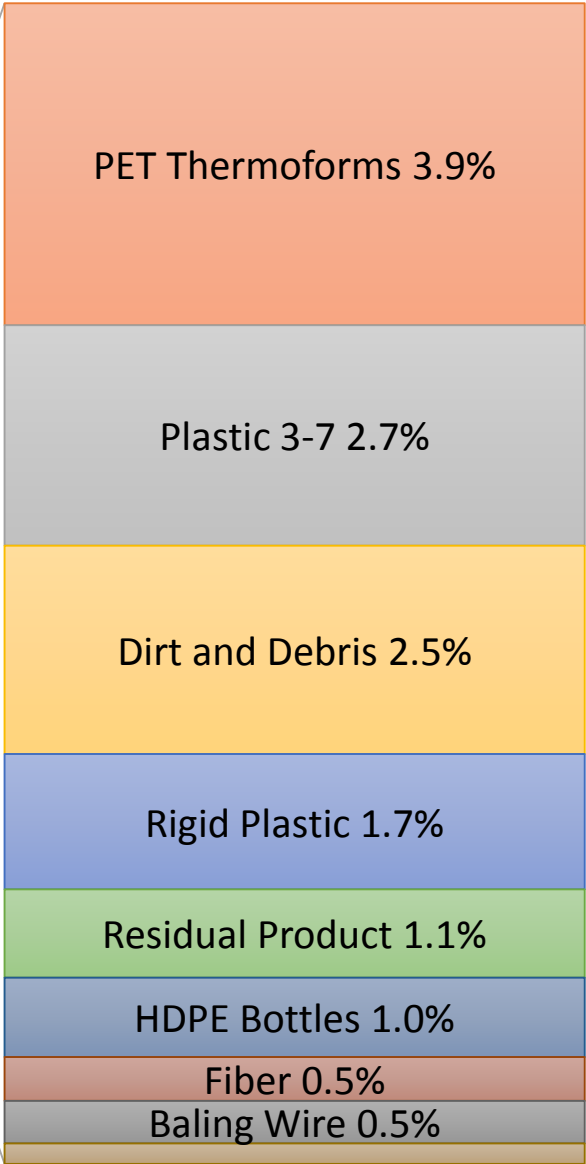
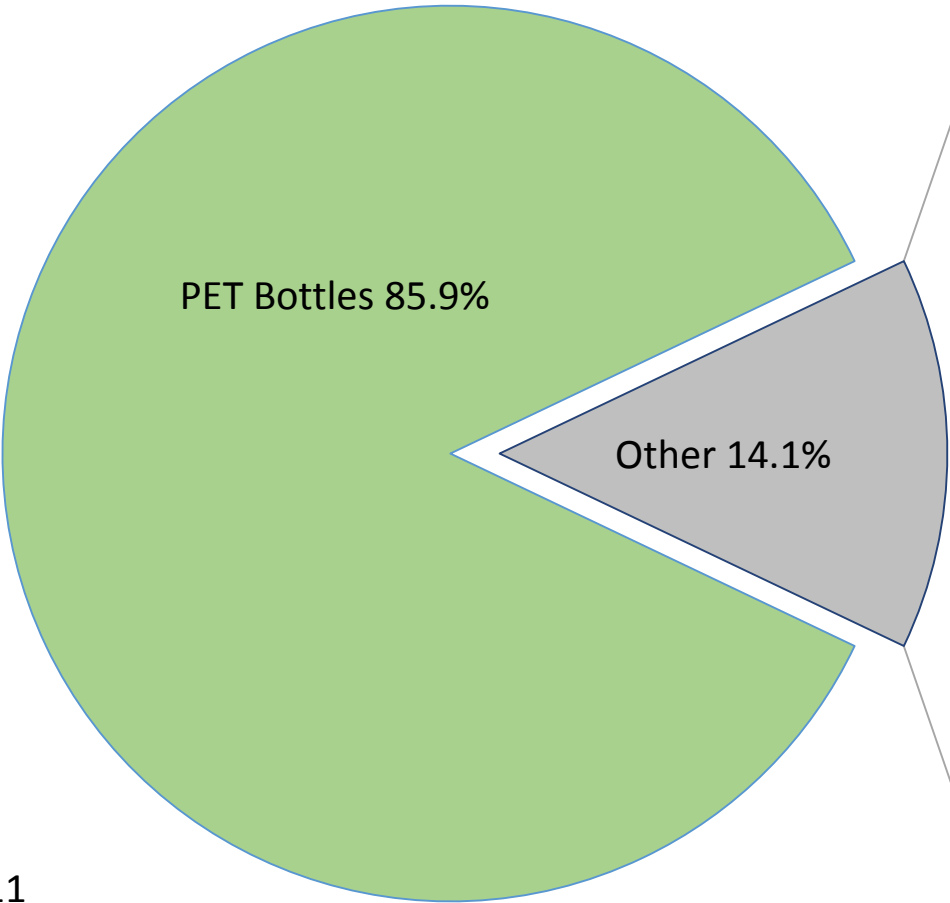


n = 11
Avg 94.6%
Min 85.6%
Max 98.8%



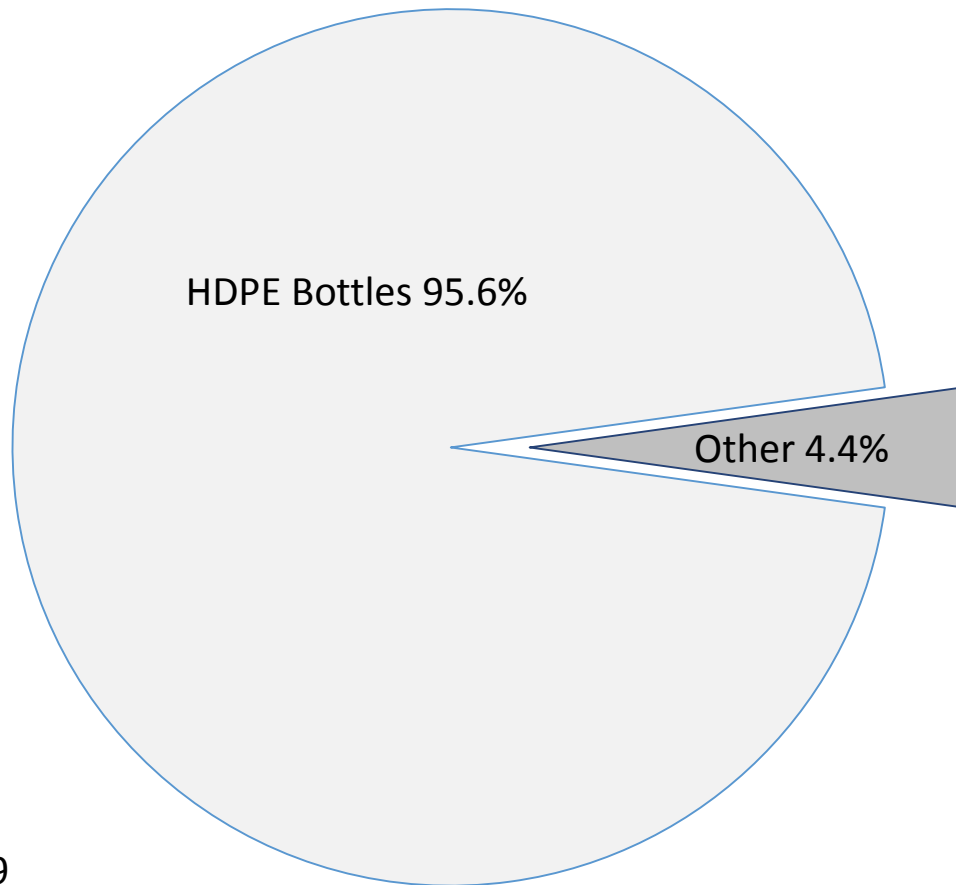
PET Bale Composition (% by weight)

n = 11
Avg 85.9%
Min 53.1%
Max 95.0%

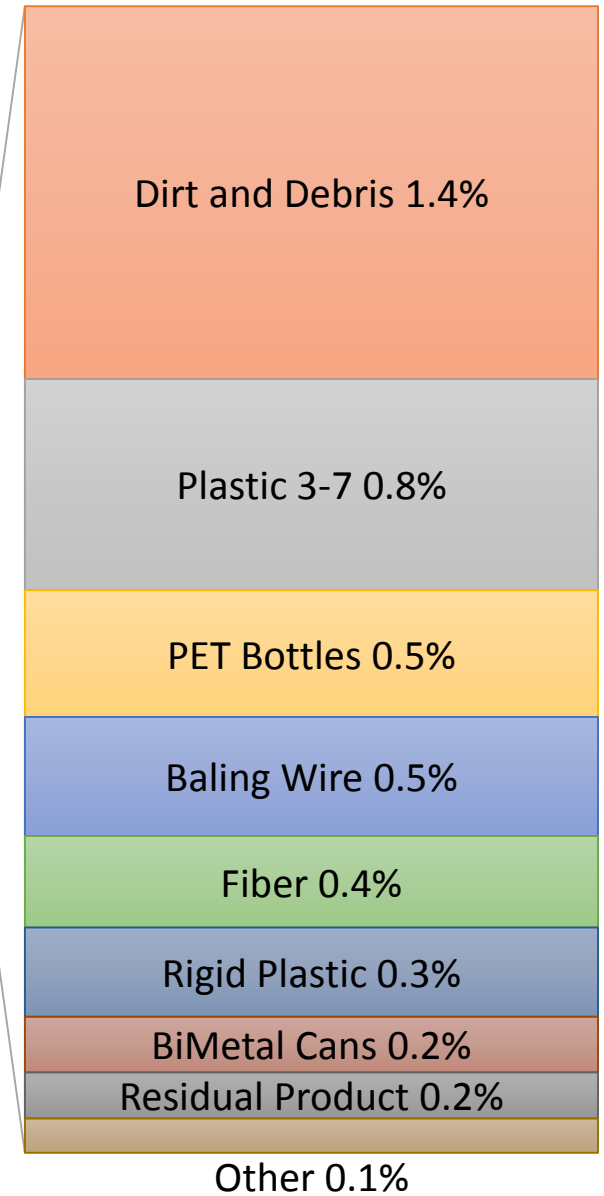


Other 0.3%

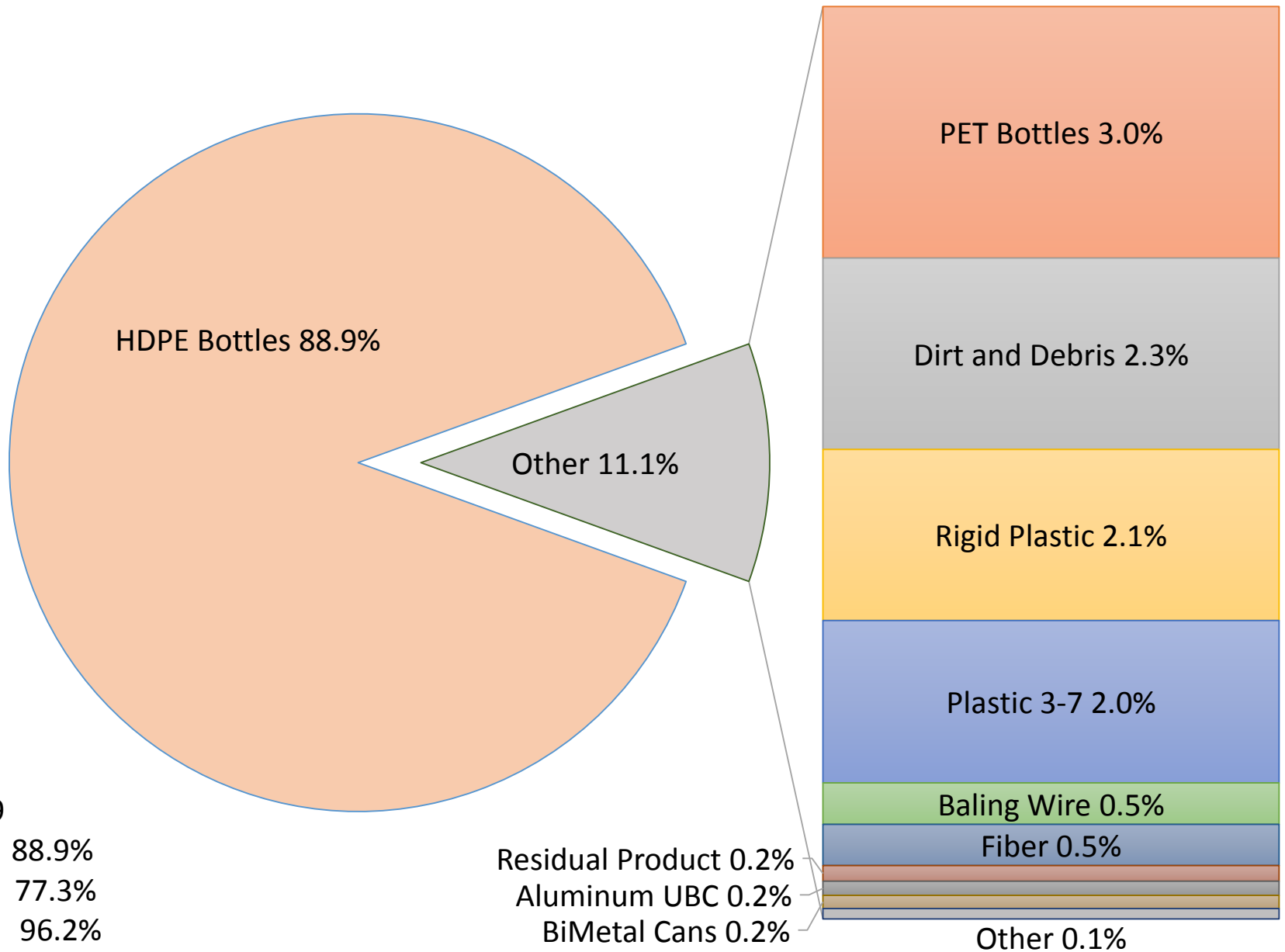
HDPE Natural Bale Composition (% by weight)



n = 9
Avg 95.6%
Min 83.6%
Max 98.5%



HDPE Colored Bale Composition (% by weight)



n = 9

Avg 88.9%

Min 77.3%

Max 96.2%



Discussion

- The study is an exploratory study to determine if the level of observed contamination in aluminum and plastic bales has a material effect on expenditures from the Beverage Container Recycling Fund (BCRF).
- Based the findings from this study, the department may be paying about \$9.3 to \$9.7 million per year for contaminants based on all loads of aluminum, PET, and HDPE claimed by CS, CP, and SP programs



Discussion

- “Commingled” – What is it?

“Commingled” means a mix of empty beverage containers and all other containers of the same material type (Sec. 14506.5)

“Beverage Container” means the individual, separate bottle, can, jar, carton, or other receptacle in which a beverage is sold. Beverage container does not mean cups or other similar open or loosely sealed receptacle (Sec. 14512)

- No definition of “container” in statute or regulations
- Thoughts from the industry?



Discussion

- “Contamination” – What is it?
- No definition in statute or regulations
- CalRecycle: Anything other than Commingled, as defined in Sec. 14506.5, so any “out-of-grade” material is a contaminant
- Thoughts from the industry?



Discussion

- “Shrink” vs. “Yield” – What is it?
- *“Shrinkage” means the reduced value due to contamination of empty beverage containers by dirt, moisture or other foreign substances (14 CCR Sec. 45)*
- CalRecycle currently allows a percentage of “non-material” to be reported as a shrinkage prior to determining the redeemed weight of baled materials
- “Yield” not defined in statute or regulation
- “Yield”: Buyers’ perspective regarding the quality of bale
- Thoughts from the industry?



Future Implication

- Need to define “contamination”
- Possible new survey methods for CS, CP and SP
- Propose new rate structure: Ideas
 - How to handle “Non-material”
 - Possible discount factor
 - Address buyers’ concerns – “Yield”
 - MRF Rate



Questions & Comments



For further questions or comments, please contact:

**Mike Miller, Chief
Operations Branch
Division of Recycling
(916) 323-0713
mike.miller@calrecycle.ca.gov**



Thank You!