Thank You!

www.AveryDennison.com
Coming Up...

October 27th
Keep Your Caps On! A 2015 Update
Today’s Presenters

Kara Pochiro
APR Communications
Director

Tonya Randell
Project manager,
Moore Recycling
Association of Postconsumer Plastic Recyclers (APR)

The Voice of Plastics Recycling™

International trade association representing the plastics recycling industry.
The APR works with our members every day to GROW plastic recycling.
**APR Goals**

*Increasing supply of recycled plastics*

*Reducing contamination for plastic recyclers*

*Promote use of postconsumer plastic*
Plastic Recycling Market Information and Services Directory

APR provides a complete directory of materials that APR Members purchase and sell, as well as services (grinding, densifying, washing, pelletizing, compounding and solid stating) provided by APR members. The Plastic Recycling Market Information and Services Directory is updated periodically throughout the year, so please check back often.

As another resource, visit www.plasticsmarkets.org. This site’s purpose is to connect suppliers and buyers of all types of scrap plastic (from bales to post consumer resin). It is supported by the plastics industry and intended for use by the recycling industry in the United States and Canada. This site is NOT intended for the general public or household plastics.

Questions? Please contact Kara Pochiro

PDF Downloads

Plastic Recycling Market Information and Services - Full Directory

Use the links below to access specific sections:

PET
Polyethylene and Polypropylene
Plastic Film
Additional Resin and Plastic Materials
Services Provided by APR Members
# Polyethylene and Polypropylene Market Information

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact Information</th>
<th>HDPE Bottles Baled</th>
<th>HDPE Ground Bottle Flake</th>
<th>HDPE Pellets</th>
<th>HDPE Flakes and/or Pellet</th>
<th>HDPE Pigmented Bottle Bales</th>
<th>HDPE Unpigmented Bottle Bales</th>
<th>PP Bales</th>
<th>PP Flakes and/or Pellet</th>
<th>Pre-Picked Bales</th>
<th>Bulky Rigid Bales</th>
<th>All Rigid Plastic Bales</th>
<th>Pre-Pickup PE</th>
<th>Pre-Pickup PP</th>
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<tbody>
<tr>
<td>AMI Recycling Solutions (FL)</td>
<td>(305) 773-6299</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
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<tr>
<td>Avangard Innovative, LP (TX)</td>
<td>(281) 582-0700</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
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<tr>
<td>Balcones Recycling (TX)</td>
<td>(512) 472-3355</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
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<td>S/P</td>
<td>S/P</td>
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</tr>
<tr>
<td>Blue Mountain Plastics Inc. (CAN)</td>
<td>(519) 925-3550</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
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<tr>
<td>Blue Ridge Plastics (NC)</td>
<td>(330) 696-9520</td>
<td>P</td>
<td>P</td>
<td>S/P</td>
<td>P</td>
<td></td>
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<td></td>
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<tr>
<td>Carris Reels (VT)</td>
<td>(802) 236-2543</td>
<td>P</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Castella Recycling (ME)</td>
<td>(207) 791-2390</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
<td>S/P</td>
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<td>S/P</td>
</tr>
</tbody>
</table>
Model Bale Specifications: “Bulky Rigid”

This model is not meant to replace the specifications of individual buyers, many of whom may have different allowables in terms of contents and bale sizes. Rather, it is meant to provide a benchmark to suppliers.

Any large rigid #5 PP and/or #2 HDPE plastic bulky items, generated through a positive sort from curbside, drop-off or other public or private recycling collection program. Examples include: crates, buckets, baskets, totes, and lawn furniture. Buckets/pails with metal handles are acceptable. This bale should not contain mixed #1-7 containers, toys with metal, drums (HNW 55 gallons) or PVC/vinyl.

**ACCEPTABLE LEVELS OF CONTAMINANTS:** Total contaminants should not exceed 10% by weight:

- Any plastic items or packaging including #1 Pet, #3 PVC, #6 PS, #7 Other (4% maximum allowable)
- Metal (2% maximum acceptable)
- Paper/cardboard (2% maximum acceptable)
- Liquid/other residues (2% max. acceptable)

**THE FOLLOWING CONTAMINANTS ARE NOT ALLOWED AT ANY LEVEL:**

- Any plastic bags, sheets, or film
- Wood, glass, electronics scrap
- Oils, grease, rocks, mud, dirt
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides.
- Items with circuit boards or battery packs
- Medical and hazardous waste
- Products with degradable additives

**IMPORTANT:** Any plastic container that previously contained any hazardous or potentially hazardous material should be strictly avoided. Many purchasers will reject an entire load if any of the above materials are found and will return them at the supplier’s expense.

**Bale Size/Minimum Shipping Weight:** Approximately 30”x42”x48” or 30”x48”x60”. Bale sizes should allow a minimum of 35,000 pounds to be shipped on 48 foot trailer, which is an industry standard. Individual companies may apply price deductions for shipments that do not meet their minimum weight requirements.

**Bale Density:** 15-20 lbs/ft3

**Bale Wire:** Bales should be held together with 10-12 gauge, noncorrosive galvanized metal wire, with all bale wires wrapped in one direction (crisscrossing or double strapping should be preapproved by the buyer before shipping). A minimum number of bale wires should be used to maintain bale integrity. This number will vary with bale size and density.

**Bale Tare Weight:** A tare weight of 8 pounds per bale will be taken from the gross weight.

**Bale Integrity:** Bale integrity must be maintained throughout loading, shipping, unloading and storage.

**Storage:** Bales should be stored, with the bottom bale on a pallet, indoors or covered outdoors. Material must not be stored outdoors uncovered for a period exceeding four (4) weeks to prevent UV degradation from direct sunlight and moisture contamination.
APR Model Bale Specifications

**PET**
- PET Bottles
- PET Bottles with Gradings
- Bale Audit Test Method
- PET Thermoforms

**Rigid Plastic**
- HDPE Pigmented Bottles
- HDPE Unpigmented Bottles
- Polypropylene (PP)
- Tubs and Lids (Thin Wall Packaging)
- Bulky Rigids
- All Rigid Plastic (Formerly known as #1-7 with Bulky)
- Pre-Picked (Formerly known as #3-7 with Bulky)
APR Model Bale Specifications

Film Model Bale Specifications
- HD and LD Retail Bags
- MRF Mix Film
- PE Retail Mix Film
- PE Ag Film Including Mulch
- PE Ag Film Not Including Mulch
- Mixed Clear PE Film Grade A
- Mixed Clear PE Film Grade B
- LDPE Colored Film
- LDPE Furniture Mix Film
- LLDPE Clear Film Grade A
Commodity Terms

These Outreach Terms & Tools aim to help streamline the "front end" of plastics recycling: community collection.

In addition, a separate resource has been developed to help streamline communications at the "back end" of the plastics recycling value chain: buying and selling plastics that have been collected. Please ask your Material Recovery Facility (MRF) to provide your recycling data using these Plastics Recycling Commodity Terms.

Municipality
What have we diverted?

MRF
Reply Using the Terms

MRF
Seller

Markets
Domestic and Export Buyers

Better Tracking
Success of Plastic Recycling

Plastics Recycling Terms & Tools
Better Communication... Better Recycling.
Value Chain Communication - Room for Improvement

- What kind of bale is it, really?
  - Mixed Rigid Plastic – *does this include bulky?*
  - 1-7 bale – *all plastics?*
  - 3-7 bale – *what about PET and HDPE containers?*

There will always be nuances, but we can do better.

- Streamline buyer/seller communication – consistency is important to buyers.
- Improve collection and diversion data tracking.
<table>
<thead>
<tr>
<th>TERMINOLOGY</th>
<th>DEFINITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET &amp; HDPE Bottles</td>
<td>PET &amp; HDPE Bottles</td>
</tr>
<tr>
<td>Commingled Plastic Bottles</td>
<td>The market mix of bottles: Primarily PET and HDPE bottles with some other bottles</td>
</tr>
<tr>
<td>Tubs &amp; Lids</td>
<td>Non-bottle rigid household containers - primarily PP and PE, No bulky rigid plastic</td>
</tr>
<tr>
<td>Tubs &amp; Lids: with Bulky</td>
<td>Tubs and lids; Bulky rigid plastic (includes buckets, totes, crates, lawn furniture, carts, storage bins) - primarily PP and PE</td>
</tr>
<tr>
<td>PE/PP Bottles, Containers &amp; Bulky</td>
<td>PE &amp; PP bottles and containers; Bulky rigid plastic (includes buckets, totes, crates, lawn furniture, carts, storage bins)</td>
</tr>
<tr>
<td>Mixed Clamshells</td>
<td>A mixture of PET, PS, PVC, PLA thermoformed containers: trays, cups, clamshells, boxes</td>
</tr>
<tr>
<td>Bulky Rigid Plastic</td>
<td>Primarily PE and PP (includes buckets, totes, crates, lawn furniture, carts, storage bins and other large items)</td>
</tr>
<tr>
<td>Pre-picked Rigid Plastic: No Bulky</td>
<td>Bottles and containers with the PET &amp; HDPE bottles removed: includes Non-PET and non-HDPE household bottles and all non bottle containers (thermoform packaging, cups, trays, clamshells, tubs and lids)</td>
</tr>
<tr>
<td>Pre-picked Rigid Plastic: with Bulky</td>
<td>All rigid plastic with PET and HDPE bottles removed: includes non-PET and non-HDPE household bottles, all non bottle containers (thermoform packaging, cups, trays, clamshells, tubs and lids), and Bulky rigid (includes buckets, totes, crates, lawn furniture, carts, storage bins and other large items)</td>
</tr>
<tr>
<td>All Rigid Plastic: No Bulky</td>
<td>All bottles and containers (includes thermoform packaging, cups, trays, clamshells, tubs and lids)</td>
</tr>
<tr>
<td>All Rigid Plastic: with Bulky</td>
<td>All bottles and containers (includes thermoform packaging, cups, trays, clamshells, tubs and lids); Bulky rigid (includes buckets, totes, crates, lawn furniture, carts, storage bins and other large items)</td>
</tr>
</tbody>
</table>
**Film & Foam**

<table>
<thead>
<tr>
<th>TERMINOLOGY</th>
<th>DEFINITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRF Film</td>
<td>Mixed PE film generated at a MRF</td>
</tr>
<tr>
<td>Mixed Retail Bags/Wrap Film</td>
<td>Mixed color including grocery bags</td>
</tr>
<tr>
<td>EPS Blocks/Shapes</td>
<td>EPS Blocks/Shapes (e.g. protective packaging, foam coolers)</td>
</tr>
<tr>
<td>EPS Blocks/Shapes &amp; Foam Food Service</td>
<td>EPS Blocks/Shapes &amp; Foam Food Service (e.g. cups, plates, clamshells)</td>
</tr>
</tbody>
</table>
Tracking and Flow of Data

• Organization, Local, State Data
  – Tracking Terms available on Re-TRAC Connect

• National Annual Plastic Recycling Study
  – Recycling Reports published Annually:
    US Bottle, Non-Bottle Rigid, Film & Bag and Canada

• EPA and Other US and Canada Decision Makers use this data
  – Walmart uses EPA MSW for their Scorecard
Outreach Terms: Plastic Collection Programs

- **Reclamation**
  - Recycling into useable raw material

- **MRF**
  - Sorting to market

- **Products**

- **Municipality**
  - Trying to Divert Material

- **Consumer**
  - Put it in the bin

**Communicating WHAT GOES INTO THE BIN**

**What should we tell the public about plastics?**

**What plastic can I put in my bin?**
Communicating to Residents – Is It Working?

- People are confused
  - All Plastic 1-7 – *which ones are those again?*
  - All Plastic 1-9 – *hmm, which one is #9*
  - All plastic jugs – *is my soda bottle a jug?*
    ...*I don’t get it, so forget it, or*
    ...*I will just put whatever I want in*

- Need meaningful terms that effectively communicate what residents should put in their bin
What is the Solution?

Partners:

- Re-TRAC
- APR: The Association of Postconsumer Plastic Recyclers

Advisory Group:
- Trade associations
- Markets
- MRF
- Community outreach representatives

Plastics Recycling Terms & Tools

Better Communication... Better Recycling

This resource provides common terminology to help streamline communications for community recycling programs throughout the U.S. and Canada. Its goals are to strengthen consumer education and increase the quantity and quality of plastics recycled.

Click each section below in succession to learn more.

Overview

1. What are the Terms & Tools?
   - The Plastics Recycling Terms & Tools provide common terminology for community recycling programs throughout the United States and Canada to use with residents when communicating about plastics recycling along with simple tools to help recycling programs adopt this common language. The Terms and Tools address many types of plastics that are collected for recycling and are designed to help communities increase the quality and quantity of plastics collected and to facilitate better tracking.

2. Who created the Terms & Tools?
3. Why every community should use the Terms & Tools

How to Use the Outreach Terms

4. Before/After Example Using the Outreach Terms
5. Tool: Use the New Outreach Terms
6. The Plastics Recycling Outreach Terms (complete list)

Additional Outreach Resources/Tools

7. Image Gallery: A picture is worth a thousand words
8. Further Your Outreach with Re-TRAC
9. Plastic Film & Bag Recycling

These Outreach Terms & Tools aim to help streamline the front end of plastics recycling: community collection.

In addition, a separate set of terms has been developed to help streamline communications at the “back end” of the plastics recycling value chain: buying and selling plastics that have been collected. Please ask your Material Recovery Facility (MRF) to provide recycling data using these Plastics Recycling Commodity Terms.
Community Outreach

- 4 Steps to Build your program
  - Main Program Category
  - Additions
  - Exclusions
  - Optional Notes

BEFORE & AFTER RECYCLING PROGRAM TERMINOLOGY

This schematic compares a hypothetical plastics recycling program using unclear recycling terms and using updated more descriptive terms, the Outreach Terms, available here.

The terms laid out on this site provide options that will help you be as succinct or as detailed as you wish. You choose what fits best for your program and any particular outreach vehicle (flyer, website, etc.). A more detailed program might look like this:

BEFORE

Plastic #1 - #7

AFTER

Succinct:
Plastic Bottles & Containers

Use more descriptive terms your residents can relate to:

**PLEASE RECYCLE:**
Plastic Bottles & Containers
  - Plastic Soda, Water and Other Drink Bottles
  - Plastic Food and Household Bottles / Jars
  - Plastic Tubs & Lids
  - Plastic Produce, Dell & Bakery Containers, Cups, Trays
  - Plastic Non-food Containers & Packaging

**Plastic Buckets**

* Empty, flatten and put caps back on bottles / jars
* Rinse or wipe clean all food or other residue from bottles

**EXCLUSIONS:**
No Containers that held Hazardous Products
Image Gallery

- Royalty-free
- Acceptable items and exclusions
- Provided in JPEG, TIFF and EPS
- EPS allows for easy layering

Thank you
Create Your Own Flyer

- Pulls in
  - Program selections
  - Image selections
- Add
  - Logo
  - Community info
  - Contact info

Plastics Recycling Terms & Tools
Better Communication...Better Recycling.

Recycle More Plastic

PLEASE RECYCLE:
- Plastic Bottles & Containers
  - Plastic Soda, Water and Other Drink Bottles
  - Plastic Food and Household Bottles / Jars
  - Plastic Tubes & Lids
  - Plastic Produce, Deli & Bakery Containers, Cups, Trays
  - Plastic Non-food Containers & Packaging
  - Plastic Bulky Items
  - Plastic Bags, Wraps & Film (bag in bag)

Plastic Buckets
Plastic Toys

OH AND BY THE WAY...
- Empty, flatten and put caps back on bottles / jars
- Rinse or wipe clean all food or other residue from bottles

EXCLUSIONS:
- No Containers that held Hazardous Products
- No Clamshells or Trays from produce, deli, bakery, take-out
- No Pouches (stand up to bags or squeeze pouches for items such as ground coffee, juice, dried fruit, yogurt, laundry, oil)
New Communications Tools for Recycling Professionals

RecycleYourPlastics

GO TO: www.recycleyourplastics.org

1,088
Find the Terms & Tools

www.RecycleYourPlastics.org/termsandtools

www.RecycleYourPlastics.org/commodityterms
Additional Resources

Frequently Asked Questions
APR strives to be a valuable source of information to the general public, state and local solid waste management officials, legislators, and other key audiences. We want the general public to understand how plastics can be recycled, and to encourage their participation in collection programs.

FAQs Menu
- CAPS ON FAQS
- TUBS, LIDS, BULKY RIGIDS FAQS
- DEGRADABLE PLASTICS FAQS
- PLASTIC FILM RECYCLING FAQS
Additional Resources

Problem Containers

Report problem containers to help APR reduce contamination in the plastic recycling stream.

Click here to report now.
Problem Container Notification Form

APR consistently works with package designers, engineers and brand companies on product design for recyclability issues. The Problem Container Notification Form serves to notify APR of potential issues with a specific container or package. Upon receiving this information, APR works with the container manufacturer to suggest changes to ensure compatibility with the most current recycling technology. Thank you for taking the time to notify us of a concern.

Brand Name (*)
Container Size (*)
Container Resin (*)
Nature of problem (*)
When was problem first identified? (*)
From which location are containers recycling? (*)
How does the problem adversely affect recycling? (*)
Upload Container Image (*)
Your name (*)
Your company (*)
Your Email (*)
Today's date (*)

Send
Additional Resources

Sort For Value

Material Prices Per Pound
*Default pricing based in May 2014

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<thead>
<tr>
<th>Material Type</th>
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<tr>
<td>All Rigid Plastic with Bulky</td>
<td>$0.06</td>
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<tr>
<td>Crammed Plastic Bottles</td>
<td>$0.11</td>
</tr>
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<td>Bulky Rigid Plastic</td>
<td>$0.17</td>
</tr>
<tr>
<td>Pre-Picked Rigid Plastic; No Bulky</td>
<td>$0.04</td>
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<tr>
<td>PET Bottles</td>
<td>$0.21</td>
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<tr>
<td>PET Bottles &amp; Thermoforms</td>
<td>$0.19</td>
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<tr>
<td>HDPE Bottles; Mixed Natural &amp; Colored</td>
<td>$0.30</td>
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<tr>
<td>HDPE Bottles; Natural</td>
<td>$0.40</td>
</tr>
<tr>
<td>HDPE Bottles; Colored</td>
<td>$0.26</td>
</tr>
<tr>
<td>Tubs &amp; Lids</td>
<td>$0.13</td>
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<td>HDPE Bottles &amp; Containers; Colored</td>
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<td>HDPE Injection; Bulky</td>
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<td>PP Bottles, Containers &amp; Bulky</td>
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<td>Disposal Cost</td>
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Re-calculate  Defaults

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<td>Commingled Bottles</td>
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<td>PET Bottles</td>
<td>$191</td>
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<td>HDPE Bottles Mixed C,N</td>
<td>$252</td>
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<td>HDPE Bottles: C</td>
<td>$224</td>
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<tr>
<td>HDPE Bottles: N</td>
<td>$295</td>
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*The material percentages used in the calculation to the right are sourced from the National Mixed Rigid Plastic Bale Composition Study & Analysis of Non-Bottle Rigid Plastic Available for Recycling, Association of Postconsumer Plastic Recyclers (APR), 2011

This tool is brought to you by APR and Moore Recycling

[APR and Moore Recycling Logos]
Additional Resources

Connecting Recycled Plastics Buyers and Suppliers
This site’s purpose is to connect suppliers and buyers of all types of scrap plastic (from bales to post consumer resin). It’s supported by the plastics industry and intended for use by the recycling industry in North America. This site is NOT intended for the general public.

Looking for information about household recycling or other questions about plastics?
Visit our Recycling Resources

Handling & Baling Guidelines
The guidelines include bale characteristics, storage and handling considerations, shipping considerations, loading instructions and a chart containing loading diagrams that will help you make weight.

How much do MRFs really gain by separating the different plastics collected through single-stream recycling?
A recent study shows – in a unique, visual format – the economic advantages of greater sortation. For more information, read this article.

Announcements
Is your data in? The 2014 Plastic Recycling Study is nearing completion. If you process or export postconsumer plastic, you should have received an email with a link to the survey. Your participation is important and we urge you to complete the survey as soon as you can. If you didn’t receive a survey link, please let us know at plastics@plasticsmarkets.org. Thanks!
Contact Us!

Kara Pochiro:  Kara@PlasticsRecycling.org

Tonya Randell:  Tonya.Randell@MooreRecycling.com

PlasticsRecycling.org

RecycleMorePlastics.org