



South Carolina
Department of Commerce

Just right for recycling.

How to Recycle Plastics for Manufacturers (or Large Companies)

South Carolina has a robust plastics recycling industry with 80 companies and over 1,500 employees in the value chain that collect and recycle residential, commercial, and industrial plastics scrap material. There are 15 industrial plastics recyclers in the state who recycle more than 200 million pounds annually.

Materials Accepted

- ◇ Post-Industrial/Rigid Plastics: Parts, scrap, over-runs, purge, sprues, and obsoletes
- ◇ Post-Industrial Film: Manufactured Packaging Film, films from packaging, resin liner bags, and shrink wrap
- ◇ Dunnage: Drums, buckets, pallets, totes, and supersacks (bags)

How to Recycle Post-Industrial Rigid Plastics, Post-Industrial Film & Dunnage: Questions a Recycling Company May Ask

- ◇ Post-Industrial/Rigid Plastics:
 - What type plastic?
 - ◇ Examples: PP (Polypropylene), TPO (Thermoplastic polyolefin), HDPE (High-density polypropylene), LDPE (low-density polyethylene), PET (Polyethylene terephthalate), PETE (Polyethylene Terephthalate), PETA (Polyethylene terephthalate), ABS (Acrylonitrile Butadiene Styrene), and PA (Nylon). There are multiple types and variations.
 - Do you have more than one type of plastic in your facility? If so, what types?
 - ◇ How to find this information: Facility Engineer, markings on the container, or the Material Safety Data Sheet (MSDS) for the material.
 - What's your monthly volume by type? (Volume preferred: tracker-trailer load)
 - What color is the material?
 - What form is it in? (ex: part, scrap, sprue, or purge)
 - Can your business keep different kinds of plastic separated? (If so, this changes the value of the material.)

How to Recycle Post-Industrial Rigid Plastics, Post-Industrial Film & Dunnage: Questions a Recycling Company May Ask—Continued

- If reprocessed into pellet form, could you use this material back into your process as raw material?
- Does your business have space to store the material?
- Does your business have any interest in reusing the material back into your process? (Closed-Loop)
- ◇ Film Post-Industrial:
 - What type of plastic?
 - ◇ Examples: LDPE (low-density polyethylene), LLDPE (linear low-density polyethylene), PET (polyethylene terephthalate), PA (Nylon), and other
 - What's your monthly volume by type? (Volume preferred: tracker-trailer load)
 - Does it have stickers or any paper contamination? (If so, this changes the value of the material.)
 - What form is it in? (ex: loose, rolled, or baled)
 - Can your business keep the plastics separated by plastic type and color? (If so, this changes the value of the material.)
 - Do you have the ability to bale their material, if it loose? (Loose film material must be baled for shipment.)
 - ◇ Dunnage:
 1. What type of plastic?
 2. What form is it in? (ex: pallets, buckets, totes, or drums)
 3. What's your monthly volume by material type and form? (ex: 100 PP pallets or 2000 HDPE buckets) (Volume preferred: tracker-trailer load)
 4. How is it packaged for transportation or storage? (ex: loose, baled, or palletized)
 5. Can your business keep the plastics separated by plastic type and color? (If so, this changes the value of the material.)

Pictures and/or samples of the material(s) are always helpful, and will likely be requested.



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How to Recycle Properly

- ◇ Keep the plastics clean of contaminants.
- ◇ Understand individual and/or commercial sustainability goals in order to create your programs.
- ◇ Bale material when possible.

What is Contamination?

- ◇ Metal, paper, components, substrate (molded together), or multilayer materials (that can't be separated)
- ◇ Mixed Materials – not sorting the materials by material type.

Recent Innovations

- ◇ New research and development of the actual recyclability of layered plastics (design for sustainability)
- ◇ Chemical Recycling of Plastics: Chemical recycling breaks the plastic down at a molecular level. This means the monomer can be recovered in what's called closed-loop recycling or the plastic waste can be transformed into monomers or other useful materials.

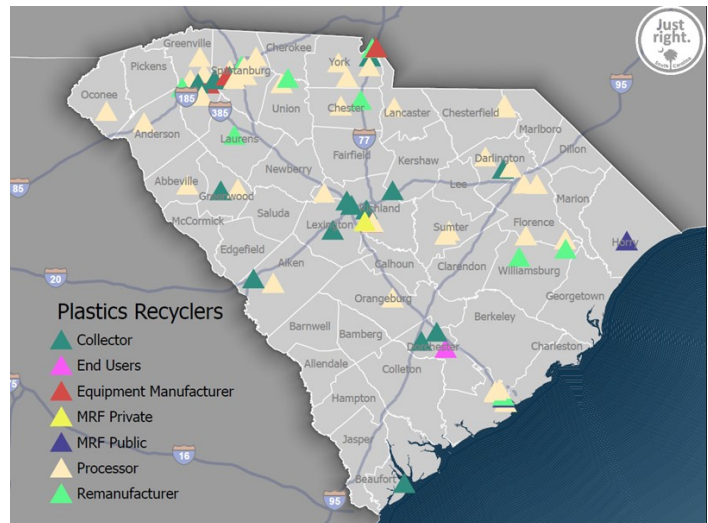
End Products Created

- ◇ HDPE: Paint cans, Burt Bees packaging, Green Toys, and agricultural pipe
- ◇ PET: Fashion apparel, outdoor gear, car interiors, and staple fiber fill
- ◇ PP: Specialty thermoplastic fibers, car interiors, straws, rope, carpet, and bottle caps
- ◇ LDPE: Outdoor decking, garbage cans, paneling, furniture, flooring, and bubble wrap

Additional Resources

- ◇ [Institute of Scrap Recycling Industries, Inc. \(ISRI\)](#)
- ◇ [Association of Plastics Recyclers](#)
- ◇ [Carolinas Plastics Recycling Council \(CPRC\) – Your Bottle Means Jobs Campaign](#)
- ◇ [Smart Business Recycling Program](#) – If you recycle, make sure to report it!
- ◇ [Recycling in SC](#)

Plastics Recyclers in South Carolina



For more details, please visit the [SC Recycling Markets Directory](#) or contact us at recycling@sccommerce.com.