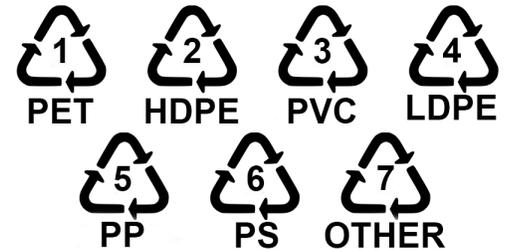


THE HARD FACTS ABOUT PLASTIC

The triangle symbols found on the underside of plastic containers do NOT mean the product is recyclable.

These triangle symbols are the resin identification code, which indicates the type of plastic the product is made of. It **does not** mean that the item is recyclable. There is a disconnect between the manufacturers and the solid waste industry, which causes misinformation and confusion among the general public.



Plastics #1 & 2 are readily recyclable and are usually recycled in the USA.

These plastics are mostly converted into new plastic bottles or containers, while some are converted into textiles or insulation.

Plastic #1 (PET) from the RethinkWaste service area stays in domestic markets; it is currently sent to Custom Polymers in Alabama and DAK in Indiana.

Plastic #2 (HDPE) from the RethinkWaste service area is recycled through both domestic and international markets. When it is exported, it is sent to South Korea and Taiwan. When it stays domestic, it is sent to Talco Plastics and Epic Plastics in California.



Figure 1: Plastic #1 (PET) Bottle



Figure 2: Plastic #2 (HDPE) Container

Plastics #3 - 7 are all versions of plastic which are difficult to recycle, and currently have no market.

Prior to March of 2018, the United States sent large amounts of plastics and paper to China¹ to be recycled. When China implemented the National Sword Policy, the accepted contamination rates changed from 5% to 0.5%. No facility in the United States or other industrialized countries could meet this new standard. In response, the flow of recyclable materials was diverted to secondary markets in different East and South East Asian countries. This drastic shift caused a market collapse for plastics #3 - 7, so there is no way to ensure the proper recycling of those materials at this time. Currently, RethinkWaste is still accepting plastics #1 - 7, but once plastics #1 - 2 are sorted out, plastics #3 - 7 are directed to the Shoreway Transfer Station and sent to the landfill.



Figure 3: Plastic #3 (PVC) Pipe



Figure 4: Plastic #4 (LDPE) Bag



Figure 5: Plastic #5 (PP) Container



Figure 6: Plastic #6 (PS)



Figure 7: Plastic #7 (PP) Container

¹ <https://e360.yale.edu/features/piling-up-how-chinas-ban-on-importing-waste-has-stalled-global-recycling>

Plastic items that DO NOT belong in the recycling include plastic utensils, nursery planter boxes, plastic hangers, Styrofoam, packing peanuts, and black plastic.

In the RethinkWaste service area, only hard, rigid plastic items (plastics #1 - #7) are accepted as recyclable materials at Shoreway. There are some exceptions to this rule – for example, plastic utensils, nursery planter boxes, plastic hangers, Styrofoam, packing peanuts, and black-colored plastic are not accepted for a variety of reasons. Some items cannot be accurately or efficiently captured by facility machinery, such as plastic utensils and black plastic.

Other items, like nursery planter boxes and plastic hangers, can damage equipment due to their size or shape. In addition, RethinkWaste does not currently have an existing market to sell the materials to, which means that there are limited to no buyers that would take the material back to recycle it.



Figure 8: Plastic #8 Plastic Utensil



Figure 9: Styrofoam Packing Peanuts

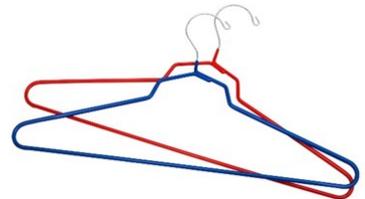


Figure 10: Plastic Hangers

Black plastic is particularly tricky, since it is both difficult to capture and doesn't have a stable market. The containers would need to be sorted out using the optical sorter machinery, which utilizes near-infrared light rays to read plastic resin type. Optical sorting equipment doesn't work for black plastic because the near-infrared light waves are absorbed and not reflected.



Figure 11: Black Plastic Container

Support California Recycling and Plastic Pollution Reduction Act 2022 ballot initiative Single-Use Packaging Legislation

In the 2019-2020 California Legislative Session, two bills (AB 1080 [Gonzalez] and SB 54 [Allen]) were introduced to help significantly reduce the amount of disposable/single-use packaging and foodware waste entering California's waste stream. While both bills did not pass, both bills are expected to be re-introduced during the 2021-2022 California Legislative Session.

This ballot initiative would give the California Department of Resources Recycling and Recovery (CalRecycle) authority to require that producers of single-use plastic packaging and foodware make their products "reusable, recyclable or compostable" by 2030. Producers would also be tasked with reducing the amount of single-use packaging and foodware at least 25% by that date. More information at: <https://plasticsfreeca.org/>

How is "single-use plastic" defined in these bills?

Single-use plastic products means single-use food service ware, including utensils, straws, plates, bowls, cups, and stirrers. It also includes single-use packaging such as the product container, the labels, or what the product are shipped in. One example that we see often is plastic-coated paper and paperboard!

Impacts to RethinkWaste?

The Shoreway Materials Recover Facility would be able to produce higher quality products and would result in increased revenue for the Agency.

Relevant Articles

- <https://www.sfchronicle.com/opinion/editorials/article/Editorial-Two-state-bills-would-limit-throwaway-13904975.php>
- <https://www.wastedive.com/news/california-state-legislators-want-to-phase-out-non-recyclable-plastic-products/549406/>
- <https://www.latimes.com/environment/story/2019-09-14/california-legislature-fail-legislation-single-use-plastics>