Job Type and Summary

- 'Recycling contaminant annotation using polygons'
- The task is to annotate images showing the hopper of a garbage truck during recycling collection days. The target objects are contaminants that should not be present in residents' recycling bins. This means that many of the images will contain few or no objects needing annotation.

Detection Guide

 The objects requiring annotation for this task are those that cause issues for recycling processing facilities.

Classes List	Attributes List
 Black garbage bag Black plastic Clamshell packaging Clear plastic bag/film Grocery bag Non-black garbage bag Pizza box Polycoated cup Polycoated food packaging Styrofoam 	• N/A

Description and Examples of Classes and Attributes

• Black garbage bag

Black garbage bags, either tied and containing unknown objects, or empty/untied.

Correct:



Incorrect:



• Black plastic

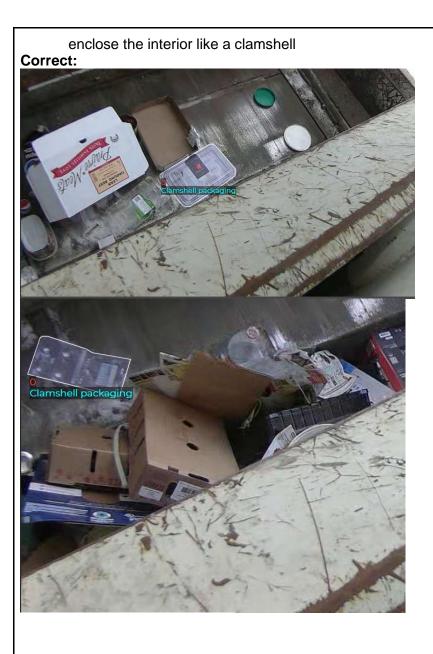
Any plastic objects that are coloured black. These are rigid objects unlike the previous black garbage bag which is a highly flexible bag.

Correct:

Incorrect:

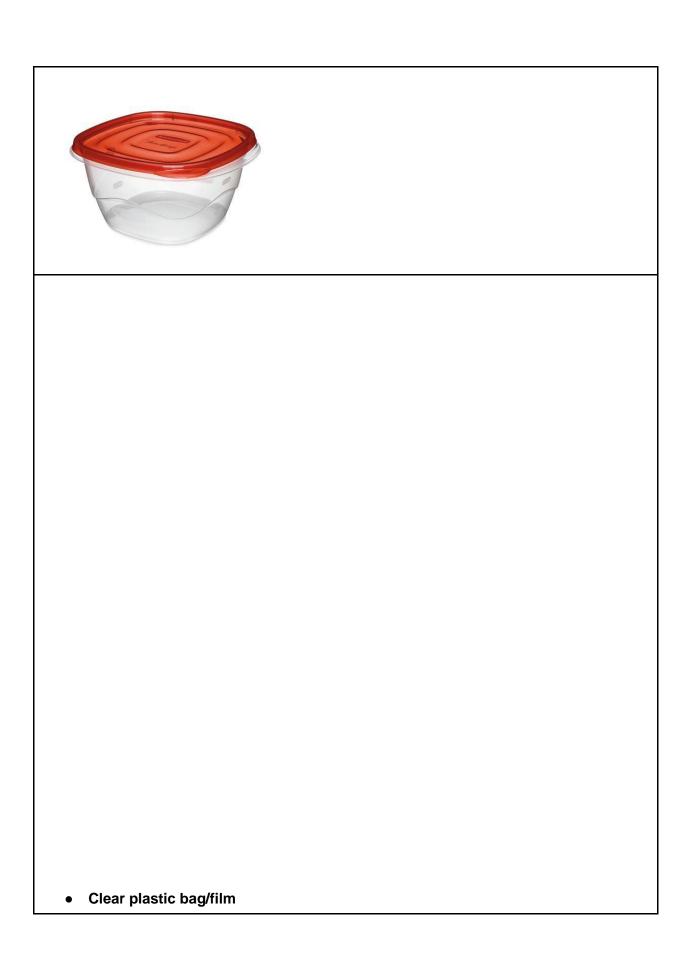


Clamshell packagingPlastic packing such as from electronics or bakeries, comprising two pieces that





Incorrect:



Any clear plastic bag such as those for ice, bread, bulk grocery items, or any pieces of thin, soft or stretchy plastic used for wrapping. Any empty plastic bag smaller than a garbage bag should be included. Grocery bags should not be included

Correct:





Incorrect:





• Grocery bag

Plastic bag from grocery stores used for carrying groceries. Both tied bags containing items, and empty bags should be included.

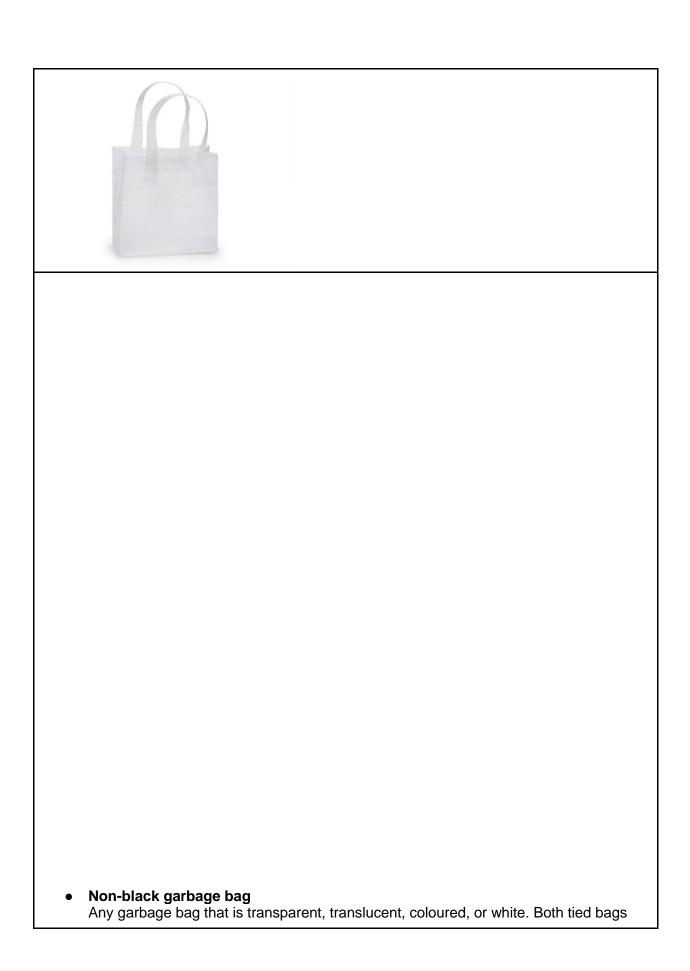
Correct:







Incorrect:



containing items, and empty bags should be included.

Correct:



Incorrect:



Polycoated cup

These are cups that are made of multiple types of materials (ie plastic-coated cardboard). The most common are coffee and soft drink take-away cups. Clear plastic

cups are not included in this category. If the object is not clearly a coffee or soft drink take-away cup, it should not be included. Foam cups should also not be included, but rather be included in the "Styrofoam" category

Correct:





Incorrect:



Pizza box

Cardboard boxes from pizza deliveries. Boxes from grocery store frozen pizzas should not be included

Correct:





Incorrect:



Polycoated food packaging
Take-away food trays, microwave meal trays, ice cream tubs with waxy/plastic interior.
If the product is coloured black, it should instead be categorized as "black plastic".
Clear plastic items should not be included.







Squeezable tubes

These are tubes that toothpaste, prescription creams, glue, or other squeezable products would be packaged in.

Correct:









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Stand-up pouches

This is plastic packaging containers that are designed to be able to stand in place. In order to do this, they are typically made with multiple types of materials and are difficult to recycle. Examples would be from snack packaging, pet food, or common household food items like oats.

Correct:







Styrofoam

Styrofoam of any kind, including flat or shaped packaging pieces, take-out containers, trays from packaged meat, foam cups, etc. Any colour should be included. Very small items like packing peanuts should not be included.

Correct:







Annotation Technique

- Polygon tool should be used to segment objects that fit into one of the specified categories. Due to the nature of the task, many of the images will contain no objects needing annotation.
- If an item is visible only through another transparent/translucent object, the parts of it that are clearly visible should still be annotated, as if it were normally occluded.
- If in doubt about the identity of a particular object after five seconds, the image should be sent to QA

Edge Cases

None