# What happens to compostable packaging?

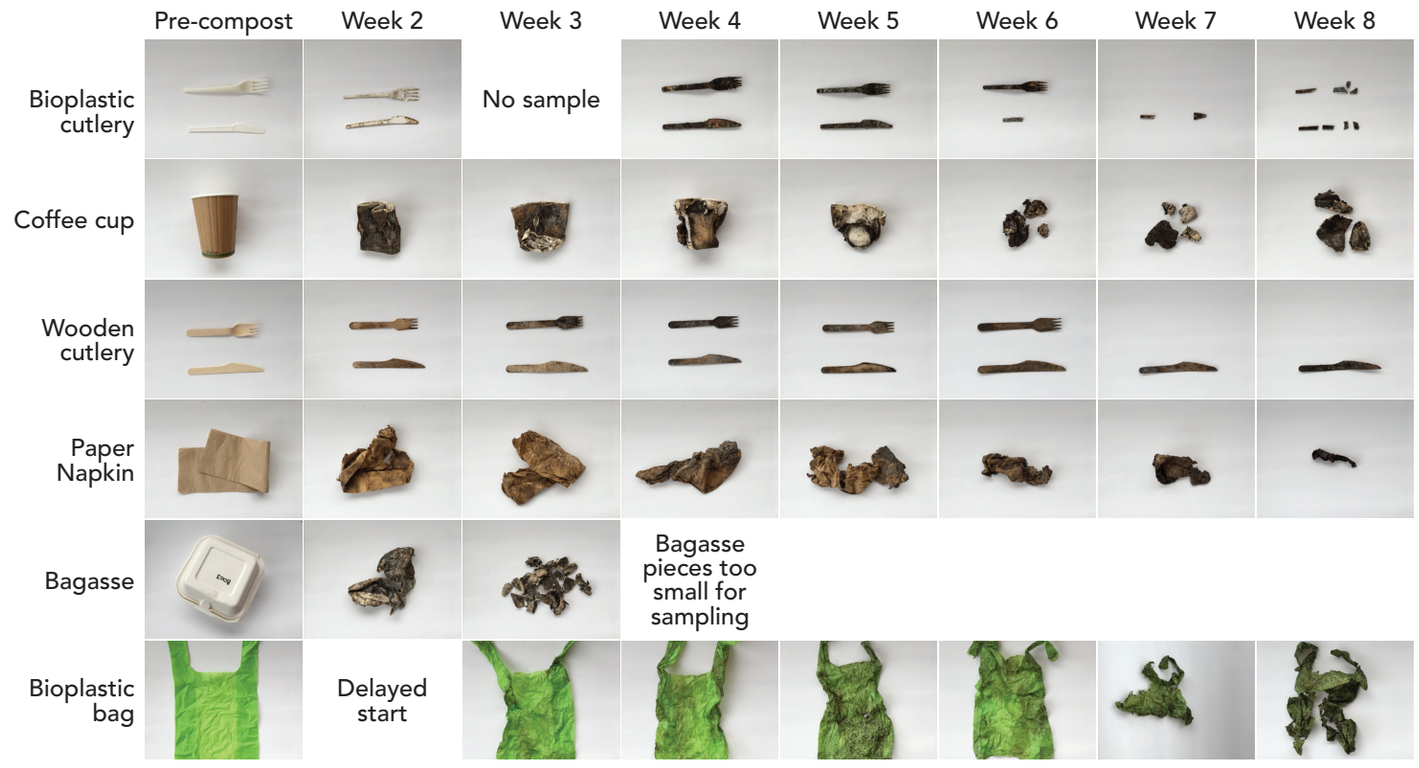
The compostable packaging used by retailers compliant under the Single-Use Plastic By-Law is either made from common biodegradable materials (paper, wood, cardboard, bagasse) or is a bioplastic with composting certification. The City of Hobart recognises Australian home composting certification (AS 5810-2010) and three industrial composting certifications for Australia (AS4736), the US (ASTM D6400), and the European (EU 13432). The main requirements of the industrial certifications can be seen below:

| | AS4736 (AUS)[1] | ASTM D6400 (US)[2] | EN13432 (EU)[3] |
|---|---|---|---|
| Decomposition standard | 90% in 180 days | 60% in 180 days | 90% in 180 days |
| Toxicity | Nil | Nil | Nil |
| Worm test | Yes | No | No |
| Disintegration | 90% < 2mm in 84 days | 90% < 2mm in 84 days | 90% < 2mm in 84 days |

When compostable products are placed in an organics bin they are taken to a commercial composting facility where they are composted in conditions that are typically hotter than the average home compost heap. Often these facilities involve large rows of compost made up of a careful balance of carbon (e.g. garden waste) and nitrogen (e.g. fish waste) rich material. These rows are kept sufficiently moist and are regularly turned for aeration using a front-loader excavator. Contamination is removed and microorganisms break down the material.

The photos below provide an 8 week snapshot of compostable packaging breaking down at the compost facility at the McRobies Waste Management Centre (the Hobart tip). The compost produced at McRobies meets Australian Standard AS 4454 – Composts, soil conditioners and mulches. This standard requires compost piles to reach a minimum temperature of 55°C for three consecutive days before each turn, with a pile being subjected to at least three turns.

*Figure 1 Disintegration rates of certified compostable packaging during trials at McRobies Composting Facility*




1 Australian Standard AS 4736 – 2006 Biodegradable plastics – Biodegradable plastics suitable for composting and other microbial treatment

2 ASTM D6400 – Standard specification for labelling of plastics designed to be aerobically composted in municipal or industrial facilities

3 EN13432 – Requirements for packaging recoverable through composting and biodegradation.

4 Australian Standard AS 4454 – 2012 Composts, soil conditioners and mulches