Emerging regulatory requirements on plastic disposable tableware



Article | Issue 021 | April 2023

Author: Harris Wan

Background

Plastic is definitely one of the most important inventions in human history: nowadays, plastic materials are widely used in many circumstances. Their usage ranges from composite materials in aircraft to plastics in general consumer products. Despite their versatility, plastic also causes one of the biggest environmental crises in the $21^{\rm st}$ century, due to their durability.

In order to deal with this worldwide problem, a resolution was passed by the representatives from 175 countries at the fifth session of the United Nations Environment Assembly in March 2022 to complete the drafting of a global treaty that aims at alleviating the serious problem of plastic pollution by $2024^{\,1}$.

Inside This Article

- 1. Regulating plastic products in Hong
 Kong
- About definition of plastics in The Product Eco-Responsibility (Amendment) Bill 2023
- 3. Composition analysis of disposable tableware

1. Regulating plastic products in Hong Kong

Like other countries, the plastic waste problem is also severe in Hong Kong. Around 2,300 tonnes of waste plastics were disposed of daily at landfills in 2021, accounting for about 21% of total municipal solid waste, and had increased by around 37% since 2008. Of all the waste plastics, plastic/polyfoam tableware constitutes about 10%². In other words, around 230 tonnes (equivalent to the weight of 19 double-decker buses) of plastics tableware, which were used only once, were disposed of in the landfill each day.

For this reason, the Hong Kong Environmental Protection Department conducted a two-month public consultation on the Scheme on Regulation of Disposable Plastic Tableware on 9 July 2021. Among the 8,552 submissions received, over 90% supported in principle the introduction of legislation to regulate disposable plastic tableware progressively in Hong Kong², which clearly showed consent among general public on this topic. Hong Kong Government then submitted the Product Eco-Responsibility (Amendment) Bill 2023 in February 2023 to Legislative Council to propose regulating nine types of disposable plastic tableware, including expanded polystyrene (EPS) tableware, straws, stirrers, cutlery, plates, cups, cup lids, food containers, and food container covers, in two phases. (Table 1)

| Types of disposable plastic tableware | Phase 1 | Phase 2 |
|---------------------------------------|---|--|
| Polyfoam tableware | | |
| Straws | Prohibits the sale to end-customers and | |
| Stirrers | Prohibits the provision at catering | g premises to customers for dine-in |
| Cutlery (forks, knives, spoons) | and takeaway services | |
| Plates | | |
| Cups | | Prohibits the sale to end- |
| Cup lids | Prohibits the provision at | customers Prohibits the provision |
| Food containers | catering premises to customers | at catering premises to customers |
| Food container covers | for dine-in services | for dine-in and takeaway services |
| Proposed implementation timetable | Fourth quarter of 2023 at the earliest | Year 2025 tentatively |

Table 1 The Product Eco-Responsibility (Amendment) Bill 2023 in February 2023 implementation timetable



2. About definition of plastics in The Product Eco-Responsibility (Amendment) Bill 2023

For the purposes of the amendment Bill 2023, plastic means material consisting of a polymer, excluding natural polymer that has not been chemically modified³. That is if a polymer which can be found in natural environment (such as cellulose, hemicelluloses, lignin, starch, keratin etc.), it will not be regarded as a plastic; otherwise, it is plastic. For example, wood, bamboo, and bagasse, which contain only cellulose, hemicelluloses, or lignin as polymer materials, will not be regarded as plastics; while some well-known biodegradable materials such as polylactic acid (PLA) or polybutylene succinate (PBS) will be regarded as plastic because they are not naturally occurred.

However, use of plastic material in disposable tableware is allowed by the Bill in some circumstances, as long as the plastic material does not function as a major structural component (such as printing ink, glue, or water-based barrier coating used in paper-based products)^{note 1}.

3. Composition analysis of disposable tableware

Manufacturers shall ensure their disposable tableware products meet statutory requirements after the regulation becomes effective. Those who fail to comply are liable on conviction to a fine. To ensure disposable tableware is plastic free, the most efficient way is to analyse the product by Attenuated Total Reflection Fourier transform infrared (ATR-FTIR) spectroscopy. If water-based barrier coating is used in paper-based product, it is necessary to test according to Water-based Coated Paper Cup (including Water-based Coated Carton Paper (T/CPA 001-2021).

It is better to test your disposable tableware products before the regulation comes to effective. You are welcome to contact us if you would like to have more information.

Note 1 Those interpretations are based on our understanding on the literal meaning of the Product Eco-Responsibility (Amendment) Bill. The right of final interpretation shall belong to the law enforcement units or judiciary.

- 1 Resolution adopted by the United Nations Environment Assembly on 2 March, United Nations Environment Assembly of the United Nations Environment Programme 2022 (UNEP/EA.5/Res.14)

 (https://wedocs.unep.org/bitstream/handle/20.500.11822/39764/END%20PLASTIC%20POLLUTION%20%20TOWARDS%20AN%20INTERNATIONAL%20LEGALLY%20BINDING%20INSTRUMENT%20%20English.pdf?sequence=1&isAllowed=y)
- 2 Legislative Council Brief of Product Eco-responsibility (Amendment) Bill 2023 (<u>https://www.legco.gov.hk/yr2023/english/brief/eeb20230208_20230208-e.pdf</u>)
- 3 Product Eco-Responsibility (Amendment) Bill 2023

For enquiries (HK Office):

Mr. Joey Kwok

(852) 2690-8255 / 6059-9644 / WhatsApp:: 6059-9644

Email: joeykwok@cmatesting.org