

**For discussion  
on 24 May 2021**

**Legislative Council  
Panel on Environmental Affairs**

**Voluntary Scheme for Phasing Out  
Personal Care and Cosmetic Products Containing Microbeads**

**PURPOSE**

The Chief Executive promulgated in the 2019 Policy Address Supplement the implementation of a voluntary scheme for phasing out personal care and cosmetic products (PCCPs) containing microbeads (“the Scheme”) to encourage the trade to stop manufacturing, importing or selling such products, with a view to gradually eliminating them in Hong Kong. This paper briefs Members on the Government’s work and progress in the development of the Scheme.

**THE USE OF MICROBEADS AND ITS POTENTIAL  
ENVIRONMENTAL IMPACTS**

2. Microbeads are added to some rinse-off PCCPs for providing specific functions such as scrubbing, exfoliating and cleansing. Products that may contain microbeads include scrub, facial wash, shower gel, soap and toothpaste, etc. After the use of these rinse-off products, the microbeads will be drained into sewerage systems. The majority of these microbeads will be removed in sewage treatment works, whereas the rest will be discharged together with treated effluent into the marine environment. Since it has been reported that microbeads in PCCPs are one of the possible sources of microplastics causing pollution to marine lives and food chains, their potential environmental impacts have attracted worldwide attention in recent years.

3. According to some scientific researches, microbeads (normally defined as solid plastic particles less than 5 mm) take a long time to degrade in the environment. Being similar in size to planktons, they may be mistakenly consumed by aquatic organisms and get into food chains. Besides, chemical substances may adhere to and accumulate on their surfaces, thereby posing a potential threat to marine ecosystems and human health. Although there is a

large body of open literature on the subject of microbeads at present, views on the impact of microbeads are diverse and further studies are pending to substantiate relevant findings. Few scientific evidence is available regarding the direct impact of microbeads on human health. In fact, there doesn't exist a set of internationally well recognised standards guiding the sampling and testing, data analysis and risk assessment for studying microbeads in the marine environment.

4. Application of microbeads in PCCPs is attributed to their relatively stable properties and ease of quality control on product texture. Nevertheless, when choosing product ingredients, manufacturers would bear in mind their corporate social responsibility and green image, apart from factors of market positioning, production costs and technical requirements. At present, many manufacturers either have adopted or are in the stage of developing the use of other natural ingredients to replace microbeads with reformulation of their products to achieve comparable functions in exfoliation or cleansing. These natural alternatives include cocoa beans, almond powder, fruit seeds (such as apricots or grapes), sea salt, pumice, charcoal powder, rice, oatmeal, etc. There are also some man-made alternatives like synthetic silica and cellulose. Overall, the supply and cost of alternatives of microbeads are stable in the market of raw materials.

## **MICROBEAD CONTROL STRATEGIES**

5. Microbeads in PCCPs are regarded as the only source of microplastics “intentionally released” into the ocean. As a result, various source control measures have emerged targeting on these microbeads. The Environmental Protection Department (EPD) completed a consultancy study in March 2020 to review the international trend of controlling PCCPs containing microbeads, collate and analyse relevant local market information, and recommend viable control options for Hong Kong. The consultancy study found two mainstream approaches adopted across the world, namely voluntary phasing-out and legislative control, for the progressively replacement of microbeads with alternatives in these products.

6. Jurisdictions like Australia and the Netherlands have successfully put in place voluntary schemes to phase out microbeads. In the case of Australia, its government launched a voluntary programme in 2017 together with an assessment of the phase-out rate of products containing microbeads, which was shown to have increased from about 80% to 99%, based on statistics up to 2020. On the other hand, there are various countries and jurisdictions, including Europe, USA, New Zealand, South Korea, China, etc, that have progressively

implemented different forms of regulatory control measures to control microbeads.

7. As for the situation in Hong Kong, PCCP products in the local market are mostly imported, from many places of origin that have already adopted different means and scope of banning the manufacturing of some microbead-containing products. In recent years, some multinational companies and unions have pledged and taken voluntary actions to phase out microbeads and replace them with natural alternatives (e.g. salt crystals, nut shells) in their products, while some retailers have started to cease the sale of PCCPs containing microbeads or gradually reduce their stock of these products. With the advent of more jurisdictions promulgating new regulations, coupled with the limited shelf-life of the PCCPs, it is anticipated that not many products containing microbeads will remain in the local market.

8. In the event that Hong Kong pursues a regulatory approach, the process will be quite lengthy and will involve steps of formulating an appropriate and clear regulatory approach, establishing testing standards that will not become an importation barrier, consulting various stakeholders in the trade, going through the legislative procedure, and allowing time for the industry to clear out their stock. Hence, be it a transitional arrangement amid the legislative process or a response to the society's strong aspirations, a voluntary phase-out scheme is in dire need such that Hong Kong can keep pace with the international trend of eliminating products containing microbeads for protecting the marine ecosystems.

## **THE SCHEME AND THE PROGRESS**

9. Based on the consultant's recommendation, the Government will initially implement the Scheme for a two-year period and review its effectiveness at a later stage to ascertain the need for further tightening the control of products containing microbeads in Hong Kong. Making reference to successful experience from other jurisdictions, the Government is planning to launch a "Microbead-free Charter" (the Charter) in collaboration with the trade. Participants, taking due consideration of their operational conditions, may set their own targets and timetables for ceasing or reducing the manufacture, import and sale of PCCPs containing microbeads and strive to achieve the targets within the set timeframe. In the course of the Scheme, the Government will follow up on the participants' phase-out progress, and review the phase-out status of the PCCPs containing microbeads in the local retail market. At the same time, the Government will launch complementary publicity and education activities to enhance public's understanding of microbead-related subjects and

facilitate consumers in choosing microbead-free products.

10. The Charter will be implemented by the EPD. The participants will include PCCP manufacturers, importers (agents/distributors), retailers, hair dressing/beauty salons and trade associations, etc. They can join the Charter in multiple ways apt for their different business modes. For example, manufacturers and importers will take the lead to stop/reduce the manufacture/import of PCCPs containing microbeads, while the retailers and hairdressing/beauty salons may promote microbead-free products to their consumers. Industry associations and all other participant groups will work together to promote the Scheme to their business partners and publicise microbead-related information through different platforms. The EPD will organise promotional activities such as launching and award presentation ceremonies. Participants will not only be recognised with the Charter's logo and certificates, those who actively phase out microbeads and promote the Scheme will also be commended with awards as tokens of appreciation.

11. Making reference to global regulatory approaches, and taking into account feedbacks from the trade, the EPD defines microbeads as solid plastic particles intentionally added in rinse-off PCCPs for scrubbing, exfoliating or cleaning purposes, and smaller than 5mm in size. The Charter will cover exfoliators and other rinse-off PCCPs for face, body, hair, mouth, etc.

12. Apart from answering enquiries, the EPD will publicise and timely update a list of merchants that have joined the "Microbead-free Charter" as well as a list of microbead-free brands and products lines or categories provided by the merchants, with a view to facilitating consumers to purchase such products. The EPD will also promote the Scheme to the public and the trade through a thematic webpage and other social media platforms. Moreover, the EPD will design interactive online games to introduce basic information on microbeads to the public, and will organise workshops to provide advanced training on microbead-related issues to staff of participants so that they can convey appropriate and accurate information to consumers.

13. The EPD had held a briefing meeting for the trade in October 2020 to introduce the draft plan of the Charter and had collected their feedback by the end of November 2020 for enhancing the mode and design of the Scheme. Moreover, we had briefed the Wholesale and Retail Task Force of Business Facilitation Advisory Committee the revised plan and the associated supporting measures in April 2021. By and large, the trade responded positively and supported the implementation of the Scheme to phase out PCCPs containing microbeads. In light of feedbacks from the trade, the EPD is now finalising the implementation details of the Scheme, including the execution plan, product

listing, monitoring methodology, implementation timetable, etc. In parallel, the EPD is making arrangements with the service contractor to roll out the Scheme in 2021, featured with an opening ceremony and a series of campaign activities, subject to the development of the COVID-19 pandemic.

14. Furthermore, the EPD have employed market investigators under the “Green Employment Scheme” of the Environment Bureau to gain better understanding of the prevailing situation of the sale of PCCPs containing microbeads at retail market and to collect relevant information for assessing the local phase-out rate of PCCPs containing microbeads.

### **ADVICE SOUGHT**

15. Members are requested to note the work progress of the Scheme and offer views.

**Environment Bureau  
Environmental Protection Department  
May 2021**