

LCQ18: Microplastics and waste plastics causing environmental problems

Following is a question by Dr Hon Elizabeth Quat and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (April 17):

Question:

Recently, some university researchers tested 18 oyster samples taken from various markets and farms, the results of which showed that all the samples contained microplastics. On the other hand, the quantity of plastic bags disposed of at landfills in recent years has shown a rising trend. In this connection, will the Government inform this Council:

(1) given that the Environmental Protection Department commenced a one-year consultancy study in April last year to study the impacts of microplastics on the environment and regulatory proposals in this respect, when the outcome of the study will be published;

(2) whether it will step up promotional efforts to encourage the public to avoid buying and using products containing microplastics (e.g. personal care products) so as to reduce the pollution caused to the ocean by microplastics; if so, of the details; if not, the reasons for that;

(3) whether it will consider enacting legislation to ban the sale of products containing microplastics in Hong Kong; if so, of the details; if not, the reasons for that;

(4) given that the Water Supplies Department has not conducted any regular monitoring and tests of microplastics at reservoirs or water gathering grounds for the reason that there is currently no internationally standardised method for testing the concentration of microplastics in samples of fresh water, whether the Government will invite local science and research institutions to develop a set of locally standardised methods for testing microplastics; if so, of the details; if not, the reasons for that;

(5) whether it has formulated (i) targets for gradually reducing the quantity of waste plastics disposed of at landfills and (ii) a timetable for implementing such targets; if so, of the details; if not, the reasons for that;

(6) whether it will be more proactive in encouraging business operators and members of the public to give up using plastic bags and excessively packaged products; if so, of the details; if not, the reasons for that; and

(7) as it has been reported that currently quite a number of business operators still provide free plastic bags to customers in contravention of the law, whether the Government will step up the relevant law enforcement efforts; if so, of the details; if not, the reasons for that?

Reply:

President,

Our reply to the question raised by Dr Hon Elizabeth Quat is as follows:

(1) and (3) Microplastic pollution and the associated potential environmental impacts have been a topic of global concern in recent years. Microplastics found in the aquatic environment may have different identities and origins. They include microbeads arising from industrial production (e.g. as additives in personal care and cosmetic products (PCCPs)) and fragments from degradation of plastic products and waste. The common view about microplastics is that microplastics degraded from waste plastics in the environment will likely have a greater environmental impact than microbeads from PCCPs. Existing initiatives tackling microplastics are thus mainly focused on how to reduce the amount of plastic materials entering the marine environment. That said, certain places around the world have started to adopt various means to progressively control the use of microbeads in PCCPs.

Last year, the Environmental Protection Department (EPD) commenced a consultancy study on PCCPs containing microbeads to grasp the latest international development in the control practices on such products, solicit local stakeholders' views on control regime and make recommendations on control strategies. The study is still in progress and is anticipated to complete within this year. Results of the study will be announced in due course. At this stage, we have not yet formulated any control measures.

(2) Given that there is currently no local legislation requiring provision of information or specification on microbeads content for products sold in Hong Kong, nor are there any common standards adopted by different places of origin on the methods for identifying and labelling microbeads content in their products, we consider that it is not the opportune time now to give relevant advice to the public on the purchase and use of such products. That said, when formulating the strategy for controlling PCCPs containing microbeads, we will also consider how to organise appropriate publicity and education activities to dovetail with the control strategy. We will also continue to collect and analyse the latest scientific research findings and data from various sources as well as gather baseline data to study the seasonal changes and geographical distributions of microplastics in our waters, with a view to providing the public with appropriate and accurate information, enhancing their comprehension of microbeads-related subjects and encouraging them to take actions to prevent microbeads from entering the marine environment.

(4) The Water Supplies Department (WSD) has engaged a consultant to review the current international development regarding health risks associated with

microplastics in drinking water. According to the results of the consultancy review, drinking water is in general not a major route of human intake of microplastics. At present, there is neither any standard for microplastics in drinking water adopted by international organisations or regulating authorities nor any world-recognised standardised method for testing microplastics in water samples. Therefore, the WSD considers it more appropriate to keep abreast of the further research findings and course of actions on the subject by international organisations (such as the World Health Organization) including the establishment of testing method for microplastics in drinking water and to take appropriate follow-up actions.

(5) We are studying and formulating various initiatives to tackle the issue of waste plastics, but given the many variables in play, we are currently unable to formulate a specific target for gradually reducing the quantity of waste plastics disposed of at landfills and the timetable for implementing the target. The present work of the Government includes, making reference to the research and development in other countries or places on the control of disposable plastic items, we are commencing a study on controlling or banning disposable plastic tableware to explore, inter alia, the necessity and feasibility of such control or ban, and the scope, regulatory mechanism and applicable substitutes concerned should such control or ban is deemed necessary and feasible. The study is scheduled for completion in 2020.

Additionally, the Government commissioned a feasibility study in October 2017 on the introduction of a producer responsibility scheme (PRS) on plastic product containers, targeting those carrying beverages or personal care products. Taking into account the recommendations of the consultant, the Government decided to accord priority to plastic beverage containers, which account for about 60 per cent of overall waste plastic containers disposed of in Hong Kong, and proceed first with the introduction of a PRS for this type of containers. The consultant will continue to conduct the feasibility study on the PRS on plastic personal care product containers and submit a report to the Government. Separately, as the disposal of plastic shopping bags (PSBs) has been on the rise for two consecutive years and the PSB charging scheme has been in operation for some time, the EPD will review the effectiveness of the scheme in reducing the use and disposal of PSBs.

We have been striving to promote the "plastic-free" culture through publicity and education efforts. In the summer of 2018, we organised the "Plastic Free Beach, Tableware First" campaign at public beaches across the territory. A total of 51 restaurants and kiosks participated and used bamboo sticks, paper straws and paper bags in place of disposable plastic tableware, including polyfoam food containers. The Environmental Campaign Committee (ECC) has also launched a programme which involves lending reusable tableware to event organisers for free and providing them with one-stop service for delivery, collection and cleaning of tableware. Meanwhile, the EPD and the ECC have collaborated with the food and beverage sector to jointly hold the "Plastic-Free Takeaway, Use Reusable Tableware" campaign to encourage members of the public to go "plastic-and-disposable-free" and reduce the use of disposable plastic tableware when they order takeaways by providing suitable incentives. The first phase of the campaign – a two-month pilot programme at

three major fast food chains in Hong Kong – concluded successfully on January 15 this year. During the pilot programme, members of the public together reduced waste and saved more than 1.2 million sets of disposable tableware. We are working on the next phase of the publicity and education campaign with a view to further promoting the "plastic-and-disposable-free" message to members of the public.

We have provided the catering sector with guidelines to encourage restaurants to provide reusable tableware and food containers for dine-in customers, avoid using polyfoam food containers, and welcome customers to bring their own food containers for buying take-away food, etc. Under the Sustainable Development Fund, the Government has previously supported the food and beverage sector to formulate guidelines on green procurement for the trade, including encouraging the commercial and industrial sectors to use reusable or plant-fibre tableware instead of disposable plastic ones. Through the annual Hong Kong Awards for Environmental Excellence, the EPD also commends organisations that have excelled in environmental management, including restaurants committed to waste reduction at source (such as taking measures to encourage customers not to ask for disposable tableware and food containers).

In parallel, starting from January 2019, the Government has taken the lead in banning plastic straws and polyfoam food containers in premises and canteens mainly serving government staff. Relevant departments, when inviting tenders for new contracts and renewing existing contracts, will also require restaurant operators in suitable government venues to avoid using disposable plastic tableware. Moreover, the sale of plastic bottled drinking water of one litre or less in the automatic vending machines in government venues has stopped progressively from February 2018. To encourage the public to develop a habit of bringing their own water bottles and reducing the consumption of plastic bottled water, the Government will install additional water dispensers in suitable government venues. Our initial target is to install 500 more water dispensers by 2021-22.

Moreover, to strengthen recycling of waste plastics and enhance the confidence of the public in waste plastics recycling system, the EPD plans to roll out a two-year Pilot Scheme on Collection and Recycling Services of Waste Plastics in three different districts (i.e. Eastern District, Kwun Tong and Sha Tin) to provide free collection service for waste plastics from non-commercial and non-industrial sources (non-C&I) such as public and private housing estates, schools, public institutions, and EPD's Community Recycling Centres and Community Green Stations in the districts, with a view to gaining practical experience before expanding the service to the whole territory. The EPD is tendering the waste plastics collection service contract of the Eastern District, with a view to gradually rolling out the services this year. We will also invite tenders for waste plastics collection service in Kwun Tong and Sha Tin districts one after another later.

(6) The EPD liaises with supermarkets, the retail and courier sectors from time to time, advising the sectors to adopt relevant waste reduction measures, such as avoiding the use of unnecessary packaging materials and

using greener materials to replace plastics for packaging. We will continue to encourage different stakeholders to practise simple packaging through education and other channels. We will continue to adopt a multi-pronged approach to promote the importance of waste reduction at source. In parallel, we are actively preparing for the introduction of the municipal solid waste charging to create financial incentives to drive behavioural changes in waste generation in various sectors and hence reduce overall waste disposal.

Since the full implementation of the PSB charging scheme in 2015, we have been conducting different types of publicity and education programmes to encourage the public to bring their own bags. In addition, as mentioned above, we will review the effectiveness of the PSB charging scheme.

(7) Since the full implementation of the PSB charging scheme on April 1, 2015 up to the end of March this year, we have conducted over 120 000 inspections and successfully completed 629 prosecutions (including prosecution by fixed penalty tickets and summons). It can be seen from the inspections in the past few years that the vast majority of retailers have complied with the requirements of the law to collect the PSB charge; and the overall compliance rate has reached a high level. In addition to enforcement inspections, we also continue our publicity and education efforts to raise the awareness of retailers to charge customers not less than 50 cents for each PSB, including deploying staff to inspect and distribute leaflet at major events (such as Brands and Products Expo and Lunar New Year Fairs). With regard to the compliance status, we will adjust our enforcement strategies from time to time in order to conduct more effective inspections and enforcement against illegal activities of small number of non-compliant retailers.