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#### Environmental Protection Department Headquarters

15 & 16/F, East Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong



環境保護署總部

香港添馬 添美道二號 政府總部東翼 十五及十六樓

Ms Sharon CHUNG Clerk to Public Works Subcommittee Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road, Central Hong Kong

2 May 2014

Dear Ms CHUNG,

# Public Works Subcommittee Meeting on 7 May 2014

# Supplementary Information in Connection with SENT Landfill Extension and IWMF Phase 1

At the meeting of the Public Works Subcommittee (PWSC) on 16 April 2014, Members discussed the proposed extension of Southeast New Territories (SENT) Landfill (PWSC(2014-15)6) and development of integrated waste management facilities (IWMF) phase 1 (PWSC(2014-15)7). Some Members suggested inviting representatives from the Food and Environmental Hygiene Department (FEHD) and the Housing Department (HD) to attend future meetings of the PWSC and the Finance Committee (FC) on the funding proposals to provide information on cross-departmental efforts in source separation and waste recovery. Taking into account the more focused scope of the two PWSC items above and the wider perspectives of the issues raised on inter-departmental waste reduction and recycling policies and programmes, we consider that it would be more effective to provide an overall summary on how government departments promote and implement waste reduction and recycling in their operations for reference by Members. We would be prepared to elaborate and discuss the issues in more detail at the Panel on Environmental Affairs if necessary.

#### Steering Committee to Promote the Sustainable Development of the Recycling Industry

2. To step up concerted efforts across the Government in reducing waste at source and promoting the development of the recycling industry, a Steering Committee has been established for this cause under the leadership of the Chief Secretary. The Committee comprises representatives from relevant bureaux and departments, namely Environment Bureau, Commerce and Economic Development Bureau, Education Bureau, Development Bureau, Financial Services and the Treasury Bureau, Food and Health

Bureau, Labour and Welfare Bureau, Transport and Housing Bureau, Home Affairs Department and Information Services Department.

# Waste Reduction and Recycling in the Daily Operation of Government Departments

*Tri-colour waste separation bins for paper, metals and plastics* 

- 3. To facilitate source separation of waste by the public for recycling, FEHD, Leisure and Cultural Services Department (LCSD) and the Agriculture, Fisheries and Conservation Department (AFCD) have placed about 4,600 sets of waste separation bins at public places, roadsides, refuse collection points, leisure and cultural venues and country parks, and FEHD is responsible for providing collection services to these recyclables. HD, Housing Society (HS), Government Property Agency (GPA) and Hospital Authority have also provided about 3,500 sets of waste separation bins at public rental housing estates, government quarters, government offices, hospitals and clinics, and their recyclables collection services are arranged separately through their respective property management agents or cleansing contractors.
- 4. To ensure that the recyclables collected in the waste separation bins in public places, in particular plastic recyclables which are often of lower value, are delivered to recyclers for recycling and not disposed of, FEHD's new collection service contract to be effective in August 2014 stipulates that the contractor has to nominate recyclers that are capable of properly processing the plastic recyclables collected under the contract. At the tendering stage, EPD will inspect the recycling sites of the nominated recyclers with FEHD to ascertain the recyclers' capability in processing plastic recyclables. Furthermore, the contractor will be required to use transparent plastic bags printed with the words '用作收集可回收物料' in the collection of the recyclables for better monitoring.

Waste reduction and recycling at public rental housing estates

- 5. HD has set up facilities for source separation of waste at all public rental housing estates (168 nos. as at 2014). Waste reduction and recycling programmes and activities are regularly organised at public rental housing estates. Rechargeable batteries and compact fluorescent lamps are being collected for recycling at all public rental housing estates. Food Waste Recycling Trial schemes are being operated in 14 public rental housing estates under HD's Green Delight in Estates Programme.
- 6. In December 2010, EPD and HD jointly launched the Pilot Programme on Source Separation of Glass Bottles in 6 selected public rental housing estates in East Kowloon. Since then, the programme has been expanded progressively to cover all 29 public rental housing estates in East Kowloon by phases in 2012. With the successful experience and the assistance of HD, EPD has expedited the work on expanding the programme to all the public rental housing estates in Tuen Mun (9 nos.), Sai Kung (5 nos.) and North (4 nos.) Districts in January, March and April 2014 respectively. EPD will continue to work closely with HD to further extend the programme with a view to covering all the public rental housing estates in Hong Kong by the end of 2014.

Waste reduction and recycling at government quarters and government joint-users office buildings managed by GPA

7. Sixty-four sites of government quarters managed by GPA are provided with waste separation bins for paper, metals and plastics. Some of these sites also have recycling programmes for old clothes, computers, electrical appliances, moon cake metal boxes and Lunar New Year red packets. At the 15 larger scale government quarters, there are regular waste-commodity exchange programmes. Glass bottle collection programmes in 57 government quarters are operated by the property management agents in collaboration with Hong Chi Association and/or with the support of the Environmental Campaign Committee. In addition, food waste recycling schemes were launched in 2013 at two quarters. Apart from quarters, GPA further provides facilities or other waste reduction and recycling initiatives to facilitate source separation of waste at 47 joint-users office buildings.

### Green Office Management

8. A General Circular on 'Green Practices and Waste Avoidance' was issued in August 2012 to set out practicable green practices and waste avoidance measures for bureaux and departments to follow. Department representatives are reminded to continuously take appropriate actions to implement the recommended measures of the above general circular, in particular, the requirements on attending/organising events and meetings in respect of gifts, souvenirs and corsages, and to arrange with relevant cleansing contractors to provide recyclables collection bins and collection service for waste metals and plastics in addition to paper. To facilitate bureaux and departments to implement the recommended green practices and waste avoidance measures as set out in the circular, EPD organised a seminar on 'Green Management in Government Buildings' in November 2012 with topics related to waste reduction, food waste reduction and recycling as well as energy conservation. Over 220 representatives from 58 bureaux/departments attended the seminar.

# Pilot Scheme on Municipal Solid Waste (MSW) Charging

9. On 7 April 2014, EPD launched a pilot scheme on MSW charging on 7 housing estates, with a view to collecting further public opinions and accumulate experience for the future implementation of MSW charging. The scheme was launched with support from the Housing Authority and the Housing Society as some of the participating estates are under their management.

# Waste Reduction and Recycling in Major Leisure, Cultural and Sports Events and Lunar New Year Fairs

*Green measures taken in major leisure, cultural and sports events* 

10. For leisure, cultural and sports events at venues managed by the LCSD, arrangements have been made for reuse and recycling the house programme booklets.

- 11. With the support of the LCSD, EPD has started setting up public glass bottle collection points at a number of LCSD's facilities such as indoor sports centres, parks, town hall etc. as trial along with the expansion of glass collection network in Sai Kung, North and Tuen Mun Districts. More collection points will be set up at LCSD's facilities when the glass recycling network is expanded further to other districts.
- 12. Moreover, the LCSD has continuously introduced waste reduction and recycling measures in the major events held at its venues, such as Rugby Sevens, Hong Kong Games and Hong Kong Flower Show, etc. These measures include avoiding the production and distribution of souvenir items, producing less tailor-made publicity materials, deploying recycling promotion ambassador teams, providing special bins, re-using or re-planting of planting materials, etc. To further enhance waste reduction and recycling, the LCSD has collaborated with EPD to collect wilted flowers from the Hong Kong Flower Show for recycling into compost at the Ngau Tam Mei Waste Composting Plant starting from 2013. These measures could certainly help enhance public awareness of the importance of waste reduction and recycling as well as increasing the amount of recyclables collected.

#### Green measures taken in Lunar New Year Fairs

13. To increase public awareness of the importance of waste reduction and recycling in the Lunar New Year Fairs, FEHD has increased the number of recycling bins and the temporary recyclables storage areas during the event since 2010. Public announcements were made at the venues to notify the public on the locations of the recycling bins. In 2014, about 7 tonnes of waste wood, scaffolding and peach blossom trees had been collected from the two Lunar New Year Fairs at Victoria Park and Tuen Mun by FEHD, and these materials were delivered to a waste wood recycler at the EcoPark for recycling.

#### Peach Blossom Trees Recycling Campaign after the Lunar New Year in 2014

14. In February 2014, FEHD opened 37 refuse collection points (RCPs) across the territory as collection points to facilitate the Peach Blossom Trees Recycling Campaign after the Lunar New Year. Some 770 peach blossom trees were collected at these RCPs. Altogether, more than 2,200 pieces, about 30 tonnes, of peach blossom trees were collected during the Campaign and delivered to the waste wood recycler at the EcoPark for recycling.

# Rugby Sevens 2014

15. A number of new environmentally friendly ideas and practices had been implemented for trial at the Hong Kong Sevens 2014 to promote waste reduction and recycling. EPD had joined hands with LCSD to enhance the stadium's continued recycling initiatives; the departments also collaborated with food caterers and concession service providers to arrange the donation of surplus food as well as separation and collection of other types of recyclables such as food waste, glass bottles and paper for recycling.

# Reduction and Recycling of Construction Waste from Public Works Projects

- 16. In 2012, Hong Kong generated about 63,538 tonnes of construction waste (also known as construction and demolition (C&D) materials) per day. Of which, over 90% is inert materials which can be reused or recycled, including rock, rubble, boulder, earth, soil, sand, concrete, asphalt, brick, tile, masonry or used bentonite. The remaining has to be disposed of at landfills which is about 3,440 tonnes per day, and about 22% were from public works projects.
- 17. The Government strives to minimise the environmental impact arising from public works projects and has been promoting multi-pronged measures to reduce, reuse and recycle C&D materials including
  - (a) At the planning and design stage, works departments are required to adopt design options that will minimise C&D materials as far as possible. Amongst other things, a Construction and Demolition Materials Management Plan (C&DMMP) is required under the relevant technical circular for projects generating or importing 50,000 cubic metres or more of C&D materials. The C&DMMP has to be endorsed by the relevant vetting committee to ensure proper implementation of measures to minimise C&D materials.
  - (b) At the tendering stage, extra credits would be given for any proposal that exceeds the tender requirements to minimise the generation of C&D materials, e.g. adopting standardised and modular components for site office, etc.
  - (c) At the construction stage, works departments will require contractors to implement the waste reduction measures as set out in the above C&DMMP and tender documents. Waste reduction targets, measures and management will be set up in accordance with the submitted Environmental Management Plan (EMP) which shall include the implementation of on-site waste separation of C&D materials so as to facilitate subsequent recycling. In addition, for those public works projects that have adopted Pay for Environment Scheme, contractors are entitled for payment according to contract terms if they have provided waste separation facilities for C&D materials within the sites and arranged for collection of recyclable materials by recyclers.
  - (d) The Development Bureau also encourages the industry to implement innovative environmental management measures and strategies through various awards and recognitions, such as the Outstanding Environment Management and Performance Award set up under the Considerate Contractors Site Award Scheme.

#### Use of Eco-Construction Materials in Public Works

18. As regards the use of eco-construction materials, it has been specified in the public works contracts to use those construction materials with recycled C&D materials, e.g. recycled asphalt pavement, recycled sub-base materials and pavers made from

recycled aggregates and glass, to encourage recycling. Since October 2010, pavers with recycled glass content have been specified for use in all road maintenance contracts and most of the new public works contracts. In 2011 to 2013, such eco-pavers have been widely used in various public works projects. It is estimated that a total of some 590,000 square metres of eco-pavers which absorbed about 4,000 tonnes of waste glass have been used. Furthermore, public works contracts have specified the use of metallic hoardings while the use of hardwoods for formwork has been banned.

# Reduction and Recycling of Food Waste at Publicly Managed Premises

19. The Food Wise Hong Kong initiative has been supported by many relevant departments and public organisations, some of which have signed the Food Wise Charter including the Immigration Department, Fire Services Department, Correctional Services Department, Government Flying Service, and the Civil Aid Department etc. of government departments have also implemented trial schemes on food waste reduction and recycling at their managed facilities. For example, the Housing Authority has conducted food waste recycling trial scheme at 14 public housing estates by phases since 2011, involving nearly 1,000 families to encourage the cultivation of food waste separation habits and food waste recycling. The Lo Wu Correctional Institution has an average of 75% of its inmates participating in the Waste No Food Scheme since April The project enhanced environmental awareness and encouraged the reduction of leftover food. Upon enrolment to the scheme, the persons in custody volunteer to receive a reduced portion of their staple food. The scheme has avoided 500 bowls of rice having to be dumped every day (i.e. around 100 kilograms). The institution also installed an on-site food waste decomposing system with a daily capacity of 100 kilograms which turns fruit peels, vegetable leaves and meal leftover into organic compost for greening purposes. The Central Government Offices at Tamar has installed a composter with a daily capacity of 50 kilograms to handle food waste arising from the canteen. Other departments including EPD, LCSD, FEHD, GPA etc. have also installed composters at their facilities to promote various stakeholders to participate in food waste reduction and source separation.

# Government Departments' Use of Biodiesel Made of Waste Cooking Oil

20. The use of biodiesel made of waste cooking oil is conducive to the sustainable use of resources. To test whether biodiesel is suitable for use in vehicles, vessels and machinery, EPD commissioned in January 2012 a 16-month pilot scheme to use B5 diesel (a blend of 95% Euro V diesel and 5% biodiesel which is recycled from used cooking oil) on some government vehicles, vessels and machinery. Government departments actively participate in the pilot scheme. In the first phase of the scheme, participant departments included the Drainage Services Department, Correctional Services Department, Hong Kong Police Force, Marine Department and EPD. Given the success of the scheme, EPD initiated the 24-month second phase on in May 2013, with LCSD and Government Logistics Department joining the scheme.

# Promotion of Waste Reduction in Schools

21. EPD has, with support from the Education Bureau, taken forward many initiatives to promote waste reduction and recycling in schools. Initiatives include the 'Use Less, Waste Less in My Hands' Campaign, Waste Separation and Recycling Scheme in Schools, recycling of glass bottles and waste electrical and electronic equipment in schools, on-site meal portioning, Green Lunch Charter, Hong Kong Green School Award, Student Environmental Protection Ambassador Scheme etc.

Yours sincerely,

( Ellen CHAN ) for Director of Environmental Protection

c.c. Secretary for Financial Services and the Treasury (Attn: Ms Jasmine CHOI)