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Panel on Food Safety and Environmental Hygiene

**Subcommittee on Issues Relating to
the Improvement of Environmental Hygiene and Cityscape**

**Background brief prepared by the Legislative Council Secretariat
for the meeting on 9 February 2021**

**Administration's efforts to improve
public cleansing services**

Purpose

This paper provides background information on cleansing services provided by the Food and Environmental Hygiene Department ("FEHD") in maintaining public cleanliness (including street cleansing and refuse collection), and summarizes the views and concerns of members of the Panel on Food Safety and Environmental Hygiene ("the Panel") on the subject.

Background

2. According to information available on FEHD's website, FEHD and its cleansing contractors have a total workforce of about 12 900 to keep the city clean and provide cleansing services (including street sweeping, refuse collection and other cleansing work) in Hong Kong.

Street cleansing

3. According to the Administration, all streets are manually swept at least once every day. In the main commercial and tourist areas, streets are swept on an average of four times a day, and up to eight times a day in the busiest pedestrian areas. Complementing manual sweeping, 10 contractor's mechanical sweepers are used to cleanse highways, flyovers and central road

dividers as well as other high-use traffic areas. FEHD and its cleansing contractors have a total of 118 street washing vehicles. Depending on the nature of the area served, FEHD will adjust the frequency of street washing which may be conducted on a need or daily basis. To help keep Hong Kong clean and tidy, about 12 100 litter containers and about 1 920 dog excreta collection bins are placed on the streets, and they are cleared at least once a day.

Refuse collection

4. As advised by the Administration, FEHD and its cleansing contractors operate some 253 modern refuse collection vehicles. Every day, about 5 830 tonnes of household waste is collected, including 1 030 tonnes from Hong Kong Island, 1 810 tonnes from Kowloon and 2 990 tonnes from the New Territories and outlying islands. Household waste is taken to the refuse transfer stations or landfills managed by the Environmental Protection Department ("EPD"). In addition, FEHD has a total of 162 permanent off-street public refuse collection points ("RCPs"), 10 temporary RCPs; 868 village-type RCPs/RCPs with temporary structures; and about 1 900 bin sites.

Application of technologies to enhance environmental hygiene

5. To improve its public cleansing and refuse collection services, FEHD has applied/tested the following environmental hygiene technologies in recent years:

- (a) using mini-mechanical sweepers in cleansing the village areas;
- (b) conducting a trial use of solar-powered compacting refuse bins ("compacting bins") for household waste collection;
- (c) conducting a pilot scheme from February to July 2018 on a trial use of 360 degrees cameras to monitor the accumulation of marine refuse;
- (d) installing Internet Protocol ("IP") cameras at illegal refuse deposit blackspots over the territory¹ since June 2018 to curb illegal deposits of refuse;
- (e) introducing solar-powered aluminium RCPs in rural areas on a trial basis; and

¹ According to FEHD's website, as at January 2021, IP cameras have been installed at 227 locations.

- (f) introducing pressure washer surface cleaners and leaf blowers to enhance the efficiency and effectiveness of street cleansing.

Members' concerns

6. Major views and concerns expressed by members at various Panel meetings in the Sixth Legislative Council are summarized below.

Application of technologies in enhancing environmental hygiene

7. Members were of the view that the Administration should explore and adopt new technologies which could help enhance the quality and efficiency of public cleansing services. There was a suggestion that the Administration should conduct trial of new technologies on a larger scale, i.e. conducting the trial use of different technologies in various districts concurrently, so as to save time on the studies and tests on various technologies to ascertain if they were suitable for wider application in Hong Kong.

8. The Administration responded that FEHD had been actively exploring the application of suitable technologies in collaboration with the Hong Kong Science and Technology Parks Corporation and technology companies, as well as studying the use of technologies to enhance the quality and efficiency of public cleansing services. In order to apply technologies in a more effective and timely manner, FEHD planned to assign designated staff to keep abreast of the development of various technologies and assess the feasibility of applying them in Hong Kong. If suitable technologies were identified, the Administration would first conduct preliminary tests and make adjustments in the light of the local environment and actual conditions, and then assess the feasibility, effectiveness and suitability of the technologies. FEHD would extend to all districts in Hong Kong the use of technologies which had been proven effective. Technologies that could enhance the cleansing services would be extended to applicable environments across the territory.

9. There was a view that rubbish bins not designed with lids should not be used in public places (including rural areas and public rental housing estates) for collection of waste, as such kind of rubbish bins could not keep out insects but instead provided food sources and shelters for rodents. Some members suggested that FEHD should improve the design of some existing refuse collection facilities in rural areas to facilitate proper handling of refuse.

10. According to the Administration, FEHD had already commenced a trial on compacting bins for use at 12 bin sites in rural areas for collection of household waste from the nearby residents. With the auto inlet opening with

sensors, the compacting bins allowed the public to dispose of bagged refuse without having to touch the bin. FEHD had also put in place some aluminium RCPs, where the public could dispose of their waste easily into the refuse bins therein through window-type openings. FEHD would explore further enhancement in the form of auto-sensor opening panels and assess whether such facilities were suitable for wider use in Hong Kong after the trial.

11. In response to members' suggestion that FEHD should improve its communication with relevant departments, e.g. EPD, in the application of technologies in enhancing environmental hygiene, the Administration advised that FEHD maintained close collaboration with relevant departments in enhancing environmental hygiene. As an example to illustrate, representatives from FEHD joined the meetings of the Steering Group on the Modification of Recycling and Refuse Collection Facilities in Public Places set up under the Environment Bureau to review the provision and design of recycling and refuse collection facilities in public places.

Measures to enhance refuse collection

12. Some members pointed out that as most RCPs managed by FEHD were closed at night, refuse from residential buildings in the area collected by private refuse collectors very often was stacked up along the pavements outside RCPs pending collection by refuse collection vehicles. There was a suggestion that FEHD should consider extending the opening/service hours of RCPs/refuse collection vehicles, in particular those located at/servicing major bar areas (e.g. Lan Kwai Fong in Central), so as to provide convenience to the public by coping with the demand for refuse collection service at midnight and in the early morning.

13. According to the Administration, in considering whether the opening hours of an RCP should be extended, the Administration would take into account a number of factors such as the views of local residents and the demand for refuse collection service during midnight or in small hours of the day. Also, the views of the respective District Council had to be obtained. To cater for the needs of bars and food premises located in Central, Lan Kwai Fong RCP and Gage Street RCP were open 24 hours a day. Private refuse collectors could deposit waste and refuse collected within the district in these RCPs. To address the service demand of various districts, the number of RCPs providing 24-hour service had increased in recent years. For example, five out of seven permanent off-street RCPs in Yuen Long town centre, including the Tung Tai Street RCP, were already operating 24 hours.

Enforcement work against illegal disposal of refuse

14. Concern was expressed about the increasing trend of illegal disposal of domestic waste on streets by members of the public. There were suggestions that FEHD should step up enforcement action against public cleanliness offences and deploy additional manpower resources to each district to support the enhanced enforcement work against illegal disposal of refuse by food premises and bars, particularly in the early hours of the morning.

15. In response, the Administration advised that FEHD had flexibly deployed existing staff in carrying out enforcement work. Since late June 2017, FEHD had set up six dedicated enforcement teams ("DETs") in six districts to step up enforcement action against public cleanliness offences. FEHD planned to seek more resources to set up DETs for deployment to every district in the long run to support its work in this respect.

16. Questions were raised as to (a) whether IP cameras installed at illegal refuse deposit blackspots for surveillance and enforcement purposes were supported with facial recognition technology to facilitate the identification of fly-tippers and subsequent prosecution; and (b) whether the installation locations of IP cameras were made known to the public, as offenders might try to evade monitoring by dumping refuse at other locations not under camera surveillance.

17. According to the Administration, all the blackspots installed with IP cameras were made known to the public, pursuant to the advice of the Office of the Privacy Commissioner for Personal Data. IP cameras were not supported with facial recognition technology. Instead, the footage captured by IP cameras would be analysed using artificial intelligence image analysis technology, through which illegal acts of refuse deposit could be identified. As the accuracy rate of artificial intelligence was over 99%, FEHD could rely on the footage captured to collect evidence and institute prosecution against fly-tippers. FEHD officers would analyse the timing and patterns of the illegal acts to formulate more effective enforcement operations. To enhance the effectiveness of enforcement actions, FEHD closely monitored the targeted locations and suitably adjusted action plans, including changing the location of the IP cameras.

Measures to enhance the quality of outsourced cleansing services

18. Some members were concerned how the Administration would assess the quality of outsourced cleansing services. Question was raised as to whether FEHD had taken any measures to monitor the performance of service providers and to assess the quality and effectiveness of the equipment used by them.

19. The Administration responded that there were clauses in the service contracts stipulating the requirements that must be met by the contractors in carrying out cleansing operations, and contractors were required to use equipment which would satisfy the standard specified by FEHD. Also, FEHD had allocated additional resources to enhance the supervision over contractors. If the performance of contractors was not up to the required standard, FEHD would take action against the contractors in accordance with its sanction system. Any breach of contractual obligations by the contractors would lead to the issuance of verbal warnings, written warnings and default notices as well as withholding/deducting monthly payment of service charge to the contractors. Unsatisfactory performance would affect the contractors' future bidding for FEHD's outsourced service contracts.

20. Some members held the view that FEHD's practice of awarding outsourced contracts to the lowest bidder was the root cause for inferior cleansing services, and outsourced service providers might not have the incentives to improve their services due to cost consideration. In evaluating tenders for the provision of environmental hygiene services, FEHD had all along been adopting the standard marking scheme approved by the Government's Central Tender Board. Members urged the Administration to review whether the relative weightings of technical score and price score (respectively at 30% and 70%) should continue to be adopted. There was a suggestion that the technical score should be given a heavier weighting, as so doing could help enhance the quality and efficiency of public cleansing services work.

21. In response, the Administration advised that, as announced in the Chief Executive's 2018 Policy Address, it had completed a review of the employment terms and conditions of government service contracts, and come up with improvement measures applicable to service contracts which relied heavily on the deployment of non-skilled employees, including those for the provision of environmental hygiene services. Under the improvement measures that took effect from 1 April 2019, the technical weighting in tender evaluation for the above-mentioned service contracts could be increased to the range of 50% to 70%. The technical weighting must not fall below 50% in any case, while a technical weighting higher than 70% might be adopted if the procuring department saw fit.

Recent developments

22. The Administration will brief the Subcommittee on the measures to improve refuse collection and street cleanliness at the meeting on 9 February 2021.

Issues to be covered include (a) improvement of refuse collection facilities and refuse disposal; (b) enhancement of monitoring and tackling of illegal refuse (including bulky waste and construction waste) deposit blackspots; (c) measures for monitoring and improving street cleanliness (including application of technologies, criteria for selection, effectiveness of application and cleanliness of private streets); and (d) enhancement of outsourced street cleansing services.

Relevant papers

23. A list of the relevant papers on the Legislative Council website is in the **Appendix**.

Council Business Division 2
Legislative Council Secretariat
5 February 2021

**Relevant papers on issues relating to Administration's efforts
to improve public cleansing services**

Committee	Date of meeting	Paper
Panel on Food Safety and Environmental Hygiene	14.11.2017 (Item IV)	<u>Agenda</u> <u>Minutes</u>
	12.6.2018 (Item VI)	<u>Agenda</u> <u>Minutes</u>
	13.11.2018 (Item IV)	<u>Agenda</u> <u>Minutes</u>
	12.2.2019 (Item III)	<u>Agenda</u> <u>Minutes</u>
Legislative Council	5.6.2019	<u>Official Record of Proceedings</u> <u>Pages 11230 to 11235 (Written</u> <u>question raised by Hon</u> <u>Elizabeth QUAT on "Rodent</u> <u>infestation and environmental</u> <u>hygiene issues")</u>
	18.12.2019	<u>Official Record of Proceedings</u> <u>Pages 3629 to 3641 (Written</u> <u>question raised by Hon WU</u> <u>Chi-wai on "Internet Protocol</u> <u>Camera Scheme")</u>