For discussion on 14 September 2021

Legislative Council Panel on Food Safety and Environmental Hygiene

Improvement of Management and Hygiene Conditions of Public Toilets

Purpose

This paper briefs Members on the follow-up actions taken by the Food and Environmental Hygiene Department (FEHD) in response to the recommendations made in The Ombudsman's direct investigation report on the "Management and Repair of Public Toilets by Food and Environmental Hygiene Department and Architectural Services Department" published in May 2021; and the report published by the Subcommittee on Issues Relating to the Improvement of Environmental Hygiene and Cityscape (the Subcommittee) in July 2021 respectively.

Background

- 2. Currently, the FEHD manages 809 flushing public toilets, with 91 on Hong Kong Island, 61 in Kowloon and 657 in the New Territories and on outlying islands. In addition, there are 36 aqua privies in the New Territories and on outlying islands. All public toilets are open 24 hours for public use free of charge.
- 3. The FEHD has been improving the facilities and service of public toilets under a multi-pronged approach and committed to monitoring their operation and performance as well as promoting public education, with a view to enhancing the overall hygiene and service levels of public toilets.

Direct Investigation Report of The Ombudsman

- 4. In May 2019, the Office of The Ombudsman conducted a direct investigation against the FEHD and the Architectural Services Department (ArchSD) to examine the Government's mechanism and efforts relating to public toilet management, maintenance and repair. The direct investigation examined
- (a) the toilet cleansing services provided by its outsourced contractors and the FEHD itself:
- (b) the handling of complaints against public toilets and vandalism of public toilet facilities by the FEHD;
- (c) the maintenance and repair services of public toilets provided by the ArchSD;
- (d) the co-operation and communication between the FEHD and the ArchSD on public toilet repair, maintenance and refurbishment works; and
- (e) any other rooms for improvement.
- 5. The Office of The Ombudsman published the investigation report in May 2021. The report affirmed the FEHD's efforts in stepping up publicity and public education and exploring ways to upgrade public toilet facilities. It also endorsed the direction of the FEHD, the ArchSD and the Electrical and Mechanical Services Department (EMSD) to make use of technology to build a communication platform for enhancing the efficiency of repair works.
- 6. The Ombudsman made nine recommendations to the FEHD, one recommendation to the ArchSD and one recommendation to both the FEHD and the ArchSD in the report. The FEHD has implemented most of the recommendations, and is actively studying and following up on the remaining two. The ArchSD is also actively studying the recommendation put to it. Details of the follow-up actions taken by both departments in response to the recommendations are set out at **Annex**.

Report of the Subcommittee

7. Separately, the Subcommittee was earlier set up under the Legislative Council Panel on Food Safety and Environmental Hygiene to study the

Government's measures for improving environmental hygiene and cityscape. At its fourth meeting on 27 April 2021, the Subcommittee discussed the FEHD's measures to improve the environmental hygiene of public toilets. Subsequently, the Subcommittee published a report on 23 July 2021 and recommended that the Government should expedite the refurbishment / facelifting works of public toilets by streamlining work procedures and engage external parties for more innovative ideas on the maintenance / management of public toilets with a view to enhancing the service levels of public toilets. The FEHD's efforts in these respects are set out below.

Enhancing the Efficiency of Repair Works in Public Toilets

8. To enhance the efficiency of repair works in public toilets, the FEHD, the ArchSD and the EMSD have jointly developed a "minor works order record system" mobile application (the mobile app) since the second quarter of 2019 to link with the ArchSD's and the EMSD's computer maintenance systems for data sharing. The FEHD can make repair requests to the ArchSD and the EMSD via the mobile app and keep track of the progress of repair works, thereby improving the accuracy of various records and expediting the repair process of public toilets. It also facilitates systematic collation of management data for further analysis and service enhancement. The FEHD has extended the use of the mobile app to all districts since March 2020. As at July 2021, the FEHD had made about 18 000 and 6 500 repair requests for public toilets to the ArchSD and the EMSD via the system respectively, of which 95% and 98% were made on the same day or the next day the facility damage was found. The ArchSD completed the repair works of 99.9% of the repair requests it received within the ranges of the target completion dates, while the EMSD completed the repair works of 97% of the repair requests within three days.

Refurbishment / Facelifting Works of Public Toilets

9. It was announced in the 2019-20 Budget that the Government would make an additional allocation of over \$600 million to implement the Enhanced Public Toilet Refurbishment Programme (EPTRP) for about 240 public toilets under the management of the FEHD by phases in five years from 2019-20 onwards. There are two types of works under the EPTRP, namely refurbishment and facelifting. The refurbishment works will generally adopt new design, enhance prevailing layout, beautify facades, replace and increase

toilet facilities as well as improve ventilation equipment and lighting system, with a view to making public toilets clean and hygienic and ensuring that their design and appearance could blend well with the surrounding environment. The FEHD will adjust the scope of the refurbishment of individual toilets having regard to the actual circumstances. The scope of facelifting works does not involve the prevailing layout and mainly includes replacement of aged facilities and installation of new features, and replacement of cubicle partitions, wall finishes and floor tiles, so as to improve the facilities and hygiene level of public toilets. Generally speaking, refurbishment works take about 2 to 3 years to complete, while facelifting works require about 1 to 1.5 years.

- 10. Under the EPTRP, the FEHD has continued to work closely with the ArchSD to streamline work procedures and speed up works progress. In 2019-20 (i.e. the first year of the EPTRP), refurbishment or facelifting projects for 42 public toilets were rolled out. The refurbishment or facelifting works for 23 public toilets have been completed¹ and the remaining works are underway as planned. In the next year (2020-21), the refurbishment or facelifting projects for 49 more public toilets were commenced. The facelifting works for 24 public toilets have been completed¹ and the remaining works are underway as planned. The FEHD is currently rolling out and planning refurbishment or facelifting projects for a total of about 100 public toilets in 2021-22 and 2022-23 respectively.
- 11. To further expedite the progress of improvement works for public toilets (in particular those situated in rural areas), the FEHD and the ArchSD are actively exploring the application of Modular Integrated Construction (MiC)² and Design for Manufacture and Assembly (DfMA) 3 in public toilet refurbishment and improvement works to shorten on-site construction time and the closure period of public toilets. The ArchSD is engaging a consultant to

As at 31 July 2021.

MiC transfers labour-intensive processes and site-bound wet works (such as concreting, screeding and plastering) and most building services installations to off-site manufacturing yards through standardisation, thus enhancing productivity, site safety, environmental performance and cost-effectiveness. public toilet projects are smaller in scale and there is not much repetition of modules, the use of MiC can still shorten construction time, in particular for interior finishes, fixtures and fittings on-site, and allow better quality control. MiC can also minimise the impact of factors, such as weather and manpower, on the works and better ensure delivery of projects on time.

DfMA is a design approach that emphasises the ease of manufacture and efficiency of assembly of construction components. It enables off-site manufacturing for on-site assembly, which can reduce on-site construction processes. Prefabricated components and MiC, both of which replace conventional site operations with off-site prefabrication, are examples of DfMA.

study the feasibility of applying the two construction methods in public toilet improvement projects. It expects that MiC and DfMA can be piloted in the improvement projects for several public toilets in rural areas and new public toilet projects in 2022-23, so as to evaluate the effectiveness and assess the feasibility of applying the technology in the improvement projects of other public toilets in rural areas, as well as construction or reprovisioning works of new public toilets in urban areas. If the results are satisfactory, we will consider phasing in the construction methods in the improvement works of more public toilets in rural areas and new public toilet projects from 2023-24, with a view to further expediting the progress of public toilet improvement programme.

12. The FEHD will continue to work with the ArchSD to actively take forward the remaining refurbishment or facelifting works under the EPTRP by streamlining work procedures, speeding up works progress and applying new construction methods such as MiC and DfMA. In addition, the FEHD will review the effectiveness of the EPTRP in a timely manner and consider expanding the programme to include other suitable public toilets.

Pilot Scheme on Smart Public Toilet System

- 13. The FEHD is actively exploring the utilisation of technologies in enhancing public toilet service. For example, daily operation data of public toilets ⁴ are collected for reference in the review of service quality and management effectiveness, as well as for the introduction of new technologies for better public toilet design. To this end, the FEHD has developed a "smart public toilet system" and piloted the system in the Tsim Sha Tsui East Public Transport Interchange Public Toilet and the Southorn Centre Public Toilet in Wan Chai since 1 May 2021. The FEHD is now evaluating the performance and effectiveness of the system and will review and follow up in due course.
- 14. At the same time, the FEHD is working with the EMSD to consider making use of the Government-Wide Internet-of-Things Network (GWIN)⁵ to

The data collected by the smart public toilet system includes:

⁽a) the usage of public toilets, such as visitor flow, the occupancy status of toilet compartments / urinals, etc.:

⁽b) environmental parameters, such as temperature, humidity, odour, etc.;

⁽c) the usage of consumables, such as soap, toilet paper, toilet seat sanitisers, hand sanitisers, etc.; and

⁽d) operating status of electrical and mechanical (E&M) equipment, such as hand dryers, floor fans, etc.

The GWIN is a government network of wireless sensors built by the EMSD to assist digitalisation of E&M equipment, so as to support various smart applications for the improvement of public service quality.

launch a "smart toilet pilot programme". It is expected that the relevant devices will be successively installed at 10 FEHD public toilets over the territory from the third quarter of 2021 onwards to collect useful information and data for better efficacy of cleansing, housekeeping and maintenance. The system will also provide members of the public with useful information on the occupancy status of the toilets.

Design Thinking Programme

15. To seek innovative ideas for developing ideal public toilets, the FEHD and the ArchSD have co-organised a design thinking programme called "Toilet Tells: Rediscover Public Toilet" (Toilet Tells). Toilet Tells covers four stages: Discover, Define, Develop and Deliver. Between November 2020 and June 2021, a total of eight design thinking workshops were organised to garner the views of various stakeholders (including different age groups, users with disabilities, design professionals, academics, architects, management and maintenance personnel). We are collating the information collected from the workshops, and studying the implementation of innovative ideas in the service, design and management of public toilets where practicable. In addition, the FEHD and the ArchSD jointly organised the "PT 2.0 - Public Toilet Design Competition". The aim is to create a new image for public toilets in Hong Kong by unleashing the creativity of the public and the relevant sectors to bring about innovative designs that incorporate smart technologies and high levels of buildability and cost-effectiveness. The adjudication of the competition has been completed, and the results are expected to be released by the end of September 2021. The FEHD and the ArchSD will consider applying the design concepts of the winning entries in public toilet projects as appropriate.

Conclusion

16. The FEHD will continue to apply technologies and adopt innovative ideas and fully co-operate with the relevant departments, thereby improving the facilities and management of public toilets on various fronts, with a view to enhancing the overall service level. It is also hoped that the public can take good care of public facilities and keep public toilets clean and hygienic.

Advice Sought

17. Members are invited to comment on the follow-up actions.

Food and Health Bureau Food and Environmental Hygiene Department September 2021

Annex

Follow-up actions in response to the 11 recommendations made to the Food and Environmental Hygiene Department and the Architectural Services Department in the Direct Investigation Report of The Ombudsman on "Management and Repair of Public Toilets by Food and Environmental Hygiene Department and Architectural Services Department"

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
|---------------------------------|---|---|
| Food and Environ | mental Hygiene Departmen | nt (FEHD) |
| Recommendation (1) | Review the current mechanism in a timely and realistic manner, and collate information that includes demographic characteristics and tourist number of various districts, as well as the visitor counts of individual public toilets, so that resources can be allocated properly and flexibly for improving public toilet planning and management. | The FEHD reviews the mechanism for public toilet planning and management from time to time. In the fourth quarter of 2020, the FEHD completed a review and formulated more specific guidelines for the provision of toilet attendants to public toilets. The factors to be considered include daily utilisation of individual public toilets, their utilisiation rates in specific periods (e.g. during festive events or the swimming season, and at weekends / on holidays for toilets in a tourist spot), whether the toilets are located at a tourist spot, the hygiene conditions, the number of complaints, the cost-effectiveness, etc. The new guidelines have been implemented starting from January 2021. The FEHD will deploy appropriate resources to improve public toilet services having regard to actual circumstances. Specifically, apart from the provision of toilet attendants to high-utilisation public toilets (i.e. with 300 visitors or more a day), appropriate arrangements (such as |

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
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| | | adjusting the inspection and cleansing frequencies) are made by District Environmental Hygiene Offices (DEHOs) according to the actual circumstances of individual public toilets in order to keep them clean. |
| | | For public toilets with very high utilisation, two toilet attendants are provided for the period with the highest utilisation to cater for the actual needs. Subject to actual usage, some public toilets are further provided with all-day toilet attendant service, i.e. toilet attendant service on even midnight shift other than day shift and night shift. To further enhance the cleanliness and hygiene of public toilets, the FEHD also increases deep cleansing operations by its contractos to reduce the daily work of toilet attendants subject to the actual patronage of individual public toilets. If necessary, the FEHD will adjust the frequency of inspection to ensure that the conditions of public toilets can be examined in a timely manner and follow-up measures be taken as appropriate. |
| Recommendation (2) | Conduct comprehensive statistical analysis on cases involving issuance of default notices to contractors and deduction of monthly service fees related to public toilet cleansing services with a view to identifying inadequacies and introducing specific | The FEHD is making improvements to its Contract Management System for more effective collection of records on follow-up actions, including verbal warnings and default notices issued, taken by DEHOs against defaults by contractors, and will conduct statistical analysis and take specific improvement actions / measures as necessary. The revamp work of the system is scheduled for completion in the second quarter of |

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
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| | improvement measures. | 2022. |
| Recommendation (3) | Continue to step up inspections at outsourced toilets, including those in the suburbs that may have more visitors on holidays. | The FEHD has been paying attention to the patronage and cleansing condition of public toilets on holidays, and will continue to adjust the number of inspections in a timely manner according to the actual needs of individual toilets in order to examine their condition and take appropriate follow-up measures, including strengthening the inspection of public toilets in the suburbs and increasing the frequency of cleansing or providing toilet attendant service for these toilets on holidays in light of the increased visitors, so as to maintain the cleanliness of public toilets. |
| Recommendation (4) | Draw up specific performance indicators for directly managed toilets for compliance by the FEHD's frontline staff. | Guidelines on maintenance of venues and facilities (including public toilets) as well as management of public toilets are specified in the FEHD's Operation Manual for Cleansing Services for compliance by its staff. The FEHD is conducting a review and making reference to the format of outsourced street cleansing service contracts to set out specific performance indicators. The Operation Manual for Cleansing Services will be revised as appropriate for compliance by its staff. The relevant work is scheduled for completion in the first quarter of 2022. |
| Recommendation (5) | Consider deploying toilet attendants to "high-utilisation directly | The FEHD revised its internal guidelines in December 2020, specifying that in addition to providing toilet attendant |

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| | managed toilets" so that their cleanliness level can be maintained. | service at high-utilisation public toilets under normal circumstances, appropriate arrangements will be made at individual toilets subject to actual circumstances, such as whether the toilets are located at a tourist spot, the hygiene conditions, the number of complaints, the cost-effectiveness, and their utilisation rates in specific periods (e.g. during festive events or the swimming season, and at weekends / on holidays for toilets in a tourist spot). The FEHD will deploy appropriate resources to improve public toilet services. |
| | | In respect of the public toilets for which toilet attendant service has been provided, the FEHD will increase the frequency of deep cleansing operations, adjust or extend the service hours of toilet attendants, and deploy additional toilet attendants depending on the actual level of cleanliness, with a view to keeping the public toilets clean. |
| | | In addition to inspecting public toilets in accordance with the established mechanism, the FEHD's staff will conduct further inspections depending on the actual circumstances. Complaints on the level of cleanliness received will be followed up and handled promptly. |
| Recommendation (6) | Continue with the statistical analysis on public toilet related complaints and make better use of the data for improving public toilet | The FEHD will continue with the statistical analysis on public toilet-related complaints, which will be provided for DEHOs and units concerned as reference for taking corresponding management measures. |

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
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| | management. | |
| Recommendation (7) | Continue to strengthen publicity and education to address the problem of vandalism at public toilet facilities, and maintain communication with law enforcement departments for exploring solutions, for instance, by consolidating and forwarding the information collected and analysed to law enforcement departments to facilitate formulation of measures to strengthen enforcement action. | The FEHD has been disseminating messages on the importance of toilet hygiene and proper use of toilet facilities through various means, including making use of the Facebook and Instagram pages of Keep Clean Ambassador Ah Tak, and installing broadcasting systems and posting publicity stickers at public toilets. Regarding the problem of vandalism at public toilet facilities, the FEHD will continue to strengthen communication with law enforcement departments, sharing with them information of the incidents, such as the location, time and nature, with a view to helping them conduct a comprehensive analysis of the problem and effectively combating the relevant criminal offences. Where necessary, the FEHD will step up discussions with law enforcement departments on the ways to tackle and improve the problem and on enhancement of security measures. |
| Recommendation (8) | Update the Toilet Handbook regularly and in a timely manner so that it can serve as reference for public toilet refurbishment projects carried out by FEHD and ArchSD. | The FEHD is conducting a comprehensive review of the Toilet Handbook to include the latest standards of and requirements for the design of public toilets. The review is expected to be completed by the end of 2021. The Handbook can serve as a reference for the FEHD, ArchSD and other relevant departments in carrying out toilet refurbishment projects. |

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
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| Recommendation (9) | Continue with the timely reviews of utilisation rates, conducting consultations and make use of relevant statistics to determine whether a public toilet remains in a tourist hotspot; reexamine whether there are public toilets that have not undergone refurbishment for a long time, with facilities dilapidated or frequently breaking down, and consider whether such public toilets should be given higher priority in resource allocation and included in the public toilet refurbishment programme. | The FEHD will continue to perform timely reviews of utilisation rates, conduct consultations and make use of relevant statistics to determine whether a public toilet remains in a tourist hotspot. It will also re-examine public toilets that have not undergone refurbishment for a longer time to decide whether they should be accorded priority for inclusion in the refurbishment programme. In collecting public views on the public toilet services, the FEHD will also consider gathering views on the refurbishment of individual public toilets, so as to set priorities for the public toilet refurbishment programme. |

| Paragraph 7.24 of the Report | Recommendations | Follow-up Actions |
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| Architectural Serv | ices Department (ArchSD) | |
| Recommendation (10) | Assess the feasibility of raising penalties specified in works orders for exerting greater deterrent effect on contractors involved in delay in works completion. | The ArchSD is reviewing the feasibility of increasing the penalties for works orders in order to have more substantial deterrent effect on contractors delaying the works, with a view to strengthening the monitoring of contractors with poor performance and avoiding continuous delays in works. The relevant mechanism and contract terms are planned to be implemented upon the resigning of maintenance term contracts. |
| FEHD and ArchS | D | |
| Recommendation (11) | Continue to strengthen proactive communication with each other for closer monitoring of progress in public toilet repair works, and implement effective measures to ensure that requests for repair at public toilets are promptly submitted to ArchSD upon discovery of the items in need of repair. | The FEHD will continue to maintain close communication with the ArchSD and strengthen the monitoring of progress of repair and maintenance works of public toilets. The FEHD extended the use of the minor works order record system to all districts in March 2020. The system allows effective information exchange among the FEHD, the ArchSD and the Electrical and Mechanical Services Department, and has enhanced the transparency of such information. It also facilitates early submission of repair reports, strengthens the monitoring of repair |

information.

progress and enables proper record of

Besides, the system records the dates and time of discovering the defects and of requests for repair, which can be used for

works-related

producing statistics and analyses.