

# **CHAPTER 1**

**Food and Health Bureau  
Food and Environmental Hygiene Department  
Architectural Services Department**

**Planning, provision and management  
of public toilets by the  
Food and Environmental Hygiene Department**

**Audit Commission  
Hong Kong  
28 October 2019**

*This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.*

Report No. 73 of the Director of Audit contains 10 Chapters which are available on our website at <https://www.aud.gov.hk>

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# **PLANNING, PROVISION AND MANAGEMENT OF PUBLIC TOILETS BY THE FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT**

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# **PLANNING, PROVISION AND MANAGEMENT OF PUBLIC TOILETS BY THE FOOD AND ENVIRONMENTAL HYGIENE DEPARTMENT**

## **Executive Summary**

1. In the olden days of Hong Kong, the dwellings of many residents were not provided with toilets and, in general, their hygiene conditions were poor. In 1867, following the outbreaks of cholera between 1865 and 1866, the Government began to provide public toilets. Public toilets were provided by the Government at squatter areas, rural areas and locations without proper sanitary facilities for the sake of protecting public health.

2. According to the Public Health and Municipal Services Ordinance (Cap. 132), the Food and Environmental Hygiene Department (FEHD) may provide and maintain latrines (i.e. toilets) for the use of the public. According to FEHD, public accessible toilet facilities are now mainly provided in different venues/locations (e.g. restaurants and shopping malls). FEHD is no longer the main provider of public accessible toilet facilities and its provision of public toilets is mainly to supplement the general need of the public and tourists. As of June 2019, FEHD managed 798 public toilets (with flushing systems) over the territory and 51 aqua privies (i.e. village-type dry toilets without any flushing system) in the New Territories and on outlying islands. Public toilets and aqua privies managed by FEHD are available for public use free of charge and open 24 hours a day.

3. FEHD sets out the criteria for provision of public toilets under its management in FEHD's Handbook on Standard Features for Public Toilets (FEHD Toilet Handbook). In general, consideration will be given to providing public toilets at tourist spots and locations with anticipated high utilisation rates and without adequate alternative toilet facilities in the vicinity (e.g. toilets within public/commercial venues like parks, playgrounds or shopping arcades) to serve the public/tourists.

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4. FEHD has implemented various works projects for provision of public toilets. Apart from constructing new ones and reprovisioning existing ones, since 2000, FEHD has also implemented a Public Toilet Refurbishment Programme to give a new look to public toilets with enhancements in design and facilities. From 2016-17 to 2018-19, 13 new public toilets were built, 10 public toilets reprovisioned and 27 public toilets refurbished, and the estimated total project costs for these projects were \$282.8 million (comprising \$97.8 million for new construction, \$56.9 million for reprovisioning and \$128.1 million for refurbishment). FEHD also implemented a programme to convert aqua privies into flushing toilets between February 2005 and November 2014. A total of 441 aqua privies were converted into flushing toilets and the total expenditure was \$740.2 million. FEHD mainly engages the Architectural Services Department (ArchSD) as its works agent in implementation of public toilet works projects.

5. FEHD manages public toilets and aqua privies to upkeep the conditions of toilet facilities and hygiene. The cleansing services for these toilets are outsourced to contractors under the related contracts for street cleansing services or provided by FEHD staff. According to FEHD, the cleansing frequency of public toilets and aqua privies depends on the public demand and usage of the toilets. In addition, toilet attendant services are provided in public toilets with high utilisation rates or at tourist spots. Starting from March 2019, FEHD has also procured the services of dedicated deep cleansing teams for such toilets to improve their cleansing condition and to relieve the workload of toilet attendants. In 2018-19, FEHD's expenditure in providing public cleansing services was \$3,096 million (which included, for example, street cleansing and household waste collection). According to FEHD, no breakdown of the expenditure showing the figures solely for provision and management of public toilets was available.

6. As announced in the 2018 Policy Agenda of the Chief Executive of the Hong Kong Special Administrative Region, comprehensive refurbishment works would be carried out for those public toilets of FEHD with high utilisation rates or located at tourist hotspots. The Financial Secretary also announced in the 2019-20 Budget that the Government would allocate more resources to FEHD for refurbishing its public toilets by phases. It is estimated that a total expenditure of about \$600 million will be incurred, involving about 240 (30% of 798) public toilets in the coming five years (i.e. 2019-20 to 2023-24). The Audit Commission (Audit) has recently conducted a review to examine the planning, provision and management of public toilets by FEHD.



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### Planning and provision of public toilets

7. *Need to continue to enhance the use of technology to assess and review utilisation rates of public toilets on a regular basis.* Utilisation rate is a key criterion for considering the provision of public toilets by FEHD. According to FEHD, public toilets are classified by utilisation rate (measured by average number of daily visitors) into different categories (e.g. a toilet with 300 or more daily visitors on average is classified as having a high utilisation rate). Audit noted that, in 2018 or earlier, FEHD collected data on average number of daily visitors by manual counting. Since early 2019, FEHD has progressively conducted an infrared sensor counting exercise to count the number of visitors to public toilets. Audit compared the results of infrared sensor counting and manual counting for 149 public toilets. For 93 (62%) public toilets, there were considerable variances between the utilisation rates found by the two counting methods. Audit considers that FEHD needs to review the effectiveness of the technology and continue to enhance the use of technology to assess and review the utilisation rates of public toilets on a regular basis for planning and management purposes (paras. 2.2, 2.4 to 2.6 and 2.8).

8. *Male-to-female toilet compartment ratio stated in FEHD guidelines not fully met.* According to FEHD Toilet Handbook, the ratio of 1 male to 2 female toilet compartments should be used as a general guideline (the ratio has been adopted by FEHD since April 2004). Regarding the male-to-female toilet compartment ratios for the 798 public toilets managed by FEHD as of June 2019, Audit found that 421 (53%) toilets did not meet the 1:2 ratio (i.e. with fewer female compartments than required). Of these 421 public toilets, 360 toilets were constructed or refurbished after 2004, with male-to-female toilet compartment ratios between 1:0 (i.e. without female compartment) and 1:1.9, averaging 1:1.3. According to FEHD, the reasons for not meeting the 1:2 ratio were mainly due to site constraints for expansion. In Audit's view, FEHD needs to, in consultation with ArchSD, take measures to meet the male-to-female toilet compartment ratio as stated in its guidelines as far as practicable (paras. 2.11 to 2.14).

9. *Need to consider reviewing guidelines on provision of sanitary fitments for males and females.* From 2016-17 to 2018-19, a total of 23 public toilets were newly built or reprovisioned and they all met the 1:2 male-to-female toilet compartment ratio (not including urinals for male). Audit noted that: (a) in terms of sanitary fitments (i.e. including both compartments and urinals), 16 (70%) of these 23 public toilets had fewer female sanitary fitments than male sanitary fitments; and

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(b) FEHD's existing guidelines only covered compartments, but not urinals. Audit considers that there is merit for FEHD to consider reviewing its guidelines on provision of sanitary fittings (paras. 2.15, 2.17 and 2.18).

10. ***Some public toilets not refurbished for a long time.*** FEHD shortlists a specific number of public toilets for refurbishment works annually under the Public Toilet Refurbishment Programme which has been implemented since 2000. Audit noted that, as of June 2019, 138 (17%) of the 798 public toilets managed by FEHD had not been included in the Refurbishment Programme in the past 10 years, including 29 (21% of 138) toilets with high utilisation rates. According to FEHD, the key criteria for including a public toilet in the Refurbishment Programme were always its utilisation rate and overall condition. Audit noted that additional resources of about \$600 million would be allocated under the Enhanced Public Toilet Refurbishment Programme for refurbishment works of public toilets (see para. 6). In Audit's view, FEHD needs to, in collaboration with ArchSD, prioritise public toilets for inclusion in the Refurbishment Programme having regard to their utilisation rates and conditions (paras. 2.32 and 2.36 to 2.39).

11. ***Some public toilets not provided with accessible unisex toilets.*** According to FEHD Toilet Handbook, accessible unisex toilets should, where possible, be provided. Audit noted that, as of June 2019, 418 (52%) of the 798 public toilets managed by FEHD were not provided with accessible unisex toilets. Audit noted that, while some of the 418 public toilets could not be provided with accessible unisex toilets (e.g. due to site constraints and technical feasibility issues), further studies would be conducted on 139 public toilets by ArchSD. In Audit's view, FEHD needs to, in collaboration with ArchSD, take measures to provide accessible unisex toilets (e.g. under the Public Toilet Refurbishment Programme) as far as practicable (paras. 2.48 and 2.50).

### **Management of public toilet works projects**

12. FEHD mainly engages ArchSD as its works agent in implementation of public toilet works projects. In general, the construction and reprovisioning of public toilet projects implemented by ArchSD and refurbishment projects under the Public Toilet Refurbishment Programme are funded under two block votes (controlled by ArchSD) of the Capital Works Reserve Fund (paras. 3.2 and 3.3).

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13. *Scope for improvement in construction and re-provisioning of public toilets.* From 2016-17 to 2018-19, ArchSD completed construction of two public toilets and re-provisioning of five public toilets. The seven projects were completed about 1 month to 11 months later than their respective original target completion dates. Audit examination found that for a project with delay of about 8 months in completing the construction works, the delay was due to unsatisfactory performance and slow progress of the contractor. Inadequate resource was one of the contributory factors for the contractor's unsatisfactory performance. There is a need for ArchSD to closely monitor to ensure that adequate resources are deployed by term contractors to carry out public toilet works projects (para. 3.7).

14. *Long time taken in completing refurbishment works of some public toilets.* As of August 2019, there were 84 public toilets included in the Refurbishment Programmes with works not yet completed, including 44 toilets which had been included in the Programmes for about four to eight years after obtaining funding approval. Audit noted a case with refurbishment works still in progress for eight years after inclusion in the Refurbishment Programme, taking about seven years to work out the design for the refurbishment (due to land allocation/acquisition and ad hoc requests arising from local consultations). ArchSD needs to take measures to complete public toilet works projects as soon as practicable (para. 3.9).

15. *Need to convert aqua privies into flushing toilets as soon as practicable.* From February 2005 to November 2014, FEHD implemented a programme to convert aqua privies into flushing toilets by seven phases. The initiative was included in the Policy Agenda in 2007-08, with the target of converting all aqua privies into flushing toilets in phases by 2012-13. However, there were still 51 aqua privies as of June 2019. According to FEHD and ArchSD, 18 aqua privies had been planned for demolition and the conversion works for the remaining 33 aqua privies were at different stages (e.g. under study or in progress). FEHD needs to, in collaboration with ArchSD, expedite actions in converting aqua privies into flushing toilets as far as practicable (paras. 3.18 and 3.23 to 3.25).

### Management of public toilets

16. FEHD has 19 District Environmental Hygiene Offices (DEHOs) for monitoring and management of district environmental hygiene services and facilities in the 18 districts, including public toilets and aqua privies. As of June 2019, the

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cleansing services of 625 (78% of 798) public toilets and 31 (61% of 51) aqua privies were outsourced to contractors under the related contracts for street cleansing services, and the remaining 173 (22% of 798) public toilets and 20 (39% of 51) aqua privies were provided by FEHD in-house cleansing workmen. To monitor the performance of contractors and in-house cleansing workmen, FEHD staff periodically conduct inspections of conditions of hygiene, cleanliness and facilities of the public toilets and aqua privies, including routine inspection by DEHO Foreman grade staff and supervisory check by DEHO Health Inspector grade staff (paras. 4.2, 4.6 and 4.7).

17. ***Scope for improvement in conducting inspections of cleansing services and documenting inspection results.*** FEHD guidelines have set out the frequency of routine inspections (which depends on the toilet location and availability of toilet attendant services) and for facilities in remote area, DEHO can exercise discretion to determine the most suitable minimum inspection frequency. According to FEHD guidelines, for public toilets with cleansing services provided by contractors, results of routine inspections should be recorded in a computer system (i.e. Contract Management System (CMS)). Audit examined the inspection records of four DEHOs from January 2018 to June 2019 and noted that: (a) two DEHOs had exercised discretion under FEHD guidelines to adjust downwards the frequencies of routine inspections for 104 public toilets. As the adjustment involved a large number of public toilets converted from aqua privies (which were usually located at remote locations with low utilisation rates), there is merit for FEHD to review the guidelines on the inspection frequency of such toilets; (b) the actual numbers of routine inspections conducted by two DEHOs were fewer than scheduled by 11% and 24% respectively; (c) for one DEHO: (i) the results of 81% of the routine inspections conducted were recorded in CMS, but the results of the remaining 19% inspections conducted were recorded on manual inspection form; and (ii) for inspections conducted on public toilets with attendant services, the results of only 2% of the inspections were recorded in the inspection reports for such toilets (according to FEHD, the results of some of such inspections were recorded in reports for toilets without toilet attendants); and (d) the standard inspection record for public toilets with cleansing services provided by in-house cleansing workmen was in manual form (paras. 4.8 and 4.9).

18. ***Need to take measures to address the issues leading to the increasing number of defects requiring repair and maintenance.*** Audit noted that the number of defects of public toilets and aqua privies referred to the maintenance agents (mainly ArchSD) for rectification increased by 33% from 13,290 in 2015 to 17,732 in 2018,

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while the number of public toilets and aqua privies only increased by 1%. Based on the repair and maintenance requests received by ArchSD for public toilets and aqua privies from January 2015 to June 2019, Audit found that some public toilets required frequent repair and maintenance. For example, for six public toilets, the number of their repair and maintenance requests averaged 89 to 128 requests per year (paras. 4.11 and 4.12).

19. ***Scope for improvement in facilities of some public toilets.*** Audit conducted two rounds of site visits in late May and late June 2019 respectively to 30 public toilets. The toilets were managed by the four DEHOs with inspection records examined by Audit (see para. 17). The site visits found that some toilets had a large number of defective facilities involving various types of defects (e.g. one toilet was identified with 29 defective items involving six types of defects in June 2019 site visits). Moreover, in the June 2019 site visits, Audit noted that 181 defective items identified in May 2019 had not yet been rectified (including 150 items involving minor repairs which should have been rectified by cleansing contractors within 24 hours after being informed by FEHD staff) (paras. 4.20 to 4.22).

20. ***Scope for reviewing provision of toilet attendant services.*** According to FEHD, toilet attendant services are provided in public toilets with high utilisation rates or at tourist spots. As of June 2019, 264 (33%) of the 798 public toilets were provided with attendant services. Audit examination revealed that: (a) 24 (12%) of the 207 public toilets with high utilisation rates were not provided with attendant services; (b) 5 (22%) of the 23 public toilets located at tourist spots were not provided with attendant services; and (c) 77 (29%) of the 264 public toilets provided with attendant services were not having high utilisation rates nor located at tourist spots (para. 4.37).

21. ***Some public toilets with attendant services not provided with attendant rooms.*** According to FEHD Toilet Handbook, a small cubicle should be provided in each male toilet and female toilet for the attendant, and a power socket and an oscillating fan should be provided inside the attendant room. Audit examination of FEHD records revealed that, as of June 2019, 33 (13%) of the 264 public toilets provided with attendant services were not provided with attendant rooms. Of the remaining 231 (87%) public toilets with attendant rooms, there were 53 toilets with only one toilet attendant room and 178 toilets without power socket, fan or exhaust fan inside the attendant rooms (paras. 4.39 and 4.40).

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22. *Scope for enhancing analysis of complaints received on public toilets.*

From 2016 to 2018, FEHD received an average of about 2,800 complaints on public toilets annually. Audit reviewed the information kept by FEHD's computer system (i.e. Complaints Management Information System (CMIS)) on complaints on public toilets, and noted that there was no dedicated field for capturing the name of a public toilet under complaint and FEHD had not made use of the data field "subject" (containing brief information about the content of complaint) to analyse the nature of complaint (paras. 4.49 and 4.50).

23. *Need to enhance publicity on proper use of public toilets.*

According to FEHD, in addition to hardware improvement and enhancement of cleansing services, public awareness about the importance of toilet hygiene as well as the proper use of toilet facilities are equally vital in upkeeping cleanliness of public toilets. During Audit's site visits of public toilets in May and June 2019, Audit noted that some toilets were not properly used by the public, e.g. some toilets remained unflushed after use (paras. 4.55 and 4.56).

### Audit recommendations

24. **Audit recommendations are made in the respective sections of this Audit Report. Only the key ones are highlighted in this Executive Summary. Audit has recommended that the Director of Food and Environmental Hygiene should:**

*Planning and provision of public toilets*

- (a) **review the effectiveness of the infrared sensor counting technology and continue to enhance the use of technology to assess and review the utilisation rates of public toilets on a regular basis (para. 2.9);**
- (b) **consider reviewing FEHD guidelines on provision of sanitary fitments (including urinals and compartments), and subject to the review, in consultation with the Director of Architectural Services, take measures to meet the male-to-female toilet compartment ratio as stated in FEHD guidelines as far as practicable (para. 2.19(a) and (b));**
- (c) **in collaboration with the Director of Architectural Services, prioritise public toilets for inclusion in the Enhanced Public Toilet Refurbishment**

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Programme having regard to their utilisation rates and conditions (para. 2.42(a));

- (d) in collaboration with the Director of Architectural Services, take measures to provide accessible unisex toilets as far as practicable (para. 2.58(a));

### *Management of public toilet works projects*

- (e) in collaboration with the Director of Architectural Services, expedite actions in converting aqua privies into flushing toilets as far as practicable (para. 3.27);

### *Management of public toilets*

- (f) review FEHD guidelines on the inspection frequency of public toilets converted from aqua privies (para. 4.31(a));
- (g) take measures to ensure that routine inspections are conducted as scheduled and inspection results are timely input to CMS (para. 4.31(b));
- (h) remind DEHO staff to strictly follow FEHD's requirements to input the inspection results in CMS (para. 4.31(c));
- (i) explore the use of information technology for keeping inspection records of cleansing services provided by in-house cleansing workmen (para. 4.31(d));
- (j) in collaboration with the Director of Architectural Services, take measures to address the issues leading to the increasing number of defects in public toilets requiring repair and maintenance (para. 4.31(f)(i));
- (k) strengthen actions to ensure that defects in public toilets are timely identified and referred to contractors and relevant maintenance agents for repair and maintenance, and closely monitor the progress and take appropriate follow-up actions (para. 4.31(i));

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- (l) **review the provision of toilet attendant services, having regard to the up-to-date utilisation rates of public toilets assessed with the use of technology and other relevant factors (para. 4.42(b));**
  - (m) **in collaboration with the Director of Architectural Services, strengthen actions to provide attendant rooms and related facilities for toilets with attendant services as far as possible (para. 4.42(c));**
  - (n) **consider enhancing CMIS and strengthen the regular analysis of complaints received on public toilets (para. 4.53(b)); and**
  - (o) **continue to enhance publicity on proper use of public toilets (para. 4.62(a)).**
25. **Regarding management of public toilet works projects, Audit has also recommended that:**
- (a) **the Director of Architectural Services should:**
    - (i) **closely monitor to ensure that adequate resources are deployed by term contractors to carry out public toilet works projects (para. 3.13(a)); and**
    - (ii) **take measures to complete public toilet works projects as soon as practicable (para. 3.13(b)); and**
  - (b) **the Director of Food and Environmental Hygiene and the Director of Architectural Services should endeavour to take forward refurbishment projects under the Public Toilet Refurbishment Programme in a timely manner (para. 3.15).**

## Response from the Government

26. The Director of Food and Environmental Hygiene and the Director of Architectural Services agree with the audit recommendations.



## **PART 1: INTRODUCTION**

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

### ***Background***

1.2 In Hong Kong, the provision of public toilets by the Government has a long history dating back to the nineteenth century. In the olden days of Hong Kong, the dwellings of many residents were not provided with toilets and, in general, their hygiene conditions were poor. In 1867, following the outbreaks of cholera between 1865 and 1866, the Government began to provide public toilets. Public toilets were provided by the Government at squatter areas, rural areas and locations without proper sanitary facilities for the sake of protecting public health.

1.3 According to the Public Health and Municipal Services Ordinance (Cap. 132), the Food and Environmental Hygiene Department (FEHD) may provide and maintain latrines (i.e. toilets) for the use of the public where FEHD considers such toilets to be required having regard to the general benefit of the public, and may equip any such toilets with all requisite furnishings, fittings and mechanical or other appliances for the use, convenience or assistance of persons resorting thereto.

1.4 According to FEHD, regarding the provision of public toilets under its management:

- (a) the living and public health standards of Hong Kong have improved significantly over the years, and the vast majority of buildings in Hong Kong are provided with proper sanitary facilities. Public accessible toilet facilities are now mainly provided in different venues/locations (e.g. restaurants and shopping malls) to cater for the need of the public at large;
- (b) FEHD is no longer the main provider of public accessible toilet facilities. Nowadays, the provision of public toilets by FEHD is mainly to supplement the general need of the public and tourists. Making reference to Singapore, no standalone public toilets are built and maintained by its government.

## Introduction

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Based on FEHD's observation of the behavioural pattern of the public nowadays, people often use public accessible toilets provided in shopping malls, food centres, markets, restaurants, etc; and

- (c) if land is reserved for construction of public toilets under FEHD's management based on population, it is likely that there will be a duplication of facilities and waste of resources.

1.5 As of June 2019, FEHD managed 798 public toilets (with flushing systems) over the territory and 51 aqua privies (i.e. village-type dry toilets without any flushing system) in the New Territories and on outlying islands. Public toilets and aqua privies managed by FEHD are available for public use free of charge and open 24 hours a day (Note 1). For a public toilet/aqua privy, it normally comprises a male toilet and a female toilet. For 380 (48%) of the 798 public toilets, accessible unisex toilet facilities are also provided.

1.6 Public toilets managed by FEHD are provided throughout the territory, mainly at transport facilities, tourist spots, and any place where crowds are likely to congregate or transient pedestrian traffic is heavy. While most public toilets take the form of a free-standing building (see Photograph 1 for an example), some of them form part of a building with independent entrance at the street level (see Photograph 2 for an example).

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**Note 1:** *FEHD also provides toilets for use by the public in venues under its management which are not open 24 hours a day (e.g. toilets at public markets). In addition, apart from FEHD, other government departments may provide toilet facilities for use by the public in venues/facilities under their management (e.g. parks and sports centres under the Leisure and Cultural Services Department, and country parks under the Agriculture, Fisheries and Conservation Department). Venue toilets under the management of FEHD and toilet facilities under the management of other government departments are not covered in this audit review.*

**Photograph 1**

**A free-standing public toilet at Yuen Long**



*Source: Photograph taken by Audit staff in June 2019*

**Photograph 2**

**A public toilet forming part of a building at Sheung Wan**



*Source: Photograph taken by Audit staff in October 2019*

### *Planning for public toilets*

1.7 The Hong Kong Planning Standards and Guidelines (HKPSG — Note 2) provides general guidelines to ensure that, during the planning process, the Government will reserve adequate land to facilitate social and economic development and provide appropriate public facilities (e.g. community facilities and internal transport facilities) to meet the needs of the public. There are no population-based nor other planning standards for the provision of public toilets by FEHD in HKPSG. According to FEHD, new public toilets under FEHD's management are provided on a need basis (e.g. in new cross-boundary control points), and it is not necessary to provide in HKPSG for the provision of public toilets under FEHD's management (see para. 1.4) with reference to a planning standard.

1.8 ***FEHD's planning criteria for public toilets.*** FEHD sets out the criteria for provision of public toilets under its management in FEHD's Handbook on Standard Features for Public Toilets (hereinafter referred to as FEHD Toilet Handbook). In general, consideration will be given to providing public toilets at tourist spots and locations with anticipated high utilisation rates and without adequate alternative toilet facilities in the vicinity (e.g. toilets within public/commercial venues like parks, playgrounds or shopping arcades) to serve the public/tourists.

1.9 The Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap. 123I — B(SF)R) under the Buildings Ordinance (Cap. 123) govern the standards for the provision of sanitary fitments (including the number of waterclosets, urinals and lavatory basins) in regulated buildings (e.g. cinemas, places of public entertainment, restaurants and workplaces). The minimum standard for the provision of sanitary fitments in regulated buildings is prescribed with reference to the numbers of males and females that are present (or likely to be present) in a building. As the number of male/female persons reaches different levels, the prescribed number of sanitary fitments (e.g. waterclosets and urinals) required is increased accordingly.

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**Note 2:** *HKPSG, published by the Planning Department, is a Government manual of criteria for determining the scale, location and site requirements of various land uses and facilities. According to the Planning Department, it is responsible for coordinating the compilation of HKPSG, and the respective government bureaux and departments will from time to time formulate/review their planning standards and guidelines in HKPSG, taking into account their policies and requirements.*

1.10 According to the Architectural Services Department (ArchSD), being the works agent of the Government, there are no comparable regulated buildings for FEHD's public toilets and no defined methodology to determine population size they serve (Note 3). Provision of sanitary fitments for public toilets should be determined according to individual project needs and specific design requirements from FEHD subject to site constraints. According to FEHD, B(SF)R is not applicable to FEHD's public toilets which are not confined to only serving users in a particular building. FEHD Toilet Handbook sets out the standard of provision of sanitary fitments in public toilets under FEHD's management.

### ***Public toilet works projects***

1.11 FEHD has implemented various works projects for provision of public toilets. Apart from constructing new ones and reprovisioning existing ones, since 2000, FEHD has also implemented a Public Toilet Refurbishment Programme to give a new look to public toilets with enhancements in design and facilities. In addition, as the absence of a flushing system in aqua privies may create hygiene, pest and odour problems, FEHD implemented a programme to convert aqua privies into flushing toilets between February 2005 and November 2014. FEHD mainly engages ArchSD as its works agent in implementation of public toilet works projects (Note 4).

1.12 ***Construction, reprovisioning and refurbishment projects.*** Construction, reprovisioning and refurbishment projects of public toilets implemented by ArchSD are usually funded under block votes for Category D projects in the Public Works Programme under the Capital Works Reserve Fund (see also Note 4 to para. 1.11). The Director of Architectural Services is the vote controller of the related block votes. FEHD, as the project proponent, determines the need for such projects and submits

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**Note 3:** *According to ArchSD, the methodology of B(SF)R is to determine the sanitary provisions for toilet facilities ancillary to the regulated buildings based on the population sizes served by the regulated buildings or their areas. Such methodology cannot be applied for FEHD's public toilets because a public toilet is not ancillary to any building.*

**Note 4:** *ArchSD is FEHD's works agent for implementation of Public Toilet Refurbishment Programme and conversion of aqua privies into flushing toilets. For construction and reprovisioning of public toilets, in addition to ArchSD which provides funding for the related works under the Capital Works Reserve Fund, other works departments may also be responsible for the construction and reprovisioning works during implementation of other projects and the works are funded under the related project votes.*

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through ArchSD for funding approval for Category D projects (see paras. 3.4(b) and 3.5). FEHD will also consult District Councils (DCs) and the local communities on the project plans for the construction works. From 2016-17 to 2018-19, 13 new public toilets were built and 10 public toilets reprovisioned, and the estimated total project costs for these projects were \$154.7 million (comprising \$97.8 million for new construction and \$56.9 million for reprovisioning — Note 5). In addition, 27 public toilets were refurbished from 2016-17 to 2018-19 with estimated total project costs of \$128.1 million.

1.13 *Aqua privy conversion programme.* FEHD implemented the conversion programme from February 2005 to November 2014 and the works were funded under Category A projects in the Public Works Programme (Note 6). A total of 441 aqua privies were converted into flushing toilets and the total expenditure was \$740.2 million.

### *Management of public toilets and aqua privies*

1.14 FEHD manages public toilets and aqua privies to upkeep the conditions of toilet facilities and hygiene. As of June 2019, of the total 798 public toilets, the cleansing services for 625 (78%) public toilets were outsourced to contractors under the related contracts for street cleansing services (Note 7). Besides, of the total

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**Note 5:** *For the 13 public toilets newly built and 10 public toilets reprovisioned from 2016-17 to 2018-19, the construction works for:*

- (a) 2 new public toilets (with project cost of \$14.9 million) and 5 reprovisioned public toilets (with project cost of \$20.7 million) were completed by ArchSD under the related block vote for which ArchSD was the vote controller; and*
- (b) the remaining 11 new public toilets (with project cost of \$82.9 million) and 5 reprovisioned public toilets (with project cost of \$36.2 million) were completed under other departments' projects and the costs were charged to the related project votes. The project management of these projects was not covered in this audit review as the project management was under the purview of other departments and, in general, the works involved for public toilets were not the main works of the projects.*

**Note 6:** *A project is upgraded to a Category A project when funding approval is granted by the Finance Committee of the Legislative Council.*

**Note 7:** *The Audit Commission had conducted a review on "Hiring of service contractors and professionals", the results of which (covering FEHD's street cleansing services) were included in Chapter 8 of the Director of Audit's Report No. 63 of October 2014.*

51 aqua privies, the cleansing services for 31 (61%) aqua privies were outsourced to contractors. The cleansing services for the remaining 173 (22%) public toilets and 20 (39%) aqua privies were provided by FEHD staff.

1.15 According to FEHD, the cleansing frequency of public toilets and aqua privies depends on the public demand and usage of the toilets. All public toilets and aqua privies are cleansed at least twice a day. In addition, toilet attendant services are provided in public toilets with high utilisation rates or at tourist spots. In general, toilet attendants work on day and evening shifts at different working hours at a maximum of not exceeding 10 hours per shift per day. As of June 2019, 264 (33% of 798) public toilets were provided with toilet attendants.

1.16 To improve the cleansing condition of public toilets and to relieve the workload of toilet attendants, FEHD has procured the services of dedicated deep cleansing teams starting from March 2019 for toilets with high utilisation rates or located at tourist spots. As of June 2019, services of deep cleansing teams were provided at 186 (23% of 798) public toilets. FEHD has planned to extend such services to all public toilets upon renewal of the respective cleansing services contracts.

1.17 To monitor the performance of contractors providing cleansing services, FEHD staff periodically conduct inspections of the conditions of hygiene, cleanliness and facilities of the public toilets and aqua privies. If deficiencies in cleanliness are found, FEHD would request cleansing contractors to rectify within a short time. If defects in toilet facilities are identified, FEHD would request rectification by cleansing contractors (for minor defects) or its maintenance agents (mainly ArchSD for complicated defects or serious damage — Note 8).

1.18 In 2018-19, FEHD's expenditure in providing public cleansing services was \$3,096 million, which included street cleansing and household waste collection, and management of public cleansing facilities such as public toilets and refuse collection points. As of June 2019, a total of 11,866 staff, including 3,106 FEHD staff and 8,760 contractors' staff, were involved in providing these services. According to

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**Note 8:** *For defects in respect of mechanical equipment (such as malfunctioned hand dryer), FEHD will report the defects to the Electrical and Mechanical Services Department for repair works.*

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FEHD, no breakdown of the expenditure and staff showing the figures solely for provision and management of public toilets was available (Note 9).

### *Responsible sections and offices*

1.19 The main sections and offices of FEHD responsible for the planning, provision and management of public toilets (including aqua privies) are as follows:

- (a) the Headquarters Cleansing and Pest Control Section under Operations Division 3 is responsible for formulating departmental policies and guidelines on environmental hygiene services, including those for public toilets;
- (b) the 19 District Environmental Hygiene Offices (DEHOs — Note 10) under three Operations Divisions are responsible for monitoring and management of district environmental hygiene services and facilities, including public toilets;
- (c) the Planning and Development Section of the Administration Division is responsible for planning, development and coordination of implementation of FEHD capital and minor works projects, including those for public toilets; and
- (d) the Quality Assurance Section of the Grade Management and Development Division is responsible for conducting quality assurance inspections on the services provided by FEHD and service contractors, including public toilets.

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**Note 9:** *According to FEHD, public cleansing services include various services such as street cleansing, household waste collection and management of public cleansing facilities. As of April 2019, there were a total of 34 contracts for street cleansing services (for a 2-year period) at a total cost of about \$2,584 million. According to these 34 contracts, the direct costs related to cleansing services of public toilets were about \$210 million (about 8% of the total contract cost). However, according to FEHD, other costs (e.g. management and administrative costs) were shared by all public cleansing services and could not be separately allocated to public toilet cleansing services.*

**Note 10:** *Of the 19 DEHOs, 2 DEHOs (Yau Tsim and Mong Kok) serve one DC/district (Yau Tsim Mong). Each of the remaining 17 DEHOs serves one DC/district.*



An extract of FEHD's organisation chart as at 30 June 2019 is at Appendix A.

### *Additional funding for the Public Toilet Refurbishment Programme*

1.20 As announced in the 2018 Policy Agenda of the Chief Executive of the Hong Kong Special Administrative Region, comprehensive refurbishment works would be carried out for those public toilets of FEHD with high utilisation rates or located at tourist hotspots. The Financial Secretary also announced in the 2019-20 Budget that the Government would allocate more resources to FEHD for refurbishing its public toilets by phases, improving ventilation and other facilities, as well as enhancing their cleanliness and hygiene. It is estimated that a total expenditure of about \$600 million will be incurred, involving about 240 (30% of 798) public toilets in the coming five years (i.e. 2019-20 to 2023-24).

### **Audit review**

1.21 In May 2019, the Audit Commission (Audit) commenced a review to examine the planning, provision and management of public toilets by FEHD. The audit review has focused on the following areas:

- (a) planning and provision of public toilets (PART 2);
- (b) management of public toilet works projects (PART 3); and
- (c) management of public toilets (PART 4).

Audit has found room for improvement in the above areas, and has made a number of recommendations to address the issues.

### **Acknowledgement**

1.22 Audit would like to acknowledge with gratitude the full cooperation of the staff of FEHD and ArchSD during the course of the audit review.

## **PART 2: PLANNING AND PROVISION OF PUBLIC TOILETS**

2.1 This PART examines FEHD's actions in planning and provision of public toilets, focusing on:

- (a) utilisation of public toilets (paras. 2.2 to 2.10);
- (b) planning and provision of sanitary fitments in public toilets (paras. 2.11 to 2.21);
- (c) planning for new and reprovisioning of public toilets (paras. 2.22 to 2.31);
- (d) planning for refurbishment of public toilets (paras. 2.32 to 2.45); and
- (e) provision of public toilet facilities (paras. 2.46 to 2.60).

### **Utilisation of public toilets**

2.2 Utilisation rate is a key criterion for considering the provision of public toilets by FEHD (see para. 1.8). According to FEHD, public toilets are classified by utilisation rate (measured by average number of daily visitors) into three categories, i.e. high (300 or more daily visitors on average), normal (100 to 299 daily visitors on average) and low (below 100 daily visitors on average).

#### ***Need to continue to enhance the use of technology to assess and review utilisation rates of public toilets on a regular basis***

2.3 Audit noted that, in 2003, FEHD conducted a review and identified 16 public toilets to be closed down after considering that their utilisation rates were on the low side and toilet facilities were already provided in the vicinity. In September 2003, in consulting a DC regarding the closure of a public toilet, FEHD informed the DC that it had regularly reviewed the need for public toilets in new development areas and whether the existing public toilets were still required in view of changes in circumstances over time, and the regular review could ensure that the need of the

public could be met and existing resources no longer required could be reallocated for better use. According to FEHD, it had conducted regular reviews on the need for public toilets and aqua privies during the Public Toilet Refurbishment Programme and aqua privy conversion programme respectively and consulted DCs for demolition or conversion accordingly, and had also reviewed individual cases for new, reprovisioning or proposed closure of toilet facilities to assess the local need, local objections and other toilet facilities provided in the vicinity.

2.4 *Manual counting of utilisation rates.* In April 2019, in response to an enquiry by a Member of the Legislative Council (LegCo), FEHD informed LegCo that 207 public toilets had a high utilisation rate (i.e. with 300 or more daily visitors on average). In response to Audit's enquiries, FEHD provided the utilisation rates (in terms of average number of daily visitors) of all public toilets (see Table 1). In August 2019, FEHD informed Audit that:

- (a) the average number of daily visitors shown in Table 1 was collected by manual counting in 2018 or earlier;
- (b) manual counting was usually conducted by FEHD staff on a need basis and in various specific periods due to operational need (e.g. when a toilet was planned for refurbishment or upon local requests for enlargement or closure); and
- (c) combined means of actual counting and estimation were involved in the manual counting methodology and sampling basis (e.g. number of days selected for counting) and there was no single rule. The related documentation could not be retrieved as different points in time were involved.

**Table 1**

**Utilisation rates of public toilets  
(Manual counting by FEHD in 2018 or earlier)**

| Average no. of daily visitors | No. of public toilets |
|-------------------------------|-----------------------|
| High                          |                       |
| (3,000 or above)              | 14 (2%)               |
| (2,000 - 2,999)               | 17 (2%)               |
| (1,000 - 1,999)               | 54 (7%)               |
| (300 - 999)                   | 122 (15%)             |
|                               | } 207<br>(26%)        |
| Normal (100 - 299)            | 216 (27%)             |
| Low (< 100)                   | 375 (47%)             |
| Total                         | 798 (100%)            |

*Source: FEHD records*

2.5 ***Infrared sensor counting technology introduced.*** FEHD has progressively conducted infrared sensor counting since early 2019. In February and March 2019, FEHD hired a contractor to install infrared sensors at 149 public toilets (Note 11) to count the number of visitors. According to FEHD, infrared sensor counting technology was introduced to collect more precise and useful data for analysis of the utilisation rates of public toilets to facilitate review of cleansing frequency and planning of maintenance of toilet facilities and refurbishment of public toilets. The use of infrared sensor counting technology would be extended to cover all public toilets in late 2019.

2.6 Audit compared the results of infrared sensor counting and manual counting for the 149 public toilets. For 93 (62%) public toilets, there were considerable variances between the utilisation rates found by the two counting methods (see

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**Note 11:** *The contractor was hired at a cost of \$240,000 to install infrared sensors at the entrances of both male and female public toilets/bathroom (covering 149 public toilets at tourist spots or having very high usage rates and 1 bathroom) for seven days for counting the number of persons passing the entrances. The contractor was required to remove all installed devices and submit a statistical report showing the daily/hourly headcount after the seven-day counting period.*

## Planning and provision of public toilets

Table 2). For example, a public toilet at Tai Po with a high utilisation rate (1,000 to 1,999 daily visitors on average) revealed by manual counting was found to have a low utilisation rate (91 daily visitors on average) by infrared sensor counting.

**Table 2**

**Public toilets with variances between the utilisation rates found by manual counting (in 2018 or earlier) and infrared sensor counting (in early 2019)**

| Utilisation rate   |                       | No. of toilets classified by utilisation rate found by infrared sensor counting |               |               |           |                     |               | Total |
|--|-----------------------|---|---------------|---------------|-----------|---------------------|---------------|-------|
|  |                       | High  |               |               |           | Normal<br>(100-299) | Low<br>(<100) |       |
|  |                       | (3,000 or above)  | (2,000-2,999) | (1,000-1,999) | (300-999) |                     |               |       |
| No. of toilets classified by utilisation rate found by manual counting | High (3,000 or above) |   | 3             | -             | 1         | -                   | -             | 4     |
|  | (2,000-2,999)         | 2   |               | 5             | 4         | -                   | -             | 11    |
|  | (1,000-1,999)         | -   | 7             |               | 18        | 3                   | 1             | 29    |
|  | (300-999)             | 8   | 6             | 22            |           | 3                   | -             | 39    |
|  | Normal (100-299)      | 2   | 2             | 1             | 2         |                     | 1             | 8     |
|  | Low (<100)            | -   | -             | -             | 2         | -                   |               | 2     |
| Total  |                       | 12  | 18            | 28            | 27        | 6                   | 2             | 93    |

Legend:  Public toilets with a lower utilisation rate found by infrared sensor counting (39 toilets in total)

Public toilets with a higher utilisation rate found by infrared sensor counting (54 toilets in total)

Source: *Audit analysis of FEHD records*

2.7 In September and October 2019, FEHD informed Audit that:

- (a) for the public toilet at Tai Po in paragraph 2.6, the manual counting data (i.e. 1,000 to 1,999 daily visitors on average) was collected during the 2018 National Day Holidays with a huge inflow of tourists while the

## Planning and provision of public toilets

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infrared sensor counting data (i.e. 91 daily visitors on average) was collected in summer which was not a peak season for tourists. No toilet attendant service was provided at the public toilet;

- (b) some public toilets were located near tourist attractions. The sudden surge of tourists at specific periods or during festive events might contribute to a high utilisation rate in manual counting which was conducted on a need basis to assess the situations. Some toilets were located in the areas previously associated with parallel trade activities or neighbouring construction works. The changes in these activities or projects over time had also affected the utilisation rates of the toilets and led to the variances between manual counting and infrared sensor counting; and
- (c) FEHD was conducting a trial on using the Smart Toilet System with fixed laser ranging sensors at two public toilets to collect continuous utilisation data of the toilets.

2.8 According to FEHD, utilisation rate is a key criterion for considering the provision of public toilets (see para. 1.8) and reviewing cleansing frequency and planning of maintenance of toilet facilities (see para. 2.5), and infrared sensor counting technology would be able to collect more precise and useful utilisation data (see para. 2.5). As FEHD has started to apply the infrared sensor counting technology since early 2019 and would extend the use of it to cover all public toilets in late 2019, Audit considers that FEHD needs to review the effectiveness of the technology and continue to enhance the use of technology to assess and review the utilisation rates of public toilets on a regular basis for planning and management purposes.

## Audit recommendation

2.9 **Audit has *recommended* that the Director of Food and Environmental Hygiene should review the effectiveness of the infrared sensor counting technology and continue to enhance the use of technology to assess and review the utilisation rates of public toilets on a regular basis for planning and management purposes.**

## Response from the Government

2.10 The Director of Food and Environmental Hygiene agrees with the audit recommendation. She has said that FEHD will continue to adopt new technology for people counting on trial use of Smart Toilet System and review the effectiveness of all technologies and the utilisation rates of public toilets on a regular basis.

## Planning and provision of sanitary fitments in public toilets

2.11 According to FEHD Toilet Handbook, the ratio of 1 male to 2 female toilet compartments should be used as a general guideline, unless otherwise specified, and the actual number of toilet compartments should depend on site condition, space availability, usage pattern and operational need. Since April 2004, FEHD has adopted 1:2 male-to-female toilet compartment ratio. Audit noted that this ratio was not fully met (see paras. 2.12 to 2.14) and there was scope for reviewing the guidelines on provision of sanitary fitments (see paras. 2.15 to 2.18).

### *Male-to-female toilet compartment ratio stated in FEHD guidelines not fully met*

2.12 Regarding the male-to-female toilet compartment ratios for the 798 public toilets managed by FEHD as of June 2019, Audit found that 376 (47%) toilets met the 1:2 ratio as stated in its guidelines, 421 (53%) toilets did not meet the 1:2 ratio (i.e. with fewer female compartments than required), and the remaining toilet only had an accessible unisex toilet without male or female toilet. Audit noted that, of the 421 public toilets not meeting the 1:2 ratio, 360 public toilets were constructed or refurbished after 2004 (i.e. after adopting the 1:2 ratio in 2004). The male-to-female toilet compartment ratios of these 360 public toilets were between 1:0 (i.e. without female compartment) and 1:1.9, averaging 1:1.3.

2.13 In September and October 2019, FEHD and ArchSD informed Audit the following:

#### ***FEHD***

- (a) although FEHD had adopted the 1:2 male-to-female toilet compartment ratio since 2004, the standard could not immediately be seen in public toilets

## **Planning and provision of public toilets**

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with works completed in 2004 and the subsequent few years as the design and layout of these toilets had been finalised before 2004;

- (b) most public toilets not meeting the 1:2 ratio were located in the New Territories, which were usually small in size with 4 to 5 compartments in total and subject to site constraints for expansion. These toilets were mainly converted from aqua privies and, in most cases, the walls and ceiling structures of aqua privies were retained during the conversion works to avoid engineering problems and safety issues. In addition, some toilets were with multi-storey design and rearranging part of the male toilet into the female toilet to change the male-to-female toilet compartment ratio to or closer to 1:2 was not practicable;
- (c) a number of public toilets were refurbished or improved under the retrofitting programme for upgrading the barrier-free facilities. The improvement works carried out under this programme might not involve a complete overhaul to the layout of the toilets. Therefore, the male-to-female toilet compartment ratio would not be improved; and

### ***ArchSD***

- (d) the numbers of various sanitary fitments to be provided in each toilet project were first proposed by FEHD. ArchSD, as the works agent of the toilet project, would offer technical advice on whether the site could accommodate the sanitary fitments proposed. FEHD, as the project proponent, would consider whether the design options meet its requirements. After this interactive process, the final layout design, including the number of sanitary fitments, would be endorsed by the Working Group on Upgrading of Public Toilets (see para. 3.2).

2.14 In Audit's view, subject to the review on provision of male and female sanitary fitments in public toilets (see para. 2.18), FEHD needs to, in consultation with ArchSD, take measures to meet the male-to-female toilet compartment ratio as stated in its guidelines as far as practicable.



### *Need to consider reviewing guidelines on provision of sanitary fitments for males and females*

2.15 Since April 2004, FEHD has adopted the ratio of male-to-female toilet compartments (i.e. urinals for male are not included) of 1:2 (from 1:1.5) as a general guideline in planning for construction, reprovisioning and refurbishment of public toilets under its management.

2.16 In September 2019, FEHD informed Audit that, according to its recent infrared sensor counting of 338 public toilets (mainly of higher utilisation rates) in 2019, the average ratio of male-to-female users was 1.8:1. The ratio was 7:1 in one of these public toilets.

2.17 From 2016-17 to 2018-19, a total of 23 public toilets were newly built or reprovisioned. Audit noted the following:

- (a) ***Ratio based on toilet compartments.*** All 23 public toilets met the 1:2 male-to-female toilet compartment ratio according to FEHD Toilet Handbook; and
- (b) ***Ratio based on sanitary fitments.*** For the 23 public toilets, in terms of sanitary fitments (i.e. including both compartments and urinals), the male-to-female ratios were between 1:0.5 and 1:1. For 16 (70%) of these 23 public toilets, the number of female sanitary fitments was smaller than that of male sanitary fitments. Table 3 shows examples on provision of sanitary fitments in five public toilets.

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Table 3

**Provision of sanitary fitments in five public toilets  
newly built or reprovisioned from 2016-17 to 2018-19**

| Toilet | No. of sanitary fitments |               |  |                           | Ratio   |   |
|--------|--------------------------|---------------|--|---------------------------|---|---|
|        | Male compartment<br>(a)  | Urinal<br>(b) | Male compartment and urinal<br>(c) = (a) + (b) | Female compartment<br>(d) | Sanitary fitments for male to female<br>(e) = 1:[(d) ÷ (c)] | Compartment for male to female<br>(f) = 1:[(d) ÷ (a)] |
| A      | 3                        | 8             | 11   | 6                         | 1:0.5   | 1:2   |
| B      | 2                        | 4             | 6  | 4                         | 1:0.7   | 1:2   |
| C      | 4                        | 6             | 10   | 8                         | 1:0.8   | 1:2   |
| D      | 6                        | 7             | 13   | 12                        | 1:0.9   | 1:2   |
| E      | 4                        | 4             | 8  | 8                         | 1:1   | 1:2   |

Source: *Audit analysis of FEHD records*

2.18 Audit noted that FEHD's existing guidelines only covered compartments (adopting 1:2 male-to-female toilet compartment ratio), but not urinals. In Audit's view, there is merit for FEHD to consider reviewing its guidelines on provision of sanitary fitments (including urinals and compartments), taking into account up-to-date information on usage pattern of compartments and urinals, and male and female users of public toilets.

### Audit recommendations

2.19 Audit has *recommended* that the Director of Food and Environmental Hygiene should:

- (a) subject to the review in (b) below, in consultation with the Director of Architectural Services, take measures to meet the male-to-female toilet compartment ratio as stated in FEHD guidelines as far as practicable; and

- (b) **consider reviewing FEHD guidelines on provision of sanitary fitments (including urinals and compartments), taking into account up-to-date information on usage pattern of compartments and urinals, and male and female users of public toilets.**

## **Response from the Government**

2.20 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD will:

- (a) work with ArchSD to take measures to meet the male-to-female toilet compartment ratio as stated in FEHD guidelines as far as practicable; and
- (b) further review the guidelines on the provision of sanitary fitments in public toilets with consideration to usage patterns of compartments and urinals as well as the ratio of male and female users.

2.21 The Director of Architectural Services agrees with the audit recommendation in paragraph 2.19(a). She has said that ArchSD will provide assistance and technical advice to FEHD in implementing this recommendation.

## **Planning for new and reprovisioning of public toilets**

2.22 According to FEHD, in planning for new and reprovisioning of public toilets, consideration is given to the following:

- (a) ***Requests from the public (including local residents, DC Members and LegCo Members).*** ArchSD is FEHD's works agent for implementation of these projects and the Director of Architectural Services is the vote controller of the related block vote of the Capital Works Reserve Fund. After receiving requests for provision of public toilets, FEHD will consider relevant factors and check the availability of suitable sites and, for justified cases, FEHD will submit through ArchSD requests for funding approval and implementation of works projects (see para. 3.4(b)); and

## **Planning and provision of public toilets**

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- (b) *Need for public toilets in new works projects of other government departments.* Construction or reprovisioning of public toilets may be included in new works projects initiated by other government departments after consultation with FEHD, such as provision of public toilets at new public transport interchanges. The initiating department will apply for funding under the related project votes and the related works departments will be responsible for construction and reprovisioning of public toilets during implementation of the projects.

From 2016-17 to 2018-19, 13 new public toilets were built and 10 public toilets were reprovisioned (see Note 5 to para. 1.12).

2.23 According to FEHD Toilet Handbook:

- (a) the need for new and reprovisioned public toilets should be critically examined and fully justified having regard to all relevant factors, including but not limited to existing and anticipated utilisation rates and availability of similar facilities in the vicinity; and
- (b) in general, consideration will be given to providing public toilets at tourist spots and locations with anticipated high utilisation rates and without adequate alternative toilet facilities in the vicinity (e.g. toilets within public/commercial venues like parks, playgrounds or shopping arcades) to serve the public/tourists.

### ***Need to provide more guidelines on the criteria for assessing the need for new and reprovisioning public toilets***

2.24 Regarding the criteria concerning existing and anticipated utilisation rates and availability of similar facilities in the vicinity (see para. 2.23(a)), Audit noted that FEHD had no guidelines elaborating the application of such criteria, including:

- (a) the basis (in terms of utilisation and other toilet facilities in the vicinity) for determining the need for a toilet and the scale of its facilities (e.g. number of waterclosets/urinals when the number of male/female visitors reaches different levels) (see also paras. 2.12 to 2.18 for Audit's findings related to provision of male and female toilet compartments); and

- (b) the basis to determine availability of other toilet facilities in the vicinity (e.g. distance from a proposed public toilet).

2.25 Regarding the criterion concerning the provision of public toilets at tourist spots (see para. 2.23(b)), Audit noted that in March 2017, in response to a LegCo Member's enquiry, the Food and Health Bureau informed LegCo that FEHD had not laid down criteria for defining whether certain public toilets were located within the areas of tourist hotspots.

2.26 In Audit's view, FEHD needs to consider providing more guidelines on the application of the criteria for assessing the need for new and reprovisioning public toilets under the management of FEHD.

### *Need to keep under review the adequacy of public toilets at tourist spots*

2.27 According to FEHD Toilet Handbook, consideration will be given to providing public toilets at tourist spots. Specific considerations for public toilets at tourist spots include providing feature wall on the exterior of the toilets to create a lively atmosphere and providing more pedestal type waterclosets to cater for the needs of overseas tourists.

2.28 Some LegCo Members and DC Members have expressed concerns on inadequate public toilets at tourist spots from time to time. In August and September 2019, FEHD informed Audit that:

- (a) FEHD had assessed the adequacy of the number and facilities of the public toilets at tourist spots having regard to the up-to-date level of utilisation and alternative toilet facilities in the vicinity, and had made best endeavours to address any inadequacy problem of the number and facilities whenever circumstances permit;
- (b) however, owing to the inherent factors of site constraints, the fact that public toilets were never popular with the public at large and the "not in my backyard" mindset of the general public, FEHD could hardly be able

## Planning and provision of public toilets

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to address the inadequacy problems of number and facilities, especially at tourist spots;

- (c) the number of tourists had increased drastically in recent years with over 65 million tourists having visited Hong Kong in 2018. They visited nearly each district of Hong Kong. For traditional tourist attractions, it was quite difficult for FEHD to expand the existing public toilets to keep up with the increase in tourists at these locations as most of these attractions were located in developed areas; and
- (d) to tackle the problem, FEHD endeavoured to ameliorate the inadequacy problem through the use of more efficient facilities/features such as using more powerful hand dryer to dry hands more speedily and using flushing valve system for flushing waterclosets after use to enhance the turnover of using toilets.

2.29 In Audit's view, FEHD needs to make continued efforts to address the problem of inadequate public toilets at tourist spots as far as practicable.

## Audit recommendations

2.30 **Audit has *recommended* that the Director of Food and Environmental Hygiene should:**

- (a) **consider providing more guidelines on the application of the criteria for assessing the need for new and reprovisioning public toilets under the management of FEHD; and**
- (b) **make continued efforts to address the problem of inadequate public toilets at tourist spots as far as practicable.**

### Response from the Government

2.31 The Director of Food and Environmental Hygiene generally agrees with the audit recommendations. She has said that:

- (a) FEHD will keep under review FEHD guidelines and criteria in considering the provision of new and reprovisioning public toilets under its management; and
- (b) there is no specific definition for “tourist spots” in Hong Kong. For new tourist attractions, the planners and operators of these attractions should be responsible for planning the provision of enough toilet facilities to serve the tourists. FEHD will continue to consult the Tourism Commission in reviewing the adequacy of public toilets at tourist spots with a view to better serving the needs of tourists.

### Planning for refurbishment of public toilets

2.32 Since 2000, FEHD has implemented a Public Toilet Refurbishment Programme to give a new look to public toilets with enhancements in design and facilities. Under the Programme, FEHD shortlists a specific number of public toilets for refurbishment works annually. According to FEHD, in drawing up the shortlist, priority is given to public toilets (Note 12) fulfilling the following prevailing criteria:

- (a) of old design which have not undergone major refurbishment;
- (b) with high utilisation rates;
- (c) located in popular scenic areas or at tourist spots; and
- (d) with unsatisfactory internal condition/state of wear and tear.

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**Note 12:** *According to FEHD, priority is also given to aqua privies which are infeasible to be converted into flushing toilets and subject to in-situ refurbishment.*

## Planning and provision of public toilets

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2.33 According to FEHD, prior to 2018-19, only full-scale refurbishment works (Note 13) for public toilets were carried out. However, as only a small number of public toilets could be approved for full-scale refurbishment works each year, and conditions of some public toilets with high utilisation rates might deteriorate rapidly before they would be due for another round of full-scale refurbishment works (see para. 2.35(b)), in 2018-19, refurbishment works of a smaller-scale, namely facelifting was introduced. Public toilets are selected for facelifting works based on the following criteria:

- (a) public toilets with high utilisation rates, which have been dilapidated rapidly but are premature for another round of refurbishment, and subject to overwhelming complaints/criticisms; and
- (b) public toilets which have not undergone refurbishment for quite a long period of time, with unsatisfactory internal condition/state of wear and tear but without structural defects (e.g. spalling), and can be simply made good by facelifting without change of layout.

2.34 ArchSD is FEHD's works agent for implementation of the Public Toilet Refurbishment Programme and the Director of Architectural Services is the vote controller of the related block votes of the Capital Works Reserve Fund. After drawing up a list of proposed public toilets for inclusion in the Refurbishment Programme, FEHD will submit the list to ArchSD for funding approval and implementation. Table 4 shows the number of public toilets included in the Refurbishment Programme from 2016-17 to 2018-19.

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**Note 13:** *According to FEHD, there are two types of refurbishment works, namely full-scale refurbishment and smaller-scale facelifting: (a) full-scale refurbishment will adopt new design, improve toilet layout, beautify exterior wall and replace facilities; and (b) for facelifting of public toilets, the scope of works covers mainly replacement of aged facilities and installation of new features, with the prevailing layout and exterior wall remaining unchanged.*



**Table 4**

**Number of public toilets included in Public Toilet Refurbishment Programme  
(2016-17 to 2018-19)**

| <b>Year of Refurbishment Programme</b> | <b>No. of public toilets included in Refurbishment Programme</b> |
|--|--|
| 2016-17                                | 20   |
| 2017-18                                | 7  |
| 2018-19                                | 15 (Note)  |
| <b>Total</b>                           | <b>42</b>  |

*Source: FEHD records*

*Note: There were 15 public toilets with full-scale refurbishment works under the 2018-19 Public Toilet Refurbishment Programme. In addition, according to FEHD, ArchSD had acceded to its additional requests for carrying out facelifting works for 17 toilets in 2018-19.*

***Some public toilets not refurbished for a long time***

2.35 According to FEHD:

- (a) to facilitate the planning and estimation of the resources required, it has, since 2018, set a target that every public toilet will undergo major refurbishment every 10 years. The 10-year refurbishment cycle is a planning target and not a rigid standard for refurbishing each and every public toilet. FEHD has all along taken into consideration all relevant factors, including internal conditions, state of wear and tear, utilisation rates and location of public toilets as well as the time lapse since the last refurbishment, in deciding whether and when to put a public toilet into the Public Toilet Refurbishment Programme; and
- (b) as the condition of public toilets with higher utilisation rates tends to deteriorate more rapidly and will require more frequent refurbishment, consideration should be given to include these heavily-used public toilets in the annual refurbishment programme at a shorter interval so that they can be refurbished before being dilapidated.

## Planning and provision of public toilets

2.36 As of June 2019, FEHD managed 798 public toilets over the territory. Audit found that:

- (a) 599 (75%) toilets had been built or refurbished within the past 10 years; and
- (b) 199 (25%) toilets had not been refurbished for more than 10 years. Of these 199 toilets:
  - (i) 61 toilets had been included in the Public Toilet Refurbishment Programme in the past 10 years but refurbishment works were yet to be completed; and
  - (ii) 138 toilets had not been refurbished for 11 to 18 years (averaging 13 years) and had not been included in the Refurbishment Programme in the past 10 years, of which 29 toilets (21%) had high utilisation rates (see Table 5).

**Table 5**

**Public toilets not refurbished for more than 10 years and not included in Public Toilet Refurbishment Programme in the past 10 years (June 2019)**

| Time counting from last refurbishment date to June 2019 | No. of public toilets                                |   |                          |
|---|--|---|--------------------------|
|   | With low to normal utilisation rate<br>(Note)<br>(a) | With high utilisation rate<br>(Note)<br>(b) | Total<br>(c) = (a) + (b) |
|   | More than 10 to 12 years                             | 70  | 9                        |
| More than 12 to 15 years                                | 35   | 10  | 45                       |
| More than 15 to 18 years                                | 4  | 10  | 14                       |
| Total   | 109<br>(79%)   | 29<br>(21%)                                 | 138<br>(100%)            |

Source: *Audit analysis of FEHD records*

Note: *The utilisation rates were based on manual counting by FEHD in 2018 or earlier (see para. 2.4).*

2.37 In September and October 2019, FEHD informed Audit that:

- (a) the key criteria for including a public toilet in the Public Toilet Refurbishment Programme were always the utilisation rate and overall condition of the public toilet; and
- (b) regarding the 138 public toilets not refurbished for more than 10 years and not included in the Refurbishment Programme in the past 10 years (see Table 5 in para. 2.36):
  - (i) of the 109 toilets with low to normal utilisation rates, the vast majority of them were converted from aqua privies with low utilisation rates and hence were given a lower priority for refurbishment; and
  - (ii) of the 29 toilets with high utilisation rates, 20 toilets had not been refurbished for more than 12 years to 18 years. FEHD would consider including 19 of the 20 toilets in the 2020-21 Refurbishment Programme. For the remaining toilet, FEHD considered it not cost-effective to refurbish this toilet as it would be closed in 2019 for demolition. A temporary toilet would be put in place until the completion of the reprovisioned toilet in 2022.

2.38 Under the Enhanced Public Toilet Refurbishment Programme (see para. 1.20), the Government will allocate additional resources of about \$600 million to commence full-scale refurbishment or facelifting works for about 240 public toilets of FEHD by phases in the five years from 2019-20 to 2023-24. According to FEHD:

- (a) for the Enhanced Public Toilet Refurbishment Programme, as the condition of the public toilets would vary over time, FEHD would adopt an incremental approach to make the best decision in the selection of toilets for refurbishment each year based on the latest observations; and

## **Planning and provision of public toilets**

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- (b) 42 public toilets (comprising 20 toilets for full-scale refurbishment and 22 toilets for facelifting works) had been selected with funding approved for implementation under the Enhanced Public Toilet Refurbishment Programme in 2019-20. In selecting the 42 public toilets, FEHD had considered both the updated manual headcount data (see para. 2.4) about utilisation rates collected by DEHOs and infrared sensor counting (where available) as well as overall condition of the public toilets.

2.39 Audit noted that some public toilets had not been refurbished for a long time (see para. 2.36(b)). In Audit's view, FEHD needs to, in collaboration with ArchSD, prioritise public toilets for inclusion in the Enhanced Public Toilet Refurbishment Programme having regard to their utilisation rates and conditions, particularly those with high utilisation rates and in ageing conditions.

### ***Need to consult stakeholders of tourism industry regarding conditions of public toilets at tourist spots***

2.40 According to FEHD, in planning for refurbishment of public toilets, priority will be given to public toilets located in popular scenic areas or at tourist spots (see para. 2.32(c)). Audit noted that, to implement the initiative of improving facilities and cleansing services of public toilets at major tourist spots as announced in the 2018 Policy Agenda, FEHD consulted the Tourism Commission and came up with a list of 23 public toilets that would require improvements in December 2018. However, prior to this, FEHD had not regularly consulted the Tourism Commission or other stakeholders of the tourism industry regarding conditions of public toilets at tourist spots.

2.41 Standard of provision and cleanliness of public toilets plays a part in shaping tourists' view of the environmental hygiene of Hong Kong. In Audit's view, FEHD needs to consult stakeholders of tourism industry (e.g. the Tourism Commission) on a regular basis for planning the related refurbishment works.

## **Audit recommendations**

2.42 **Audit has *recommended* that the Director of Food and Environmental Hygiene should:**

- (a) **in collaboration with the Director of Architectural Services, prioritise public toilets for inclusion in the Enhanced Public Toilet Refurbishment Programme having regard to their utilisation rates and conditions, particularly those with high utilisation rates and in ageing conditions; and**
- (b) **consult stakeholders of tourism industry (e.g. the Tourism Commission) on a regular basis for planning the related refurbishment works.**

## **Response from the Government**

2.43 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD will:

- (a) collaborate with ArchSD to continue to work out the priority list of public toilets for refurbishment at appropriate interval having regard to their utilisation rates, services/overall conditions and locations, as well as the time lapse since they were last refurbished; and
- (b) continue to consult the Tourism Commission on a regular basis for planning the public toilet refurbishment works.

2.44 The Director of Architectural Services agrees with the audit recommendation in paragraph 2.42(a). She has said that ArchSD will provide assistance and technical advice to FEHD in implementing this recommendation.

2.45 The Commissioner for Tourism shares the view that standard of provision and cleanliness of public toilets may alter tourists' perception on Hong Kong and concurs with the audit recommendation in paragraph 2.42(b).

### Provision of public toilet facilities

2.46 Audit examination found that there was scope for improvement in the provision of accessible unisex toilets (see paras. 2.47 to 2.50) and portable toilets (see paras. 2.51 to 2.54), and in exploring new toilet facilities and technologies (see paras. 2.55 to 2.57).

#### *Some public toilets not provided with accessible unisex toilets*

2.47 It is the Government's established policy objective to provide barrier-free facilities for persons with disabilities, thereby facilitating them to live independently and fully integrate into the community. In addition, barrier-free facilities could benefit the elderly. According to FEHD Toilet Handbook:

- (a) provision of accessible unisex toilet should comply with the requirements in the prevailing "Design Manual: Barrier Free Access" (issued by the Buildings Department in 2008 — Note 14);
- (b) the accessible unisex toilet should, where possible, be accessible from a public corridor or directly from outside the building so that the toilet can be used by persons with a disability, wheelchair users, the elderly and the elderly with frailty, with assistance from members of either sex if necessary; and
- (c) the accessible unisex toilet should normally be at ground floor level. If not, it should be accessible by wheelchair users with special designs (i.e. an accessible route should be provided for wheelchair users by provision of an accessible ramp or lift).

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**Note 14:** *The Buildings Department is responsible for updating a Design Manual concerning barrier-free access and the latest version is "Design Manual: Barrier Free Access 2008". According to the Design Manual, where toilet is provided on a floor, at least one shall be designed as an accessible unisex sanitary facility for use by persons of both sexes and access to which does not necessitate traversing an area reserved for one sex only.*

## Planning and provision of public toilets

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2.48 Audit noted that, as of June 2019, of the 798 public toilets managed by FEHD, only 380 (48%) toilets were provided with accessible unisex toilets. Of the remaining 418 (52%) public toilets not provided with accessible unisex toilets, 292 (70% of 418) toilets had been either constructed (15 toilets) or refurbished (277 toilets) after 2008 (i.e. after the promulgation of the “Design Manual: Barrier Free Access” in 2008 — see para. 2.47(a)).

2.49 In September 2019, FEHD and ArchSD informed Audit of the following:

- (a) **FEHD.** Of the 798 public toilets, 441 were converted from aqua privies, which had five compartments or below. Most of these toilets were at remote areas or within the boundary of rural villages with difficulty for provision of additional accessible unisex toilets due to site constraints. The reasons for not providing accessible unisex toilets also included restriction by the building structures, local objection received and land restriction for provision of accessible unisex toilets; and
- (b) **ArchSD.** Of the 418 public toilets not provided with accessible unisex toilets:
  - (i) 263 toilets had already been considered in the Retrofitting Programme for barrier-free facilities but the majority of them had been found infeasible;
  - (ii) 16 toilets had been included in the Public Toilet Refurbishment Programme; and
  - (iii) further studies of the remaining 139 toilets would be conducted.

2.50 According to FEHD Toilet Handbook, accessible unisex toilets (which could also be used by the elderly) should, where possible, be provided (see para. 2.47(b)). Audit noted that 418 (52%) of the 798 public toilets managed by FEHD were not provided with accessible unisex toilets (see para. 2.48). While some of the 418 public toilets could not be provided with accessible unisex toilets (e.g. due to site constraints and technical feasibility issues — see para. 2.49(a) and (b)(i)), further studies would be conducted on 139 public toilets (see para. 2.49(b)(iii)). In Audit’s view, FEHD needs to, in collaboration with ArchSD, take measures to

## **Planning and provision of public toilets**

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provide accessible unisex toilets (e.g. under the Public Toilet Refurbishment Programme) as far as practicable.

### ***Need to keep under review the provision of portable toilets***

2.51 According to FEHD, portable toilets are provided in various situations, including during temporary closure of public toilets for refurbishment, for public functions/events, and where no toilet facilities are available and the need for a public toilet is established but there are constraints on construction of a public toilet (e.g. site constraints). FEHD engages a contractor to supply and manage (e.g. cleansing and repair services) the portable toilets. The cleansing frequency of portable toilets varies among locations, ranging from three times a day to twice a week.

2.52 The current portable toilet management contract was awarded to a contractor at a contract value of \$45 million for three years from March 2018 to February 2021. According to the contract, portable toilets are provided at 145 locations for long-term service (Note 15). Audit noted that 120 (83%) of 145 locations were also included in the previous 3-year contract (with contract period from March 2015 to February 2018), indicating that portable toilets had been provided at some locations for a long time, with the longest case at Central and Western District for 15 years.

2.53 In September and October 2019, FEHD informed Audit that it had:

- (a) initiated in February 2019 a mechanism involving FEHD's Headquarters and DEHOs to review the provision of portable toilets, and issued new guidelines on portable toilets in September 2019 to request DEHOs to conduct regular review and gather objective utilisation data of portable toilets to ascertain the service needs, and whether the provision of portable toilets can be terminated or whether permanent public toilets are warranted; and

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**Note 15:** *According to the contract, long-term service means provision of portable toilet services throughout the contract period or for a continuous duration of more than 180 days.*



- (b) hired contractors to install infrared sensors at all 179 portable toilets at 100 locations in the third quarter of 2019 to review the utilisation rates of portable toilets. Based on the assessment criteria, FEHD would consider ceasing the portable toilet service with very low public demand and providing new public toilets to replace the portable toilets in case the demand is high.

2.54 In Audit's view, as the hygiene condition and facilities/features of portable toilets are substandard compared with other permanent toilets, FEHD needs to keep under review the provision of portable toilets with a view to assessing the need for the service and for replacing them with permanent toilets.

### ***Need to continue to explore new toilet facilities and technologies to enhance public toilet services***

2.55 According to FEHD, in addition to the prevailing design guidelines set out in FEHD Toilet Handbook, FEHD will gradually provide or retrofit new and refurbished toilets with enhanced design features/installations to improve public toilet services, including:

- (a) light-emitting diode lighting with replaceable light bulbs;
- (b) automatic sensor soap dispenser for each wash hand basin;
- (c) at least two electric hand dryers of more powerful model with drip tray and waterproof power sockets at suitable places in the common areas;
- (d) lockable stainless steel jumbo roll toilet paper holders in toilet compartments;
- (e) blower fans of high drying speed (with timer control) fitted with air-boot with enhanced design to assist evaporation of moisture underneath the wash hand basins;
- (f) drinking water dispensers outside public toilets as far as practicable subject to site condition; and

## Planning and provision of public toilets

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- (g) placing manhole covers of public toilets at inconspicuous locations and away from the toilet entrances as far as practicable.

2.56 In September and October 2019, FEHD informed Audit that FEHD:

- (a) would adopt the enhanced features/installations of cabinet wash hand basin system and air-conditioning systems with air curtain on a trial basis to assess and confirm their feasibility and cost-effectiveness; and
- (b) had put on trial a number of new technologies such as atomised ozonated water technology and nano bubble technology in the flushing system to inhibit bacteria growth and degrade odour molecules, nano plasma driven catalyst air purification and nano confined catalytic oxidation technology to abate odour and improve air quality, microalgae green wall to absorb carbon dioxide for air purification and enhance the aesthetic aspect as well as Smart Toilet System to improve toilet management for assessing their effectiveness. FEHD had also been exploring the application of other new technologies such as the use of antibacterial coating on urinals and waterclosets to inhibit bacterial growth and self-sanitising handles to provide sterilisation on the surface.

2.57 In Audit's view, FEHD needs to continue to explore new toilet facilities and technologies to enhance public toilet services, taking into account FEHD's and counterparts' experiences in provision and maintenance of public toilets.

## Audit recommendations

2.58 **Audit has recommended that the Director of Food and Environmental Hygiene should:**

- (a) **in collaboration with the Director of Architectural Services, take measures to provide accessible unisex toilets (e.g. under the Public Toilet Refurbishment Programme) as far as practicable;**

- (b) **keep under review the provision of portable toilets with a view to assessing the need for the service and for replacing them with permanent toilets; and**
- (c) **continue to explore new toilet facilities and technologies to enhance public toilet services, taking into account FEHD's and counterparts' experiences in provision and maintenance of public toilets.**

## **Response from the Government**

2.59 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD:

- (a) will collaborate with ArchSD under the Public Toilet Refurbishment Programme to endeavour to provide accessible unisex toilets as far as practicable;
- (b) has embarked on exploring the feasibility of turning those portable toilets with long-term need into permanent toilets, with regard to the utilisation rates of the toilets, technical feasibility of construction works, availability of resources and public support; and
- (c) will continue to explore the application of up-to-date toilet facilities and new technologies, taking into account experiences in provision and maintenance of public toilets to enhance the toilet services.

2.60 The Director of Architectural Services agrees with the audit recommendation in paragraph 2.58(a). She has said that ArchSD will provide assistance and technical advice to FEHD in implementing this recommendation.

## **PART 3: MANAGEMENT OF PUBLIC TOILET WORKS PROJECTS**

3.1 This PART examines actions taken by ArchSD and FEHD in managing public toilet works projects, focusing on:

- (a) construction, reprovisioning and refurbishment projects (paras. 3.2 to 3.17); and
- (b) aqua privy conversion programme (paras. 3.18 to 3.29).

### **Construction, reprovisioning and refurbishment projects**

3.2 FEHD mainly engages ArchSD as its works agent in implementation of public toilet works projects. Since 2000, FEHD and ArchSD have set up a Working Group on Upgrading of Public Toilets (hereinafter referred to as the Working Group – Note 16) which holds frequent discussions on how to optimise FEHD’s public toilets to ensure that the design of public toilet facilities can blend well with the surrounding environment and keep up with the times, with a view to making the public toilet facilities hygienic, clean, safe and decent. The Working Group will consider the following matters relating to public toilets:

- (a) planning and implementation of the Public Toilet Refurbishment Programme;
- (b) reviewing the prevailing public toilet standard features prescribed by FEHD in relation to the layout/elevation plan and the colour/material scheme for public toilets under FEHD; and
- (c) application of prevailing public toilet standard features prescribed by FEHD to new construction, refurbishment or reprovisioning projects under FEHD.

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**Note 16:** *The Working Group is chaired by a Deputy Director of FEHD, with members from FEHD and ArchSD.*

## Management of public toilet works projects

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3.3 The construction, reprovisioning and refurbishment of public toilets are carried out through the following channels:

- (a) for construction and reprovisioning of public toilets (including the conversion of some aqua privies not covered by the aqua privy conversion programme mentioned in paras. 3.18 and 3.19), the projects implemented by ArchSD (Note 17) are usually funded under the block vote for minor building works (Head 703 (Buildings), Subhead 3101GX controlled by ArchSD — Note 18) of the Capital Works Reserve Fund, or as Category A projects in the Public Works Programme funded under the Capital Works Reserve Fund (e.g. the aqua privy conversion programme or any district-wide bundled public toilet projects in future); and
- (b) for refurbishment projects under the Public Toilet Refurbishment Programme, they are implemented by ArchSD and funded under the block vote for refurbishment works (Head 703 (Buildings), Subhead 3004GX controlled by ArchSD — Note 19) of the Capital Works Reserve Fund.

3.4 ***Procedures in implementation of public toilet projects.*** For construction or reprovisioning of a public toilet implemented by ArchSD, the procedures are, in general, as follows:

- (a) ***Consultation and feasibility study.*** After examining the need for construction or reprovisioning of a public toilet (see para. 2.23(a)), FEHD will conduct consultation with local communities and DC Members, and

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**Note 17:** *Construction and reprovisioning of public toilets implemented under other departments' projects are funded by the related project votes with works carried out by the related works departments.*

**Note 18:** *Minor building works (including alterations, additions, improvement works and fitting-out works) are funded under this block vote (Head 703, Subhead 3101GX). The Minor Building Works Committee, chaired by the Director of Architectural Services, is authorised to approve expenditure for individual items not exceeding \$20 million.*

**Note 19:** *Refurbishment works (including renewing or replacing building elements and facilities to enhance health and hygiene, public safety and security, and upgrading building standards and planned maintenance works) are funded under this block vote (Head 703, Subhead 3004GX). The Director of Architectural Services is authorised to approve expenditure for individual items not exceeding \$30 million.*

## Management of public toilet works projects

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check the availability of suitable site and apply for land allocation. Upon receiving the proposal with project scope from FEHD, ArchSD will carry out technical feasibility study and preliminary design;

- (b) ***Funding approval.*** After obtaining local support and approval for land allocation and completion of technical feasibility study, FEHD will submit a funding request to the Minor Building Works Committee through ArchSD for the construction or reprovisioning project;
- (c) ***Detailed design.*** After obtaining funding approval, ArchSD will carry out detailed design for the construction or reprovisioning works and seek approval from the Working Group. FEHD will consult local communities and DC Members on the approved project plan and, if necessary, handle land allocation issues; and
- (d) ***Implementation of works and handover.*** After the project plan is finalised, ArchSD will implement the construction or reprovisioning works. After the works are completed, ArchSD will hand over the public toilet to FEHD for public use.

3.5 For refurbishment projects under the Public Toilet Refurbishment Programme, upon determining the list of public toilets and aqua privies to be included in the Refurbishment Programme annually, FEHD will submit a funding request to ArchSD for inclusion in the block vote in annual Estimates for LegCo's approval in the coming financial year for implementation. After obtaining funding approval, the procedures will be the same as those for implementing construction or reprovisioning projects (see para. 3.4(c) and (d)).

3.6 ***Works arrangement for implementation of public toilet projects.*** According to ArchSD, there are different ways to implement public toilet projects. ArchSD has a list of term consultants, term contractors and term design-and-build contractors, which have been engaged through open tender, for implementation of minor building works and refurbishment works. In general, public toilet projects will be implemented as follows:

- (a) ArchSD normally issues assignment letters and works orders to the term consultants and contractors respectively as appropriate for implementation of public toilet projects;

## Management of public toilet works projects

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- (b) for public toilet projects designed by consultants, when the construction or refurbishment works are properly specified after detailed design, apart from issuing works orders to the term contractors to carry out the works, ArchSD may also engage contractors for carrying out the works through open tender; and
- (c) for projects assigned to term design-and-build contractors, ArchSD will monitor the design development for meeting various requirements.

ArchSD is responsible for administering consultancy agreements and works contracts (including issuing works orders, monitoring the progress and quality of works, and certifying completion of works).

### *Scope for improvement in construction and reprovisioning of public toilets*

3.7 According to ArchSD, the target works period for construction or reprovisioning of a public toilet is usually nine months (which does not provide any allowance for slippage — Note 20). From 2016-17 to 2018-19, for the construction and reprovisioning of public toilets initiated by FEHD, ArchSD completed construction of two public toilets (involving project cost of \$14.9 million) and reprovisioning of five public toilets (involving project cost of \$20.7 million) (see Note 5 to para. 1.12). For the two new public toilet projects, they were completed about 1 month and 9 months later than their respective original target completion dates (Note 21). For the five public toilet reprovisioning projects, they were carried out by

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**Note 20:** *According to ArchSD: (a) there are various causes for a construction contract or works order to be completed beyond the target completion date stated in the contract or works order. Some causes (e.g. inclement weather or disruption due to local issues) are outside the control of the contractor and extensions of time will be granted to the contractor; (b) for proper contract management, the target completion date in a contract or works order will not include allowance for such extensions of time; and (c) these events are common in construction and therefore contracts completed beyond the original target completion dates due to the encountering of such events cannot be regarded as delay.*

**Note 21:** *According to ArchSD, after assessment of all extensions of time (see Note 20) entitled by the contractors, one of the two new public toilet projects was completed within the extended completion date and the remaining new project was completed 4 months later than the extended completion date.*

## Management of public toilet works projects

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the same term contractor and were completed about 7 to 11 months later than their respective original target completion dates (Note 22). Audit noted that there was scope for improvement in management of a public toilet reprovisioning project which was completed 11 months later than the original target completion date (see Case 1).

### Case 1

#### **Delay in completing the works for reprovisioning a public toilet (May 2012 to October 2019)**

1. In May 2012, FEHD conducted local consultation for reprovisioning of a public toilet in the North District (Toilet F — Note) and no adverse comment was received. In October 2013, land allocation of a new site for reprovisioning of Toilet F was approved. In January 2015, the funding request for reprovisioning of Toilet F was approved. In August 2015, ArchSD engaged a consultant (Consultant X) for works design and contract administration.

2. In July 2016, ArchSD planned to issue a works order to a contractor (Contractor A) for implementation of the reprovisioning works of Toilet F with commencement date in the same month (target to be completed in 9-month period by April 2017). However, due to shortage of labour resources of Contractor A, ArchSD finally issued a works order of \$4.7 million to Contractor A with commencement date in October 2016 and target completion date in July 2017. In November 2016 and February 2017, ArchSD issued two letters to Contractor A expressing concern on slow progress of works.

3. In March 2017, in response to an objection received from a village representative stating that the new Toilet F would cause “Fung Shui” problem, the construction works were suspended. After several rounds of discussion with the village representative and villagers, FEHD agreed to conduct enhanced beautification works at Toilet F, and the construction works resumed in June 2017.

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**Note 22:** *According to ArchSD, after assessment of all extensions of time entitled by the contractor for three of the five public toilet reprovisioning projects, the three public toilets were completed 5 to 10 months later than their respective extended completion dates. As of September 2019, extension of time assessment for the remaining two public toilet reprovisioning projects was still in progress and the delay period was yet to be ascertained.*



**Case 1 (Cont'd)**

4. Between February and June 2018, Consultant X issued four warning letters to Contractor A for unsatisfactory performance, including applying uncertified structural materials, site progress slippage, inadequate resources and unsatisfactory management and coordination.

5. In June 2018, after receiving Contractor A's undertaking to carry out the outstanding works for Toilet F (including 21 items of defective or outstanding works, such as defective wall partition and outstanding testing and commissioning works of electrical system), ArchSD certified that the works were substantially completed. In August 2018, Consultant X issued two warning letters to Contractor A for slow progress in completing certain critical outstanding items (e.g. water quality test). In the same month, ArchSD issued a warning letter to Contractor A for slow progress in completing the critical outstanding items for Toilet F.

6. In September 2018, the new Toilet F was handed over to FEHD. However, the villagers objected to the opening of the toilet until completion of beautification works. In December 2018, the scope of the beautification works (e.g. fence wall and greening) was finalised. In January 2019, ArchSD issued a works order of \$370,000 to another contractor for the beautification works (at location outside the toilet). The beautification works were substantially completed in May 2019 and handed over to FEHD in July 2019. Toilet F has been opened for public use since 11 October 2019.

7. In September and October 2019, ArchSD and FEHD informed Audit of the following:

- (a) **ArchSD.** The works were targeted to be completed in July 2017 and were eventually completed in June 2018, which involved a period of 334 days (about 11 months) comprising: (i) 95 days (3.1 months) of works suspension due to villagers' objection; (ii) 9 days (0.3 month) due to inclement weather; and (iii) 230 days (7.6 months) of delay due to unsatisfactory performance of Contractor A, which had been reflected in the contractor's performance reports; and
- (b) **FEHD.** As time was required for liaising with ArchSD and village representatives on the delivery of the beautification works, the opening of Toilet F for public use could only take effect from 11 October 2019.

### Case 1 (Cont'd)

#### *Audit comments*

8. While the construction works for the new Toilet F were targeted to be completed in July 2017 (see para. 2), the toilet was eventually opened in October 2019. Audit noted a delay of about 8 months in completing the construction works due to unsatisfactory performance and slow progress of Contractor A (see paras. 4, 5 and 7(a)). Inadequate resource was one of the contributory factors for Contractor A's unsatisfactory performance. In Audit's view, ArchSD needs to closely monitor to ensure that adequate resources are deployed by term contractors to carry out public toilet works projects.

*Source:* Audit analysis of ArchSD and FEHD records

*Note:* The re-provisioning included demolition of an aqua privy (which was excluded from the aqua privy conversion programme as the concerned villagers objected to the proposed in-situ conversion and proposed relocation of the aqua privy to another site) and construction of a new flushing toilet at a new site.

#### ***Long time taken in completing refurbishment works of some public toilets***

3.8 FEHD conducted reviews in 2016 and 2018 on the workflow of the Public Toilet Refurbishment Programme with a view to expediting the completion of projects. Based on the reviews conducted, the overall timeline for taking forward a refurbishment project was about 4 to 5 years, comprising:

- (a) 1 year from recommending inclusion of a public toilet in the Refurbishment Programme to obtaining funding approval of relevant block vote in annual Estimates by LegCo in the coming financial year for implementation;
- (b) 2 to 3 years for detailed design, including designing the toilet layout and seeking approval from the Working Group, conducting local consultation and handling land allocation issues; and
- (c) 1 year for implementing the construction works.

## Management of public toilet works projects

According to FEHD, the timeline was a rough estimation based on experience for reference of members of the Working Group.

3.9 As shown in Table 6, as of August 2019:

- (a) for 160 public toilets included in the Public Toilet Refurbishment Programmes between 2011-12 and 2018-19 (Note 23) after obtaining funding approval, 58 (36%) were under design, 26 (16%) with works in progress, 68 (43%) completed and 8 (5%) withdrawn from the Programmes; and
- (b) of the 84 (i.e. 58 under design + 26 with works in progress) public toilets with works not yet completed, 44 (i.e. 25 under design + 19 with works in progress) toilets had been included in the Refurbishment Programmes between 2011-12 and 2015-16 for about four to eight years after obtaining funding approval.

Audit examined a public toilet project with works still in progress for eight years after inclusion in the Refurbishment Programme in 2011-12, and found that there was room for improvement in implementing the refurbishment works (see Case 2).

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**Note 23:** *As of August 2019, the refurbishment projects prior to the 2011-12 Refurbishment Programme were completed.*

## Management of public toilet works projects

Table 6

**Progress of works for public toilets included in  
Public Toilet Refurbishment Programme  
(August 2019)**

| Year of Refurbishment Programme | Number of public toilets            |                                    |                             |   | Total number of public toilets included in Refurbishment Programme<br>(e) = (a) + (b) + (c) + (d) |
|---------------------------------|-------------------------------------|------------------------------------|-----------------------------|---|---|
|                                 | With works under design<br>(Note 1) | With works in progress<br>(Note 2) | With works completed<br>(c) | Withdrawn from the Programme<br>(Note 3)<br>(d) |   |
|                                 | (a)                                 | (b)                                |                             |   |   |
| 2011-12                         | 1                                   | 3                                  | 23                          | 1   | 28  |
| 2012-13                         | 1                                   | 2                                  | 24                          | 4   | 31  |
| 2013-14                         | 25 } 8                              | 19 } 7                             | 15                          | —   | 30  |
| 2014-15                         | 6                                   | 2                                  | 4                           | 2   | 14  |
| 2015-16                         | 9                                   | 5                                  | —                           | 1   | 15  |
| 2016-17                         | 13                                  | 5                                  | 2                           | —   | 20  |
| 2017-18                         | 5                                   | 2                                  | —                           | —   | 7   |
| 2018-19                         | 15                                  | —                                  | —                           | —   | 15  |
| Total                           | 58<br>(36%)                         | 26<br>(16%)                        | 68<br>(43%)                 | 8<br>(5%)                                       | 160<br>(100%)   |

Source: ArchSD and FEHD records

Note 1: According to ArchSD, the public toilets with works under design included those at tender stage.

Note 2: According to ArchSD, the public toilets with works in progress included those awaiting site possession to commence works.

Note 3: According to ArchSD, the public toilets were withdrawn from the Refurbishment Programme due to various reasons, such as objections received or the toilets going to be demolished.

**Case 2**

**Long time taken in refurbishing a public toilet  
(January 2011 to October 2019)**

1. In January 2011, ArchSD approved funding for refurbishing a public toilet in Yuen Long (Toilet G) in the 2011-12 Public Toilet Refurbishment Programme. In August 2012, the layout plan for Toilet G was completed and approved by the Working Group, which included provision of an accessible unisex toilet. In July 2013 and January 2014, local consultation was conducted on refurbishment of Toilet G and no adverse comment was received. In February 2014, land allocation for Toilet G (including additional area for accessible unisex toilet) was approved.
2. In July 2014, when ArchSD planned to commence the refurbishment works at Toilet G, FEHD received local objections requesting refurbishment works to be carried out without extending the toilet block for accessible unisex toilet. In November 2014, ArchSD engaged a consultant (Consultant Y) to revise the layout plan without accessible unisex toilet. In April 2015, Consultant Y informed ArchSD that the refurbishment scheme for Toilet G was structurally feasible based on available information and visual inspection.
3. In October 2015, the Working Group approved the revised design (i.e. without accessible unisex toilet) after considering the local objections and that the accessible unisex toilet might impose adverse impacts on the manoeuvring of desludging vehicle (as the open space for parking might be reduced).
4. In May and July 2016, when seeking local views on the approved revised design, local residents and a DC Member requested a bio-treatment plant (for treating waste by a biological process and recirculating the treated effluent for flushing purpose) to be installed at Toilet G. ArchSD advised that installation of the bio-treatment plant was beyond the ambit of the Refurbishment Programme (which involved refinishing and renewal works to the existing facilities), and FEHD needed to submit funding request under minor building works. Between July 2016 and November 2017, ArchSD liaised with FEHD and followed up with Consultant Y to explore the feasibility of installing the bio-treatment plant. In November 2017, FEHD noted that the DC Member no longer insisted on installing the bio-treatment plant in Toilet G.

### Case 2 (Cont'd)

5. In January 2018, FEHD informed ArchSD to proceed with the refurbishment works of Toilet G based on the revised design approved in October 2015 (see para. 3). In August 2018, ArchSD awarded a works contract of \$1.97 million to a contractor by open tender (Contractor B) for the refurbishment works, and the works commenced in the same month with target completion date in February 2019.

6. In September 2018, Contractor B notified ArchSD that the structural brick walls of Toilet G were in poor condition after removal of finishes and rendering, and the works had to be suspended due to safety concern. Consultant Y recommended replacing the defective bricks to rectify the existing unsatisfactory condition. In April 2019, ArchSD accepted Consultant Y's recommendation but considered that the quotation of Contractor B for replacing the defective bricks of structural brick walls at \$1.35 million was exceptionally high, and decided to terminate the contract and assign another contractor to carry out the remaining works. Contractor B was paid an amount of \$0.3 million for the works carried out when the contract was terminated.

7. In May 2019, ArchSD issued a works order of \$1.5 million to another contractor for carrying out the remaining refurbishment works for Toilet G, with revised target completion date of November 2019.

8. In September and October 2019, ArchSD and FEHD informed Audit of the following:

- (a) **ArchSD.** It took about seven years (from January 2011 to January 2018) to work out the design due to various factors beyond ArchSD's control including land allocation/acquisition and ad hoc requests arising from several local consultations. In addition, ArchSD had to engage another contractor to continue the works in May 2019 in order to avoid the excessive variation cost claimed by Contractor B; and
- (b) **FEHD.** From January 2011 to January 2018, ArchSD and FEHD had worked out the design which could finally address all concerns raised by different stakeholders throughout the period and resolve local objections for implementation of refurbishment works. For the delay in refurbishment works due to some unexpected structural safety concerns relating to the poor brick wall condition of Toilet G, the deferment of the project in addressing the structural safety concerns was inevitable and considered necessary to ensure safety. The delay in completion of Toilet G was an isolated case.

**Case 2 (Cont'd)**

***Audit comments***

9. As of October 2019, refurbishment works for Toilet G had not yet been completed (i.e. eight years after funding was approved in January 2011). Audit noted that, in April 2015, Consultant Y informed ArchSD that the refurbishment scheme of Toilet G was structurally feasible based on available information and visual inspection (see para. 2). However, in September 2018, the refurbishment works needed to be suspended due to structural integrity concern arising from the poor conditions of structural brick walls after removal of finishes and rendering (see para. 6). In the event, ArchSD had to engage another contractor to continue the works in May 2019 with revised target completion date of November 2019 (see para. 7).

10. In Audit's view:

- (a) ArchSD needs to take measures to complete public toilet works projects as soon as practicable, including assessment of the latest conditions of structural brick walls of public toilets under refurbishment; and
- (b) FEHD needs to, in collaboration with ArchSD, expedite actions in opening Toilet G for public use.

*Source: Audit analysis of ArchSD and FEHD records*

3.10 In April 2019, FEHD informed LegCo Panel on Food Safety and Environmental Hygiene that:

- (a) the overall timeline for refurbishment took about 2 to 3 years, while the whole process for facelifting works required about 1 to 1.5 years; and
- (b) the actual time required to complete a refurbishment project depended on its complexity, including the site conditions, site area, location, design, land allocation and views of the local community.

## Management of public toilet works projects

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3.11 During August to October 2019, FEHD and ArchSD informed Audit of the following:

- (a) **FEHD.** The timeline for taking forward a standard refurbishment project would be expedited (from about 4 to 5 years — see para. 3.8) to 2 to 3 years due to the concerted efforts by ArchSD and FEHD in implementing improvement measures. The expedited timeline would be applied to the projects under the Enhanced Public Toilet Refurbishment Programme from 2019-20 onwards. The timeline for taking forward a facelifting project would be about 1 to 1.5 years. Occasionally, some incidents might happen and interrupt the progress of refurbishment projects which were beyond the control of FEHD; and
- (b) **ArchSD.** Subject to smooth local consultation, necessary land acquisition and no unforeseeable site constraints, ArchSD would provide technical support to and work closely with FEHD with a view to meeting the timeline for taking forward refurbishment projects under the Public Toilet Refurbishment Programme.

3.12 Audit noted that, as of August 2019, some public toilets had been included in the Public Toilet Refurbishment Programme for a long time but works were still not completed (see para. 3.9). Audit welcomes the efforts of FEHD and ArchSD to expedite the timeline in taking forward a refurbishment project from 2019-20 Refurbishment Programme onwards (see para. 3.11). In Audit's view, FEHD and ArchSD need to endeavour to take forward refurbishment projects under the Public Toilet Refurbishment Programme in a timely manner.

## Audit recommendations

3.13 **Audit has recommended that the Director of Architectural Services should:**

- (a) **closely monitor to ensure that adequate resources are deployed by term contractors to carry out public toilet works projects; and**



- (b) **take measures to complete public toilet works projects as soon as practicable, including assessment of the latest conditions of structural brick walls of public toilets under refurbishment.**

3.14 **Audit has *recommended* that the Director of Food and Environmental Hygiene should, in collaboration with the Director of Architectural Services, expedite actions in opening Toilet G for public use.**

3.15 **Audit has *recommended* that the Director of Food and Environmental Hygiene and the Director of Architectural Services should endeavour to take forward refurbishment projects under the Public Toilet Refurbishment Programme in a timely manner.**

## **Response from the Government**

3.16 The Director of Architectural Services agrees with the audit recommendations in paragraphs 3.13 to 3.15. She has said that ArchSD will:

- (a) monitor the adequacy of resources deployed by the term contractor in carrying out public toilet projects;
- (b) when conducting feasibility studies on public toilet refurbishment projects, verify the presence of structural brick walls and assess their conditions before proceeding with the refurbishment works on site;
- (c) closely monitor and supervise the consultants and contractors for timely completion of works for Toilet G; and
- (d) provide technical support to and work closely with FEHD with a view to meeting the timeline for taking forward refurbishment projects under the Public Toilet Refurbishment Programme.

3.17 The Director of Food and Environmental Hygiene generally agrees with the audit recommendations in paragraphs 3.14 and 3.15.

### Aqua privy conversion programme

3.18 Aqua privy is a village-type dry latrine without any flushing system. The absence of a flushing system may create hygiene, pest and odour problems. To meet the rising expectation of the public over the standard of public toilet facilities, from February 2005 to November 2014, FEHD implemented a programme to convert aqua privies in the New Territories and outlying islands into flushing toilets by seven phases. The initiative was included in the Policy Agenda in 2007-08, with the target of converting all aqua privies into flushing toilets in phases by 2012-13.

3.19 The aqua privy conversion programme was funded under Category A projects in the Public Works Programme. ArchSD, as FEHD's works agent, engaged term contractors for carrying out the conversion works and was responsible for administering the term contracts (including issuing works orders, monitoring the progress and quality of works, and certifying completion of works). Table 7 shows the implementation of the conversion programme. The salient points are as follows:

- (a) **Completion of works.** The works for the seven phases (Phase 2 included 2A and 2B) of aqua privy conversion programme were completed between March 2007 and November 2014. Except for Phases 1, 2A and 7, the works for other phases were completed by their target completion dates. For Phases 1, 2A and 7, the works were completed about 3 months (Phases 1 and 2A) and 11 months (Phase 7) later than their target completion dates;
- (b) **Aqua privies converted.** FEHD targeted to convert 465 aqua privies under the conversion programme. In the event, a total of 441 aqua privies were converted into flushing toilets and 11 aqua privies not converted (due to site constraints) were in-situ refurbished; and
- (c) **Expenditure.** The total expenditure incurred was \$740.2 million. The actual expenditures for all phases, except Phase 1, were within the approved funding. According to ArchSD, for Phase 1, the excess in expenditure of \$0.5 million (or 2%) was due to contract-price fluctuation.

## Management of public toilet works projects

**Table 7**

### Implementation of aqua privy conversion programme

| Phase | Works commencement date | Target completion date | Actual completion date | Approved funding (Note 1) (\$ million) | Actual expenditure (\$ million) | Target no. of aqua privies to be converted (Note 1) | Actual no. of aqua privies converted |
|-------|-------------------------|------------------------|------------------------|--|---------------------------------|---|--------------------------------------|
| 1     | 2/2005                  | 12/2006                | 3/2007                 | 26.6                                   | 27.1                            | 30  | 30                                   |
| 2A    | 7/2005                  | 3/2007<br>(Note 2)     | 6/2007                 | 30.1                                   | 22.8                            | 40  | 39                                   |
| 2B    | 1/2006                  | 12/2007                | 12/2007                | 36.1                                   | 22.5                            | 30  | 28                                   |
| 3     | 11/2007                 | 5/2009                 | 5/2009                 | 66.0                                   | 52.4                            | 30  | 30                                   |
| 4     | 11/2007                 | 5/2009                 | 5/2009                 | 42.6                                   | 35.6                            | 20  | 20                                   |
| 5     | 11/2008                 | 6/2010                 | 5/2010                 | 189.6                                  | 134.3                           | 80  | 80                                   |
| 6     | 11/2009                 | 6/2011                 | 6/2011                 | 221.1                                  | 178.7                           | 90  | 90                                   |
| 7     | 2/2011                  | 12/2013                | 11/2014                | 383.3                                  | 266.8                           | 145   | 124<br>(Note 3)                      |
| Total |                         |                        |                        | 995.4                                  | 740.2                           | 465   | 441                                  |

*Source: FEHD and ArchSD records*

*Note 1: The approved funding was funded under Category A projects in the Public Works Programme as approved by the Finance Committee of LegCo. The target number of aqua privies to be converted referred to those stated in the related papers seeking funding approval.*

*Note 2: According to a funding paper submitted to LegCo for approval, the target completion date was in early 2007.*

*Note 3: Under Phase 7 of the conversion programme, in addition to 124 aqua privies converted into flushing toilets, 11 aqua privies not converted (due to site constraints such as lack of water supply) were in-situ refurbished.*

### ***Long time taken in converting some aqua privies into flushing toilets***

3.20 For the seven phases of aqua privy conversion programme, the works for Phases 1, 2A and 7 were completed about 3 months (Phases 1 and 2A) and 11 months

## Management of public toilet works projects

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(Phase 7) later than their target completion dates. For Phase 7 of the conversion programme (i.e. longest among the three phases completed later than their target completion dates — Note 24), ArchSD had issued 135 works orders for carrying out conversion works for 124 aqua privies and in-situ refurbishment works for 11 aqua privies. Audit examination revealed that, of the 135 works orders, the actual completion dates for 119 (88%) works orders were later than their respective original target completion dates specified in the works orders (see Table 8). In September 2019, ArchSD informed Audit that after consideration of the extensions of time granted (e.g. due to inclement weather or other events outside the contractor's control), there was delay in only 23 (17% of 135) works orders (with liquidated damages imposed).

**Table 8**

**Comparison of target and actual completion dates of works orders under Phase 7 of aqua privy conversion programme**

| <b>Number of months later than target completion date</b> | <b>Number of works orders</b> |
|---|-------------------------------|
| No delay  | 16 (12%)                      |
| 3 months or less  | 87 (64%)                      |
| More than 3 to 6 months                                   | 24 (18%)                      |
| More than 6 to 9 months                                   | 2 (2%)                        |
| More than 9 to 12 months                                  | 3 (2%)                        |
| More than 12 to 15 months                                 | 3 (2%)                        |
| <b>Total</b>  | <b>135 (100%)</b>             |

} 119 (88%)

*Source: Audit analysis of ArchSD records*

3.21 In Audit's view, in implementing the conversion works of aqua privies, ArchSD needs to monitor the works progress and endeavour to complete the works as soon as practicable.

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**Note 24:** *According to FEHD, Phase 7 was the last phase of the aqua privy conversion programme which involved the largest number of aqua privies, and the most difficult cases were left to this phase because of land, technical, local objection or other issues to be resolved.*

*Scope for improvement in  
planning of water connection works*

3.22 Audit noted a case (Case 3) showing that there was scope for improving the planning of water connection works for converting an aqua privy into a flushing toilet.

**Case 3**

**Room for improvement in planning of water connection works  
for converting an aqua privy into a flushing toilet  
(March 2012 to October 2019)**

1. In March 2012, ArchSD issued a works order to a contractor (Contractor C) for conversion of an aqua privy in Cheung Chau into a flushing toilet (Toilet H) under the conversion programme. In August 2012, the Water Supplies Department (WSD) approved Contractor C's design proposal to install a new water main for the supply of fresh water for general ablution, cleansing and flushing purposes (with three water meters) to Toilet H. WSD also requested ArchSD to undertake the design and laying of the water main outside the lot boundary of Toilet H as entrusted works.

2. In February 2013, after receiving Contractor C's undertaking to carry out the water connection works for the new water main to Toilet H, ArchSD certified that the conversion works were substantially completed. The flushing water supply to Toilet H was connected from the existing water main (mainly for hand washing) previously serving the aqua privy. In April 2013, Toilet H was handed over to FEHD for public use.

3. In August 2013, ArchSD submitted drawings to WSD showing the proposed alignment of new water main. In the same month, WSD conducted an inspection and found that the plumbing works were completed generally in order. In October 2013, WSD approved the proposed alignment for the new water main. However, the proposed alignment of the water main was later considered not feasible due to land and substantial geotechnical issues.

4. In September 2014, Contractor C submitted a revised alignment of the water main which was approved by WSD in October 2014. According to ArchSD, the proposed alignment was later also found not feasible due to the underlying geotechnical problems. In September 2015, Contractor C submitted a proposal of plumbing installation works due to change in layout of Toilet H and the proposal was approved by WSD in November 2015.

### Case 3 (Cont'd)

5. In March and July 2016, WSD requested Contractor C, ArchSD and FEHD to complete the new water main and report completion of plumbing installation works in Toilet H. In September 2016, as requested by ArchSD, FEHD informed WSD that it decided to cancel the application of the new water main connection. WSD had no objection to the cancellation.

6. In January 2017, Contractor C submitted a new application to WSD for flushing water supply connection from the existing water main for approval. In February 2017, WSD carried out an inspection at Toilet H and found that the source of water supply for flushing was an extension from the existing potable water main to the flushing system instead of adopting the proposal approved in November 2015 (see para. 4) and hence considered as not conforming to the Waterworks Ordinance (Cap. 102 — Note). WSD requested FEHD to rectify the non-conformance.

7. In September 2017, WSD informed Contractor C that WSD had no objection to its proposal for flushing water supply for Toilet H, including flushing water supply to be branched off from the existing potable water main and provision of a meter to the existing water main for flushing purpose. In February 2018, Contractor C completed the related works and the water supply for flushing was then authorised by WSD.

8. In September and October 2019, ArchSD informed Audit that:

- (a) as a temporary measure to facilitate earliest opening of Toilet H for public use, the flushing water supply to the toilet was connected from the existing water main previously serving the aqua privy;
- (b) during 2013 to 2016, FEHD, ArchSD and Contractor C had explored different alignments for the water main connection but all alignments were eventually found not feasible. Upon confirmation that the new water main connection could not be made, FEHD, ArchSD and Contractor C had proactively negotiated with WSD to call off the originally proposed new water main connection and re-submit a formal application to adopt the as-fitted temporary flushing water supply connection from the existing water main as the permanent water main connection;

### Case 3 (Cont'd)

- (c) when the construction works of Toilet H were completed in 2013, adequate measures (i.e. provision of flushing water tank) were already provided to separate the flushing water supply system from the fresh water supply system to prevent contaminations; and
- (d) in February 2018, WSD inspected and authorised the water supply for flushing upon receipt of all the related documents and minor modification at the connection point from Contractor C. The plumbing works made for flushing water supply when Toilet H was completed in 2013 did in fact comply with the Waterworks Ordinance from technical point of view while the procedural non-compliance lasted for nearly five years (counting from opening of the toilet in April 2013 to authorisation of flushing water supply in February 2018).

#### *Audit comments*

9. Toilet H had not fully conformed to the Waterworks Ordinance since its opening in April 2013 and up to the completion of the modification works in February 2018 (i.e. nearly five years — see paras. 2 and 6 to 8). In Audit's view, in implementing public toilet works projects, ArchSD needs to take measures to enhance the planning of water main connection works and ensure that the requirements of the Waterworks Ordinance are complied with.

*Source:* Audit analysis of ArchSD, FEHD and WSD records

*Note:* According to the Waterworks Regulation (Cap. 102A) under the Waterworks Ordinance, application shall be made to the Water Authority (i.e. the Director of Water Supplies) for construction, installation, alteration or removal of an inside service (which includes pipes and fittings in premises, and those between premises and those connecting to the public mains). According to the Waterworks Ordinance, WSD may disconnect an inside service if it is satisfied that waste, misuse or pollution of the supply has occurred or is likely to occur.

## **Management of public toilet works projects**

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### ***Need to convert aqua privies into flushing toilets as soon as practicable***

3.23 As announced in the Policy Agenda in 2007-08, the target of converting all aqua privies into flushing toilets was by 2012-13 (see para. 3.18). However, there were still 51 aqua privies as of June 2019. According to FEHD, the reasons for not converting the 51 aqua privies under the conversion programme (which was completed in 2014) were as follows:

- (a) for 17 (33%) aqua privies, conversion would result in encroachment upon private lot;
- (b) for 15 (29%) aqua privies, there were constraints for the conversion (e.g. lack of water supply and geographical limitation);
- (c) for 8 (16%) aqua privies, local objections were received for the conversion;
- (d) for 5 (10%) aqua privies, the conversion works were affected by other public or private projects; and
- (e) the remaining 6 (12%) aqua privies would be demolished.

3.24 Audit noted that, in November 2011, FEHD informed LegCo Panel on Food Safety and Environmental Hygiene that, although some aqua privies were not included in the conversion programme, FEHD had, on the premise of enhancing environmental hygiene, been actively exploring suitable follow-up options, including proposals for conversion of individual aqua privies into flushing toilets, in-situ refurbishment, demolition or reprovisioning. In September and October 2019, FEHD and ArchSD informed Audit of the following:

#### ***FEHD***

- (a) the progress of the conversion works for 45 aqua privies (excluding the 6 aqua privies to be demolished (see para. 3.23 (e))) was as follows:
  - (i) for 13 (29%) aqua privies, conversion works were under study by FEHD;



## **Management of public toilet works projects**

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- (ii) for 11 (24%) aqua privies, FEHD had been conducting local consultation and checking the availability of suitable site for conversion works;
  - (iii) for 7 (16%) aqua privies, the conversion works were planned or in progress;
  - (iv) for 2 (4%) aqua privies, they would be reprovisioned into flushing toilets under public or private development; and
  - (v) the remaining 12 (27%) aqua privies had been planned for demolition;
- (b) to improve the hygiene condition of the aqua privies, FEHD had applied Microbiological Odour Arresting Agent in the aqua privies to control odour problem. Moreover, contractors and FEHD in-house staff would conduct routine and ad hoc cleansing operations at the aqua privies to ensure that their hygiene conditions were satisfactory. The above remedial measures had effectively reduced hygiene, pest and odour problems of aqua privies and very few related complaints were received from January 2016 to April 2019; and

### ***ArchSD***

- (c) ArchSD would provide technical support to FEHD in expediting actions in converting aqua privies into flushing toilets as far as practicable.

3.25 In Audit's view, in order to meet the rising expectation of the public over the standard of public toilet facilities, FEHD needs to, in collaboration with ArchSD, expedite actions in converting aqua privies into flushing toilets as far as practicable.

### Audit recommendations

3.26 **Audit has *recommended* that the Director of Architectural Services should:**

- (a) **in implementing the conversion works of aqua privies, monitor the works progress and endeavour to complete the works as soon as practicable; and**
- (b) **in implementing public toilet works projects, take measures to enhance the planning of water main connection works and ensure that the requirements of the Waterworks Ordinance are complied with.**

3.27 **Audit has *recommended* that the Director of Food and Environmental Hygiene should, in collaboration with the Director of Architectural Services, expedite actions in converting aqua privies into flushing toilets as far as practicable.**

### Response from the Government

3.28 The Director of Architectural Services agrees with the audit recommendations in paragraphs 3.26 and 3.27. She has said that ArchSD will:

- (a) when handling the conversion works of aqua privies, monitor the works progress and endeavour to complete the works as soon as practicable according to programme;
- (b) when handling public toilet works projects, enhance the planning of water main connection works and ensure that the requirements of the Waterworks Ordinance are complied with; and
- (c) provide technical support to FEHD in expediting actions in converting aqua privies into flushing toilets as far as practicable.

## **Management of public toilet works projects**

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3.29 The Director of Food and Environmental Hygiene generally agrees with the audit recommendation in paragraph 3.27. She has said that:

- (a) FEHD and ArchSD had successfully completed the conversion works of 452 (441 aqua privies converted to flushing toilets and 11 aqua privies in-situ refurbished) out of 465 aqua privies under the conversion programme and another 18 aqua privies which were not covered by the conversion programme (see para. 3.3(a)); and
- (b) for the remaining aqua privies, they are the most difficult cases with complications in terms of local objections, site or technical constraints. FEHD will continue to take a positive and proactive approach and work closely with concerned parties and stakeholders to tackle these vexing problems.

## **PART 4: MANAGEMENT OF PUBLIC TOILETS**

- 4.1 This PART examines FEHD's management of public toilets, focusing on:
- (a) monitoring of cleanliness and conditions of facilities in public toilets (paras. 4.2 to 4.33);
  - (b) working arrangements and facilities for outsourced workers performing cleansing duties in public toilets (paras. 4.34 to 4.44);
  - (c) handling of complaints on public toilets (paras. 4.45 to 4.54); and
  - (d) publicity work (paras. 4.55 to 4.63).

### **Monitoring of cleanliness and conditions of facilities in public toilets**

4.2 FEHD has 19 DEHOs for monitoring and management of district environmental hygiene services and facilities in the 18 districts (see Note 10 to para. 1.19(b)), including public toilets and aqua privies. As of June 2019, FEHD managed 798 public toilets over the territory (see Appendix B for the number of public toilets in the 18 districts) and 51 aqua privies in the New Territories and on outlying islands. Of the 798 public toilets and 51 aqua privies, the cleansing services of:

- (a) 625 (78% of 798) public toilets and 31 (61% of 51) aqua privies were outsourced to contractors under the related contracts for street cleansing services (Note 25); and
- (b) 173 (22% of 798) public toilets and 20 (39% of 51) aqua privies were provided by FEHD in-house cleansing workmen.

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**Note 25:** *As of April 2019, FEHD had outsourced the cleansing services of the public toilets and aqua privies to contractors under 34 contracts for street cleansing services (for a 2-year period) at a total cost of about \$2,584 million.*

4.3 According to FEHD, the cleansing frequency of public toilets and aqua privies depends on the public demand and usage of the toilets. Generally speaking, toilet attendant services are provided in public toilets with high utilisation rates or at tourist spots. As of June 2019, 264 (33%) of the 798 public toilets were provided with attendant services. For public toilets with attendant services, cleansing services are provided continuously during duty hours, while other public toilets and aqua privies are cleansed at least twice a day. Furthermore, to address the rising concerns and complaints on poor hygiene condition of public toilets with very high utilisation rates (particularly those at tourist spots), FEHD had selected 83 public toilets as target public toilets for service enhancement in September 2018 (revised to 94 toilets in May 2019), including enhanced inspection and provision of additional deep cleansing services.

4.4 ***Cleansing services by contractors.*** According to FEHD, regarding the cleansing services provided by contractors for public toilets (including aqua privies):

- (a) the contractor is required to deploy staff to keep public toilets clean and hygienic, replenish toilet supplies (including toilet paper and soap), report damages of facilities and carry out minor repair and maintenance works (see Appendix C for a list of minor repair and maintenance works under the responsibility of cleansing contractors based on the contracts);
- (b) the level of cleanliness for public toilets are classified into Grade A (i.e. free of dirt and dust), Grade B (i.e. predominantly free of dirt and dust) and Grade C (i.e. widespread distribution of dirt and dust) under the contracts. Upon detection of level of cleanliness fallen to Grade B or C by FEHD staff, the contractor needs to re-perform the toilet cleansing services to attain Grade A within a specified time (e.g. within 30 minutes from Grade B to Grade A for toilets with toilet attendant services); and
- (c) in the event of any irregularities, defaults or non-compliance with contract provisions in the delivery of public cleansing services, FEHD will take follow-up actions, including issuance of verbal and written warnings and default notices (Note 26). For each default notice issued, the contractor

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**Note 26:** *According to FEHD: (a) in 2018, it had issued 2,567 verbal warnings, 81 written warnings and 1,241 default notices to street cleansing contractors; and (b) it had not maintained breakdown of these warnings and notices specific to public toilet and aqua privy services.*

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will need to pay an amount specified in contract as liquidated damages to FEHD.

4.5 ***Cleansing services by in-house staff.*** According to FEHD, in providing cleansing services, the in-house cleansing workmen need to keep public toilets (including aqua privies) clean and hygienic, replenish consumables (e.g. toilet paper and soap) after each cleansing and report any defect to the relevant maintenance agents (mainly ArchSD — Note 27) for replacement or maintenance.

4.6 ***Monitoring of cleansing services by contractors.*** To monitor the performance of contractors, FEHD staff periodically conduct inspections of conditions of hygiene, cleanliness and facilities of the public toilets, as follows:

(a) ***Routine inspection.*** According to FEHD guidelines, DEHO Foreman grade staff are required to conduct inspections on public toilets and timely input the inspection results into mobile devices on site and upload the related records into a computer system (see para. 4.8) within 24 hours from the time of inspections. The frequency of inspections depends on the toilet location and availability of toilet attendant services, as follows:

(i) DEHO Foreman grade staff should inspect:

- public toilets with attendant services at least once every work shift (Note 28);
- public toilets without attendant services and aqua privies in populated areas at least once every other day; and
- aqua privies in non-populated areas at least once every 10 days (Note 29); and

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**Note 27:** *According to FEHD, in 2018, around 74% of the defect requests were referred to ArchSD and the remaining defect requests were mainly referred to the Electrical and Mechanical Services Department.*

**Note 28:** *According to FEHD, DEHO Foreman grade staff usually have two shifts (i.e. day and evening shifts) with 7-day work per week.*

**Note 29:** *According to FEHD, as of June 2019, the 51 aqua privies were generally located in non-populated areas in the New Territories and on outlying islands.*

- (ii) for facilities in remote area, DEHO Senior Health Inspectors can exercise discretion to determine the most suitable minimum inspection frequency;
- (b) ***Supervisory check.*** DEHO Health Inspector grade staff will conduct surprise supervisory check (6-week inspection cycle for Health Inspector and 3-month inspection cycle for Senior Health Inspector) on public toilets inspected by their subordinates, and all related inspection details (including date, time and observations) are recorded in a standard inspection form; and
- (c) ***Quality assurance inspection.*** FEHD's Quality Assurance Section will conduct a quality assurance inspection every two years on the services delivered by DEHOs, including toilet cleansing services and related inspections.

4.7 ***Monitoring of cleansing services by in-house staff.*** For public toilets (including aqua privies) with cleansing services provided by in-house cleansing workmen, according to FEHD guidelines, DEHO Foreman grade staff are responsible for carrying out daily and weekly inspections for monitoring in-house cleansing of public toilets and aqua privies located in their responsible areas respectively. DEHO Foreman grade staff should properly record all inspection details (including date, time and observations) in a standard inspection form daily and submit to their supervisors. The supervisory check and quality assurance inspection are the same as those for monitoring performance of contractors (see para. 4.6 (b) and (c)).

### ***Scope for improvement in conducting inspections of cleansing services and documenting inspection results***

4.8 FEHD has maintained a computer system (i.e. Contract Management System (CMS)) to record the routine inspection results, written warnings and default notices issued to contractors to facilitate its daily operation and monitoring of contractors' performance. According to FEHD guidelines, for public toilets with cleansing services provided by contractors, results of routine inspections (including irregularities) should be recorded in CMS. According to FEHD:

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- (a) for public toilets with attendant services, the inspection officers should input the inspection results on a specific toilet inspection report in CMS, which records the inspection results (satisfactory or unsatisfactory) on performance of contractors and toilet conditions (e.g. cleanliness of toilet compartments, urinals and wash hand basins, replenishment of toilet supplies, and minor repair and maintenance works by contractors) for each toilet; and
- (b) for public toilets without attendant services, the inspection officers should input the inspection results on a street cleansing services inspection report in CMS, which records the overall inspection results (satisfactory or unsatisfactory) in respect of contractors' performance on various services (including an item for public toilets) under the contracts for street cleansing services (which also include, for example, street cleansing and household waste collection — see para. 1.18) for a defined area of a district.

4.9 To evaluate FEHD's monitoring of cleansing services and facilities of public toilets, Audit selected four DEHOs (i.e. Central/Western DEHO, Mong Kok DEHO, Yau Tsim DEHO and Yuen Long DEHO — Note 30) to examine their inspection records for the public toilets from January 2018 to June 2019. Except Yuen Long DEHO which managed public toilets and aqua privies with cleansing services provided by contractors (for 127 toilets and 8 aqua privies) and in-house cleansing workmen (for 56 toilets and 7 aqua privies), the other three DEHOs managed public toilets with cleansing services provided by contractors only. Audit noted room for improvement in conducting inspections and recording inspection results, as follows:

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**Note 30:** *The four DEHOs managed public toilets in districts with the highest number of public toilets on Hong Kong Island, Kowloon and New Territories respectively (i.e. Central/Western District, Yau Tsim Mong District (by both Yau Tsim DEHO and Mong Kok DEHO) and Yuen Long District — see Appendix B). Audit also conducted site visits to selected public toilets managed by the four DEHOs in May and June 2019 (see para. 4.20). The number of public toilets and aqua privies managed by the four DEHOs are as follows: (a) 36 public toilets under Central/Western DEHO; (b) 8 public toilets under Mong Kok DEHO; (c) 12 public toilets under Yau Tsim DEHO; and (d) 183 public toilets and 15 aqua privies under Yuen Long DEHO.*



- (a) ***Frequencies of routine inspections adjusted in some DEHOs.*** FEHD guidelines have set out the frequency of routine inspections (which depends on the toilet location and availability of toilet attendant services — see para. 4.6(a)(i)) and for facilities in remote area, DEHO Senior Health Inspectors can exercise discretion to determine the most suitable minimum inspection frequency (see para. 4.6(a)(ii)). Of the four selected DEHOs, the inspection frequencies of public toilets for two DEHOs (Central/Western DEHO and Yuen Long DEHO) had been adjusted by the Senior Health Inspectors, as follows:
- (i) for Central/Western DEHO, according to FEHD, the Senior Health Inspector had exercised discretion to adjust the inspection frequency for one public toilet from once every other day (i.e. 2 days) to once per week (i.e. 7 days), as there was no proper vehicular access to the toilet; and
  - (ii) for Yuen Long DEHO, according to FEHD, 103 (81%) of the 127 public toilets with cleansing services provided by contractors were converted from aqua privies (which were usually located at remote locations with low utilisation rates). FEHD considered it inadvisable to increase the inspection frequency of these public toilets drastically from once every 10 days (when they were aqua privies) to once every other day (after conversion to public toilets without attendants). The Senior Health Inspectors had adjusted the inspection frequency of these toilets to once every two weeks (i.e. 14 days). Given the large number of public toilets converted from aqua privies in Yuen Long, FEHD considered the discretion exercised reasonable and practicable.

In view of the large number of public toilets converted from aqua privies, Audit considers that there is merit for FEHD to review the guidelines on the inspection frequency of such toilets;

- (b) ***Actual number of routine inspections fewer than scheduled in some DEHOs.*** As shown in Table 9, of the four selected DEHOs, the actual numbers of routine inspections conducted by two DEHOs (Yuen Long and Mong Kok) were fewer than scheduled. In particular, even with its inspection frequency adjusted (see (a)(ii) above), Yuen Long DEHO still had a significant shortfall of 4,133 inspections (24% of 17,359 scheduled inspections). According to FEHD, the reasons for the shortfall of the two DEHOs included:

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- (i) staff vacancies and redeployment of staff resources to other tasks (e.g. ad hoc tidy up operations, joint departmental clearance operations and enforcement operations, etc.); and
- (ii) staff forgetting to input the daily inspection reports to CMS.

Audit considers it unsatisfactory that some DEHOs conducted fewer routine inspections than the number scheduled and inspection results were not fully input to CMS, which may undermine the effectiveness of the monitoring mechanism. FEHD needs to take measures to ensure that routine inspections are conducted as scheduled and inspection results are timely input to CMS;

**Table 9**

**Number of routine inspections scheduled by DEHOs  
compared with actual number of inspections conducted  
(January 2018 to June 2019)**

| DEHO                     | Number of routine inspections scheduled by DEHO<br><br>(a) | Actual number of routine inspections conducted<br>(Note 1)<br><br>(b) | Difference<br><br>(c) = (b) – (a) |
|--------------------------|--|---|-----------------------------------|
| Yuen Long                | 17,359   | 13,226  | - 4,133 (-24%)                    |
| Mong Kok                 | 8,720  | 7,755   | - 965 (-11%)                      |
| Yau Tsim (Note 2)        | 9,759  | 10,023  | + 264 (+3%)                       |
| Central/Western (Note 2) | 25,535   | 27,119  | + 1,584 (+6%)                     |
| Overall                  | 61,373   | 58,123  | - 3,250 (-5%)                     |

*Source: FEHD records*

*Note 1: According to FEHD, the actual number of inspections was based on the following records: (a) specific toilet inspection report on performance of contractors and toilet conditions (see para. 4.8(a)); (b) street cleansing services inspection report (see para. 4.8(b)); and (c) manual on-site daily inspection form for hygiene conditions of public toilets/bathhouses.*

*Note 2: According to FEHD, for the Central/Western and Yau Tsim DEHOs: (a) the actual number of inspections conducted included extra inspections to investigate complaints or follow-up irregularities detected and was therefore higher than the number of required routine inspections; and (b) based on FEHD records, the two types of inspections could not be differentiated.*

- (c) ***Improvements needed in recording inspections in CMS.*** FEHD guidelines require that results of routine inspections should be recorded in CMS. According to FEHD, the inspection officer should input the inspection results on the specific toilet inspection reports (for public toilets with attendant services), and on the street cleansing services inspection reports (for public toilets without attendant services) in CMS (see para. 4.8). For Central/Western DEHO, according to FEHD:
- (i) the results of 22,037 (81%) of the 27,119 routine inspections conducted were recorded in CMS (including both the specific toilet inspection reports and the street cleansing services inspection reports). The results of the remaining 5,082 (19%) inspections conducted were recorded on manual inspection form, and not recorded in CMS; and
  - (ii) 24,542 inspections were conducted for public toilets with attendant services, of which the results of 530 (2% of 24,542) inspections were recorded in the specific toilet inspection reports. The results of some of the remaining inspections were recorded in street cleansing services inspection reports instead of the specific toilet inspection reports.

In Audit's view, FEHD needs to remind DEHO staff to strictly follow FEHD's requirements to input the inspection results in CMS;

- (d) ***Need to explore the use of information technology for keeping inspection records of cleansing services provided by in-house cleansing workmen.*** Of the four DEHOs, only Yuen Long DEHO managed public toilets with cleansing services provided by in-house cleansing workmen (see para. 4.9). Audit examined Yuen Long DEHO's inspection records from January 2018 to June 2019 and noted that the standard inspection record was in manual form. In Audit's view, FEHD needs to explore the use of information technology for keeping such records; and
- (e) ***Need to provide regular management information to senior management.*** Audit noted that no regular management information was provided to FEHD senior management on cleanliness and conditions of facilities of public toilets (e.g. summary analysis of inspection results). In September 2019, FEHD informed Audit that:

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- (i) DEHO inspecting officers were required to upload the daily inspection reports to CMS, which facilitated DEHO supervisory officers to compile the monthly assessment report for the number of warning letters and default notices issued during the month. The monthly assessment report allowed DEHO management to monitor the performance of the contractors including cleanliness and conditions of facilities of public toilets; and
- (ii) CMS was launched in 2002 to facilitate FEHD's monitoring of contractors' operational performance. As the outdated CMS could not cope with the operational needs over time, FEHD had commenced a revamped CMS project in October 2016 (Note 31). The revamped CMS had been rolled out since April 2019, and full implementation of the revamped CMS for public cleansing services contracts would be effective from November 2019.

In Audit's view, FEHD needs to make use of the revamped CMS to provide regular management information to senior management on cleanliness and conditions of facilities of public toilets.

### *Need to take measures to address the issues leading to the increasing number of defects requiring repair and maintenance*

4.10 According to FEHD guidelines, FEHD staff should ensure venues and facilities (including public toilets) are properly maintained and defects are reported to the relevant authorities for repairs as soon as possible. According to FEHD, the repairing authorities are as follows:

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**Note 31:** *According to FEHD, the objectives of the revamped CMS project include: (a) facilitating management of major outsourced services; (b) enhancing operational efficiency with new workflow and other functions in CMS to support field inspection and contract management tasks; (c) providing more effective sharing and retrieval of contract management information with online access of reference materials and enhanced query/report functions in CMS; (d) producing more timely and comprehensive information related to management of environmental hygiene service contracts in CMS for reference; and (e) promoting green office with reduced printing and storage of paper documents.*

- (a) for public toilets with cleansing services provided by contractors:
  - (i) for minor repairs (e.g. replacement of light bulb or light tube), the cleansing contractors are responsible for carrying out the repair or maintenance works within 24 hours after being informed by FEHD staff under the cleansing contracts. Furthermore, the cleansing contractors shall provide materials and labour to carry out and complete the related repair and maintenance works, irrespective of any reason for their loss or damage. Appendix C shows the list of minor repair and maintenance works under the responsibility of the cleansing contractors based on the contracts; and
  - (ii) for major repairs (e.g. repairing leaking pipes), FEHD staff will initiate requests to the relevant maintenance agents (mainly ArchSD) to arrange repair works; and
- (b) for public toilets with cleansing services provided by FEHD in-house cleansing workmen, all repairs are carried out by relevant maintenance agents.

According to FEHD guidelines, the repair requests to relevant maintenance agents should be properly recorded.

4.11 According to FEHD, it has yet to maintain a computerised system for managing repair and maintenance requests for public toilets. In response to Audit's enquiry, FEHD provided Audit with information on the total number of defects referred to its maintenance agents for rectification (see Table 10). Audit noted that the number of defects referred for rectification had been increasing over the years. From 2015 to 2018, the number of defects referred for rectification increased by 33% (from 13,290 in 2015 to 17,732 in 2018), while the number of public toilets and aqua privies only increased by 1% (from 846 (787 public toilets + 59 aqua privies) to 852 (799 public toilets + 53 aqua privies)) during the same period.

**Table 10**

**Number of defects for public toilets and aqua privies  
referred to maintenance agents  
(2015 to 2018)**

| <b>Year</b>  | <b>Number of defects<br/>(Note)</b> |
|--------------|-------------------------------------|
| 2015         | 13,290                              |
| 2016         | 13,823                              |
| 2017         | 14,618                              |
| 2018         | 17,732                              |
| <b>Total</b> | <b>59,463</b>                       |

*Source: FEHD records*

*Note: According to FEHD: (a) the number of defects included those referred to ArchSD and the Electrical and Mechanical Services Department; (b) although it had not maintained the number of defects referred to other maintenance agents (e.g. WSD), the related numbers were minimal; and (c) it had not maintained the numbers of defects for public toilets referred to cleansing contractors.*

4.12 As FEHD did not have breakdown by each public toilet in respect of the defects referred to its maintenance agents for rectification, to assess how frequent repairs were required for each toilet, Audit examined ArchSD's records for repair and maintenance requests received from FEHD (Note 32) for each of the 798 public toilets and 51 aqua privies (totalling 849) from January 2015 to June 2019, and found that some public toilets required frequent repair and maintenance (see Table 11). For example, the number of repair and maintenance requests for six public toilets ranged from 401 to 576 over the review period, representing on average 89 to 128 requests per year.

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**Note 32:** *ArchSD, being a main maintenance agent of FEHD for repair and maintenance works (see Note 27 to para. 4.5), had maintained a computerised system on repair and maintenance requests received from other government departments, including FEHD.*

**Table 11**

**Frequency of repair and maintenance requests for public toilets  
(January 2015 to June 2019)**

| Number of repair and maintenance requests | Number of public toilets |
|---|--------------------------|
| 0 to 100                                  | 695 (82%)                |
| 101 to 200                                | 113 (13%)                |
| 201 to 300                                | 26 (3%)                  |
| 301 to 400                                | 9 (1%)                   |
| 401 to 576                                | 6 (1%)                   |
| Total                                     | 849 (100%)               |

*Source: ArchSD records*

- 4.13 In September and October 2019, FEHD informed Audit that:
- (a) there was a significant increase in the number of defects reported in 2018 (increase of more than 3,000 cases from 14,618 cases in 2017 to 17,732 cases in 2018 — see Table 10 in para. 4.11), which involved public toilets with high utilisation rates, in particular those at tourist spots. The increase in repair and maintenance works might be due to improper use of the public toilets by the public (Note 33 ), relatively high utilisation/vandalism rate of individual public toilet and ageing toilet facilities. Furthermore, FEHD had stepped up the monitoring of public toilets since 2018 and selected some target public toilets for service enhancement (see para. 4.3). As a result, the detection of defects and referral had significantly increased; and
  - (b) in order to enhance the effectiveness of reporting defects in public toilets in terms of accuracy and timeliness, FEHD had been developing a mobile application (mobile app) since the second quarter of 2019 and would introduce the use of handheld device to facilitate the reporting of defective

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**Note 33:** *According to FEHD, it has planned to produce a set of Ah Tak stickers to be posted inside public toilets to promote the proper use of toilet facilities, and the stickers are scheduled to be released by mid-November 2019 (see para. 4.55(d)).*

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items by its frontline staff during inspection of public toilets, tracking of progress of maintenance works and collation of management data for further analysis. The trial application of the mobile app, which would co-ordinate and interface with the computer systems of maintenance agents (e.g. ArchSD), would be rolled out by phases from October 2019.

4.14 In Audit's view, FEHD needs to, in collaboration with ArchSD, take measures to address the issues leading to the increasing number of defects in public toilets requiring repair and maintenance.

### *Need to improve maintenance of repair and maintenance records*

4.15 Given that FEHD has not maintained a computerised system for repair and maintenance works of public toilets (see para. 4.11), Audit selected 30 public toilets (Note 34) managed by the four DEHOs (i.e. Central/Western DEHO, Mong Kok DEHO, Yau Tsim DEHO and Yuen Long DEHO — see para. 4.9) and examined their repair and maintenance records from January 2018 to June 2019. Audit examination revealed that:

- (a) for the 20 public toilets under Central/Western DEHO and Yuen Long DEHO, no records were maintained for repair and maintenance requests to cleansing contractors. For requests to maintenance agents, related progress was recorded in computerised spreadsheets; and
- (b) for the 10 public toilets under the other two DEHOs (i.e. Mong Kok DEHO and Yau Tsim DEHO), no records were maintained for repair and maintenance requests to cleansing contractors. For requests to maintenance agents, the two DEHOs used manual log-books to record requests made and the work progress for monitoring purposes.

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**Note 34:** *Of the 30 public toilets, the cleansing services for 29 toilets were provided by cleansing contractors and the remaining toilet by FEHD in-house cleansing workmen.*



4.16 In Audit's view, to facilitate follow up of repair requests and monitoring of progress, there is merit for FEHD to explore the use of information technology (e.g. computerised system) for maintaining repair and maintenance records of public toilets to improve efficiency.

4.17 According to FEHD, DEHO inspecting officers are required to record the repair and maintenance requests to ArchSD properly (see para. 4.10), and for counter checking purpose, ArchSD will provide FEHD with a monthly report on repair requests received to facilitate FEHD to check for any discrepancy with its records. Audit examined FEHD's repair and maintenance requests to ArchSD for the 30 public toilets under the four DEHOs from January 2018 to June 2019 and noted that there was discrepancy in number of repair and maintenance requests between FEHD and ArchSD records. FEHD informed Audit in October 2019 that for the 30 public toilets, 1,911 requests had been referred to ArchSD from January 2018 to June 2019. However, in ArchSD's computerised system, a total of 2,026 requests had been received from FEHD during the same period (i.e. a discrepancy of 115 (2,026 – 1,911) requests).

4.18 In Audit's view, FEHD needs to, in collaboration with ArchSD, ascertain the reasons for the discrepancy with a view to enhancing the follow-up actions of repair and maintenance requests.

### ***Some minor repairs under responsibility of cleansing contractors referred to maintenance agents***

4.19 Audit noted that, in March 2019, ArchSD had expressed concern to FEHD over the appropriateness to raise certain requests to ArchSD for the reported items under minor repair works of public toilets which were the responsibilities of FEHD contractors as stipulated in the contracts for street cleansing services (see para. 4.10(a)(i)). In September and October 2019, FEHD informed Audit that:

- (a) upon receipt of enquiries from ArchSD, FEHD had investigated the cases and provided feedback to ArchSD on the cases highlighted. In the event, 19 requests were confirmed to be wrong referrals;

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- (b) it reminded DEHO inspection officers in March 2019 to ensure that the repairs referred to ArchSD should be appropriate, having regard to the contractual requirements on conducting minor repair works for the defective items at contractors' expenses and no inappropriate use of ArchSD repairing services; and
- (c) it would develop a mobile app and introduce the use of handheld device to facilitate the reporting of defective items by its frontline staff during inspection of public toilets, tracking of progress of maintenance works and collation of management data for further analysis.

In Audit's view, FEHD needs to make continued efforts to ensure that repair and maintenance requests of public toilets are properly referred to the responsible party.

### *Scope for improvement in facilities and hygiene conditions of some public toilets*

4.20 ***Audit site visits.*** To ascertain the facilities and hygiene conditions of public toilets, Audit conducted site visits to 30 public toilets managed by the four DEHOs which were selected for examination of inspection records (see para. 4.9). Audit conducted two rounds of visits in May (24<sup>th</sup> and 31<sup>st</sup>) and June 2019 (20<sup>th</sup> and 21<sup>st</sup>) respectively. The June site visits were conducted by Audit staff together with FEHD staff to ascertain the then conditions and the follow-up actions of deficiencies found in the May site visits.

4.21 ***Some public toilets had a large number of defective facilities involving various types of defects.*** With reference to the repair and maintenance responsibilities of contractors for toilet facilities as specified in the cleansing contracts, Audit prepared a checklist for assessing the conditions of facilities in public toilets during Audit site visits (see Appendix D). Audit site visits identified a total of 384 defective items in May 2019 and 307 defective items (including 181 items found in May 2019 but not rectified and 126 new items) in June 2019 (Note 35). As shown in Tables 12 and 13, some public toilets had a large number of defective items involving various types of defects. Photographs 3 and 4 show examples of defects in coat hook and toilet paper holder respectively.

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**Note 35:** *The site visit results were confirmed with FEHD.*

**Table 12**

**Number of defective items identified in each public toilet during Audit site visits  
(June 2019)**

| Number of defective items identified | Number of public toilets |
|--------------------------------------|--------------------------|
| 0                                    | 2 (7%)                   |
| 1 to 5                               | 5 (17%)                  |
| 6 to 10                              | 11 (36%)                 |
| 11 to 15                             | 4 (13%)                  |
| 16 to 20                             | 6 (20%)                  |
| Over 20 (Note)                       | 2 (7%)                   |
| Total                                | 30 (100%)                |

*Source: Audit site visits*

*Note: One toilet had 24 defective items and another had 29. The toilet with 29 defective items involved six types of defects, as follows: (a) 10 items involved defect in coat hook; (b) 9 items involved defect in toilet paper holder; (c) 5 items involved locked/blocked compartment; (d) 3 items involved defect in watercloset seat with cover; (e) 1 item involved defect in liquid soap dispenser/hand sanitiser; and (f) 1 item involved flushing water system not functioning.*

**Table 13**

**Number of types of defects identified in each public toilet  
during Audit site visits  
(June 2019)**

| Number of types of defects identified | Number of public toilets |
|---------------------------------------|--------------------------|
| 0                                     | 2 (7%)                   |
| 1 to 3                                | 8 (27%)                  |
| 4 to 6                                | 16 (53%)                 |
| 7 or 8                                | 4 (13%)                  |
| Total                                 | 30 (100%)                |

*Source: Audit site visits*

**Photograph 3**  
**Defect in coat hook**



**Photograph 4**  
**Defect in toilet paper holder**



*Source: Photographs taken by Audit staff in June 2019*

4.22 ***Need to timely rectify defective items.*** In the June 2019 site visits, Audit noted that 181 defective items found in May 2019 had not yet been rectified (see para. 4.21) despite the routine inspections and supervisory checks conducted by DEHOs during the period. Of the 181 defective items, 150 items involved minor repairs (Note 36) which should have been rectified by cleansing contractors within 24 hours after being informed by FEHD staff (see para. 4.10(a)(i)). However, as the four DEHOs did not maintain records of repair and maintenance requests to cleansing contractors (see para. 4.15), Audit could not ascertain whether FEHD staff had not informed contractors of the defects or the cleansing contractors failed to rectify the defects within the specified time. For the remaining 31 defective items which needed to be referred to maintenance agents for repair, as of September 2019:

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**Note 36:** *A total of 154 defective items involved minor repairs. However, only 150 items should be rectified by cleansing contractors as four items were found in a public toilet with cleansing service provided by FEHD in-house staff and should be rectified by maintenance agents (see para. 4.10(b)).*

- (a) 6 items (19%) had been referred to relevant maintenance agents before June 2019 site visits; and
- (b) 25 items (81%) were referred to relevant maintenance agents after June 2019 site visits.

4.23 In Audit's view, FEHD needs to strengthen actions to ensure that defects in public toilets are timely identified and referred to contractors and relevant maintenance agents for repair and maintenance, and closely monitor the progress and take appropriate follow-up actions.

4.24 *Hygiene conditions and cleanliness of some public toilets need improvement.* During the site visits in May and June 2019, Audit also assessed the hygiene conditions and cleanliness of the public toilets against the following criteria (Note 37) with three grading levels (i.e. Good, Fair and Poor):

- (a) toilet walls and floor are dry and free of dirt;
- (b) toilet bowls, seats and flushing cisterns are clean and free of dirt;
- (c) wash hand basins and mirrors are free of dirt and their surrounding are clean and dry;
- (d) toilet compartments are clean and dry, and hand rails are shiny; and
- (e) no strong foul smell.

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**Note 37:** *The criteria for assessing the hygiene conditions and cleanliness of public toilets were worked out by Audit with reference to FEHD's poster "Join Us to Monitor Our Contractor's Performance" shown in public toilets.*

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4.25 The assessment results in May and June 2019 indicated that, of the 30 public toilets visited by Audit, while no “poor” grade in any of the above five criteria was noted in 14 (47%) and 24 (80%) public toilets, 6 (20%) and 1 (3%) public toilets had three or more criteria graded as “poor” respectively. Table 14 shows a summary of Audit’s assessment of hygiene conditions and cleanliness of the 30 public toilets visited in June 2019.

**Table 14**

**Assessment of hygiene conditions and cleanliness of the 30 public toilets  
visited by Audit  
(June 2019)**

| Criteria  | No. of public toilets |                 |                 |       |
|---|-----------------------|-----------------|-----------------|-------|
|   | “Good”<br>grade       | “Fair”<br>grade | “Poor”<br>grade | Total |
| (a) Toilet walls and floor are dry and free of dirt                                       | 9                     | 20              | 1               | 30    |
| (b) Toilet bowls, seats and flushing cisterns are clean and free of dirt                  | 9                     | 17              | 4               | 30    |
| (c) Wash hand basins and mirrors are free of dirt and their surrounding are clean and dry | 12                    | 16              | 2               | 30    |
| (d) Toilet compartments are clean and dry, and hand rails are shiny                       | 7                     | 19              | 4               | 30    |
| (e) No strong foul smell  | 17                    | 13              | —               | 30    |

*Source: Audit site visits*

*Note: The grading assessed involved judgment by Audit staff and reflected the condition at the time of visit which may not be representative of the condition at any other time.*

4.26 In Audit’s view, FEHD needs to strengthen actions to improve the hygiene conditions and cleanliness of public toilets.

4.27 *Need to keep monitoring hygiene conditions of toilet supplies.* According to the cleansing contract, the contractor should:

- (a) provide toilet paper and jumbo roll toilet paper to the common parts of public toilets and each water closet compartment and ensure that such is always available for use. The toilet paper shall comply with the standard specified under contract. Furthermore, contractor should submit a certificate or report to FEHD certifying that the toilet paper supplied meets the microbiological standard of national standard within two weeks after contract commencement, and submit a fresh certificate or report in case there is a change of supplier or type of the toilet paper; and
- (b) provide liquid soap and hand-gel based antiseptic solution of the types approved by FEHD for each soap dispenser and hand sanitiser.

4.28 Audit noted that, from time to time, there were media reports raising concerns over the hygiene and cleanliness of toilet supplies such as toilet papers and liquid soap. In September 2019, FEHD informed Audit that:

- (a) during routine inspection, the inspecting officers would also check the cleanliness and replenishment of consumables including soap and toilet paper in public toilets and detect the use of any substandard consumables;
- (b) FEHD would regularly arrange thematic inspection to check the consumables used in public toilets including the testing certificates from the suppliers; and
- (c) post-contamination was more likely to be an issue and FEHD would enhance the toilet facilities with automatic soap dispenser and enclosed type paper dispenser to guard against splattering of water and bacteria.

4.29 In Audit's view, FEHD needs to keep monitoring the hygiene conditions of toilet paper and liquid soap in public toilets with a view to ensuring that these toilet supplies always meet the hygiene standard.

## Management of public toilets

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### *Need to collect user feedback on public toilets*

4.30 According to FEHD, it had conducted three surveys between 2004 and 2008 to collect public views on public toilets and data on the utilisation of public toilets. According to the survey results in 2008, 71 % of the respondents were satisfied with the public toilet services provided by FEHD while only 3% were not satisfied. However, Audit noted that FEHD had not conducted any similar survey since the 2008 survey. In September 2019, FEHD informed Audit that FEHD was arranging a trial use of visitor feedback system to gather user feedback of each toilet under monitoring in the new Smart Toilet System, which would gather instantaneous feedback for a much longer period of time on toilets being monitored. In Audit's view, if the trial result of visitor feedback system is satisfactory, FEHD needs to implement the visitor feedback system promptly with a view to ascertaining and meeting the changing needs and expectations for public toilet services.

### **Audit recommendations**

4.31 **Audit has *recommended* that the Director of Food and Environmental Hygiene should:**

- (a) **review FEHD guidelines on the inspection frequency of public toilets converted from aqua privies;**
- (b) **take measures to ensure that routine inspections are conducted as scheduled and inspection results are timely input to CMS;**
- (c) **remind DEHO staff to strictly follow FEHD's requirements to input the inspection results in CMS;**
- (d) **explore the use of information technology for keeping inspection records of cleansing services provided by in-house cleansing workmen;**
- (e) **make use of the revamped CMS to provide regular management information to senior management on cleanliness and conditions of facilities of public toilets;**



- (f) **in collaboration with the Director of Architectural Services:**
  - (i) **take measures to address the issues leading to the increasing number of defects in public toilets requiring repair and maintenance; and**
  - (ii) **ascertain the reasons for the discrepancy of the repair and maintenance records of public toilets between FEHD and ArchSD with a view to enhancing the follow-up actions of repair and maintenance requests;**
- (g) **explore the use of information technology for maintaining repair and maintenance records of public toilets to improve efficiency;**
- (h) **make continued efforts to ensure that repair and maintenance requests of public toilets are properly referred to the responsible party;**
- (i) **strengthen actions to ensure that defects in public toilets are timely identified and referred to contractors and relevant maintenance agents for repair and maintenance, and closely monitor the progress and take appropriate follow-up actions;**
- (j) **strengthen actions to improve the hygiene conditions and cleanliness of public toilets;**
- (k) **keep monitoring the hygiene conditions of toilet paper and liquid soap in public toilets with a view to ensuring that these toilet supplies always meet the hygiene standard; and**
- (l) **if the trial result of visitor feedback system is satisfactory, implement the visitor feedback system promptly with a view to ascertaining and meeting the changing needs and expectations for public toilet services.**

### Response from the Government

4.32 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD:

- (a) will review the guidelines on the inspection frequency of public toilets including those public toilets converted from aqua privies and having low utilisation rates;
- (b) has an established mechanism to alert DEHO staff on the procedures for timely input into CMS, and DEHO supervising officers should conduct checks to inspection officers' submission through CMS at appropriate intervals. FEHD will remind staff to strictly follow the guidelines for input of CMS properly and conduct checks to ensure that the public toilets are inspected as scheduled and records timely input into CMS;
- (c) will remind DEHO staff to act strictly in accordance with FEHD's requirements that the inspection officers should input into CMS timely and properly after inspection of toilets. Upon the full implementation of the revamped CMS from November 2019, the new system will prevent inspection officers from making improper data input as in the old system;
- (d) will review the use of information technology for keeping inspection records of in-house services and enhance the revamped CMS to provide regular summary reports on cleanliness as well as repair and maintenance conditions of facilities of public toilets. As remedial measures, FEHD will remind staff to conduct monthly checking of the repair works orders and observe any particular types of facilities in the public toilets with abnormal or sudden increase of repair orders and report to the district management for necessary follow-up action. Furthermore, FEHD will also develop a mobile app to facilitate the reporting of defective items to enhance the effectiveness of reporting defects in terms of accuracy and timeliness, tracking of progress of maintenance works and collation of management data for analysis; and
- (e) will continue to regularly arrange thematic inspection to check the consumables used in public toilets and enhance the toilet facilities with automatic soap dispenser and enclosed type paper dispenser.

4.33 The Director of Architectural Services agrees with the audit recommendations in paragraph 4.31(f). She has said that ArchSD will:

- (a) analyse the repair requests and liaise closely with FEHD to conduct joint investigation on the existing ageing public toilets with a view to taking measures to address the issues leading to the increasing number of defects in public toilets requiring repair and maintenance. ArchSD will inform FEHD of any observations relevant to the management of facilities; and
- (b) liaise closely with FEHD to conduct joint investigation with a view to ascertaining the reasons for the discrepancy of the repair and maintenance records of public toilets between FEHD and ArchSD, and to provide appropriate support amongst other maintenance agents to FEHD for its development of the computerised system to interface with that of ArchSD's on reporting and monitoring of repair and maintenance requests.

### **Working arrangements and facilities for outsourced workers performing cleansing duties in public toilets**

4.34 As of June 2019, of the total 798 public toilets and 51 aqua privies, the cleansing services for 625 (78%) public toilets and 31 (61%) aqua privies were outsourced to contractors under the related contracts for street cleansing services. In addition, 264 (33%) public toilets were provided with toilet attendants (see paras. 4.2 and 4.3).

### ***Need to closely monitor the implementation and effectiveness of the improvement measures in enhancing working conditions of outsourced workers***

4.35 In May 2019, FEHD informed LegCo Panel on Manpower that, to enhance the employment conditions and protection for non-skilled workers (including toilet attendants) employed by its outsourced service contractors, the following measures had been/would be adopted:

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- (a) for service contracts tendered on or after April 2019:
  - (i) increasing the weighting of technical assessment of marking scheme from 30% to 50%;
  - (ii) increasing the weighting of the wage level of non-skilled workers from 16% to 25% in the technical assessment;
  - (iii) providing a contractual gratuity to non-skilled workers with no less than one year's service of a continuous contract under the Employment Ordinance (Cap. 57) upon completion or termination of the Standard Employment Contract (including resignation by employees or dismissal by employers save for summary dismissal due to the employee's serious misconduct). The rate of the gratuity would be 6% of the total wages earned by the employees during the relevant employment period;
  - (iv) providing statutory holiday pay for non-skilled workers having been employed under a continuous contract for not less than one month;
  - (v) if a non-skilled worker is required to report duty when typhoon signal no. 8 or above is hoisted, the amount of wages for that day/shift's work should be at least 150% of the wages that the worker would be originally entitled to; and
  - (vi) to benefit non-skilled workers engaged in the service contracts that rely heavily on the deployment of non-skilled workers during the transitional period between the announcement of the new policy on 10 October 2018 and the effective date of 1 April 2019, FEHD would negotiate with the service contractors concerned to incorporate relevant new enhancement measures into the service contracts by making top-up payments on a reimbursement basis;
- (b) to improve the environment of attendant rooms, FEHD would install oscillating fans, exhaust fans and power sockets in existing attendant rooms if circumstances permit. In addition, FEHD would as far as possible make available attendant rooms and improve facilities for toilet attendants in new public toilets or when public toilets were refurbished; and

- (c) to improve the manpower arrangement for public toilet services and relieve the workload of toilet attendants, on top of toilet attendants and routine cleansing services, FEHD had set up dedicated deep cleansing teams in districts since March 2019 to perform regular deep cleansing services for public toilets with high utilisation rates or at tourist spots (Note 38). Such dedicated deep cleansing teams would be progressively extended to all public toilets upon renewal of the respective cleansing contracts.

4.36 Audit noted the above measures taken by FEHD and considers that FEHD needs to closely monitor the implementation and effectiveness of the improvement measures in enhancing working conditions of outsourced workers performing cleansing duties in public toilets.

### *Scope for reviewing provision of toilet attendant services*

4.37 According to FEHD, toilet attendant services are provided in public toilets with high utilisation rates or at tourist spots. As of June 2019, 264 (33%) of the 798 public toilets were provided with attendant services. Audit examination revealed that there was room for improvement in providing toilet attendant services, as follows:

- (a) *Some public toilets with high utilisation rates not provided with toilet attendant services.* In April 2019, FEHD informed LegCo that 207 public toilets had high utilisation rates (i.e. with 300 or more daily visitors on average — see para. 2.4). Audit examination revealed that, of the 207 public toilets with high utilisation rates, 24 (12%) toilets were not provided with attendant services. In September 2019, FEHD informed Audit that the utilisation rates of public toilets were not up-to-date, and based on the recent data collected by infrared sensor counting technology (see para. 2.5), 11 (46%) of the 24 public toilets had high utilisation rates (i.e. with 300 or more daily visitors on average). Of these 11 toilets:
  - (i) 2 public toilets had been provided with toilet attendants since July 2019;

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**Note 38:** *According to FEHD, as of June 2019, services of deep cleansing teams were provided at 186 public toilets.*

## Management of public toilets

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- (ii) 1 public toilet was a toilet with urinal only, rendering provision of toilet attendant services not cost effective; and
  - (iii) for the remaining 8 public toilets, relevant DEHOs were reviewing the provision of toilet attendants based on latest counting data;
- (b) ***Some public toilets at tourist spots not provided with toilet attendant services.*** Audit examination revealed that, of the 23 public toilets which were located at tourist spots as identified by FEHD in December 2018 (see para. 2.40), 5 (22%) toilets were not provided with attendant services. In September 2019, FEHD informed Audit that:
- (i) in general, toilet attendant services would be provided to public toilets with high utilisation rates and at tourist spots, depending on ground situations; and
  - (ii) regarding the 5 toilets located at tourist spots without attendant services, FEHD had provided attendant services to one toilet in July 2019 and planned to provide attendant services to another toilet from November 2019. For the remaining 3 toilets, they were very small in size with very low utilisation rates, and provision of toilet attendants was considered not cost effective; and
- (c) ***Some public toilets not having high utilisation rates and not located at tourist spots provided with toilet attendant services.*** Of the 264 public toilets provided with attendant services, 77 (29%) of them were not one of the 207 public toilets with high utilisation rates nor one of the 23 public toilets located at tourist spots. In October 2019, FEHD informed Audit that, of the 77 public toilets:
- (i) based on the recent data collected by infrared sensor counting technology (see para. 2.5), 13 (17%) public toilets had high utilisation rates (i.e. with 300 or more daily visitors on average) and were justified to be provided with attendant services;
  - (ii) 9 (12%) public toilets were provided with attendant services on selected dates only (such as weekends and public holidays), and provision of toilet attendant services was to address the upsurge need of local visitors during weekends and holidays; and

- (iii) for the remaining 55 (71%) public toilets, FEHD would review the need for provision of toilet attendant services based on the latest utilisation data collected by infrared sensor counting.

4.38 The above audit findings indicate that FEHD's criteria for providing toilet attendant services (i.e. toilets with high utilisation rates or at tourist spots) are not fully met. According to FEHD, in providing toilet attendant services, apart from utilisation rate and location of public toilets, FEHD also considers other factors, including whether the high utilisation rate only occurred at particular time or interval, hygiene condition, cost effectiveness, practicability, inherent site constraint for accommodating toilet attendants and alternative cleansing measures other than provision of toilet attendant services. In Audit's view, FEHD needs to review the provision of toilet attendant services, having regard to the up-to-date utilisation rates of public toilets assessed with the use of technology and other relevant factors (e.g. hygiene condition).

### *Some public toilets with attendant services not provided with attendant rooms*

4.39 According to FEHD Toilet Handbook:

- (a) a small cubicle should be provided in each male toilet and female toilet for the attendant. Each attendant room should be provided with a viewing panel with tempered clear glass to facilitate the toilet attendant to keep a vigilant watch over the toilet area; and
- (b) a power socket and an oscillating fan should be provided inside the attendant room.

4.40 Audit examination of FEHD records revealed that, as of June 2019:

- (a) of the 264 public toilets provided with attendant services, 33 (13%) toilets were not provided with attendant rooms; and
- (b) of the remaining 231 (i.e. 264 – 33) public toilets with attendant rooms:

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- (i) 53 (23%) toilets only had one toilet attendant room. Given that each of these toilets comprised a male and a female toilets with a toilet attendant serving each one, the two attendants might need to use the same room; and
- (ii) 178 (77%) toilets did not have power socket, fan or exhaust fan inside the attendant rooms (see para. 4.35(b)).

4.41 According to FEHD, it will request ArchSD to install oscillating fans, exhaust fans and power sockets in existing attendant rooms if circumstances permit, and as far as possible make available attendant rooms and improve facilities for toilet attendants in new public toilets or when public toilets were refurbished (see para. 4.35(b)). In Audit's view, with a view to improving the working condition of toilet attendants, FEHD needs to, in collaboration with ArchSD, strengthen actions to provide attendant rooms and related facilities for toilets with attendant services as far as possible.

## Audit recommendations

4.42 **Audit has *recommended* that the Director of Food and Environmental Hygiene should:**

- (a) **closely monitor the implementation and effectiveness of the improvement measures in enhancing working conditions of outsourced workers performing cleansing duties in public toilets;**
- (b) **review the provision of toilet attendant services, having regard to the up-to-date utilisation rates of public toilets assessed with the use of technology and other relevant factors (e.g. hygiene condition); and**
- (c) **in collaboration with the Director of Architectural Services, strengthen actions to provide attendant rooms and related facilities for toilets with attendant services as far as possible.**



## **Response from the Government**

4.43 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD:

- (a) has been working closely with ArchSD to improve the working conditions in public toilets such as provision of attendant rooms at new public toilets or after refurbishment;
- (b) has adopted infrared people counter to assess the daily headcount of public toilets, and will continue to apply new technology to obtain the updated utilisation rates of public toilets and review the provision of toilet attendants; and
- (c) will continue to liaise with ArchSD to provide toilet attendant related facilities (e.g. power sockets, oscillating fans and exhaust fans) for existing attendant rooms, if circumstances permit.

4.44 The Director of Architectural Services agrees with the audit recommendation in paragraph 4.42(c). She has said that ArchSD will, upon FEHD's request, provide assistance and technical advice in implementing this recommendation.

## **Handling of complaints on public toilets**

4.45 FEHD receives complaints on public toilets through various channels, including the government hotline 1823, referrals from government bureaux and departments and those received by FEHD directly. According to FEHD, information about complaints is maintained in a computer system (i.e. Complaints Management Information System (CMIS)) which provides a central record of complaint information to help monitor progress with a view to ensuring that all complaints are dealt with properly and efficiently. According to FEHD guidelines:

- (a) upon receiving a complaint, FEHD clerical staff will input the case details into CMIS and a case officer will be assigned to handle the case. The case officer will follow up the case, including conducting investigation and updating CMIS; and

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- (b) all complaints received must be dealt with promptly, and the quicker a complaint is handled the better. Wherever possible, attempt should be made to resolve a complaint on the spot. Where it is not possible, the case officer should give a substantive or an interim reply to a complainant within 10 calendar days upon receipt of the complaint. If an interim reply is issued to the complainant, the case officer should aim at issuing a substantive reply within 30 calendar days upon receipt of the complaint. For complicated cases requiring longer processing time, the case officer should update the complainant on the progress within 30 calendar days upon receipt of the complaint, and review the case progress regularly (at least at a monthly interval) and give further interim replies to the complainant as necessary. The progress should be inputted into CMIS immediately to reflect the latest position of the cases in the system.

According to FEHD, CMIS has built-in reminder and alert functions to assist case officers and their supervisors to identify cases with delays in replying to complainants (e.g. alerts for overdue interim reply and substantive reply and a monthly management information report on complaints showing the lapse time of overdue complaints).

4.46 Table 15 shows the number of complaints on public toilets received by FEHD (including referral cases) from January 2016 to April 2019.

**Table 15**

**Number of complaints received on public toilets  
(January 2016 to April 2019)**

| Year                       | Number of complaints<br>(Note) |
|----------------------------|--------------------------------|
| 2016                       | 2,774                          |
| 2017                       | 2,913                          |
| 2018                       | 2,626                          |
| 2019<br>(up to April 2019) | 897                            |
| Total                      | 9,210                          |

*Source: FEHD records*

*Note: According to FEHD, the number of complaints included those received on public toilets and bathhouses, but there was no separate breakdown for the number of complaints received on public toilets. As of August 2019, there were 27 public bathhouses.*

***Need to deal with complaints on public toilets promptly***

4.47 To assess the time taken for handling complaint cases on public toilets, Audit conducted an ageing analysis of the 3,759 completed complaint cases in the period from January 2018 to April 2019. The analysis showed that it took more than 1 month to 12 months to complete the handling of 614 (16%) complaint cases after receipt by FEHD (see Table 16). Audit noted that, as of April 2019, the handling of 139 complaint cases on public toilets was not yet completed. Of these 139 complaint cases, 74 (53%) complaint cases were received for more than 1 month with the longest case being outstanding for seven months. In September 2019, FEHD informed Audit that some complaint cases should not be regarded as cases with delays in handling and replying to complaints, such as repeated complaints, cases with complications in complaint nature which might cause lengthy handling and omission in inputting the dates of replying complaints.

**Table 16**

**Ageing analysis of complaint cases completed from  
January 2018 to April 2019**

| <b>Period from receipt of complaint to completion date</b> | <b>Number of complaints</b> |
|--|-----------------------------|
| 1 month or less  | 3,145 (83.7%)               |
| More than 1 month to 3 months                              | 405 (10.8%)                 |
| More than 3 months to 6 months                             | 194 (5.1%)                  |
| More than 6 months to 9 months                             | 9 (0.2%)                    |
| More than 9 months to 12 months                            | 6 (0.2%)                    |
| <b>Total</b>   | <b>3,759 (100%)</b>         |

} 614  
(16.3%)

*Source: Audit analysis of FEHD records*

4.48 According to FEHD guidelines, all complaints received must be dealt with promptly and the quicker a complaint is handled the better (see para. 4.45(b)). In Audit’s view, FEHD should endeavour to deal with complaints received on public toilets promptly and update CMIS records timely.

***Scope for enhancing analysis of complaints received on public toilets***

4.49 From 2016 to 2018, FEHD received an average of about 2,800 complaints on public toilets annually. In April 2019, in response to LegCo Members’ enquiries, FEHD informed LegCo that no statistics was kept regarding public toilets with the highest number of complaints and the number of complaints on unsatisfactory hygiene condition of public toilets.

4.50 Audit reviewed the information kept by CMIS on complaints on public toilets and noted that:

- (a) ***Public toilet under complaint.*** While there was a field “location under complaint” in CMIS, it could not provide information on all the concerned public toilets (e.g. the field was left blank or with incomplete information). There was no dedicated field for capturing the name of a public toilet under complaint (while a complainant may not always provide the exact name of the public toilet under complaint, FEHD needs to ascertain the exact toilet in handling the complaint); and
- (b) ***Nature of complaint.*** Although there was a field “subject” in CMIS containing brief information about the content of complaint, FEHD had not made use of the data field to analyse the nature of complaint.

4.51 Audit analysed the information maintained in the field “subject” in CMIS for the 3,523 complaints received from January 2018 to April 2019. Audit found that 2,252 (64%) complaints involved damaged and inadequate facilities, and 1,060 (30%) complaints involved conditions of hygiene and cleanliness (one complaint might involve more than one nature — see Table 17).

Table 17

**Nature of complaints on public toilets  
(January 2018 to April 2019)**

| <b>Nature of complaints</b>           | <b>No. of complaints</b> |
|---------------------------------------|--------------------------|
| Damaged or inadequate facilities      | 2,252 (64%)              |
| Conditions of hygiene and cleanliness | 1,060 (30%)              |
| Against staff                         | 246 (7%)                 |
| Others (Note 1)                       | 550 (16%)                |
| No. of complaints received (Note 2)   | 3,523 (100%)             |

*Source: Audit analysis of FEHD records*

*Note 1: Others mainly included complaints on one or more public toilets in general without specifying the nature.*

*Note 2: One complaint might involve more than one nature (e.g. a complaint on damaged facilities and conditions of hygiene).*

4.52 In Audit's view, FEHD needs to consider enhancing CMIS (e.g. adding a field for inputting the name of a public toilet) and strengthen the regular analysis of complaints received on public toilets (e.g. by individual toilet and by the nature of complaints) with a view to providing useful management information for monitoring and enhancing public toilet services.

### **Audit recommendations**

4.53 **Audit has recommended that the Director of Food and Environmental Hygiene should:**

- (a) **endeavour to deal with complaints received on public toilets promptly and update CMIS records timely; and**
- (b) **consider enhancing CMIS (e.g. adding a field for inputting the name of a public toilet) and strengthen the regular analysis of complaints**

received on public toilets (e.g. by individual toilet and by the nature of complaints) with a view to providing useful management information for monitoring and enhancing public toilet services.

## Response from the Government

4.54 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD:

- (a) has established mechanism to remind staff of the procedures and guidelines for handling complaints; and
- (b) will explore the feasibility of enhancing CMIS and strengthening the analysis of complaints for monitoring and enhancing public toilet services.

## Publicity work

4.55 According to FEHD, in addition to hardware improvement and enhancement of cleansing services, public awareness about the importance of toilet hygiene as well as the proper use of toilet facilities are equally vital in upkeeping cleanliness of public toilets. FEHD appeals to the public for collaborative efforts in enhancing the cleanliness and hygiene of public toilets through health educational and promotional activities, including the following:

- (a) setting up health education promotional booths at selected public toilets with a high utilisation rate since May 2019 and extending implementation of the measure to other suitable public toilets to remind the public of being mindful and considerate when using public toilets;
- (b) making use of social media featuring Keep Clean Ambassador Ah Tak as well as other publicity materials to step up public education on the importance of toilet hygiene and the proper use of toilet facilities. Posters with Keep Clean Ambassador Ah Tak have been put up to remind public of six toilet rules (i.e. don't step on the toilet seat, flush the toilet after use, rubbish must go in the rubbish bin, wash hands with soap, don't flick the water off on the floor and blow hands dry — see Figure 1);

Figure 1

Poster on six toilet rules featuring Keep Clean Ambassador Ah Tak



Source: FEHD records

- (c) setting up a section on good toilet behaviour and symbolism on toilet signage at FEHD's Health Education Exhibition and Resource Centre in Tsim Sha Tsui since January 2016. According to FEHD, the number of visitors to the Resource Centre between January 2016 and May 2019 were as follows:

| Year                     | Number of visitors |
|--------------------------|--------------------|
| 2016                     | 102,567            |
| 2017                     | 93,724             |
| 2018                     | 97,450             |
| 2019<br>(up to May 2019) | 37,984             |



- (d) since May 2019, planning to produce a set of Ah Tak stickers to be posted inside public toilets to promote the proper use of toilet facilities. According to FEHD, the stickers are scheduled for release by mid-November 2019.

### *Need to enhance publicity on proper use of public toilets*

4.56 During Audit's site visits of public toilets in May and June 2019 (see para. 4.20), Audit noted that some toilets were not properly used by the public, e.g.:

- (a) some toilets remained unflushed after use; and
- (b) some toilet fittings were wilfully damaged (see Photograph 5 for an example) or soiled with graffiti.

#### **Photograph 5**

#### **A public toilet seat wilfully damaged at Yuen Long**



*Source: Photograph taken by Audit staff in June 2019*

4.57 In Audit's view, FEHD needs to continue to enhance publicity on proper use of public toilets (e.g. displaying stickers on proper use of public toilets in each toilet compartment).

### *Scope for enhancing provision of information about public toilets on website*

4.58 According to FEHD, it regularly updates the information about public toilets with location maps on its website and has provided a mobile version of the webpage to facilitate visitors browsing the information with mobile phones or other mobile devices (Note 39). Audit reviewed the information about public toilets on FEHD's website as of August 2019 and noted that:

- (a) there were 7 public toilets with male toilets only as of August 2019. However, FEHD's website only showed that 2 toilets were for male and no such information for the remaining 5 toilets. In October 2019, FEHD informed Audit that its website had already been updated to reflect that the 7 public toilets were for male only; and
- (b) 27 public toilets were closed for refurbishment as of August 2019 (e.g. a public toilet at Yuen Long had been closed for refurbishment since August 2018). However, information about their closure was not uploaded onto FEHD website (e.g. the related closing and reopening dates, whether portable toilets are provided as substitutes and the location of the nearest public toilet).

4.59 In Audit's view, FEHD needs to enhance provision of information about public toilets on its website, including closure of toilets undergoing refurbishment.

### *Scope for improving directional signs for public toilets*

4.60 According to FEHD Toilet Handbook, where appropriate, a directional sign should be provided at suitable locations outside the public toilet to guide users to the male toilet, female toilet and accessible unisex toilet. In August 2019, Audit conducted site visits to 10 public toilets in Central and Western District and found that:

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**Note 39:** *The Hong Kong Tourism Board has also included a mobile app (developed by the private sector) on its website for locating public toilets and other toilet facilities nearby.*

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- (a) four public toilets were not provided with directional signs; and
- (b) for the remaining six public toilets provided with directional signs:
  - (i) one public toilet with both male and female toilets was provided with a directional sign showing the availability of male and female toilets (see Photograph 6);
  - (ii) one public toilet with male toilet only was provided with a directional sign showing the availability of public toilets (i.e. without indicating the availability of male toilet only — see Photograph 7);
  - (iii) four public toilets with male, female and accessible unisex toilets were provided with directional signs showing the availability of public toilets or availability of male and female toilets (i.e. without showing the availability of accessible unisex toilet); and
  - (iv) no directional signs indicated the distance to the nearest public toilet.

**Photograph 6**

**Directional sign showing availability of male and female toilets**



**Photograph 7**

**Directional sign showing availability of public toilets**



*Source: Photographs taken by Audit staff in August 2019*

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4.61 In September and October 2019, FEHD informed Audit that the provision of directional signage on streets:

- (a) should only be provided on a need-to-do basis in order not to entail excessive street furniture, and the provision of public toilet information on FEHD website and mobile apps were more effective means than the directional signs on streets; and
- (b) was under the jurisdiction of the Highways Department and FEHD needed to seek the advice of the Highways Department on the matter.

In Audit's view, FEHD needs to consider the merit of providing and enhancing the directional signs for public toilets as far as practicable.

## Audit recommendations

4.62 **Audit has *recommended* that the Director of Food and Environmental Hygiene should:**

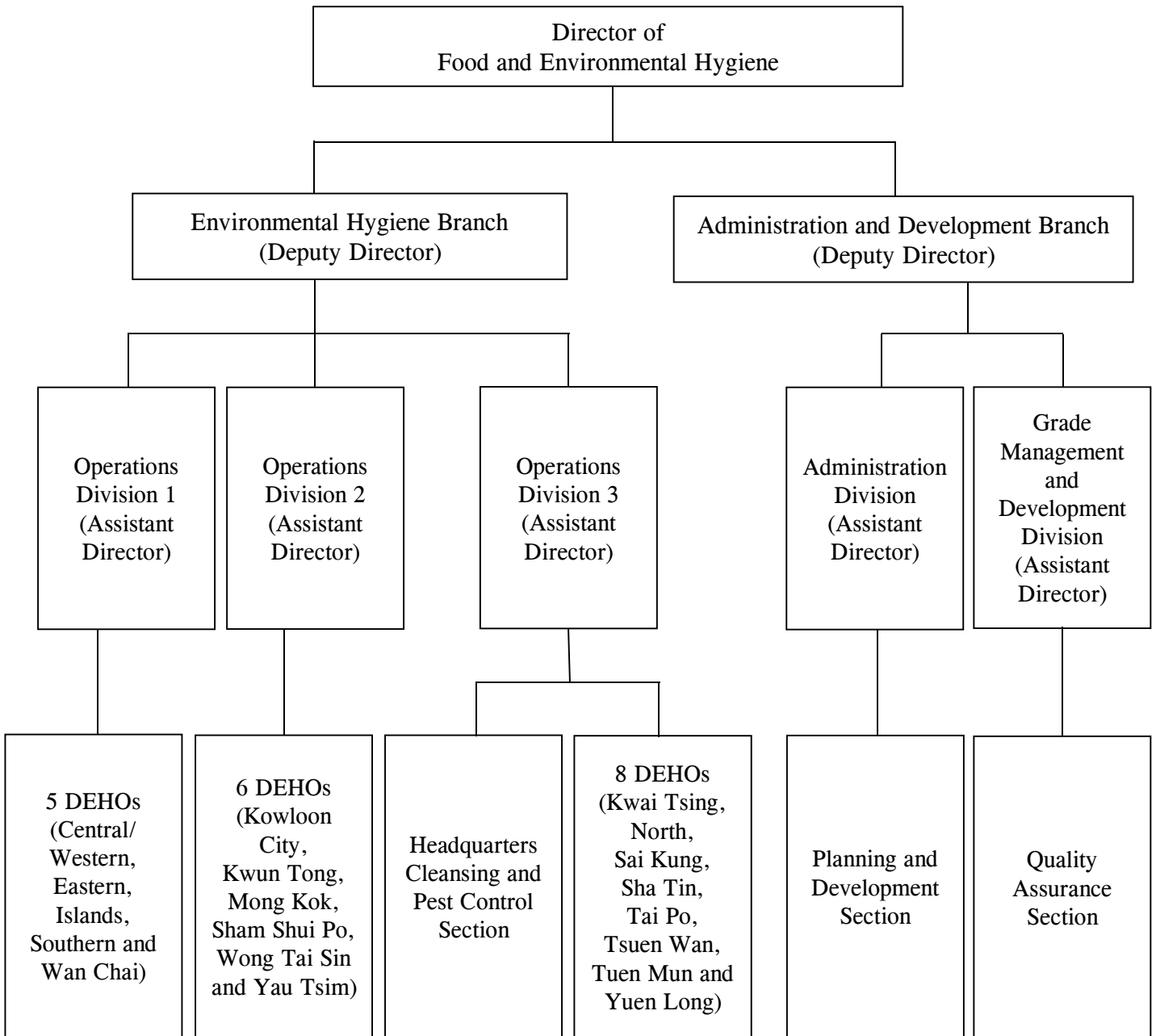
- (a) **continue to enhance publicity on proper use of public toilets (e.g. displaying stickers on proper use of public toilets in each toilet compartment);**
- (b) **enhance provision of information about public toilets on FEHD website, including closure of toilets undergoing refurbishment; and**
- (c) **consider the merit of providing and enhancing the directional signs for public toilets as far as practicable.**

## **Response from the Government**

4.63 The Director of Food and Environmental Hygiene agrees with the audit recommendations. She has said that FEHD:

- (a) has enhanced publicity on proper use of public toilets by disseminating messages on the importance of toilet hygiene as well as the proper use of toilet facilities. FEHD makes use of social media featuring Keep Clean Ambassador Ah Tak to step up public education and appeal to the public for being civic-minded and considerate when using public toilet facilities;
- (b) will review to enhance provision of information (such as toilet type, closure of toilets or undergoing refurbishment) on its website; and
- (c) will consult the Highways Department to provide and enhance the directional signs for public toilets if necessary.

**Food and Environmental Hygiene Department:  
Organisation chart (extract)  
(30 June 2019)**



Source: FEHD records

**Number of public toilets in 18 districts  
(June 2019)**

| District (Note)                                 | Number of public toilets |
|---|--------------------------|
| <b>(a) Hong Kong Island</b>                     |                          |
| 1. Central and Western                          | 36                       |
| 2. Southern                                     | 23                       |
| 3. Wan Chai                                     | 18                       |
| 4. Eastern                                      | 13                       |
| Sub-total (a)                                   | 90                       |
| <b>(b) Kowloon</b>                              |                          |
| 5. Yau Tsim Mong                                | 20                       |
| 6. Kowloon City                                 | 15                       |
| 7. Sham Shui Po                                 | 10                       |
| 8. Kwun Tong                                    | 10                       |
| 9. Wong Tai Sin                                 | 6                        |
| Sub-total (b)                                   | 61                       |
| <b>(c) New Territories and outlying islands</b> |                          |
| 10. Yuen Long                                   | 183                      |
| 11. North                                       | 136                      |
| 12. Tai Po                                      | 72                       |
| 13. Islands                                     | 68                       |
| 14. Sai Kung                                    | 60                       |
| 15. Tuen Mun                                    | 47                       |
| 16. Tsuen Wan                                   | 32                       |
| 17. Sha Tin                                     | 30                       |
| 18. Kwai Tsing                                  | 19                       |
| Sub-total (c)                                   | 647                      |
| Total (d) = (a) + (b) + (c)                     | 798                      |

*Source: FEHD records*

*Note: Except for public toilets in Yau Tsim Mong District managed by two DEHOs (Mong Kok DEHO and Yau Tsim DEHO), public toilets in each of the other 17 districts are managed by one DEHO.*

*Remarks: According to FEHD: (a) public toilets managed by FEHD are mainly provided at transport facilities, tourist spots and any place where crowds are likely to congregate or transient pedestrian traffic is heavy; and (b) public toilets are more concentrated in Central and Western District and village areas in the districts in the New Territories because of the increase in population and lack of proper toilet facilities in these areas in early years of Hong Kong.*

**List of minor repair and maintenance works  
under responsibility of cleansing contractors for public toilets**

| <b>Type of repair and maintenance works</b>   |
|---|
| 1. Replace watercloset seat with cover  |
| 2. Replace nylon cord connected to the lever arm of high level flushing cistern   |
| 3. Replace lever handle of low level flushing cistern (excluding foot pedal type flushing cistern)                      |
| 4. Re-fix/replace bottle trap underneath wash hand basin, urinal and sink   |
| 5. Replace washer of leaking water tap (excluding infrared sensor tap)  |
| 6. Re-fix/replace locking device for watercloset/shower compartment door  |
| 7. Re-fix/replace coat hook   |
| 8. Clear minor blockage of watercloset, urinal, wash hand basin, sink, flow controller of water tap and surface channel |
| 9. Re-fix/replace fluorescent tube/light bulb (excluding flood lights)  |
| 10. Re-fix/replace toilet paper holder (including the bar for holding the toilet paper)                                 |
| 11. Re-fix/replace jumbo roll tissue holder (including the bar for holding jumbo roll toilet paper)                     |
| 12. Re-fix notice box/board and inspection record box   |
| 13. Re-fix hand rail/litter container   |
| 14. Re-fix/replace liquid soap dispenser  |
| 15. Re-fix/replace liquid hand sanitiser/dispenser  |
| 16. Replace battery for sensor of automatic tap (if any)  |
| 17. Re-fix folding baby changing counter (if any)   |

*Source: FEHD records*

*Remarks: According to FEHD cleansing contracts:*

- (a) *all labour and materials for the repair and maintenance services shall be provided at contractors' own expenses;*
- (b) *all materials and replacement parts used shall be a direct replacement and they shall be of the same brand and quality as the existing parts used in the public toilets. In case such materials and replacements are not available in the market, the nearest equivalent shall be provided subject to the prior approval of FEHD; and*
- (c) *the contractors shall maintain such stocks of materials, spares, equipment and tools as they consider necessary for the prompt and effective completion of the repair and maintenance works required.*



### **Audit checklist for assessing conditions of facilities in public toilets**

| <b>Type of defects</b>  |
|---|
| 1. Defect in watercloset seat with cover  |
| 2. Defect in nylon cord connected to the lever arm of high level flushing cistern                           |
| 3. Defect in lever handle of low level flushing cistern (excluding foot pedal type flushing cistern)        |
| 4. Defect in bottle trap underneath wash hand basin, urinal and sink  |
| 5. Leaking water tap  |
| 6. Defect in locking device for watercloset/shower compartment door   |
| 7. Defect in coat hook  |
| 8. Blockage of watercloset, urinal, wash hand basin, sink, flow controller of water tap and surface channel |
| 9. Defect in fluorescent tube/light bulb/light-emitting diode light bulb                                    |
| 10. Defect in toilet paper holder (including the bar for holding the toilet paper)                          |
| 11. Defect in jumbo roll tissue holder (including the bar for holding jumbo roll toilet paper)              |
| 12. Defect in notice box/board and inspection record box  |
| 13. Defect in hand rail/litter container  |
| 14. Defect in liquid soap dispenser/hand sanitiser  |
| 15. Sensor of automatic tap (if any) out of battery/broken or tap not working                               |
| 16. Defect in fixed or folding baby changing counter  |
| 17. Flushing water system not functioning   |
| 18. Locked/blocked compartment  |
| 19. Locked/blocked urinal   |
| 20. Lack of toilet paper  |
| 21. Lack of soap or hand sanitiser  |

*Source: With reference to FEHD cleansing contractors' repair and maintenance responsibilities for public toilets (see Appendix C)*

## Acronyms and abbreviations

|        |  |
|--------|--|
| ArchSD | Architectural Services Department  |
| Audit  | Audit Commission   |
| B(SF)R | Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations |
| CMIS   | Complaints Management Information System   |
| CMS    | Contract Management System   |
| DC     | District Council   |
| DEHO   | District Environmental Hygiene Office  |
| FEHD   | Food and Environmental Hygiene Department  |
| HKPSG  | Hong Kong Planning Standards and Guidelines  |
| LegCo  | Legislative Council  |
| WSD    | Water Supplies Department  |