

# **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.