

Your Ref. : CB4/PAC/R75
Our Ref. : (11) in FEHD CI&PC/32-60/10/7

1 March 2021

Ms Wendy JAN,
Clerk to Public Accounts Committee,
Legislative Council Complex,
1 Legislative Council Road,
Central, Hong Kong

Dear Ms JAN,

Public Accounts Committee

Consideration of Chapter 2 of the Director of Audit's Report No. 75

Government's efforts in tackling shoreline refuse

I refer to your letter (with appendix) of 19 February 2021 and provide you with a consolidated reply to Items (V)9 to (V)12 therein in the ensuing paragraphs.

Item (V)9 of Appendix

2. The Food and Environmental Hygiene Department (FEHD) will review and update from time to time the relevant contents and sections of the Operational Manual for Management of Public Cleansing Contracts (Operational Manual) as appropriate to enhance the effectiveness of contract management. FEHD has completed in the fourth quarter of 2020 a review of the inspection guidelines of the Operational Manual regarding the inspection frequency/area for special sites/areas, ungazetted beaches and coastal areas. Senior Health Inspectors in districts may exercise discretion to determine the most appropriate minimum number of inspections to be conducted at work sites in remote areas. The relevant decisions are required to be properly documented, which will serve as a basis for FEHD to better monitor the performance of contractors. In addition, FEHD is conducting a review on the contents of the Operational Manual

regarding the monitoring of cleansing service at special sites/areas, ungazetted beaches and coastal areas, and will formulate guidelines in a separate chapter, with a view to further enhancing the monitoring and evaluation of the overall performance of contractors. The relevant work is expected to be completed in the first quarter of 2021.

Item (V)10 of Appendix

3. FEHD launched the pilot scheme on the installation of 360-degree cameras in three remote areas from February to July 2018. In the light of the satisfactory evaluation results, FEHD launched a one-year trial scheme in March 2020 to install one 360-degree camera at each of the 15 marine refuse priority sites in remote areas in the Southern District, Islands District, Tuen Mun District, Tai Po District, Sha Tin District and Sai Kung District. The solar-powered system was used to capture clear and readable images once every 30 minutes from 6:00 a.m. to 6:00 p.m. daily. Captured images were sent to a server via 4G network for subsequent viewing and downloading by the contractor/government representatives at the contractor's website. FEHD can monitor the condition of the sites remotely for effective planning of clean-up operations. This can save time and cost of monitoring, particularly for those coastal sites which are remote and not easily accessible (e.g. Tap Mun (East) and Tung Lung Chau).

4. When assessing the effectiveness of 360-degree cameras, the major factors of consideration are whether they can effectively monitor the accumulation of marine refuse washed ashore, their cost effectiveness, and whether they can assist FEHD to effectively adjust the frequency of clean-up services. The 15 priority sites are mostly located in remote areas that require long travelling time or are not readily accessible (especially those outlying islands which can only be accessed by vessels). The use of 360-degree cameras enables real-time monitoring by FEHD without having to travel for long time to these locations for site inspections. As a result, monitoring work can be expedited, so as the arrangement for clean-up operations by the contractor where necessary. Meanwhile, the images can assist in monitoring the contractor's clean-up performance. As the time for travelling to these locations by FEHD is saved, resources can be deployed to handle other prioritised street cleansing services.

5. Between March 2020 and January 2021, there were nine occasions in which FEHD found abnormal increase in the accumulation of shoreline refuse by reviewing the images captured by 360-degree cameras, they then flexibly arranged clean-up services to the relevant locations, including Fan Lau (thrice), Sam Pak Wan (twice), Shek Pai Wan (once), Shui Hau (once), Shap Long (once) and Lung Kwu Tan and Lung Kwu Sheung Tan (once).

6. The successful data transmission of the captured photographs from the 360-degree camera system is one of the challenges in this trial scheme. Investigation by the contractor found that the defective on-line data transmission during the early trial period was generally caused by technical problems. The contractor has taken remedial actions to solve the connectivity problems. From January to February 2021, there was basically no more instance where FEHD failed to receive the images captured due to connectivity problems. In general, the camera system operated smoothly.

Item (V)11 of Appendix

7. To address public concerns on the cleanliness along the shorelines across the territory, the Government has enhanced the removal of shoreline refuse. Over the past few years, FEHD has put on trial different models/approaches with a view to providing effective clean-up service. It first adopted the outcome basis approach or “job basis” approach (Contracts A, B and C) in the procurement of clean-up services. The estimated hours of each site stated in the contract specifications by FEHD provided a reference for the contractor to estimate the contract price for clean-up service of each site. The actual time for clean-up service at each site may vary, subject to the quantity of shoreline refuse to be collected. The contractor must complete the clean-up service at a standard to the satisfaction of FEHD. If the completion time exceeded the estimated hours, the contractor would not be paid for the excess hours.

8. However, to enhance the flexibility in deploying adequate manpower to cope with the surge of refuse due to unforeseeable circumstances, such as the super typhoon Hato that hit Hong Kong in 2017, the input basis approach or

“fixed-manpower basis” approach (Contract D) was adopted on a trial basis in 2018. The contractor was required to ensure full attendance of its personnel during the working hours specified in the work schedules with a view to meeting operational needs and coping with unforeseen circumstances by deployment of adequate manpower in a more effective and flexible manner.

9. In approving the acceptance of recommended tender for Contract D in May 2018, the Central Tender Board commented that the over-reliance on a single contractor was undesirable from the risk management perspective. In this light, FEHD split the clean-up service in tender of a contract (Contract E) into two Districts Groups in 2019. Since FEHD had to take into account the possibility of unforeseen incidents, e.g. massive/urgent/contingent clean-up operations for individual affected districts (such as after the passage of typhoons), strategic grouping of districts into two was introduced so that manpower could be flexibly deployed to address the special needs of an individual district within the districts group. For instance, contractor personnel in Districts Group I could be mobilised from Kwai Tsing District and Tsuen Wan District to work in Lantau Island (e.g. Shui Hau) through the road networks in case of surge of refuse. In Contract E, the “outcome basis approach” or “job basis approach” was adopted again since fixed manpower could not be fully utilised under the “fixed-manpower basis” approach when the refuse yield was hardly high in individual districts.

10. The estimated contract prices for shoreline clean-up were specified in Table 10 of the Audit Report. Contracts A and B, covering 174 sites, were two-year contracts at a total contract price of \$5.4 million. The average annual contract price for Contracts A and B was therefore \$2.7 million. Contract C, covering 66 sites, was a one-year contract at a total contract price of \$12.3 million. Therefore, it is more reasonable to use the second year figure of Contracts A to C (covering 240 (i.e. 174+66) sites at a total contract price of \$15 million) for comparison. In comparing the total contract price for the one-year Contract D, covering 270 sites, at \$38 million with that for Contracts A to C, there seems to be an increase of about 1.5 times. The increase in contract price was attributable to an increased number of sites covering ungazetted beaches and coastal areas,

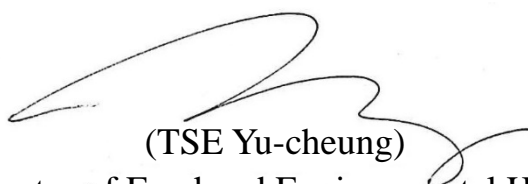
higher total frequencies of clean-up operations, a rise in the monthly wages of outsourced cleansing workmen, and additional work requirements for monitoring the service quality of contractors, such as submission of digital images of work sites and working report with photos by the contractor to FEHD after providing clean-up service.

11. Unlike Contract D for a term of one year, Contract E was a two-year contract. The estimated total contract price for Contract E was \$51.8 million or \$25.9 million in terms of average annual contract price. In comparison, the estimated annual contract price for Contract E was about 32% lower than that for Contract D. The decrease was mainly attributable to a better use of manpower resources under the “job basis” approach instead of the fixed-manpower approach adopted by FEHD in Contract D as mentioned in paragraph 9.

Item (V)12 of Appendix

12. The reasons why FEHD put on trial different models/approaches with a view to providing effective clean-up service and their effectiveness were addressed in paragraphs 7 to 9 above.

Yours sincerely,



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for Director of Food and Environmental Hygiene

c.c.

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