

GOVERNMENT'S EFFORTS IN TACKLING SHORELINE REFUSE

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1. According to the report of a Marine Refuse Study completed by the Environmental Protection Department (EPD) in 2015 (the 2015 Study), marine refuse refers to any solid waste, discarded or lost material, resulting from human activities, that has entered the marine environment irrespective of the sources. Floating refuse (i.e. marine refuse floating on sea surface) may be washed ashore and accumulated near the coastline as shoreline refuse. While floating refuse is collected by the Marine Department (MD), shoreline refuse is collected by a number of government departments, namely the Agriculture, Fisheries and Conservation Department (AFCD), the Food and Environmental Hygiene Department (FEHD), and the Leisure and Cultural Services Department (LCSD) according to the locations of which they are in charge. In 2019, 3,856 tonnes of shoreline refuse were collected by AFCD, FEHD and LCSD.

2. The Government set up in 2012 and subsequently revamped in 2018 an Inter-departmental Working Group to coordinate and enhance efforts among the relevant departments in tackling the marine refuse problem. In support of the Working Group, EPD completed the 2015 Study. The relevant departments took specific actions to implement recommendations of the 2015 Study, which included: (a) enhancing cleaning efforts (e.g. increasing cleaning frequencies of 27 priority sites identified by the 2015 Study); (b) providing support and facilities to reduce the amount of refuse entering the sea (e.g. providing waste recycling bins and water dispensers at coastal areas); (c) launching publicity and educational campaigns; and (d) conducting regulatory and enforcement actions. A Clean Shorelines Liaison Platform (which mainly includes a dedicated website and social platforms) has been established after the 2018 Policy Address to engage organisations and volunteers that advocate for keeping the shorelines clean, with a view to leveraging community efforts to protect the marine environment. The Audit Commission (Audit) has recently conducted a review to examine the Government's efforts in tackling shoreline refuse.

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Monitoring of shoreline cleanliness by Environmental Protection Department

3. ***Inspections of coastal sites.*** EPD conducts regular inspections at specific coastal sites which are more prone to marine refuse accumulation, and assesses the cleanliness conditions of these sites using a Shoreline Cleanliness Grading System (with five levels ranging from “Grade 1 — Clean” to “Grade 5 — Poor”) (i.e. shoreline cleanliness monitoring programme). From April 2015 to October 2017, EPD staff inspected each priority site at least once in both wet and dry seasons. With a new list of 29 priority sites updated in November 2017 and up to December 2019, EPD staff conducted inspections to the newly listed priority sites under a new monitoring regime, in which the frequency of re-inspection of a priority site (ranging from within one to six months) was set by reference to the cleanliness level recorded. Since mid-January 2020, EPD has ceased deploying its own staff to conduct routine inspections and engaged a contractor to conduct on-site inspections of the 29 priority sites monthly and 90 other coastal sites quarterly under a site monitoring contract. EPD has also engaged another contractor to deploy unmanned aircraft systems (UAS) for shoreline surveillance since May 2020 under a trial project (paras. 2.4 to 2.7, 2.12 and 2.17(a)).

4. ***Inspections by EPD staff.*** Audit examined records of inspections by EPD staff to the 29 priority sites from November 2017 to December 2019 (26 months) and identified the following issues (para. 2.8):

- (a) ***Some re-inspections not conducted within planned timeframe.*** There were deviations from the planned timeframe in conducting 24 re-inspections involving 13 of the 29 priority sites (up to a delay of 106 days in one case). According to EPD, 9 of the 24 re-inspections were covered by helicopter surveillance flights (arranged with the Government Flying Service). However, the information obtained by helicopter aerial surveillance was different from that by on-site inspections as the angle of photographs taken and the surveillance area varied in each flight and the Shoreline Cleanliness Grading System was not applicable (para. 2.9); and
- (b) ***Inconsistencies in documentation of inspection.*** EPD standardised the format of the inspection report after a review exercise conducted in July 2019. Since then, field staff had been required to include photographs taken at designated points of each coastal site in the inspection report. Supervisory checks were also introduced after the review exercise. Based

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on a sample check of 15 reports on inspections conducted after July 2019, Audit found that: (i) photographs of some designated points were not included in 4 inspection reports and the reasons for omission were not documented; and (ii) supervisory checks were not documented in 6 inspection reports (para. 2.10).

5. ***Need to promulgate cleanliness conditions of coastal sites.*** EPD does not regularly promulgate in the public domain the cleanliness condition of coastal sites. In Audit's view, information on the cleanliness condition of coastal sites is useful for non-governmental organisations (e.g. green groups) in planning their voluntary clean-up events. With the lapse of time and the increased inspection coverage and frequency since 2020, there are merits for EPD to disseminate the information on cleanliness conditions of coastal sites through the dedicated Clean Shorelines website (para. 2.13).

6. ***Need to keep in view coastal sites under shoreline cleanliness monitoring programme.*** Audit found that the cleanliness condition of the priority sites had generally improved from January 2018 to mid-August 2020. For instance, 27 (93%) of 29 priority sites identified in November 2017 were accorded an average cleanliness grading better than "Grade 3 — Fair" from January to mid-August 2020. However, during the same period, some non-priority sites attained worse cleanliness gradings (e.g. the Brothers Marine Park). In Audit's view, EPD should continue to keep in view the need for updating the coastal sites in the shoreline cleanliness monitoring programme taking into account changes in cleanliness and other circumstances of individual sites, and make use of UAS inspections to supplement on-site inspections (paras. 2.16 to 2.18).

7. ***Handling of pork hock incident.*** In May 2017, EPD and the authorities in Guangdong Province launched a regional notification and alert mechanism allowing one side to notify the other of heavy rain or significant environmental incidents. In conjunction with the mechanism, EPD has compiled a protocol for handling surge of marine refuse in Hong Kong (the Protocol), which outlines the established arrangements for action departments (i.e. AFCD, FEHD, LCSD and MD) to handle surge of marine refuse at Hong Kong's waters and coastal areas owing to typhoon, heavy rainfalls, or significant environmental incidents. On 11 July 2020, local media reports revealed that a large quantity of pork hocks had been found on the beaches in Humen, Dongguan, Guangdong Province. From 13 to 16 July 2020, media reports revealed that pork hocks had been found on the beaches in Tuen Mun District and

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Tsuen Wan District. According to EPD, the pork hocks found on the beaches did not meet the broad classification of marine refuse (i.e. plastics, metal, glass, processed timber, paper, porcelain, rubber and cloth) and hence, the incident did not meet the conditions for activating the Protocol. Notwithstanding this, it had taken follow-up actions on the incident in response to a media enquiry on 13 July 2020. Audit considers that there are merits for EPD to draw on the experience in the incident to update the Protocol, where appropriate (paras. 2.21 to 2.25).

Clean-up operations by Agriculture, Fisheries and Conservation Department

8. ***Cleansing contracts.*** AFCD is responsible for the cleanliness of six Marine Parks, one Marine Reserve, and shorelines of 24 country parks and 11 designated special areas outside the country parks in Hong Kong. As at 1 July 2020, the cleansing work of the Marine Parks and Marine Reserve was outsourced to 3 contractors under 5 recurrent contracts. From 2015 to 2019, AFCD collected 1,670 tonnes (averaging 334 tonnes per annum) of marine refuse in its Marine Parks and Marine Reserve (para. 3.2). Audit examination revealed the following areas for improvement:

- (a) ***Need to improve the inspection reporting requirements.*** Monitoring staff of AFCD are required to complete a Daily Site Inspection Form or any of the two other inspection forms after each inspection. Audit noted that some important information was missing in the inspection forms. For example, the inspection form used by AFCD staff in two Marine Parks (Sha Chau and Lung Kwu Chau Marine Park and the Brothers Marine Park) did not record the time of inspection, and all inspection forms did not record the departure time of the contractors' staff (paras. 3.3 and 3.4);
- (b) ***Need to take effective follow-up actions on cases of suspected absence from duty of contractors' staff.*** According to the provisions in AFCD's cleansing contracts, contractors should ensure that the number of cleaners deployed to perform a cleansing operation and the number of working hours are not less than that stipulated in the contracts. Audit examined 772 inspection records (from 1 April 2019 to 31 March 2020) and found that: (i) the inspection forms of 18 site inspections in 3 Marine Parks (Tung Ping Chau, Hoi Ha Wan and Yan Chau Tong Marine Parks) showed that AFCD staff either did not find the contractors' staff on site, or found that contractors' staff had left early. In 12 out of the 18 cases, AFCD staff either did not document any follow-up actions taken (7 cases), gave up

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calling the contractors after several unsuccessful phone calls (3 cases), or the contractor informed AFCD that the duration of cleansing work had to be shortened (2 cases) and yet no information on the dates of replacement work was recorded; and (ii) 99 inspections scheduled for Sha Chau and Lung Kwu Chau Marine Park were cancelled because the AFCD staff concerned were occupied by other tasks. The monitoring procedures of AFCD have not specified a minimum inspection frequency for AFCD staff over a period of time (para. 3.5); and

- (c) ***Need to enhance the monitoring of contractors' work.*** Audit examined the provisions in the 5 recurrent AFCD cleansing contracts (in force as of August 2020) and found that: (i) the internal guideline of AFCD did not provide clear assessment criteria for assessing the level of satisfaction with the services provided by a contractor; (ii) only one cleansing contract specified that the contractor should submit digital images before each service and after completion of the service; and (iii) all 5 contracts had not included provisions requiring the contractors to report the arrival and departure times of their staff (para. 3.7).

9. ***Audit's site visits.*** Audit's site visits to two Marine Parks from June to August 2020 found the following issues:

- (a) ***Long time taken to remove large objects washed ashore.*** Audit's site visit on 18 June 2020 found two red pipe structures along the shoreline of Lung Kwu Chau. According to AFCD records, the two pipe structures were first found in December 2019 and follow-up actions (including identifying the owner of the structures and trying to engage some cleansing service companies for arranging quick removal of the structures) had been taken to remove the structures but not successful. Subsequently, AFCD sought the assistance from MD and the pipe structures were eventually removed by MD's contractor on 29 July 2020 (paras. 3.11, 3.12 and 3.14);
- (b) ***Marine refuse found beyond high water mark of Sha Chau and Lung Kwu Chau Marine Park.*** According to the cleansing contract of the Marine Park, the contractor should clear all refuse at areas near the high water mark and the edge of the sea on beaches, as well as all floating refuse within the Marine Park boundary. Audit's site visits on 18 June, 24 July and 24 August 2020 found a large quantity of refuse at the area beyond high

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water mark and next to the natural vegetation (i.e. back-of-beach area) of Sha Chau and Lung Kwu Chau (paras. 3.15 and 3.16);

- (c) ***Need to improve the cleanliness of back-of-beach area of Lung Kwu Chau.*** AFCD is responsible for clean-up of marine refuse within the boundary of the Marine Park, excluding the back-of-beach area. For the back-of-beach area of Lung Kwu Chau, AFCD agreed to conduct a one-off in-depth clean-up operation with EPD's funding support, albeit falling outside the boundary of the Marine Park. AFCD awarded two ad hoc cleansing contracts (from November 2018 to May 2019 and February to July 2020) covering the back-of-beach area of Lung Kwu Chau. Audit found that the frequency of collection, number of staff to be deployed and working hours per day had not been specified in the two ad hoc contracts and the contractor was not required to submit digital images of the site after each clean-up operation as evidence supporting that the cleansing work was satisfactorily completed. In July and August 2020, Audit paid site visits to Lung Kwu Chau and found that: (i) the refuse had not been fully cleaned up at Lung Kwu Chau in accordance with the contract provisions; and (ii) a large quantity of refuse was accumulated at the back-of-beach area adjacent to a footpath on Lung Kwu Chau (paras. 3.17 and 3.18); and
- (d) ***Need to improve the cleanliness of the Brothers Marine Park.*** The contractor of the cleansing contract of the Brothers Marine Park cleaned West Brother and East Brother each once a month, which was the lowest frequency among the Marine Parks and Marine Reserve. Audit's site visits on 24 July and 24 August 2020 found a large quantity of refuse (barrels, bamboo sticks and foam boxes) accumulated along the shorelines of the Marine Park (paras. 3.19 to 3.21).

Clean-up operations by Leisure and Cultural Services Department

10. ***Collection and removal of shoreline refuse at gazetted beaches.*** LCSD is responsible for the cleanliness of 41 gazetted beaches and the cleansing work is performed by contractors under three cleansing contracts covering different districts. While the cleanliness condition of gazetted beaches was generally more satisfactory than that of the other coastal sites, Audit found the following areas for improvement (paras. 4.2, 4.6 and 4.8):

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- (a) ***Need to ensure accuracy and timely reporting of statistics on special cleansing operations.*** LCSD conducted special cleansing operations at the priority sites during wet seasons and at the remaining gazetted beaches after heavy rainfall, strong monsoon, typhoons or other inclement weather. Audit noted that the statistics of special cleansing operations had not been reported to the Working Group or its Task Force after January 2018. Audit examination of a statistical return on special cleansing operations provided by LCSD revealed that: (i) for the four priority sites, the number of special cleansing operations decreased from around 100 each in 2018 and 2019 to 24 for the first half of 2020. The decrease might reflect a general improvement in the cleanliness condition of the priority sites; and (ii) for the other 37 non-priority sites, the number of special cleansing operations increased significantly from 236 in 2019 to 931 for the first half of 2020. According to LCSD, the provision of one additional cleansing worker per day at each of the six beaches in Sai Kung from February to May 2020 and in some of the Sai Kung beaches in June 2020 was incorrectly reported as 842 special cleansing operations in the statistical return provided to Audit (paras. 4.10 to 4.12);
- (b) ***Need to tighten controls on provision of additional cleansing workers.*** Audit examined the requests made by LCSD for provision of additional cleansing workers by contractors for beaches in different districts from April 2017 to March 2020 and found that: (i) justifications for the requests for additional cleansing workers were not documented; (ii) additional cleansing workers had been deployed before the issue of a written service order to the contractor on some occasions; and (iii) while LCSD requested the contractor to provide four additional cleansing workers to work for eight hours on alternate Fridays each month in Rocky Bay Beach from June 2018 to March 2020, the quantity of refuse collected on the Fridays with additional cleansing workers did not show a significant increase as compared to that on the Fridays without additional cleansing workers (para. 4.14); and
- (c) ***Need to improve accuracy of shoreline refuse data.*** LCSD venue staff records the total number of bags and/or the total weight of shoreline refuse and land refuse on a daily basis. A summary of shoreline refuse data of each gazetted beach is provided to EPD on a monthly basis. Audit noted that LCSD did not have laid-down procedures on how to classify, count and weigh the refuse collected, resulting in the following issues (para. 4.15):

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- (i) ***Refuse collected not consistently classified as shoreline refuse.*** Audit conducted interviews with venue staff of 13 beaches and found that they had different interpretations on how to classify refuse collected as shoreline refuse. For example, venue staff of two beaches in one district said that only refuse collected in the water area would be classified as shoreline refuse. In contrast, venue staff of three beaches in another district said that refuse collected in the water area and on the entire sand area would be classified as shoreline refuse (para. 4.15(a)(i));
- (ii) ***Variation in estimating refuse weight.*** According to the interviews with the venue staff of different beaches, the refuse weight was estimated based on a formula (i.e. multiplying the number of bags/bins of refuse collected by an estimated weight for each bag/bin of refuse). The estimated weight for each bag/bin of refuse in each beach was either 15 kilograms (kg) or 25 kg (for garbage bag) and either 250 kg or 300 kg (for garbage bin). No record was available showing when and how LCSD determined the estimated weight for each bag/bin of refuse and whether LCSD had regularly calibrated the estimated weight (para. 4.15(a)(ii)); and
- (iii) ***Refuse on shark prevention nets not reported.*** In 2019, the maintenance contractor of shark prevention nets reported that refuse with a total weight of 14,847 kg had been removed during its maintenance service. However, LCSD had not included the quantity of refuse reported by the maintenance contractor in compiling the marine refuse data for submission to EPD (para. 4.15(a)(iii)).

Clean-up operations by Food and Environmental Hygiene Department

11. ***Monitoring of clean-up operations.*** FEHD is responsible for the cleanliness of ungazetted beaches and coastal areas in Hong Kong that are not under the purview of other government departments. As of August 2020, of the 306 sites of ungazetted beaches and coastal areas under FEHD's purview, the clean-up work of 287 (94%) sites was outsourced to a contractor and clean-up work of the remaining 19 (6%) sites was undertaken by its in-house staff. From 2015 to 2019, FEHD collected 4,045 tonnes (averaging 809 tonnes per annum) of shoreline refuse in the

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ungazetted beaches and coastal areas under its purview (paras. 5.2 and 5.3). Audit examination revealed the following areas for improvement:

- (a) ***Need to update guidelines for assessing the cleanliness level.*** According to FEHD's Operational Manual for Management of Public Cleansing Contracts (Operational Manual), FEHD staff shall assess the overall performance of the contractor through random checking. The frontline staff will determine whether the cleanliness level achieved is satisfactory based on both the terms and condition of the contract and the work plans proposed by the contractor and approved by FEHD. In Audit's view, FEHD needs to update its guidelines for assessing the cleanliness level achieved by the contractor, making reference to EPD's Shoreline Cleanliness Grading System for the cleanliness level where appropriate (para. 5.5);
- (b) ***Need to comply with the monitoring requirements of the Operational Manual.*** According to the Operational Manual, Senior Foremen should inspect at least 50% of the scheduled work sites on the day the service is provided. Health Inspectors and Senior Health Inspectors should conduct checking on the submissions of Senior Foremen, by making use of the Contract Management System of FEHD, twice and once a week respectively. In June and July 2020, Audit paid visits to FEHD's Islands and Sai Kung District Environmental Hygiene Offices and found cases that the work sites inspected had not been recorded on the concerned Senior Foreman's Daily Inspection Reports. Without information on work sites inspected, Audit could not ascertain whether the 50% target inspection rate for Senior Foremen had been achieved. Audit also noted that the requirement of the Operational Manual to make use of the System to conduct checking on the submissions of the Senior Foreman once/twice a week had not been fully achieved (paras. 5.6 and 5.7);
- (c) ***Audit's field visits.*** From June to mid-September 2020, Audit conducted field visits to three priority sites and found:
 - (i) a large quantity of refuse in two sites (Ting Kok Road near Po Sam Pai Village in Tai Po District and Shui Hau in Islands District) and the refuse had not yet been fully cleaned up by the contractor as of mid-September 2020; and

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- (ii) a plastic bucket and a large bamboo scaffold at the shoreline of Lung Kwu Tan near Lung Tsai in Tuen Mun District (para. 5.12); and
- (d) ***Tendering of clean-up service.*** From 2016 to 2021, FEHD adopted different grouping strategies for the contracts for provision of clean-up (and waste removal) services for the ungazetted beaches and coastal areas and other territorial sites under its purview (para. 5.16). Audit examination revealed the following areas for improvement:
 - (i) ***Need to avoid over-reliance on a single contractor.*** In approving the acceptance of recommended tender for the territory-wide clean-up contract for the period from June 2018 to May 2019, the Central Tender Board in May 2018 commented that the over-reliance on a single contractor was undesirable from the risk management perspective and requested FEHD to take this into account in future. According to the Financial Services and the Treasury Bureau Circular Memorandum No. 4/2019 “Concentration Risk in relation to Cleansing and Security Service Contracts” (issued in April 2019), government departments are encouraged to implement appropriate means to promote competition including restricting the number of contracts to be awarded to the same tenderer. However, FEHD awarded the 2019-21 clean-up service for two Districts Groups in May 2019 to the same contractor without imposing such restriction (paras. 5.16 and 5.19); and
 - (ii) ***Need to make realistic estimation of clean-up service hours for inclusion in future contracts as far as practicable.*** The 2019-21 clean-up contract requires the contractor to perform clean-up service to achieve the cleanliness level to the satisfaction of FEHD (i.e. adopting an outcome basis approach). Audit selected one district each (with the longest estimated hours) from the two Districts Groups of the contract and found that, for the period from June 2019 to May 2020, the actual hours incurred by the contractor were only 38.3% and 53.3% respectively of the estimated hours included in the contract (paras. 5.20 and 5.23).

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Other related issues

12. *Publicity and public engagement efforts in promoting shoreline cleanliness.* Audit examination revealed the following areas for improvement:

- (a) *Clean-up events for remote and difficult-to-access coastal sites.* Audit found that from January 2019 to July 2020, no clean-up events were organised at three priority sites, one of which being the Sha Chau and Lung Kwu Chau Marine Park (see para. 9(b) and (c)). In order to encourage community groups to conduct clean-up events at the coastal sites with genuine marine refuse problems, EPD should consider periodically promulgating their cleanliness conditions (para. 6.5);
- (b) *Need to encourage the use of marine refuse data cards.* EPD encourages community groups to collect coastal refuse data (using marine refuse data card templates uploaded on the Clean Shorelines website) and report them to EPD upon completion of each clean-up operation. Audit noted that of the 1,440 clean-up events organised by community groups from April 2015 to July 2020, EPD only received 20 sets of marine refuse data from the organisers of 58 clean-up events (para. 6.6);
- (c) *Need to remind contractor to report accurate figures in monthly analytical reports of social media pages.* EPD has set up three Clean Shorelines social media pages and the maintenance of two of them is outsourced to a contractor. Audit found that there were a number of errors in the figures reported in the monthly analytical reports submitted by the contractor (paras. 6.7 and 6.8); and
- (d) *Need to gauge public views on shoreline cleanliness.* In 2016, EPD planned to conduct a survey to gauge the public impression on shoreline cleanliness following the implementation of improvement measures by the Working Group since April 2015. The survey was subsequently cancelled due to various reasons. Audit noted that the Working Group had encountered difficulties in gathering feedback through face-to-face public engagement sessions and clean shorelines activities after 2018 due to social unrest in 2019 and the outbreak of the coronavirus disease (COVID-19) in 2020. Audit considers that there are merits for the Working Group to consider appropriate ways to gauge public views on shoreline cleanliness at a future opportune time (paras. 6.9 and 6.10).

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13. ***Using 360-degree camera system to monitor remote coastal sites.*** For close monitoring of shoreline refuse, FEHD launched a trial scheme on hiring camera system services at 5 priority sites from February to July 2018. Digital images were captured in day time and uploaded to a central server automatically. FEHD staff monitored the condition of the coastal sites through a website provided by the contractor. After reviewing the result of the trial, FEHD extended the trial services at 15 priority sites for one year from March 2020 to February 2021 (paras. 6.13 and 6.14). Audit examination revealed the following areas for improvement:

- (a) ***Need to keep proper records on causes of malfunctioning of the camera system and follow-up actions taken.*** There had been six cameras installed in the Islands District. Audit noted that, from 1 March to 31 May 2020 (92 days), there was a total of 301 camera-days without image received. However, no follow-up actions on these malfunctioning cameras had been recorded in the report forms (para. 6.16); and
- (b) ***Need to ascertain whether the contractor has achieved the service contract requirements and consider taking follow-up actions in case of non-compliance.*** Audit noted that no images were received from 10 (67%) of the 15 priority sites for a period from 31 to 91 days, and the objective of monitoring the cleanliness condition of the priority sites was hampered (para. 6.17).

14. ***Need to step up enforcement actions against marine littering.*** MD, AFCD, FEHD and LCSD are empowered to take enforcement action against marine littering or nearshore littering. In the 10-year period from 2010 to 2019, while FEHD took enforcement actions on 5 marine littering cases per annum on average, AFCD only took enforcement actions in 3 of the 10 years and LCSD only gave verbal advice without taking any prosecution action. While pertinent departments were asked to step up inspections and patrols to achieve a deterrent effect and improve compliance according to the Working Group Meeting paper submitted in June 2014, Audit noted that the number of enforcement actions taken against marine littering by AFCD and LCSD had still remained low (paras. 6.20 and 6.22).

15. ***Provision of more water dispensers at gazetted beaches.*** Providing more water dispensers at gazetted beaches, parks, waterfront promenades and other recreational venues was one of the actions under the improvement measure to reduce refuse from entering the marine environment identified by the 2015 Study. In view

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of the high public patronage (e.g. 11 million visitors in 2019-20), water dispensers should be provided at gazetted beaches as far as practicable, to encourage members of the public to bring their own reusable water bottles to avoid purchasing and consuming one-off plastic-bottled beverages. Audit examination however revealed that progress in installing water dispensers was slow. As of June 2020, water dispensers were only provided in 24 (59%) of 41 gazetted beaches (paras. 6.25, 6.27 and 6.28).

Audit recommendations

16. **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:**

- (a) **the Director of Environmental Protection should:**
 - (i) **consider disseminating the information on cleanliness conditions of coastal sites, and continue to keep in view the need for updating the coastal sites in the shoreline cleanliness monitoring programme, and make use of UAS inspections (currently under trial) to supplement on-site inspections when reviewing the site monitoring contract requirements in future (para. 2.19(b) and (c));**
 - (ii) **draw on the experience in the pork hock incident to update the Protocol, where appropriate (para. 2.26); and**
 - (iii) **arrange for the Working Group to consider appropriate ways to gauge public views on shoreline cleanliness at a future opportune time (para. 6.11(c));**
- (b) **the Director of Agriculture, Fisheries and Conservation should:**
 - (i) **improve the inspection reporting requirements of cleansing services and take effective follow-up actions on cases of suspected absence from duty of contractors' staff and specify a minimum inspection frequency for AFCD staff (para. 3.8(a) and (b));**

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- (ii) **take measures to enhance monitoring of contractors' work, including issuing guidelines on the assessment of the quality of services of the contractors, requiring contractors to provide additional evidence on the work performed and report the arrival and departure times of their staff for each cleansing operation in future contracts (para. 3.8(d));**
 - (iii) **consider improving the salvage operation of large floating objects found in the Marine Parks and Marine Reserve (para. 3.22(a));**
 - (iv) **strengthen the monitoring of contractor's work in cleaning up the back-of-beach area of Lung Kwu Chau and review the effectiveness of the ad hoc cleansing services at back-of-beach area of Lung Kwu Chau (para. 3.22(b) and (c));**
 - (v) **explore effective measures in removing refuse located at the back-of-beach area of Lung Kwu Chau not covered by the existing contract (para. 3.22(d));**
 - (vi) **take prompt actions to improve the cleanliness of the Brothers Marine Park and consider the need for increasing the cleansing frequency (para. 3.22(e)); and**
 - (vii) **step up enforcement actions against marine littering (para. 6.23);**
- (c) **the Director of Leisure and Cultural Services should:**
 - (i) **ensure that the results of special cleansing operations are reported to the Working Group and its Task Force and improve the accuracy of management information on special cleansing operation statistics (para. 4.16(b) and (c));**
 - (ii) **tighten controls on the provision of additional workers for cleansing work of beaches and improve the accuracy of shoreline refuse data (para. 4.16(d) and (e));**
 - (iii) **step up enforcement actions against marine littering (para. 6.23); and**

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- (iv) expedite the installation of water dispensers in gazetted beaches (para. 6.32(a)); and
- (d) the Director of Food and Environmental Hygiene should:
 - (i) update the guidelines for assessing the cleanliness level achieved by the contractor and remind FEHD's supervisory staff to comply with the monitoring requirements of FEHD's Operational Manual (para. 5.10(a) and (b));
 - (ii) step up efforts in monitoring the cleanliness of priority sites and strengthen the supervision on the contractor's work (para. 5.14);
 - (iii) in consultation with the Department of Justice as appropriate, consider splitting the territory-wide clean-up service contract into different Districts Groups and imposing a restriction to the effect that the contracts cannot be awarded to a single contractor in future, taking due consideration of the prevailing market condition (para. 5.24(a));
 - (iv) make realistic estimation of clean-up service hours for inclusion in future contracts as far as practicable (para. 5.24(b));
 - (v) keep proper records on causes of malfunctioning of the camera system and follow-up actions taken (para. 6.18(a)); and
 - (vi) ascertain whether the contractor has achieved the service contract requirements and consider taking follow-up actions in case of non-compliance (para. 6.18(b)).

Response from the Government

17. The Director of Environmental Protection, the Director of Agriculture, Fisheries and Conservation, the Director of Leisure and Cultural Services, and the Director of Food and Environmental Hygiene agree with the audit recommendations.