本智檔號 OUR REF: ( ) in EP CR80/AUDIT/2/1 (2016) 來函檔號 YOUR REF: CB4/PAC/R67 電話 TEL. NO.: 2872 1750 圖文傳真 FAX NO: 2872 0376 電子郵件 E-MAIL: 網 址 HOMEPAGE: http://www.epd.gov.hk Environmental Protection Department Headquarters

> 16/F, East Wing, Central Government Offices, 2 Tim Mei Avenue, Tamar, Hong Kong



環境保護署總部 香港添馬添美道2號 政府總部東翼16樓

3 January 2017

Public Accounts Committee Legislative Council Secretariat Legislative Council Complex 1 Legislative Council Road Central, Hong Kong

(Attn: Mr. Anthony CHU)

Dear Sirs,

# Public Account Committee Consideration of Chapter 4 of the Director of Audit's Report No. 67

# Management of abandoned construction and demolition materials

In response to your letter dated 19 December 2016, the Administration would like to provide the requested information as enclosed for Members' reference.

Yours faithfully,

(FONG Kin-wa) for Director of Environmental Protection

Encl.

c.c. Director of Civil Engineering and Development (fax no. 2246 8708) Secretary for Financial Services and the Treasury (fax no. 2147 5239) Director of Audit (fax no. 2583 9063)

# **Appendix**

# Public Accounts Committee Questions and Request for Information in respect of Chapter 4 of the Director of Audit's Report No. 67 Management of abandoned construction and demolition materials

### For the Environmental Protection Department ("EPD")

## Part 2: Construction Waste Disposal Charging Scheme

1. The Administration is requested to explain why the situation in paragraph 2.10 of the Audit Report occurred. Whether the Administration will review and adjust the levels of charges under the Construction Waste Disposal Charging Scheme ("the charging scheme") on a regular basis, so as to ensure that the levels of charges will conform with the user-pay principle, as well as the principle of full recovery of the capital and recurrent costs of the facilities deployed for disposal of abandoned construction and demolition ("C&D") materials in future?

#### **Reply:**

Following the implementation of the Construction Waste Disposal Charging Scheme in 2006, we have been monitoring its overall implementation situation. We have also examined the charging level. Yet, in view of a host of considerations (including the Government's overall moratorium on fees and charges for public services from 2008 to 2010, and the prevailing developments of the scheme for the delivery of surplus fill for reuse in the Mainland which has left the costs of the disposal scheme to be determined), we have not proposed any fee revision. Subsequently, the Environment Bureau published in May 2013 the "Hong Kong Blueprint for Sustainable Use of Resources 2013 - 2022", which indicated the charging level will be adjusted according to a review scheduled to be completed by 2015. We have completed the review in accordance with the said timetable and the new charges will come into effect, pursuant to the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Amendment of Schedules) Notice 2016, on 7 April 2017.

Looking ahead, we will conduct fees and charges review in accordance with Financial Circular No. 6/2016 on an annual basis. In conducting the reviews, apart from the user-pay and the full cost recovery principles, we will also take into account such factors including the effectiveness of the charges in reducing waste, environmental considerations, as well as impact on the trade and other relevant stakeholders.

2. Whether the Administration agrees that its failure to review and adjust the levels of

charges under the charging scheme in the past decade and under-recovery of cost has reduced the effectiveness of the charging scheme?

## **Reply:**

Following the implementation of the Construction Waste Disposal Charging Scheme in 2006, the quantity of construction waste disposed of at landfills has been substantially reduced<sup>1</sup> and maintained at a relatively low level as compared with the situation before the implementation of the scheme. This shows that the scheme is effective in reducing waste.

As we have pointed out in our proposal on increasing construction waste disposal charges submitted to the Legislative Council in early 2016, the generation of construction waste from construction work is to some extent inevitable. Once waste reduction measures in a project have reached certain level, the marginal effect on waste reduction attributable to increase in disposal charges will be reduced. In fact, the increase in the disposal of construction waste in recent years is mainly due to the significant growth in construction works. Nevertheless, we agree that the charging level should be reviewed regularly so as to ensure that the charges can effectively encourage waste reduction.

3. As shown in paragraph 2.38, whether the Director of Environmental Protection will lay down rules or specific guidelines governing the adjustment of the levels of charges under the charging scheme when reviewing these levels of charges, with a view to adjusting the levels of charges in line with the costs more effectively in future, such as making an annual review on the levels of charges a mandatory requirement? Whether the Administration has already had a direction in mind at the present stage on how to fulfil the principle of full recovery of costs?

# **Reply:**

After the new charges have come into effect on 7 April 2017, the levels of landfill charge and public fill charge will be able to achieve full cost recovery, whereas the sorting charge is lower than the landfill charge (with the differential maintained at \$25), so as to attract the use of sorting facilities by waste producers. Hence the cost recovery rate of sorting charge is correspondingly at 66%.

<sup>&</sup>lt;sup>1</sup> The implementation of Construction Waste Disposal Charging Scheme has significantly alleviated the pressure on our landfills. Before implementing the charges, the three-year average of construction waste disposed of at landfills stood at 6,600 tonnes per day, whereas after implementation of the charges, it has reduced to some 3,200 tonnes per day; the three-year average for 2013-2015 has maintained at about 3,200 tonnes per day.

Looking ahead, we will conduct fees and charges review in accordance with Financial Circular No. 6/2016 on an annual basis. In conducting the reviews, apart from the user-pay and the full cost recovery principles, we will also take into account such factors including the effectiveness of the charges in reducing waste, environmental considerations, as well as impact on the trade and other relevant stakeholders.

4. Regarding the situation described in paragraph 2.21 of the Audit Report, whether the Administration agrees that the lack of annual review of the charge rates from 2007 to October 2014 was at variance with the requirement set out in Financial Circular No. 6/2006 on Fees and Charges; if so, what measure(s) will be taken by the Administration to ensure that it will act in accordance with the requirement set out in the aforesaid circular in the future?

#### **Reply:**

Please refer to the reply to question (1) above.

5. Regarding the circumstances described in paragraph 2.28 of the Audit Report, where applicants have failed to meet the 21-day requirement with regard to the establishment of billing accounts ("the 21-day requirement"), whether EPD has any specific guidelines or procedures in place for follow up actions/prosecution to be taken/instituted? If it has, of the criteria adopted by EPD for determining whether or not prosecution will be instituted against the applicants who have failed to meet the 21-day requirement; and whether details of such criteria have been made available to the public and internally within EPD? Whether EPD staff members have failed to observe such guidelines, resulting in prosecution not instituted against a number of cases of non-compliance with the 21-day requirement? After the award of a works contract with a value of \$1 million or above to a contractor and the passage of the 21-day requirement, why have EPD staff not taken immediate follow-up actions against cases involving non-compliance with the 21-day requirement? Whether any such delay was due to negligence or maladministration on the part of EPD, or deliberate procrastination on the part of the applicants? Given the large number of cases in which no prosecution has been instituted, whether EPD has examined if loopholes exist in any such guidelines, which have been used by applicants for late payment of charges; if not, whether EPD has taken immediate actions to examine matters relating to issuance of specific guidelines in accordance with the recommendation made by the Audit Commission in paragraph 2.29 of the Audit Report?

#### **Reply:**

When considering prosecution actions against non-compliant contractors who could not establish billing account within 21 days after being awarded the contract, EPD staff have been relying on (i) "The Statement of Prosecution Policy for the EPD" which sets out generic guidance and principles; and (ii) in-house advice from the Central Prosecution Unit (CPU) of EPD which is based on the merits of each case. The prosecution policy mentioned in (i) has been uploaded to the EPD's website (http://www.epd.gov.hk/epd/english/news\_events/current\_issue/current\_policy.html) for public reference.

Under section 9(1) of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation, Cap 354N (the "Regulation"), a main contractor who undertakes construction works with a value of \$1,000,000 or above under a contract that has been awarded on or after the commencement of this section shall, within 21 days after being awarded the contract, makes an application to the Director of Environmental Protection to establish a billing account solely in respect of that contract. A main contractor who, without reasonable excuse, fails to comply with the above Regulation commits an offence.

For cases where contractors who could not establish billing account within 21 days after being awarded the contract, EPD staff have conducted immediate follow up investigation upon discovery of such cases in accordance with the above guidelines. In general, we will ensure that prosecution actions are taken within six months. If it is confirmed that the contractor has reasonable excuse (e.g. no construction waste generated from the works, postage delay), we will follow the Prosecution Policy and consider not taking prosecution action having regard to the merits of each case. For the specific case where an application was submitted 2,127 days after award of contract, the works contract was awarded before the implementation of the Construction Waste Disposal Charging Scheme on 1 December 2005 and thus was an "exemption account". Hence, EPD had not taken prosecution.

We agree with Audit's recommendations on enhancing our enforcement practice. We are consolidating previous case examples and will issue specific guidelines for reference and adoption by enforcement staff. The specific guidelines will list out the factors to be considered under different scenarios, the procedures to be followed including consulting CPU's views and analysis of previous cases.

#### Part 3: Measures to increase reuse of fill materials

6. According to Table 5 in paragraph 3.9 of the Audit Report, only 20%, 14%, 29% and 31% fill materials were recovered from abandoned C&D materials in year 2009, 2010, 2014 and 2015 respectively, a long way off meeting the inert-content requirement (i.e. containing more than 50% of fill materials by weight) described in paragraph 1.4(c) of the Audit Report. The Administration is requested to explain the reasons for that, and what measures will be taken to ensure that fill materials recovered from abandoned C&D materials will meet the inert-content requirement.

#### **Reply:**

During sorting, inevitably a certain portion of inert content (fill material) of the abandoned C&D materials cannot be sorted out due to contamination (e.g. sanitary ware and steel being bound to concrete). Such contaminated abandoned C&D materials would have to be disposed of at landfills. As mentioned in paragraph 3.12(a) of the Audit report, the actual quantity of fill materials that could be sorted from abandoned C&D materials would generally be lower than the inert content of the abandoned C&D materials accepted for disposal at sorting facilities.

Regular samplings of vehicle loads and sorted materials have been carried out by EPD & CEDD at the sorting facilities to ascertain whether the vehicle loads comply with the inert content requirement and to monitor the efficiency of the sorting process. The latest inert content survey completed in October 2016 revealed that the percentage of vehicle loads meeting the inert content requirement (contains more than 50% by weight) at sorting facilities was about 70%. Besides, according to CEDD's investigation, for vehicle loads complying with the inert content requirement for acceptance at sorting facilities, about 85% of fill materials can be recovered by the sorting process. EPD will continue to work with CEDD to closely monitor the effectiveness of the screening methodology at the sorting facilities.

#### Part 4: Measures to prevent and detect illegal dumping

7. Based on the figures provided in paragraph 4.8 of the Audit Report, does the Administration admit that it has failed to take pro-active follow-up actions for prevention and detection of illegal dumping of C&D materials? Among the figures given in paragraph 4.18 concerning the number of prosecutions, whether there are any cases of repeated offences? How the existing system could address the situation effectively?

#### **Reply:**

The Government has been attaching great importance to taking enforcement actions against these illegal land filling and fly-tipping activities. Nevertheless, tackling these illegal activities has been challenging, since these activities are mostly conducted at inconspicuous locations or at odd hours. Although the total quantity of C&D waste fly-tipped has been controlled to less than 0.05% of the total generation of C&D materials, we will continue to explore new measures to enhance enforcement Some of the enhanced measures include: (1) implement a prior effectiveness. notification mechanism under the Waste Disposal (Amendment) Ordinance 2013 since 4 August 2014 (That means a person is required to obtain the written permission of the relevant landowners and acknowledged by EPD with notification to relevant departments for follow-up actions, prior to the intended date of the deposition of C&D waste on private land); (2) establish an inter-departmental coordination mechanism; (3) launched a trial scheme of setting up surveillance camera system to combat illegal dumping activities; (4) examine the feasibility of adopting Global Positioning System (GPS) at C&D waste collection vehicles; and (5) adopt trip ticket system in public works projects to help track the movement of C&D waste generated.

There were a few repeated offence cases included in the prosecution figures described in paragraph 4.18 of the Audit Report. Subject to the availability of resources, the Government plans to install an enhanced surveillance camera system at the serious hotspots, as well as to step up the frontline enforcement action with targeted covert operations to enhance the deterrent effect. We understand that the court will consider all relevant factors (such as the nature or seriousness of the offences, whether it is repeated offence and the impacts on the environment, etc.) of individual cases before sentencing. It is probable that the court may impose heavier penalties to those repeated offenders.

8. EPD is requested to advise on the progress in implementing the recommendations as set out in paragraph 4.13 of the Audit Report.

### **Reply:**

The Environmental Protection Department and the Development Bureau have started discussion with major public organisations so as to encourage them to adopt a similar trip-ticket system in their suitable works projects, which would help improve the management of construction and demolition materials generated from these projects. 9. It has been mentioned in paragraph 4.20 of the Audit Report that there were nearly 80 cases where prosecution actions were not taken due to the fact that images of registration marks of the related vehicles captured by the cameras were unclear, EPD is requested to explain the reasons for that, including whether the reliability of the trial surveillance camera system in combating illegal dumping is questionable. Regarding the response given by EPD in paragraph 4.34, is EPD of the view that enhancing the technical specifications of the surveillance camera systems will necessarily improve the current situation, or is there any other measure(s) that could improve the situation more effectively? What are the technical specifications of the existing cameras?

#### **Reply:**

There were some cases that prosecution actions could not be taken, as the vehicle registration marks of the vehicles concerned could not be clearly captured by the surveillance cameras used in the trial scheme. These were mainly attributed to poor lighting conditions at the site locations; technical specification of the surveillance cameras; the shooting range and distance (in particular for night operation with dim or no street lighting); and the vehicles were in motion thus affecting the quality of the image being captured.

EPD is now conducting an overall review of the experience gained and the issues identified from the trial scheme. It is aimed to improve the design and operation of the surveillance camera system which will be adopted as one of the tools for the detection and prevention of illegal dumping of C&D waste. While the review is still on-going, our preliminary observation is that surveillance cameras should help to enhance enforcement effectiveness against fly-tipping by vehicles as well as strengthen the deterrent effect at the hotspot. Relevant government departments will continue to deploy different means to tackle illegal dumping activities.

Technical specifications of the two sets of surveillance camera system used during the trial scheme are listed below:

- 1. Provide 1080p (1920 x 1080 resolution) full HD video, image sensor (2.0 Mega pixel) and wide angle lens (120 degree); and
- 2. Provide 720p (1280 x 720 resolution) HD video, image sensor (1280 x 960 resolution) and wide angle lens (160 degree).
- 10. Does EPD agree that follow-up actions should be taken in respect of the 14 cases mentioned in paragraph 4.22 of the Audit Report, where prosecution actions were not taken as the vehicle owners could not be contacted? What measure(s) will be taken by

EPD to improve the situation?

#### **Reply:**

According to the Road Traffic Ordinance (Cap. 374), a vehicle owner is required to notify the Transport Department (TD) within 72 hours of change of address. EPD had already forwarded all the cases with letters previously sent to the addresses provided by TD and returned unclaimed in the trial scheme to the TD for their follow up.

We agreed with the Audit's recommendations. For similar cases in the future, apart from liaising with the TD, we will also approach other government departments (e.g Immigation Department, etc.) to review whether the registered vehicle owners had other alternative correspondence addresses. We will also include this procedure in our revised enforcement guidelines for fly-tipping control.

11. Whether EPD agrees that follow-up actions should be taken in respect of the 19 cases and the 4 cases respectively mentioned in paragraphs 4.26 and 4.31 of the Audit Report? What measure(s) will be taken by EPD to improve the situation?

#### **Reply:**

In the trial scheme, EPD could not take prosecution actions due to insufficient evidence in ascertaining the identity of the offenders during investigation, including vehicle owners, drivers, or clients of the hired vehicles. EPD is now seeking legal advice from the Department of Justice on these cases and will continue to follow up on the issues. We will also collaborate with other government departments to share their enforcement experience in order to strengthen our investigation and enforcement efforts.

12. Whether EPD has studied how, in future, to solve the problem as mentioned in paragraph 4.27 of the Audit Report that the vehicle owner could not recognise the drivers involved in the cases as shown in the video recording and thus no prosecution could be instituted? Does EPD consider the Audit recommendation in paragraph 4.33(d) feasible at this stage? Are there any foreseeable difficulties?

## **Reply:**

In response to Audit's recommendation, we are now seeking legal advice from Department of Justice. We have also liaised with the Hong Kong Police Force to share their enforcement approach and experience with a view to resolve the problems encountered, so as to strengthen our investigation and enforcement efforts.

13. Whether EPD agrees that the cases mentioned in paragraph 4.30 of the Audit Report should be followed up? What measures will be taken by the Department to improve the situation?

## **Reply:**

For the cases where the drivers claimed that the waste dumping was conducted on the advice of Food and Environmental Hygiene Department (FEHD)'s staff or contractors at the refuse collection points, EPD will notify the FEHD in a timely manner for checking and taking follow-up actions with their staff or contractors in future. We are now following-up with FEHD to strengthen collaboration in combating fly-tipping activities in the vicinity of the refuse collection points and will also review the relevant enforcement guidelines.

## Part 5: Way forward

14. According to Appendix A to the Audit Report, whether the Government has, at this stage, tried to get an idea of Taishan's demand for fill materials in the next five years? How will the Administration deal with the situation in case Taishan does not need fill materials anymore? As there will still be a number of urban redevelopment plans to be undertaken in Hong Kong in the next few years, whether the Administration has assessed the total quantity of construction and demolition materials as well as its impact on the charge rates?

#### **Reply:**

Reducing the generation of fill materials locally and facilitating local reuse of fill materials are amongst the priorities in our waste management strategy. At present, major public works projects, including the infrastructural projects undertaken by the public organisations, are required to draw up Construction and Demolition Material Management Plans. The Plans would have to assess the volume of construction and demolition materials produced, and to identify outlets for beneficial reuse and recycling of any surplus excavated materials. The Public Fill Committee chaired by the Director of Civil Engineering and Development also oversees the coordination of major capital works projects undertaken by the works departments and major public organisations to promote the local reuse of fill materials.

number of fill-absorbing projects will commence and will ease the need for delivery of fill materials to the Mainland. As regards the charging level, we will conduct fees and charges review in accordance with Financial Circular No. 6/2016 on an annual basis. In conducting the reviews, apart from the user-pay and the full cost recovery principles, we will also take into account such factors including the effectiveness of the charges in reducing waste, environmental considerations, as well as impact on the trade and other relevant stakeholders.

15. What is the progress of the follow-up actions taken by the Secretary for the Environment and the Director of Civil Engineering and Development in respect of the recommendation in paragraph 5.10? Whether the Government has any relevant statistics or target cities in mind at present? If target places are quite far away from Hong Kong, has EPD conducted a preliminary assessment of the impact on the charge rates?

#### **Reply:**

We have all along conducted annual joint liaison meetings with the relevant Mainland authorities at the senior level regarding the surplus public fill delivery scheme to examine the actual operation of the delivery of fill materials to Taishan, delivery arrangements in the coming year, as well as long term planning including the exploration of other suitable receptor sites. On the other hand, the availability of a suitable receptor site depends on the needs of the relevant Mainland authorities and involves a host of relevant factors (such as technical feasibility and planning). Once the relevant delivery costs and expenses are known, we will conduct fees and charges review in accordance with Financial Circular No. 6/2016 on an annual basis. In conducting the reviews, apart from the user-pay and the full cost recovery principles, we will also take into account such factors including the effectiveness of the charges in reducing waste, environmental considerations, as well as impact on the trade and other relevant stakeholders.