

**A brief account of Chapter 1 of Report No. 70  
“Management of restored landfills”  
by the Director of Audit  
at the Public Hearing of the Public Accounts Committee  
of the Legislative Council on Monday, 14 May 2018**

Mr. Chairman,

Thank you for inviting me to give a brief account of Chapter 1 of Report No. 70 of the Director of Audit, entitled “Management of restored landfills”.

This Audit Report comprises four PARTs.

PART 1 of the Report, namely “Introduction”, describes the background to the audit.

Today, there are 13 closed landfills in Hong Kong. These landfills, closed between 1975 and 1996, occupy a total area of 320 hectares. Landfills are different from any ordinary piece of land because the buried waste undergoes continuous biodegradation, generates landfill gas and leachate during the process and causes differential ground settlement. Hence, these landfills demand dedicated and effective efforts of restoration.

Restoration comprises two stages. Stage 1 is restoration works which includes the construction and installation of restoration facilities. Stage 2 mainly relates to the operation and maintenance of restoration facilities for 30 years after completion of such facilities (i.e. aftercare work). Both stages aim to ensure that landfills are maintained in a safe condition and are environmentally acceptable for appropriate future beneficial uses (i.e. afteruse of restored landfills). The Environmental Protection Department (EPD) has used a design-build-operate (DBO) form of contract for the restoration of the 13 closed landfills. Under the DBO contract arrangement, a contractor is responsible for the design and construction of restoration facilities and the aftercare work after completion of these facilities. In 2016-17, the total actual operating cost of the aftercare work was \$67.9 million.

In general, the development of afteruse projects at restored landfills is implemented by the Government (including the EPD, the Home Affairs

Department, the Leisure and Cultural Services Department (LCSD) and the Architectural Services Department) or non-governmental bodies. According to the EPD, in light of the many development constraints (e.g. no piling at landfills), revitalisation of restored landfills for recreational use is the most suitable option.

PART 2 of the Report examines the EPD's monitoring of the contractors' aftercare work at restored landfills.

The EPD's landfill restoration contractors need to comply with the statutory requirements stipulated under the relevant environmental legislations and the various major environmental parameters stipulated in the contracts.

The Audit Commission (Audit) noted that, in 2016, the EPD received complaints on suspected malpractice of the landfill restoration contractor of the Pillar Point Valley Landfill (PPVL) in the operation of some restoration facilities. The EPD then took proactive follow-up actions and its investigations found that, during the nearly two-year period between December 2015 and November 2017, the contractor had non-compliances with various statutory requirements stipulated under the Water Pollution Control Ordinance and certain contractual requirements. As a result, the contractor was fined a total of \$208,000. In addition, monthly payments totalling about \$7.7 million were deducted from the contractor, of which \$5.3 million were deducted in 2016-17, accounting for about one-third of the amount payable to the contractor in that year.

In light of the above-mentioned complaints, the EPD completed a review on the environmental monitoring practices at its waste facilities. The review recommended, among others, the installation of advanced monitoring equipment at PPVL and 4 other restored landfills with a view to automating the monitoring work and detecting cases of non-compliance in a more timely manner. However, as of March 2018, there was delay in the installation of certain advanced equipment items. Therefore, Audit has recommended that the EPD should expedite the progress of installing the advanced equipment and strengthen its monitoring actions before automated data monitoring systems are in place.

PART 3 of the Report examines the development of government recreational facilities at restored landfills.

Since the early 2000s, the Government has planned projects for developing recreational facilities at 7 restored landfills. Audit found that 5 of these projects had encountered different development problems, of which 1 project was still at preliminary planning stage and 4 projects had increases in costs and works delay.

For example, regarding the 3 projects selected for case studies, Audit noted that, in the course of exploring the technical feasibility or tendering for the projects, the government departments for developing the concerned facilities could not fully address and consider issues including ground settlement or buried restoration facilities at restored landfills. These gave rise to problems that works could not commence or the works design had to be revised after issue of tenders or during the construction stage, causing increases in costs and delay in works completion. In this regard, Audit has made recommendations accordingly.

PART 4 of the Report examines the EPD's monitoring of non-governmental bodies' afteruse facilities at restored landfills.

Audit noted that, with delegated authority from the Lands Department, the EPD granted land licences to 5 non-governmental bodies to develop and operate recreational facilities at restored landfills. Audit found that, as of December 2017, two licensees had not completed the development of facilities, with delays of 6 and 15 months respectively. In this connection, Audit has recommended that the EPD should keep under review the development progress of afteruse facilities. In addition, in view of the diversified nature of afteruse facilities, the expertise and capacity of the EPD to ensure licensees' compliance with licence conditions (e.g. the requirement to operate a high-quality facility) is inadequate. Therefore, Audit has recommended that the EPD should seek the assistance and support of the relevant bureaux and departments (e.g. the Home Affairs Bureau and the LCSD) in monitoring whether the licence conditions are complied with.

In his Policy Address of January 2014, the Chief Executive announced that the Government had earmarked \$1 billion to launch the Restored Landfill Revitalisation Funding Scheme (Funding Scheme) to provide funding for developing recreational, environmental or other community facilities on restored landfill sites. According to the EPD, the Funding Scheme covers 7 restored landfills with applications to be invited in three batches. However, as of December 2017, no in-principle approval had

been granted to Batch 1 applicants (giving rise to a delay of 28 months when compared with the original action timetable) and applications under Batches 2 and 3 had not been invited. In this connection, Audit has recommended that the Environment Bureau and the EPD should make additional efforts in implementing the Funding Scheme with a view to expediting the development of gainful use at restored landfills so that the community can benefit from them at the earliest opportunity.

Our views and recommendations were agreed by the relevant bureaux and departments. I would like to take this opportunity to acknowledge with gratitude the full cooperation, assistance and positive response of their staff during the course of the audit review.

Thank you, Mr. Chairman.