

Management of abandoned construction and demolition materials

The Audit Commission ("Audit") conducted a review of Government's efforts in managing abandoned construction and demolition ("C&D") materials.¹

2. Under the Waste Disposal (Designated Waste Disposal Facility) Regulation (Cap. 354L), abandoned C&D materials may be disposed at the two public fill banks, two fill material transfer facilities and two sorting facilities managed by the Civil Engineering and Development Department, as well as at the three landfills and seven Outlying Islands Transfer Facilities managed by the Environmental Protection Department ("EPD"). From January 2006, a charging scheme for disposal of abandoned C&D materials (hereinafter referred to as "the charging scheme") has been in force. The charge rates per tonne of abandoned C&D materials were \$27 for disposal at public fill banks and fill material transfer facilities, \$100 for disposal at sorting facilities, and \$125 for disposal at landfills and Outlying Islands Transfer Facilities. In 2014, 21 million tonnes ("Mt") of abandoned C&D materials were generated, of which 19.56 Mt (93%) were recycled as fill materials for reuse and 1.44 Mt (7%) were mixed C&D materials (including both fill materials and non-inert construction waste) and disposed of at landfills. Disposed C&D materials or construction waste accounted for 27% of the 5.42 Mt of total waste being disposed of at landfills.

3. The Committee noted the following findings from the Director of Audit's Report:

- charge rates of the charging scheme had not been revised from January 2006 to August 2016. Despite repeated requests from the Financial Services and the Treasury Bureau ("FSTB") from mid-2006 to mid-2014, EPD and the Civil Engineering and Development Department had not conducted any review of the charge rates and related costs of disposal of abandoned C&D materials, nor provided FSTB with information on the full cost of the operations at government facilities for receiving abandoned C&D materials. As a result, the estimated unrecovered costs aggregated to \$3,811 million from 2006-2007 to 2014-2015, which was at variance with the Government's user-pay principle, as well as the principle of full recovery of the capital and recurrent costs of the facilities deployed for disposal of

¹ Abandoned C&D materials comprising inert C&D materials (e.g. rocks and soil) which can be reused as fill materials in reclamation and site formation projects (hereinafter referred to as "fill materials") and non-inert C&D materials (e.g. waste bamboos and timber) which need to be disposed of (hereinafter referred to as "non-inert construction waste").

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abandoned C&D materials. The charge rates would be revised² from April 2017. After implementation of the new charge rates and based on the forecasted costs for 2017-2018, the fill-material charge and the landfill charge would attain full-cost recovery and the sorting charge would attain a cost recovery rate of 66%;

- under the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N), a main contractor who undertakes construction works with a contract valued \$1 million or above should, within 21 days after being awarded the contract, make an application to EPD to establish a billing account, so that EPD could charge the contractor for disposal of abandoned C&D materials in respect of that contract (hereinafter referred to as "the 21-day requirement"). Any person failing to comply with the 21-day requirement without reasonable excuse might commit an offence. From December 2005 to December 2015, 2 724 (14%) of 19 453 applications did not meet the 21-day requirement, and some applicants even took 2 127 days to make applications after contract award, but EPD had only taken prosecution actions against 338 cases;
- according to the Waste Disposal (Designated Waste Disposal Facility) Regulation, abandoned C&D materials being disposed of at sorting facilities must meet the inert-content requirement (i.e. contained more than 50% of fill materials by weight), so that the fill materials could be extracted for reuse. With a 50% threshold, it was expected that around 50% of the abandoned C&D materials accepted at sorting facilities would be recovered as fill materials. However, only 28% on average (ranging from 14% to 44%) of the abandoned materials were recovered as filled materials from 2006 to 2015, which indicated that the inert-content of many vehicle loads accepted did not meet the above requirement;
- there had been significant increases in the quantities of illegal dumped C&D materials found and cleared by government departments since the implementation of the charging scheme. In 2015, 6 300 tonnes of illegally dumped C&D materials were cleared by government departments;

² Under the new charge rates, fill-material charge, sorting charge and landfill charge would be increased to \$71 per tonne, \$175 per tonne and \$200 per tonne respectively.

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- a trial scheme was implemented from August 2015 to February 2016 to detect illegal dumping activities by installing surveillance camera systems at 12 black-spot locations. Although the systems had captured images of vehicles involving in illegal dumping of C&D materials, EPD did not take prosecution actions in 122 cases because:
 - (a) images of vehicle registration marks captured were unclear;
 - (b) vehicle owners concerned could not be contacted for taking prosecution actions as the letters sent to them were returned unclaimed;
 - (c) vehicle owners or drivers concerned did not provide case details;
 - (d) there was a long lapse of time in handling the cases; and
 - (e) responsible drivers claimed the dumping was carried out under the instruction of persons who had hired the delivery service; and

- from 2007 to 2014, 73.67 Mt (59%) of the total 125.65 Mt of fill materials generated in Hong Kong were exported to Taishan on the Mainland. However, as the quantity of fill materials for export to Taishan was subject to agreement between the Environment Bureau and the related Mainland authority on a yearly basis, there might be a risk that Taishan would not absorb all surplus fill materials generated in Hong Kong in a particular year and in the long run.

4. The Committee did not hold any public hearing on this subject. Instead, it asked for written responses regarding the review of the level of charges under the charging scheme, the guidelines on factors for consideration in taking prosecution actions against persons not complying with the 21-day requirement, measures to prevent and detect illegal dumping, as well as the ability of Taishan and the availability of other destinations to absorb surplus fill materials. The replies from **Director of Environmental Protection** and **Director of Civil Engineering and Development** are in *Appendices 30* and *31* respectively.

5. The Committee wishes to be kept informed of the progress made in implementing the various recommendations made by Audit.