

Proposed Landfill Charging Scheme – Details of Associated Arrangements

Purpose

This paper sets out the detailed arrangements and associated charges relating to the proposed landfill charging scheme.

Background

2. In March 2002, we informed Members, through ACE Paper No 8/2002, of the framework of the proposed landfill charging scheme. To recap, the scheme comprises the following key features :

- (a) to charge construction waste disposed of at landfills in the first phase. It is necessary to focus on construction waste first as it is voluminous¹ and poses the greatest threat to the lifespan of landfills;
- (b) to set the landfill charge for the disposal of construction waste at \$125 per tonne. This represents full recovery of the capital (\$56 per tonne) and recurrent (\$69 per tonne) costs of the three existing landfills;
- (c) to establish a direct settlement system and require major waste producers, mainly construction contractors (which generate about

¹ In 2002, construction works generate over 16 million tonnes of construction waste. We reused/recycled some 80% of these waste, but the remaining 4 million tonnes had to be disposed of at landfills, and they accounted for 48% of the waste disposed of at landfills.

70 - 80% of construction waste), to open accounts and pay landfill charges direct to the Government;

- (d) to charge waste haulers who deliver construction waste arising from renovation works, which constitute the remaining 20-30% of construction waste. As there are about 300,000 small ad-hoc renovation works each year, it would be extremely difficult and costly to locate the waste producers and extend the direct settlement system to them. Hence, we have no alternative but to charge waste haulers when they deliver construction waste to landfills – a practice that is adopted in most economies with such charging scheme. To allay waste haulers' concern about cashflow problems, they would be billed on a monthly basis and given a credit period of 30 days. The demand for payment will be suspended if waste haulers have concrete evidence showing that they fail to collect the charges from the waste producers; and
- (e) to exempt all construction contracts that are awarded before the commencement of the landfill charging scheme. This is to address the construction industry's concern about running contracts awarded before the implementation of the scheme as there are no provisions in the contracts to enable them to recover landfill charges from their clients.

Proposed Supporting Measures

3. We propose the following measures in support of the landfill charging scheme.

4. Construction waste is a mixture of inert public fill and non-inert waste, and a large proportion of the inert public fill can be reused/recycled. Hence, an important means to reduce disposal of waste at landfills is to separate the inert portion from the non-inert portion, such that the inert public fill could be reused/recycled and only the non-inert waste would be disposed of at landfills.

5. Sorting of waste at source is not widely practised in Hong Kong because most construction/renovation sites have space constraints. Also, there is no economic incentive for construction firms to carry out sorting. With the

implementation of landfill charging, there would be a need for sorting facilities which could assist the construction industry to sort mixed waste, particularly from small construction sites, so as to reduce the landfill charge payable. We plan to make available two *sorting facilities* - one in Tuen Mun in close proximity to the West New Territories Landfill, and another in Tseung Kwan O near the Southeast New Territories Landfill. The two facilities could together handle about 2,500 tonnes of mixed construction waste each day.

6. To divert inert public fill away from landfills, and to provide outlets for inert public fill arising from sorting facilities, there will be a number of *public fill reception facilities*. They include reclamation projects² and the temporary fill banks³.

7. In summary, there will be three types of disposal facilities for construction waste i.e. landfills, sorting facilities and public fill reception facilities. Taking into account their capacity and costs, we intend to adopt the following waste acceptance criteria –

- (a) Landfills – to receive mixed construction waste with not more than 50% inert content;
- (b) Sorting Facilities – to receive mixed construction waste with more than 50% inert content; and
- (c) Public fill reception facilities – to accept pure inert public fill.

Sorting and Public Fill Charges

8. In line with the User Pays Principle, we intend to charge the disposal of construction waste at sorting facilities and public fill reception facilities. The charges are tentatively set at \$100⁴ per tonne for sorting

² Except special projects with time or other constraints, all reclamation projects are using as much public fill as possible to meet their fill requirements.

³ Because of the decreasing number and scale of reclamation projects, we have set up a temporary fill bank at Tseung Kwan O to stockpile inert public fill for future use when new reclamation projects are available. Another temporary fill bank will be set up at Tuen Mun.

⁴ There are currently no sorting facilities. The actual cost of the facilities will not be known until such facilities have been set up.

facilities and \$27⁵ per tonne for public fill reception facilities.

9. To be effective, we consider that the proposed sorting charge needs to be set and maintained at a good relativity to the landfill charge of \$125 per tonne. On the one hand, it has to be lower than the landfill charge thereby providing a financial incentive for waste producers/haulers to go for sorting. On the other hand, the charge cannot be so low as to invite abuse by users. The sorting facilities would provide waste producers, particularly small construction sites with physical constraints and cannot carry out on-site sorting, a “cheaper alternative” to landfills. We do not agree with the idea of providing the sorting facilities free of charge as this goes against the User Pays Principle and would amount to subsidizing the waste producers with taxpayers’ money. In addition, this is most likely to invite abuse by users who will be tempted to take mixed with waste with high non-inert content to the sorting facilities instead of landfills.

10. As for the proposed public fill charge, it must be noted that with the decreasing number of reclamation projects in Hong Kong, the huge amount of inert public fill generated from construction works has become a substantial liability for which expensive disposal outlets have to be made available. Hence, it is necessary and reasonable to impose a public fill charge to encourage the industry to adopt construction methods that would reduce the generation of inert public fill.

Related Powers to Implement the Scheme

11. As set out in para 7, the three different types of facilities are meant to receive construction waste with different inert content. To ensure that users would not deliver inappropriate waste to the facilities (e.g. users trying to pay a lower charge by carrying non-inert waste to public fill reception facilities), the site staff would have to inspect the vehicles arriving at these facilities and determine if they are carrying the appropriate waste for the facilities in question. They would also be empowered to turn away vehicles

⁵ This represents the cost of existing public fill reception facilities. Due to the lack of local reclamation projects, we are actively exploring the feasibility of reusing inert public fill in reclamation projects outside Hong Kong. If this option is viable, there may be additional costs involved (e.g. for transporting the fill to the reclamation sites) and the charge would have to be increased accordingly.

carrying inappropriate waste. As it is not practicable in terms of time, space, logistical and cost requirements to carry out detailed inspection and weighing of the detailed content of each vehicle at the gate of facilities, site staff would have to make an immediate judgment based on visual inspection.

12. Site staff at landfills would also need to determine, based on visual inspection, whether a waste load is construction waste and thus should be subject to the landfill charge. Such is needed to prevent evasion of the landfill charge by users who may claim that the waste is commercial/industrial waste and is not subject to charging.

13. Users could choose to pay the required charge, or not to use the facility, or reduce the inert/non-inert content to fit the admission criteria of the concerned facility.

Advice Sought

14. Members are invited to comment on the proposals set out in paragraphs 4 to 13 above.

**Environment, Transport and Works Bureau
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