

For Information

Legislative Council Panel on Environmental Affairs

Additional Information on Waste Management, Landfill and Waste Recycling Operations

Introduction

At the meeting of the LegCo Panel on Environmental Affairs held on 8 January 1999, Members have asked for additional information regarding waste management, landfill operations and issues relating to waste recycling activities. This note provides supplementary information as requested by Members.

Costs of Collection and Transportation of Municipal Wastes incurred by the municipal services departments

2. According to the information provided by the Urban Services Department and Regional Service Department, the costs of collecting and transporting municipal waste are as follows:

USD

	1996/97	1997/98
Average daily cost for collection of refuse	\$490,005	\$527,642
Average daily cost for transportation of refuse	\$638,804	\$672,495
Average total daily cost	\$1,128,809	\$1,200,137
Average daily quantity of refuse/junk handled	3,129 tonnes	3,140 tonnes
Average cost of collection and transportation per tonne	\$360	\$382

RSD

	1996/97	1997/98
Average daily cost for collection of refuse	\$488,946	\$512,600
Average daily cost for transportation of refuse	\$366,479	\$368,058
Average daily cost for collection and transportation by RSD contractors	\$42,832	\$64,489
Average total daily cost	\$898,257	\$945,114
Average daily quantity of refuse/junk handled	2,463 tonnes	2,528 tonnes
Average cost of collection and transportation per tonne	\$364	\$374

Operation costs of landfills

3. Landfills are operated by contractors on behalf of Government. The operation cost is the amount paid to the contractors for handling wastes disposed in landfills. The rate is based on the amount of waste disposed of each month. The current average cost for disposing a tonne of waste in a landfill is \$60. The actual rate varies among landfills. A typical schedule of operating fees charged by one of the landfill operators is at Annex A. These rates are fixed at the time of tender based on the estimated amount of monthly intakes of waste over a 15 to 25-year period and are adjusted annually according to inflation.

4. The total monthly operation fee paid to a contractor is therefore obtained by multiplying the total amount of waste received by a landfill in the month by the rate relevant to the monthly tonnage.

5. If we take into account the construction and aftercare costs, the average cost per month of disposal at landfills amounts to \$110.

Information on Landfills

Design build and operate contracts

6. The three landfills were constructed under Design-Build-Operate (DBO) contracts. Under a DBO scheme, one contractor undertakes all the design, construction, operation, restoration and aftercare work. This means we tell contractors what they have to achieve, rather than telling them what to do and how to do it. In this way, we can use the contractor's expertise to the fullest extent possible and buy a service at an agreed price for the whole life of the landfill at an agreed standard of performance. This gives a unity of responsibility and apportions clear liabilities for the parties involved in the project development.

30-years aftercare period

7. Landfills have an operational life of 15 to 25 years. After the closure of landfills, gas and leachate will still be generated for a rather long period of time. These substances require specialized treatment because leachate is a highly polluting liquid and landfill gas could cause explosions, fires or the asphyxiation of people if it is not handled properly.

8. These risks fall to very low levels after 25 to 30 years. It is therefore appropriate to allow a 30-year aftercare period in a landfill contract.

Monitoring of operation, management and charging of landfills

9. The Environmental Protection Department (EPD) is responsible for overall management of landfill contracts. It has full time staff stationed on-site to supervise the day to day management and operation of the landfills. The

design and construction of the landfills are checked by independent checking engineers (ICE) jointly appointed by Government and the contractors. The responsibilities of the ICE are to carry out the checking role in accordance with the contracts' requirements in a professional and impartial manner.

10. Stringent environmental and operational standards are specified in the contracts. Should the contractors not fully comply with all the stipulated standards, part of the operation fees will not be paid and the contractor will be required to take immediate steps to remedy the situation.

11. Any charges that may be imposed in the future for disposal of waste at landfills will be administered and collected by EPD staff as normal General Revenue. The contractors will not get any additional payment when landfill charges are introduced.

International Obligations relevant to waste management and subsidies

12. The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) regulates the import and export of hazardous wastes, and does not impose any standards on waste management within the jurisdiction of individual parties.

13. We are obliged, as member of the World Trade Organization (WTO), to comply with various trade agreements. The WTO Agreement on Subsidies and Countervailing Measures (SCM) provides that contracting parties could take action against three main types of subsidies which:

- ◆ give preference to the use of domestic over imported goods;
- ◆ are specific to an enterprise, industry or groups of enterprises or industries; or
- ◆ involve assistance to industrial research, assistance to disadvantaged regions or adapting existing facilities to new environmental requirements.

14. In addition, the General Agreement on Tariffs and Trade (GATT) prohibits any quantitative restrictions on import except where the import ban:

- ◆ relates to the conservation of an exhaustible resource;
- ◆ is made effective in conjunction with restrictions on domestic production or consumption; and
- ◆ does not constitute a means of arbitrary or unjustifiable discrimination, or a disguised restriction on international trade.

15. As advised by the Trade Department, the waste paper collectors and recyclers' suggestions of restricting importation of foreign recycled products or to provide direct subsidy to the trade, would, prima facie, be inconsistent with our obligation under WTO and GATT.

Assistance to the Recycling Industry

16. As stated previously, it remains the Administration's position that no direct subsidies in terms of loans, credits or cash assistance to a particular private operation would be appropriate. However, the Administration is accelerating the provision of suitable land at an acceptable rate for the recycling industry, as outlined in the Waste Reduction Framework Plan. Last year, we have let out two pieces of land in Tuen Mun and Sheung Shui for plastics and metal recycling operations. The Working Group convened by EPD with the waste collectors and recyclers will discuss other specific locations. We have identified two potential sites in the old Kai Tak airport site for the waste recycling industry, with preference being given to the waste paper industry. On 23 January 1999, we have arranged a visit with the waste trade representatives, who showed interest in the sites. We have asked the Government Property Agency to proceed with the tendering process.

Administration's Position in the Proposal from the Hong Kong General Association of Recycling Business

17. We have met the waste paper collectors, recyclers and exporters on 11 January 1999 and exchanged initial views on the proposed centralized waste handling and trading centre. The Administration has invited the representatives from the waste paper trade to provide further details on the "centralized waste handling centre" proposals to facilitate our deliberation. However, we must point out that we cannot accede to the demand that we should draft the proposal. It would be most improper for us to both draft and approve or disapprove the proposals. We will continue the dialogue with the trade representatives to arrive at a solution acceptable to all parties and which serve the best interest of the community.

Planning, Environment and Lands Bureau
March 1999

Landfill - Operation Fees (Dec. 97 prices)

Monthly Waste Input (Tonnes)	Operation Fee per tonne (HK\$)
75001 - 80000	88.94
80001 - 85000	83.89
85001 - 90000	78.95
90001 - 95000	75.01
95001 - 100000	71.48
100001 - 105000	68.30
105001 - 110000	65.42
110001 - 115000	62.45
115001 - 120000	60.08
120001 - 125000	57.91
125001 - 130000	55.97
130001 - 135000	54.18
135001 - 140000	52.52
140001 - 145000	50.64
145001 - 150000	49.22
150001 - 155000	47.90
155001 - 160000	46.59
160001 - 165000	45.36
165001 - 170000	44.20
170001 - 175000	42.90
175001 - 180000	41.89
180001 - 185000	40.93
185001 - 190000	40.12
190001 - 195000	39.35
195001 - 200000	38.34
200001 - 205000	37.65
205001 - 210000	37.21
210001 - 215000	36.38