

1. Planned increases in population and industrial development could have potential resource implications in terms of the capacity of existing or committed waste disposal-facilities in the Territory. In addition to the practical issues of disposing of waste products, environmental impacts include potential congestion due to collection vehicles using narrow roads or indeed the number of vehicles required to convey waste. This is particularly so in the New Territories where noise and air pollution from refuse collection vehicles conveying the wastes to disposal sites could have adverse impacts in local terms.
2. The territorial Waste Disposal Strategy and the findings of the Waste Reduction Study and the Monitoring of Municipal Wastes 1991-1992 were reviewed in the context of the TDS Review. The latter is in keeping with one of the principle aims of the TDS to minimise the generation of waste wherever practical. This concept is strongly supported as it will not only reduce the amount of material used but will also extend the life of the existing solid waste disposal sites.

#### **Domestic Waste**

3. Estimates of domestic waste arising for the three options have been made and are included in Table 7.1. The variations in disposal requirements are minor, although the implications for actual disposal locations are of greater concern.

#### **Construction Waste**

4. It is pertinent to note that the Waste Reduction Study did not take into account the disposal or reduction of construction waste arisings despite these being particularly problematic wastes to control and dispose of. The amount of bamboo and wooden formwork used on construction sites (and then disposed of by means other than burning) is a particular concern. The amount of marine mud which often needs to be dredged and disposed prior to the formation of land is also a key issue, especially under the HB-Biased option which is predicated upon reclamation for new developments. Appropriate disposal sites for both contaminated and uncontaminated mud are limited and alternative disposal (or land development) strategies may need to be considered in future.

#### **Summary**

5. The major differences between the scenarios are summarised in Table 7.2. Differences occur in Central and Western, Kowloon City, Kwun Tong, rural NWNT, Fanling/Sheung Shui and North Lantau. Wastes arising on Lantau will be handled by the North Lantau Refuse Transfer Station, and at the Outlying Islands Transfer Facilities which is at the tendering stage at present. Ultimate disposal will be (by barge) to WENT which will minimise the traffic impacts. Rural NWNT and Fanling are close to the WENT and NENT landfills. Additional disposal vehicle movements could however cause further congestion on local roads under the NT-Biased Scenario. Additional loads generated in the Metro Area under the HB-Biased Option could possibly be accommodated by the existing and planned urban area Refuse Transfer Stations.

**Table 7.1 Domestic Waste Arising from Forecast Population at 2006 (Tonne/day)**

	<b>NT-Biased Option</b>	<b>HB-Biased Option</b>	<b>Recommended Strategy</b>
<b>Metro Area</b>			
Central and Western	468	635	531
Wanchai	352	365	382
Eastern	912	927	928
Southern	428	435	434
Yau Ma Tei	326	332	329
Mongkok	220	224	222
Sham Shui Po	590	599	594
Kowloon City	818	831	859
Kwun Tong	816	1,025	918
Wong Tai Sin	710	721	715
Tsuen Wan	384	390	387
Kwai Chung	430	437	433
Tsing Yi	260	264	262
<b>New Territories</b>			
Tuen Mun	786	782	775
Yuen Long	301	273	302
Tin Shui Wai	499	507	503
Tai Po	385	391	388
Fanling /Sheung Shui	491	356	353
Sha Tin	637	647	642
Ma On Shan	306	303	308
Tseung Kwan O	707	716	712
North Lantau	289	370	245
Rural NWNT	656	508	552
Rural NENT	101	102	101
Rural SENT	98	100	99
Rural SWNT (N.Lantau)	129	131	130
<b>Metro Total</b>	<b>6,718</b>	<b>7,186</b>	<b>6,995</b>
<b>Non-Metro Total</b>	<b>5,386</b>	<b>4,917</b>	<b>5,109</b>

**Table 7.2 Waste Disposal Issues**

Issue	NT-Biased Option	HB-Biased Option	Recommended Strategy
Generation Rate	<p>greater population leads to greater domestic wastes;</p> <p>increase in number of water and sewage treatment facilities also gives rise to sludge disposal issues.</p>	<p>domestic wastes collected up at well established or planned facilities;</p> <p>more construction waste to be disposed of including marine mud (which could be contaminated).</p>	<p>balance of both domestic and construction wastes compared to other options.</p>
Disposal	<p>more problematic in NWNT and NENT than other options because the facilities are dispersed;</p> <p>local roads may not be able to cope with traffic;</p> <p>increases in noise, air pollution and congestion forecast from land based disposal;</p> <p>marine based transport for disposal to WENT from Outlying Islands Transfer Facilities and North Lantau Refuse Transfer Station.</p>	<p>consider more marine disposal routes rather than road based especially for construction wastes;</p> <p>existing and planned collection facilities well situated throughout the urban area</p>	<p>balance of rural and metropolitan collection and disposal facilities</p>