

- 7.1.2.9 The *Works Bureau Technical Circular No. 5/99 – Trip-ticket System for Disposal of Construction and Demolition Material* promulgates the policy to implement a trip-ticket system in Public Works Programme (PWP) contracts for the proper disposal of C&D material at public filling facilities or landfills.
- 7.1.2.10 The *Works Bureau Technical Circular No. 25/99 – Incorporation of Information on Construction and Demolition Material Management in Public Works Subcommittee Papers* promulgates the policy and guidelines for incorporating information on the management of construction and demolition material in Public Works Subcommittee papers recommending the upgrading of projects to Category A of the Public Works Programme for the implementation of construction works.
- 7.1.2.11 The *Works Bureau Technical Circular No. 29/2000 - Waste Management Plan* introduces the requirement for contractors to prepare and implement a waste management plan (WMP). The requirement shall be included in all PWP contracts (including design and build contracts but excluding term contracts and contracts administered by Electrical and Mechanical Services Department).

## **7.2 Previous and Existing Conditions**

- 7.2.1** Wastes generated from the previous airport operation at Kai Tak were mainly from three sources namely airport (airside), airport (landside) and airport related industries. Based on the data collected from a questionnaires survey carried out in the previous SEKDFS, it was found that the collected wastes comprised 65.5 tonnes per day (tpd) of domestic, commercial, industrial and chemical wastes. Among them, only 10.5 tpd, mainly refuse, was collected by the Urban Services Department (USD). After collection, this waste was compacted and containerised at the Kowloon Bay Transfer Station (KBTS). The containerised waste was then transferred to landfill for disposal.
- 7.2.2** The remaining wastes, including chemical, domestic and industrial wastes, a total of approximately 55 tpd, are collected by private collectors and then either recycled (for instance chemical waste) or disposed of at landfills.
- 7.2.3** The old Kai Tak Airport has now been scheduled to divide into different areas to provide temporary uses for government sites and short-term tenancies. Existing land uses range from open storage to vehicle parking areas and golf centre.

## **7.3 Assessment Methodology**

### **7.3.1 General**

- 7.3.1.1 The assessment on waste management implications follows the criteria and guidelines as stated in Annexes 7 and 15 of the *EIAO-TM* together with other relevant legislation, policies, and guidelines discussed in Section 7.1 above.
- 7.3.1.2 This assessment covers the analysis of activities and waste generation and proposal for waste management in the construction and operational stages of the proposed development in SEKD.

### **7.3.2 Analysis of Activities and Waste Generation**

#### ***Construction Stage***

- 7.3.2.1 Waste generating activities during the construction stage of the proposed project are identified. Wastes generated would generally include construction and demolition (C&D) material,

chemical waste, and workforce waste. Quantity, quality, and timing of the generation of different categories of waste are identified as far as possible.

### *Operational Stage*

7.3.2.2 The quantity, quality, and timing of waste generation during the operational stage are estimated from the population, land uses, and the program of the proposed development. Municipal solid waste would be of most concern during the operational stage. According to *Monitoring of Solid Waste in Hong Kong 1999* prepared by EPD, the forecast of domestic waste is related primarily to the growth of population in Hong Kong. A linear regression model of historical waste quantities against historical population has been developed. Population forecast provided by the Planned Department has been applied to the domestic waste projection using the regression relationship between population and waste quantity in the model

7.3.2.3 Similar linear regression models have been developed for commercial and industrial (C&I) waste through the following:

- Commercial waste generation is considered against GDP contribution of the commercial sector; and
- Industrial waste generation is considered against the Index of Industrial Production. The forecast of this index is derived from the projection of population and GDP growth provided by the Planning Department and the Financial Services Bureau respectively.

7.3.2.4 Based on the above linear regression model, the projected generation rates of domestic rate and C&I waste are obtained and presented in Table 7.1 below.

**Table 7.1 Projection of per capita Generation Rates and Quantities of Municipal Solid Waste Disposed of at Waste Facilities 2006 – 2016**

Year	Domestic Waste		C&I Waste		Municipal Solid Waste
	Quantity (tpd)	Per capita generation rate (kg/person/day)	Quantity (tpd)	Per capita generation rate (kg/employee/day)	Quantity (tpd)
2006	10,090	1.30	2,140	0.55	12,230
2011	11,650	1.40	2,310	0.55	13,960
2016	13,190	1.48	2,540	0.58	15,730

Note: 1. Figures on waste quantities are rounded off to the nearest 10tpd and may not add up to total due to rounding-off.  
2. Figures are estimated by linear projection model.  
3. Figures are project based on the assumption of no additional waste reduction measures.

7.3.2.5 The forecast quantity of domestic waste or C&I waste during operational phase of SEKD was worked out by multiplying the projected generation rate by the predicted population or employment size respectively. For years between 2006, 2011 and 2016, the per capita generation rates were determined by interpolation.

## **7.4 Identification, Prediction and Evaluation of Potential Impacts**

### **7.4.1 Construction Phase Impact Assessment**

#### *Waste Arising*

##### (i) Construction Waste – Demolition Materials

7.4.1.1 During development of the site, the existing Carpark and Terminal Buildings in the NAKTA area will be demolished to maximize the development potential. Under the current implementation program, the Carpark Building and the Terminal Building is scheduled to be