

## **16.5 Sewerage and Sewage Treatment Implications**

**16.5.1.1** The philosophy of conventional "shallow" gravity sewers coupled with sewage lift stations is proposed to be provided for the sewerage of SEKD. This approach provides conventional gravity sewers to cater for the developments within each subcatchment area, and subsequently drains the sewage to a local lift station which would be situated adjacent to a major stormwater drainage culvert. At the lift station, the collected flows would be pumped over the drainage culverts into the next subcatchment, to discharge into a manhole where the sewage would flow by gravity into the next lift station. Ultimately, the collected sewage would be directed collectively to either the To Kwa Wan PTW or the Kwun Tong PTW.

**16.5.2** Based on the population and landuse distribution for the SEKD development, and also on the population projections in the hinterland by the RCEKSMP study, it is shown that there will be no potential capacity constraints at To Kwa Wan PTW. For Kwun Tong PTW, depending on which current PWWF projections are adopted, there may be a potential capacity constraint by year 2016. Provision for expansion areas at both the Kwun Tong and To Kwa Wan PTWs has been allowed for to make allowance for any future upgrading should this be found necessary.

## **16.6 Waste Management Implications**

**16.6.1** Wastes generated during the construction stage of the development would generally include construction and demolition (C&D) material, chemical waste, and workforce waste. With the implementation of practicable waste management measures, the associated impacts are not considered to be an insurmountable environmental constraints.

**16.6.2** Waste generated during the operational stage is mainly municipal solid waste. It is estimated that the total waste (i.e domestic and C&I waste) generated from SEKD would increase from 95 tpd in year 2005 to 434 tpd in year 2018. Together with the municipal solid waste generated from the existing catchment of KBTS, the capacity of the existing KBTS would be exceeded in year 2006. Based on the future waste arising estimated in this study, a new RTS with capacity in the range of 3000 to 3700 tpd and with marine access is proposed in Area 6C of SEKD to serve the SEKD and the existing catchment of KBTS. The proposed RTS site is located at more than 300m from existing and planned residential uses. With the implementation of practicable mitigation measures adopted in other newly built RTSs in the territory, adverse environmental impact associated with the operation of the proposed RTS is not expected. The proposed RTS is a Designated Project under Schedule 2 Part I:G.2 of the EIAO, a detailed EIA should be carried out by the future project proponent and approved under the EIAO to confirm that there will be no insurmountable environmental impacts associated with the construction and operation of the RTS.

**16.6.3** There is no major difficulty on technical grounds, as evidenced by the application of the Automated Refuse Collection System to 2 public housing estates in the pilot scheme. The use of ARCS for combined sites will have institutional and financial issues to be resolved, though not insurmountable. South East Kowloon Development, being a newly developed area, will provide better opportunity of applying the ARCS than in other developed and congested areas. As such, an institutional framework should be formulated to target for a wider application. A further study, based on the initial findings of this report, is recommended to allow the implementation to follow.

## **16.7 Land Contamination Impact**

**16.7.1** Two relevant recent studies namely SEKDFS EIA and NAKTA Decommissioning EIA have been reviewed to provide the background information for assessment of land contamination impact. The previous studies identified a number of 'hotspots' within the Kai Tak Airport. Remediation works is now carrying out at the identified locations to decontaminate the land up