8. WASTE MANAGEMENT IMPLICATIONS

Introduction

- 8.1 Waste management during the construction phase would be the contractor's responsibility. The contractor must confirm that all wastes produced during the construction phase of the Project are handled, stored and disposed of in accordance with good waste management practices and EPD's regulations and requirements. The recommended mitigation measures in the EIA Report should form the basis of the Waste Management Plan to be developed by the Contractor in the construction stage.
- 8.2 Waste materials generated during construction activities, such as construction and demolition (C&D) material and general refuse, are recommended to be audited at regular intervals (at least quarterly) to ensure that proper storage, transportation and disposal practices are being implemented. This monitoring of waste management practices would confirm that these solid wastes generated during construction are not disposed of into the adjacent coastal waters. The Contractor would be responsible for the implementation of mitigation measures to minimise waste or redress problems arising from the waste materials.

Mitigation Measures

- 8.3 Mitigation measures for waste management as recommended in the EIA Report are summarised below. With the appropriate handling, storage and disposal of waste arising during the construction works as defined below, the potential to cause adverse environmental impacts would be minimised.
- 8.4 The implementation schedule of the recommended mitigation measures is presented in <u>Appendix A</u>. During the site inspections, the ET shall pay special attention to the issues relating to waste management and check whether the Contractor has implemented the recommended good site practices and other mitigation measures.

Good Site Practices

- 8.5 Adverse impacts related to waste management are not expected to arise, provided that good site practices are strictly followed. Recommendations for good site practices during the construction activities include:
 - Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site
 - Training of site personnel in proper waste management and chemical handling procedures
 - Provision of sufficient waste disposal points and regular collection of waste
 - Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers
 - Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors
 - Separation of chemical wastes for special handling and appropriate treatment at the Chemical Waste Treatment Facility
 - A recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) shall be proposed

Waste Reduction Measures

8.6 Good management and control can prevent the generation of a significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by implementing of good site practices. Recommendations to achieve waste reduction include:

- Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal
- Encourage collection of aluminium cans by providing separate labelled bins to enable this waste to be segregated from other general refuse generated by the workforce
- Proper storage and site practices to minimise the potential for damage or contamination of construction materials
- Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.
- 8.7 In addition to the above measures, specific mitigation measures are recommended below for the identified waste arising to minimise environmental impacts during handling, transportation and disposal of these wastes.

General Refuse

8.8 General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.

Construction and Demolition Material

8.9 In order to minimise impacts resulting from collection and transportation of C&D material for off-site disposal, the excavated material generated from excavation works for the proposed sodium hypochlorite solution storage area, dechlorination plant and pipe gallery should be reused on-site as backfilling material as far as practicable. The surplus excavated material should be disposed of at the designated public fill reception facility, as agreed with the Secretary of the Public Fill Committee, for other beneficial uses. C&D waste generated from site clearance and dismantling of formwork would require disposal to the designated landfill site. In order to monitor the disposal of C&D material at the public fill reception facility and landfill and to control fly-tipping, a trip-ticket system should be included. One may make reference to ETWB TCW No. 31/2004 for details.

Chemical Wastes

8.10 If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.