Agreement No. CE 35/2006(CE)
Kai Tak Development Engineering Study
cum Design and Construction of Advance Works
– Investigation, Design and Construction

DECOMMISSIONING OF THE FORMER KAI TAK AIRPORT OTHER THAN THE NORTH APRON ENVIRONMENTAL MONITORING AND AUDIT MANUAL

Contents

List of Tables

List of Appendices

3 WASTE MANAGEMENT IMPLICATIONS

3.1 Introduction

3.1.1 Waste management will be the Contractor's responsibility to ensure that all wastes produced during the decommissioning works of the Project are handled, stored and disposed of in accordance with good waste management practices and EPD's regulations and requirements.

3.1.2 Waste materials generated during the decommissioning works, such as construction and demolition (C&D) material, general refuse and chemical wastes, 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 will ensure that these solid and liquid wastes are not disposed into the nearby harbour waters. The Contractor will be responsible for the implementation of any mitigation measures to minimise waste or redress problems arising from the waste materials.

3.2 Waste Control and Mitigation Measures

3.2.1 Mitigation measures for waste management are summarised below. With the appropriate handling, storage and removal of waste arisings during the decommissioning works as defined below, the potential to cause adverse environmental impacts will be minimised.

Good Site Practices

3.2.2 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 decommissioning works 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 waste handling procedures;
- Provision of sufficient waste disposal points and regular collection for disposal;
- 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;
- A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).

Waste Reduction Measures

3.2.3 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 ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:

- Sorting C&D waste from demolition of the remaining structures to recover recyclable portions such as metals;
- 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;

- Encouraging collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force;
- Recycling any unused chemicals or those with remaining functional capacity;
- Proper storage and site practices to minimise the potential for damage or contamination of construction materials;
- Planning and stocking construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.

3.2.4 In addition to the above measures, specific mitigation measures are recommended below for the identified waste arisings to minimise environmental impacts during handling, transportation and disposal of these wastes.

Construction and Demolition Material

3.2.5 The C&D material should be sorted on-site into inert C&D material (that is, public fill) and C&D waste. The inert C&D material would require disposal to the designated public fill reception facility. C&D waste, such as steel and other metals should be re-used or recycled and, as a last resort, disposed of to landfill. It is recommended that a suitable area be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.

3.2.6 In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system should be included as one of the contractual requirements and implemented by an Environmental Team undertaking the Environmental Monitoring and Audit work. An Independent Environmental Checker should be responsible for auditing the results of the system.

General Refuse

3.2.7 General refuse should be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector should be employed by the Contractor to remove general refuse from the site, separately from C&D material. Effective collection and storage methods (including enclosed and covered area) of site wastes would be required to prevent waste materials from being blown around by wind, wastewater discharge by flushing or leaching into the marine environment, or creating odour nuisance or pest and vermin problem.

Chemical Wastes

3.2.8 After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) should be handled according to the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*. Spent chemicals should be collected by a licensed collector for disposal at the CWTF or other licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.

3.2.9 **Table 3.1** provides a summary of the various waste types likely to be generated during the decommissioning works, together with the recommended handling and disposal methods.

Table 3.1 Summary of Waste Handling Procedures and Disposal Routes

Waste Type	Generated From Works Item	Total Quantity Generated	Quantity to be disposed off-site / re-used	Handling	Disposal
C&D Material	Demolition of Remaining Structures	4100 m^3	4100 m^3 (no reuse is considered feasible)	Sort on-site into: • Inert C&D material (public fill) (200 m^3) • C&D waste (3900m^3)	To be disposed to public fill reception facilities for other beneficial uses To be disposed to landfill
Chemical Wastes	Lubrication oil, fuel etc. from operation, maintenance, and servicing of construction and decontamination treatment plant and equipment, and from decontamination works	Few cubic metres per month (preliminary estimate)	Few cubic metres per month (preliminary estimate)	Recycle on-site or by licensed companies Stored on-site within suitably designed containers	Chemical Waste Treatment Facility or other licensed facility
General Refuse	Waste paper, discarded containers etc. generated from workforce	Few cubic metres per month (preliminary estimate)	Few cubic metres per month (preliminary estimate)	Provide on-site refuse collection points	Refuse station for compaction and containerisation and then to landfill

3.2.10 The implementation schedule of the recommended mitigation measures is presented in **Appendix A**.