

China Resources Construction Company Limited

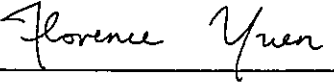
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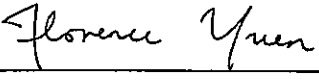
Contract No. SS M333

Reprovisioning of Diamond Hill
Crematorium

Waste Management Plan for Phase I Works

February 2005


Reviewed by (PM):


Checked by:


Approved by:
(Environmental Team Leader)

Report Version: Revision 2 Date of Submission: 14 February 2005

The information contained in this report is, to the best of our knowledge, correct at the time of printing. The interpretation and recommendations in the report are based on our experience, using reasonable professional skill and judgment, and based upon the information that was available to us. These interpretations and recommendations are not necessarily relevant to any aspect outside the restricted requirements of our brief. This report has been prepared for the sole and specific use of our client and MEMCL accepts no responsibility for its use by others.

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14 February 2005

BY POST & FAX (2524 8194)

Architectural Services Department
Queensway Government Offices
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Your
Ref:

Our 1148-05/E05-11571
Ref:

For attention of: Mr Michael Mak

Dear Michael

**Reprovisioning of Diamond Hill Crematorium
Waste Management Plan (WMP) for Phase 1 Works (Revision 2)**

We refer to email on 14 February 2005 from MEMCL copied to us enclosing the captioned WMP.

We have no comment and hereby verified the WMP.

Should you have any queries, please do not hesitate to contact the undersigned on 2911 2719.

Yours sincerely

A handwritten signature in black ink, appearing to be "Coleman Ng", written over a white background.

**Coleman Ng
Independent Environmental Checker
HYDER CONSULTING LIMITED**

cc MEMCL - Mr. Y. T. Tang/Ms Florence Yuen
CRCCCL - Mr. Eric To

(Fax: 2891 0305)

(Fax: 2827 2921)

CN/AL



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1. PROJECT BACKGROUND

- 1.1 Works under Reprovisioning of Cremators at Diamond Hill Crematorium (hereinafter called the “Project”) under Contract No. SS M333 was awarded to China Resources Construction Company Limited (hereinafter called the “Contractor”) by the Architectural Services Department of the Hong Kong Special Administrative Region (HKSAR) in September 2004.
- 1.2 The Project is divided into two phases. The Works to be executed in Phase I include the following major items:
- Demolition of facilities in Existing Crematorium in the southern side of the Project site, including
 - Existing siting out area
 - Garden of remembrance
 - Existing building structure, including CLP secondary substation, toilets, pavilion and retaining walls
 - Construction of the New Crematorium main facilities, including
 - One cremator plant room housing six cremators
 - Three fuel tanks (with total capacity of 34,000L)
 - Two service halls (each can hold 120 people)
 - One pulverizing room
 - One mortuary
 - One office
 - Toilets for public
 - Ancillary service rooms including battery fork lift, transformer and switch room, emergency generator room and joss burners
 - Two automatic transportation systems for coffins and part of an underground service tunnel for coffin circulation
 - Vehicular loading bay for coffin van, coach
 - Landscape area
 - Dangerous goods store
 - Installation of temporary CLP electricity transformer at Phase II boundary
- 1.3 Layout of the work site is shown in Figure 1.1.
- 1.4 As stipulated in Special Conditions of Contract SCC70(2) and SCC70(4) and Condition 3.2 of the Environmental Permit EP-179/2004, a Waste Management Plan for the Phase I Works should be submitted. This Waste Management Plan for Phase I Works is prepared to fulfil these requirements.

2. PURPOSE OF THE PLAN

- 2.1 This Waste Management Plan (WMP) aims to describe the arrangement for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the demolition and construction activities of Phase 1 the Project. This WMP includes the recommended mitigation measures on waste management as contained in the Particular Specification of Contract Document (No. SS M333).

- 2.2 This WMP also estimates the quantity of waste generation of Phase I Works throughout the entire construction period. This WMP and the appended Waste Generation and Handling Procedure would be revised when deemed necessary.

3. WASTE MANAGEMENT POLICY AND STRATEGIES

- 3.1 The Environmental Policy of China Resources Construction Company Limited is provided in Appendix B. The management's approach, commitment and targets/measures for the waste management on-site were stated in the policy statement. Core elements of waste management are listed in Table 3.1 and described in Section 4 to 11 of this WMP.

Table 3.1 Core Elements of Waste Management

Elements	Reference Section
License or Permit Requirements	4
Legislation and Guidelines	5
Organization, Duties and Responsibilities for Waste Management	6
Classification and Analysis of Waste	7
Control Measures for Different Categories of Waste	8
Waste Monitoring and Audit	9
Training	10

- 3.2 The various waste management options would be categorised in terms of preference from an environmental viewpoint. The options considered to be more preferable have the least impacts and are more sustainable in the longer term. Hence, the hierarchy of waste management is as follows:
- Avoidance and minimisation, i.e. not generating waste through changing or improving practices and design;
 - Reuse of materials, thus avoiding disposal;
 - Recovery and recycling, thus avoiding disposal; and
 - Treatment and disposal, according to relevant laws, guidelines and good practice.
- 3.3 This hierarchy would be used to evaluate waste management options, thus allowing maximum waste reduction. Waste reduction measures would be introduced at the planning stage and carried through the demolition and construction activities, whenever possible, by careful purchasing control, reuse of formworks and good site management. By reducing or eliminating over-ordering of construction materials, waste is avoided and costs are reduced both in terms of purchasing of raw materials and disposing of wastes.

4. LICENSE OR PERMIT REQUIREMENTS

Registration as a Chemical Waste Producer

- 4.1 Under the Waste Disposal (Chemical Waste) (General) Regulation, producers of chemical wastes must have registration with the Environmental Protection Department. The registration

would be applied as required.

Dumpling license to Public Filling Area

- 4.2 The Land (Miscellaneous Provisions) Ordinance requires that dumping licences are obtained by individuals or companies who deliver inert portion of construction and demolition material (i.e. Public Fill) to Public Filling Areas. The licences are issued by the Civil Engineering and Development Department under delegated powers from the Director of Lands. The license would be applied as required.

5. LEGISLATION AND GUIDELINES

Statutory Requirements

- 5.1 The following legislation covers, or has some bearing upon, the storage, collection, treatment and disposal of wastes in Hong Kong:
- Waste Disposal Ordinance (Cap 354);
 - Waste Disposal (Chemical Waste) (General) Regulation (Cap 354);
 - Land (Miscellaneous Provisions) Ordinance (Cap 28);
 - Public Health and Municipal Services Ordinance (Cap 132) — Public Cleansing and Prevention of Nuisances (Urban Council) and (Regional Council) By-Laws; and
 - Dumping at Sea Ordinance (Cap 466).

Non-statutory Requirements

- 5.2 Other guiding documents which detail how the contractor should comply with the regulations are as follows:
- *Waste Reduction Framework Plan, 1998 to 2007*, Planning, Environment and Lands Bureau, Government Secretariat, 5 November 1998;
 - *2001 Review of the Waste Reduction Framework Plan*, Waste Reduction Committee;
 - *Site Practice for Waste Reduction in Construction Industry (2001)*, Environmental Protection Department;
 - *Environmental Guidelines for Planning in Hong Kong (1990)*, Hong Kong Planning and Standards Guidelines, Hong Kong Government;
 - *New Disposal Arrangements for Construction Waste (1992)*, Environmental Protection Department & Civil Engineering Department;
 - *A Guide to the Registration of Chemical Waste Producers (2001)*, Environmental Protection Department;
 - *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes (1992)*, Environmental Protection Department;
 - *A Guide to the Control on Import and Export of Waste (1999)*, Environmental Protection Department;
 - *Works Bureau Technical Circular No. 2/93, Public Dumps*, Works Bureau;
 - *Works Bureau Technical Circular No. 2/93B, Public Filling Facilities*, Works Bureau;
 - *Works Bureau Technical Circular No. 16/96, Wet Soil in Public Dumps*, Works Bureau;

- *Works Bureau Technical Circular No. 25/99, 25/99A and 25/99C, Incorporation of Information on Construction and Demolition Material Management in Public Works Sub-committee Papers*, Works Bureau;
- *Works Bureau Technical Circular No. 12/00, Fill Management*, Works Bureau;
- *Works Bureau Technical Circular No. 19/01, Metallic Site Hoardings and Signboards*, Works Bureau;
- *Works Bureau Technical Circular No. 6/02 and 6/02A, Enhancement Specification for Site Cleanliness and Tidiness*, Works Bureau;
- *Works Bureau Technical Circular No. 21/2002, Trip-ticket System for Disposal of Construction and Demolition Material*, Works Bureau;
- *Environment, Transport and Works Bureau Technical Circular (Works) No. 33/2002, Management of Construction and Demolition Material including Rock*, Environment, Transport and Works Bureau;
- *Environment, Transport and Works Bureau Technical Circular (Works) No. 15/2003, Waste Management on Construction Sites*, Environment, Transport and Works Bureau.

6. ORGANISATION, DUTIES AND RESPONSIBILITIES FOR WASTE MANAGEMENT

Project Organisation

- 6.1 The project organisation with respect to waste management is outlined below. The organisation structure for waste management is shown in Figure 6.1. Contacts of key waste management personnel of the Project are listed in Appendix A.

Duties and Responsibilities of Key Waste Management Personnel

The Architect

- 6.2 The Architect should be responsible for:
- Providing full support on the implementation of the approved WMP;
 - Ensuring the WMP is fully implemented throughout the construction period;
 - Reviewing the waste monitoring and audit report submitted by the ET;
 - Following up and ensuring the carrying out of corrective actions in accordance with the WMP; and
 - Investigating and auditing of the equipment and work methodologies with respect to waste management.

Independent Environmental Checker (IEC)

- 6.3 The IEC should be responsible for the following duties in relation to the implementation of the WMP:
- Review effectiveness of the waste mitigation measures recommended in the WMP.

The Contractor

- 6.4 The Contractor should:
- Work within the scope of the construction contract and other tender documents;

- Participate in the waste management site inspections undertaken by the ET and the IEC as required and undertake any corrective actions instructed by the Architect; and
- Take responsibility and strictly adhere to the provisions of the WMP and the contract specifications.

Project Manager

6.5 Project Manager should be responsible for overall planning, site operations, appointment of committee members for waste management staff supervision control co-ordination and external liaison. The waste management responsibilities of the Project Manager include:

- Overseeing waste management of the Project, which they achieve by implementation of the WMP;
- Participating and providing necessary support to the ET for the preparation and review of WMP;
- Ensuring that staff attends environmental training with regard to waste management organized by the WM;
- Implementing environmental controls and mitigation as set out in this WMP as well as any additional measures necessary for compliance with environmental control measures;
- Ensuring the recommendations and instructions from the Architect or ET are implemented to improve the waste management practice and carry out immediate action to rectify the non-compliance of waste management requirements;
- Providing leadership in the efficient management of project and in meeting project's waste management objectives; and
- Anticipating waste generation impacts that may require mitigation before the problem arises.

Waste Manager (WM)

6.6 The waste management responsibilities of the WM include:

- Arranging routine joint site inspection with ET and review environmental inspection report submitted by the ET;
- Ensuring works are undertaken in accordance with the recommendations made and instructions given by the Architect and ET;
- Monitoring and controlling the works including those of subcontractors to ensure compliance with specified requirements;
- Ensuring appropriate waste management mitigation measures are properly implemented;
- Ensuring follow up actions are properly undertaken in the event of non-compliance of the WMP;
- Reviewing method statement to ensure appropriate mitigation measures are implemented prior to execution of works;
- Liaise with the Architect and ET on waste management issues;
- Monitor records of all trained personnel in the site offices;
- Monitor the following documents:
 - any statutory required waste management permits/licenses including dumping licence, chemical waste producer, admission ticket and etc.;
 - C&D material disposal delivery record; and
 - waste reuse / recycle / disposal summary.
- Ensuring all relevant legislation and the Contractor's duty of care is complied with

throughout the duration of the Project;

- Initiating waste reduction scheme on site;
- Ensuring that all the Contractor's employees and nominated subcontractors' employees are aware of their responsibilities regarding the content of the WMP; and
- Coordinating waste management on site, gathering data on waste and keeping accurate records on waste movement both on and off site.

Engineer

6.7 The Engineer should have the following duties in relation to waste management:

- Assisting the WM in the implementation of WMP;
- Monitoring and controlling works including those of subcontractors to ensure compliance of WMP;
- Review the WMP at monthly intervals and submit a revised and updated WMP if necessary;
- Preparing and updating the yearly or monthly summary waste flow tables and the summary table for use of timber in temporary works construction;
- Reporting to the Project Manager or WM regarding non-compliance of waste management issues; and
- Ensuring the remedial actions or mitigation measures to be carried out as planned.

Foremen

6.8 Foremen should be responsible for the following duties in relation to waste management:

- Assisting the Engineer in the implementation of WMP;
- Controlling works including those of subcontractors to fulfill the requirements of waste management;
- Reporting to the Engineer any non-compliance of waste management issues;
- Maintaining the on-site waste management facilities including sorting area, temporary storage area, general refuse bins and recycling bins etc;
- Carrying out remedial actions or mitigation measures to rectify non-compliance; and
- Carrying out routine maintenance of waste management facilities and keeping proper maintenance records in site office.

Subcontractor and other Employees

6.9 Every employee and subcontractor has the duty to carry out the waste management practices instructed by the Engineer and Foremen. Copies of WMP would be issued to all subcontractors.

6.10 Every employee and subcontractor should report promptly to foreman any non-compliance of waste management issues.

Environmental Team (ET)

6.11 The ET is an independent environmental consultant employed by the Contractor. The waste management responsibilities of the ET include:

- Provide specialist advice on waste management issues to the Contractor;
- Conduct site inspections and investigate and inspect Contractor's equipment and work methodologies with respect to waste management mitigation measures stipulated in the

- WMP, and anticipate waste management issues that may require mitigation;
- Review the programme of works to anticipate potential waste management implications;
 - Report the implementation status of waste management mitigation measures from site inspections; and
 - Follow the procedures stipulated in the agreed Event and Action Plans in the event of non-compliance or complaint.

7. CLASSIFICATION AND ANALYSIS OF WASTE

Classification of Waste

7.1 The waste generated from the demolition and construction activities of Phase 1 of the Project would be divided into distinct categories based on their composition, as follows:

- Excavated Material;
- Construction and Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Contaminated Material.

Excavated Material

7.2 Excavated materials comprise clean rock and soil generated during demolition and construction.

Construction and Demolition (C&D) Material

7.3 C&D materials comprise unwanted materials generated during demolition and construction, including rejected structures and materials, materials which have been over ordered or are surplus to requirements, and materials used and discarded.

7.4 C&D material could be divided into two categories according to whether they are inert or non-inert. Inert material such as debris, rubble, bitumen material, earth and concrete is known as “Public Fill”, while the non-inert part such as metal, timber, vegetation, packaging waste, organic material and all recyclables and non-recyclables is called “C&D Waste”.

Chemical Waste

7.5 Chemical wastes are the substances defined by the Schedule I of the Waste Disposal (Chemical Waste) (General) Regulation. Chemical wastes generated from the construction site would primarily arise from the demolition of CLP secondary substation and maintenance of plant and equipment. These may typically include oils, lubricants, paints and solvents.

General Refuse

7.6 General refuse include food waste and other debris arising from various construction activities, site workforce and site housekeeping.

Contaminated Material

7.7 Contaminated Material anticipated includes Polychlorinated biphenyls containing materials (PCBCM) arising likely from contaminated soil around the existing CLP secondary substation, which will be demolished during Phase 1 of the Project. Supplementary contamination assessment for the existing CLP secondary substation would be carried out to identify the types

of contaminants and level of contamination and remediation required.

Analysis of Waste Generation

- 7.8 Different types and quantities of waste would be generated throughout Phase 1 of the Project from various demolition and construction activities and daily operation of the constructions site.
- 7.9 The estimated amount of waste to be generated from Phase 1 of the Project and their respective handling procedure are provided in Table 7.1.

Table 7.1 Waste Generation and Handling Procedures

Construction Activity	Waste Generation Period	Waste Generation Operation	Estimated Quantities of Excavated Materials and Control Measures			Estimated Quantities of C&D Materials and Control Measure						Estimated Quantities of Chemical Waste and Control Measure			Estimated Quantities of General Refuse and Control Measure			Estimated Quantities of Contaminated Material and Control Measure						
			Qty (m ³)	Control Measure	Transport Route	Public Fill (Inert)			C&D Waste (Non-Inert)			Qty (m ³)	Control Measure	Transport Route	Qty (m ³)	Control Measure	Transport Route	Qty (m ³)	Control Measure	Transport Route	Qty (m ³)	Control Measure	Transport Route	
						Qty (m ³)	Control Measure	Transport Route	Qty (m ³)	Control Measure	Transport Route													Qty (m ³)
Site Clearance, preparation and establishment	Nov 04 – Dec 04	Establishment of site offices and hoarding erection								6m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
	Nov 04 – Dec 04	Break up existing pavement and planters								12m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
Road Diversion & U/G Utilities Diversion	Dec 04 – Jan 05	Break up existing road slab								100m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
	Dec 04 – Jan 05	Excavation for pipe trenches	500m ³	Reuse on site	N/A					12m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
	Dec 04 – Jan 05	Formwork for cable pits, manholes								2m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel	4m ³	Reuse on site	N/A									
Demolition Works	Dec 04 – Jan 05	Demolition of CLP Substation, Pavilion & Toilet Block								100m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
	Jan 05 – Feb 05	Removal of PCB Contaminated Soil below CLP Substation																		25m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel		
Pipe Pile / Sheet Pile	Feb 05 – Mar 05	Drilling Work for Pipe Pile								10m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel												
Site Formation	Feb 05 – May 05	Excavation work to formation level Temporary Shoring	4,145m ³	Disposed off to Kai Tak PFBP	Trucks via Po Kong Village Rd, Kwun Tong Rd & Kai Tak Rd																			
			5,000m ³	Reused on site	N/A																			
Foundation Work	May 05 – Jun 05	Formwork for Foundation & Ground Beam								3m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel	7m ³	Reused on other projects	N/A									
	May 05 – Jun 05	Bending & Cutting of Steel Reinforcement											3m ³	Collected by recycling companies	N/A									
	May 05 – Jun 05	Placing Concrete				50m ³	Disposed off to Kai Tak PFBP	Trucks via Po Kong Village Rd, Kwun Tong Rd & Kai Tak Rd																
Superstructure	Aug 05 – Dec 05	Formwork for Wall & Slab								5 m ³	Disposed of to TKO Landfill	Trucks via Po Kong Village Rd, Kwun Tong Rd & TKO Tunnel	20 m ³	Reused on other projects	N/A									
	Aug 05 – Dec 05	Bending & Cutting of Steel Reinforcement											30 m ³	Collected by recycling companies	N/A									
	Aug 05 – Dec 05	Placing Concrete				150m ³	Disposed off to Kai Tak PFBP	Trucks via Po Kong Village Rd, Kwun Tong Rd & Kai Tak Rd																
Finishing Work & B.S. Installation	Sep 05 – Jul 06	Blockwork, Plastering &							10m ³	Disposed off to Kai Tak	Trucks via Po Kong	2,863 m ³	Disposed of to TKO	Trucks via Po Kong	3.1m ³	Collected by Licensed	N/A							

8. CONTROL MEASURES FOR DIFFERENT CATEGORIES OF WASTE

General

8.1 Preliminary sorting of waste generated from various demolition and construction activities as detailed in Section 7 would be conducted on-site into distinct categories based on their composition, as follows:

- Excavated Material;
- Construction and Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Contaminated Material.

8.2 The reuse, recycling, treatment and disposal can be effected by proper segregation practices exercised on-site. Location Plan of Tentative Waste Sorting and Storage Area is provided in Figure 8.1.

Excavated Material

8.3 Excavated materials would be segregated from other material or waste to avoid contamination thereby ensuring acceptability at Public Fill Facility and avoiding the need for disposal at Landfill.

8.4 Prior to the re-use of inert excavated material, it would need to be appropriately handled to avoid air quality (dust generation) and water quality (run-off) impacts. Procedures to be followed during the storage of excavated materials would include:

- Wetting of the surface of stockpiles as necessary, particularly during dry periods;
- Minimization of disturbance to stockpiles by enclosing and covering, particularly during prolonged wet, dry or windy periods; and
- Separation of stockpiles from, and installation of silt traps into, the surface water drainage system

8.5 Excavated material would be transported within the site by trucks. During truck loading and excavated material transportation, consideration would be given to potential environmental impacts caused by fugitive dust emissions. Accordingly, prior to transfer and transport, excavated material would be dampened and / or covered as necessary.

8.6 For each and every vehicular trip transporting surplus excavated material off-site (Kai Tak Public Filling Area), a trip ticket would be provided by the disposal site.

8.7 The original of the trip ticket from the disposal site would be submitted to ArchSD. A copy of the trip ticket would also be maintained by the WM for reference.

Construction and Demolition (C&D) Material

8.8 Low waste construction technologies together with careful planning would be adopted to avoid/minimise C&D material generation. Such measures include:

- Management of construction materials such that over-ordering, poor storage and maintenance, mishandling as well as improper operation procedures would be avoided;
- Restriction on use of hardwood such that softwood, metal props and/or proprietary steel system would be considered for falsework;
- Formwork would be designed to maximize the use of standard wooden panels so that high reuse levels could be achieved. More durable alternatives such as steel formwork or plastic facing would be considered for repetitive areas to increase the potential for reuse;
- C&D materials would be, as much as possible and practicable, separated into reusable items and materials to be disposed of or recycled. It would be conducted at the immediate working area to avoid loss or leakage during handling;
- All C&D materials arising from or in connection with the construction and demolition work would be sorted on-site and be separated into different categories for disposal at landfills, public filling areas, or refuse and recycling as appropriate. The sorting area might be revised from time to time in order to suit the demolition and construction activities;
- Useful materials such as timber, rubble and steel/metal would be segregated for reuse. For example concrete and masonry would be crushed and used as fill, steel reinforcing bar would be used by scrap steel mills, formwork and timber would be cleaned for reuse, off-cuts of reinforcement would be sorted into usable lengths and short off cuts stacked for scrap metal. Where it is no longer reusable, scrap steel and metal items would be collected by recycling companies;
- Segregated material would be temporary stored at designated areas for reuse on site. Tentative locations of waste sorting/segregation and storage areas are shown in Figure 8.1.
- The remaining non-reusable C&D materials would be sorted on-site into the inert portion (e.g. rock, brick, bituminous material, concrete and soil, etc.) as the “public fill” and the non-inert portion (e.g. timber, vegetation and paper, etc.) as the “C&D waste”. The public fill would be delivered to the Government approved Public Fill Facility. The hard inert construction and demolition (C&D) materials, such as broken rock and concrete which could be recycled into aggregates for reuse in construction works, would be delivered to Kai Tak PFBP. The non-recyclable portion of C&D waste, (containing no more than 30% by weight of inert content) would be tipped at TKO landfill. Recycling companies would be arranged to collect the recyclable portion of C&D waste.

Chemical Waste

8.9 Chemical waste that is produced (mainly spent lubricating oil), as defined by Schedule 1 of the *Waste Disposal (Chemical Waste) (General) Regulation* (e.g. Used oil and spent solvent), would be handled in accordance with the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes* as follows:

Packaging

8.10 Chemical waste would be packed and held in containers of suitable design so as to prevent leakage, spillage or escape of the contents under normal conditions of handling, storage and transport.

8.11 Containers used for the storage of chemical wastes would be:

- Suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;
- Have a capacity of less than 450 litres unless the specifications have been approved by the

EPD; and

- Display a label in English and Chinese in accordance with instructions prescribed in *Schedule 2* of the Regulations.

Storage

8.12 The Contractors would provide a suitable area for temporary storage of chemical waste. The storage area would be specially constructed and bunded, and located close to the source of waste generation as far as is practicable. The tentative location of the chemical waste storage area is provided in Figure 8.1.

8.13 The storage area for chemical wastes would:

- Be clearly labeled and used solely for the storage of chemical waste;
- Be enclosed on at least 3 sides;
- Have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20% of the total volume of waste stored in that area, whichever is the greatest;
- Have adequate ventilation;
- Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste if necessary); and
- Be arranged so that incompatible materials are adequately separated.

Disposal

8.14 Chemical waste would be disposed of via a licensed waste collector:

- To an off site facility licensed to receive chemical waste such as the Chemical Waste Treatment Facility located in Tsing Yi; or
- To a reuser of the waste, under the approval from the EPD.

8.15 A Spill Response Plan as attached in Appendix D would be developed and implemented to deal with any accidental spillage of chemicals on-site. The spill response plan would contain procedures for:

- Spill prevention and precaution;
- Response actions; and
- Spill clean up and disposal.

General Refuse

8.16 Measures that encourage waste avoidance or minimisation include:

- Reducing the number of photo copies to a minimum and by copying on both sides of paper for internal documents and external documents where appropriate;
- Preventing over-ordering of office equipment and consumables;
- Procuring green office equipment and consumables in terms of energy efficiency, recycled content and durability;
- Providing drinking facility and encouraging employees to bring their own cup; and
- Discouraging take-out food.

8.17 Additional measures that facilitate reuse/recycling and orderly disposal include:

- Deploying sufficient recycle bins at convenient locations to facilitate collection of recyclables including wasted aluminum cans, plastic bottles and papers;

- Deploying sufficient refuse collection bin at convenient locations to facilitate collection of non-recyclables for disposal at landfills; and
- Participating local collection scheme (e.g. scheme launched by District Board) if available.

Contaminated Material

- 8.18 After decommissioning but prior to demolition of the existing CLP secondary substation, further contamination investigation would be carried out to confirm the quality and quantity of Polychlorinated Biphenyls Containing Materials (PCBCM) requiring treatment and disposal that is likely from contaminated soil around CLP secondary substation.
- 8.19 The aforementioned PCBCM are classified as chemical waste. The packaging, labelling and storage practices of chemical waste as stipulated in the previous paragraphs should also be applied to PCBCM.

Site Cleanliness and Tidiness

- 8.20 The Contractor would perform Daily Cleaning and Weekly Tidying of the Site including the Public Cleaning Areas. The extent of the Public Cleaning Areas required for cleaning should include, but not limited to, areas within 3 metres on the peripheral outside the barriers or hoardings, or as determined by the Architect on-site for each work location based on the requirements of the Contract, and taking into account the actual site condition before work commences.

Daily Cleanliness

- 8.21 “Daily Cleaning” would include cleaning and tidying up after work of tools, equipment, unused materials, storage areas and common areas such as passageways, daily removal of waste materials from works areas, removal of any rubbish and debris dumped onto the Site by the public and, without derogating from the generality of the foregoing, would include, but not limited to, all the items subject to checking.
- 8.22 The Contractor would develop inspection checklist for Daily Cleaning for the Architect’s approval. The inspection checklist would be reviewed and updated whenever there is a change in work nature or work location and re-submitted for the Architect’s approval. The inspection checklist would include an assessment on the cleanliness and tidiness of all work locations, plus the Public Cleaning Areas. Items to be checked against for each work location would include, but not limited to, the following:
- Clearing of stockpiling and wastes arising from the work;
 - Maintenance of passageways, common accesses and public areas free of obstruction;
 - Proper storage and stacking of materials;
 - Proper placement and storage of tools and equipment after work;
 - Proper sorting, storage and/or disposal of waste materials in accordance with the WMP;
 - Proper securing of hoarding, barriers, guarding, lighting and signing of works;
 - Prevention and removal of water pond, stagnant water and flooding;
 - Conditions of cleanliness and tidiness of Site including Public Cleaning Areas in the perspective of the general public; and
 - Other cleaning requirements as instructed by the Architect.

- 8.23 The Contractor would assign a person to inspect the Site after each Daily Cleaning. The assigned person would check and ensure the cleanliness and tidiness of the Site, complete the inspection checklist, record the areas requiring improvements, and take photographs of areas where cleaning and tidying up works have been done and where improvement actions are required.
- 8.24 The Contractor would notify the Architect the time schedule for Daily Cleaning and the name of assigned person responsible for inspection and checking after each Daily Cleaning.
- 8.25 The Contractor would submit, in the morning of the day (which is not a General Holiday) following a Daily Cleaning, the inspection checklist, records and photographs prepared for the Architect's checking and record. The records of the daily cleanliness checklists, records and photographs would also be available on site for relevant parties to inspect.
- 8.26 The Architect may carry out inspection and surprise checks to verify the Contractor's performance on cleanliness and tidiness of the Site before the noon of the day (which is not a General Holiday) following a Daily Cleaning. The Architect would notify the Contractor and record in the Site Diary for any non-payment of the item for "Daily Cleaning" on that day in question and the areas of dissatisfaction for improvement by the Contractor.
- 8.27 The Contractor would in the morning of everyday, and before work commences, inspect and remove any rubbish and debris that may be littered by the public over the night within the Site including the Public Cleaning Area prior to the inspection by the Architect.

Weekly Tidying

- 8.28 "Weekly Tidying" would include the cleansing and tidying up of the common areas and accesses, cleaning and/or re-conditioning of hoardings, barriers, guarding, lighting, signage and/or traffic cones, cleansing of external covers for plant and equipment, hoardings, as well as Site as a whole, are clean and tidy in the perspective of the general public and, without derogating from the generality of the foregoing, would include, but not limited to, all the items subject to checking.
- 8.29 The Contractor would develop inspection checklist for the Weekly Tidying for the approval of the Architect. The inspection checklist would be reviewed and updated whenever there is a change in work nature or work location and re-submitted for approval by the Architect. The inspection checklist would include an assessment on the cleanliness and tidiness of the Site conditions at various work locations, including the Public Cleaning Areas. Items to be checked against each work location would include, but not limited to, the following:
- Thorough cleansing of passageways, common accesses and public areas;
 - Re-organizing of storage materials for better utilization of storage spaces and safe stacking if appropriate;
 - Maintenance of re-conditioning of tools and equipment;
 - Cleansing of external covers for plant and equipment;
 - Collection and removal of disposed waste materials off site in accordance with the WMP;
 - Cleansing, re-conditioning and/or replacement of hoarding, barriers, guarding, lighting, and signage of works to good working condition;
 - Clearing of drains and channels to prevent flooding; and
 - Other cleansing requirements as instructed by the Architect from the perspective of the general public.

- 8.30 The Contractor would assign a person to inspect the Site after each Weekly Tidying. The assigned person would check and ensure the overall cleanliness and tidiness of the Site, complete the inspection checklist, record the areas requiring improvements, and take photographs of areas where cleaning and tidying up actions have been done and where improvement actions are required.
- 8.31 The Contractor would notify the Architect the time schedule for Weekly Tidying and the name of assigned person responsible for the inspection and checking after each Weekly Tidying.
- 8.32 The Contractor would submit, in the morning of the day (which is not a General Holiday) following a Weekly Tidying, the inspection checklist, records and photographs prepared for the Architect for checking and record. The records of the daily cleanliness checklists, records and photographs would also be available on site for relevant parties to inspect.
- 8.33 The Architect would check and inspect the overall cleanliness and tidiness of the Site on the day (which is not a General Holiday) following the Weekly Tidying. The Architect would advise the Contractor whether his performance is to his/her satisfaction, or if not, where improvement actions are required.
- 8.34 The Contractor would promptly rectify the defects identified by the assigned person and/or the Architect. The Contractor would not be entitled to any payment for the item for “Weekly Tidying” for a Cleaning Week Day if the Contractor fails to rectify the identified defects pursuant to Section 8.23 and 8.26 above to the satisfaction of the Architect before the end of the day (which is not a General Holiday) following the Cleaning Week Day.
- 8.35 Daily Site Cleanliness Checklist and Weekly Site Tidying Checklist are presented in Appendix G and H respectively.
- 8.36 The Contractor would in the morning of every Cleaning Week Day before work commences inspect and remove any rubbish and debris that might be littered by the public over the night within any area which cleanliness and tidiness the Contractor is required to maintain under this Contract before the inspection by the Architect.

9. WASTE MONITORING AND AUDIT

Trip Ticket System

- 9.1 The Contractor would produce a Construction and Demolition Material Disposal Delivery Form (the Form) for each and every vehicular trip transporting C&D material off site. The Contractor would complete all relevant details on the Form in duplicate except the Time of Departure. A specimen of the Form is contained in Appendix C.
- 9.2 Prior to the vehicle leaving the site, the Contractor would present to the Architect the completed Form. The Architect would insert the Time of Departure and stamp the Form. The Architect would retain a copy of the Form and return the original to the Contractor. The Form would be carried on board the vehicle at all times throughout the vehicular trip.
- 9.3 For each vehicular trip, the Contractor would present to the operator of the Designated Public Filling Facility or Landfill (the Operator) the stamped Form prior to the disposal of C&D

material. The operator would stamp and return the Form to the Contractor together with a computer print-out receipt to acknowledge the disposal of public fill. The Contractor would submit the stamped Form and the original receipt to the Architect within 2 working days of the vehicular trip. The copies of the Form and the receipt would be maintained on site for future reference.

- 9.4 For each trip of off site disposal of chemical waste, trip tickets issued for every chemical waste collection made by the licensed waste collection would be copied to the Architect and the original would be maintained on site for future reference.
- 9.5 The Contractor acknowledges and would permit the Architect to request and obtain information from the operator of the Designated Public Filling Facility/Landfill verifying the receipt and the accuracy of the information on the receipt.
- 9.6 All C&D material would become the property of the Contractor when it is removed from the Site.

Inspection Programme

- 9.7 The objectives of weekly environmental site inspection are:
- To ensure that the waste arising from works are handled, stored, collected, transported and disposed of in an environmentally acceptable manner;
 - To ensure that the handling, storage, collection and disposal of waste arising from the demolition works comply with the relevant requirements under the Waste Disposal Ordinance and its regulations; and
 - To encourage the reuse and recycling of materials.
- 9.8 The ET, with assistance from the WM, would audit the waste management practice during the weekly environmental site inspection to evaluate the overall performance of the implementation of the WMP and ensure the appropriate control measures are properly implemented. Immediately after the weekly inspection, a summary table of follow up actions would be agreed. A sample of the Checklist for Weekly Environmental Site Inspection Checklist is provided in Appendix E. The results of the waste management audits would be reported in the monthly environmental monitoring and audit reports.
- 9.9 In the event of any identified non-compliance against the provisions of this WMP, actions would be taken in according to the Event and Action Plan for non-compliance as shown in Table 9.1. Non-compliance would include the following situations:
- Infringement of legal requirements with respect to waste issues.
 - Persistent outstanding of control measures stated in the WMP as identified during the site inspection or audit by the ET/IEC.

Table 9.1 Event Action Plan for Non-compliance

Step	Day	Action	Contractor/ ET	Architect	IEC
1.	1	Create a new non-compliance record within 1 working day after making an observation during a site audit accompanied by Project Manager or his delegate. ET sends a Notice of Non-Compliance (NNC) to the Contractor and copy to the Architect and IEC. The NNC would include the observations and the reasons for non-compliance.	■		
2.	2	Propose corrective actions within 1 working day after the receipt of the NNC.	■	□	
3.	2	Review and agree with the proposed corrective actions and make additional recommendations as required.	■	□	□
4.	2	Implement the proposed corrective actions once they have been agreed.	■		
5.	-	Check the implementation of the corrective actions at the next site audit. Close the non-compliance record if the implementation of the corrective actions is satisfactory.	■	□	
6.	-	Propose preventive actions within 3 working days after the closure of the non-compliance record.	■	□	

■ Action party

□ Comments on the non-compliance record where applicable.

Record Keeping and Reporting

General

- 9.10 The Contractor would keep adequate and proper records such as delivery dockets and measurement records relating to the implementation of the WMP. The records would include trip-ticket, completed inspection checklists and training records.

Monthly Summary Waste Flow Table

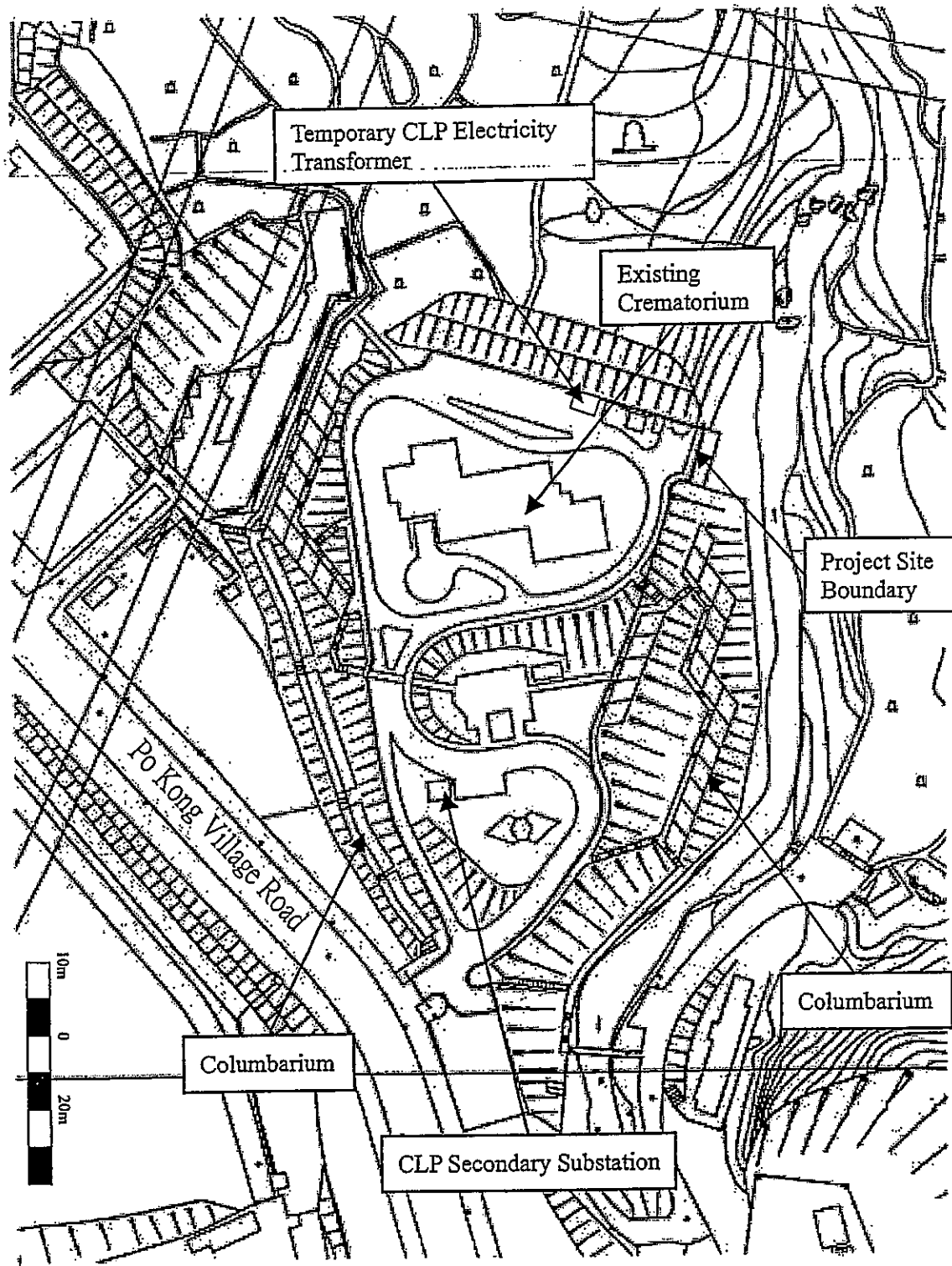
- 9.11 As part of the WMP, a mechanism would be established to record the quantities of C&D materials generated each month, using the monthly summary “Waste Flow Table” (WFT) as given in Appendix F. The monthly summary WFT would be completed and submitted to the Architect by not later than the 15th day of each month following the reporting month, or if it is a General Holiday, the day following the General Holiday.

Yearly Summary Waste Flow Table

- 9.12 Estimated quantities of C&D materials that would be generated each year from the site, would also be provided by the Contractor, using the yearly summary WFT as given in Appendix F. The yearly summary WFT covering the whole construction period would be included in the WMP, and thereafter updated on a half-yearly basis and submitted to the Architect by not later than 1st of June and December of each year, or if it is a General Holiday, the day following the General Holiday, throughout the construction period in order to account for the revised works programme and latest outturn on the quantities of C&D materials generated from the site.

10. TRAINING

- 10.1 The Project Manager would arrange the WM and other site personnel to attend the training on waste management organized by training institutes or organizations (e.g. the Business Environment Council, Hong Kong Polytechnic University, etc.) as considered appropriate by the Architect if they have not attended similar courses before.
- 10.2 The WM would arrange and provide training on waste management in the site-specific induction and its refresher training for all persons employed by the Contractor or his sub-contractor on the Works or in connection with the Contract. The training would cover the waste management policy, targets, measures for on-site sorting of C&D materials and measurement on waste management performance on Site.
- 10.3 The WM is allowed to develop and provide toolbox talks for the topic on on-site sorting of C&D materials to promote the worker's awareness on handling, sorting, reuse and recycling of C&D materials. Training material for environmental toolbox talks with regard to waste management would be prepared by the WM and disseminated to supervisor/foremen and subcontractor's representatives for conducting tool-box talks to all workers or labourers at regular intervals.

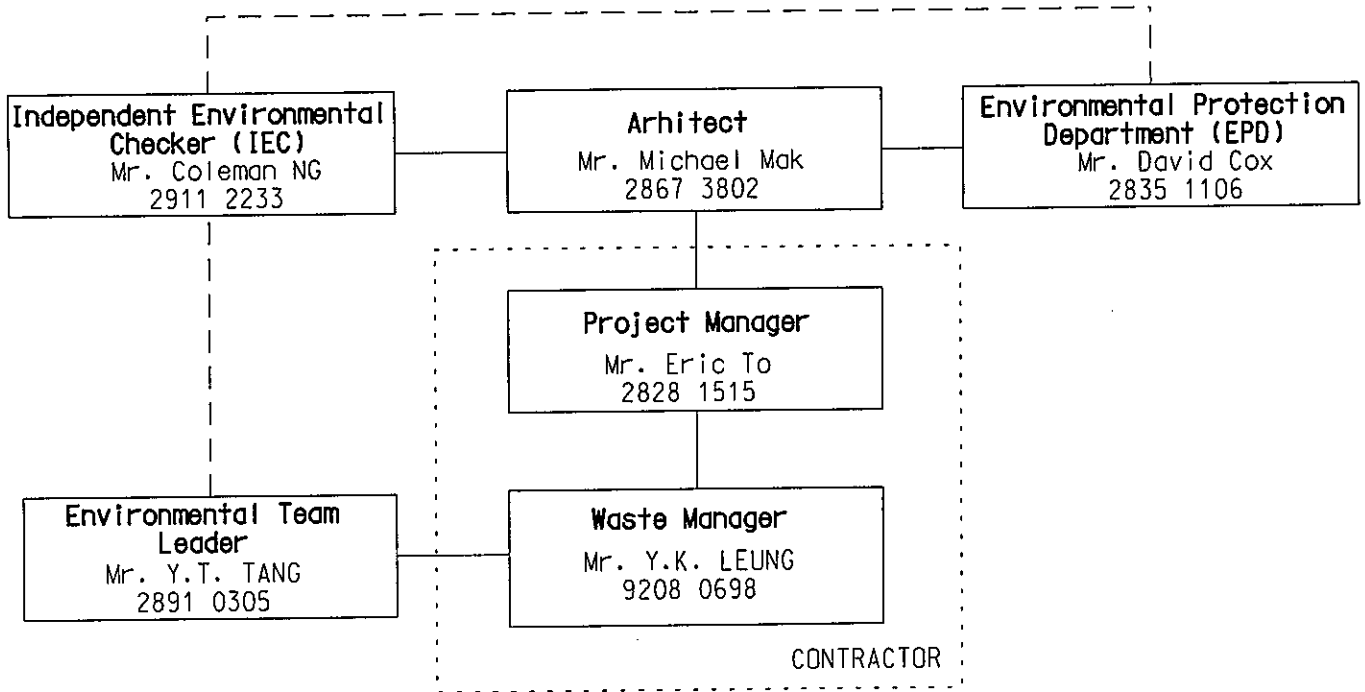


Title Contract No. : SS M333 Re-provisioning of Diamond Hill Crematorium Layout of Work Site	Scale N.T.S.	Project No. S07904	Maunsell MAUNSELL ENVIRONMENTAL MANAGEMENT CONSULTANTS LTD
	Date 2005	Figure No. 1.1	

Legend:

———— Direct Communication

- - - - Liaison



Maunsell
ENVIRONMENTAL MANAGEMENT CONSULTANTS LTD.
茂盛環境管理顧問有限公司

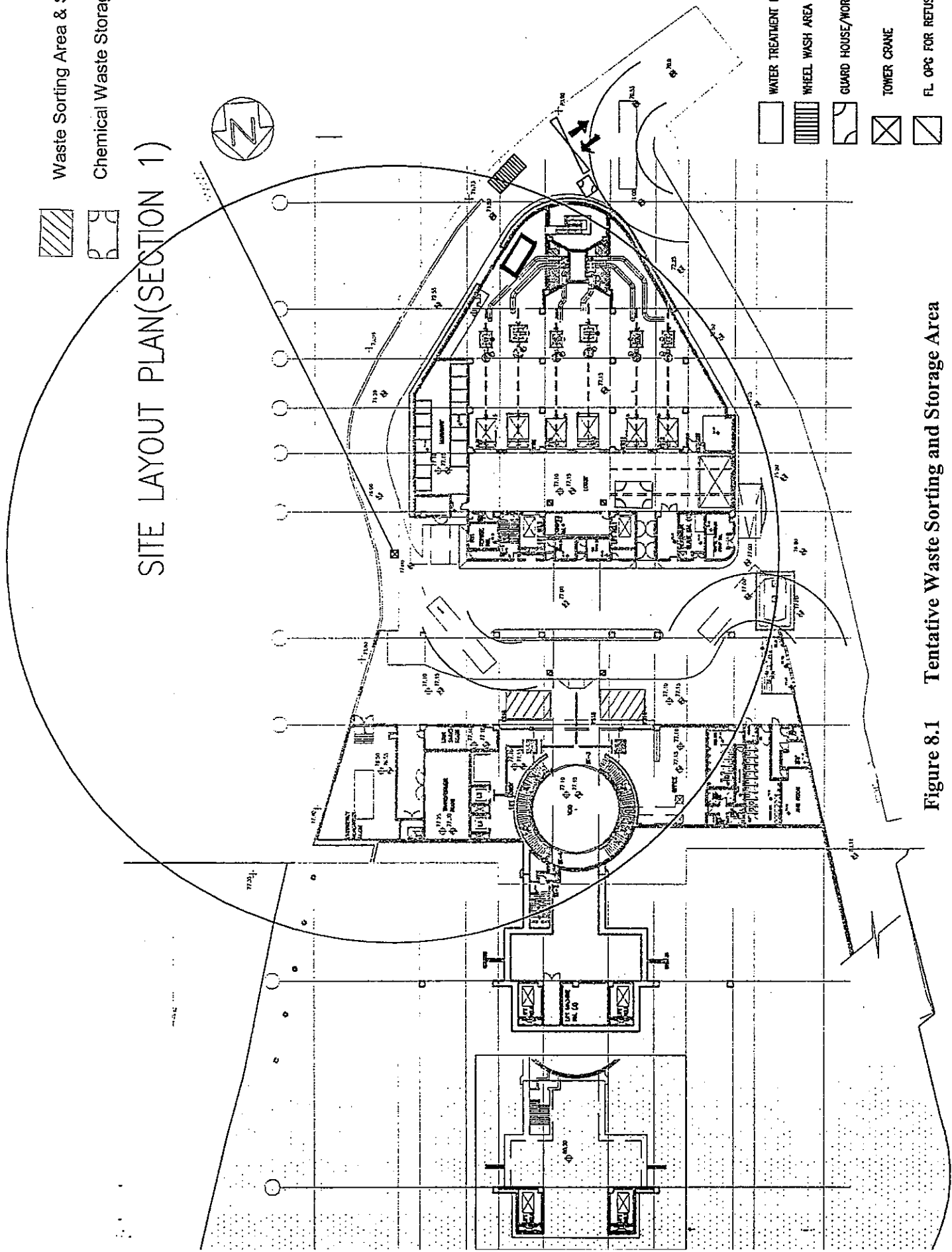
CONTRACT NO: SS M333
REPROVISIONING OF CREMATORS
AT DIAMOND HILL CREMATORIUM
**PROJECT ORGANIZATION FOR
WASTE MANAGEMENT**

SCALE
比例 N.T.S.
JOB No
項目編號 S07904

DATE
日期 OCT 2004
DRAWING No
圖號 6.1

Waste Sorting Area & Storage Area
 Chemical Waste Storage Area

SITE LAYOUT PLAN(SECTION 1)









-  WATER TREATMENT PLANT
-  WHEEL WASH AREA
-  GUARD HOUSE/WORKER'S ENTRANCE
-  TOWER CRANE
-  FL. OPC FOR REFUSE DISPOSAL
-  FL. OPC(ABOVE) FOR REFUSE DISPOSAL

Figure 8.1 Tentative Waste Sorting and Storage Area

**APPENDIX A
CONTACTS OF KEY WASTE
MANAGEMENT PERSONNEL**

Contacts of Key Waste Management Personnel

Party	Name	Telephone No.	Fax No.
Environmental Protection Department			
SEPO	Mr. David Cox	2835 1106	2591 0558
EPO	Ms. Marlene Ho	2835 1186	2591 0558
EPO (LCO)	Mr. Charles Wu	2117 7540	2756 8588
Architect			
Architectural Services Department			
Project Architect	Mr. Michael Mak	2867 3802	2524 8194
Assistant Architect	Mr. Johnson Lee	2867 4135	2524 8194
Independent Environmental Checker			
Hyder Consulting Limited			
IEC	Mr. Coleman Ng	2911 2233	2805 5028
Assistant to IEC	Mr. Adi Lee	2911 2233	2805 5028
Contractor			
China Resources Construction Company Limited			
Project Manager	Mr. Eric To	2828 1515	2827 2921
Waste Manager	Mr. Y. K. Leung	9208 0698	2827 2921
Engineer	Mr. Frankie Cheung	9259 4546	2827 2921
Foreman	Mr. C. M. Wong	9219 8021	2827 2921
Environmental Team			
Maunsell Environmental Management Consultants Limited			
ET Leader	Mr. Y.T. Tang	2893 1551	2891 0305
Audit Team Leader	Ms. Florence Yuen	2893 1551	2891 0305
Monitoring Team Leader	Mr. Thomas Chan	2893 1551	2891 0305

APPENDIX B
ENVIRONMENTAL POLICY



Environmental Policy

China Resources Construction Company Limited (CRCC), a building contractor, is committed to control and maintain a high standard of environmental protection.

It is our goal to support environmental protection and prevention of pollution in balance with socio-economic needs and address the needs of a broad range of interested parties.

Through the implementation of Environmental Management System which based on the requirements of the ISO14001:1996 international standard, CRCC is committed to:

- Carrying out the construction works in compliance with all relevant environmental regulatory and statutory requirements, and with other requirements to which CRCC subscribes;
- Adopt innovative construction technologies and effective utilization of resources to minimize pollution and wastage;
- Educate the employees and subcontractors to enhance environmental awareness; and
- Seeking continuous improvement in environmental performance by setting appropriate objectives and goals throughout the Company.

To reflect the current needs of the environmental protection issues, this Environmental Policy shall be reviewed annually or when necessary by top management and each CRCC staff is being addressed on the importance of this policy.

Verence Fung
Deputy Managing Director

01 January 2004

**APPENDIX C
CONSTRUCTION AND DEMOLITION
MATERIAL DISPOSAL DELIVERY FORM**

**Construction and Demolition Material
Disposal Delivery Form**

Department: Architectural Services Department Contract No.: SS M333

Contractor: China Resources Construction Company Limited

Contract Title: Reprovisioning of Diamond Hill Crematorium

Location of Site: Diamond Hill

Location of Public Filling Facility/Landfill *: _____

Vehicle Registration No.: _____ Date: _____

Approximate Load: Full / three quarter / half / one quarter *

Remarks: _____ Weight of Material Loaded _____ tonnes

Time of Departure: _____

Authorised Chop of Architect

**Delete whichever inappropriate*

Authorised Chop of
Operator of Landfill

APPENDIX D
SPILL RESPONSE PLAN

SPILL RESPONSE PLAN

1. SPILL PREVENTION AND PRECAUTION

General Precaution

- Avoid disorder and storage of unnecessary materials in working areas.
- Prevent obstructions and tripping hazards
- Prepare all required equipment prior to commencement of work
- Prohibit smoking at or near the dangerous goods stores

Storage Precautions

- Use solid and impermeable enclosure walls or storage containers
- Reduce the danger of falling of stacked containers
- Provide tightly closed lips to avoid leakage of chemical wastes to further reduce the danger of container falling
- Store compatible chemical wastes in the same storage area
- Inspect the storage area to detect if any leakage or defective containers on a regular basis
- Use suitable containers, which are resistant to the stored chemical wastes, to avoid leakage or spillage
- Check the conditions of the storage containers regularly
- Identify and provide suitable notices in storage area
- Provide adequate ventilate in the storage area
- Prohibit open flame and smoking near the chemical waste storage area
- Prevent mixing of incompatible chemical wastes
- Carry Out mixing of compatible chemical wastes outside if the storage area
- Store large and heavy containers on the floor as far as possible or avoid storage of these containers higher than 2 feet from the floor
- Keep chemical waste containers below eye level
- Provide adequate space for handling of the containers
- Maintain a log of chemical wastes
- Separate incompatible chemicals from each other

Transfer and Transport Precautions

- Consider the size of the container to avoid overfilling
- Use pumps to transfer chemical wastes instead of simple pouring
- Provide containment structure to hold the chemical wastes when leakage or spillage of chemical waste occurs
- Use safety and suitable labelled containers
- Use suitable carriers to transfer the chemical waste containers from one location to another
- Employ licensed waste collectors to be responsible for chemical waste transport

2. RESPONSE ACTIONS

- Workers should be aware of emergency telephone numbers, locations of emergency showers, locations of spill kits, emergency exit and evacuation routes. Medical emergency response should be undertaken whenever necessary. The response actions to an accident would include the following steps:
- Keep untrained personnel away from the spillage area or evacuate all personnel and call the emergency service if the spills are highly toxic and volatile
- Provide forced ventilation in the spillage area
- Allow only trained persons who have equipped with protective clothing and equipment to enter the spillage area for clean up
- Transfer the spills back into containers using suitable equipment whenever practicable
- Use suitable absorbing materials to clean up the spills and dispose the absorbing materials as chemical wastes
- Use suitable solvent to clean the spillage area after removing the spills
- Inform ET, IEC and Environmental Protection Department in the case where the spillage of chemicals would cause serious contamination of an area of risk of pollution
- Prepare necessary protective devices, safety equipment, containers and clean up materials for emergency use
- Train staff to handle the spillage of chemicals
- Evaluate the potential hazard of the chemical wastes

3. SPILL CLEAN UP AND DISPOSAL

- Prevent spreading of fumes and vapours by closing doors and windows of spillage area
- Control the leakage of the chemical wastes and absorb the spills using suitable absorbing materials
- Use acidic or alkaline solution for neutralisation wherever appropriate
- Take special precautions for flammable wastes and wastes in powder form
- Keep and label the clean up wastes
- Clean the spillage area and equipment used in the response actions
- Dispose the clean up wastes as chemical wastes

4. SAFETY EQUIPMENT

- Fire extinguishers
- Brush, dustpan, mop and bucket
- Dry sand
- Tissue and towelling
- Containers including plastic bags, drums, etc
- Absorbing materials
- Pumps
- Sampling devices

**APPENDIX E
WEEKLY ENVIRONMENTAL SITE
INSPECTION CHECKLIST**

EM&A Environmental Audit Checklist

Project:	<u>Contract No. SS M333</u>	Inspected by	
Inspection	<u>Reprovisioning of Diamond Hill Crematorium</u>	Client:	<u>ArchSD</u>
Date:	<u></u>	IEC:	<u>Hyder Consulting Ltd.</u>
Time:	<u></u>	ET:	<u>MEMCL</u>
		Contractor:	<u>CRC</u>

PART A: GENERAL INFORMATION

Weather: Sunny Fine Cloudy Rainy

Temperature: °C

Humidity: High Moderate Low

Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.02	Is the effluent discharged in accordance with the discharge licence?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.03	Is the discharge of turbid water avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.07	Is drainage system well maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.09	Are temporary exposed slopes properly covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	Are earthworks final surfaces well compacted or protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.11	Are manholes adequately covered or temporarily sealed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.12	Are there any procedures and equipment for rainstorm protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Are wheel washing facilities well maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	Is runoff from wheel washing facilities avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	Are there toilets provided on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.16	Are toilets properly maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.18	Is the oil leakage or spillage avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.22	Are the oil interceptors/grease traps maintained properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
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1.23 Is used bentonite recycled where appropriate?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Section 2: Air Quality

2.01 Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.02 Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.03 Are the excavated materials sprayed with water during handling?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.04 Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.05 Is the exposed earth properly treated within six months after the last construction activities?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.06 Are the access roads sprayed with water to maintain the entire road surface wet or paved?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.07 Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.08 Is the load on vehicles covered entirely by clean impervious sheeting?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.09 Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.10 Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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2.11 Is dark smoke emission from plant/equipment avoided?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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2.12 Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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2.13 Are site vehicles travelling within the speed limit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.14 Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

2.15 Is open burning avoided?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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Section 3: Noise

3.01 Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.02 Is silenced equipment adopted?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.03 Is idle equipment turned off or throttled down?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.04 Are all plant and equipment well maintained and in good condition?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.05 Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.06 Are hand held breakers fitted with valid noise emission labels during operation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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3.07 Are air compressors fitted with valid noise emission labels during operation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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3.08 Are flaps and panels of mechanical equipment closed during operation?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.09 Are Construction Noise Permit(s) applied for percussive piling works?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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3.10 Are Construction Noise Permit(s) applied for general construction works during restricted hours?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

3.11 Are valid Construction Noise Permit(s) posted at site entrances?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

Section 4: Waste/Chemical Management

4.01 Are receptacles available for general refuse collection?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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4.02 Is general refuse sorting or recycling implemented?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

4.03 Is general refuse disposed of properly and regularly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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EM&A Environmental Audit Checklist

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
4.04 Is the Contractor registered as a chemical waste producer?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.05 Are the chemical waste containers properly labelled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.06 Are the chemical wastes stored in proper storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.07 Is the chemical waste storage area properly labelled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.08 Is the chemical waste storage area used for storage of chemical waste only?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.09 Are incompatible chemical wastes stored in different areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10 Are the chemical wastes disposed of by licensed collectors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11 Are trip tickets for chemical wastes disposal available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.12 Are chemical/fuel storage areas bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13 Are designated areas identified for storage and sorting of construction wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.14 Are construction wastes sorted on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.15 Are construction wastes reused?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.16 Are construction wastes disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.17 Are site hoardings and signboards made of durable materials instead of timber?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.18 Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.19 Are appropriate procedures followed if contaminated material exists?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.20 Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 5: Landscape & Visual						
5.01 Are retained and transplanted trees in health condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.02 Are retained and transplanted trees properly protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.03 Are surgery works carried out for the damaged trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.04 Is damage to trees outside site boundary due to construction activities avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.05 Is the night-time lighting controlled to minimize glare to sensitive receivers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 6: Others						
6.01 Are relevant Environmental Permits posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks

Client

IEC

ET

Contractor

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APPENDIX F
WASTE FLOW TABLES

Name of Department: ArchSD CED / DSD / EMSD / Hyd / TDD / WSD

Contract No.: SS M333

Monthly Summary Waste Flow Table for (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated (in '000 m ³)	Broken Concrete (see Note 4) (in '000 m ³)	Reused in the Contract (in '000 m ³)	Reused in other Projects (in '000 m ³)	Disposed as Public Fill (in '000 m ³)	Metals (in '000 kg)	Paper/ cardboard packaging (in '000 kg)	Plastics (see Note 3) (in '000 kg)	Chemical Waste (in '000 kg)	Others, e.g. general refuse (in '000 m ³)
Jan										
Feb										
Mar										
Apr										
May										
Jun										
Sub Total										
Jul										
Aug										
Sep										
Oct										
Nov										
Dec										
Sub Total										

Notes:

- (1) The performance targets are given in Sub-clause 2(5) (c) in Clause 1.63 in Part 14 of the Employer's Requirements.
- (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
- (4) Broken concrete for recycling into aggregates

Summary Table for Work Processes or Activities Requiring Timber for Temporary Works

Contact No.: SS M333

Contract Title: Reprovisioning of Diamond Hill Crematorium

Item No.	Description of Works Process or Activity [see note (a) below]	Justifications for Using Timber in Temporary Construction Works	Est. Quantities of Timber Used (m ³)	Actual Quantities used (m ³)	Remark
1					
2					
3					
4					
5					
6					
7					
Total Estimated Quantity of Timber Used					

- Notes:
- (a) The Contractor shall list out all the work items requiring timber of use in temporary construction works. Several minor items may be grouped into one for ease of updating.
 - (b) The summary table shall be submitted to the *Architect/Engineer/Supervising Officer's Representative monthly together with the waste flow table for review and monitoring in accordance with the PS Sub-clause 1(4) in Appendix C.

Yearly Summary Waste Flow Table

Year	Estimated Annual Quantities of Inert C&D Materials (in '000 m ³)										Estimated Annual Quantities of C&D Wastes									
	Total Quantity Generated		Broken Concrete (see Note 4)		Reused in the Contract		Reused in other Projects		Disposed as Public Fill		Metals		Paper/ cardboard packaging		Plastics (see Note 3)		Chemical Waste		Others, e.g. general refuse	
	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.	Est.	Act.
2004	0.135		N/A		0.1		N/A		0.035		1	0.5		0.2		0.035		0.06		
2005	9.49		N/A		5.25		N/A		4.24		34	1.5		0.8		1.9		1.775		
2006	0.25		N/A		0.15		N/A		0.1		1.42	8		1		0.935		1.29		
2007																				
2008																				
2009																				
2010																				
2011																				
2012																				
2013																				
Grand Total	9.875		N/A		5.5		N/A		4.375		36.42	10		2		2.87		3.125		

- Notes:
- (1) The performance targets are given in Sub-clause 2(5) (c) in Clause 1.63 in Part 14 of the Employer's Requirements.
 - (2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 - (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
 - (4) Broken concrete for recycling into aggregates

**APPENDIX G
DAILY SITE CLEANLINESS CHECKLIST**

Site Cleanliness Checklist (Daily)

地盤清潔檢查表(每日)

檢查日期: _____
Date of Inspection: _____
地點: _____
Location: _____

時間: _____
Time: _____
檢查員: _____
Inspected by: _____

項目 Item	每日地盤清潔要求 Daily Site Cleanliness Requirement	*遵守? *Compliance?		N/A	重新檢查 Re-inspection
		Yes	No		
1	通道及公共地方沒有阻塞? Are passageways, common accesses and public areas free of obstruction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	通道及公共地方是否清楚分開? Are passageways, common accesses and public areas clearly demarcated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	工地入口是否清潔及整齊? Are all site entrances clean and tidy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	工地入口是否有沖洗車輪設施? Are all site entrances provided with wheel washing facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	易生塵埃地方是否有噴水設施或其他防塵設施? Are water spraying facilities or other dust suppression means deployed in dusty site areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	未用之物料是否已整齊排列及儲存於適當地方? Are unused materials piled up and stored in appropriate areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	儲存未用物料之地方是否清潔及整齊? Are the stockpiling and storage areas for unused materials clean and tidy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	易生塵埃的物料堆有否覆蓋? Are stockpiles of excavated materials properly covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	工具是否清潔及恰當地儲藏? Are tools cleaned and returned to appropriate storage places or tool boxes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	儲藏工具之地方是否清潔及整齊? Are the storage places and tool boxes for tools clean and tidy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11	儀器是否清潔及恰當地放回適當之儲存地方? Are equipment cleaned and set back to appropriate storage/parking locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12	儲存儀器之地方是否清潔及整齊? Are the storage and parking locations for equipment clean and tidy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	廢物已根據廢物管理計劃分類,儲存及清理? Proper sorting, storage and/or disposal of waste materials in accordance with the Waste Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14	地盤之廢物是否已清理? Are waste materials including rubbish removed from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15	圍板,欄河,照明,指示是否妥善安放? Are hoarding, barriers, guarding, lighting and signing of works properly secured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16	積水已清除及防止水災? Are water ponds, stagnant water and flooding prevented and removed from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17	渠道及排水渠是否沒有阻塞及保持良好狀態? Are drains, gullies free from blockage and maintained in good working order?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
18	地盤範圍放置足夠廢物箱/籃? Are there enough refuse collection tanks /bins available on site areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Signatures:

Contractor's Representative(s)

(Name: _____)

Checked by:

(Name: _____)

**APPENDIX H
WEEKLY SITE TIDYING CHECKLIST**

Site Tidying Checklist (Weekly)**地盤整理檢查表(每週)**

檢查日期:

時間:

Date of Inspection: _____

Time: _____

地點:

檢查員:

Location: _____

Inspected by: _____

項目 Item	每週地盤整理要求 Weekly Site Tidying Requirement	*遵守? *Compliance?		N/A	重新檢查 Re-inspection
		Yes	No		
1	通道及公共地方已全面清潔? Thorough cleansing of passageways, common accesses and public areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	儲存之物料已適當地重新整理以更有效地使用儲存地方? Re-organizing of storage materials for better utilization of storage spaces if appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	儲存未用物料及儲泥地方已清潔? Cleansing of stockpiling and storage areas of unused materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	工具已有適當保養及修復? Maintenance and re-conditioning of tools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	工具已清洗? Cleansing of tools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	儲存工具及工具箱之地方已清潔? Cleansing of storage places of tools and tool boxes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	機器設備已有適當保養及修復? Maintenance and re-conditioning of equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8	機器設備之外殼已清洗? Cleansing of external covers of equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9	儲存及放置機器設備之地方已清潔? Cleansing of storage and parking locations of equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10	機械設備之外殼已清洗? Cleansing of external covers of plant?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11	廢物已根據廢物管理計劃收習及清走? Collection and removal of disposed waste materials off site in accordance with the Waste Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12	圍板,欄河,照明,指示已清洗及修復? Cleansing, re-conditioning and/or replacement of hoarding, barriers, guarding, lighting, and signage of works to good working condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13	渠道及排水渠是否已清理以防止氾濫? Clearing of drains and channels to prevent flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
14	有否進行每日地盤清潔檢查? Are daily site cleanliness inspections carried out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Signatures:

Contractor's Representative(s)

Checked by:

(Name: _____)

(Name: _____)

*不遵守項目之跟進工作必須即日完成及重新檢查

*Non compliance item(s) shall be rectified on the same day and arrange re-inspection.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100