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23 December 2010
By Fax (2833 9162) and Post

Attn: Mr. Danny Tang

Dear Sir,

**Agreement No. CE 8/2009(EP)
Harbour Area Treatment Scheme (HATS) Stage 2A
Independent Environmental Checker for Construction Phase – Investigation**

**Contract No. DC/2008/09
Construction of Sewage Conveyance System from Ap Lei Chau to Aberdeen
Waste Management Plan (Rev. 2.1)**

I refer to the waste management plan (rev. 2.1) received on 23 December 2010 via email. Pursuant to S.9.152 of the EIA Report for HATS Stage 2A, I hereby verify the captioned plan.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

A handwritten signature in cursive script, appearing to read 'Anne F Kerr'.

Dr. Anne F Kerr
Independent Environmental Checker

c.c. AECOM
Paul Y.

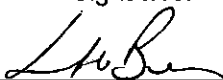
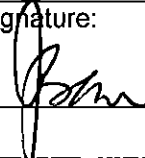
Mr. Edwin Tang
Mr. Andrew Hui

By email
By email

Project Title
<p>Contract No.: DC/2008/09</p> <p>Harbour Area Treatment Scheme Stage 2A Construction of Sewage Conveyance System from Ap Lei Chau to Aberdeen</p>

Document Title
Waste Management Plan

Document Number
WMP – DC/2008/09

Revision Number		
2.1		
Prepared by Env. Dept.	Signature: 	Date: 22-12-2010
Approved by Project Manager	Signature: 	Date: 22-12-2010

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REVISION HISTORY

Revision No.	Revision Date	Pages	Amendment
1	22-02-2010	38	Attachment F - Site Safety, Health & Environmental Organization Structure was updated
1	22-02-2010	40	Attachment G – Layout Plan for Temporary Storage of C&D material was added Section 6.4(ii) was updated
1	22-02-2010	29	Attachment B – Daily Record Summary for C&D Waste Disposal was added
1	22-02-2010	43	Attachment H – Proforma for Summary Record of Chemical Waste Disposal was added
1	22-02-2010	45	Attachment I – Proforma for Record of Timber Usage was added
2	04-12-2010	38	Attachment F - Site Safety, Health & Environmental Organization Structure was updated
2	04-12-2010	40	Attachment G – Layout Plan for Temporary Storage of C&D material was added
2.1	22-12-2010	4	Section 1.3 Description of Works was added
2.1	22-12-2010	5	Section 1.4 Environmental Team's responsibilities were amended
2.1	22-12-2010	11, 13 and 14	Section 4.3, 4.7 and 4.10 were updated
2.1	22-12-2010	27	Attachment A - Summary Waste Flow Tables and Attachment G - Layout Plan for Temporary Storage of C&D Material were updated

ISSUING RECORD

Controlled copies of this Site Waste Management Plan are to be issued by the Safety & Environmental Manager to the following persons/organisation:

Controlled Copy No.	Issued to	Date Issued	Rev. No.
1	Engineers - AECOM	22-12-2010	2.1
2	Project Manager - Site Office	22-12-2010	2.1
3	Project Environmental Officer - Site Office	22-12-2010	2.1
4	Safety & Environmental Department - Head Office	22-12-2010	2.1

SECTION 1 – General

1.1 Introduction

This Site Waste Management Plan (WMP) shall describe the arrangements for avoidance, reuse, recovery and recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities to be carried out under this Contract for generally include the maintenance and construction of minor works to all sewage treatment works, sewage pumping stations, flood pumping stations, other plants and facilities, tunnels and submarine outfalls within the Contract Areas.

1.2 Purpose

This Site Waste Management Plan provides details of the measures; procedures and initiatives to be employed by the Contractor, Paul Y. Construction Company, Limited to control and manage waste related environmental issues that may arise during the construction works of the project.

The main purpose of this Site Waste Management Plan is to:

- (i) Make reference to statutory and contractual environmental management requirements and obligations;
- (ii) Clarify responsibilities;
- (iii) Describe committed mitigation measures;
- (iv) Provide details of preventive actions to be taken;
- (v) Provide details relating to environmental licensing requirements;
- (vi) Inform the PYC's SHE Team Members and sub-contractors of the PYC's management measures, systems and obligations.

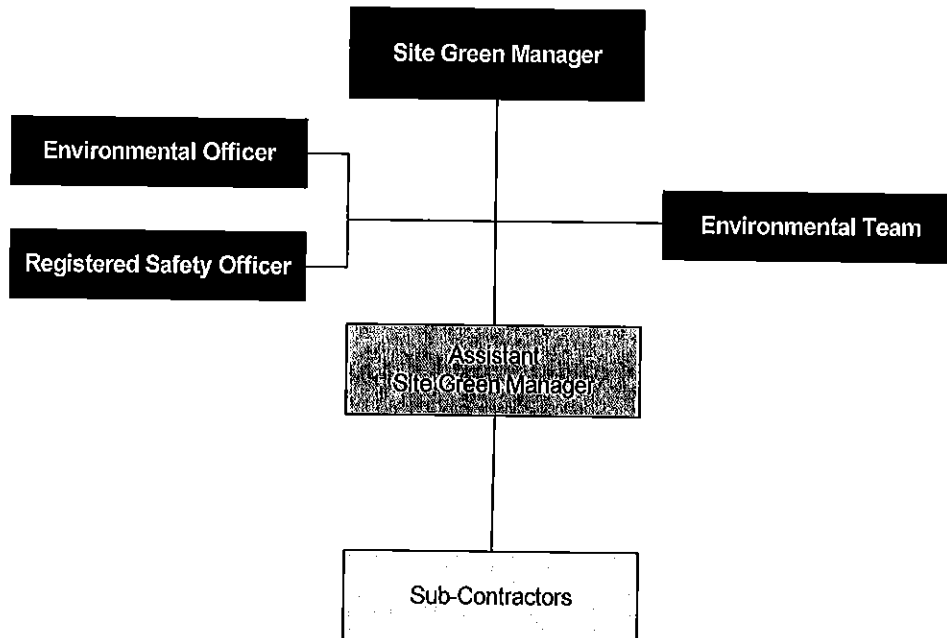
1.3 Description of the Works

The Works to be executed under this Contract include, but not exclusively, the following major items:

- Construction of sewage conveyance system (Tunnel Q) from Ap Lei Chau to Aberdeen Preliminary Treatment Works;
- Construction of associate connection pipes and fitting with Portion Aberdeen PTW and Ap Lei Chau PTW for future connection at the terminal pit at Aberdeen PTW by others;
- Construction of sea water intake pipe at Portion Abd PTW-III;
- Coral transplantation at the sea frontage area adjacent to Portion Abd PTW-III;
- Landscape works, which include the landscaping, tree transplanting and preservation works;
- Re-provisioning of existing structures and temporary structures.

1.4 Safety, Health and Environment (SHE) Committee Organisation Structure

At the site level, Site Safety, Health and Environmental Committee is responsible for the execution of EMS procedures and work instructions on each site. A typical site SHE organization chart is shown as below for reference.



1.5 Function Descriptions and Responsibilities

PYC is the main contractor for this project and has the overall responsibility for the construction works including the implementation of this section. The Project Management will assemble relevant personnel to undertake environmental management issues associated with this contract.

The Site Green Manager (SGM) is the Project Manager fully responsible for the overall implementation of Environmental Management System in his site. He will also provide sufficient resources to maintain the system and site environmental performance. He will instruct his Assistant Site Green Manager (ASGM) to implement the site practices on a day-to-day basis.

The Environmental Team (ET) will:

- To investigate and audit the Contractor's equipment and work methodologies with respect to pollution control and environmental mitigation, and anticipated environmental issues for proactive action before problems arise;
- To monitor the various environmental parameters and collecting / monitoring all necessary data as required in the Contract;
- To audit and prepare audit reports on the environmental monitoring data and the site environmental conditions;

- To forward the environmental monitoring and audit results to the Engineer, the Contractor as well as the Employer and the Director of Environmental Protection as necessary;
- To recommend suitable mitigation measures to the Engineer who shall notify the Contractor accordingly in case of exceedance of the environmental limits specified in the Contract;
- To undertake investigation procedures for complaints on environmental matters;

Environmental Officer (EO) will oversee all environmental matters for the project and liaise with the Employer's Engineer during the full duration of the contract. He is responsible for ensuring that the Project Environmental Plan is properly implemented. He is also responsible for carrying out Environmental Induction Training with fresh site personnel and for maintaining refresher training.

The Assistant Site Green Manager is the Site Agent responsible to ensure that the relevant personnel with respect to environmental management are carrying out their duties diligently. Due to site activities that the works are proceeded in different locations, he will assign Sub-Agents to assist him to enforce site environmental performance.

The Project Environmental Supervisor is responsible for the day-to-day overview of site practices in his assigned location in relation to site environmental performance. He is also responsible for preparing, handling, updating and upkeeping the environmental documentation, such as environmental submission, permit administration, test recording, water sample test result, trip tickets and etc. of which will be readily available for inspection within short notice.

The Sub-contractors in different trades will be responsible for ensuring their workers aware of the work activities which might affect the surrounding environment in site environmental performance. Under PYC's instructions, the Sub-contractors will provide controls in a full co-operative manner with Employer's Project Office. The Sub-contractors are also responsible for preparing their own plans which are consistent with conditions of the contract.

1.6 Lines of Communication

- The environmental information, which includes policy, significant environmental aspects, environmental management programs, procedures and work instructions, legal requirements, complaint, will be communicated internally and externally as necessary.
- The internal communication will involve members of all relevant levels and functions within the company; the external communication will involve government departments, clients, neighbours and interest parties.

SECTION 2 – LEGISLATIVE REQUIREMENTS

The following legislation either covers or has some bearing upon the handling, treatment and disposal of wastes in the Hong Kong SAR and will also be considered in the Plan:

- (i) Waste Disposal Ordinance (Cap 354)
- (ii) Waste Disposal (Chemical Waste)(General) Regulation (Cap 354)
- (iii) Land (Miscellaneous Provisions) Ordinance (Cap 28)
- (iv) Public Health and Municipal Services Ordinance (Cap 132) (includes mosquito control)
- (v) Dumping at Sea Ordinance (Cap 466)
- (vi) Environmental Impact Assessment Ordinance (Cap 499)
- (vii) Waste Disposal (Amendment) Ordinance 2004
- (viii) Waste Disposal (Designated Waste Disposal Facility)(Amendment) Regulation 2004
- (ix) Waste Disposal (Charges for Disposal of Construction Waste) Regulation

Other guideline documents that detail how the construction work should comply with the regulations include:

- (i) Waste Disposal Plan for Hong Kong (December 1989), Planning, Environment and Lands Branch Government Secretariat
- (ii) Environment (Ch. 9), Hong Kong Planning Standards and Guidelines (2003), Hong Kong Government
- (iii) New Disposal Arrangement for Construction Waste (1992), Environmental Protection Department & Civil Engineering Department
- (iv) Code of Practice on the Packing, Labelling and Storage of Chemical Wastes (1999), Environmental Protection Department
- (v) Environmental, Transport and Works Bureau Technical Circular (Works) No. 34/2002, Management of Dredged/ Excavated Sediment
- (vi) Works Branch Technical Circular No. 2/93, Public Dumps
- (vii) Works Branch Technical Circular No. 2/93B, Public Filling Facilities
- (viii) Works Branch Technical Circular No. 16/96, Wet, Soil in Public Dumps
- (ix) Works Branch Technical Circular No. 4/98 and 4/98A, Use of Public Fill in Reclamation and Earth Filing Projects
- (x) Works Branch Technical Circular No. 25/99, 25/99A and 25/99C, Incorporation of Information on Construction and Demolition Material Management in PWSC Papers
- (xi) Works Branch Technical Circular No. 12/2000, Fill Management
- (xii) ETWB/TCW6/2002 and 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness
- (xiii) Works Branch Technical Circular No. 21/2002, Trip-ticket System for Disposal of Construction and Demolition Material

- (xiv) ETWB/TCW15/2003, Waste Management on Construction Sites
- (xv) Environment, Transport and Works Bureau Technical Circular (Works) No. 33/2002, Management of Construction and Demolition Material Including Rock
- (xvi) Waste Reduction Framework Plan, 1998 to 2007, Planning, Environmental and Lands Bureau, Government Secretariat, 5 November 1998
- (xvii) A Guide to the Registration of Chemical Waste Producers by EPD
- (xviii) A Guide to the Chemical Waste Control Scheme by EPD
- (xix) Particular Specification section 25
General Specification for Civil Engineering Works, 2006 edition, section 25

SECTION 3 – IDENTIFICATION OF WORK PROCESSES/ ACTIVITIES

WORK PROCESSES/ACTIVITIES	
1.	Preliminary Works
1.1	Site Clearance
1.2	Erection of Hoarding and Fencing
1.3	Demolition and Re provision of Existing Structure
1.4	Coral Transplantation
2.	Horizontal Directional Drilling Works
2.1	Geotechnical Investigation
2.2	Pipe Installation
2.3	Site Clearance after completion of HDD Works
3.	Construction of Seawater Intake Pipe
3.1	Removal of Seawall Block
3.2	Installation of Seawater Intake Pipe
3.3	Reinstatement of Seawall
4.	Preservation and Protection of Existing Trees
5.	Landscape Works

SECTION 4 – SITE SPECIFIC WASTE MANAGEMENT

4.1 Waste Policy Principles (Waste Management Hierarchy)

Waste management options can be categorised in terms of preference from an environmental viewpoint, whereby the more preferable options have the least impacts and provide for enhanced sustainability. A Waste Management Hierarchy shall be applied on site as follows:

- (i) Avoidance and minimisation, i.e. not generating waste, achieved by changing or improving practices and design;
- (ii) Reuse/recovery/recycling of materials, thus avoiding disposal; and
- (iii) Treatment and disposal, in accordance with relevant laws, guidelines and good practice.

4.2 Construction Waste Management

Waste material may include any excavation spoil, sewage, waste water or effluent containing sand, cement, silt or any other suspended or dissolved material to flow from the site onto any adjoining land, storm drain, sanitary sewer. Waste material also includes any waste matter or refuse to be deposited anywhere within the site or onto any adjoining land (e.g. Concrete waste or used formwork etc.). Formwork will be reused/recovered/recycled as far as possible before disposal to landfill.

When handling the waste material, the following measures shall be undertaken:

- (i) The strategy for management and disposal of all wastes arising from the project will be based on the principle of segregation and re-use/recover/recycle on site followed by disposal to landfill or designated outlet as appropriate;
- (ii) Disposal of other inert construction wastes is governed by the ENVIRONMENTAL PROTECTION DEPARTMENT policy on the disposal of construction waste. The principles established maximise re-use/recovery/recycling of materials on site and segregation of Wastes to ensure that the minimum quantities are disposed of to landfill and that the maximum is directed for disposal to reclamation. All construction waste shall necessarily be sorted on site into inert and non-inert materials whenever practicable;
- (iii) Non-inert materials such as wood and other materials including glass, plastics, steel and metals shall be disposed of to landfill. Inert materials like soil, sand, rubble, shall be separated from non-inert material and suitably disposed of ;
- (iv) In addition, quantities of site fencing, scaffolding and timber for the building work shall be reused/recovered/recycled where possible. Those materials that cannot be reused/recovered/recycled will require disposal at landfill;

- (v) All vehicles carrying waste shall have properly fitting Side and Tail Boards, and the materials being transported shall be securely covered;
- (vi) The PYC shall record the amount of wastes generated, recycled and disposed of (including the disposal site);
- (vii) The PYC shall make use of a trip ticket system for the disposal of Construction and Demolition (C&D) Materials to any designated public filling facility and/or landfill.

4.3 Excavated Material

Excavated material generated during the contract shall be disposed off site or transferred to the temporary storage areas where possible (see section 4.8). It is recommended that the excavated topsoil shall be stored separately from fills and treated accordingly to avoid degradation. Other excavated materials shall be sorted immediately at source to avoid double handling as far as possible for inert C&D materials. In this project, there will not be any marine deposits

4.4 Municipal (Non-construction) Waste

The following principles shall be adopted for Municipal (Non Construction) Waste:

- (i) All works areas shall be cleaned of general litter and refuse daily.
- (ii) General refuse and litter shall be stored in enclosed bins or compaction units separate from construction or chemical wastes. A suitable waste collector shall be used to remove general waste and litter off site for disposal.
- (iii) Refuse shall not be burned at any Construction Area.
- (iv) General refuse may be generated by food service activities on site, so reusable rather than disposable dishware shall be used if feasible.
- (v) Separately labelled bins shall be provided where practicable, to allow segregation of recyclable material generated by individual site staff (e.g. aluminium cans) such that recycling collectors could be assessed.
- (vi) Segregation of recyclable material generated by individual site staff (e.g. aluminium cans) such that recycling collectors could be assisted.
- (vii) Office wastes shall be reduced through recycling of paper. If volumes are large enough to warrant collection, participation in a local collection scheme shall be considered, if available.
- (viii) Where connection to the existing foul sewer main is not possible the PYC will employ a licensed contractor to provide sufficient number of portable chemical toilets for handling of sewage from the construction workforce. The licensed contractor will be responsible for collecting the toilet sewage for regular disposal. An adequate number of chemical toilets will be provided in accordance with the

number of staff on site.

General refuse will be properly collected and stored with enclosed bins or compaction units separate from construction wastes before disposal off the site. The refuse will be disposed regularly off site, on frequency of daily or every second day basis to appropriate refuse collection points. No burning of refuse at the site will be allowed.

The PYC will maintain disposal records for the general waste, which will be available for inspection by the Engineer at any time. The disposal records shall contain the basic information such as; date, time, quantity, and location of dumping, name of vessel, authorised signature, etc. The detailed information of disposed excavated materials shall be included in the latest revision of WMP.

4.5 Management Strategy for C&D Materials

Objectives are:-

- (i) To reduce the generation of C&D materials;
- (ii) To maximise reuse and recycling; and
- (iii) To reduce the intake of mixed C&D waste.

The essence is to:

- (i) Maintain a well-managed public filling programme with sufficient public filling areas and barging points at convenient locations.
- (ii) Sorting of mixing and C&D materials.
- (iii) Reuse and recycling of C&D materials.
- (iv) Avoid and Minimise C&D Waste during operation

4.6 Minimisation of C&D Materials Generation

The generation of C&D materials should be avoided and minimised and this can be achieved through:-

- (i) Balance cut and fill
- (ii) Lean Construction
- (iii) Low waste technology
- (iv) Use of pre-casting and pre-fabrication standardises construction activities
- (v) Use of tailor-made building fixtures and fittings
- (vi) Minimise the amount of material and temporary works kept on site
- (vii) Use more durable material
- (viii) Increase flexibility in design
- (ix) Better site management as well as improved material storage and handling on site

- (x) Research and implement new building materials and technology

If C&D materials generation is unavoidable, reuse and recycle should be maximised. Sorting is a good means to facilitate material reuse and recycle. As far as site conditions permit, a dedicated area will be allocated for waste segregation.

4.7 Waste Flow Table (WFT)

The volume of C&D materials will be recorded in accordance with monthly and yearly summary WFT. PYC shall use the yearly summary WFT (See *Attachment A*) to list out the estimated C&D materials to be generated annually.

- (i) Inert C&D materials to be generated from the Contract;
- (ii) Broken concrete (arising from demolition or construction activities in the Contract) for recycling into aggregates;
- (iii) Inert C&D materials reused in the Contract;
- (iv) Inert C&D materials reused in other projects (including reclamation projects) or the Contractor's outlet approved by the Engineer;
- (v) Inert C&D materials for disposed of to public filling outlets (i.e. (v) = (i) – (ii) – (iii) – (iv))
- (vi) Metals (including reinforcement bars) for collection by recycling contractors;
- (vii) Paper/ cardboard packaging for collection by recycling contractors;
- (viii) Plastics (i.e. plastic bottles/ containers, plastic sheets/ foam from equipment of material packaging);
- (ix) Chemical wastes for collection by registered chemical waste collectors; and
- (x) General refuses to be disposed of at landfills.

This yearly summary WFT of the above listed C&D materials shall includes other recoverable/ reusable/ recyclable materials and imported materials for use on the Site. It shall be updated on a half-yearly basis and be submitted to the DSD's Engineer and be incorporated with the latest revision of WMP.

The monthly summary (See *Attachment A*) shall be recorded with the actual quantities of C&D materials generated each month and shall be submitted to the DSD's Engineer together with other updated sections of WMP (if any). The peak disposal period in this project would be in February 2010 which is for the excavation of mud pit at the entry side (Abd-i). Another period would be from December 2010 to April 2011 which includes works like the excavation of mud pit at the exit side (ALC-i) and the tunnel enlargement works.

4.8 Identification of Temporary Storage Areas

In the contract commencement stage, PYC shall identify and provide sufficient space for the temporary storage of C&D materials to facilitate collection and sorting on site. The provided space shall be commensurate with the estimated quantity for each type of C&D materials generated. In order to optimise the storage space, except the recover/ reuse C&D materials, all other C&D materials shall be removed from site as far as practicable.

4.9 Arrangement of Recyclable Materials

PYC shall sort out the recyclable materials from C&D materials during excavation and demolition. With reasonable care and with WFT properly recording all recyclable materials, PYC shall arrange any licensed recycling vendors to collect the sorted materials for recycle.

4.10 Waste Types and Corresponding Disposal Locations

Waste materials shall be disposed of at appropriate facilities as simplified in the table below:

Waste Type	Disposal Site
C&D Materials	First dispose to designated stockpile area for sorting, then to be disposed by an appointed collector to the designated locations
Metal (all steel/ metallic materials recovered and re-bar wastage generated)	To vendors for reuse and recycle
Paper/ Cardboard Packaging	To vendors for reuse and recycle
Plastics	To vendors for reuse and recycle
Chemical waste (Not Asbestos)	To be collected by a licensed chemical waste collectors
General Municipal Waste	To be collected by a licensed refuse collector to refuse collection points by barge

A government disposal facility can be a public fill reception facility managed by the PEC or a landfill or Outlying Islands Transfer Facilities managed by the EPD. In this project, All C&D material will be disposed to Chai Wan Public Filling Barging Point (CWBP) (or location to be directed by the Engineer). When the CWBP stated is closed 2 hours after hoisting of tropical cyclone warning signal no. 1 or above, the Contractor shall disposed the C&D materials to the Tseung Kwan O Area 137 Fill Bank. All C&D waste will be disposed to SENT Landfill (or location to be directed by the Engineer). The disposal routings for Abd-i, AbdPTW-iii and ALC-i are shown in Attachment J.

SECTION 5 –TRIP TICKET SYSTEM

5.1 The “Trip Ticket” System (Mechanism for Recording C&D Materials Removed Offsite)

The “Trip Ticket” system will be adhered throughout this project. A standard format (See *Attachment B*) will be adopted for the Trip Ticket, which acts as a travelling document that provides evidence of the conformance of the transportation of waste to statutory and other contract and stipulated requirements. The ticket will be chopped by DSD’s Engineer after satisfactory inspection and before leaving the project site. Upon arrival at the relevant disposal site the Trip Ticket will again be inspected either by fill staff (if it is a legal fill site) or by DSD’s Engineer if it is another designated disposal site. The Trip Ticket/receipt containing two inspection chops (one from Designated Public Filling Facility or Designated Public Filling Facility/ Landfill, one from Engineer’s/ Architect’s Representative) will then be returned to the site and maintained as records.

We shall implement a standard trip-ticket recording as follows,

- (i) Outline details of the transportation, contents of the truck (type and approximate volume of waste) and the designated disposal facility.
- (ii) Trace the ticket receipt issued to the truck operator once the waste is delivered to the designated facility and return to the DSD’s Engineer for verification.

5.2 Disposal of Construction and Demolition Materials to Designated Disposal Ground

PYC shall implement a trip ticket system (TTS) for the removal of construction and demolition (C&D) materials from the Site to the designated disposal ground. The inert portion of the C&D materials comprising soil, broken rock and concrete, etc. shall be disposed of at Government public filling facilities or sorting facilities as advised by the Public Fill Committee or other disposal outlets as directed by the Engineer. The non-inert portion of the C&D materials that are not recyclable shall be disposed of at Government landfills locations as advised by EPD.

5.3 Alternative Disposal Grounds Proposed by Contractor and Approval Procedures

In order to make use of C&D materials generated by the Site, PYC shall use his best endeavours to identify other construction projects where such materials can be used. Where PYC has identified such a project which can be used as an alternative disposal ground, he shall obtain the written approval of the Engineer, who will process PYC’s request expeditiously. In support of the request for such approval PYC shall provide relevant information including:

- (i) A detailed description of the alternative disposal ground, including location, lot number (where appropriate) and location plan;
- (ii) Where the alternative disposal ground is a private construction project, submit a letter from the Authorised Person of the development (as defined under the Buildings Ordinance) to confirm that:
 - (a) The C&D materials for use in the development is acceptable;
 - (b) The use of land so formed by the C&D materials is in conformity with the statutory town plan/ lease conditions;
 - (c) The Engineer's staff are allowed to enter the alternative ground to conduct inspections where necessary; and
 - (d) The estimated quantity and type of C&D materials to be used in the construction works and the approximate delivery programmed, together with the name, post and specimen signature of the competent person to sign the Disposal Delivery Form.
- (iii) Where the alternative disposal ground is a private land but not a construction site, submit a letter from the relevant authorities, such as the Lands Department and Planning Department, to confirm the suitability of the alternative disposal ground in receiving the proposed amount of C&D materials for use, and a written consent from the landowner.
- (iv) Where the alternative disposal ground is a government construction project, submit written consent from the project office of the alternative disposal ground to use the C&D materials generated from the Site, and to confirm the estimated quantity and type of C&D materials required and the approximate delivery programme.
- (v) A system for transmitting disposal records from the alternative disposal ground to the Engineer's Representative (e.g. by adopting the TTS or alike).
- (vi) Where the disposal ground is proposed by PYC and has been approved by the Engineer, PYC shall ensure that the DDF is signed off by a competent person as agreed by the Engineer at the disposal ground to confirm completion of each trip. PYC shall also maintain a daily record with details of each disposal trip from the Site to the disposal ground.

5.4 Implementation

PYC shall prepare a site management plan for implementation of the TTS. The plan shall include the following details:

Site organisation and staff duties

A site organisational chart showing the manpower resources and duties of each staff for

implementation of the TTS. (Attachment F) The Contractor shall:

- (i) Appoint a senior staff member (with at least two years experience in site management) fully responsible for implementing and overseeing the operation of the TTS; and
- (ii) Appoint experience person(s) to man each exit from the Site for the purpose of checking every truck carrying C&D materials leaving the Site so as to ensure that the truck driver bears a duly completed, signed and stamped Disposal Delivery Form (DDF). A sample of the DDF is given at *Attachment B*.
- (iii) Instead of manning each exit from the Site as required under sub-clause (ii) above, PYC may propose alternative methods of control to the Engineer, who may accept such proposals if he is satisfied that the proposals are equally effective for ensuring that every truck carrying C&D materials leaving the Site will bear a duly completed, signed and stamped Disposal Delivery Form.

Disposal Programme

PYC shall prepare a monthly programme as determined by the Engineer for disposal of C&D materials off the Site, and indicate the estimated quantities, types of the C&D materials and corresponding disposal grounds. PYC shall update the programme on a monthly basis and submit it to the Engineer for information by each month as agreed by the Engineer.

Site Procedures

PYC shall establish site procedures to ensure that each truckload of C&D material leaving the Site will bear a duly completed DDF. PYC shall also establish a mechanism to ensure timely retrieval of the DDF and/ or receipt from the disposal grounds where irregularities are observed.

Surveillance

PYC shall establish a surveillance system within the Site and at any alternative disposal grounds to check that the disposal activities comply with the requirements as set out in the Particular Specification. The Disposal Records of C&D Materials (Inert) from Public Works Contracts posted by Civil Engineering and Development Department can be monitored from CEDD's Website at [<http://www.cedd.gov.hk/eng/services/tripticket/index.html>] the day after the delivery was made. Likewise, the Disposal Record of C&D Materials (Non-Inert) at any landfill NENT, SENT, WENT and OITF posted by Environmental Protection Department can be monitored from EPD's Website at [<http://www.info.gov.hk/trip/filearea/down.fl.thm>]

Recording system

PYC shall maintain a comprehensive register of the DDF issued, and make it available for inspection by Engineer's Representative upon requires whenever practicable. Where required, the Engineer may requires such records to include a register of all Works Orders with disposal of C&D materials and the quantity of inert and non-inert materials generated from each of such Works Order and the disposal record of the materials against each Works Order.

Control Measures to track internal movement of materials

Where trucks need to exit and re-enter the Site for delivery of C&D materials generated by the Site, PYC shall devise control measures to ensure that the C&D materials are not disposed of outside the Site in breach of the Contract.

5.5 General Procedures of the TTS and Record Keeping

The procedures for implementation of the TTS are as follows:

- (i) The Engineer's Representative will prepare and hand the DDF to PYC on the day of disposal.
- (ii) For each truckload of C&D materials leaving the Site, PYC's truck driver must bear a duly completed, signed and stamped DDF.
- (iii) The truck shall proceed to the disposal ground as stipulated in DDF. Where the disposal ground is a government disposal facility, PYC's truck driver shall present DDF to the facility operator. If the C&D materials accords with the acceptance criteria, disposal of the materials will be permitted and the facility operator will give the PYC's truck driver a transaction receipt and stamp the DDF.
- (iv) PYC shall maintain a daily record of disposal of C&D materials from the Site including details of the C&D materials, the truck number, departure time, etc, using the Daily Record Summary (DRS), a sample of which is given in *Attachment B*.
- (v) PYC shall submit the duly completed Part 1 of the DRS form promptly to the Engineer's Representative by 1:00 p.m. of the working day following the date of disposal.
- (vi) For disposal at government disposal facilities, PYC shall check the information recorded in the DRS against available information including his own records and data from CEDD's website [<http://www.cedd.gov.hk/eng/services/tripticket/index.html>] and then complete Part 2 of the DRS form for submission to the Engineer's Representative within 3 working days after the date of disposal.
- (vii) Where an irregularity is observed or where requested by the Engineer's Representative under special circumstances (e.g. a DDF has been issued but

there is no disposal record at the designated disposal facilities), PYC shall submit to the Engineer's Representative within 5 working days after the recorded date of disposal the supporting evidence such as duly stamped DDF and/ or the transaction receipt (where relevant) to confirm proper completion of the delivery trips in question, or within 2 working days after the Engineer's Representative has requested for such evidence, whichever is later. A fax copy of the DDF and transaction receipt is acceptable, unless otherwise directed by the Engineer.

SECTION 6 –MEASURES FOR GOOD SITE MANAGEMENT

6.1 Training & Communication of this Plan

PYC shall review relevant statutory regulations and waste management practice and identify training needs for different levels of staff as well as subcontractors. Relevant contractual requirements shall also be discussed during the training.

PYC shall conduct orientation and specific training for workers about the concepts of waste management and appropriate waste control procedures including waste reduction, handling and sorting, reuse and recycling of C&D materials, as well as site cleanliness and housekeeping, by the Environmental Engineer/ Registered Safety Officer.

At regular intervals, PYC shall provide tool-box training to all workers or labours at regular intervals to promote environmental awareness and to communicate updated issues regarding waste management practices. All Foremen and subcontractor's representatives shall obtain the information and technique through in-house training organised by PYC's Environmental Department.

6.2 Avoidance/ Minimisation to use Timber for Temporary Works

Reasonably practicable steps shall be planned for works so as to change or improve design and practices through liaison, planning and site management including but not limited to:

- (i) Precast concrete units produced at a casting yard with high degree of quality control;
- (ii) Standard wooden panels for high reuse level if timber formworks are unavoidable;
- (iii) Purchase materials in a manner that minimises waste and unnecessary costs with consideration such as matching size of materials purchased with the dimensions of structure to avoid excessive cutoffs;
- (iv) Check consistency of drawings and specifications to avoid unnecessary hacking-off of concrete or unwanted work;
- (v) Avoid use of 'sensitive material' such as use of hardwood for shuttering and strutting;
- (vi) Implement measures to minimise over-ordering and then wastage of materials such as concrete, mortars and cement grouts;
- (vii) Maximise potentials reuse, namely durable, reusable hoarding to replace timber hoarding and use of metal in place of wood for formwork;
- (viii) Minimise total quantities required, such as use of gondola in place of bamboo scaffold;

- (ix) Whenever possible, consider alternative processes that reduce or preferably avoid entirely C&D waste generation.

6.3 Raw Material Storage to Avoid Unneeded Wastage

Apart from good intention of Section 4.2 to avoid and minimise the waste at the stages of design and work execution, however, in the process between two these stages the handling and treatment of raw material storage is another potential area able to reduce the wastage as well by way of site tidiness and cleanliness in Section 4.8.

PYC shall adopt the guidelines to properly handle the raw material storage with suitable protective measures on site as listed in below (Extracted from Ciria, 1997, Waste Minimisation in Construction: Site Guide):

Material	Store under cover	Store in secure area	Store in pallets	Store material bound	Special Requirements
Sand, gravel, rock, crushed concrete					Store on hard standing base to reduce wastage. Store in bays if large quantities
Plaster, cement	✓		✓		Avoid material getting damp
Concrete, paviers				✓	Store material in original packaging until used, and protect from vehicle movements
Bricks			✓	✓	Store material in original packaging until used, and protect from vehicle movements
Clay pipes, concrete pipes			✓	✓	Use stoppers and spacers to prevent rolling, and store in original packaging until used
Wood	✓	✓		✓	Protect all types of wood from rain
Metals	✓	✓			Store in original packaging until used
Any internal fittings	✓	✓			Store in original packing until used
Cladding	✓	✓			Wrap in polythene to prevent scratches
Sheet glass, glazing units		✓	✓		Protect glass from breakage due to bad handling or vehicle movements
Paints		✓			Protect from theft
Bituminous felts	✓	✓			Usually store in rolls and protect with polythene

Material	Store under cover	Store in secure area	Store in pallets	Store material bound	Special Requirements
Insulating material	✓	✓			Store under polythene
Ceramic tiles	✓	✓		✓	Store in original packaging until required
Glass fibre	✓			✓	
Iron mongery	✓	✓			
Oils		✓			Store in bowzers, tanks or cans according to quantity - protect container from damage to reduce likelihood of spillage - use a bund
Kerbstones				✓	Protect from vehicle movements & tar spraying to reduce damage
Clay & slate tiles		✓	✓	✓	Keep in original packaging until use
Topsoil, subsoil					Store on hardstanding base to reduce wastage and keep segregated from potential contaminants
Precast concrete units					Store in original packaging, away from vehicular movements

6.4 Sorting Facilities

Waste sorting shall be implemented in the following manner:-

- (i) The site shall designate area(s) for temporary waste storage and subsequent segregation for ease of handling.
- (ii) The storage and sorting area(s) (see Attachment G) for waste and recyclable materials shall be clearly marked and labelled.
- (iii) The checking of C&D waste generation shall be incorporated into the daily inspection programme to ensure that they are not mixed into the general refuse area but are stored in a designated area for collection by subcontractors for recycling as appropriate.

6.5 Chemical Waste Control

Whenever possible alternative processes shall be considered that reduce or preferably avoid entirely chemical waste generation. Chemical waste shall be identified through following steps:-

- (i) Examine the MSDS (Material Safety Data Sheet) of the chemical(s) to be in the

used process/activity,

- (ii) Check the MSDS against Schedule 1 of Waste Disposal Ordinance to determine whether the material(s) in question is/are chemical waste.

A Waste Producer License shall be applied for and the guidelines stated in the "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes" shall be followed.

Chemical waste storage containers shall be:-

- (i) Suitable for the intended purpose, corrosion resistant, well maintained and securely closed;
- (ii) Maintained with a capacity of < 450L unless received specific approval from Environmental Protection Department is given;
- (iii) Identified with a warning label as specified in Schedule 2 of the Waste Disposal Ordinance.

Chemical waste storage areas shall:-

- (i) Be clearly labelled and any waste properly stored, it must be only used for the storage of chemical waste and be enclosed on at least 3 sides;
- (ii) Have an impermeable floor and bunking capacity of 110% of either the largest container to be stored or 20% by volume of the chemical waste in that area, whichever is the greater;
- (iii) Have adequate ventilation away from water spillage and wood storing place;
- (iv) Be covered to prevent ingress of rainfall (water collected within the bunk, if checked containing chemical, must be disposed of as chemical waste);
- (v) Be arranged such as to separate incompatible materials.

Disposal of chemical waste shall be regulated to involve,

- (i) Communication with Environmental Protection Department prior to waste generation; in case of Part A chemical waste under Section 17 of the Waste Disposal Ordinance, notification to Environmental Protection Department shall be made before at least 10 working days ;
- (ii) Use of a licensed waste collector;
- (iii) Disposal to a facility licensed to receive chemical wastes, such as the Chemical Waste Treatment Centre or other approved facility (which offers both collection service and supply of suitable storage containers);
- (iv) Reuse of chemical waste, under approval of Environmental Protection Department, such as the Business Environment Council of which operates a Waste Exchange Scheme to assist in locating receivers or buyers of chemical waste.

6.6 Handling and Disposal of Waste

For disposal of surplus or unsuitable C&D materials, the following measures shall be adopted,

Any C&D materials shall be:-

- (i) Cleared as quickly as possible after demolition to minimise potential dust and water impacts;
- (ii) Properly covered to minimise windblown litter and dust during transportation.
- (iii) Except asbestos waste, inert portion of Construction and Demolition (C&D) wastes shall be disposed to public fills.
- (iv) Non-inert and organic C&D wastes shall be disposed to landfill sites.
- (v) If bentonite slurries are generated, they shall be disposed of in form of solid waste if it cannot be avoided to any Public Filling Site.

The public fill which comprises soil, rock, concrete, brick, cement, inert building debris, aggregates and asphalt shall be reused as filling for site formation works within this project whenever the material is suitable. The C&D waste which may comprise metal, timber, paper, glass, junk and general garbage as non-inert materials shall be reused or recycled and, as the last resort, disposal of at landfills.

6.7 Site Cleaning and Tidying, Control of Mosquitoes

The Registered Safety Officer shall ensure that strict cleaning and tidying of the site is carried out on a daily basis. Standing water shall be cleared as soon as practicable, or be treated with approved oil at least once per week. The Registered Safety Officer shall ensure that the anti-mosquito measures outlined in Site Safety Plan are implemented on site. All the control measures are properly enforced including disposal of any surplus water holding containers, checking that no possible breeding areas for mosquitoes exist. The notice including "Cover any water tanks and remove any stagnant water containers, fill ends of bamboo scaffolding or fill them with holes, drain away accumulated water to rainwater drains after sedimentation" shall be prominently displayed on site and workers are briefed in toolbox talks on the importance of anti-mosquito measures. Effective mosquito control & removal of stagnant water shall be addressed during all Site Safety Committee Meetings. Spraying of pesticide or larvicidal oil to kill adult mosquitoes and prevent breeding should only be employed as the last resort where removal of stagnant water would be impossible or the drainage cannot be done effectively.

6.8 Records & Updating of the WMP

The PEC shall ensure that proper and adequate records are maintained on site in relation to the requirements of this plan. This shall include records such as; delivery tickets,

photographs, measurement records, cleaning checklists, truck visit records and etc. These shall be submitted to the DSD's Engineer every month.

- (i) Records associated with the Trip Ticket System.
- (ii) Quantities of different types of waste generated and their disposal method. (see Attachment H and I)

This Site Waste Management Plan will be reviewed on (as a minimum) a six-month basis for internal reference only and shall take into consideration any audit or other findings. The Project Environmental Co-ordinator is responsible for ensuring that this review is carried out regularly. Any findings will be communicated to the site team in accordance with Training & Communication principles outlined.

6.9 Inspection Programme (Waste Monitoring and Audit)

The Site Green Manager shall ensure that the ASGM/ Sub-Agents always monitor the generation and disposition of wastes throughout the construction period and the Sub-contractors always properly handle and dispose the wastes in conforming with this WMP. This shall be achieved by routine checking to ensure a satisfactory performance on compliance with this WMP.

6.10 Corrective Actions in Response to Non-conformance

Refer to the flowchart (*Attachment C*).

The efficiency of site practices to minimise construction waste associated impacts will be assessed and any deficiencies or areas requiring improvement will be reported to the PYC's Environmental Engineer. The PYC's SHE Team will advise on additional waste minimisation and management procedures as necessary.

Any incidents of illegal dumping of construction wastes, emergency such as chemical spill or any major Non-conformance will be reported immediately to the Environmental Engineer and DSD's Engineer. Further, where called upon, the SGM and Environmental Engineer will advise on any required remedial works.

The PEC shall undertake regular site inspections to determine that the requirements of the WMP are met. The Project Environmental Management will also undertake regular six monthly site audits under their Environmental Site Audit programme. In the event that any non-compliance of environmental management procedures is identified by any party, an Environmental Action Note (EAN) shall be completed (mentioned in *Attachment D*) by any observer and notify the SGM and Environmental Engineer immediately.

On receipt of the EAN, the Assistant Site Green Manager shall review the observations and submit to the Site Green Manager who shall:

- (i) Investigate the cause of the non-conformance;
- (ii) Recommend the appropriate corrective action and/or preventative actions;
- (iii) Estimate the time needed to implement the measures; and
- (iv) Complete the EAN and file for record.

On completion of the corrective or preventative action the Environmental Engineer shall complete the EAN and record all necessary details in the logbook for corrective and preventative actions.

Any non-conformance identified by the DSD's Engineer, will follow an additional action reporting procedures if required by the DSD's Representative. In case of emergency such as chemical spill, the flowchart procedure is described in Chemical Spillage Handling Method (*Attachment E*).

ATTACHMENT A

SUMMARY WASTE FLOW TABLES

Contract No.: DC/2008/09

Estimated Volume of Monthly Waste Flow Table for 2009 to 2011

November 2010

Month	Estimated Quantities of Inert C&D Materials Generated Monthly					Estimated Quantities of C&D Wastes Generated Monthly				
	(a)-(b)-(c)-(d)-(e) Total Quantity Generated	(b) Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed in Public Fill	(f) Metals	(g) Paper/cardboard packaging	(h) Plastics	(i) Chemical Wastes	(j) Others, e.g. general refuse disposed at Landfill
	ton	ton	ton	ton	ton	ton	ton	ton	ton	ton
Jul	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	2
Dec	193	0	0	0	193	0	0	0	0	2
Subtotal	193	0	0	0	193	0	0	0	0	4
Jan	50	0	0	0	50	0	0	0	0	2
Feb	457	0	0	0	457	0	0	0	0	2
Mar	16	0	0	0	16	0	0	0	0	2
Apr	5	0	0	0	5	0	0	0	0	2
May	0	0	0	0	0	0	0	0	0	2
Jun	54	0	0	0	54	0	0	0	0	2
Jul	110	0	0	0	110	0	0	0	0	2
Aug	302	0	0	0	302	0	0	0	0	2
Sep	182	0	0	0	182	0	0	0	0	2
Oct	221	0	0	0	221	0	0	0	0.85	6
Nov	223	0	0	0	223	0	0	0	0.51	2
Dec	310	0	0	0	310	0	0	0	0	2
Subtotal	1990	0	0	0	1990	0	0	0	1.36	20
Jan	367	10	0	0	357	0	0	0	0	2
Feb	560	10	0	0	550	0	0	0	1	2
Mar	356	10	0	0	346	20	0	0	0	2
Apr	326	0	0	0	326	0	0	10	0	2
May	295	0	0	0	295	0	0	0	1	2
Jun	225	0	0	0	225	20	0	0	0	2
Jul	10	10	0	0	0	0	0	0	0	2
Aug	0	0	0	0	0	0	0	0	0	2
Subtotal	1959	40	0	0	1959	40	0	10	2	18
Total	3922	40	0	0	3922	40	0	10	1.36	38

ATTACHMENT B

**CONSTRUCTION AND DEMOLITION
MATERIAL DISPOSAL DELIVERY FORM (DDF)**

And

**DAILY RECORD SUMMARY FOR C&D WASTE
DISPOSAL**

Serial No. [Redacted]

Date: [Redacted]
日期: [Redacted]

Designated PFF/Landfill:
指定公眾填土設施 / 堆填區:

Vehicle Licence Plate Number:
車牌號碼:

Issued By:
簽發:

Approximate Load:
大約承載量:

1/4 1/2 3/4 Full 滿

Remark:
備註:

(This part retained by issuing office)
(此部分由簽發處保留)
CEDD(CE0)84

Serial No. [Redacted]

Construction and Demolition Materials Disposal Delivery Form 拆建物料運載記錄



(Information contained in this form may be displayed on Internet. 此表內所載資料可經上網於
互聯網)

Date: [Redacted]
日期: [Redacted]
Time of departure from site:
離開地盤時間: [Redacted]
Vehicle Licence Plate Number:
車牌號碼: [Redacted]

Designated Public Filling Facility/Landfill:
指定公眾填土設施 / 堆填區: [Redacted]
Location of Site:
地盤位置: [Redacted]

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Central & Western
中西區 | <input type="checkbox"/> Eastern
東區 | <input type="checkbox"/> Southern
南區 | <input type="checkbox"/> Sai Kung
西貢 |
| <input type="checkbox"/> Yan, Tsim, Mong
油尖旺 | <input type="checkbox"/> Shaamshui Po
深水埗 | <input type="checkbox"/> Wong Tai Sin
黃大仙 | <input type="checkbox"/> Outlying Islands
離島 |
| <input type="checkbox"/> Kowloon Tong
九龍塘 | <input type="checkbox"/> Kowloon East
九龍東 | <input type="checkbox"/> Tuen Mun
屯門 | <input type="checkbox"/> Sha Tin
沙田 |
| <input type="checkbox"/> Yuen Long
元朗 | <input type="checkbox"/> North
北區 | <input type="checkbox"/> Tai Po
大埔 | |

Approximate Load: 1/4 1/2 3/4 Full 滿
大約承載量:

Please stick contract no. barcode above
請在上方貼上合約編號條碼

Chop of Designated Public Filling Facility/Landfill
公眾填土設施 / 堆填區蓋印

Chop of Engineer's Representative
工程師代表蓋印

Remark: Original form with a light red and inclined watermark "DDF"

Daily Record Summary for C&D waste disposal

Contract No.: DCC0809 Harbour Area Treatment Scheme Stage 2A Construction of Sewage Conveyance System from Ay Lei Chau to Aberdeen

- (1) Contract no. & title; _____
- (2) Date of disposal; _____
- (3) Designated disposal ground(s): (a) Fill Bank at _____
 (b) _____
 (c) _____
- (4) Approval alternative disposal grounds: _____
 others: _____

DDF Serial No.	Vehicle registration no.	Departure time from site	Approx. vol (e.g. Full/Three Quarter/Half/One quarter)	C&D material type (e.g. inert or non-inert)	Actual disposal ground	Arrival time at disposal ground	Remarks

Part 1 ←-----→ Part 2

<p>Submitted by _____</p> <p>Signature _____</p> <p>Date _____</p> <p>Received by _____</p> <p>Post _____</p> <p>Date & Time _____</p>	<p>(Name of Contractor's Designated Person)</p> <p>Submitted by _____</p> <p>Signature _____</p> <p>Date _____</p> <p>Received by _____</p> <p>Post _____</p> <p>Date & Time _____</p> <p>(Name of Contractor's Designated Person)</p>
--	--

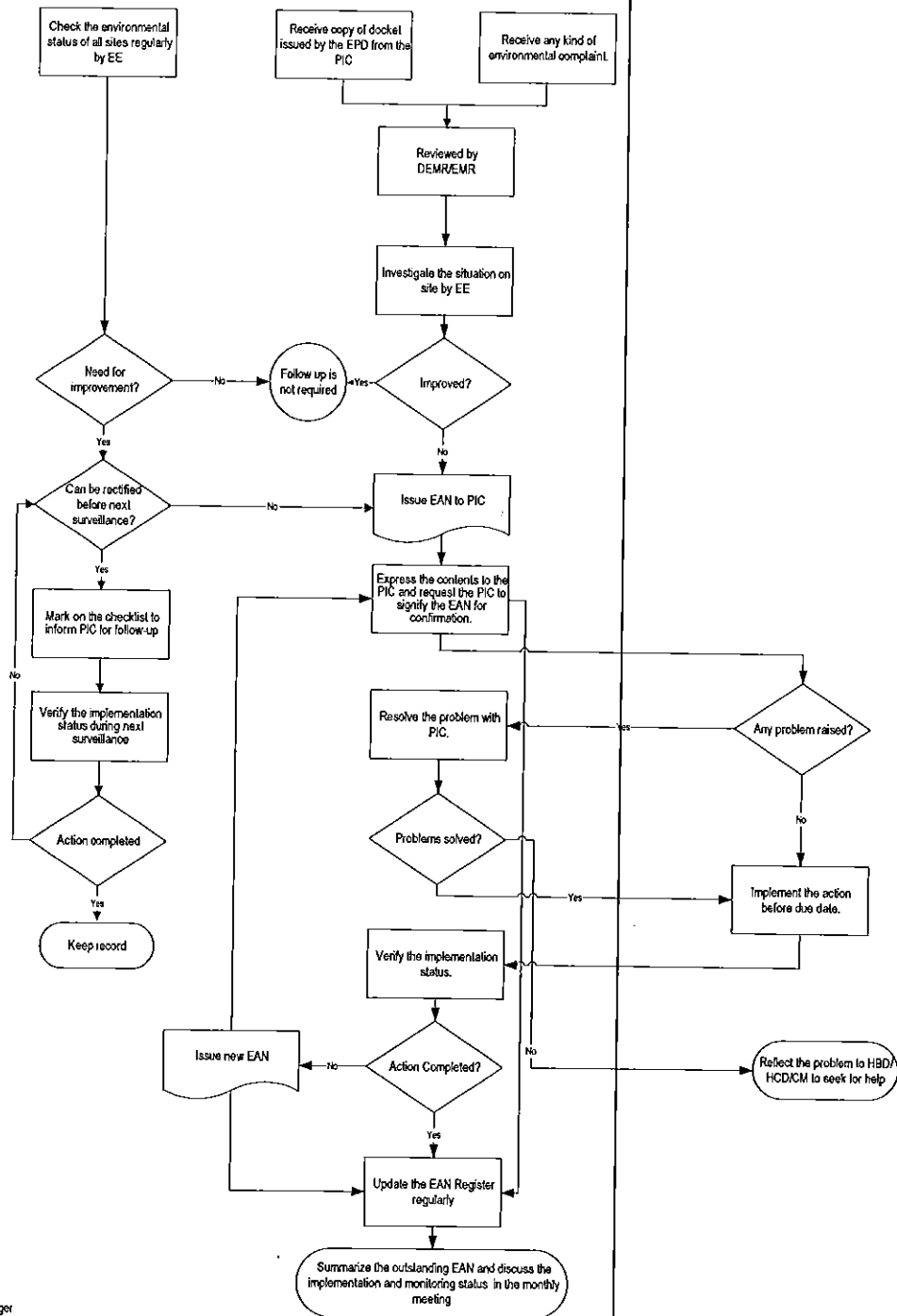
1 Part 1 - The Contractor shall complete Part 1 and submit it to the Architect's/Engineer's Representative by 1:00 pm of the following working day of the disposal trip.
 2 Part 2 - The Contractor shall complete Part 2 and submit it to the Architect's/Engineer's Representative within 3 working days of the disposal trip.

ATTACHMENT C

**CORRECTIVE ACTIONS IN RESPONSE
TO NON-CONFORMANCE**

Safety & Environmental Department


Project In-Charge



- CM : Contracts Manager
- DEMR : Deputy Environmental Management Representative
- EAN : Environmental Action Note (ENV 001) (Appendix 1)
- EE : Environmental Engineer
- EMR : Environmental Management Representative
- EPD : Environmental Protection Department
- HBD : Head of Building Division
- HCD : Head of Civil Division
- PIC : Project In-Charge

ATTACHMENT D

ENVIRONMENTAL ACTION NOTE (EAN)

To 致: Attn 收件人:	Site 地盤		Safety & Environmental Department 安全及環保部
ENVIRONMENTAL ACTION NOTE (EAN) 環保改善建議通知			
Action Note Number 通知編號: / / EAN / /			
We detect on site the environmental non-compliance / potential non-compliance with details as follows: 現於 貴地盤發現有不符 / 潛在性不符環保規例的情況，詳情如下:			
Type 環保類別: <input type="checkbox"/> Air 空氣 <input type="checkbox"/> Noise 噪音 <input type="checkbox"/> Water 水質 <input type="checkbox"/> Waste 廢物 <input type="checkbox"/> Others 其他			
Related Regulation 相關之條例: _____			
Description 內容: 			
Recommended Actions 建議需採取之行動: 			
Enclosure ^a <input type="checkbox"/> No <input type="checkbox"/> Yes Page(s) 附件 ^a 無 有 共 頁			
Preventive Actions 預防措施: 			
負責人姓名: _____ 完成日期: _____ 簽署: _____			
* 如有違反環保法例事項，須要立即更正 Due date for action ^a <input type="checkbox"/> 24 hrs. <input type="checkbox"/> 3 days <input type="checkbox"/> 7 days <input type="checkbox"/> Other, please specify 以上行動須於: ^a <input type="checkbox"/> 二十四小時內完成 <input type="checkbox"/> 三日內完成 <input type="checkbox"/> 七日內完成 <input type="checkbox"/> 其他，請註明: _____			
Reinspection 覆查結果: 			
Should you have any queries, please do not hesitate to contact the Safety & Environmental Department. 如對上述建議行動有任何疑問，請即與安全及環保部聯絡。 (Tel. 電話: 2831 8171)			
Prepared by: 制訂人			Acknowledged Receipt by: 地盤代表簽收
Department in charge: 安全及環保部負責人			
Name 姓名:	Name 姓名:	Name 姓名:	
Signature 簽署:	Signature 簽署:	Signature 簽署:	
Date 日期:	Date 日期:	Date 日期:	

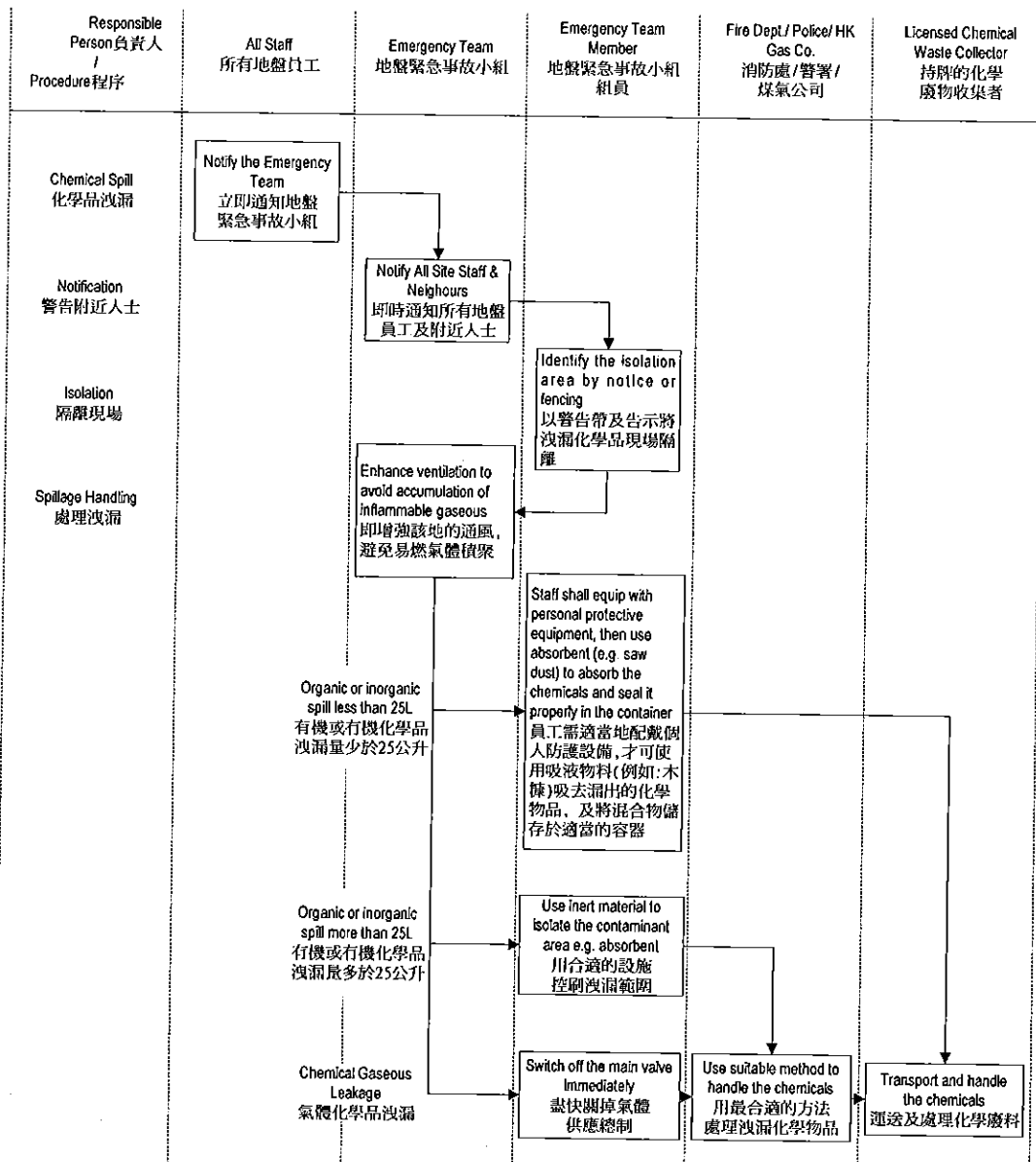
^a Tick the where applicable
在適當 位置上加上剔號

c.c. 副本抄送 Contracts Manager 合約經理
 Subletting Dept. 分判部
 Related S/C 有關判頭 _____

ENV001	C	30/08/05
--------	---	----------

ATTACHMENT E

CHEMICAL SPILLAGE HANDLING METHOD



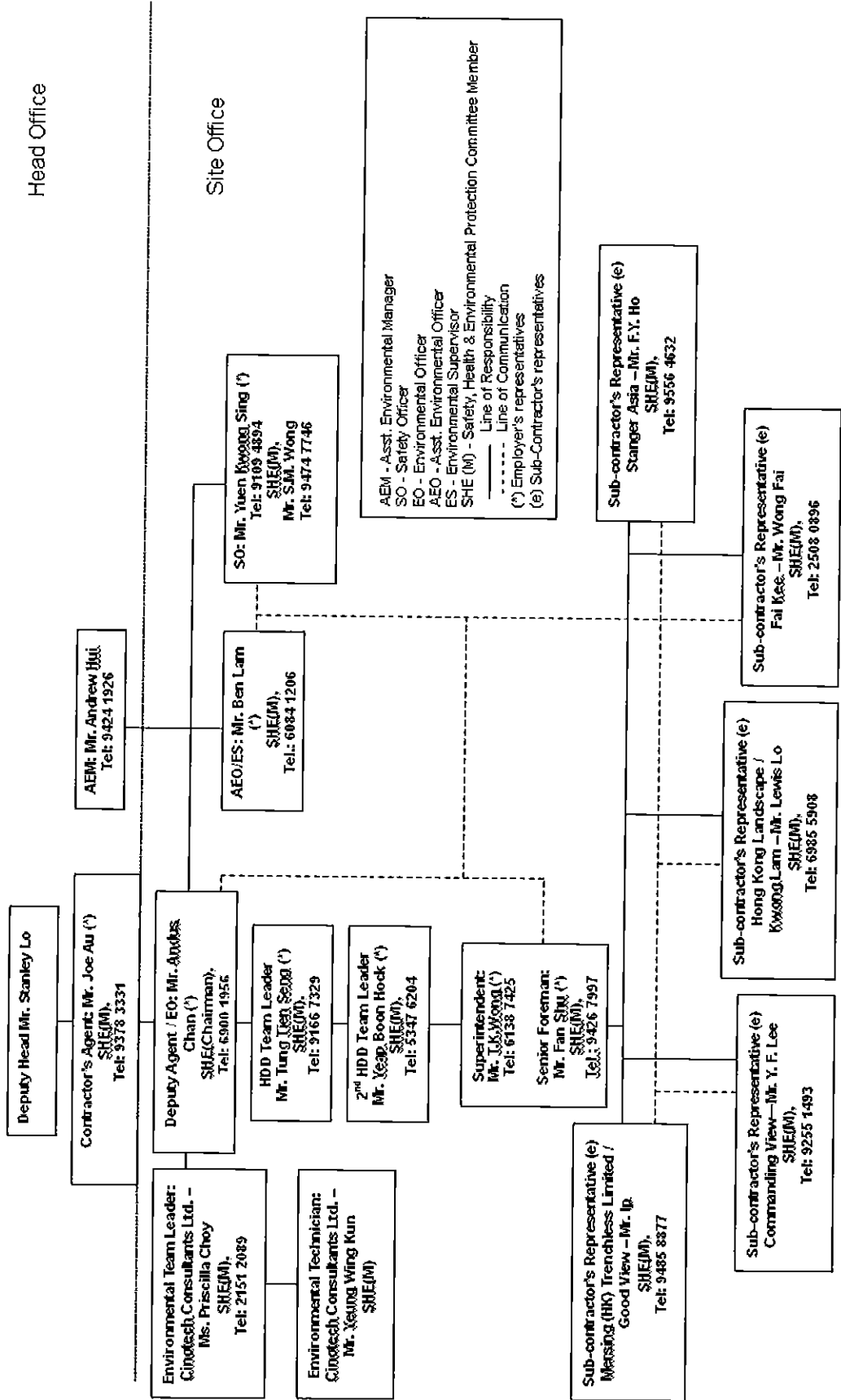
The staff shall make reference to Material Safety Data Sheet (MSDS) and seek advice for handling method or for any ambiguity

除依照上述方法處理，如對某化學品的特性不清楚，應該參考該化學品之物料安全資料表(Material Safety Data Sheet 簡稱 MSDS)內的處理方法或尋求進一步的協助。

ATTACHMENT F

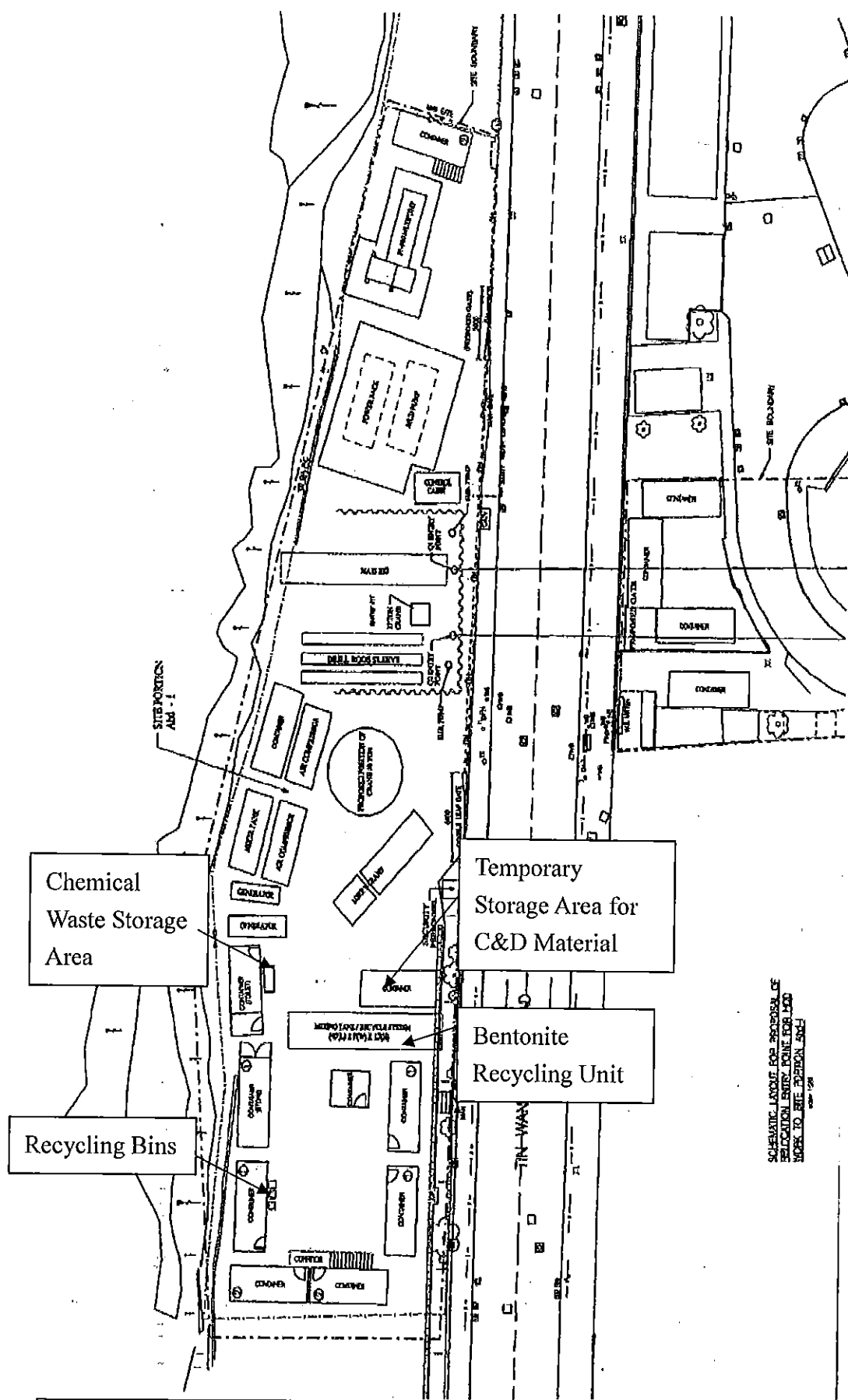
**SITE SAFETY, HEALTH & ENVIRONMENTAL
ORGANIZATION STRUCTURE**

Site Environmental Organization Structure

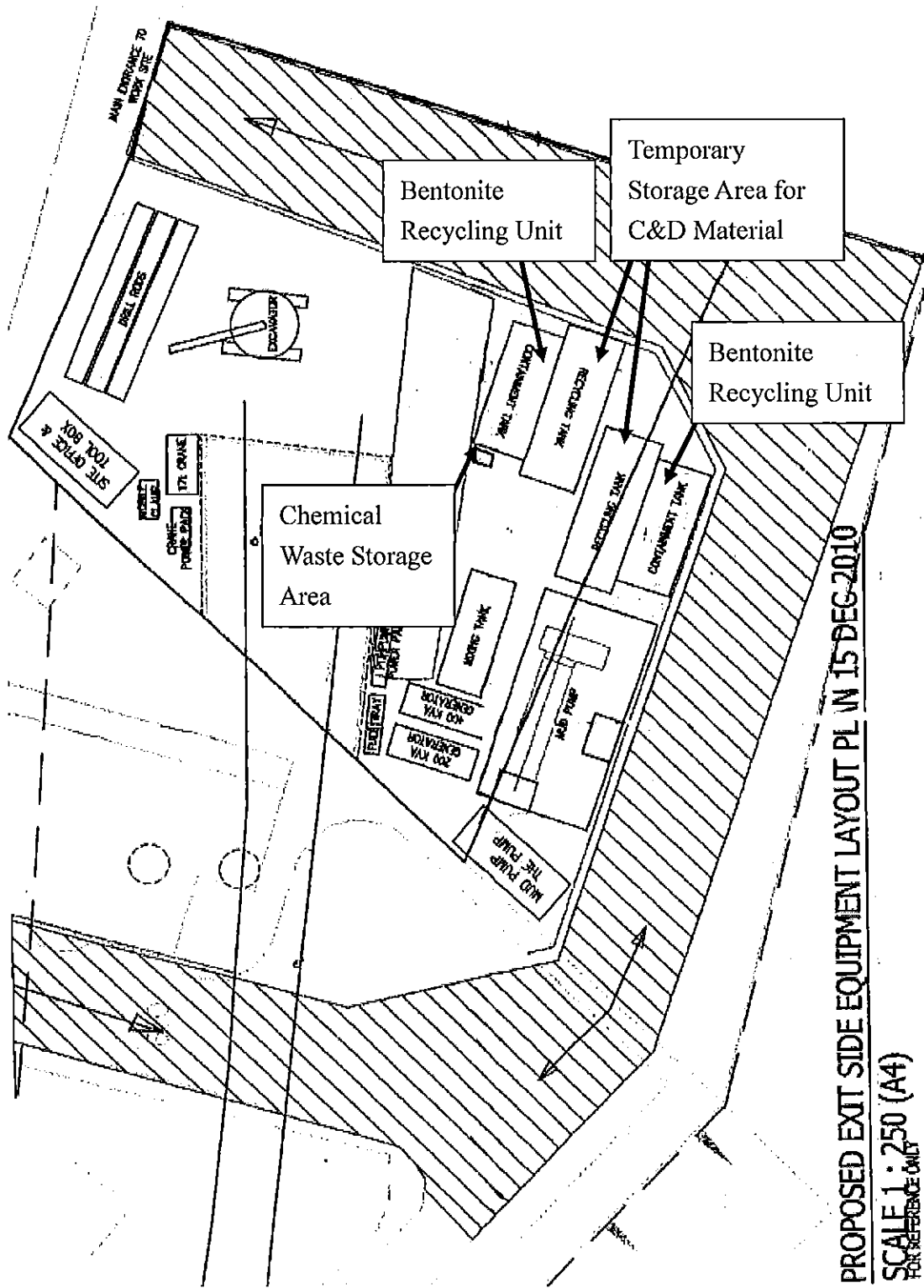


ATTACHMENT G

**LAYOUT PLAN FOR TEMPORARY STORAGE OF C&D
MATERIAL**



SCHEMATIC LAYOUT FOR PREPARATION OF BENTONITE RECYCLING UNIT. POINT FOR 100% REMEDIATION. POINT FOR 100% REMEDIATION. POINT FOR 100% REMEDIATION. WORK TO BE DONE.



PROPOSED EXIT SIDE EQUIPMENT LAYOUT PL IN 15 DEC-2010

SCALE 1:250 (A4)
FOR REFERENCE ONLY

ATTACHMENT H

**PROFORMA FOR SUMMARY RECORD OF CHEMICAL
WASTE DISPOSAL**

SUMMARY RECORD OF CHEMICAL WASTE DISPOSAL

Monthly No.	Month	Chemical Waste Description	Weight in (kg)	Remark
1	Aug-09			
2	Sep-09			
3	Oct-09			
4	Nov-09			
5	Dec-09			
6	Jan-10			
7	Feb-10			
8	Mar-10			
9	Apr-10			
10	May-10			
11	Jun-10			
12	Jul-10			
13	Aug-10			
14	Sep-10			
15	Oct-10			
16	Nov-10			
17	Dec-10			

ATTACHMENT I

PROFORMA FOR RECORD OF TIMBER USAGE

Appendix 25.1
Summary Table for Work Processes or Activities Requiring Timber for Temporary Works

Contract No.: _____

Contract Title: _____

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)	Remarks
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
Total Estimated Quantity of Timber Used					

Notes: (a) The Contractor shall list out all the work items requiring timber for use in temporary construction works. Several minor work items may be grouped into one for ease of updating.
(b) The summary table shall be submitted to the Engineer's Representative monthly together with the Waste Flow Table for review and monitoring in accordance with the PS clause 25.22(3).

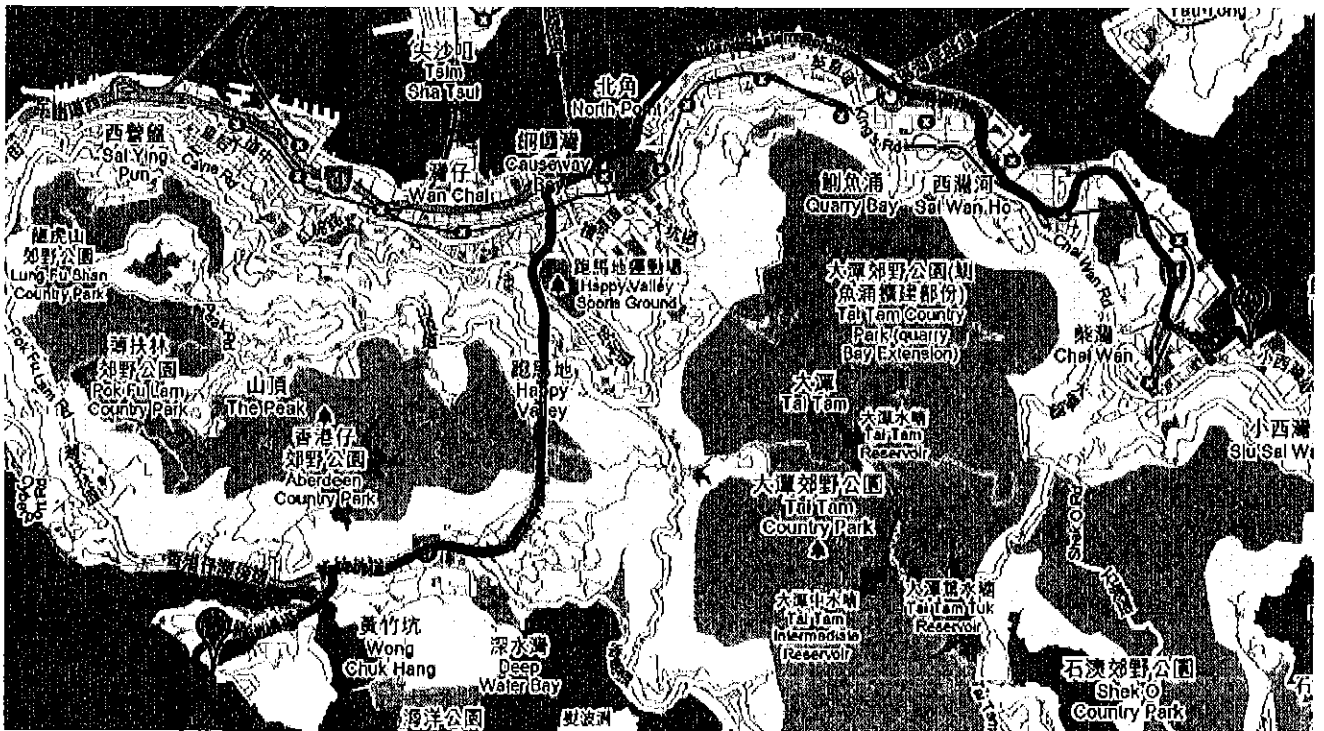
ATTACHMENT J

DISPOSAL ROUTINGS FOR Abd-i, AbdPTW-iii AND ALC-i

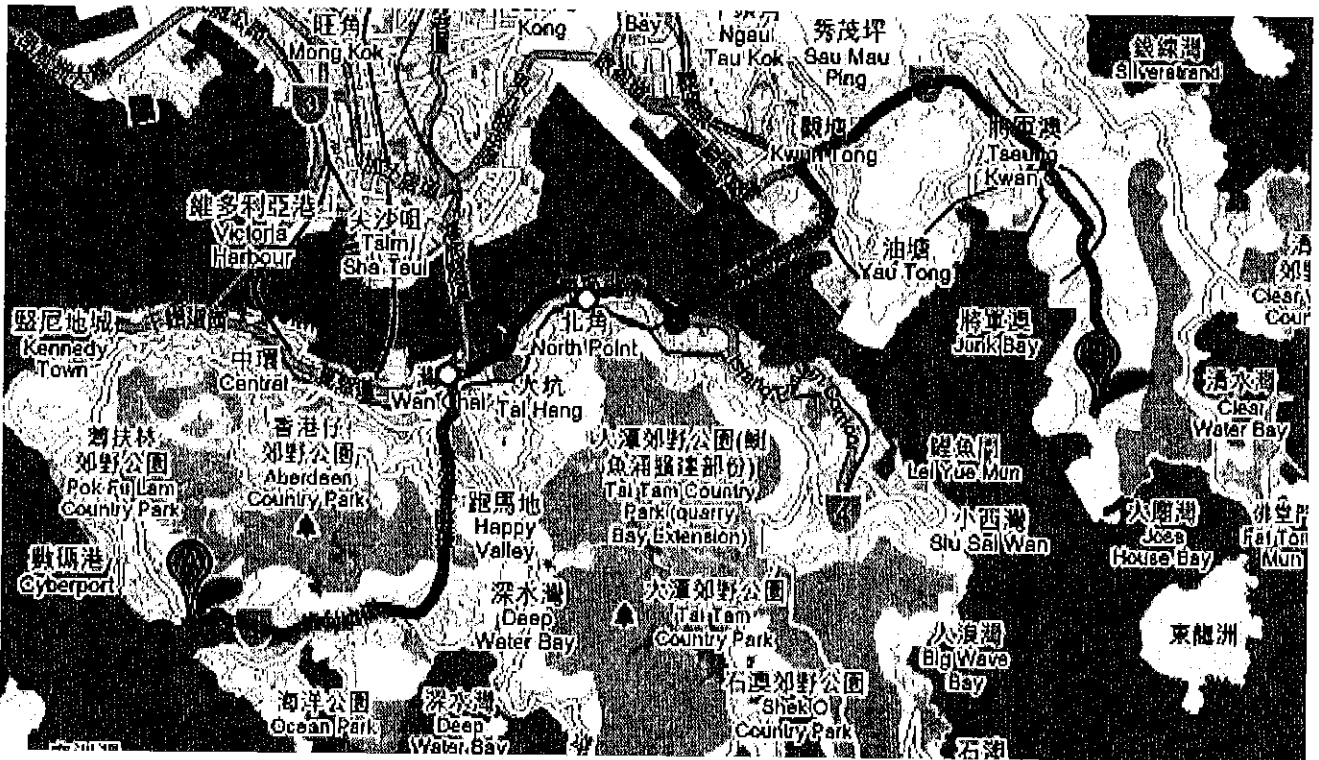
Abd-i / AbdPTW-iii (A) to CWBP (B)



ALC-i (B) to CWBP (A)



Abd-i / AbdPTW-iii (A) to TKOFB (B)



ALC-i (A) to TKOFB (B)

