

Annex C1

Site Walkover Checklist

GENERAL SITE DETAILS

SITE OWNER/CLIENT Drainage Services Department (DSD)

PROPERTY ADDRESS Sheung Tak Street, Chai Wan, Hong Kong

PERSON CONDUCTING THE QUESTIONNAIRE

NAME Carol Chan

POSITION Environmental Consultant, Allied Environmental Consultants Limited

AUTHORIZED OWNER/CLIENT REPRESENTATIVE (IF APPLICABLE)

NAME P.N. Sum

POSITION Senior Site Agent at Welcome Construction Co., Ltd. (Term Contractor of DSD)

TELEPHONE 2682 3823

SITE ACTIVITIES

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees: Full-time: _____
 Part-time: _____
 Temporary/Seasonal: _____

Maximum no. of people on site at any time: Max. 50

Typical hours of operation: 24-hr

Number of shifts: 2

Days per week: 7

Weeks per year: 52

Scheduled plant shut-down: Not applicable

Detail the main sources of energy at the site:

Gas Yes/No No

Electricity Yes/No

Coal Yes/No No

Oil Yes/No No

Other Yes/No No

SITE DESCRIPTION

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: Approx. 7,000m²

What area of the site is covered by buildings (%): 10% (Temporary building only)

Please list all current and previous owners/occupiers if possible. Housing Department, Kai Hing

Trading Company, Highway Department, Drainage Service Department / Welcome Construction Co., Ltd

Is a site plan available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: Not applicable

Describe surrounding land use (residential, industrial, rural, etc.) and identify neighbouring facilities and types of industry.

North: New World First Bus Chong Fu Road Permanent Depot (Industrial)

South: Chai Wan Public Cargo Working Area (Industrial), Citybus Chai Wan Depot (Industrial)

Esso Petrol cum LPG Filling Station

East: Chai Wan Public Cargo Working Area (Industrial)

West: Hong Kong Institute of Vocational Education (Chai Wan) (Institutional), Knight Court

(Residential)

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Describe the topography of the area (flat terrain, rolling hills, mountains, by a large body of water, vegetation, etc.).

Flat terrain with scattered vegetation and no water body.

State the size and location of the nearest residential communities.

Knight Court (approx. 150m to the northwest of the Project site)

Are there any sensitive habitats nearby, such as nature reserves, parks, wetlands or sites of special scientific interest?

The nearest sensitive habitat nearby is Heng Fa Chuen Playground, which is approximately 200m to the northeast of the Project site.

Questionnaire with Existing/Previous Site Owner or Occupier

	Yes/No	Notes
1. What are the main activities/operations at the above address?		Vehicle parking and material storage
2. How long have you been occupying the site?		7-8 years
3. Were you the first occupant on site? (If yes, what was the usage of the site prior to occupancy.)	No	
4. Prior to your occupancy, who occupied the site?		Fee-paying carpark
5. What were the main activities/operations during their occupancy?		Vehicle parking
6. Have there been any major changes in operations carried out at the site in the last 10 years?		No change since being occupied by DSD term contractor
7. Have any polluting activities been carried out in the vicinity of the site in the past?	No	
8. To the best of your knowledge, has the site ever been used as a petrol filling station/car service garage?	No	
9. Are there any boreholes/wells or natural springs either on the site or in the surrounding area?	No	
10. Do you have any registered hazardous installations as defined under relevant ordinances? (If yes, please provide details.)	No	
11. Are any chemicals used in your daily operations? (If yes, please provide details.)	No	
• Where do you store these chemicals?		N/A
12. Material inventory lists, including quantities and locations available? (If yes, how often are these inventories updated?)	No	
13. Has the facility produced a separate hazardous substance inventory?	Yes	Storage of 2 to 3 drums of diesel / gasoline were recorded in the past
14. Have there ever been any incidents or accidents (e.g. spills, fires, injuries, etc.) involving any of these materials? (If yes, please provide details.)	No	

	Yes/No	Notes
15. How are materials received (e.g. rail, truck, etc.) and stored on site (e.g. drums, tanks, carboys, bags, silos, cisterns, vaults and cylinders)?	See Note	Construction materials such as aggregate, drainage pipes, manhole covers, cement, milled asphalt, etc. are received by vehicles and stored in sealed containers (e.g. liquid) & covered by impervious sheeting (solid)
16. Do you have any underground storage tanks? (If yes, please provide details.)	No	
• How many underground storage tanks do you have on site?		N/A
• What are the tanks constructed of?		N/A
• What are the contents of these tanks?		N/A
• Are the pipelines above or below ground?		N/A
• If the pipelines are below ground, has any leak and integrity testing been performed?		N/A
• Have there been any spills associated with these tanks?		N/A
17. Are there any disused underground storage tanks?	No	
18. Do you have regular check for any spillage and monitoring of chemicals handled? (If yes, please provide details.)	Yes	Every 6 months
19. How are the wastes disposed of?	See Note	C&D waste to sorting facility/ landfill
20. Have you ever received any notices of violation of environmental regulations or received public complaints? (If yes, please provide details.)	No	
21. Have any spills occurred on site? (If yes, please provide details.)	No	
• When did the spill occur?		N/A
• What were the substances spilled?		N/A
• What was the quantity of material spilled?		N/A
• Did you notify the relevant departments of the spill?		N/A
• What were the actions taken to clean up the spill?		N/A
• What were the areas affected?		N/A
22. Do you have any records of major renovation of your site or re-arrangement of underground utilities, pipe work/underground tanks (If yes, please provide details.)	No	
23. Have disused underground tanks been removed or otherwise secured (e.g. concrete, sand, etc.)?	No	
24. Are there any known contaminations on site? (If yes, please provide details.)	No	
25. Has the site ever been remediated? (If yes, please provide details.)	No	

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Observations

	Yes/No	Notes
1. Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?		N/A
2. What are the conditions of the bund walls and floors?		N/A
3. Are any surface water drains located near to drum storage and unloading areas?		N/A
4. Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	Yes	General refuse
5. Is there a storage site for the wastes?	Yes	Only for a max. of 24 hours
6. Is there an on-site landfill?	No	
7. Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	
8. Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	
9. Are there any potential off-site sources of contamination?	No	
10. Does the site have any equipment which might contain polychlorinated biphenyls (PCBs)?	No	
11. Are there any sumps, effluent pits, interceptors or lagoons on site?	No	
12. Any noticeable odours during site walkover?	No	
13. Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	See Note	No storage of diesel and oils except a few sealed containers with lubricant were identified within the site boundary

Annex C2

Potential Information Sources for Site Appraisal

1. Aerial photographs from the Lands Department of Hong Kong
2. Public Records Office – For obtaining old maps and photos
3. Local Libraries – Public libraries and/or Universities Libraries
4. Antiquities and Monuments Office – For obtaining old maps and historical information
5. Topographic Maps from the Survey and Mapping Office – Lands Department
6. Land title searches from the Land Registry
7. Site plans obtained from site contacts
8. Building layout drawings from current and previous site owners
9. Previous assessments completed by site owners
10. Consultation with authorities for obtaining information such as underground utilities, sensitive areas, previous site investigation, zoning and spill records:
 - a. Planning Department
 - b. Agriculture, Fisheries and Conservation Department
 - c. Lands Department
 - d. Buildings Department
 - e. Environmental Protection Department
 - f. Fire Services Department
 - g. Drainage Services Department
 - h. Civil Engineering and Development Department
 - i. Geotechnical Engineering Office, Civil Engineering and Development Department

Annex D

Health, Safety and Environmental Controls during Site Appraisal, Site Investigation and Remediation

	Site Appraisal	Site Investigation	Remediation
Health and Safety (H&S)			
Identify potential health and safety risks and determine control measures	✓	✓	✓
Potential Risks			
• Exposure to hazardous materials on site	✓	✓	✓
• Exposure to contaminated soil & groundwater		✓	✓
• Exposure to volatile / toxic vapours	✓	✓	✓
• Exposure to sample preservative chemicals		✓	✓
• Exposure to chemicals used in remediation			✓
• Possible presence of underground services and utilities		✓	✓
• Machines / equipment on site	✓	✓	✓
• Machines / equipment used in site investigation and remediation		✓	✓
• Manual handling and repetitive motions		✓	✓
• Confined space		✓	✓
• Moving vehicles	✓	✓	✓
• Falling and flying objects	✓	✓	✓
• Dust	✓	✓	✓
• Noise	✓	✓	✓
• Slip and trip	✓	✓	✓
• Fall from height	✓	✓	✓
• Fire and explosion	✓	✓	✓
• Poisonous plants and animals	✓	✓	✓
• Heat stress	✓	✓	✓
H&S Control Measures			
• Prepare site H&S plan		✓	✓
• Appoint site safety personnel		✓	✓
• Works designed and supervised by competent persons		✓	✓
• Personal protective equipment (PPE), for example:			
• Safety shoes	✓	✓	✓
• Helmet	✓	✓	✓
• Respiratory protection	✓	✓	✓
• Breathing apparatus			✓
• Hearing protection	✓	✓	✓
• Goggles	✓	✓	✓
• Face mask		✓	✓

	Site Appraisal	Site Investigation	Remediation
• Gloves		✓	✓
• Coverall		✓	✓
• Barricade the site		✓	✓
• Communicate with other working on site		✓	✓
• Check for explosive/flammable gases		✓	✓
• Confined space entry procedure		✓	✓
• Subsurface utility survey		✓	✓
• Compressed gas procedure		✓	✓
• Chemical handling procedure		✓	✓
• Provide decontamination facilities		✓	✓
• Use mechanical tools to reduce manual handling		✓	✓
Environment			
• Identify potential environmental impacts and determine control measures		✓	✓
Potential Environmental Impacts			
• Handling and storage of potentially contaminated soil and groundwater		✓	✓
• Disposal of contaminated wastes arising from the on-site activities		✓	✓
• Discharge of potentially contaminated wastewater		✓	✓
Environmental Control Measures			
• Segregate potentially contaminated soil and groundwater		✓	✓
• Stockpile of potentially contaminated materials should be contained and covered		✓	✓
• Collect potentially contaminated water recovered for appropriate treatment and disposal		✓	✓
• Segregate contaminated waste for disposal in accordance with the requirements of the Waste Disposal Ordinance		✓	✓
• Discharge to the storm water drainage, sewer or surface water shall comply with the requirements of the Water Pollution Control Ordinance		✓	✓
• Comply with noise and vibration limits		✓	✓
• Comply with Air Pollution Control Ordinance		✓	✓

Notes: This table is provided as a guide for identification of potential health, safety and environmental risks and control measures associated with site appraisal, site investigation and remediation activities. Potential risks and control measures listed here are those typically found and implemented in Hong Kong. Risks should be reviewed for each individual site and site-specific control measures should be identified and implemented accordingly. Reference should be made to relevant legislation and guidelines relating to the protection of H&S of personnel such as the *Factories and Industrial Undertakings Ordinance* and the *Occupational Safety and Health Ordinance* and their associated regulations and relevant environmental legislations.