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By Post and Fax (fax: 2993 7577)
11 October 2011

MTR Corporation Limited
MTR Headquarters Building,
Telford Plaza, Kowloon Bay,
Kowloon, Hong Kong
(Attn: Mr. Richard KWAN, Environmental Manager)

Dear Mr. Kwan,

Shatin to Central Link – Stabling Sidings at Hung Hom Freight Yard
EIA Study Brief (ESB-233/2011)
Contamination Assessment Plan (CAP)

I refer to your referenced letter dated 30.9.2011, submitting a copy of the Contamination Assessment Plan for our agreement as per Section 3 of Appendix J of the EIA Study Brief No. ESB-233/2011.

2. For the avoidance of doubt, I extract the relevant requirements of the concerned EIA Study Brief as follow:

Appendix J, S.3 – *During the course of the EIA study, the Applicant shall submit a Contamination Assessment Plan (CAP) to the Director for endorsement prior to conducting an actual contamination impact assessment of the land or site(s). The CAP shall include proposal with details on representative sampling and analysis required to determine the nature and the extent of the contamination of the relevant land or site(s). Alternatively, the Applicant may refer to other previously agreed and still relevant and valid CAP(s) for the concerned site(s).*

3. Please note that our views /comments on the Contamination Assessment Plan for Shatin to Central Link – Stabling Sidings at Hung Hom Freight Yard are only provided for the partial fulfillment of the specific requirements for agreement stipulated in the above-mentioned EIA study brief clauses and shall not pre-empt our future decisions to the

EIA report approval process for the Shatin to Central Link -Stabling Sidings at Hung Hom Freight Yard EIA under the EIA Ordinance. Our views below shall not absolve your responsibility to fulfill requirements in other statutory legislation.

4. Subject to the above caveats, I confirm that we have no further comment on the Contamination Assessment Plan.

(Desmond CHAN)
Project Engineer (Metro Assessment)
for Director of Environmental Protection

c.c. Internal S(RA)4

MTR Corporation Limited

Shatin To Central Link (SCL) Consultancy Agreement No. NEX/2206

Stabling Sidings at Hung Hom Freight Yard – Contamination Assessment Plan

25445

Draft | September 2011

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			Prepared by	Checked by	Approved by
		Name	Various	Thomas Chan	Sam Tsoi
		Signature			
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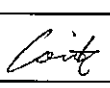
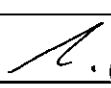
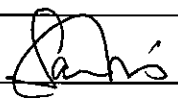
			Prepared by	Checked by	Approved by
		Name	Various	Thomas Chan	Sam Tsoi
		Signature			
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Issue Document Verification with Document ✓

Contents

Figures

1 Introduction

1.1 Background

The Shatin to Central Link (SCL) is one of the ten large-scale infrastructure projects announced by the Chief Executive in his 2007-2008 Policy Address. MTR Corporation Limited has been entrusted to plan and design for this project.

For the purposes of the Environmental Impact Assessment (EIA), five EIA Studies, namely Tai Wai to Hung Hom Section (SCL (TAW-HUH)), Mong Kok East to Hung Hom Section (SCL (MKK-HUH)), Hung Hom to Admiralty Section (SCL (HUH-ADM)), Protection Works at Causeway Bay Typhoon Shelter and Stabling Sidings at Hung Hom Freight Yard (HHS), have been conducted to cover different sections of the SCL. They include:

- SCL – Tai Wai to Hung Hom Section [SCL (TAW-HUH)] – the extension of Ma On Shan Line from Tai Wai Station via Hin Keng, Diamond Hill, Kai Tak, To Kwa Wan, Ma Tau Wai and Ho Man Tin to Hung Hom, and link up with the existing West Rail Line, along with a proposed stabling sidings option in Diamond Hill (DHS);
- SCL – Stabling Sidings at Hung Hom Freight Yard [SCL (HHS)] (hereinafter referred to as "the Project", being considered in this EIA) – another stabling sidings option for SCL (TAW – HUH) proposed at the former freight terminal in Hung Hom;
- SCL – Mong Kok East to Hung Hom Section [SCL (MKK-HUH)] – the realignment work for the existing East Rail Line tracks from the tunnel portal near Oi Man Estate (Portal 1A) to the proposed North Ventilation Building (NOV) in Hung Hom;
- SCL – Hung Hom to Admiralty Section [SCL (HUH-ADM)] – the section from NOV, Plant Rooms and Emergency Access in Hung Hom across the harbour to the Causeway Bay Typhoon Shelter (CBTS), Exhibition Station (EXH) and then to ADM; and
- SCL Protection works at Causeway Bay Typhoon Shelter – the section of approximately 160m long of the SCL tunnel protection works at the crossing over Central-Wan Chai Bypass (CWB) tunnels, which would be constructed under the CWB project.

An application (No. ESB-191/2008) for an EIA Study Brief under Section 5(1)(a) of the EIAO was submitted by MTR Corporation in June 2008 with a project profile (No. PP-356/2008). A Study Brief was issued by EPD in July 2008 to provide the scope and requirements of the EIA study for SCL (TAW-HUH). In that Study Brief, the rail alignment of the SCL (TAW-HUH), 7 stations, namely Hin Keng Station (HIK), Diamond Hill Station (DIH), Kai Tak Station (KAT), To Kwa Wan Station (TKW), Ma Tau Wai Station (MTW), Ho Man Tin Station (HOM) and Hung Hom Station (HUH), along with other supporting facilities and the proposed stabling sidings in Diamond Hill (DHS) were covered.

Following the cessation of the operations of various freight facilities at Hung Hom in April 2011, MTR Corporation Limited has started a detailed study to investigate the feasibility and environmental acceptability of utilizing the former freight yard to accommodate the train stabling requirements for SCL (TAW-HUH) at the disused freight terminal in Hung Hom.

To make the former Hung Hom Freight Yard feasible for the use of stabling, in addition to providing siding tracks underneath the existing podium structure covering the freight yard, and launching/retrieval and emergency tracks and shunt neck extending outside the podium, it would be necessary to make appropriate changes to the design of SCL (TAW-HUH) and SCL (MKK-HUH) at HUH, KAT and DIH and its associated alignment

and facilities. These works are collectively referred to as the Project in this EIA (**Figure 1.1)**.

According to the latest programme, the construction works for the Project would commence in 2012 and all major civil construction works would be completed by 2016. The remaining station fit-out, track layout etc works would be completed by 2018.

Ove Arup & Partners Hong Kong Ltd (Arup) was commissioned by MTR Corporation Limited (MTR Corporation) as the EIA Consultant for the Project.

1.2 Study Area

The HHS will be located underneath the existing podium structure covering the former Hung Hom Freight Yard at Hung Hom, except its shunt neck, launching/ retrieval and emergency tracks which will extend outside the podium as they connect to the tracks to be constructed for the SCL (TAW to HUH) section. It is also necessary to make appropriate changes in the design of Hung Hom, Kai Tak and Diamond Hill Stations and its associated alignment and facilities proposed in SCL (TAW-HUH) and SCL (MKK-HUH) EIA Reports to suit this operational arrangement. A summary of the general design of various components of the Project is given below:

Table 1.1: Summary of Key Elements of the Project

Key Elements	Location	Works Required
Stabling Sidings	HHS	• Construction of a train stabling sidings under the existing deck of Hung Hom Station • Construction of a fan area to the north of the train stabling sidings • Construction of tracks to the north and south of the stabling sidings to enable manoeuvring of trains to and from the stabling to the SCL (TAW-HUH) alignment • Construction of noise mitigation over the fan area and near the shunt neck.
Stations and its associated alignment and facilities	HUH Modification	• Construction of underground platforms • Modification work of HUH podium • Construction of plant rooms underneath HUH podium • Construction of ventilation shafts and CLP transformer plant • Others such as utility diversion
	KAT	• Construction of Kai Tak Station and associated tunnels • Construction of a underground refuge sidings of about 300m in length as part of the Kai Tak Station construction
	DIH	• Construction of the interchange station with existing Kwun Tong Line at Diamond Hill • Site formation to connect station to adjacent existing ground. • Construction of SCL (TAW-HUH) tunnel section approaching to Diamond Hill Station to suit the DIH location without DHS. • Others such as utility diversion in Diamond Hill CDA site arising from the deletion of DHS

1.3 Objectives

The purpose of this CAP is to provide information, guidance and instruction to characterize land contamination and identify where contaminations are or may be present within the Study Area during the construction of this Project.

As the Study Area for land contamination assessment of this Project overlaps with part of the land contamination assessment areas under the EIA study for the SCL (TAW-HUH) and SCL (MKK-HUH), the information from the CAP, supplementary CAP and Contamination Assessment Report (CAR) of SCL (MKK-HUH) and SCL (TAW-HUH) will be reviewed, the objectives of this CAP are:

- To provide an account on the land use within the project site boundary and relevant past land use history in relation to possible land contamination;
- To identify areas of potential contamination and associated impacts, risks or hazards;
- To present previous land contamination assessment data and
- To determine if further sampling and testing work is required.

1.4 Statutory Legislation and Evaluation Criteria

This CAP is prepared in accordance with the following Technical Memorandum and Guidance Notes:

- Annex 19 of the Technical Memorandum on Environmental Impact Assessment Process (TM-EIA), Guidelines for Assessment of Impact On Sites of Cultural Heritage and Other Impacts (Section 3 : Potential Contaminated Land Issues);
- Practice Guide (PG) for Investigation and Remediation of Contaminated Land;
- Guidance Notes for Contaminated Land Assessment and Remediation; and
- Guidance Manual for Use of Risk-Based Remediation Goals (RBRGs) for Contaminated Land Management.

In accordance with EPD's *Guidance Note for Contamination Land Assessment and Remediation*, a contamination assessment evaluation should:

- provide a clear and detailed account of the present land-use and the relevant past land history, in relation to possible land contamination;
- identify areas of potential contamination and associated impacts, risks or hazards; and
- submit a plan to evaluate the actual contamination conditions for soil and/or groundwater, if required.

The EPD's Guidance Notes include a summary of the general steps of a contamination assessment study and indicate that interpretation of results should make reference to the Guidance Manual. The soil and groundwater samples collected shall be compared with Risk based Remediation Goals (RBRGs) as stipulated in Table 2.1 and Table 2.2 of the Guidance Manual.

Under Annex 19 of the TM-EIAO, a number of potentially contaminating historical land uses should be considered, including oil installations, gas works, metal workshops, car repair and dismantling workshops, which have the potential to cause or have caused land contamination. The land use identified within the Study Area with potential land contamination concerns include oil installations, dangerous goods storage and locomotives maintenance workshops.

This CAP sets out the requirements for a baseline contamination evaluation of the Study Area. If additional site investigation activities are required, a CAR will be prepared following the site investigation. If contamination is identified in the CAR, a Remediation Action Plan (RAP) will be developed to deal with these areas prior to the commencement of construction works for the Project. The RAP would follow the requirements specified in EPD's *Guidance Notes for Investigation and Remediation of Contaminated Sites*. A Remediation Report (RR) would be prepared to demonstrate adequate clean-up and submitted to EPD for agreement prior to the commencement of construction works within the contaminated area identified.

2 Site Appraisal

2.1 Desktop Review

A desktop study has been conducted to review past and present land uses, activities and installation in the vicinity of the current Study Area that may pose potential impact for land contamination. As mentioned in **Section 1.2**, the Study Area was encroached upon the land contamination assessment area for SCL (MKK-HUH) and SCL (TAW-HUH) EIA studies. The findings of the approved CAPs and the CARs under these two studies were therefore reviewed.

It should be noted that the approved CAP, supplementary CAP and CARs of SCL (MKK-HUH) and SCL (TAW-HUH) referred in this CAP had been carried out with reference to the *Guidance Notes for Investigation Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repairing/Dismantling Workshops* and were endorsed by EPD. For the purpose of land contamination assessment under this Project, the aforesaid reports have been reviewed and the findings adopted in this CAP are consistent with the requirements stipulated in the new PG.

2.1.1. Review of Aerial Photographs and Historical Land Use

According to the approved CAP and supplementary CAP of SCL (MKK-HUH) and SCL (TAW-HUH), the development history of the Study Area was reviewed with the aid of aerial photograph. The historical land use of the Study Area is summarised below.

Hung Hom Area

Area around Hung Hom Interchange near Chatham Road North

This area was mainly occupied by open storage area, traffic roads and temporary structures in 1967. It was noted as the Hung Hom Interchange from 1973 to 2006. Planted areas and some temporary structures were found scattered around the Hung Hom Interchange during 1973 to 2006. No major land use changes were noted since then.

Signal Telecom Automatic Revenue Collection (STA) Building, Workshop and Depot

This area was mainly occupied by an unknown temporary structure in 1967. The STA Building, a workshop and a depot were noted in this area in 1973. No major land use changes were noted since then.

Area around Gillies Avenue South

This area was mainly used as an open car park from 1967 to 1973. It was noted as the Gillies Avenue South in 1989. No major land use changes were noted since then.

Locomotive Running Shed

The locomotive Running Shed was first noted in this area in 1967. An unknown cylinder structure was noted at the east of the shed from 1973 to 1989. Two above ground tanks with unknown usage were noted at the southeast corner of the shed in 1989. These facilities were removed in 1999. No major land use changes were noted since then.

Hung Hom Freight Terminal (HFT)

This area was previously sea; reclamation was noted in 1964. It was mainly vacant in 1967. It was used as an open storage in 1973. In 1989 this area was noted as HFT. No major land use changes were noted since then.

The Metropolis

This area was sea from 1967 to 1973. Reclamation of this area was observed to begin in 1989. Reclamation of this area was completed and building construction of this area was noted in 1999. It was noted as The Metropolis in 2006.

Hung Hom Bus Terminal

This area was mainly vacant from 1967 to 1973. It was noted as the bus terminal in 1989. No major land use changes were noted since then.

Hong Kong Coliseum

This area was mainly vacant in 1967. Open storage was noted in this area in 1973. This area was transformed into the Hong Kong Coliseum as noted in 1989's aerial photograph. No major land use changes were noted since then.

Hung Hom Freight Yard

This area was mainly vacant in 1967. It was used as open storage in 1973. This area was noted as the Hung Hom Freight Yard in 1989. No major land use changes were noted since then.

International Mail Centre

This area was mainly vacant in 1967. An open storage was noted in this area in 1973. The International Mail Centre was noted in this area in 1989. No major land use changes were observed since then.

Kai Tak Area

Land reclamation for Kai Tak Airport and the Kai Tak runway was completed in 1947 and 1963 respectively. There was no major change in landuse of the airport since then until it ceased operation. Kai Tak Airport was already closed and parts of the administration buildings were demolished in 2000. Kowloon Wall City was demolished and developed into Kowloon Wall City Park.

Diamond Hill Area

Tai Hom Village and areas to the north of Lung Cheung Road comprised mainly agricultural fields, squatter houses and hilly terrain in 1963. Squatter houses remained observed from 1973 to 1993. The demolition of Tai Hom Village was in progress in 2000 with the southern part of the village cleared. The whole Tai Hom Village had already been cleared in 2008.

2.1.2. Review of Results of Previous Site Investigations (SIs)

Land Contamination Assessment for SCL (MKK-HUH)

The CAP and supplementary CAP of SCL (MKK-HUH) was approved in October 2009 and March 2010 respectively. The site investigations were carried out from March 2008 to December 2010. After the completion of SI works, a Contamination Assessment Report was submitted to EPD for endorsement in August 2011.

The land contamination study for SCL (MKK-HUH) has covered the northern, western and southern portion of the Hung Hom Works Site.

According to the approved CAR of SCL (MKK-HUH), emergency generator room and the associated fuel tank room, railway tracks for good yard, storage area for dangerous goods and paints, locomotive running shed, aboveground and underground fuel/oil storage tanks and fuel dispensers were identified as potential contaminated sites within the Hung Hom Works Site. A total of 16 boreholes and 8 trial pits were established within or in close proximity to these sites. The as-built sampling locations are shown in **Figure 2.1** and the summary of the SI works is presented in **Table 2.1**.

Results of SI indicated that the 172 soil samples and 14 groundwater samples collected within the current Study Area were all complied with the RBRGs (industrial) levels and no remediation of soil or groundwater is required.

Land Contamination Assessment for SCL (TAW-HUH)

The CAP of SCL (TAW-HUH) was approved in December 2009. The site investigations were carried out from February to August 2009 and a Contamination Assessment Report was endorsed by EPD in December 2009.

The land contamination study for SCL (TAW-HUH) has covered the southern portion of the Hung Hom Works Sites and the Works Sites at KAT and DIH. Some land uses with potential land contamination concerns were identified.

According to the approved CAR of SCL (TAW-HUH), the potential source of contamination within Kai Tak Works Area was due to historical spillage/leakage of aviation fuel during the operation of the Former Kai Tak Airport. This contamination concern has been addressed under three previous EIA studies namely, *EIA for Kai Tak Airport North Apron Decommissioning* (NAKTA EIA), *Comprehensive Feasibility Study for the Revised Scheme of South East Kowloon Development* (SEKDCFS) and t*he Kai Tak Development EIA* (KTD EIA) and the contamination identified at the North Apron of Kai Tak Area has been cleaned up during the period from 1998 to 2007 by the permit holder, Territory Development Department (now Civil Engineering and Development Department) in accordance with the Environmental Permit condition of EP007/1998

The CAR of SCL (TAW-HUH) has concluded that no further site investigation of contaminated soils/ ground water is necessary for KAT Works Site.

For Works Site at DIH and the southern portion of Hung Hom Works Site, the CAP of SCL (TAW-HUH) indicated that potential land contamination concern may be caused by historical land uses such as metal workshops, car repair yards, dye works and plastics company in former Tai Hom Village at DIH Works Site and possible spillage or leakage of fuel due to land occupied as fuelling area, carpark or storage area in International Mail Centre located at Hung Hom Works Site.

Site investigations were undertaken to investigate the nature, scale and extent of possible contamination at Tai Hom Village located at DIH Works Site and International Mail Center located at Hung Hom Works Site, A total of 8 boreholes were drilled for soil and groundwater sampling. The as-built sampling locations are shown in **Figures 2.1** - **2.2** and the summary of the SI works is presented in **Table 2.2**. Results of SI indicated that the 68 soil samples and 8 groundwater samples collected within DIH Works Site and Hung Hom Works Site were all complied with the RBRGs (industrial) levels and no remediation of soil or groundwater is required.

To sum up, a total of 32 sampling locations have been established within the Study Area of SCL (HHS) under SCL (TAW-HUH) and SCL (MKK-HUH) land contamination studies. A total of 240 soil samples and 22 groundwater samples were collected and all samples were complied with the RBRGs (industrial) levels.

Table 2.1 Summary of SI Works Conducted in SCL (MKK-HUH)

Site ID (Description)	Drillhole reference	Stage of SI [1]	Actual Co-ordinates		Sampling Method	No. of Sample Tested		Remarks	Compliance to Industrial RBRGs
			Easting	Northing		Soil	Groundwater		
SCL (MKK-HUH)									
Hung Hom Works Site									
1-10 (Open storage and previous paint storage)	2209/SCL/EDH249(P)	Stage 1	836785.58	818603.26	Borehole	10	1		All sample results indicated compliance
1-18 (Emergency generator room and the associated fuel tank room)	2209/SCL/ETT103		836786.86	818601.59	Trial pit	3	0		All sample results indicated compliance
1-22 (MTR railway operations (Historic railway maintenance facility area))	11203/SCL/EB121	Stage 2	836720.38	818757.59	Borehole	3	0	Existing utilities were encountered during the construction of inspection pit. Borehole to 3m.	All sample results indicated compliance
2-04 (Locomotive Running Shed; the 7 boreholes are shared among Sites 2.04, 2.06 and 2-07)	11202/SCL/EDH138	Post-Stage 1	836867.98	818332.14	Borehole	10	1		All sample results indicated compliance
	11202/SCL/EDH139		836869.68	818340.35	Borehole	14	1		All sample results indicated compliance
	11202/SCL/EDH140		836844.75	818408.40	Borehole	14	1		All sample results indicated compliance
	11202/SCL/EDH141		836855.61	818420.81	Borehole	16	1		All sample results indicated compliance
	11202/SCL/EDH142		836888.11	818350.03	Borehole converted to trial pit	3	0	Borehole converted to a trial pit. Could not be drilled to the proposed depth since obstruction was encountered at 3.13 mbgs.	All sample results indicated compliance

Site ID (Description)	Drillhole reference	Stage of SI [1]	Actual Co-ordinates		Sampling Method	No. of Sample Tested		Remarks	Compliance to Industrial RBRGs
			Easting	Northing		Soil	Groundwater		
								Another inspection pit was excavated at a nearby possible location but an obstruction was encountered at 2.8mbgs. Other potential sampling locations are constrained by limited working space. Further sampling has been conducted during Stage 2 SI at 11203/SCL/EB146.	
	11202/SCL/EDH143		836888.58	818328.63	Borehole	13	1		All sample results indicated compliance
	11202/SCL/EDH144		836872.78	818319.26	Borehole	13	1		All sample results indicated compliance
	11203/SCL/EB146 (new sampling location near 11202/SCL/EDH142 due to incomplete SI)	Stage 2	836896.61	818348.41	Borehole	5	1		All sample results indicated compliance

Site ID (Description)	Drillhole reference	Stage of SI [1]	Actual Co-ordinates		Sampling Method	No. of Sample Tested		Remarks	Compliance to Industrial RBRGs
			Easting	Northing		Soil	Groundwater		
2-05 (USTs near the locomotive running shed)	2209/SCL/ETT165	Stage 1	836883.32	818399.37	Trial pit	3	0	Borehole converted to a trial pit (renamed from 2209/SCL/EDH246 to 2209/SCL/ETT165) A box culvert was encountered during the construction of the inspection pit sampling from a trial pit was conducted Stage 1 SI.	All sample results indicated compliance
	11203/SCL/EB140	Stage 2	836884.25	818397.89	Borehole	5	1		All sample results indicated compliance
	11203/SCL/EB141		836901.58	818384.08	Borehole	5	1		All sample results indicated compliance
2-06 (Aboveground lubricating oil storage tank near the locomotive running shed)	2209/SCL/ETT102	Stage 1	836867.21	818395.13	Trial pit	3	0		All sample results indicated compliance
	Refer to Site 2-04 for the description of the seven boreholes shared among Sites 2-04, 2-06 and 2-07.								All sample results indicated compliance
2-07 (Dispenser west and north of the locomotive running shed)	2209/SCL/EDH244	Stage 1	836851.31	818388.31	Borehole	11	1		All sample results indicated compliance
	Refer to Site 2-04 for the description of the seven boreholes shared among Sites 2-04, 2-06 and 2-07.								All sample results indicated compliance
2-08 (Railway tracks)	11202/SCL/ETP027	Post-Stage 1	836839.45	818354.63	Trial pit	3	0		All sample results indicated compliance
	11202/SCL/ETP012		836803.07	818182.61	Borehole	11	1		All sample results indicated compliance
	11202/SCL/ETP042		836810.98	818006.38	Trial pit	3	0		All sample results indicated compliance
	11202/SCL/ETP043		836805.41	818091.11	Trial pit	3	0		All sample results indicated compliance
	11202/SCL/ETP044		836838.91	818277.13	Trial pit	3	0		All sample results indicated compliance

Site ID (Description)	Drillhole reference	Stage of SI [1]	Actual Co-ordinates		Sampling Method	No. of Sample Tested		Remarks	Compliance to Industrial RBRGs
			Easting	Northing		Soil	Groundwater		
2-09 (D.G. storage containers near the Southern Warehouse)	2209/SCL/EDH231	Stage 1	836810.43	817977.08	Borehole	7	1		All sample results indicated compliance
3-02 (Container stacker refuelling and maintenance area at Hung Hom Freight Yard)	2209/SCL/EDH229(P)	Stage 1	836788.17	817875.41	Borehole	6	1		All sample results indicated compliance
	2209/SCL/EDH124(P)		836810.60	817937.70	Borehole	5	0		All sample results indicated compliance
Total No. of Sample Tested						**172**	**14**		**All sample results indicated compliance**

Note:
[1] According to the approved SCL (MKK-HUH) CAP, the SI work was conducted in 3 stages – Stage 1, Post-stage 1, and Stage 2.

Table 2.2 Summary of SI Works Conducted in SCL (TAW-HUH)

Site ID (Description)	Drillhole reference	Actual Co-ordinates		Sampling Method	No. of Sample Tested		Remarks	Compliance to Industrial RBRGs
		Easting	Northing		Soil	Groundwater		
SCL (TAW-HUH)								
Diamond Hill Works Site								
L4 (Former Tai Hom Village)	2209/SCL/EDH036	838675.24	822286.97	Borehole	11	1		All sample results indicated compliance
	2209/SCL/EDH037(P)	838676.03	822328.36	Borehole	11	1		All sample results indicated compliance
	2209/SCL/EDH039	838697.80	822269.48	Borehole	9	1		All sample results indicated compliance
	2209/SCL/EDH042	838777.31	822248.90	Borehole	7	1		All sample results indicated compliance
	2209/SCL/EDH043	838749.11	822263.43	Borehole	7	1		All sample results indicated compliance
	2209/SCL/EDH045	838879.58	822156.64	Borehole	7	1		All sample results indicated compliance
	2209/SCL/EDH046(P)	838883.59	822209.86	Borehole	10	1		All sample results indicated compliance
Hung Hom Works Site								
L-17 (International Mail Centre)	2209/SCL/EDH257	836711.21	817926.48	Borehole	6	1		All sample results indicated compliance
Total No. of Sample Tested					**68**	**8**		**All sample results indicated compliance**

3 Site Survey

3.1 Site Survey for SCL(HHS)

As shown in **Figures 2.1 - 2.2** and discussed in **Section 2.1.2**, the data collected under SCL (TAW-HUH) and SCL (MKK-HUH) EIA studies have only covered the northern, southern and western portion of the Hung Hom Works Site and the Works Site at KAT and DIH, while the potential land contamination concern at the eastern part of the Hung Hom Works Site within the Study Area of SCL (HHS) has not been assessed.

A site survey was therefore conducted on 28 June 2011 for the current study to visit the eastern part of the Hung Hom Works Site and to confirm findings of desktop study. No additional land uses with potential land contaminated concerns have been identified in the assessed area.

During site survey, the eastern part of the Hung Hom Works Site was identified as the track area of disused Hung Hom Freight Yard which consists of both ballast-based and concrete based tracks. **Figure 3.1** shows the photo records of this site survey. According to the site personnel, there has been no record of chemical spillage/leakage during the operation of the Hung Hom Freight Yard.

As observed, the site condition of the track area was similar to the railway tracks for goods yard (Site 2-08 of **Table 2.1** refers) assessed in the land contamination assessment of SCL (MKK-HUH). Results of site investigation under SCL (MKK-HUH) as summarized in **Table 2.2** indicated that all samples collected along the railway tracks are in compliance with the RBRG levels for industrial purpose. With similar type of land uses, adverse land contamination impact at the eastern part of the Hung Hom Works Site is therefore not expected

In addition, as confirmed during the site survey, there was only one underground fuel storage facility within the Study Area and the potential land contamination concern due to the underground fuel tank has already been assessed under the land contamination assessment of SCL (MKK-HUH), land contamination impact due to underground fuel tank is not expected. Based on the findings of site survey, no further site investigation is required within the Hung Hom Works Site.

4 Conclusion

Desktop review and site survey has been conducted to identify potential land contamination within the Study Area of the Project. Based on the respective CARs of SCL (MKK-HUH) and SCL (TAW-HUH), all sample results within Works Site of Hung Hom and Diamond Hill indicated compliance with relevant RBRG criteria while land contamination concern at KAT Works Site has been cleared in accordance with Environmental Permit EP007/1998. For the track area in the disused Hung Hom Freight Yard, since it consists of similar track forms to the railway tracks assessed under SCL (MKK-HUH), by making reference to the SI results in the CAR of SCL (MKK-HUH), no adverse land contamination concerns are expected. Site survey, has also confirmed that no additional land uses with potential land contaminated concerns were identified within the Study Area of the Project, it is therefore concluded that potential land contamination concerns are not anticipated and hence further sampling and testing work for the Study Area would deem to be not necessary.

FIGURES

SCL (TAW-HUH)

Diamond Hill Station (DIH)

Kai Tak Station (KAT)

Kai Tak Refuge Siding

SCL (MKK-HUH)

Hung Hom Station (HUH)

Hung Hom Stabling Sidings (HHS)

SCL (HUH-ADM)

0 150 300 450 600 750

LEGEND :

- Proposed SCL Alignment (Under Separate EIAs)
- SCL (TAW-HUH) Alignment to be Modified under the Project
- Kai Tak Refuge Sidings & KAT Associated Tunnels
- HHS Tracks
- Proposed Station / Station Modification
- Hung Hom Stabling Sidings

PLOT DRV: $PLTDRVL$
MODELNAME: $MODEL$
FILENAME: $FILE$
PRINTED BY: $USER$ $DATE$ $TIME$

REV	DESCRIPTION	BY	DATE	APPROVED
A	FIRST ISSUE	AC	08/11	FC

DRAWN	AC
DESIGNED	LK
CHECKED	TC
APPROVED	FC
DATE	08/11

MTR

SHATIN TO CENTRAL LINK

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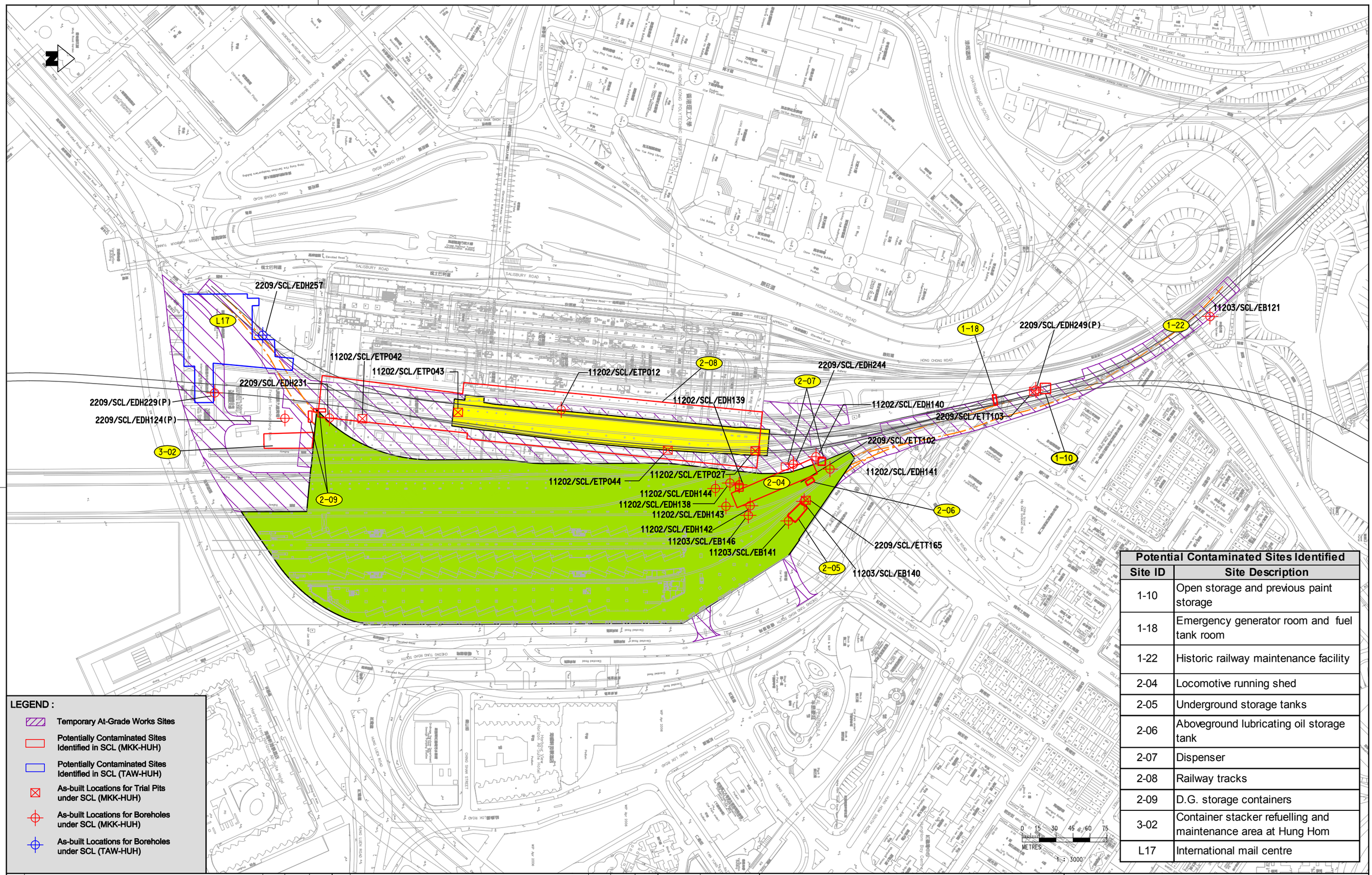
TITLE

NEX2206 – SCL(HHS)
STABLING SIDINGS AT HUNG HOM FREIGHT YARD
Overview of the Project

SCALE	DRAWING NO.	REV.
1:30000 (A3)	Figure 1.1	A



LEGEND :

- Temporary At-Grade Works Sites
- Potentially Contaminated Sites Identified in SCL (MKK-HUH)
- Potentially Contaminated Sites Identified in SCL (TAW-HUH)
- As-built Locations for Trial Pits under SCL (MKK-HUH)
- As-built Locations for Boreholes under SCL (MKK-HUH)
- As-built Locations for Boreholes under SCL (TAW-HUH)

Potential Contaminated Sites Identified	
Site ID	Site Description
1-10	Open storage and previous paint storage
1-18	Emergency generator room and fuel tank room
1-22	Historic railway maintenance facility
2-04	Locomotive running shed
2-05	Underground storage tanks
2-06	Aboveground lubricating oil storage tank
2-07	Dispenser
2-08	Railway tracks
2-09	D.G. storage containers
3-02	Container stacker refuelling and maintenance area at Hung Hom
L17	International mail centre

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MODELNAME: $MODEL$
FILENAME: $FILE$
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REV	DESCRIPTION	BY	DATE	APPROVED
A	FIRST ISSUE	GL	07/11	FC

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NEX2206 – SCL(HHS)
STABLING SIDINGS AT HUNG HOM FREIGHT YARD
As-built Sampling Locations in Hung Hom Work Site

SCALE 1 : 3000 (A3)

DRAWING NO. Figure 2.1

REV. A

Potential Contaminated Sites Identified	
Site ID	Site Description
L4	Former Tai Hom Village

2209/SCL/EDH043

2209/SCL/EDH042

2209/SCL/EDH037(P)

2209/SCL/EDH046(P)

L4

2209/SCL/EDH045

2209/SCL/EDH039

2209/SCL/EDH036

LEGEND :

- Temporary At-Grade Works Sites
- Potentially Contaminated Sites Identified in SCL (TAW-HUH)
- As-built Locations for Boreholes under SCL (TAW-HUH)

0 10 20 30 40 50 METRES

1 : 2000

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DATE	07/11

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NEX2206 – SCL(HHS)
STABLING SIDINGS AT HUNG HOM FREIGHT YARD
As-built Sampling Locations in Diamond Hill Work Site

SCALE	DRAWING NO.	REV.
1 : 2000 (A3)	Figure 2.2	A

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Photo: 0707

Photo: 0711

Photo: 0714

Photo: 0703

Photo No. 0707

Photo No. 0711

Photo No. 0714

Photo No. 0703

0 10 20 30 40 50
METRES
1 : 2000

REV	DESCRIPTION	BY	DATE	APPROVED
A	FIRST ISSUE	AC	07/11	FC

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NEX2206 – SCL(HHS)
STABLING SIDINGS AT HUNG HOM FREIGHT YARD
Photo records for Site Survey

SCALE	DRAWING NO.	REV.
1 : 2000 (A3)	Figure 3.1	A

PLOT DRV: $PLTDRVL$
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