

Gammon Construction Limited

Shatin to Central Link (Hung Hom – Admiralty Section)

Kai Tak Barging Facility under FEP-01/436/2012/F

Monthly EM&A Report for February 2024

[March 2024]

	Name	Signature	
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Version: 0

Date: 06 March 2024

Disclaimer

This Environmental Monitoring and Audit Report is prepared for Gammon Construction Limited and is given for its sole benefit in relation to and pursuant to Kai Tak Barging Facility under FEP-01/436/2012/F and may not be disclosed to, quoted to or relied upon by any person other than Gammon Construction Limited without our prior written consent. No person (other than Gammon Construction Limited into whose possession a copy of this report comes may rely on this plan without our express written consent and Gammon Construction Limited may not rely on it for any purpose other than as described above.

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Environmental Permit No. FEP-01/436/2012/F

Central Kowloon Route

Independent Environmental Checker Verification

Works Contract:	Kai Tak West (HY/2014/07)
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Reference Document/Plan

Document/ Plan to be Certified/ Verified:	Monthly EM&A Report No.38 (February 2024)
Date of Report:	11 March 2024
Date received by IEC:	11 March 2024

3.2

Reference EP Condition

Environmental Permit Condition:

Environmental Monitoring and Audit Requirements

3.2 Four hard copies and one electronic copy of the monthly EM&A Reports shall be submitted to the Director within two weeks after the end of the reporting month. Four hard copies and one electronic copy of the monthly EM&A Reports shall be submitted to the Director within two weeks after the end of the reporting month. The monthly EM&A Reports shall include a summary of all non-compliance with the recommendations in the EIA Report or this Permit. The submissions shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual. Additional copies of the submission shall be certified by the ET Leader and verified by the IEC as complying with the requirements as set out in the EM&A Manual. Additional copies of the submission shall be provided upon request by the Set the submission shall be provided upon request by the Director.

IEC Verification

I hereby verify that the above referenced document/plan complies with the above referenced condition of FEP-01/436/2012/F.

Mandy 20.

Ms Mandy To Independent Environmental Checker Date:

11 March 2024

Our ref: 0436942_IEC Verification Cert_KTW (SCL Barging Point)_Monthly EM&A Rpt No 38.docx

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EXECUTIVE SUMMARY

Shatin to Central Link (Hung Hom – Admiralty Section) – Kai Tak Barging Facility (hereafter called "the Project") covers part of the usage of the Kai Tak Barging Facility.

The Project comprises the follow works:

• Barging Facility usage.

The EM&A programme commenced on 1 January 2021.

This is the 38th monthly EM&A Report presenting the EM&A works carried out during the period between 1 and 29 February 2024. As informed by the Contractor, major activities in the reporting period were:

Locations	Site Activities		
Barging Facility of Kai Tak West	Material Storage.		
Barging Facility of Central Tunnel	Material Storage.		
Barging Facility of Sports Park	• Nil		
Barging Facility of Yau Mai Tei East	• Nil		

Complaint, Notification of Summons and Successful Prosecution

No complaint, notification of summons and successful prosecution were received in the reporting month.

Reporting Changes

No report changes in the reporting period.

Future Key Issues

Key issues to be considered in the next three months included:

Locations	Site Activities		
Barging Facility of Kai Tak West	Material Storage.		
Barging Facility of Central Tunnel	Material Storage.		
Barging Facility of Sports Park	• Nil		
Barging Facility of Yau Mai Tei East	• Nil		

Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, water pollution control, and waste management.

The barging activity was substantial completed at the end December 2023, and the termination proposal of the Kai Tak Barging Facility under FEP-01/436/2012/F was submitted to EPD in January 2024. The EM&A works will continue until the application is approved.

1 INTRODUCTION

Purpose of the Kai Tak Barging Facility under EP-436/2012/F was handed over to Highway Department from MTR on 22 December 2020. Gammon Construction Limited was commissioned by the Highway Department as the Civil Contractor to operate the Shatin to Central Link (Hung Hom – Admiralty Section) – Kai Tak Barging Facility and coordinate with the other Contractors, Bouygues Travaux Publics and Hip Hing Construction Limited. A new contractor Build King – SK Ecoplant JV was joined in July 2023. AECOM Asia Company Limited (AECOM) was appointed by Gammon Construction Limited as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme during construction phase of the Project.

1.1 Purpose of the Report

1.1.1 This is the 38th monthly EM&A Report which summaries audit findings for the Project during the reporting period between 1 and 29 February 2024.

1.2 Report Structure

- 1.2.1 This monthly EM&A Report is organized as follows:
 - Section 1: Introduction
 - Section 2: Project Information
 - Section 3: Environmental Monitoring Requirement
 - Section 4: Implementation Status of Environmental Mitigation Measures
 - Section 5: Monitoring Results
 - Section 6: Environmental Site Inspection and Audit
 - Section 7: Environmental Non-conformance
 - Section 8: Future Key Issues
 - Section 9: Conclusions and Recommendations

2 **PROJECT INFORMATION**

2.1 Background

- 2.1.1 The Shatin to Central Link (SCL) is a 17km extension of the existing Ma On Shan Line (MOL) and East Rail Line (EAL) comprising (i) The East-West Corridor which extends the MOL from Tai Wai via East Kowloon to connect with the West Rail Line (WRL) at Hung Hom Station (HUH); and (ii) The North-South Corridor which is an extension of the East Rail Line (EAL) at Hung Hom across the harbour to Admiralty Station (ADM).
- 2.1.2 The Environmental Impact Assessment (EIA) Reports for SCL Hung Hom to Admiralty Section [SCL (HUH-ADM)] (Register No.: AEIAR-166/2012) was approved on 17 February 2012 under the Environmental Impact Assessment Ordinance (EIAO). Following the approval of the EIA Report, an Environmental Permit (EP) was granted on 22 March 2012, which covers SCL (HUH-ADM) EP No.: EP-436/2012), for the construction and operation. Variation of EP (VEP) was subsequently applied and the latest EP (EP No. EP-436/2012/F) was issued by the Director of Environmental Protection (DEP) on 23 January 2019. Further Environmental Permit (FEP-01/436/2012/F) was issued by the Director of Environmental Protection (DEP) on 6 April 2020 to cover the usage of the Kai Tak Barging Facility.
- 2.1.3 The usage of the Kai Tak Barging Facility had been divided into four different sectors and managed by different contractors, which are Gammon Construction Limited, Bouygues Travaux Publics, Hip Hing Construction Limited and Build King SK Ecoplant JV.
- 2.1.4 The site layout plan of the Project is shown in **Figure 1.1**.

2.2 Site Description

- 2.2.1 The major construction activities under this Project include:
 - (a) Barging Facility operation for Soil Disposal.

2.3 Construction Programme and Activities

2.3.1 The major construction activities undertaken in the reporting month are summarized in **Table 2.1**.

Table 2.1Construction Activities in the reporting month

Locations	Site Activities		
Barging Facility of Kai Tak West	Material Storage.		
Barging Facility of Central Tunnel	Material Storage.		
Barging Facility of Sports Park	• Nil		
Barging Facility of Yau Mai Tei East	• Nil		

The construction programme is presented in other EM&A monthly report under related Environmental Permits.

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2.4 Project Organization

2.4.1 The project organization structure is shown in **Appendix A**. The key personnel contact names and numbers for the Project are summarized in **Table 2.2.**

 Table 2.2
 Contact Information of Key Personnel

Party	Role	Position	Name	Telephone	Fax
Arup-Mott MacDonald Joint Venture	Residential Engineer (ER)	Engineer's Representative	Mr. Patrick Lo	3619 5901	2268 3954
ERM	Independent Environmental Checker (IEC)	Independent Environmental Checker	Ms. Mandy To	2271 3113	3015 8052
Common		Contracts Manager	Mr. Kin Fai Tam	2516 8823	2516 6260
Gammon	Contractor	Environmental Manager	Ms. Michelle Tang	9267 8866	2516 6260
AECOM Contractor's Environmental Team (ET)		ET Leader	Mr. Y. W. Fung	3856 5681	2317 7609

2.5 Status of Environmental Licences, Notification and Permits

2.5.1 Relevant environmental licenses, permits and/or notifications on environmental protection for this Project and valid in the reporting month are summarized in Table 2.3.

Table 2.3 Status of Environmental Licenses, Notifications and Permits

Permit / License No. /	Valid Period				
Notification/ Reference No.	From	From To Status		Remarks	
Further Environmental	Permit	·	·		
FEP-01/436/2012/F	6 Apr 2020	End of Project	Valid	FEP for Shatin to Central Link (Hung Hom – Admiralty Section) - Kai Tak Barging Facility	
Wastewater Discharge	License				
WT00041154-2022	12 Jul 2022	31 Jul 2027	Valid	Discharge of effluent at Kai Tak Barging Facility – Central Tunnel (Contract No. HY/2018/08)	
WT00038552-2021	9 Sep 2021	30 Sep 2026	Valid	Wastewater Discharge Licence - Barging Facility under KTW	
Construction Noise Per	mit				
GW-RE0814-23	3 Aug 2023	2 Feb 2024	No further renewal*	Barging Point Operation at Kai Tak Barging Facility – Kai Tak West (Contract No. HY/2014/07	
GW-RE1526-23	1 Dec 2023	29 Apr 2024	Valid	Barging Point Operation at Kai Tak Barging Facility – Central Tunnel (Contract No. HY/2018/08	
Chemical Waste Produc	er Registration				
5213-286-G2347-58	1 Feb 2021	End of Project	Valid	Chemical Waste Producer – Kai Tak Barging Facility (Kai Tak West)	
5111-236-B2557-02	25 Sep 2019	End of Project	Valid	Chemical Waste Producer – Central Kowloon Route – Central Tunnel	
Marine Dumping Permit					
-	-	-	-	-	
Billing Account for Con	struction Waste	Disposal			
7034790	6 Aug 2019	End of Project	Account Active	Construction Waste Disposal Account (Main) for Central Kowloon Route – Central Tunnel	
7029909	22 Jan 2018	End of Project	Account Active	Construction Waste Disposal Account (Main) for Central Kowloon Route – Kai Tak West	
Notification Under Air F	Pollution Control	(Construction Du	st) Regulation		
-	_	-	-	_	

Remark: * The barging activity was substantial completed at the end December 2023. The related license is not further renewal.

3 ENVIRONMENTAL MONITORING REQUIREMENTS

3.1 Landscape and Visual

3.1.1 As per the EM&A Manuals, no impact for landscape and visual mitigation measures at Kai Tak Barging Facility. Therefore, no bi-weekly site inspection should be undertaken once every two weeks during the construction period.

4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

4.1.1 The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Reports, the EP and EM&A Manuals. The implementation status of the environmental mitigation measures during the reporting period is summarized in **Appendix C**. Status of required submissions under the EP during the reporting period is summarised in **Table 4.1**.

Table 4.1 Status of Required Submission under Environmental Permit

EP Condition	Submission	Submission Date
Condition 3.2 of FEP-01/436/2012/F	Monthly EM&A Report for January 2024	14 February 2024

5 MONITORING RESULTS

5.1 Waste Management

5.1.1 C&D materials and wastes sorting were carried out on site. Receptacles were available for C&D wastes and general refuse collection.

For Central Kowloon Route – Kai Tak West (Contract: HY/2014/07)

5.1.2 No inert C&D material, general refuse was generated in the reporting month. No plastics, metals and paper/cardboard packaging were collected by recycle contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1, Type 2 and Type 3 Marine sediment were disposed at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table under FEP-01/436/2012/F is annexed in **Annex D1**.

For Kai Tak Sports Park (Agreement No. CE 30/2018 (EP))

5.1.3 No inert C&D material, general refuse was generated in the reporting month. No plastics, metals and paper/cardboard packaging were collected by recycle contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1, Type 2 and Type 3 Marine sediment were disposed at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table under FEP-01/436/2012/F is annexed in **Annex D2**.

For Central Kowloon Route – Central Tunnel (Contract: HY/2018/08)

5.1.4 No inert C&D material, general refuse was generated in the reporting month. No plastics, metals and paper/cardboard packaging were collected by recycle contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1, no Type 2 and Type 3 Marine sediment were disposed at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table under FEP-01/436/2012/F is annexed in **Annex D3**.

For Central Kowloon Route – Yau Ma Tei East (Contract: HY/2014/08)

- 5.1.5 No inert C&D material, general refuse was generated in the reporting month. No plastics, metals and paper/cardboard packaging were collected by recycle contractor in the reporting month. No chemical waste was collected by licensed contractor in the reporting period. No Type 1, no Type 2 and Type 3 Marine sediment were disposed at Confined Marine Disposal Facility to the East of Sha Chau. The waste flow table under FEP-01/436/2012/F is annexed in **Annex D4**.
- 5.1.6 The Contractor is advised to properly maintain on site C&D materials and wastes collection, sorting and recording system and maximize reuse / recycle of C&D materials and wastes. The Contractor is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.
- 5.1.7 The Contractor is reminded that chemical waste containers should be properly treated and stored temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

6 ENVIRONMENTAL SITE INSPECTION AND AUDIT

- 6.1.1 Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. A summary of the mitigation measures implementation schedule is provided in **Appendix B**.
- 6.1.2 In the reporting month, 4 site inspections were carried out on 7, 14, 21 and 28 February 2024. Joint inspections with the IEC, ER, the Contractor and ET were conducted on 28 February 2024. No non-compliance was recorded during the site inspection. Details of observations recorded during the site inspections are presented in **Table 6.1** respectively.

Parameters	Date	Observations and Recommendations	Follow-up
Air Quality	Nil	Nil	Nil
Noise	Nil	Nil	Nil
Water Quality	Nil	Nil	Nil
Waste/ Chemical Management	Nil	Nil	Nil
Permits/ Licenses	Nil	Nil	Nil

 Table 6.1
 Observations and Recommendations of Site Audit

*The item was under rectification on last reporting month.

6.1.3 All follow-up actions requested by Contractor's ET during the site inspection were undertaken as reported by the Contractor and confirmed in the following weekly site inspection conducted during the reporting period.

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 Summary of Environmental Non-Compliance

7.1.1 No environmental non-compliance was recorded in the reporting month.

7.2 Summary of Environmental Complaints

7.2.1 No environmental related complaint was received in the reporting month. Cumulative statistics on complaint is provided in **Appendix C**.

7.3 Summary of Environmental Summon and Successful Prosecutions

7.3.1 No environmental related prosecution or notification of summons was received in the reporting month. Cumulative statistics on notification of summons and successful prosecutions is provided in **Appendix C**.

8 FUTURE KEY ISSUES

8.1 Construction Programme for the Next Three Months

8.1.1 The major construction works between March 2024 to May 2024 are provided in **Table 8.1**.

Table 8.1Construction Activities in the coming three months

Locations	Site Activities
Barging Facility of Kai Tak West	Material Storage.
Barging Facility of Central Tunnel	Material Storage.
Barging Facility of Sports Park	• Nil
Barging Facility of Yau Mai Tei East	• Nil

8.2 Key Issues for the Coming Month

- 8.2.1 Potential environmental impacts arising from the above construction activities are mainly associated with construction dust, construction noise, and waste management.
- 8.2.2 The barging activity was substantial completed at the end December 2023, and the termination proposal of the Kai Tak Barging Facility under FEP-01/436/2012/F was submitted to EPD in January 2024. The EM&A works will continue until the application is approved.

9 CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

- 9.1.1 4 nos. of environmental site inspections were carried out in February 2024. Recommendations on remedial actions were given by ET and IEC to the Contractor for the deficiencies identified during the site audit.
- 9.1.2 Referring to the Contractor's information, no environmental complaint, notification of summons and successful prosecution was received in the reporting month.

9.2 Recommendations

9.2.1 According to the environmental site inspections performed in the reporting month, the following recommendations were provided:

Air Quality Impact

• No specific observation was identified in the reporting month.

Construction Noise

• No specific observation was identified in the reporting month.

Water Quality Impact

• No specific observation was identified in the reporting month.

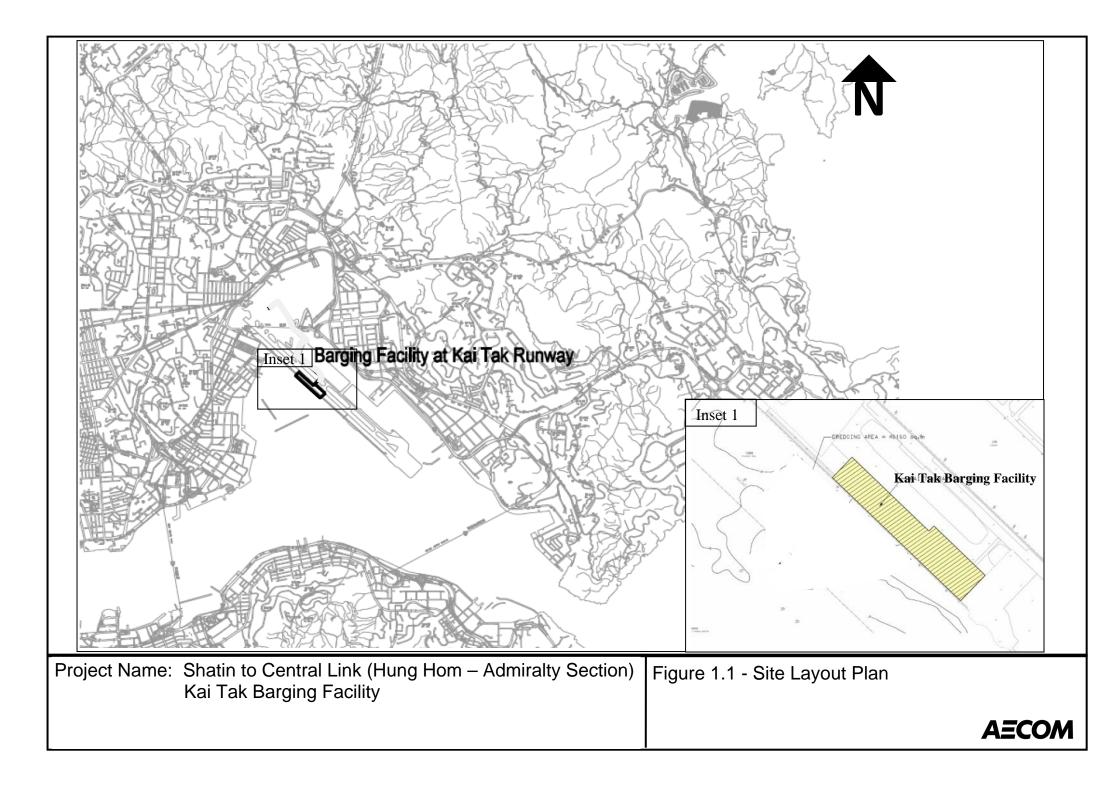
Chemical and Waste Management

• No specific observation was identified in the reporting month.

Permits/licenses

• No specific observation was identified in the reporting month.

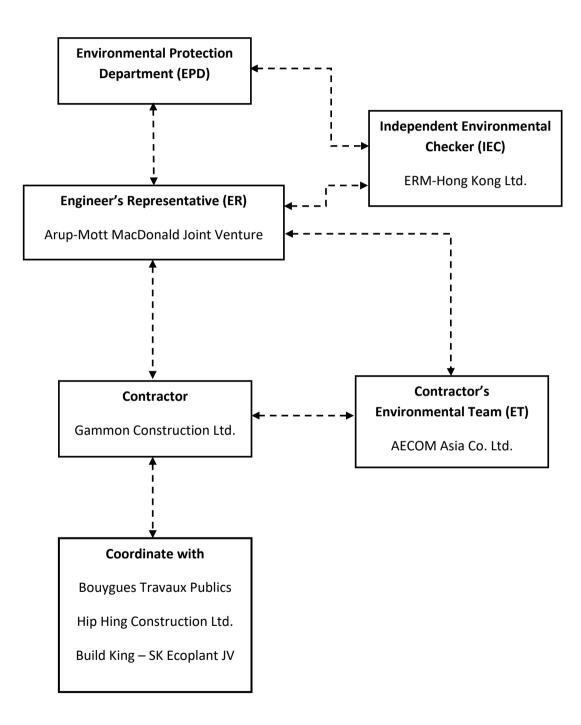
FIGURES



Annex A

Project Organization Structure

Annex A Project Organization Structure



Annex B

Implementation Schedule of Environmental Mitigation Measures

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
Ecological	Impact					
S5.134	Accidental chemical spillage and construction site run-off to the receiving water bodies, mitigation measures such as removing the pollutants before discharge into storm drain and paving the section of construction road between the wheel washing bay and the public road as suggested in Sections 11.216 and 11.219 to 11.256 of the EIA Report shall be adopted.	To minimize the contamination of wastewater discharge	Contractor	All land based works areas	Construction Phase	N/A
Landscape	and Visual Impact					
Constructio	on Phase					
Table 7.9	CM1 - Trees unavoidably affected by the works shall be transplanted as far as possible in accordance with ETWB TC(W) 3/2006 – Tree Preservation.	Transplanting and reuse of affected trees.	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM2a - Compensatory tree planting shall be provided in accordance with ETWB TC(W) 3/2006 – Tree Preservation to compensate for felled trees and maintained until end of the establishment period.	Compensation for the removal of existing trees due to the Project.	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM2b - Compensatory shrub planting shall be provided to compensate for the loss of shrub planting in amenity areas.	Compensation for the removal of existing shrub planting due to the Project.	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM3 - Control of night-time lighting glare	Minimize the night time glare due to the Project during construction phase	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM4 - Erection of decorative screen hoarding compatible with the surrounding setting.	Minimize the visual impact of the Project during construction phase	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM5 - Management of facilities on work sites which give control on the height and disposition/arrangement of all facilities on the works site to minimize visual impact to adjacent VSRs	Control of height and deposition/ arrangement of temporary facilities in works areas	MTR	Works Sites	Construction Phase	N/A
Table 7.9	CM6 - All hard and soft landscape areas disturbed temporarily during construction shall be reinstated on like-to-like basis to the satisfaction of the relevant Government Departments.	Reinstatement of temporary works areas.	MTR	Works Sites	Construction Phase	N/A
Constructio	on Dust Impact					
Table 8.5	 Barging facilities: (i) Transportation of spoils to the barging point – Pave all road surfaces within the barging facilities and provide watering once along with the haul road for every working hours to reduce dust emission by 91.7%. This dust suppression efficiency is derived based on the average haul road traffic, average evaporation rate and an assumed application intensity of 1.0 L/m² once every working hour. Any potential dust impact and watering mitigation would be subject to the actual site condition. For example, a construction activity that produces inherently wet conditions or in cases under rainy weather, the above water application intensity may not be unreservedly applied. While the above watering frequency is to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.0 L/m² to achieve the removal efficiency. The dust levels would be monitored and managed under an EM&A programme as specified in the EM&A Manual. (ii) Unloading of spoil materials – Undertake the unloading process within a 3-sided screen with top tipping hall. Provide water spraying and flexible dust curtains at the discharge point for dust suppression. 	To minimize dust impacts	Contractor	All barging points	Construction phase	V
00.00	(iii) Vehicles leaving the barging facilities – Pass vehicles through the wheel washing facilities provided at site exits.		Oration			V
S8.89	Enclosing the unloading process at barging point by a 3-sided screen with top tipping hall, provision of water spraying and flexible dust curtains to reduce dust emission	To minimize dust impact	Contractor	All barging points	Construction phase	V

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
58.90	 Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices: Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved 	To minimize dust impacts	Contractor	Works areas	Construction phase	V
	 roads, particularly during dry weather. Use of frequent watering for particularly dusty construction areas and areas close to ASRs. Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines. 					V V
	 Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs. 					V
	 Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. Establishment and use of vehicle wheel and body washing facilities at the exit points of the site. Provision of wind shield and dust extraction units or similar dust mitigation measures at the loading area of barging point, and use of water sprinklers at the loading area where dust generation is likely during the loading process of loose material, particularly in dry seasons/ 					V V V
	 periods. Provision of not less than 2.4m high hoarding from ground level along site boundary where adjoins a road, streets or other accessible to the public except for a site entrance or exit. Imposition of speed controls for vehicles on site haul roads. Where possible, routing of vehicles and positioning of construction plant shall be at the 					N/A V N/A
	 where possible, routing or vehicles and possiblening or construction plant shall be at the maximum possible distance from ASRs. Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) shall be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides. 					N/A
	 Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise 					N/A
	 Dust suppression measures (con't) De-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement 	To minimize dust impacts	Contractor	Works areas	Construction phase	N/A
	 The portion of any road where along the site boundary should be kept clear of dusty materials. Use of frequent watering for any dusty construction process (e.g. breaking works) to reduce dust emissions. 					V V
	 Emission from Vehicles and Plants All vehicles shall be shut down in intermittent use. Only well-maintained plant should be operated on-site and plant should be serviced regularly to avoid emission of black smoke. All diesel fuelled construction plant within the works areas shall be powered by ultra low sulphur diesel fuel (ULSD) 	Reduce air pollution emission from construction vehicles and plants	Contractor	Works areas	Construction phase	V V V
Airborne No	•					
Constructio						-
\$9.55	 The following good site practices shall be implemented: Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program Silencers or mufflers on construction equipment shall be utilized and shall be properly 	To minimize construction noise impact	Contractor	Works areas	Construction phase	V V
	 maintained during the construction program Mobile plant, if any, shall be sited as far from NSRs as possible Machines and plant (such as trucks) that may be in intermittent use shall be shut down between 					V V
	 work periods or shall be throttled down to a minimum Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs Material stockpiles and other structures shall be effectively utilized, wherever practicable, in 					N/A
	Material stockpiles and other structures shall be effectively utilized, wherever practicable, in					N/A

Shatin to Central Link (Hung Hom – Admiralty Section) Kai Tak Barging Facility

AECOM

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure
,	screening noise from on-site construction activities			
/	 Install movable noise barriers, acoustic mat or full enclosure, screen the noisy plants during operation Air compressors or Hand-held breaker shall be fitted with valid noise emission labels during operation 	To minimize construction noise impact	Contractor	Works areas
Water Qual	ity Impact			
Constructio	on Phase			
S11.216	The following mitigation measures are proposed to minimize the potential water quality impacts from the construction works at or close to the seafront:	To minimize release of construction wastes from construction works	Contractor	Construction works close to the seafron
	• Temporary storage of construction materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction and demolition materials shall be located well away from the seawater front and storm drainage during carrying out of the works.	at or close to the seafront		
	Stockpiling of construction and demolition materials and dusty materials shall be covered and located away from the seawater front and storm drainage.			
	 Construction debris and spoil shall be covered up and/or disposed of as soon as possible to avoid being washed into the nearby receiving waters. 			
S11.222 to 11.245	 The site practices outlined in ProPECC PN 1/94 "Construction Site Drainage" shall be followed where practicable. Surface Run-off Surface Run-off from construction sites shall be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers shall be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries shall be provided where necessary to intercept storm run-off from outside the site so that it will not wash across the site. Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks. Silt removal facilities, channels and manholes shall be maintained and the deposited silt and grit shall be removed regularly, at the onset of and after each rainstorm to prevent local flooding. Any practical options for the diversion and re-alignment of drainage shall comply with both engineering and environmental requirements in order to provide adequate hydraulic capacity of all drains. Minimum distances of 100 m shall be maintained between the discharge points of construction site runoff and the existing saltwater intakes. Construction works shall be programmed to minimize soil excavation works in rainy seasons (April to September). If excavation in soil cannot be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces shall be corvered e.g. by tarpaulin, and temporary access roads shall be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing acrose exposed soil surfaces. Arrangements shall always be in place in such a way that adequate shall be provided where necessary. Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the f	To minimize water quality impacts from construction site runoff and general construction activities	Contractor	Works areas

	When to implement the measures?	Implementation Status
	Construction phase	V
	P	N/A
s at or ont	Construction Phase	
		V
		V
		V
3	Construction Phase	
		V
		V
		V
		N/A
		N/A
		V
		N/A

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	 Good site practices shall be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis. Boring and Drilling Water 					V
	 Water used in ground boring and drilling for site investigation or rock / soil anchoring shall as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater shall be discharged into storm drains via silt removal facilities. Wheel Washing Water 					N/A
	 All vehicles and plant shall be cleaned before they leave a construction site to minimize the deposition of earth, mud, debris on roads. A wheel washing bay shall be provided at every site exit if practicable and wash-water shall have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road shall be paved with backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains. 					V
	 <u>Bentonite Slurries</u> Bentonite slurries used in diaphragm wall and bore-pile construction shall be reconditioned and used again wherever practicable. If the disposal of a certain residual quantity cannot be avoided, the bentonite slurries shall either be dewatered or mixed with inert fill material for disposal to a public filling 					N/A
	 area. If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewer, storm drains or the receiving waters as set out in the TM-DSS. 					N/A
	 Water for Testing & Sterilization of Water Retaining Structures and Water Pipes Water used in water testing to check leakage of structures and pipes shall be used for other purposes 					N/A
	 as far as practicable. Surplus unpolluted water will be discharged into storm drains. Sterilization is commonly accomplished by chlorination. Specific advice from EPD shall be sought during the design stage of the works with regard to the disposal of the sterilizing water. The sterilizing water shall be used again wherever practicable. 					N/A
	 Acid Cleaning, Etching and Pickling Wastewater Acidic wastewater generated from acid cleaning, etching, pickling and similar activities shall be neutralized to within the pH range of 6 to 10 before discharging into foul sewers. If there is no public foul sewer in the vicinity, the neutralized wastewater shall be tankered off site for disposal into foul sewers or treated to a standard acceptable to storm drains and the receiving waters. 					V
	 Wastewater from Site Facilities Wastewater collected from any temporary canteen kitchens, including that from basins, sinks and floor drains, shall be discharged into foul sewer via grease traps. In case connection to the public foul sewer is not feasible, wastewater generated from kitchens or canteen, if any, shall be collected in a temporary storage tank. A licensed waste collector shall be deployed to clean the temporary storage tank on a regular basis. 					N/A
	 Drainage serving an open oil filling point shall be connected to storm drains via petrol interceptors with peak storm bypass. Vehicle and plant servicing areas, vehicle wash bays and lubrication bays shall as far as possible be located within roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor. Oil leakage or spillage shall be contained and cleaned up immediately. Waste oil shall be collected and stored for recycling or disposal in accordance with the Waste Disposal 					N/A V
S11.246 & 11.247	Ordinance. Construction work force sewage discharges on site are expected to be discharged to the nearby existing trunk sewer or sewage treatment facilities. If disposal of sewage to public sewerage system is not feasible, appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the construction workers over the construction site to prevent direct disposal of sewage into the water environment. The Contractor shall also be responsible for waste disposal and maintenance practices. Notices shall be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment.	To minimize water quality impacts due to sewage generated from construction workforce	Contractor	Works areas	Construction Phase	N/A

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S11.248	In case seepage of uncontaminated groundwater occurs, groundwater shall be pumped out from the works areas and discharged into the storm system via silt removal facilities. Uncontaminated groundwater from dewatering process shall also be discharged into the storm system via silt traps.	To minimize impact from discharge of uncontaminated groundwater	Contractor	Works areas	Construction Phase	V
S11.252	 The following good site practices shall be adopted for the proposed barging points: all vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash all hopper barges shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material construction activities shall not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site loading of barges and hoppers shall be controlled to prevent splashing of material into the surrounding water. Barges or hoppers shall not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation 	To minimize water quality impacts generated from the barging points.	Contractor	Barging points	Construction Phase	N/A
S11.253	There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. All the runoff and wastewater generated from the works areas shall be treated so that it satisfies all the standards listed in the TM-DSS. Minimum distances of 100 m shall be maintained between the discharge points of construction site effluent and the existing seawater intakes. The beneficial uses of the treated effluent for other on-site activities such as dust suppression, wheel washing and general cleaning etc., can minimize water consumption and reduce the effluent discharge volume. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring shall be carried out in accordance with the WPCO license which is under the ambit of Regional Office (RO) of EPD.	To minimize water quality impact from effluent discharges from construction sites	Contractor	All construction works areas	Construction Phase	N/A
S11.254	Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation shall be observed and complied with for control of chemical wastes.	To minimize water quality impact from accidental spillage of chemical	Contractor	All construction works areas	Construction Phase	V
S11.255	Any service shop and maintenance facilities shall be located on hard standings within a bunded area, and sumps and oil interceptors shall be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage shall only be undertaken within the areas appropriately equipped to control these discharges.	To minimize water quality impact from accidental spillage of chemical	Contractor	All construction works areas	Construction Phase	N/A
S11.256	Disposal of chemical wastes shall be carried out in compliance with the Waste Disposal Ordinance. The "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes" published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows:	To minimize water quality impact from accidental spillage of chemical	Contractor	All construction works areas	Construction Phase	
	 Suitable containers shall be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. Chemical waste containers shall be suitably labelled, to notify and warn the personnel who are 					V
	 handling the wastes, to avoid accidents. Storage area shall be selected at a safe location on site and adequate space shall be allocated to the storage area. 					V
Vaste Mana	agement Implications					
Constructio	on Phase					
S12.75	 Good Site Practices and Waste Reduction Measures Prepare a Waste Management Plan (WMP) approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites. 	To reduce waste management impacts	Contractor	All Work Sites	Construction Phase	V
	 Training of site personnel in, site cleanliness, proper waste management and chemical handling procedures; Provision of sufficient waste disposal points and regular collection of waste; 					V V

S12.75	 Good Site Practices and Waste Reduction Measures Prepare a Waste Management Plan (WMP) approved by the Engineer/Supervising Officer of the Project based on current practices on construction sites. Training of site personnel in, site cleanliness, proper waste management and chemical handling procedures; Provision of sufficient waste disposal points and regular collection of waste; 	To reduce waste management impacts	Contractor	All Work Sites
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IA Ref. / M&A Log lef.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	 Appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and Separation of chemical wastes for special handling and appropriate treatment. 					V N/A V
12.76	 Good Site Practices and Waste Reduction Measures (con't) Sorting of demolition debris and excavated materials from demolition works to recover reusable/ 	To achieve waste reduction	Contractor	All Work Sites	Construction Phase	V
	recyclable portions (i.e. soil, broken concrete, metal etc.);Segregation and storage of different types of waste in different containers, skips or stockpiles to					V
	 enhance reuse or recycling of materials and their proper disposal; Encourage collection of aluminum cans by providing separate labeled bins to enable this waste to be segregated from other general refuse generated by the workforce; 					N/A
	 Proper storage and site practices to minimize the potential for damage or contamination of construction materials; 					N/A
	 Plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste; and 					N/A V
	 Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycle. 					V
12.77	Good Site Practices and Waste Reduction Measures (con't) The Contractor shall prepare and implement a WMP as part of the EMP in accordance with ETWB TCW No. 19/2005 which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities. Such a management plan shall incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP shall be submitted to the Engineer for approval. The Contractor shall implement the waste management practices in the EMP throughout the construction stage of the Project. The EMP shall be reviewed regularly and updated by the Contractor, preferably in a monthly basis.	To achieve waste reduction	Contractor	All Work Sites	Construction Phase	V
2.78	Good Site Practices and Waste Reduction Measures (con't) C&D materials would be reused in other local concurrent projects as far as possible. If all reuse outlets are exhausted during the construction phase, the C&D materials would be disposed of at Taishan, China as a last resort.	To achieve waste reduction	Contractor	All Work Sites	Construction Phase	N/A
2.79	Storage, Collection and Transportation of Waste Should any temporary storage or stockpiling of waste is required, recommendations to minimize the impacts include:	To minimize potential adverse environmental impacts arising from	Contractor	Work Sites	Construction Phase	N/A
	 Waste, such as soil, shall be handled and stored well to ensure secure containment, thus minimizing the potential of pollution; Maintain and clean storage areas routinely; Stocknilling area shall be provided with source and water aproving system to provent materials. 	waste storage				N/A V V
	 Stockpiling area shall be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; and Different locations shall be designated to stockpile each material to enhance reuse. 					N/A
12.80	 Different locations shall be designated to stockpile each material to enhance redse. Storage, Collection and Transportation of Waste (con't) Waste haulier with appropriate permits shall be employed by the Contractor for the collection and transportation of waste from works areas to respective disposal outlets. The following suggestions shall be enforced to minimize the potential adverse impacts: Remove waste in timely manner 	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	Work Sites	Construction Phase	V
	 Waste collectors shall only collect wastes prescribed by their permits Impacts during transportation, such as dust and odour, shall be mitigated by the use of covered trucks or in enclosed containers 					V N/A
	 Obtain relevant waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 345) and the Land (Miscellaneous Provisions) Ordinance (Cap. 28) 					v

Shatin to Central Link (Hung Hom – Admiralty Section) Kai Tak Barging Facility

AECOM

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
	 Waste shall be disposed of at licensed waste disposal facilities Maintain records of quantities of waste generated, recycled and disposed 					V
S12.81	 Storage, Collection and Transportation of Waste (con't) Implementation of trip ticket system with reference to DevB TC(W) No.6/2010 to monitor disposal of waste and to control fly-tipping at PFRFs or landfills. A recording system for the amount of waste generated, recycled and disposed (including disposal sites) shall be proposed. 	To minimize potential adverse environmental impacts arising from waste collection and disposal	Contractor	Work Sites	Construction Phase	V
S12.83 – 12.86	 Sorting of C&D Materials Sorting to be performed to recover the inert materials, reusable and recyclable materials before disposal off-site. Specific areas shall be provided by the Contractors for sorting and to provide temporary storage areas for the sorted materials. The C&D materials shall at least be segregated into inert and non-inert materials, in which the inert portion could be reused and recycled as far as practicable before delivery to PFRFs as mentioned for beneficial use in other projects. While opportunities for reusing the non-inert portion shall be investigated before disposal of at designated landfills. Possibility of reusing the spoil in the Project will be continuously investigated in the detailed design and construction stages, it includes backfilling to cut and cover construction works for the hung here acuth and parth approach tuppole. 	To minimize potential adverse environmental impacts during the handling, transportation and disposal of C&D materials	Contractor	Work Sites	Construction Phase	V V V
S12.91 – 12.94	 Hung Hom south and north approach tunnels. Sediments (con't) Stockpiling of contaminated sediments shall be avoided as far as possible. If temporary stockpiling of contaminated sediments is necessary, the excavated sediment shall be covered by tarpaulin and the area shall be placed within earth bunds or sand bags to prevent leachate from entering the ground, nearby drains and/or surrounding water bodies. The stockpiling areas shall be completely paved or covered by linings in order to avoid contamination to underlying soil or groundwater. Separate and clearly defined areas shall be provided for stockpiling of contaminated and uncontaminated materials. Leachate, if any, shall be collected and discharged according to the Water Pollution Control Ordinance (WPCO). In order to minimise the potential odour / dust emissions during excavation and transportation of the sediment, the excavated sediments shall be wetted during excavation / material handling and shall be properly covered when placed on trucks or barges. Loading of the excavated sediment slurry to the surrounding water. The barge transporting the sediments to the designated disposal sites shall be equipped with tight fitting seals to prevent leakage and shall not be filled to a level that would cause overflow of materials or laden water during loading or transportation. In addition, monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by the DEP. In order to minimise the exposure to contaminated materials, workers shall, when necessary, wear appropriate personal protective equipments (PPE) when handling contaminated sediments. Adequate washing and cleaning facilities shall also be provided on site. 	To ensure handling of sediments are in accordance to statutory requirements	Contractor	Work Sites, Sediment disposal sites	Construction Phase	N/A
S12.95	 Sediments (con't) A possible arrangement for Type 3 disposal is by geosynthetic containment. A geosynthetic containment method is a method whereby the sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal. The technology is readily available for the manufacture of the geosynthetic containers to the project-specific requirements. Similar disposal methods have been used for projects in Europe, the USA and Japan and the issues of fill retention by the geosynthetic fabrics, possible rupture of the containers and sediment loss due to impact of the container on the seabed have been addressed. 	To ensure handling of sediments are in accordance to statutory requirements	Contractor	Work Sites, Sediment disposal sites	Construction Phase	N/A

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
S12.97	Containers for Storage of Chemical Waste The Contractor shall register with EPD as a chemical waste producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Containers used for storage of chemical waste shall:	To register with EPD as a Chemical waste producer and store chemical waste in	Contractor	Work Sites	Construction Phase	
	• Be compatible with the chemical wastes being stored, maintained in good condition and securely sealed;	appropriate containers				V
	 Have a capacity of less than 450 litters unless the specifications have been approved by EPD; and Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2. 					V
	Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Waste Disposal (Chemical Waste) (General) Regulation.					· · · · · · · · · · · · · · · · · · ·
S12.98	 Chemical Waste Storage Area Be clearly labeled to indicate corresponding chemical characteristics of the chemical waste and used for storage of chemical waste only; Be enclosed on at least 3 sides; Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the 	To prepare appropriate storage areas for chemical waste at works areas	Contractor	Work Sites	Construction Phase	V V V
	 greatest; Have adequate ventilation; Be covered to prevent rainfall from entering; and Be properly arranged so that incompatible materials are adequately separated. 					V V V
S12.99	 Chemical Waste Lubricants, waste oils and other chemical wastes would be generated during the maintenance of vehicles and mechanical equipments. Used lubricants shall be collected and stored in individual containers which are fully labelled in English and Chinese and stored in a designated secure place. 	To clearly label the chemical waste at works areas	Contractor	Work Sites	Construction Phase	N/A
S12.100	Collection and Disposal of Chemical Waste A trip-ticket system shall be operated in accordance with the Waste Disposal (Chemical Waste) (General) Regulation to monitor all movements of chemical waste. The Contractor shall employ a licensed collector to transport and dispose of the chemical wastes, to either the approved CWTC at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	To monitor the generation, reuse and disposal of chemical waste	Contractor	Work Sites	Construction Phase	N/A
S12.101	General Refuse General refuse shall be stored in enclosed bins or compaction units separate from C&D materials and chemical waste. A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D materials and chemical wastes. Preferably, an enclosed and covered area shall be provided to reduce the occurrence of wind-blown light material.	To properly store and separate from other C&D materials for subsequent collection and disposal	Contractor	Work Sites	Construction Phase	V
S12.102	General Refuse (con't) The recyclable component of general refuse, such as aluminum cans, paper and cleansed plastic containers shall be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste shall be set up by the Contractor. The Contractor shall also be responsible for arranging recycling companies to collect these materials.	To facilitate recycling of recyclable portions of refuse	Contractor	Work Sites	Construction Phase	V
S12.103	General Refuse (con't) The Contractor shall carry out an education programme for workers in avoiding, reducing, reusing and recycling of materials generation. Posters and leaflets advising on the use of the bins shall also be provided in the sites as reminders.	To raise workers' awareness on recycling issue	Contractor	Work Sites	Construction Phase	V

EIA Ref. / EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	When to implement the measures?	Implementation Status
/	Accidental spillage	To minimize potential	Contractor	Work Sites	Construction	
	To prevent accidental spillage of chemicals, the following is recommended:	adverse environmental			Phase	
	 Proper storage and handling facilities will be provided. 	impacts arising from				V
	 All the tanks, containers, storage area will be bunded and the locations will be locked as far as possible from the sensitive watercourse and stormwater drains. 	accidental spillage				V
	 The contractor will register as a chemical waste producer if chemical wastes would be generated. Storage of chemical waste arising from the construction activities will be stored with suitable labels and warnings. 					V
	• Disposal of chemical wastes will be conducted in compliance with the requirements as stated in the Waste disposal (Chemical Waste) (General) Regulation.					V

Legend: V = implemented;

x= not implemented;@= partially implemented;N/A= not applicable

Annex C

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

Annex C

Cumulative Statistics on Complaints, Notification of Summons and Successful Prosecutions

	Date received	Subject	Status	Total no. received in this month	Total no. received since project commencement
Environmental complaints				0	1
Notification of summons				0	0
Successful prosecutions				0	0

Annex D

Monthly Summary Waste Flow Table

Annex D1 Monthly Summary Waste Flow Table (Note 3)

Monthly Summary Waste Flow Table for 2024 - (Central Kowloon Route - Kai Tak West)(Gammon Construction Limited)

															D Materials (i.e. 0	C&D Wastes) G	enerated Monthly	Actual Quantities of Contaminated Soil Monthly	Actual Quantities of Land-based Sediment Monthly			Actual Quantities of Marine-based sediment Monthly			
Month			Generated				Disp	osed			Reused			Recycled		Disp	oosed	Reused	Reused Disposed		osed				
WORT	Fill Material		Artificial Materia	el de la companya de		N 1	N 1	N 1											Reused in the Contract	Disposed at D	Designated Site	Dispo	osed at Designated	d Site	
	Soil and Rock	Broken Concrete	Asphalt	Building Derbis	Total Quantity Generated	Disposed as Public Fills at TKO137	Disposed as Public Fills at TM38	Disposed as Public Fills at CWPFBP	Total Quantity Disposal	Reused in the Contract	Reused in Other Projects	Total Quantity Reused	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	General Refuse (Note 2)	Reused in the Contract	Type 1 (Cat. L)	Type 1 (Cat. M _p)	Type 2 (Cat. M _f , Cat. H)	Type 1 (Cat. L, Cat. M _p)	Type 2 (Cat. M _t , Cat. H, Cat. H _p)	Type 3 (Cat. H _f)	
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000L)	('000Kg)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	
Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Mar																							i 1		
Apr																									
May																							()		
Jun																							í – – – – – – – – – – – – – – – – – – –		
SUB-TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jul																									
Aug																							()		
Sep																							()		
Oct																							í – – – – – – – – – – – – – – – – – – –		
Nov																									
Dec																							, <u> </u>		
TOTAL in 2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
CUMULATIVE TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Notes:

Assume the density of fill is 2 ton/m³.

2. Refuse disposed to NENT landfill.

3. The data presented in this waste flow table only included the waste generated from Kai Tak Barging Facility under FEP-01/436/2012/F, other data presented under the related Further Environmental Permit (FEP-01/457/2013/C).

Annex D2 Monthly Summary Waste Flow Table (Note 3)

Monthly Summary Waste Flow Table for 2024 - (Kai Tak Sports Park)(Hip Hing Engineering Co Ltd)

					Actual Quantities	of Inert C&D Ma	terials Generated	Monthly (Note 1)				Actual Quantities of Non-inert C&D Materials (i.e. C&D Wastes) Generated Monthly						Actual Quantities of Land-based Sediment Monthly			Actual Quantities of Marine-based sediment Monthly			
Month			Generated				Disp	osed			Reused			Recycled			Disposed		Reused Dispose		osed	Disposed			
MORT	Fill Material		Artificial Materia	al		Diseased as	Diseased as	Disposed as						Den er/					Reused in the Contract	Disposed at Designated Site		Disposed at Designated		d Site	
	Soil and Rock	Broken Concrete	Asphalt	Building Derbis	Total Quantity Generated	Disposed as Public Fills at TKO137	Disposed as Public Fills at TM38	Public Fills at CWPFBP	Total Quantity Disposal	Reused in the Contract	Reused in Other Projects	Total Quantity Reused	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste	General Refuse (Note 2)	Reused in the Contract	Type 1 (Cat. L)	Type 1 (Cat. M _p)	Type 2 (Cat. M _f , Cat. H)	Type 1 (Cat. L, Cat. M _p)	Type 2 (Cat. M _t , Cat. H, Cat. H _p)	Type 3 (Cat. H _f)	
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000L)	('000Kg)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)					
Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Mar																									
Apr																									
May																									
Jun																									
SUB-TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jul																									
Aug																									
Sep																									
Oct																									
Nov																									
Dec																									
TOTAL in 2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
CUMULATIVE TOTAL							0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Notes:

1. Assume the density of fill is 2 ton/m³.

2. Refuse disposed to NENT landfill.

3. The data presented in this waste flow table only included the waste generated from Kai Tak Barging Facility under FEP-01/436/2012/F, other data presented under the related Environmental Permit (EP-554/2017).

Annex D3 Monthly Summary Waste Flow Table (Note 3)

Monthly Summary Waste Flow Table for 2024 - (Central Kowloon Route - Central Tunnel)(Bouygues Travaux Publics)

															D Materials (i.e. 0	C&D Wastes) G	enerated Monthly	Actual Quantities of Contaminated Soil Monthly	Actual Quantities of Land-based Sediment Monthly			Actual Quantities of Marine-based Sediment Monthly			
Month			Generated				Disp	osed			Reused			Recycled		Disp	oosed	Reused	Reused Disposed						
WORT	Fill Material		Artificial Materia	l I		Diseased as	Diseased as	Discount of	Total Quantity Disposal					Den er/					Reused in the Contract	Disposed at D	Designated Site	Dispo	osed at Designated	.d Site	
	Soil and Rock	Broken Concrete	Asphalt	Building Derbis	Total Quantity Generated	Disposed as Public Fills at TKO137	Disposed as Public Fills at TM38	Disposed as Public Fills at CWPFBP		Reused in the Contract	Reused in Other Projects	Total Quantity Reused	Metals	Paper/ cardboard packaging	Plastics	Chemical Waste		Reused in the Contract	Type 1 (Cat. L)	Type 1 (Cat. M _p)	Type 2 (Cat. M _f , Cat. H)	Type 1 (Cat. L, Cat. M _p)	Type 2 (Cat. M _i , Cat. H, Cat. H _o)	Type 3 (Cat. H _f)	
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000L)	('000Kg)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)					
Jan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Mar																							()		
Apr																							í – – – – – – – – – – – – – – – – – – –		
May																							1	1	
Jun																								1	
SUB-TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Jul																							í – – – – – – – – – – – – – – – – – – –		
Aug																							1	1	
Sep																							1	1	
Oct																									
Nov																									
Dec																									
TOTAL in 2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2023	0.000	1589.680	0.000	0.000	1589.680	1464.040	125.640	0.000	1589.680	284.960	0.000	284.960	0.000	0.000	0.000	0.000	9.290	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
TOTAL in 2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
CUMULATIVE TOTAL	0.000	0.000	0.000	1589.680	1464.040	125.640	0.000	1589.680	284.960	0.000	284.960	0.000	0.000	0.000	0.000	9.290	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

Notes:

1. Assume the density of fill is 2 ton/m³.

2. Refuse disposed to NENT landfill.

3. The data presented in this waste flow table only included the waste generated from Kai Tak Barging Facility under FEP-01/436/2012/F, other data presented under the related Environmental Permit (EP-457/2013/C).

Annex D4 Monthly Summary Waste Flow Table (Note 3)

Monthly Summary Waste Flow Table for 2024 - (Yau Ma Tei East)(BUILD KING - SK ECOPLANT JOINT VENTURE)

					Actual Quantities	of Inert C&D Mate	erials Generated	Monthly (Note 1)				Actual Quantitie	s of Non-inert C&	D Materials (i.e.	C&D Wastes) G	enerated Monthly	Actual Quantities of Contaminated Soil Monthly	Actual Quantities of Land-based Sediment Monthly			Actual Quantities of Marine-based Sediment Monthly		
			Generated				Disp	osed		Reused			Recycled			Dis	posed	Reused		Disposed		Disposed		
Month	Fill Material		Artificial Materia	l	7.10	Disposed as	Disposed as	Disposed as	Total Quantity	Reused in		T 10 0		Paper/		Chemical	0 10 /		Dispo	osed at Designate	ed Site	Disposed at Designated S		d Site
	Soil and Rock	Broken Concrete	Asphalt	Building Derbis	Total Quantity Generated	Public Fills at TKO137	Public Fills at TM38	Public Fills at CWPFBP	Disposal		Reused in Other Projects	Total Quantity Reused	Metals	cardboard packaging	Plastics	Waste	General Refuse (Note 2)	Reused in the Contract	Type 1 (Cat. L)	Type 1 (Cat. M _p)	Type 2 (Cat. M _t , Cat. H)	Type 1 (Cat. L, Cat. M _p)	Type 2 (Cat. M _f , Cat. H, Cat. H _p)	Type 3 (Cat. H _f)
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000L)	('000Kg)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)				
Jan	0.000	0.000 0.000 0.000 0.0				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mar																								
Apr																								
May																								
Jun																								
SUB-TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Jul																								
Aug																								
Sep																								
Oct																								
Nov																								
Dec																								
TOTAL in 2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL in 2023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13316.000	0.000	0.000	0.000	0.000	0.000
TOTAL in 2024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CUMULATIVE TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13316.000	0.000	0.000	0.000	0.000	0.000

Notes:

Assume the density of fill is 2 ton/m³.
 Refuse dispersed to NENT landfill

Results discussed by the second of the second second