MOTT MACDONALD

Expansion of Hong Kong International Airport into a Three-Runway System

Construction Phase Monthly EM&A Report No. 79 (For July 2022)

August 2022

Airport Authority Hong Kong

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Mott MacDonald Hong Kong Limited
registered in Hong Kong no. 236497

Airport Authority Hong Kong

This Monthly EM&A Report No. 79 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

Terence Kong
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date 12 August 2022

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By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
Hong Kong International Airport
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Principal Manager, Environmental Compliance

12 August 2022

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 79 (July 2022)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 79 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 12 August 2022.

We write to verify the captioned submission in accordance with the requirement stipulated in Condition 3.5 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 3922 9376.

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CTCC	Construction Traffic Control Centre
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
EPSS	Emergency Power Supply Systems
ET	Environmental Team
FCZ	Fish Culture Zone
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
PM	Project Manager
SC	Sha Chau
SCZ	Speed Control Zone
SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings

SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

Executive summary

The "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) serves to meet the future air traffic demands at Hong Kong International Airport (HKIA). On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 79th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 July 2022.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and land-based ground improvement works, together with runway, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

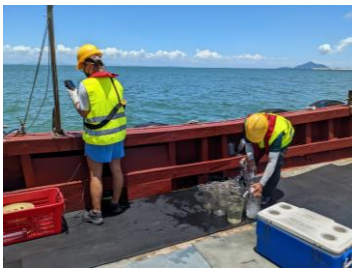
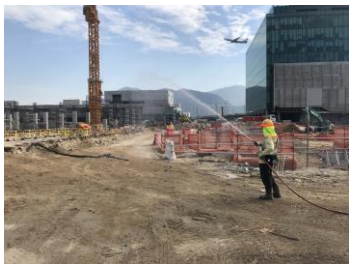
EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on the information including ET's observations, records of Maritime Surveillance System (MSS), and contractors' site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

Snapshots of EM&A Activities in the Reporting Period

		
Impact Water Quality Monitoring conducted by ET	Dust Suppression measure conducted by Contractor	Inspection of Contractor's Wastewater Treatment Facility by ET

Results of Impact Monitoring

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

The water quality monitoring results for all parameters, except dissolved oxygen (DO), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO, some of the testing results triggered the relevant Action and/or Limit Levels, and corresponding investigations were conducted accordingly. The investigation findings revealed that the cases were not related to the Project. To conclude the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Excavation and lateral support systems installation; and
- Stockpiling.

Contract 3303 Third Runway and Associated Works

- Architectural, builder's and finishing works;
- Footing and utilities work;
- Box culvert construction;
- Operation of asphalt plant; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation; and
- Software development.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works;
- Drainage and utilities works; and
- Building construction.

Contract 3308 Foreign Object Debris Detection System

- Calibration and site acceptance test for foreign object debris detection sensor;
- Rectification work for handover sensor system; and
- Drilling of earthing and lightning pit.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Construction of walls and slabs;
- Installation of pipe piles;
- Land-based ground improvement works; and
- Backfilling works.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, builder's work and finishing works; and
- Defects and outstanding works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Reinforced concrete works;
- Site setup works; and
- Excavation.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Block wall construction;
- Drainage works;
- Bridge demolition;
- Backfilling;
- Temporary road construction; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection of guide rail; and
- Concrete plinth and stitch construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Laying of water mains;
- Paving works; and
- Road works.

Contract 3723 Construction Support Facilities

- Clearance works.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Excavation;
- Falseworks and formworks; and
- Backfilling.

Contract 3802 APM and BHS Tunnels and Related Works

- Installation of dewatering well;
- Excavation and lateral supports; and
- Tunnel construction.

Construction Support (Services / Licences):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant.

Summary Table

The following table summarises the key findings of the EM&A programme during the reporting period:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received		√	No construction activities-related complaint was received during the reporting period.	Nil
		√	In the previous reporting period, a complaint regarding dust issue at 3RS construction site was received on 28 June 2022.	ET requested the relevant contractors to provide information related to the complaint. During regular site inspections, dust was observed when there were vehicle movements on haul roads and was rectified by the relevant contractor. A joint site inspection was conducted subsequently in which no fugitive dust was observed when there were vehicle movements at the concerned haul roads and the roads was wet during the inspection. All contractors were reminded to properly implement dust mitigation measures, especially water spraying at haul roads in accordance the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
			In the previous reporting period, a complaint regarding dust issue at 3RS construction site was received on 28 June 2022.	ET requested the relevant contractor to provide information related to the complaint. During regular site inspections, dust was observed when there were vehicle movements on haul roads and was rectified by the relevant contractor. A joint site inspection was conducted subsequently in which no fugitive dust was observed when there were vehicle movements at the concerned haul roads and the roads was wet during the inspection. All contractors were reminded to properly implement dust mitigation measures, especially water spraying at haul roads in accordance the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.
			In the previous reporting period, a complaint regarding dust issue at 3RS construction site was received on 30 June 2022.	The complaint is under investigation. Findings will be reported in the next Monthly EM&A Report.

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Notification of any summons and status of prosecutions		√	No notification of summons nor prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:
^ Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1[1]. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

Construction of the Project is to proceed in the general order of diversion of the submarine aviation fuel pipelines, diversion of the submarine power cables, land formation, and construction of infrastructure, followed by construction of superstructures.

The summary of construction works programme can be referred to **Section 1.4**.

1.2 Scope of this Report

This is the 79th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 July 2022.

1.3 Project Organisation

The Project's organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance, Sustainability	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leaders	Heidi Yu	2828 5704
		Ken Wong	2828 5817

[1] The Manual is available on the Project's dedicated website (accessible at: http://env.threerunwaysystem.com/en/index.html).

Party	Position	Name	Telephone
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Reclamation Works:

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	Environmental Officer	Zhang Bin Wang	3763 1451

Airfield Works:

Party	Position	Name	Telephone
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Gabriel Wong	6114 9590
Contract 3305 Airfield Ground Lighting System (ADB Safegate Hong Kong Limited)	Project Manager	Allam Al-Turk	2944 9725
	Environmental Officer	Calvin Sze	9205 9277
Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS (Chinney Alliance Engineering Limited)	Project Director	Dennis Yam	9551 9920
	Environmental Officer	Richard Liu	9216 8990
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Ken Tang	9640 5397
	Environmental Officer	Albert Chan	9700 1083
Contract 3308 Foreign Object Debris Detection System (DAS Aviation Services Group)	Project Manager	Jeffrey Yau	9873 7422
Contract 3310 North Runway Modification Works (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Federick Wong	9842 2703

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Project Manager	Wyman Lau	6112 9753
	Health Safety Environmental Manager	Mike Leung	6625 2550
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Ray Cheung	9785 1566
Contract 3404 Integrated Airport Control System (Shun Hing Systems Integration Co., Ltd.)	Project Manager	Andy Ng	9102 2739
	Environmental Officer	Richard Ng	9802 9577
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Jacky Lai	9028 8975
Contract 3408 Third Runway Concourse and Apron Works (Beijing Urban Construction Group Company Limited and Chevalier (Construction) Company Limited Joint Venture)	Assistant Project Manager	Qian Zhang	5377 7976
	Environmental Officer	Malcolm Leung	7073 7559

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Fanny Law	6184 4650

Automated People Mover (APM) and Baggage Handling System (BHS):

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	H Y Yue	9185 8186
	Project Manager	Kunihiro Tatecho	9755 0351

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Environmental Officer	Y M Tong	5316 9801
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	John Mak	6273 8703
Contract 3723 Eastern Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Ltd. Joint Venture.)	Deputy Project Director	Philip Kong	9337 8700
	Environmental Officer	Eddie Suen	6338 8862
Contract 3728 Minor Site Works (Shun Yuen Construction Company Limited)	Contract Manager	C K Liu	9194 8739
	Environmental Officer	Dan Leung	6856 5899
Contract 3733 Emergency Repair Service (Wing Hing Construction Co., Ltd.)	Project Manager	Michael Kan	9206 0550
	SHE Manager	Mike Leung	6625 2550

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Kingsley Chiang	9424 8437
	Environmental Officer	Eunice Kwok	9243 1331
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Construction Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Phoebe Ng	9869 1105

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	General Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and ground improvement works, together with runway, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period.

Table 1.2: Summary of Status of All Environmental Aspects under the Updated EM&A Manual

Parameters	EM&A Requirements	Status
Air Quality		
Baseline Monitoring	At least 14 consecutive days before commencement of construction work	The baseline air quality monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	At least 3 times every 6 days	On-going
Noise		
Baseline Monitoring	Daily for a period of at least two weeks prior to the commencement of construction works	The baseline noise monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Water Quality		
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides, for at least four weeks prior to the commencement of marine works.	The baseline water quality monitoring result was reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	Three days per week, at mid-flood and mid-ebb tides.	On-going for reclamation works. General impact water quality monitoring for water jetting works was completed on 23 May 2017.
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	At least four weeks	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	Three times per week until completion of DCM works.	Due to the completion of all marine-based DCM works within April 2022, regular DCM monitoring was ceased at all

Parameters	EM&A Requirements	Status
		monitoring stations starting from 28 April 2022 and would be resumed if there are marine-based DCM works in the coming future.
Sewerage and Sewage Treatment		
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	Methodology to be prepared and submitted to EPD one year before the scheduled commencement of operation of the proposed third runway	The proposed methodology of the annual sewage flow monitoring was approved by EPD. The annual flow monitoring has been started since June 2021.
Details of the routine H_2S monitoring system for the sewerage system of 3RS	Details to be prepared and submitted to EPD at least one year before commencement of the operation of 3RS	The details of the routine H_2S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management		
Waste Monitoring	At least weekly	On-going
Land Contamination		
Supplementary Contamination Assessment Plan (CAP)	At least 3 months before commencement of any soil remediation works.	The Supplementary CAP was submitted and approved by EPD under EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	CAR to be submitted for golf course	The CAR for Golf Course was submitted and accepted by EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	CAR to be submitted for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply Systems were submitted and accepted by EPD.
Terrestrial Ecology		
Pre-construction Egretry Survey Plan	Once per month in the breeding season between April and July, prior to the commencement of HDD drilling works.	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Monthly monitoring during the HDD construction works period from August to March.	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology		
Pre-Construction Phase Coral Dive Survey	Prior to marine construction works	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	-	The coral translocation was completed.
Post-Translocation Coral Monitoring	As per an enhanced monitoring programme based on the Coral Translocation Plan	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)		
Baseline Monitoring	6 months of baseline surveys before the commencement of land formation related construction works. Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: Two days per month at the Sha Chau station and two days per month at the Lung Kwu Chau station; and Passive Acoustic Monitoring (PAM): For the whole duration of baseline period.	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	Vessel line transect surveys: Two full surveys per month; Land-based theodolite tracking surveys: One day per month at the Sha Chau	On-going

Parameters	EM&A Requirements	Status
	station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	
Landscape & Visual		
Landscape & Visual Plan	At least 3 months before the commencement of construction works on the formed land of the Project.	The Landscape & Visual Plan was submitted and approved by EPD under EP Condition 2.18
Baseline Monitoring	One-off survey within the Project site boundary prior to commencement of any construction works	The baseline landscape & visual monitoring result was reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	Weekly	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	Monitor and check	On-going
SkyPier High Speed Ferries (HSF) implementation measures	Monitor and check	On-going
Construction and Associated Vessels Implementation measures	Monitor and check	On-going
Silt Curtain Deployment Plan implementation measures	Monitor and check	On-going
Spill Response Plan implementation measures	Monitor and check	On-going
Complaint Hotline and Email channel	Construction phase	On-going
Environmental Log Book	Construction phase	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, and CWD were carried out in the reporting period.

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Eighteen environmental management meetings for EM&A review with works contracts: 7, 8, 12, 14, 20, 21, 22, 25, 27 and 28 July 2022.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

2 Air Quality Monitoring

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location
AR1A	Man Tung Road Park
AR2	Village House at Tin Sum

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

Portable direct reading dust meter was used to carry out the air quality monitoring. Details of equipment used in the reporting period are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2021	Monthly EM&A Report No. 70, Appendix E
	SIBATA LD-3B-1 (Serial No. 597337)	11 May 2022	Monthly EM&A Report No. 77, Appendix D

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.

c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.

d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in **Appendix D**, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

The air quality monitoring schedule involved in the reporting period is provided in **Appendix B**.

The air quality monitoring results in the reporting period are summarised in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix C**.

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	18 - 80	306	500
AR2	15 - 95	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

General meteorological conditions throughout the impact monitoring period were recorded. Wind data including wind speed and wind direction for each monitoring day were collected from the Chek Lap Kok Wind Station.

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq}, L_{10}, and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2(1)	Tung Chung West Development	To be determined
NM3A(2)	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Notes:
(1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.

(2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq(30mins)}$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A)(1)

Note:
(1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	18 Jun 2022	**Appendix D**
	Castle GA607 (Serial No. 040162)	22 Mar 2022	Monthly EM&A Report No. 75, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

The monitoring procedures involved in the noise monitoring can be summarised as follows:

a. The sound level meter was set on a tripod at least a height of 1.2m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3dB(A) was applied to the free field measurements.
b. Façade measurements were made at the monitoring station NM3A.
c. Parameters such as frequency weighting, time weighting and measurement time were set.
d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
e. During the monitoring period, L_{eq}, L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
f. Noise measurement results, when higher than the baseline monitoring levels, were corrected with reference to the baseline monitoring levels.
g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

h. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
i. The meter and calibrator were sent to the supplier or laboratory accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS) to check and calibrate at yearly intervals.

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring listed in **Table 3.3** are valid in the reporting period.

3.4 Summary of Monitoring Results

The noise monitoring schedule involved in the reporting period is provided in **Appendix B**.

The noise monitoring results in the reporting period are summarised in **Table 3.4.** Detailed impact monitoring results are presented in **Appendix C**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	63 - 67	75
NM4(1)	62 - 65	70(2)
NM5(1)	54 - 59	75
NM6(1) (3)	62 - 67	75

Notes:

(1) +3dB(A) Façade correction included;

(2) The limit level will be reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.

(3) Some of the noise measurement results were higher than the baseline monitoring levels. In order to reduce the influence of non-Project related noise on the monitoring results, these measurement results were corrected with reference to the baseline monitoring results.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, and suspended solids (SS) was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 14 water quality monitoring stations, comprising 6 impact (IM) stations, 5 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
C2	Control Station	806945	825682	
C3(2)	Control Station	817803	822109	
IM1(4)	Impact Station	806458	818351	
IM2(4)	Impact Station	806236	819183	
IM7(4)	Impact Station	806835	821349	
IM10(4)	Impact Station	809838	822240	
IM11(4)	Impact Station	810545	821501	
IM12(4)	Impact Station	811519	821162	
SR1A(1)	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	
SR8(3)	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.
(2) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.
(3) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.
(4) With the seawall completion and removal of enhanced open sea silt curtains, these monitoring stations were relocated back to their original locations. For IM2, there was minor adjustment of the monitoring location.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring are presented in **Table 4.3**.

Table 4.2: Action and Limit Levels for General Water Quality Monitoring

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l		Surface and Middle 4.1mg/l	
		Bottom 3.4mg/l		Bottom 2.7mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Action and Limit Levels SR1A					
SS (mg/l))		33		42	
Action and Limit Levels SR8					
SS (mg/l)		52		60	

Notes:

(1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.

(2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.

(3) Depth-averaged results are used unless specified otherwise.

Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM7, SR3
SR2(1)	IM7, IM10, IM11, IM12, SR1A, SR3, SR4A, SR8
Ebb Tide	
C1	SR4A
C2	IM1, IM2, IM7, IM10, IM11, IM12, SR1A, SR2, SR3, SR8

Note:

(1) As per findings of Baseline Water Quality Monitoring Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Equipment

Table 4.4 summarises the equipment used in the reporting period for monitoring of specific water quality parameters under the water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 21G105356)	28 Jul 2022	**Appendix D**
	YSI ProDSS (Serial No. 15M100005)	28 Jul 2022	**Appendix D**
	YSI ProDSS (Serial No. 16H104233)	10 Jun 2022	Monthly EM&A Report No. 78, Appendix D
	YSI ProDSS (Serial No. 17E100747)	10 Jun 2022	Monthly EM&A Report No. 78, Appendix D

Other equipment used as part of the impact water quality monitoring programme are listed in **Table 4.5**.

Table 4.5: Other Monitoring Equipment

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx
Current Meter (measurement of current speed and direction, and water depth)	Sontek HydroSurveyor

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

Water quality monitoring samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) for locations with water depth >6m. For locations with water depth between 3m and 6m, water samples were taken at two depths (surface and bottom). For locations with water depth <3m, only the mid-depth was taken. Duplicate water samples were taken and analysed.

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4ºC without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument was checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of SS (in mg/l).

Calibration certificates of the monitoring equipment used in the reporting period are listed in **Table 4.4**.

4.3.3 Laboratory Measurement / Analysis

Analysis of SS have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS determination. The SS determination works were started within 24 hours after collection of the water samples. The analysis of SS have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix B**. Monitoring for both ebb and flood tides on 2 July 2022 was cancelled due to No. 8 Southeast Gale or Storm Signal in force.

The water quality monitoring results for all parameters, except DO, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

For DO, some of the testing results triggered the corresponding Action and/or Limit Levels, and investigations were conducted accordingly.

Table 4.7 to **Table 4.10** present the summary of the DO compliance status at IM and SR stations during mid-ebb and mid-flood tides for the reporting period.

Table 4.7: Summary of DO (Surface + Middle) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR2	SR3	SR4A
05/07/2022									
07/07/2022									
09/07/2022									
12/07/2022									
14/07/2022									
16/07/2022									
19/07/2022									
21/07/2022									
23/07/2022									
26/07/2022									
28/07/2022	D								D
30/07/2022									
No. of result triggering Action or Limit Level	1	0	0	0	0	0	0	1	1

Table 4.8: Summary of DO (Bottom) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR2	SR3	SR4A
05/07/2022									
07/07/2022									
09/07/2022									
12/07/2022									
14/07/2022									
16/07/2022									
19/07/2022									
21/07/2022									
23/07/2022	D	D							D
26/07/2022	D	D			D				D
28/07/2022	D	D							D
30/07/2022									
No. of result triggering Action or Limit Level	3	3	2	1	1	0	0	1	3

Table 4.9: Summary of DO (Surface + Middle) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR3	SR4A
05/07/2022								
07/07/2022								
09/07/2022								
12/07/2022								
14/07/2022								
16/07/2022								
19/07/2022								
21/07/2022								
23/07/2022								
26/07/2022								
28/07/2022								
30/07/2022								
No. of result triggering Action or Limit Level	0	1	0	0	0	0	0	1

Table 4.10: Summary of DO (Bottom) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR3	SR4A
05/07/2022								
07/07/2022								
09/07/2022								
12/07/2022								
14/07/2022								
16/07/2022								
19/07/2022								
21/07/2022								
23/07/2022							D	
26/07/2022				D			D	
28/07/2022							D	
30/07/2022								
No. of result triggering Action or Limit Level	2	3	0	1	1	0	3	2

Note: Detailed results are presented in **Appendix C**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	Monitoring result triggered the Limit Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Limit Level at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring results triggered the corresponding Action and/or Limit Levels on four monitoring days. Some cases occurred at monitoring stations upstream of the Project during ebb and flood tide and would unlikely be affected by the Project.

In accordance with Event and Action Plan stipulated in the Manual, EPD was informed when the corresponding Limit Levels were triggered, while IEC and Contractors were informed when the corresponding Action and/or Limit Levels were triggered. Repeat in-situ measurements were conducted on 24, 25, 27 and 29 July 2022 according to the requirements as stipulated in the Manual.

Investigation focusing on the cases which occurred at monitoring stations located downstream of the Project was carried out. Details of the Project's marine construction activities and site observations of the concerned monitoring days were collected. Findings were summarised in **Table 4.11**.

Table 4.11: Summary of Findings from Investigation of DO Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
23/07/2022	Seawall construction	At least 1 km	Silt curtain deployed	No	No	No
26/07/2022	Seawall construction	At least 1 km	Silt curtain deployed	No	No	No
28/07/2022	Seawall construction	At least 1 km	Silt curtain deployed	No	No	No
30/07/2022	Seawall construction	At least 3 km	Silt curtain deployed	No	No	No

The investigation confirmed that marine construction works were conducted with silt curtains deployed during the concerned monitoring days. The silt curtains were maintained properly and checked by ET regularly. No muddy water discharges from outfalls of the reclaimed land were observed. The cases triggering the respective Action and/or Limit Levels at different water depths, namely surface & middle (S+M) and bottom (B), will be discussed in the following paragraphs.

For the DO results recorded at the Surface and Middle water depth during mid-ebb tide (please refer to **Table 4.7**), the DO results at some of the downstream stations triggered Action and/or Limit Levels on 28 July 2022. For both IM1 and SR4A, it is noted that these stations are located in the western side of the Project, which have had similar previous records of widespread low DO during wet season. Also, similar low DO concentrations were also recorded at the control stations, suggesting the presence of external factors affecting the DO concentration in that area.

For the DO results recorded at the Bottom water depth during mid-ebb tide (please refer to **Table 4.8**), the DO results at some of the downstream stations triggered Action and/or Limit Levels on 23, 26 and 28 July 2022. For IM1, IM2 and SR4A, it is noted that these stations are located in the western side of the Project, which have had similar previous records of widespread low DO during wet season. Also, similar low DO concentrations were also recorded at the control stations C1 and C2 on multiple monitoring days, suggesting the presence of external factors affecting the DO concentration in that area. For IM11, low DO concentration was also recorded at its control station and the nearest upstream station, which might possibly suggest the presence of external factors affecting the DO concentration on 26 July 2022.

For the DO results recorded at the Bottom water depth during mid-flood tide (please refer to **Table 4.10**), the DO results at some of the downstream stations triggered Action Levels on 23, 26 and 28 July 2022. For the cases on 26 July 2022 at IM10 and SR3, low DO concentrations were also recorded at their respective control stations and their nearest upstream stations, which might possibly suggest the presence of external factors affecting the DO concentration on that day. For the cases on 23 and 28 July 2022 at SR3, it is noted that SR3 was the only downstream station triggering the Action Level on these monitoring days, with no proximate stations triggering Action and/or Limit Levels, suggesting the possibility of external factors affecting the DO concentration in that area.

No silt plume, construction vessel, spillage incident or specific observation at outfalls were observed in the vicinity when monitoring was undertaken at the monitoring station. Therefore, the cases were considered unlikely due to the Project.

4.5 Conclusion

During the reporting period, it is noted that most of the monitoring results were within their corresponding Action and Limit Levels, while some DO measurement results triggered the corresponding Action and/or Limit Levels, investigations were conducted accordingly.

Based on the investigation findings, all results that triggered the corresponding Action and/or Limit Levels were not due to the project. Therefore, the Project did not cause adverse impact at the water quality sensitive receivers. All required actions under the Event and Action Plan were followed. These cases appeared to be due to natural fluctuation or other sources not related to the Project.

Nevertheless, as part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures as recommended in the Manual during weekly site inspection and regular environmental management meetings.

5 Waste Management

In accordance with the Manual, the waste generated from construction activities was audited once per week to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation and disposal were assessed during the audits.

5.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

5.2 Waste Management Status

Weekly monitoring on all works contracts were carried out by the ET to check and monitor the implementation of proper waste management practices during the construction phase.

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors have taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix A**.

Based on updated contractors' information, construction waste generated in the reporting period is summarised in **Table 5.2**. ET and IEC have carried out site audits regularly and reviewed the trip ticket system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel, reinforcement bar, structural steel, aluminium, copper, other metals, paper and plastic are sorted on-site and transported off-site for recycling during this reporting period.

Table 5.2: Construction Waste Statistics

	C&D Material Stockpiled for Reuse or Recycle(1) (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
June 2022(2)	34,177	3,209	*40,846	10,305	1,000	0	2,679
July 2022(3)	44,288	4,682	30,029	11,485	0	0	1,953

Notes:

(1) C&D refers to Construction and Demolition.

(2) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Quarterly and Annual EM&A Reports.

(3) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual, Waste Management Plan and the proposal of Further Development on Treatment Level / Details and the Reuse Mode for Marine Sediment (hereinafter referred to as “Further Development Proposal”) of the Project. The sampling process, storage conditions of the excavated marine sediment, treatment process, final backfilling location as well as associated records were inspected and checked by ET and verified by IEC to ensure they were in compliance with the requirements as stipulated in the Waste Management Plan and Further Development Proposal.

Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period. The details of the marine sediment sampling, treatment and backfilling will be reported in the Annual EM&A Reports.

6 Chinese White Dolphin Monitoring

In accordance with the Manual, CWD monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking survey and passive acoustic monitoring should be conducted during construction phase.

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

The Action and Limit Levels for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of Action and Limit Levels for CWD monitoring were summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

	NEL, NWL, AW, WL and SWL as a Whole
Action Level(3)	Running quarterly(1) STG < 1.86 & ANI < 9.35
Limit Level(3)	Two consecutive running quarterly(2) (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

(1) Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.

(3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This also provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

The planned vessel survey transect lines following the waypoints set for construction phase monitoring as proposed in the Manual are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas

Waypoint	Easting	Northing	Waypoint	Easting	Northing
			NEL		
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
			NWL		
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
			AW		
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
			WL		
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
			SWL		
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey stations were set up at two locations, one facing east/south/west on the southern slopes of Sha Chau (SC), and the other facing north/northeast/northwest at Lung Kwu Chau (LKC). The stations (D and E) are depicted in **Figure 6.2** and shown in **Table 6.3** with position coordinates, height of station and approximate distance of consistent theodolite tracking capabilities for CWD.

Table 6.3: Land-based Theodolite Survey Station Details

Stations	Location	Geographical Coordinates	Station Height (m)	Approximate Tracking Distance (km)
D	Sha Chau (SC)	22° 20' 43.5" N 113° 53' 24.66" E	45.66	2
E	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys provided data for density and abundance estimation and other assessments using distance-sampling methodologies, specifically, line-transect methods.

The surveys involved small vessel line-transect data collection and have been designed to be similar to, and consistent with, previous surveys for the AFCD for their long-term monitoring of small cetaceans in Hong Kong. The survey was designed to provide systematic, quantitative measurements of density, abundance and habitat use.

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL, AW, WL and SWL areas as proposed in the Manual, which are consistent with the AFCD long-term monitoring programme (except AW). There are two types of transect lines:

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and going around islands.

All data collected on both primary and secondary transect lines were used for analysis of sighting distribution, group size, activities including association with fishing boat, and mother-calf pairs. Only on-effort data collected under favourable conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+

telephoto lens), then followed until they were lost from view. At that point, the boat returned (off effort) to the survey line at the closest point after obtaining photo records of the dolphin group and began to survey on effort again.

Focal follows of dolphins would be used for providing supplementary information only where practicable (i.e. when individual dolphins or small stable groups of dolphins with at least one member that could be readily identifiable with unaided eyes during observations and weather conditions are favourable). These would involve the boat following (at an appropriate distance to minimise disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

CWDs can be identified by their unique features like presence of scratches, nick marks, cuts, wounds, deformities of their dorsal fin and distinguished colouration and spotting patterns.

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to photograph both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS Project during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey obtains fine-scale information on the time of day and movement patterns of the CWDs. A digital theodolite (Sokkia/Sokkisha Model DT5 or similar equipment) with 30-power magnification and 5-s precision was used to obtain the vertical and horizontal angle of each dolphin and vessel position. Angles were converted to geographic coordinates (latitude and longitude) and data were recorded using *Pythagoras* software, Version 1.2. This method delivers precise positions of multiple spatially distant targets in a short period of time. The technique is fully non-invasive, and allows for time and cost-effective descriptions of dolphin habitat use patterns at all times of daylight.

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

Theodolite tracking included focal follows of CWD groups and vessels. Priority was given to tracking individual or groups of CWD. The survey team also attempted to track all vessels moving within 1 km of the focal CWD.

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 6, 8, 11, 12, 13, 15, 19 and 25 July 2022 covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

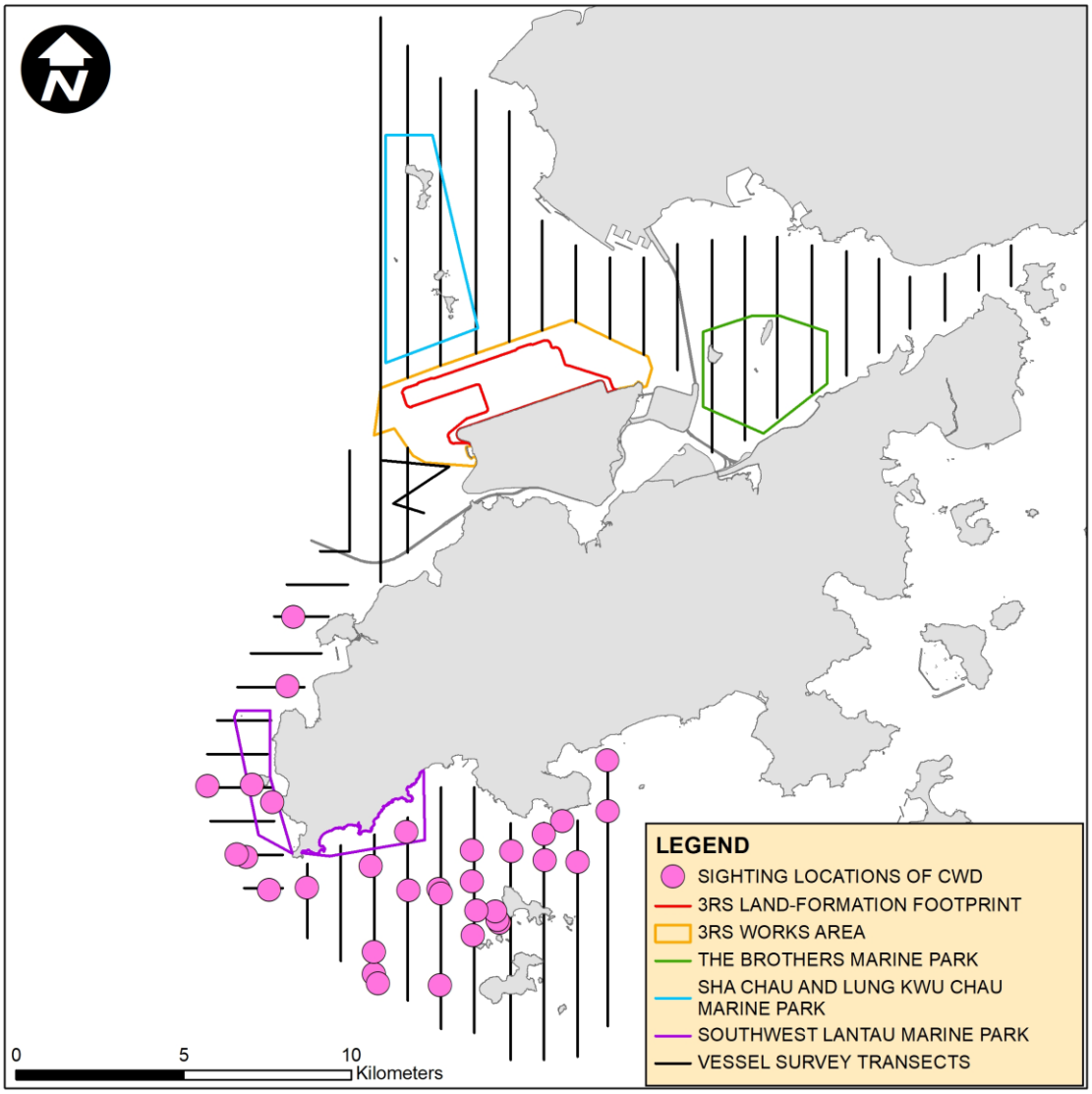
A total of around 433.24 km of survey effort was collected from these surveys and 428.43 km of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In the current reporting period, 32 sightings with 88 dolphins were sighted. Amongst these sightings, 31 sightings with 87 dolphins were on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in the current reporting period is illustrated in **Figure 6.3**. CWD groups in WL were mainly observed at waters around Peaked Hill and Fan Lau, with two sightings recorded near Tai O and Yi O. In SWL, there was a cluster of CWD groups recorded to the northwest of the Soko Islands. There were also several CWD sightings scattered at inshore waters from Shui Hau to Fan Lau in the SWL survey area, while a few other sightings were recorded at the southwestern part of survey area away from shore. There was no CWD sighting recorded in NWL or NEL survey areas during the reporting period.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 32 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the vessel survey data. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{Total\ No.of\ \ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{Total\ No.of\ Dolphins\ from\ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

(Notes: Only data collected under Beaufort 3 or below condition were used)

In this reporting period, a total of around 428.43 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 31 on-effort sightings with 87 dolphins were sighted under such condition. Calculation of the encounter rates for the month are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from May to July 2022), a total of around 1263.20 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 67 on-effort sightings and a total number of 231 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the reporting period and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI remain above the Action Level, thus the Action Level is not triggered.

Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels

	Encounter Rate (STG)	Encounter Rate (ANI)
July 2022	7.24	20.31
Running Quarter from May to July 2022[(1)]	5.30	18.29
Action Level	Running quarterly[(1)] STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In the current reporting period, 32 groups of 88 dolphins in total were sighted, and the average group size of CWDs was 2.8 dolphins per group. Over half of the CWD sightings were with small group size (i.e. 1-2 dolphins), while the number of CWD sightings with medium group size (i.e. 3-9 dolphins) were lower. There was also one CWD sighting with large group size (i.e. 10 or more dolphins) recorded near Fan Lau in WL survey area.

Activities and Association with Fishing Boats

There were 10 CWD sightings recorded engaging in foraging activities in the current reporting period. Amongst them, three CWD sightings were observed associated with operating purse seiner in SWL.

Mother-calf Pair

In this reporting period, there were four CWD sightings recorded with mother-and-unspotted juvenile pair(s) and/or mother-and-unspotted calf pair(s) in WL survey area.

6.4.2 Photo Identification

In the current reporting period, a total number of 28 different CWD individuals were identified for totally 37 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM058	11-Jul-22	2	WL
NLMM061	12-Jul-22	15	SWL
NLMM063	13-Jul-22	6	SWL
NLMM085	12-Jul-22	3	SWL
		6	SWL
SLMM002	12-Jul-22	2	SWL
		4	SWL
	13-Jul-22	4	SWL
SLMM014	12-Jul-22	2	SWL
		7	SWL
	13-Jul-22	3	SWL
SLMM027	11-Jul-22	2	WL
SLMM029	12-Jul-22	8	SWL
SLMM037	12-Jul-22	2	SWL
SLMM050	13-Jul-22	4	SWL
SLMM060	12-Jul-22	9	SWL
SLMM074	8-Jul-22	4	WL
WLMM003	11-Jul-22	1	WL
	13-Jul-22	7	SWL

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
WLMM018	8-Jul-22	4	WL
WLMM019	11-Jul-22	1	WL
WLMM038	8-Jul-22	2	WL
WLMM047	12-Jul-22	10	SWL
WLMM049	12-Jul-22	13	SWL
	13-Jul-22	10	SWL
WLMM052	8-Jul-22	2	WL
WLMM076	12-Jul-22	13	SWL
WLMM081	11-Jul-22	2	WL
WLMM083	8-Jul-22	2	WL
		3	WL
WLMM131	12-Jul-22	1	SWL
		4	SWL
WLMM176	8-Jul-22	2	WL
WLMM177	8-Jul-22	1	WL
WLMM178	8-Jul-22	2	WL
WLMM179	11-Jul-22	4	WL
WLMM180	11-Jul-22	4	WL

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 18 July 2022 and at SC on 19 July 2022, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD group was tracked off LKC or SC stations during the reporting period. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix C**.

Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau (LKC)	1	6:00	0	0
Sha Chau (SC)	1	6:00	0	0
TOTAL	**2**	**12:00**	**0**	**0**

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. Both C-POD and F-POD are considered as effective PAM devices in detecting CWD occurrence, and F-POD was the main PAM device deployed where feasible. During this reporting period, the F-POD was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.4**). The F-POD was last deployed on 16 May 2022 and the next retrieval is scheduled in early August 2022. Acoustic data would be reviewed to give an indication of CWD occurrence patterns and anthropogenic noise information. Analysis would involve use of proprietary software for objective automated data analyses and experienced analysts to perform visual validation for assessment of dolphin detection. As the period of data collection and analysis takes about four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were provided by the contractor for marine filling works, in which dolphin observers were also deployed by the contractor in accordance with the MMWP. Overall, 1 to 3 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 704 individuals being trained and the training records kept by the ET. From the contractors' MMWP and DEZ monitoring records, no dolphin or other marine mammals were observed within or around the silt curtain or DEZ during this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.4** and **Section 7.5** respectively.

6.7 Timing of reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking survey and PAM will be provided in future annual reports after a larger sample size of data has been collected.

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and two days of land-based theodolite tracking survey effort. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works to audit the implementation of proper environmental pollution control and mitigation measures for the Project were conducted by ET and IEC on a weekly and bi-weekly basis, respectively. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Besides, physically ad-hoc site inspections were also conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice was given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix A**.

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored in accordance with the Manual. All measures undertaken by both the contractor and the landscape contractor during the construction phase and first year of the operation phase shall be audited by a landscape architect, as a member of the ET, on a regular basis to ensure compliance with the intended aims of the measures. Site inspections shall be undertaken at least once every two months during the operation phase.

The implementation status of the environmental protection measures is summarized below in **Table 7.1**. Examples of landscape and visual mitigation measures are shown in **Table 7.2**. The

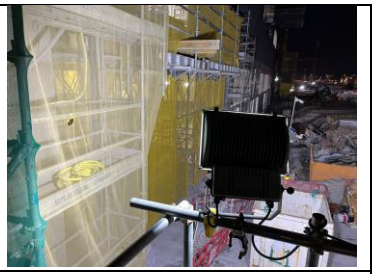
monitoring programme for detailed design, construction, establishment works and long term management (10 years) stages is presented in **Table 7.3**. Event and Action Plan for Landscape and Visual impacts is stated in **Table 7.4**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures was checked by ET during weekly site inspection and reported by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	All works contracts
CM2 – Reduction of construction period to practical minimum		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas	Tree Protection Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors' performance on the implementation of the tree maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3508, 3801

Landscape and Visual Mitigation Measures during Construction	Implementation Status	Relevant Contract(s) in the Reporting Period
CM9 – Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme	Tree Transplanting Specifications were provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project where trees would unavoidably be affected by the construction works. The Contractors were required to submit Method Statements for tree transplanting prior to the transplanting works. Tree inspections were conducted by ET to check the tree transplanting works implemented by the Contractors on site. The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period after the completion of each batch of transplanting works. Long term management of the transplanted trees was currently monitored by ET annually.	3508, 3801
CM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical	The Contractor's performance on the implementation of advanced hydroseeding works was observed and checked by the ET during weekly site inspection.	3303

Table 7.2: Examples of Landscape and Visual Mitigation Measures in the Reporting Periods

		
Erection of site hoardings around works area in unobtrusive colours (CM5)	Avoidance of excessive height and bulk of site buildings (CM6)	Control of night-time lighting using light hooding and minimisation of night working period (CM7)
		
General view of tree protection zone for retained tree (CM8)	General view of a transplanted tree (CM9)	General view of advanced hydroseeding around taxiways and runways (CM10)

In accordance with the Updated EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the cumulative total number of retained trees and transplanted trees under the Project were 36 and 26, respectively. Nine retained trees under Contract 3801 were removed due to the potential safety issues along Airport Express Line (AEL) railway track. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.5**.

Details of the retained trees are to be discussed in the Quarterly EM&A reports.

Table 7.3: Monitoring Programme for Landscape and Visual

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Detailed Design	Checking of design works against the recommendations of the landscape and visual impact assessments within the EIA shall be undertaken during detailed design and tender stage, to ensure that they fulfil the intention of the mitigation measures. Any changes to the design, including design changes on site shall also be checked.	Report by AAHK / PM confirming that the design conforms to requirements of EP.	Approved by Client	At the end of the Detailed Design Phase
Construction	Checking of the contractor's operations during the construction period.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Weekly
Establishment Works	Checking of the planting works during the twelve-month Establishment Period after completion of each batch of transplanting works.	Report on Contractor's compliance, by ET	Counter signature of report by IEC	Every two months
Long Term Management (10 year)	Monitoring of the long-term management of the planting works in the period up to 10 years after completion of each batch of transplanting works.	Report on Compliance by ET or Maintenance Agency as appropriate	Counter signature of report by Management Agency	Annually

Table 7.4: Event and Action Plan for Landscape and Visual

Event Action Level	Action			
	ET	IEC	AAHK / PM	Contractor
Design Check	Check final design conforms to the requirements of EP and prepare report.	Check report. Recommend remedial design if necessary.	Undertake remedial design if necessary.	

Event Action Level	Action			
Non-conformity on one occasion	Identify source. Inform IEC and AAHK / PM. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed.	Check report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Check implementation of remedial measures.	Notify Contractor. Ensure remedial measures are properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.
Repeated Non-conformity	Identify source. Inform IEC and AAHK / PM. Increase monitoring frequency. Discuss remedial actions with IEC, AAHK / PM and Contractor. Monitor remedial actions until rectification has been completed. If non-conformity stops, cease additional monitoring.	Check monitoring report. Check Contractor's working method. Discuss with ET and Contractor on possible remedial measures. Advise AAHK / PM on effectiveness of proposed remedial measures. Supervise implementation of remedial measures.	Notify Contractor. Ensure remedial measures area properly implemented.	Amend working methods to prevent recurrence of non-conformity. Rectify damage and undertake additional action necessary.

Table 7.5: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period

Existing				
Contract	Retain (nos.)	Transplanted (nos.)		To-be-transplanted (nos.)
		Establishment Period	Maintenance Period	
3302	9	0	0	0
3503	0	0	9	0
3508[(1)]	24	12	0	0
3602	0	0	0	0
3801	3	0	5[(2)]	0
Sub-total	36	12	14	0
Provisional				
Contract	**Retain (nos.)**	**Transplanted (nos.)**		**To-be-transplanted (nos.)**
3508[(1)]	50	0		10
Sub-total	50	0		10
Grand Total	**86**	**26**		**10**

Notes:

(1) As some of the site areas have been handed over to Contract 3508, Contractor of Contract 3508 is currently managing the trees that are located within their site area. Existing trees to be managed by Contract 3508 is subject to change after initial tree surveys for each batch of site areas have been conducted by the Contractor.

(2) Three transplanted trees (CT1194, CT1794 and CT1795) were subsequently felled after transplantation. Please refer to **Table 7.6** for details.

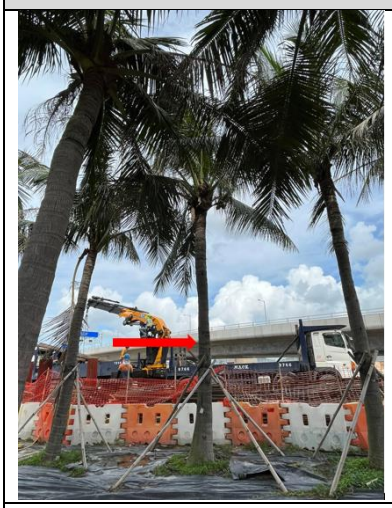
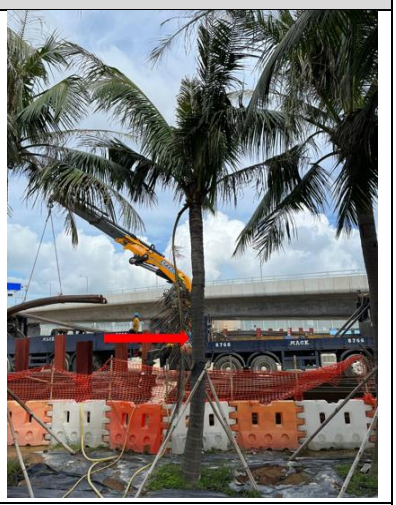
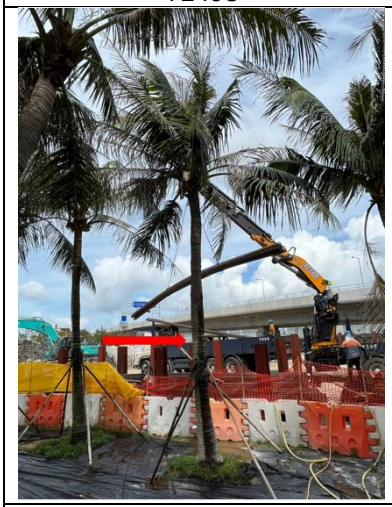
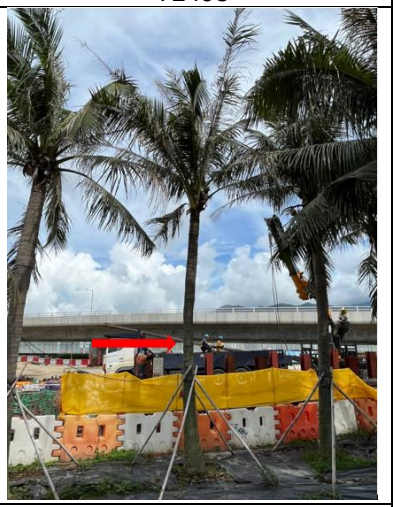
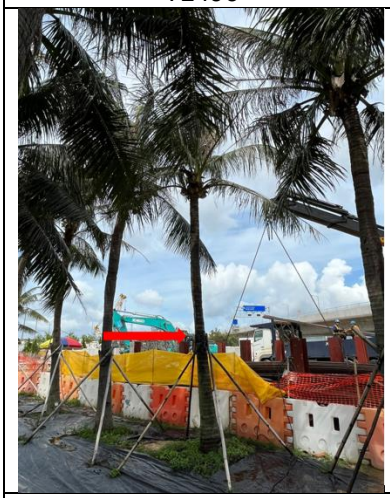
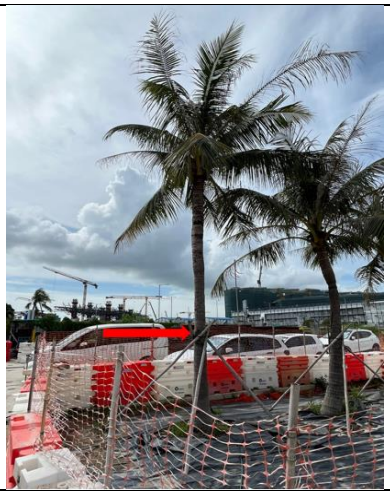
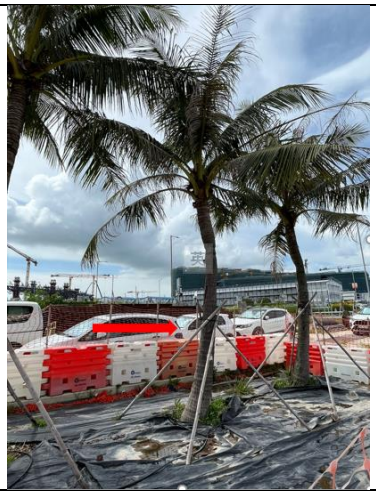
Summary of the updated transplanted trees and photos are presented in **Table 7.6** and **Table 7.7**.

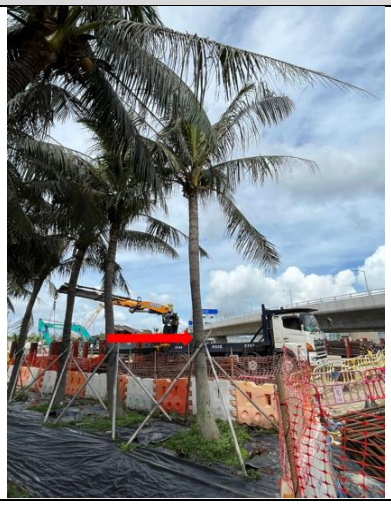
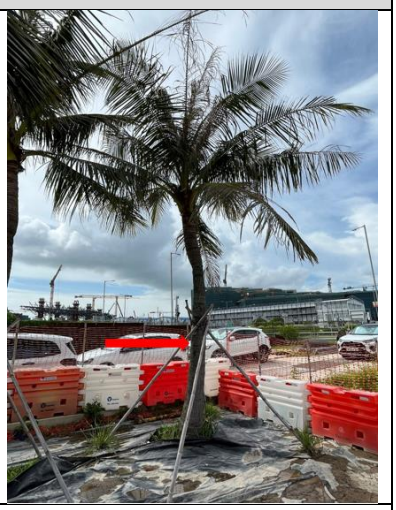
Table 7.6: Summary of the Transplanted Trees Updated in the Reporting Period

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
CT276	3 May 2018	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Next inspection will be conducted in February 2023. Photos of the last inspection in February 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.74.
CT1253	4 May 2018	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	
T835	22 Jan 2020	Long Term Management period Feb 2021 – Jan 2030	AAHK	Establishment Period was completed. Next inspection will be conducted in February 2023. Photos of the last inspection in February 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.74.
T836	13 Dec 2019	Long Term Management period Feb 2021 – Jan 2030	AAHK	
T838	22 Jan 2020	Long Term Management period Feb 2021 – Jan 2030	AAHK	
T812	21 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	Establishment Period was completed. Next inspection will be conducted in December 2022. Photos of the last inspection in December 2021 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.72.
T814	20 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	
T815	15 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	
T829	18 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	
T830	14 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	
T831	19 Dec 2020	Long Term Management period Jan 2022 – Dec 2031	AAHK	
T1493	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508	Next inspection will be conducted in September 2022. Photos of the last inspection in July 2022 were shown in **Table 7.7**.
T1494	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508	
T1495	10 Jul 2021	Establishment period 11 Jul 2021 – Jul 2022	Contract 3508	
T1496	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	
T1497	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	
T1498	29 Jun 2021	Establishment period 30 Jun 2021 – Jul 2022	Contract 3508	
T1499	29 Jun 2021	Establishment period 30 Jun 2021 – Jul 2022	Contract 3508	
T1500	30 Jun 2021	Establishment period 1 Jul 2021 – Jul 2022	Contract 3508	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
T1501	30 Jun 2021	Establishment period 1 Jul 2021 – Jul 2022	Contract 3508	
T1502	5 Jul 2021	Establishment period 6 Jul 2021 – Jul 2022	Contract 3508	
T1503	6 Jul 2021	Establishment period 7 Jul 2021 – Jul 2022	Contract 3508	
T1504	24 Jun 2021	Establishment period 25 Jun 2021 – Jul 2022	Contract 3508	
CT1194	4 May 2018	Long Term Management period Jun 2019 – May 2028	Southern Landside Petrol Filling Station	Establishment Period was completed. Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted as recommended by tree specialist of the contractor of Southern Landside Petrol Filing Station.
CT1794	3 May 2018	Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.
CT1795	3 May 2018	Long Term Management period Jun 2019 – May 2028	AsiaWorld-Expo	Establishment Period was completed. The tree within the land parcel was acquired by the government for construction of emergency hospital to handle COVID19 pandemic at AsiaWorld-Expo. The tree was felled in late 2020.

Table 7.7: Photos of the Existing Transplanted Trees Inspected in this Reporting Month

Under 12-month Establishment Period:		
		
T1493	T1494	T1495
		
T1496	T1497	T1498
		
T1499	T1500	T1501

Under 12-month Establishment Period:		
		
T1502	T1503	T1504

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply Systems (EPSS) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for aforesaid CARs. No leakage was found after the removal of underground fuel pipelines of T2 EPSS and all required additional photos have been submitted to EPD.

According to the approved supplementary CAP, there are 3 remaining locations where site re-appraisal / additional site investigation are proposed. Based on the latest construction information, there is no development programme for these locations at this stage. As such, the status of site re-appraisal/ additional site investigation shall be further updated upon latest development programme is available.

7.4 Audit of SkyPier High Speed Ferries

The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in July 2022. Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.8**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 3 to 5 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

As updated by CLP Power, the construction works of the Hong Kong Offshore LNG Terminal Project may affect the route diversion operation of the SkyPier HSFs from Q1 to Q3 2022. The captains were informed on the issue and ET will continue to closely monitor the implementation of the SkyPier Plan in the period.

Table 7.8: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 July 2022
Total number of ferry movements recorded and audited for HSF to/from Zhuhai and Macau	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
A maximum daily cap of 125 movements for all SkyPier HSFs including those not using diverted route	3 to 5 daily movement

7.5 Audit of Construction and Associated Vessels

The updated MTRMP-CAV was approved by EPD on 31 May 2022 under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Four skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 8 skippers were trained by contractor's Environmental Officers. In total, 1871 skippers were trained from August 2016 to July 2022.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly Construction Traffic Control Centre (CTCC) audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.6 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD. The ET checked the contractors' dolphin sighting record and relevant records to audit the implementation of DEZ and there was no finding.

During the reporting period, there were no dolphin sightings within the DEZ.

7.7 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.9**.

Table 7.9: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.18	Landscape & Visual Plan	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.8 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory requirements was recorded. The latest statuses of the environmental licenses and permits in the reporting period are presented in **Appendix E**.

7.9 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

7.9.1 Complaints

No construction activities-related complaint was received during the reporting period.

Complaints received in the previous reporting period

A complaint regarding dust issue at 3RS construction site area was received on 28 June 2022. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photos provided by the complainant, ET recognized the locations, identified the related contractors and requested them to provide information regarding the complaint. According to the information received, the contractors reported they had assigned water tankers to carry out water spraying to the concerned locations. The contractors also reviewed their dust control layout plan and provided enhanced mitigation measure such as refresher training to their water tanker drivers. At ET's weekly site inspections, dust was observed when there were vehicle movements on haul roads and was rectified by the related contractor. At a subsequent joint site inspection, no fugitive dust was observed when there were vehicle movements at the concerned haul roads and the roads were wet during inspection. All contractors were reminded to properly implement dust mitigation measures, especially water spraying at haul

roads in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

A complaint regarding dust issue at 3RS construction site area was received on 28 June 2022. The case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. From the photos provided by the complainant, ET recognized the location, identified a related contractor and requested them to provide information regarding the complaint. The contractor replied they had arranged water trucks to carry out water spraying at the concerned location. The contractors also reviewed their dust control layout plan and provided enhanced mitigation measures such as refresher training to their water tanker drivers and added water tanker to the fleet. At ET's weekly site inspections, dust was observed during vehicle movements on main haul roads and was rectified by the related contractor. At a subsequent joint site inspection, no fugitive dust was observed when there were vehicle movements at the concerned haul roads and the roads were wet during inspection. All contractors were reminded to properly implement dust mitigation measures, especially water spraying at haul roads in accordance with the implementation schedule in the Updated EM&A Manual. Hence, the case was considered closed.

A complaint regarding dust issue at 3RS construction site was received on 30 June 2022. The case is under investigation and findings will be reported in the next Monthly EM&A Report.

7.9.2 Notifications of Summons or Status of Prosecution

Neither notification of summons nor prosecution was received during the reporting period.

7.9.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised in **Appendix F**.

8 Future Key Issues and Other EIA & EM&A Issues

8.1 Construction Programme for the Coming Reporting Period

Key activities anticipated in the next reporting period for the Project will include the following:

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction; and
- Backfilling works.

Airfield Works:

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Excavation and lateral support systems installation; and
- Stockpiling.

Contract 3303 Third Runway and Associated Works

- Architectural, builder's and finishing works;
- Footing and utilities work;
- Box culvert construction;
- Operation of asphalt plant; and
- Cable laying and ducting works.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation; and
- Software development.

Contract 3306 Observation Facility Control System Supporting Interim 2RS and 3RS

- Equipment installation.

Contract 3307 Fire Training Facility

- Architectural, builder's and finishing works;
- Drainage and utilities works;
- Building construction.

Contract 3308 Foreign Object Debris Detection System

- Calibration and site acceptance test for foreign object debris detection sensor;
- Rectification work for handover sensor system; and
- Drilling of earthing and lightning pit.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Excavation works;
- Construction of walls and slabs;
- Installation of pipe piles;

- Land-based ground improvement works; and
- Backfilling works.

Third Runway Concourse

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Architectural, builder's work and finishing works; and
- Defects and outstanding works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Bored piling;
- Structure works;
- Excavation; and
- Road formation.

Contract 3408 Third Runway Concourse and Apron Works

- Reinforced concrete works;
- Site setup works; and
- Excavation.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Block wall construction;
- Drainage works;
- Bridge demolition;
- Backfilling;
- Temporary road construction; and
- Architectural, builder's work and finishing works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Guidebeam installation.

Contract 3602 Existing APM System Modification Works

- Erection of guide rail; and
- Concrete plinth and stitch construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Laying of drainage pipes and water mains;
- Paving works; and
- Road works.

Contract 3723 Construction Support Facilities

- Clearance works; and
- E&M installation.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Excavation;
- Falseworks and formworks; and
- Backfilling.

Contract 3802 APM and BHS Tunnels and Related Works

- Installation of dewatering well;
- Excavation and lateral supports; and
- Tunnel construction.

Construction Support (Services / Licenses):

Contract 3901A Concrete Batching Facility

- Operation of concrete batching plant and material conveyor belt.

Contract 3901B Concrete Batching Facility

- Operation of concrete batching plant.

8.2 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period expected to be associated with the construction activities include:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- DEZ monitoring for seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

The implementation of required mitigation measures by the contractors will be monitored by the ET.

8.3 Monitoring Schedule for the Coming Reporting Period

A tentative schedule of the planned environmental monitoring work in the next reporting period is provided in **Appendix B**.

8.4 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period are located in reclamation areas and existing airport island respectively. Works in the reclamation areas included seawall construction, filling and land-based ground improvement works, together with runway, concourse and associated works. Land-based works on existing airport island involved mainly airfield works, Terminal 2 expansion works, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include road and drainage works, cable ducting, demolition, piling, and excavation works.

All the monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

The water quality monitoring results for all parameters, except DO, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO, some of the testing results triggered the relevant Action and/or Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

On the implementation of the SkyPier Plan, due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement between HKIA SkyPier and Zhuhai and Macau was recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period. The daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 3 to 5 daily movements, which are within the maximum daily cap of 125 daily movements.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Trainings have been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's CTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures

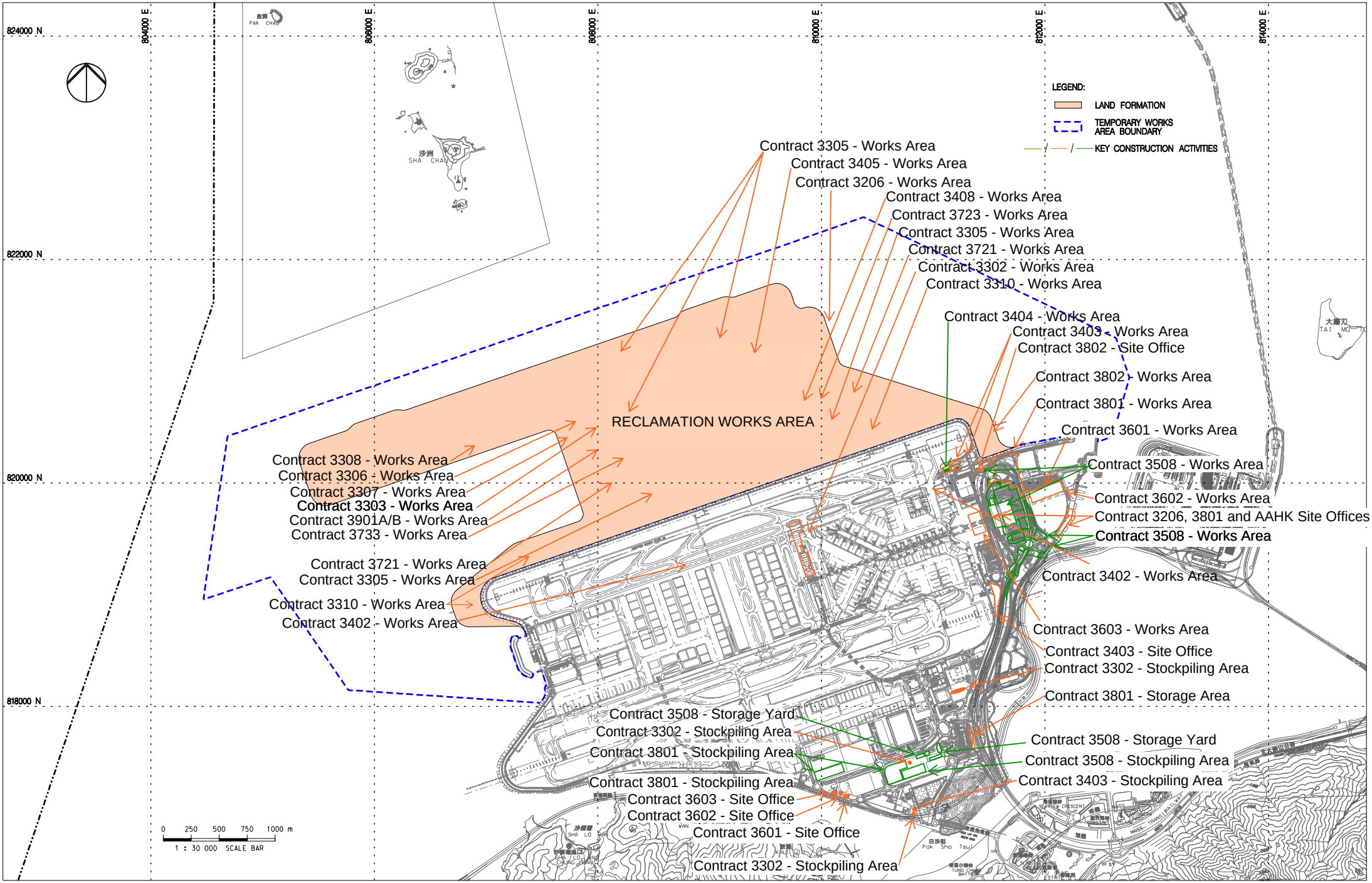
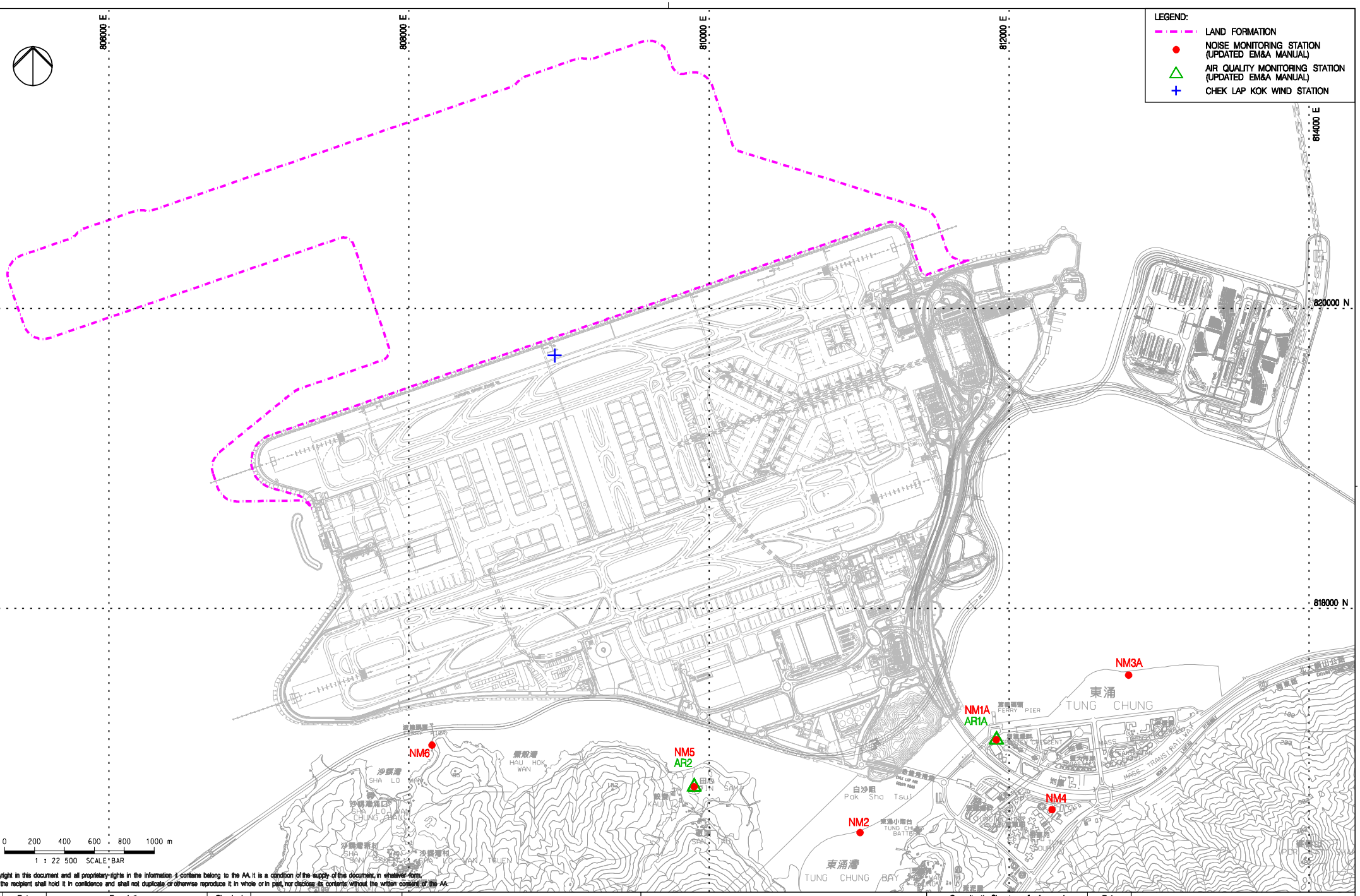


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Note: The locations are for indicative purpose. The actual construction work locations are in accordnace with the construction work programme.



Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

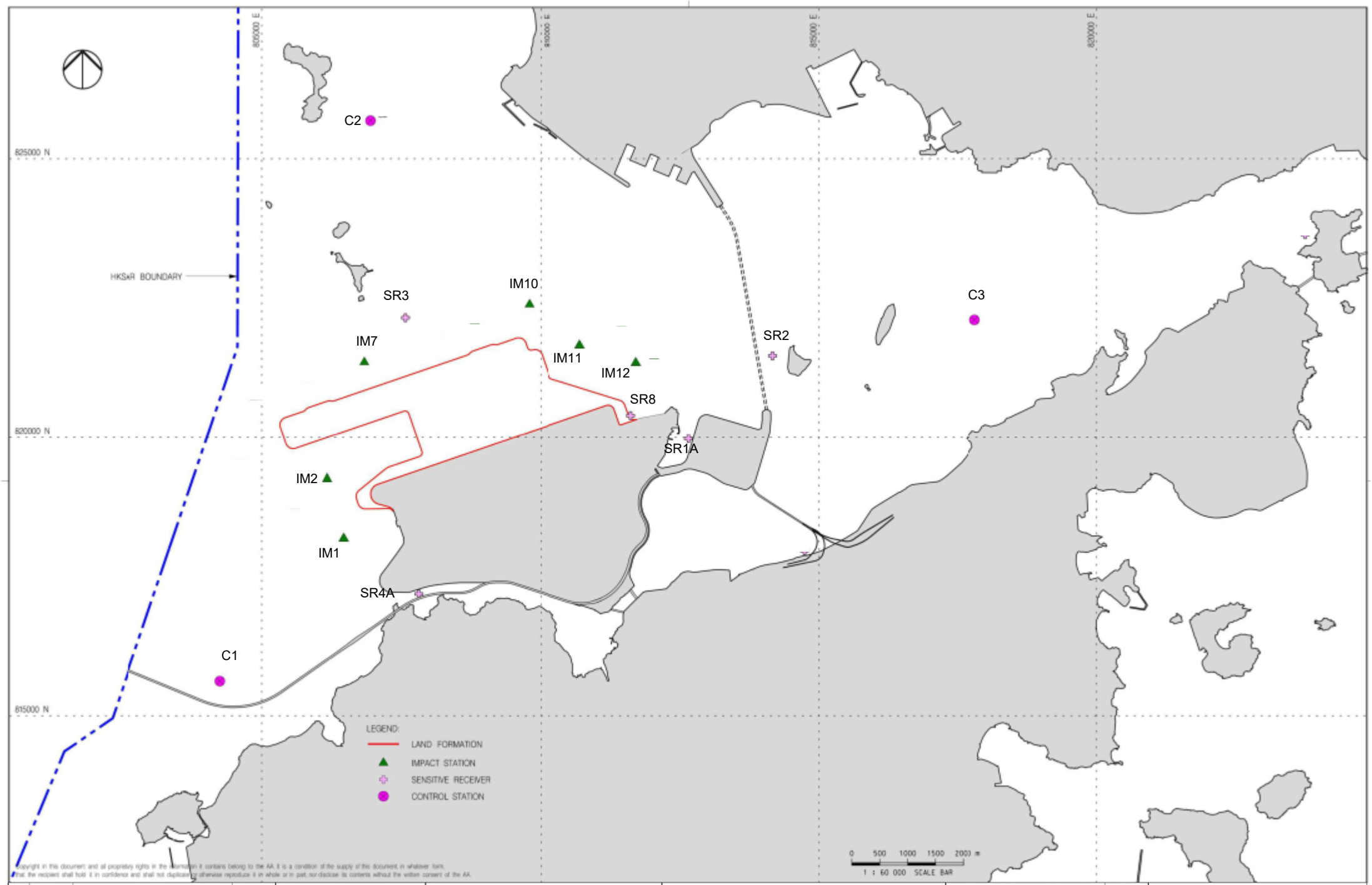
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

Filename: J:\355482\REPORT\EN\EMA\181029\FIG 2.1.dgn



Rev.	Date	Description	Checked
A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title: WATER QUALITY MONITORING STATIONS

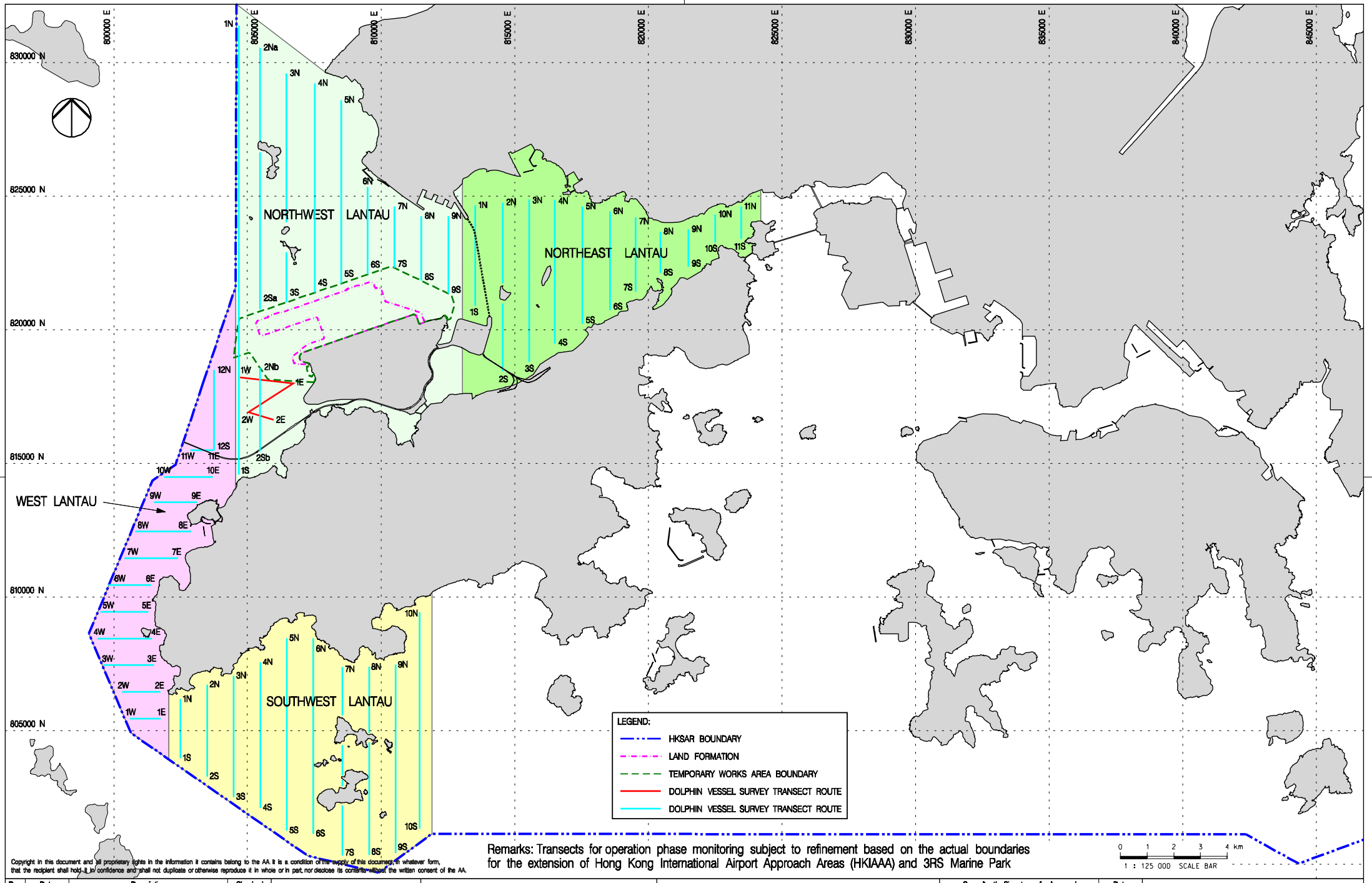
Consultant's Signatures for Approval		Date
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 4.1

Scale at A3 1 : 60000

Rev. A



Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park

0 1 2 3 4 km
1 : 125 000 SCALE BAR

Rev.	Date	Description	Checked
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH
F	04APR19	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

VESSEL BASED DOLPHIN MONITORING TRANSECTS IN CONSTRUCTION, POST-CONSTRUCTION AND OPERATION PHASES

Consultant's Signatures for Approval		Date
Design	JC	04APR19
Checkers	JC / TK	04APR19
Approver	EC	04APR19

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

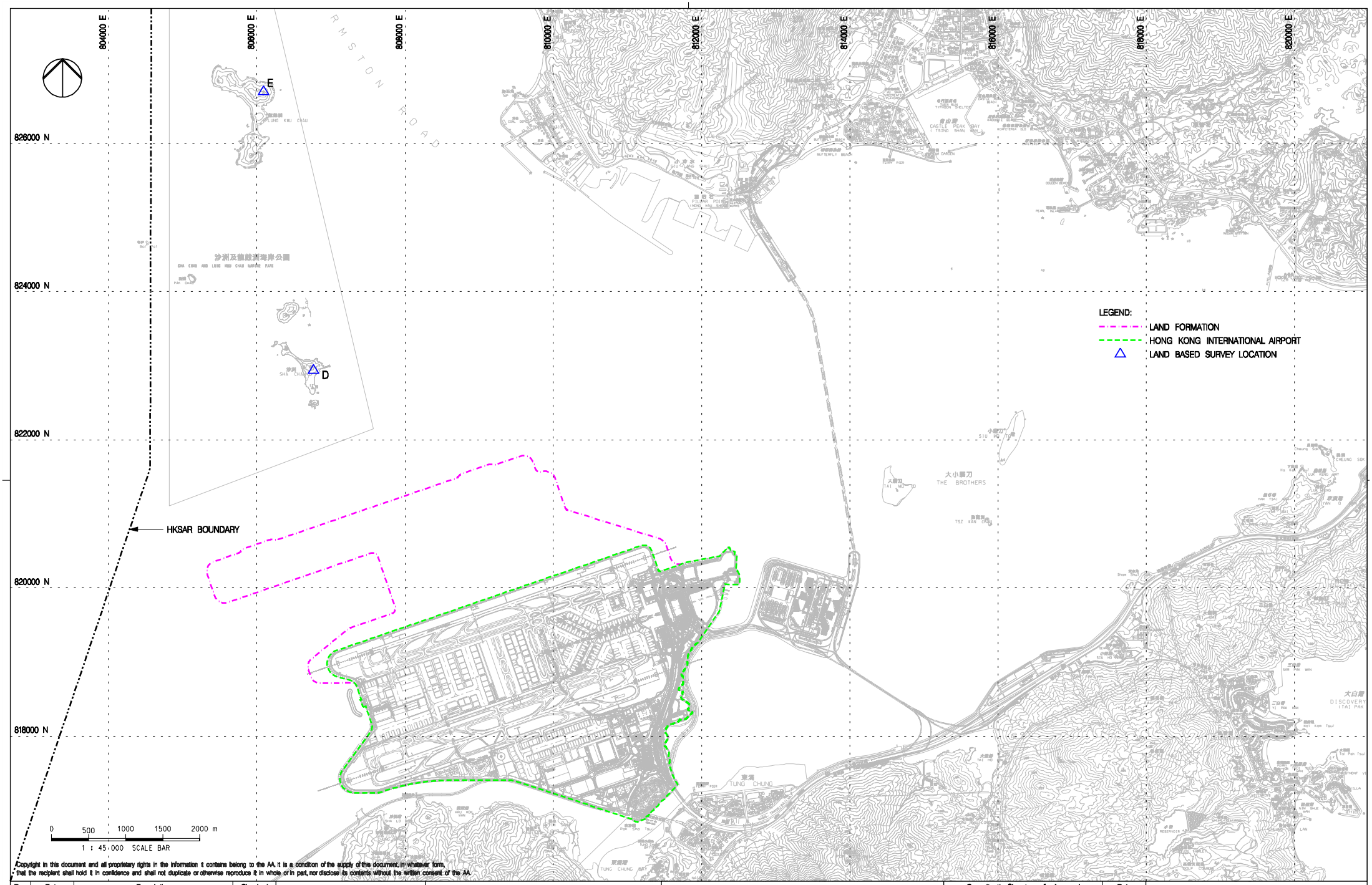
Drawing No.

FIGURE 6.1

Scale at A3
1 : 125000

Rev. F

Filename: J:\355482\REPORT\ENV\EMA\190404\FIG 6.1.dgn



Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	08FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

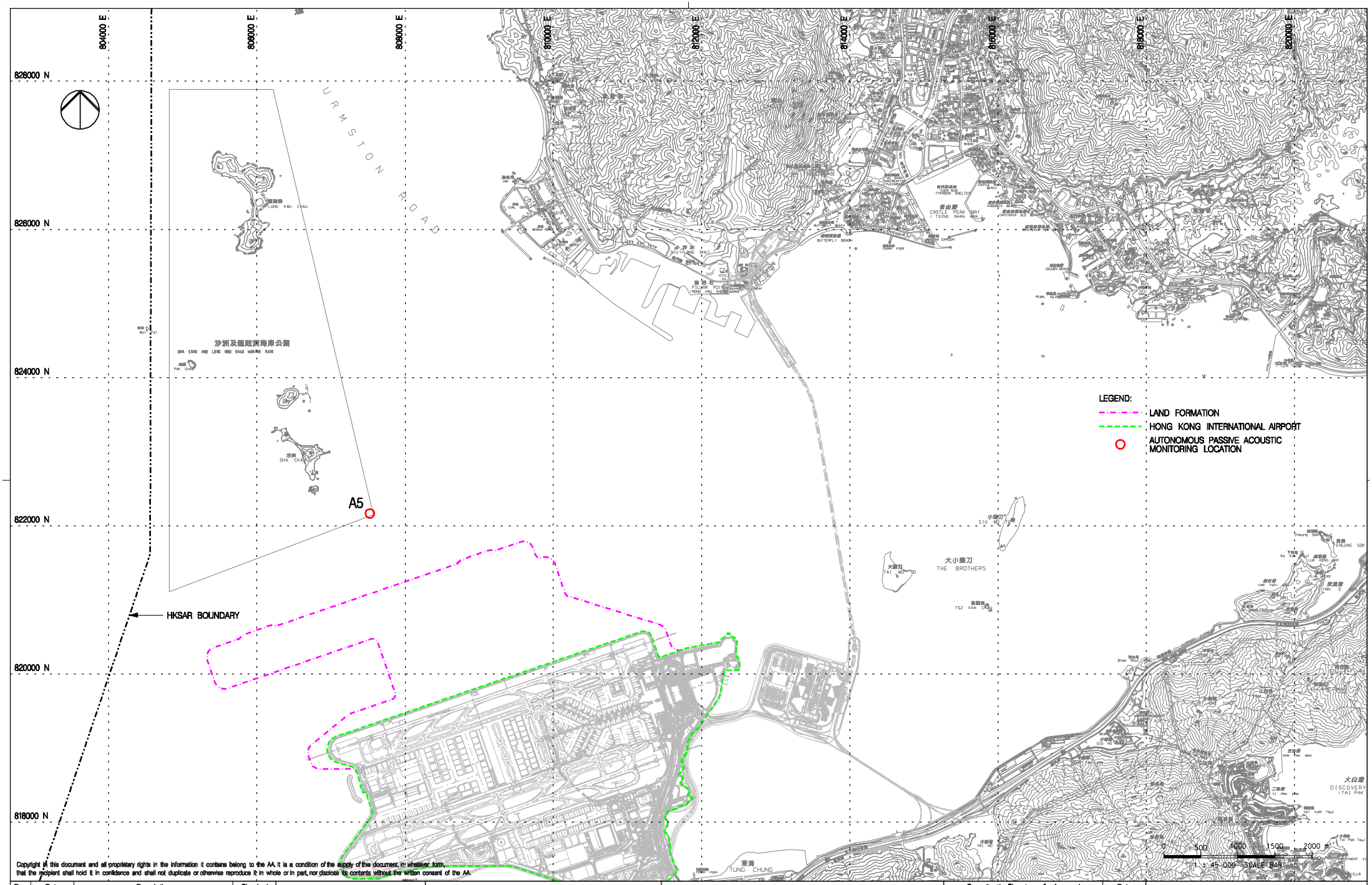
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.5.dgn



Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT
B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29OCT18
Checkers	JC / TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No.

FIGURE 6.4

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\EN\EMA\181029\FIG 2.11.dgn

Appendix A. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	**Dust Control Measures** ▪ Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	▪ Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling.	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management ▪ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads ▪ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or ▪ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Within construction site / Duration of the construction phase	I
			Exposed Earth ▪ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Loading, Unloading or Transfer of Dusty Materials ▪ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	Within construction site / Duration of the construction phase	I
			Debris Handling ▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and ▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.	Within construction site / Duration of the construction phase	I
			Transport of Dusty Materials ▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.	Within construction site / Duration of the construction phase	I
			Wheel washing ▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Within construction site / Duration of the construction phase	I
			Use of vehicles ▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; ▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and ▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.	Within construction site / Duration of the construction phase	I
			Site hoarding ▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	**Best Practices for Concrete Batching Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include: Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high-level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.		
			Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stockpiles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used;	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side; ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed.		
			Loading of materials for batching ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process.	Within Concrete Batching Plant / Duration of the construction phase	I
			Vehicles ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and ▪ All access and route roads within the premises shall be paved and adequately wetted.	Within Concrete Batching Plant / Duration of the construction phase	I
			Housekeeping ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.	Within Concrete Batching Plant / Duration of the construction phase	I
5.2.6.6	2.1	-	**Best Practices for Asphaltic Concrete Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include: Design of Chimney ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected.		
			Cold feed side ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures.	Within Concrete Batching Plant / Duration of the construction phase	I
			Hot feed side ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages; ▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and	Within Concrete Batching Plant / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units).		
			Material transportation ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and ▪ Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.	Within Concrete Batching Plant / Duration of the construction phase	I
			Control of emissions from bitumen decanting ▪ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; ▪ Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; ▪ Proper chimney for the discharge of bitumen fumes shall be provided at high level; ▪ The emission of bitumen fumes shall not exceed the required emission limit; and ▪ The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.	Within Concrete Batching Plant / Duration of the construction phase	I
			Liquid fuel ▪ The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air.	Within Concrete Batching Plant / Duration of the construction phase	I
			Housekeeping ▪ A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Within Concrete Batching Plant / Duration of the construction phase	I
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include: Crushers	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure.		
			Vibratory screens and grizzlies ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage
			Belt conveyors ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage
			Storage piles and bins ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required.	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; ▪ All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or ▪ The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls; and ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.		
			Rock drilling equipment ▪ Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.	Within Concrete Batching Plant / Duration of the construction phase	N/A as there was no rock crushing plant at this stage
			Hazard to Human Life – Construction Phase		
Table 6.40	3.2	-	▪ Precautionary measures should be established to request barges to move away during typhoons.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ An appropriate marine traffic management system should be established to minimize risk of ship collision.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ Location of all existing hydrant networks should be clearly identified prior to any construction works.	Construction Site / Construction Period	I
			Noise Impact – Construction Phase		
7.5.6	4.3	-	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: ▪ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; ▪ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; ▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
7.5.6	4.3	-	**Adoption of QPME** ▪ QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Movable Noise Barriers** ▪ Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Noise Enclosure/ Acoustic Shed** ▪ Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Within the Project site / During construction phase / Prior to commencement of operation	I
			Water Quality Impact – Construction Phase		
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** <u>General Measures to be Applied to All Works Areas</u> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the seabed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the wastewater meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to All Works Areas ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I – For marine filling C – Completed in Nov 2020 for sand blanket
			▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities;		C – Completed in May 2018
			▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and		I (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The Silt Curtain Deployment Plan shall be implemented.		I
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		I – For C7a C – Completed in Dec 2021 for C8 *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u> ▪ Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides;	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;		N/A (The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and		I – For C7a C – Completed in Dec 2021 for C8 (The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I
			<u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u> ▪ Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.	Within construction site / Duration of the construction phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
8.8.1.4	5.1	-	**Modification of the Existing Seawall** ▪ Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** ▪ During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	I
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment.	Within construction site / Duration of the construction phase	C – For approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			<u>For construction of the eastern approach lights at the CMPs</u> ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings; ▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site.		C – Completed in Oct 2021
8.8.1.8	5.1	-	**Construction of Site Runoff and Drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended:	Within construction site / Duration of the construction phase	
			▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sandbag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		I
			▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;		I
			▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		I
			▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
			▪ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system;		I
			▪ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and		I
			▪ Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events.		I
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and ▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.	Within construction site / During construction phase	I
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	C – Completed in Jan 2019
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	C – Completed in Jan 2019
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work;		I
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and		I
			▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable;	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; ▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments:	Project Site Area / Construction Phase	I
			▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;		I
			▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions;		I
			▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;		I
			▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			▪ Treated and untreated sediment should be clearly separated and stored separately; and		I
			▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal: ▪ Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; ▪ 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 EPD; and ▪ Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.	Project Site Area / Construction Phase	N/A – the field joint excavation works for the submarine cable diversion will no longer be conducted anymore
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'windblown' light material.	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas.		C – Completed in Jan 2018
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 emergency power supply system nos.1, 2, 3, 4 and 5 were submitted to EPD)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A as no remediation was required.
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A as no contaminated soil was found.

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	C – Completed in Jan 2019
12.7.2.3 and 12.7.2.6	9.1	2.30	**Avoidance and Minimisation of Direct Impact to Egretry** ▪ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry; ▪ In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and ▪ The containment pit at the daylighting location shall be covered or camouflaged.	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.5	9.1	2.30	**Preservation of Nesting Vegetation** ▪ The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.7.2.4 and 12.7.2.6	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season** ▪ All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	C – Completed in Jan 2019
12.10.1.1	9.3	-	**Ecological Monitoring** ▪ During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	C – Completed in Jan 2019
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	▪ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	C – Completed in Jan 2016
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.7 to 13.11.1.10	-	2.31	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	C – Completed in Jan 2019 for diversion of aviation fuel pipeline
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		C – Completed in Oct 2021 for new approach lights
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			▪ Prohibition of underwater percussive piling; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		C – Completed in Jan 2019 for HDD works
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		C – Completed in Oct 2021 for new approach lights
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		C – Completed in Jan 2019 for HDD works
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy**	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.		
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	I
			Other mitigation measures ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I C – Completed in Sep 2016
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;	Marine waters around land formation works area during construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and		I
			▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.		C – Completed in Oct 2021 for the bored piling work of New approach lights
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan** ▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.	Construction phase	I
13.11.5.21 to 13.11.5.23	10.6.1	-	**Construction Vessel Speed Limits and Skipper Training** ▪ A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities (as currently indicated by the 1x1km grid squares in Figure 6 of Appendix 13.2 of EIA report). ▪ Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	C – Completed in Jan 2019 for diversion of aviation fuel pipeline

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		C – Completed in Jan 2019 for HDD works
14.9.1.11	-		**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		C – Completed in Oct 2021 for new approach lights N/A for marker beacons as HKIAAA Marker Beacons would be replaced by buoys
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		C – Completed on Jan 2019 for HDD work
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases.	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	I
			Cultural Heritage Impact – Construction Phase		
			Not applicable to the construction stage of this project.		
			Health Impact – Aircraft Emissions		
			Not applicable to the construction stage of this project.		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Health Impact – Aircraft Noise		
			Not applicable to the construction stage of this project.		

Notes:

" - " For items denoted as " - " provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.

" I " Implemented and on-going where applicable.

" N/A " Not applicable to the construction works implemented during the reporting month.

" ^ " Checked by ET through site inspection and record provided by the Contractor.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jul-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 WQ General [1] mid-ebb: 15:08 mid-flood: 07:48
3	4 Site Inspection AR1A, AR2 NM1A, NM5	5 Site Inspection WQ General mid-ebb: 17:01 mid-flood: 09:59	6 Site Inspection CWD Survey (Vessel) NM4, NM6	7 Site Inspection WQ General mid-ebb: 06:59 mid-flood: 12:19	8 Site Inspection CWD Survey (Vessel)	9 AR1A, AR2 WQ General mid-ebb: 09:01 mid-flood: 15:33
10	11 Site Inspection CWD Survey (Vessel)	12 Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 11:43 mid-flood: 04:36	13 Site Inspection CWD Survey (Vessel) NM4, NM6	14 Site Inspection WQ General mid-ebb: 13:25 mid-flood: 06:16	15 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	16 WQ General mid-ebb: 15:03 mid-flood: 07:59
17	18 Site Inspection CWD Survey (Land-based)	19 Site Inspection CWD Survey (Vessel, Land-based) NM4, NM6 WQ General mid-ebb: 17:19 mid-flood: 10:47	20 Site Inspection	21 Site Inspection AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 07:31 mid-flood: 13:11	22 Site Inspection	23 WQ General mid-ebb: 09:41 mid-flood: 16:38
24	25 Site Inspection CWD Survey (Vessel)	26 Site Inspection NM4, NM6 WQ General mid-ebb: 11:54 mid-flood: 04:18	27 Site Inspection AR1A, AR2 NM1A, NM5	28 Site Inspection WQ General mid-ebb: 13:06 mid-flood: 05:47	29 Site Inspection	30 WQ General mid-ebb: 14:15 mid-flood: 07:07
31		**Notes:** Contract Number - Site Inspection CWD - Chinese White Dolphin Air quality and Noise Monitoring Station NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan WQ - Water Quality [1] WQ Monitoring for both ebb and flood tides on 2 July 2022 was cancelled due to No. 8 Southeast Gale or Storm Signal in force.				

Tentative Monitoring Schedule of Next Reporting Period

Aug-22

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Site Inspection	**2** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 15:54 mid-flood: 09:10	**3** Site Inspection	**4** Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 17:07 mid-flood: 10:48	**5** Site Inspection CWD Survey (Vessel) NM4, NM6	**6** WQ General mid-ebb: 07:10 mid-flood: 13:48
7	**8** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**9** Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 10:36 mid-flood: 03:14	**10** Site Inspection	**11** Site Inspection CWD Survey (Vessel) WQ General mid-ebb: 12:26 mid-flood: 05:19	**12** Site Inspection CWD Survey (Vessel) NM4, NM6	**13** AR1A, AR2 WQ General mid-ebb: 14:01 mid-flood: 07:07
14	**15** Site Inspection	**16** Site Inspection CWD Survey (Vessel, Land-based) WQ General mid-ebb: 16:01 mid-flood: 09:36	**17** Site Inspection CWD Survey (Land-based) NM4, NM6	**18** Site Inspection WQ General mid-ebb: 17:07 mid-flood: 11:25	**19** Site Inspection AR1A, AR2 NM1A, NM5	**20** WQ General mid-ebb: 07:29 mid-flood: 19:58
21	**22** Site Inspection	**23** Site Inspection WQ General mid-ebb: 10:49 mid-flood: 23:13	**24** Site Inspection	**25** Site Inspection AR1A, AR2 NM1A, NM5 WQ General mid-ebb: 12:09 mid-flood: 19:19	**26** Site Inspection NM4, NM6	**27** WQ General mid-ebb: 13:19 mid-flood: 20:07
28	**29** Site Inspection	**30** Site Inspection WQ General mid-ebb: 14:53 mid-flood: 08:24	**31** Site Inspection AR1A, AR2 NM1A, NM5			

Notes:

Contract Number - Site Inspection

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality

NM1A/AR1A - Man Tung Road Park
NM4 - Ching Chung Hau Po Woon Primary School
NM5/AR2 - Village House, Tin Sum
NM6 - House No. 1, Sha Lo Wan

Appendix C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

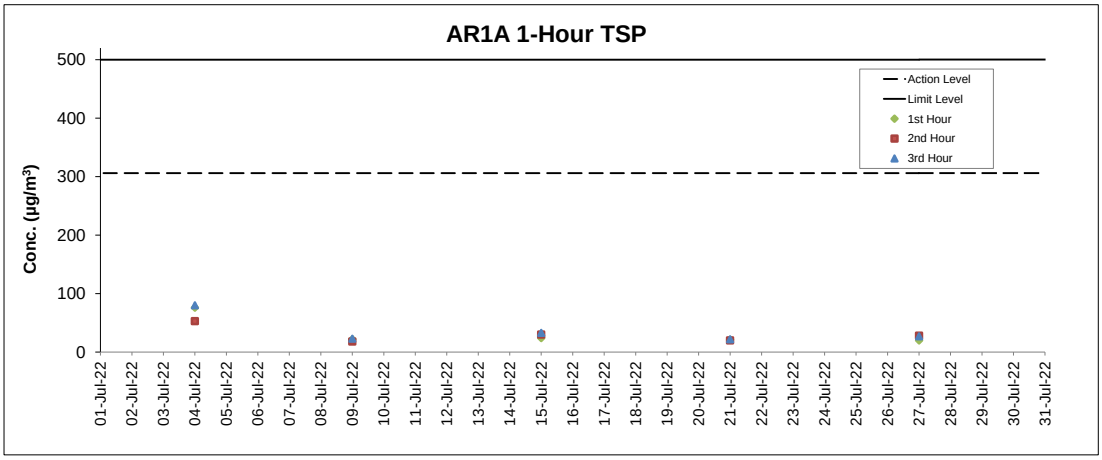
Station: AR1A- Man Tung Road Park

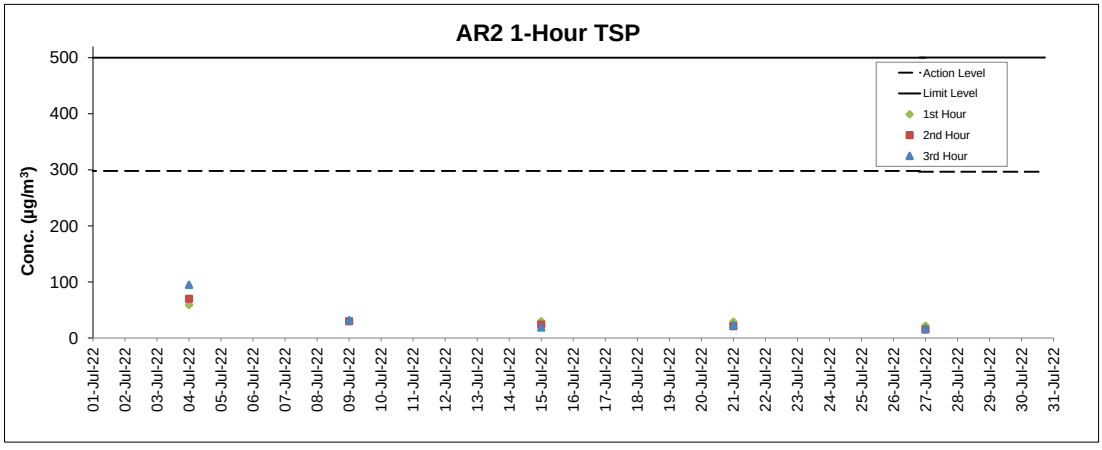
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
04-Jul-22	13:34	Overcast	9.4	211	76	306	500
04-Jul-22	14:34	Overcast	8.1	214	53	306	500
04-Jul-22	15:34	Overcast	8.3	203	80	306	500
09-Jul-22	13:09	Sunny	4.4	267	22	306	500
09-Jul-22	14:09	Sunny	2.8	266	18	306	500
09-Jul-22	15:09	Sunny	1.7	Variable	23	306	500
15-Jul-22	15:06	Sunny	3.9	213	24	306	500
15-Jul-22	16:06	Sunny	4.7	207	30	306	500
15-Jul-22	17:06	Sunny	4.4	208	33	306	500
21-Jul-22	12:53	Sunny	3.1	177	21	306	500
21-Jul-22	13:53	Sunny	5.8	153	20	306	500
21-Jul-22	14:53	Sunny	5.3	160	22	306	500
27-Jul-22	13:33	Sunny	4.2	271	20	306	500
27-Jul-22	14:33	Sunny	3.1	289	28	306	500
27-Jul-22	15:33	Sunny	4.2	254	27	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
04-Jul-22	9:00	Overcast	10.3	197	59	298	500
04-Jul-22	10:00	Overcast	10.0	194	70	298	500
04-Jul-22	11:00	Overcast	9.7	204	95	298	500
09-Jul-22	8:47	Sunny	3.3	99	30	298	500
09-Jul-22	9:47	Sunny	3.3	87	30	298	500
09-Jul-22	10:47	Sunny	4.7	66	32	298	500
15-Jul-22	10:50	Sunny	4.2	257	30	298	500
15-Jul-22	11:50	Sunny	3.3	242	24	298	500
15-Jul-22	12:50	Sunny	3.9	233	19	298	500
21-Jul-22	9:03	Sunny	3.3	168	29	298	500
21-Jul-22	10:03	Sunny	4.7	156	21	298	500
21-Jul-22	11:03	Sunny	4.7	148	23	298	500
27-Jul-22	9:53	Sunny	4.7	241	22	298	500
27-Jul-22	10:53	Sunny	5.0	272	15	298	500
27-Jul-22	11:53	Sunny	4.7	259	17	298	500





Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
04-Jul-22	Overcast	13:33	67.7	55.1	66
04-Jul-22	Overcast	13:38	61.3	55.1	
04-Jul-22	Overcast	13:43	68.5	55.7	
04-Jul-22	Overcast	13:48	70.3	55.5	
04-Jul-22	Overcast	13:53	70.0	55.7	
04-Jul-22	Overcast	13:58	67.8	55.0	
15-Jul-22	Sunny	14:10	68.8	66.9	67
15-Jul-22	Sunny	14:15	66.7	62.9	
15-Jul-22	Sunny	14:20	66.8	60.2	
15-Jul-22	Sunny	14:25	65.1	56.0	
15-Jul-22	Sunny	14:30	64.6	52.2	
15-Jul-22	Sunny	14:35	65.3	52.7	
21-Jul-22	Sunny	11:52	58.2	51.9	67
21-Jul-22	Sunny	11:57	60.7	53.0	
21-Jul-22	Sunny	12:02	69.5	64.5	
21-Jul-22	Sunny	12:07	69.2	65.0	
21-Jul-22	Sunny	12:12	65.0	59.2	
21-Jul-22	Sunny	12:17	60.3	55.4	
27-Jul-22	Sunny	13:52	60.7	54.2	63
27-Jul-22	Sunny	13:57	61.0	58.4	
27-Jul-22	Sunny	14:02	65.3	58.3	
27-Jul-22	Sunny	14:07	60.6	58.3	
27-Jul-22	Sunny	14:12	61.0	58.5	
27-Jul-22	Sunny	14:17	60.6	58.2	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
06-Jul-22	Sunny	13:26	63.2	61.1	65
06-Jul-22	Sunny	13:31	62.5	59.2	
06-Jul-22	Sunny	13:36	61.8	58.8	
06-Jul-22	Sunny	13:41	61.4	58.8	
06-Jul-22	Sunny	13:46	62.3	58.7	
06-Jul-22	Sunny	13:51	62.2	58.5	
13-Jul-22	Sunny	13:22	64.3	59.3	64
13-Jul-22	Sunny	13:27	63.0	60.8	
13-Jul-22	Sunny	13:32	62.4	58.6	
13-Jul-22	Sunny	13:37	61.7	59.0	
13-Jul-22	Sunny	13:42	61.2	58.9	
13-Jul-22	Sunny	13:47	62.8	59.6	
19-Jul-22	Sunny	13:18	63.9	60.5	65
19-Jul-22	Sunny	13:23	63.4	59.9	
19-Jul-22	Sunny	13:28	63.0	61.2	
19-Jul-22	Sunny	13:33	61.2	59.0	
19-Jul-22	Sunny	13:38	62.1	59.0	
19-Jul-22	Sunny	13:43	63.8	60.3	
26-Jul-22	Sunny	14:02	61.6	56.7	62
26-Jul-22	Sunny	14:07	59.4	57.0	
26-Jul-22	Sunny	14:12	59.9	57.2	
26-Jul-22	Sunny	14:17	60.3	56.8	
26-Jul-22	Sunny	14:22	60.4	57.5	
26-Jul-22	Sunny	14:27	60.6	57.4	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
04-Jul-22	Overcast	09:34	53.6	48.4	56
04-Jul-22	Overcast	09:39	52.6	47.1	
04-Jul-22	Overcast	09:44	56.8	46.4	
04-Jul-22	Overcast	09:49	53.5	47.5	
04-Jul-22	Overcast	09:54	53.9	47.5	
04-Jul-22	Overcast	09:59	58.2	50.4	
15-Jul-22	Sunny	09:57	57.5	47.2	59
15-Jul-22	Sunny	10:02	58.9	46.7	
15-Jul-22	Sunny	10:07	56.2	46.1	
15-Jul-22	Sunny	10:12	49.2	45.6	
15-Jul-22	Sunny	10:17	50.3	45.5	
15-Jul-22	Sunny	10:22	50.7	45.4	
21-Jul-22	Sunny	08:04	54.1	51.5	57
21-Jul-22	Sunny	08:09	52.3	47.7	
21-Jul-22	Sunny	08:14	58.5	49.2	
21-Jul-22	Sunny	08:19	55.4	51.9	
21-Jul-22	Sunny	08:24	57.3	55.3	
21-Jul-22	Sunny	08:29	57.0	51.0	
27-Jul-22	Sunny	09:00	53.8	51.6	54
27-Jul-22	Sunny	09:05	53.9	47.7	
27-Jul-22	Sunny	09:10	50.1	46.9	
27-Jul-22	Sunny	09:15	48.9	45.8	
27-Jul-22	Sunny	09:20	54.8	50.2	
27-Jul-22	Sunny	09:25	51.6	46.0	

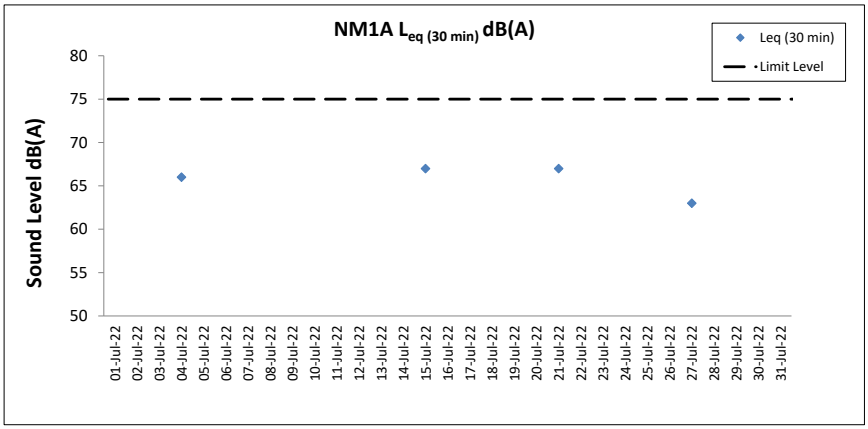
Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.

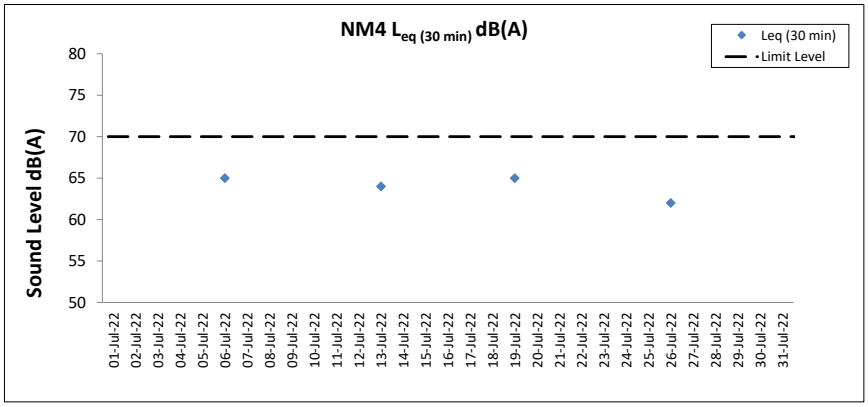
Noise Measurement Results

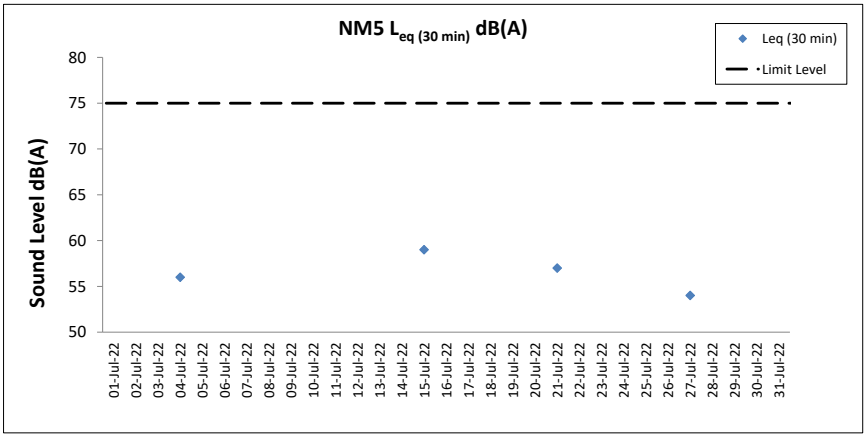
Station: NM6- House No.1 Sha Lo Wan

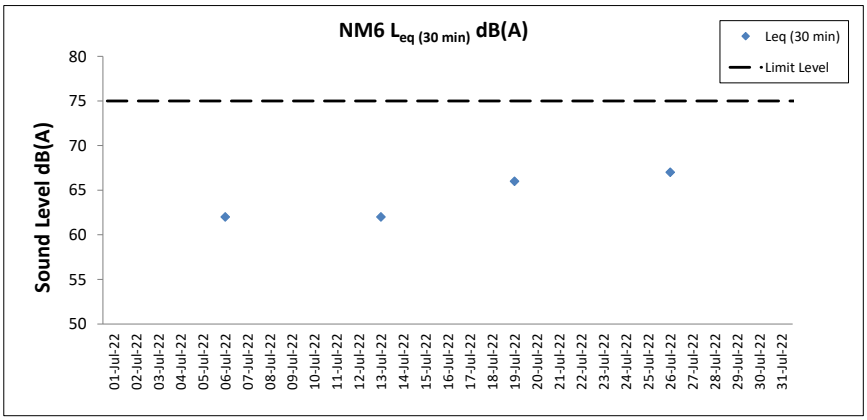
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
06-Jul-22	Sunny	15:35	66.7	54.7	62*
06-Jul-22	Sunny	15:40	68.8	61.3	
06-Jul-22	Sunny	15:45	59.2	52.4	
06-Jul-22	Sunny	15:50	64.6	53.5	
06-Jul-22	Sunny	15:55	64.4	54.6	
06-Jul-22	Sunny	16:00	67.2	56.8	
13-Jul-22	Sunny	15:34	60.6	45.0	62*
13-Jul-22	Sunny	15:39	68.5	42.6	
13-Jul-22	Sunny	15:44	73.0	55.6	
13-Jul-22	Sunny	15:49	68.0	46.0	
13-Jul-22	Sunny	15:54	63.4	49.3	
13-Jul-22	Sunny	15:59	59.7	45.2	
19-Jul-22	Sunny	15:40	68.7	44.5	66*
19-Jul-22	Sunny	15:45	69.1	49.3	
19-Jul-22	Sunny	15:50	72.7	51.4	
19-Jul-22	Sunny	15:55	67.3	56.0	
19-Jul-22	Sunny	16:00	63.5	48.3	
19-Jul-22	Sunny	16:05	64.7	54.7	
26-Jul-22	Sunny	15:36	70.6	45.5	67
26-Jul-22	Sunny	15:41	57.4	42.2	
26-Jul-22	Sunny	15:46	59.8	40.8	
26-Jul-22	Sunny	15:51	48.8	38.2	
26-Jul-22	Sunny	15:56	63.2	42.1	
26-Jul-22	Sunny	16:01	62.8	43.8	

Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.









Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Rainy	Moderate	16:31	8.4	Surface	1.0	0.5	206	26.8	26.8	8.0	8.0	7.5	7.6	102.3	102.3	7.9	7.8	9.0	10.2	7	5	815603	804223
						1.0	0.5	208	26.8		8.0		7.6		102.2		7.8		9.0		6			
					Middle	4.2	0.4	193	26.5	26.5	8.1	8.1	7.9	7.9	100.4	100.2	7.7		9.6		5			
						4.2	0.5	187	26.5		8.1		7.9		99.9		7.7		9.7		5			
					Bottom	7.4	0.5	206	26.4	26.4	8.0	8.0	19.0	20.4	87.7	87.8	6.3	6.3	11.9		5			
						7.4	0.5	201	26.4		8.0		21.9		87.8		6.2		12.0		4			
C2	Rainy	Rough	15:19	11.8	Surface	1.0	0.4	160	26.9	26.9	8.0	8.0	6.4	6.4	101.5	101.5	7.8	7.2	7.4	6.6	4	4	825699	806933
						1.0	0.4	163	26.9		8.0		6.3		101.4		7.8		7.4		4			
					Middle	5.9	0.3	162	26.4	26.4	7.8	7.8	13.3	13.2	88.1	88.0	6.6		5.8		4			
						5.9	0.3	164	26.4		7.8		13.1		87.9		6.6		5.8		4			
					Bottom	10.8	0.3	147	26.3	26.3	7.8	7.8	15.1	15.1	86.3	86.2	6.4	6.4	6.5		4			
						10.8	0.4	150	26.3		7.8		15.2		86.1		6.4		6.6		5			
C3	Misty	Moderate	16:14	9.0	Surface	1.0	0.4	80	27.2	27.2	8.0	8.0	10.2	10.2	90.8	90.8	6.8	6.8	1.5	2.3	4	4	822099	817803
						1.0	0.3	85	27.2		8.0		10.2		90.8		6.8		1.4		4			
					Middle	4.5	0.4	55	27.2	27.2	8.0	8.0	10.4	10.5	90.8	90.8	6.8		2.2		4			
						4.5	0.4	48	27.1		8.0		10.5		90.8		6.8		2.2		3			
					Bottom	8.0	0.3	64	27.2	27.2	8.0	8.0	12.0	11.9	91.2	91.3	6.8	6.8	3.2		3			
						8.0	0.3	67	27.2		8.0		11.8		91.4		6.8		3.2		3			
IM1	Rainy	Moderate	16:15	7.2	Surface	1.0	0.3	191	26.8	26.8	8.0	8.0	8.0	8.0	101.5	101.5	7.8	7.4	8.4	9.9	4	5	818355	806461
						1.0	0.2	191	26.8		8.0		8.0		101.5		7.8		8.4		4			
					Middle	3.6	0.3	192	26.4	26.4	8.0	8.0	9.6	10.1	94.0	93.2	7.1		9.8		5			
						3.6	0.3	191	26.3		8.1		10.6		92.3		7.0		9.4		4			
					Bottom	6.2	0.3	183	26.4	26.4	7.9	7.9	28.3	28.3	87.9	88.2	6.0	6.1	11.7		5			
						6.2	0.3	179	26.4		7.9		28.3		88.4		6.1		11.5		5			
IM2	Rainy	Moderate	16:09	7.0	Surface	1.0	0.3	195	26.7	26.7	8.0	8.0	7.8	7.8	102.0	102.0	7.8	7.4	8.6	8.5	4	5	819192	806222
						1.0	0.4	197	26.7		8.0		7.8		101.9		7.8		8.8		4			
					Middle	3.5	0.3	174	26.5	26.5	7.9	7.9	16.4	16.3	95.2	95.5	7.0		9.0		4			
						3.5	0.3	178	26.5		7.9		16.2		95.7		7.0		9.9		5			
					Bottom	6.0	0.3	175	26.3	26.3	7.9	7.9	26.9	26.9	83.6	83.6	5.8	5.8	7.2		5			
						6.0	0.3	176	26.3		7.9		26.9		83.6		5.8		7.2		5			
IM7	Rainy	Rough	15:48	7.9	Surface	1.0	0.2	173	26.8	26.8	8.0	8.0	6.1	6.1	101.9	101.9	7.9	7.4	9.4	7.4	3	4	821337	806811
						1.0	0.2	177	26.8		8.0		6.1		101.8		7.9		9.4		4			
					Middle	4.0	0.3	169	26.5	26.5	7.9	7.9	11.4	11.4	91.4	91.3	6.9		6.1		4			
						4.0	0.2	175	26.5		7.9		11.4		91.1		6.9		6.1		5			
					Bottom	6.9	0.2	166	26.4	26.4	7.8	7.8	13.9	13.9	91.1	91.2	6.8	6.8	6.7		4			
						6.9	0.2	159	26.4		7.8		13.9		91.3		6.8		6.7		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The monitoring session on 2 July 2022 was cancelled due to No. 8 Southeast Gale or Storm Signal in force.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	15:21	8.2	Surface	1.0	0.4	114	27.0	27.0	8.5	8.5	9.5	9.6	87.4	87.0	6.6	6.2	6.1	7.3	5	5	822217	809835
						1.0	0.4	120	27.0		8.5		9.6		86.5		6.5		6.1		4			
					Middle	4.1	0.4	97	26.9	26.9	8.5	8.4	13.5	13.5	78.4	78.4	5.8		7.0		5			
						4.1	0.4	103	26.9		8.4		13.5		78.3		5.8		7.1		4			
					Bottom	7.2	0.4	86	27.0	27.0	8.3	8.3	15.3	15.3	79.0	79.1	5.8	5.8	8.8		5			
						7.2	0.4	92	27.0		8.3		15.3		79.2		5.8		8.6		5			
IM11	Misty	Moderate	15:24	6.4	Surface	1.0	0.6	103	27.1	27.1	8.7	8.7	9.7	9.7	89.4	88.9	6.8	6.4	7.0	8.4	4	4	821486	810549
						1.0	0.6	101	27.0		8.7		9.7		88.4		6.7		7.1		4			
					Middle	3.2	0.6	94	27.1	27.1	8.4	8.4	13.7	13.8	82.8	82.8	6.1		8.8		4			
						3.2	0.5	101	27.1		8.3		13.8		82.8		6.1		8.7		4			
					Bottom	5.4	0.6	102	27.1	27.2	8.3	8.3	14.2	14.0	84.0	84.3	6.2	6.2	9.3		4			
						5.4	0.6	108	27.2		8.3		13.8		84.6		6.2		9.3		4			
IM12	Misty	Moderate	15:30	8.0	Surface	1.0	0.6	93	27.0	27.0	8.6	8.6	10.9	10.9	88.3	88.3	6.6	6.6	2.1	3.3	4	4	821179	811540
						1.0	0.6	90	27.0		8.6		10.9		88.3		6.6		2.2		4			
					Middle	4.0	0.6	84	27.0	27.0	8.6	8.6	12.6	12.7	88.5	88.6	6.6		3.6		5			
						4.0	0.5	89	27.0		8.6		12.7		88.6		6.6		3.6		4			
					Bottom	7.0	0.5	95	27.1	27.1	8.6	8.5	12.8	12.7	89.3	89.4	6.6	6.6	4.1		4			
						7.0	0.5	87	27.1		8.5		12.7		89.4		6.6		4.1		4			
SR1A	Misty	Moderate	15:44	5.4	Surface	1.0	0.0	133	27.3	27.3	8.0	8.0	10.1	10.1	91.1	91.1	6.8	6.8	2.6	3.0	4	3	819974	812656
						1.0	0.0	127	27.3		8.0		10.1		91.1		6.8		2.5		3			
					Middle	2.7	0.0	126	-	-	-	-	-	-	-	-	-		-		-			
						2.7	0.0	130	-		-		-		-		-		-		-			
					Bottom	4.4	0.0	129	27.3	27.3	7.9	7.9	10.2	10.2	91.6	91.8	6.9	6.9	3.3		3			
						4.4	0.0	127	27.2		7.9		10.1		91.9		6.9		3.4		3			
SR2	Misty	Moderate	16:02	5.2	Surface	1.0	0.6	49	27.2	27.2	7.9	7.9	10.1	10.1	91.5	91.5	6.9	6.9	8.1	8.9	3	4	821473	814171
						1.0	0.6	45	27.1		7.9		10.2		91.5		6.9		8.1		4			
					Middle	-	0.6	38	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	34	-		-		-		-		-		-		-			
					Bottom	4.2	0.5	27	27.1	27.2	7.8	7.8	11.9	11.9	92.1	92.3	6.9	6.9	9.7		4			
						4.2	0.5	34	27.2		7.8		11.9		92.5		6.9		9.7		3			
SR3	Rainy	Rough	15:39	8.3	Surface	1.0	0.5	160	26.7	26.7	7.9	7.9	7.2	7.2	98.4	98.4	7.6	7.3	8.3	9.0	7	7	822154	807593
						1.0	0.5	157	26.7		7.9		7.2		98.3		7.6		8.1		7			
					Middle	4.2	0.5	155	26.5	26.5	7.8	7.8	11.1	11.1	92.4	92.4	7.0		6.7		7			
						4.2	0.5	150	26.5		7.8		11.1		92.4		7.0		7.3		7			
					Bottom	7.3	0.4	136	26.4	26.4	7.8	7.8	14.8	14.9	85.6	85.6	6.3	6.3	11.6		6			
						7.3	0.5	139	26.4		7.8		14.9		85.6		6.3		12.0		6			
SR4A	Rainy	Moderate	16:50	9.4	Surface	1.0	0.1	340	26.8	26.8	8.0	8.0	8.4	8.4	101.3	101.2	7.7	6.7	9.1	9.3	6	5	817193	807813
						1.0	0.0	335	26.8		8.0		8.4		101.0		7.7		9.1		5			
					Middle	4.7	0.0	356	26.3	26.3	8.0	8.0	26.3	26.0	81.6	81.7	5.7		9.2		5			
						4.7	0.1	1	26.3		8.0		25.7		81.7		5.7		9.3		5			
					Bottom	8.4	0.0	356	26.3	26.3	7.9	7.9	27.5	27.5	84.4	84.5	5.8	5.9	9.5		5			
						8.4	0.0	353	26.3		7.9		27.5		84.6		5.9		9.8		4			
SR8	Misty	Moderate	15:34	5.0	Surface	1.0	-	-	27.2	27.2	8.4	8.4	11.4	11.4	89.5	89.5	6.7	6.7	6.0	6.1	4	4	820394	811618
						1.0	-	-	27.1		8.4		11.5		89.5		6.7		5.9		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	27.2	27.2	8.3	8.3	12.6	12.6	90.2	90.4	6.7	6.7	6.2		4			
						4.0	-	-	27.2		8.3		12.6		90.5		6.7		6.2		4			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Cloudy	Moderate	10:21	8.4	Surface	1.0	0.3	54	26.7	26.7	8.1	8.1	6.7	6.7	100.8	100.7	7.8	6.9	10.9	9.9	6	7	815611	804258
						1.0	0.3	56	26.7		8.1		6.7		100.5		7.8		10.9		6			
					Middle	4.2	0.3	25	26.3	26.3	8.0	8.0	22.2	22.2	84.2	84.2	5.9		10.2		7			
						4.2	0.4	19	26.3		8.0		22.2		84.2		5.9		10.3		6			
					Bottom	7.4	0.3	39	26.3	26.3	8.0	8.0	29.7	29.7	83.5	83.6	5.7	5.7	8.8		7			
						7.4	0.4	31	26.3		8.0		29.7		83.6		5.7		8.6		7			
C2	Cloudy	Rough	11:33	11.7	Surface	1.0	0.4	349	26.9	26.9	8.0	8.0	7.3	7.3	100.7	100.7	7.7	7.1	6.9	7.3	6	5	825660	806957
						1.0	0.5	354	26.9		8.0		7.3		100.6		7.7		6.9		5			
					Middle	5.9	0.4	12	26.4	26.4	7.8	7.8	14.5	14.5	86.9	86.8	6.5		6.7		4			
						5.9	0.4	8	26.3		7.8		14.5		86.7		6.4		6.8		5			
					Bottom	10.7	0.4	359	26.3	26.3	7.8	7.8	16.4	16.5	79.4	79.2	5.8	5.8	8.1		4			
						10.7	0.4	358	26.3		7.8		16.6		79.0		5.8		8.6		5			
C3	Misty	Moderate	09:43	9.2	Surface	1.0	0.5	255	27.0	27.0	8.4	8.4	9.1	9.1	89.7	89.7	6.8	6.8	7.2	8.8	4	4	822106	817802
						1.0	0.5	249	27.0		8.4		9.1		89.6		6.8		7.1		3			
					Middle	4.6	0.5	265	27.1	27.2	8.3	8.3	10.7	10.7	89.5	89.5	6.7		9.1		4			
						4.6	0.5	265	27.2		8.3		10.7		89.5		6.7		9.1		4			
					Bottom	8.2	0.5	283	27.3	27.4	8.2	8.2	11.6	11.6	90.2	90.4	6.7	6.7	10.1		4			
						8.2	0.5	284	27.4		8.2		11.5		90.5		6.7		10.2		4			
IM1	Cloudy	Moderate	10:36	6.5	Surface	1.0	0.3	6	26.7	26.7	8.0	8.0	7.5	7.5	102.6	102.6	7.9	7.9	8.8	9.1	5	6	818361	806469
						1.0	0.3	8	26.7		8.0		7.5		102.6		7.9		8.7		5			
					Middle	3.3	0.2	350	26.6	26.6	8.0	8.0	7.6	7.6	102.3	102.3	7.9		8.8		5			
						3.3	0.2	346	26.6		8.0		7.6		102.2		7.9		8.8		6			
					Bottom	5.5	0.3	359	26.6	26.6	8.0	8.0	7.7	7.7	101.9	101.9	7.8	7.8	9.6		7			
						5.5	0.3	358	26.6		8.0		7.7		101.9		7.8		9.6		6			
IM2	Cloudy	Moderate	10:42	6.8	Surface	1.0	0.3	12	26.7	26.7	8.0	8.0	7.1	7.1	102.6	102.6	7.9	7.9	9.2	9.7	4	5	819185	806249
						1.0	0.3	7	26.7		8.0		7.1		102.6		7.9		9.3		5			
					Middle	3.4	0.3	359	26.6	26.6	8.0	8.0	8.7	8.7	101.6	101.6	7.8		8.2		5			
						3.4	0.3	352	26.6		8.0		8.8		101.6		7.8		8.2		5			
					Bottom	5.8	0.3	336	26.4	26.4	8.0	8.0	11.1	11.2	96.6	96.3	7.3	7.3	11.2		5			
						5.8	0.3	340	26.4		8.0		11.3		96.0		7.3		11.9		5			
IM7	Cloudy	Rough	11:07	7.8	Surface	1.0	0.2	346	26.8	26.8	7.9	7.9	8.0	8.0	98.1	98.1	7.5	7.3	6.3	7.4	6	6	821349	806822
						1.0	0.2	345	26.8		7.9		8.0		98.1		7.5		6.3		7			
					Middle	3.9	0.1	344	26.5	26.5	7.8	7.8	9.7	9.7	92.3	92.2	7.0		7.3		7			
						3.9	0.1	342	26.5		7.8		9.7		92.0		7.0		7.4		6			
					Bottom	6.8	0.2	321	26.4	26.4	7.8	7.8	13.1	13.1	85.2	85.2	6.4	6.4	8.7		6			
						6.8	0.2	318	26.4		7.8		13.1		85.2		6.4		8.7		6			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	10:51	8.8	Surface	1.0	0.5	300	27.0	27.0	7.8	7.8	8.8	8.8	90.0	89.7	6.8	6.5	4.0	5.1	3	4	822255	809846
						1.0	0.5	294	27.0		7.8		8.8		89.4		6.8		4.1		4			
					Middle	4.4	0.4	276	27.0	27.0	7.7	7.7	10.5	10.4	83.8	83.5	6.3		5.1		3			
						4.4	0.4	276	27.0		7.7		10.4		83.2		6.2		5.1		4			
					Bottom	7.8	0.4	274	27.1	27.1	7.7	7.7	14.3	14.3	83.4	83.9	6.1	6.2	6.1		4			
						7.8	0.4	274	27.1		7.7		14.2		84.3		6.2		6.3		4			
IM11	Misty	Moderate	10:44	8.0	Surface	1.0	0.4	285	26.9	26.9	7.7	7.7	10.0	10.0	86.7	86.4	6.5	6.3	5.4	6.3	4	4	821493	810549
						1.0	0.4	283	26.9		7.7		9.9		86.0		6.5		5.5		3			
					Middle	4.0	0.5	271	26.9	27.0	7.7	7.7	12.3	12.3	81.2	81.1	6.0		6.1		3			
						4.0	0.4	266	27.0		7.7		12.3		80.9		6.0		6.0		4			
					Bottom	7.0	0.4	304	27.2	27.2	7.6	7.6	16.7	16.6	81.4	81.9	5.9	6.0	7.4		4			
						7.0	0.4	310	27.2		7.6		16.5		82.4		6.0		7.4		4			
IM12	Misty	Moderate	10:39	8.8	Surface	1.0	0.5	297	26.9	26.9	7.7	7.7	9.1	9.1	89.4	89.1	6.8	6.5	2.2	3.4	4	4	821159	811516
						1.0	0.4	296	26.9		7.7		9.1		88.8		6.7		2.2		4			
					Middle	4.4	0.4	264	26.9	26.9	7.7	7.7	14.0	14.0	84.2	84.0	6.2		3.4		4			
						4.4	0.5	266	26.9		7.7		14.0		83.8		6.2		3.4		4			
					Bottom	7.8	0.4	277	27.1	27.2	7.6	7.6	18.3	17.9	83.0	83.7	6.0	6.1	4.7		4			
						7.8	0.4	274	27.2		7.6		17.4		84.3		6.1		4.6		4			
SR1A	Misty	Moderate	10:20	4.8	Surface	1.0	0.1	200	27.1	27.1	7.6	7.6	9.0	9.0	90.5	90.5	6.8	6.8	6.4	7.1	4	4	819974	812664
						1.0	0.1	197	27.1		7.6		9.0		90.4		6.8		6.5		4			
					Middle	2.4	0.0	185	-	-	-	-	-	-	-	-	-		-		-			
						2.4	-	186	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	201	27.4	27.4	7.5	7.5	9.0	9.0	90.6	90.7	6.8	6.8	7.8		5			
						3.8	0.1	193	27.4		7.5		9.0		90.7		6.8		7.7		4			
SR2	Misty	Moderate	10:03	5.2	Surface	1.0	0.1	275	27.0	27.0	8.4	8.4	9.1	9.1	88.8	88.8	6.7	6.7	4.5	4.8	5	5	821466	814151
						1.0	0.1	276	27.0		8.4		9.0		88.8		6.7		4.4		5			
					Middle	-	0.1	272	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	270	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	262	27.0	27.0	8.4	8.4	12.3	12.3	89.7	89.8	6.7	6.7	5.1		4			
						4.2	0.1	266	27.0		8.4		12.3		89.8		6.7		5.1		5			
SR3	Cloudy	Rough	11:15	8.8	Surface	1.0	0.3	344	26.8	26.8	7.9	7.9	7.2	7.2	99.6	99.6	7.6	7.2	5.2	7.6	4	4	822139	807583
						1.0	0.2	336	26.8		7.9		7.2		99.6		7.6		5.3		4			
					Middle	4.4	0.3	328	26.4	26.4	7.9	7.9	12.2	12.2	90.2	90.2	6.7		6.7		4			
						4.4	0.3	327	26.4		7.9		12.2		90.2		6.7		6.7		4			
					Bottom	7.8	0.2	328	26.3	26.3	7.9	7.9	17.2	17.2	82.6	82.6	6.0	6.0	10.8		3			
						7.8	0.2	334	26.3		7.9		17.2		82.6		6.0		10.8		4			
SR4A	Cloudy	Moderate	10:00	8.4	Surface	1.0	0.1	139	26.7	26.7	7.9	7.9	8.1	8.1	102.2	102.2	7.8	7.5	8.2	10.4	6	6	817194	807796
						1.0	0.0	145	26.7		7.9		8.1		102.1		7.8		8.2		5			
					Middle	4.2	0.1	147	26.5	26.5	7.9	7.9	11.3	11.3	93.8	93.8	7.1		11.2		6			
						4.2	-	151	26.5		7.9		11.3		93.7		7.1		11.0		6			
					Bottom	7.4	0.0	129	26.4	26.4	7.8	7.8	16.7	16.7	87.0	85.3	6.4	6.3	11.7		7			
						7.4	0.0	126	26.4		7.8		16.8		83.6		6.1		12.0		6			
SR8	Misty	Moderate	10:34	5.0	Surface	1.0	-	-	27.5	27.5	7.6	7.6	9.4	9.4	90.5	90.6	6.8	6.8	9.6	9.8	3	4	820384	811639
						1.0	-	-	27.4		7.6		9.4		90.7		6.8		9.6		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	27.5	27.5	7.6	7.6	10.3	10.3	91.6	91.7	6.8	6.8	10.0		4			
						4.0	-	-	27.5		7.6		10.3		91.7		6.8		10.1		4			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The monitoring session on 2 July 2022 was cancelled due to No. 8 Southeast Gale or Storm Signal in force.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	07:24	8.2	Surface	1.0	0.3	219	27.2	27.2	7.9	7.9	19.3	19.3	73.6	73.6	5.3	5.1	6.0	10.6	6	6	815631	804239
						1.0	0.3	212	27.1		7.9		19.4		73.6		5.3		6.1		6			
					Middle	4.1	0.3	226	26.9	26.9	7.9	7.9	23.7	23.7	70.6	70.6	4.9		12.6		7			
						4.1	0.3	228	26.9		7.9		23.7		70.6		4.9		12.2		6			
					Bottom	7.2	0.3	201	26.9	26.9	7.9	7.9	29.7	29.7	71.0	71.1	4.8	4.8	13.4		6			
						7.2	0.3	199	26.9		7.9		29.7		71.1		4.8		13.3		5			
C2	Cloudy	Moderate	08:41	10.3	Surface	1.0	0.5	179	27.6	27.6	8.1	8.1	7.4	7.2	75.9	75.8	5.8	5.1	9.6	8.2	6	6	825684	806944
						1.0	0.5	184	27.6		8.1		7.0		75.7		5.7		9.5		6			
					Middle	5.2	0.4	184	26.8	26.8	8.2	8.2	22.9	22.9	63.2	63.2	4.4		3.4		7			
						5.2	0.4	186	26.8		8.2		22.9		63.1		4.4		3.4		6			
					Bottom	9.3	0.5	186	26.8	26.8	8.1	8.1	26.3	26.3	60.7	60.6	4.2	4.2	11.4		6			
						9.3	0.5	182	26.8		8.1		26.4		60.5		4.2		11.9		7			
C3	Fine	Moderate	07:12	9.2	Surface	1.0	0.3	79	27.2	27.2	7.9	7.9	6.9	6.9	95.9	95.8	7.3	6.8	6.1	6.6	5	5	822096	817798
						1.0	0.3	81	27.2		7.9		6.9		95.7		7.3		6.0		6			
					Middle	4.6	0.2	78	26.7	26.7	7.9	7.9	16.2	16.2	86.5	86.5	6.3		6.5		5			
						4.6	0.2	79	26.6		7.9		16.2		86.5		6.3		6.6		6			
					Bottom	8.2	0.2	86	26.5	26.5	7.9	7.9	23.9	23.9	81.6	81.9	5.7	5.8	7.2		5			
						8.2	0.2	83	26.5		7.9		23.9		82.1		5.8		7.1		5			
IM1	Cloudy	Moderate	07:46	6.3	Surface	1.0	0.3	179	27.5	27.5	8.0	8.0	11.1	11.0	85.6	85.7	6.4	6.0	5.7	9.4	7	7	818352	806452
						1.0	0.3	175	27.5		8.0		11.0		85.7		6.4		5.6		6			
					Middle	3.2	0.3	188	27.0	27.0	8.0	8.0	19.0	19.0	76.7	76.7	5.5		9.9		7			
						3.2	0.2	181	27.0		8.0		18.9		76.7		5.5		10.0		7			
					Bottom	5.3	0.3	174	27.0	27.0	8.0	8.0	29.5	29.5	72.9	73.1	4.9	4.9	12.5		8			
						5.3	0.2	167	27.0		8.0		29.6		73.2		4.9		13.0		7			
IM2	Cloudy	Moderate	07:51	6.9	Surface	1.0	0.3	206	27.8	27.8	7.8	7.8	7.6	7.6	88.9	88.9	6.7	6.3	5.4	8.5	5	6	819171	806252
						1.0	0.4	205	27.8		7.8		7.6		88.9		6.7		5.3		4			
					Middle	3.5	0.3	199	27.1	27.1	7.9	7.9	13.2	13.2	81.0	80.7	6.0		8.3		7			
						3.5	0.2	204	27.0		7.9		13.3		80.3		5.9		8.7		6			
					Bottom	5.9	0.3	187	27.0	27.0	7.8	7.8	29.7	29.7	72.5	72.6	4.9	4.9	11.3		7			
						5.9	0.4	192	27.0		7.8		29.7		72.6		4.9		11.8		7			
IM7	Cloudy	Moderate	08:15	7.8	Surface	1.0	0.3	203	27.7	27.7	7.8	7.8	5.7	5.7	81.9	81.9	6.3	6.1	6.4	6.3	7	10	821335	806858
						1.0	0.3	206	27.7		7.8		5.7		81.9		6.3		6.4		8			
					Middle	3.9	0.2	189	27.3	27.3	7.9	7.9	10.4	10.4	76.9	76.9	5.8		5.0		10			
						3.9	0.2	186	27.3		7.9		10.4		76.9		5.8		5.0		10			
					Bottom	6.8	0.2	179	27.0	27.0	7.8	7.8	23.3	23.3	64.7	64.7	4.5	4.5	7.5		12			
						6.8	0.2	183	27.0		7.8		23.3		64.7		4.5		7.5		12			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	08:30	8.1	Surface	1.0	0.3	137	27.3	27.3	7.9	7.9	5.6	5.6	89.9	89.9	6.9	6.5	8.4	8.6	6	6	822234	809820
						1.0	0.4	137	27.3		7.9		5.6		89.8		6.9		8.4		6			
					Middle	4.1	0.3	144	26.8	26.8	7.8	7.8	12.7	12.7	81.1	81.1	6.0		8.5		6			
						4.1	0.3	145	26.8		7.8		12.7		81.0		6.0		8.6		7			
					Bottom	7.1	0.3	105	26.6	26.7	7.8	7.8	17.9	17.9	75.5	75.7	5.5	5.5	9.1		7			
						7.1	0.3	105	26.7		7.8		17.9		75.8		5.5		8.9		6			
IM11	Fine	Moderate	08:21	7.4	Surface	1.0	0.4	91	27.4	27.4	7.9	7.9	6.2	6.2	92.4	92.3	7.1	6.8	8.5	9.1	6	6	821480	810547
						1.0	0.4	95	27.4		7.9		6.2		92.2		7.1		8.5		6			
					Middle	3.7	0.3	94	27.0	27.0	7.9	7.9	8.8	8.8	84.8	84.8	6.4		9.3		6			
						3.7	0.3	92	27.0		7.9		8.9		84.7		6.4		9.3		7			
					Bottom	6.4	0.3	88	26.3	26.3	7.8	7.8	21.0	21.0	73.3	73.5	5.3	5.3	9.5		6			
						6.4	0.3	85	26.3		7.8		21.1		73.6		5.3		9.5		6			
IM12	Fine	Moderate	08:14	8.2	Surface	1.0	0.3	104	27.2	27.2	7.9	7.9	5.7	5.7	90.9	90.6	7.0	6.6	8.3	8.7	7	7	821173	811527
						1.0	0.3	110	27.2		7.9		5.7		90.3		7.0		8.3		6			
					Middle	4.1	0.4	90	26.7	26.7	7.9	7.9	9.6	9.6	81.4	81.1	6.2		8.7		7			
						4.1	0.4	87	26.6		7.9		9.7		80.8		6.1		8.7		7			
					Bottom	7.2	0.3	87	26.3	26.3	7.8	7.8	22.0	21.9	70.9	71.0	5.1	5.1	9.1		8			
						7.2	0.3	86	26.3		7.8		21.8		71.1		5.1		9.2		7			
SR1A	Fine	Moderate	07:49	4.6	Surface	1.0	0.1	129	27.3	27.3	7.9	7.9	5.6	5.6	95.7	95.7	7.4	7.4	7.2	7.3	7	7	819973	812655
						1.0	0.1	123	27.2		7.9		5.6		95.6		7.4		7.2		7			
					Middle	2.3	0.0	129	-	-	-	-	-	-	-	-	-		-		-			
						2.3	0.1	129	-		-		-		-		-		-		-			
					Bottom	3.6	0.0	157	27.0	27.1	7.9	7.9	9.9	9.9	91.8	91.9	6.9	6.9	7.4		7			
						3.6	0.0	159	27.1		7.9		9.9		91.9		6.9		7.5		7			
SR2	Fine	Moderate	07:35	5.6	Surface	1.0	0.4	29	27.4	27.4	7.9	7.9	6.3	6.2	94.1	94.0	7.2	7.2	7.7	7.8	8	8	821486	814148
						1.0	0.4	23	27.4		7.9		6.0		93.9		7.2		7.6		8			
					Middle	-	0.4	42	-	-	-	-	-	-	-	-	-		-		-			
						-	0.3	49	-		-		-		-		-		-		-			
					Bottom	4.6	0.3	45	26.9	26.9	7.8	7.8	11.7	11.7	82.7	82.7	6.2	6.2	7.9		9			
						4.6	0.3	47	26.9		7.8		11.7		82.7		6.2		8.0		8			
SR3	Cloudy	Moderate	08:22	8.9	Surface	1.0	0.4	166	27.9	27.9	7.6	7.6	6.1	6.1	81.8	81.8	6.2	6.0	8.8	9.3	6	8	822156	807561
						1.0	0.4	159	27.9		7.6		6.2		81.8		6.2		8.8		5			
					Middle	4.5	0.4	147	27.4	27.4	7.9	7.9	11.9	11.9	76.4	76.4	5.7		5.7		8			
						4.5	0.4	145	27.4		7.9		11.9		76.4		5.7		5.7		8			
					Bottom	7.9	0.5	152	27.1	27.2	7.9	7.9	23.0	23.0	65.8	65.9	4.6	4.6	13.4		12			
						7.9	0.5	154	27.2		7.9		22.9		66.0		4.6		13.2		11			
SR4A	Cloudy	Moderate	07:07	8.5	Surface	1.0	0.0	80	27.5	27.5	7.9	7.9	10.5	10.5	84.7	84.7	6.3	6.1	5.7	10.6	12	11	817168	807807
						1.0	0.0	78	27.5		7.9		10.5		84.7		6.3		6.0		13			
					Middle	4.3	0.0	82	27.2	27.2	8.0	8.0	13.8	13.7	79.4	79.4	5.8		11.1		13			
						4.3	-	81	27.2		8.0		13.7		79.4		5.8		11.5		12			
					Bottom	7.5	0.0	83	26.9	26.9	7.9	7.9	29.5	29.5	70.9	71.0	4.8	4.8	14.8		9			
						7.5	0.0	82	26.9		7.9		29.5		71.1		4.8		14.6		9			
SR8	Fine	Moderate	08:09	4.9	Surface	1.0	-	-	27.6	27.6	7.9	7.9	6.8	6.8	93.7	93.7	7.1	7.1	7.9	8.1	12	12	820369	811640
						1.0	-	-	27.6		7.9		6.8		93.7		7.1		7.9		12			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.9	-	-	27.6	27.6	7.9	7.9	6.7	6.8	93.9	94.0	7.1	7.1	8.3		11			
						3.9	-	-	27.6		7.9		6.8		94.0		7.1		8.4		12			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	12:15	8.8	Surface	1.0	0.3	48	28.1	28.1	8.0	8.0	6.8	6.8	87.2	87.2	6.6	6.5	7.5	11.0	8	7	815614	804227
						1.0	0.2	51	28.1		8.0		6.8		87.1		6.6		7.6		7			
					Middle	4.4	0.3	50	27.6	27.6	8.0	8.0	8.9	8.9	83.9	83.8	6.3		10.9		8			
						4.4	0.3	56	27.6		8.0		8.9		83.7		6.3		10.9		7			
					Bottom	7.8	0.2	39	27.3	27.3	8.0	8.0	12.8	12.9	73.0	73.0	5.3	5.3	14.7		7			
						7.8	0.2	40	27.3		8.0		13.1		73.0		5.3		14.7		7			
C2	Cloudy	Moderate	10:57	11.0	Surface	1.0	0.1	220	27.6	27.6	7.8	7.8	7.1	7.1	75.1	75.1	5.7	5.1	9.5	6.4	11	11	825689	806953
						1.0	0.1	219	27.6		7.8		7.1		75.0		5.7		9.5		11			
					Middle	5.5	0.1	222	26.8	26.8	8.0	8.0	23.2	23.3	63.6	63.7	4.5		3.9		12			
						5.5	0.0	225	26.8		8.0		23.4		63.7		4.5		3.9		11			
					Bottom	10.0	0.1	234	27.0	27.1	8.0	7.9	23.6	23.6	63.9	64.0	4.5	4.5	5.7		12			
						10.0	0.1	236	27.1		7.9		23.6		64.1		4.5		6.1		11			
C3	Cloudy	Moderate	12:15	9.6	Surface	1.0	0.4	271	27.5	27.5	8.0	8.0	7.7	7.7	93.2	93.0	7.1	6.5	6.3	6.6	12	12	822101	817800
						1.0	0.4	274	27.4		8.0		7.8		92.8		7.0		6.2		12			
					Middle	4.8	0.4	245	26.6	26.6	8.0	8.0	17.5	17.5	81.5	81.4	5.9		6.5		12			
						4.8	0.4	251	26.6		8.0		17.6		81.3		5.9		6.7		12			
					Bottom	8.6	0.4	257	26.3	26.3	7.9	7.9	31.6	31.6	75.7	75.9	5.1	5.1	7.1		11			
						8.6	0.4	249	26.3		7.9		31.5		76.1		5.1		7.0		12			
IM1	Cloudy	Moderate	11:48	6.6	Surface	1.0	0.1	17	27.9	27.9	8.0	8.0	9.7	9.7	83.7	83.7	6.2	6.2	10.9	11.5	9	8	818371	806464
						1.0	0.1	19	27.9		8.0		9.7		83.7		6.2		11.0		8			
					Middle	3.3	0.1	17	27.3	27.3	8.1	8.1	10.6	10.6	82.2	82.0	6.1		10.8		7			
						3.3	0.1	15	27.3		8.1		10.6		81.8		6.1		10.8		8			
					Bottom	5.6	0.1	16	27.2	27.3	8.1	8.1	29.4	29.3	73.4	73.6	4.9	5.0	12.7		8			
						5.6	0.1	15	27.3		8.1		29.3		73.7		5.0		12.9		7			
IM2	Cloudy	Moderate	11:39	6.7	Surface	1.0	0.2	278	28.0	28.0	8.1	8.1	9.0	9.0	87.0	87.0	6.5	6.5	9.2	7.6	4	5	819177	806220
						1.0	0.2	271	28.0		8.1		9.0		87.0		6.5		9.9		5			
					Middle	3.4	0.2	301	27.8	27.8	8.1	8.1	11.0	11.0	86.2	86.2	6.4		6.6		5			
						3.4	0.2	295	27.8		8.1		11.0		86.1		6.4		6.5		6			
					Bottom	5.7	0.2	300	27.8	27.8	8.1	8.1	11.7	11.7	86.0	86.0	6.3	6.3	6.6		5			
						5.7	0.2	304	27.8		8.1		11.7		85.9		6.3		6.8		6			
IM7	Cloudy	Moderate	11:16	7.8	Surface	1.0	0.1	275	27.9	27.9	8.0	8.0	5.8	5.8	82.0	82.0	6.2	6.1	8.0	8.8	5	5	821369	806826
						1.0	0.1	273	27.9		8.0		5.8		81.9		6.2		7.9		5			
					Middle	3.9	0.1	270	27.4	27.4	8.2	8.2	7.4	7.4	79.5	79.5	6.0		5.5		5			
						3.9	0.0	262	27.4		8.2		7.4		79.5		6.0		5.5		5			
					Bottom	6.8	0.1	248	27.1	27.2	8.1	8.1	22.3	22.4	66.6	66.8	4.7	4.7	12.8		5			
						6.8	0.2	247	27.2		8.1		22.4		66.9		4.7		13.0		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Cloudy	Moderate	10:46	8.1	Surface	1.0	0.1	233	27.7	27.7	7.9	7.9	5.3	5.3	93.6	93.6	7.2	6.9	8.1	8.6	11	8	822259	809816
						1.0	0.1	231	27.7		7.9		5.3		93.6		7.2		8.2		11			
					Middle	4.1	0.1	225	27.1	27.0	7.9	7.9	7.4	7.2	87.1	86.7	6.7		8.7		8			
						4.1	0.1	229	26.9		7.9		7.1		86.2		6.6		8.8		8			
					Bottom	7.1	0.2	227	26.6	26.6	7.8	7.8	17.4	17.4	72.7	72.8	5.3	5.3	9.0		6			
						7.1	0.2	231	26.6		7.8		17.5		72.8		5.3		9.0		5			
IM11	Cloudy	Moderate	10:52	7.9	Surface	1.0	0.2	278	27.3	27.3	7.9	7.9	6.6	6.6	91.7	91.6	7.0	6.5	7.6	8.0	4	5	821502	810522
						1.0	0.2	283	27.3		7.9		6.6		91.5		7.0		7.5		5			
					Middle	4.0	0.1	281	26.8	26.8	7.9	7.9	12.4	12.8	80.2	80.0	6.0		8.0		4			
						4.0	0.1	275	26.7		7.9		13.3		79.8		5.9		8.1		6			
					Bottom	6.9	0.1	282	26.4	26.4	7.8	7.8	19.3	19.3	75.1	75.3	5.4	5.5	8.5		5			
						6.9	0.1	287	26.4		7.8		19.3		75.5		5.5		8.5		6			
IM12	Cloudy	Moderate	11:01	8.7	Surface	1.0	0.1	288	27.6	27.6	7.9	7.9	6.6	6.6	94.2	94.2	7.2	7.0	6.5	6.9	5	6	821147	811533
						1.0	0.1	280	27.6		7.9		6.6		94.1		7.2		6.4		5			
					Middle	4.4	0.1	306	27.1	27.1	7.9	7.9	8.7	8.6	88.9	89.0	6.7		6.8		6			
						4.4	0.1	309	27.0		8.0		8.5		89.0		6.8		6.8		5			
					Bottom	7.7	0.1	293	26.4	26.4	7.8	7.8	18.7	18.7	76.4	76.4	5.5	5.6	7.4		6			
						7.7	0.1	300	26.4		7.8		18.6		76.4		5.6		7.4		7			
SR1A	Cloudy	Moderate	11:32	5.0	Surface	1.0	0.0	178	27.5	27.5	7.9	7.9	7.2	7.2	93.6	93.5	7.1	7.1	7.3	7.7	9	10	819974	812657
						1.0	0.0	178	27.5		7.9		7.2		93.4		7.1		7.3		10			
					Middle	2.5	0.1	184	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.1	178	-		-		-		-		-		-		-			
					Bottom	4.0	-	205	26.6	26.6	7.9	7.9	18.3	18.3	83.1	83.5	6.0	6.1	8.2		11			
						4.0	0.0	207	26.6		7.9		18.3		83.8		6.1		8.1		10			
SR2	Cloudy	Moderate	11:50	5.5	Surface	1.0	0.1	319	27.5	27.5	8.0	8.0	7.0	7.0	94.9	94.9	7.2	7.2	7.1	7.2	9	8	821474	814167
						1.0	0.1	322	27.5		8.0		7.0		94.8		7.2		7.2		9			
					Middle	-	0.0	298	-	-	-	-	-	-	-	-	-		-		-			
						-	0.0	290	-		-		-		-		-		-		-			
					Bottom	4.5	0.1	331	26.6	26.6	7.9	7.9	18.3	18.3	83.1	83.4	6.0	6.1	7.2		7			
						4.5	0.2	323	26.6		7.9		18.3		83.7		6.1		7.2		6			
SR3	Cloudy	Moderate	11:12	8.9	Surface	1.0	0.1	150	27.8	27.8	7.9	7.9	7.0	6.9	81.0	81.0	6.1	6.0	7.8	7.6	5	5	822136	807587
						1.0	0.1	154	27.8		7.9		6.7		80.9		6.1		7.8		5			
					Middle	4.5	0.1	143	27.5	27.5	8.2	8.2	8.4	8.4	78.7	78.6	5.9		6.4		5			
						4.5	0.1	145	27.4		8.3		8.4		78.5		5.9		6.7		5			
					Bottom	7.9	0.1	164	27.2	27.3	8.2	8.2	23.3	23.4	66.7	66.9	4.6	4.7	8.5		4			
						7.9	0.1	157	27.3		8.2		23.4		67.0		4.7		8.4		5			
SR4A	Cloudy	Moderate	12:45	8.9	Surface	1.0	0.0	138	28.2	28.2	8.0	8.0	9.4	9.4	89.2	89.2	6.6	6.5	9.7	11.9	5	6	817212	807806
						1.0	0.0	135	28.2		8.0		9.4		89.2		6.6		9.7		6			
					Middle	4.5	0.0	129	27.6	27.6	8.2	8.2	11.0	11.1	85.3	85.3	6.3		9.6		6			
						4.5	0.0	124	27.6		8.2		11.1		85.2		6.3		9.4		6			
					Bottom	7.9	0.1	136	27.2	27.2	8.2	8.2	28.5	28.5	70.1	70.3	4.8	4.8	16.4		6			
						7.9	0.1	143	27.2		8.2		28.5		70.4		4.8		16.4		6			
SR8	Cloudy	Moderate	11:06	4.9	Surface	1.0	-	-	27.4	27.4	7.9	7.9	7.3	7.3	91.5	91.3	7.0	7.0	7.2	7.3	5	5	820385	811614
						1.0	-	-	27.4		7.9		7.3		91.1		6.9		7.2		5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.9	-	-	27.1	27.1	7.9	7.9	9.1	9.2	89.4	89.4	6.8	6.8	7.4		5			
						3.9	-	-	27.1		7.9		9.3		89.3		6.7		7.4		5			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Cloudy	Moderate	07:24	8.2	Surface	1.0	0.2	197	27.2	27.2	7.9	7.9	19.3	19.3	73.6	73.6	5.3	5.1	6.0	10.6	6	6	815627	804266
						1.0	0.1	197	27.1		7.9		19.4		73.6		5.3		6.1		7			
					Middle	4.1	0.1	208	26.9	26.9	7.9	7.9	23.7	23.7	70.6	70.6	4.9		12.6		7			
						4.1	0.1	212	26.9		7.9		23.7		70.6		4.9		12.2		6			
					Bottom	7.2	0.1	211	26.9	26.9	7.9	7.9	29.7	29.7	71.0	71.1	4.8	4.8	13.4		6			
						7.2	0.1	203	26.9		7.9		29.7		71.1		4.8		13.3		6			
C2	Cloudy	Moderate	08:41	10.3	Surface	1.0	0.5	159	27.6	27.6	8.1	8.1	7.4	7.2	75.9	75.8	5.8	5.1	9.6	8.2	6	6	825672	806949
						1.0	0.5	162	27.6		8.1		7.0		75.7		5.7		9.5		5			
					Middle	5.2	0.5	184	26.8	26.8	8.2	8.2	22.9	22.9	63.2	63.2	4.4		3.4		6			
						5.2	0.5	176	26.8		8.2		22.9		63.1		4.4		3.4		6			
					Bottom	9.3	0.4	176	26.8	26.8	8.1	8.1	26.3	26.3	60.7	60.6	4.2	4.2	11.4		7			
						9.3	0.5	173	26.8		8.1		26.4		60.5		4.2		11.9		6			
C3	Sunny	Moderate	09:02	11.4	Surface	1.0	0.4	68	27.7	27.8	7.9	7.9	13.4	13.4	87.8	87.9	6.4	6.2	6.5	6.6	7	7	822127	817817
						1.0	0.4	63	27.8		7.9		13.4		87.9		6.4		7.1		7			
					Middle	5.7	0.4	86	27.1	27.1	8.0	8.0	16.6	16.6	83.3	83.3	6.0		5.9		7			
						5.7	0.4	81	27.1		8.0		16.6		83.2		6.0		6.0		6			
					Bottom	10.4	0.4	94	26.6	26.6	7.9	7.9	25.6	25.7	71.4	71.6	5.0	5.0	7.2		7			
						10.4	0.4	93	26.6		7.9		25.7		71.7		5.0		7.2		6			
IM1	Cloudy	Moderate	07:46	6.3	Surface	1.0	0.1	168	27.5	27.5	8.0	8.0	11.1	11.0	85.6	85.7	6.4	6.0	5.7	9.4	6	6	818336	806453
						1.0	0.1	173	27.5		8.0		11.0		85.7		6.4		5.6		6			
					Middle	3.2	0.0	182	27.0	27.0	8.0	8.0	19.0	19.0	76.7	76.7	5.5		9.9		7			
						3.2	0.1	187	27.0		8.0		18.9		76.7		5.5		10.0		6			
					Bottom	5.3	0.1	176	27.0	27.0	8.0	8.0	29.5	29.5	72.9	73.1	4.9	4.9	12.5		7			
						5.3	0.2	179	27.0		8.0		29.6		73.2		4.9		13.0		6			
IM2	Cloudy	Moderate	07:51	6.9	Surface	1.0	0.1	195	27.8	27.8	7.8	7.8	7.6	7.6	88.9	88.9	6.7	6.3	5.4	8.5	6	6	819199	806253
						1.0	0.0	201	27.8		7.8		7.6		88.9		6.7		5.3		5			
					Middle	3.5	0.1	188	27.1	27.1	7.9	7.9	13.2	13.2	81.0	80.7	6.0		8.3		6			
						3.5	0.1	191	27.0		7.9		13.3		80.3		5.9		8.7		6			
					Bottom	5.9	0.1	198	27.0	27.0	7.8	7.8	29.7	29.7	72.5	72.6	4.9	4.9	11.3		6			
						5.9	0.1	195	27.0		7.8		29.7		72.6		4.9		11.8		7			
IM7	Cloudy	Moderate	08:15	7.8	Surface	1.0	0.2	156	27.7	27.7	7.8	7.8	5.7	5.7	81.9	81.9	6.3	6.1	6.4	6.3	6	7	821372	806833
						1.0	0.2	156	27.7		7.8		5.7		81.9		6.3		6.4		7			
					Middle	3.9	0.1	156	27.3	27.3	7.9	7.9	10.4	10.4	76.9	76.9	5.8		5.0		7			
						3.9	0.2	158	27.3		7.9		10.4		76.9		5.8		5.0		7			
					Bottom	6.8	0.1	169	27.0	27.0	7.8	7.8	23.3	23.3	64.7	64.7	4.5	4.5	7.5		7			
						6.8	0.1	174	27.0		7.8		23.3		64.7		4.5		7.5		7			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	10:43	7.2	Surface	1.0	0.4	115	27.5	27.5	7.8	7.8	8.2	8.1	78.4	78.4	5.9	5.8	8.7	9.1	7	7	822222	809849
						1.0	0.4	111	27.5		7.8		8.1		78.4		5.9		8.8		6			
					Middle	3.6	0.5	134	27.3	27.3	7.8	7.8	9.7	9.7	75.2	75.1	5.7		9.1		7			
						3.6	0.5	133	27.2		7.8		9.7		74.9		5.6		9.2		6			
					Bottom	6.2	0.5	147	27.3	27.4	7.8	7.8	16.1	16.0	74.7	74.8	5.4	5.4	9.5		7			
						6.2	0.5	145	27.4		7.8		16.0		74.9		5.4		9.5		6			
IM11	Sunny	Moderate	10:35	7.2	Surface	1.0	0.5	113	27.8	27.8	7.8	7.8	8.3	8.3	77.9	77.8	5.8	5.5	8.8	9.9	6	6	821510	810551
						1.0	0.5	116	27.8		7.8		8.3		77.7		5.8		8.9		6			
					Middle	3.6	0.5	85	27.3	27.3	7.8	7.8	9.9	9.9	70.6	70.3	5.3		10.1		6			
						3.6	0.5	87	27.3		7.8		9.8		69.9		5.2		10.2		6			
					Bottom	6.2	0.5	85	27.1	27.1	7.8	7.8	16.8	17.9	61.6	61.7	4.4	4.4	10.7		6			
						6.2	0.6	91	27.1		7.8		18.9		61.7		4.4		10.6		5			
IM12	Sunny	Moderate	10:11	7.9	Surface	1.0	0.6	113	27.8	27.8	7.8	7.8	7.1	7.1	85.2	85.2	6.4	6.1	9.4	9.6	6	6	821155	811512
						1.0	0.6	117	27.8		7.8		7.1		85.2		6.4		9.3		6			
					Middle	4.0	0.6	108	27.6	27.6	7.8	7.8	11.1	11.1	77.9	77.9	5.8		9.1		5			
						4.0	0.6	115	27.5		7.8		11.1		77.9		5.8		9.3		6			
					Bottom	6.9	0.6	80	26.9	26.9	7.8	7.8	19.3	19.2	68.6	68.7	4.9	4.9	10.5		6			
						6.9	0.6	77	26.9		7.8		19.2		68.8		4.9		9.7		5			
SR1A	Sunny	Moderate	09:42	4.8	Surface	1.0	0.0	129	27.7	27.7	7.7	7.7	10.9	10.9	84.9	84.9	6.3	6.3	7.4	7.4	7	6	819973	812659
						1.0	0.0	124	27.7		7.7		10.9		84.9		6.3		7.4		6			
					Middle	2.4	0.1	134	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	130	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	115	27.7	27.7	7.7	7.7	10.9	10.9	84.9	84.9	6.3	6.3	7.4		6			
						3.8	0.0	113	27.7		7.7		10.9		84.9		6.3		7.4		6			
SR2	Sunny	Moderate	09:25	4.7	Surface	1.0	0.6	34	28.0	28.0	7.9	7.9	6.7	6.7	88.5	88.4	6.7	6.7	8.1	7.5	5	6	821449	814146
						1.0	0.6	36	27.9		7.9		6.7		88.3		6.7		8.0		5			
					Middle	-	0.5	57	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	63	-		-		-		-		-		-		-			
					Bottom	3.7	0.5	35	27.3	27.3	7.9	7.9	14.2	14.1	78.2	78.2	5.7	5.7	7.1		6			
						3.7	0.6	34	27.3		7.9		14.1		78.2		5.7		7.1		6			
SR3	Cloudy	Moderate	08:22	8.9	Surface	1.0	0.4	172	27.9	27.9	7.6	7.6	6.1	6.1	81.8	81.8	6.2	6.0	8.8	9.3	6	7	822166	807561
						1.0	0.4	170	27.9		7.6		6.2		81.8		6.2		8.8		7			
					Middle	4.5	0.4	157	27.4	27.4	7.9	7.9	11.9	11.9	76.4	76.4	5.7		5.7		6			
						4.5	0.4	158	27.4		7.9		11.9		76.4		5.7		5.7		7			
					Bottom	7.9	0.4	151	27.1	27.2	7.9	7.9	23.0	23.0	65.8	65.9	4.6	4.6	13.4		7			
						7.9	0.3	154	27.2		7.9		22.9		66.0		4.6		13.2		7			
SR4A	Cloudy	Moderate	07:17	8.5	Surface	1.0	0.1	86	27.5	27.5	7.9	7.9	10.5	10.5	84.7	84.7	6.3	6.1	5.7	10.6	7	7	817203	807814
						1.0	0.1	83	27.5		7.9		10.5		84.7		6.3		6.0		8			
					Middle	4.3	0.1	117	27.2	27.2	8.0	8.0	13.8	13.7	79.4	79.4	5.8		11.1		7			
						4.3	-	112	27.2		8.0		13.7		79.4		5.8		11.5		6			
					Bottom	7.5	0.1	110	26.9	26.9	7.9	7.9	29.5	29.5	70.9	71.0	4.8	4.8	14.8		6			
						7.5	0.0	113	26.9		7.9		29.5		71.1		4.8		14.6		6			
SR8	Sunny	Moderate	10:06	4.6	Surface	1.0	-	-	28.6	28.6	7.9	7.9	5.6	5.6	94.7	94.6	7.1	7.1	10.5	11.3	7	6	820389	811626
						1.0	-	-	28.6		7.9		5.7		94.5		7.1		10.6		6			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	28.9	28.9	7.8	7.8	7.9	7.9	94.0	94.0	6.9	6.9	12.0		5			
						3.6	-	-	28.9		7.8		7.9		94.0		6.9		12.0		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	15:17	8.8	Surface	1.0	0.2	45	28.1	28.1	8.0	8.0	6.8	6.8	87.2	87.2	6.6	6.5	7.5	11.0	7	7	815609	804241
						1.0	0.2	51	28.1		8.0		6.8		87.1		6.6		7.6		7			
					Middle	4.4	0.3	27	27.6	27.6	8.0	8.0	8.9	8.9	83.9	83.8	6.3		10.9		7			
						4.4	0.3	28	27.6		8.0		8.9		83.7		6.3		10.9		7			
					Bottom	7.8	0.3	17	27.3	27.3	8.0	8.0	12.8	12.9	73.0	73.0	5.3	5.3	14.7		7			
						7.8	0.3	19	27.3		8.0		13.1		73.0		5.3		14.7		6			
C2	Cloudy	Moderate	13:54	11.0	Surface	1.0	0.0	227	27.6	27.6	7.8	7.8	7.1	7.1	75.1	75.1	5.7	5.1	9.5	6.4	6	6	825695	806957
						1.0	0.1	234	27.6		7.8		7.1		75.0		5.7		9.5		6			
					Middle	5.5	0.0	217	26.8	26.8	8.0	8.0	23.2	23.3	63.6	63.7	4.5		3.9		6			
						5.5	-	210	26.8		8.0		23.4		63.7		4.5		3.9		6			
					Bottom	10.0	0.0	254	27.0	27.1	8.0	7.9	23.6	23.6	63.9	64.0	4.5	4.5	5.7		7			
						10.0	0.0	251	27.1		7.9		23.6		64.1		4.5		6.1		7			
C3	Cloudy	Moderate	15:18	11.7	Surface	1.0	0.4	259	28.3	28.3	8.0	8.0	11.8	11.8	90.8	90.8	6.6	5.9	8.6	9.4	7	6	822125	817811
						1.0	0.4	253	28.3		8.0		11.8		90.8		6.6		9.3		6			
					Middle	5.9	0.4	269	26.8	26.8	8.0	8.0	22.4	22.4	73.0	73.0	5.2		8.1		6			
						5.9	0.4	271	26.7		8.0		22.3		73.0		5.2		8.0		7			
					Bottom	10.7	0.4	274	26.5	26.5	8.0	8.0	28.4	28.4	69.1	69.1	4.7	4.7	11.3		6			
						10.7	0.4	268	26.5		8.0		28.4		69.1		4.7		11.2		6			
IM1	Cloudy	Moderate	14:37	6.6	Surface	1.0	0.2	1	27.9	27.9	8.0	8.0	9.7	9.7	83.7	83.7	6.2	6.2	10.9	11.5	6	7	818332	806446
						1.0	0.2	359	27.9		8.0		9.7		83.7		6.2		11.0		7			
					Middle	3.3	0.2	342	27.3	27.3	8.1	8.1	10.6	10.6	82.2	82.0	6.1		10.8		7			
						3.3	0.1	341	27.3		8.1		10.6		81.8		6.1		10.8		6			
					Bottom	5.6	0.2	15	27.2	27.3	8.1	8.1	29.4	29.3	73.4	73.6	4.9	5.0	12.7		8			
						5.6	0.2	8	27.3		8.1		29.3		73.7		5.0		12.9		6			
IM2	Cloudy	Moderate	14:20	6.7	Surface	1.0	0.2	288	28.0	28.0	8.1	8.1	9.0	9.0	87.0	87.0	6.5	6.5	9.2	7.6	7	6	819180	806238
						1.0	0.2	286	28.0		8.1		9.0		87.0		6.5		9.9		6			
					Middle	3.4	0.2	298	27.8	27.8	8.1	8.1	11.0	11.0	86.2	86.2	6.4		6.6		6			
						3.4	0.2	292	27.8		8.1		11.0		86.1		6.4		6.5		6			
					Bottom	5.7	0.2	292	27.8	27.8	8.1	8.1	11.7	11.7	86.0	86.0	6.3	6.3	6.6		6			
						5.7	0.1	296	27.8		8.1		11.7		85.9		6.3		6.8		5			
IM7	Cloudy	Moderate	14:13	7.8	Surface	1.0	0.2	243	27.9	27.9	8.0	8.0	5.8	5.8	82.0	82.0	6.2	6.1	8.0	8.8	6	6	821372	806831
						1.0	0.2	241	27.9		8.0		5.8		81.9		6.2		7.9		6			
					Middle	3.9	0.2	260	27.4	27.4	8.2	8.2	7.4	7.4	79.5	79.5	6.0		5.5		6			
						3.9	0.2	262	27.4		8.2		7.4		79.5		6.0		5.5		5			
					Bottom	6.8	0.2	252	27.1	27.2	8.1	8.1	22.3	22.4	66.6	66.8	4.7	4.7	12.8		5			
						6.8	0.2	255	27.2		8.1		22.4		66.9		4.7		13.0		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Cloudy	Moderate	13:58	7.2	Surface	1.0	0.1	265	28.3	28.3	7.8	7.8	4.7	4.7	87.0	87.0	6.6	6.5	9.3	10.3	6	6	822227	809860
						1.0	0.1	262	28.3		7.8		4.7		86.9		6.6		9.3		6			
					Middle	3.6	0.2	271	28.0	28.0	7.9	7.9	5.5	5.5	83.9	83.8	6.4		12.1		5			
						3.6	0.2	268	27.9		7.9		5.5		83.7		6.4		11.8		6			
					Bottom	6.2	0.2	234	27.1	27.1	7.8	7.8	17.1	17.1	68.0	68.1	4.9	4.9	9.7		5			
						6.2	0.2	239	27.1		7.8		17.1		68.1		4.9		9.8		5			
IM11	Cloudy	Moderate	14:04	7.0	Surface	1.0	0.2	281	28.9	28.9	7.8	7.8	5.1	5.0	93.0	93.0	7.0	6.8	12.1	10.7	4	4	821523	810554
						1.0	0.2	274	28.9		7.8		5.0		93.0		7.0		12.2		4			
					Middle	3.5	0.2	300	28.4	28.4	7.9	7.9	6.8	6.7	88.5	88.4	6.6		10.0		4			
						3.5	0.2	305	28.4		7.9		6.7		88.2		6.6		10.0		4			
					Bottom	6.0	0.2	300	27.1	27.1	7.8	7.8	16.2	16.2	75.3	75.4	5.5	5.5	10.0		4			
						6.0	0.2	304	27.1		7.8		16.3		75.4		5.5		10.0		4			
IM12	Cloudy	Moderate	14:11	7.7	Surface	1.0	0.2	290	28.3	28.3	7.9	7.9	6.2	6.2	91.7	91.6	6.9	6.5	8.9	8.2	3	4	821139	811533
						1.0	0.3	291	28.2		7.9		6.2		91.5		6.9		8.8		4			
					Middle	3.9	0.3	275	27.6	27.6	7.9	7.9	8.1	8.1	81.5	81.2	6.1		7.7		4			
						3.9	0.2	280	27.6		7.9		8.1		80.8		6.1		7.6		4			
					Bottom	6.7	0.3	285	26.5	26.5	7.8	7.8	26.5	26.5	64.2	64.3	4.5	4.5	8.2		4			
						6.7	0.3	277	26.5		7.8		26.5		64.4		4.5		8.2		4			
SR1A	Cloudy	Moderate	14:38	4.9	Surface	1.0	0.0	191	28.7	28.7	8.1	8.1	6.8	6.8	106.8	106.7	8.0	8.0	8.3	8.2	6	6	819972	812663
						1.0	0.0	189	28.7		8.1		6.8		106.6		8.0		8.4		6			
					Middle	2.5	0.0	170	-	-	-	-	-	-	-	-	-		-		-			
						2.5	-	172	-		-		-		-		-		-		-			
					Bottom	3.9	0.0	213	28.0	28.0	7.9	7.9	8.3	8.3	92.4	92.4	6.9	6.9	8.3		6			
						3.9	0.0	207	28.0		7.9		8.3		92.4		6.9		7.7		6			
SR2	Cloudy	Moderate	14:54	5.0	Surface	1.0	0.1	278	27.8	27.8	7.8	7.8	7.4	7.4	83.1	83.2	6.3	6.3	8.1	8.1	6	6	821466	814142
						1.0	0.1	279	27.7		7.8		7.5		83.2		6.3		8.0		7			
					Middle	-	0.1	279	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	285	-		-		-		-		-		-		-			
					Bottom	4.0	0.1	269	27.8	27.8	8.0	8.0	13.1	13.1	90.9	91.0	6.6	6.7	8.1		5			
						4.0	0.1	270	27.8		8.0		13.1		91.1		6.7		8.1		5			
SR3	Cloudy	Moderate	14:07	8.9	Surface	1.0	0.1	187	27.8	27.8	7.9	7.9	7.0	6.9	81.0	81.0	6.1	6.0	7.8	7.6	6	6	822123	807555
						1.0	0.1	185	27.8		7.9		6.7		80.9		6.1		7.8		7			
					Middle	4.5	0.1	163	27.5	27.5	8.2	8.2	8.4	8.4	78.7	78.6	5.9		6.4		6			
						4.5	0.2	159	27.4		8.3		8.4		78.5		5.9		6.7		6			
					Bottom	7.9	0.1	203	27.2	27.3	8.2	8.2	23.3	23.4	66.7	66.9	4.6	4.7	8.5		6			
						7.9	0.1	208	27.3		8.2		23.4		67.0		4.7		8.4		6			
SR4A	Cloudy	Moderate	15:58	8.9	Surface	1.0	0.0	135	28.2	28.2	8.0	8.0	9.4	9.4	89.2	89.2	6.6	6.5	9.7	11.9	5	6	817206	807817
						1.0	0.1	133	28.2		8.0		9.4		89.2		6.6		9.7		5			
					Middle	4.5	0.0	115	27.6	27.6	8.2	8.2	11.0	11.1	85.3	85.3	6.3		9.6		5			
						4.5	0.0	121	27.6		8.2		11.1		85.2		6.3		9.4		6			
					Bottom	7.9	0.0	143	27.2	27.2	8.2	8.2	28.5	28.5	70.1	70.3	4.8	4.8	16.4		6			
						7.9	0.0	145	27.2		8.2		28.5		70.4		4.8		16.4		6			
SR8	Cloudy	Moderate	14:17	4.7	Surface	1.0	-	-	29.2	29.2	7.9	7.9	6.1	6.1	99.7	99.6	7.4	7.4	13.3	13.8	6	6	820378	811621
						1.0	-	-	29.2		7.9		6.1		99.4		7.4		13.5		6			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.7	-	-	29.2	29.2	7.9	7.9	6.8	6.8	96.1	96.2	7.1	7.1	14.6		6			
						3.7	-	-	29.2		7.9		6.8		96.3		7.1		14.0		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Sunny	Moderate	12:02	8.8	Surface	1.0	0.7	200	27.7	27.7	8.1	8.0	11.1	11.6	92.2	91.5	6.8	5.9	9.6	10.0	4	4	815615	804258
						1.0	0.7	203	27.6		8.0		12.1		90.8		6.7		9.7		4			
					Middle	4.4	0.7	212	26.6	26.6	8.0	8.0	28.4	28.5	73.8	73.9	5.1		13.1		4			
						4.4	0.8	217	26.6		8.0		28.6		74.0		5.1		13.1		4			
					Bottom	7.8	0.7	193	26.6	26.6	8.0	8.0	29.0	29.0	74.8	74.9	5.1	5.1	7.1		4			
						7.8	0.7	185	26.6		8.0		29.0		75.0		5.1		7.3		5			
C2	Sunny	Moderate	10:32	10.5	Surface	1.0	0.6	159	28.2	28.2	8.1	8.1	12.0	12.1	97.0	96.9	7.1	6.3	7.1	10.6	5	6	825705	806944
						1.0	0.5	158	28.1		8.1		12.1		96.7		7.1		7.6		5			
					Middle	5.3	0.6	173	27.3	27.3	8.0	8.0	20.0	19.9	76.5	76.7	5.4		12.9		6			
						5.3	0.6	178	27.3		8.0		19.7		76.8		5.5		12.6		5			
					Bottom	9.5	0.6	187	27.1	27.1	7.9	7.9	22.4	22.4	73.0	73.1	5.1	5.1	11.7		6			
						9.5	0.6	182	27.1		7.9		22.4		73.1		5.1		11.9		6			
C3	Sunny	Calm	11:03	10.0	Surface	1.0	0.5	67	28.3	28.3	8.5	8.5	19.5	19.5	99.6	99.8	7.0	7.0	4.2	5.8	8	7	822093	817809
						1.0	0.5	59	28.3		8.5		19.5		99.9		7.0		4.2		7			
					Middle	5.0	0.6	89	28.3	28.3	8.5	8.5	19.6	19.6	100.6	100.7	7.0		6.1		7			
						5.0	0.6	96	28.3		8.5		19.6		100.7		7.0		6.2		6			
					Bottom	9.0	0.5	51	28.3	28.3	8.5	8.5	19.6	19.6	100.9	101.0	7.0	7.1	7.2		7			
						9.0	0.5	56	28.3		8.5		19.5		101.0		7.1		7.1		6			
IM1	Sunny	Moderate	11:44	6.7	Surface	1.0	0.5	202	27.3	27.3	8.1	8.1	17.1	17.1	93.7	93.5	6.8	5.9	8.5	8.0	6	5	818338	806473
						1.0	0.5	200	27.2		8.1		17.1		93.3		6.7		8.7		6			
					Middle	3.4	0.5	209	26.7	26.7	8.0	8.0	27.7	27.7	74.5	74.6	5.1		9.9		6			
						3.4	0.5	203	26.7		8.0		27.7		74.6		5.1		9.9		5			
					Bottom	5.7	0.5	193	26.6	26.6	8.0	8.0	28.7	28.7	74.4	74.5	5.1	5.1	5.9		4			
						5.7	0.5	197	26.6		8.0		28.7		74.5		5.1		5.3		4			
IM2	Sunny	Moderate	11:17	6.9	Surface	1.0	0.5	195	27.7	27.8	8.1	8.1	19.9	19.6	92.2	94.2	6.5	5.9	8.7	10.9	4	5	819175	806245
						1.0	0.5	191	27.8		8.1		19.2		96.1		6.8		8.9		5			
					Middle	3.5	0.4	211	26.8	26.8	8.0	8.0	25.2	25.3	74.4	74.3	5.2		13.0		4			
						3.5	0.4	210	26.8		8.0		25.3		74.2		5.1		13.8		5			
					Bottom	5.9	0.5	202	26.5	26.6	8.0	8.0	29.2	29.1	73.1	73.2	5.0	5.0	10.7		5			
						5.9	0.5	204	26.6		8.0		29.1		73.3		5.0		10.6		5			
IM7	Sunny	Moderate	11:11	8.4	Surface	1.0	0.3	163	28.1	28.1	8.1	8.1	13.3	13.3	104.9	104.9	7.6	7.1	6.7	8.8	5	5	821342	806854
						1.0	0.3	161	28.0		8.1		13.3		104.9		7.6		6.7		6			
					Middle	4.2	0.3	185	27.8	27.7	8.0	8.0	13.4	14.3	93.2	90.5	6.8		7.4		5			
						4.2	0.2	178	27.6		8.0		15.2		87.7		6.3		7.5		5			
					Bottom	7.4	0.3	155	27.2	27.2	7.9	7.9	21.9	21.9	76.4	76.6	5.4	5.4	12.2		4			
						7.4	0.3	150	27.2		7.9		21.9		76.7		5.4		12.1		5			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Calm	10:01	8.6	Surface	1.0	0.5	117	28.6	28.6	7.7	7.7	12.6	12.6	91.1	91.1	6.6	5.9	5.0	7.0	6	5	822246	809859
						1.0	0.5	113	28.6		7.7		12.6		91.1		6.6		5.0		5			
					Middle	4.3	0.5	122	28.6	28.6	7.7	7.7	16.8	16.8	75.3	75.3	5.2		7.0		5			
						4.3	0.5	127	28.6		7.7		16.8		75.3		5.2		7.0		5			
					Bottom	7.6	0.5	93	28.7	28.7	7.7	7.7	19.6	19.5	78.6	80.7	5.5	5.7	8.9		4			
						7.6	0.5	86	28.7		7.7		19.4		82.8		5.8		8.8		5			
IM11	Sunny	Calm	10:08	7.0	Surface	1.0	0.6	96	28.5	28.5	7.8	7.8	11.9	11.9	103.4	102.7	7.5	6.9	5.1	6.9	4	4	821485	810521
						1.0	0.6	92	28.5		7.8		11.9		102.0		7.4		5.2		4			
					Middle	3.5	0.6	106	28.6	28.7	7.8	7.8	12.3	12.5	91.8	87.6	6.6		7.4		4			
						3.5	0.7	112	28.7		7.8		12.7		83.4		6.0		7.5		4			
					Bottom	6.0	0.6	96	29.0	29.1	7.8	7.8	17.3	17.2	85.5	86.2	6.0	6.1	8.1		4			
						6.0	0.6	101	29.1		7.8		17.2		86.9		6.1		8.2		4			
IM12	Sunny	Calm	10:13	7.4	Surface	1.0	0.7	97	28.4	28.4	7.8	7.8	12.7	12.8	93.4	91.5	6.8	6.3	3.3	4.4	4	5	821144	811532
						1.0	0.7	102	28.4		7.8		12.8		89.6		6.5		3.4		4			
					Middle	3.7	0.7	105	28.5	28.6	7.8	7.8	15.9	15.9	85.2	85.2	6.0		4.1		5			
						3.7	0.7	97	28.6		7.8		15.9		85.2		6.0		4.2		5			
					Bottom	6.4	0.7	87	29.1	29.1	7.8	7.8	16.0	15.9	87.3	88.0	6.1	6.2	5.6		5			
						6.4	0.7	86	29.1		7.8		15.9		88.6		6.2		5.6		5			
SR1A	Sunny	Calm	10:33	4.6	Surface	1.0	0.0	117	29.3	29.4	7.9	7.9	13.3	13.3	110.2	110.3	7.8	7.8	8.9	8.9	6	6	819976	812658
						1.0	0.0	112	29.4		7.9		13.3		110.3		7.8		8.8		6			
					Middle	2.3	0.0	96	-	-	-	-	-	-	-	-	-		-		-			
						2.3	0.0	97	-		-		-		-		-		-		-			
					Bottom	3.6	0.0	113	29.7	29.7	7.9	7.9	13.3	13.3	108.9	108.4	7.7	7.7	9.0		6			
						3.6	0.0	106	29.7		7.9		13.2		107.9		7.6		9.0		5			
SR2	Sunny	Calm	10:44	5.0	Surface	1.0	0.6	49	28.7	28.7	7.9	7.9	11.7	11.7	98.6	98.4	7.1	7.1	6.0	6.6	4	4	821461	814157
						1.0	0.6	44	28.7		7.9		11.7		98.2		7.1		6.1		4			
					Middle	-	0.6	54	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	52	-		-		-		-		-		-		-			
					Bottom	4.0	0.6	66	28.5	28.6	7.9	7.9	15.4	15.0	96.1	98.9	6.9	7.1	7.1		3			
						4.0	0.6	68	28.6		7.9		14.6		101.7		7.3		7.1		3			
SR3	Sunny	Moderate	10:53	8.8	Surface	1.0	0.6	169	28.2	28.2	8.0	8.0	12.1	12.1	96.0	96.0	7.0	6.4	6.9	9.5	4	5	822143	807548
						1.0	0.5	176	28.1		8.0		12.1		95.9		7.0		7.1		5			
					Middle	4.4	0.5	169	27.5	27.5	8.0	8.0	17.6	17.6	80.2	80.2	5.7		9.3		5			
						4.4	0.6	172	27.5		8.0		17.7		80.2		5.7		9.3		5			
					Bottom	7.8	0.6	159	27.0	27.0	8.0	8.0	23.4	23.4	76.6	76.6	5.4	5.4	12.4		5			
						7.8	0.6	153	27.0		8.0		23.4		76.6		5.4		12.4		5			
SR4A	Sunny	Moderate	12:29	8.8	Surface	1.0	0.0	72	28.6	28.7	8.2	8.2	11.2	11.2	110.9	110.7	8.1	6.6	9.8	8.8	4	4	817197	807812
						1.0	0.0	79	28.7		8.2		11.2		110.5		8.0		10.3		4			
					Middle	4.4	0.0	41	26.7	26.7	8.0	8.0	26.8	26.7	75.1	75.2	5.2		7.1		4			
						4.4	0.1	39	26.7		8.0		26.6		75.2		5.2		7.2		4			
					Bottom	7.8	0.0	81	26.7	26.7	8.0	8.0	28.2	28.2	77.3	77.6	5.3	5.3	9.3		4			
						7.8	0.0	83	26.7		8.0		28.2		77.9		5.3		9.3		5			
SR8	Sunny	Calm	10:17	5.0	Surface	1.0	-	-	29.2	29.3	7.9	7.9	12.7	12.7	104.8	104.8	7.5	7.5	8.2	8.8	3	4	820396	811611
						1.0	-	-	29.3		7.9		12.7		104.7		7.5		8.2		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.5	29.5	7.9	7.9	12.7	12.7	104.6	104.7	7.4	7.4	9.4		5			
						4.0	-	-	29.5		7.9		12.6		104.7		7.4		9.5		4			

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Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 12 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Fine	Moderate	04:08	7.8	Surface	1.0	0.2	30	27.5	27.5	8.1	8.1	9.8	9.8	98.8	98.6	7.4	6.5	11.7	12.6	5	5	815623	804229
						1.0	0.2	29	27.5		8.1		9.7		98.4		7.3		11.8		5			
					Middle	3.9	0.3	37	26.5	26.5	8.0	8.0	21.1	21.1	78.9	78.9	5.6		12.5		6			
						3.9	0.3	39	26.5		8.0		21.1		78.9		5.6		12.5		5			
					Bottom	6.8	0.2	27	26.1	26.1	7.9	7.9	31.0	30.9	71.0	71.3	4.8	4.8	13.9		5			
						6.8	0.2	30	26.1		7.9		30.9		71.5		4.8		13.4		6			
C2	Fine	Moderate	05:14	10.6	Surface	1.0	0.3	337	27.9	27.9	8.1	8.1	12.3	12.3	98.3	98.1	7.2	6.3	7.8	8.9	4	5	825702	806943
						1.0	0.3	333	27.8		8.1		12.3		97.9		7.2		7.4		4			
					Middle	5.3	0.3	345	26.9	26.9	7.9	7.9	22.0	22.0	75.9	76.0	5.3		8.6		4			
						5.3	0.3	342	26.9		7.9		22.1		76.1		5.3		8.1		5			
					Bottom	9.6	0.4	4	26.9	26.9	7.9	7.9	22.1	22.1	77.6	77.7	5.5	5.5	10.8		5			
						9.6	0.3	3	26.9		7.9		22.1		77.8		5.5		10.4		5			
C3	Sunny	Calm	04:57	8.2	Surface	1.0	0.4	247	28.1	28.1	7.8	7.8	20.2	20.2	98.1	98.1	6.9	6.8	1.0	1.5	7	6	822116	817805
						1.0	0.4	240	28.0		7.8		20.2		98.0		6.9		1.0		7			
					Middle	4.1	0.5	272	27.8	27.8	7.8	7.8	20.5	20.5	95.8	95.6	6.7		1.4		6			
						4.1	0.4	271	27.8		7.8		20.6		95.3		6.7		1.5		6			
					Bottom	7.2	0.5	234	28.0	28.0	7.7	7.7	25.1	25.1	90.7	90.9	6.2	6.2	2.1		5			
						7.2	0.4	232	28.0		7.7		25.1		91.0		6.2		2.1		5			
IM1	Fine	Moderate	04:26	6.3	Surface	1.0	0.1	21	26.8	26.8	8.0	8.0	22.3	22.3	80.1	80.1	5.6	5.4	10.7	12.1	6	6	818342	806452
						1.0	0.1	21	26.7		8.0		22.3		80.1		5.6		10.3		6			
					Middle	3.2	0.2	32	26.4	26.4	8.0	8.0	27.3	27.4	73.8	73.9	5.1		12.9		6			
						3.2	0.2	31	26.4		8.0		27.5		74.0		5.1		13.3		6			
					Bottom	5.3	0.1	10	26.3	26.3	8.0	8.0	29.1	29.1	75.8	75.9	5.2	5.2	12.9		6			
						5.3	0.0	12	26.3		8.0		29.1		76.0		5.2		12.5		5			
IM2	Fine	Moderate	04:32	6.8	Surface	1.0	0.1	340	26.8	26.8	8.0	8.0	21.0	20.8	83.3	83.4	5.9	5.5	12.2	13.4	4	5	819177	806244
						1.0	0.1	334	26.8		8.0		20.7		83.4		5.9		12.7		4			
					Middle	3.4	0.1	357	26.4	26.4	8.0	8.0	26.9	26.9	73.1	73.2	5.0		13.2		4			
						3.4	0.2	352	26.4		8.0		26.9		73.3		5.1		13.3		5			
					Bottom	5.8	0.1	13	26.2	26.2	8.0	8.0	29.2	29.2	75.7	75.9	5.2	5.2	14.2		5			
						5.8	0.1	17	26.2		8.0		29.2		76.1		5.2		14.7		5			
IM7	Fine	Moderate	04:59	8.4	Surface	1.0	0.2	329	28.6	28.6	8.1	8.1	9.6	9.7	113.1	113.1	8.3	7.2	5.9	9.2	4	5	821346	806817
						1.0	0.2	330	28.6		8.1		9.7		113.1		8.3		5.9		4			
					Middle	4.2	0.2	358	27.1	27.1	8.0	8.0	15.8	15.9	84.7	84.6	6.1		9.8		5			
						4.2	0.2	350	27.0		8.0		15.9		84.4		6.1		9.2		5			
					Bottom	7.4	0.2	330	26.7	26.7	8.0	8.0	23.0	23.0	78.3	78.5	5.5	5.5	12.3		5			
						7.4	0.2	322	26.7		8.0		23.0		78.6		5.5		12.3		6			

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Calm	06:16	7.8	Surface	1.0	0.4	311	28.2	28.2	7.7	7.7	10.8	10.9	88.8	88.5	6.5	5.9	6.1	6.5	4	4	822237	809836
						1.0	0.3	305	28.2		7.7		11.0		88.2		6.4		6.1		4			
					Middle	3.9	0.4	315	27.9	27.9	7.7	7.7	19.8	19.8	74.9	75.1	5.3		6.1		4			
						3.9	0.4	315	27.9		7.7		19.9		75.2		5.3		6.1		4			
					Bottom	6.8	0.4	276	28.0	28.0	7.7	7.7	19.9	19.9	80.8	82.5	5.7	5.8	7.3		4			
						6.8	0.4	276	28.0		7.7		19.9		84.1		5.9		7.3		4			
IM11	Sunny	Calm	06:08	9.0	Surface	1.0	0.4	275	28.3	28.3	7.8	7.8	10.9	10.9	94.1	93.1	6.9	6.2	6.1	7.2	3	4	821517	810550
						1.0	0.4	268	28.2		7.8		10.9		92.1		6.8		6.1		4			
					Middle	4.5	0.4	284	28.3	28.4	7.6	7.6	16.8	16.8	77.6	77.7	5.5		7.3		4			
						4.5	0.5	287	28.4		7.6		16.8		77.7		5.5		7.3		3			
					Bottom	8.0	0.4	301	28.8	28.9	7.6	7.6	18.2	18.2	80.0	80.3	5.6	5.6	8.1		4			
						8.0	0.4	299	28.9		7.6		18.1		80.6		5.6		8.1		5			
IM12	Sunny	Calm	06:00	9.4	Surface	1.0	0.5	292	28.5	28.5	7.6	7.6	10.9	10.9	97.7	97.2	7.1	6.6	7.0	8.2	4	4	821146	811519
						1.0	0.5	295	28.4		7.6		10.9		96.7		7.1		7.0		4			
					Middle	4.7	0.4	290	28.7	28.8	7.6	7.6	16.0	16.0	86.6	86.8	6.1		8.0		4			
						4.7	0.4	286	28.8		7.6		16.0		87.0		6.1		8.0		3			
					Bottom	8.4	0.5	256	29.0	29.1	7.6	7.6	16.0	15.9	88.8	89.5	6.2	6.3	9.5		3			
						8.4	0.5	261	29.1		7.6		15.8		90.1		6.3		9.6		4			
SR1A	Sunny	Calm	05:38	5.2	Surface	1.0	0.1	198	28.5	28.5	7.5	7.5	13.6	13.4	102.6	102.7	7.4	7.4	8.4	9.0	4	5	819976	812664
						1.0	0.1	194	28.5		7.5		13.1		102.7		7.4		8.4		4			
					Middle	2.6	0.0	198	-	-	-	-	-	-	-	-	-		-		-			
						2.6	0.0	202	-		-		-		-		-		-		-			
					Bottom	4.2	0.0	172	28.5	28.5	7.5	7.5	14.5	14.4	103.1	103.2	7.4	7.4	9.7		5			
						4.2	0.0	178	28.5		7.5		14.3		103.2		7.4		9.6		6			
SR2	Sunny	Calm	05:24	5.0	Surface	1.0	0.2	235	28.9	28.9	7.5	7.5	11.1	11.1	103.8	103.8	7.5	7.5	9.2	9.6	6	5	821453	814159
						1.0	0.2	228	28.8		7.5		11.1		103.7		7.5		9.3		5			
					Middle	-	0.1	243	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	245	-		-		-		-		-		-		-			
					Bottom	4.0	0.1	216	28.7	28.7	7.5	7.5	11.2	11.1	103.2	103.1	7.5	7.5	10.0		5			
						4.0	0.1	216	28.7		7.5		11.1		103.0		7.5		10.1		4			
SR3	Fine	Moderate	05:07	9.0	Surface	1.0	0.3	345	27.8	27.8	8.0	8.0	11.7	11.7	93.9	93.8	6.9	6.2	7.2	9.9	5	4	822140	807571
						1.0	0.3	349	27.8		8.0		11.7		93.6		6.8		7.2		5			
					Middle	4.5	0.3	318	27.2	27.2	7.9	7.9	18.1	18.1	77.3	77.3	5.5		9.7		4			
						4.5	0.2	319	27.2		7.9		18.1		77.3		5.5		9.7		4			
					Bottom	8.0	0.4	334	26.7	26.7	7.9	7.9	23.5	23.6	73.0	73.7	5.1	5.2	13.0		4			
						8.0	0.4	336	26.7		7.9		23.6		74.3		5.2		12.7		4			
SR4A	Fine	Moderate	03:47	8.6	Surface	1.0	0.1	209	27.8	27.8	8.1	8.1	10.0	10.0	96.1	95.8	7.1	6.3	7.5	9.3	5	5	817197	807827
						1.0	0.1	203	27.8		8.1		10.0		95.5		7.1		7.5		5			
					Middle	4.3	0.0	199	26.3	26.3	8.0	8.0	23.9	24.0	78.6	78.5	5.5		8.7		5			
						4.3	0.0	193	26.3		8.0		24.0		78.3		5.5		8.7		5			
					Bottom	7.6	0.1	238	26.1	26.1	7.8	7.8	30.6	30.6	66.4	66.3	4.5	4.5	11.7		5			
						7.6	0.0	235	26.1		7.8		30.6		66.1		4.5		11.8		6			
SR8	Sunny	Calm	05:55	5.0	Surface	1.0	-	-	28.7	28.7	7.6	7.6	13.9	13.9	104.0	103.8	7.5	7.5	6.7	7.4	6	6	820394	811599
						1.0	-	-	28.7		7.6		13.8		103.6		7.4		6.8		5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.0	29.0	7.6	7.6	18.9	18.6	92.6	94.3	6.4	6.6	8.1		6			
						4.0	-	-	29.0		7.6		18.4		95.9		6.7		8.0		7			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	12:47	8.2	Surface	1.0	0.7	225	28.5	28.5	8.1	8.1	16.7	16.7	97.3	97.2	6.9	6.3	5.9	8.5	6	6	815624	804244
						1.0	0.6	220	28.5		8.1		16.8		97.0		6.9		6.0		7			
					Middle	4.1	0.7	222	26.7	26.7	8.0	8.0	24.6	24.6	80.1	79.9	5.6		7.2		6			
						4.1	0.7	219	26.6		8.0		24.6		79.6		5.6		7.3		6			
					Bottom	7.2	0.7	212	26.3	26.3	8.0	8.0	30.5	30.5	70.9	71.3	4.8	4.9	12.5		5			
						7.2	0.6	212	26.3		8.0		30.5		71.6		4.9		12.1		5			
C2	Sunny	Moderate	11:40	10.8	Surface	1.0	0.5	166	27.7	27.7	8.0	8.0	17.4	17.4	83.8	83.7	6.0	5.7	11.9	13.8	4	5	825698	806962
						1.0	0.6	160	27.7		8.0		17.5		83.6		6.0		11.3		4			
					Middle	5.4	0.5	169	27.5	27.5	8.0	8.0	21.3	21.3	76.2	76.3	5.3		13.8		4			
						5.4	0.5	174	27.5		8.0		21.3		76.3		5.4		13.1		5			
					Bottom	9.8	0.5	164	27.5	27.5	8.0	8.0	21.5	21.5	77.7	77.7	5.4	5.5	16.7		5			
						9.8	0.5	167	27.5		8.0		21.5		77.7		5.5		16.3		6			
C3	Sunny	Moderate	12:46	9.8	Surface	1.0	0.5	86	28.4	28.4	7.7	7.7	21.9	22.0	91.1	91.1	6.3	6.2	4.3	4.9	7	6	822129	817804
						1.0	0.5	79	28.4		7.7		22.0		91.1		6.3		4.3		7			
					Middle	4.9	0.5	75	28.4	28.4	7.8	7.8	22.2	22.2	89.6	89.4	6.2		4.4		5			
						4.9	0.6	70	28.4		7.7		22.3		89.2		6.1		4.5		6			
					Bottom	8.8	0.6	53	28.4	28.5	7.7	7.7	22.2	22.1	89.5	89.9	6.2	6.2	6.0		6			
						8.8	0.6	53	28.5		7.7		22.1		90.2		6.2		5.9		6			
IM1	Sunny	Moderate	12:33	7.3	Surface	1.0	0.3	183	27.4	27.4	8.0	8.0	21.5	21.5	87.9	88.0	6.2	5.7	9.0	10.7	4	5	818364	806472
						1.0	0.4	187	27.3		8.0		21.5		88.0		6.2		9.0		4			
					Middle	3.7	0.4	211	26.7	26.7	8.0	8.0	26.2	26.1	75.1	75.3	5.2		10.4		5			
						3.7	0.4	207	26.7		8.0		26.1		75.4		5.2		10.3		4			
					Bottom	6.3	0.4	176	26.5	26.5	8.0	8.0	29.4	29.4	72.6	72.9	5.0	5.0	12.7		5			
						6.3	0.4	168	26.5		8.0		29.4		73.1		5.0		12.9		5			
IM2	Sunny	Moderate	12:28	7.7	Surface	1.0	0.4	193	28.0	28.0	8.1	8.1	18.4	18.4	108.2	107.3	7.6	6.5	8.0	10.7	6	7	819159	806248
						1.0	0.4	188	28.0		8.1		18.5		106.3		7.5		8.1		6			
					Middle	3.9	0.4	176	26.9	26.9	8.0	8.0	23.1	23.1	78.8	78.4	5.5		12.5		7			
						3.9	0.4	170	26.8		8.0		23.2		78.0		5.5		12.7		7			
					Bottom	6.7	0.4	210	26.8	26.8	8.0	8.0	27.9	27.9	74.6	74.9	5.1	5.1	11.4		7			
						6.7	0.5	204	26.8		8.0		27.9		75.1		5.1		11.5		8			
IM7	Sunny	Moderate	12:03	8.4	Surface	1.0	0.3	135	28.2	28.2	8.0	8.0	16.7	16.7	91.8	91.9	6.5	6.2	9.0	12.0	8	7	821340	806848
						1.0	0.3	129	28.1		8.0		16.7		91.9		6.6		9.1		7			
					Middle	4.2	0.3	143	27.5	27.5	8.0	8.0	19.7	19.7	81.7	81.7	5.8		12.0		7			
						4.2	0.3	150	27.5		8.0		19.8		81.6		5.8		12.6		6			
					Bottom	7.4	0.3	167	27.4	27.4	8.0	8.0	22.4	22.4	82.3	82.5	5.8	5.8	14.7		8			
						7.4	0.3	172	27.4		8.0		22.3		82.6		5.8		14.5		7			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Sunny	Moderate	11:45	8.4	Surface	1.0	0.7	91	28.8	28.8	7.7	7.7	16.5	16.5	94.8	94.2	6.7	6.4	3.7	4.6	4	5	822229	809842
						1.0	0.7	93	28.8		7.7		16.6		93.5		6.6		3.7		5			
					Middle	4.2	0.6	97	28.8	28.8	7.7	7.7	18.4	18.4	89.6	89.6	6.2		4.6		5			
						4.2	0.5	95	28.8		7.7		18.4		89.6		6.2		4.6		6			
					Bottom	7.4	0.6	92	28.8	28.9	7.7	7.7	18.4	18.4	90.2	90.7	6.3	6.4	5.7		5			
						7.4	0.7	87	28.9		7.7		18.3		91.2		6.4		5.6		5			
IM11	Sunny	Moderate	11:51	7.2	Surface	1.0	0.7	88	28.5	28.5	7.7	7.7	16.5	16.5	85.6	85.3	6.1	5.8	7.0	8.1	6	6	821509	810552
						1.0	0.7	86	28.5		7.7		16.5		85.0		6.0		7.1		5			
					Middle	3.6	0.7	76	28.5	28.5	7.7	7.7	19.2	19.3	80.1	80.2	5.6		8.1		6			
						3.6	0.8	83	28.5		7.7		19.3		80.2		5.6		8.1		6			
					Bottom	6.2	0.7	93	28.5	28.5	7.8	7.8	19.4	19.3	81.1	81.3	5.7	5.7	9.0		6			
						6.2	0.7	88	28.5		7.8		19.3		81.5		5.7		9.0		6			
IM12	Sunny	Moderate	11:56	7.0	Surface	1.0	0.8	88	28.9	28.9	7.8	7.8	16.4	16.4	95.5	95.2	6.7	6.5	5.0	6.3	4	4	821146	811505
						1.0	0.8	83	28.8		7.8		16.5		94.8		6.7		5.1		4			
					Middle	3.5	0.7	116	28.8	28.8	7.8	7.8	16.7	16.7	90.8	88.2	6.4		6.5		4			
						3.5	0.7	114	28.8		7.8		16.7		85.6		6.0		6.5		5			
					Bottom	6.0	0.8	112	28.9	29.0	7.7	7.7	20.1	20.2	85.6	87.2	5.9	6.0	7.4		4			
						6.0	0.9	106	29.0		7.7		20.2		88.7		6.1		7.5		4			
SR1A	Sunny	Moderate	12:18	4.4	Surface	1.0	0.0	65	28.8	28.8	7.7	7.8	18.7	18.8	90.1	90.2	6.3	6.3	7.0	7.6	4	4	819970	812666
						1.0	0.0	57	28.7		7.8		18.8		90.2		6.3		7.0		5			
					Middle	2.2	0.0	90	-	-	-	-	-	-	-	-	-		-		-			
						2.2	0.0	94	-		-		-		-		-		-		-			
					Bottom	3.4	-	79	28.8	28.8	7.7	7.7	18.8	18.8	91.3	91.5	6.4	6.4	8.2		4			
						3.4	0.0	73	28.8		7.7		18.7		91.6		6.4		8.2		3			
SR2	Sunny	Moderate	12:30	5.0	Surface	1.0	0.7	41	28.7	28.7	7.8	7.8	17.9	17.9	86.3	86.0	6.0	6.0	7.2	7.9	5	5	821466	814176
						1.0	0.7	44	28.7		7.7		18.0		85.7		6.0		7.2		6			
					Middle	-	0.7	42	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	47	-		-		-		-		-		-		-			
					Bottom	4.0	0.7	64	28.7	28.8	7.7	7.7	19.2	19.3	84.8	85.4	5.9	6.0	8.6		5			
						4.0	0.7	59	28.8		7.7		19.3		85.9		6.0		8.7		5			
SR3	Sunny	Moderate	11:57	8.5	Surface	1.0	0.5	150	28.4	28.4	8.1	8.1	15.1	15.1	105.1	105.0	7.5	6.9	5.8	10.5	4	5	822163	807583
						1.0	0.4	155	28.4		8.1		15.1		104.9		7.5		6.0		6			
					Middle	4.3	0.5	149	27.7	27.7	8.0	8.0	19.0	19.0	86.8	86.8	6.2		11.2		4			
						4.3	0.5	146	27.6		8.0		19.0		86.7		6.2		11.5		5			
					Bottom	7.5	0.5	160	27.6	27.6	8.0	8.0	20.9	20.9	86.4	86.4	6.1	6.1	14.0		4			
						7.5	0.5	165	27.5		8.0		21.0		86.4		6.1		14.8		6			
SR4A	Sunny	Moderate	13:07	9.2	Surface	1.0	0.1	73	28.0	28.0	8.1	8.1	19.5	19.5	91.2	91.9	6.4	5.6	10.9	12.2	8	7	817187	807826
						1.0	0.1	75	28.0		8.1		19.5		92.6		6.5		10.6		7			
					Middle	4.6	0.0	87	26.9	26.9	8.0	8.0	26.4	26.5	69.6	69.5	4.8		11.8		8			
						4.6	0.0	88	26.9		8.0		26.7		69.4		4.8		11.6		6			
					Bottom	8.2	0.0	75	26.9	26.9	8.0	8.0	27.1	27.1	69.1	69.2	4.7	4.8	14.4		6			
						8.2	0.0	77	26.9		8.0		27.1		69.3		4.8		14.3		8			
SR8	Sunny	Moderate	12:02	5.2	Surface	1.0	-	-	29.1	29.1	7.7	7.7	17.3	17.3	93.0	93.1	6.5	6.5	9.4	9.7	5	5	820403	811606
						1.0	-	-	29.1		7.7		17.3		93.1		6.5		9.5		6			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	29.1	29.1	7.7	7.8	17.3	17.3	93.8	93.9	6.6	6.6	10.0		5			
						4.2	-	-	29.1		7.8		17.3		94.0		6.6		10.0		4			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	06:31	8.5	Surface	1.0	0.3	36	27.3	27.3	8.0	8.0	17.8	17.8	92.2	92.0	6.6	5.9	9.3	11.2	3	3	815627	804224
						1.0	0.4	33	27.3		8.0		17.8		91.8		6.6		9.5		3			
					Middle	4.3	0.4	31	26.6	26.6	8.0	8.0	25.1	25.0	74.8	74.8	5.2		10.7		3			
						4.3	0.4	29	26.6		8.0		25.0		74.7		5.2		10.6		3			
					Bottom	7.5	0.4	21	25.6	25.6	7.9	7.9	32.0	32.0	62.6	62.7	4.2	4.3	13.6		3			
						7.5	0.4	17	25.6		7.9		32.0		62.8		4.3		13.7		2			
C2	Fine	Moderate	07:48	11.9	Surface	1.0	0.5	347	27.5	27.5	8.0	8.0	17.2	16.8	88.7	88.8	6.3	6.0	9.9	12.4	4	4	825704	806928
						1.0	0.5	339	27.5		8.0		16.3		88.8		6.4		9.6		3			
					Middle	6.0	0.5	339	27.1	27.1	8.0	8.0	21.0	21.1	80.1	80.3	5.6		12.8		3			
						6.0	0.5	341	27.1		8.0		21.1		80.4		5.6		12.2		4			
					Bottom	10.9	0.4	331	27.0	27.0	8.0	8.0	21.8	21.8	82.9	83.0	5.8	5.8	15.1		4			
						10.9	0.4	329	27.0		8.0		21.8		83.1		5.8		15.1		5			
C3	Sunny	Moderate	06:37	8.2	Surface	1.0	0.4	274	28.5	28.5	7.8	7.8	17.6	17.6	92.0	91.9	6.5	6.4	1.7	2.1	4	4	822130	817793
						1.0	0.5	269	28.5		7.8		17.6		91.8		6.4		1.6		4			
					Middle	4.1	0.5	241	28.5	28.6	7.8	7.8	19.1	19.1	91.8	91.9	6.4		2.0		3			
						4.1	0.5	237	28.6		7.8		19.1		91.9		6.4		2.1		4			
					Bottom	7.2	0.5	264	28.6	28.6	7.7	7.7	19.1	19.1	92.3	92.4	6.4	6.5	2.6		4			
						7.2	0.6	267	28.6		7.7		19.0		92.5		6.5		2.6		4			
IM1	Fine	Moderate	06:48	7.2	Surface	1.0	0.3	26	27.6	27.6	8.0	8.0	16.3	16.3	95.6	95.7	6.8	6.5	7.1	10.2	6	6	818348	806462
						1.0	0.2	20	27.6		8.0		16.3		95.7		6.8		7.2		6			
					Middle	3.6	0.3	35	27.0	27.0	8.0	8.0	19.2	19.2	87.9	87.8	6.3		7.9		7			
						3.6	0.3	35	26.9		8.0		19.3		87.6		6.2		8.0		6			
					Bottom	6.2	0.2	37	26.4	26.4	8.0	8.0	27.0	27.0	74.9	75.2	5.1	5.2	15.3		6			
						6.2	0.2	42	26.4		8.0		27.0		75.4		5.2		16.0		6			
IM2	Fine	Moderate	06:53	7.7	Surface	1.0	0.3	5	27.4	27.4	8.1	8.1	19.2	19.0	95.5	95.6	6.8	6.3	9.0	10.8	3	3	819191	806236
						1.0	0.3	10	27.4		8.1		18.8		95.6		6.8		8.2		3			
					Middle	3.9	0.4	0	27.0	27.0	8.0	8.0	21.3	21.3	82.7	82.6	5.8		10.2		3			
						3.9	0.3	358	27.0		8.0		21.3		82.4		5.8		10.3		3			
					Bottom	6.7	0.4	14	26.6	26.6	8.0	8.0	25.6	25.6	74.2	74.3	5.1	5.1	13.5		3			
						6.7	0.4	20	26.6		8.0		25.6		74.3		5.1		13.4		2			
IM7	Fine	Moderate	07:21	8.1	Surface	1.0	0.2	7	27.5	27.5	8.0	8.0	15.6	15.7	95.1	94.8	6.8	6.4	11.6	13.7	7	8	821362	806857
						1.0	0.2	1	27.4		8.0		15.7		94.5		6.8		11.2		8			
					Middle	4.1	0.3	345	27.2	27.2	8.0	8.0	19.4	19.3	84.5	84.6	6.0		14.0		8			
						4.1	0.3	341	27.2		8.0		19.3		84.6		6.0		14.0		8			
					Bottom	7.1	0.2	16	27.1	27.1	8.0	8.0	21.7	21.7	81.9	82.0	5.7	5.8	15.5		7			
						7.1	0.2	20	27.1		8.0		21.8		82.1		5.8		15.8		8			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 14 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	07:55	7.8	Surface	1.0	0.4	288	28.4	28.4	7.5	7.5	15.2	15.2	83.0	82.9	5.9	5.9	6.1	7.3	4	5	822217	809836
						1.0	0.3	292	28.4		7.5		15.2		82.8		5.9		6.2		3			
					Middle	3.9	0.3	279	28.4	28.4	7.5	7.5	18.0	18.0	82.2	82.2	5.8		7.0		5			
						3.9	0.3	284	28.4		7.5		18.1		82.1		5.8		7.0		5			
					Bottom	6.8	0.4	302	28.5	28.5	7.5	7.7	18.0	18.0	82.5	82.8	5.8	5.8	8.8		5			
						6.8	0.4	294	28.5		7.8		17.9		83.1		5.8		8.7		7			
IM11	Sunny	Moderate	07:45	9.0	Surface	1.0	0.4	281	28.4	28.4	7.8	7.8	17.4	17.4	85.4	85.4	6.0	6.0	4.6	5.3	5	5	821496	810550
						1.0	0.5	288	28.4		7.8		17.4		85.3		6.0		4.6		4			
					Middle	4.5	0.4	272	28.5	28.5	7.8	7.7	20.2	20.2	85.3	85.4	5.9		5.1		5			
						4.5	0.4	277	28.5		7.7		20.3		85.4		5.9		5.1		6			
					Bottom	8.0	0.4	263	28.7	28.8	7.7	7.6	20.6	20.6	85.9	86.0	5.9	5.9	6.1		5			
						8.0	0.4	261	28.8		7.5		20.5		86.1		5.9		6.2		5			
IM12	Sunny	Moderate	07:37	9.4	Surface	1.0	0.5	290	28.2	28.2	7.5	7.5	19.2	19.2	88.7	88.3	6.2	6.0	7.7	8.3	7	9	821183	811519
						1.0	0.5	283	28.1		7.5		19.3		87.8		6.2		7.8		9			
					Middle	4.7	0.4	283	28.3	28.4	7.5	7.5	21.9	21.9	82.6	82.7	5.7		8.0		8			
						4.7	0.4	280	28.4		7.5		22.0		82.7		5.7		8.0		9			
					Bottom	8.4	0.5	299	28.7	28.8	7.5	7.7	23.1	23.0	85.0	85.7	5.8	5.9	9.2		10			
						8.4	0.5	296	28.8		7.8		22.9		86.3		5.9		9.1		11			
SR1A	Sunny	Moderate	07:12	5.2	Surface	1.0	0.0	201	28.6	28.6	7.7	7.6	16.6	16.7	94.2	93.8	6.7	6.7	5.9	6.2	4	4	819982	812663
						1.0	0.0	200	28.6		7.5		16.7		93.3		6.6		5.9		4			
					Middle	2.6	-	198	-	-	-	-	-	-	-	-	-		-		-			
						2.6	0.0	190	-		-		-		-		-		-		-			
					Bottom	4.2	-	181	28.6	28.6	7.5	7.5	21.9	21.7	88.2	89.6	6.1	6.2	6.6		4			
						4.2	0.0	186	28.6		7.5		21.5		90.9		6.3		6.5		4			
SR2	Sunny	Moderate	06:58	5.0	Surface	1.0	0.1	235	28.5	28.5	7.5	7.5	19.0	19.1	91.8	91.8	6.4	6.4	2.5	2.8	4	5	821486	814166
						1.0	0.1	235	28.5		7.5		19.1		91.7		6.4		2.5		5			
					Middle	-	0.1	254	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	250	-		-		-		-		-		-		-			
					Bottom	4.0	0.1	243	28.6	28.6	7.5	7.5	19.2	19.2	92.1	92.2	6.4	6.4	3.1		4			
						4.0	0.2	242	28.6		7.5		19.2		92.3		6.4		3.2		5			
SR3	Fine	Moderate	07:29	8.8	Surface	1.0	0.5	345	27.7	27.7	8.0	8.0	15.6	15.6	98.2	98.0	7.0	6.6	8.3	10.3	4	4	822123	807585
						1.0	0.5	344	27.6		8.0		15.6		97.7		7.0		8.3		3			
					Middle	4.4	0.4	337	27.4	27.4	8.0	8.0	19.3	19.3	88.2	88.3	6.2		10.9		4			
						4.4	0.4	344	27.4		8.0		19.3		88.3		6.2		10.9		4			
					Bottom	7.8	0.4	337	27.3	27.3	8.1	8.1	19.5	19.5	90.6	92.5	6.4	6.6	11.7		4			
						7.8	0.4	342	27.3		8.1		19.5		94.3		6.7		11.6		4			
SR4A	Fine	Moderate	06:11	9.3	Surface	1.0	0.0	216	27.4	27.4	8.0	8.0	16.0	16.0	90.4	90.4	6.5	6.4	9.3	10.4	7	7	817212	807824
						1.0	0.1	217	27.4		8.0		15.9		90.3		6.5		9.3		6			
					Middle	4.7	-	196	27.4	27.4	8.0	8.0	18.2	18.1	87.5	87.5	6.2		10.7		6			
						4.7	0.0	198	27.4		8.0		18.1		87.5		6.2		10.6		6			
					Bottom	8.3	0.0	215	27.3	27.3	7.9	7.9	19.3	19.3	84.2	84.2	6.0	6.0	11.2		7			
						8.3	0.0	215	27.3		7.9		19.3		84.2		6.0		11.6		7			
SR8	Sunny	Moderate	07:31	5.0	Surface	1.0	-	-	28.8	28.8	7.8	7.8	19.4	19.4	84.8	84.6	5.9	5.9	8.4	8.8	5	6	820390	811631
						1.0	-	-	28.8		7.8		19.5		84.4		5.9		8.5		6			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.0	29.0	7.8	7.7	21.9	21.8	84.8	85.3	5.8	5.9	9.1		6			
						4.0	-	-	29.0		7.7		21.7		85.8		5.9		9.1		6			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	14:35	8.8	Surface	1.0	0.7	204	28.1	28.2	8.0	8.0	18.8	18.8	81.0	81.0	5.7	4.9	9.8	12.0	6	7	815635	804236
						1.0	0.7	209	28.2		8.0		18.8		80.9		5.7		9.7		5			
					Middle	4.4	0.6	197	26.4	26.4	7.9	7.9	28.4	28.5	59.1	59.1	4.1		12.9		6			
						4.4	0.6	201	26.3		7.9		28.5		59.0		4.1		12.3		7			
					Bottom	7.8	0.7	228	26.0	26.0	7.9	7.9	31.3	31.2	53.8	54.0	3.7	3.7	14.0		8			
						7.8	0.6	225	26.0		7.9		31.2		54.2		3.7		13.3		8			
C2	Sunny	Moderate	13:25	11.4	Surface	1.0	0.4	155	28.2	28.2	7.9	7.9	12.5	12.5	90.8	90.8	6.6	6.0	7.9	11.9	4	5	825684	806952
						1.0	0.4	158	28.2		7.9		12.5		90.7		6.6		8.0		5			
					Middle	5.7	0.4	167	27.9	27.9	7.9	7.9	18.7	18.7	76.1	76.1	5.4		13.2		5			
						5.7	0.5	168	27.9		7.9		18.7		76.1		5.4		13.4		6			
					Bottom	10.4	0.4	164	27.8	27.8	7.9	7.9	19.1	19.1	76.0	76.1	5.4	5.4	14.1		6			
						10.4	0.4	164	27.8		7.9		19.1		76.2		5.4		14.5		6			
C3	Sunny	Moderate	15:33	9.6	Surface	1.0	0.5	62	27.2	27.2	8.0	8.0	18.2	18.1	73.9	73.7	5.3	5.1	1.7	2.7	5	5	822131	817813
						1.0	0.5	62	27.1		8.0		18.0		73.5		5.3		1.7		5			
					Middle	4.8	0.5	64	27.1	27.1	8.0	8.0	21.8	21.9	69.0	68.9	4.9		2.8		4			
						4.8	0.4	67	27.1		8.0		22.0		68.8		4.8		2.8		5			
					Bottom	8.6	0.5	57	27.2	27.2	8.0	8.0	22.5	22.6	69.2	69.8	4.9	4.9	3.4		4			
						8.6	0.5	52	27.2		8.0		22.6		70.3		4.9		3.5		5			
IM1	Sunny	Moderate	14:19	7.6	Surface	1.0	0.4	195	28.2	28.2	8.0	7.9	16.2	16.2	88.3	88.3	6.3	6.1	7.7	8.6	4	5	818328	806464
						1.0	0.3	195	28.2		7.9		16.2		88.2		6.3		7.7		4			
					Middle	3.8	0.3	180	27.8	27.8	7.9	7.9	17.5	17.5	83.1	83.1	5.9		7.8		5			
						3.8	0.3	177	27.8		7.9		17.5		83.0		5.9		7.8		6			
					Bottom	6.6	0.3	169	27.2	27.2	7.9	7.9	23.2	23.2	67.9	67.9	4.7	4.7	10.2		6			
						6.6	0.4	176	27.1		7.9		23.3		67.8		4.7		10.3		5			
IM2	Sunny	Moderate	14:13	7.4	Surface	1.0	0.4	200	28.2	28.2	7.9	7.9	16.5	16.5	87.6	87.6	6.2	6.1	8.2	10.4	4	5	819187	806215
						1.0	0.4	199	28.2		7.9		16.5		87.6		6.2		8.1		5			
					Middle	3.7	0.4	179	27.9	27.9	7.9	7.9	17.2	17.2	84.0	83.9	6.0		7.8		5			
						3.7	0.4	176	27.9		7.9		17.2		83.8		6.0		7.8		6			
					Bottom	6.4	0.4	201	27.4	27.4	7.9	7.9	23.2	23.2	67.7	67.8	4.7	4.7	15.3		5			
						6.4	0.4	195	27.4		7.9		23.2		67.9		4.7		15.3		6			
IM7	Sunny	Moderate	13:50	8.4	Surface	1.0	0.3	140	28.5	28.5	7.9	7.9	17.2	17.2	91.8	91.9	6.4	6.1	9.0	11.7	5	6	821364	806854
						1.0	0.3	136	28.5		7.9		17.1		91.9		6.4		9.1		6			
					Middle	4.2	0.3	132	28.2	28.2	7.9	7.9	18.7	18.6	81.7	81.7	5.8		11.3		6			
						4.2	0.3	126	28.2		7.9		18.6		81.6		5.7		11.6		6			
					Bottom	7.4	0.3	153	27.4	27.4	8.0	8.0	21.4	21.3	82.3	82.5	5.7	5.8	14.7		7			
						7.4	0.3	153	27.4		8.0		21.1		82.6		5.8		14.5		6			

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Water Quality Monitoring
Water Quality Monitoring Results on 16 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Sunny	Moderate	13:22	8.2	Surface	1.0	0.6	97	27.6	27.6	7.9	7.9	16.3	16.3	71.2	71.1	5.1	5.1	6.4	8.1	5	5	822243	809818
						1.0	0.6	96	27.6		7.9		16.3		71.0		5.1		6.5		4			
					Middle	4.1	0.6	109	27.5	27.5	7.9	7.9	18.9	19.0	70.8	71.0	5.0		8.7		4			
						4.1	0.6	110	27.5		7.9		19.0		71.1		5.1		8.8		5			
					Bottom	7.2	0.6	107	27.6	27.6	7.9	7.9	19.4	19.4	73.8	74.6	5.2	5.3	9.0		5			
						7.2	0.6	111	27.6		7.9		19.4		75.3		5.3		9.0		6			
IM11	Sunny	Moderate	14:32	7.0	Surface	1.0	0.7	87	27.9	27.9	7.9	7.9	13.7	13.7	76.0	75.9	5.5	5.5	6.4	7.6	6	5	821486	810566
						1.0	0.7	84	27.9		7.9		13.7		75.7		5.5		6.4		6			
					Middle	3.5	0.7	103	27.9	27.9	7.9	7.9	16.1	16.1	76.0	76.3	5.5		7.6		5			
						3.5	0.7	100	27.9		7.9		16.2		76.5		5.5		7.6		5			
					Bottom	6.0	0.7	89	27.9	27.9	7.9	7.9	16.9	16.9	78.2	78.9	5.6	5.7	9.0		4			
						6.0	0.7	95	27.9		7.9		16.8		79.5		5.7		8.9		5			
IM12	Sunny	Moderate	14:41	7.2	Surface	1.0	0.8	90	27.4	27.4	7.9	7.9	18.2	18.2	69.3	69.3	5.0	5.0	6.4	7.3	5	5	821179	811531
						1.0	0.9	87	27.4		7.9		18.2		69.2		5.0		6.5		4			
					Middle	3.6	0.8	98	27.4	27.4	7.9	7.9	19.7	19.7	68.7	68.7	4.9		7.0		5			
						3.6	0.8	101	27.4		7.9		19.8		68.7		4.9		7.0		6			
					Bottom	6.2	0.9	110	27.3	27.3	7.9	7.9	20.0	19.9	69.8	70.5	4.9	5.0	8.5		6			
						6.2	0.9	113	27.3		7.9		19.9		71.2		5.0		8.6		5			
SR1A	Sunny	Moderate	14:56	4.2	Surface	1.0	-	57	28.1	28.1	7.9	7.9	15.6	15.6	73.3	73.2	5.3	5.3	7.1	8.2	5	5	819973	812655
						1.0	0.0	50	28.0		7.9		15.6		73.1		5.3		7.8		4			
					Middle	2.1	0.0	63	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.0	63	-		-		-		-		-		-		-			
					Bottom	3.2	0.1	65	26.8	26.9	7.9	7.8	22.3	22.2	75.3	76.1	5.3	5.3	8.9		5			
						3.2	-	70	26.9		7.8		22.0		76.8		5.3		8.9		5			
SR2	Sunny	Moderate	15:16	5.2	Surface	1.0	0.8	32	27.8	27.8	7.9	7.9	17.8	17.8	74.5	74.3	5.3	5.3	5.1	6.0	4	5	821485	814182
						1.0	0.8	25	27.8		7.9		17.9		74.1		5.3		5.0		5			
					Middle	-	0.8	45	-	-	-	-	-	-	-	-	-		-		-			
						-	0.8	37	-		-		-		-		-		-		-			
					Bottom	4.2	0.8	40	27.0	27.1	7.9	7.9	21.5	21.6	76.6	77.7	5.4	5.5	7.0		6			
						4.2	0.7	36	27.1		7.9		21.6		78.7		5.5		6.9		5			
SR3	Sunny	Moderate	13:43	8.4	Surface	1.0	0.5	147	28.3	28.3	7.9	7.9	15.6	15.7	83.4	83.4	6.0	5.8	9.2	12.0	4	5	822155	807581
						1.0	0.4	150	28.3		7.9		15.7		83.4		6.0		9.3		6			
					Middle	4.2	0.5	163	28.2	28.2	7.9	7.9	16.7	16.7	76.7	76.7	5.5		12.0		6			
						4.2	0.5	166	28.2		7.9		16.7		76.6		5.5		11.3		5			
					Bottom	7.4	0.5	139	28.2	28.2	7.9	7.9	18.3	18.3	77.1	77.2	5.4	5.5	15.0		5			
						7.4	0.5	136	28.2		7.9		18.3		77.2		5.5		15.2		5			
SR4A	Sunny	Moderate	14:56	8.5	Surface	1.0	0.1	71	28.2	28.2	7.9	7.9	17.3	17.3	85.2	85.1	6.0	5.6	10.2	8.9	6	5	817194	807786
						1.0	0.0	77	28.1		7.9		17.3		85.0		6.0		10.5		7			
					Middle	4.3	0.0	49	27.6	27.6	7.9	7.9	20.4	20.4	74.4	74.4	5.2		7.7		5			
						4.3	0.0	41	27.6		7.9		20.4		74.4		5.2		7.4		5			
					Bottom	7.5	0.1	61	27.3	27.3	7.9	7.9	24.0	24.0	66.8	66.9	4.6	4.6	9.1		4			
						7.5	0.1	57	27.3		7.9		24.0		66.9		4.6		8.3		4			
SR8	Sunny	Moderate	14:45	5.0	Surface	1.0	-	-	27.8	27.8	7.9	7.9	18.6	18.6	74.6	74.7	5.3	5.3	6.9	7.1	3	3	820396	811608
						1.0	-	-	27.8		7.9		18.6		74.7		5.3		6.8		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	27.3	27.3	7.9	7.9	20.2	20.2	79.9	81.2	5.7	5.8	7.4		4			
						4.0	-	-	27.3		7.9		20.1		82.5		5.8		7.4		3			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	08:27	8.0	Surface	1.0	0.5	26	27.9	27.9	7.9	7.9	16.1	16.1	83.1	83.1	6.0	4.9	8.1	11.8	7	7	815636	804234
						1.0	0.5	24	27.9		7.9		16.1		83.0		5.9		8.2		6			
					Middle	4.0	0.5	18	26.6	26.7	7.9	7.9	27.2	27.2	54.9	54.9	3.8		12.8		6			
						4.0	0.5	15	26.7		7.9		27.2		54.8		3.8		12.8		7			
					Bottom	7.0	0.5	19	26.2	26.2	7.9	7.9	30.9	30.8	47.4	47.6	3.2	3.2	14.8		6			
						7.0	0.4	26	26.2		7.9		30.8		47.7		3.2		14.3		7			
C2	Fine	Moderate	09:36	11.4	Surface	1.0	0.6	5	28.1	28.1	7.9	7.9	12.6	12.6	89.9	89.7	6.6	6.1	8.5	10.3	8	11	825700	806922
						1.0	0.6	12	28.1		7.9		12.6		89.4		6.5		8.7		9			
					Middle	5.7	0.6	1	27.9	27.9	7.9	7.9	18.0	18.0	78.5	78.5	5.6		10.1		12			
						5.7	0.6	358	27.9		7.9		18.0		78.4		5.6		10.1		11			
					Bottom	10.4	0.6	354	27.9	28.0	7.9	7.9	19.4	19.4	79.4	79.6	5.6	5.6	12.3		14			
						10.4	0.6	358	28.0		7.9		19.4		79.7		5.6		12.4		13			
C3	Sunny	Moderate	08:30	8.0	Surface	1.0	0.6	261	27.7	27.7	7.7	7.7	17.3	17.4	70.3	70.2	5.0	5.0	7.1	8.1	4	4	822117	817821
						1.0	0.6	262	27.7		7.7		17.4		70.1		5.0		7.1		4			
					Middle	4.0	0.6	257	27.6	27.6	7.7	7.7	17.6	17.7	69.9	69.9	5.0		8.1		4			
						4.0	0.6	249	27.6		7.7		17.7		69.8		5.0		8.0		4			
					Bottom	7.0	0.6	264	27.6	27.6	7.7	7.7	17.9	17.9	70.5	70.6	5.0	5.0	9.3		4			
						7.0	0.6	265	27.6		7.7		17.9		70.7		5.0		9.2		4			
IM1	Fine	Moderate	08:44	6.8	Surface	1.0	0.4	21	27.7	27.7	7.9	7.9	19.6	19.5	75.8	75.9	5.4	5.2	15.7	14.6	6	6	818330	806447
						1.0	0.3	17	27.7		7.9		19.5		76.0		5.4		15.2		6			
					Middle	3.4	0.4	22	27.6	27.6	7.9	7.9	22.0	22.0	69.7	69.7	4.9		12.6		6			
						3.4	0.4	29	27.6		7.9		22.0		69.7		4.9		12.6		6			
					Bottom	5.8	0.4	16	27.5	27.5	7.9	7.9	22.3	22.3	70.8	70.9	4.9	4.9	15.9		7			
						5.8	0.4	17	27.5		7.9		22.3		71.0		4.9		15.8		7			
IM2	Fine	Moderate	08:53	6.7	Surface	1.0	0.5	8	27.8	27.8	7.9	7.9	18.8	18.7	79.1	79.2	5.6	5.2	11.7	10.6	4	8	819198	806254
						1.0	0.5	2	27.8		7.9		18.7		79.3		5.6		11.5		5			
					Middle	3.4	0.4	15	27.6	27.6	7.9	7.9	21.9	21.9	69.2	69.1	4.8		7.6		7			
						3.4	0.4	12	27.6		7.9		21.9		69.0		4.8		8.1		8			
					Bottom	5.7	0.4	6	27.6	27.6	7.9	7.9	22.3	22.3	68.7	68.7	4.8	4.8	12.9		10			
						5.7	0.3	9	27.6		7.9		22.3		68.7		4.8		12.1		11			
IM7	Fine	Moderate	09:11	8.6	Surface	1.0	0.3	6	28.3	28.3	7.9	7.9	15.2	15.2	83.3	83.3	6.0	5.7	7.0	11.3	9	10	821338	806852
						1.0	0.3	2	28.3		7.9		15.2		83.2		6.0		7.0		9			
					Middle	4.3	0.3	18	27.8	27.8	7.9	7.9	19.2	19.2	75.3	75.3	5.3		11.0		10			
						4.3	0.3	22	27.8		7.9		19.2		75.3		5.3		11.4		8			
					Bottom	7.6	0.3	7	27.8	27.8	7.9	7.9	19.6	19.6	75.3	76.8	5.3	5.4	15.8		11			
						7.6	0.3	10	27.8		7.9		19.6		78.2		5.5		15.8		12			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Sunny	Moderate	09:31	8.0	Surface	1.0	0.4	292	27.7	27.7	7.9	7.9	16.3	16.3	73.6	73.5	5.3	5.3	5.2	6.3	4	5	822259	809838
						1.0	0.5	292	27.7		7.9		16.3		73.4		5.3		5.1		4			
					Middle	4.0	0.5	275	27.6	27.6	7.9	7.9	17.3	17.3	72.1	72.0	5.2		6.8		5			
						4.0	0.6	273	27.6		7.9		17.3		71.9		5.2		6.7		5			
					Bottom	7.0	0.5	270	27.4	27.4	7.9	7.9	19.4	19.4	73.5	74.5	5.2	5.3	7.0		5			
						7.0	0.5	277	27.4		7.9		19.4		75.4		5.4		7.1		4			
IM11	Sunny	Moderate	09:25	8.4	Surface	1.0	0.5	294	27.7	27.7	7.9	7.9	16.4	16.4	75.6	75.5	5.4	5.4	5.1	6.2	4	4	821518	810559
						1.0	0.4	298	27.6		7.9		16.4		75.3		5.4		5.1		5			
					Middle	4.2	0.4	263	27.5	27.5	7.9	7.9	16.7	16.9	73.9	73.8	5.3		6.0		4			
						4.2	0.4	268	27.4		7.9		17.0		73.7		5.3		6.1		4			
					Bottom	7.4	0.4	263	27.2	27.2	7.9	7.9	19.5	19.5	78.8	79.8	5.6	5.7	7.4		3			
						7.4	0.4	259	27.2		7.9		19.5		80.8		5.8		7.5		4			
IM12	Sunny	Moderate	09:20	9.2	Surface	1.0	0.5	280	27.5	27.5	7.9	7.9	16.5	16.5	71.7	71.3	5.2	5.0	4.4	5.6	4	4	821145	811499
						1.0	0.5	282	27.5		7.9		16.5		70.9		5.1		4.5		5			
					Middle	4.6	0.5	272	27.4	27.4	7.9	7.9	19.7	19.8	69.4	69.5	4.9		5.9		3			
						4.6	0.5	277	27.4		7.9		19.9		69.6		4.9		5.8		4			
					Bottom	8.2	0.5	276	27.5	27.6	7.9	7.9	20.1	20.1	75.0	76.2	5.3	5.4	6.4		3			
						8.2	0.5	270	27.6		7.9		20.1		77.3		5.5		6.5		3			
SR1A	Sunny	Moderate	08:58	5.0	Surface	1.0	0.0	197	27.9	27.9	7.8	7.8	14.5	14.5	76.0	75.8	5.5	5.5	6.2	6.9	4	4	819982	812661
						1.0	0.1	194	27.9		7.8		14.5		75.5		5.5		6.1		3			
					Middle	2.5	0.0	200	-	-	-	-	-	-	-	-	-		-		-			
						2.5	-	202	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	172	27.8	27.8	7.8	7.8	17.8	17.7	76.3	79.0	5.4	5.6	7.6		4			
						4.0	0.1	172	27.8		7.8		17.7		81.7		5.8		7.7		4			
SR2	Sunny	Moderate	08:45	4.8	Surface	1.0	0.1	247	27.7	27.7	7.7	7.7	17.1	17.1	71.2	71.2	5.1	5.1	7.1	7.6	3	4	821472	814170
						1.0	0.2	246	27.7		7.7		17.1		71.2		5.1		7.1		4			
					Middle	-	0.1	249	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	251	-		-		-		-		-		-		-			
					Bottom	3.8	0.2	227	27.7	27.7	7.7	7.7	17.1	17.1	71.2	71.2	5.1	5.1	8.0		4			
						3.8	0.2	224	27.7		7.7		17.0		71.1		5.1		8.0		4			
SR3	Fine	Moderate	09:17	8.8	Surface	1.0	0.4	329	28.4	28.4	7.9	7.9	13.5	13.5	88.8	88.8	6.4	6.1	7.5	8.8	7	7	822152	807586
						1.0	0.4	322	28.4		7.9		13.5		88.8		6.4		8.0		6			
					Middle	4.4	0.5	355	28.1	28.1	7.9	7.9	16.5	16.5	81.7	81.7	5.8		8.5		6			
						4.4	0.5	358	28.1		7.9		16.5		81.7		5.8		8.8		7			
					Bottom	7.8	0.4	343	28.2	28.2	7.9	7.9	16.9	16.9	81.7	81.8	5.8	5.8	9.9		7			
						7.8	0.4	344	28.2		7.9		16.9		81.9		5.8		9.8		8			
SR4A	Fine	Moderate	08:02	9.3	Surface	1.0	0.0	238	28.1	28.1	7.9	7.9	18.9	18.9	82.3	82.3	5.8	5.7	13.0	13.3	5	5	817177	807824
						1.0	0.1	238	28.1		7.9		18.9		82.2		5.8		13.1		5			
					Middle	4.7	0.0	247	28.0	28.0	7.9	7.9	19.1	19.1	80.1	80.1	5.6		13.6		4			
						4.7	0.1	246	28.0		7.9		19.1		80.0		5.6		13.6		4			
					Bottom	8.3	0.0	239	27.6	27.6	7.8	7.8	22.6	22.6	68.1	68.2	4.7	4.7	13.4		4			
						8.3	0.0	235	27.6		7.8		22.6		68.2		4.7		13.4		5			
SR8	Sunny	Moderate	09:15	5.2	Surface	1.0	-	-	27.8	27.8	7.9	7.9	16.3	16.3	74.1	74.2	5.3	5.3	8.1	8.6	4	4	820381	811630
						1.0	-	-	27.8		7.9		16.3		74.2		5.3		8.0		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	27.7	27.7	7.9	7.9	17.9	17.9	76.9	77.7	5.5	5.6	9.3		4			
						4.2	-	-	27.7		7.9		17.9		78.4		5.6		9.2		4			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	16:43	8.5	Surface	1.0	0.4	206	28.8	28.8	8.1	8.1	15.3	15.3	99.2	98.5	7.0	5.7	3.5	6.3	3	3	815599	804238
						1.0	0.4	210	28.8		8.1		15.3		97.8		6.9		3.6		4			
					Middle	4.3	0.5	218	25.6	25.6	7.8	7.8	28.0	28.0	64.7	64.4	4.4		5.0		4			
						4.3	0.5	210	25.6		7.8		28.0		64.0		4.4		5.3		3			
					Bottom	7.5	0.4	221	25.5	25.5	7.8	7.8	28.8	28.8	51.6	51.6	3.6	3.6	10.1		3			
						7.5	0.4	220	25.5		7.8		28.8		51.6		3.6		10.1		3			
C2	Sunny	Moderate	15:40	12.1	Surface	1.0	0.4	180	28.5	28.5	8.0	8.0	14.8	14.8	85.5	85.5	6.1	5.3	3.8	6.7	4	5	825684	806964
						1.0	0.4	177	28.4		8.0		14.8		85.5		6.1		3.9		4			
					Middle	6.1	0.3	162	27.5	27.5	8.0	8.0	18.9	18.9	62.8	62.7	4.5		5.6		4			
						6.1	0.3	156	27.5		8.0		18.9		62.5		4.4		6.0		5			
					Bottom	11.1	0.4	178	25.9	26.0	8.0	8.0	26.4	26.4	51.5	51.7	3.6	3.6	10.6		5			
						11.1	0.4	176	26.0		8.0		26.4		51.8		3.6		10.0		5			
C3	Sunny	Moderate	16:38	9.6	Surface	1.0	0.4	60	28.2	28.2	8.0	7.9	20.0	20.0	93.3	92.9	6.5	6.2	2.1	3.3	4	3	822088	817785
						1.0	0.4	65	28.2		7.9		20.1		92.5		6.5		2.1		3			
					Middle	4.8	0.4	63	27.9	27.9	7.9	7.9	20.5	20.5	84.5	84.3	5.9		3.4		3			
						4.8	0.4	58	27.8		7.9		20.6		84.0		5.9		3.4		3			
					Bottom	8.6	0.4	91	27.5	27.8	7.9	7.9	20.4	20.4	88.7	90.7	6.1	6.3	4.2		3			
						8.6	0.5	94	28.1		7.9		20.4		92.6		6.5		4.3		3			
IM1	Sunny	Moderate	16:30	6.8	Surface	1.0	0.3	199	28.8	28.8	8.1	8.1	15.6	15.6	104.1	103.9	7.4	6.1	2.1	6.9	3	3	818368	806465
						1.0	0.3	203	28.8		8.1		15.6		103.6		7.3		2.2		3			
					Middle	3.4	0.2	189	27.1	27.1	7.8	7.8	21.0	21.0	70.2	70.2	4.9		8.0		4			
						3.4	0.2	187	27.1		7.8		21.1		70.2		4.9		8.1		3			
					Bottom	5.8	0.2	162	25.9	25.9	7.8	7.8	26.8	26.8	52.1	52.1	3.6	3.6	10.8		4			
						5.8	0.2	157	25.9		7.8		26.8		52.1		3.6		10.3		3			
IM2	Sunny	Moderate	16:24	6.8	Surface	1.0	0.3	205	28.8	28.8	8.1	8.1	14.9	14.9	100.3	100.6	7.1	6.1	2.8	6.2	4	4	819179	806250
						1.0	0.2	201	28.8		8.1		14.9		100.8		7.1		3.0		3			
					Middle	3.4	0.2	198	27.3	27.2	7.8	7.8	18.7	18.8	72.1	72.1	5.2		4.2		4			
						3.4	0.2	200	27.1		7.8		18.9		72.1		5.1		4.4		4			
					Bottom	5.8	0.2	173	26.4	26.4	7.8	7.8	25.3	25.4	51.2	51.2	3.5	3.5	11.5		4			
						5.8	0.2	170	26.4		7.8		25.4		51.2		3.5		11.6		4			
IM7	Sunny	Moderate	16:05	8.5	Surface	1.0	0.2	165	28.4	28.4	7.9	7.9	15.1	15.1	83.2	83.2	6.0	5.5	2.9	5.3	5	4	821343	806850
						1.0	0.2	159	28.3		7.9		15.1		83.1		6.0		3.0		4			
					Middle	4.3	0.2	133	27.8	27.8	7.8	7.8	16.9	16.9	68.5	68.2	4.9		5.1		4			
						4.3	0.2	140	27.7		7.8		16.9		67.9		4.9		5.6		3			
					Bottom	7.5	0.1	143	27.4	27.4	7.8	7.8	19.6	19.7	66.7	66.7	4.7	4.7	7.5		3			
						7.5	0.1	142	27.3		7.8		19.7		66.6		4.7		7.6		4			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	15:36	9.2	Surface	1.0	0.4	108	29.1	29.1	8.1	8.1	15.0	15.0	108.6	108.3	7.7	7.2	5.1	6.4	3	3	822225	809855
						1.0	0.4	111	29.0		8.1		15.1		108.0		7.7		5.1		3			
					Middle	4.6	0.4	90	28.5	28.5	8.0	8.0	15.4	15.4	96.8	95.0	6.9		6.2		3			
						4.6	0.5	93	28.5		8.0		15.4		93.2		6.6		6.2		3			
					Bottom	8.2	0.4	94	28.5	28.5	7.9	7.9	19.6	19.5	82.8	83.2	5.8	5.8	7.8		4			
						8.2	0.4	90	28.5		7.9		19.5		83.6		5.8		7.7		3			
IM11	Sunny	Moderate	15:41	7.0	Surface	1.0	0.5	88	28.4	28.4	8.0	8.0	16.0	16.0	90.7	89.3	6.5	6.0	7.1	8.2	3	3	821481	810560
						1.0	0.5	89	28.3		8.0		15.9		87.8		6.3		7.0		3			
					Middle	3.5	0.5	89	28.2	28.2	7.9	7.9	18.8	18.8	77.8	77.7	5.5		8.6		3			
						3.5	0.5	85	28.2		7.9		18.8		77.6		5.5		8.7		3			
					Bottom	6.0	0.5	94	28.1	28.1	7.9	7.9	19.5	19.5	77.3	79.1	5.4	5.6	9.0		4			
						6.0	0.5	95	28.1		7.9		19.6		80.8		5.7		9.1		3			
IM12	Sunny	Moderate	15:46	7.2	Surface	1.0	0.5	96	28.8	28.8	8.0	8.0	15.5	15.5	100.8	100.8	7.2	6.5	5.4	6.4	3	3	821163	811520
						1.0	0.6	101	28.8		8.0		15.5		100.8		7.2		5.4		3			
					Middle	3.6	0.6	86	28.3	28.3	7.9	7.9	17.5	17.5	81.1	80.9	5.7		6.2		3			
						3.6	0.6	89	28.2		7.9		17.5		80.7		5.7		6.1		3			
					Bottom	6.2	0.5	94	28.0	28.0	7.9	7.9	20.2	20.2	81.8	82.4	5.7	5.8	7.6		3			
						6.2	0.5	86	28.0		7.9		20.2		83.0		5.8		7.5		4			
SR1A	Sunny	Moderate	16:09	5.0	Surface	1.0	0.0	108	28.5	28.5	8.0	7.9	17.8	17.8	93.5	92.8	6.6	6.6	5.3	5.9	3	3	819975	812665
						1.0	0.0	109	28.4		7.9		17.8		92.1		6.5		5.4		3			
					Middle	2.5	-	99	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.0	101	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	132	28.0	28.1	7.9	7.9	21.1	21.0	88.3	88.9	6.2	6.2	6.5		2			
						4.0	0.0	133	28.1		7.9		20.8		89.5		6.2		6.3		3			
SR2	Sunny	Moderate	16:20	5.2	Surface	1.0	0.5	59	28.9	28.9	8.0	8.0	17.2	17.2	102.0	101.9	7.2	7.2	3.6	3.7	3	3	821453	814168
						1.0	0.5	65	28.8		8.0		17.3		101.8		7.1		3.6		2			
					Middle	-	0.5	39	-	-	-	-	-	-	-	-	-		-		-			
						-	0.4	36	-		-		-		-		-		-		-			
					Bottom	4.2	0.6	54	28.4	28.4	7.9	7.9	19.6	19.4	95.7	97.4	6.7	6.8	3.9		3			
						4.2	0.5	53	28.4		8.0		19.3		99.0		6.9		3.9		3			
SR3	Sunny	Moderate	15:58	9.0	Surface	1.0	0.4	162	28.7	28.7	8.0	8.0	14.3	14.3	89.9	89.8	6.4	5.8	2.5	4.2	3	3	822158	807548
						1.0	0.5	157	28.7		8.0		14.3		89.7		6.4		2.5		3			
					Middle	4.5	0.4	141	27.8	27.8	7.8	7.8	16.6	16.6	71.2	71.0	5.1		4.3		3			
						4.5	0.4	146	27.7		7.8		16.6		70.7		5.1		4.5		3			
					Bottom	8.0	0.4	140	27.5	27.5	7.8	7.8	20.1	20.1	64.0	64.5	4.5	4.6	5.6		4			
						8.0	0.4	140	27.5		7.8		20.1		65.0		4.6		5.7		4			
SR4A	Sunny	Moderate	17:10	9.0	Surface	1.0	0.0	353	29.1	29.1	8.1	8.1	15.2	15.2	99.0	96.8	7.0	5.5	2.7	8.3	3	4	817168	807789
						1.0	0.0	348	29.1		8.1		15.3		94.5		6.7		2.8		3			
					Middle	4.5	-	333	26.4	26.4	7.8	7.8	24.3	24.4	60.9	61.0	4.2		8.5		4			
						4.5	0.0	328	26.4		7.8		24.5		61.0		4.2		8.4		4			
					Bottom	8.0	0.0	315	26.3	26.3	7.8	7.8	25.5	25.5	52.9	53.3	3.7	3.8	14.0		5			
						8.0	0.0	309	26.3		7.8		25.5		53.7		3.8		13.6		6			
SR8	Sunny	Moderate	15:50	5.0	Surface	1.0	-	-	29.0	29.1	8.0	8.0	17.8	17.8	96.1	96.1	6.7	6.7	4.9	5.0	3	4	820405	811627
						1.0	-	-	29.1		8.0		17.7		96.1		6.7		4.9		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.8	29.9	8.0	8.0	17.7	17.7	96.4	96.6	6.6	6.6	5.1		4			
						4.0	-	-	29.9		8.0		17.6		96.7		6.6		5.1		4			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	11:24	8.8	Surface	1.0	0.4	38	28.0	28.0	7.9	7.9	15.5	15.5	82.8	82.7	6.0	5.6	3.9	5.4	5	4	815625	804256
						1.0	0.4	42	28.0		7.9		15.6		82.6		5.9		4.0		5			
					Middle	4.4	0.4	51	27.7	27.7	7.9	7.9	17.4	17.4	74.2	74.2	5.3		4.8		4			
						4.4	0.4	47	27.7		7.9		17.4		74.1		5.3		4.8		4			
					Bottom	7.8	0.4	32	27.5	27.5	7.9	7.9	19.0	19.0	69.5	69.6	4.9	4.9	7.3		4			
						7.8	0.4	32	27.5		7.9		19.0		69.6		4.9		7.6		4			
C2	Fine	Moderate	12:28	11.5	Surface	1.0	0.3	9	29.5	29.5	8.1	8.1	12.4	12.4	95.3	94.8	6.8	5.8	2.5	4.3	4	3	825666	806955
						1.0	0.3	14	29.5		8.1		12.4		94.3		6.7		2.6		3			
					Middle	5.8	0.3	0	27.8	27.8	7.9	7.9	17.3	17.3	68.4	68.4	4.9		2.6		4			
						5.8	0.3	355	27.8		7.9		17.3		68.3		4.9		2.6		3			
					Bottom	10.5	0.3	9	27.4	27.4	7.9	7.9	20.1	20.1	60.3	60.4	4.3	4.3	7.6		3			
						10.5	0.4	1	27.4		7.9		20.2		60.5		4.3		7.7		2			
C3	Sunny	Moderate	10:25	8.0	Surface	1.0	0.5	255	28.1	28.1	7.9	7.8	17.5	17.4	85.1	85.1	6.0	5.7	1.0	2.6	3	3	822126	817791
						1.0	0.5	249	28.1		7.8		17.3		85.0		6.0		1.1		4			
					Middle	4.0	0.5	273	27.8	27.8	7.8	7.8	19.8	19.8	76.6	76.6	5.4		3.0		3			
						4.0	0.5	271	27.8		7.8		19.9		76.5		5.4		3.0		3			
					Bottom	7.0	0.5	272	27.9	27.9	7.8	7.8	21.9	21.8	76.8	77.0	5.3	5.4	3.8		2			
						7.0	0.5	272	27.9		7.8		21.8		77.1		5.4		3.8		2			
IM1	Fine	Moderate	11:37	6.4	Surface	1.0	0.3	6	28.4	28.4	7.9	7.9	13.9	13.9	90.1	90.0	6.5	6.1	3.1	3.8	4	4	818332	806451
						1.0	0.2	12	28.3		7.9		13.9		89.9		6.5		3.2		4			
					Middle	3.2	0.3	22	27.9	27.9	7.9	7.9	16.6	16.6	79.4	79.2	5.7		3.6		3			
						3.2	0.2	18	27.9		7.9		16.6		79.0		5.7		3.6		4			
					Bottom	5.4	0.3	7	27.7	27.7	7.9	7.9	18.1	18.2	76.9	76.9	5.5	5.5	4.6		3			
						5.4	0.3	1	27.6		7.9		18.2		76.8		5.5		4.8		3			
IM2	Fine	Moderate	11:43	7.1	Surface	1.0	0.3	357	28.3	28.3	7.9	7.9	14.2	14.2	88.8	88.6	6.4	6.0	3.1	4.8	3	4	819196	806238
						1.0	0.3	355	28.3		7.9		14.2		88.3		6.4		3.2		3			
					Middle	3.6	0.3	23	27.7	27.7	7.9	7.9	17.1	17.2	79.1	78.9	5.7		4.5		4			
						3.6	0.3	19	27.6		7.9		17.2		78.7		5.6		4.8		3			
					Bottom	6.1	0.3	349	27.0	27.0	7.9	7.9	19.2	19.2	64.6	64.8	4.6	4.6	6.6		4			
						6.1	0.3	347	27.0		7.9		19.3		64.9		4.6		6.7		4			
IM7	Fine	Moderate	12:02	8.4	Surface	1.0	0.2	352	28.5	28.5	8.0	8.0	13.9	13.9	81.3	81.1	5.8	5.3	2.7	6.2	2	3	821350	806850
						1.0	0.3	354	28.4		8.0		14.0		80.9		5.8		3.0		2			
					Middle	4.2	0.2	4	27.9	27.9	7.9	7.9	16.8	16.8	65.8	65.5	4.7		5.1		3			
						4.2	0.2	359	27.9		7.9		16.8		65.2		4.7		5.1		3			
					Bottom	7.4	0.2	359	26.5	26.5	7.9	7.9	24.6	24.6	50.9	51.2	3.6	3.6	10.7		3			
						7.4	0.2	2	26.5		7.9		24.6		51.4		3.6		10.7		3			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

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Water Quality Monitoring
Water Quality Monitoring Results on 19 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	11:32	8.4	Surface	1.0	0.5	280	28.6	28.6	7.9	7.9	15.5	15.5	90.7	90.5	6.4	6.2	4.2	5.1	2	3	822240	809824
						1.0	0.5	282	28.6		7.9		15.5		90.3		6.4		4.2		3			
					Middle	4.2	0.4	283	28.3	28.3	7.9	7.9	17.3	17.3	84.2	84.1	6.0		5.1		3			
						4.2	0.4	285	28.2		7.9		17.3		84.0		6.0		5.1		4			
					Bottom	7.4	0.4	312	27.6	27.6	7.9	7.9	22.2	22.1	81.2	82.3	5.7	5.8	6.1		3			
						7.4	0.4	309	27.6		7.9		22.1		83.3		5.8		6.1		4			
IM11	Sunny	Moderate	11:25	8.0	Surface	1.0	0.4	282	28.4	28.4	7.9	7.9	16.1	16.1	88.3	87.9	6.3	5.8	3.1	4.5	3	3	821520	810523
						1.0	0.4	279	28.3		7.9		16.2		87.5		6.2		3.1		3			
					Middle	4.0	0.4	282	27.9	27.9	7.9	7.9	19.7	19.7	76.1	76.0	5.4		4.9		3			
						4.0	0.5	282	27.9		7.9		19.7		75.8		5.3		4.9		2			
					Bottom	7.0	0.4	270	28.1	28.2	7.9	7.9	21.5	21.5	75.6	75.9	5.2	5.3	5.6		3			
						7.0	0.4	276	28.2		7.9		21.5		76.1		5.3		5.6		2			
IM12	Sunny	Moderate	11:20	9.2	Surface	1.0	0.4	293	28.3	28.3	7.9	7.9	16.2	16.3	91.5	90.8	6.5	6.1	3.7	4.7	<2	3	821156	811495
						1.0	0.4	297	28.2		7.9		16.3		90.0		6.4		3.7		<2			
					Middle	4.6	0.4	284	28.0	28.0	7.9	7.9	18.7	18.7	82.1	82.0	5.8		5.0		3			
						4.6	0.4	280	28.0		7.9		18.7		81.8		5.8		5.0		2			
					Bottom	8.2	0.4	269	27.7	27.7	7.9	7.9	22.2	22.2	78.8	79.4	5.5	5.6	5.5		3			
						8.2	0.4	267	27.7		7.9		22.2		79.9		5.6		5.4		3			
SR1A	Sunny	Moderate	11:11	4.6	Surface	1.0	0.0	187	29.0	29.0	7.9	7.9	16.6	16.6	93.1	93.0	6.5	6.5	3.2	3.7	3	3	819970	812658
						1.0	0.0	194	29.0		7.9		16.6		92.8		6.5		3.2		3			
					Middle	2.3	-	177	-	-	-	-	-	-	-	-	-		-		-			
						2.3	0.0	179	-		-		-		-		-		-		-			
					Bottom	3.6	0.1	205	29.4	29.4	7.9	7.9	16.8	16.8	92.4	92.6	6.4	6.5	4.1		3			
						3.6	0.0	202	29.4		7.9		16.8		92.7		6.5		4.1		2			
SR2	Sunny	Moderate	10:44	4.8	Surface	1.0	0.2	264	28.6	28.6	7.9	7.9	16.5	16.4	87.4	87.4	6.2	6.2	5.6	6.2	3	3	821448	814177
						1.0	0.1	265	28.6		7.9		16.4		87.3		6.2		5.7		2			
					Middle	-	0.1	283	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	290	-		-		-		-		-		-		-			
					Bottom	3.8	0.2	260	29.2	29.3	7.9	7.9	17.3	17.3	86.6	87.1	6.0	6.1	6.6		4			
						3.8	0.1	259	29.3		7.9		17.2		87.5		6.1		6.7		4			
SR3	Fine	Moderate	12:09	8.9	Surface	1.0	0.3	332	28.7	28.7	8.0	8.0	13.1	13.1	86.5	86.3	6.2	5.8	2.6	5.7	3	3	822125	807587
						1.0	0.3	324	28.6		8.0		13.0		86.1		6.2		2.9		3			
					Middle	4.5	0.3	348	28.0	28.0	7.8	7.8	15.7	15.7	73.7	73.8	5.3		6.4		3			
						4.5	0.2	346	28.0		7.8		15.6		73.9		5.3		6.6		3			
					Bottom	7.9	0.3	338	27.8	27.9	7.8	7.8	17.8	17.8	65.2	65.6	4.6	4.7	8.0		3			
						7.9	0.3	337	27.9		7.8		17.7		65.9		4.7		7.5		4			
SR4A	Fine	Moderate	11:06	9.6	Surface	1.0	0.0	139	28.2	28.2	7.9	7.9	16.8	16.8	77.8	77.6	5.5	5.1	5.4	8.1	8	7	817200	807805
						1.0	0.0	137	28.2		7.9		16.8		77.4		5.5		5.6		7			
					Middle	4.8	0.0	151	27.9	27.9	7.9	7.9	17.5	17.5	65.8	65.2	4.7		8.0		7			
						4.8	0.1	148	27.9		7.9		17.5		64.6		4.6		8.6		7			
					Bottom	8.6	0.1	159	26.3	26.3	7.9	7.9	25.6	25.6	52.6	52.6	3.7	3.7	10.5		7			
						8.6	0.1	155	26.3		7.9		25.6		52.6		3.7		10.5		6			
SR8	Sunny	Moderate	11:15	5.2	Surface	1.0	-	-	28.9	29.0	7.9	7.9	16.3	16.3	89.4	89.2	6.3	6.3	5.7	6.4	2	3	820393	811619
						1.0	-	-	29.0		7.9		16.3		89.0		6.3		5.5		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	29.4	29.5	7.9	7.9	17.4	17.3	89.3	89.8	6.2	6.3	7.3		3			
						4.2	-	-	29.5		7.9		17.3		90.3		6.3		7.2		2			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Fine	Moderate	08:17	7.9	Surface	1.0	0.4	214	29.1	29.1	8.1	8.1	15.2	15.2	101.7	100.9	7.2	5.6	7.3	10.5	2	3	815636	804230
						1.0	0.4	214	29.1		8.1		15.2		100.0		7.1		7.5		2			
					Middle	4.0	0.4	208	26.7	26.7	7.9	7.9	27.5	27.5	58.1	58.4	4.0		11.3		3			
						4.0	0.4	203	26.7		7.9		27.5		58.6		4.0		12.0		2			
					Bottom	6.9	0.3	220	26.5	26.5	7.9	7.9	28.5	28.5	58.0	58.4	4.0	4.0	12.6		3			
						6.9	0.4	215	26.5		7.9		28.5		58.8		4.0		12.5		3			
C2	Fine	Moderate	06:43	11.2	Surface	1.0	0.4	174	27.7	27.7	8.1	8.1	14.0	14.0	92.2	92.5	6.8	5.9	2.8	4.0	4	3	825692	806966
						1.0	0.5	179	27.6		8.1		14.0		92.7		6.8		2.7		3			
					Middle	5.6	0.4	173	27.5	27.5	7.9	7.9	18.0	18.1	70.4	70.4	5.0		4.0		4			
						5.6	0.4	168	27.5		7.9		18.1		70.4		5.0		4.0		3			
					Bottom	10.2	0.4	178	27.5	27.5	7.9	7.9	18.3	18.3	63.2	63.2	4.5	4.5	5.2		3			
						10.2	0.4	171	27.5		7.9		18.3		63.2		4.5		5.3		2			
C3	Sunny	Moderate	07:51	8.2	Surface	1.0	0.2	72	27.6	27.6	8.0	8.0	19.8	19.8	85.2	85.1	6.0	6.0	1.0	1.3	2	3	822127	817801
						1.0	0.2	77	27.6		8.0		19.8		84.9		6.0		1.1		3			
					Middle	4.1	0.1	55	27.6	27.6	7.9	7.9	20.1	20.1	84.1	84.0	5.9		1.1		3			
						4.1	0.1	54	27.6		7.9		20.1		83.9		5.9		1.1		3			
					Bottom	7.2	0.2	59	27.7	27.8	7.9	7.9	20.7	20.7	85.0	85.2	6.0	6.0	1.7		3			
						7.2	0.2	54	27.8		7.9		20.7		85.4		6.0		1.7		3			
IM1	Fine	Moderate	07:53	6.6	Surface	1.0	0.2	192	28.9	28.9	8.1	8.1	16.4	16.7	93.9	91.3	6.6	5.1	4.0	7.8	3	3	818350	806441
						1.0	0.2	198	28.9		8.1		17.0		88.6		6.2		4.0		4			
					Middle	3.3	0.3	180	26.6	26.6	7.8	7.8	28.2	28.2	55.5	55.6	3.8		8.6		3			
						3.3	0.3	183	26.5		7.8		28.3		55.7		3.8		8.7		2			
					Bottom	5.6	0.2	176	26.5	26.5	7.8	7.8	28.4	28.4	56.5	56.7	3.9	3.9	10.7		3			
						5.6	0.2	168	26.5		7.8		28.4		56.9		3.9		10.5		2			
IM2	Fine	Moderate	07:48	6.8	Surface	1.0	0.3	213	28.8	28.8	8.1	8.1	17.7	17.8	93.2	92.9	6.5	5.2	5.0	8.5	2	2	819198	806228
						1.0	0.3	213	28.7		8.1		17.9		92.6		6.5		5.0		2			
					Middle	3.4	0.4	190	26.7	26.7	7.9	7.9	25.6	25.7	54.8	54.8	3.8		7.1		3			
						3.4	0.4	183	26.6		7.9		25.8		54.7		3.8		6.8		2			
					Bottom	5.8	0.3	227	26.5	26.5	7.9	7.9	28.2	28.2	54.6	54.7	3.8	3.8	13.5		3			
						5.8	0.3	226	26.5		7.9		28.2		54.7		3.8		13.6		2			
IM7	Fine	Moderate	07:24	7.9	Surface	1.0	0.2	196	29.1	29.1	8.0	8.0	14.9	14.9	101.3	101.3	7.2	6.3	3.9	7.2	3	3	821333	806826
						1.0	0.2	188	29.0		8.0		14.9		101.2		7.2		4.1		3			
					Middle	4.0	0.2	218	28.1	28.1	7.8	7.8	20.2	20.3	75.3	75.2	5.3		7.2		3			
						4.0	0.1	222	28.0		7.8		20.3		75.1		5.3		7.5		3			
					Bottom	6.9	0.2	209	27.8	27.8	7.8	7.8	22.3	22.3	65.6	65.7	4.6	4.6	10.2		3			
						6.9	0.2	203	27.8		7.8		22.3		65.8		4.6		10.4		4			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Sunny	Moderate	09:14	8.4	Surface	1.0	0.2	136	28.3	28.3	8.1	8.1	15.6	15.6	86.8	86.4	6.2	5.8	3.4	4.5	3	3	822217	809836
						1.0	0.2	130	28.2		8.1		15.6		86.0		6.2		3.3		3			
					Middle	4.2	0.3	152	28.0	28.0	8.0	8.0	18.5	18.5	76.9	76.9	5.4		4.1		3			
						4.2	0.3	150	28.0		8.0		18.6		76.9		5.4		4.1		3			
					Bottom	7.4	0.3	138	28.0	28.0	8.0	8.0	18.9	18.9	80.7	82.1	5.7	5.8	5.9		3			
						7.4	0.3	139	28.0		8.0		18.9		83.5		5.9		6.0		4			
IM11	Sunny	Moderate	09:04	8.2	Surface	1.0	0.2	97	28.2	28.2	8.1	8.1	15.8	15.8	87.8	87.2	6.3	5.7	1.8	2.8	2	3	821512	810542
						1.0	0.2	96	28.1		8.1		15.9		86.6		6.2		1.9		3			
					Middle	4.1	0.2	117	27.8	27.8	7.9	7.9	19.4	19.5	73.2	73.4	5.2		2.7		3			
						4.1	0.2	120	27.7		7.9		19.6		73.5		5.2		2.8		4			
					Bottom	7.2	0.2	87	27.7	27.8	8.0	8.0	19.9	19.8	76.8	78.6	5.4	5.6	3.8		4			
						7.2	0.3	86	27.8		8.0		19.7		80.3		5.7		3.8		3			
IM12	Sunny	Moderate	08:57	9.0	Surface	1.0	0.3	101	28.2	28.2	8.0	8.0	16.1	16.1	86.4	86.0	6.2	5.8	1.4	2.4	3	3	821145	811511
						1.0	0.2	96	28.1		8.0		16.2		85.5		6.1		1.4		3			
					Middle	4.5	0.2	107	27.9	27.9	7.9	7.9	17.9	17.9	77.1	77.1	5.5		2.8		4			
						4.5	0.3	108	27.9		7.9		17.9		77.1		5.5		2.7		3			
					Bottom	8.0	0.3	106	27.8	27.8	7.9	7.9	19.6	19.6	79.9	81.3	5.6	5.7	3.1		4			
						8.0	0.3	99	27.8		7.9		19.7		82.6		5.8		3.0		3			
SR1A	Sunny	Moderate	08:33	4.2	Surface	1.0	0.0	137	28.4	28.4	8.0	8.0	15.5	15.5	91.7	91.6	6.5	6.5	1.2	1.4	2	3	819981	812655
						1.0	0.1	135	28.3		8.0		15.5		91.4		6.5		1.2		4			
					Middle	2.1	0.0	156	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.0	156	-		-		-		-		-		-		-			
					Bottom	3.2	0.1	165	28.2	28.2	8.0	8.0	16.8	16.8	91.4	92.0	6.5	6.6	1.7		3			
						3.2	0.1	160	28.1		8.0		16.8		92.5		6.6		1.7		2			
SR2	Sunny	Moderate	08:20	4.6	Surface	1.0	0.4	46	28.6	28.6	8.1	8.1	15.5	15.5	92.0	92.0	6.5	6.5	1.2	1.3	4	4	821443	814153
						1.0	0.3	40	28.6		8.1		15.5		91.9		6.5		1.2		5			
					Middle	-	0.3	20	-	-	-	-	-	-	-	-	-		-		-			
						-	0.3	18	-		-		-		-		-		-		-			
					Bottom	3.6	0.3	34	28.8	28.9	8.1	8.1	15.6	15.6	92.0	92.2	6.5	6.5	1.4		3			
						3.6	0.3	31	29.0		8.1		15.5		92.4		6.5		1.4		4			
SR3	Fine	Moderate	07:18	8.5	Surface	1.0	0.4	172	28.6	28.6	7.9	7.9	16.7	16.7	88.6	88.5	6.3	5.7	4.0	7.8	4	3	822146	807550
						1.0	0.4	178	28.6		7.9		16.7		88.3		6.2		4.0		3			
					Middle	4.3	0.5	184	28.0	28.0	7.8	7.8	20.0	20.0	74.4	74.3	5.2		6.9		4			
						4.3	0.5	184	28.0		7.8		20.0		74.2		5.2		7.4		3			
					Bottom	7.5	0.4	162	27.6	27.6	7.8	7.8	23.5	23.5	60.4	60.5	4.2	4.2	12.2		3			
						7.5	0.5	162	27.6		7.8		23.5		60.6		4.2		12.1		3			
SR4A	Fine	Moderate	08:31	8.8	Surface	1.0	0.1	304	29.3	29.4	8.1	8.1	15.1	15.1	103.5	103.4	7.3	6.0	4.9	9.3	4	3	817192	807792
						1.0	0.1	303	29.4		8.1		15.1		103.2		7.3		5.2		4			
					Middle	4.4	0.0	301	27.1	27.1	7.9	7.9	22.9	23.0	66.3	66.2	4.6		10.5		3			
						4.4	0.0	299	27.0		7.9		23.0		66.0		4.6		10.8		3			
					Bottom	7.8	0.0	303	26.8	26.8	7.9	7.9	27.2	27.2	57.8	58.0	4.0	4.0	12.4		2			
						7.8	0.0	303	26.8		7.9		27.2		58.1		4.0		12.3		3			
SR8	Sunny	Moderate	08:50	5.0	Surface	1.0	-	-	28.7	28.7	8.0	8.0	15.2	15.2	89.0	88.5	6.3	6.3	1.7	2.5	3	3	820407	811605
						1.0	-	-	28.7		8.0		15.2		88.0		6.3		1.8		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	28.1	28.1	7.9	7.9	18.1	18.0	87.8	89.1	6.2	6.3	3.2		3			
						4.0	-	-	28.1		8.0		17.9		90.4		6.4		3.3		3			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	11:59	8.2	Surface	1.0	0.1	9	29.4	29.4	8.2	8.2	8.0	8.0	112.7	112.7	8.2	7.8	4.3	7.8	3	3	815598	804248
						1.0	0.1	14	29.3		8.2		8.1		112.6		8.2		4.2		3			
					Middle	4.1	0.0	356	29.3	29.3	8.1	8.1	15.3	15.3	105.7	105.6	7.4		3.1		2			
						4.1	0.0	355	29.3		8.1		15.3		105.5		7.4		3.1		3			
					Bottom	7.2	0.1	32	27.1	27.1	7.9	7.9	25.5	25.5	61.6	61.7	4.2	4.3	16.0		3			
						7.2	0.1	39	27.1		7.9		25.5		61.7		4.3		16.2		3			
C2	Sunny	Moderate	13:26	12.2	Surface	1.0	0.2	335	30.1	30.1	8.2	8.2	14.5	14.5	114.5	114.5	8.0	6.5	3.2	3.5	4	3	825673	806942
						1.0	0.1	342	30.1		8.2		14.5		114.4		8.0		3.2		3			
					Middle	6.1	0.1	351	28.0	28.0	7.9	7.9	21.8	21.8	70.5	70.5	4.9		3.5		3			
						6.1	0.1	350	28.0		7.9		21.8		70.4		4.9		3.5		3			
					Bottom	11.2	0.1	327	27.6	27.6	7.9	7.9	24.0	24.0	65.0	65.0	4.5	4.5	3.8		3			
						11.2	0.1	331	27.6		7.9		24.0		65.0		4.5		3.9		2			
C3	Sunny	Moderate	13:28	9.2	Surface	1.0	0.3	261	28.2	28.2	8.0	8.0	18.8	18.8	87.5	86.2	6.2	5.8	1.1	2.3	3	3	822126	817796
						1.0	0.3	268	28.2		8.0		18.8		84.9		6.0		1.1		2			
					Middle	4.6	0.3	251	26.8	26.8	8.0	8.0	24.1	24.1	78.3	78.5	5.5		2.2		3			
						4.6	0.3	257	26.8		8.0		24.2		78.7		5.5		2.3		2			
					Bottom	8.2	0.3	233	26.8	26.9	8.0	8.0	24.5	24.5	81.4	83.0	5.7	5.8	3.6		3			
						8.2	0.3	240	26.9		8.0		24.4		84.6		5.9		3.6		3			
IM1	Sunny	Moderate	12:18	6.6	Surface	1.0	0.0	354	29.8	29.8	8.3	8.3	9.4	9.4	124.4	124.6	9.0	8.4	4.4	6.0	2	4	818356	806449
						1.0	0.1	359	29.8		8.3		9.4		124.7		9.0		4.4		3			
					Middle	3.3	0.1	15	29.2	29.2	8.2	8.2	12.9	12.9	109.1	109.1	7.8		4.6		4			
						3.3	0.1	8	29.2		8.2		12.9		109.1		7.8		4.6		3			
					Bottom	5.6	0.1	353	26.6	26.6	7.9	7.9	27.9	28.0	53.8	53.9	3.7	3.7	8.9		4			
						5.6	0.0	349	26.6		7.9		28.0		53.9		3.7		8.9		5			
IM2	Sunny	Moderate	12:25	7.6	Surface	1.0	0.1	301	29.4	29.4	8.2	8.2	10.5	10.6	115.9	115.9	8.4	7.1	3.9	7.3	3	3	819180	806259
						1.0	0.1	296	29.4		8.2		10.6		115.8		8.3		3.8		3			
					Middle	3.8	0.1	296	28.1	28.1	8.0	8.0	20.9	20.9	83.4	83.3	5.8		4.4		2			
						3.8	0.1	301	28.1		8.0		21.0		83.1		5.8		4.4		3			
					Bottom	6.6	0.1	288	26.5	26.5	7.9	7.9	28.3	28.3	52.2	52.3	3.6	3.6	13.9		3			
						6.6	0.1	288	26.5		7.9		28.3		52.4		3.6		13.3		4			
IM7	Sunny	Moderate	12:53	8.3	Surface	1.0	0.1	276	29.4	29.4	8.1	8.1	14.0	14.0	107.4	107.4	7.6	6.6	3.4	6.0	2	4	821320	806828
						1.0	0.2	275	29.4		8.1		14.0		107.4		7.6		3.4		3			
					Middle	4.2	0.1	254	28.5	28.5	7.9	7.9	19.1	19.1	79.0	78.8	5.5		4.5		4			
						4.2	0.1	260	28.5		7.9		19.1		78.6		5.5		4.5		4			
					Bottom	7.3	0.2	286	27.9	27.9	7.9	7.9	22.0	22.0	65.0	65.1	4.5	4.5	10.1		4			
						7.3	0.2	288	27.9		7.9		22.0		65.2		4.5		10.1		4			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	12:00	9.0	Surface	1.0	0.2	261	28.6	28.6	9.0	9.0	13.8	13.8	96.2	95.2	6.9	6.4	2.1	3.3	4	4	822226	809830
						1.0	0.2	258	28.5		9.0		13.8		94.1		6.8		2.2		4			
					Middle	4.5	0.2	282	28.4	28.4	9.0	9.0	16.3	16.3	83.2	83.0	5.9		3.5		4			
						4.5	0.2	286	28.4		9.0		16.4		82.7		5.9		3.6		3			
					Bottom	8.0	0.2	254	28.4	28.5	9.0	9.0	18.2	18.1	84.8	86.6	6.0	6.1	4.2		3			
						8.0	0.3	256	28.5		9.0		18.1		88.3		6.2		4.2		4			
IM11	Sunny	Moderate	12:11	7.2	Surface	1.0	0.3	275	28.6	28.6	8.2	8.2	15.6	15.6	93.3	93.1	6.6	6.4	1.4	1.7	3	3	821515	810524
						1.0	0.3	270	28.6		8.2		15.6		92.9		6.6		1.4		3			
					Middle	3.6	0.3	272	28.3	28.3	8.1	8.1	17.6	17.7	86.4	86.5	6.1		1.7		4			
						3.6	0.3	276	28.2		8.1		17.8		86.6		6.1		1.7		3			
					Bottom	6.2	0.3	253	28.0	28.1	8.1	8.2	18.1	18.1	88.2	90.1	6.2	6.4	1.9		3			
						6.2	0.3	260	28.1		8.2		18.1		92.0		6.5		1.9		4			
IM12	Sunny	Moderate	12:17	7.0	Surface	1.0	0.3	278	29.4	29.4	8.1	8.1	15.4	15.4	94.0	92.7	6.6	6.1	1.6	1.7	5	4	821154	811528
						1.0	0.3	279	29.4		8.1		15.4		91.3		6.4		1.7		4			
					Middle	3.5	0.3	265	27.9	27.9	7.9	7.9	17.9	17.9	79.6	79.5	5.6		1.7		4			
						3.5	0.3	262	27.9		7.9		17.9		79.4		5.6		1.8		4			
					Bottom	6.0	0.3	258	27.8	27.8	7.9	7.9	19.7	19.7	82.3	84.4	5.8	6.0	1.8		3			
						6.0	0.3	265	27.8		7.9		19.6		86.4		6.1		1.8		3			
SR1A	Sunny	Moderate	12:40	5.0	Surface	1.0	-	187	28.8	28.8	8.0	8.0	16.6	16.6	96.5	96.2	6.8	6.8	1.1	1.6	3	4	819982	812659
						1.0	0.0	188	28.8		8.0		16.6		95.8		6.8		1.2		4			
					Middle	2.5	0.0	196	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.0	191	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	170	28.8	28.8	8.0	8.0	16.6	16.6	97.1	97.4	6.9	6.9	2.0		4			
						4.0	-	175	28.8		8.0		16.5		97.6		6.9		2.0		4			
SR2	Sunny	Moderate	12:54	4.8	Surface	1.0	0.1	277	28.5	28.5	8.1	8.1	18.1	18.2	97.2	97.0	6.8	6.8	2.1	2.6	3	3	821466	814179
						1.0	0.1	277	28.4		8.1		18.3		96.8		6.8		2.1		4			
					Middle	-	0.1	285	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	290	-		-		-		-		-		-		-			
					Bottom	3.8	0.1	305	28.3	28.3	8.0	8.1	18.9	18.9	94.4	96.8	6.6	6.8	3.0		3			
						3.8	0.1	307	28.3		8.1		18.9		99.2		7.0		3.1		2			
SR3	Sunny	Moderate	13:03	9.7	Surface	1.0	0.1	302	29.4	29.4	8.2	8.2	13.4	13.4	122.2	122.1	8.7	7.6	3.2	5.7	<2	2	822123	807588
						1.0	0.1	309	29.4		8.2		13.4		122.0		8.7		3.2		<2			
					Middle	4.9	0.1	271	29.0	29.0	8.0	8.0	16.9	16.9	91.0	91.0	6.4		3.5		2			
						4.9	0.1	272	29.0		8.0		16.9		90.9		6.4		3.6		3			
					Bottom	8.7	0.1	290	27.6	27.6	7.8	7.8	23.5	23.5	56.8	56.9	3.9	3.9	10.5		3			
						8.7	0.1	293	27.6		7.8		23.5		56.9		3.9		10.4		2			
SR4A	Sunny	Moderate	11:31	8.9	Surface	1.0	0.0	147	29.6	29.6	8.2	8.2	15.1	15.1	106.9	106.8	7.5	6.3	5.4	8.6	3	5	817191	807828
						1.0	0.0	143	29.6		8.2		15.1		106.6		7.5		5.6		4			
					Middle	4.5	0.0	142	28.3	28.3	8.0	8.0	22.2	22.1	74.3	74.8	5.1		7.2		4			
						4.5	0.1	142	28.3		8.0		22.1		75.2		5.2		7.2		5			
					Bottom	7.9	0.0	109	26.7	26.7	7.9	7.9	27.5	27.5	50.7	50.7	3.5	3.5	13.1		6			
						7.9	0.0	108	26.7		7.9		27.5		50.7		3.5		12.9		7			
SR8	Sunny	Moderate	12:24	4.8	Surface	1.0	-	-	28.5	28.5	8.0	8.0	16.7	16.7	93.1	92.7	6.6	6.6	1.2	1.8	3	3	820387	811607
						1.0	-	-	28.4		8.0		16.7		92.3		6.5		1.2		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.8	-	-	28.2	28.2	8.0	8.0	17.9	18.0	85.4	85.4	6.0	6.0	2.3		4			
						3.8	-	-	28.2		8.0		18.0		85.4		6.0		2.3		3			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Fine	Moderate	09:54	8.2	Surface	1.0	0.5	200	30.6	30.6	8.5	8.5	8.7	8.6	139.7	139.6	10.0	9.0	4.5	6.9	3	3	815621	804226
						1.0	0.5	204	30.6		8.5		8.6		139.4		9.9		4.6		3			
					Middle	4.1	0.5	215	29.8	29.8	8.3	8.3	11.2	11.2	113.9	113.6	8.1		4.9		3			
						4.1	0.5	214	29.8		8.3		11.2		113.2		8.1		4.9		3			
					Bottom	7.2	0.4	186	26.9	27.0	7.9	7.9	27.5	27.4	58.5	58.7	4.0	4.0	11.5		2			
						7.2	0.4	187	27.0		7.9		27.4		58.8		4.0		11.1		3			
C2	Fine	Moderate	11:24	11.0	Surface	1.0	0.5	188	29.5	29.5	8.2	8.2	9.4	9.4	103.0	102.0	7.5	5.6	4.5	6.2	2	2	825696	806964
						1.0	0.5	188	29.5		8.2		9.5		101.0		7.3		4.3		2			
					Middle	5.5	0.5	183	26.8	26.8	8.0	8.0	27.0	27.1	53.1	53.1	3.7		6.8		2			
						5.5	0.5	175	26.8		8.0		27.1		53.1		3.7		7.0		2			
					Bottom	10.0	0.5	176	25.8	25.8	8.0	8.0	30.7	30.7	44.3	44.3	3.0	3.0	7.3		3			
						10.0	0.5	170	25.8		8.0		30.7		44.3		3.0		7.2		2			
C3	Sunny	Moderate	09:31	8.0	Surface	1.0	0.3	67	29.5	29.5	8.4	8.4	12.9	12.9	115.6	115.5	8.2	7.3	1.0	1.6	4	3	822106	817783
						1.0	0.3	63	29.5		8.4		12.9		115.3		8.2		1.1		3			
					Middle	4.0	0.2	51	28.0	28.0	8.1	8.1	18.7	18.7	91.0	90.7	6.4		1.7		3			
						4.0	0.2	51	27.9		8.1		18.7		90.3		6.4		1.7		3			
					Bottom	7.0	0.3	53	27.5	27.5	8.1	8.1	22.1	22.1	87.5	88.0	6.1	6.2	2.0		3			
						7.0	0.2	48	27.5		8.1		22.1		88.5		6.2		2.0		3			
IM1	Fine	Moderate	10:19	6.8	Surface	1.0	0.3	200	30.3	30.3	8.4	8.4	9.4	9.4	124.6	124.4	8.9	6.1	5.7	8.0	2	2	818361	806435
						1.0	0.3	205	30.3		8.4		9.4		124.2		8.9		5.3		2			
					Middle	3.4	0.3	205	26.6	26.6	7.9	7.9	28.5	28.4	48.1	48.2	3.3		6.8		2			
						3.4	0.3	204	26.6		7.9		28.4		48.2		3.3		6.9		2			
					Bottom	5.8	0.2	200	26.3	26.3	7.9	7.9	30.3	30.3	44.8	44.8	3.1	3.1	11.6		2			
						5.8	0.3	206	26.3		7.9		30.3		44.8		3.1		11.6		2			
IM2	Fine	Moderate	10:27	6.9	Surface	1.0	0.3	221	29.6	29.6	8.4	8.4	11.4	11.5	114.2	112.7	8.2	5.8	3.6	6.8	2	2	819188	806240
						1.0	0.4	222	29.5		8.4		11.6		111.2		8.0		3.7		3			
					Middle	3.5	0.4	208	26.6	26.6	7.9	7.9	28.1	28.1	51.1	51.1	3.5		6.3		2			
						3.5	0.4	208	26.5		7.9		28.1		51.1		3.5		6.4		2			
					Bottom	5.9	0.4	225	26.2	26.2	7.9	7.9	30.1	30.1	44.6	44.7	3.0	3.1	10.2		2			
						5.9	0.5	232	26.2		7.9		30.1		44.7		3.1		10.7		2			
IM7	Fine	Moderate	10:56	7.1	Surface	1.0	0.3	228	30.2	30.2	8.3	8.3	9.6	9.6	115.6	115.4	8.3	6.4	4.1	4.6	3	3	821354	806829
						1.0	0.3	224	30.2		8.3		9.6		115.1		8.2		3.9		3			
					Middle	3.6	0.3	215	27.7	27.8	7.9	7.9	23.2	23.1	65.9	66.0	4.6		3.2		3			
						3.6	0.3	220	27.8		7.9		23.1		66.0		4.6		3.3		3			
					Bottom	6.1	0.3	201	26.8	26.8	7.9	7.9	28.0	28.0	44.6	44.7	3.1	3.1	6.4		2			
						6.1	0.4	204	26.8		7.9		28.0		44.7		3.1		6.5		3			

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Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Sunny	Moderate	10:44	8.6	Surface	1.0	0.4	120	29.7	29.7	8.2	8.2	8.9	8.5	94.7	92.1	6.9	5.3	1.2	1.8	2	3	822233	809854
						1.0	0.4	127	29.7		8.2		8.2		89.4		6.5		1.2		3			
					Middle	4.3	0.4	137	26.9	26.9	7.7	7.7	21.8	21.8	56.6	56.1	4.0		1.9		3			
						4.3	0.4	131	26.8		7.7		21.8		55.5		3.9		2.0		3			
					Bottom	7.6	0.4	149	26.7	26.7	7.7	7.7	24.0	24.0	56.1	57.1	3.9	4.0	2.2		4			
						7.6	0.4	148	26.7		7.7		24.0		58.1		4.1		2.3		3			
IM11	Sunny	Moderate	10:40	8.0	Surface	1.0	0.3	119	30.0	30.0	8.3	8.3	7.3	7.3	102.9	99.8	7.5	6.0	1.2	1.5	2	3	821504	810542
						1.0	0.3	121	30.0		8.3		7.3		96.6		7.0		1.1		2			
					Middle	4.0	0.4	97	27.2	27.1	7.7	7.7	20.4	20.7	66.8	66.9	4.7		1.6		3			
						4.0	0.4	90	27.0		7.7		21.0		66.9		4.7		1.6		3			
					Bottom	7.0	0.3	125	26.7	26.8	7.7	7.7	23.7	23.5	75.7	78.5	5.3	5.5	1.8		3			
						7.0	0.4	126	26.9		7.7		23.3		81.3		5.7		1.8		4			
IM12	Sunny	Moderate	10:36	8.8	Surface	1.0	0.5	99	29.5	29.5	8.3	8.3	7.3	7.4	107.8	106.3	7.9	7.1	1.0	1.5	3	3	821142	811498
						1.0	0.5	91	29.4		8.2		7.5		104.7		7.7		1.0		3			
					Middle	4.4	0.5	90	28.9	28.8	8.1	8.1	11.0	11.8	92.0	88.7	6.6		1.7		2			
						4.4	0.4	84	28.6		8.0		12.5		85.4		6.2		1.7		3			
					Bottom	7.8	0.5	74	27.3	27.5	7.8	7.8	21.8	21.1	85.1	88.4	6.0	6.2	1.9		3			
						7.8	0.5	67	27.6		7.8		20.4		91.6		6.3		1.8		2			
SR1A	Sunny	Moderate	10:10	4.0	Surface	1.0	0.0	120	29.3	29.3	8.2	8.2	11.7	11.7	113.9	113.3	8.2	8.2	1.2	1.9	3	3	819977	812665
						1.0	0.0	124	29.2		8.2		11.7		112.6		8.1		1.2		2			
					Middle	2.0	0.0	131	-	-	-	-	-	-	-	-	-		-		-			
						2.0	0.0	127	-		-		-		-		-		-		-			
					Bottom	3.0	0.1	114	29.0	29.0	7.9	7.9	17.6	16.9	97.1	99.1	6.8	7.0	2.7		3			
						3.0	0.1	120	29.0		7.9		16.2		101.1		7.1		2.7		3			
SR2	Sunny	Moderate	09:56	4.8	Surface	1.0	0.4	32	29.6	29.6	8.2	8.2	10.1	10.1	114.5	114.4	8.3	8.3	1.1	1.2	3	3	821483	814177
						1.0	0.4	39	29.5		8.2		10.1		114.2		8.3		1.0		3			
					Middle	-	0.4	54	-	-	-	-	-	-	-	-	-		-		-			
						-	0.5	47	-		-		-		-		-		-		-			
					Bottom	3.8	0.5	52	28.9	28.9	8.1	8.1	13.1	12.7	109.8	109.8	7.9	7.9	1.3		3			
						3.8	0.5	57	28.9		8.1		12.3		109.7		7.9		1.4		2			
SR3	Fine	Moderate	11:03	8.0	Surface	1.0	0.6	173	30.3	30.3	8.4	8.4	9.2	9.2	116.6	116.4	8.3	6.6	3.9	6.2	2	3	822162	807565
						1.0	0.5	179	30.3		8.4		9.2		116.2		8.3		3.9		2			
					Middle	4.0	0.5	153	28.3	28.3	8.0	8.0	21.6	21.6	70.6	70.1	4.9		5.7		3			
						4.0	0.6	155	28.3		8.0		21.6		69.5		4.8		5.9		3			
					Bottom	7.0	0.6	168	26.8	26.8	7.9	7.9	27.7	27.7	49.8	49.8	3.4	3.4	9.0		3			
						7.0	0.6	175	26.8		7.9		27.7		49.8		3.4		9.0		3			
SR4A	Fine	Moderate	09:29	8.6	Surface	1.0	0.0	349	30.2	30.2	8.5	8.5	9.9	9.9	128.2	128.0	9.1	6.5	4.0	7.4	3	3	817179	807808
						1.0	0.0	344	30.2		8.5		9.9		127.7		9.1		4.1		3			
					Middle	4.3	0.0	357	27.3	27.3	7.9	7.9	25.7	25.7	55.5	55.5	3.8		6.7		3			
						4.3	0.1	356	27.3		7.9		25.7		55.5		3.8		6.7		3			
					Bottom	7.6	0.1	341	26.6	26.6	7.9	7.9	28.9	28.9	47.9	48.0	3.3	3.3	11.3		3			
						7.6	0.0	336	26.6		7.9		28.9		48.0		3.3		11.3		2			
SR8	Sunny	Moderate	10:29	5.2	Surface	1.0	-	-	29.8	29.8	8.2	8.2	10.2	10.2	105.9	104.5	7.6	7.5	2.5	2.9	3	3	820400	811645
						1.0	-	-	29.7		8.2		10.2		103.0		7.4		2.6		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	28.0	28.7	7.8	7.8	16.6	16.4	94.8	95.9	6.8	6.8	3.2		3			
						4.2	-	-	29.4		7.8		16.1		96.9		6.8		3.3		3			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	16:17	8.4	Surface	1.0	0.2	40	30.0	30.0	8.5	8.5	11.5	11.5	131.0	130.6	9.3	6.8	4.7	7.9	5	4	815612	804267
						1.0	0.2	32	30.0		8.5		11.5		130.2		9.2		4.7		4			
					Middle	4.2	0.2	28	26.8	26.8	8.0	8.0	26.1	26.2	62.5	62.6	4.3		8.5		5			
						4.2	0.2	29	26.8		8.0		26.2		62.6		4.3		8.8		4			
					Bottom	7.4	0.2	49	26.6	26.6	7.9	7.9	27.3	28.2	57.7	57.8	3.9	3.9	10.1		4			
						7.4	0.2	55	26.6		7.9		29.2		57.8		3.9		10.7		4			
C2	Sunny	Moderate	15:02	10.8	Surface	1.0	0.1	343	28.8	28.8	8.1	8.1	19.0	18.3	84.4	85.5	5.9	5.0	4.9	5.5	3	3	825665	806947
						1.0	0.1	342	28.8		8.1		17.6		86.5		6.1		4.9		3			
					Middle	5.4	0.1	318	27.0	27.0	8.0	8.0	26.5	26.5	58.7	58.8	4.0		5.3		4			
						5.4	0.1	321	27.0		8.0		26.6		58.8		4.0		5.4		3			
					Bottom	9.8	0.1	326	26.9	26.9	8.0	8.0	27.1	27.1	59.3	59.4	4.1	4.1	6.6		3			
						9.8	0.2	323	26.9		8.0		27.2		59.4		4.1		6.2		4			
C3	Sunny	Moderate	16:17	9.0	Surface	1.0	0.2	265	30.4	30.4	8.4	8.4	12.5	12.6	120.6	116.3	8.5	5.8	1.8	2.7	2	3	822096	817805
						1.0	0.2	265	30.4		8.4		12.6		111.9		7.9		1.9		3			
					Middle	4.5	0.2	248	26.2	26.2	7.8	7.8	25.4	25.5	51.6	49.1	3.6		2.6		3			
						4.5	0.3	246	26.1		7.8		25.5		46.5		3.3		2.8		2			
					Bottom	8.0	0.2	262	24.9	24.9	7.8	7.8	29.0	29.0	46.6	46.7	3.3	3.3	3.4		3			
						8.0	0.2	262	24.9		7.8		29.1		46.7		3.3		3.6		3			
IM1	Sunny	Moderate	15:57	6.6	Surface	1.0	0.2	18	30.5	30.5	8.6	8.6	9.2	9.2	156.7	156.6	11.2	10.8	5.9	10.0	4	4	818337	806462
						1.0	0.2	14	30.5		8.6		9.2		156.4		11.1		5.9		4			
					Middle	3.3	0.1	14	30.5	30.5	8.6	8.6	9.3	9.3	149.1	147.9	10.6		11.6		4			
						3.3	0.2	7	30.5		8.6		9.3		146.6		10.4		11.5		4			
					Bottom	5.6	0.2	23	26.9	26.9	7.9	7.9	28.3	28.3	50.3	50.4	3.4	3.4	12.6		4			
						5.6	0.2	28	26.9		7.9		28.3		50.5		3.4		12.8		4			
IM2	Sunny	Moderate	15:50	6.9	Surface	1.0	0.2	324	31.2	31.2	8.7	8.7	8.5	8.5	172.6	172.6	12.2	11.6	4.9	5.6	3	4	819193	806249
						1.0	0.2	319	31.2		8.7		8.5		172.5		12.2		4.9		3			
					Middle	3.5	0.2	330	30.7	30.7	8.6	8.6	9.8	9.8	156.2	155.9	11.1		4.4		3			
						3.5	0.2	329	30.7		8.6		9.8		155.5		11.0		4.4		4			
					Bottom	5.9	0.1	321	26.5	26.5	7.9	7.9	29.1	29.1	48.0	48.1	3.3	3.3	7.5		4			
						5.9	0.2	322	26.5		7.9		29.0		48.2		3.3		7.5		5			
IM7	Sunny	Moderate	15:24	8.0	Surface	1.0	0.1	247	30.2	30.2	8.3	8.3	9.5	9.5	117.5	117.3	8.4	6.6	4.7	3.8	3	3	821355	806842
						1.0	0.1	250	30.2		8.3		9.5		117.0		8.4		4.6		3			
					Middle	4.0	0.2	262	27.6	27.6	7.9	7.9	22.2	22.2	69.5	69.3	4.8		3.2		3			
						4.0	0.2	262	27.6		7.9		22.1		69.1		4.8		3.2		3			
					Bottom	7.0	0.1	259	27.0	27.0	7.9	7.9	26.7	26.7	54.4	54.7	3.7	3.8	3.4		3			
						7.0	0.2	255	27.0		7.9		26.7		54.9		3.8		3.4		2			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
IM10	Sunny	Moderate	14:55	9.0	Surface	1.0	0.3	280	30.0	30.0	8.2	8.2	7.4	7.4	104.1	103.4	7.6	6.6	1.2	2.4	3	3	822249	809849
						1.0	0.3	282	29.9		8.2		7.4		102.6		7.5		1.2		3			
					Middle	4.5	0.3	265	29.7	29.7	8.2	8.2	8.7	8.7	81.1	76.2	5.9		2.3		3			
						4.5	0.2	270	29.6		8.2		8.8		71.2		5.2		2.4		3			
					Bottom	8.0	0.3	272	26.8	26.8	7.7	7.7	23.7	23.7	66.2	68.8	4.6	4.8	3.6		3			
						8.0	0.3	271	26.8		7.7		23.6		71.4		5.0		3.6		3			
IM11	Sunny	Moderate	15:03	7.4	Surface	1.0	0.3	271	30.1	30.1	8.3	8.3	8.3	8.3	122.8	123.1	8.9	8.6	2.2	2.8	3	3	821494	810563
						1.0	0.2	274	30.0		8.3		8.3		123.4		8.9		2.1		3			
					Middle	3.7	0.3	269	29.9	29.9	8.3	8.3	9.8	9.8	116.1	113.9	8.3		3.1		3			
						3.7	0.3	271	29.8		8.3		9.8		111.7		8.1		3.1		3			
					Bottom	6.4	0.2	283	28.1	28.1	7.9	7.9	19.8	19.8	90.9	92.8	6.4	6.5	3.2		3			
						6.4	0.2	279	28.0		7.9		19.9		94.7		6.6		3.2		2			
IM12	Sunny	Moderate	15:12	7.2	Surface	1.0	0.3	278	29.9	29.9	8.3	8.3	9.3	9.3	120.9	120.4	8.7	7.9	1.0	1.6	3	3	821177	811536
						1.0	0.4	279	29.8		8.3		9.3		119.8		8.6		1.1		3			
					Middle	3.6	0.3	295	29.5	29.5	8.2	8.2	11.9	11.8	106.3	100.0	7.6		1.4		3			
						3.6	0.3	295	29.5		8.2		11.7		93.7		6.7		1.5		3			
					Bottom	6.2	0.3	265	27.4	27.7	7.8	7.8	22.7	22.5	84.5	89.3	5.9	6.2	2.3		2			
						6.2	0.3	262	27.9		7.8		22.3		94.1		6.5		2.4		3			
SR1A	Sunny	Moderate	15:42	5.0	Surface	1.0	0.0	181	30.3	30.3	8.5	8.5	9.2	9.2	143.9	143.4	10.3	10.3	3.2	3.6	3	3	819980	812659
						1.0	0.1	188	30.2		8.5		9.2		142.9		10.2		3.2		3			
					Middle	2.5	0.0	180	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.0	182	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	204	29.7	29.9	8.2	8.2	15.9	15.6	123.9	123.9	8.6	8.6	4.1		3			
						4.0	-	201	30.0		8.2		15.4		123.8		8.6		4.2		3			
SR2	Sunny	Moderate	15:54	4.6	Surface	1.0	0.0	308	30.8	30.8	8.5	8.4	10.2	10.2	127.7	123.5	9.0	8.7	1.4	1.9	3	3	821479	814144
						1.0	0.1	304	30.8		8.4		10.2		119.2		8.4		1.5		3			
					Middle	-	0.1	320	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	317	-		-		-		-		-		-		-			
					Bottom	3.6	0.1	317	27.5	27.6	7.9	7.9	21.5	21.4	95.3	97.2	6.7	6.8	2.5		3			
						3.6	0.1	317	27.7		7.9		21.2		99.1		6.9		2.4		3			
SR3	Sunny	Moderate	15:17	8.7	Surface	1.0	0.2	215	30.2	30.2	8.3	8.3	10.0	10.1	123.4	123.3	8.8	7.5	5.0	6.5	3	3	822148	807553
						1.0	0.1	215	30.2		8.3		10.1		123.2		8.8		5.0		4			
					Middle	4.4	0.1	228	29.1	29.1	8.1	8.1	15.1	15.2	86.9	86.5	6.1		4.2		3			
						4.4	0.1	230	29.1		8.1		15.2		86.1		6.1		4.2		4			
					Bottom	7.7	0.1	194	26.8	26.8	7.9	7.9	27.7	27.7	44.5	44.7	3.1	3.1	10.3		3			
						7.7	0.1	200	26.8		7.9		27.7		44.8		3.1		10.3		3			
SR4A	Sunny	Moderate	16:35	8.6	Surface	1.0	0.0	137	31.6	31.6	8.7	8.7	10.2	10.2	167.4	167.1	11.6	9.6	7.2	8.7	5	7	817182	807824
						1.0	0.0	130	31.6		8.7		10.2		166.8		11.6		7.1		6			
					Middle	4.3	0.1	119	29.7	29.8	8.2	8.2	17.8	17.8	109.5	109.3	7.5		8.5		7			
						4.3	0.1	121	29.8		8.2		17.8		109.1		7.5		8.6		7			
					Bottom	7.6	0.1	121	27.5	27.5	7.9	7.9	25.0	25.0	57.8	58.0	4.0	4.0	10.3		8			
						7.6	0.1	118	27.5		7.9		25.0		58.2		4.0		10.3		8			
SR8	Sunny	Moderate	15:24	4.6	Surface	1.0	-	-	30.8	30.8	8.4	8.4	9.6	9.6	140.3	139.7	9.9	9.9	2.2	2.6	3	3	820382	811614
						1.0	-	-	30.8		8.4		9.6		139.1		9.9		2.2		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	30.8	30.8	8.3	8.3	10.0	9.9	123.7	121.8	8.7	8.6	3.1		3			
						3.6	-	-	30.8		8.3		9.9		119.9		8.5		3.0		3			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	12:08	8.5	Surface	1.0	0.6	221	29.5	29.5	8.4	8.4	14.1	14.2	121.3	121.1	8.6	7.8	2.3	3.0	5	6	815610	804238
						1.0	0.5	220	29.4		8.4		14.3		120.9		8.5		2.4		6			
					Middle	4.3	0.6	190	28.5	28.5	8.2	8.2	18.5	18.5	99.4	99.2	7.0		3.3		6			
						4.3	0.6	183	28.5		8.2		18.5		99.0		6.9		3.3		6			
					Bottom	7.5	0.6	229	28.4	28.4	8.2	8.2	18.6	18.6	93.9	93.8	6.6	6.6	3.3		7			
						7.5	0.6	230	28.4		8.2		18.7		93.7		6.6		3.3		7			
C2	Sunny	Moderate	10:47	11.4	Surface	1.0	0.7	153	29.3	29.3	8.3	8.3	14.3	14.3	104.7	104.8	7.4	6.1	3.1	4.3	5	5	825661	806944
						1.0	0.7	149	29.3		8.3		14.3		104.8		7.4		3.1		4			
					Middle	5.7	0.6	187	27.6	27.6	8.0	8.0	21.6	21.6	69.0	68.8	4.8		2.4		5			
						5.7	0.7	189	27.6		8.0		21.6		68.6		4.8		2.5		6			
					Bottom	10.4	0.6	150	25.4	25.4	7.9	7.9	28.3	28.3	43.9	44.0	3.1	3.1	7.7		6			
						10.4	0.7	153	25.4		7.9		28.4		44.0		3.1		7.3		6			
C3	Fine	Moderate	12:10	9.2	Surface	1.0	0.2	54	29.5	29.5	8.5	8.5	18.9	18.9	133.5	133.2	9.2	7.6	3.1	3.9	4	4	822117	817780
						1.0	0.3	54	29.5		8.5		18.9		132.9		9.1		3.1		3			
					Middle	4.6	0.3	45	28.0	28.1	8.2	8.2	23.7	23.6	89.3	89.0	6.1		3.6		5			
						4.6	0.3	39	28.1		8.2		23.5		88.7		6.1		3.7		4			
					Bottom	8.2	0.2	63	24.9	24.9	8.0	8.0	32.5	32.6	50.8	51.1	3.5	3.5	5.0		5			
						8.2	0.3	69	24.9		8.0		32.6		51.3		3.5		4.9		5			
IM1	Sunny	Moderate	11:52	6.6	Surface	1.0	0.4	194	29.9	29.9	8.5	8.5	15.4	15.4	128.9	128.8	9.0	5.7	2.7	5.4	6	7	818349	806448
						1.0	0.4	187	29.9		8.5		15.4		128.7		9.0		2.7		6			
					Middle	3.3	0.4	180	25.9	25.9	7.8	7.8	28.0	28.0	34.5	34.5	2.4		3.9		7			
						3.3	0.3	183	25.9		7.8		28.0		34.5		2.4		3.9		7			
					Bottom	5.6	0.4	176	25.7	25.7	7.9	7.9	28.6	28.6	37.5	37.6	2.6	**2.6**	9.9		8			
						5.6	0.4	170	25.7		7.9		28.6		37.7		2.6		9.4		7			
IM2	Sunny	Moderate	11:47	6.8	Surface	1.0	0.4	210	30.1	30.1	8.6	8.6	14.8	14.8	123.1	122.8	8.6	5.8	2.3	4.0	6	7	819183	806217
						1.0	0.5	208	30.1		8.6		14.8		122.4		8.5		2.4		5			
					Middle	3.4	0.4	183	26.4	26.4	8.0	8.0	25.5	25.6	44.1	44.1	3.1		4.0		7			
						3.4	0.4	189	26.4		8.0		25.6		44.0		3.1		4.1		7			
					Bottom	5.8	0.5	189	25.6	25.6	8.0	8.0	29.0	29.1	35.9	36.0	2.5	**2.5**	5.5		8			
						5.8	0.5	195	25.6		8.0		29.1		36.1		2.5		5.5		7			
IM7	Sunny	Moderate	11:24	8.0	Surface	1.0	0.2	178	29.5	29.5	8.4	8.4	12.8	12.9	116.2	116.0	8.3	7.4	2.5	3.0	6	6	821343	806851
						1.0	0.2	184	29.5		8.4		12.9		115.8		8.2		2.5		6			
					Middle	4.0	0.3	182	28.8	28.8	8.1	8.1	18.6	18.5	93.1	93.3	6.5		2.4		5			
						4.0	0.3	182	28.8		8.1		18.4		93.4		6.6		2.5		6			
					Bottom	7.0	0.3	164	26.3	26.3	7.8	7.8	26.1	26.1	45.8	46.1	3.2	3.2	3.9		5			
						7.0	0.3	166	26.3		7.8		26.1		46.3		3.2		4.0		6			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	10:42	8.0	Surface	1.0	0.6	101	30.1	30.1	8.5	8.5	15.4	15.4	130.0	129.9	9.0	7.9	4.5	7.8	6	6	822221	809826
						1.0	0.6	104	30.1		8.5		15.4		129.7		9.0		4.4		6			
					Middle	4.0	0.6	90	29.2	29.2	8.2	8.2	19.5	19.5	100.1	99.6	6.9		6.1		6			
						4.0	0.5	83	29.2		8.2		19.5		99.0		6.8		6.2		6			
					Bottom	7.0	0.6	123	26.6	26.6	7.9	7.9	28.6	28.6	44.9	45.3	3.1	3.1	12.8		6			
						7.0	0.7	121	26.6		7.9		28.6		45.7		3.1		12.7		6			
IM11	Fine	Moderate	10:53	7.6	Surface	1.0	0.7	89	29.6	29.7	8.4	8.4	19.0	18.8	116.8	119.5	8.0	5.7	4.1	4.9	6	5	821489	810556
						1.0	0.7	84	29.7		8.4		18.6		122.2		8.4		4.2		5			
					Middle	3.8	0.7	84	27.0	27.0	7.9	7.9	26.7	26.8	44.9	44.9	3.1		4.7		5			
						3.8	0.6	82	26.9		7.9		26.9		44.9		3.1		4.8		6			
					Bottom	6.6	0.7	92	26.6	26.6	7.9	7.9	28.1	28.0	43.4	43.3	3.0	3.0	5.9		5			
						6.6	0.7	89	26.5		7.9		28.0		43.1		3.0		6.0		5			
IM12	Fine	Moderate	10:59	7.9	Surface	1.0	0.7	98	29.9	29.9	8.4	8.4	16.8	16.8	126.2	126.0	8.7	6.7	3.7	4.8	6	6	821177	811531
						1.0	0.7	95	29.9		8.4		16.8		125.7		8.7		3.7		7			
					Middle	4.0	0.8	106	28.0	28.0	8.0	8.0	23.3	23.3	68.3	68.1	4.7		4.7		7			
						4.0	0.8	109	28.0		8.0		23.4		67.9		4.7		4.8		6			
					Bottom	6.9	0.7	98	26.7	26.7	7.9	7.9	27.4	27.4	51.2	51.4	3.5	3.5	5.9		6			
						6.9	0.7	95	26.7		7.9		27.4		51.6		3.5		5.9		6			
SR1A	Fine	Calm	11:36	5.2	Surface	1.0	0.1	139	30.0	30.0	8.4	8.4	18.1	18.1	126.3	125.6	8.7	8.7	5.9	7.1	5	5	819972	812658
						1.0	0.1	144	30.0		8.4		18.1		124.9		8.6		6.0		5			
					Middle	2.6	0.1	133	-	-	-	-	-	-	-	-	-		-		-			
						2.6	0.1	126	-		-		-		-		-		-		-			
					Bottom	4.2	0.0	141	28.1	28.1	8.1	8.1	23.7	23.7	87.0	86.2	6.0	5.9	8.1		5			
						4.2	0.0	139	28.1		8.1		23.8		85.3		5.8		8.3		5			
SR2	Fine	Moderate	11:50	4.7	Surface	1.0	0.7	49	29.8	29.8	8.5	8.5	17.5	17.5	133.5	132.7	9.2	9.2	3.6	4.3	6	5	821482	814183
						1.0	0.6	41	29.7		8.5		17.6		131.8		9.1		3.6		6			
					Middle	-	0.6	41	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	38	-		-		-		-		-		-		-			
					Bottom	3.7	0.6	62	28.3	28.3	8.2	8.2	22.7	22.8	86.7	86.5	6.0	6.0	5.0		4			
						3.7	0.6	56	28.3		8.2		22.8		86.3		5.9		5.1		5			
SR3	Sunny	Moderate	11:17	8.7	Surface	1.0	0.6	161	29.8	29.8	8.4	8.4	14.4	14.4	121.2	121.1	8.5	7.0	10.8	5.5	4	5	822144	807560
						1.0	0.5	166	29.8		8.4		14.3		121.0		8.5		10.8		4			
					Middle	4.4	0.6	149	28.4	28.4	8.1	8.1	19.0	19.0	78.2	77.3	5.5		2.4		5			
						4.4	0.6	145	28.4		8.1		19.0		76.3		5.3		2.4		5			
					Bottom	7.7	0.6	156	26.3	26.3	7.8	7.8	26.0	26.0	42.2	42.4	2.9	3.0	3.3		5			
						7.7	0.6	152	26.3		7.8		26.0		42.6		3.0		3.3		5			
SR4A	Sunny	Moderate	12:29	8.7	Surface	1.0	0.1	69	30.7	30.7	8.7	8.7	14.9	14.9	127.8	127.6	8.8	6.2	3.4	8.3	6	6	817173	807791
						1.0	0.1	61	30.7		8.7		14.9		127.4		8.8		3.5		6			
					Middle	4.4	0.0	47	27.2	27.3	8.1	8.1	23.5	23.4	49.7	49.8	3.5		10.2		6			
						4.4	0.0	49	27.3		8.2		23.3		49.8		3.5		10.7		6			
					Bottom	7.7	0.0	78	26.1	26.1	8.1	8.1	27.7	27.7	36.6	36.7	2.5	**2.6**	11.2		5			
						7.7	0.0	82	26.1		8.1		27.7		36.8		2.6		10.9		5			
SR8	Fine	Calm	11:10	4.8	Surface	1.0	-	-	30.0	30.0	8.4	8.4	17.4	17.4	125.6	124.8	8.6	8.6	3.9	4.8	5	5	820412	811615
						1.0	-	-	30.0		8.4		17.4		124.0		8.5		4.0		6			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.8	-	-	27.4	27.4	8.0	8.0	25.3	25.3	61.3	61.4	4.2	4.2	5.6		4			
						3.8	-	-	27.4		8.0		25.3		61.5		4.2		5.8		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	04:26	8.1	Surface	1.0	0.2	21	29.2	29.2	8.5	8.5	13.9	13.9	95.8	95.5	6.7	5.4	5.1	7.6	4	5	815606	804254
						1.0	0.3	23	29.2		8.5		13.9		95.2		6.7		5.0		4			
					Middle	4.1	0.3	24	27.0	27.0	8.0	8.0	22.4	22.4	58.7	58.6	4.1		4.4		5			
						4.1	0.2	30	27.0		8.0		22.4		58.5		4.1		4.5		4			
					Bottom	7.1	0.3	46	24.8	24.8	7.8	7.8	30.2	30.2	36.0	36.3	2.5	2.5	13.4		6			
						7.1	0.2	50	24.8		7.8		30.2		36.6		2.5		13.4		7			
C2	Fine	Moderate	05:57	11.4	Surface	1.0	0.2	359	29.1	29.1	8.3	8.3	14.1	14.1	94.3	94.3	6.7	5.7	4.3	6.2	4	4	825699	806934
						1.0	0.3	353	29.1		8.3		14.0		94.3		6.7		4.3		5			
					Middle	5.7	0.3	335	27.2	27.2	8.0	8.0	21.3	21.3	65.5	65.3	4.6		2.5		5			
						5.7	0.3	338	27.2		8.0		21.3		65.0		4.6		2.5		4			
					Bottom	10.4	0.3	12	25.1	25.1	7.9	7.9	28.0	28.0	47.5	47.6	3.3	3.3	11.8		3			
						10.4	0.2	11	25.1		7.9		28.0		47.7		3.3		11.7		4			
C3	Fine	Moderate	03:54	9.7	Surface	1.0	0.3	259	29.1	29.1	8.5	8.5	17.3	17.3	135.6	135.4	9.4	8.2	2.5	3.4	3	4	822129	817821
						1.0	0.3	261	29.1		8.5		17.3		135.2		9.4		2.6		3			
					Middle	4.9	0.3	254	27.4	27.4	8.3	8.3	24.5	24.5	102.2	102.1	7.0		3.6		4			
						4.9	0.2	252	27.4		8.3		24.4		102.0		7.0		3.6		3			
					Bottom	8.7	0.3	242	25.0	25.0	8.1	8.1	31.2	31.2	65.5	65.6	4.5	4.5	4.1		4			
						8.7	0.3	244	25.0		8.1		31.2		65.6		4.5		4.2		4			
IM1	Fine	Moderate	04:44	6.5	Surface	1.0	0.2	7	28.7	28.7	8.5	8.5	16.7	16.8	91.5	91.5	6.4	4.6	5.5	8.3	6	5	818348	806440
						1.0	0.2	7	28.7		8.5		16.9		91.5		6.4		5.5		6			
					Middle	3.3	0.2	34	25.6	25.6	8.0	8.0	27.7	27.8	40.1	40.1	2.8		6.2		5			
						3.3	0.2	35	25.5		8.0		27.8		40.1		2.8		6.1		6			
					Bottom	5.5	0.1	31	25.4	25.4	8.1	8.1	28.4	28.4	40.9	41.1	2.8	2.9	13.3		4			
						5.5	0.1	29	25.4		8.1		28.3		41.2		2.9		13.1		5			
IM2	Fine	Moderate	04:50	7.0	Surface	1.0	0.1	342	27.9	27.9	8.2	8.2	18.9	18.9	82.1	82.2	5.8	4.1	3.2	4.0	4	5	819196	806258
						1.0	0.1	337	27.9		8.2		18.8		82.3		5.8		3.2		4			
					Middle	3.5	0.1	351	25.5	25.5	7.8	7.8	27.7	27.8	34.8	34.8	2.4		3.8		4			
						3.5	0.0	350	25.5		7.8		27.8		34.7		2.4		3.8		5			
					Bottom	6.0	0.1	10	25.3	25.3	7.9	7.9	28.6	28.6	36.9	37.3	2.6	**2.6**	4.9		5			
						6.0	0.1	5	25.3		7.9		28.6		37.6		2.6		4.9		5			
IM7	Fine	Moderate	05:20	7.7	Surface	1.0	0.2	351	29.4	29.4	8.5	8.5	13.7	13.7	94.5	94.7	6.7	5.8	2.9	4.8	4	5	821371	806825
						1.0	0.2	345	29.4		8.5		13.7		94.9		6.7		3.0		4			
					Middle	3.9	0.2	0	27.5	27.5	8.2	8.2	20.8	20.8	68.4	68.3	4.8		4.9		5			
						3.9	0.1	359	27.5		8.2		20.8		68.2		4.8		5.1		5			
					Bottom	6.7	0.1	352	26.1	26.1	8.0	8.0	26.9	26.9	51.7	52.5	3.6	3.7	6.5		5			
						6.7	0.1	347	26.1		8.0		26.9		53.2		3.7		6.4		6			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	05:51	8.1	Surface	1.0	0.3	285	29.4	29.4	8.4	8.4	16.8	16.8	121.8	121.8	8.4	7.0	4.7	5.9	6	6	822260	809822
						1.0	0.3	280	29.4		8.4		16.8		121.7		8.4		4.7		6			
					Middle	4.1	0.3	279	28.2	28.2	8.1	8.1	20.9	21.2	83.0	82.0	5.7		5.2		6			
						4.1	0.3	281	28.2		8.1		21.5		81.0		5.6		5.2		5			
					Bottom	7.1	0.3	285	26.1	26.1	7.9	7.9	28.5	28.5	41.9	42.1	2.9	2.9	7.9		5			
						7.1	0.4	278	26.1		7.9		28.5		42.3		2.9		8.0		6			
IM11	Fine	Moderate	05:33	7.9	Surface	1.0	0.3	290	29.1	29.1	8.4	8.4	17.2	17.2	115.2	114.9	8.0	5.7	3.4	5.5	4	5	821485	810548
						1.0	0.3	292	29.1		8.4		17.1		114.5		7.9		3.4		5			
					Middle	4.0	0.3	287	26.6	26.6	7.9	7.9	26.2	26.2	49.3	49.2	3.4		4.6		6			
						4.0	0.3	288	26.5		7.9		26.3		49.0		3.4		4.8		5			
					Bottom	6.9	0.4	296	26.0	26.0	7.9	7.9	28.2	28.1	45.2	45.3	3.1	3.1	8.3		6			
						6.9	0.4	298	26.0		7.9		28.0		45.3		3.1		8.4		6			
IM12	Fine	Moderate	05:23	8.2	Surface	1.0	0.4	292	29.3	29.4	8.5	8.5	16.7	16.7	129.0	128.6	8.9	6.6	3.5	4.4	5	5	821176	811507
						1.0	0.4	294	29.4		8.5		16.7		128.2		8.9		3.5		5			
					Middle	4.1	0.4	287	27.2	27.2	8.0	8.0	24.1	24.1	62.2	62.3	4.3		4.5		5			
						4.1	0.4	280	27.2		8.0		24.1		62.4		4.3		4.4		5			
					Bottom	7.2	0.3	299	26.2	26.2	7.9	7.9	27.6	27.6	53.9	54.0	3.7	3.7	5.4		5			
						7.2	0.4	297	26.2		7.9		27.5		54.0		3.7		5.3		5			
SR1A	Fine	Calm	04:47	5.6	Surface	1.0	0.0	190	29.5	29.5	8.4	8.4	17.4	17.4	132.2	132.4	9.1	9.1	3.0	4.1	5	4	819974	812664
						1.0	0.0	193	29.5		8.4		17.3		132.6		9.1		3.1		4			
					Middle	2.8	0.1	168	-	-	-	-	-	-	-	-	-		-		-			
						2.8	0.1	170	-		-		-		-		-		-		-			
					Bottom	4.6	-	172	27.6	27.7	8.1	8.1	24.0	23.9	76.8	78.1	5.3	5.4	5.2		4			
						4.6	0.1	168	27.7		8.1		23.8		79.3		5.4		5.1		4			
SR2	Fine	Moderate	04:30	5.2	Surface	1.0	0.0	245	29.2	29.2	8.5	8.5	17.0	17.0	138.5	138.2	9.6	9.6	2.9	3.3	4	5	821462	814160
						1.0	0.0	238	29.2		8.5		17.0		137.8		9.5		2.9		3			
					Middle	-	0.1	238	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	238	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	255	28.5	28.5	8.3	8.3	20.1	20.0	112.5	112.6	7.7	7.8	3.8		6			
						4.2	0.1	254	28.5		8.3		20.0		112.7		7.8		3.8		5			
SR3	Fine	Moderate	05:28	8.2	Surface	1.0	0.2	338	29.7	29.7	8.5	8.5	13.9	13.9	95.6	95.6	6.7	5.3	2.7	3.4	4	5	822167	807557
						1.0	0.2	340	29.7		8.5		13.9		95.6		6.7		2.7		5			
					Middle	4.1	0.3	329	26.8	26.8	7.9	7.9	23.0	23.1	53.8	53.9	3.8		3.1		5			
						4.1	0.2	324	26.8		7.9		23.2		54.0		3.8		3.2		5			
					Bottom	7.2	0.2	354	25.8	25.8	7.9	7.9	26.7	26.7	44.2	44.5	3.1	3.1	4.3		5			
						7.2	0.2	0	25.8		7.9		26.7		44.7		3.1		4.6		6			
SR4A	Fine	Moderate	04:07	8.0	Surface	1.0	0.0	134	28.0	28.0	8.1	8.1	19.2	19.2	77.0	77.0	5.4	**3.9**	4.8	7.0	7	8	817166	807793
						1.0	0.0	133	28.0		8.1		19.2		76.9		5.4		4.9		8			
					Middle	4.0	0.1	122	25.8	25.8	7.9	7.9	26.8	26.8	34.1	34.1	2.4		7.3		8			
						4.0	0.1	123	25.8		7.9		26.8		34.1		2.4		7.3		7			
					Bottom	7.0	0.0	129	25.6	25.6	7.9	7.9	27.7	27.7	32.9	33.0	2.3	**2.3**	8.9		9			
						7.0	0.0	132	25.6		7.9		27.7		33.1		2.3		9.0		8			
SR8	Fine	Calm	05:15	5.0	Surface	1.0	-	-	29.3	29.2	8.4	8.4	17.9	17.9	130.3	130.0	9.0	9.0	3.7	4.7	4	4	820409	811628
						1.0	-	-	29.1		8.4		18.0		129.7		8.9		3.8		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	28.4	28.4	8.3	8.3	20.9	21.0	114.3	113.7	7.8	7.8	5.7		4			
						4.0	-	-	28.4		8.3		21.1		113.1		7.8		5.7		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Sunny	Moderate	12:46	7.6	Surface	1.0	0.6	197	30.3	30.3	8.2	8.2	19.9	19.9	87.4	86.2	5.9	4.8	5.8	6.8	2	3	815616	804260
						1.0	0.5	189	30.3		8.2		19.9		84.9		5.7		5.7		3			
					Middle	3.8	0.6	231	27.4	27.4	8.0	8.0	26.6	26.6	54.2	53.9	3.7		6.7		3			
						3.8	0.7	233	27.4		8.0		26.6		53.5		3.7		6.8		3			
					Bottom	6.6	0.6	189	25.7	25.8	7.9	7.9	32.0	32.0	42.5	42.6	2.9	2.9	7.9		4			
						6.6	0.6	184	25.8		7.9		32.0		42.7		2.9		7.8		3			
C2	Sunny	Moderate	11:39	10.6	Surface	1.0	0.7	157	29.2	29.2	8.2	8.2	18.6	18.5	88.8	88.7	6.1	5.4	3.5	4.3	3	3	825684	806956
						1.0	0.6	161	29.2		8.2		18.5		88.5		6.1		3.5		3			
					Middle	5.3	0.6	181	28.3	28.3	8.0	8.0	22.2	22.2	67.2	67.0	4.6		4.1		3			
						5.3	0.7	184	28.3		8.0		22.2		66.8		4.6		4.1		3			
					Bottom	9.6	0.7	174	26.0	26.1	8.0	8.0	30.1	30.0	61.4	62.7	4.2	4.3	5.2		3			
						9.6	0.7	171	26.1		8.0		29.9		63.9		4.4		5.2		4			
C3	Fine	Moderate	12:44	9.8	Surface	1.0	0.4	59	28.3	28.3	8.2	8.2	21.3	21.3	95.0	94.9	6.6	5.9	3.7	6.2	3	3	822091	817783
						1.0	0.4	56	28.3		8.2		21.3		94.8		6.6		3.6		2			
					Middle	4.9	0.4	55	26.8	26.8	8.2	8.2	24.6	24.6	75.4	75.0	5.3		5.2		3			
						4.9	0.4	61	26.8		8.2		24.6		74.6		5.2		5.1		3			
					Bottom	8.8	0.4	60	25.5	25.5	8.1	8.1	27.9	27.9	59.3	59.5	4.2	4.2	9.7		3			
						8.8	0.4	60	25.5		8.1		27.9		59.6		4.2		9.8		4			
IM1	Sunny	Moderate	12:30	7.2	Surface	1.0	0.4	199	28.5	28.5	8.1	8.1	22.0	22.1	74.8	74.2	5.1	**4.0**	7.2	8.2	2	3	818331	806461
						1.0	0.4	202	28.5		8.1		22.1		73.6		5.1		7.1		3			
					Middle	3.6	0.4	171	26.0	26.0	7.9	7.9	30.6	30.6	41.0	41.1	2.8		8.4		3			
						3.6	0.4	173	26.0		7.9		30.6		41.2		2.8		8.5		3			
					Bottom	6.2	0.4	172	25.8	25.8	7.9	7.9	31.7	31.7	42.3	42.5	2.9	2.9	9.1		3			
						6.2	0.4	166	25.8		7.9		31.7		42.6		2.9		9.0		3			
IM2	Sunny	Moderate	12:25	7.0	Surface	1.0	0.5	192	29.3	29.3	8.3	8.3	20.6	20.6	87.2	86.1	6.0	4.7	6.4	7.2	3	3	819206	806228
						1.0	0.5	185	29.3		8.3		20.6		85.0		5.8		6.4		2			
					Middle	3.5	0.4	201	27.4	27.5	8.0	8.0	25.9	25.9	52.5	52.2	3.6		7.1		3			
						3.5	0.4	193	27.5		8.0		25.8		51.8		3.5		7.1		3			
					Bottom	6.0	0.4	200	26.2	26.2	7.9	7.9	30.4	30.4	43.8	44.0	3.0	3.0	8.1		4			
						6.0	0.5	193	26.2		7.9		30.4		44.2		3.0		8.0		4			
IM7	Sunny	Moderate	12:04	8.0	Surface	1.0	0.3	162	30.0	30.0	8.2	8.2	16.9	16.9	92.2	91.7	6.4	5.3	2.2	3.5	3	3	821367	806833
						1.0	0.3	168	30.0		8.2		16.9		91.1		6.3		2.1		3			
					Middle	4.0	0.3	182	27.6	27.6	8.0	8.0	23.6	23.6	60.5	60.4	4.2		3.4		3			
						4.0	0.3	189	27.6		8.0		23.6		60.3		4.2		3.5		3			
					Bottom	7.0	0.3	177	27.4	27.4	8.0	8.0	26.0	26.0	56.0	56.1	3.8	3.8	4.9		3			
						7.0	0.3	175	27.4		8.0		26.0		56.1		3.8		4.9		2			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	11:23	7.8	Surface	1.0	0.6	91	28.9	28.9	8.1	8.1	16.9	16.9	93.3	93.2	6.6	6.5	3.7	5.3	3	3	822261	809819
						1.0	0.6	93	28.9		8.1		16.9		93.1		6.5		3.7		2			
					Middle	3.9	0.6	96	28.9	28.9	8.2	8.2	18.3	18.3	93.6	93.5	6.5		4.4		3			
						3.9	0.6	93	28.9		8.2		18.3		93.4		6.5		4.5		3			
					Bottom	6.8	0.6	94	27.8	27.8	7.9	7.9	21.6	21.6	61.1	61.3	4.3	4.3	7.7		3			
						6.8	0.6	91	27.8		7.9		21.6		61.5		4.3		7.6		4			
IM11	Fine	Moderate	11:42	8.6	Surface	1.0	0.7	86	29.3	29.3	8.2	8.2	16.4	16.4	97.5	97.4	6.8	5.7	4.5	6.3	4	3	821504	810554
						1.0	0.7	86	29.3		8.2		16.4		97.3		6.8		4.6		3			
					Middle	4.3	0.7	97	27.8	27.8	8.0	8.0	20.9	20.9	66.5	66.4	4.7		6.4		3			
						4.3	0.6	92	27.7		8.0		20.9		66.3		4.6		6.5		2			
					Bottom	7.6	0.7	85	27.2	27.2	8.0	8.0	23.5	23.5	60.8	61.1	4.2	4.3	8.0		2			
						7.6	0.7	77	27.2		8.0		23.5		61.4		4.3		7.9		3			
IM12	Fine	Moderate	11:47	9.2	Surface	1.0	0.8	90	28.7	28.7	8.2	8.2	17.6	17.6	90.2	90.1	6.3	5.6	2.1	4.8	3	3	821160	811498
						1.0	0.8	83	28.6		8.2		17.6		89.9		6.3		2.1		3			
					Middle	4.6	0.7	116	27.8	27.9	8.0	8.0	21.2	21.1	69.6	69.6	4.9		4.5		3			
						4.6	0.7	113	27.9		8.0		21.0		69.5		4.9		4.4		3			
					Bottom	8.2	0.8	95	26.5	26.6	8.0	8.0	25.5	25.4	60.8	60.9	4.2	4.2	7.7		2			
						8.2	0.8	101	26.6		8.0		25.4		60.9		4.2		7.8		4			
SR1A	Fine	Calm	12:13	5.2	Surface	1.0	0.0	99	28.8	28.8	8.2	8.2	18.7	18.7	93.5	93.4	6.5	6.5	2.3	3.3	4	4	819983	812654
						1.0	-	102	28.7		8.2		18.8		93.3		6.5		2.4		4			
					Middle	2.6	0.1	92	-	-	-	-	-	-	-	-	-		-		-			
						2.6	0.1	94	-		-		-		-		-		-		-			
					Bottom	4.2	0.0	110	28.0	28.0	8.1	8.1	21.7	21.7	76.4	76.3	5.3	5.3	4.2		4			
						4.2	0.0	116	27.9		8.1		21.8		76.2		5.3		4.4		4			
SR2	Fine	Moderate	12:26	5.4	Surface	1.0	0.6	54	29.1	29.1	8.3	8.3	17.6	17.6	106.9	106.6	7.5	7.5	2.6	3.3	3	3	821463	814177
						1.0	0.7	52	29.0		8.3		17.6		106.2		7.4		2.6		3			
					Middle	-	0.7	65	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	60	-		-		-		-		-		-		-			
					Bottom	4.4	0.6	28	28.0	28.0	8.1	8.1	21.1	21.1	78.4	78.4	5.5	5.5	4.0		3			
						4.4	0.6	25	28.0		8.1		21.2		78.4		5.5		4.1		4			
SR3	Sunny	Moderate	11:55	8.6	Surface	1.0	0.5	166	29.2	29.2	8.2	8.2	18.1	18.1	87.4	87.2	6.1	5.1	3.6	4.7	2	3	822144	807551
						1.0	0.5	170	29.2		8.2		18.1		87.0		6.0		3.7		3			
					Middle	4.3	0.6	171	27.6	27.6	8.0	8.0	22.7	22.8	59.1	59.0	4.1		4.8		3			
						4.3	0.6	177	27.6		8.0		22.8		58.8		4.1		4.9		3			
					Bottom	7.6	0.6	143	28.2	28.2	8.0	8.0	25.7	25.6	62.0	62.8	4.2	4.3	5.7		3			
						7.6	0.6	150	28.2		8.0		25.5		63.5		4.3		5.5		3			
SR4A	Sunny	Moderate	13:09	8.8	Surface	1.0	0.0	53	29.3	29.4	8.2	8.2	21.1	21.1	81.2	80.8	5.5	4.2	4.1	5.4	3	3	817199	807790
						1.0	0.0	56	29.4		8.2		21.0		80.4		5.5		4.1		3			
					Middle	4.4	0.0	68	26.6	26.6	7.9	7.9	28.3	28.3	42.6	42.7	2.9		5.4		3			
						4.4	0.1	74	26.6		7.9		28.4		42.7		2.9		5.4		3			
					Bottom	7.8	0.1	75	26.4	26.4	7.9	7.9	30.3	30.3	44.9	45.1	3.1	3.1	6.5		3			
						7.8	0.1	69	26.4		7.9		30.3		45.2		3.1		6.6		2			
SR8	Fine	Calm	11:52	5.3	Surface	1.0	-	-	28.8	28.8	8.1	8.1	18.5	18.5	98.1	97.9	6.8	6.8	2.5	3.5	2	3	820411	811630
						1.0	-	-	28.7		8.1		18.5		97.7		6.8		2.7		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.3	-	-	28.3	28.3	8.1	8.1	20.6	20.5	87.5	87.5	6.1	6.1	4.4		3			
						4.3	-	-	28.3		8.1		20.5		87.5		6.1		4.5		3			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	05:45	8.5	Surface	1.0	0.3	33	28.6	28.6	8.1	8.1	21.5	21.5	87.2	87.2	6.0	4.8	3.4	6.7	2	3	815643	804247
						1.0	0.3	34	28.6		8.1		21.4		87.1		6.0		3.4		3			
					Middle	4.3	0.3	32	26.9	26.9	8.0	8.0	26.4	26.4	53.5	53.4	3.7		4.5		3			
						4.3	0.3	26	26.9		8.0		26.4		53.2		3.6		4.5		3			
					Bottom	7.5	0.3	24	24.7	24.7	7.9	7.9	34.1	34.1	28.5	28.7	1.9	2.0	12.2		3			
						7.5	0.3	26	24.7		7.9		34.1		28.8		2.0		12.3		3			
C2	Sunny	Moderate	07:07	11.2	Surface	1.0	0.4	344	29.1	29.1	8.2	8.2	18.5	18.5	88.5	88.4	6.1	5.4	3.5	7.0	2	2	825677	806921
						1.0	0.3	344	29.0		8.2		18.5		88.3		6.1		3.5		2			
					Middle	5.6	0.4	337	28.0	28.0	8.1	8.1	22.3	22.3	68.3	68.2	4.7		4.5		3			
						5.6	0.4	340	28.0		8.1		22.3		68.1		4.7		4.7		2			
					Bottom	10.2	0.3	2	25.5	25.5	8.0	8.0	30.7	30.7	47.4	47.4	3.3	3.3	12.9		2			
						10.2	0.3	355	25.5		8.0		30.7		47.4		3.3		12.9		3			
C3	Fine	Moderate	05:57	10.7	Surface	1.0	0.4	252	27.6	27.6	8.1	8.1	21.0	20.9	94.8	95.0	6.6	6.1	2.1	3.1	3	3	822131	817801
						1.0	0.4	253	27.6		8.1		20.9		95.1		6.7		2.0		3			
					Middle	5.4	0.4	239	26.7	26.7	8.0	8.0	24.5	24.5	80.0	79.7	5.6		2.4		3			
						5.4	0.3	238	26.7		8.0		24.5		79.4		5.5		2.3		3			
					Bottom	9.7	0.4	269	24.4	24.4	7.9	7.9	29.7	29.7	50.8	51.0	3.6	3.6	4.7		2			
						9.7	0.4	272	24.4		7.9		29.7		51.1		3.6		4.8		3			
IM1	Sunny	Moderate	06:03	6.9	Surface	1.0	0.2	4	28.6	28.6	8.2	8.2	20.0	20.0	91.5	91.5	6.3	4.8	3.8	8.8	3	3	818362	806453
						1.0	0.1	358	28.6		8.2		20.0		91.4		6.3		3.8		2			
					Middle	3.5	0.2	359	26.5	26.5	7.9	7.9	28.1	28.1	47.1	47.2	3.2		10.2		2			
						3.5	0.1	353	26.5		7.9		28.1		47.2		3.2		10.3		3			
					Bottom	5.9	0.2	4	25.9	25.9	7.8	7.8	30.6	30.6	39.6	39.7	2.7	2.7	12.3		3			
						5.9	0.2	4	25.9		7.8		30.6		39.7		2.7		12.3		3			
IM2	Sunny	Moderate	06:10	7.1	Surface	1.0	0.3	21	28.3	28.3	8.1	8.1	21.7	21.6	78.0	78.0	5.4	4.5	4.7	7.5	3	2	819172	806229
						1.0	0.3	21	28.3		8.1		21.6		78.0		5.4		4.8		3			
					Middle	3.6	0.2	20	26.8	26.8	7.9	7.9	27.3	27.3	50.6	50.6	3.5		8.0		2			
						3.6	0.2	20	26.8		7.9		27.4		50.5		3.5		8.1		2			
					Bottom	6.1	0.3	16	25.9	25.9	7.8	7.8	30.4	30.4	43.2	43.2	2.9	2.9	9.8		2			
						6.1	0.3	13	25.9		7.8		30.4		43.2		2.9		9.9		2			
IM7	Sunny	Moderate	06:38	8.3	Surface	1.0	0.2	355	29.1	29.1	8.2	8.2	18.3	18.3	93.1	92.8	6.4	5.4	3.5	5.6	2	2	821342	806816
						1.0	0.2	355	29.1		8.2		18.3		92.4		6.4		3.5		3			
					Middle	4.2	0.2	351	27.6	27.6	8.0	8.0	24.0	24.0	62.4	62.5	4.3		4.9		3			
						4.2	0.2	358	27.6		8.0		24.0		62.5		4.3		5.1		2			
					Bottom	7.3	0.2	3	26.7	26.7	8.0	8.0	27.9	27.9	50.4	50.5	3.4	3.5	8.2		2			
						7.3	0.2	6	26.7		8.0		28.0		50.5		3.5		8.2		2			

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Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	07:26	8.0	Surface	1.0	0.3	291	28.7	28.7	8.2	8.2	18.2	18.3	93.7	93.6	6.5	6.4	3.5	5.6	3	3	822239	809826
						1.0	0.3	285	28.7		8.2		18.3		93.5		6.5		3.5		2			
					Middle	4.0	0.3	313	28.7	28.7	8.2	8.2	18.3	18.3	91.2	91.1	6.4		5.4		3			
						4.0	0.4	307	28.7		8.2		18.3		90.9		6.3		5.5		2			
					Bottom	7.0	0.3	290	27.2	27.2	7.9	7.9	22.7	22.7	52.5	52.6	3.7	3.7	7.8		3			
						7.0	0.3	295	27.2		7.9		22.7		52.6		3.7		7.7		3			
IM11	Fine	Moderate	07:17	8.9	Surface	1.0	0.4	267	28.1	28.1	8.0	8.0	18.3	18.3	76.7	76.6	5.4	4.8	3.4	4.8	2	2	821489	810547
						1.0	0.4	267	28.0		8.0		18.3		76.4		5.4		3.5		3			
					Middle	4.5	0.4	270	27.4	27.4	8.0	8.0	22.2	22.2	58.9	59.0	4.1		4.7		2			
						4.5	0.3	271	27.4		8.0		22.2		59.0		4.1		4.6		2			
					Bottom	7.9	0.4	274	27.0	27.0	8.0	8.0	23.6	23.5	64.9	64.9	4.5	4.5	6.3		2			
						7.9	0.4	273	27.0		8.0		23.5		64.9		4.5		6.4		2			
IM12	Fine	Moderate	07:08	9.5	Surface	1.0	0.3	267	28.1	28.1	8.1	8.1	17.8	17.8	86.4	84.7	6.1	5.9	2.7	3.9	3	3	821162	811534
						1.0	0.3	261	28.1		8.1		17.9		83.0		5.9		2.7		4			
					Middle	4.8	0.3	289	27.7	27.7	8.1	8.1	21.2	21.2	81.9	81.9	5.7		3.6		3			
						4.8	0.3	289	27.6		8.1		21.2		81.8		5.7		3.7		3			
					Bottom	8.5	0.4	286	26.3	26.3	8.0	8.0	25.7	25.7	61.3	60.9	4.3	4.3	5.3		3			
						8.5	0.4	293	26.3		8.0		25.7		60.5		4.2		5.4		2			
SR1A	Fine	Calm	06:39	5.5	Surface	1.0	0.1	186	28.8	28.8	8.1	8.1	18.6	18.5	85.1	82.8	5.9	5.8	3.0	4.1	2	3	819982	812660
						1.0	0.1	185	28.8		8.1		18.5		80.5		5.6		3.1		3			
					Middle	2.8	0.0	176	-	-	-	-	-	-	-	-	-		-		-			
						2.8	0.0	178	-		-		-		-		-		-		-			
					Bottom	4.5	0.0	203	26.0	26.0	8.0	8.0	26.5	26.6	58.5	58.4	4.1	4.1	5.1		3			
						4.5	0.0	197	25.9		8.0		26.6		58.3		4.1		5.3		2			
SR2	Fine	Moderate	06:21	5.7	Surface	1.0	0.1	265	28.4	28.4	8.1	8.1	19.6	19.6	97.3	97.2	6.8	6.8	2.5	3.2	3	3	821444	814186
						1.0	0.1	258	28.3		8.1		19.7		97.0		6.7		2.6		2			
					Middle	-	0.1	241	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	236	-		-		-		-		-		-		-			
					Bottom	4.7	0.1	238	26.2	26.2	8.0	8.0	26.0	26.0	65.9	66.0	4.6	4.6	3.8		3			
						4.7	0.1	234	26.2		8.0		26.0		66.0		4.6		4.0		2			
SR3	Sunny	Moderate	06:48	8.8	Surface	1.0	0.4	330	28.9	28.9	8.1	8.1	19.0	19.0	84.9	84.8	5.9	5.0	3.3	6.0	3	2	822157	807548
						1.0	0.4	332	28.9		8.1		19.0		84.7		5.9		3.3		2			
					Middle	4.4	0.4	353	27.8	27.8	8.0	8.0	23.4	23.4	60.1	60.1	4.1		4.1		3			
						4.4	0.3	359	27.8		8.0		23.5		60.1		4.1		4.3		2			
					Bottom	7.8	0.3	355	26.9	26.9	8.0	8.0	26.9	26.9	48.8	48.8	3.3	3.3	10.4		2			
						7.8	0.3	351	26.9		8.0		26.9		48.8		3.3		10.4		2			
SR4A	Fine	Moderate	05:24	8.8	Surface	1.0	0.0	132	28.4	28.4	8.1	8.1	21.1	21.1	81.9	81.9	5.6	4.6	5.1	8.9	2	2	817169	807825
						1.0	0.1	138	28.4		8.1		21.1		81.8		5.6		5.1		3			
					Middle	4.4	0.1	151	27.1	27.1	7.9	7.9	26.2	26.2	52.7	52.7	3.6		9.9		2			
						4.4	0.1	148	27.1		7.9		26.2		52.6		3.6		9.9		2			
					Bottom	7.8	0.0	115	26.6	26.6	7.9	7.9	28.1	28.1	44.2	44.2	3.0	3.0	11.8		2			
						7.8	0.0	108	26.6		7.9		28.1		44.2		3.0		11.8		2			
SR8	Fine	Calm	07:02	5.4	Surface	1.0	-	-	28.9	28.9	8.1	8.1	18.6	18.6	97.5	97.5	6.8	6.8	3.6	5.1	2	3	820405	811630
						1.0	-	-	28.9		8.1		18.6		97.4		6.8		3.7		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.4	-	-	27.8	27.8	8.1	8.1	21.1	21.1	82.8	82.8	5.8	5.8	6.5		3			
						4.4	-	-	27.8		8.1		21.1		82.7		5.8		6.5		3			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Rough	14:21	8.8	Surface	1.0	0.6	205	28.7	28.7	8.1	8.1	21.5	21.5	81.0	81.0	5.6	4.4	2.9	5.7	<2	<2	815622	804233
						1.0	0.6	202	28.7		8.1		21.5		81.0		5.6		2.9		<2			
					Middle	4.4	0.6	217	26.7	26.7	7.9	7.9	29.3	29.3	47.6	47.6	3.2		5.5		<2			
						4.4	0.6	211	26.7		7.9		29.3		47.5		3.2		5.5		<2			
					Bottom	7.8	0.7	215	25.8	25.8	7.9	7.9	31.9	31.9	39.2	39.3	2.7	2.7	8.7		<2			
						7.8	0.7	210	25.8		7.9		31.9		39.4		2.7		8.7		<2			
C2	Cloudy	Rough	12:37	10.8	Surface	1.0	0.5	169	28.9	28.9	8.1	8.1	22.1	22.1	78.4	78.4	5.4	4.9	1.4	2.8	<2	<2	825676	806934
						1.0	0.5	170	28.9		8.1		22.1		78.4		5.3		1.5		<2			
					Middle	5.4	0.5	152	28.2	28.2	8.0	8.0	24.3	24.3	65.3	65.3	4.5		2.8		<2			
						5.4	0.5	148	28.2		8.0		24.3		65.3		4.5		2.8		<2			
					Bottom	9.8	0.5	159	27.8	27.8	7.9	7.9	25.8	25.8	53.5	53.6	3.6	3.6	4.1		<2			
						9.8	0.5	165	27.8		7.9		25.8		53.6		3.6		4.0		<2			
C3	Misty	Moderate	14:52	9.0	Surface	1.0	0.3	62	25.8	25.8	8.0	8.0	28.0	28.1	75.0	72.9	5.2	5.0	1.1	1.5	2	2	822130	817814
						1.0	0.3	60	25.7		8.0		28.1		70.7		4.9		1.1		2			
					Middle	4.5	0.4	52	25.5	25.5	8.0	7.9	28.4	28.4	69.6	69.2	4.9		1.3		<2			
						4.5	0.4	44	25.5		7.9		28.5		68.8		4.8		1.3		<2			
					Bottom	8.0	0.3	47	25.4	25.4	7.9	7.9	28.6	28.6	73.9	75.1	5.2	5.3	2.2		<2			
						8.0	0.4	41	25.3		7.9		28.7		76.3		5.3		2.2		<2			
IM1	Cloudy	Moderate	13:49	8.6	Surface	1.0	0.4	181	28.7	28.7	8.1	8.1	21.6	21.6	82.5	82.4	5.7	5.3	3.3	4.6	3	2	818348	806468
						1.0	0.4	182	28.7		8.1		21.6		82.3		5.7		3.3		3			
					Middle	4.3	0.4	204	28.1	28.1	8.0	8.0	24.7	24.7	70.2	70.3	4.8		3.7		2			
						4.3	0.4	207	28.1		8.0		24.8		70.3		4.8		3.7		2			
					Bottom	7.6	0.4	198	26.9	26.9	7.9	7.9	28.9	28.9	50.8	50.8	3.5	3.5	6.7		2			
						7.6	0.4	203	26.9		7.9		28.9		50.8		3.5		6.6		2			
IM2	Cloudy	Moderate	13:43	8.5	Surface	1.0	0.5	208	28.8	28.8	8.1	8.0	21.9	21.9	81.4	81.4	5.6	5.2	3.1	4.3	<2	2	819200	806224
						1.0	0.5	204	28.8		8.0		21.9		81.3		5.6		3.1		<2			
					Middle	4.3	0.4	205	28.1	28.1	8.0	8.0	25.2	25.2	70.1	70.1	4.8		4.5		<2			
						4.3	0.4	208	28.0		8.0		25.3		70.0		4.8		4.5		<2			
					Bottom	7.5	0.5	191	26.8	26.9	7.9	7.9	29.0	28.9	52.5	52.6	3.6	3.6	5.2		2			
						7.5	0.5	196	26.9		7.9		28.9		52.7		3.6		5.2		2			
IM7	Cloudy	Rough	13:14	9.6	Surface	1.0	0.3	165	28.5	28.5	8.0	8.0	22.5	22.4	76.7	76.7	5.3	5.0	3.0	4.2	2	3	821370	806834
						1.0	0.3	168	28.5		8.0		22.4		76.6		5.3		3.0		2			
					Middle	4.8	0.3	164	28.3	28.3	8.0	8.0	23.6	23.6	66.5	66.6	4.6		3.2		3			
						4.8	0.3	163	28.3		8.0		23.6		66.7		4.6		3.2		2			
					Bottom	8.6	0.3	150	27.2	27.2	7.9	7.9	27.6	27.6	50.0	50.0	3.4	3.4	6.2		3			
						8.6	0.3	150	27.2		7.9		27.6		50.0		3.4		6.3		3			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 July 22 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	12:37	9.0	Surface	1.0	0.6	108	28.3	28.3	8.1	8.1	22.1	22.2	84.3	83.9	5.8	5.6	1.3	1.6	3	2	822230	809814
						1.0	0.6	111	28.2		8.1		22.2		83.5		5.8		1.3		2			
					Middle	4.5	0.6	114	28.0	28.0	8.1	8.1	22.8	22.9	77.2	77.0	5.3		1.6		2			
						4.5	0.7	110	28.0		8.1		23.0		76.8		5.3		1.6		2			
					Bottom	8.0	0.6	90	28.3	28.3	8.1	8.1	23.3	23.1	77.0	77.9	5.3	5.4	2.0		2			
						8.0	0.6	86	28.3		8.1		22.9		78.8		5.4		2.0		2			
IM11	Misty	Moderate	13:20	7.4	Surface	1.0	0.6	99	27.5	27.5	8.0	8.0	23.4	23.5	78.1	77.5	5.4	5.2	1.1	1.2	<2	2	821504	810522
						1.0	0.6	98	27.5		8.0		23.5		76.9		5.3		1.1		<2			
					Middle	3.7	0.7	77	27.5	27.6	8.0	8.0	23.8	23.8	72.5	72.3	5.0		1.2		<2			
						3.7	0.7	71	27.6		8.0		23.9		72.1		5.0		1.2		<2			
					Bottom	6.4	0.7	117	28.0	28.1	8.0	8.0	23.8	23.8	73.6	74.4	5.0	5.1	1.4		3			
						6.4	0.7	115	28.1		8.0		23.7		75.2		5.2		1.4		3			
IM12	Misty	Moderate	13:25	7.2	Surface	1.0	0.8	111	27.4	27.4	8.0	8.0	23.8	23.8	76.0	75.8	5.3	5.2	1.3	1.8	2	2	821165	811537
						1.0	0.7	116	27.3		8.0		23.9		75.6		5.2		1.3		2			
					Middle	3.6	0.8	101	27.0	27.0	8.0	8.0	24.5	24.6	74.5	74.5	5.2		2.0		<2			
						3.6	0.8	97	26.9		8.0		24.7		74.5		5.2		2.0		<2			
					Bottom	6.2	0.8	107	26.7	26.8	8.0	8.0	25.2	25.0	81.2	82.0	5.7	5.8	2.1		<2			
						6.2	0.8	113	26.8		8.0		24.9		82.8		5.8		2.0		<2			
SR1A	Misty	Moderate	13:38	5.0	Surface	1.0	0.0	77	27.0	27.0	7.9	7.9	23.9	23.8	63.2	63.2	4.4	4.4	3.4	3.8	<2	2	819980	812658
						1.0	0.0	78	27.0		7.9		23.8		63.2		4.4		3.5		<2			
					Middle	2.5	0.0	62	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.0	55	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	58	27.1	27.2	7.9	7.9	26.3	26.3	63.8	63.9	4.4	4.4	4.1		2			
						4.0	0.0	62	27.2		7.9		26.2		63.9		4.4		4.0		2			
SR2	Misty	Moderate	14:13	5.4	Surface	1.0	0.7	44	27.3	27.2	8.0	8.0	22.9	22.9	87.3	87.5	6.1	6.1	2.1	2.6	2	2	821453	814142
						1.0	0.7	50	27.1		8.0		22.9		87.6		6.1		2.1		2			
					Middle	-	0.7	55	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	54	-		-		-		-		-		-		-			
					Bottom	4.4	0.7	43	26.7	26.8	8.0	8.0	25.4	25.4	89.9	90.4	6.2	6.3	3.0		<2			
						4.4	0.7	47	26.8		8.0		25.4		90.9		6.3		3.0		<2			
SR3	Cloudy	Rough	13:06	10.1	Surface	1.0	0.5	149	28.6	28.6	8.0	8.0	22.6	22.6	69.6	69.6	4.8	4.4	3.2	4.6	2	2	822162	807581
						1.0	0.5	143	28.5		8.0		22.6		69.5		4.8		3.3		2			
					Middle	5.1	0.5	158	28.0	28.1	7.9	7.9	24.9	24.9	59.3	59.3	4.0		3.2		2			
						5.1	0.5	162	28.1		7.9		24.9		59.2		4.0		3.2		2			
					Bottom	9.1	0.5	148	27.8	27.8	7.9	7.9	25.9	25.9	56.0	56.1	3.8	3.8	7.4		2			
						9.1	0.5	154	27.8		7.9		25.9		56.1		3.8		7.3		2			
SR4A	Cloudy	Moderate	14:54	10.7	Surface	1.0	0.0	350	28.2	28.2	8.0	8.0	23.9	23.9	77.7	77.8	5.3	5.0	3.8	5.3	2	2	817192	807806
						1.0	0.1	353	28.2		8.0		23.9		77.9		5.3		3.8		2			
					Middle	5.4	0.1	347	28.0	28.0	8.0	8.0	25.1	25.1	68.4	68.3	4.7		3.6		3			
						5.4	0.0	352	28.0		8.0		25.2		68.2		4.6		3.6		2			
					Bottom	9.7	0.1	342	27.1	27.1	7.9	7.9	28.4	28.4	53.3	53.4	3.6	3.6	8.3		2			
						9.7	0.0	344	27.1		7.9		28.4		53.4		3.6		8.3		3			
SR8	Misty	Moderate	13:30	4.6	Surface	1.0	-	-	27.1	27.1	7.9	7.9	23.2	23.2	71.0	71.0	5.0	5.0	3.7	4.2	<2	2	820409	811645
						1.0	-	-	27.0		7.9		23.3		71.0		5.0		3.8		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	26.9	26.9	7.9	7.9	25.4	25.3	75.1	75.7	5.2	5.3	4.6		2			
						3.6	-	-	26.9		7.9		25.3		76.3		5.3		4.7		2			

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 July 22 during Mid-Flood Tide

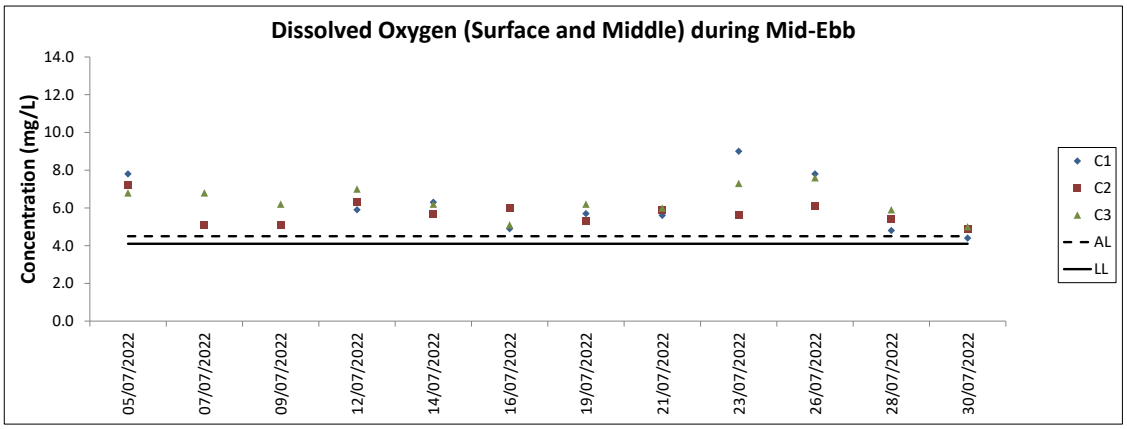
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
C1	Fine	Moderate	06:22	7.2	Surface	1.0	0.2	28	28.3	28.3	8.0	8.0	23.9	23.9	74.6	74.6	5.1	4.8	3.3	5.8	<2	2	815632	804230
						1.0	0.2	28	28.3		8.0		23.9		74.6		5.1		3.4		<2			
					Middle	3.6	0.2	25	27.8	27.8	8.0	8.0	25.9	25.9	63.9	64.1	4.4		3.9		2			
						3.6	0.2	18	27.8		8.0		25.9		64.2		4.4		3.9		2			
					Bottom	6.2	0.2	33	26.1	26.1	7.9	7.9	30.9	30.9	43.3	43.6	2.9	3.0	10.2		3			
						6.2	0.2	34	26.1		7.9		30.9		43.8		3.0		10.2		2			
C2	Fine	Moderate	07:53	9.9	Surface	1.0	0.4	340	28.7	28.7	8.0	8.0	22.4	22.4	77.0	77.0	5.3	5.0	2.4	2.7	3	3	825664	806967
						1.0	0.4	342	28.7		8.0		22.4		76.9		5.3		2.4		3			
					Middle	5.0	0.5	7	28.2	28.2	8.0	8.0	24.0	24.0	67.8	67.8	4.6		2.8		3			
						5.0	0.5	3	28.2		8.0		24.0		67.8		4.6		2.8		2			
					Bottom	8.9	0.5	333	27.9	27.9	7.9	7.9	25.2	25.2	62.1	62.2	4.2	4.2	2.9		2			
						8.9	0.4	338	27.9		7.9		25.2		62.2		4.2		2.9		2			
C3	Misty	Moderate	07:32	8.0	Surface	1.0	0.5	258	28.0	28.0	8.1	8.1	21.8	21.8	85.2	85.1	5.9	5.6	1.0	1.1	2	2	822116	817789
						1.0	0.4	262	28.0		8.1		21.8		84.9		5.9		1.1		3			
					Middle	4.0	0.5	274	27.9	28.0	8.1	8.1	22.2	22.3	75.7	75.5	5.2		1.1		2			
						4.0	0.5	275	28.0		8.1		22.3		75.2		5.2		1.1		2			
					Bottom	7.0	0.5	256	28.1	28.2	8.1	8.1	24.0	23.9	75.1	76.4	5.1	5.2	1.3		2			
						7.0	0.6	251	28.2		8.1		23.8		77.6		5.3		1.2		2			
IM1	Fine	Moderate	06:46	7.8	Surface	1.0	0.2	18	28.7	28.7	8.1	8.1	22.9	23.0	81.3	81.2	5.5	5.1	2.8	3.9	<2	2	818330	806475
						1.0	0.2	22	28.7		8.1		23.0		81.1		5.5		2.8		<2			
					Middle	3.9	0.2	30	27.9	27.9	8.0	8.0	26.5	26.5	68.7	68.6	4.7		2.7		2			
						3.9	0.2	25	27.9		8.0		26.5		68.4		4.6		2.8		2			
					Bottom	6.8	0.2	6	26.8	26.8	8.0	8.0	29.4	29.4	52.2	52.3	3.5	3.5	6.1		2			
						6.8	0.2	4	26.8		8.0		29.4		52.3		3.5		6.1		2			
IM2	Fine	Moderate	06:53	7.1	Surface	1.0	0.2	9	28.2	28.2	8.0	8.0	24.9	24.9	74.7	74.8	5.1	4.8	2.9	3.2	<2	2	819163	806223
						1.0	0.3	4	28.2		8.0		24.9		74.9		5.1		2.9		<2			
					Middle	3.6	0.2	12	28.0	28.0	8.0	8.0	25.7	25.7	65.2	65.2	4.4		3.3		<2			
						3.6	0.2	7	28.0		8.0		25.7		65.2		4.4		3.3		<2			
					Bottom	6.1	0.3	338	27.5	27.5	7.9	7.9	27.0	27.1	57.1	57.0	3.9	3.9	3.4		3			
						6.1	0.3	339	27.5		7.9		27.1		56.9		3.9		3.5		2			
IM7	Fine	Moderate	07:21	7.9	Surface	1.0	0.1	346	28.7	28.7	8.0	8.0	21.4	21.4	78.2	78.0	5.4	4.8	3.3	4.8	2	2	821355	806846
						1.0	0.2	353	28.7		8.0		21.5		77.8		5.3		3.3		3			
					Middle	4.0	0.2	327	28.0	28.0	7.9	7.9	25.1	25.1	61.7	61.7	4.2		3.4		2			
						4.0	0.2	322	28.0		7.9		25.0		61.7		4.2		3.3		3			
					Bottom	6.9	0.2	348	27.3	27.3	7.9	7.9	27.4	27.4	52.9	53.0	3.6	3.6	7.7		2			
						6.9	0.2	344	27.3		7.9		27.4		53.0		3.6		7.7		2			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 July 22 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	08:47	8.6	Surface	1.0	0.3	280	28.2	28.2	8.0	8.0	21.9	21.9	83.0	82.9	5.7	5.7	1.1	1.7	2	2	822233	809861
						1.0	0.3	273	28.2		8.0		22.0		82.7		5.7		1.2		3			
					Middle	4.3	0.3	314	28.4	28.4	8.0	8.0	22.1	22.1	82.7	82.8	5.7		1.3		2			
						4.3	0.3	319	28.4		8.0		22.2		82.9		5.7		1.3		2			
					Bottom	7.6	0.3	296	28.6	28.6	8.0	8.0	22.2	22.2	85.6	85.6	5.9	5.9	2.7		<2			
						7.6	0.3	295	28.6		8.0		22.2		85.6		5.9		2.7		<2			
IM11	Misty	Moderate	08:42	8.0	Surface	1.0	0.3	286	27.3	27.4	8.0	8.0	23.6	23.7	75.3	75.2	5.2	5.2	1.6	2.1	<2	2	821486	810535
						1.0	0.3	281	27.4		8.0		23.7		75.1		5.2		1.6		<2			
					Middle	4.0	0.3	291	27.4	27.4	8.0	8.0	24.0	24.0	74.7	74.7	5.2		1.9		2			
						4.0	0.3	284	27.4		8.0		24.0		74.6		5.2		2.0		2			
					Bottom	7.0	0.3	296	27.6	27.7	8.0	8.0	24.8	24.8	78.9	79.2	5.4	5.5	2.8		3			
						7.0	0.3	302	27.7		8.0		24.7		79.5		5.5		2.8		3			
IM12	Misty	Moderate	08:36	8.8	Surface	1.0	0.4	285	28.2	28.2	8.0	8.0	22.1	22.1	74.7	73.7	5.2	4.8	3.1	4.1	3	2	821166	811540
						1.0	0.4	287	28.1		8.0		22.1		72.7		5.0		3.1		2			
					Middle	4.4	0.4	265	26.3	26.3	8.0	8.0	26.3	26.3	65.2	65.6	4.5		4.2		2			
						4.4	0.4	263	26.3		8.0		26.3		65.9		4.6		4.2		2			
					Bottom	7.8	0.4	282	26.3	26.3	8.0	8.0	26.4	26.4	74.8	75.3	5.2	5.3	5.1		<2			
						7.8	0.3	282	26.3		8.0		26.4		75.7		5.3		5.1		<2			
SR1A	Misty	Moderate	08:03	4.0	Surface	1.0	0.1	203	27.5	27.5	8.0	8.0	23.2	23.3	73.5	73.6	5.1	5.1	1.1	1.2	<2	2	819973	812659
						1.0	0.1	209	27.5		8.0		23.3		73.6		5.1		1.1		<2			
					Middle	2.0	0.0	182	-	-	-	-	-	-	-	-	-		-		-			
						2.0	-	181	-		-		-		-		-		-		-			
					Bottom	3.0	0.0	183	27.6	27.7	8.0	8.0	23.3	23.3	74.4	74.7	5.2	5.2	1.2		3			
						3.0	0.0	183	27.7		8.0		23.3		74.9		5.2		1.2		2			
SR2	Misty	Moderate	07:55	4.8	Surface	1.0	0.1	273	27.5	27.5	7.8	7.8	23.0	23.0	71.0	70.9	4.9	4.9	1.8	2.0	<2	<2	821450	814157
						1.0	0.1	268	27.5		7.8		23.0		70.7		4.9		1.8		<2			
					Middle	-	0.0	283	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	283	-		-		-		-		-		-		-			
					Bottom	3.8	0.1	283	27.6	27.7	7.8	7.8	22.8	22.7	70.3	70.7	4.9	4.9	2.1		<2			
						3.8	0.1	281	27.7		7.8		22.7		71.0		4.9		2.2		<2			
SR3	Fine	Moderate	07:28	9.2	Surface	1.0	0.2	347	28.8	28.8	8.0	8.0	21.1	21.1	78.5	78.5	5.4	4.7	2.9	5.1	<2	2	822153	807557
						1.0	0.2	351	28.8		8.0		21.1		78.4		5.4		2.9		<2			
					Middle	4.6	0.3	341	28.0	28.0	7.9	7.9	25.1	25.1	58.6	58.6	4.0		3.9		<2			
						4.6	0.3	335	28.0		7.9		25.1		58.6		4.0		3.9		<2			
					Bottom	8.2	0.3	343	27.7	27.7	7.9	7.9	26.1	26.1	58.0	58.2	4.0	4.0	8.5		2			
						8.2	0.3	343	27.7		7.9		26.1		58.3		4.0		8.5		2			
SR4A	Fine	Moderate	05:49	9.1	Surface	1.0	0.0	272	28.6	28.6	8.0	8.0	22.7	22.7	78.9	78.9	5.4	4.8	3.3	5.8	<2	<2	817206	807791
						1.0	0.0	267	28.6		8.0		22.7		78.8		5.4		3.2		<2			
					Middle	4.6	0.0	276	27.5	27.5	7.9	7.9	27.1	27.0	60.0	60.2	4.1		6.7		<2			
						4.6	0.0	277	27.5		7.9		27.0		60.3		4.1		6.6		<2			
					Bottom	8.1	0.0	258	26.9	26.9	7.9	7.9	29.1	29.1	54.9	55.0	3.7	3.7	7.7		<2			
						8.1	0.1	261	26.9		7.9		29.1		55.1		3.7		7.6		<2			
SR8	Misty	Moderate	08:31	5.0	Surface	1.0	-	-	27.6	27.6	8.0	8.0	23.0	23.2	76.1	76.1	5.3	5.3	3.6	3.8	<2	<2	820398	811626
						1.0	-	-	27.5		8.0		23.4		76.1		5.3		3.6		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	26.8	26.9	8.0	8.0	25.1	24.7	79.7	82.1	5.5	5.7	4.1		<2			
						4.0	-	-	26.9		8.0		24.4		84.4		5.9		4.1		<2			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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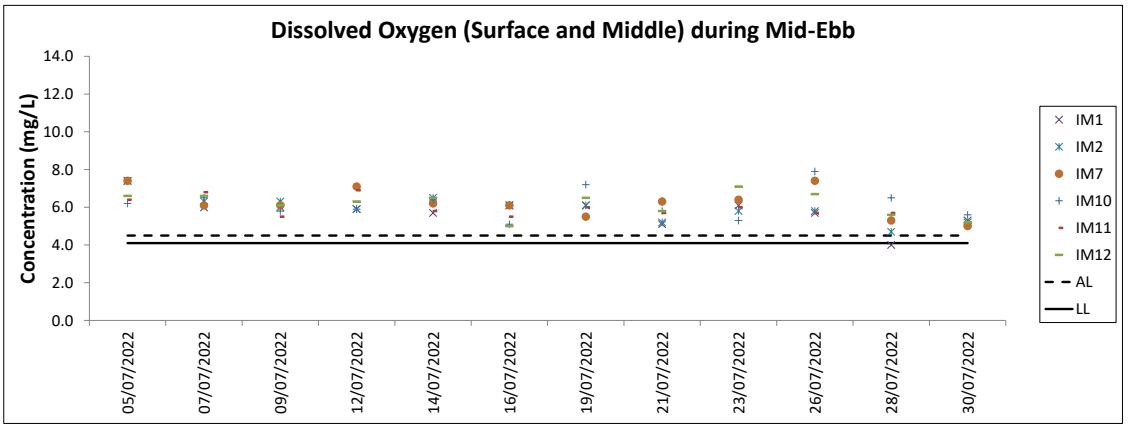
30/07/2022
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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10.0
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6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
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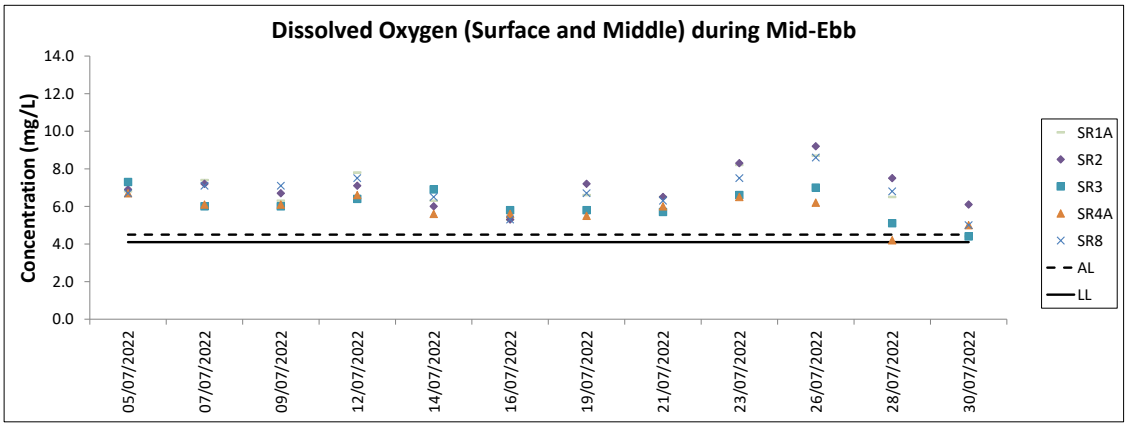
28/07/2022
30/07/2022
IM1
IM2
IM7
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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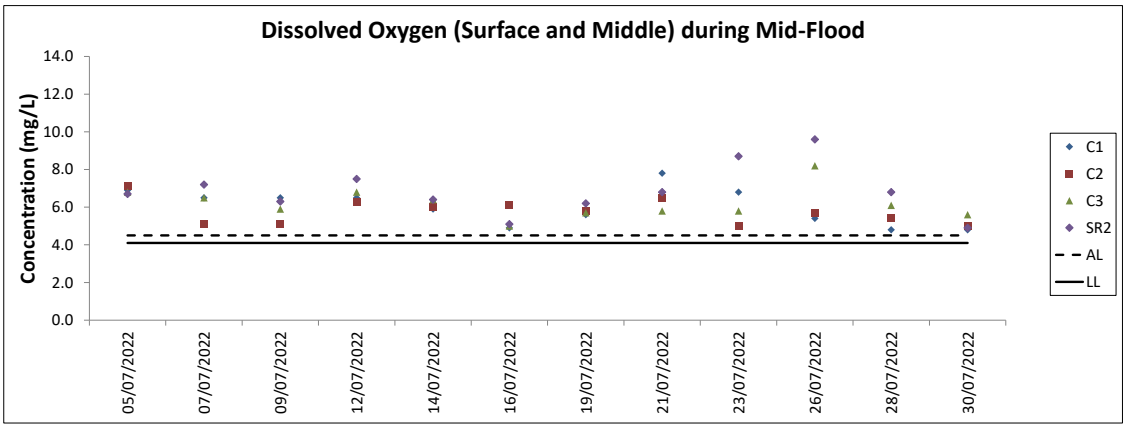
SR1A
SR2
SR3
SR4A
SR8
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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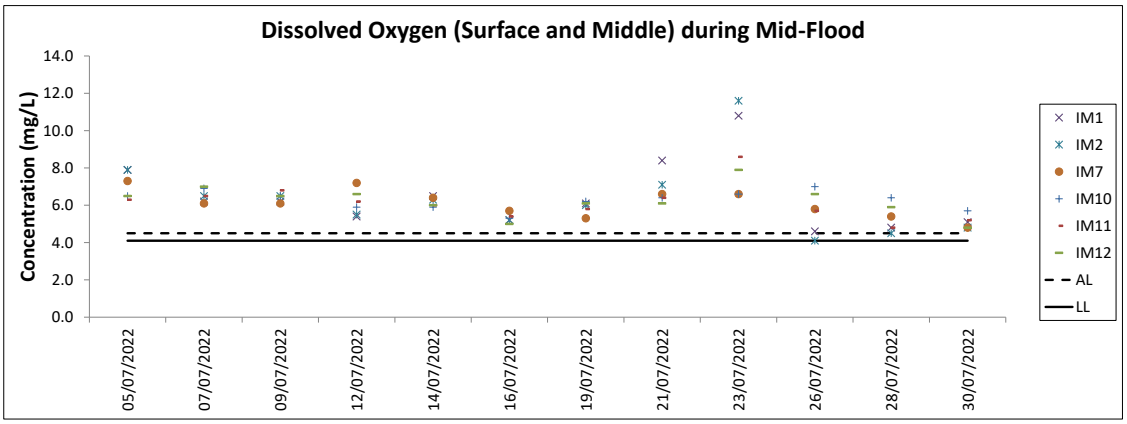
30/07/2022
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
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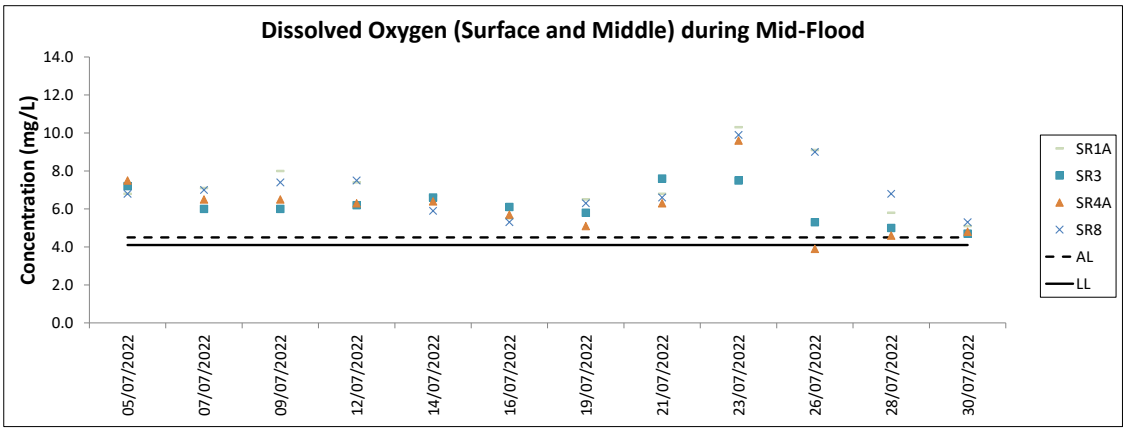
IM1
IM2
IM7
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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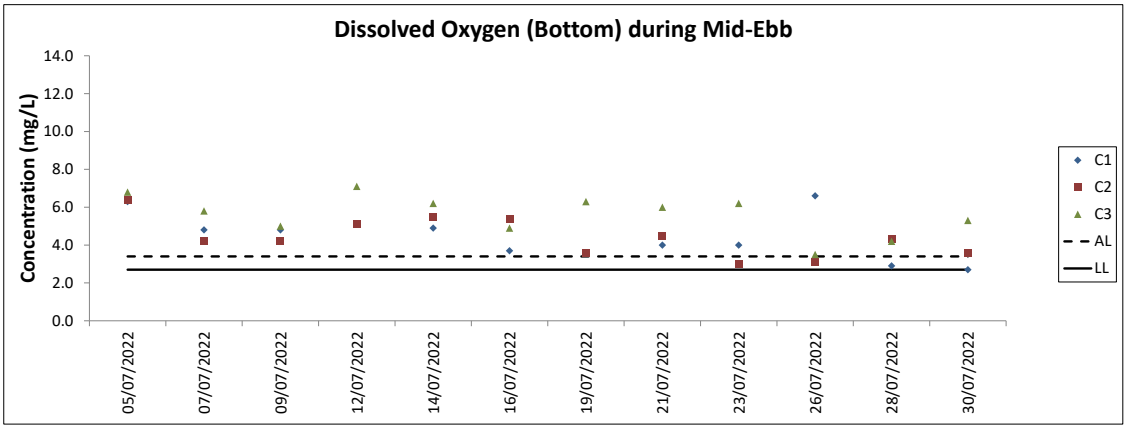
30/07/2022
SR1A
SR3
SR4A
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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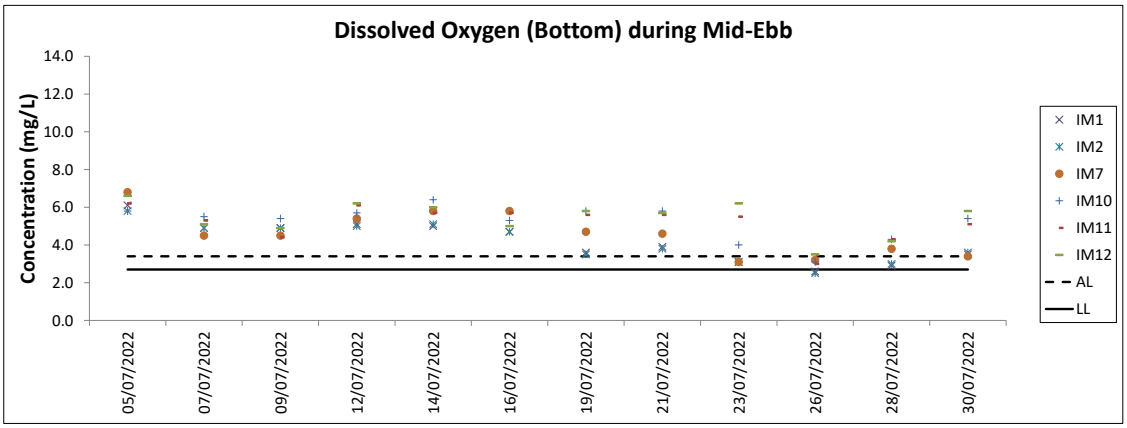
30/07/2022
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
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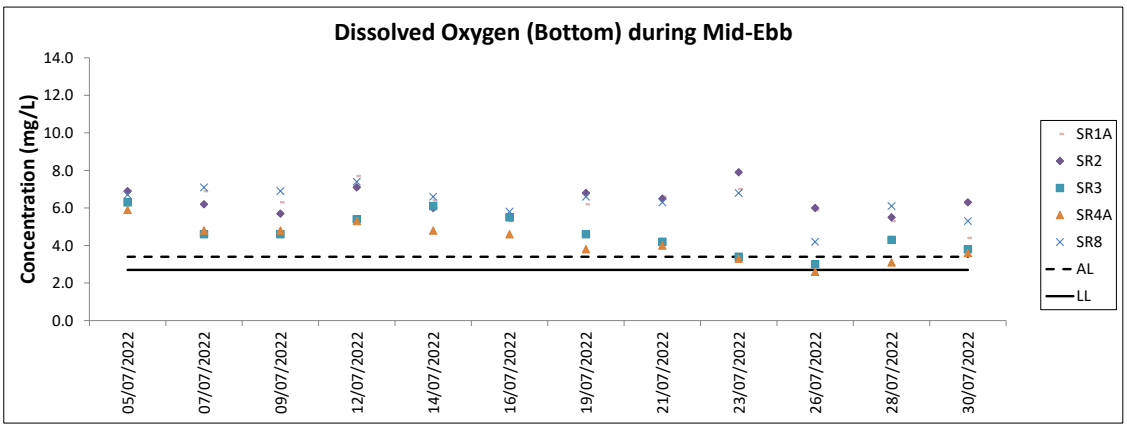
IM1
IM2
IM7
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
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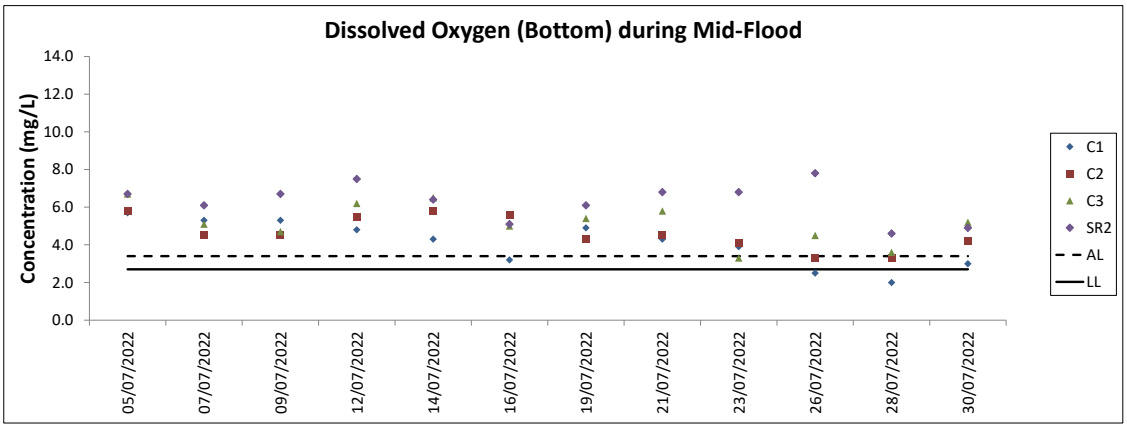
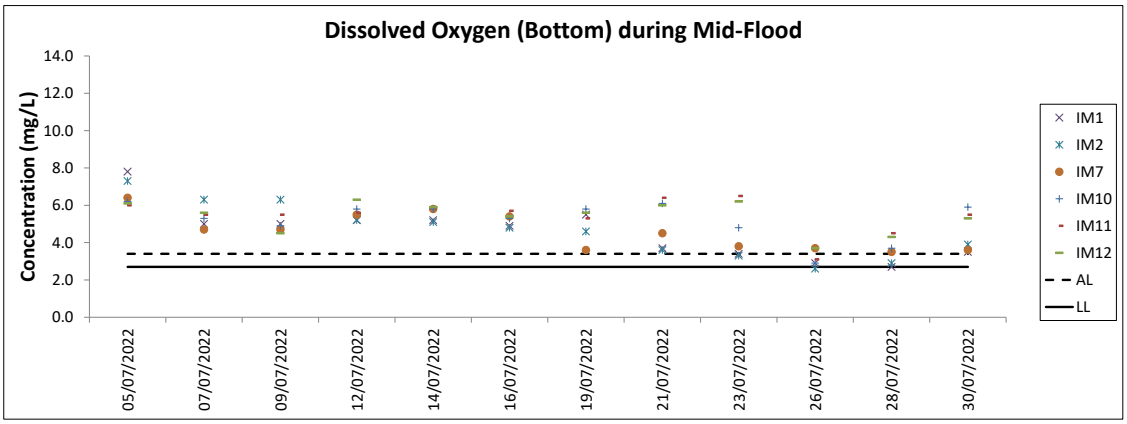
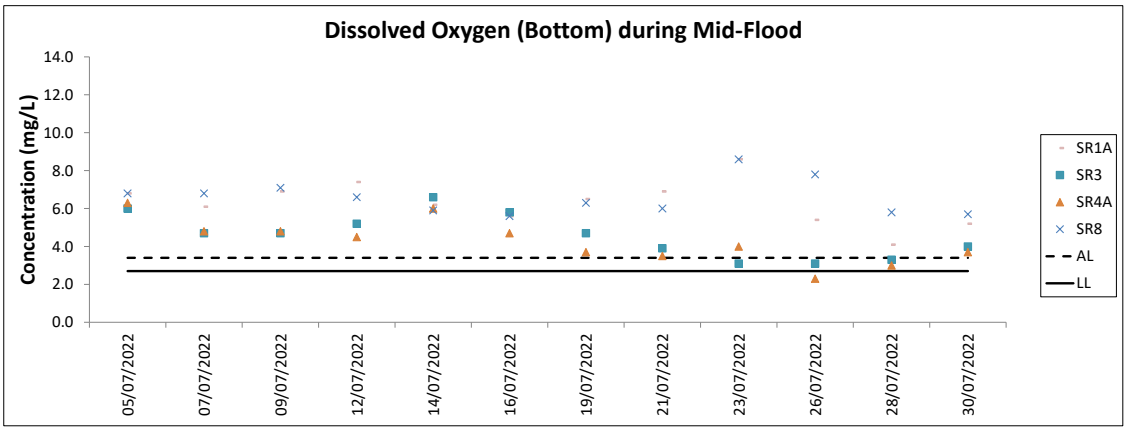
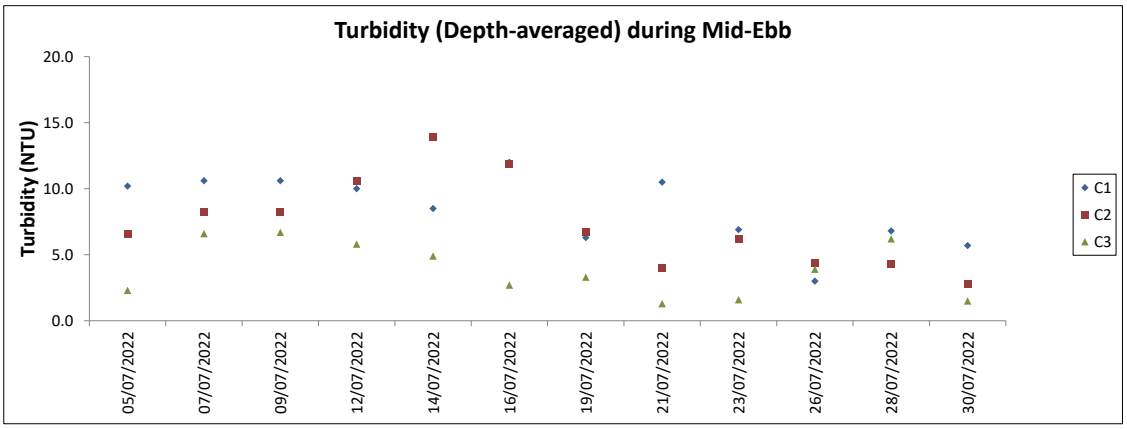
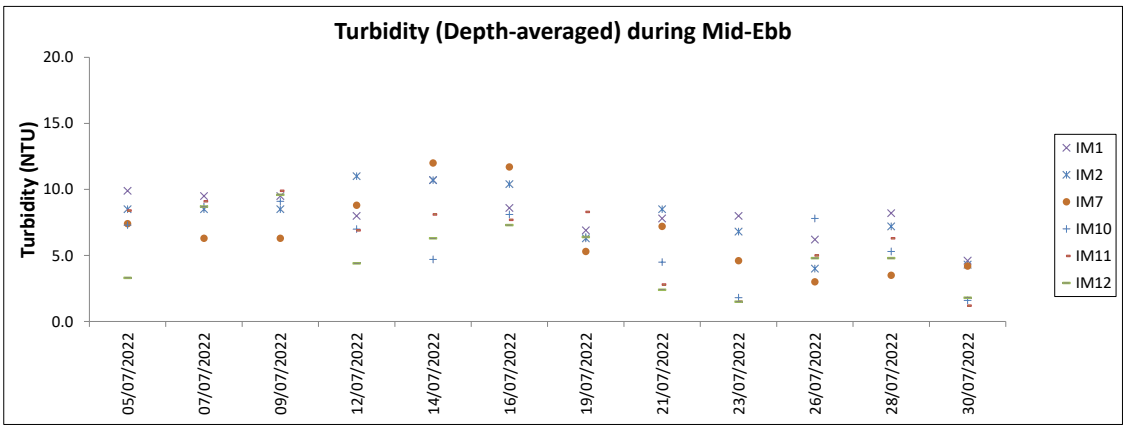
SR1A
SR2
SR3
SR4A
SR8
AL
LL

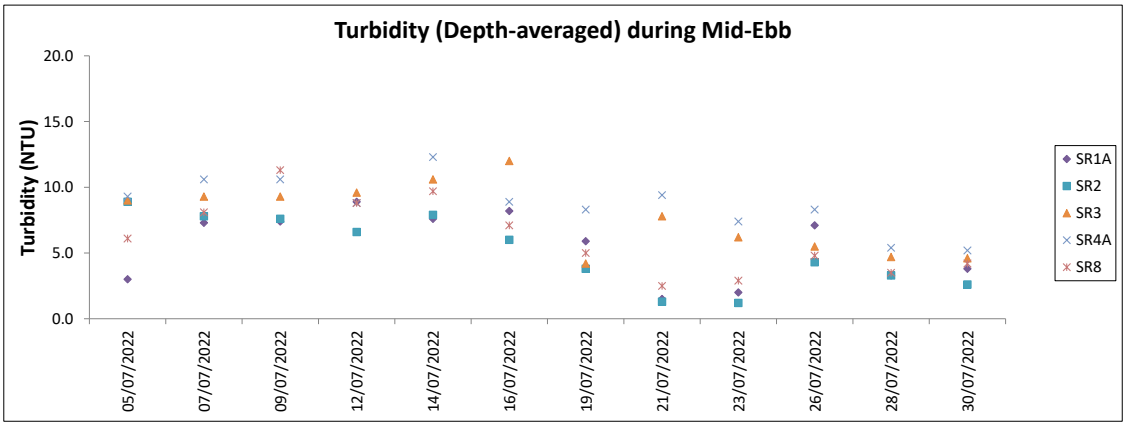

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
26/07/2022
28/07/2022
30/07/2022
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
26/07/2022
28/07/2022
30/07/2022
IM1
IM2
IM7
IM10
IM11
IM12
AL
LL

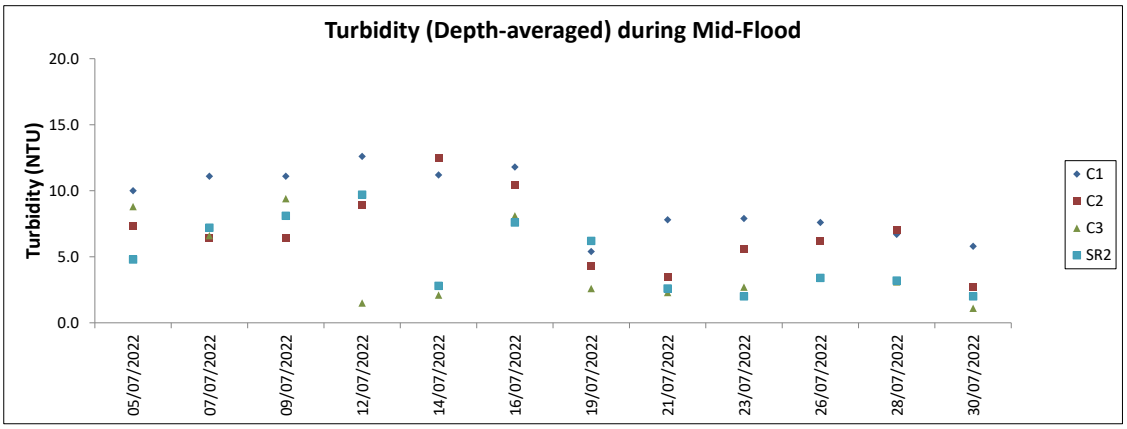

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
05/07/2022
07/07/2022
09/07/2022
12/07/2022
14/07/2022
16/07/2022
19/07/2022
21/07/2022
23/07/2022
26/07/2022
28/07/2022
30/07/2022
SR1A
SR3
SR4A
SR8
AL
LL

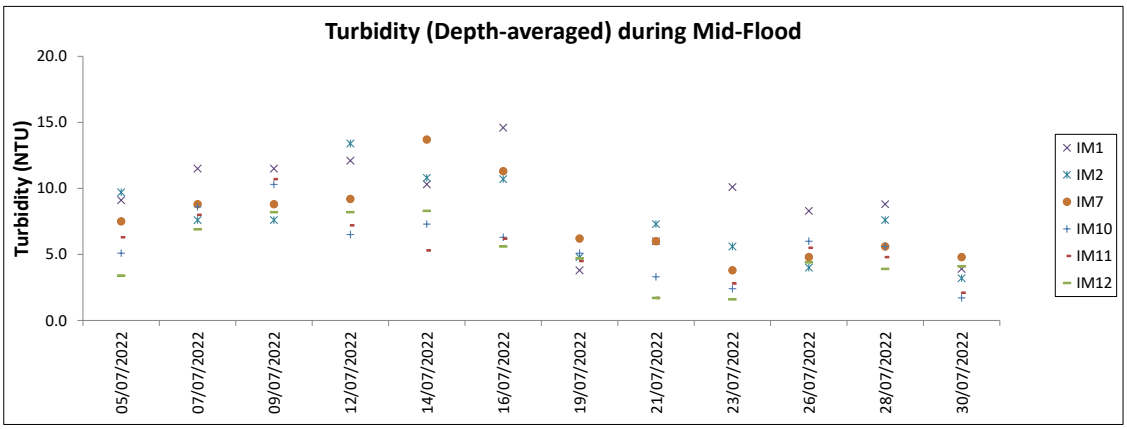


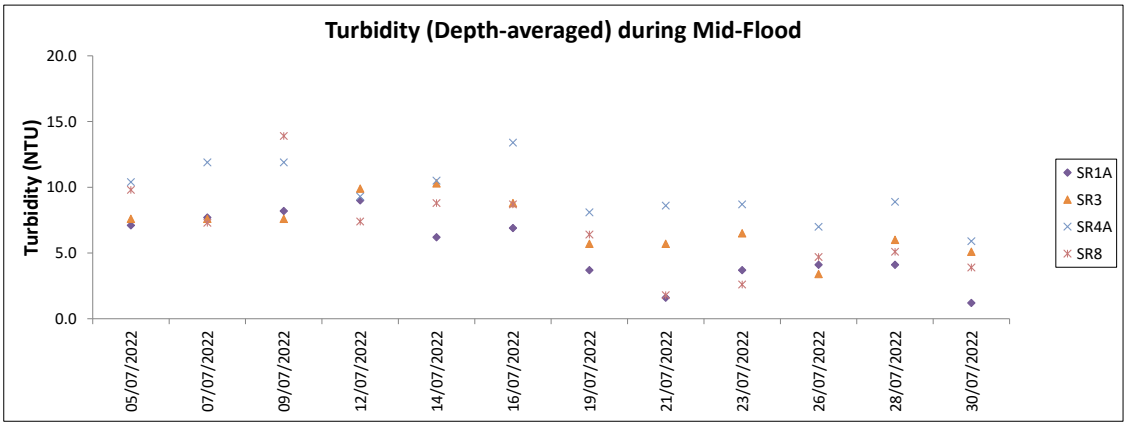




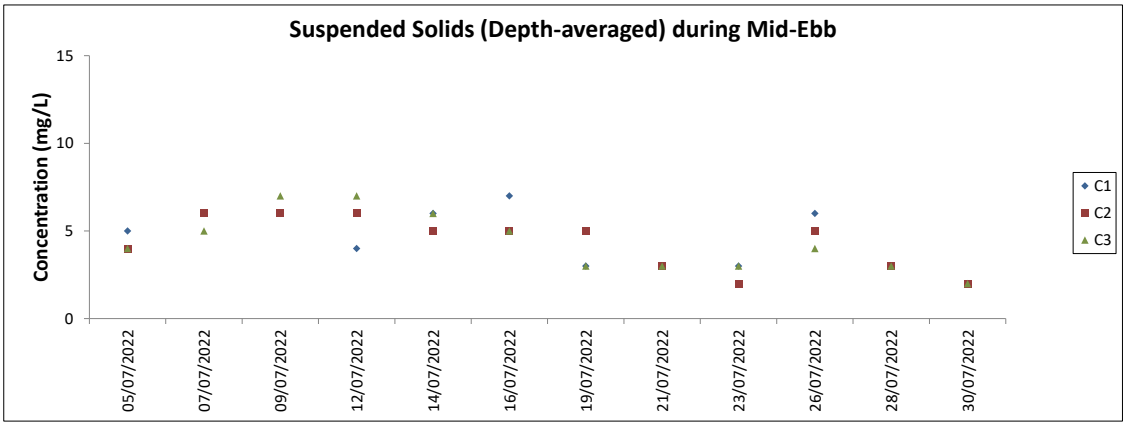
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

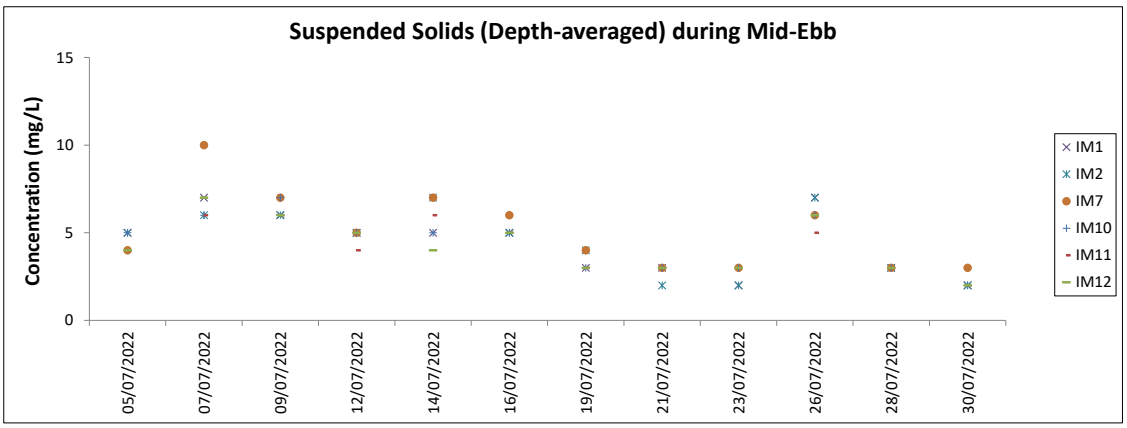


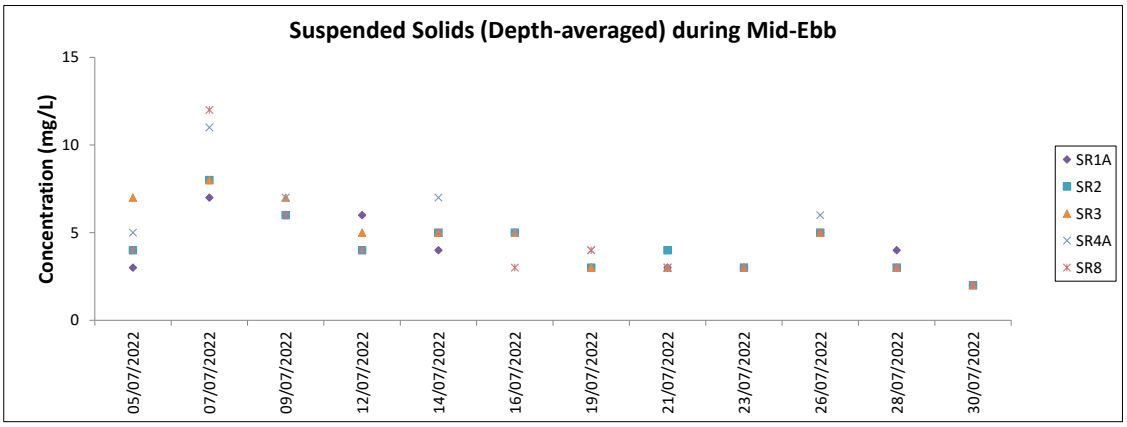




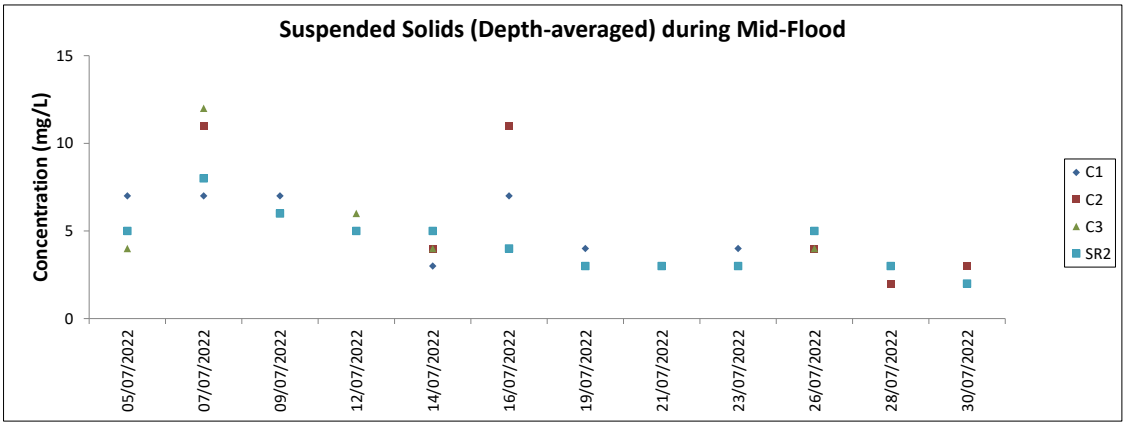
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

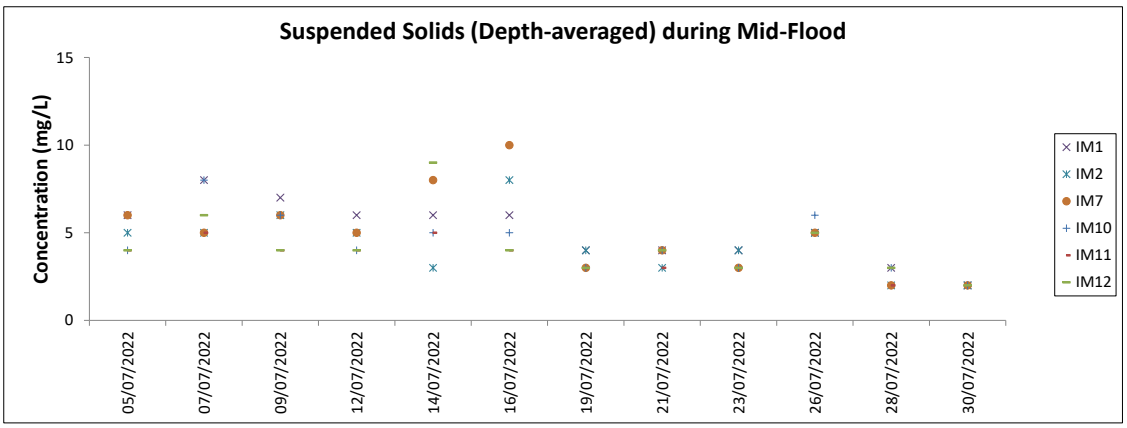


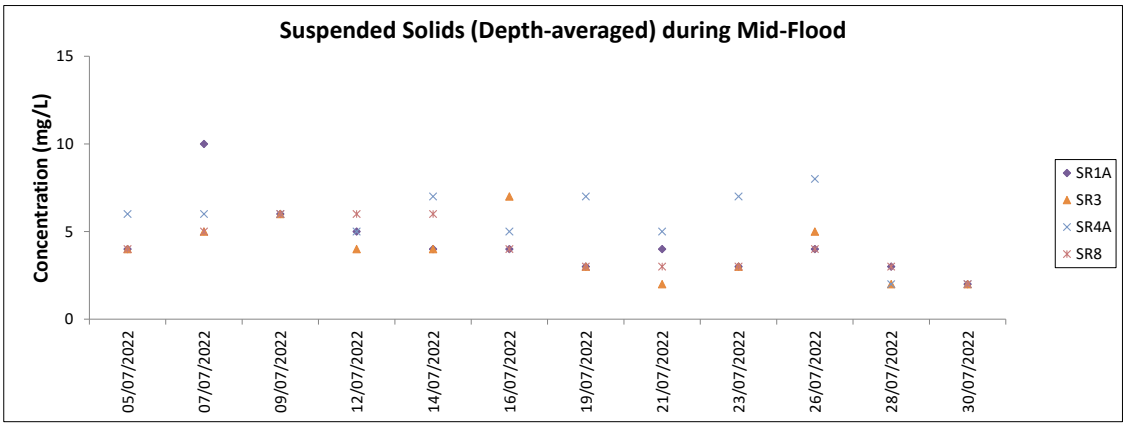




Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.







Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
05-May-22	AW	2	2.920	SPRING	32166	3RS ET	P
05-May-22	AW	3	2.000	SPRING	32166	3RS ET	P
05-May-22	WL	2	5.195	SPRING	32166	3RS ET	P
05-May-22	WL	3	9.037	SPRING	32166	3RS ET	P
05-May-22	WL	4	2.510	SPRING	32166	3RS ET	P
05-May-22	WL	2	3.705	SPRING	32166	3RS ET	S
05-May-22	WL	3	4.821	SPRING	32166	3RS ET	S
05-May-22	WL	4	0.950	SPRING	32166	3RS ET	S
06-May-22	AW	2	2.930	SPRING	32166	3RS ET	P
06-May-22	AW	3	1.880	SPRING	32166	3RS ET	P
06-May-22	WL	2	6.666	SPRING	32166	3RS ET	P
06-May-22	WL	3	6.387	SPRING	32166	3RS ET	P
06-May-22	WL	2	3.577	SPRING	32166	3RS ET	S
06-May-22	WL	3	1.092	SPRING	32166	3RS ET	S
06-May-22	WL	4	1.192	SPRING	32166	3RS ET	S
10-May-22	NWL	2	12.600	SPRING	32166	3RS ET	P
10-May-22	NWL	3	48.400	SPRING	32166	3RS ET	P
10-May-22	NWL	4	2.200	SPRING	32166	3RS ET	P
10-May-22	NWL	2	3.100	SPRING	32166	3RS ET	S
10-May-22	NWL	3	9.200	SPRING	32166	3RS ET	S
11-May-22	NWL	3	48.600	SPRING	32166	3RS ET	P
11-May-22	NWL	4	15.800	SPRING	32166	3RS ET	P
11-May-22	NWL	3	10.300	SPRING	32166	3RS ET	S
11-May-22	NWL	4	1.000	SPRING	32166	3RS ET	S
16-May-22	NEL	2	28.540	SPRING	32166	3RS ET	P
16-May-22	NEL	3	9.600	SPRING	32166	3RS ET	P
16-May-22	NEL	2	10.460	SPRING	32166	3RS ET	S
17-May-22	NEL	2	31.980	SPRING	32166	3RS ET	P
17-May-22	NEL	3	4.880	SPRING	32166	3RS ET	P
17-May-22	NEL	2	10.340	SPRING	32166	3RS ET	S
27-May-22	SWL	2	21.030	SPRING	32166	3RS ET	P
27-May-22	SWL	3	32.180	SPRING	32166	3RS ET	P
27-May-22	SWL	2	3.980	SPRING	32166	3RS ET	S
27-May-22	SWL	3	12.230	SPRING	32166	3RS ET	S
30-May-22	SWL	2	37.268	SPRING	32166	3RS ET	P
30-May-22	SWL	3	13.317	SPRING	32166	3RS ET	P
30-May-22	SWL	2	10.802	SPRING	32166	3RS ET	S
30-May-22	SWL	3	4.900	SPRING	32166	3RS ET	S
08-Jun-22	NEL	2	33.490	SUMMER	32166	3RS ET	P
08-Jun-22	NEL	3	4.100	SUMMER	32166	3RS ET	P
08-Jun-22	NEL	2	9.710	SUMMER	32166	3RS ET	S
10-Jun-22	NEL	2	8.150	SUMMER	32166	3RS ET	P
10-Jun-22	NEL	3	29.260	SUMMER	32166	3RS ET	P
10-Jun-22	NEL	2	2.100	SUMMER	32166	3RS ET	S
10-Jun-22	NEL	3	8.090	SUMMER	32166	3RS ET	S
13-Jun-22	NWL	3	44.400	SUMMER	32166	3RS ET	P
13-Jun-22	NWL	4	19.600	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Jun-22	NWL	3	8.700	SUMMER	32166	3RS ET	S
13-Jun-22	NWL	4	2.900	SUMMER	32166	3RS ET	S
16-Jun-22	NWL	2	5.000	SUMMER	32166	3RS ET	P
16-Jun-22	NWL	3	56.100	SUMMER	32166	3RS ET	P
16-Jun-22	NWL	4	2.200	SUMMER	32166	3RS ET	P
16-Jun-22	NWL	3	11.300	SUMMER	32166	3RS ET	S
16-Jun-22	NWL	4	1.200	SUMMER	32166	3RS ET	S
21-Jun-22	WL	2	2.300	SUMMER	32166	3RS ET	P
21-Jun-22	WL	3	18.350	SUMMER	32166	3RS ET	P
21-Jun-22	WL	3	10.750	SUMMER	32166	3RS ET	S
21-Jun-22	AW	3	2.840	SUMMER	32166	3RS ET	P
21-Jun-22	AW	4	2.030	SUMMER	32166	3RS ET	P
22-Jun-22	SWL	2	53.159	SUMMER	32166	3RS ET	P
22-Jun-22	SWL	2	14.980	SUMMER	32166	3RS ET	S
23-Jun-22	SWL	2	44.900	SUMMER	32166	3RS ET	P
23-Jun-22	SWL	3	1.800	SUMMER	32166	3RS ET	P
23-Jun-22	SWL	2	11.271	SUMMER	32166	3RS ET	S
23-Jun-22	SWL	3	2.000	SUMMER	32166	3RS ET	S
24-Jun-22	AW	2	4.280	SUMMER	32166	3RS ET	P
24-Jun-22	WL	2	7.205	SUMMER	32166	3RS ET	P
24-Jun-22	WL	3	11.842	SUMMER	32166	3RS ET	P
24-Jun-22	WL	2	2.828	SUMMER	32166	3RS ET	S
24-Jun-22	WL	3	7.080	SUMMER	32166	3RS ET	S
24-Jun-22	SWL	3	3.901	SUMMER	32166	3RS ET	P
24-Jun-22	SWL	3	0.965	SUMMER	32166	3RS ET	S
06-Jul-22	NEL	2	30.220	SUMMER	32166	3RS ET	P
06-Jul-22	NEL	3	6.900	SUMMER	32166	3RS ET	P
06-Jul-22	NEL	2	7.080	SUMMER	32166	3RS ET	S
06-Jul-22	NEL	3	3.200	SUMMER	32166	3RS ET	S
08-Jul-22	AW	2	4.940	SUMMER	32166	3RS ET	P
08-Jul-22	WL	2	8.670	SUMMER	32166	3RS ET	P
08-Jul-22	WL	3	9.126	SUMMER	32166	3RS ET	P
08-Jul-22	WL	4	1.270	SUMMER	32166	3RS ET	P
08-Jul-22	WL	2	3.690	SUMMER	32166	3RS ET	S
08-Jul-22	WL	3	3.935	SUMMER	32166	3RS ET	S
08-Jul-22	WL	4	2.300	SUMMER	32166	3RS ET	S
11-Jul-22	AW	2	5.010	SUMMER	32166	3RS ET	P
11-Jul-22	WL	2	11.940	SUMMER	32166	3RS ET	P
11-Jul-22	WL	3	5.332	SUMMER	32166	3RS ET	P
11-Jul-22	WL	2	5.710	SUMMER	32166	3RS ET	S
11-Jul-22	WL	3	4.068	SUMMER	32166	3RS ET	S
12-Jul-22	SWL	2	21.251	SUMMER	32166	3RS ET	P
12-Jul-22	SWL	3	22.070	SUMMER	32166	3RS ET	P
12-Jul-22	SWL	2	7.492	SUMMER	32166	3RS ET	S
12-Jul-22	SWL	3	5.587	SUMMER	32166	3RS ET	S
12-Jul-22	SWL	4	1.240	SUMMER	32166	3RS ET	S
13-Jul-22	SWL	2	41.213	SUMMER	32166	3RS ET	P
13-Jul-22	SWL	3	6.400	SUMMER	32166	3RS ET	P
13-Jul-22	SWL	2	13.895	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Jul-22	SWL	3	1.700	SUMMER	32166	3RS ET	S
15-Jul-22	NWL	2	51.300	SUMMER	32166	3RS ET	P
15-Jul-22	NWL	3	13.500	SUMMER	32166	3RS ET	P
15-Jul-22	NWL	2	9.600	SUMMER	32166	3RS ET	S
15-Jul-22	NWL	3	2.000	SUMMER	32166	3RS ET	S
19-Jul-22	NWL	2	34.900	SUMMER	32166	3RS ET	P
19-Jul-22	NWL	3	29.500	SUMMER	32166	3RS ET	P
19-Jul-22	NWL	2	5.700	SUMMER	32166	3RS ET	S
19-Jul-22	NWL	3	5.700	SUMMER	32166	3RS ET	S
25-Jul-22	NEL	2	32.950	SUMMER	32166	3RS ET	P
25-Jul-22	NEL	3	4.480	SUMMER	32166	3RS ET	P
25-Jul-22	NEL	2	8.410	SUMMER	32166	3RS ET	S
25-Jul-22	NEL	3	0.960	SUMMER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
05-May-22	1	1014	CWD	6	WL	3	800	ON	3RS ET	22.2777	113.8513	SPRING	PURSE SEINER	S
05-May-22	2	1039	CWD	2	WL	2	91	ON	3RS ET	22.2613	113.8501	SPRING	NONE	P
05-May-22	3	1059	CWD	2	WL	2	165	ON	3RS ET	22.2579	113.8374	SPRING	NONE	S
05-May-22	4	1104	CWD	1	WL	3	192	ON	3RS ET	22.2549	113.8353	SPRING	NONE	S
05-May-22	5	1143	CWD	6	WL	3	192	ON	3RS ET	22.2241	113.8335	SPRING	PURSE SEINER	P
05-May-22	6	1201	CWD	1	WL	3	283	ON	3RS ET	22.2238	113.8234	SPRING	NONE	P
05-May-22	7	1222	CWD	1	WL	3	135	ON	3RS ET	22.2148	113.8345	SPRING	NONE	P
06-May-22	1	1036	CWD	2	WL	2	169	ON	3RS ET	22.2631	113.8562	SPRING	NONE	S
06-May-22	2	1043	CWD	1	WL	2	717	ON	3RS ET	22.2606	113.8529	SPRING	NONE	P
06-May-22	3	1102	CWD	8	WL	2	394	ON	3RS ET	22.2418	113.8436	SPRING	NONE	P
06-May-22	4	1139	CWD	2	WL	2	1	ON	3RS ET	22.2269	113.8376	SPRING	NONE	S
06-May-22	5	1149	CWD	5	WL	2	95	ON	3RS ET	22.2236	113.8340	SPRING	NONE	P
06-May-22	6	1201	CWD	1	WL	3	335	ON	3RS ET	22.2175	113.8195	SPRING	NONE	S
06-May-22	7	1214	CWD	5	WL	3	221	ON	3RS ET	22.2145	113.8246	SPRING	NONE	P
06-May-22	8	1231	CWD	2	WL	3	132	ON	3RS ET	22.2058	113.8358	SPRING	NONE	P
06-May-22	9	1245	CWD	6	WL	3	32	ON	3RS ET	22.1964	113.8374	SPRING	NONE	P
27-May-22	1	1101	FP	1	SWL	3	52	ON	3RS ET	22.1438	113.9277	SPRING	NONE	S
27-May-22	2	1416	CWD	12	SWL	3	582	ON	3RS ET	22.1595	113.8736	SPRING	NONE	S
30-May-22	1	1053	FP	2	SWL	2	100	ON	3RS ET	22.1613	113.9363	SPRING	NONE	P
30-May-22	2	1403	CWD	2	SWL	2	817	ON	3RS ET	22.1782	113.8783	SPRING	NONE	P
30-May-22	3	1512	CWD	1	SWL	3	779	ON	3RS ET	22.1781	113.8497	SPRING	NONE	P
30-May-22	4	1534	CWD	10	SWL	3	145	ON	3RS ET	22.1869	113.8496	SPRING	PURSE SEINER	P
13-Jun-22	1	1214	CWD	3	NWL	3	105	ON	3RS ET	22.3813	113.8885	SUMMER	NONE	P
22-Jun-22	1	1037	FP	3	SWL	2	59	ON	3RS ET	22.1877	113.9363	SUMMER	NONE	P
22-Jun-22	2	1040	FP	11	SWL	2	130	ON	3RS ET	22.1821	113.9364	SUMMER	NONE	P
22-Jun-22	3	1044	FP	2	SWL	2	79	ON	3RS ET	22.1776	113.9364	SUMMER	NONE	P
22-Jun-22	4	1058	FP	3	SWL	2	238	ON	3RS ET	22.1418	113.9330	SUMMER	NONE	S
22-Jun-22	5	1124	FP	2	SWL	2	272	ON	3RS ET	22.1928	113.9273	SUMMER	NONE	P
22-Jun-22	6	1151	FP	4	SWL	2	126	ON	3RS ET	22.1717	113.9189	SUMMER	NONE	S
22-Jun-22	7	1246	CWD	2	SWL	2	573	ON	3RS ET	22.2123	113.8992	SUMMER	NONE	S
22-Jun-22	8	1446	CWD	2	SWL	2	890	ON	3RS ET	22.1927	113.8685	SUMMER	NONE	P
22-Jun-22	9	1508	CWD	1	SWL	2	119	ON	3RS ET	22.1967	113.8588	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
23-Jun-22	1	1124	CWD	1	SWL	2	61	ON	3RS ET	22.2000	113.9276	SUMMER	NONE	P
23-Jun-22	2	1140	CWD	5	SWL	2	80	ON	3RS ET	22.2055	113.9218	SUMMER	NONE	S
23-Jun-22	3	1437	CWD	1	SWL	2	291	ON	3RS ET	22.1739	113.8783	SUMMER	NONE	P
23-Jun-22	4	1457	CWD	1	SWL	2	1334	ON	3RS ET	22.1603	113.8698	SUMMER	NONE	S
23-Jun-22	5	1525	CWD	18	SWL	2	253	ON	3RS ET	22.1991	113.8607	SUMMER	NONE	S
24-Jun-22	1	1140	CWD	1	WL	2	124	ON	3RS ET	22.2142	113.8296	SUMMER	NONE	P
24-Jun-22	2	1151	CWD	2	WL	2	100	ON	3RS ET	22.2141	113.8335	SUMMER	NONE	P
24-Jun-22	3	1223	CWD	2	WL	3	495	ON	3RS ET	22.1986	113.8268	SUMMER	NONE	S
24-Jun-22	4	1237	CWD	11	WL	3	114	ON	3RS ET	22.1962	113.8295	SUMMER	NONE	P
24-Jun-22	5	1316	CWD	7	SWL	3	64	ON	3RS ET	22.1935	113.8498	SUMMER	NONE	P
24-Jun-22	6	1341	CWD	2	SWL	3	61	ON	3RS ET	22.1743	113.8499	SUMMER	NONE	P
24-Jun-22	7	1358	CWD	9	SWL	3	526	ON	3RS ET	22.1862	113.8586	SUMMER	NONE	P
08-Jul-22	1	1100	CWD	1	WL	2	301	ON	3RS ET	22.2417	113.8435	SUMMER	NONE	P
08-Jul-22	2	1148	CWD	7	WL	3	46	ON	3RS ET	22.2152	113.8332	SUMMER	NONE	P
08-Jul-22	3	1209	CWD	3	WL	3	187	ON	3RS ET	22.2104	113.8392	SUMMER	NONE	S
08-Jul-22	4	1242	CWD	13	WL	3	747	ON	3RS ET	22.1956	113.8317	SUMMER	NONE	P
11-Jul-22	1	1037	CWD	5	WL	2	1040	ON	3RS ET	22.2603	113.8451	SUMMER	NONE	P
11-Jul-22	2	1135	CWD	6	WL	3	198	ON	3RS ET	22.2147	113.8204	SUMMER	NONE	S
11-Jul-22	3	1225	CWD	1	WL	3	48	ON	3RS ET	22.1964	113.8289	SUMMER	NONE	S
11-Jul-22	4	1258	CWD	5	WL	3	69	ON	3RS ET	22.1868	113.8383	SUMMER	NONE	P
12-Jul-22	1	1019	CWD	1	SWL	2	78	ON	3RS ET	22.2218	113.9360	SUMMER	PURSE SEINER	P
12-Jul-22	2	1034	CWD	4	SWL	2	2058	ON	3RS ET	22.2081	113.9362	SUMMER	PURSE SEINER	P
12-Jul-22	3	1157	CWD	5	SWL	2	155	ON	3RS ET	22.1945	113.9275	SUMMER	NONE	P
12-Jul-22	4	1220	CWD	3	SWL	2	161	ON	3RS ET	22.2054	113.9230	SUMMER	NONE	S
12-Jul-22	5	1241	CWD	1	SWL	2	N/A	OFF	3RS ET	22.2019	113.9177	SUMMER	NONE	P
12-Jul-22	6	1245	CWD	1	SWL	2	188	ON	3RS ET	22.1950	113.9180	SUMMER	NONE	P
12-Jul-22	7	1345	CWD	1	SWL	2	162	ON	3RS ET	22.1780	113.9049	SUMMER	NONE	S
12-Jul-22	8	1354	CWD	3	SWL	3	1211	ON	3RS ET	22.1789	113.9044	SUMMER	NONE	S
12-Jul-22	9	1425	CWD	1	SWL	2	131	ON	3RS ET	22.1976	113.8969	SUMMER	NONE	P
12-Jul-22	10	1440	CWD	1	SWL	2	48	ON	3RS ET	22.1891	113.8969	SUMMER	NONE	P
12-Jul-22	11	1518	CWD	1	SWL	3	173	ON	3RS ET	22.1612	113.8877	SUMMER	NONE	P
12-Jul-22	12	1537	CWD	3	SWL	3	136	ON	3RS ET	22.1871	113.8872	SUMMER	NONE	P
12-Jul-22	13	1604	CWD	2	SWL	2	809	ON	3RS ET	22.2025	113.8780	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
12-Jul-22	14	1626	CWD	1	SWL	2	255	ON	3RS ET	22.1867	113.8786	SUMMER	NONE	P
12-Jul-22	15	1650	CWD	1	SWL	3	193	ON	3RS ET	22.1642	113.8686	SUMMER	NONE	P
12-Jul-22	16	1705	CWD	1	SWL	3	29	ON	3RS ET	22.1702	113.8686	SUMMER	NONE	P
13-Jul-22	1	1037	FP	3	SWL	2	308	ON	3RS ET	22.1938	113.9367	SUMMER	NONE	P
13-Jul-22	2	1113	FP	4	SWL	2	93	ON	3RS ET	22.1658	113.9276	SUMMER	NONE	P
13-Jul-22	3	1231	CWD	1	SWL	2	141	ON	3RS ET	22.1811	113.9037	SUMMER	NONE	S
13-Jul-22	4	1254	CWD	5	SWL	2	216	ON	3RS ET	22.1973	113.9083	SUMMER	PURSE SEINER	P
13-Jul-22	5	1332	CWD	1	SWL	2	173	ON	3RS ET	22.1813	113.8982	SUMMER	NONE	P
13-Jul-22	6	1350	CWD	4	SWL	2	402	ON	3RS ET	22.1746	113.8972	SUMMER	NONE	P
13-Jul-22	7	1445	CWD	2	SWL	2	161	ON	3RS ET	22.1859	113.8879	SUMMER	NONE	P
13-Jul-22	8	1547	CWD	2	SWL	2	52	ON	3RS ET	22.1617	113.8699	SUMMER	NONE	S
13-Jul-22	9	1610	CWD	1	SWL	2	277	ON	3RS ET	22.1933	113.8677	SUMMER	NONE	P
13-Jul-22	10	1651	CWD	1	SWL	2	89	ON	3RS ET	22.1874	113.8492	SUMMER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

Sighting data of finless porpoise (FP) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report. All FP sightings are excluded in calculation.

Calculation of the encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 428.429 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 31 on-effort sightings and total number of 87 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in July 2022 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in July 2022

$$STG = \frac{31}{428.429} \times 100 = 7.24$$

Encounter Rate by Number of Dolphins (ANI) in July 2022

$$ANI = \frac{87}{428.429} \times 100 = 20.31$$

Calculation of the running quarterly STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 1263.197 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 67 on-effort sightings and total number of 231 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{67}{1263.197} \times 100 = 5.30$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{231}{1263.197} \times 100 = 18.29$$

CWD Small Vessel Line-transect Survey **Photo Identification**

	
WLMM177_20220708_1_4	WLMM038_20220708_2_6
	
WLMM052_20220708_2_7	WLMM083_20220708_2_1
	
WLMM176_20220708_2_4_Lower	WLMM178_20220708_2_2
	
WLMM083_20220708_3_2	SLMM074_20220708_4_8

	
WLMM018_20220708_4_1	WLMM003_20220711_1_2
	
WLMM019_20220711_1_2	NLMM058_20220711_2_1
	
SLMM027_20220711_2_1	WLMM081_20220711_2_3
	
WLMM179_20220711_4_1	WLMM180_20220711_4_4

	
WLMM131_20220712_1_12	SLMM002_20220712_2_5
	
SLMM014_20220712_2_1	SLMM037_20220712_2_3
	
NLMM085_20220712_3_1	SLMM002_20220712_4_2
	
WLMM131_20220712_4_6	NLMM085_20220712_6_7

	
SLMM014_20220712_7_4	SLMM029_20220712_8_3
	
SLMM060_20220712_9_1	WLMM047_20220712_10_1
	
WLMM049_20220712_13_1	WLMM076_20220712_13_1
	
NLMM061_20220712_15_3	SLMM014_20220713_3_1

	
SLMM002_20220713_4_1	SLMM050_20220713_4_1
	
NLMM063_20220713_6_2	WLMM003_20220713_7_1
	
WLMM049_20220713_10_4	

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
18-Jul-22	Lung Kwu Chau	8:55	14:55	6:00	2-3	2	0	NA
19-Jul-22	Sha Chau	10:40	16:40	6:00	3	2	0	NA

Visibility: 1=Excellent, 2=Good, 3=Fair, 4=Poor

Appendix D. Calibration Certificates

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C223335
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-1114) Date of Receipt / 收件日期 : 9 June 2022

Description / 儀器名稱 : Acoustic Calibrator
Manufacturer / 製造商 : Casella
Model No. / 型號 : CEL-120/1
Serial No. / 編號 : 2383737
Supplied By / 委託者 : Mott MacDonald Hong Kong Limited
3/F., Manulife Place, 348 Kwun Tong Road, Kwun Tong,
Kowloon, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 18 June 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong
Assistant Engineer

Certified By 核證 : K C Lee
Engineer

Date of Issue 簽發日期 : 20 June 2022

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
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輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C223335
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C213954
CL281	Multifunction Acoustic Calibrator	AV210017
TST150A	Measuring Amplifier	C221750

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.0	± 0.25	± 0.2
114 dB, 1 kHz	114.1		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 5 Hz	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
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專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070113
Date of Issue : 28 July 2022

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment :	YSI ProDSS (Multi-Parameters)
Manufacturer :	YSI (a xylem brand)
Serial Number :	15M10005
Date of Received :	28 July 2022
Date of Calibration :	28 July 2022
Date of Next Calibration :	27 October 2022
Request No. :	D-BB070113

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H+
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130B
Conductivity	APHA 21e 2510B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.08	0.08	Satisfactory
7.42	7.53	0.11	Satisfactory
10.01	10.14	0.13	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
15.0	14.9	-0.1	Satisfactory
25.0	25.1	0.1	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.90	-1.00	Satisfactory
20	20.49	2.45	Satisfactory
30	30.77	2.57	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070113
Date of Issue : 28 July 2022

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.36	7.56	0.20	Satisfactory
5.52	5.70	0.18	Satisfactory
2.82	3.00	0.18	Satisfactory
0.11	0.30	0.19	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.05	--	Satisfactory
10	9.82	-1.80	Satisfactory
20	19.17	-4.10	Satisfactory
100	97.92	-2.10	Satisfactory
800	812.44	1.60	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

Expected Reading (µS/cm at 25°C)	Display Reading (µS/cm at 25°C)	Tolerance (%)	Result
146.9	150.6	2.52	Satisfactory
1412	1291	-8.57	Satisfactory
12890	12806	-0.65	Satisfactory
58670	59168	0.85	Satisfactory
111900	114106	1.97	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

·The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

·The results relate only to the calibrated equipment as received

·The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

·"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---

專業化驗有限公司
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070112
Date of Issue : 28 July 2022

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment :	YSI ProDSS (Multi-Parameters)
Manufacturer :	YSI (a xylem brand)
Serial Number :	21G105356
Date of Received :	28 July 2022
Date of Calibration :	28 July 2022
Date of Next Calibration :	27 October 2022
Request No. :	D-BB070112

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H+
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130B
Conductivity	APHA 21e 2510B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.06	0.06	Satisfactory
7.42	7.51	0.09	Satisfactory
10.01	10.09	0.08	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
15.0	14.9	-0.1	Satisfactory
25.0	25.1	0.1	Satisfactory
40.0	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.92	-0.80	Satisfactory
20	20.38	1.90	Satisfactory
30	30.61	2.03	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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AUTHORIZED SIGNATORY:

LEE Chun-ning
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB070112
Date of Issue : 28 July 2022

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.36	7.56	0.20	Satisfactory
5.52	5.63	0.11	Satisfactory
2.82	3.00	0.18	Satisfactory
0.11	0.30	0.19	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.05	--	Satisfactory
10	9.83	-1.70	Satisfactory
20	19.04	-4.80	Satisfactory
100	97.83	-2.20	Satisfactory
800	817.37	2.20	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

Expected Reading (µS/cm at 25°C)	Display Reading (µS/cm at 25°C)	Tolerance (%)	Result
146.9	151.1	2.86	Satisfactory
1412	1283	-9.14	Satisfactory
12890	12734	-1.21	Satisfactory
58670	59111	0.75	Satisfactory
111900	113325	1.27	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

·The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.

·The results relate only to the calibrated equipment as received

·The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

·"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.

·The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

--- END OF REPORT ---

Appendix E. Status of Environmental Permits and Licenses

	Description	Permit/ Reference No.	Status
EIAO	Environmental Permit	EP-489/2014	Approved on 7 Nov 2014

Contract No.	Description	Location	Permit/ Reference No.	Status
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0190-22	Valid from 28 Mar 2022 to 27 Sep 2022
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3302	Notification of Construction Work under APCO	Works area of 3302	479483	Receipt acknowledged by EPD on 6 May 2022
		Staging area of 3302	479482	Receipt acknowledged by EPD on 6 May 2022
			479479	Receipt acknowledged by EPD on 6 May 2022
			479481	Receipt acknowledged by EPD on 6 May 2022
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Works area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0242-22	Valid from 20 Apr 2022 to 19 Oct 2022
			GW-RS0427-22	Valid from 3 Jun 2022 to 2 Nov 2022
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019 * Pending for contractor's update in this reporting month
	Specified Process license under APCO	Works area of 3303	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
		Works area of 3303	WT00036734-2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0291-22	Valid from 16 May 2022 to 14 Nov 2022
		Works area of 3303 (Reclamation area)	GW-RS0066-22	Superseded by GW-RS0518-22
			GW-RS0518-22	Valid from 6 July 2022 to 5 Jan 2023
3305	Notification of Construction Work under APCO	Works area of 3305	460857	Receipt acknowledged by EPD on 12 Oct 2020
	Registration as Chemical Waste Producer	Works area of 3305	5213-951-A3024-01	Completion of Registration on 13 Nov 2020
	Bill Account for disposal	Works area of 3305	A/C 7035360	Approval granted from EPD on 9 Oct 2019
3306	Registration as Chemical Waste Producer	Works area of 3306	8335-951-C4434-01	Completion of Registration on 1 Apr 2020
	Bill Account for disposal	Works area of 3306	A/C 7035868	Approval granted from EPD on 27 Nov 2019
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0052-22	Valid from 6 Feb 2022 to 5 Aug 2022
3308	Bill Account for disposal	Works area of 3308	A/C 7038988	Approval granted from EPD on 24 Nov 2020
	Construction Noise Permit (General Works)	Works area of 3308	GW-RS0109-22	Valid from 1 Mar 2022 to 31 Jul 2022
3310	Notification of Construction Work under APCO	Works area of 3310	474782	Receipt acknowledged by EPD on 10 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3310	5213-951-C4682-01	Completion of Registration on 21 Dec 2021
	Discharge License under WPCO	Works area of 3310	WT00039654-2021	Valid from 31 Dec 2021 to 31 Dec 2026
	Bill Account for disposal	Works area of 3310	A/C 7042793	Approval granted from EPD on 4 Jan 2022
	Construction Noise Permit (General Works)	Works area of 3310 (Existing airport)	GW-RS0499-22	Superseded by GW-RS0612-22
			GW-RS0612-22	Valid from 29 Jul 2022 to 26 Jan 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3310 (Reclamation area)	GW-RS0367-22	Valid from 14 May 2022 to 11 Nov 2022
	Construction Noise Permit (Percussive Piling)	Works area of 3310 (Reclamation area)	PP-RS0006-22	Valid from 4 Apr 2022 to 30 Sep 2022
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
		Works area of 3403 (with Area 17 and Area 15)	475369	Receipt acknowledged by EPD on 28 Dec 2021
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0083-22	Valid from 1 Mar 2022 to 31 Aug 2022
3404	Bill Account for disposal	Works area of 3404	A/C 7035158	Approval granted from EPD on 12 Sep 2019
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Discharge License under WPCO	Works area of 3405	WT00037084-2020	Valid from 17 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit	Works area of 3405	GW-RS0241-22	Valid from 16 Apr 2022 to 11 Oct 2022
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
	Registration as Chemical Waste Producer	Works area of 3408	WPN 5218-951-B2621-01	Completion of Registration on 16 Jul 2021
	Discharge License under WPCO	Works area of 3408	WT00038836-2021	Valid from 27 Sep 2021 to 30 Sep 2026
	Bill Account for disposal	Works area of 3408	A/C 7039063	Approval granted from EPD on 2 Dec 2020
	Construction Noise Permit (General Works)	Works area of 3408	GW-RS0268-22	Valid from 16 Apr 2022 to 30 Sep 2022
3508	Notification of Construction	Works area of 3508	459017	Receipt acknowledged by EPD on 19 Aug 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Work under APCO		459469	Receipt acknowledged by EPD on 4 Sep 2020
		Works area of 3508 (Area J)	467132	Receipt acknowledged by EPD on 3 May 2021
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
	Discharge License under WPCO	Works area of 3508	WT00037209-2020	Valid from 11 Mar 2021 to 31 Mar 2026
			WT00037523-2021	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037225-2020	Valid from 1 Apr 2021 to 30 Apr 2026
			WT00037549-2021	Valid from 1 Apr 2021 to 30 Apr 2026
	Bill Account for disposal	Works area of 3508	7038224	Approval granted from EPD on 8 Sep 2020
	Construction Noise Permit (General Works)	Works area of 3508	GW-RS0233-22	Valid from 13 Apr 2022 to 12 Oct 2022 Superseded by GW-RS0525-22
		Works area of 3508	GW-RS0525-22	Valid from 8 Jul 2022 to 5 Jan 2023
		Works area of 3508	GW-RS0166-22	Valid from 18 Mar 2022 to 16 Sep 2022
		Works area of 3508	GW-RS0415-22	Valid from 29 May 2022 to 19 Nov 2022 Superseded by GW-RS0527-22
		Works area of 3508	GW-RS0527-22	Valid from 8 Jul 2022 to 1 Jan 2023
		Works area of 3508 (Special Case)	GW-RS0309-22	Valid from 16 May 2022 to 31 Jul 2022
		Works area of 3508 (Special Case)	GW-RS0486-22	Valid from 23 Jun 2022 to 5 Oct 2022
3601	Notification of Construction Work under APCO	Works area of 3601	451762	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 7029991	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3601	GW-RS0370-22	Valid from 1 Jun 2022 to 30 Nov 2022
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0126-22	Valid from 1 Mar 2022 to 31 Aug 2022
		Works area of 3602	GW-RS0172-22	Valid from 28 Mar 2022 to 27 Sep 2022
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Site office of 3603	5296-951-S4069-01	Completion of Registration on 22 Jan 2018
		Test Loop Site of 3603	8334-512-S4273-01	Completion of Registration on 17 Sep 2020
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0335-22	Valid from 24 May 2022 to 23 Nov 2022
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 7035234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0436-22	Valid from 10 Jun 2022 to 10 Nov 2022
3723	Notification of Construction Work under APCO	3723A	464440	Receipt acknowledged by EPD on 9 Feb 2021
		3723B	464444	Receipt acknowledged by EPD on 9 Feb 2021
	Registration as Chemical Waste Producer	3723A	WPN 5218-951-T3920-01	Completion of Registration on 9 Feb 2021
		3723B	WPN 5218-951-T3921-01	Completion of Registration on 9 Feb 2021
	Discharge License under WPCO	Works area of 3723A & 3723B	WT00039451-2021	Valid from 28 Oct 2021 to 31 Oct 2023
	Bill Account for disposal	Works area of 3723A	A/C 7039755	Approval granted from EPD on 24 Feb 2021
		Works area of 3723B	A/C 7039754	Approval granted from EPD on 24 Feb 2021
	Construction Noise Permit (General Works)	Works area of 3723A & 3723B	GW-RS1013-21	Valid from 14 Jan 2022 to 13 Jul 2022
3728	Registration as Chemical Waste Producer	Works area of 3728	WPN 5111-951-S3467-03	Completion of Registration on 7 May 2021
	Discharge License under WPCO	Works area of 3728	WT00037809-2021	Valid from 27 Jul 2021 to 31 Jul 2026
	Bill Account for disposal	Works area of 3728	A/C 7039409	Approval granted from EPD on 22 Jan 2021
3733	Notification of Construction	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
	Work under APCO			
	Registration as Chemical Waste Producer	Works area of 3733	474728	Receipt acknowledged by EPD on 9 Dec 2021
	Bill Account for disposal	Works area of 3733	7041945	Approval granted from EPD on 21 Oct 2021
	Construction Noise Permit (General Works)	Works area of 3733	GW-RS0440-22	Valid from 10 Jun 2022 to 9 Dec 2022
3801	Notification of Construction Work under APCO	Works area of 3801	451991	Receipt acknowledged by EPD on 18 Dec 2019
			477839	Receipt acknowledged by EPD on 21 Mar 2022
		Stockpiling area of 3801	454269	Receipt acknowledged by EPD on 12 Mar 2020
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 30 Jul 2019 to 30 Nov 2022
		Stockpiling area of 3801	WT00037354-2021	Valid from 8 Mar 2021 to 31 Mar 2026
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0470-22	Valid from 9 Jun 2022 to 6 Dec 2022
	Construction Noise Permit (Special Case)	Works area of 3801 (Box Jacking)	GW-RS0288-22	Valid from 9 May 2022 to 8 Aug 2022
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
		Works area of 3802 (Existing Airport)	WPN 5218-951-G2945-01	Completion of Registration on 29 Sep 2020
	Discharge License under WPCO	Works area of 3802	WT00037032-2020	Valid from 25 May 2021 to 31 May 2026
		Works area of 3802	WT00039092-2021	Valid from 30 Nov 2021 to 31 Nov 2026
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0248-22	Valid from 16 Apr 2022 to 11 Oct 2022
		Works area of 3802 (Ventilation Building)	GW-RS0247-22	Valid from 16 Apr 2022 to 10 Oct 2022 Superseded by GW-RS0587-22
		Works area of 3802 (Ventilation Building)	GW-RS0587-22	Valid from 18 Jul 2022 to 17 Jan 2023
		Works area of 3802	GW-RS0353-22	Valid from 20 May 2022 to 19 Nov 2022 Superseded by GW-RS0592-22

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3802	GW-RS0592-22	Valid from 21 Jul 2022 to 17 Jan 2023
3901A	Notification of Construction Work under APCO	Works area of 3901A	466883	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901A	EP/RS/0000443 053	Approval granted on 11 Dec 2020
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024
	Landfill Disposal of Waste Concrete from Batching Plant	Works area of 3901A	EP195/01/18	Valid from 20 June 2022 to 19 March 2023
	Registration as Chemical Waste Producer	Works area of 3901A	WPN 5218-951-K3400-01	Completion of Registration on 17 Jul 2020
	Bill Account for disposal	Works area of 3901A	A/C 7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0059-22	Valid from 5 Feb 2022 to 4 Aug 2022
3901B	Notification of Construction Work under APCO	Works area of 3901B	466885	Receipt acknowledged by EPD on 26 Apr 2021
	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438 488	Approval granted on 26 Jun 2020
	Specified Process license under APCO	Works area of 3901B	L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0128-22	Valid from 14 Mar 2022 to 13 Sep 2022
		Works area of 3901B	GW-RS0552-22	Valid from 5 Aug 2022 to 4 Feb 2023

Appendix F. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

Statistics for Exceedances for 1-hour TSP, Noise, Water, Waste, CWD Monitoring

		Total no. recorded in the reporting period	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
Waste	Action	0	1
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not project related, are not shown in this table.

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	55	2	2