MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No. 92
(For August 2023)

September 2023

This Monthly EM&A Report No. 92 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 14 September 2023

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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

14 September 2023

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 92 (August 2023)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 92 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 September 2023.

We would like to inform you that we have no adverse comment and 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 9141.

Yours faithfully,
AECOM Asia Co. Ltd.

Roy Man
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 92nd 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 August 2023.

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, land improvement works and filling together with taxiways, concourse, tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS) and associated works. Land-based works on existing airport island involved Terminal 2 expansion works, modification and tunnel work for APM and BHS, utilities works, road and drainage works, demolition, piling, excavation works, and 132kV cable laying 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	36
Noise monitoring	20
Water quality monitoring	14
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 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

		
Dust Suppression Measure conducted by Contractor	Chemical Spill Drill conducted by Contractor	On-site Checking of Construction Noise Permit conducted 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 were conducted for DO results triggering the relevant Action and Limit Level and the investigation findings revealed that the cases were not related to the Project. To conclude, the construction activities during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Contract 3206 Main Reclamation Works

- Filling materials delivery.

Airfield Works

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation;
- Power supply system installation; and
- Cable containment installation.

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

- Equipment installation;
- Structured cabling.

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Seawall construction;

- Construction of stormwater drainage;
- Piling works;
- Aviation fuel pipe works;
- Excavation lateral support;
- Construction of box culvert; and
- Land improvement works (Transition layer and backfilling works).

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Electrical and mechanical works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Structure works;
- Marine sediment treatment works; and
- Tunnel concreting and backfilling works;

Contract 3408 Third Runway Concourse and Apron Works

- Building services and architectural, builder's work and finishing works;
- Fuel pipe installation works;
- Utilities works;
- Erection works for concrete batching plant; and
- Excavation and reinforced concrete works.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Bridge demolition;
- Pier construction;
- Pump station and electrical station works; 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)

- Guide beam installation.

Contract 3602 Existing APM System Modification Works

- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation; and
- Steel work installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Provision of backup services.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Backfilling works;
- Excavation;
- Pipe pile trimming; and

- Castle cable trench,

Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box culvert construction;
- Tunnel construction; and
- Electrical and mechanical works.

Contract 3804 East and Landside Fire Stations

- Site setup and formation works;
- Bored pile works;
- Raft foundation and footing works;
- Tower crane footing and erection works; and
- Pile cap construction works.

Contract 3805 New Airport District Police Operational Base

- Bored pile works; and
- Construction of temporary working platform.

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 and material conveyor belt.

Contract 3908 Quay Management Services

- Provision of services of site management and logistic control of 3RS quays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

Utilities:

132kV Cable

- Cable trenching and cable layering;
- Duct installation and cable duct mandrill test;
- Backfilling; and
- Draw pit opening.

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	Nil

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
			received during the reporting period.	
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 92nd 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 August 2023.

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	Roy Man	3922 9141
	Deputy Independent Environmental Checker	Jackel Law	3922 9376

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 1525

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 3305 Airfield Ground Lighting System (ADB Safegate Hong Kong Limited)	Project Manager	Allam Al-Turk	2944 9725
	Environmental Officer	Ivan Ting	9222 9490
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	Ferddy Leung	5585 6746
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

Party	Position	Name	Telephone
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
	Safety and Environmental Manager	Josephine Chang	9383 7705
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
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Xia Bo	6586 4950
	Environmental Officer	Y M Tong	5316 9801
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Richard Ng	9802 9577

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 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
	Safety Health Environmental 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 Engineering & Construction Company Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Ruby Hui	6218 6408
	Environmental Supervisor	Yan Ng	5345 8555
Contract 3804 East and Landside Fire Stations (Beijing Urban Construction Group Company Limited - Beijing Urban Construction International Company Limited - Kin Shing (Leung's) General Contractors Ltd Joint Venture)	Project Manager	Mr. Zhang Xianda	4661 6818
	Environmental Officer	Ms. Kimberly Wong	5542 1669
Contract 3805 New Airport District Police Operational Base (Chinney Construction Co., Ltd.)	Project Manager	Cheuk Wing Wai	9339 8321
	Environmental Officer	Mike Li	6306 8547

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

Party	Position	Name	Telephone
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	General Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319
Contract 3908 Quay Management Services (Gitanes – Crown Asia Joint Venture)	Project Manager	Mr. Ian Li	9750 6438
	Environmental Officer	Mr. Tang Kai Fun	9406 3526
Contract 3913 Asphalt Batching Plant (SPR Joint Venture)	Project Manager	Xie Yi Sheng	6580 6005
	Environmental Officer	Kenneth Chan	9300 2182

Utilities:

Party	Position	Name	Telephone
132 kV Cable (CLP Power Hong Kong Limited / Kum Shing Construction Company Limited)	Engineer	Ken Fung	6391 9087
	Project Engineer	Ivan Shek	9822 5836

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, land improvement works and filling together with taxiways, concourse, tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS) and associated works. Land-based works on existing airport island involved Terminal 2 expansion works, modification and tunnel work for APM and BHS, utilities works, road and drainage works, demolition, piling, excavation works, and 132kV cable laying.

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.

Parameters	EM&A Requirements	Status
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 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 was started from June 2021 and completed in 2022.
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 H_2S monitoring proposal was accepted by EPD in Jun 2023.
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		

Parameters	EM&A Requirements	Status
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 station and one day per month at the Lung Kwu Chau station; and PAM: For the whole duration for land formation related construction works.	On-going
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
Establishment Works Monitoring	Bi-monthly	On-going
Long Term Management (10 years) Monitoring	Annually	On-going
Environmental Auditing		
Regular site inspection	Weekly	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	Monitor and check	No Marine Mammal Watching Plan (MMWP) implementation measures during this reporting period.
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

Parameters	EM&A Requirements	Status
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:

- Sixteen environmental management meetings for EM&A review with works contracts: 2, 3, 9, 10, 15, 16, 17, 23, 28 & 30 August 2023.

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 (mg/m^3)	Limit Level (mg/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)	16 Sep 2022	Appendix D of Monthly EM&A Report No. 83
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-1 (Serial No. 597337)	04 May 2023	**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 of the Monthly EM&A Report No. 77 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 of 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 (mg/m^3)	Action Level (mg/m^3)	Limit Level (mg/m^3)
AR1A	11 - 45	306	500
AR2	8 - 47	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)	19 Mar 2023	Appendix D of Monthly EM&A Report No.87
Integrated Sound Level Meter	Rion NL-52 (Serial No. 01287679)	10 Oct 2022	Appendix D of Monthly EM&A Report No. 82
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	19 Mar 2023	Appendix D of Monthly EM&A Report No.87
Acoustic Calibrator	Casella CEL-120 (Serial No. 2383737)	18 Jun 2023	Appendix D of Monthly EM&A Report No.91

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:

a. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
b. 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 of 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 - 66	75
NM4[(1) (3)]	61 - 64	70[(2)]
NM5[(1) (3)]	61 - 65	75
NM6[(1) (3)]	66 - 71	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 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, school activities near NM4 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. 15M100005)	23 Jun 2023	Appendix D of Monthly EM&A Report No. 91
	YSI ProDSS (Serial No. 16H104233)	2 Jun 2023	Appendix D of Monthly EM&A Report No. 90
	YSI ProDSS (Serial No. 21K101468)	2 Jun 2023	Appendix D of Monthly EM&A Report No. 90

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 provided in **Appendix B**.

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 Level, 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 and Middle) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM7	IM10	IM11	IM12	SR2	SR3	SR4A
01-08-23									
03-08-23									
05-08-23									
08-08-23									
10-08-23									
12-08-23	D								
15-08-23									
17-08-23									
19-08-23									
22-08-23									
24-08-23									
26-08-23									
29-08-23									
31-08-23	D	D			D	D	D		
No. of result triggering Action or Limit Level	2	1	1	1	1	1	1	1	0

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

	IM1	IM2	IM7	IM10	IM11	IM12	SR2	SR3	SR4A
01-08-23									
03-08-23									
05-08-23									
08-08-23									
10-08-23									
12-08-23	D	D							D
15-08-23									
17-08-23									
19-08-23									
22-08-23									
24-08-23									
26-08-23									
29-08-23									
31-08-23									
No. of result triggering Action or Limit Level	1	1	0	0	0	0	0	0	1

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

	IM1	IM2	IM7	IM10	IM11	IM12	SR3	SR4A
01-08-23								
03-08-23								
05-08-23								
08-08-23								
10-08-23								
12-08-23								
15-08-23								
17-08-23								
19-08-23								
22-08-23								
24-08-23								
26-08-23								
29-08-23								
31-08-23				D			D	
No. of result triggering Action or Limit Level	0	0	0	1	1	1	1	0

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

	IM1	IM2	IM7	IM10	IM11	IM12	SR3	SR4A
01-08-23								
03-08-23								
05-08-23								
08-08-23								
10-08-23								
12-08-23								
15-08-23								
17-08-23								
19-08-23								
22-08-23								
24-08-23								
26-08-23								
29-08-23								
31-08-23								
No. of result triggering Action or Limit Level	1	1	0	0	0	0	0	1

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 Level on two monitoring days.

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 Limit Levels were triggered. Repeat in-situ measurements were conducted for monitoring stations located downstream during ebb tide on 13 and 14 August 2023 according to the requirements as stipulated in the Manual, while the repeat in-situ measurements on 1 September 2023 were cancelled due to No.8 Northwest Gale or Storm Signal was still in force.

Monitoring result triggered the corresponding Action Level at IM7, IM10 and SR3 during ebb-tide on 31 August 2023, IM11 and IM12 during flood-tide on 31 August 2023 IM1, IM2 and SR4A during flood-tide on 12 August 2023. These cases occurred at monitoring stations upstream of the Project and would unlikely be affected by the Project.

Investigations focusing on the cases which occurred at monitoring stations located downstream of the Project were 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
12/08/2023	Seawall construction	At least 1 km	Implemented	No	No	No
31/08/2023	Nil	N/A	N/A	No	No	No

The investigations confirmed that seawall construction works were conducted with proper implementation of mitigation measures during the concerned monitoring days.

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 downstream stations triggered Action Level on 12 and 31 August 2023. For IM1 and IM2, it is noted that these stations are located in the western side of the Project, which had similar previous records of widespread low DO level during wet season. Also, for IM11, IM12 and SR2, similar low DO concentrations were also recorded at the control station C2, suggesting the presence of external factors affecting the DO concentration in that area. In addition, the seawall construction works was undertaken over 1km away from the concerned monitoring stations on 12 August 2023 and there was no marine construction works on 31 August 2023. The triggers were unlikely caused by the Project.

For the DO results recorded at the bottom water depth during mid-ebb tide (please refer to **Table 4.8**), downstream stations including IM1, IM2 and SR4A triggered Action and/or Limit Level on 12 August 2023. For IM1 and IM2, it is noted that these stations are located in the western side of the Project, which had similar previous records of widespread low DO level during wet season. Similar low DO levels were also recorded at control station C2, and the seawall construction works were undertaken more than 1 km away from the monitoring stations, which might possibly suggest the presence of external factors affecting the DO concentration. For SR4A, it is located at a semi-embayed area, which is far away from the Project, and is also unlikely to be affected by the Project.

For the DO results recorded at the surface and middle water depth during mid-flood tide (please refer to **Table 4.9**), the DO results at two downstream stations IM10 and SR3, triggered Action Level on 31 August 2023. For the case at IM10, low DO concentration was also recorded at its nearest upstream station (i.e. IM11), and it is unlikely to be affected by the Project. For SR3, low DO concentration was also recorded at the control stations C1 and SR2, suggesting the presence of external factors affecting the area as a whole. Furthermore, there was no marine construction works on 31 August 2023. Therefore, the triggers were unlikely caused by the Project.

No silt plume, construction vessel, spillage incident or specific observation at outfalls were observed in the vicinity when monitoring was undertaken at the monitoring stations. Therefore, the case was 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**. The 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 bar, metal strip, aluminium, 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) (m3)	C&D Material Reused in the Project (m3)	C&D Material Reused in other Projects (m3)	C&D Material Transferred to Public Fill (m3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
Aug 2023(2)	210	11,050	1,531	6,849	0	0	3580

Notes:

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

(2) 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.

Backfilling works for treated marine sediment were conducted during the reporting period. The details of the marine sediment sampling, treatment and backfilling can be referred to Annual EM&A Report No.7.

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 2, 3, 8, 9, 16, 17, 22 and 24 August 2023 covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

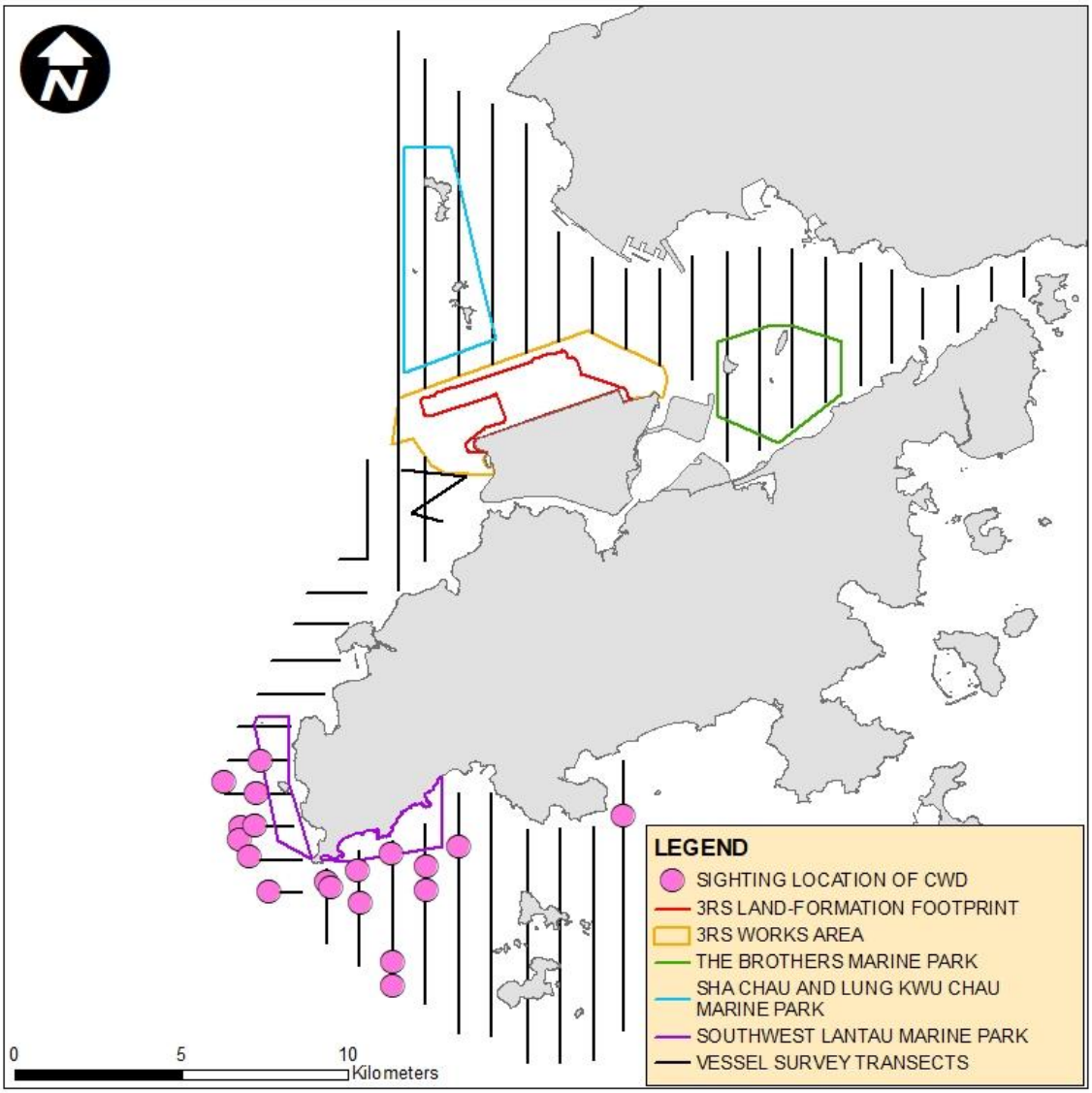
A total of around 449.06 km of survey effort was collected from these surveys and all survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In the current reporting period, 19 sightings with 61 dolphins were sighted. All these sightings were on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of dolphin sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in the current reporting period is illustrated in **Figure 6.3**. In WL, CWD sightings were scattered at the waters between Yi O and Fan Lau. In SWL, most CWD sightings were recorded at the western part of the survey area between Shek Pik and Fan Lau while there was one sighting recorded at the east near Lo Kei Wan. There was no CWD sighting recorded in NWL and NEL survey areas during the reporting period.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 19 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 449.06 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 19 on-effort sightings with 61 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 June to August 2023), a total of around 1328.09 km of survey effort was conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 50 on-effort sightings and a total number of 158 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. Both the running quarterly encounter rate STG and ANI remain above the Action Level, and 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)
August 2023	4.23	13.58
Running Quarter from June to August 2023(1)	3.76	11.90
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, 19 groups of 61 dolphins in total were sighted, and the average group size of CWDs was 3.2 dolphins per group. The majority of the CWD sightings was having small group size (i.e. 1-2 dolphins). There was no CWD sighting with large group size (i.e. 10 or more dolphins) recorded in the current reporting period.

Activities and Association with Fishing Boats

There were five CWD sightings recorded engaging in foraging activities in the current reporting period in SWL and WL survey areas. Two sightings were observed in association with operating purse seiners in SWL.

Mother-calf Pair

In this reporting period, there were two sightings with the presences of mother-and-unspotted calf pair recorded in SWL and WL respectively. Furthermore, there was another sighting with the presences of mother-and-unspotted juvenile pair observed in SWL.

6.4.2 Photo Identification

In the current reporting period, a total number of 23 different CWD individuals were identified for totally 31 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
NLMM027	02-Aug-23	10	SWL
NLMM070	08-Aug-23	3	WL
SLMM002	02-Aug-23	10	SWL
	03-Aug-23	4	SWL
SLMM003	02-Aug-23	4	SWL
SLMM010	03-Aug-23	3	SWL
SLMM022	02-Aug-23	9	SWL
		10	SWL
	08-Aug-23	3	WL
SLMM027	08-Aug-23	6	WL
SLMM029	03-Aug-23	3	SWL
SLMM037	02-Aug-23	8	SWL
SLMM044	02-Aug-23	10	SWL
SLMM049	03-Aug-23	3	SWL
SLMM052	02-Aug-23	4	SWL
	08-Aug-23	4	WL

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM060	02-Aug-23	1	SWL
WLMM001	02-Aug-23	8	SWL
		10	SWL
	08-Aug-23	4	WL
WLMM018	08-Aug-23	5	WL
WLMM028	03-Aug-23	4	SWL
WLMM056	03-Aug-23	4	SWL
WLMM058	08-Aug-23	5	WL
WLMM073	08-Aug-23	6	WL
WLMM093	03-Aug-23	4	SWL
	08-Aug-23	2	WL
WLMM102	03-Aug-23	4	SWL
	08-Aug-23	2	WL
WLMM118	08-Aug-23	6	WL
WLMM190	08-Aug-23	5	WL

6.4.3 Land-based Theodolite Tracking Survey

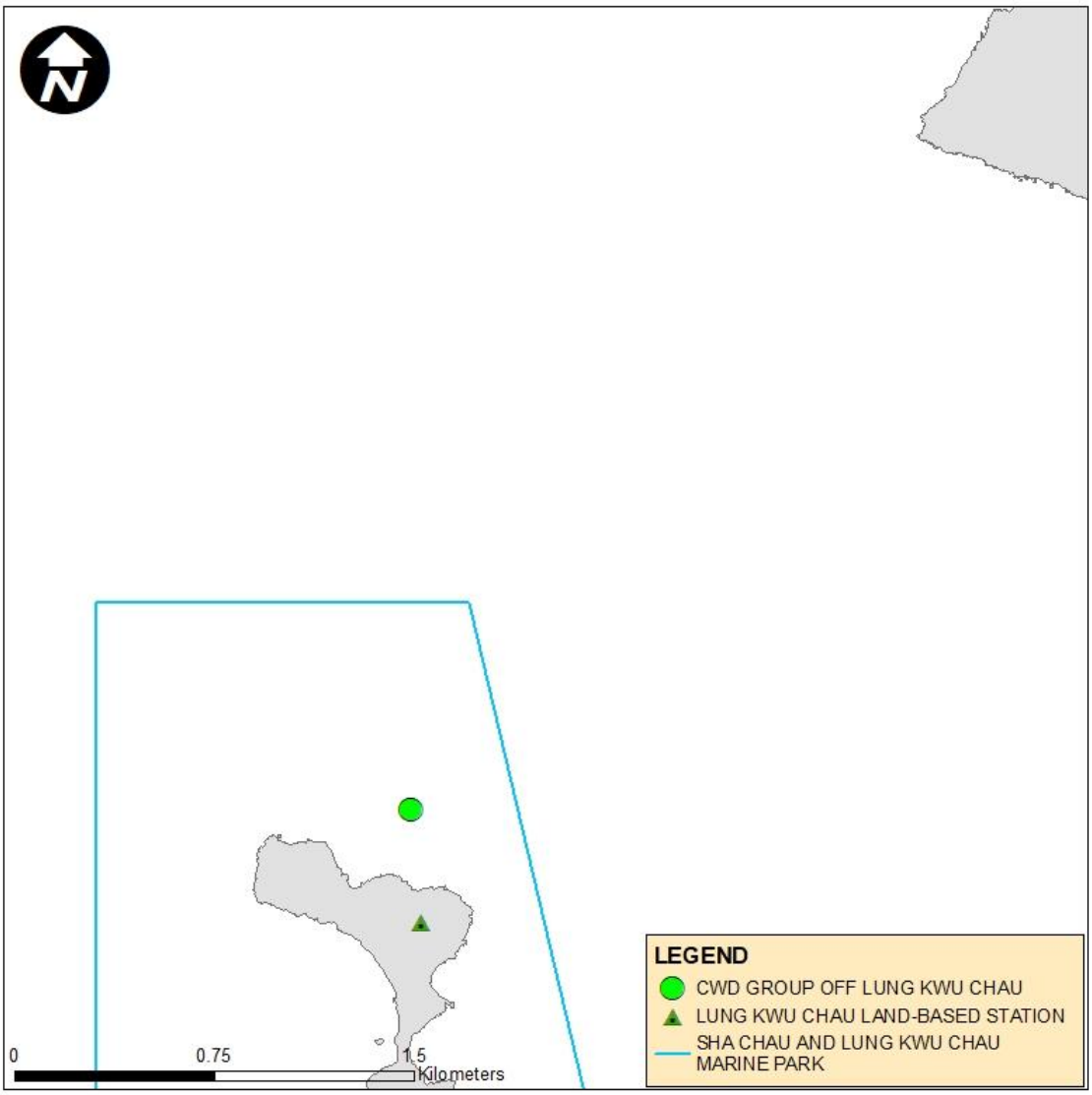
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 15 August 2023 and at SC on 23 August 2023, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. One group of CWD were tracked off LKC Station while no CWD were tracked off SC station 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**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking survey in August 2023 were depicted in **Figure 6.4**

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	1	0.17
Sha Chau (SC)	1	6:00	0	0
TOTAL	**2**	**12:00**	**1**	**0.08**

Figure 6.4: Plots of First Sightings of All CWD Groups obtained from Land-based Stations



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 retrieved on 1 August 2023 and subsequently re-deployed underwater and positioned at south of Sha Chau Island inside the SCLKCMP (**Figure 6.5**). 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, two dolphin observation stations and teams of at least two dolphin observers were deployed by the contractor for continuous monitoring of the DEZ for seawall construction works in accordance with the DEZ Plan. No trainings for the proposed dolphin observers on the implementation of DEZ monitoring were provided by the ET during this reporting period, with a cumulative total of 705 individuals being trained and the training records kept by the ET. From the contractors' records, no dolphin or other marine mammals were observed during this reporting month. These contractors' records were also audited by the ET during site inspection.

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, 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 and OM7 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**.

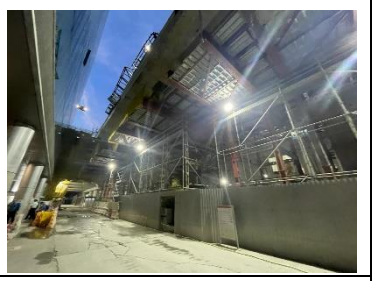
Table 7.1: Landscape and Visual – Construction Phase Audit Summary

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
SCM10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical	The advanced hydroseeding works around taxiways and runways were partially completed at this stage and would resume in next phase.	To be implemented
OM7- Compensatory tree planting for all felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under the relevant technical circulars.(1)	The first batch of compensatory tree was planted and the first bi-monthly site inspection for the 12-month establishment period was undertaken in June 2023. A photo showing the general view of compensatory planting was shown in **Table 7.2**. Next inspection will be conducted in October 2023.	3RS Project contracts

Note:
(1) AAHK is the management and maintenance agency of the compensatory trees. Tree Felling Application is not required for 3RS project.

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 transplanted trees (CM9)	General view of compensatory tree planting (OM7)

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 remained unchanged (i.e. 46 and 26 respectively) comparing to the previous reporting period.

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.

For the compensatory tree monitoring, the bi-monthly site inspection for the 12-month establishment period was conducted in this reporting period. Next inspection will be conducted in October 2023.

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	Report on compliance by ET or	Counter signature of report by	Annually

years after completion of each batch of transplanting works.	maintenance Agency as appropriate	Management Agency	

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.	
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	34	0	12	0
3602	0	0	0	0
3801	3	0	5	0

Existing				
Grand Total	**46**	**0**	**26**	**0**

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

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 2024. Photos of the last inspection in February 2023 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No. 86.
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 2024. Photos of the last inspection in February 2023 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No. 86.
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 2023. Photos of the last inspection in December 2022 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No.84.
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	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	Establishment Period was completed. Next inspection will be conducted in July 2024. Photos of the last inspection in July 2023 can be referred to Table 7.7 of the Construction Phase Monthly EM&A Report No. 91.
T1494	6 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1495	10 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1496	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1497	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1498	29 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1499	29 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1500	30 Jun 2021	Long Term Management period	Contract 3508	

Tree ID	Transplant Date	Management Stage	Management Agency	Remarks
		Aug 2022 – Jul 2031		
T1501	30 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1502	5 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1503	6 Jul 2021	Long Term Management period Aug 2022 – Jul 2031	Contract 3508	
T1504	24 Jun 2021	Long Term Management period Aug 2022 – Jul 2031	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.

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 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

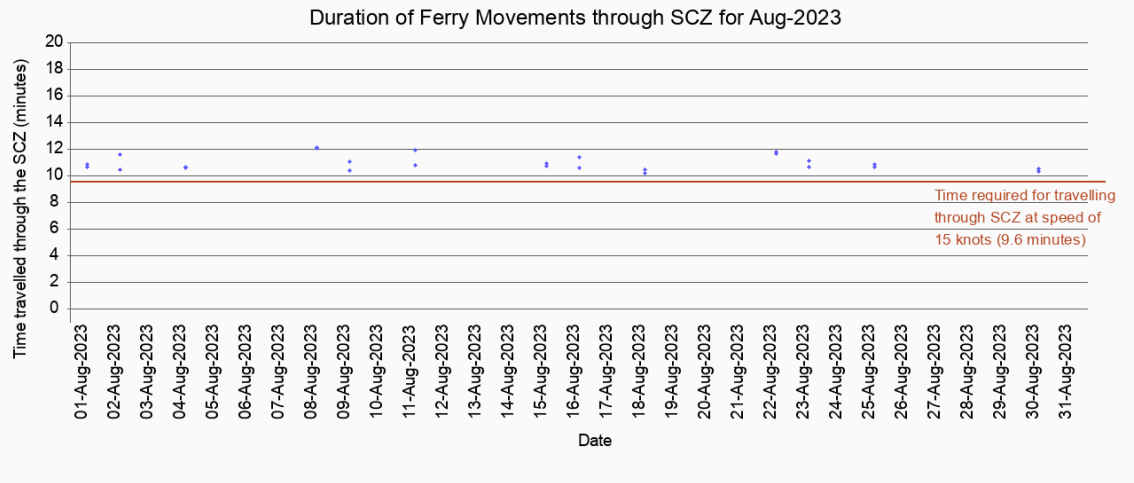
SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed 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 operational needs, the SkyPier HSF services to/from Zhuhai has been suspended until further notice. Key audit findings for the SkyPier HSF travelling to/from Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.7**. The daily movement of all SkyPier HSFs, including those not using the diverted route, in this reporting period (i.e., 16 to 50 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.

According to the updated statistic, total 24 ferry movements between HKIA SkyPier and Macau were recorded in July 2023. Updated figures for July 2023 will be reported in the forthcoming Quarterly and Annual EM&A reports.

In total, 26 ferry movements between HKIA SkyPier and Macau were recorded in August 2023 and the data are presented in **Appendix G**. The time spent by the SkyPier HSF travelling through the SCZ in August 2023 was presented in **Figure 7.1.** It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all the SkyPier HSF spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for August 2023



Note: Data above the red line indicated that the time spent by the SkyPier HSFs travelling through the SCZ is more than 9.6 minutes, which is in compliance with the SkyPier Plan.

Table 7.7: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 August 2023
Total number of ferry movements recorded and audited for HSF to/from Macau	26
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speed of all HSFs travelling through the SCZ ranged from 11.2 to 13.3 knots. All HSFs had travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. The time

Requirements in the SkyPier Plan	1 to 31 August 2023
	used by HSFs to travel through SCZ is presented in **Figure 7.1**.
A maximum daily cap of 125 movements for all SkyPier HSFs including those not using diverted route	16 to 50 daily movements

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:

- 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 within the works area, entering from non-designated gates and entering no entry zone 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 was no dolphin sighting 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 7.8**.

Table 7.8: 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	

EP Condition	Submission	Status
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.

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:

Contract 3206 Main Reclamation Works

- Filling materials delivery.

Airfield Works:

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Construction of tunnel structure;
- Pipe and drainage diversion works;
- Utilities and backfilling works; and
- Stockpiling.

Contract 3305 Airfield Ground Lighting System

- Enhanced vehicular warning light hardware installation;
- Power supply system installation; and
- Cable containment installation.

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

- Equipment installation;
- Structured cabling.

Contract 3308 Foreign Object Debris Detection System

- Rectification work for handover sensor system.

Contract 3310 North Runway Modification Works

- Architectural, builder's work and finishing works;
- Seawall construction;
- Construction of stormwater drainage;
- Piling works;
- Aviation fuel pipe works;
- Excavation lateral support;
- Construction of box culvert; and
- Land improvement works (Transition layer and backfilling works).

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Electrical and mechanical works.

Contract 3404 Integrated Airport Control System

- System maintenance.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Structure works;
- Marine sediment treatment works; and
- Tunnel concreting and backfilling works;

Contract 3408 Third Runway Concourse and Apron Works

- Building services and architectural, builder's work and finishing works;
- Fuel pipe installation works;
- Utilities works;
- Foundation works for concrete batching plant; and
- Excavation and reinforced concrete works.

Terminal 2 Expansion:

Contract 3508 Terminal 2 Expansion Works

- Bridge demolition;
- Pier construction;
- Pump station and electrical station works; 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)

- Guide beam installation.

Contract 3602 Existing APM System Modification Works

- Concrete plinth construction.

Contract 3603 Baggage Handling System (BHS)

- BHS installation; and
- Steel work installation.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Provision of backup services.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Backfilling works;
- Excavation;
- Pipe pile trimming; and
- Castle cable trench.

Contract 3802 APM and BHS Tunnels and Related Works

- Excavation and lateral supports;
- Box culvert construction;
- Tunnel construction; and
- Electrical and mechanical works.

Contract 3804 East and Landside Fire Stations

- Site setup and formation works;
- Bored pile works;
- Raft foundation and footing works;
- Tower crane footing and erection works; and
- Pile cap construction works.

Contract 3805 New Airport District Police Operational Base

- Bored pile works; and
- Construction of temporary working platform.

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 and material conveyor belt.

Contract 3908 Quay Management Services

- Provision of services of site management and logistic control of 3RS quays; and
- Provision of flat top barge and vehicle delivery services between the launching point in Hong Kong and 3RS quays.

Contract 3913 Asphalt Batching Plant

- Operation of asphalt batching plant.

Utilities:

132kV Cable

- Cable trenching and cable layering;
- Duct installation and cable duct mandrill test;
- Backfilling; and
- Draw pit opening.

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;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works; and
- Management of chemicals and avoidance of oil spillage on-site.

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, land improvement works and filling together with taxiways, concourse, tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS) and associated works. Land-based works on existing airport island involved Terminal 2 expansion works, modification and tunnel work for APM and BHS, utilities works, road and drainage works, demolition, piling, excavation works, and 132kV cable laying 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.

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 were conducted for the DO results triggering the relevant Action and/or Limit Level and the investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities during 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, the daily movements of all SkyPier HSFs in the reporting period, including those not using the diverted route, were in the range of 16 to 50 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 26 HSFs movements under the SkyPier Plan were recorded in the reporting period. The average speed of all HSFs travelling through the SCZ ranged from 11.2 to 13.3 knots. All HSFs travelled through the SCZ with average speed under 15 knots in compliance with the SkyPier Plan. In summary, the ET and IEC audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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. Deviations including speeding within the works area, entering from non-designated gates and entering no entry zone 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

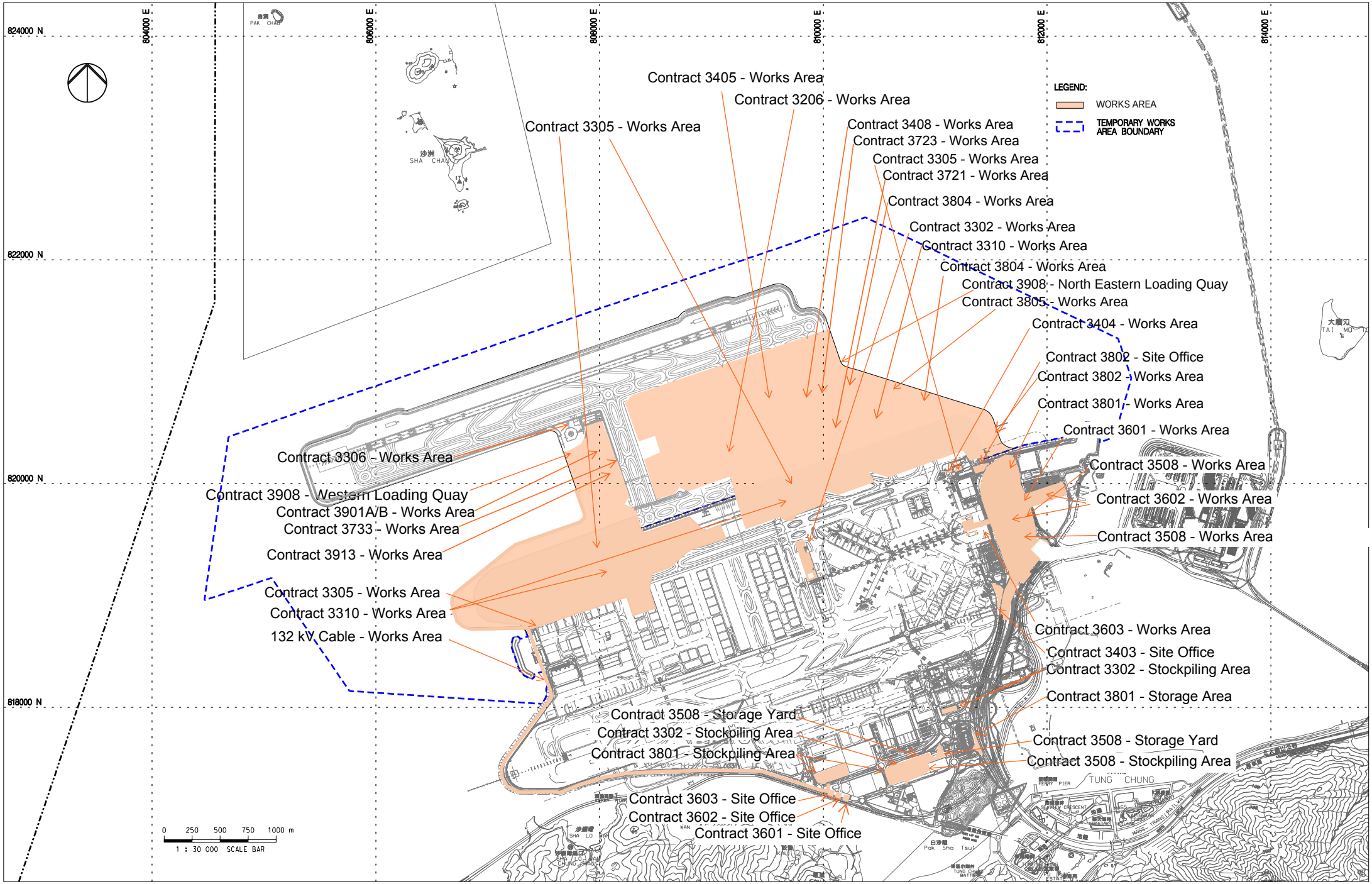
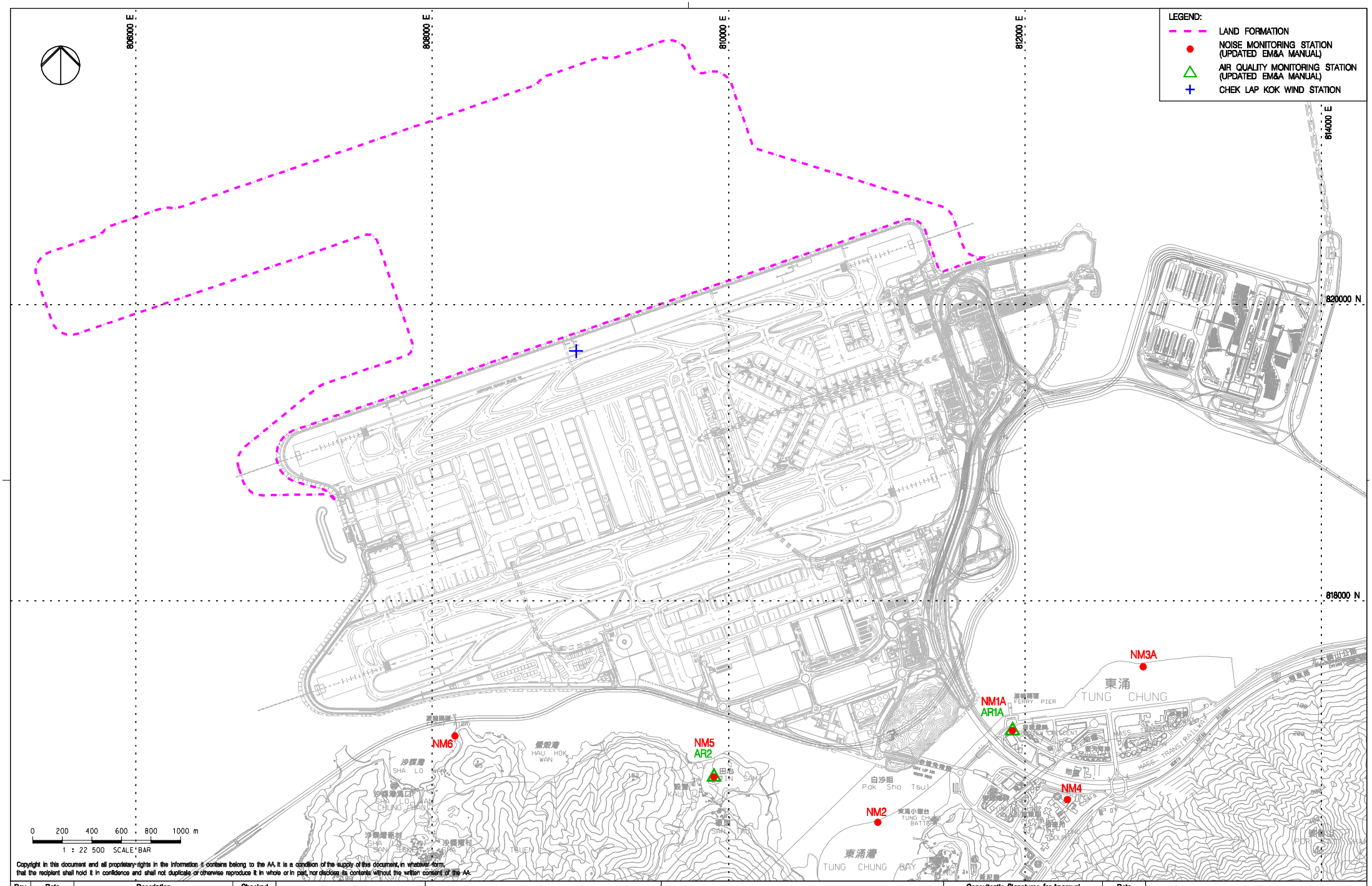


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

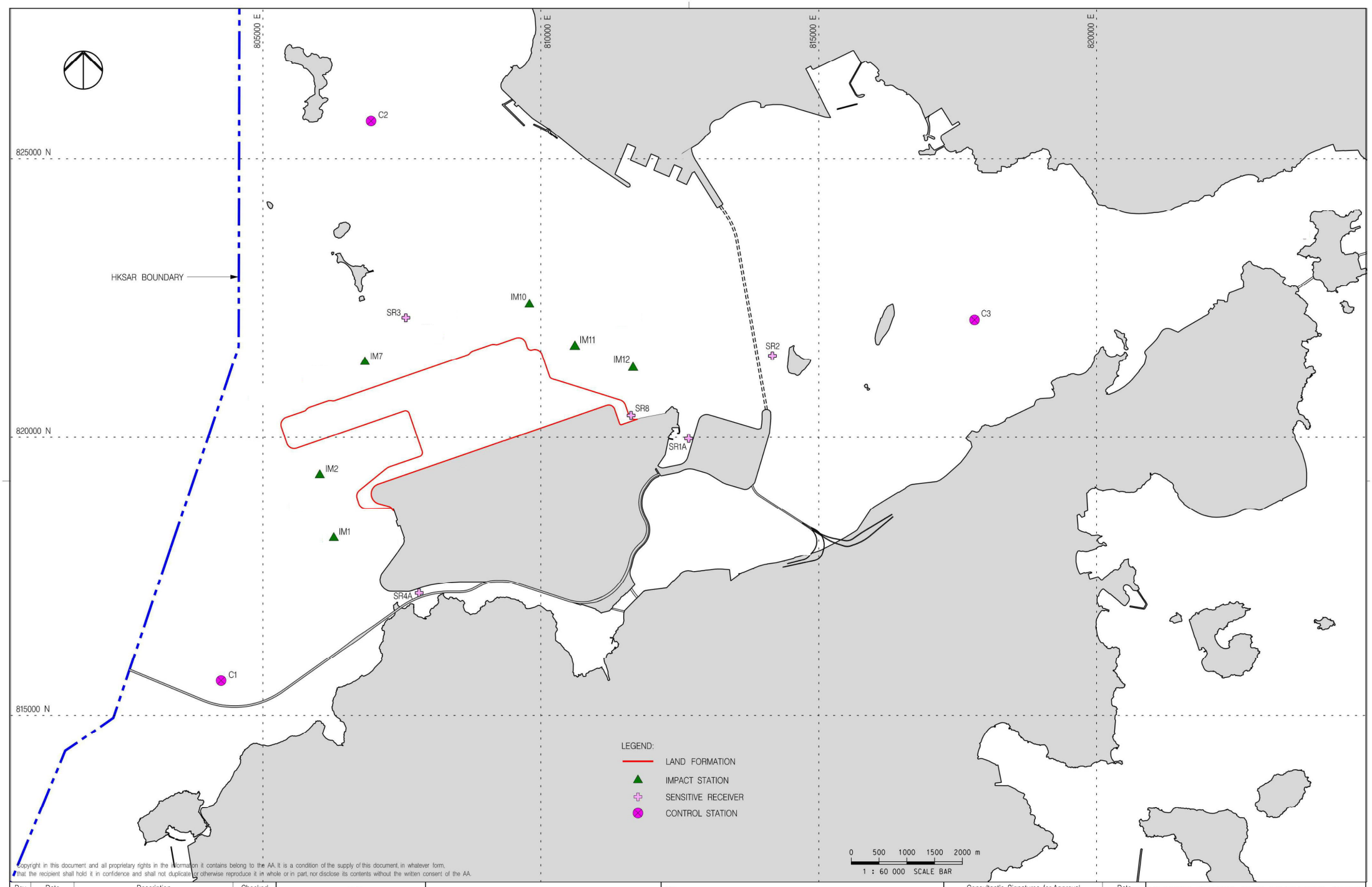
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



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A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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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

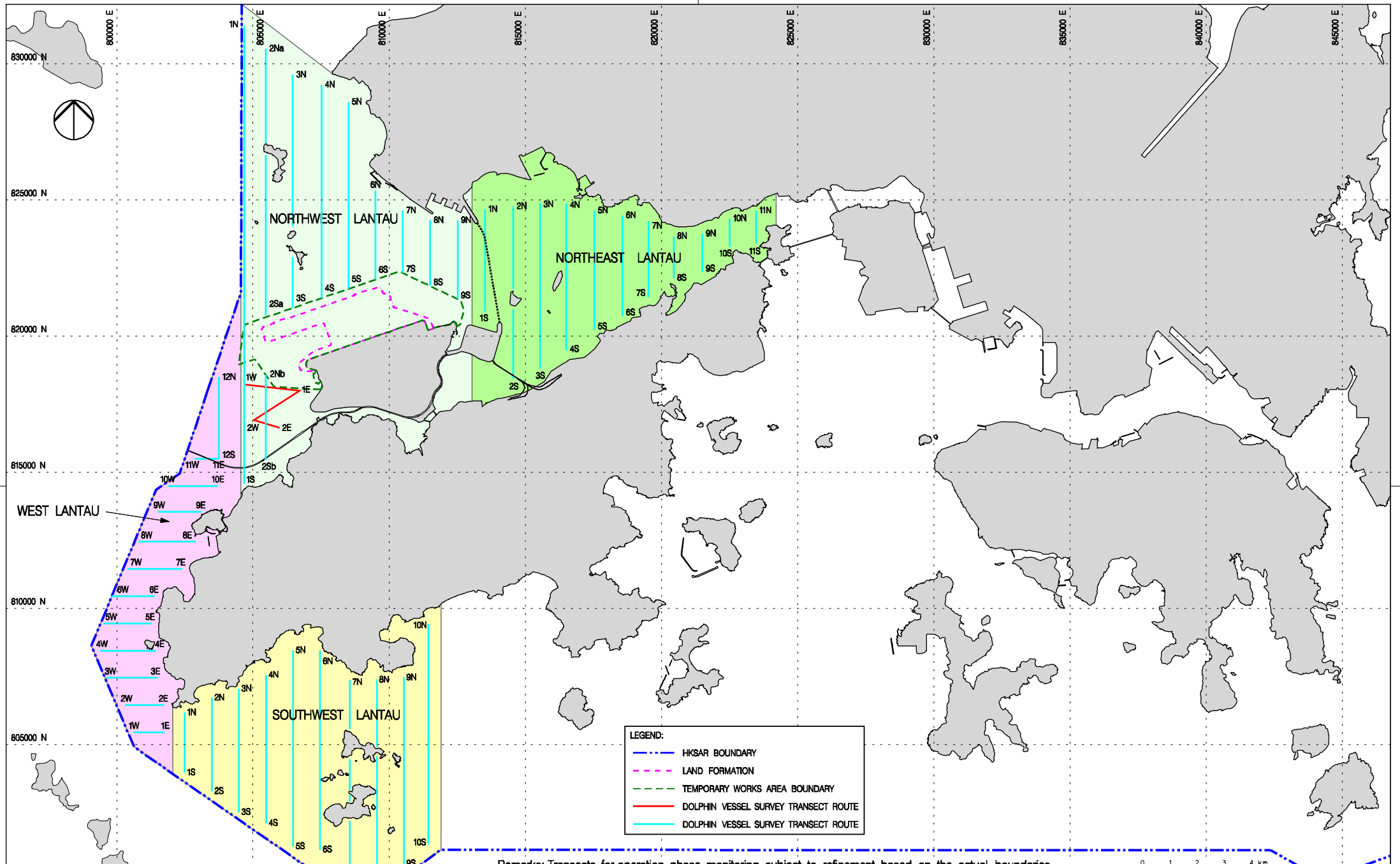
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\190821\FIG 4.1.dgn



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

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

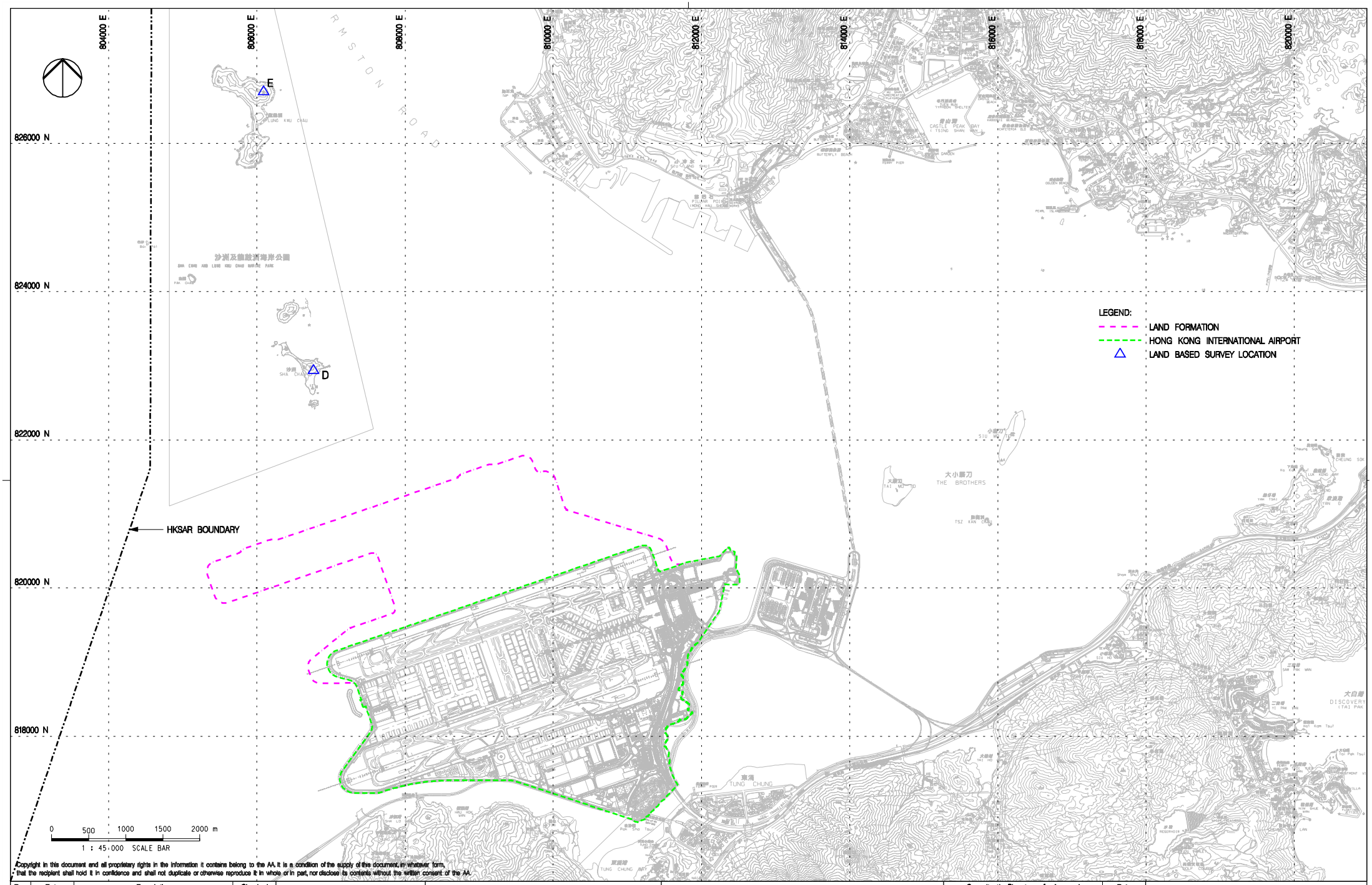
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



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A	02DEC15	FIRST ISSUE	JC
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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
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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

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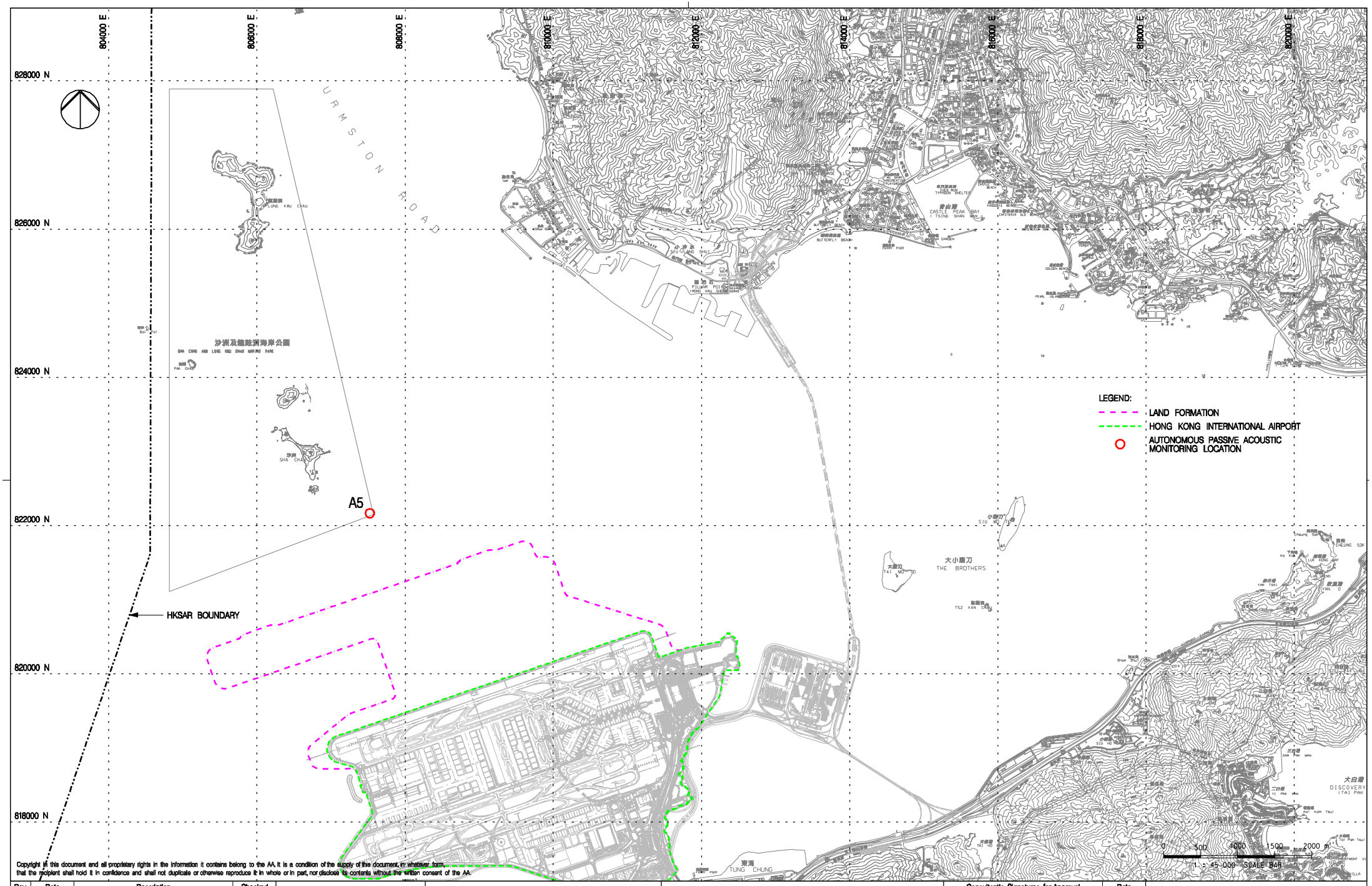

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A	29AUG17	FIRST ISSUE	JT
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C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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Approver	EC	29OCT18

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\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	C – Marine filling works completed in March 2023
			▪ 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		C – Marine filling works completed in March 2023 (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 – For C7a and localised silt curtains (All enhanced silt curtain removed since March 2023)
			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	C – Marine filling works completed in March 2023 (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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
					*(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 – For C7a and localised silt curtains (All enhanced silt curtain removed since March 2023)
			<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	C – Marine filling works completed in March 2023 (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;		C – Marine filling works completed in March 2023 (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)

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I – For C7a and localised silt curtains (All enhanced silt curtain removed since March 2023)
			<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	N/A – the seawall modification works undertaken after land formation.
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			For construction of the eastern approach lights at the CMPs ▪ 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
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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
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	Within construction site / During construction phase	C – Completed in Jan 2019

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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.		
			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
			▪ 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;	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?^
			▪ 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.		
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; ▪ 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.	Project Site Area / Construction Phase	I
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
10.5.1.5	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: ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	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
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;	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?^
			▪ 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.		
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
			▪ 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):	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?^
			▪ 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.		
			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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
					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** ▪ 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
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.3 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
			▪ 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	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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
			▪ 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		

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	-	**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
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. –	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases.	
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.		
			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.

"C" Construction works completed.

Appendix B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Aug-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 12:41 mid-flood: 5:29	**2** CWD Survey (Vessel)	**3** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 14:17 mid-flood: 7:18	**4** Site Inspection	**5** WQ General & Regular DCM mid-ebb: 15:45 mid-flood: 9:05
6	**7** Site Inspection AR1A, AR2 NM1A, NM5	**8** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 17:57 mid-flood: 12:15	**9** CWD Survey (Vessel)	**10** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 8:32 mid-flood: 21:00	**11** Site Inspection	**12** AR1A, AR2 WQ General & Regular DCM mid-ebb: 10:40 mid-flood: 23:05
13	**14** Site Inspection	**15** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 12:45 mid-flood: 5:35	**16** CWD Survey (Vessel)	**17** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 13:52 mid-flood: 6:56	**18** Site Inspection AR1A, AR2 NM1A, NM5	**19** WQ General & Regular DCM mid-ebb: 14:50 mid-flood: 8:10
20	**21** Site Inspection	**22** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 10:11	**23** CWD Survey (Land-based)	**24** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 17:59 mid-flood: 12:40	**25** Site Inspection NM4, NM6	**26** WQ General & Regular DCM mid-ebb: 8:23 mid-flood: 20:59
27	**28** Site Inspection	**29** Site Inspection WQ General & Regular DCM mid-ebb: 11:37 mid-flood: 4:30	**30** AR1A, AR2 NM1A, NM5	**31** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 13:13 mid-flood: 6:25		

Notes:

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

Tentative Monitoring Schedule of Next Reporting Period

Sep-23

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection	**2** WQ General & Regular DCM mid-ebb: 14:38 mid-flood: 08:09
3	**4** Site Inspection	**5** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 16:32 mid-flood: 10:54	**6** CWD Survey (Vessel)	**7** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 06:16 mid-flood: 18:44	**8** Site Inspection CWD Survey (Vessel)	**9** WQ General & Regular DCM mid-ebb: 09:04 mid-flood: 21:49
10	**11** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**12** Site Inspection WQ General & Regular DCM mid-ebb: 11:46 mid-flood: 18:52	**13** CWD Survey (Vessel) NM4, NM6	**14** Site Inspection WQ General & Regular DCM mid-ebb: 12:54 mid-flood: 19:30	**15** Site Inspection CWD Survey (Land-based) CWD Survey (Vessel)	**16** AR1A, AR2 WQ General & Regular DCM mid-ebb: 13:52 mid-flood: 20:07
17	**18** Site Inspection CWD Survey (Vessel)	**19** Site Inspection WQ General & Regular DCM mid-ebb: 15:20 mid-flood: 09:24	**20** CWD Survey (Vessel)	**21** Site Inspection CWD Survey (Land-based) NM4, NM6 WQ General & Regular DCM mid-ebb: 16:45 mid-flood: 11:22	**22** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**23** WQ General & Regular DCM mid-ebb: 06:18 mid-flood: 18:56
24	**25** Site Inspection	**26** Site Inspection WQ General & Regular DCM mid-ebb: 10:23 mid-flood: 17:57	**27** NM4, NM6	**28** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 12:06 mid-flood: 18:56	**29** Site Inspection	**30** WQ General & Regular DCM mid-ebb: 13:31 mid-flood: 07:15

Notes:

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

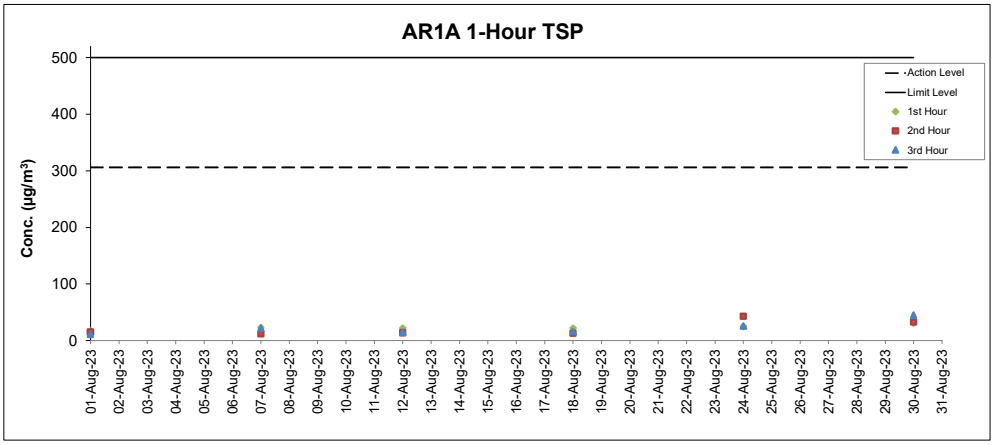
Station: AR1A- Man Tung Road Park

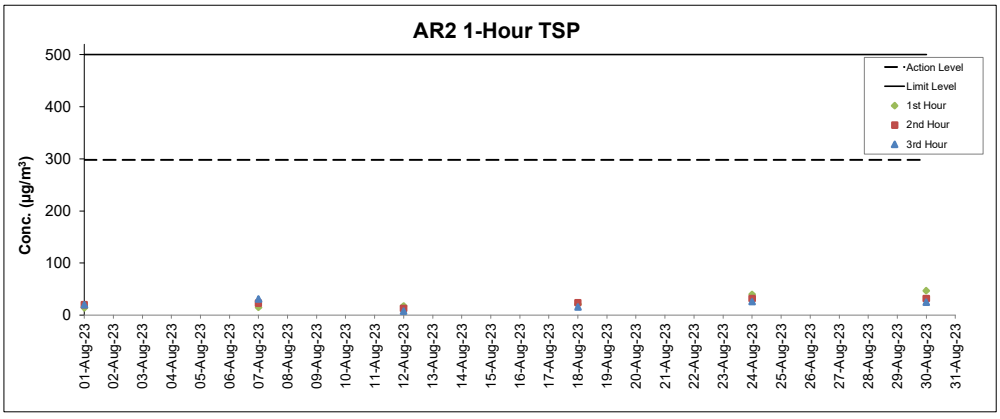
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
1-Aug-23	8:39	Cloudy	3.3	39	17	306	500
1-Aug-23	9:39	Cloudy	2.5	43	15	306	500
1-Aug-23	10:39	Cloudy	5.3	238	11	306	500
7-Aug-23	8:05	Cloudy	3.3	213	23	306	500
7-Aug-23	9:05	Cloudy	2.8	243	12	306	500
7-Aug-23	10:05	Cloudy	4.4	203	22	306	500
12-Aug-23	8:20	Cloudy	3.3	230	22	306	500
12-Aug-23	9:20	Cloudy	3.6	231	14	306	500
12-Aug-23	10:20	Cloudy	4.7	234	15	306	500
18-Aug-23	8:42	Drizzle	4.7	238	22	306	500
18-Aug-23	9:42	Drizzle	4.4	224	13	306	500
18-Aug-23	10:42	Drizzle	5.3	226	16	306	500
24-Aug-23	8:40	Sunny	1.4	Variable	25	306	500
24-Aug-23	9:40	Sunny	3.3	98	43	306	500
24-Aug-23	10:40	Sunny	4.7	102	26	306	500
30-Aug-23	9:03	Sunny	3.3	2	31	306	500
30-Aug-23	10:03	Sunny	3.9	355	33	306	500
30-Aug-23	11:03	Sunny	3.9	4	45	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)
1-Aug-23	12:30	Cloudy	3.3	159	14	298	500
1-Aug-23	13:30	Cloudy	2.2	333	20	298	500
1-Aug-23	14:30	Cloudy	2.5	5	20	298	500
7-Aug-23	12:53	Cloudy	4.2	234	15	298	500
7-Aug-23	13:53	Cloudy	5.3	240	23	298	500
7-Aug-23	14:53	Cloudy	3.9	234	31	298	500
12-Aug-23	12:37	Cloudy	5.6	245	18	298	500
12-Aug-23	13:37	Cloudy	6.1	232	13	298	500
12-Aug-23	14:37	Cloudy	5.8	240	8	298	500
18-Aug-23	12:33	Drizzle	3.3	33	21	298	500
18-Aug-23	13:33	Drizzle	2.2	136	24	298	500
18-Aug-23	14:33	Drizzle	1.7	294	16	298	500
24-Aug-23	14:46	Sunny	2.2	47	40	298	500
24-Aug-23	15:46	Sunny	1.7	294	32	298	500
24-Aug-23	16:46	Sunny	4.7	104	26	298	500
30-Aug-23	13:14	Sunny	5.3	335	47	298	500
30-Aug-23	14:14	Sunny	5.8	320	32	298	500
30-Aug-23	15:14	Sunny	5.3	317	25	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) ^
1-Aug-23	Cloudy	9:22	60.9	57.2	63
1-Aug-23	Cloudy	9:27	61.1	57.3	
1-Aug-23	Cloudy	9:32	60.5	56.7	
1-Aug-23	Cloudy	9:37	60.5	57.6	
1-Aug-23	Cloudy	9:42	60.9	57.4	
1-Aug-23	Cloudy	9:47	61.9	58.0	
7-Aug-23	Cloudy	9:10	62.0	57.6	63
7-Aug-23	Cloudy	9:15	61.1	57.5	
7-Aug-23	Cloudy	9:20	61.3	58.2	
7-Aug-23	Cloudy	9:25	61.2	57.9	
7-Aug-23	Cloudy	9:30	61.0	57.5	
7-Aug-23	Cloudy	9:35	60.3	57.0	
18-Aug-23	Drizzle	9:18	64.5	61.4	66
18-Aug-23	Drizzle	9:23	63.5	61.4	
18-Aug-23	Drizzle	9:28	63.2	60.9	
18-Aug-23	Drizzle	9:33	63.7	61.0	
18-Aug-23	Drizzle	9:38	63.6	61.2	
18-Aug-23	Drizzle	9:43	64.1	61.5	
24-Aug-23	Sunny	9:02	63.8	60.1	65
24-Aug-23	Sunny	9:07	63.1	59.9	
24-Aug-23	Sunny	9:12	63.9	60.2	
24-Aug-23	Sunny	9:17	62.6	59.9	
24-Aug-23	Sunny	9:22	63.3	60.1	
24-Aug-23	Sunny	9:27	62.7	59.4	
30-Aug-23	Sunny	11:01	60.9	52.9	64
30-Aug-23	Sunny	11:06	57.5	50.8	
30-Aug-23	Sunny	11:11	62.8	51.0	
30-Aug-23	Sunny	11:16	61.1	51.2	
30-Aug-23	Sunny	11:21	64.4	51.9	
30-Aug-23	Sunny	11:26	66.9	55.2	

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) ^
3-Aug-23	Sunny	12:59	61.5	58.7	62
3-Aug-23	Sunny	13:04	60.4	58.0	
3-Aug-23	Sunny	13:09	60.1	57.0	
3-Aug-23	Sunny	13:14	60.7	56.6	
3-Aug-23	Sunny	13:19	61.1	56.8	
3-Aug-23	Sunny	13:24	61.6	57.1	
10-Aug-23	Cloudy	13:48	58.6	55.1	61
10-Aug-23	Cloudy	13:53	59.4	55.2	
10-Aug-23	Cloudy	13:58	59.3	54.8	
10-Aug-23	Cloudy	14:03	58.9	55.3	
10-Aug-23	Cloudy	14:08	60.3	56.7	
10-Aug-23	Cloudy	14:13	62.4	57.6	
17-Aug-23	Cloudy	14:18	58.8	55.7	62
17-Aug-23	Cloudy	14:23	59.9	55.3	
17-Aug-23	Cloudy	14:28	60.4	56.2	
17-Aug-23	Cloudy	14:33	60.8	56.8	
17-Aug-23	Cloudy	14:38	64.6	56.4	
17-Aug-23	Cloudy	14:43	59.5	55.7	
25-Aug-23	Sunny	11:04	64.1	58.1	64
25-Aug-23	Sunny	11:09	61.9	57.2	
25-Aug-23	Sunny	11:14	61.9	57.8	
25-Aug-23	Sunny	11:19	63.6	57.4	
25-Aug-23	Sunny	11:24	63.4	57.5	
25-Aug-23	Sunny	11:29	65.0	58.0	
31-Aug-23	Cloudy	13:35	61.3	56.6	62
31-Aug-23	Cloudy	13:40	61.5	56.9	
31-Aug-23	Cloudy	13:45	60.2	56.6	
31-Aug-23	Cloudy	13:50	61.2	56.3	
31-Aug-23	Cloudy	13:55	59.7	56.0	
31-Aug-23	Cloudy	14:00	59.9	57.1	

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) ^
1-Aug-23	Cloudy	11:53	64.4	59.7	64*
1-Aug-23	Cloudy	11:58	63.3	59.6	
1-Aug-23	Cloudy	12:03	63.4	60.1	
1-Aug-23	Cloudy	12:08	63.4	60.5	
1-Aug-23	Cloudy	12:13	62.8	59.4	
1-Aug-23	Cloudy	12:18	63.0	59.9	
7-Aug-23	Cloudy	11:54	62.1	58.2	61*
7-Aug-23	Cloudy	11:59	61.6	57.1	
7-Aug-23	Cloudy	12:04	61.6	57.6	
7-Aug-23	Cloudy	12:09	61.1	57.7	
7-Aug-23	Cloudy	12:14	61.8	56.7	
7-Aug-23	Cloudy	12:19	61.5	58.3	
18-Aug-23	Drizzle	12:04	65.6	54.9	64*
18-Aug-23	Drizzle	12:09	66.3	52.3	
18-Aug-23	Drizzle	12:14	60.9	52.3	
18-Aug-23	Drizzle	12:19	61.4	53.3	
18-Aug-23	Drizzle	12:24	64.2	53.4	
18-Aug-23	Drizzle	12:29	64.3	54.8	
24-Aug-23	Sunny	13:13	64.0	59.2	64*
24-Aug-23	Sunny	13:18	62.7	59.1	
24-Aug-23	Sunny	13:23	64.5	60.1	
24-Aug-23	Sunny	13:28	62.9	59.0	
24-Aug-23	Sunny	13:33	62.3	59.5	
24-Aug-23	Sunny	13:38	62.8	59.1	
30-Aug-23	Sunny	13:10	64.5	60.8	65*
30-Aug-23	Sunny	13:15	63.9	61.4	
30-Aug-23	Sunny	13:20	63.8	60.8	
30-Aug-23	Sunny	13:25	63.7	61.0	
30-Aug-23	Sunny	13:30	64.2	61.0	
30-Aug-23	Sunny	13:35	65.6	61.0	

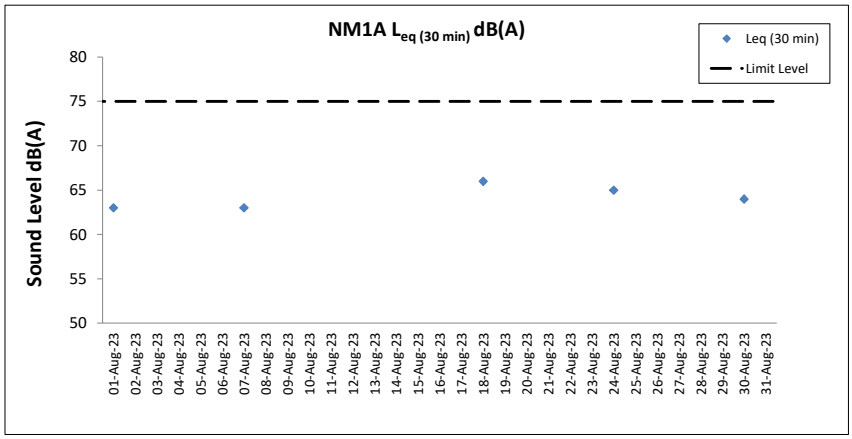
Remarks:
(^) +3dB (A) correction in Leq(30mins) dB(A) was applied to free-field measurement.
(*) The measurement result was corrected with reference to the baseline monitoring levels.

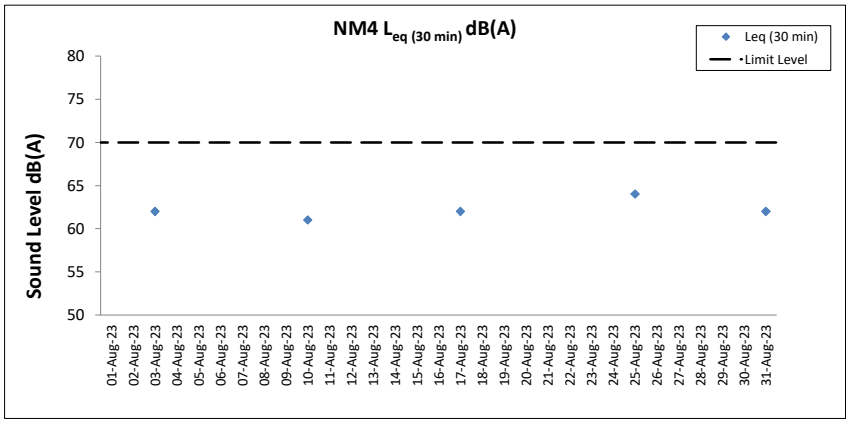
Noise Measurement Results

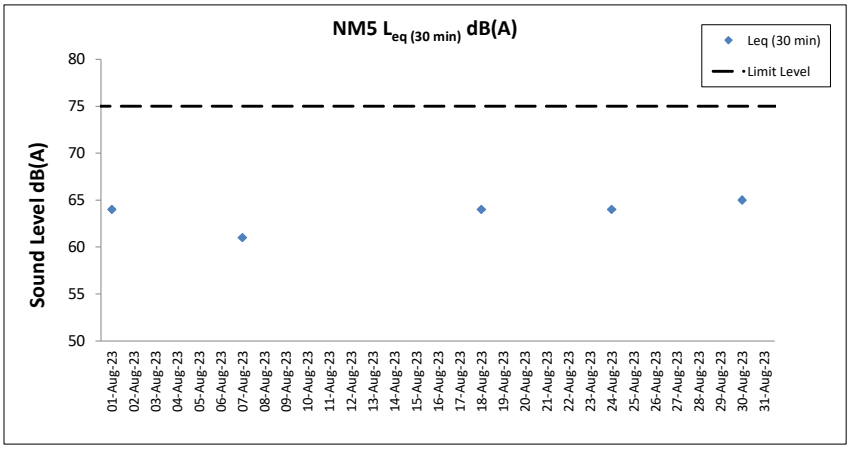
Station: NM6- House No.1 Sha Lo Wan

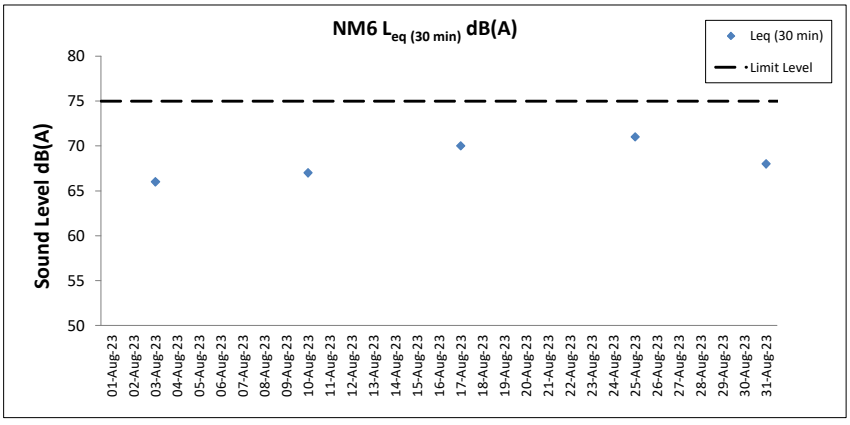
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A) ^
3-Aug-23	Sunny	15:40	61.4	43.8	66
3-Aug-23	Sunny	15:45	70.7	50.2	
3-Aug-23	Sunny	15:50	66.0	45.5	
3-Aug-23	Sunny	15:55	65.3	43.8	
3-Aug-23	Sunny	16:00	70.4	45.8	
3-Aug-23	Sunny	16:05	57.9	47.3	
10-Aug-23	Cloudy	15:44	69.0	51.2	67
10-Aug-23	Cloudy	15:49	66.2	55.7	
10-Aug-23	Cloudy	15:54	64.2	48.8	
10-Aug-23	Cloudy	15:59	66.0	53.7	
10-Aug-23	Cloudy	16:04	67.6	49.6	
10-Aug-23	Cloudy	16:09	64.1	53.6	
17-Aug-23	Cloudy	15:47	73.1	46.4	70*
17-Aug-23	Cloudy	15:52	69.5	47.0	
17-Aug-23	Cloudy	15:57	68.3	44.6	
17-Aug-23	Cloudy	16:02	73.4	48.4	
17-Aug-23	Cloudy	16:07	71.5	49.9	
17-Aug-23	Cloudy	16:12	69.7	54.7	
25-Aug-23	Sunny	9:47	74.7	58.2	71*
25-Aug-23	Sunny	9:52	73.3	58.6	
25-Aug-23	Sunny	9:57	77.9	59.2	
25-Aug-23	Sunny	10:02	76.6	59.0	
25-Aug-23	Sunny	10:07	75.5	57.3	
25-Aug-23	Sunny	10:12	73.5	57.3	
31-Aug-23	Cloudy	15:35	70.7	54.9	68*
31-Aug-23	Cloudy	15:40	74.6	58.2	
31-Aug-23	Cloudy	15:45	72.6	58.5	
31-Aug-23	Cloudy	15:50	72.6	55.3	
31-Aug-23	Cloudy	15:55	68.3	57.5	
31-Aug-23	Cloudy	16:00	74.1	57.1	

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

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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 01 August 23 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	12:45	8.6	Surface	1.0	0.7	216	28.4	28.4	8.1	8.1	27.2	27.2	71.2	71.2	4.7	4.7	13.0	11.2	3	4	815618	804227
						1.0	0.8	219	28.4		8.1		27.2		71.2		4.7		12.3		3			
					Middle	4.3	0.7	204	28.3	28.3	8.1	8.1	27.3	27.3	68.9	69.0	4.6		10.3		4			
						4.3	0.7	210	28.3		8.1		27.3		69.0		4.6		10.2		4			
					Bottom	7.6	0.7	230	28.3	28.3	8.2	8.2	27.3	27.3	59.8	59.8	4.0	4.0	10.8		4			
						7.6	0.8	229	28.3		8.2		27.3		59.8		4.0		10.9		4			
C2	Cloudy	Moderate	11:12	11.8	Surface	1.0	0.5	179	29.0	29.0	8.1	8.1	25.4	25.4	80.0	79.9	5.3	4.9	2.4	5.8	4	4	825691	806956
						1.0	0.5	176	29.0		8.1		25.4		79.8		5.3		2.4		3			
					Middle	5.9	0.6	183	28.4	28.4	8.1	8.1	26.4	26.4	65.5	65.5	4.4		6.1		3			
						5.9	0.6	182	28.4		8.1		26.4		65.5		4.4		6.0		4			
					Bottom	10.8	0.5	173	28.3	28.3	8.1	8.1	26.4	26.4	61.2	61.2	4.1	4.1	9.0		4			
						10.8	0.5	171	28.3		8.1		26.4		61.2		4.1		8.9		4			
C3	Rainy	Moderate	12:58	11.5	Surface	1.0	0.4	79	27.8	27.8	7.8	7.8	26.7	26.7	62.7	62.7	4.2	4.1	2.3	3.8	5	4	822113	817820
						1.0	0.5	78	27.8		7.8		26.7		62.6		4.2		2.3		4			
					Middle	5.8	0.4	51	27.7	27.7	7.8	7.8	27.0	27.0	59.6	59.6	4.0		3.4		4			
						5.8	0.5	54	27.7		7.8		27.0		59.5		4.0		3.4		5			
					Bottom	10.5	0.5	77	27.3	27.3	7.8	7.8	28.0	28.0	58.1	58.2	3.9	4.0	5.7		4			
						10.5	0.5	69	27.3		7.8		28.0		58.3		4.0		5.8		4			
IM1	Cloudy	Moderate	12:19	6.1	Surface	1.0	0.5	183	28.4	28.4	8.1	8.1	27.1	27.1	71.6	71.6	4.8	4.6	7.8	9.6	4	5	818371	806440
						1.0	0.5	187	28.4		8.1		27.1		71.6		4.8		7.8		3			
					Middle	3.1	0.5	205	28.4	28.4	8.1	8.1	27.1	27.1	65.3	65.3	4.3		10.1		5			
						3.1	0.5	210	28.4		8.1		27.1		65.3		4.3		10.2		5			
					Bottom	5.1	0.5	214	28.3	28.3	8.1	8.1	27.1	27.1	54.6	54.6	3.6	3.6	10.3		5			
						5.1	0.5	219	28.3		8.1		27.1		54.6		3.6		11.6		6			
IM2	Cloudy	Moderate	12:13	6.8	Surface	1.0	0.5	193	28.5	28.5	8.1	8.1	27.1	27.1	72.6	72.6	4.8	4.6	4.0	9.0	4	4	819167	806234
						1.0	0.5	187	28.4		8.1		27.1		72.6		4.8		4.4		4			
					Middle	3.4	0.6	177	28.2	28.2	8.1	8.1	27.3	27.3	66.6	66.6	4.4		9.6		4			
						3.4	0.6	176	28.2		8.1		27.4		66.6		4.4		9.6		3			
					Bottom	5.8	0.5	184	28.2	28.2	8.1	8.1	27.4	27.4	63.5	63.5	4.2	4.2	13.4		3			
						5.8	0.5	185	28.2		8.1		27.4		63.5		4.2		13.2		3			
IM7	Cloudy	Moderate	11:41	7.9	Surface	1.0	0.3	167	28.8	28.8	8.1	8.1	72.3	72.3	56.2	56.2	5.2	4.8	1.7	3.4	3	4	821360	806830
						1.0	0.2	160	28.8		8.1		72.3		56.2		5.2		1.7		4			
					Middle	4.0	0.3	155	28.5	28.5	8.1	8.1	65.6	65.6	65.6	65.6	4.4		3.5		4			
						4.0	0.3	160	28.5		8.1		65.5		65.5		4.4		3.6		3			
					Bottom	6.9	0.3	175	28.4	28.4	8.1	8.1	60.2	60.2	60.2	60.2	4.0	4.0	4.9		5			
						6.9	0.3	180	28.4		8.1		60.2		60.2		4.0		4.8		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 01 August 23 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	Rainy	Rough	11:02	8.3	Surface	1.0	0.6	107	28.6	28.6	7.8	7.8	25.9	25.9	74.4	74.4	5.5	5.0	3.4	4.5	4	4	822217	809841
						1.0	0.6	114	28.6		7.8		25.9		74.4		5.5		3.5		4			
					Middle	4.2	0.6	93	28.2	28.2	7.8	7.8	26.1	26.1	65.2	65.3	4.4		4.9		4			
						4.2	0.5	90	28.2		7.8		26.1		65.3		4.4		4.9		4			
					Bottom	7.3	0.6	102	28.2	28.2	7.8	7.8	26.3	26.3	64.4	64.5	4.4	4.4	5.1		4			
						7.3	0.6	98	28.2		7.8		26.3		64.5		4.4		5.2		5			
IM11	Rainy	Rough	11:14	7.7	Surface	1.0	0.7	100	28.0	28.0	7.8	7.8	26.1	26.1	65.8	65.8	4.9	4.6	7.8	9.3	4	5	821490	810533
						1.0	0.7	100	28.0		7.8		26.1		65.8		4.9		7.9		5			
					Middle	3.9	0.7	94	27.9	27.9	7.8	7.8	26.2	26.2	62.9	63.0	4.3		8.4		4			
						3.9	0.7	94	27.9		7.8		26.2		63.0		4.3		8.4		5			
					Bottom	6.7	0.7	78	27.9	27.9	7.8	7.8	26.3	26.3	60.9	60.9	4.1	4.1	11.7		6			
						6.7	0.6	72	27.9		7.8		26.3		60.9		4.1		11.8		5			
IM12	Rainy	Rough	11:24	7.4	Surface	1.0	0.8	97	28.0	28.0	7.8	7.8	25.8	25.8	72.5	72.5	5.1	4.7	3.4	6.8	4	5	821180	811519
						1.0	0.8	102	28.0		7.8		25.8		72.5		5.1		3.5		4			
					Middle	3.7	0.8	113	28.0	28.0	7.8	7.8	26.2	26.2	61.2	61.2	4.3		7.3		4			
						3.7	0.8	116	28.0		7.8		26.2		61.2		4.3		7.3		5			
					Bottom	6.4	0.8	100	27.9	27.9	7.8	7.8	26.2	26.2	60.5	60.5	4.1	4.1	9.5		6			
						6.4	0.8	102	27.9		7.8		26.2		60.5		4.1		9.6		5			
SR1A	Rainy	Moderate	12:12	5.2	Surface	1.0	0.0	83	28.4	28.4	7.9	7.9	25.0	25.1	73.1	73.1	5.1	5.1	2.7	4.9	4	3	819972	812654
						1.0	0.1	86	28.3		7.9		25.1		73.1		5.1		2.8		3			
					Middle	2.6	0.0	95	-	-	-	-	-	-	-	-	-		-		-			
						2.6	0.0	100	-		-		-		-		-		-		-			
					Bottom	4.2	0.0	58	28.1	28.1	7.8	7.8	25.9	25.9	62.8	62.9	4.3	4.3	6.9		2			
						4.2	0.1	55	28.1		7.8		25.9		63.0		4.3		6.9		3			
SR2	Rainy	Moderate	12:27	5.0	Surface	1.0	0.8	40	28.1	28.1	7.8	7.8	25.9	25.9	65.8	65.8	4.9	4.9	6.1	7.9	4	4	821445	814172
						1.0	0.7	41	28.1		7.8		25.9		65.8		4.9		6.1		3			
					Middle	-	0.7	51	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	57	-		-		-		-		-		-		-			
					Bottom	4.0	0.7	47	27.9	27.9	7.8	7.8	26.4	26.4	63.1	63.1	4.3	4.3	9.6		4			
						4.0	0.7	42	27.9		7.8		26.4		63.1		4.3		9.6		4			
SR3	Cloudy	Moderate	11:33	8.0	Surface	1.0	0.6	154	28.8	28.8	8.1	8.1	25.7	25.7	76.0	76.0	5.1	4.9	1.8	3.8	4	4	822159	807548
						1.0	0.6	152	28.8		8.1		25.7		76.0		5.1		1.8		3			
					Middle	4.0	0.6	166	28.5	28.5	8.1	8.1	26.5	26.5	69.8	69.8	4.7		3.7		3			
						4.0	0.6	169	28.5		8.1		26.5		69.8		4.7		3.6		4			
					Bottom	7.0	0.5	163	28.4	28.4	8.1	8.1	26.7	26.7	62.2	62.2	4.2	4.2	5.8		4			
						7.0	0.5	164	28.4		8.1		26.7		62.2		4.2		5.7		4			
SR4A	Cloudy	Moderate	13:20	9.1	Surface	1.0	0.0	68	28.9	28.9	8.0	8.0	26.4	26.4	73.6	73.6	4.9	4.6	4.8	7.0	3	4	817184	807786
						1.0	0.0	73	28.9		8.0		26.4		73.6		4.9		4.9		3			
					Middle	4.6	0.0	56	28.6	28.6	8.1	8.1	26.8	26.8	62.5	62.5	4.2		5.7		3			
						4.6	0.0	48	28.6		8.1		26.8		62.5		4.2		5.8		4			
					Bottom	8.1	0.0	76	28.5	28.5	8.1	8.1	27.0	27.0	61.4	61.5	4.1	4.1	10.5		4			
						8.1	0.0	69	28.5		8.1		27.0		61.5		4.1		10.2		4			
SR8	Rainy	Moderate	11:36	5.1	Surface	1.0	-	-	28.2	28.2	7.8	7.8	25.6	25.6	78.3	78.3	5.3	5.3	4.2	5.6	5	4	820379	811607
						1.0	-	-	28.2		7.8		25.6		78.3		5.3		4.3		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.1	-	-	28.2	28.2	7.8	7.8	25.8	25.8	72.2	72.3	4.9	4.9	6.9		4			
						4.1	-	-	28.1		7.8		25.8		72.3		4.9		6.9		3			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 August 23 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	05:09	8.5	Surface	1.0	0.3	44	28.2	28.2	8.1	8.1	26.4	26.4	78.2	78.1	5.2	4.7	0.5	3.7	4	3	815634	804242
						1.0	0.2	37	28.1		8.1		26.4		78.0		5.2		0.5		3			
					Middle	4.3	0.3	14	27.7	27.7	8.1	8.1	27.6	27.6	61.5	61.5	4.1		5.1		3			
						4.3	0.3	18	27.7		8.1		27.6		61.4		4.1		5.4		3			
					Bottom	7.5	0.3	30	27.7	27.7	8.1	8.1	27.8	27.8	58.8	58.8	3.9	3.9	5.5		3			
						7.5	0.3	23	27.7		8.1		27.8		58.8		3.9		5.5		3			
C2	Cloudy	Moderate	06:41	11.2	Surface	1.0	0.6	1	28.6	28.6	8.1	8.1	24.6	24.6	79.8	79.8	5.4	4.8	2.0	4.9	4	4	825677	806958
						1.0	0.6	353	28.6		8.1		24.6		79.7		5.3		2.0		5			
					Middle	5.6	0.5	345	27.9	27.9	8.1	8.1	26.4	26.4	62.3	62.4	4.2		5.6		3			
						5.6	0.5	342	27.9		8.1		26.4		62.5		4.2		6.3		4			
					Bottom	10.2	0.6	340	27.8	27.8	8.1	8.1	26.5	26.5	63.6	63.7	4.3	4.3	6.8		3			
						10.2	0.6	346	27.8		8.1		26.5		63.8		4.3		6.8		3			
C3	Fine	Moderate	04:19	10.3	Surface	1.0	0.2	272	27.6	27.6	8.0	8.0	27.5	27.5	66.7	66.7	4.5	4.4	3.1	5.0	4	4	822112	817818
						1.0	0.3	265	27.6		8.0		27.5		66.6		4.5		3.1		4			
					Middle	5.2	0.3	285	27.3	27.3	8.0	8.0	28.1	28.1	63.7	63.7	4.3		4.5		4			
						5.2	0.3	281	27.3		8.0		28.1		63.7		4.3		4.6		4			
					Bottom	9.3	0.3	276	26.9	26.9	8.0	8.0	29.0	29.0	64.4	64.5	4.4	4.4	7.4		5			
						9.3	0.2	274	26.9		8.0		29.0		64.6		4.4		7.4		4			
IM1	Cloudy	Moderate	05:35	6.7	Surface	1.0	0.2	20	27.8	27.8	8.1	8.1	27.3	27.3	68.4	68.4	4.6	4.5	6.6	5.5	4	4	818346	806472
						1.0	0.2	16	27.8		8.1		27.3		68.4		4.6		6.9		4			
					Middle	3.4	0.3	22	27.7	27.7	8.1	8.1	27.6	27.6	64.6	64.7	4.4		5.2		4			
						3.4	0.2	17	27.7		8.1		27.6		64.8		4.4		5.2		4			
					Bottom	5.7	0.3	35	27.7	27.7	8.1	8.1	27.7	27.7	57.3	57.3	3.8	3.8	4.5		3			
						5.7	0.3	34	27.7		8.1		27.7		57.3		3.8		4.6		3			
IM2	Cloudy	Moderate	05:40	6.7	Surface	1.0	0.2	7	27.8	27.8	8.1	8.1	27.2	27.2	67.4	67.4	4.5	4.5	7.2	8.5	3	4	819204	806251
						1.0	0.2	7	27.8		8.1		27.2		67.4		4.5		7.2		4			
					Middle	3.4	0.3	6	27.8	27.8	8.1	8.1	27.3	27.3	66.2	66.2	4.4		8.6		4			
						3.4	0.3	2	27.8		8.1		27.3		66.2		4.4		8.6		3			
					Bottom	5.7	0.3	34	27.7	27.7	8.1	8.1	27.4	27.4	58.0	58.0	3.9	3.9	9.8		4			
						5.7	0.3	27	27.7		8.1		27.4		58.0		3.9		9.8		5			
IM7	Cloudy	Moderate	06:09	8.2	Surface	1.0	0.2	358	28.3	28.3	8.1	8.1	25.8	25.8	68.5	68.5	4.6	4.6	1.6	1.9	3	4	821369	806856
						1.0	0.2	354	28.2		8.1		25.9		68.4		4.6		1.7		3			
					Middle	4.1	0.3	359	28.1	28.1	8.1	8.1	26.5	26.5	68.6	68.7	4.6		1.9		4			
						4.1	0.3	359	28.1		8.1		26.5		68.7		4.6		1.9		4			
					Bottom	7.2	0.2	335	28.0	28.0	8.1	8.1	26.8	26.8	69.8	69.9	4.7	4.7	2.2		4			
						7.2	0.2	341	28.0		8.1		26.8		69.9		4.7		2.3		5			

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Water Quality Monitoring
Water Quality Monitoring Results on 01 August 23 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	Fine	Moderate	06:01	7.9	Surface	1.0	0.4	289	28.1	28.1	7.9	7.9	25.9	25.9	76.6	76.6	5.4	4.8	3.9	5.3	4	4	822261	809849
						1.0	0.4	292	28.1		7.9		25.9		76.6		5.4		3.9		3			
					Middle	4.0	0.4	296	28.0	28.0	7.8	7.8	26.1	26.1	60.8	60.9	4.1		6.0		4			
						4.0	0.5	290	28.0		7.8		26.1		60.9		4.1		6.1		5			
					Bottom	6.9	0.4	290	28.0	28.0	7.8	7.8	26.1	26.1	60.2	60.2	4.1	4.1	6.1		4			
						6.9	0.4	288	28.0		7.8		26.1		60.2		4.1		6.1		5			
IM11	Fine	Moderate	05:46	7.1	Surface	1.0	0.5	278	28.1	28.1	7.8	7.8	26.0	26.0	67.6	67.6	5.1	4.6	4.7	6.0	3	4	821523	810525
						1.0	0.4	272	28.1		7.8		26.0		67.6		5.1		4.7		4			
					Middle	3.6	0.5	270	28.0	28.0	7.8	7.8	26.1	26.1	61.3	61.3	4.1		6.3		3			
						3.6	0.5	262	28.0		7.8		26.1		61.3		4.2		6.2		4			
					Bottom	6.1	0.5	265	28.0	28.0	7.8	7.8	26.1	26.1	63.3	63.3	4.3	4.3	7.1		5			
						6.1	0.5	265	28.0		7.8		26.1		63.3		4.3		7.2		5			
IM12	Fine	Moderate	05:37	6.8	Surface	1.0	0.5	279	28.2	28.2	7.9	7.9	26.0	26.0	68.9	68.9	5.2	4.7	2.7	5.4	4	4	821156	811523
						1.0	0.4	286	28.2		7.9		26.0		68.9		5.2		2.7		3			
					Middle	3.4	0.4	294	28.1	28.1	7.9	7.9	26.3	26.3	61.9	61.9	4.2		4.6		4			
						3.4	0.4	289	28.1		7.9		26.3		61.9		4.2		4.6		4			
					Bottom	5.8	0.5	270	27.5	27.5	7.8	7.8	27.7	27.6	57.5	57.6	3.9	3.9	8.9		5			
						5.8	0.5	270	27.5		7.8		27.6		57.7		3.9		8.9		4			
SR1A	Fine	Calm	05:01	4.4	Surface	1.0	0.0	199	28.5	28.5	7.9	7.9	25.2	25.2	72.9	72.9	4.9	4.9	2.2	3.0	4	5	819978	812654
						1.0	0.0	198	28.5		7.9		25.2		72.9		4.9		2.3		5			
					Middle	2.2	0.0	198	-	-	-	-	-	-	-	-	-		-		-			
						2.2	-	197	-		-		-		-		-		-		-			
					Bottom	3.4	0.0	210	28.4	28.4	7.8	7.8	25.5	25.5	69.3	69.4	4.7	4.7	3.6		5			
						3.4	0.0	210	28.4		7.8		25.5		69.4		4.7		3.7		5			
SR2	Fine	Moderate	04:42	4.2	Surface	1.0	0.1	247	28.4	28.4	7.9	7.9	25.2	25.2	74.2	74.2	5.0	5.0	2.0	5.9	5	5	821465	814162
						1.0	0.1	241	28.4		7.9		25.2		74.2		5.0		2.1		6			
					Middle	-	0.1	264	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	257	-		-		-		-		-		-		-			
					Bottom	3.2	0.1	241	27.6	27.6	7.9	7.8	27.1	27.1	60.8	60.9	4.1	4.1	9.8		5			
						3.2	0.1	242	27.6		7.8		27.1		60.9		4.1		9.8		4			
SR3	Cloudy	Moderate	06:15	9.2	Surface	1.0	0.4	324	28.5	28.5	8.1	8.1	25.1	25.1	73.4	73.5	4.9	4.8	9.2	6.4	4	4	822140	807556
						1.0	0.3	322	28.5		8.1		25.1		73.5		4.9		9.2		4			
					Middle	4.6	0.4	325	28.3	28.3	8.1	8.1	25.9	25.9	68.2	68.2	4.6		2.4		4			
						4.6	0.3	331	28.3		8.1		26.0		68.1		4.6		2.6		4			
					Bottom	8.2	0.4	339	28.0	28.0	8.1	8.1	26.7	26.7	61.0	61.0	4.1	4.1	7.4		4			
						8.2	0.5	340	28.0		8.1		26.7		61.0		4.1		7.4		5			
SR4A	Cloudy	Moderate	04:41	8.8	Surface	1.0	0.0	238	27.9	27.9	8.1	8.1	27.2	27.2	69.3	69.4	4.7	4.7	2.6	3.4	4	4	817167	807801
						1.0	0.0	235	27.9		8.1		27.2		69.4		4.7		2.6		4			
					Middle	4.4	0.0	241	27.8	27.8	8.1	8.1	27.3	27.3	68.5	68.5	4.6		3.4		4			
						4.4	0.1	239	27.8		8.1		27.3		68.4		4.6		3.4		4			
					Bottom	7.8	0.0	272	27.7	27.7	8.1	8.1	27.5	27.5	52.7	52.7	3.5	3.5	4.3		4			
						7.8	0.0	267	27.7		8.1		27.5		52.7		3.5		4.3		4			
SR8	Fine	Calm	05:29	4.6	Surface	1.0	-	-	28.2	28.2	7.8	7.8	26.1	26.1	67.2	67.2	4.5	4.5	3.3	3.9	5	6	820377	811625
						1.0	-	-	28.2		7.8		26.1		67.2		4.5		3.3		5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	28.1	28.1	7.8	7.8	26.3	26.3	65.6	65.6	4.5	4.5	4.4		6			
						3.6	-	-	28.1		7.8		26.3		65.6		4.5		4.5		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 03 August 23 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	12:53	9.0	Surface	1.0	0.4	203	29.1	29.1	8.0	8.0	26.5	26.5	75.5	75.6	5.0	5.1	2.7	4.6	4	4	815620	804268
						1.0	0.4	204	29.1		8.0		26.5		75.6		5.0		2.7		4			
					Middle	4.5	0.4	199	28.5	28.5	8.0	8.0	28.1	28.1	76.9	76.8	5.1		2.7		4			
						4.5	0.5	205	28.5		8.0		28.1		76.6		5.1		2.7		4			
					Bottom	8.0	0.4	191	27.7	27.7	8.0	8.0	28.7	28.7	64.5	64.6	4.3	4.3	8.1		5			
						8.0	0.4	188	27.7		8.0		28.7		64.7		4.3		8.7		4			
C2	Cloudy	Moderate	14:22	11.9	Surface	1.0	0.8	184	29.4	29.4	7.9	7.9	24.1	24.1	73.6	73.6	4.9	4.7	3.9	7.7	7	7	825689	806939
						1.0	0.8	179	29.4		7.9		24.1		73.5		4.9		4.0		8			
					Middle	6.0	0.8	153	28.6	28.6	7.9	7.9	25.1	25.1	65.3	65.3	4.4		8.8		6			
						6.0	0.8	154	28.5		7.9		25.2		65.3		4.4		9.0		7			
					Bottom	10.9	0.8	171	28.0	28.0	7.9	7.9	26.7	26.7	60.6	60.6	4.1	4.1	10.3		6			
						10.9	0.8	173	28.0		7.9		26.7		60.6		4.1		10.3		6			
C3	Sunny	Moderate	13:38	7.8	Surface	1.0	0.4	67	27.9	27.9	8.3	8.3	25.2	25.2	81.8	81.7	5.5	5.1	1.1	1.3	9	8	822124	817791
						1.0	0.4	60	27.8		8.3		25.2		81.6		5.5		1.1		8			
					Middle	3.9	0.4	55	27.7	27.7	8.1	8.1	27.7	27.7	70.0	70.0	4.7		1.1		7			
						3.9	0.5	54	27.7		8.1		27.7		70.0		4.7		1.1		8			
					Bottom	6.8	0.5	50	27.7	27.7	8.1	8.1	30.0	30.0	62.3	62.3	4.1	4.1	1.6		7			
						6.8	0.5	56	27.7		8.1		30.0		62.3		4.1		1.6		8			
IM1	Cloudy	Moderate	13:16	6.6	Surface	1.0	0.3	187	28.5	28.5	8.0	8.0	26.9	26.9	68.3	68.3	4.6	4.5	4.6	8.1	7	6	818330	806477
						1.0	0.3	189	28.5		8.0		26.9		68.3		4.6		5.0		6			
					Middle	3.3	0.3	185	28.1	28.1	8.0	8.0	27.7	27.7	65.6	65.5	4.4		8.7		6			
						3.3	0.3	184	28.1		8.0		27.7		65.4		4.4		8.9		5			
					Bottom	5.6	0.3	210	28.0	28.0	8.0	8.0	27.9	27.9	64.9	64.9	4.4	4.4	10.5		4			
						5.6	0.3	207	28.0		8.0		27.9		64.8		4.3		10.9		5			
IM2	Cloudy	Moderate	13:23	8.3	Surface	1.0	0.3	196	28.9	28.9	8.0	8.0	25.8	25.8	73.7	73.6	4.9	4.6	2.6	6.9	8	6	819164	806247
						1.0	0.3	198	28.9		8.0		25.8		73.5		4.9		2.7		8			
					Middle	4.2	0.4	198	28.1	28.1	8.0	8.0	27.3	27.4	63.4	63.3	4.3		7.9		7			
						4.2	0.4	196	28.1		8.0		27.4		63.1		4.2		7.1		6			
					Bottom	7.3	0.3	198	27.9	27.9	8.0	8.0	27.8	27.8	62.1	62.1	4.2	4.2	10.5		4			
						7.3	0.3	194	27.9		8.0		27.8		62.1		4.2		10.2		5			
IM7	Cloudy	Moderate	13:50	8.8	Surface	1.0	0.4	189	29.1	29.1	7.9	7.9	25.7	25.8	69.0	68.8	4.6	4.7	2.9	5.3	4	5	821358	806836
						1.0	0.4	192	29.0		7.9		25.8		68.6		4.6		3.0		5			
					Middle	4.4	0.3	182	28.9	28.9	8.0	8.0	26.6	26.6	70.3	70.3	4.7		4.0		4			
						4.4	0.4	185	28.8		8.0		26.6		70.2		4.7		4.5		6			
					Bottom	7.8	0.4	180	28.3	28.3	8.0	8.0	27.2	27.2	64.6	64.7	4.3	4.3	8.9		6			
						7.8	0.4	180	28.3		8.0		27.2		64.8		4.3		8.6		6			

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 August 23 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	12:34	9.6	Surface	1.0	0.5	85	28.6	28.6	8.7	8.7	21.6	21.6	95.4	95.4	6.5	6.3	1.0	1.8	8	8	822229	809844
						1.0	0.6	92	28.6		8.7		21.6		95.3		6.5		1.1		8			
					Middle	4.8	0.5	79	28.6	28.6	8.5	8.5	22.7	22.8	90.2	90.2	6.1		1.1		7			
						4.8	0.5	80	28.6		8.5		22.8		90.2		6.1		1.2		8			
					Bottom	8.6	0.5	89	28.6	28.7	8.5	8.5	23.0	23.0	90.0	90.0	6.1	6.1	3.2		7			
						8.6	0.6	93	28.7		8.5		23.0		90.0		6.1		3.2		8			
IM11	Sunny	Moderate	12:45	7.2	Surface	1.0	0.7	79	29.4	29.4	8.4	8.4	21.6	21.6	95.1	95.1	6.4	6.3	1.1	1.9	9	9	821491	810562
						1.0	0.7	83	29.4		8.4		21.6		95.0		6.4		1.0		8			
					Middle	3.6	0.6	96	29.3	29.3	8.4	8.4	22.1	22.1	91.8	91.8	6.2		1.2		9			
						3.6	0.6	94	29.3		8.4		22.1		91.8		6.2		1.2		9			
					Bottom	6.2	0.7	77	29.4	29.5	8.4	8.4	23.9	23.9	84.6	84.7	5.6	5.6	3.6		9			
						6.2	0.7	82	29.5		8.4		23.9		84.7		5.6		3.5		8			
IM12	Sunny	Moderate	12:49	7.0	Surface	1.0	0.8	112	28.3	28.3	8.4	8.4	21.4	21.4	95.1	95.1	6.5	6.3	1.0	1.8	8	9	821165	811514
						1.0	0.8	107	28.2		8.4		21.4		95.0		6.5		1.0		9			
					Middle	3.5	0.7	103	28.1	28.1	8.2	8.2	23.3	23.3	88.0	88.0	6.0		1.4		8			
						3.5	0.7	106	28.1		8.2		23.3		88.0		6.0		1.5		9			
					Bottom	6.0	0.8	73	28.1	28.1	8.2	8.2	23.8	23.8	86.7	86.8	5.9	5.9	2.7		9			
						6.0	0.8	77	28.1		8.2		23.8		86.9		5.9		2.8		10			
SR1A	Sunny	Moderate	13:14	4.8	Surface	1.0	0.1	61	29.4	29.5	8.5	8.5	22.2	22.2	95.7	95.7	6.4	6.4	1.1	1.8	9	9	819983	812664
						1.0	0.0	58	29.5		8.4		22.2		95.6		6.4		1.1		8			
					Middle	2.4	-	57	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	50	-		-		-		-		-		-		-			
					Bottom	3.8	0.1	84	29.8	29.9	8.4	8.4	23.8	23.7	89.8	89.8	5.9	5.9	2.5		9			
						3.8	0.0	90	29.9		8.4		23.7		89.8		5.9		2.4		10			
SR2	Sunny	Moderate	13:20	5.0	Surface	1.0	0.7	55	29.3	29.3	8.5	8.5	21.4	21.4	97.8	97.8	6.6	6.6	2.3	3.0	10	9	821480	814159
						1.0	0.7	62	29.3		8.5		21.4		97.8		6.6		2.3		9			
					Middle	-	0.7	55	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	49	-		-		-		-		-		-		-			
					Bottom	4.0	0.7	70	29.3	29.3	8.3	8.3	22.6	22.6	93.2	93.2	6.2	6.2	3.7		8			
						4.0	0.7	70	29.3		8.3		22.6		93.2		6.2		3.6		9			
SR3	Cloudy	Moderate	13:58	8.2	Surface	1.0	0.6	172	29.5	29.5	7.9	7.9	25.6	25.6	73.8	73.8	4.9	4.7	4.1	5.7	6	7	822154	807589
						1.0	0.6	173	29.4		7.9		25.6		73.7		4.9		4.3		6			
					Middle	4.1	0.7	148	28.9	28.9	7.9	7.9	26.2	26.2	66.9	66.7	4.5		6.0		7			
						4.1	0.7	152	28.9		7.9		26.2		66.5		4.4		6.1		7			
					Bottom	7.2	0.6	140	28.6	28.6	7.9	7.9	26.3	26.3	64.2	64.3	4.3	4.3	6.9		8			
						7.2	0.6	135	28.6		7.9		26.3		64.3		4.3		7.0		9			
SR4A	Cloudy	Moderate	12:32	9.7	Surface	1.0	0.0	119	29.1	29.1	7.9	7.9	26.3	26.3	73.2	73.2	4.8	4.7	4.4	4.6	5	5	817201	807792
						1.0	0.0	118	29.1		7.9		26.3		73.2		4.8		4.3		6			
					Middle	4.9	-	117	28.1	28.1	7.9	7.9	27.5	27.5	67.2	67.2	4.5		4.1		4			
						4.9	0.0	116	28.1		7.9		27.5		67.2		4.5		4.1		5			
					Bottom	8.7	0.0	93	28.0	28.0	7.9	7.9	27.6	27.6	63.5	63.6	4.3	4.3	5.2		4			
						8.7	0.0	93	28.0		7.9		27.6		63.7		4.3		5.2		4			
SR8	Sunny	Moderate	12:56	4.6	Surface	1.0	-	-	29.0	29.0	8.3	8.3	22.1	22.1	93.7	93.7	6.3	6.3	5.1	5.8	9	9	820398	811618
						1.0	-	-	29.0		8.3		22.1		93.6		6.3		5.0		9			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	29.0	29.0	8.3	8.3	23.1	23.1	91.2	91.5	6.1	6.2	6.4		9			
						3.6	-	-	29.0		8.3		23.1		91.7		6.2		6.5		9			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 August 23 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	08:00	8.4	Surface	1.0	0.6	42	27.8	27.8	8.0	8.0	28.2	28.2	66.6	66.6	4.5	4.4	5.4	9.6	7	8	815617	804245
						1.0	0.6	40	27.8		8.0		28.2		66.6		4.5		5.4		8			
					Middle	4.2	0.5	35	27.6	27.6	8.0	8.0	28.7	28.7	63.0	63.0	4.2		10.2		8			
						4.2	0.5	38	27.6		8.0		28.7		63.0		4.2		10.2		7			
					Bottom	7.4	0.5	39	27.5	27.5	8.0	8.0	28.8	28.8	63.5	63.6	4.3	4.3	13.1		8			
						7.4	0.5	44	27.5		8.0		28.8		63.6		4.3		13.3		9			
C2	Fine	Moderate	06:25	11.4	Surface	1.0	0.2	347	28.6	28.6	7.9	7.9	25.4	25.4	67.3	67.3	4.5	4.5	9.3	11.4	11	9	825675	806922
						1.0	0.2	352	28.6		7.9		25.4		67.2		4.5		9.6		11			
					Middle	5.7	0.2	333	28.5	28.5	7.9	7.9	25.8	25.8	65.4	65.4	4.4		10.5		10			
						5.7	0.2	327	28.5		7.9		25.8		65.4		4.4		10.0		9			
					Bottom	10.4	0.2	330	28.5	28.5	7.9	7.9	25.8	25.8	65.6	65.7	4.4	4.4	14.9		7			
						10.4	0.2	322	28.5		7.9		25.8		65.8		4.4		14.2		8			
C3	Fine	Moderate	07:41	10.0	Surface	1.0	0.6	262	28.1	28.1	8.1	8.1	25.9	26.0	71.3	69.8	4.8	4.6	1.1	2.2	7	8	822115	817814
						1.0	0.6	262	28.1		8.1		26.0		68.2		4.6		1.0		7			
					Middle	5.0	0.6	279	28.1	28.1	8.1	8.1	26.1	26.1	67.6	67.6	4.5		2.2		8			
						5.0	0.6	285	28.1		8.1		26.1		67.6		4.5		2.1		7			
					Bottom	9.0	0.6	255	28.1	28.1	8.0	8.0	26.1	26.0	67.9	68.1	4.6	4.6	3.3		9			
						9.0	0.6	249	28.1		8.0		26.0		68.3		4.6		3.3		8			
IM1	Fine	Moderate	07:38	6.7	Surface	1.0	0.3	2	28.6	28.6	7.9	7.9	26.6	26.6	69.5	69.6	4.7	4.7	4.1	5.5	7	6	818369	806459
						1.0	0.3	5	28.6		7.9		26.6		69.6		4.7		4.2		6			
					Middle	3.4	0.3	7	28.4	28.4	7.9	7.9	27.3	27.3	69.7	69.7	4.7		3.8		7			
						3.4	0.3	6	28.4		7.9		27.3		69.7		4.7		3.8		6			
					Bottom	5.7	0.4	24	27.9	27.9	7.9	7.9	27.9	27.9	64.8	64.9	4.4	4.4	8.8		6			
						5.7	0.4	28	27.9		7.9		27.9		64.9		4.4		8.3		5			
IM2	Fine	Moderate	07:31	7.5	Surface	1.0	0.3	9	28.6	28.6	7.9	7.9	26.3	26.3	68.2	68.2	4.6	4.7	3.5	4.1	6	8	819164	806259
						1.0	0.3	8	28.6		7.9		26.3		68.2		4.6		3.5		7			
					Middle	3.8	0.3	17	28.4	28.4	8.0	8.0	27.3	27.3	72.1	72.1	4.8		3.1		7			
						3.8	0.4	19	28.4		8.0		27.3		72.0		4.8		3.2		8			
					Bottom	6.5	0.3	1	27.9	27.9	7.9	7.9	27.8	27.8	65.1	65.1	4.4	4.4	5.7		9			
						6.5	0.3	3	27.9		7.9		27.8		65.1		4.4		5.6		8			
IM7	Fine	Moderate	06:59	8.3	Surface	1.0	0.2	302	28.7	28.7	7.9	7.9	24.7	24.7	70.5	70.5	4.8	4.7	2.4	4.5	7	7	821361	806842
						1.0	0.2	309	28.7		7.9		24.7		70.4		4.8		2.4		8			
					Middle	4.2	0.1	299	28.4	28.4	7.9	7.9	25.2	25.2	68.8	68.8	4.7		4.4		7			
						4.2	0.1	304	28.4		7.9		25.2		68.7		4.6		4.4		8			
					Bottom	7.3	0.2	299	28.4	28.4	7.9	7.9	25.7	25.7	65.4	65.4	4.4	4.4	6.8		7			
						7.3	0.2	293	28.4		7.9		25.7		65.4		4.4		6.8		7			

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Water Quality Monitoring

Water Quality Monitoring Results on 03 August 23 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	08:56	9.8	Surface	1.0	0.4	308	28.6	28.6	8.1	8.1	24.2	24.2	76.2	75.5	5.1	4.9	2.4	3.9	8	9	822220	809843
						1.0	0.4	315	28.6		8.1		24.2		74.8		5.0		2.4		9			
					Middle	4.9	0.4	300	28.6	28.6	8.1	8.1	24.3	24.3	70.0	70.0	4.7		4.3		9			
						4.9	0.5	305	28.6		8.1		24.3		69.9		4.7		4.3		9			
					Bottom	8.8	0.4	315	28.6	28.6	8.1	8.1	24.3	24.3	70.9	71.2	4.8	4.8	5.0		10			
						8.8	0.4	317	28.6		8.1		24.3		71.4		4.8		5.0		8			
IM11	Fine	Moderate	08:47	8.0	Surface	1.0	0.4	289	28.6	28.6	8.1	8.1	24.2	24.2	75.5	75.5	5.1	5.1	1.2	4.2	10	10	821522	810558
						1.0	0.4	282	28.6		8.1		24.2		75.5		5.1		1.2		10			
					Middle	4.0	0.4	294	28.5	28.5	8.1	8.1	24.3	24.3	75.5	75.6	5.1		5.2		10			
						4.0	0.4	291	28.5		8.1		24.3		75.6		5.1		5.1		11			
					Bottom	7.0	0.5	299	28.2	28.2	7.9	7.9	24.4	24.5	76.4	76.6	5.2	5.2	6.1		11			
						7.0	0.5	291	28.1		7.9		24.5		76.7		5.2		6.1		10			
IM12	Fine	Moderate	08:40	7.8	Surface	1.0	0.5	274	28.6	28.6	8.2	8.2	23.9	23.9	85.7	85.6	5.8	5.4	3.3	5.1	11	10	821167	811538
						1.0	0.4	275	28.5		8.2		23.9		85.5		5.8		3.2		11			
					Middle	3.9	0.5	280	28.5	28.5	8.1	8.1	24.0	24.0	74.9	74.8	5.1		5.5		10			
						3.9	0.5	279	28.5		8.0		24.0		74.6		5.0		5.4		9			
					Bottom	6.8	0.5	290	28.5	28.5	8.0	8.0	24.0	24.0	75.6	76.3	5.1	5.2	6.4		10			
						6.8	0.5	293	28.5		8.0		24.0		76.9		5.2		6.5		9			
SR1A	Fine	Moderate	08:22	4.8	Surface	1.0	0.0	193	28.5	28.5	8.2	8.2	23.7	23.8	81.1	81.0	5.5	5.5	2.3	3.3	8	8	819972	812657
						1.0	0.0	193	28.5		8.2		23.8		80.9		5.5		2.3		7			
					Middle	2.4	0.0	212	-	-	-	-	-	-	-	-	-		-		-			
						2.4	-	215	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	188	28.5	28.5	8.2	8.2	23.9	23.9	80.8	80.8	5.5	5.5	4.2		8			
						3.8	0.0	185	28.5		8.2		23.8		80.7		5.5		4.2		8			
SR2	Fine	Moderate	08:01	5.2	Surface	1.0	0.1	260	28.5	28.5	8.1	8.1	23.9	23.9	85.3	85.2	5.8	5.8	1.2	2.4	8	8	821450	814143
						1.0	0.1	265	28.5		8.1		23.9		85.1		5.8		1.2		7			
					Middle	-	0.1	246	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	241	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	247	28.5	28.5	8.1	8.1	23.9	23.9	85.4	85.5	5.8	5.8	3.6		8			
						4.2	0.0	250	28.5		8.1		23.9		85.6		5.8		3.5		8			
SR3	Fine	Moderate	06:50	8.6	Surface	1.0	0.1	308	28.7	28.7	7.9	7.9	25.0	25.0	68.9	68.9	4.6	4.6	5.4	8.1	7	7	822128	807592
						1.0	0.1	314	28.7		7.9		25.0		68.9		4.6		5.4		6			
					Middle	4.3	0.2	302	28.6	28.6	7.9	7.9	25.6	25.6	67.0	67.0	4.5		8.3		7			
						4.3	0.2	303	28.6		7.9		25.7		67.0		4.5		8.5		8			
					Bottom	7.6	0.1	317	28.5	28.5	7.9	7.9	25.9	25.9	68.2	68.5	4.6	4.6	10.5		7			
						7.6	0.1	314	28.5		7.9		25.9		68.7		4.6		10.7		8			
SR4A	Fine	Moderate	08:27	8.4	Surface	1.0	0.0	136	28.4	28.5	7.9	7.9	26.9	26.9	71.2	71.2	4.7	4.5	5.7	7.9	5	6	817188	807789
						1.0	0.0	142	28.5		7.9		26.9		71.2		4.7		5.7		5			
					Middle	4.2	0.0	145	28.2	28.2	7.9	7.9	27.2	27.2	64.3	64.3	4.3		7.3		6			
						4.2	0.0	144	28.2		7.9		27.2		64.2		4.3		7.6		6			
					Bottom	7.4	0.0	115	28.1	28.1	7.9	7.9	27.4	27.4	64.6	64.6	4.3	4.3	10.3		6			
						7.4	0.0	110	28.1		7.9		27.4		64.6		4.3		10.6		6			
SR8	Fine	Moderate	08:34	5.0	Surface	1.0	-	-	28.5	28.5	8.2	8.2	23.4	23.4	85.0	84.4	5.8	5.8	1.8	2.3	8	7	820374	811603
						1.0	-	-	28.5		8.2		23.4		83.8		5.7		1.7		7			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	28.3	28.3	8.0	8.0	23.5	23.5	80.6	82.7	5.5	5.7	3.0		7			
						4.0	-	-	28.3		8.0		23.5		84.8		5.8		2.9		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 05 August 23 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	Rough	15:39	8.3	Surface	1.0	0.6	207	29.6	29.6	7.9	7.9	26.8	26.8	77.6	77.6	5.1	5.1	6.9	7.8	5	6	815642	804251
						1.0	0.6	203	29.6		7.9		26.8		77.6		5.1		7.0		6			
					Middle	4.2	0.7	206	29.6	29.6	7.9	7.9	26.9	26.9	76.9	76.9	5.1		7.7		6			
						4.2	0.7	199	29.6		7.9		26.9		76.8		5.1		7.8		5			
					Bottom	7.3	0.6	207	29.6	29.6	7.9	7.9	26.9	26.9	73.7	73.7	4.9	4.9	8.8		7			
						7.3	0.7	205	29.6		7.9		26.9		73.7		4.9		8.8		6			
C2	Sunny	Rough	14:06	9.2	Surface	1.0	0.3	177	29.9	29.9	7.9	7.9	26.9	26.9	77.7	77.7	5.1	5.1	4.8	5.5	4	4	825678	806939
						1.0	0.3	175	29.9		7.9		26.9		77.7		5.1		4.8		5			
					Middle	4.6	0.3	169	29.6	29.6	7.9	7.9	27.0	27.0	76.7	76.7	5.0		5.4		4			
						4.6	0.3	168	29.6		7.9		27.0		76.7		5.0		5.4		4			
					Bottom	8.2	0.3	170	29.6	29.6	7.8	7.8	27.3	27.3	75.4	75.3	4.9	4.9	6.4		3			
						8.2	0.2	173	29.6		7.8		27.3		75.2		4.9		6.4		4			
C3	Sunny	Moderate	15:14	7.8	Surface	1.0	0.5	71	28.6	28.6	7.9	7.9	26.3	26.3	64.5	64.4	4.3	4.3	1.1	1.6	6	5	822092	817780
						1.0	0.4	70	28.6		7.9		26.3		64.3		4.3		1.1		5			
					Middle	3.9	0.5	50	28.5	28.5	7.9	7.9	26.5	26.5	63.3	63.2	4.2		1.9		5			
						3.9	0.4	47	28.4		7.9		26.6		63.1		4.2		1.8		4			
					Bottom	6.8	0.5	90	28.3	28.3	7.9	7.9	26.8	26.8	63.5	63.6	4.3	4.3	2.0		4			
						6.8	0.5	96	28.3		7.9		26.8		63.6		4.3		2.0		4			
IM1	Sunny	Moderate	15:15	7.1	Surface	1.0	0.3	182	29.6	29.6	7.9	7.9	26.8	26.8	77.1	77.1	5.1	5.1	5.7	6.4	3	4	818330	806441
						1.0	0.3	181	29.6		7.9		26.8		77.1		5.1		5.8		3			
					Middle	3.6	0.4	168	29.6	29.6	7.9	7.9	26.9	26.9	76.5	76.5	5.0		6.3		5			
						3.6	0.3	161	29.6		7.9		26.9		76.5		5.0		6.3		4			
					Bottom	6.1	0.3	182	29.6	29.6	7.9	7.9	26.9	26.9	59.6	59.6	3.9	3.9	7.1		5			
						6.1	0.3	187	29.6		7.9		26.9		59.6		3.9		7.2		4			
IM2	Sunny	Moderate	15:03	7.4	Surface	1.0	0.2	176	29.7	29.7	7.9	7.9	25.5	25.5	79.4	79.4	5.2	5.1	3.0	5.2	3	4	819177	806255
						1.0	0.2	178	29.7		7.9		25.5		79.3		5.2		3.1		4			
					Middle	3.7	0.3	205	29.2	29.2	7.9	7.9	27.1	27.1	74.2	74.2	4.9		5.4		3			
						3.7	0.3	209	29.2		7.9		27.1		74.2		4.9		5.4		4			
					Bottom	6.4	0.3	187	28.4	28.4	7.9	7.9	30.6	30.6	60.1	60.2	4.0	4.0	7.3		4			
						6.4	0.3	184	28.4		7.9		30.6		60.2		4.0		7.3		4			
IM7	Sunny	Rough	14:40	7.7	Surface	1.0	0.2	139	29.5	29.5	7.9	7.9	25.7	25.7	81.5	81.5	5.4	4.8	2.4	3.5	3	4	821370	806846
						1.0	0.2	132	29.5		7.9		25.7		81.5		5.4		2.5		4			
					Middle	3.9	0.2	156	28.5	28.5	7.9	7.9	29.8	29.8	61.7	61.7	4.1		3.1		4			
						3.9	0.2	159	28.5		7.9		29.8		61.7		4.1		3.1		3			
					Bottom	6.7	0.2	127	28.3	28.3	7.9	7.9	30.7	30.7	57.5	57.5	3.8	3.8	4.9		6			
						6.7	0.2	121	28.3		7.9		30.7		57.5		3.8		4.9		5			

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
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Water Quality Monitoring
Water Quality Monitoring Results on 05 August 23 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	14:06	9.4	Surface	1.0	0.5	88	29.1	29.1	7.9	7.9	24.5	24.5	66.9	66.9	4.5	4.5	3.0	4.0	4	5	822253	809861
						1.0	0.5	92	29.1		7.9		24.5		66.9		4.5		3.0		4			
					Middle	4.7	0.5	99	29.0	29.0	7.9	7.9	24.9	24.9	65.7	65.7	4.5		4.3		6			
						4.7	0.5	104	29.0		7.9		24.9		65.7		4.5		4.3		4			
					Bottom	8.4	0.5	117	29.0	29.0	7.9	7.9	25.1	25.1	65.6	65.6	4.4	4.4	4.8		5			
						8.4	0.5	123	29.0		7.9		25.1		65.6		4.4		4.7		6			
IM11	Sunny	Moderate	14:11	7.2	Surface	1.0	0.6	91	29.1	29.1	7.9	7.9	24.5	24.5	67.9	67.9	4.6	4.6	1.2	2.8	5	5	821501	810559
						1.0	0.6	85	29.1		7.9		24.5		67.9		4.6		1.2		4			
					Middle	3.6	0.6	80	29.1	29.1	7.9	7.9	24.7	24.7	67.6	67.6	4.5		3.1		5			
						3.6	0.6	80	29.1		7.9		24.7		67.5		4.5		3.0		4			
					Bottom	6.2	0.6	71	28.9	28.9	7.9	7.9	25.1	25.1	66.6	66.6	4.5	4.5	4.3		6			
						6.2	0.6	76	28.9		7.9		25.1		66.6		4.5		4.3		6			
IM12	Sunny	Moderate	14:16	7.6	Surface	1.0	0.7	83	29.2	29.2	7.9	7.9	24.6	24.6	69.1	69.1	4.6	4.6	1.8	2.6	4	4	821169	811512
						1.0	0.6	77	29.2		7.9		24.6		69.0		4.6		1.8		4			
					Middle	3.8	0.7	101	29.1	29.1	7.9	7.9	25.0	24.9	67.4	67.4	4.5		2.6		4			
						3.8	0.7	106	29.1		7.9		24.9		67.3		4.5		2.6		5			
					Bottom	6.6	0.7	76	29.0	29.0	7.9	7.9	25.1	25.1	66.0	66.0	4.4	4.4	3.4		5			
						6.6	0.7	74	29.0		7.9		25.1		66.0		4.4		3.4		4			
SR1A	Sunny	Moderate	14:37	4.2	Surface	1.0	0.0	106	29.6	29.6	7.9	7.9	25.1	25.1	75.2	75.2	5.0	5.0	1.2	1.5	3	3	819971	812658
						1.0	0.1	107	29.6		7.9		25.1		75.2		5.0		1.2		3			
					Middle	2.1	0.0	120	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.1	121	-		-		-		-		-		-		-			
					Bottom	3.2	0.0	80	29.3	29.3	7.9	7.9	25.2	25.2	73.7	73.8	4.9	4.9	1.8		3			
						3.2	0.0	86	29.3		7.9		25.2		73.9		4.9		1.8		3			
SR2	Sunny	Moderate	14:55	5.0	Surface	1.0	0.7	37	29.4	29.4	7.9	7.9	24.3	24.3	73.0	73.0	4.9	4.9	1.3	1.8	6	5	821458	814157
						1.0	0.7	43	29.4		7.9		24.3		73.0		4.9		1.3		6			
					Middle	-	0.6	52	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	57	-		-		-		-		-		-		-			
					Bottom	4.0	0.7	74	29.4	29.4	7.9	7.9	24.2	24.2	74.1	74.2	5.0	5.0	2.3		4			
						4.0	0.7	79	29.4		7.9		24.2		74.2		5.0		2.4		3			
SR3	Sunny	Rough	14:31	8.1	Surface	1.0	0.4	142	29.6	29.6	7.9	7.9	26.9	26.9	77.5	77.6	5.1	5.0	3.7	6.4	3	4	822139	807547
						1.0	0.4	144	29.6		7.9		26.9		77.7		5.1		3.7		4			
					Middle	4.1	0.4	169	29.6	29.6	7.9	7.9	27.2	27.2	74.2	74.3	4.9		6.9		3			
						4.1	0.4	169	29.6		7.9		27.2		74.3		4.9		6.8		4			
					Bottom	7.1	0.4	126	29.5	29.5	7.8	7.8	27.4	27.4	72.5	72.5	4.8	4.8	8.5		4			
						7.1	0.4	127	29.5		7.8		27.4		72.5		4.8		8.5		4			
SR4A	Sunny	Moderate	16:07	9.6	Surface	1.0	0.0	17	29.6	29.6	7.9	7.9	27.9	27.9	74.6	74.6	4.9	4.7	2.0	5.5	4	4	817206	807793
						1.0	0.0	24	29.6		7.9		27.9		74.6		4.9		2.0		4			
					Middle	4.8	0.0	39	28.0	28.0	7.9	7.9	30.6	30.6	66.5	66.5	4.4		6.4		4			
						4.8	0.0	33	28.0		7.9		30.6		66.5		4.4		6.4		4			
					Bottom	8.6	0.0	49	27.5	27.5	7.9	7.9	31.4	31.4	58.1	58.1	3.9	3.9	8.2		4			
						8.6	0.0	46	27.5		7.9		31.4		58.1		3.9		8.3		4			
SR8	Sunny	Moderate	14:21	5.0	Surface	1.0	-	-	29.4	29.4	7.9	7.9	24.7	24.7	71.8	71.8	4.8	4.8	1.3	1.7	4	5	820404	811643
						1.0	-	-	29.4		7.9		24.7		71.8		4.8		1.3		5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.1	29.1	7.9	7.9	25.1	25.1	68.9	69.0	4.6	4.6	2.2		5			
						4.0	-	-	29.1		7.9		25.1		69.0		4.6		2.1		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 05 August 23 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	08:08	7.1	Surface	1.0	0.4	28	30.0	30.0	7.8	7.8	24.5	24.5	82.8	82.9	5.5	5.4	3.4	3.4	3	3	815639	804249
						1.0	0.4	24	30.0		7.8		24.5		82.9		5.5		3.4		3			
					Middle	3.6	0.3	15	29.9	29.9	7.8	7.8	24.7	24.7	80.6	80.6	5.3		2.4		3			
						3.6	0.3	20	29.9		7.8		24.7		80.6		5.3		2.3		3			
					Bottom	6.1	0.3	35	29.8	29.8	7.8	7.8	25.5	25.5	77.7	77.7	5.1	5.1	4.4		3			
						6.1	0.3	41	29.8		7.8		25.5		77.7		5.1		4.5		3			
C2	Sunny	Moderate	09:43	8.3	Surface	1.0	0.5	340	29.5	29.5	7.8	7.8	27.3	27.3	77.5	77.5	5.1	5.0	2.1	3.8	4	5	825696	806956
						1.0	0.5	345	29.5		7.8		27.3		77.5		5.1		2.1		5			
					Middle	4.2	0.5	337	29.5	29.5	7.8	7.8	27.3	27.3	73.4	73.4	4.8		3.3		5			
						4.2	0.5	334	29.5		7.8		27.3		73.4		4.8		3.3		6			
					Bottom	7.3	0.5	351	29.5	29.5	7.8	7.8	27.3	27.3	72.8	72.8	4.8	4.8	5.8		5			
						7.3	0.4	358	29.5		7.8		27.3		72.8		4.8		5.8		6			
C3	Sunny	Moderate	09:13	11.2	Surface	1.0	0.7	261	28.0	28.0	7.8	7.8	27.4	27.4	62.0	62.0	4.2	4.2	1.1	1.4	4	4	822125	817802
						1.0	0.7	256	28.0		7.8		27.4		62.0		4.2		1.1		4			
					Middle	5.6	0.6	260	27.8	27.8	7.8	7.8	27.7	27.7	61.4	61.4	4.1		1.5		5			
						5.6	0.6	258	27.8		7.8		27.7		61.4		4.1		1.5		4			
					Bottom	10.2	0.6	268	27.7	27.7	7.8	7.8	27.8	27.9	60.8	60.8	4.1	4.1	1.7		5			
						10.2	0.6	261	27.7		7.8		27.9		60.7		4.1		1.7		4			
IM1	Sunny	Moderate	08:31	6.9	Surface	1.0	0.2	6	29.9	29.9	7.8	7.8	24.5	24.5	80.4	80.4	5.3	5.2	2.3	4.7	4	4	818358	806446
						1.0	0.1	2	29.9		7.8		24.6		80.4		5.3		2.3		3			
					Middle	3.5	0.1	30	29.9	29.9	7.8	7.8	25.5	25.5	75.8	75.8	5.0		3.6		4			
						3.5	0.2	24	29.9		7.8		25.5		75.8		5.0		3.6		3			
					Bottom	5.9	0.2	14	29.8	29.8	7.8	7.8	26.1	26.1	73.6	73.6	4.8	4.8	8.3		5			
						5.9	0.2	19	29.8		7.8		26.1		73.6		4.8		8.3		6			
IM2	Sunny	Moderate	08:43	6.4	Surface	1.0	0.2	323	30.0	30.0	7.8	7.8	23.9	23.9	82.7	82.7	5.5	5.4	1.6	2.3	4	4	819196	806256
						1.0	0.2	321	30.0		7.8		23.9		82.7		5.5		1.6		4			
					Middle	3.2	0.2	325	29.9	29.9	7.8	7.8	24.6	24.6	80.8	80.8	5.3		2.1		4			
						3.2	0.2	327	29.9		7.8		24.6		80.8		5.3		2.1		5			
					Bottom	5.4	0.2	313	29.9	29.9	7.8	7.8	25.4	25.4	76.7	76.7	5.1	5.1	3.1		4			
						5.4	0.2	305	29.9		7.8		25.4		76.7		5.1		3.0		5			
IM7	Sunny	Moderate	09:10	7.2	Surface	1.0	0.2	340	30.0	30.0	7.8	7.8	24.8	24.8	79.6	79.6	5.3	5.3	2.7	3.7	3	4	821372	806836
						1.0	0.2	344	30.0		7.8		24.8		79.6		5.3		2.7		4			
					Middle	3.6	0.2	339	29.9	29.9	7.8	7.8	25.4	25.4	78.7	78.7	5.2		3.2		4			
						3.6	0.2	340	29.9		7.8		25.4		78.7		5.2		3.2		4			
					Bottom	6.2	0.2	346	29.7	29.7	7.8	7.8	26.2	26.2	78.1	78.1	5.1	5.1	5.3		4			
						6.2	0.1	347	29.7		7.8		26.2		78.1		5.1		5.2		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 05 August 23 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	10:44	10.0	Surface	1.0	0.4	303	29.1	29.1	7.8	7.8	24.4	24.5	66.4	66.4	4.5	4.5	2.1	4.3	4	5	822224	809820
						1.0	0.4	304	29.1		7.8		24.5		66.3		4.5		2.1		5			
					Middle	5.0	0.4	292	29.0	29.0	7.8	7.8	24.8	24.8	66.2	66.2	4.5		4.3		5			
						5.0	0.4	296	29.0		7.8		24.8		66.2		4.5		4.3		5			
					Bottom	9.0	0.5	294	29.0	29.0	7.8	7.8	24.7	24.7	67.3	67.4	4.5	4.5	6.6		5			
						9.0	0.5	298	29.0		7.8		24.7		67.4		4.5		6.5		5			
IM11	Sunny	Moderate	10:39	8.2	Surface	1.0	0.3	284	29.2	29.2	7.9	7.9	24.3	24.3	68.8	68.8	4.6	4.6	1.0	1.7	6	4	821491	810521
						1.0	0.3	283	29.2		7.9		24.2		68.8		4.6		1.0		5			
					Middle	4.1	0.3	289	29.1	29.1	7.9	7.9	24.6	24.6	68.0	68.0	4.6		1.6		4			
						4.1	0.3	291	29.1		7.9		24.6		68.0		4.6		1.6		4			
					Bottom	7.2	0.4	310	29.1	29.1	7.9	7.9	24.8	24.8	69.3	69.4	4.6	4.7	2.6		3			
						7.2	0.4	302	29.1		7.9		24.8		69.4		4.7		2.6		4			
IM12	Sunny	Moderate	10:28	7.8	Surface	1.0	0.5	298	29.4	29.4	7.9	7.9	24.6	24.6	71.3	71.3	4.8	4.8	1.4	2.2	3	4	821148	811521
						1.0	0.5	302	29.4		7.9		24.6		71.2		4.8		1.4		4			
					Middle	3.9	0.4	268	29.3	29.3	7.9	7.9	24.8	24.8	69.7	69.7	4.7		1.8		4			
						3.9	0.4	271	29.3		7.9		24.8		69.6		4.7		1.8		5			
					Bottom	6.8	0.5	293	28.9	28.9	7.9	7.9	25.2	25.2	67.7	67.8	4.5	4.6	3.2		5			
						6.8	0.5	289	28.9		7.9		25.2		67.9		4.6		3.2		5			
SR1A	Sunny	Moderate	10:00	3.8	Surface	1.0	0.1	207	29.2	29.2	7.8	7.8	25.1	25.1	69.4	69.4	4.6	4.6	1.7	2.2	3	3	819972	812660
						1.0	0.0	201	29.2		7.8		25.1		69.4		4.6		1.7		4			
					Middle	1.9	0.1	207	-	-	-	-	-	-	-	-	-		-		-			
						1.9	-	213	-		-		-		-		-		-		-			
					Bottom	2.8	0.1	207	29.1	29.1	7.8	7.8	25.1	25.1	69.5	69.5	4.6	4.6	2.7		3			
						2.8	0.0	201	29.1		7.8		25.1		69.5		4.6		2.7		3			
SR2	Sunny	Moderate	09:41	4.0	Surface	1.0	0.2	261	29.0	29.0	7.9	7.9	25.2	25.2	67.6	67.6	4.5	4.5	2.0	3.3	6	6	821466	814164
						1.0	0.2	260	29.0		7.9		25.2		67.5		4.5		2.0		7			
					Middle	-	0.1	242	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	239	-		-		-		-		-		-		-			
					Bottom	3.0	0.1	274	28.2	28.2	7.9	7.9	26.7	26.7	62.3	62.3	4.2	4.2	4.6		4			
						3.0	0.1	267	28.2		7.9		26.7		62.3		4.2		4.5		5			
SR3	Sunny	Moderate	09:22	7.8	Surface	1.0	0.3	340	29.5	29.5	7.8	7.8	27.3	27.3	78.4	78.4	5.1	5.0	2.3	4.9	4	4	822144	807555
						1.0	0.3	344	29.5		7.8		27.3		78.4		5.1		2.3		4			
					Middle	3.9	0.3	346	29.5	29.5	7.8	7.8	27.3	27.3	73.8	73.8	4.8		5.4		4			
						3.9	0.4	341	29.5		7.8		27.3		73.8		4.8		5.4		4			
					Bottom	6.8	0.3	344	29.5	29.5	7.8	7.8	27.4	27.4	72.8	72.8	4.8	4.8	6.9		4			
						6.8	0.3	349	29.5		7.8		27.4		72.8		4.8		7.0		4			
SR4A	Sunny	Moderate	07:46	8.9	Surface	1.0	0.0	237	30.0	30.0	7.8	7.8	24.3	24.3	82.1	82.1	5.4	5.3	1.6	4.1	4	4	817192	807817
						1.0	0.1	233	30.0		7.8		24.3		82.1		5.4		1.7		4			
					Middle	4.5	0.0	237	29.8	29.8	7.8	7.8	25.4	25.4	78.2	78.2	5.2		3.9		4			
						4.5	0.0	237	29.8		7.8		25.4		78.2		5.2		3.9		4			
					Bottom	7.9	0.0	235	29.7	29.7	7.8	7.8	26.3	26.3	74.7	74.8	4.9	4.9	6.8		4			
						7.9	0.0	228	29.7		7.8		26.3		74.8		4.9		6.9		4			
SR8	Sunny	Moderate	10:23	5.0	Surface	1.0	-	-	29.2	29.2	7.9	7.9	25.1	25.1	67.4	67.4	4.5	4.5	3.0	3.0	4	5	820371	811632
						1.0	-	-	29.1		7.9		25.1		67.4		4.5		3.0		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	29.0	29.0	7.9	7.9	25.1	25.1	67.4	67.5	4.5	4.5	3.1		6			
						4.0	-	-	29.0		7.9		25.1		67.5		4.5		3.1		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 08 August 23 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	18:06	8.4	Surface	1.0	0.3	217	30.2	30.2	8.0	8.0	21.7	21.7	90.9	90.6	6.1	5.2	3.8	9.3	<2	2	815640	804226
						1.0	0.2	215	30.2		8.0		21.7		90.2		6.1		4.0		<2			
					Middle	4.2	0.3	200	28.6	28.6	8.0	8.0	28.2	28.2	64.4	65.0	4.3		10.4		<2			
						4.2	0.4	205	28.6		8.0		28.2		65.6		4.4		10.5		<2			
					Bottom	7.4	0.3	223	28.3	28.3	8.0	8.0	28.5	28.5	60.1	60.5	4.0	4.1	13.6		2			
						7.4	0.2	229	28.3		8.0		28.5		60.9		4.1		13.6		<2			
C2	Cloudy	Moderate	16:17	12.2	Surface	1.0	0.2	158	30.2	30.2	7.9	7.9	22.3	22.4	88.9	88.5	5.9	5.6	4.7	8.5	<2	<2	825703	806943
						1.0	0.2	153	30.2		7.9		22.4		88.1		5.9		4.6		<2			
					Middle	6.1	0.2	172	30.0	30.0	7.9	7.9	23.4	23.4	79.3	79.3	5.3		10.4		<2			
						6.1	0.2	179	30.0		7.9		23.4		79.3		5.3		10.4		<2			
					Bottom	11.2	0.2	151	29.9	29.9	7.9	7.9	23.6	23.8	74.0	74.0	4.9	4.9	10.5		<2			
						11.2	0.2	155	29.9		7.9		24.1		74.0		4.9		10.5		<2			
C3	Fine	Moderate	18:11	11.2	Surface	1.0	0.3	79	29.4	29.4	7.9	7.9	27.1	27.1	81.6	81.6	5.4	5.1	0.2	0.7	2	2	822109	817783
						1.0	0.3	73	29.4		7.9		27.1		81.6		5.4		0.2		<2			
					Middle	5.6	0.2	62	28.4	28.4	7.9	7.9	29.0	29.0	70.6	70.6	4.7		0.4		<2			
						5.6	0.3	62	28.4		7.9		29.0		70.6		4.7		0.4		2			
					Bottom	10.2	0.3	69	27.5	27.5	7.9	7.9	31.0	31.0	62.1	62.1	4.1	4.1	1.4		2			
						10.2	0.3	73	27.5		7.9		31.0		62.1		4.1		1.4		<2			
IM1	Cloudy	Moderate	17:34	6.2	Surface	1.0	0.2	190	30.0	30.1	8.0	8.0	23.2	23.2	88.6	88.6	5.9	5.7	3.7	4.6	<2	**<u><2</u>**	818342	806437
						1.0	0.2	193	30.1		8.0		23.2		88.6		5.9		3.7		<2			
					Middle	3.1	0.2	187	29.6	29.6	8.0	8.0	24.2	24.2	81.7	81.4	5.5		4.9		<2			
						3.1	0.2	187	29.6		8.0		24.2		81.1		5.4		5.1		<2			
					Bottom	5.2	0.2	186	29.5	29.5	8.0	8.0	24.8	24.8	77.4	77.4	5.2	5.2	5.2		<2			
						5.2	0.2	178	29.4		8.0		24.8		77.3		5.2		5.2		<2			
IM2	Cloudy	Moderate	17:26	7.2	Surface	1.0	0.3	213	30.0	30.1	8.0	8.0	23.2	23.2	88.6	88.6	5.9	5.6	3.7	4.6	<2	2	819190	806221
						1.0	0.3	217	30.1		8.0		23.2		88.6		5.9		3.7		<2			
					Middle	3.6	0.3	211	29.6	29.6	8.0	8.0	24.2	24.2	80.1	80.1	5.3		4.9		2			
						3.6	0.3	210	29.6		8.0		24.2		80.1		5.3		5.1		2			
					Bottom	6.2	0.2	196	29.5	29.5	8.0	8.0	24.8	24.8	72.3	72.3	4.8	4.8	5.2		<2			
						6.2	0.2	200	29.4		8.0		24.8		72.3		4.8		5.2		2			
IM7	Cloudy	Moderate	16:52	7.5	Surface	1.0	0.1	138	30.3	30.3	7.9	7.9	21.8	21.9	89.5	89.0	6.0	5.7	4.1	6.4	<2	**<u><2</u>**	821355	806852
						1.0	0.1	133	30.2		7.9		22.0		88.5		5.9		4.5		<2			
					Middle	3.8	0.2	142	29.9	29.9	7.9	7.9	22.6	22.6	81.5	81.2	5.5		5.8		<2			
						3.8	0.2	146	29.8		7.9		22.6		80.8		5.4		6.3		<2			
					Bottom	6.5	0.1	127	29.5	29.5	7.9	7.9	25.3	25.3	76.3	76.7	5.1	5.1	8.7		<2			
						6.5	0.2	122	29.5		7.9		25.3		77.1		5.1		8.7		<2			

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 August 23 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	16:17	8.1	Surface	1.0	0.2	87	29.8	29.8	7.9	7.9	25.5	25.5	86.3	86.3	5.7	5.3	0.9	1.7	<2	**<u>≤2</u>**	822250	809839
						1.0	0.1	92	29.8		7.9		25.5		86.3		5.7		0.9		<2			
					Middle	4.1	0.2	84	29.4	29.4	7.8	7.8	27.1	27.1	74.5	74.5	4.9		1.8		<2			
						4.1	0.2	87	29.4		7.8		27.1		74.5		4.9		1.8		<2			
					Bottom	7.1	0.2	115	29.2	29.2	7.8	7.8	27.5	27.5	73.7	73.8	4.9	4.9	2.4		<2			
						7.1	0.2	117	29.2		7.8		27.5		73.8		4.9		2.4		<2			
IM11	Fine	Moderate	16:32	7.4	Surface	1.0	0.3	94	29.9	29.9	7.9	7.9	25.5	25.5	88.3	88.3	5.8	5.7	1.8	1.7	<2	**<u>≤2</u>**	821515	810538
						1.0	0.3	97	29.9		7.9		25.5		88.3		5.8		1.8		<2			
					Middle	3.7	0.3	108	29.7	29.7	7.9	7.9	26.1	26.1	82.9	82.9	5.5		1.3		<2			
						3.7	0.3	108	29.7		7.9		26.1		82.9		5.5		1.3		<2			
					Bottom	6.4	0.3	101	29.2	29.2	7.9	7.9	27.4	27.4	75.6	75.6	5.0	5.0	2.2		<2			
						6.4	0.3	107	29.2		7.9		27.4		75.6		5.0		2.2		<2			
IM12	Fine	Moderate	16:45	7.1	Surface	1.0	0.3	88	30.1	30.1	7.9	7.9	25.6	25.6	90.4	90.4	5.9	5.6	1.3	2.8	3	2	821179	811504
						1.0	0.3	86	30.1		7.9		25.6		90.4		5.9		1.3		3			
					Middle	3.6	0.4	92	29.6	29.6	7.9	7.9	26.6	26.6	79.8	79.8	5.2		2.6		<2			
						3.6	0.3	87	29.6		7.9		26.6		79.8		5.2		2.7		<2			
					Bottom	6.1	0.4	76	29.2	29.2	7.8	7.8	27.6	27.6	72.1	72.1	4.8	4.8	4.3		<2			
						6.1	0.3	68	29.2		7.8		27.6		72.1		4.8		4.4		<2			
SR1A	Fine	Calm	17:29	4.6	Surface	1.0	-	119	30.0	30.0	7.9	7.9	25.9	25.9	90.9	90.9	6.0	6.0	3.0	3.6	<2	<2	819981	812663
						1.0	0.0	119	30.0		7.9		25.9		90.9		6.0		3.0		<2			
					Middle	2.3	0.0	140	-	-	-	-	-	-	-	-	-		-		-			
						2.3	0.0	134	-		-		-		-		-		-		-			
					Bottom	3.6	0.1	114	29.6	29.6	7.9	7.9	26.3	26.3	84.5	84.5	5.6	5.6	4.3		<2			
						3.6	0.1	109	29.6		7.9		26.3		84.5		5.6		4.3		<2			
SR2	Fine	Moderate	17:48	5.8	Surface	1.0	0.3	63	29.1	29.1	7.9	7.9	27.5	27.5	79.5	79.5	5.2	5.2	1.2	2.3	<2	**<u>≤2</u>**	821466	814158
						1.0	0.4	67	29.1		7.9		27.5		79.5		5.2		1.2		<2			
					Middle	-	0.4	32	-	-	-	-	-	-	-	-	-		-		-			
						-	0.4	38	-		-		-		-		-		-		-			
					Bottom	4.8	0.4	49	28.2	28.2	7.9	7.9	29.5	29.5	69.0	69.0	4.6	4.6	3.4		<2			
						4.8	0.4	43	28.2		7.9		29.5		69.0		4.6		3.4		<2			
SR3	Cloudy	Moderate	16:42	8.4	Surface	1.0	0.2	167	30.3	30.3	7.9	7.9	21.6	21.6	90.3	90.3	6.1	5.7	3.9	5.9	2	2	822127	807567
						1.0	0.3	159	30.3		7.9		21.6		90.3		6.1		3.9		2			
					Middle	4.2	0.3	140	29.7	29.7	8.0	8.0	23.1	23.1	79.9	79.9	5.3		6.6		<2			
						4.2	0.3	146	29.6		8.0		23.2		79.9		5.3		7.0		2			
					Bottom	7.4	0.2	143	29.5	29.5	8.0	8.0	25.4	25.4	76.0	76.0	5.1	5.1	7.1		<2			
						7.4	0.2	139	29.5		8.0		25.4		76.0		5.1		7.1		<2			
SR4A	Cloudy	Moderate	18:43	9.4	Surface	1.0	0.0	314	30.5	30.5	8.0	8.0	21.1	21.1	98.0	97.8	6.4	6.1	3.8	5.5	<2	<2	817208	807801
						1.0	0.0	317	30.5		8.0		21.1		97.6		6.4		3.9		<2			
					Middle	4.7	0.0	312	30.1	30.1	8.0	8.0	22.1	22.1	86.7	86.2	5.8		5.8		<2			
						4.7	0.0	314	30.0		8.0		22.1		85.7		5.8		6.2		<2			
					Bottom	8.4	0.0	302	29.8	29.9	8.0	8.0	25.0	25.1	76.1	76.6	5.0	5.1	6.7		<2			
						8.4	0.0	305	29.9		8.0		25.2		77.0		5.1		6.6		<2			
SR8	Fine	Calm	16:53	4.9	Surface	1.0	-	-	30.4	30.4	7.9	7.9	25.3	25.3	92.1	92.1	6.0	6.0	3.1	3.8	<2	2	820378	811637
						1.0	-	-	30.4		7.9		25.3		92.1		6.0		3.1		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.9	-	-	29.6	29.6	7.9	7.9	26.7	26.7	79.3	79.3	5.2	5.2	4.4		2			
						3.9	-	-	29.6		7.9		26.7		79.3		5.2		4.5		<2			

DA: Depth-Averaged

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

<u>Value exceeding Action Level is underlined</u>; **<u>Value exceeding Limit Level is bolded and underlined</u>**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 August 23 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	11:43	8.3	Surface	1.0	0.2	20	29.8	29.8	8.0	8.0	21.8	21.8	83.2	82.9	5.6	4.8	4.9	8.1	<2	2	815598	804260
						1.0	0.2	21	29.8		8.0		21.8		82.5		5.6		4.9		2			
					Middle	4.2	0.3	9	28.1	28.1	8.0	8.0	28.3	28.3	59.4	59.5	4.0		9.3		2			
						4.2	0.3	12	28.1		8.0		28.3		59.6		4.0		9.2		2			
					Bottom	7.3	0.2	43	28.0	28.0	8.0	8.0	28.5	28.5	63.8	64.2	4.3	4.3	10.3		<2			
						7.3	0.2	49	28.0		8.0		28.5		64.5		4.3		10.0		<2			
C2	Fine	Moderate	12:57	11.8	Surface	1.0	0.3	348	30.4	30.4	7.9	7.9	23.0	22.2	90.9	90.7	6.1	5.7	5.2	9.2	<2	2	825669	806947
						1.0	0.3	353	30.4		7.9		21.3		90.4		6.0		5.2		<2			
					Middle	5.9	0.2	338	29.8	29.8	7.9	7.9	23.2	23.3	79.7	79.5	5.3		8.4		2			
						5.9	0.2	341	29.8		7.9		23.4		79.3		5.3		8.4		2			
					Bottom	10.8	0.2	3	29.7	29.7	7.9	7.9	24.2	24.2	74.3	74.4	5.0	5.0	14.2		3			
						10.8	0.2	4	29.7		7.9		24.2		74.5		5.0		14.2		3			
C3	Sunny	Moderate	11:12	10.6	Surface	1.0	0.4	270	29.6	29.6	7.8	7.8	26.2	26.2	82.1	82.1	5.4	5.2	1.5	3.8	<2	<2	822123	817813
						1.0	0.4	268	29.6		7.8		26.2		82.1		5.4		1.5		<2			
					Middle	5.3	0.3	261	29.2	29.2	7.8	7.8	27.4	27.4	74.5	74.5	4.9		3.4		<2			
						5.3	0.4	262	29.2		7.8		27.4		74.5		4.9		3.4		<2			
					Bottom	9.6	0.3	261	28.6	28.6	7.8	7.8	29.3	29.3	67.9	68.0	4.5	4.5	6.6		<2			
						9.6	0.3	263	28.6		7.8		29.3		68.0		4.5		6.6		<2			
IM1	Fine	Moderate	12:05	6.3	Surface	1.0	0.1	356	29.8	29.8	8.0	8.0	22.2	22.2	87.3	87.0	5.9	5.3	2.4	5.5	<2	<2	818327	806468
						1.0	0.1	0	29.7		8.0		22.3		86.7		5.8		2.5		<2			
					Middle	3.2	0.2	-	29.3	29.3	7.9	7.9	25.3	25.4	71.0	70.8	4.7		3.3		<2			
						3.2	0.2	359	29.2		7.9		25.4		70.6		4.7		3.4		<2			
					Bottom	5.3	0.2	346	29.2	29.2	7.9	7.9	25.8	25.8	69.3	69.5	4.6	4.6	10.8		<2			
						5.3	0.1	345	29.2		7.9		25.8		69.7		4.6		11.0		<2			
IM2	Fine	Moderate	12:10	7.2	Surface	1.0	0.1	348	29.6	29.6	7.9	7.9	24.1	24.1	80.1	79.9	5.3	5.1	4.3	5.1	<2	<2	819177	806221
						1.0	0.2	349	29.6		7.9		24.1		79.7		5.3		4.3		<2			
					Middle	3.6	0.1	359	29.3	29.3	7.9	7.9	25.4	25.5	74.1	74.0	4.9		4.9		<2			
						3.6	0.1	354	29.2		7.9		25.6		73.9		4.9		5.4		<2			
					Bottom	6.2	0.1	345	29.1	29.1	7.9	7.9	26.1	26.1	68.4	68.8	4.6	4.6	5.8		<2			
						6.2	0.1	350	29.1		7.9		26.1		69.1		4.6		5.8		<2			
IM7	Fine	Moderate	12:43	7.9	Surface	1.0	0.1	300	30.1	30.1	7.9	7.9	20.7	20.7	93.5	93.4	6.3	6.1	3.6	5.2	<2	2	821360	806844
						1.0	0.1	295	30.1		7.9		20.7		93.3		6.3		3.7		2			
					Middle	4.0	0.1	310	30.0	30.0	7.9	7.9	21.8	21.9	86.1	86.1	5.8		4.1		<2			
						4.0	0.1	302	30.0		7.9		21.9		86.0		5.8		4.5		<2			
					Bottom	6.9	0.1	339	29.8	29.8	7.9	7.9	22.9	22.9	80.6	80.6	5.4	5.4	7.7		<2			
						6.9	0.0	344	29.8		7.9		22.9		80.6		5.4		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 08 August 23 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	13:14	7.8	Surface	1.0	0.3	300	30.2	30.2	7.9	7.9	24.0	24.0	97.9	97.9	6.5	6.4	2.0	2.7	<2	<2	822239	809830
						1.0	0.3	295	30.2		7.9		24.0		97.9		6.5		2.1		<2			
					Middle	3.9	0.3	285	30.1	30.1	7.9	7.9	24.4	24.4	93.5	93.5	6.2		2.6		<2			
						3.9	0.3	292	30.1		7.9		24.4		93.4		6.2		2.7		<2			
					Bottom	6.8	0.3	290	30.1	30.1	7.8	7.8	25.9	25.9	81.2	81.2	5.3	5.3	3.4		<2			
						6.8	0.3	293	30.1		7.8		25.9		81.2		5.3		3.4		<2			
IM11	Sunny	Moderate	12:51	6.9	Surface	1.0	0.4	286	30.1	30.1	7.9	7.9	24.5	24.5	94.7	94.7	6.2	6.1	2.6	3.5	<2	2	821478	810530
						1.0	0.3	291	30.1		7.9		24.5		94.6		6.2		2.6		<2			
					Middle	3.5	0.4	276	30.1	30.1	7.9	7.9	24.9	24.9	89.3	89.3	5.9		3.8		<2			
						3.5	0.4	282	30.1		7.9		24.9		89.3		5.9		3.8		<2			
					Bottom	5.9	0.4	298	30.1	30.1	7.8	7.8	26.0	26.0	77.4	77.4	5.1	5.1	4.2		<2			
						5.9	0.4	303	30.1		7.8		26.0		77.4		5.1		4.2		2			
IM12	Sunny	Moderate	12:38	6.5	Surface	1.0	0.3	296	30.2	30.2	7.9	7.9	25.1	25.1	87.3	87.3	5.7	5.7	2.1	3.1	<2	<2	821148	811496
						1.0	0.3	289	30.2		7.9		25.1		87.3		5.7		2.1		<2			
					Middle	3.3	0.3	277	30.2	30.2	7.8	7.8	25.1	25.1	86.4	86.4	5.7		3.0		<2			
						3.3	0.3	273	30.2		7.8		25.2		86.4		5.7		3.1		<2			
					Bottom	5.5	0.3	267	30.1	30.1	7.8	7.8	26.1	26.1	75.7	75.7	5.0	5.0	4.1		<2			
						5.5	0.3	274	30.1		7.8		26.1		75.7		5.0		4.1		<2			
SR1A	Sunny	Calm	11:58	4.2	Surface	1.0	-	200	29.4	29.4	7.9	7.9	26.7	26.7	81.2	81.2	5.4	5.4	4.7	5.5	<2	<2	819970	812662
						1.0	0.0	194	29.4		7.9		26.7		81.2		5.4		4.8		<2			
					Middle	2.1	0.1	198	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.1	194	-		-		-		-		-		-		-			
					Bottom	3.2	0.0	183	29.1	29.1	7.9	7.9	27.8	27.8	73.1	73.1	4.8	4.8	6.3		<2			
						3.2	0.1	178	29.0		7.9		27.8		73.1		4.8		6.4		<2			
SR2	Sunny	Moderate	11:39	4.4	Surface	1.0	0.1	258	29.8	29.8	7.8	7.8	25.8	25.8	83.2	83.2	5.5	5.5	3.3	3.8	<2	<2	821466	814185
						1.0	0.1	255	29.8		7.8		25.8		83.2		5.5		3.3		<2			
					Middle	-	0.1	273	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	265	-		-		-		-		-		-		-			
					Bottom	3.4	0.1	262	29.2	29.2	7.8	7.8	27.3	27.3	75.6	75.6	5.0	5.0	4.2		<2			
						3.4	0.1	260	29.2		7.8		27.3		75.6		5.0		4.2		<2			
SR3	Fine	Moderate	12:49	8.3	Surface	1.0	0.2	341	30.7	30.7	7.9	7.9	20.7	20.7	93.7	93.6	6.3	5.8	3.3	4.1	<2	<2	822168	807561
						1.0	0.2	344	30.7		7.9		20.7		93.4		6.2		3.5		<2			
					Middle	4.2	0.2	339	29.8	29.8	7.9	7.9	22.9	23.0	78.7	78.6	5.3		4.8		<2			
						4.2	0.2	341	29.8		7.9		23.0		78.4		5.2		4.8		<2			
					Bottom	7.3	0.2	347	29.7	29.7	7.9	7.9	23.5	23.5	78.0	78.0	5.2	5.2	4.2		<2			
						7.3	0.2	344	29.7		7.9		23.5		78.0		5.2		4.3		<2			
SR4A	Fine	Moderate	11:16	8.8	Surface	1.0	0.0	138	30.2	30.2	7.8	7.8	23.2	23.2	78.9	78.9	5.2	5.0	4.3	5.7	<2	<2	817205	807795
						1.0	0.0	139	30.2		7.8		23.2		78.8		5.2		4.3		<2			
					Middle	4.4	0.1	149	29.9	29.9	7.8	7.8	23.6	23.6	71.4	71.1	4.7		4.3		<2			
						4.4	-	143	29.9		7.8		23.6		70.7		4.7		4.3		<2			
					Bottom	7.8	0.0	127	28.7	28.7	7.9	7.9	27.0	27.0	57.2	57.3	3.8	3.8	8.7		<2			
						7.8	0.0	133	28.7		7.9		27.0		57.4		3.8		8.5		<2			
SR8	Sunny	Calm	12:29	4.3	Surface	1.0	-	-	30.1	30.1	7.9	7.9	24.1	24.1	94.5	94.5	6.3	6.3	1.7	2.5	<2	<2	820394	811608
						1.0	-	-	30.1		7.9		24.1		94.5		6.3		1.7		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.3	-	-	30.1	30.1	7.8	7.8	25.9	25.9	89.9	89.9	6.0	6.0	3.2		<2			
						3.3	-	-	30.1		7.8		25.9		89.9		6.0		3.2		<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 10 August 23 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	09:11	8.0	Surface	1.0	0.5	219	27.7	27.7	7.9	7.9	27.2	27.2	61.5	59.7	4.1	3.9	2.4	3.3	2	2	815617	804265
						1.0	0.5	214	27.6		7.9		27.3		57.8		3.9		2.5		2			
					Middle	4.0	0.4	190	27.5	27.5	7.9	7.9	27.4	27.4	56.2	56.0	3.8		3.3		2			
						4.0	0.5	194	27.5		7.9		27.4		55.7		3.8		3.4		2			
					Bottom	7.0	0.5	197	27.5	27.5	7.9	7.9	27.5	27.4	56.9	57.6	3.8	3.9	4.1		3			
						7.0	0.5	189	27.5		7.9		27.4		58.3		3.9		4.1		3			
C2	Sunny	Moderate	10:16	9.8	Surface	1.0	0.5	165	28.1	28.1	7.9	7.9	25.6	25.6	57.2	57.0	3.8	3.7	0.5	1.2	2	3	825700	806937
						1.0	0.6	168	28.0		7.9		25.7		56.8		3.8		0.5		3			
					Middle	4.9	0.5	179	27.9	27.9	7.9	7.9	26.0	26.0	54.3	53.5	3.7		1.1		3			
						4.9	0.5	185	27.9		7.9		26.1		52.7		3.5		1.1		4			
					Bottom	8.8	0.5	165	27.8	27.8	7.9	7.9	26.5	26.5	47.2	47.4	3.2	3.2	2.1		3			
						8.8	0.5	158	27.8		7.9		26.5		47.5		3.2		2.1		4			
C3	Sunny	Moderate	09:01	10.8	Surface	1.0	0.2	44	28.9	28.9	7.9	7.9	25.7	25.7	79.2	79.0	5.3	5.0	1.1	1.6	3	3	822112	817786
						1.0	0.2	47	28.9		7.9		25.7		78.8		5.2		1.1		4			
					Middle	5.4	0.1	51	28.8	28.8	7.8	7.8	26.1	26.1	72.4	72.6	4.8		1.7		3			
						5.4	0.1	54	28.8		7.8		26.1		72.8		4.8		1.8		3			
					Bottom	9.8	0.1	24	28.8	28.8	7.8	7.8	25.9	25.9	68.2	68.5	4.5	4.6	2.0		<2			
						9.8	0.1	23	28.8		7.8		25.8		68.7		4.6		1.9		<2			
IM1	Sunny	Moderate	09:23	6.0	Surface	1.0	0.3	190	27.9	27.9	8.0	8.0	27.0	27.0	77.1	77.1	5.1	5.1	5.4	6.4	4	4	818347	806461
						1.0	0.3	190	27.9		8.0		27.0		77.1		5.1		5.5		4			
					Middle	3.0	0.3	176	27.7	27.7	7.9	7.9	27.2	27.3	76.5	76.5	5.0		6.7		5			
						3.0	0.4	183	27.7		7.9		27.3		76.5		5.0		6.8		4			
					Bottom	5.0	0.3	198	27.7	27.7	7.9	7.9	27.2	27.2	59.6	59.6	3.9	3.9	7.0		5			
						5.0	0.3	192	27.7		7.9		27.1		59.6		3.9		7.0		4			
IM2	Sunny	Moderate	09:29	7.6	Surface	1.0	0.5	199	27.9	27.9	8.0	8.0	27.2	27.3	79.4	79.4	5.2	5.1	3.7	4.3	3	3	819206	806250
						1.0	0.5	201	27.8		8.0		27.4		79.3		5.2		3.9		4			
					Middle	3.8	0.4	222	27.7	27.7	8.0	8.0	27.7	27.8	74.2	74.2	4.9		4.4		3			
						3.8	0.4	216	27.7		8.0		27.8		74.2		4.9		4.5		3			
					Bottom	6.6	0.4	229	27.7	27.7	7.9	7.9	28.0	27.9	60.1	60.2	4.0	4.0	4.8		3			
						6.6	0.4	226	27.7		7.9		27.9		60.2		4.0		4.8		2			
IM7	Sunny	Moderate	09:50	8.2	Surface	1.0	0.4	224	28.2	28.2	7.9	7.9	25.6	25.6	81.5	81.5	5.4	4.8	1.1	1.6	4	4	821357	806847
						1.0	0.3	217	28.2		7.9		25.6		81.5		5.4		1.1		4			
					Middle	4.1	0.3	199	28.2	28.2	7.9	7.9	25.6	25.6	61.7	61.7	4.1		1.4		4			
						4.1	0.4	204	28.2		7.9		25.6		61.7		4.1		1.4		3			
					Bottom	7.2	0.4	237	28.2	28.2	7.9	7.9	25.5	25.5	57.5	57.5	3.8	3.8	2.2		3			
						7.2	0.4	237	28.2		7.9		25.4		57.5		3.8		2.2		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 10 August 23 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	10:16	9.6	Surface	1.0	0.3	145	29.1	29.1	7.9	7.9	23.4	23.4	71.3	71.3	4.8	4.6	4.1	5.3	3	3	822229	809818
						1.0	0.3	142	29.1		7.9		23.4		71.2		4.8		4.0		3			
					Middle	4.8	0.4	151	29.1	29.2	7.9	7.9	26.0	26.0	67.3	67.7	4.4		5.3		3			
						4.8	0.4	154	29.2		7.9		26.0		68.0		4.5		5.4		3			
					Bottom	8.6	0.4	144	29.5	29.5	7.9	7.9	25.9	25.9	66.3	70.5	4.4	4.7	6.4		2			
						8.6	0.3	141	29.5		7.9		25.9		74.7		4.9		6.5		3			
IM11	Sunny	Moderate	10:09	9.0	Surface	1.0	0.3	118	29.2	29.2	7.9	7.9	25.3	25.4	78.2	76.7	5.2	4.6	4.0	5.2	6	6	821516	810563
						1.0	0.3	118	29.2		7.9		25.4		75.2		5.0		4.1		7			
					Middle	4.5	0.3	107	29.2	29.3	7.9	7.9	25.6	25.6	61.1	61.4	4.0		5.4		5			
						4.5	0.3	106	29.3		7.9		25.6		61.6		4.1		5.4		6			
					Bottom	8.0	0.3	106	29.5	29.5	7.9	7.9	25.5	25.5	65.5	67.2	4.3	4.4	6.1		4			
						8.0	0.3	111	29.5		7.9		25.5		68.9		4.5		6.0		5			
IM12	Sunny	Moderate	10:00	8.6	Surface	1.0	0.4	105	29.4	29.4	7.9	7.9	24.6	24.6	94.1	92.3	6.2	5.5	1.8	2.6	4	5	821144	811508
						1.0	0.4	107	29.4		7.9		24.7		90.5		6.0		1.8		6			
					Middle	4.3	0.3	98	29.4	29.4	7.9	7.9	25.0	25.1	74.6	73.2	4.9		2.7		5			
						4.3	0.3	98	29.4		7.9		25.2		71.7		4.7		2.7		5			
					Bottom	7.6	0.4	91	29.5	29.5	7.9	7.9	25.1	25.1	79.6	81.4	5.3	5.4	3.3		4			
						7.6	0.4	87	29.5		7.9		25.0		83.1		5.5		3.3		4			
SR1A	Sunny	Moderate	09:38	3.8	Surface	1.0	-	124	29.2	29.2	7.9	7.9	24.4	24.5	75.9	75.4	5.1	5.1	1.8	2.2	6	5	819972	812659
						1.0	0.0	130	29.2		7.9		24.5		74.9		5.0		1.9		5			
					Middle	1.9	0.0	116	-	-	-	-	-	-	-	-	-		-		-			
						1.9	0.1	108	-		-		-		-		-		-		-			
					Bottom	2.8	-	111	29.1	29.1	7.9	7.9	24.8	24.7	75.8	76.8	5.0	5.1	2.5		4			
						2.8	0.0	115	29.0		7.9		24.6		77.8		5.2		2.5		4			
SR2	Sunny	Moderate	09:25	5.4	Surface	1.0	0.5	25	29.1	29.1	7.9	7.9	24.9	25.0	81.4	78.8	5.4	5.3	2.9	3.1	4	4	821483	814162
						1.0	0.5	23	29.1		7.9		25.1		76.2		5.1		2.9		5			
					Middle	-	0.5	22	-	-	-	-	-	-	-	-	-		-		-			
						-	0.5	18	-		-		-		-		-		-		-			
					Bottom	4.4	0.5	40	28.9	28.9	7.9	7.9	25.7	25.5	70.6	72.1	4.7	4.8	3.3		4			
						4.4	0.5	35	28.9		7.9		25.4		73.5		4.9		3.3		3			
SR3	Sunny	Moderate	09:57	7.4	Surface	1.0	0.5	174	28.2	28.2	7.9	7.9	25.4	25.4	77.5	77.6	5.1	5.0	0.9	1.5	4	4	822127	807568
						1.0	0.5	167	28.2		7.9		25.4		77.7		5.1		1.0		3			
					Middle	3.7	0.6	170	28.1	28.1	7.9	7.9	25.4	25.4	74.2	74.3	4.9		1.2		4			
						3.7	0.6	170	28.1		7.9		25.4		74.3		4.9		1.2		3			
					Bottom	6.4	0.6	156	28.2	28.2	7.9	7.9	25.3	25.3	72.5	72.5	4.8	4.8	2.3		4			
						6.4	0.6	149	28.2		7.9		25.3		72.5		4.8		2.3		4			
SR4A	Sunny	Moderate	08:55	10.0	Surface	1.0	0.0	331	28.2	28.2	8.0	8.0	25.6	25.6	74.6	74.6	4.9	4.7	4.2	5.2	2	3	817198	807809
						1.0	0.0	332	28.2		8.0		25.7		74.6		4.9		4.4		3			
					Middle	5.0	0.0	317	28.1	28.1	8.0	8.0	25.9	25.9	66.5	66.5	4.4		5.3		3			
						5.0	0.1	309	28.1		8.0		25.9		66.5		4.4		5.3		4			
					Bottom	9.0	0.1	300	28.1	28.1	8.0	8.0	26.1	26.1	58.1	58.1	3.9	3.9	6.0		3			
						9.0	0.1	296	28.1		8.0		26.1		58.1		3.9		6.0		4			
SR8	Sunny	Moderate	09:55	5.4	Surface	1.0	-	-	29.6	29.6	7.9	7.9	23.8	23.8	90.0	90.3	6.0	6.0	2.6	2.8	4	4	820370	811603
						1.0	-	-	29.5		7.9		23.7		90.5		6.0		2.5		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.4	-	-	29.4	29.4	7.9	7.9	23.5	23.5	83.6	83.1	5.6	5.6	3.0		4			
						4.4	-	-	29.4		7.9		23.6		82.5		5.5		3.0		3			

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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	20:30	8.4	Surface	1.0	0.1	210	27.8	27.8	8.0	8.0	26.6	26.7	64.7	64.3	4.3	4.0	2.0	3.5	3	3	815642	804248
						1.0	0.1	212	27.8		8.0		26.7		63.8		4.3		2.1		3			
					Middle	4.2	0.1	207	27.7	27.7	8.0	8.0	27.0	27.0	58.0	55.2	3.9		3.4		4			
						4.2	0.1	211	27.6		8.0		27.1		52.4		3.5		3.4		3			
					Bottom	7.4	0.1	225	27.7	27.8	8.0	8.0	28.9	28.8	55.2	57.3	3.7	3.8	5.0		4			
						7.4	0.1	217	27.8		8.0		28.7		59.4		3.9		5.0		3			
C2	Fine	Moderate	19:17	11.0	Surface	1.0	0.0	194	28.0	28.0	7.9	7.9	25.8	25.8	57.2	57.1	3.9	3.5	1.0	1.4	3	4	825672	806955
						1.0	0.0	188	28.0		7.9		25.9		57.0		3.8		1.0		4			
					Middle	5.5	0.1	177	27.9	27.9	7.9	7.9	26.2	26.2	48.1	48.1	3.2		1.4		4			
						5.5	0.1	182	27.9		7.9		26.2		48.0		3.2		1.4		4			
					Bottom	10.0	0.1	175	27.9	27.9	7.9	7.9	26.1	26.1	49.1	49.6	3.3	3.4	1.6		4			
						10.0	0.0	176	27.9		7.9		26.0		50.0		3.4		1.6		5			
C3	Fine	Moderate	20:37	8.2	Surface	1.0	0.0	23	29.1	29.1	7.9	7.9	25.9	26.0	64.5	64.4	7.5	6.7	3.6	4.5	4	4	822107	817814
						1.0	0.1	28	29.0		7.9		26.0		64.3		7.3		3.6		4			
					Middle	4.1	0.0	5	28.9	28.9	7.9	7.9	26.2	26.2	63.3	63.2	5.9		4.3		5			
						4.1	0.0	0	28.8		7.9		26.3		63.1		5.9		4.4		4			
					Bottom	7.2	0.0	39	28.7	28.7	7.9	7.9	26.6	26.5	63.3	63.2	6.4	6.6	5.7		4			
						7.2	0.0	34	28.7		7.9		26.5		63.1		6.8		5.7		5			
IM1	Fine	Moderate	20:21	6.8	Surface	1.0	0.1	191	28.0	28.0	8.0	8.0	27.0	27.0	80.4	80.4	5.3	5.2	4.4	5.5	3	3	818335	806473
						1.0	0.1	189	27.9		8.0		27.1		80.4		5.3		4.3		3			
					Middle	3.4	0.1	193	27.9	27.9	8.0	8.0	27.2	27.3	75.8	75.8	5.0		5.0		4			
						3.4	0.1	191	27.8		8.0		27.3		75.8		5.0		5.0		3			
					Bottom	5.8	0.1	184	27.8	27.8	8.0	8.0	27.4	27.4	73.6	73.6	4.8	4.8	7.0		4			
						5.8	0.1	179	27.8		8.0		27.4		73.6		4.8		7.0		3			
IM2	Fine	Moderate	20:14	6.8	Surface	1.0	0.1	209	28.1	28.1	8.0	8.0	26.9	27.0	75.2	75.0	5.0	4.7	1.1	1.9	3	4	819205	806230
						1.0	0.2	204	28.1		8.0		27.0		74.7		5.0		1.1		4			
					Middle	3.4	0.1	179	27.9	27.9	8.0	8.0	27.2	27.2	67.3	64.7	4.5		2.0		4			
						3.4	0.1	173	27.9		8.0		27.3		62.0		4.1		2.0		2			
					Bottom	5.8	0.1	217	27.9	28.0	8.0	8.0	27.2	27.1	66.5	68.0	4.4	4.5	2.7		4			
						5.8	0.1	212	28.0		8.0		27.0		69.5		4.6		2.6		4			
IM7	Fine	Moderate	19:53	9.2	Surface	1.0	0.1	144	28.2	28.2	7.9	7.9	25.8	25.9	79.6	79.6	5.3	5.3	2.5	3.3	4	4	821350	806851
						1.0	0.0	151	28.1		7.9		26.0		79.6		5.3		2.6		5			
					Middle	4.6	0.1	139	28.0	28.0	7.9	7.9	26.5	26.5	78.7	78.7	5.2		3.1		5			
						4.6	0.1	146	28.0		7.9		26.5		78.7		5.2		3.1		4			
					Bottom	8.2	0.1	142	28.0	28.0	7.9	7.9	27.0	26.9	78.1	78.1	5.1	5.1	4.1		4			
						8.2	0.1	134	28.0		7.9		26.8		78.1		5.1		4.2		3			

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									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA		
IM10	Fine	Moderate	19:16	9.6	Surface	1.0	0.1	43	30.2	30.2	7.9	7.9	23.7	23.7	85.4	84.4	10.8	10.0	2.1	3.2	4	4	822220	809838
						1.0	0.1	35	30.1		7.9		23.8		83.4		10.7		2.1		3			
					Middle	4.8	0.1	33	29.9	29.9	7.9	7.9	24.0	24.1	61.4	61.1	9.2		3.2		4			
						4.8	0.0	29	29.9		7.9		24.1		60.8		9.2		3.3		3			
					Bottom	8.6	0.0	73	29.8	29.8	7.9	7.9	24.3	24.2	63.4	64.3	9.4	9.5	4.4		4			
						8.6	0.0	74	29.8		7.9		24.2		65.2		9.5		4.3		4			
IM11	Fine	Moderate	19:32	8.0	Surface	1.0	0.2	74	30.2	30.2	7.9	7.9	24.0	24.0	82.7	82.2	10.7	10.3	3.8	4.4	3	3	821505	810533
						1.0	0.2	71	30.2		7.9		24.0		81.7		10.6		3.8		3			
					Middle	4.0	0.1	76	30.1	30.1	7.9	7.9	24.0	24.0	73.7	73.7	10.0		4.3		2			
						4.0	0.1	71	30.1		7.9		24.0		73.6		10.0		4.3		3			
					Bottom	7.0	0.1	52	30.1	30.1	7.9	7.9	24.0	24.0	74.3	74.4	10.1	10.1	5.1		3			
						7.0	0.2	44	30.1		7.9		24.0		74.5		10.1		5.0		3			
IM12	Fine	Moderate	19:38	7.6	Surface	1.0	0.1	106	30.1	30.1	7.9	7.9	24.4	24.4	63.8	63.7	12.2	10.7	6.1	7.4	3	3	821165	811508
						1.0	0.1	98	30.0		7.9		24.4		63.5		11.6		6.2		4			
					Middle	3.8	0.1	81	29.6	29.6	7.9	7.9	24.8	24.8	63.6	63.6	9.4		7.9		3			
						3.8	0.1	87	29.6		7.9		24.8		63.6		9.4		7.9		3			
					Bottom	6.6	0.2	74	29.6	29.7	7.9	7.9	25.2	25.0	59.0	62.4	9.1	9.3	8.1		3			
						6.6	0.2	79	29.8		7.9		24.9		65.8		9.5		8.0		2			
SR1A	Fine	Moderate	20:00	5.0	Surface	1.0	0.0	147	30.2	30.2	7.9	7.9	24.5	24.5	84.0	80.3	9.7	9.5	7.4	7.8	2	3	819977	812658
						1.0	0.0	147	30.2		7.9		24.6		76.6		9.2		7.5		4			
					Middle	2.5	0.1	159	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.1	156	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	172	30.2	30.2	7.9	7.9	24.6	24.6	74.5	73.8	9.1	9.1	8.1		3			
						4.0	0.1	171	30.1		7.9		24.5		73.0		9.0		8.1		3			
SR2	Fine	Moderate	20:14	5.0	Surface	1.0	0.2	20	29.7	29.7	7.9	7.9	25.2	25.2	68.4	66.6	8.7	8.6	5.3	5.9	4	4	821442	814169
						1.0	0.2	21	29.7		7.9		25.2		64.8		8.5		5.2		5			
					Middle	-	0.2	34	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	35	-		-		-		-		-		-		-			
					Bottom	4.0	0.2	54	29.6	29.6	7.9	7.9	25.3	25.3	68.5	68.6	7.7	7.7	6.5		4			
						4.0	0.2	53	29.5		7.9		25.3		68.7		7.7		6.6		3			
SR3	Fine	Moderate	19:47	8.2	Surface	1.0	0.1	165	28.2	28.2	7.9	7.9	25.5	25.5	78.4	78.4	5.1	5.0	1.1	1.2	2	3	822161	807579
						1.0	0.1	165	28.2		7.9		25.5		78.4		5.1		1.1		2			
					Middle	4.1	0.1	140	28.2	28.2	7.9	7.9	25.5	25.5	73.8	73.8	4.8		1.1		2			
						4.1	0.1	141	28.2		7.9		25.5		73.8		4.8		1.1		2			
					Bottom	7.2	0.1	164	28.2	28.2	7.9	7.9	25.4	25.4	72.8	72.8	4.8	4.8	1.3		4			
						7.2	0.1	164	28.2		7.9		25.4		72.8		4.8		1.3		3			
SR4A	Fine	Moderate	20:41	9.0	Surface	1.0	0.0	42	28.3	28.3	8.0	8.0	26.7	26.7	73.5	73.5	4.9	4.9	2.3	3.5	3	2	817199	807810
						1.0	0.0	38	28.3		8.0		26.7		73.5		4.9		2.2		2			
					Middle	4.5	0.0	33	28.3	28.3	8.0	8.0	26.7	26.7	73.8	73.9	4.9		3.5		2			
						4.5	0.1	40	28.3		8.0		26.7		74.0		4.9		3.4		2			
					Bottom	8.0	0.0	62	28.3	28.3	8.0	8.0	26.6	26.6	75.2	75.4	5.0	5.0	4.7		2			
						8.0	0.1	60	28.3		8.0		26.6		75.5		5.0		4.8		2			
SR8	Fine	Moderate	19:44	4.6	Surface	1.0	-	-	30.0	30.0	7.9	7.9	24.2	24.3	80.1	78.1	10.5	10.4	4.6	4.8	4	4	820385	811635
						1.0	-	-	30.0		7.9		24.3		76.0		10.2		4.5		5			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	29.9	29.9	7.9	7.9	24.4	24.4	65.2	65.3	9.5	9.5	5.1		3			
						3.6	-	-	29.8		7.9		24.4		65.4		9.5		5.1		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 12 August 23 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	Fine	Moderate	10:46	7.4	Surface	1.0	0.5	224	29.0	29.0	8.2	8.2	14.8	14.8	102.8	103.0	7.3	7.3	1.3	3.3	<2	2	815600	804256
						1.0	0.5	217	29.0		8.2		14.8		103.1		7.3		1.4		<2			
					Middle	3.7	0.5	208	28.6	28.6	8.2	8.2	16.1	16.1	103.1	103.0	7.3		3.5		2			
						3.7	0.5	201	28.6		8.2		16.1		102.8		7.3		3.4		2			
					Bottom	6.4	0.5	217	27.5	27.5	8.0	8.0	21.7	23.2	75.3	73.1	5.2	5.1	4.9		2			
						6.4	0.6	220	27.5		8.0		24.8		70.8		4.9		5.2		<2			
C2	Fine	Moderate	12:07	11.2	Surface	1.0	0.7	175	28.5	28.5	8.1	8.1	21.2	20.3	100.8	101.1	7.0	5.5	0.8	4.8	2	2	825662	806960
						1.0	0.7	173	28.5		8.1		19.5		101.4		7.1		0.8		<2			
					Middle	5.6	0.6	166	26.7	26.7	7.9	7.9	28.0	28.0	58.4	58.5	4.0		3.3		2			
						5.6	0.6	160	26.7		7.9		27.9		58.6		4.0		3.5		<2			
					Bottom	10.2	0.7	182	26.1	26.1	7.9	7.9	29.5	29.5	51.4	51.4	3.5	3.5	9.8		<2			
						10.2	0.7	179	26.1		7.9		29.6		51.4		3.5		10.2		<2			
C3	Sunny	Moderate	10:49	10.2	Surface	1.0	0.2	61	24.7	24.7	7.9	7.9	19.3	19.3	114.1	114.1	8.5	8.5	1.1	1.5	2	2	822129	817819
						1.0	0.3	59	24.7		7.9		19.3		114.0		8.5		1.1		<2			
					Middle	5.1	0.3	50	24.7	24.7	7.9	7.9	18.3	18.3	112.1	112.1	8.4		1.4		<2			
						5.1	0.3	53	24.7		7.9		18.3		112.1		8.4		1.4		2			
					Bottom	9.2	0.2	49	23.6	23.6	7.8	7.8	18.2	18.2	87.3	87.4	6.7	6.7	2.2		<2			
						9.2	0.2	50	23.6		7.8		18.1		87.4		6.7		2.2		<2			
IM1	Fine	Moderate	11:04	6.1	Surface	1.0	0.4	193	27.6	27.6	8.0	8.0	25.8	25.7	75.4	75.8	5.2	4.1	1.1	5.5	<2	2	818368	806451
						1.0	0.4	196	27.6		8.0		25.6		76.1		5.2		1.1		2			
					Middle	3.1	0.4	192	26.4	26.4	7.9	7.9	30.6	30.6	44.6	44.6	3.0		6.4		<2			
						3.1	0.3	191	26.4		7.9		30.6		44.6		3.0		6.1		2			
					Bottom	5.1	0.4	168	26.1	26.1	7.9	7.9	31.3	31.3	45.0	45.1	3.1	3.1	9.0		2			
						5.1	0.3	162	26.1		7.9		31.3		45.1		3.1		9.2		<2			
IM2	Fine	Moderate	11:10	6.8	Surface	1.0	0.6	211	28.4	28.4	8.3	8.2	19.6	19.6	113.8	113.8	7.9	5.5	1.0	3.8	2	2	819172	806216
						1.0	0.6	215	28.4		8.2		19.6		113.8		7.9		1.1		<2			
					Middle	3.4	0.5	192	26.9	26.9	7.9	7.9	28.8	28.8	46.0	46.0	3.1		4.8		2			
						3.4	0.5	190	26.9		7.9		28.8		46.0		3.1		4.8		2			
					Bottom	5.8	0.5	226	26.3	26.3	7.9	7.9	30.9	30.9	44.2	44.6	3.0	3.1	5.5		<2			
						5.8	0.5	230	26.3		7.9		30.9		44.9		3.1		5.7		<2			
IM7	Fine	Moderate	11:37	7.6	Surface	1.0	0.3	218	28.8	28.8	8.2	8.2	19.2	19.2	108.3	108.2	7.5	6.9	0.7	2.0	<2	<2	821369	806854
						1.0	0.3	213	28.8		8.2		19.2		108.0		7.5		0.8		<2			
					Middle	3.8	0.3	239	28.2	28.2	8.0	8.0	22.9	23.0	91.3	91.2	6.3		0.3		<2			
						3.8	0.3	232	28.2		8.0		23.1		91.0		6.2		0.3		<2			
					Bottom	6.6	0.4	209	27.1	27.1	7.9	7.9	28.3	28.3	50.6	50.6	3.4	3.4	5.0		<2			
						6.6	0.4	213	27.1		7.9		28.4		50.5		3.4		5.2		<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 12 August 23 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	12:12	9.6	Surface	1.0	0.5	145	25.6	25.6	7.9	7.9	18.9	18.9	110.9	110.8	8.2	6.2	1.3	3.4	<2	2	822233	809830
						1.0	0.5	141	25.6		7.9		18.9		110.6		8.1		1.3		2			
					Middle	4.8	0.5	144	23.9	23.9	7.9	7.9	29.6	29.6	58.5	60.2	4.2		3.1		2			
						4.8	0.5	143	23.9		7.9		29.6		61.8		4.4		3.1		<2			
					Bottom	8.6	0.5	125	23.5	23.5	7.9	7.9	30.6	30.6	51.3	51.3	3.7	3.7	5.6		<2			
						8.6	0.5	121	23.4		7.9		30.6		51.3		3.7		5.6		<2			
IM11	Sunny	Moderate	12:04	8.4	Surface	1.0	0.5	98	25.1	25.1	7.9	7.9	20.1	20.1	108.7	108.5	8.0	6.6	1.7	2.7	<2	2	821495	810566
						1.0	0.4	100	25.0		7.9		20.1		108.3		8.0		1.7		2			
					Middle	4.2	0.5	98	24.3	24.3	7.9	7.9	27.7	27.7	70.9	70.8	5.1		2.5		<2			
						4.2	0.6	96	24.3		7.9		27.7		70.7		5.1		2.5		<2			
					Bottom	7.4	0.5	128	23.9	23.9	7.9	7.9	29.2	29.2	56.5	56.5	4.0	4.0	4.0		2			
						7.4	0.5	127	23.9		7.9		29.3		56.4		4.0		4.0		<2			
IM12	Sunny	Moderate	11:56	8.0	Surface	1.0	0.5	105	25.0	25.0	7.9	7.9	21.4	21.4	114.4	114.4	8.4	7.3	1.2	1.9	2	2	821163	811509
						1.0	0.6	105	25.0		7.9		21.4		114.4		8.4		1.2		2			
					Middle	4.0	0.5	99	24.5	24.5	7.9	7.9	26.5	26.5	87.1	87.3	6.2		1.5		2			
						4.0	0.6	104	24.5		7.9		26.5		87.5		6.3		1.5		<2			
					Bottom	7.0	0.5	115	23.7	23.7	7.9	7.9	29.8	29.8	48.9	48.9	3.5	3.5	3.0		<2			
						7.0	0.5	111	23.7		7.9		29.9		48.8		3.5		3.0		<2			
SR1A	Sunny	Moderate	11:40	4.6	Surface	1.0	0.0	120	24.8	24.8	7.9	7.9	23.2	23.2	112.5	112.3	8.2	8.2	1.2	1.6	2	2	819975	812664
						1.0	0.0	115	24.8		7.9		23.2		112.0		8.1		1.2		2			
					Middle	2.3	0.0	136	-	-	-	-	-	-	-	-	-				-			
						2.3	0.1	143	-		-		-		-		-				-			
					Bottom	3.6	0.0	115	24.6	24.6	7.9	7.9	26.1	26.0	94.2	94.3	6.8	6.8	2.0		<2			
						3.6	0.1	109	24.6		7.9		26.0		94.3		6.8		2.0		2			
SR2	Sunny	Moderate	11:12	5.8	Surface	1.0	0.6	46	25.0	25.0	7.9	7.9	23.0	23.0	111.8	111.8	8.1	8.1	1.8	1.9	2	2	821448	814171
						1.0	0.6	45	25.0		7.9		23.0		111.8		8.1		1.8		2			
					Middle	-	0.5	45	-	-	-	-	-	-	-	-	-		-		-			
						-	0.5	50	-		-		-		-		-		-		-			
					Bottom	4.8	0.6	58	24.4	24.4	7.9	7.9	27.2	27.2	91.5	91.6	6.6	6.6	2.0		<2			
						4.8	0.5	50	24.4		7.9		27.2		91.6		6.6		2.0		<2			
SR3	Fine	Moderate	11:45	8.0	Surface	1.0	0.7	161	29.2	29.2	8.2	8.2	18.0	18.0	112.5	112.5	7.8	6.9	0.7	1.8	<2	<2	822137	807554
						1.0	0.7	160	29.2		8.2		18.0		112.5		7.8		0.7		<2			
					Middle	4.0	0.8	145	28.1	28.1	8.0	8.0	22.5	22.5	87.3	87.7	6.0		0.5		<2			
						4.0	0.8	142	28.1		8.0		22.4		88.0		6.1		0.5		<2			
					Bottom	7.0	0.7	148	27.2	27.3	7.9	7.9	27.4	27.4	53.8	53.9	3.7	3.7	4.6		<2			
						7.0	0.7	152	27.3		7.9		27.3		54.0		3.7		4.2		<2			
SR4A	Fine	Moderate	10:24	8.5	Surface	1.0	0.0	9	28.6	28.6	8.2	8.2	18.9	18.9	107.0	106.7	7.5	4.9	1.0	1.6	<2	<2	817175	807786
						1.0	0.0	8	28.6		8.2		18.9		106.3		7.4		0.9		<2			
					Middle	4.3	0.0	5	26.7	26.7	7.8	7.8	29.4	29.4	33.1	33.2	2.3		2.1		<2			
						4.3	0.0	12	26.7		7.8		29.4		33.3		2.3		1.9		<2			
					Bottom	7.5	0.0	13	26.7	26.7	7.8	7.8	29.6	29.6	35.1	35.2	2.4	**2.4**	2.0		<2			
						7.5	0.0	19	26.7		7.8		29.6		35.3		2.4		2.0		<2			
SR8	Sunny	Moderate	11:50	5.0	Surface	1.0	-	-	25.1	25.1	7.9	7.9	24.0	24.0	118.2	118.2	8.5	8.5	1.3	1.8	2	3	820396	811616
						1.0	-	-	25.1		7.9		24.0		118.1		8.5		1.3		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	24.7	24.7	7.9	7.9	25.6	25.6	96.7	96.7	7.0	7.0	2.3		3			
						4.0	-	-	24.7		7.9		25.7		96.7		6.9		2.3		3			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 August 23 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	22:56	8.5	Surface	1.0	0.1	201	29.1	29.1	8.2	8.2	17.0	17.0	108.9	108.7	7.6	5.4	0.9	4.1	3	3	815616	804249
						1.0	0.1	196	29.1		8.2		17.0		108.5		7.6		0.9		3			
					Middle	4.3	0.1	188	26.8	26.9	7.9	7.9	29.0	28.8	45.3	47.2	3.1		3.3		3			
						4.3	0.1	184	26.9		7.9		28.7		49.0		3.3		3.1		2			
					Bottom	7.5	0.1	194	26.5	26.5	7.8	7.8	30.2	30.2	42.6	42.8	2.9	2.9	8.2		3			
						7.5	0.0	197	26.5		7.8		30.2		43.0		2.9		8.2		3			
C2	Cloudy	Moderate	21:22	11.6	Surface	1.0	0.1	321	28.8	28.8	8.2	8.2	16.7	16.9	110.8	110.2	7.8	5.9	0.9	4.3	<2	2	825681	806924
						1.0	0.1	320	28.7		8.2		17.1		109.6		7.7		0.9		2			
					Middle	5.8	0.1	325	26.7	26.7	7.9	7.9	28.0	28.0	58.8	58.8	4.0		3.2		<2			
						5.8	0.1	331	26.6		7.9		28.1		58.7		4.0		3.3		<2			
					Bottom	10.6	0.1	344	26.2	26.2	7.9	7.9	29.2	29.2	51.8	51.7	3.6	3.6	8.8		<2			
						10.6	0.1	342	26.1		7.9		29.3		51.5		3.5		8.9		<2			
C3	Fine	Moderate	22:26	8.0	Surface	1.0	0.1	80	24.6	24.6	7.9	7.9	23.9	23.9	117.6	117.4	8.5	7.4	1.8	3.6	<2	2	822085	817787
						1.0	0.1	77	24.6		7.9		24.0		117.2		8.5		1.9		<2			
					Middle	4.0	0.1	99	23.8	23.8	7.9	7.9	28.2	28.1	87.4	87.3	6.3		3.7		<2			
						4.0	0.1	102	23.7		7.9		28.1		87.2		6.3		3.6		<2			
					Bottom	7.0	0.1	92	22.8	22.8	7.9	7.9	31.3	31.3	67.6	67.6	4.9	4.9	5.3		2			
						7.0	0.0	88	22.8		7.9		31.3		67.5		4.9		5.2		<2			
IM1	Cloudy	Moderate	22:35	6.4	Surface	1.0	0.0	112	29.3	29.3	8.3	8.3	15.8	15.8	116.9	116.7	8.2	6.3	1.0	2.6	4	3	818356	806439
						1.0	0.1	113	29.3		8.3		15.8		116.4		8.2		1.0		3			
					Middle	3.2	0.0	97	27.1	27.1	8.0	8.0	27.6	27.7	63.7	63.5	4.3		1.9		4			
						3.2	-	96	27.0		8.0		27.7		63.3		4.3		2.0		3			
					Bottom	5.4	0.0	130	26.2	26.2	7.9	7.9	31.1	31.1	43.8	44.2	3.0	3.0	4.9		<2			
						5.4	0.0	136	26.2		7.9		31.2		44.6		3.0		4.9		<2			
IM2	Cloudy	Moderate	22:29	6.7	Surface	1.0	0.0	55	28.9	28.9	8.3	8.3	16.8	16.8	119.6	119.6	8.4	6.4	1.1	2.3	3	2	819180	806220
						1.0	0.1	48	28.9		8.3		16.9		119.6		8.4		1.1		2			
					Middle	3.4	0.1	60	27.1	27.1	8.0	8.0	27.8	27.8	63.0	62.8	4.3		1.6		3			
						3.4	0.1	57	27.1		8.0		27.8		62.6		4.3		1.6		2			
					Bottom	5.7	0.0	48	26.5	26.5	7.9	7.9	30.5	30.5	48.1	48.2	3.3	3.3	4.1		2			
						5.7	0.1	43	26.4		7.9		30.6		48.3		3.3		4.3		<2			
IM7	Cloudy	Moderate	21:56	8.0	Surface	1.0	0.1	72	28.9	28.9	8.2	8.2	19.7	19.8	113.3	113.2	7.8	6.4	0.6	4.5	<2	<2	821370	806850
						1.0	0.1	77	28.8		8.2		19.9		113.0		7.8		0.7		<2			
					Middle	4.0	0.1	78	27.7	27.7	8.0	8.0	25.3	25.2	72.7	72.7	5.0		1.2		<2			
						4.0	0.0	82	27.7		8.0		25.2		72.6		5.0		1.2		<2			
					Bottom	7.0	0.1	60	27.5	27.5	7.9	7.9	26.3	26.3	65.7	65.9	4.5	4.5	11.7		<2			
						7.0	0.2	57	27.5		7.9		26.3		66.0		4.5		11.8		<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 12 August 23 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	21:21	9.4	Surface	1.0	0.1	8	25.5	25.5	7.9	7.9	19.1	19.1	110.7	110.6	8.1	6.2	1.4	3.0	<2	2	822225	809834
						1.0	0.1	12	25.5		7.9		19.1		110.5		8.1		1.4		2			
					Middle	4.7	0.1	24	23.8	23.8	7.9	7.9	29.7	29.7	59.0	60.7	4.2		3.3		2			
						4.7	0.1	19	23.8		7.9		29.7		62.3		4.4		3.2		3			
					Bottom	8.4	0.1	23	22.9	22.9	7.9	7.9	31.6	31.6	55.9	56.4	4.0	4.1	4.3		3			
						8.4	0.0	25	22.9		7.9		31.6		56.8		4.1		4.4		2			
IM11	Fine	Moderate	21:27	8.0	Surface	1.0	0.1	76	25.1	25.1	7.9	7.9	20.8	20.8	113.0	113.0	8.3	7.1	1.5	2.4	<2	2	821523	810527
						1.0	0.1	77	25.1		7.9		20.8		112.9		8.3		1.5		<2			
					Middle	4.0	0.1	70	24.4	24.4	7.9	7.9	26.9	26.9	81.1	81.2	5.8		2.5		<2			
						4.0	0.1	77	24.4		7.9		26.9		81.2		5.8		2.5		2			
					Bottom	7.0	0.1	72	24.1	24.1	7.9	7.9	28.5	28.6	66.6	66.5	4.8	4.8	3.2		<2			
						7.0	0.1	66	24.1		7.9		28.6		66.4		4.7		3.2		<2			
IM12	Fine	Moderate	21:32	6.6	Surface	1.0	0.1	89	24.9	24.9	7.9	7.9	22.1	22.0	108.8	108.8	8.0	7.5	1.4	1.9	2	2	821166	811516
						1.0	0.0	90	24.9		7.9		22.0		108.7		8.0		1.4		2			
					Middle	3.3	0.0	83	24.7	24.7	7.9	7.9	24.7	24.7	96.9	96.9	7.0		1.5		<2			
						3.3	0.1	82	24.7		7.9		24.7		96.8		7.0		1.5		<2			
					Bottom	5.6	0.1	69	24.1	24.1	7.9	7.9	28.6	28.6	64.1	64.1	4.6	4.6	2.6		<2			
						5.6	0.2	66	24.0		7.9		28.6		64.0		4.6		2.7		<2			
SR1A	Fine	Moderate	21:47	4.8	Surface	1.0	0.0	172	25.0	25.0	7.9	7.9	22.5	22.5	126.8	126.7	9.2	9.2	1.1	1.2	<2	2	819979	812666
						1.0	0.1	168	25.0		7.9		22.5		126.6		9.2		1.2		<2			
					Middle	2.4	0.0	173	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	179	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	145	24.9	25.0	7.9	7.9	24.4	24.4	114.9	115.1	8.3	8.3	1.3		<2			
						3.8	0.1	146	25.0		7.9		24.4		115.3		8.3		1.3		2			
SR2	Fine	Moderate	22:07	4.4	Surface	1.0	0.2	24	25.2	25.2	7.9	7.9	19.8	19.8	122.6	122.6	9.0	9.0	1.3	1.7	3	3	821452	814149
						1.0	0.2	27	25.2		7.9		19.8		122.6		9.0		1.3		2			
					Middle	-	0.2	34	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	40	-		-		-		-		-		-		-			
					Bottom	3.4	0.2	21	25.0	25.0	7.9	7.9	22.8	22.8	119.1	118.7	8.7	8.7	2.1		2			
						3.4	0.2	27	25.0		7.9		22.8		118.2		8.6		2.1		3			
SR3	Cloudy	Moderate	21:50	8.4	Surface	1.0	0.1	105	28.9	28.9	8.2	8.2	19.8	19.8	108.6	108.4	7.5	6.3	0.8	1.8	<2	2	822132	807559
						1.0	0.0	105	28.9		8.2		19.8		108.1		7.5		0.8		<2			
					Middle	4.2	0.0	98	27.7	27.7	8.0	8.0	25.0	25.0	74.9	74.8	5.1		1.0		<2			
						4.2	0.0	98	27.7		8.0		25.1		74.7		5.1		1.0		<2			
					Bottom	7.4	0.0	102	27.5	27.5	7.9	7.9	26.3	26.3	62.9	63.0	4.3	4.3	3.5		<2			
						7.4	0.0	109	27.5		7.9		26.3		63.1		4.3		3.4		2			
SR4A	Cloudy	Moderate	23:26	8.3	Surface	1.0	0.1	122	29.1	29.1	8.3	8.3	22.3	22.3	117.9	117.5	8.0	6.8	4.7	7.3	3	3	817192	807817
						1.0	0.0	115	29.1		8.3		22.3		117.0		7.9		4.9		2			
					Middle	4.2	0.0	138	28.2	28.2	8.1	8.1	25.1	25.1	82.3	82.0	5.6		6.5		3			
						4.2	0.1	144	28.2		8.1		25.1		81.7		5.6		6.6		3			
					Bottom	7.3	0.1	132	27.4	27.4	7.9	7.9	28.1	28.1	48.0	48.1	3.3	3.3	10.2		<2			
						7.3	0.0	130	27.4		7.9		28.1		48.2		3.3		11.0		<2			
SR8	Fine	Moderate	21:36	5.6	Surface	1.0	-	-	25.6	25.6	7.9	7.9	22.7	22.7	115.4	115.3	8.3	8.3	3.3	4.9	<2	<2	820399	811607
						1.0	-	-	25.6		7.9		22.7		115.1		8.3		3.3		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.6	-	-	24.5	24.5	7.9	7.9	26.5	26.5	84.1	84.2	6.0	6.0	6.6		<2			
						4.6	-	-	24.5		7.9		26.5		84.3		6.0		6.5		<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 15 August 23 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	Rainy	Moderate	13:15	8.7	Surface	1.0	0.7	206	27.5	27.5	7.9	7.9	28.7	28.7	67.6	67.5	4.6	4.3	9.3	10.9	6	5	815629	804246
						1.0	0.7	212	27.5		7.9		28.7		67.4		4.5		9.6		7			
					Middle	4.4	0.6	196	27.1	27.1	7.9	7.9	31.4	31.4	59.5	59.9	4.0		11.5		5			
						4.4	0.7	195	27.1		7.9		31.3		60.2		4.0		11.8		6			
					Bottom	7.7	0.6	204	27.1	27.1	7.9	7.9	31.5	31.5	58.0	58.1	3.9	3.9	11.5		3			
						7.7	0.7	208	27.1		7.9		31.5		58.1		3.9		11.8		3			
C2	Cloudy	Moderate	11:11	11.6	Surface	1.0	0.5	164	29.0	29.0	8.0	8.0	24.5	24.5	83.6	83.6	5.6	5.3	1.9	4.4	4	3	825674	806939
						1.0	0.5	163	29.0		8.0		24.6		83.6		5.6		1.9		3			
					Middle	5.8	0.5	182	28.2	28.2	7.9	7.9	26.6	26.6	73.0	73.0	4.9		3.8		3			
						5.8	0.5	188	28.2		7.9		26.6		73.0		4.9		3.8		3			
					Bottom	10.6	0.5	189	26.6	26.6	7.9	7.9	30.6	30.6	58.9	59.0	4.0	4.0	7.2		3			
						10.6	0.6	189	26.6		7.9		30.6		59.0		4.0		8.0		2			
C3	Sunny	Moderate	12:23	8.2	Surface	1.0	0.4	77	28.3	28.3	8.2	8.2	23.9	23.9	87.6	87.6	6.0	5.8	0.9	1.2	2	3	822109	817783
						1.0	0.4	72	28.3		8.2		23.9		87.6		6.0		0.9		2			
					Middle	4.1	0.4	59	27.9	27.9	8.2	8.2	24.7	24.7	80.8	80.8	5.5		1.1		3			
						4.1	0.5	57	27.9		8.2		24.7		80.7		5.5		1.1		2			
					Bottom	7.2	0.4	88	28.0	28.1	8.2	8.2	24.4	24.4	80.6	80.6	5.5	5.5	1.8		3			
						7.2	0.4	93	28.1		8.2		24.4		80.6		5.5		1.7		3			
IM1	Rainy	Moderate	12:49	6.8	Surface	1.0	0.5	197	28.1	28.1	8.0	8.0	28.2	28.2	74.3	74.3	5.0	4.6	2.8	6.9	2	3	818336	806463
						1.0	0.5	197	28.1		8.0		28.2		74.2		5.0		2.8		2			
					Middle	3.4	0.4	182	27.3	27.3	7.9	7.9	30.2	30.2	62.8	62.8	4.2		7.4		2			
						3.4	0.4	179	27.3		7.9		30.2		62.8		4.2		7.4		3			
					Bottom	5.8	0.5	213	27.1	27.1	7.9	7.9	31.5	31.5	54.2	54.3	3.6	3.6	10.8		3			
						5.8	0.5	206	27.1		7.9		31.5		54.3		3.6		10.4		4			
IM2	Rainy	Moderate	12:43	7.8	Surface	1.0	0.5	204	29.1	29.1	8.0	8.0	25.0	24.9	87.2	87.1	5.8	5.0	2.8	7.1	<2	2	819204	806241
						1.0	0.6	197	29.1		8.0		24.9		86.9		5.8		3.1		<2			
					Middle	3.9	0.6	181	27.5	27.5	7.9	7.9	29.4	29.4	60.6	60.7	4.1		7.8		2			
						3.9	0.6	175	27.5		7.9		29.4		60.7		4.1		7.8		2			
					Bottom	6.8	0.5	203	27.6	27.6	7.9	7.9	29.6	29.6	62.2	62.2	4.2	4.2	10.4		2			
						6.8	0.5	210	27.6		7.9		29.6		62.2		4.2		10.4		2			
IM7	Rainy	Moderate	12:06	8.4	Surface	1.0	0.3	190	29.5	29.5	8.0	8.0	24.2	24.2	88.7	88.7	5.9	5.3	1.5	3.7	3	2	821360	806831
						1.0	0.2	187	29.5		8.0		24.2		88.6		5.9		1.5		2			
					Middle	4.2	0.2	191	28.0	28.0	7.9	7.9	26.4	26.4	69.9	69.8	4.7		3.3		<2			
						4.2	0.2	188	28.0		7.9		26.4		69.7		4.7		3.5		<2			
					Bottom	7.4	0.3	153	27.4	27.4	7.9	7.9	30.1	30.1	57.3	57.4	3.8	3.9	6.1		<2			
						7.4	0.3	154	27.4		7.9		30.1		57.5		3.9		6.2		<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 15 August 23 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	11:01	8.2	Surface	1.0	0.6	93	29.2	29.2	8.1	8.1	22.3	22.3	87.8	87.8	6.0	5.4	2.0	3.9	2	2	822234	809831
						1.0	0.6	96	29.2		8.1		22.3		87.8		6.0		2.1		2			
					Middle	4.1	0.5	113	28.0	28.0	8.1	8.1	24.9	24.9	68.4	68.5	4.7		4.1		<2			
						4.1	0.5	119	28.0		8.1		24.9		68.5		4.7		4.1		<2			
					Bottom	7.2	0.5	85	28.0	28.0	8.1	8.1	25.0	25.0	71.9	72.0	4.9	4.9	5.7		<2			
						7.2	0.5	82	28.0		8.1		25.0		72.0		4.9		5.7		<2			
IM11	Fine	Moderate	11:18	7.0	Surface	1.0	0.6	105	29.0	29.0	8.0	8.0	22.1	22.1	82.0	82.0	5.6	5.3	3.2	4.8	2	2	821512	810557
						1.0	0.6	108	29.0		8.0		22.1		81.9		5.6		3.2		2			
					Middle	3.5	0.6	93	28.3	28.3	8.0	8.0	24.1	24.1	71.4	71.4	4.9		5.0		2			
						3.5	0.6	91	28.3		8.0		24.1		71.4		4.9		5.0		3			
					Bottom	6.0	0.6	68	28.0	28.0	8.0	8.0	24.9	24.9	71.4	71.4	4.9	4.9	6.1		2			
						6.0	0.6	66	28.0		8.0		24.9		71.4		4.9		6.1		3			
IM12	Rainy	Moderate	11:24	7.6	Surface	1.0	0.7	101	28.7	28.7	8.1	8.1	23.1	23.1	84.0	83.9	5.7	5.4	2.1	3.7	3	2	821184	811535
						1.0	0.6	98	28.7		8.1		23.2		83.8		5.7		2.1		2			
					Middle	3.8	0.7	92	28.2	28.2	8.1	8.1	24.2	24.2	74.5	74.5	5.1		3.9		<2			
						3.8	0.7	92	28.2		8.1		24.2		74.5		5.1		4.0		<2			
					Bottom	6.6	0.7	75	28.1	28.1	8.0	8.0	24.3	24.2	75.8	75.9	5.2	5.2	5.1		<2			
						6.6	0.7	77	28.1		8.0		24.2		75.9		5.2		5.2		<2			
SR1A	Rainy	Moderate	11:46	5.0	Surface	1.0	0.0	124	29.0	29.0	8.1	8.1	22.2	22.2	87.5	87.5	6.0	6.0	1.4	1.5	<2	<2	819981	812655
						1.0	0.0	123	29.0		8.1		22.2		87.4		6.0		1.4		<2			
					Middle	2.5	-	120	-	-	-	-	-	-	-	-	-		-		-			
						2.5	-	114	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	99	28.9	28.9	8.1	8.1	22.3	22.3	85.5	85.5	5.8	5.8	1.5		<2			
						4.0	0.1	104	28.9		8.1		22.3		85.5		5.8		1.5		<2			
SR2	Sunny	Moderate	12:00	5.8	Surface	1.0	0.6	43	27.4	27.4	8.2	8.2	24.9	24.9	76.1	76.1	5.3	5.3	2.0	2.5	2	2	821482	814151
						1.0	0.6	46	27.4		8.2		24.9		76.1		5.3		2.1		2			
					Middle	-	0.7	67	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	66	-		-		-		-		-		-		-			
					Bottom	4.8	0.7	55	27.4	27.4	8.2	8.2	27.4	27.3	68.7	68.8	4.7	4.7	3.0		<2			
						4.8	0.7	53	27.4		8.2		27.3		68.8		4.7		3.0		<2			
SR3	Cloudy	Moderate	11:55	9.3	Surface	1.0	0.5	151	29.4	29.4	8.0	8.0	24.3	24.3	85.4	85.2	5.7	5.1	2.0	6.6	2	2	822147	807557
						1.0	0.5	145	29.4		8.0		24.3		85.0		5.7		2.3		2			
					Middle	4.7	0.5	138	27.9	27.9	7.9	7.9	27.0	27.1	67.2	67.2	4.5		4.3		2			
						4.7	0.5	141	27.8		7.9		27.1		67.1		4.5		4.5		2			
					Bottom	8.3	0.5	147	27.7	27.7	7.9	7.9	30.1	30.0	59.4	59.6	4.0	4.0	13.5		2			
						8.3	0.5	151	27.7		7.9		30.0		59.7		4.0		13.1		2			
SR4A	Rainy	Moderate	13:45	8.3	Surface	1.0	0.0	22	28.5	28.5	8.1	8.1	26.2	26.2	94.7	94.6	6.4	5.7	3.6	8.8	3	3	817210	807823
						1.0	0.1	23	28.5		8.1		26.3		94.4		6.3		3.8		3			
					Middle	4.2	-	23	27.6	27.6	8.0	8.0	27.3	27.3	75.6	75.6	5.1		10.3		3			
						4.2	0.0	22	27.6		8.0		27.3		75.6		5.1		10.3		3			
					Bottom	7.3	0.0	34	27.5	27.5	7.9	7.9	29.8	29.8	60.6	60.7	4.1	4.1	12.6		3			
						7.3	0.0	30	27.5		7.9		29.8		60.8		4.1		12.3		2			
SR8	Rainy	Moderate	11:29	5.4	Surface	1.0	-	-	28.4	28.4	8.1	8.1	23.8	23.8	78.3	78.3	5.3	5.3	1.6	2.1	4	3	820373	811603
						1.0	-	-	28.4		8.1		23.8		78.3		5.3		1.5		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.4	-	-	28.8	28.9	8.1	8.1	23.0	23.0	79.0	79.2	5.4	5.4	2.7		3			
						4.4	-	-	28.9		8.1		23.0		79.3		5.4		2.7		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 15 August 23 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	05:11	8.6	Surface	1.0	0.3	22	28.2	28.2	8.0	8.0	27.1	27.1	77.1	77.0	5.2	4.5	1.6	6.2	2	2	815629	804259
						1.0	0.2	29	28.2		8.0		27.0		76.9		5.2		1.6		2			
					Middle	4.3	0.2	19	27.0	27.0	7.9	7.9	31.2	31.2	54.5	54.6	3.7		4.4		2			
						4.3	0.3	22	27.0		7.9		31.2		54.6		3.7		4.5		2			
					Bottom	7.6	0.2	19	27.1	27.2	7.8	7.8	31.2	31.1	55.7	55.9	3.7	3.7	12.6		2			
						7.6	0.3	24	27.2		7.8		31.1		56.0		3.7		12.6		3			
C2	Cloudy	Moderate	07:01	12.3	Surface	1.0	0.3	358	28.9	28.9	8.0	8.0	24.5	24.5	83.0	83.0	5.6	5.2	1.8	7.1	4	3	825671	806945
						1.0	0.3	353	28.9		8.0		24.6		82.9		5.6		1.8		3			
					Middle	6.2	0.3	339	27.5	27.5	7.9	7.9	28.0	28.0	68.9	68.8	4.7		9.1		4			
						6.2	0.3	334	27.4		7.9		28.1		68.7		4.7		9.7		3			
					Bottom	11.3	0.4	15	26.8	26.8	7.9	7.9	30.6	30.6	60.2	60.2	4.1	4.1	10.1		3			
						11.3	0.3	18	26.8		7.9		30.6		60.2		4.1		10.1		2			
C3	Sunny	Moderate	05:59	10.6	Surface	1.0	0.5	270	28.0	28.0	8.2	8.2	24.3	24.3	79.3	79.3	5.4	5.4	1.0	1.4	3	2	822103	817817
						1.0	0.5	264	28.0		8.2		24.3		79.2		5.4		1.1		2			
					Middle	5.3	0.5	275	27.8	27.8	8.2	8.2	24.6	24.6	76.6	76.6	5.3		1.1		2			
						5.3	0.5	278	27.8		8.2		24.6		76.5		5.3		1.1		2			
					Bottom	9.6	0.5	273	26.7	26.7	8.1	8.1	27.7	27.7	71.5	71.6	4.9	4.9	2.1		<2			
						9.6	0.4	269	26.7		8.1		27.7		71.7		4.9		2.1		<2			
IM1	Cloudy	Moderate	05:36	6.4	Surface	1.0	0.3	22	28.1	28.1	8.0	7.9	27.3	27.3	74.6	74.6	5.0	4.5	5.8	8.2	2	2	818327	806460
						1.0	0.3	16	28.0		7.9		27.3		74.6		5.0		5.9		2			
					Middle	3.2	0.2	20	27.0	27.0	7.9	7.9	31.0	31.1	60.6	60.5	4.1		8.3		2			
						3.2	0.2	14	27.0		7.9		31.1		60.4		4.0		8.7		2			
					Bottom	5.4	0.2	11	26.9	26.9	7.9	7.9	31.9	31.9	58.9	59.1	3.9	4.0	10.2		2			
						5.4	0.3	12	26.9		7.9		31.9		59.2		4.0		10.3		2			
IM2	Cloudy	Moderate	05:42	7.4	Surface	1.0	0.3	3	27.1	27.2	7.9	7.9	30.8	30.8	71.2	71.2	4.7	4.5	6.2	7.9	3	3	819189	806225
						1.0	0.3	2	27.2		7.9		30.8		71.2		4.7		6.1		2			
					Middle	3.7	0.2	348	27.0	27.0	7.9	7.9	31.3	31.3	63.3	63.4	4.2		7.1		2			
						3.7	0.3	354	27.0		7.9		31.4		63.4		4.2		7.8		4			
					Bottom	6.4	0.2	352	26.9	26.9	7.9	7.9	32.1	32.1	58.3	58.4	3.9	3.9	10.1		5			
						6.4	0.2	348	26.9		7.9		32.1		58.4		3.9		10.2		4			
IM7	Cloudy	Moderate	06:24	8.3	Surface	1.0	0.2	338	29.8	29.8	8.0	8.0	24.4	24.5	88.3	88.2	5.9	5.2	1.6	4.2	3	3	821363	806840
						1.0	0.2	335	29.8		8.0		24.5		88.1		5.8		1.7		3			
					Middle	4.2	0.2	354	27.9	27.9	7.9	7.9	26.8	26.8	66.7	66.6	4.5		4.1		3			
						4.2	0.2	349	27.9		7.9		26.8		66.4		4.5		4.3		3			
					Bottom	7.3	0.2	355	27.6	27.6	7.9	7.9	30.0	30.0	58.8	59.0	3.9	3.9	6.7		2			
						7.3	0.1	352	27.6		7.9		30.0		59.1		3.9		6.8		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 15 August 23 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	07:14	9.6	Surface	1.0	0.3	285	29.1	29.1	8.1	8.1	22.4	22.4	85.9	85.9	5.8	5.3	3.2	4.6	2	2	822232	809835
						1.0	0.3	288	29.1		8.1		22.4		85.8		5.8		3.2		2			
					Middle	4.8	0.3	284	28.1	28.1	8.1	8.1	24.6	24.6	70.1	70.1	4.8		4.5		2			
						4.8	0.3	284	28.1		8.1		24.6		70.1		4.8		4.5		2			
					Bottom	8.6	0.3	294	28.0	28.0	8.1	8.1	24.9	24.9	70.4	70.9	4.8	4.9	6.1		2			
						8.6	0.2	301	28.0		8.1		24.9		71.3		4.9		6.0		2			
IM11	Sunny	Moderate	07:07	9.0	Surface	1.0	0.3	269	28.9	28.9	8.1	8.1	22.6	22.6	84.9	84.8	5.8	5.7	1.5	2.4	<2	3	821504	810562
						1.0	0.3	269	28.9		8.1		22.6		84.7		5.8		1.5		<2			
					Middle	4.5	0.3	263	28.7	28.7	8.1	8.1	22.8	22.9	80.8	80.7	5.5		2.0		2			
						4.5	0.3	263	28.6		8.1		22.9		80.6		5.5		2.0		2			
					Bottom	8.0	0.3	267	28.2	28.2	8.1	8.1	24.1	24.1	75.0	75.1	5.1	5.1	3.6		3			
						8.0	0.3	263	28.2		8.1		24.1		75.2		5.1		3.5		4			
IM12	Sunny	Moderate	06:58	8.4	Surface	1.0	0.3	294	28.8	28.8	8.2	8.2	22.1	22.1	95.7	95.7	6.5	6.2	1.5	2.1	5	3	821184	811534
						1.0	0.3	289	28.8		8.2		22.1		95.7		6.5		1.5		4			
					Middle	4.2	0.3	267	28.5	28.5	8.1	8.1	22.9	23.0	85.8	85.8	5.9		1.9		3			
						4.2	0.3	263	28.5		8.1		23.0		85.7		5.9		1.9		3			
					Bottom	7.4	0.3	286	28.3	28.3	8.1	8.1	23.7	23.6	80.9	81.0	5.5	5.5	2.9		2			
						7.4	0.3	278	28.3		8.1		23.6		81.0		5.5		2.9		3			
SR1A	Sunny	Moderate	06:36	4.2	Surface	1.0	0.0	195	28.8	28.8	8.1	8.1	22.9	22.9	82.1	82.1	5.6	5.6	1.0	1.2	2	3	819976	812666
						1.0	0.0	200	28.8		8.1		22.9		82.1		5.6		1.0		2			
					Middle	2.1	-	204	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.1	210	-		-		-		-		-		-		-			
					Bottom	3.2	0.0	168	28.2	28.2	8.0	8.0	24.1	24.1	80.1	80.1	5.5	5.5	1.3		3			
						3.2	0.1	168	28.2		8.0		24.1		80.1		5.5		1.3		3			
SR2	Sunny	Moderate	06:23	5.2	Surface	1.0	0.1	270	28.3	28.3	7.9	7.9	23.6	23.6	75.1	75.1	5.1	5.1	1.3	1.4	2	2	821463	814161
						1.0	0.1	276	28.3		7.9		23.6		75.1		5.1		1.3		3			
					Middle	-	0.2	295	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	300	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	280	28.2	28.2	7.8	7.8	23.9	23.9	75.2	75.3	5.1	5.2	1.6		<2			
						4.2	0.1	282	28.2		7.8		23.9		75.4		5.2		1.6		<2			
SR3	Cloudy	Moderate	06:31	8.2	Surface	1.0	0.3	352	29.3	29.3	8.0	8.0	24.4	24.4	92.8	92.7	6.2	6.1	1.3	2.6	4	3	822155	807594
						1.0	0.3	349	29.3		8.0		24.4		92.5		6.2		1.3		3			
					Middle	4.1	0.3	342	28.6	28.6	8.0	8.0	25.1	25.1	89.4	89.2	6.0		2.2		4			
						4.1	0.3	335	28.5		8.0		25.1		89.0		6.0		2.3		3			
					Bottom	7.2	0.3	332	28.3	28.3	7.9	7.9	27.8	27.9	67.4	67.4	4.5	4.5	4.4		2			
						7.2	0.3	330	28.3		7.9		27.9		67.4		4.5		4.2		2			
SR4A	Cloudy	Moderate	04:42	9.4	Surface	1.0	0.0	124	28.3	28.3	8.0	8.0	26.6	26.6	81.3	81.3	5.5	4.9	1.6	4.3	2	3	817184	807799
						1.0	0.1	117	28.3		8.0		26.6		81.3		5.5		1.6		2			
					Middle	4.7	0.0	136	27.7	27.7	7.9	7.9	28.6	28.6	63.7	63.7	4.3		3.3		3			
						4.7	0.0	129	27.7		7.9		28.6		63.7		4.3		3.3		3			
					Bottom	8.4	0.1	132	27.3	27.3	7.9	7.9	30.4	30.4	58.8	58.8	3.9	3.9	8.0		3			
						8.4	0.0	138	27.3		8.0		30.4		58.8		3.9		8.0		3			
SR8	Sunny	Moderate	06:53	3.8	Surface	1.0	-	-	28.9	28.9	8.1	8.1	22.2	22.2	92.1	92.1	6.3	6.3	0.8	0.9	2	2	820401	811638
						1.0	-	-	28.9		8.1		22.2		92.1		6.3		0.9		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	2.8	-	-	28.9	28.9	8.1	8.1	22.3	22.3	92.3	92.3	6.3	6.3	1.0		<2			
						2.8	-	-	28.9		8.1		22.3		92.3		6.3		1.0		<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 17 August 23 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	14:08	8.6	Surface	1.0	0.7	225	29.0	29.0	8.2	8.2	24.0	24.0	78.3	78.2	5.3	4.8	3.3	6.1	3	4	815611	804245
						1.0	0.6	220	29.0		8.2		24.0		78.1		5.3		3.3		3			
					Middle	4.3	0.7	201	26.9	26.9	8.3	8.3	29.3	29.3	62.8	62.8	4.3		5.4		4			
						4.3	0.7	208	26.8		8.3		29.4		62.7		4.3		5.4		3			
					Bottom	7.6	0.6	203	26.3	26.3	8.3	8.3	30.6	30.6	58.8	58.9	4.0	4.0	9.6		5			
						7.6	0.6	200	26.3		8.3		30.6		59.0		4.0		9.5		6			
C2	Cloudy	Moderate	12:11	11.8	Surface	1.0	0.4	157	29.0	29.0	8.2	8.2	22.6	22.7	84.8	84.8	5.7	5.3	3.2	6.0	3	3	825672	806936
						1.0	0.5	157	29.0		8.2		22.7		84.8		5.7		3.2		4			
					Middle	5.9	0.5	186	28.3	28.3	8.1	8.1	24.7	24.7	71.6	71.6	4.9		5.7		4			
						5.9	0.4	181	28.3		8.1		24.7		71.6		4.9		5.7		3			
					Bottom	10.8	0.5	176	28.2	28.2	8.1	8.1	28.8	28.8	61.2	61.2	4.1	4.1	9.2		2			
						10.8	0.5	177	28.2		8.1		28.8		61.2		4.1		9.2		2			
C3	Misty	Moderate	13:33	8.2	Surface	1.0	0.4	58	27.0	27.0	7.9	7.9	29.5	29.6	70.6	70.7	4.8	4.6	1.0	2.1	3	3	822114	817825
						1.0	0.3	52	27.0		7.9		29.6		70.8		4.8		1.0		3			
					Middle	4.1	0.4	85	26.7	26.7	7.9	7.9	30.3	30.4	65.8	65.8	4.5		2.1		3			
						4.1	0.4	84	26.6		7.9		30.4		65.7		4.4		2.1		3			
					Bottom	7.2	0.4	73	26.4	26.4	7.9	7.9	30.8	30.7	65.0	65.1	4.4	4.4	3.2		2			
						7.2	0.4	71	26.4		7.9		30.7		65.2		4.4		3.2		3			
IM1	Cloudy	Moderate	13:44	7.2	Surface	1.0	0.5	196	29.5	29.5	8.2	8.2	23.0	23.0	81.0	80.8	5.4	4.8	5.4	9.1	2	3	818370	806457
						1.0	0.4	194	29.5		8.2		23.0		80.6		5.4		5.5		4			
					Middle	3.6	0.5	199	26.9	26.9	8.2	8.2	29.4	29.4	62.4	62.4	4.2		9.3		3			
						3.6	0.5	201	26.9		8.2		29.4		62.4		4.2		9.3		4			
					Bottom	6.2	0.4	192	26.7	26.7	8.2	8.2	29.7	29.7	57.1	57.2	3.9	3.9	12.4		3			
						6.2	0.5	194	26.7		8.2		29.7		57.2		3.9		12.6		4			
IM2	Cloudy	Moderate	13:38	7.2	Surface	1.0	0.5	200	29.3	29.3	8.1	8.1	23.0	23.0	84.5	84.4	5.7	5.0	0.2	3.7	4	3	819169	806230
						1.0	0.6	203	29.3		8.1		23.0		84.3		5.7		0.2		3			
					Middle	3.6	0.6	194	27.7	27.7	8.2	8.2	27.1	27.1	62.5	62.5	4.2		2.6		4			
						3.6	0.5	189	27.7		8.2		27.1		62.5		4.2		2.9		3			
					Bottom	6.2	0.5	205	26.5	26.5	8.2	8.2	30.1	30.1	57.6	57.7	3.9	3.9	8.3		3			
						6.2	0.5	212	26.5		8.2		30.1		57.7		3.9		8.2		3			
IM7	Cloudy	Moderate	13:04	8.1	Surface	1.0	0.3	171	29.2	29.2	8.1	8.1	23.1	23.1	79.0	78.9	5.3	4.9	0.1	2.6	3	4	821353	806812
						1.0	0.3	177	29.1		8.1		23.1		78.7		5.3		0.1		3			
					Middle	4.1	0.3	154	28.3	28.3	8.1	8.1	25.5	25.5	66.2	66.2	4.5		3.5		4			
						4.1	0.3	147	28.3		8.1		25.5		66.2		4.5		3.6		3			
					Bottom	7.1	0.3	182	28.2	28.2	8.1	8.1	25.7	25.7	58.7	58.7	4.0	4.0	4.3		5			
						7.1	0.3	187	28.2		8.1		25.7		58.7		4.0		4.2		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 17 August 23 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	12:12	8.0	Surface	1.0	0.6	107	29.0	29.0	8.0	7.9	25.4	25.4	86.4	86.4	5.8	5.6	2.3	3.7	4	3	822233	809848
						1.0	0.5	108	29.0		7.9		25.4		86.3		5.8		2.3		3			
					Middle	4.0	0.5	108	28.7	28.7	7.9	7.9	26.0	26.1	80.6	80.6	5.4		4.2		3			
						4.0	0.6	108	28.7		7.9		26.1		80.5		5.4		4.1		4			
					Bottom	7.0	0.5	93	28.6	28.6	7.9	7.9	26.4	26.4	75.5	75.5	5.1	5.1	4.5		2			
						7.0	0.6	98	28.6		7.9		26.3		75.5		5.1		4.5		3			
IM11	Misty	Moderate	12:28	7.8	Surface	1.0	0.6	80	29.2	29.2	8.0	8.0	25.2	25.2	88.9	88.9	5.9	5.7	1.3	2.5	3	3	821492	810528
						1.0	0.7	73	29.1		8.0		25.2		88.8		5.9		1.4		3			
					Middle	3.9	0.6	102	28.9	28.9	7.9	7.9	25.7	25.7	82.1	82.1	5.5		2.3		3			
						3.9	0.6	105	28.8		7.9		25.7		82.0		5.5		2.3		3			
					Bottom	6.8	0.7	112	28.5	28.6	7.9	7.9	26.5	26.4	75.0	75.0	5.0	5.0	3.9		2			
						6.8	0.7	113	28.6		7.9		26.4		75.0		5.0		4.0		2			
IM12	Misty	Moderate	12:34	7.6	Surface	1.0	0.7	92	29.1	29.1	8.0	8.0	25.5	25.5	87.3	87.4	5.8	5.8	1.0	1.6	3	3	821145	811521
						1.0	0.7	86	29.1		8.0		25.5		87.4		5.8		1.0		3			
					Middle	3.8	0.7	113	29.1	29.1	8.0	8.0	25.5	25.5	87.3	87.4	5.8		1.9		3			
						3.8	0.6	119	29.1		8.0		25.5		87.4		5.8		1.9		3			
					Bottom	6.6	0.7	114	28.9	28.9	7.9	7.9	25.8	25.8	88.3	88.5	5.9	5.9	1.9		3			
						6.6	0.7	121	28.9		7.9		25.8		88.6		5.9		1.9		3			
SR1A	Misty	Moderate	12:56	5.0	Surface	1.0	0.0	83	28.9	28.9	7.9	7.9	25.9	25.9	84.1	84.1	5.6	5.6	2.3	2.5	4	3	819972	812665
						1.0	0.1	89	28.8		7.9		26.0		84.1		5.6		2.3		3			
					Middle	2.5	0.1	100	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.1	105	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	87	28.1	28.2	7.9	7.9	27.7	27.7	76.1	76.2	5.1	5.1	2.7		3			
						4.0	0.1	85	28.2		7.9		27.7		76.3		5.1		2.7		2			
SR2	Misty	Moderate	13:10	5.2	Surface	1.0	0.7	50	29.6	29.6	8.0	8.0	24.1	24.1	100.1	100.2	6.7	6.7	1.3	2.2	3	2	821481	814170
						1.0	0.6	50	29.6		8.0		24.1		100.2		6.7		1.3		2			
					Middle	-	0.7	37	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	41	-		-		-		-		-		-		-			
					Bottom	4.2	0.7	49	29.0	29.1	8.0	8.0	25.4	25.4	88.5	88.6	5.9	5.9	3.0		2			
						4.2	0.7	49	29.1		8.0		25.4		88.7		5.9		3.0		2			
SR3	Cloudy	Moderate	12:55	9.4	Surface	1.0	0.5	148	29.2	29.2	8.2	8.2	22.4	22.4	83.6	83.6	5.7	5.5	3.4	7.1	2	3	822134	807569
						1.0	0.5	153	29.2		8.2		22.4		83.6		5.7		3.5		2			
					Middle	4.7	0.6	153	28.6	28.6	8.1	8.1	24.9	24.9	77.0	77.0	5.2		7.3		3			
						4.7	0.6	157	28.6		8.1		24.9		77.0		5.2		7.8		3			
					Bottom	8.4	0.5	163	28.3	28.3	8.1	8.1	27.1	27.3	63.2	63.2	4.2	4.2	10.6		3			
						8.4	0.5	159	28.3		8.1		27.5		63.2		4.2		10.3		3			
SR4A	Cloudy	Moderate	14:39	9.3	Surface	1.0	0.0	329	29.4	29.4	8.2	8.2	23.4	23.4	84.5	84.4	5.7	5.0	1.3	8.0	2	3	817208	807815
						1.0	0.0	325	29.4		8.2		23.4		84.2		5.7		1.3		3			
					Middle	4.7	-	320	27.8	27.8	8.2	8.2	27.1	27.1	63.5	63.5	4.3		9.4		3			
						4.7	0.0	325	27.8		8.2		27.1		63.5		4.3		9.4		3			
					Bottom	8.3	0.0	348	27.6	27.6	8.1	8.1	27.6	27.6	65.2	65.3	4.4	4.4	13.2		4			
						8.3	0.0	353	27.6		8.1		27.6		65.4		4.4		13.1		3			
SR8	Misty	Moderate	12:40	5.8	Surface	1.0	-	-	29.4	29.4	8.0	8.0	24.8	24.7	90.9	94.4	6.1	6.3	1.0	1.1	2	3	820386	811635
						1.0	-	-	29.4		8.0		24.6		97.8		6.5		0.9		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.8	-	-	29.2	29.2	8.0	8.0	25.1	25.1	91.2	91.0	6.1	6.1	1.4		3			
						4.8	-	-	29.2		8.0		25.1		90.8		6.1		1.3		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 17 August 23 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	06:09	8.0	Surface	1.0	0.2	33	29.1	29.1	8.2	8.2	23.5	23.5	78.4	78.3	5.3	4.6	1.7	6.4	3	3	815611	804264
						1.0	0.2	28	29.1		8.2		23.5		78.2		5.3		1.6		4			
					Middle	4.0	0.3	12	26.2	26.2	8.3	8.3	30.7	30.7	56.2	56.2	3.8		9.6		2			
						4.0	0.3	6	26.2		8.3		30.7		56.2		3.8		9.8		3			
					Bottom	7.0	0.2	27	26.1	26.1	8.3	8.3	31.0	31.0	58.6	58.8	4.0	4.0	8.0		3			
						7.0	0.2	31	26.1		8.3		31.0		58.9		4.0		7.8		2			
C2	Cloudy	Moderate	07:57	12.1	Surface	1.0	0.4	0	29.2	29.2	8.2	8.2	20.8	20.8	83.6	83.6	5.7	5.2	3.6	7.5	3	3	825696	806934
						1.0	0.4	1	29.2		8.2		20.8		83.6		5.7		3.6		4			
					Middle	6.1	0.4	336	28.3	28.3	8.1	8.1	24.2	24.3	69.7	69.7	4.7		7.2		3			
						6.1	0.5	329	28.3		8.1		24.3		69.7		4.7		7.7		3			
					Bottom	11.1	0.4	6	28.2	28.2	8.1	8.1	28.7	28.7	62.2	62.2	4.1	4.1	11.6		2			
						11.1	0.4	5	28.2		8.1		28.7		62.2		4.1		11.6		3			
C3	Fine	Moderate	06:54	10.6	Surface	1.0	0.5	261	28.0	28.0	8.0	8.0	27.6	27.6	88.6	88.7	6.0	5.8	0.7	1.0	3	2	822094	817822
						1.0	0.5	266	28.0		8.0		27.6		88.8		6.0		0.7		2			
					Middle	5.3	0.5	271	27.3	27.3	7.9	7.9	29.2	29.2	82.3	82.3	5.5		1.0		2			
						5.3	0.5	268	27.3		7.9		29.2		82.2		5.5		1.0		3			
					Bottom	9.6	0.5	278	27.2	27.2	7.9	7.9	29.5	29.5	80.7	80.7	5.4	5.4	1.2		2			
						9.6	0.5	280	27.2		7.9		29.5		80.6		5.4		1.2		2			
IM1	Cloudy	Moderate	06:33	7.1	Surface	1.0	0.2	6	29.3	29.3	8.1	8.1	22.9	22.9	81.5	81.5	5.5	4.8	8.4	6.7	2	2	818331	806473
						1.0	0.2	358	29.2		8.1		23.0		81.4		5.5		8.5		2			
					Middle	3.6	0.2	18	28.3	28.3	8.2	8.2	25.8	25.8	60.9	60.8	4.1		5.0		2			
						3.6	0.2	18	28.3		8.2		25.8		60.7		4.1		5.3		2			
					Bottom	6.1	0.2	349	26.8	26.8	8.3	8.3	29.4	29.4	57.4	57.6	3.9	3.9	6.3		2			
						6.1	0.3	351	26.8		8.3		29.4		57.8		3.9		6.7		3			
IM2	Cloudy	Moderate	06:38	7.4	Surface	1.0	0.2	6	29.3	29.3	8.1	8.1	23.0	23.0	81.3	81.2	5.5	5.1	2.0	4.8	2	3	819184	806214
						1.0	0.2	359	29.3		8.1		23.1		81.0		5.5		2.2		3			
					Middle	3.7	0.2	3	28.8	28.8	8.2	8.2	24.3	24.2	70.1	70.3	4.7		1.8		3			
						3.7	0.3	1	28.8		8.2		24.2		70.4		4.8		2.0		2			
					Bottom	6.4	0.3	355	26.8	26.8	8.3	8.3	29.5	29.5	57.2	57.3	3.9	3.9	10.4		3			
						6.4	0.3	352	26.8		8.3		29.5		57.3		3.9		10.3		4			
IM7	Cloudy	Moderate	07:14	7.8	Surface	1.0	0.2	335	29.5	29.5	8.1	8.1	22.9	22.9	82.9	82.8	5.6	5.1	1.7	3.1	2	3	821338	806812
						1.0	0.2	339	29.5		8.1		22.9		82.6		5.6		1.7		3			
					Middle	3.9	0.2	318	28.4	28.4	8.1	8.1	25.0	25.0	66.3	66.2	4.5		2.3		2			
						3.9	0.2	316	28.4		8.1		25.1		66.0		4.5		2.5		3			
					Bottom	6.8	0.2	348	28.2	28.2	8.1	8.1	25.7	25.7	61.4	61.4	4.1	4.1	5.2		2			
						6.8	0.1	340	28.2		8.1		25.7		61.4		4.1		5.1		3			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 August 23 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	08:23	9.4	Surface	1.0	0.3	303	29.0	29.0	8.0	8.0	25.7	25.7	84.3	84.2	5.6	5.6	1.1	1.6	3	3	822246	809819
						1.0	0.2	308	29.0		8.0		25.7		84.0		5.6		1.1		2			
					Middle	4.7	0.3	304	28.8	28.8	8.0	8.0	26.0	26.0	82.6	82.6	5.5		1.4		2			
						4.7	0.3	310	28.8		8.0		26.0		82.5		5.5		1.4		2			
					Bottom	8.4	0.3	280	28.7	28.7	7.9	7.9	26.1	26.1	82.6	82.8	5.5	5.6	2.4		3			
						8.4	0.3	282	28.7		7.9		26.1		82.9		5.6		2.3		4			
IM11	Sunny	Moderate	08:15	9.0	Surface	1.0	0.3	292	29.4	29.4	8.0	8.0	24.6	24.7	93.7	93.7	6.3	6.0	1.6	3.1	5	3	821506	810567
						1.0	0.4	295	29.4		8.0		24.7		93.7		6.3		1.5		4			
					Middle	4.5	0.3	274	28.9	28.9	7.9	7.9	25.6	25.6	84.3	84.3	5.6		3.7		2			
						4.5	0.3	274	28.8		7.9		25.7		84.2		5.6		3.6		3			
					Bottom	8.0	0.4	284	28.5	28.6	8.0	8.0	26.5	26.5	76.3	76.4	5.1	5.1	4.2		2			
						8.0	0.3	288	28.6		8.0		26.4		76.4		5.1		4.2		2			
IM12	Sunny	Moderate	08:07	7.4	Surface	1.0	0.4	269	29.4	29.4	8.1	8.1	24.6	24.6	104.2	103.9	7.0	6.0	1.5	2.4	3	3	821176	811501
						1.0	0.4	272	29.3		8.1		24.7		103.6		6.9		1.7		4			
					Middle	3.7	0.4	292	28.5	28.5	7.9	7.9	26.5	26.5	75.4	75.4	5.1		2.0		3			
						3.7	0.4	298	28.5		7.9		26.6		75.3		5.1		2.0		4			
					Bottom	6.4	0.3	278	28.6	28.7	7.9	7.9	26.7	26.7	77.0	77.1	5.1	5.2	3.7		2			
						6.4	0.4	276	28.7		7.9		26.7		77.2		5.2		3.7		3			
SR1A	Fine	Moderate	07:39	4.8	Surface	1.0	0.0	211	28.8	28.8	7.9	7.9	26.3	26.3	82.5	82.5	5.5	5.5	1.2	1.6	3	3	819975	812662
						1.0	0.0	210	28.7		7.9		26.4		82.4		5.5		1.2		2			
					Middle	2.4	0.0	182	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	187	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	192	28.7	28.7	7.9	7.9	26.6	26.5	79.2	79.3	5.3	5.3	2.1		3			
						3.8	0.1	196	28.7		7.9		26.4		79.4		5.3		2.1		3			
SR2	Fine	Moderate	07:23	5.2	Surface	1.0	0.1	268	28.8	28.8	8.0	8.0	26.0	26.0	86.6	86.6	5.8	5.8	1.0	1.5	4	4	821464	814184
						1.0	0.1	275	28.8		8.0		26.0		86.6		5.8		1.1		3			
					Middle	-	0.1	264	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	257	-		-		-		-		-		-		-			
					Bottom	4.2	0.0	284	27.9	27.9	8.0	8.0	27.9	27.8	77.5	77.6	5.2	5.2	1.9		4			
						4.2	0.0	277	27.9		8.0		27.8		77.7		5.2		1.9		4			
SR3	Cloudy	Moderate	07:27	8.2	Surface	1.0	0.3	326	29.1	29.1	8.2	8.2	22.5	22.5	85.2	85.2	5.8	5.6	2.2	3.6	2	3	822167	807582
						1.0	0.3	324	29.1		8.2		22.6		85.2		5.8		2.2		3			
					Middle	4.1	0.4	356	28.4	28.4	8.2	8.2	24.2	24.3	79.4	79.2	5.4		3.2		4			
						4.1	0.3	355	28.3		8.2		24.3		79.0		5.4		3.2		3			
					Bottom	7.2	0.3	331	28.1	28.1	8.1	8.1	26.0	26.0	60.7	60.7	4.1	4.1	5.5		3			
						7.2	0.3	331	28.1		8.1		26.0		60.7		4.1		5.5		4			
SR4A	Cloudy	Moderate	05:39	9.0	Surface	1.0	0.0	210	29.3	29.3	8.0	8.0	22.7	22.7	85.9	85.9	5.8	5.6	0.8	2.7	3	4	817182	807804
						1.0	0.0	206	29.3		8.0		22.7		85.8		5.8		0.7		4			
					Middle	4.5	0.0	203	29.0	29.0	8.0	8.0	23.7	23.7	79.9	79.9	5.4		2.1		4			
						4.5	0.1	195	29.0		8.0		23.7		79.8		5.4		2.1		2			
					Bottom	8.0	0.0	228	28.9	28.9	8.0	8.0	24.0	24.0	78.3	78.3	5.3	5.3	5.1		4			
						8.0	0.0	226	28.9		8.0		24.0		78.3		5.3		5.1		4			
SR8	Sunny	Moderate	08:02	4.6	Surface	1.0	-	-	28.7	28.7	7.9	7.9	26.5	26.5	79.8	79.8	5.3	5.3	2.2	2.2	2	3	820406	811618
						1.0	-	-	28.7		7.9		26.5		79.8		5.3		2.2		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.6	-	-	28.6	28.6	7.9	7.9	26.7	26.7	81.6	81.7	5.5	5.5	2.2		3			
						3.6	-	-	28.6		7.9		26.7		81.8		5.5		2.2		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 19 August 23 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	14:37	8.5	Surface	1.0	0.5	225	27.9	27.9	8.3	8.3	24.9	24.9	67.5	67.4	4.6	4.5	2.3	4.8	<2	2	815630	804236
						1.0	0.5	224	27.8		8.3		24.9		67.2		4.6		2.3		<2			
					Middle	4.3	0.5	212	26.7	26.7	8.4	8.4	28.2	28.2	64.6	64.5	4.4		3.8		2			
						4.3	0.5	218	26.7		8.4		28.2		64.4		4.3		4.1		2			
					Bottom	7.5	0.5	187	26.1	26.1	8.4	8.4	29.9	29.9	54.3	54.4	3.7	3.7	8.2		2			
						7.5	0.5	181	26.1		8.4		29.9		54.5		3.7		8.3		3			
C2	Cloudy	Moderate	13:07	11.6	Surface	1.0	0.4	157	27.9	27.9	8.2	8.2	20.8	20.9	68.4	68.4	4.8	4.5	3.7	6.6	2	3	825699	806952
						1.0	0.4	160	27.9		8.2		20.9		68.4		4.8		3.9		2			
					Middle	5.8	0.3	150	27.5	27.5	8.2	8.2	23.4	23.4	61.0	61.1	4.2		7.5		4			
						5.8	0.4	155	27.5		8.2		23.5		61.1		4.2		7.6		3			
					Bottom	10.6	0.3	189	27.4	27.5	8.2	8.2	26.7	26.7	61.6	61.6	4.2	4.2	8.4		3			
						10.6	0.3	182	27.5		8.2		26.7		61.6		4.2		8.3		4			
C3	Misty	Moderate	14:29	8.2	Surface	1.0	0.4	82	26.8	26.8	7.9	7.9	29.9	30.0	67.6	67.6	4.6	4.4	1.1	3.5	3	2	822090	817782
						1.0	0.5	75	26.8		7.9		30.0		67.6		4.6		1.1		2			
					Middle	4.1	0.4	64	26.4	26.4	7.9	7.9	30.7	30.8	61.1	61.1	4.1		3.9		<2			
						4.1	0.4	69	26.4		7.9		30.8		61.0		4.1		3.9		<2			
					Bottom	7.2	0.4	65	26.6	26.7	7.9	7.9	30.5	30.5	60.2	60.3	4.1	4.1	5.6		<2			
						7.2	0.4	68	26.7		7.9		30.4		60.4		4.1		5.6		<2			
IM1	Cloudy	Moderate	14:13	6.4	Surface	1.0	0.3	195	27.8	27.8	8.3	8.3	25.3	25.3	68.4	68.4	4.7	4.5	5.1	7.2	4	3	818350	806443
						1.0	0.3	194	27.8		8.3		25.3		68.4		4.7		5.2		3			
					Middle	3.2	0.3	189	26.5	26.5	8.4	8.4	28.7	28.7	62.5	62.5	4.3		2.7		2			
						3.2	0.3	191	26.5		8.4		28.7		62.5		4.3		2.7		2			
					Bottom	5.4	0.3	204	26.2	26.2	8.4	8.4	29.7	29.7	57.4	57.6	3.9	4.0	14.0		2			
						5.4	0.3	203	26.2		8.4		29.7		57.7		4.0		13.7		2			
IM2	Cloudy	Moderate	14:07	6.9	Surface	1.0	0.4	191	27.1	27.1	8.3	8.3	27.4	27.4	69.2	69.2	4.7	4.6	4.3	8.9	<2	**<u><2</u>**	819161	806216
						1.0	0.4	183	27.1		8.3		27.4		69.2		4.7		4.3		<2			
					Middle	3.5	0.3	179	26.3	26.3	8.4	8.4	29.4	29.5	63.8	63.8	4.4		10.0		<2			
						3.5	0.4	171	26.2		8.4		29.5		63.8		4.4		9.3		<2			
					Bottom	5.9	0.3	203	26.1	26.1	8.4	8.4	29.8	29.8	59.6	59.7	4.1	4.1	12.8		<2			
						5.9	0.3	206	26.1		8.4		29.8		59.8		4.1		12.9		<2			
IM7	Cloudy	Moderate	13:39	8.0	Surface	1.0	0.2	155	27.5	27.5	8.3	8.3	26.3	26.3	69.7	69.6	4.7	4.6	3.2	9.6	4	3	821329	806823
						1.0	0.2	153	27.5		8.3		26.3		69.4		4.7		3.2		3			
					Middle	4.0	0.2	152	26.6	26.6	8.3	8.3	27.8	27.8	65.4	65.4	4.5		11.9		3			
						4.0	0.2	152	26.6		8.3		27.8		65.4		4.5		12.5		4			
					Bottom	7.0	0.2	183	26.6	26.6	8.4	8.4	28.8	28.8	57.3	57.3	3.9	3.9	13.4		2			
						7.0	0.3	187	26.6		8.4		28.8		57.3		3.9		13.5		2			

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 August 23 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	13:08	7.8	Surface	1.0	0.4	99	29.3	29.3	8.0	8.0	25.4	25.4	87.7	87.7	5.8	5.7	1.1	1.5	<2	**<u>≤2</u>**	822224	809826
						1.0	0.4	93	29.2		8.0		25.5		87.7		5.8		1.1		<2			
					Middle	3.9	0.4	112	28.8	28.8	8.0	8.0	25.9	25.9	82.2	82.2	5.5		1.2		<2			
						3.9	0.4	114	28.8		8.0		25.9		82.2		5.5		1.2		<2			
					Bottom	6.8	0.5	108	28.8	28.8	8.0	8.0	26.0	26.0	82.3	82.3	5.5	5.5	2.0		<2			
						6.8	0.5	111	28.8		8.0		26.0		82.3		5.5		2.1		<2			
IM11	Misty	Moderate	13:24	7.2	Surface	1.0	0.6	90	29.0	29.0	8.0	8.0	25.4	25.4	90.5	90.5	6.1	5.8	1.9	2.5	4	2	821493	810542
						1.0	0.7	97	28.9		8.0		25.4		90.5		6.1		2.0		2			
					Middle	3.6	0.6	112	28.8	28.8	7.9	7.9	25.8	25.8	82.0	81.9	5.5		2.6		2			
						3.6	0.6	109	28.8		7.9		25.8		81.7		5.5		2.7		2			
					Bottom	6.2	0.6	115	28.7	28.7	7.9	7.9	26.2	26.2	78.6	78.7	5.3	5.3	3.1		2			
						6.2	0.5	119	28.7		7.9		26.2		78.7		5.3		3.1		2			
IM12	Misty	Moderate	13:30	7.2	Surface	1.0	0.6	100	29.0	29.0	8.0	8.0	25.3	25.4	90.4	90.3	6.1	5.8	1.9	2.5	<2	2	821148	811541
						1.0	0.6	97	28.9		8.0		25.4		90.1		6.1		1.9		<2			
					Middle	3.6	0.6	106	28.8	28.8	7.9	7.9	25.7	25.6	82.1	81.9	5.4		2.6		<2			
						3.6	0.6	108	28.8		7.9		25.4		81.6		5.4		2.7		<2			
					Bottom	6.2	0.6	77	28.7	28.7	7.9	7.9	26.2	26.2	78.3	78.2	5.2	5.2	3.1		2			
						6.2	0.6	72	28.7		7.9		26.1		78.1		5.2		3.1		3			
SR1A	Misty	Moderate	13:53	4.0	Surface	1.0	-	90	28.9	28.9	7.9	7.9	26.3	26.3	83.3	83.4	5.6	5.6	2.6	2.8	3	3	819973	812664
						1.0	0.1	88	28.9		7.9		26.3		83.4		5.6		2.6		2			
					Middle	2.0	0.0	86	-	-	-	-	-	-	-	-	-		-		-			
						2.0	0.0	80	-		-		-		-		-		-		-			
					Bottom	3.0	0.0	71	28.7	28.7	7.9	7.9	26.5	26.5	84.2	84.4	5.6	5.6	3.0		3			
						3.0	0.0	72	28.7		7.9		26.5		84.5		5.6		3.0		2			
SR2	Misty	Moderate	14:06	5.6	Surface	1.0	0.5	37	26.9	26.9	7.9	7.9	29.8	29.9	68.5	68.6	4.6	4.6	3.2	3.7	2	2	821481	814176
						1.0	0.5	38	26.8		7.9		30.0		68.7		4.6		3.2		2			
					Middle	-	0.6	39	-	-	-	-	-	-	-	-	-		-		-			
						-	0.5	39	-		-		-		-		-		-		-			
					Bottom	4.6	0.5	39	26.8	26.9	7.9	7.9	30.2	30.1	61.7	61.9	4.2	4.2	4.1		<2			
						4.6	0.5	40	26.9		7.9		29.9		62.0		4.2		4.1		<2			
SR3	Cloudy	Moderate	13:30	8.4	Surface	1.0	0.3	160	28.1	28.1	8.2	8.2	24.4	24.4	67.8	67.8	4.6	4.5	2.1	5.5	2	3	822143	807579
						1.0	0.4	155	28.1		8.2		24.4		67.8		4.6		2.1		2			
					Middle	4.2	0.4	133	27.2	27.2	8.3	8.3	27.2	27.2	63.4	63.4	4.3		6.4		2			
						4.2	0.4	133	27.2		8.3		27.2		63.4		4.3		6.6		3			
					Bottom	7.4	0.4	170	27.1	27.1	8.3	8.3	27.5	27.5	60.7	60.7	4.1	4.1	7.8		4			
						7.4	0.4	163	27.1		8.3		27.5		60.7		4.1		7.8		3			
SR4A	Cloudy	Moderate	15:05	8.3	Surface	1.0	0.0	7	27.9	27.9	8.2	8.2	25.2	25.2	67.8	67.8	4.6	4.5	4.7	8.3	<2	3	817207	807811
						1.0	0.0	1	27.9		8.2		25.2		67.8		4.6		4.4		<2			
					Middle	4.2	0.0	359	27.4	27.4	8.2	8.2	27.0	27.0	63.3	63.3	4.3		9.9		2			
						4.2	-	357	27.4		8.2		27.0		63.3		4.3		9.8		3			
					Bottom	7.3	0.0	23	27.4	27.4	8.2	8.2	27.0	27.0	58.3	58.4	4.0	4.0	10.3		3			
						7.3	0.1	22	27.4		8.2		27.0		58.4		4.0		10.3		4			
SR8	Misty	Moderate	13:36	4.8	Surface	1.0	-	-	29.2	29.2	8.0	8.0	25.4	25.4	88.1	88.1	5.9	5.9	1.1	1.4	3	3	820409	811613
						1.0	-	-	29.1		8.0		25.4		88.0		5.9		1.1		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.8	-	-	29.1	29.1	8.0	8.0	25.7	25.7	82.6	82.6	5.5	5.5	1.8		2			
						3.8	-	-	29.1		8.0		25.7		82.6		5.5		1.8		3			

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 August 23 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	07:32	7.8	Surface	1.0	0.3	39	27.6	27.6	8.2	8.2	25.8	25.8	66.7	66.7	4.6	4.3	2.0	5.5	3	3	815617	804261
						1.0	0.3	36	27.6		8.2		25.8		66.7		4.6		2.0		2			
					Middle	3.9	0.2	13	26.5	26.5	8.3	8.3	28.8	28.8	58.2	58.2	4.0		6.2		3			
						3.9	0.2	13	26.5		8.3		28.8		58.2		4.0		6.2		2			
					Bottom	6.8	0.2	45	26.1	26.1	8.3	8.3	29.8	29.8	56.6	56.7	3.9	3.9	8.3		3			
						6.8	0.2	47	26.1		8.3		29.8		56.8		3.9		8.3		2			
C2	Cloudy	Moderate	09:18	11.2	Surface	1.0	0.4	343	28.2	28.2	8.2	8.2	21.8	21.8	67.6	67.6	4.6	4.5	0.9	5.0	2	2	825703	806961
						1.0	0.4	350	28.2		8.2		21.8		67.6		4.6		0.9		2			
					Middle	5.6	0.4	346	28.2	28.0	8.2	8.2	23.8	23.8	67.5	64.8	4.6		5.9		2			
						5.6	0.4	343	27.7		8.2		23.8		62.0		4.2		6.1		2			
					Bottom	10.2	0.4	344	27.4	27.4	8.2	8.2	26.8	26.8	61.9	62.0	4.2	4.2	8.0		3			
						10.2	0.4	350	27.4		8.2		26.8		62.0		4.2		8.3		3			
C3	Fine	Moderate	08:20	10.2	Surface	1.0	0.5	255	27.9	27.9	8.0	8.0	27.8	27.8	87.1	87.2	5.9	5.8	0.1	0.7	<2	2	822111	817812
						1.0	0.5	250	27.9		8.0		27.8		87.2		5.9		0.1		<2			
					Middle	5.1	0.4	251	27.5	27.5	8.0	8.0	28.8	28.8	84.8	84.8	5.7		1.0		<2			
						5.1	0.4	251	27.4		8.0		28.9		84.8		5.7		1.0		<2			
					Bottom	9.2	0.5	266	27.1	27.1	8.0	8.0	29.6	29.6	78.7	78.5	5.3	5.3	1.1		2			
						9.2	0.4	273	27.1		8.0		29.6		78.3		5.3		1.1		2			
IM1	Cloudy	Moderate	07:59	6.3	Surface	1.0	0.2	4	27.7	27.7	8.2	8.2	25.7	25.6	67.8	67.9	4.6	4.5	2.2	5.6	3	2	818372	806473
						1.0	0.2	0	27.7		8.2		25.6		68.0		4.6		2.1		2			
					Middle	3.2	0.2	24	27.0	27.0	8.3	8.3	27.6	27.5	63.4	63.4	4.3		5.9		2			
						3.2	0.2	18	27.0		8.3		27.5		63.4		4.3		5.9		3			
					Bottom	5.3	0.2	23	26.2	26.2	8.3	8.3	29.7	29.7	55.7	55.8	3.8	3.8	9.0		2			
						5.3	0.2	21	26.2		8.3		29.7		55.8		3.8		8.3		2			
IM2	Cloudy	Moderate	08:06	7.1	Surface	1.0	0.2	337	28.4	28.4	8.2	8.2	23.2	23.2	76.7	76.6	5.2	4.7	0.5	5.5	2	3	819190	806232
						1.0	0.2	332	28.4		8.2		23.2		76.4		5.2		0.5		3			
					Middle	3.6	0.2	350	27.0	27.0	8.3	8.3	27.6	27.6	61.6	61.6	4.2		3.6		2			
						3.6	0.2	347	27.0		8.3		27.6		61.5		4.2		3.6		4			
					Bottom	6.1	0.2	336	26.3	26.3	8.3	8.3	29.4	29.4	57.6	57.7	3.9	4.0	12.3		3			
						6.1	0.2	336	26.3		8.3		29.4		57.7		4.0		12.6		4			
IM7	Cloudy	Moderate	08:40	8.0	Surface	1.0	0.2	331	27.5	27.5	8.2	8.2	26.4	26.4	69.4	69.4	4.7	4.5	3.3	7.9	3	2	821371	806819
						1.0	0.1	337	27.5		8.2		26.4		69.4		4.7		3.4		2			
					Middle	4.0	0.2	313	26.9	26.9	8.3	8.3	28.0	28.0	62.1	62.1	4.2		7.1		2			
						4.0	0.2	312	26.9		8.3		28.0		62.1		4.2		7.1		2			
					Bottom	7.0	0.2	332	26.7	26.7	8.3	8.3	28.5	28.5	59.1	59.2	4.0	4.0	13.2		2			
						7.0	0.2	333	26.7		8.3		28.5		59.2		4.0		13.3		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 19 August 23 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	09:49	9.4	Surface	1.0	0.3	303	29.3	29.3	8.0	8.0	25.4	25.4	86.7	86.6	5.8	5.7	1.1	1.5	<2	2	822252	809845
						1.0	0.3	309	29.2		8.0		25.4		86.5		5.8		1.1		<2			
					Middle	4.7	0.3	302	28.8	28.8	7.9	7.9	26.0	26.0	81.5	81.5	5.5		1.2		2			
						4.7	0.3	294	28.7		7.9		26.0		81.4		5.5		1.2		2			
					Bottom	8.4	0.4	308	28.8	28.8	8.0	8.0	26.0	25.9	80.9	80.9	5.4	5.4	2.3		2			
						8.4	0.4	309	28.8		8.0		25.9		80.9		5.4		2.3		2			
IM11	Fine	Moderate	09:41	9.2	Surface	1.0	0.3	293	29.5	29.5	8.0	8.0	24.6	24.6	93.9	93.9	6.3	6.0	2.0	3.3	2	2	821509	810555
						1.0	0.3	297	29.4		8.0		24.6		93.8		6.3		2.0		2			
					Middle	4.6	0.3	281	28.7	28.7	7.9	7.9	25.9	26.0	83.2	83.1	5.6		3.0		2			
						4.6	0.3	283	28.7		7.9		26.0		83.0		5.6		3.0		2			
					Bottom	8.2	0.3	283	28.6	28.6	7.9	7.9	26.4	26.4	76.8	76.9	5.1	5.2	4.9		2			
						8.2	0.3	282	28.6		7.9		26.4		77.0		5.2		4.8		3			
IM12	Fine	Moderate	09:33	7.0	Surface	1.0	0.4	294	29.0	29.0	7.9	7.9	25.4	25.4	87.5	87.5	5.9	5.7	2.1	2.7	2	2	821184	811533
						1.0	0.4	287	29.0		7.9		25.4		87.5		5.9		2.2		2			
					Middle	3.5	0.4	278	28.6	28.6	7.9	7.9	26.2	26.2	80.4	80.4	5.4		2.3		2			
						3.5	0.4	274	28.6		7.9		26.2		80.4		5.4		2.3		2			
					Bottom	6.0	0.4	276	28.5	28.5	7.9	7.9	26.7	26.7	74.9	75.0	5.0	5.0	3.8		3			
						6.0	0.4	272	28.5		7.9		26.6		75.0		5.0		3.8		2			
SR1A	Fine	Moderate	09:05	5.0	Surface	1.0	-	195	28.5	28.5	7.9	7.9	26.7	26.7	81.5	81.5	5.5	5.5	1.2	1.5	<2	2	819976	812663
						1.0	0.0	194	28.5		7.9		26.8		81.5		5.5		1.1		<2			
					Middle	2.5	0.0	182	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.0	174	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	184	28.7	28.7	7.9	7.9	26.6	26.6	75.2	75.3	5.0	5.0	2.0		2			
						4.0	0.1	178	28.7		7.9		26.5		75.4		5.0		1.9		2			
SR2	Fine	Moderate	08:49	5.6	Surface	1.0	0.1	274	28.6	28.6	7.9	7.9	26.4	26.5	86.1	86.1	5.8	5.8	1.4	1.8	2	2	821467	814184
						1.0	0.1	268	28.5		7.9		26.5		86.0		5.8		1.5		2			
					Middle	-	0.1	271	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	272	-		-		-		-		-		-		-			
					Bottom	4.6	0.0	264	28.0	28.0	8.0	8.0	27.8	27.7	75.5	75.5	5.1	5.1	2.1		2			
						4.6	0.1	268	28.0		8.0		27.7		75.5		5.1		2.1		2			
SR3	Cloudy	Moderate	08:49	8.4	Surface	1.0	0.2	344	28.0	28.0	8.2	8.2	24.8	24.8	69.8	69.8	4.7	4.6	1.3	6.2	<2	2	822166	807586
						1.0	0.2	343	28.0		8.2		24.8		69.8		4.7		1.4		<2			
					Middle	4.2	0.3	318	27.3	27.4	8.2	8.2	26.8	26.8	64.6	64.6	4.4		5.2		<2			
						4.2	0.3	311	27.4		8.2		26.8		64.6		4.4		4.8		<2			
					Bottom	7.4	0.2	321	27.0	27.0	8.3	8.3	27.6	27.6	58.1	58.2	4.0	4.0	12.4		3			
						7.4	0.2	320	27.0		8.3		27.6		58.2		4.0		12.3		2			
SR4A	Cloudy	Moderate	07:01	8.6	Surface	1.0	0.0	232	28.0	28.0	8.1	8.1	24.0	24.0	71.8	71.8	4.9	4.6	1.1	4.4	2	2	817172	807801
						1.0	0.0	226	28.0		8.1		24.0		71.7		4.9		1.1		2			
					Middle	4.3	0.1	222	27.6	27.6	8.1	8.1	26.1	26.1	63.4	63.4	4.3		3.9		3			
						4.3	0.1	224	27.6		8.1		26.1		63.3		4.3		4.0		2			
					Bottom	7.6	0.0	238	27.5	27.5	8.0	8.0	26.5	26.5	61.7	61.8	4.2	4.2	8.0		3			
						7.6	0.0	237	27.5		8.0		26.5		61.8		4.2		8.1		2			
SR8	Fine	Moderate	09:28	5.2	Surface	1.0	-	-	29.1	29.1	8.1	8.1	25.1	25.2	101.6	101.3	6.8	6.8	2.3	2.6	<2	2	820398	811620
						1.0	-	-	29.1		8.1		25.2		101.0		6.8		2.2		<2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	28.8	28.8	7.9	7.9	25.9	25.9	85.3	85.7	5.7	5.8	3.0		2			
						4.2	-	-	28.8		8.0		25.9		86.0		5.8		3.0		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 22 August 23 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	Fine	Moderate	15:56	8.4	Surface	1.0	0.3	215	27.8	27.8	7.9	7.9	25.6	25.6	65.5	65.1	4.4	4.1	2.0	2.7	3	4	815622	804232
						1.0	0.3	214	27.8		7.9		25.6		64.6		4.4		2.0		3			
					Middle	4.2	0.3	198	27.7	27.7	7.9	7.9	25.9	26.0	58.8	56.0	4.0		2.3		5			
						4.2	0.4	199	27.6		7.9		26.0		53.2		3.6		2.3		5			
					Bottom	7.4	0.4	187	27.7	27.8	7.9	7.9	27.8	27.7	56.0	58.1	3.7	3.9	3.9		5			
						7.4	0.4	180	27.8		7.9		27.6		60.2		4.0		3.9		5			
C2	Fine	Moderate	14:43	11.0	Surface	1.0	0.3	155	28.0	28.0	7.8	7.8	24.7	24.7	58.0	57.9	3.9	3.6	1.6	2.3	2	3	825694	806951
						1.0	0.3	149	28.0		7.8		24.8		57.8		3.9		1.5		2			
					Middle	5.5	0.2	163	27.9	27.9	7.8	7.8	25.1	25.1	48.9	48.9	3.3		2.3		2			
						5.5	0.3	163	27.9		7.8		25.1		48.8		3.3		2.3		4			
					Bottom	10.0	0.2	149	27.9	27.9	7.8	7.8	25.1	25.0	49.9	50.4	3.4	3.4	3.0		4			
						10.0	0.2	142	27.9		7.8		25.0		50.8		3.4		3.0		4			
C3	Fine	Moderate	15:57	11.0	Surface	1.0	0.3	72	28.4	28.4	7.9	7.9	27.1	27.1	76.1	76.0	5.1	4.8	1.0	2.9	3	4	822122	817792
						1.0	0.3	74	28.4		7.9		27.1		75.9		5.1		1.0		4			
					Middle	5.5	0.4	71	26.4	26.4	7.9	7.9	30.5	30.5	65.4	65.4	4.4		3.2		4			
						5.5	0.3	67	26.4		7.9		30.5		65.4		4.4		3.2		4			
					Bottom	10.0	0.3	87	25.7	25.7	7.9	7.9	31.9	31.9	60.8	60.9	4.1	4.2	4.6		4			
						10.0	0.3	80	25.7		7.9		31.9		60.9		4.2		4.6		4			
IM1	Fine	Moderate	15:47	6.8	Surface	1.0	0.2	197	28.0	28.0	7.9	7.9	26.0	26.0	67.9	67.6	4.6	4.5	3.3	4.3	2	3	818360	806450
						1.0	0.2	199	27.9		7.9		26.0		67.2		4.5		3.2		2			
					Middle	3.4	0.2	178	27.9	27.9	7.9	7.9	26.2	26.2	63.1	61.2	4.4		3.9		4			
						3.4	0.2	178	27.8		7.9		26.2		59.3		4.5		3.9		3			
					Bottom	5.8	0.2	188	27.8	27.8	7.9	7.9	26.4	26.4	59.3	59.9	4.0	4.1	5.9		4			
						5.8	0.2	190	27.8		7.9		26.3		60.4		4.1		5.9		5			
IM2	Fine	Moderate	15:40	7.0	Surface	1.0	0.2	175	28.1	28.1	7.9	7.9	25.9	25.9	76.0	75.8	5.1	4.8	1.0	2.8	2	4	819161	806218
						1.0	0.3	170	28.1		7.9		25.9		75.5		5.1		1.0		2			
					Middle	3.5	0.2	170	27.9	27.9	7.9	7.9	26.1	26.1	68.1	65.5	4.6		3.0		3			
						3.5	0.2	172	27.9		7.9		26.2		62.8		4.2		3.0		4			
					Bottom	6.0	0.2	168	27.9	28.0	7.9	7.9	26.1	26.0	67.3	68.8	4.5	4.6	4.4		5			
						6.0	0.2	173	28.0		7.9		26.0		70.3		4.7		4.4		5			
IM7	Fine	Moderate	15:19	9.4	Surface	1.0	0.2	161	28.2	28.2	7.8	7.8	24.7	24.8	62.4	62.3	4.6	4.6	1.4	2.2	3	4	821351	806812
						1.0	0.2	164	28.1		7.8		24.9		62.2		4.6		1.4		2			
					Middle	4.7	0.2	139	28.0	28.0	7.8	7.8	25.4	25.4	57.4	57.2	4.5		2.0		4			
						4.7	0.2	132	28.0		7.8		25.5		56.9		4.6		2.0		3			
					Bottom	8.4	0.2	144	28.0	28.0	7.8	7.8	25.9	25.8	61.1	63.8	4.1	4.3	3.1		4			
						8.4	0.2	143	28.0		7.8		25.7		66.5		4.5		3.1		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 22 August 23 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	14:36	7.8	Surface	1.0	0.3	90	28.1	28.1	7.9	7.9	28.0	28.0	76.1	76.1	5.1	5.0	1.4	2.5	3	3	822240	809838
						1.0	0.3	87	28.1		7.9		28.0		76.0		5.1		1.4		4			
					Middle	3.9	0.2	102	26.3	26.3	7.9	7.9	30.7	30.7	70.6	70.7	4.8		2.0		3			
						3.9	0.2	101	26.3		7.9		30.8		70.8		4.8		2.0		3			
					Bottom	6.8	0.3	95	26.1	26.1	7.9	7.9	31.2	31.2	71.9	72.2	4.9	4.9	4.1		2			
						6.8	0.3	91	26.1		7.9		31.2		72.4		4.9		4.1		3			
IM11	Fine	Moderate	14:52	6.8	Surface	1.0	0.4	78	28.2	28.2	7.9	7.9	27.3	27.3	74.7	74.6	5.0	4.8	1.3	1.6	4	3	821507	810551
						1.0	0.4	70	28.2		7.9		27.3		74.5		5.0		1.3		4			
					Middle	3.4	0.4	87	26.4	26.4	7.9	7.9	30.6	30.6	67.3	67.3	4.6		1.6		3			
						3.4	0.4	89	26.4		7.9		30.6		67.3		4.6		1.6		3			
					Bottom	5.8	0.3	81	26.2	26.2	7.9	7.9	31.0	31.0	68.0	68.1	4.6	4.6	1.9		2			
						5.8	0.3	74	26.2		7.9		31.0		68.2		4.6		1.8		3			
IM12	Fine	Moderate	14:59	7.2	Surface	1.0	0.4	86	28.3	28.3	7.9	7.9	27.3	27.3	73.9	73.8	5.0	4.7	1.3	1.5	3	3	821172	811502
						1.0	0.4	85	28.3		7.9		27.3		73.7		4.9		1.3		2			
					Middle	3.6	0.4	82	26.3	26.3	7.9	7.9	30.7	30.7	65.7	65.7	4.5		1.4		3			
						3.6	0.4	76	26.3		7.9		30.7		65.7		4.5		1.4		3			
					Bottom	6.2	0.4	104	26.2	26.2	7.9	7.9	31.0	31.0	65.9	66.1	4.5	4.5	1.7		3			
						6.2	0.4	102	26.2		7.9		31.0		66.2		4.5		1.7		3			
SR1A	Fine	Moderate	15:21	4.0	Surface	1.0	0.0	146	27.3	27.3	7.9	7.9	28.8	28.8	69.8	69.9	4.7	4.7	1.2	1.3	2	3	819976	812661
						1.0	0.0	145	27.3		7.9		28.8		69.9		4.7		1.2		2			
					Middle	2.0	0.0	119	-	-	-	-	-	-	-	-	-		-		-			
						2.0	0.1	124	-		-		-		-		-		-		-			
					Bottom	3.0	-	123	26.4	26.4	7.9	7.9	30.6	30.6	66.9	66.9	4.5	4.5	1.5		3			
						3.0	0.1	125	26.4		7.9		30.6		66.9		4.5		1.5		3			
SR2	Fine	Moderate	15:34	5.4	Surface	1.0	0.4	45	28.3	28.3	7.9	7.9	27.2	27.2	75.8	75.8	5.1	5.1	1.1	2.1	3	3	821456	814175
						1.0	0.3	46	28.3		7.9		27.2		75.7		5.1		1.1		3			
					Middle	-	0.4	40	-	-	-	-	-	-	-	-	-		-		-			
						-	0.3	47	-		-		-		-		-		-		-			
					Bottom	4.4	0.4	33	26.4	26.4	7.9	7.9	30.6	30.6	65.7	65.7	4.5	4.5	3.1		3			
						4.4	0.5	40	26.4		7.9		30.7		65.7		4.5		3.1		2			
SR3	Fine	Moderate	15:13	8.3	Surface	1.0	0.3	176	28.2	28.2	7.8	7.8	24.4	24.4	61.6	61.7	4.6	4.5	1.0	2.2	2	3	822150	807557
						1.0	0.3	173	28.2		7.8		24.4		61.8		4.5		1.0		2			
					Middle	4.2	0.3	144	28.2	28.2	7.8	7.8	24.4	24.4	62.7	62.8	4.5		2.4		3			
						4.2	0.3	142	28.2		7.8		24.4		62.8		4.5		2.3		2			
					Bottom	7.3	0.3	162	28.2	28.2	7.8	7.8	24.3	24.3	65.2	65.6	4.4	4.5	3.1		4			
						7.3	0.3	162	28.2		7.8		24.3		65.9		4.5		3.1		4			
SR4A	Fine	Moderate	16:07	9.0	Surface	1.0	0.0	87	28.3	28.3	7.9	7.9	25.6	25.6	74.3	74.3	5.0	5.0	1.1	2.4	5	4	817178	807820
						1.0	0.0	90	28.3		7.9		25.6		74.3		5.0		1.1		4			
					Middle	4.5	0.0	67	28.3	28.3	7.9	7.9	25.6	25.6	74.6	74.7	5.0		2.3		4			
						4.5	0.1	71	28.3		7.9		25.6		74.8		5.0		2.3		3			
					Bottom	8.0	0.1	71	28.3	28.3	7.9	7.9	25.6	25.5	76.0	76.2	5.1	5.1	3.6		3			
						8.0	0.0	65	28.3		7.9		25.5		76.3		5.1		3.7		3			
SR8	Fine	Moderate	15:04	5.6	Surface	1.0	-	-	28.2	28.2	7.9	7.9	27.3	27.3	73.6	73.6	4.9	4.9	1.4	1.5	3	3	820375	811617
						1.0	-	-	28.2		7.9		27.3		73.6		4.9		1.4		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.6	-	-	26.3	26.3	7.9	7.9	30.9	30.9	66.5	66.6	4.5	4.5	1.7		3			
						4.6	-	-	26.3		7.9		30.9		66.6		4.5		1.6		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 22 August 23 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	10:46	8.2	Surface	1.0	0.4	33	27.7	27.7	7.8	7.8	26.2	26.2	62.3	60.5	4.2	4.0	1.3	2.2	3	3	815632	804245
						1.0	0.4	26	27.6		7.8		26.2		58.6		4.0		1.4		4			
					Middle	4.1	0.4	29	27.5	27.5	7.8	7.8	26.3	26.3	57.0	56.8	3.9		2.2		4			
						4.1	0.4	32	27.5		7.8		26.4		56.5		3.8		2.3		3			
					Bottom	7.2	0.4	46	27.5	27.5	7.8	7.8	26.4	26.4	57.7	58.4	3.9	4.0	3.0		3			
						7.2	0.3	52	27.5		7.8		26.3		59.1		4.0		3.0		2			
C2	Fine	Moderate	11:51	10.0	Surface	1.0	0.4	8	28.1	28.1	7.8	7.8	24.5	24.6	62.0	61.5	4.2	4.1	1.6	2.3	6	5	825680	806923
						1.0	0.5	4	28.0		7.8		24.6		61.0		4.1		1.6		5			
					Middle	5.0	0.4	349	27.9	27.9	7.8	7.8	24.9	25.0	60.2	60.2	4.1		2.0		5			
						5.0	0.4	345	27.9		7.8		25.0		60.1		4.1		2.1		4			
					Bottom	9.0	0.4	333	27.8	27.8	7.8	7.8	25.4	25.5	59.8	59.8	4.0	4.0	3.2		4			
						9.0	0.4	334	27.8		7.8		25.5		59.8		4.0		3.2		3			
C3	Fine	Moderate	10:41	10.0	Surface	1.0	0.5	268	27.5	27.5	7.9	7.9	27.7	27.8	69.8	69.8	4.7	4.6	1.1	1.9	5	4	822093	817805
						1.0	0.5	272	27.5		7.9		27.8		69.8		4.7		1.1		6			
					Middle	5.0	0.4	248	26.9	26.9	7.9	7.9	29.0	29.0	64.9	64.9	4.4		1.2		4			
						5.0	0.4	243	26.9		7.9		29.0		64.9		4.4		1.2		4			
					Bottom	9.0	0.4	279	25.7	25.7	7.9	7.9	31.7	31.7	59.8	59.8	4.1	4.1	3.4		4			
						9.0	0.4	273	25.7		7.9		31.7		59.7		4.1		3.6		3			
IM1	Fine	Moderate	10:58	6.0	Surface	1.0	0.4	357	27.9	27.9	7.9	7.9	25.9	25.9	69.4	68.7	5.3	5.2	1.2	3.0	2	2	818355	806460
						1.0	0.5	2	27.9		7.9		26.0		68.0		5.3		1.2		2			
					Middle	3.0	0.3	13	27.7	27.7	7.8	7.8	26.2	26.2	61.6	61.7	5.0		3.2		2			
						3.0	0.4	12	27.7		7.8		26.2		61.8		5.0		3.2		2			
					Bottom	5.0	0.4	346	27.7	27.7	7.8	7.8	26.2	26.1	66.1	66.7	4.8	4.8	4.5		3			
						5.0	0.3	349	27.7		7.8		26.1		67.3		4.8		4.4		2			
IM2	Fine	Moderate	11:04	7.6	Surface	1.0	0.3	358	27.9	27.9	7.9	7.9	26.2	26.2	70.9	70.3	5.0	4.7	2.8	3.2	5	4	819193	806249
						1.0	0.4	2	27.8		7.9		26.3		69.7		5.0		2.7		4			
					Middle	3.8	0.3	1	27.7	27.7	7.9	7.9	26.7	26.7	59.3	59.1	4.5		3.3		3			
						3.8	0.4	3	27.7		7.9		26.7		58.9		4.1		3.3		3			
					Bottom	6.6	0.3	25	27.7	27.7	7.8	7.8	26.9	26.9	55.4	56.5	4.4	4.5	3.7		3			
						6.6	0.3	25	27.7		7.8		26.8		57.6		4.6		3.7		3			
IM7	Fine	Moderate	11:26	8.2	Surface	1.0	0.1	340	28.2	28.2	7.8	7.8	24.5	24.5	61.4	61.4	5.3	5.3	1.1	1.9	5	4	821343	806855
						1.0	0.2	343	28.2		7.8		24.5		61.4		5.3		1.1		4			
					Middle	4.1	0.2	334	28.2	28.2	7.8	7.8	24.5	24.5	60.9	60.8	5.2		1.4		4			
						4.1	0.2	334	28.2		7.8		24.6		60.6		5.2		1.4		4			
					Bottom	7.2	0.1	9	28.2	28.2	7.8	7.8	24.5	24.4	61.6	63.4	4.2	4.3	3.2		2			
						7.2	0.1	5	28.2		7.8		24.4		65.2		4.4		3.2		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 22 August 23 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	11:54	9.4	Surface	1.0	0.3	294	29.2	29.2	7.9	7.9	21.9	21.8	83.4	83.5	5.7	5.3	1.7	2.8	4	3	822230	809849
						1.0	0.3	289	29.1		7.9		21.8		83.6		5.7		1.8		4			
					Middle	4.7	0.3	313	28.3	28.3	7.8	7.8	26.2	26.2	72.4	72.5	4.9		2.4		3			
						4.7	0.3	317	28.3		7.8		26.2		72.5		4.9		2.4		2			
					Bottom	8.4	0.3	312	27.5	27.5	7.8	7.8	27.8	27.8	64.4	64.5	4.4	4.4	4.1		2			
						8.4	0.3	318	27.5		7.8		27.8		64.5		4.4		4.1		3			
IM11	Fine	Moderate	11:47	9.2	Surface	1.0	0.3	275	27.7	27.7	7.8	7.8	27.2	27.2	66.6	66.5	7.7	7.3	3.8	4.5	3	4	821490	810550
						1.0	0.4	267	27.6		7.8		27.2		66.4		7.6		3.8		4			
					Middle	4.6	0.3	270	27.4	27.4	7.8	7.8	27.9	27.9	64.4	64.5	7.0		4.3		3			
						4.6	0.3	270	27.4		7.8		27.9		64.5		7.0		4.3		4			
					Bottom	8.2	0.3	282	27.3	27.3	7.8	7.8	28.1	28.1	65.7	65.8	4.5	4.5	5.5		4			
						8.2	0.3	274	27.3		7.8		28.1		65.8		4.5		5.4		4			
IM12	Fine	Moderate	11:41	8.0	Surface	1.0	0.3	285	28.2	28.2	7.8	7.8	25.6	25.6	74.3	74.3	5.0	4.7	2.2	4.3	5	3	821162	811506
						1.0	0.3	288	28.2		7.8		25.6		74.3		5.0		2.4		4			
					Middle	4.0	0.4	286	27.1	27.1	7.8	7.8	28.4	28.4	63.2	63.3	4.3		4.3		3			
						4.0	0.4	278	27.1		7.8		28.4		63.3		4.3		4.3		4			
					Bottom	7.0	0.4	297	27.1	27.1	7.8	7.8	28.6	28.6	65.7	65.8	4.5	4.5	6.1		2			
						7.0	0.3	303	27.1		7.8		28.6		65.9		4.5		6.1		2			
SR1A	Fine	Moderate	11:14	4.6	Surface	1.0	0.0	178	28.3	28.3	7.8	7.8	26.0	26.0	70.3	70.3	4.7	4.7	6.6	7.0	2	2	819983	812656
						1.0	0.1	178	28.3		7.8		26.1		70.3		4.7		6.5		2			
					Middle	2.3	0.0	193	-	-	-	-	-	-	-	-	-		-		-			
						2.3	-	191	-		-		-		-		-		-		-			
					Bottom	3.6	0.0	166	28.2	28.2	7.8	7.8	26.3	26.2	72.2	72.3	4.9	4.9	7.6		3			
						3.6	0.0	160	28.2		7.8		26.2		72.4		4.9		7.6		2			
SR2	Fine	Moderate	11:00	4.4	Surface	1.0	0.1	267	27.8	27.8	7.9	7.9	26.8	26.8	70.8	70.8	4.8	4.8	2.3	2.6	3	3	821442	814184
						1.0	0.1	261	27.8		7.9		26.9		70.8		4.8		2.2		3			
					Middle	-	0.2	269	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	264	-		-		-		-		-		-		-			
					Bottom	3.4	0.1	253	27.7	27.7	7.9	7.9	27.1	27.1	73.0	73.1	4.9	4.9	2.9		3			
						3.4	0.1	249	27.7		7.9		27.1		73.1		4.9		2.9		4			
SR3	Fine	Moderate	11:32	7.5	Surface	1.0	0.2	340	28.2	28.2	7.8	7.8	24.4	24.4	62.1	62.3	4.5	4.5	1.1	2.9	<2	3	822125	807589
						1.0	0.2	345	28.2		7.8		24.4		62.4		4.6		1.1		<2			
					Middle	3.8	0.3	337	28.1	28.1	7.8	7.8	24.4	24.4	63.0	63.1	4.5		3.2		2			
						3.8	0.3	338	28.1		7.8		24.4		63.1		4.5		3.2		3			
					Bottom	6.5	0.3	322	28.2	28.2	7.8	7.8	24.3	24.2	65.3	65.7	4.4	4.5	4.3		3			
						6.5	0.2	316	28.2		7.8		24.2		66.1		4.5		4.3		3			
SR4A	Fine	Moderate	10:30	10.0	Surface	1.0	0.0	136	28.2	28.2	7.9	7.9	24.5	24.6	62.4	62.5	4.5	4.5	3.1	4.1	2	3	817184	807792
						1.0	0.0	133	28.2		7.9		24.6		62.5		4.5		3.0		3			
					Middle	5.0	0.0	148	28.1	28.1	7.9	7.9	24.8	24.8	62.9	63.0	4.6		4.2		2			
						5.0	0.0	142	28.1		7.9		24.9		63.0		4.5		4.2		3			
					Bottom	9.0	0.0	125	28.1	28.1	7.9	7.9	25.1	25.1	63.3	63.3	4.3	4.3	5.0		4			
						9.0	0.1	126	28.1		7.9		25.1		63.3		4.3		5.0		3			
SR8	Fine	Moderate	11:36	4.8	Surface	1.0	-	-	28.7	28.7	7.8	7.8	25.3	25.3	73.2	73.2	4.9	4.9	2.6	4.7	3	2	820368	811640
						1.0	-	-	28.7		7.8		25.3		73.1		4.9		2.8		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.8	-	-	27.0	27.0	7.8	7.8	28.7	28.7	64.4	64.5	4.4	4.4	6.6		2			
						3.8	-	-	27.0		7.8		28.7		64.6		4.4		6.7		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 24 August 23 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	17:48	8.5	Surface	1.0	0.2	200	29.1	29.1	8.0	8.0	26.4	26.4	93.4	93.4	6.2	5.4	2.0	4.3	4	3	815641	804256
						1.0	0.2	194	29.0		8.0		26.4		93.4		6.2		2.0		3			
					Middle	4.3	0.1	223	27.9	27.9	8.0	8.0	29.7	29.7	69.3	69.3	4.6		3.1		3			
						4.3	0.1	218	27.9		8.1		29.7		69.3		4.6		3.4		2			
					Bottom	7.5	0.2	210	27.3	27.3	8.1	8.1	31.4	31.4	57.7	57.8	3.8	3.8	7.5		<2			
						7.5	0.3	210	27.3		8.1		31.4		57.8		3.8		7.6		<2			
C2	Cloudy	Moderate	16:17	11.8	Surface	1.0	0.1	189	29.1	29.1	8.0	8.0	18.9	18.9	87.9	88.0	6.1	5.8	3.0	5.9	2	3	825661	806964
						1.0	0.1	184	29.1		8.0		18.8		88.1		6.1		3.2		3			
					Middle	5.9	0.0	187	28.7	28.7	8.0	8.0	24.9	24.9	81.8	82.0	5.5		6.8		3			
						5.9	0.1	193	28.7		8.0		25.0		82.2		5.5		6.9		2			
					Bottom	10.8	0.0	190	28.6	28.7	8.0	8.0	28.2	28.2	70.3	70.5	4.7	4.7	7.7		3			
						10.8	0.0	188	28.7		8.0		28.2		70.7		4.7		7.6		4			
C3	Misty	Moderate	17:36	10.2	Surface	1.0	0.2	57	28.6	28.6	7.9	7.9	25.0	25.0	79.5	79.4	5.4	5.0	1.5	3.4	3	3	822092	817802
						1.0	0.2	57	28.6		7.9		25.0		79.3		5.3		1.5		3			
					Middle	5.1	0.2	59	26.6	26.6	7.9	7.9	28.4	28.4	68.8	68.8	4.7		3.7		2			
						5.1	0.2	62	26.6		7.9		28.4		68.8		4.7		3.7		4			
					Bottom	9.2	0.1	67	25.9	25.9	7.9	7.9	29.8	29.8	64.2	64.3	4.4	4.4	5.0		4			
						9.2	0.1	68	25.9		7.9		29.8		64.3		4.4		5.0		4			
IM1	Cloudy	Moderate	17:23	6.8	Surface	1.0	0.1	191	29.0	29.0	8.0	8.0	24.8	24.8	78.8	78.8	5.3	4.9	4.4	6.0	2	4	818327	806442
						1.0	0.2	194	29.0		8.0		24.8		78.8		5.3		4.5		4			
					Middle	3.4	0.1	202	27.7	27.7	8.1	8.1	28.8	28.8	66.3	66.3	4.4		2.0		4			
						3.4	0.1	204	27.7		8.1		28.9		66.3		4.5		2.0		3			
					Bottom	5.8	0.1	192	27.4	27.4	8.1	8.1	30.2	30.2	55.9	55.9	3.7	3.7	11.8		4			
						5.8	0.1	197	27.4		8.1		30.2		55.9		3.7		11.5		5			
IM2	Cloudy	Moderate	17:18	7.2	Surface	1.0	0.0	195	28.3	28.3	8.0	8.0	24.3	24.3	82.8	82.8	5.6	5.1	3.6	7.4	4	3	819195	806235
						1.0	0.1	196	28.3		8.0		24.3		82.8		5.6		3.6		4			
					Middle	3.6	0.1	181	27.5	27.5	8.1	8.1	30.0	30.0	67.2	67.4	4.5		8.3		3			
						3.6	0.1	182	27.4		8.1		30.0		67.6		4.5		8.6		4			
					Bottom	6.2	0.1	201	27.3	27.3	8.1	8.1	30.2	30.2	58.0	58.1	3.9	3.9	10.2		2			
						6.2	0.1	193	27.3		8.1		30.2		58.1		3.9		10.2		3			
IM7	Cloudy	Moderate	16:49	8.1	Surface	1.0	0.0	173	28.7	28.7	8.0	8.0	25.6	25.6	84.8	84.9	4.6	4.6	2.5	7.4	4	4	821345	806835
						1.0	0.0	165	28.7		8.0		25.6		84.9		4.6		2.5		2			
					Middle	4.1	0.1	191	27.8	27.8	8.0	8.0	29.3	29.3	77.0	77.0	4.5		9.7		4			
						4.1	0.2	188	27.8		8.0		29.3		77.0		4.6		9.3		5			
					Bottom	7.1	0.1	189	27.8	27.8	8.0	8.0	30.3	30.3	62.1	62.4	4.1	4.1	10.2		5			
						7.1	0.1	194	27.8		8.0		30.3		62.6		4.1		10.3		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 24 August 23 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	16:15	8.0	Surface	1.0	0.1	99	28.3	28.3	7.9	7.9	25.9	25.9	79.5	79.5	5.4	5.2	1.8	2.9	5	4	822245	809850
						1.0	0.1	97	28.3		7.9		25.9		79.4		5.3		1.9		4			
					Middle	4.0	0.1	99	26.5	26.5	7.9	7.9	28.5	28.6	74.0	74.1	5.1		2.5		3			
						4.0	0.2	101	26.5		7.9		28.7		74.2		5.1		2.5		4			
					Bottom	7.0	0.1	92	26.3	26.3	7.9	7.9	29.1	29.1	75.3	75.6	5.1	5.2	4.5		4			
						7.0	0.0	96	26.3		7.9		29.1		75.8		5.2		4.5		3			
IM11	Misty	Moderate	16:31	7.2	Surface	1.0	0.2	73	28.4	28.4	7.9	7.9	25.2	25.2	78.1	78.0	5.3	5.1	1.7	2.0	3	3	821499	810556
						1.0	0.2	75	28.4		7.9		25.2		77.9		5.3		1.7		4			
					Middle	3.6	0.1	92	26.6	26.6	7.9	7.9	28.5	28.5	70.7	70.7	4.8		2.0		3			
						3.6	0.1	85	26.6		7.9		28.5		70.7		4.8		2.0		4			
					Bottom	6.2	0.2	95	26.4	26.4	7.9	7.9	28.9	28.9	71.4	71.5	4.9	4.9	2.3		3			
						6.2	0.1	97	26.4		7.9		28.9		71.6		4.9		2.3		3			
IM12	Misty	Moderate	16:38	7.0	Surface	1.0	0.2	97	28.5	28.5	7.9	7.9	25.2	25.1	77.3	77.2	5.2	5.0	1.7	1.9	3	3	821178	811520
						1.0	0.2	104	28.5		7.9		25.1		77.1		5.2		1.8		3			
					Middle	3.5	0.2	97	26.5	26.5	7.9	7.9	28.5	28.6	69.1	69.1	4.7		1.9		3			
						3.5	0.2	91	26.5		7.9		28.6		69.1		4.7		1.9		2			
					Bottom	6.0	0.2	99	26.4	26.4	7.9	7.9	28.9	28.9	69.3	69.5	4.7	4.8	2.1		2			
						6.0	0.2	96	26.4		7.9		28.9		69.6		4.8		2.1		2			
SR1A	Misty	Moderate	17:00	4.0	Surface	1.0	-	151	27.5	27.5	7.9	7.9	26.7	26.7	73.2	73.3	5.0	5.0	1.7	1.8	4	4	819982	812655
						1.0	0.0	146	27.5		7.9		26.7		73.3		5.0		1.7		5			
					Middle	2.0	0.0	171	-	-	-	-	-	-	-	-	-		-		-			
						2.0	-	168	-		-		-		-		-		-		-			
					Bottom	3.0	0.1	158	26.6	26.6	7.9	7.9	28.5	28.5	70.3	70.3	4.8	4.8	1.9		4			
						3.0	0.1	158	26.6		7.9		28.5		70.3		4.8		1.9		3			
SR2	Misty	Moderate	17:13	5.4	Surface	1.0	0.3	25	28.5	28.5	7.9	7.9	25.1	25.1	79.2	79.2	5.3	5.3	1.6	2.0	4	3	821470	814162
						1.0	0.3	18	28.5		7.9		25.1		79.1		5.3		1.6		3			
					Middle	-	0.3	37	-	-	-	-	-	-	-	-	-		-		-			
						-	0.2	36	-		-		-		-		-		-		-			
					Bottom	4.4	0.2	13	26.6	26.6	7.9	7.9	28.5	28.5	69.1	69.1	4.7	4.7	2.4		3			
						4.4	0.2	8	26.6		7.9		28.5		69.1		4.7		2.4		3			
SR3	Cloudy	Moderate	16:40	8.9	Surface	1.0	0.2	170	29.3	29.3	8.1	8.1	20.9	20.9	91.6	91.6	4.6	4.5	1.4	4.8	2	3	822124	807553
						1.0	0.2	175	29.3		8.1		20.9		91.6		4.5		1.4		3			
					Middle	4.5	0.2	166	28.4	28.4	8.1	8.1	28.7	28.7	69.6	69.6	4.5		5.7		2			
						4.5	0.2	162	28.4		8.1		28.7		69.6		4.5		5.9		3			
					Bottom	7.9	0.2	157	28.3	28.3	8.1	8.1	29.0	29.0	61.4	61.4	4.1	4.1	7.1		3			
						7.9	0.3	151	28.3		8.1		29.0		61.4		4.1		7.1		3			
SR4A	Cloudy	Moderate	18:16	8.8	Surface	1.0	0.0	101	29.1	29.1	8.0	8.0	26.7	26.7	88.4	88.4	5.8	5.0	4.0	7.6	4	3	817183	807825
						1.0	0.1	102	29.1		8.0		26.7		88.4		5.8		3.7		3			
					Middle	4.4	0.0	78	28.6	28.6	8.1	8.1	28.5	28.5	64.2	64.2	4.2		9.2		3			
						4.4	0.0	84	28.6		8.1		28.5		64.2		4.2		9.1		3			
					Bottom	7.8	0.0	80	28.6	28.6	8.1	8.1	28.5	28.5	55.4	55.4	3.7	3.7	9.6		3			
						7.8	0.1	84	28.6		8.1		28.5		55.4		3.7		9.6		2			
SR8	Misty	Moderate	16:43	5.8	Surface	1.0	-	-	28.4	28.4	7.9	7.9	25.2	25.2	77.0	77.0	5.2	5.2	1.8	2.4	3	3	820388	811623
						1.0	-	-	28.4		7.9		25.2		77.0		5.2		1.9		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.8	-	-	26.5	26.5	7.9	7.9	28.8	28.8	69.9	70.0	4.8	4.8	3.0		3			
						4.8	-	-	26.5		7.9		28.8		70.0		4.8		3.0		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 24 August 23 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	11:34	8.4	Surface	1.0	0.2	40	28.4	28.4	8.0	8.0	27.6	27.6	91.5	91.5	6.1	5.2	2.8	6.3	2	2	815623	804234
						1.0	0.2	37	28.4		8.0		27.6		91.5		6.1		2.8		3			
					Middle	4.2	0.1	51	27.3	27.3	8.1	8.1	30.6	30.6	63.0	63.0	4.2		7.0		3			
						4.2	0.2	56	27.3		8.1		30.6		63.0		4.2		7.0		2			
					Bottom	7.4	0.2	59	27.1	27.1	8.1	8.1	31.6	31.6	58.4	58.4	3.9	3.9	9.1		2			
						7.4	0.2	54	27.1		8.1		31.6		58.4		3.9		9.1		2			
C2	Cloudy	Moderate	13:21	11.2	Surface	1.0	0.4	357	28.8	28.8	7.9	7.9	19.8	19.8	86.7	86.8	6.0	5.8	1.7	1.8	3	3	825700	806935
						1.0	0.4	355	28.8		7.9		19.8		86.9		6.0		1.7		4			
					Middle	5.6	0.4	2	28.7	28.8	7.9	7.9	20.1	20.1	80.6	80.8	5.6		1.8		4			
						5.6	0.3	4	28.8		7.9		20.0		81.0		5.6		1.8		2			
					Bottom	10.2	0.3	0	28.1	28.1	7.9	7.9	23.8	23.8	69.1	69.3	4.7	4.7	1.8		3			
						10.2	0.3	355	28.1		7.9		23.9		69.5		4.7		1.8		3			
C3	Misty	Moderate	10:57	10.2	Surface	1.0	0.3	285	27.7	27.7	7.9	7.9	25.6	25.6	73.2	73.2	5.0	4.9	1.6	2.7	4	3	822126	817799
						1.0	0.4	283	27.7		7.9		25.7		73.2		5.0		1.6		3			
					Middle	5.1	0.4	285	27.1	27.1	7.9	7.9	26.9	26.9	68.3	68.3	4.7		2.7		3			
						5.1	0.3	290	27.1		7.9		26.9		68.3		4.7		2.7		4			
					Bottom	9.2	0.4	272	25.9	25.9	7.9	7.9	29.6	29.6	63.2	63.2	4.3	4.3	3.9		3			
						9.2	0.4	278	25.9		7.9		29.6		63.1		4.3		3.9		3			
IM1	Rainy	Moderate	12:03	6.4	Surface	1.0	0.2	3	28.7	28.7	8.0	8.0	22.3	22.3	91.6	91.6	5.3	5.2	3.3	6.3	2	2	818373	806450
						1.0	0.2	8	28.7		8.0		22.3		91.6		5.3		3.2		2			
					Middle	3.2	0.3	-	27.7	27.7	7.9	7.9	29.4	29.4	66.0	66.2	5.0		7.3		3			
						3.2	0.3	5	27.7		7.9		29.4		66.4		5.0		7.1		2			
					Bottom	5.4	0.3	26	27.4	27.4	7.9	7.9	30.5	30.4	56.8	56.9	4.8	4.8	8.5		2			
						5.4	0.3	22	27.4		7.9		30.4		56.9		4.8		8.5		3			
IM2	Rainy	Moderate	12:09	6.8	Surface	1.0	0.3	343	28.9	28.9	7.9	7.9	25.0	25.0	97.6	97.6	5.0	4.7	1.3	5.0	4	3	819170	806217
						1.0	0.3	346	28.9		7.9		25.0		97.6		5.0		1.3		2			
					Middle	3.4	0.2	336	27.8	27.8	8.0	8.0	29.4	29.4	65.1	65.1	4.5		4.4		2			
						3.4	0.3	335	27.8		8.0		29.4		65.1		4.1		4.4		3			
					Bottom	5.8	0.2	343	27.1	27.1	8.1	8.1	31.2	31.2	54.7	54.7	4.4	4.5	9.4		2			
						5.8	0.2	347	27.1		8.1		31.2		54.7		4.6		9.4		3			
IM7	Rainy	Moderate	12:42	7.8	Surface	1.0	0.1	306	28.3	28.3	7.9	7.9	22.8	22.8	90.4	90.4	5.3	5.3	4.1	7.4	2	2	821326	806825
						1.0	0.1	306	28.3		7.9		22.8		90.4		5.3		4.2		2			
					Middle	3.9	0.2	312	27.7	27.7	8.0	8.0	26.2	26.2	68.4	68.4	5.2		7.9		2			
						3.9	0.2	310	27.7		8.0		26.2		68.4		5.2		7.9		2			
					Bottom	6.8	0.2	293	27.5	27.5	8.0	8.0	26.7	26.7	60.2	60.2	4.1	4.1	10.3		2			
						6.8	0.2	294	27.5		8.0		26.7		60.2		4.1		10.2		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 24 August 23 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	12:11	9.6	Surface	1.0	0.3	290	29.4	29.4	7.9	7.9	21.8	21.7	86.8	86.9	5.9	5.5	2.2	3.2	5	4	822219	809850
						1.0	0.2	285	29.3		7.9		21.7		87.0		5.9		2.1		4			
					Middle	4.8	0.2	284	28.5	28.5	7.8	7.8	26.1	26.0	75.8	75.9	5.1		2.8		4			
						4.8	0.3	283	28.5		7.8		26.0		75.9		5.1		2.9		3			
					Bottom	8.6	0.2	302	27.7	27.7	7.8	7.8	27.7	27.7	67.8	67.9	4.6	4.6	4.6		3			
						8.6	0.2	299	27.7		7.8		27.7		67.9		4.6		4.6		2			
IM11	Misty	Moderate	12:03	9.0	Surface	1.0	0.3	290	27.9	27.9	7.8	7.8	27.1	27.1	70.0	69.9	7.7	7.3	3.8	4.1	4	3	821509	810526
						1.0	0.3	293	27.8		7.8		27.1		69.8		7.6		3.8		3			
					Middle	4.5	0.3	278	27.6	27.6	7.8	7.8	27.8	27.8	67.8	67.9	7.0		4.3		4			
						4.5	0.3	275	27.6		7.8		27.7		67.9		7.0		4.3		2			
					Bottom	8.0	0.3	286	27.5	27.5	7.8	7.8	26.0	26.0	69.1	69.2	4.7	4.7	4.4		3			
						8.0	0.2	280	27.5		7.8		26.0		69.2		4.7		4.3		3			
IM12	Misty	Moderate	11:57	8.2	Surface	1.0	0.3	306	28.4	28.4	7.8	7.8	23.5	23.5	77.7	77.7	5.3	5.0	2.7	4.4	3	3	821167	811499
						1.0	0.2	306	28.4		7.8		23.5		77.7		5.3		2.9		3			
					Middle	4.1	0.4	310	27.3	27.3	7.8	7.8	26.3	26.3	66.6	66.7	4.6		4.8		3			
						4.1	0.3	314	27.3		7.8		26.3		66.7		4.6		4.8		3			
					Bottom	7.2	0.3	306	27.3	27.3	7.8	7.8	26.5	26.5	69.1	69.2	4.7	4.7	5.6		3			
						7.2	0.4	299	27.3		7.8		26.5		69.3		4.7		5.6		4			
SR1A	Misty	Moderate	11:31	4.8	Surface	1.0	0.0	173	28.5	28.5	7.8	7.8	23.9	23.9	73.7	73.7	5.0	5.0	1.5	2.3	2	3	819977	812658
						1.0	0.1	166	28.5		7.8		23.9		73.7		5.0		1.4		3			
					Middle	2.4	0.0	172	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	166	-		-		-		-		-		-		-			
					Bottom	3.8	0.0	208	28.4	28.4	7.9	7.9	24.1	24.1	75.6	75.7	5.1	5.2	3.2		4			
						3.8	0.0	214	28.4		7.9		24.1		75.8		5.2		3.2		3			
SR2	Misty	Moderate	11:16	5.0	Surface	1.0	0.1	333	28.0	28.0	7.9	7.9	24.7	24.7	74.2	74.2	5.1	5.1	2.7	3.0	2	4	821445	814186
						1.0	0.2	329	28.0		7.9		24.7		74.2		5.1		2.7		3			
					Middle	-	0.1	333	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	329	-		-		-		-		-		-		-			
					Bottom	4.0	0.1	320	27.9	27.9	7.9	7.9	24.9	25.0	76.4	76.5	5.2	5.2	3.3		4			
						4.0	0.1	321	27.9		7.9		25.0		76.5		5.2		3.4		5			
SR3	Cloudy	Moderate	12:52	8.4	Surface	1.0	0.1	336	28.1	28.1	7.9	7.9	21.0	21.0	83.6	83.7	4.5	4.5	1.7	2.1	3	3	822164	807579
						1.0	0.1	332	28.0		7.9		21.0		83.7		4.6		1.7		3			
					Middle	4.2	0.1	317	28.3	28.3	7.9	7.9	22.6	22.6	75.8	75.8	4.5		1.8		3			
						4.2	0.1	322	28.3		7.9		22.6		75.8		4.5		1.8		2			
					Bottom	7.4	0.1	320	27.4	27.5	7.8	7.8	25.1	25.1	60.9	61.2	4.2	4.2	2.7		2			
						7.4	0.1	318	27.6		7.8		25.1		61.4		4.2		2.7		2			
SR4A	Cloudy	Moderate	11:03	8.7	Surface	1.0	0.0	184	28.8	28.8	8.0	8.0	25.8	25.8	90.5	90.5	4.5	4.5	1.9	5.2	<2	2	817192	807806
						1.0	0.1	176	28.8		8.0		25.8		90.5		4.5		1.9		<2			
					Middle	4.4	-	202	28.4	28.4	8.0	8.0	27.9	27.9	68.1	68.1	4.6		4.7		<2			
						4.4	-	203	28.4		8.0		27.9		68.1		4.5		4.8		<2			
					Bottom	7.7	0.0	186	28.3	28.3	8.0	8.0	28.3	28.3	56.5	56.6	3.8	3.8	8.8		3			
						7.7	0.0	179	28.3		8.0		28.3		56.6		3.8		8.9		2			
SR8	Misty	Moderate	11:52	5.0	Surface	1.0	-	-	28.9	28.9	7.8	7.8	23.2	23.1	76.6	76.6	5.2	5.2	3.1	3.6	3	3	820397	811609
						1.0	-	-	28.9		7.8		23.1		76.5		5.2		3.0		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.0	-	-	27.2	27.2	7.8	7.8	26.6	26.6	67.8	67.9	4.6	4.6	4.1		3			
						4.0	-	-	27.2		7.8		26.6		68.0		4.6		4.1		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 26 August 23 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	08:10	8.9	Surface	1.0	0.5	210	28.4	28.4	8.0	8.0	22.1	22.1	84.7	84.7	5.8	5.4	2.7	7.9	6	7	815631	804251
						1.0	0.5	202	28.4		8.0		22.1		84.7		5.8		2.7		5			
					Middle	4.5	0.5	197	27.4	27.4	7.9	7.9	26.5	26.5	71.4	71.3	4.9		9.5		6			
						4.5	0.5	194	27.3		7.9		26.5		71.1		4.9		9.8		7			
					Bottom	7.9	0.5	217	25.8	25.8	7.9	7.9	32.3	32.3	58.2	58.4	4.0	4.0	11.1		7			
						7.9	0.4	222	25.8		7.9		32.3		58.5		4.0		11.4		8			
C2	Cloudy	Moderate	09:50	11.3	Surface	1.0	0.7	184	27.7	27.7	7.8	7.8	26.1	26.0	67.1	67.4	4.6	4.3	1.9	5.3	3	3	825692	806967
						1.0	0.7	185	27.7		7.8		26.0		67.7		4.6		1.9		2			
					Middle	5.7	0.7	181	26.8	26.8	7.8	7.8	29.3	29.3	57.8	57.8	3.9		4.1		2			
						5.7	0.7	185	26.8		7.8		29.3		57.8		3.9		4.4		3			
					Bottom	10.3	0.7	181	26.7	26.7	7.8	7.8	29.7	29.7	57.6	57.6	3.9	3.9	10.0		3			
						10.3	0.7	179	26.7		7.8		29.7		57.5		3.9		9.7		2			
C3	Misty	Moderate	08:52	10.2	Surface	1.0	0.3	76	27.1	27.1	8.0	8.0	24.1	24.1	81.9	81.7	5.7	5.4	1.0	1.5	<2	2	822100	817786
						1.0	0.3	70	27.1		8.0		24.1		81.5		5.7		1.0		<2			
					Middle	5.1	0.4	51	26.7	26.7	8.0	8.0	25.7	25.7	74.1	72.3	5.1		1.3		2			
						5.1	0.4	43	26.7		8.0		25.8		70.4		4.9		1.3		2			
					Bottom	9.2	0.3	45	26.6	26.6	8.0	8.0	26.0	26.0	69.8	69.8	4.8	4.8	2.2		2			
						9.2	0.3	41	26.6		8.0		26.0		69.7		4.8		2.2		2			
IM1	Rainy	Moderate	08:35	6.2	Surface	1.0	0.4	201	27.7	27.8	8.0	8.0	27.3	27.3	89.4	89.4	6.0	5.0	11.4	8.3	2	3	818330	806446
						1.0	0.4	204	27.8		8.0		27.3		89.4		6.0		11.4		2			
					Middle	3.1	0.4	177	25.9	25.9	7.9	7.9	31.6	31.6	57.9	57.9	3.9		3.0		2			
						3.1	0.4	169	25.9		7.9		31.6		57.9		3.9		3.1		2			
					Bottom	5.2	0.4	198	25.5	25.5	7.9	7.9	32.9	32.9	54.2	54.4	3.7	3.7	10.3		3			
						5.2	0.4	200	25.5		7.9		32.9		54.5		3.7		10.6		4			
IM2	Rainy	Moderate	08:40	6.8	Surface	1.0	0.5	186	27.7	27.7	8.1	8.1	27.4	27.4	95.5	95.7	6.5	5.2	3.4	5.1	6	5	819199	806241
						1.0	0.5	188	27.7		8.1		27.4		95.8		6.5		3.4		7			
					Middle	3.4	0.5	193	25.8	25.8	7.9	7.9	31.8	31.8	56.8	56.6	3.9		3.5		5			
						3.4	0.4	194	25.8		7.9		31.8		56.4		3.8		3.5		4			
					Bottom	5.8	0.5	186	25.4	25.4	7.9	7.9	32.9	32.9	51.2	51.2	3.5	3.5	8.6		3			
						5.8	0.5	191	25.4		7.9		32.9		51.2		3.5		8.2		2			
IM7	Rainy	Moderate	09:19	8.3	Surface	1.0	0.3	209	29.7	29.7	7.9	7.9	16.5	16.6	91.6	91.6	6.4	6.1	2.4	4.4	3	3	821342	806823
						1.0	0.3	211	29.6		7.9		16.6		91.6		6.4		2.4		2			
					Middle	4.2	0.3	200	29.1	29.1	7.9	7.9	20.5	20.5	84.7	84.5	5.8		1.9		4			
						4.2	0.3	199	29.1		7.9		20.5		84.3		5.8		1.9		2			
					Bottom	7.3	0.3	178	27.4	27.5	7.9	7.9	27.5	27.5	62.1	62.2	4.2	4.2	8.9		3			
						7.3	0.3	173	27.5		7.9		27.5		62.2		4.2		8.8		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 26 August 23 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	Rainy	Moderate	10:05	10.0	Surface	1.0	0.5	127	28.4	28.4	7.9	7.9	18.5	18.5	82.3	82.3	5.8	5.6	1.1	1.9	3	3	822226	809823
						1.0	0.5	126	28.3		7.9		18.5		82.3		5.8		1.1		4			
					Middle	5.0	0.5	140	27.5	27.5	7.9	7.9	21.7	21.7	75.4	75.3	5.3		1.3		3			
						5.0	0.5	144	27.4		7.9		21.8		75.2		5.3		1.4		2			
					Bottom	9.0	0.5	113	27.1	27.2	7.9	7.9	25.4	25.4	66.9	67.4	4.6	4.7	3.1		2			
						9.0	0.5	113	27.2		7.9		25.4		67.8		4.7		3.1		3			
IM11	Rainy	Moderate	09:58	9.0	Surface	1.0	0.5	113	29.2	29.2	8.0	8.0	13.6	13.6	88.2	88.2	6.3	5.9	0.2	0.8	2	3	821512	810563
						1.0	0.5	113	29.2		8.0		13.6		88.1		6.3		0.2		2			
					Middle	4.5	0.4	113	28.5	28.5	7.9	7.9	19.4	19.4	77.7	77.7	5.4		0.8		2			
						4.5	0.4	114	28.5		7.9		19.3		77.7		5.4		0.7		4			
					Bottom	8.0	0.5	95	27.3	27.3	7.9	7.9	23.7	23.8	69.9	70.0	4.9	4.9	1.3		3			
						8.0	0.5	95	27.2		7.9		23.9		70.1		4.9		1.4		4			
IM12	Rainy	Moderate	09:52	8.0	Surface	1.0	0.5	110	28.8	28.8	7.9	7.9	16.2	16.2	81.8	81.8	5.8	5.6	1.0	1.4	3	3	821172	811522
						1.0	0.5	110	28.7		7.9		16.2		81.8		5.8		1.0		4			
					Middle	4.0	0.6	113	28.3	28.3	7.9	7.9	19.7	19.7	76.8	76.4	5.4		1.4		3			
						4.0	0.6	109	28.3		7.9		19.7		76.0		5.3		1.4		2			
					Bottom	7.0	0.5	115	26.7	26.8	7.9	7.9	25.7	25.5	63.1	63.9	4.4	4.5	1.6		2			
						7.0	0.5	115	26.8		7.9		25.4		64.6		4.5		1.7		2			
SR1A	Misty	Moderate	09:25	5.0	Surface	1.0	0.0	136	28.3	28.3	8.0	8.0	18.4	18.4	80.8	80.8	5.7	5.7	1.5	1.8	2	2	819974	812655
						1.0	0.1	138	28.2		8.0		18.4		80.7		5.7		1.6		2			
					Middle	2.5	0.0	121	-	-	-	-	-	-	-	-	-		-		-			
						2.5	0.1	116	-		-		-		-		-		-		-			
					Bottom	4.0	0.0	132	28.1	28.2	8.0	8.0	20.9	20.9	79.3	79.4	5.5	5.5	2.1		2			
						4.0	0.0	139	28.2		8.0		20.9		79.5		5.5		2.1		2			
SR2	Misty	Moderate	09:11	4.8	Surface	1.0	0.5	33	28.5	28.5	8.0	8.0	18.3	18.3	85.6	85.7	6.0	6.0	0.6	0.9	<2	**<u>≤2</u>**	821465	814154
						1.0	0.6	34	28.5		8.0		18.3		85.8		6.0		0.6		<2			
					Middle	-	0.5	29	-	-	-	-	-	-	-	-	-		-		-			
						-	0.6	31	-		-		-		-		-		-		-			
					Bottom	3.8	0.5	60	28.3	28.4	8.0	8.0	19.2	19.2	86.5	86.7	6.1	6.1	1.1		<2			
						3.8	0.6	58	28.4		8.0		19.2		86.8		6.1		1.1		<2			
SR3	Cloudy	Moderate	09:28	8.2	Surface	1.0	0.6	176	29.9	29.9	8.0	8.0	16.7	16.7	95.6	95.5	6.6	5.8	2.6	2.3	2	3	822130	807551
						1.0	0.6	182	29.8		8.0		16.8		95.4		6.6		2.6		2			
					Middle	4.1	0.6	162	28.0	28.0	7.9	7.9	24.4	24.4	72.5	72.5	5.0		1.9		2			
						4.1	0.7	160	28.0		7.9		24.4		72.4		5.0		2.0		3			
					Bottom	7.2	0.5	161	27.9	27.9	7.8	7.8	26.0	26.0	63.8	64.0	4.3	4.4	2.2		4			
						7.2	0.5	168	27.9		7.8		26.0		64.1		4.4		2.2		3			
SR4A	Cloudy	Moderate	07:40	8.7	Surface	1.0	0.0	91	29.0	29.0	8.1	8.1	24.3	24.3	117.8	117.8	7.9	7.9	5.4	9.7	7	7	817182	807797
						1.0	0.0	85	29.0		8.1		24.3		117.8		7.9		5.4		6			
					Middle	4.4	0.0	77	29.0	27.9	8.1	8.0	24.3	24.4	117.6	117.6	7.9		6.6		7			
						4.4	0.0	79	26.8		7.8		24.5		117.5		8.0		6.4		6			
					Bottom	7.7	0.1	79	26.0	26.0	7.8	7.8	31.6	31.6	53.1	53.2	3.6	3.6	17.1		7			
						7.7	0.0	77	26.0		7.8		31.6		53.2		3.6		17.1		7			
SR8	Rainy	Moderate	09:47	5.2	Surface	1.0	-	-	29.1	29.1	7.9	7.9	15.3	15.2	84.9	84.9	6.0	6.0	0.8	0.9	2	2	820371	811628
						1.0	-	-	29.1		7.9		15.2		84.9		6.0		0.8		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.2	-	-	28.9	28.9	7.9	7.9	16.4	16.5	84.7	84.8	6.0	6.0	1.0		2			
						4.2	-	-	28.9		7.9		16.5		84.8		6.0		1.0		2			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 August 23 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	21:40	8.8	Surface	1.0	0.1	198	27.2	27.2	7.9	7.9	27.9	27.9	74.0	74.1	5.0	4.5	6.8	7.5	2	3	815624	804241
						1.0	0.1	200	27.2		7.9		27.9		74.1		5.0		6.2		3			
					Middle	4.4	0.1	181	26.1	26.1	7.9	7.9	31.3	31.3	56.7	56.7	3.9		7.3		2			
						4.4	0.1	184	26.1		7.9		31.3		56.7		3.9		7.6		3			
					Bottom	7.8	0.1	183	25.8	25.8	7.8	7.8	32.3	32.3	51.5	51.6	3.5	3.5	8.2		3			
						7.8	0.1	180	25.8		7.8		32.3		51.6		3.5		8.6		2			
C2	Cloudy	Moderate	19:32	11.8	Surface	1.0	0.1	318	29.1	29.1	7.9	7.9	20.9	20.9	82.5	82.5	5.7	4.7	2.8	7.2	2	3	825676	806968
						1.0	0.1	323	29.1		7.9		20.9		82.4		5.6		2.9		3			
					Middle	5.9	0.1	321	26.8	26.8	7.8	7.8	29.2	29.2	55.4	55.4	3.8		8.3		3			
						5.9	0.1	328	26.8		7.8		29.2		55.3		3.8		8.6		2			
					Bottom	10.8	0.1	346	26.8	26.8	7.8	7.8	29.1	29.1	54.2	54.1	3.7	3.7	10.2		3			
						10.8	0.1	345	26.8		7.8		29.1		53.9		3.7		10.5		3			
C3	Misty	Moderate	20:36	10.2	Surface	1.0	0.1	122	27.0	27.0	7.9	7.9	24.5	24.5	78.5	78.4	5.5	5.2	0.2	0.7	3	2	822129	817782
						1.0	0.1	120	27.0		7.9		24.5		78.3		5.4		0.2		2			
					Middle	5.1	0.0	131	26.6	26.6	7.9	7.9	25.8	25.8	72.4	72.5	5.0		0.7		2			
						5.1	0.0	135	26.6		7.9		25.9		72.5		5.0		0.7		2			
					Bottom	9.2	0.0	95	26.4	26.4	7.9	7.9	26.5	26.5	73.3	73.4	5.1	5.1	1.1		2			
						9.2	0.0	97	26.4		7.9		26.6		73.5		5.1		1.1		2			
IM1	Cloudy	Moderate	21:08	6.3	Surface	1.0	0.0	82	28.4	28.4	8.1	8.1	23.9	23.9	118.8	118.7	8.1	6.0	3.4	4.6	3	3	818348	806456
						1.0	0.0	81	28.4		8.1		23.9		118.6		8.1		3.4		4			
					Middle	3.2	0.1	82	26.0	26.0	7.9	7.9	31.6	31.6	56.9	57.0	3.9		2.8		3			
						3.2	0.1	75	26.0		7.9		31.6		57.0		3.9		2.8		2			
					Bottom	5.3	0.1	83	25.6	25.6	7.9	7.9	32.5	32.5	55.6	55.6	3.8	3.8	7.6		2			
						5.3	0.0	80	25.6		7.9		32.5		55.6		3.8		7.6		2			
IM2	Cloudy	Moderate	21:03	6.8	Surface	1.0	0.0	34	28.7	28.7	8.1	8.1	21.9	21.9	111.4	111.3	7.6	6.0	2.5	5.1	3	2	819189	806225
						1.0	0.0	34	28.7		8.1		21.9		111.1		7.6		2.5		2			
					Middle	3.4	0.0	38	26.6	26.6	7.9	7.9	30.2	30.2	62.7	63.0	4.3		3.0		2			
						3.4	0.0	44	26.6		7.9		30.2		63.3		4.3		3.0		2			
					Bottom	5.8	0.0	47	25.7	25.7	7.9	7.9	32.3	32.4	57.6	57.6	3.9	3.9	9.8		2			
						5.8	0.0	49	25.7		7.9		32.4		57.6		3.9		9.6		2			
IM7	Cloudy	Moderate	20:13	8.0	Surface	1.0	0.1	105	30.3	30.3	8.0	8.0	15.7	15.7	96.6	96.6	6.7	6.2	2.5	5.5	2	2	821332	806817
						1.0	0.0	109	30.3		8.0		15.7		96.5		6.7		2.5		2			
					Middle	4.0	0.1	128	29.0	29.0	7.9	7.9	21.1	21.1	83.8	83.7	5.7		3.8		2			
						4.0	0.1	131	29.0		7.9		21.1		83.6		5.7		4.2		2			
					Bottom	7.0	0.1	99	27.0	27.0	7.8	7.8	28.9	28.9	58.6	58.7	4.0	4.0	9.9		3			
						7.0	0.1	94	27.0		7.8		28.9		58.8		4.0		9.9		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 26 August 23 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	19:15	8.6	Surface	1.0	0.1	315	28.3	28.3	8.0	8.0	18.5	18.5	81.2	81.1	5.7	5.4	1.1	1.8	2	2	822249	809830
						1.0	0.0	315	28.2		8.0		18.5		81.0		5.7		1.1		2			
					Middle	4.3	0.1	310	27.4	27.4	7.9	7.9	22.0	22.0	72.3	72.0	5.1		1.5		2			
						4.3	0.1	310	27.3		7.9		22.1		71.7		5.0		1.5		2			
					Bottom	7.6	0.1	324	26.6	26.6	7.9	7.9	26.1	26.1	59.4	59.6	4.1	4.2	2.7		2			
						7.6	0.1	319	26.6		7.9		26.1		59.8		4.2		2.8		2			
IM11	Misty	Moderate	19:32	7.0	Surface	1.0	0.1	343	28.9	28.9	8.0	7.9	15.0	15.0	83.1	83.1	5.9	5.6	1.1	1.3	3	3	821505	810560
						1.0	0.1	344	28.9		7.9		15.0		83.1		5.9		1.1		2			
					Middle	3.5	0.0	341	28.6	28.6	7.9	7.9	17.6	17.6	75.4	75.2	5.3		1.2		3			
						3.5	0.0	334	28.6		7.9		17.6		75.0		5.3		1.3		2			
					Bottom	6.0	0.1	338	27.0	27.0	7.9	7.9	24.8	24.9	66.0	66.2	4.6	4.6	1.6		3			
						6.0	0.0	336	26.9		7.9		24.9		66.4		4.6		1.7		3			
IM12	Misty	Moderate	19:38	7.2	Surface	1.0	0.0	339	29.3	29.3	8.0	8.0	14.9	15.0	84.9	84.9	6.0	5.7	0.2	0.8	2	3	821147	811532
						1.0	0.1	332	29.3		8.0		15.0		84.8		6.0		0.2		3			
					Middle	3.6	-	5	28.4	28.4	7.9	7.9	18.9	18.9	77.5	77.4	5.4		0.9		4			
						3.6	0.1	4	28.4		7.9		18.9		77.3		5.4		0.8		3			
					Bottom	6.2	0.1	353	27.2	27.2	7.9	7.9	23.3	23.4	68.8	69.0	4.8	4.8	1.4		4			
						6.2	0.1	351	27.2		7.9		23.4		69.2		4.8		1.4		4			
SR1A	Misty	Moderate	20:00	4.0	Surface	1.0	0.0	150	29.2	29.2	8.0	8.0	14.6	14.6	92.4	92.4	6.5	6.5	0.9	0.9	2	2	819976	812659
						1.0	0.0	148	29.1		8.0		14.6		92.3		6.5		0.9		2			
					Middle	2.0	0.0	146	-	-	-	-	-	-	-	-	-		-		-			
						2.0	0.0	147	-		-		-		-		-		-		-			
					Bottom	3.0	-	160	28.7	28.8	8.0	8.0	17.4	17.5	90.9	91.1	6.4	6.4	1.0		2			
						3.0	0.0	155	28.8		8.0		17.5		91.2		6.4		1.0		3			
SR2	Misty	Moderate	20:14	5.2	Surface	1.0	0.1	35	28.5	28.5	8.0	8.0	17.6	17.6	84.0	83.9	5.9	5.9	1.8	1.9	2	3	821459	814156
						1.0	0.1	42	28.5		8.0		17.6		83.7		5.9		1.8		3			
					Middle	-	0.1	6	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	1	-		-		-		-		-		-		-			
					Bottom	4.2	0.1	21	28.1	28.1	7.9	7.9	19.7	19.8	83.9	84.1	5.9	5.9	2.0		2			
						4.2	0.1	20	28.1		7.9		19.8		84.2		5.9		2.0		3			
SR3	Cloudy	Moderate	20:08	8.5	Surface	1.0	0.1	157	29.7	29.7	8.0	8.0	18.9	18.9	98.7	98.7	6.8	6.1	2.3	5.2	3	3	822153	807577
						1.0	0.1	159	29.7		8.0		18.9		98.7		6.8		2.3		3			
					Middle	4.3	0.0	160	28.3	28.3	7.8	7.8	22.7	22.7	79.5	79.4	5.5		3.0		3			
						4.3	0.1	160	28.3		7.8		22.7		79.2		5.4		3.0		2			
					Bottom	7.5	0.0	173	28.1	28.1	7.8	7.8	25.1	25.0	69.6	69.7	4.7	4.7	10.4		3			
						7.5	0.1	171	28.1		7.9		24.9		69.8		4.7		10.4		2			
SR4A	Cloudy	Moderate	22:16	8.5	Surface	1.0	0.0	114	29.0	29.0	8.2	8.2	25.7	25.7	134.3	134.2	9.0	7.1	7.3	7.7	3	3	817196	807792
						1.0	0.1	115	29.0		8.2		25.7		134.1		9.0		7.3		2			
					Middle	4.3	0.0	116	27.4	27.4	8.0	8.0	28.7	28.6	76.5	76.6	5.2		7.5		3			
						4.3	0.0	118	27.4		8.0		28.6		76.7		5.2		7.4		3			
					Bottom	7.5	0.0	133	26.9	26.9	7.9	7.9	29.7	29.7	66.4	66.5	4.5	4.5	8.2		4			
						7.5	0.1	131	26.9		7.9		29.7		66.5		4.5		8.2		3			
SR8	Misty	Moderate	19:43	4.2	Surface	1.0	-	-	29.1	29.1	8.0	8.0	14.5	14.5	92.8	92.8	6.6	6.6	0.9	1.0	2	3	820378	811628
						1.0	-	-	29.1		8.0		14.5		92.7		6.6		0.9		2			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.2	-	-	28.8	28.8	8.0	8.0	17.4	17.5	91.5	91.5	6.4	6.4	1.1		4			
						3.2	-	-	28.7		8.0		17.6		91.5		6.4		1.1		5			

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 August 23 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	Rainy	Moderate	11:40	8.4	Surface	1.0	0.7	202	27.0	27.0	7.9	7.9	28.3	28.3	67.1	67.0	4.6	4.5	9.5	9.9	4	4	815636	804233
						1.0	0.7	198	27.0		7.9		28.3		66.9		4.6		9.7		4			
					Middle	4.2	0.7	192	26.4	26.4	7.9	7.9	29.4	29.5	65.4	65.1	4.5		9.8		3			
						4.2	0.7	193	26.4		7.9		29.6		64.8		4.4		9.6		4			
					Bottom	7.4	0.7	221	26.2	26.3	7.9	7.9	30.3	30.3	57.8	58.1	3.9	4.0	10.7		5			
						7.4	0.7	225	26.4		7.9		30.2		58.3		4.0		10.4		5			
C2	Cloudy	Moderate	09:55	11.7	Surface	1.0	0.5	185	28.3	28.3	7.9	7.9	22.7	22.7	76.2	76.3	5.2	4.7	3.7	7.9	4	4	825680	806926
						1.0	0.4	178	28.2		7.9		22.8		76.3		5.2		3.7		4			
					Middle	5.9	0.4	177	26.7	26.7	7.9	7.9	28.4	28.4	60.8	60.8	4.2		8.8		4			
						5.9	0.4	175	26.7		7.9		28.5		60.7		4.2		8.3		4			
					Bottom	10.7	0.5	187	26.5	26.5	7.9	7.9	29.1	29.1	61.8	61.9	4.2	4.2	11.2		4			
						10.7	0.5	182	26.5		7.9		29.1		62.0		4.2		11.9		3			
C3	Cloudy	Moderate	12:06	11.3	Surface	1.0	0.4	65	26.9	26.9	8.0	8.0	25.2	25.2	81.6	81.6	5.7	5.3	1.2	3.7	4	4	822085	817796
						1.0	0.4	72	26.9		8.0		25.2		81.5		5.7		1.2		3			
					Middle	5.7	0.4	67	26.2	26.2	8.0	8.0	26.3	26.3	69.2	69.2	4.8		3.0		3			
						5.7	0.5	63	26.2		8.0		26.3		69.2		4.8		3.0		4			
					Bottom	10.3	0.4	74	25.6	25.6	7.9	7.9	27.7	27.7	60.5	60.6	4.2	4.2	7.0		4			
						10.3	0.4	78	25.6		7.9		27.7		60.6		4.2		7.0		3			
IM1	Rainy	Moderate	11:16	6.4	Surface	1.0	0.5	205	27.8	27.8	8.1	8.1	25.9	25.9	91.3	90.6	6.2	5.2	3.5	8.2	4	4	818349	806472
						1.0	0.4	212	27.8		8.1		25.9		89.9		6.1		3.5		5			
					Middle	3.2	0.4	193	26.3	26.3	7.9	7.9	29.5	29.6	61.0	60.7	4.2		10.4		4			
						3.2	0.5	198	26.2		7.9		29.7		60.4		4.1		10.3		4			
					Bottom	5.4	0.4	182	26.0	26.0	7.9	7.9	30.6	30.6	52.4	52.6	3.6	3.6	10.8		4			
						5.4	0.4	186	26.0		7.9		30.6		52.7		3.6		10.5		3			
IM2	Cloudy	Moderate	11:04	6.9	Surface	1.0	0.4	186	27.4	27.4	8.1	8.1	26.8	26.9	89.5	89.1	6.1	5.1	3.6	7.3	3	3	819184	806213
						1.0	0.4	192	27.3		8.1		27.1		88.6		6.0		3.6		4			
					Middle	3.5	0.4	184	26.4	26.4	7.9	7.9	29.3	29.3	61.6	61.6	4.2		6.9		3			
						3.5	0.5	187	26.3		7.9		29.4		61.5		4.2		7.0		3			
					Bottom	5.9	0.4	200	26.1	26.1	7.9	7.9	30.2	30.3	54.6	54.6	3.7	3.7	11.3		4			
						5.9	0.5	205	26.0		7.9		30.3		54.5		3.7		11.7		3			
IM7	Cloudy	Moderate	10:34	8.6	Surface	1.0	0.2	162	28.5	28.5	8.0	8.0	22.6	22.6	83.2	83.1	5.7	5.6	4.3	7.8	4	4	821366	806856
						1.0	0.3	157	28.5		8.0		22.6		82.9		5.7		4.7		4			
					Middle	4.3	0.3	152	28.3	28.3	7.9	7.9	23.1	23.1	80.1	80.1	5.5		8.5		4			
						4.3	0.3	150	28.3		7.9		23.1		80.1		5.5		8.5		3			
					Bottom	7.6	0.2	154	28.3	28.3	7.9	7.9	23.1	23.1	80.9	81.1	5.5	5.6	10.4		5			
						7.6	0.3	152	28.3		7.9		23.2		81.2		5.6		10.2		5			

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 August 23 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	Cloudy	Rough	10:26	8.3	Surface	1.0	0.6	108	27.9	27.9	8.0	8.0	21.4	21.4	88.6	88.6	6.2	6.2	2.0	2.2	5	5	822258	809834
						1.0	0.6	104	27.9		8.0		21.4		88.6		6.2		2.0		4			
					Middle	4.2	0.6	92	27.9	27.9	8.0	8.0	21.5	21.5	88.2	88.2	6.1		1.5		4			
						4.2	0.6	88	27.9		8.0		21.5		88.2		6.1		1.5		5			
					Bottom	7.3	0.6	85	28.0	28.0	8.0	8.0	21.8	21.8	86.8	86.8	6.0	6.0	3.1		4			
						7.3	0.6	86	28.0		8.0		21.8		86.8		6.0		3.2		5			
IM11	Cloudy	Rough	10:41	7.2	Surface	1.0	0.7	101	28.1	28.1	8.0	8.0	21.2	21.2	87.9	87.9	6.1	5.5	1.9	3.7	5	5	821523	810526
						1.0	0.7	102	28.1		8.0		21.2		87.8		6.1		2.0		4			
					Middle	3.6	0.8	95	27.2	27.2	7.9	7.9	22.9	22.9	69.5	69.5	4.9		2.7		5			
						3.6	0.8	99	27.2		7.9		22.9		69.5		4.9		2.7		5			
					Bottom	6.2	0.7	89	26.6	26.6	7.9	7.9	24.7	24.7	62.9	62.9	4.4	4.4	6.6		4			
						6.2	0.7	94	26.6		7.9		24.7		62.9		4.4		6.6		5			
IM12	Cloudy	Rough	10:53	7.1	Surface	1.0	0.8	104	28.1	28.1	8.1	8.1	21.2	21.2	89.6	89.6	6.2	5.8	2.0	2.6	7	6	821164	811519
						1.0	0.8	111	28.1		8.1		21.2		89.6		6.2		2.0		6			
					Middle	3.6	0.8	97	27.5	27.5	8.0	8.0	22.0	22.0	76.6	76.6	5.4		2.9		6			
						3.6	0.8	97	27.5		8.0		22.0		76.6		5.4		2.9		5			
					Bottom	6.1	0.8	106	27.1	27.1	7.9	7.9	23.2	23.2	72.5	72.6	5.1	5.1	3.0		7			
						6.1	0.8	107	27.1		7.9		23.2		72.7		5.1		3.0		7			
SR1A	Cloudy	Moderate	11:25	4.7	Surface	1.0	0.0	108	27.4	27.4	8.0	8.0	22.2	22.2	76.4	76.4	5.3	5.3	3.5	4.3	4	4	819972	812665
						1.0	0.1	111	27.4		8.0		22.2		76.4		5.3		3.6		3			
					Middle	2.4	0.0	104	-	-	-	-	-	-	-	-	-		-		-			
						2.4	0.0	102	-		-		-		-		-		-		-			
					Bottom	3.7	0.0	88	27.0	27.0	7.9	7.9	23.7	23.7	68.5	68.5	4.8	4.8	5.1		4			
						3.7	0.1	83	27.0		7.9		23.7		68.5		4.8		5.2		3			
SR2	Cloudy	Moderate	11:42	4.9	Surface	1.0	0.8	32	28.2	28.2	8.1	8.1	21.3	21.3	91.8	91.8	6.4	6.4	2.4	2.9	3	3	821476	814183
						1.0	0.7	29	28.2		8.1		21.3		91.8		6.4		2.4		2			
					Middle	-	0.7	34	-	-	-	-	-	-	-	-	-		-		-			
						-	0.7	37	-		-		-		-		-		-		-			
					Bottom	3.9	0.7	45	27.2	27.2	8.0	8.0	23.1	23.1	73.5	73.5	5.1	5.1	3.3		4			
						3.9	0.8	40	27.2		8.0		23.1		73.5		5.1		3.3		4			
SR3	Cloudy	Moderate	10:26	8.9	Surface	1.0	0.5	170	28.1	28.1	7.9	7.9	23.5	23.5	76.0	75.9	5.2	4.9	3.4	6.6	4	3	822149	807567
						1.0	0.5	173	28.1		7.9		23.6		75.8		5.2		3.6		4			
					Middle	4.5	0.5	164	27.5	27.5	7.9	7.9	25.9	25.9	66.7	66.7	4.6		8.6		3			
						4.5	0.5	162	27.5		7.9		26.0		66.6		4.6		8.2		3			
					Bottom	7.9	0.5	179	27.4	27.4	7.9	7.9	26.4	26.4	66.2	66.2	4.5	4.5	8.0		2			
						7.9	0.5	177	27.4		7.9		26.4		66.2		4.5		7.5		3			
SR4A	Rainy	Moderate	12:06	8.3	Surface	1.0	0.0	78	27.9	27.9	8.0	8.0	25.9	26.0	88.1	87.8	6.0	5.7	8.5	8.8	3	4	817183	807817
						1.0	0.0	80	27.8		8.0		26.0		87.5		6.0		8.1		3			
					Middle	4.2	0.0	76	27.5	27.5	8.0	8.0	26.8	26.8	77.5	77.6	5.3		9.5		3			
						4.2	0.1	76	27.5		8.0		26.8		77.6		5.3		9.4		4			
					Bottom	7.3	0.0	104	27.4	27.4	8.0	8.0	27.1	27.1	72.7	72.7	5.0	5.0	8.8		5			
						7.3	0.0	100	27.4		8.0		27.1		72.7		5.0		8.5		4			
SR8	Cloudy	Moderate	11:01	5.1	Surface	1.0	-	-	27.6	27.6	8.0	8.0	22.2	22.2	85.3	85.3	5.9	5.9	2.7	3.4	4	4	820406	811629
						1.0	-	-	27.6		8.0		22.2		85.3		5.9		2.8		3			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	4.1	-	-	27.2	27.2	8.0	8.0	23.2	23.2	71.4	71.4	5.0	5.0	4.2		4			
						4.1	-	-	27.2		8.0		23.2		71.4		5.0		4.2		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 29 August 23 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	03:52	8.2	Surface	1.0	0.2	35	26.5	26.5	7.9	7.9	29.1	29.2	63.3	63.2	4.3	4.0	3.5	3.5	5	5	815599	804238
						1.0	0.2	30	26.5		7.9		29.3		63.0		4.3		3.5		4			
					Middle	4.1	0.3	35	26.2	26.2	7.8	7.8	29.9	29.9	54.4	55.3	3.7		3.5		5			
						4.1	0.2	32	26.2		7.8		29.9		56.1		3.8		3.4		4			
					Bottom	7.2	0.2	11	26.0	26.0	7.8	7.8	30.6	30.6	54.7	54.9	3.7	3.8	3.5		4			
						7.2	0.2	16	26.0		7.8		30.6		55.1		3.8		3.5		5			
C2	Cloudy	Moderate	05:36	11.5	Surface	1.0	0.6	358	28.1	28.1	7.9	7.9	22.3	22.2	77.6	77.7	5.4	4.8	4.1	7.5	5	5	825705	806962
						1.0	0.6	356	28.1		7.9		22.1		77.7		5.4		4.2		5			
					Middle	5.8	0.5	354	26.6	26.6	7.9	7.9	28.5	28.6	61.7	61.7	4.2		8.9		4			
						5.8	0.5	353	26.6		7.9		28.6		61.7		4.2		9.0		5			
					Bottom	10.5	0.6	329	26.5	26.5	7.9	7.9	28.9	28.9	62.2	62.4	4.3	4.3	9.3		4			
						10.5	0.6	327	26.5		7.9		29.0		62.5		4.3		9.2		5			
C3	Fine	Moderate	03:19	10.2	Surface	1.0	0.3	265	27.2	27.2	8.0	8.0	23.9	23.9	81.7	81.7	5.7	5.4	1.4	3.2	4	4	822113	817784
						1.0	0.3	270	27.2		8.0		23.9		81.7		5.7		1.5		3			
					Middle	5.1	0.3	286	26.6	26.6	8.0	8.0	25.2	25.2	72.2	72.2	5.0		1.8		4			
						5.1	0.3	279	26.6		8.0		25.2		72.2		5.0		1.8		4			
					Bottom	9.2	0.3	256	25.1	25.1	8.0	8.0	29.1	29.1	59.1	59.2	4.1	4.1	6.4		4			
						9.2	0.3	256	25.1		8.0		29.1		59.2		4.1		6.5		3			
IM1	Rainy	Moderate	04:12	6.3	Surface	1.0	0.2	5	27.1	27.1	7.9	7.9	27.6	27.6	71.5	71.5	4.9	4.5	3.9	7.9	3	4	818370	806443
						1.0	0.1	8	27.1		7.9		27.6		71.5		4.9		3.9		4			
					Middle	3.2	0.2	25	25.9	25.9	7.9	7.9	30.6	30.6	59.8	59.8	4.1		9.7		4			
						3.2	0.2	30	25.9		7.9		30.6		59.8		4.1		9.3		5			
					Bottom	5.3	0.3	351	25.8	25.8	7.9	7.9	30.7	30.7	55.1	55.2	3.8	3.8	10.1		5			
						5.3	0.3	351	25.8		7.9		30.7		55.3		3.8		10.5		5			
IM2	Rainy	Moderate	04:19	6.8	Surface	1.0	0.2	359	27.2	27.2	8.0	8.0	27.0	27.1	75.4	75.4	5.1	4.6	4.5	7.1	4	4	819195	806224
						1.0	0.3	354	27.2		8.0		27.1		75.4		5.1		4.5		3			
					Middle	3.4	0.2	9	26.2	26.2	7.9	7.9	29.7	29.7	58.3	58.4	4.0		7.5		4			
						3.4	0.2	4	26.2		7.9		29.7		58.4		4.0		7.7		4			
					Bottom	5.8	0.2	15	26.2	26.2	7.9	7.9	29.7	29.7	59.3	59.4	4.1	4.1	9.4		3			
						5.8	0.2	22	26.2		7.9		29.7		59.5		4.1		9.1		4			
IM7	Rainy	Moderate	04:48	8.2	Surface	1.0	0.2	322	28.2	28.2	8.0	8.0	23.9	23.9	88.2	88.2	6.0	5.6	2.5	4.9	4	4	821347	806842
						1.0	0.1	318	28.1		8.0		24.0		88.2		6.0		2.5		4			
					Middle	4.1	0.2	336	27.7	27.7	7.9	7.9	24.6	24.7	76.0	75.9	5.2		3.8		4			
						4.1	0.2	339	27.6		7.9		24.7		75.7		5.2		4.0		4			
					Bottom	7.2	0.2	335	26.5	26.5	7.9	7.9	28.9	28.9	59.1	59.3	4.0	4.1	8.4		5			
						7.2	0.2	336	26.5		7.9		28.9		59.4		4.1		8.2		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 29 August 23 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	04:45	7.7	Surface	1.0	0.5	279	27.7	27.7	8.0	8.0	21.0	21.0	82.7	82.7	5.8	5.6	1.5	2.9	5	5	822245	809845
						1.0	0.5	285	27.7		8.0		21.0		82.7		5.8		1.5		4			
					Middle	3.9	0.4	308	27.6	27.6	8.0	8.0	21.6	21.6	76.6	76.6	5.4		1.9		5			
						3.9	0.5	306	27.6		8.0		21.6		76.5		5.3		2.0		4			
					Bottom	6.7	0.5	270	25.8	25.8	7.9	7.9	27.2	27.2	59.1	59.2	4.1	4.1	5.2		5			
						6.7	0.4	266	25.8		7.9		27.2		59.2		4.1		5.0		4			
IM11	Fine	Moderate	04:36	6.6	Surface	1.0	0.4	294	27.6	27.6	8.0	8.0	22.4	22.4	82.5	82.5	5.7	5.6	2.1	3.0	4	4	821490	810561
						1.0	0.4	289	27.6		8.0		22.4		82.5		5.7		2.1		4			
					Middle	3.3	0.5	289	27.4	27.4	8.0	8.0	22.7	22.7	79.4	79.4	5.5		2.0		3			
						3.3	0.5	295	27.4		8.0		22.7		79.3		5.5		2.0		3			
					Bottom	5.6	0.5	295	26.2	26.2	7.9	7.9	25.9	25.9	66.4	66.4	4.6	4.6	4.9		3			
						5.6	0.5	298	26.2		7.9		25.9		66.4		4.6		4.9		4			
IM12	Fine	Moderate	04:27	6.3	Surface	1.0	0.5	274	27.2	27.2	7.9	7.9	23.3	23.3	75.8	75.8	5.3	5.1	2.1	2.9	4	4	821163	811510
						1.0	0.5	270	27.2		7.9		23.3		75.8		5.3		2.1		3			
					Middle	3.2	0.4	295	27.0	27.0	7.9	7.9	23.9	23.9	69.4	69.4	4.8		3.1		5			
						3.2	0.4	296	27.0		7.9		23.9		69.3		4.8		3.1		4			
					Bottom	5.3	0.4	301	25.6	25.6	7.9	7.9	27.9	27.9	62.0	62.1	4.3	4.3	3.4		4			
						5.3	0.4	300	25.6		7.9		27.9		62.1		4.3		3.4		4			
SR1A	Fine	Calm	03:52	4.1	Surface	1.0	0.0	185	26.7	26.7	7.9	7.9	24.5	24.5	63.7	63.7	4.5	4.5	2.6	3.6	3	4	819972	812656
						1.0	0.0	178	26.7		7.9		24.5		63.7		4.5		2.6		4			
					Middle	2.1	0.0	198	-	-	-	-	-	-	-	-	-		-		-			
						2.1	0.0	203	-		-		-		-		-		-		-			
					Bottom	3.1	0.0	211	26.3	26.3	7.9	7.9	25.6	25.6	62.4	62.5	4.4	4.4	4.6		3			
						3.1	0.0	210	26.3		7.9		25.6		62.5		4.4		4.5		4			
SR2	Fine	Moderate	03:37	4.3	Surface	1.0	0.1	277	27.6	27.6	8.1	8.1	23.1	23.1	87.1	87.1	6.0	6.0	1.7	2.0	3	3	821443	814161
						1.0	0.0	278	27.6		8.1		23.1		87.1		6.0		1.7		4			
					Middle	-	0.1	250	-	-	-	-	-	-	-	-	-		-		-			
						-	0.1	249	-		-		-		-		-		-		-			
					Bottom	3.3	0.1	261	27.0	27.0	8.0	8.0	24.4	24.4	78.8	78.8	5.5	5.5	2.2		3			
						3.3	0.1	255	27.0		8.0		24.4		78.8		5.5		2.5		3			
SR3	Cloudy	Moderate	05:00	8.8	Surface	1.0	0.3	330	28.9	28.9	8.0	8.0	20.8	20.8	86.2	86.1	5.9	5.1	3.0	5.7	4	4	822136	807553
						1.0	0.4	327	28.8		8.0		20.8		86.0		5.9		3.0		3			
					Middle	4.4	0.3	321	27.2	27.2	7.9	7.9	26.9	26.9	63.1	63.1	4.3		4.4		4			
						4.4	0.3	322	27.2		7.9		26.9		63.1		4.3		4.5		4			
					Bottom	7.8	0.3	314	27.1	27.1	7.9	7.9	27.3	27.3	63.2	63.3	4.3	4.3	9.4		3			
						7.8	0.3	319	27.1		7.9		27.3		63.3		4.3		10.1		4			
SR4A	Cloudy	Moderate	03:28	8.4	Surface	1.0	0.0	269	27.2	27.2	7.9	7.9	27.4	27.4	71.0	71.0	4.8	4.5	4.5	4.8	3	4	817204	807833
						1.0	0.1	272	27.2		7.9		27.5		71.0		4.8		4.5		5			
					Middle	4.2	0.1	251	26.4	26.4	7.8	7.8	29.3	29.3	60.2	60.2	4.1		5.2		4			
						4.2	0.1	257	26.4		7.8		29.3		60.2		4.1		5.2		4			
					Bottom	7.4	0.0	243	26.3	26.3	7.8	7.8	30.0	30.0	56.6	56.8	3.9	3.9	4.9		5			
						7.4	0.1	236	26.3		7.8		30.0		56.9		3.9		4.9		4			
SR8	Fine	Calm	04:18	4.4	Surface	1.0	-	-	27.5	27.5	8.0	8.0	22.8	22.8	78.6	78.6	5.5	5.5	1.9	2.0	3	4	820377	811624
						1.0	-	-	27.5		8.0		22.8		78.6		5.5		1.9		4			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-			
						-	-	-	-		-		-		-		-		-		-			
					Bottom	3.4	-	-	27.1	27.1	8.0	8.0	23.8	23.8	75.8	75.8	5.3	5.3	2.0		4			
						3.4	-	-	27.1		8.0		23.8		75.8		5.3		2.0		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 31 August 23 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	Total Alkalinity Value	Total Alkalinity DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
C1	Rainy	Rough	13:11	8.4	Surface	1.0	0.6	220	26.1	26.1	7.9	7.9	30.7	30.8	71.5	71.5	4.9	4.6	4.0	4.7	6	5	-	-	815609	804269
						1.0	0.6	217	26.1		7.9		30.9		71.5		4.9		4.2		5		-			
					Middle	4.2	0.6	192	25.4	25.4	7.9	7.9	32.5	32.5	62.2	62.3	4.2		4.8		6		-			
						4.2	0.6	193	25.4		7.9		32.5		62.3		4.3		4.8		5		-			
					Bottom	7.4	0.6	195	25.4	25.4	7.9	7.9	32.5	32.5	64.6	64.7	4.4	4.4	5.2		5		-			
						7.4	0.6	199	25.4		7.9		32.5		64.8		4.4		5.2		4		-			
C2	Cloudy	Rough	11:30	11.5	Surface	1.0	0.2	168	26.7	26.7	7.9	7.9	28.4	28.5	62.9	62.9	4.3	4.1	5.5	8.0	7	7	-	-	825682	806934
						1.0	0.2	172	26.6		7.9		28.5		62.9		4.3		5.5		8		-			
					Middle	5.8	0.2	168	26.0	26.0	7.9	7.9	30.4	30.4	57.7	57.6	4.0		8.8		6		-			
						5.8	0.2	175	25.9		7.9		30.5		57.5		3.9		9.3		6		-			
					Bottom	10.5	0.2	164	26.0	26.1	7.9	7.9	31.0	30.9	56.7	56.8	3.9	3.9	9.7		7		-			
						10.5	0.2	170	26.1		7.9		30.9		56.8		3.9		9.1		6		-			
C3	Misty	Moderate	12:27	10.6	Surface	1.0	0.4	93	25.1	25.1	8.0	8.0	28.8	28.8	61.4	61.4	4.3	4.3	1.1	1.6	5	4	-	-	822086	817792
						1.0	0.5	86	25.0		8.0		28.9		61.4		4.3		1.1		4		-			
					Middle	5.3	0.5	72	24.6	24.6	8.0	8.0	29.8	29.8	61.1	61.2	4.3		1.8		4		-			
						5.3	0.4	73	24.5		8.0		29.9		61.2		4.3		1.7		4		-			
					Bottom	9.6	0.4	94	24.4	24.4	8.0	8.0	30.0	30.0	61.9	62.0	4.4	4.4	1.9		5		-			
						9.6	0.5	97	24.4		8.0		30.1		62.0		4.4		1.9		4		-			
IM1	Rainy	Rough	12:50	6.7	Surface	1.0	0.3	199	25.7	25.7	7.9	7.9	31.6	31.6	58.7	58.7	4.0	4.1	6.7	8.9	6	6	-	-	818359	806472
						1.0	0.3	192	25.7		7.9		31.6		58.7		4.0		6.7		5		-			
					Middle	3.4	0.4	174	25.4	25.4	7.9	7.9	32.1	32.1	59.9	60.0	4.1		9.6		7		-			
						3.4	0.4	179	25.4		7.9		32.1		60.1		4.1		9.0		6		-			
					Bottom	5.7	0.3	181	25.3	25.3	7.9	7.9	32.4	32.4	61.9	62.0	4.2	4.2	10.8		7		-			
						5.7	0.4	178	25.3		7.9		32.4		62.0		4.2		10.5		7		-			
IM2	Cloudy	Rough	12:41	7.0	Surface	1.0	0.3	186	25.6	25.6	7.9	7.9	31.6	31.6	62.2	62.2	4.2	4.1	7.9	10.4	8	8	-	-	819181	806256
						1.0	0.3	181	25.6		7.9		31.6		62.2		4.2		8.1		6		-			
					Middle	3.5	0.3	185	25.4	25.4	7.9	7.9	32.2	32.2	57.3	57.4	3.9		9.8		7		-			
						3.5	0.3	182	25.3		7.9		32.2		57.4		3.9		9.9		7		-			
					Bottom	6.0	0.3	177	25.2	25.2	7.9	7.9	32.6	32.6	58.5	58.7	4.0	4.0	13.3		9		-			
						6.0	0.4	178	25.2		7.9		32.6		58.9		4.0		13.7		8		-			
IM7	Cloudy	Rough	12:16	8.2	Surface	1.0	0.3	159	26.2	26.2	7.9	7.9	30.1	30.1	63.9	63.9	4.4	4.3	5.0	8.0	7	7	-	-	821366	806855
						1.0	0.2	161	26.2		7.9		30.1		63.9		4.4		5.1		6		-			
					Middle	4.1	0.3	156	25.7	25.7	7.9	7.9	31.4	31.5	61.8	61.9	4.2		8.2		8		-			
						4.1	0.3	162	25.6		7.9		31.5		61.9		4.2		8.8		5		-			
					Bottom	7.2	0.2	165	25.3	25.3	7.9	7.9	32.4	32.4	57.1	57.2	3.9	3.9	11.0		6		-			
						7.2	0.2	171	25.3		7.9		32.4		57.2		3.9		10.0		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 31 August 23 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)		Total Alkalinity		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	11:29	9.4	Surface	1.0	0.4	94	26.4	26.4	7.9	7.9	25.3	25.3	64.4	64.4	4.5	4.4	4.0	4.4	6	5	-	-	822238	809852
						1.0	0.3	87	26.4		7.9		25.3		64.4		4.5		4.0		5		-			
					Middle	4.7	0.4	97	26.0	26.0	7.9	7.9	26.3	26.4	62.1	62.0	4.3		4.1		4		-			
						4.7	0.4	93	25.9		7.9		26.4		61.8		4.3		4.1		6		-			
					Bottom	8.4	0.3	90	25.9	26.0	7.9	7.9	27.1	27.1	58.1	58.2	4.1	4.1	5.3		5		-			
						8.4	0.4	83	26.0		7.9		27.0		58.3		4.1		5.2		6		-			
IM11	Misty	Moderate	11:34	7.6	Surface	1.0	0.4	86	26.1	26.1	7.9	7.9	26.1	26.2	64.0	64.0	4.5	4.3	4.0	5.6	5	5	-	-	821484	810539
						1.0	0.4	81	26.1		7.9		26.2		64.0		4.5		4.1		6		-			
					Middle	3.8	0.4	106	25.6	25.6	7.9	7.9	27.3	27.3	58.4	58.4	4.1		5.7		5		-			
						3.8	0.4	110	25.6		7.9		27.3		58.4		4.1		5.7		4		-			
					Bottom	6.6	0.4	79	25.6	25.6	7.9	7.9	27.4	27.5	58.6	58.7	4.1	4.1	7.1		5		-			
						6.6	0.4	82	25.6		8.0		27.5		58.7		4.1		7.1		5		-			
IM12	Misty	Moderate	11:39	7.6	Surface	1.0	0.4	104	26.2	26.2	7.9	7.9	25.9	25.9	61.2	61.1	4.3	4.2	3.9	4.4	5	5	-	-	821184	811499
						1.0	0.4	110	26.2		7.9		25.9		60.9		4.3		4.0		4		-			
					Middle	3.8	0.4	89	25.8	25.8	7.9	7.9	26.9	26.9	58.8	58.9	4.1		4.1		6		-			
						3.8	0.5	82	25.8		7.9		26.9		58.9		4.1		4.1		5		-			
					Bottom	6.6	0.5	94	25.8	25.8	7.9	7.9	26.9	26.9	59.6	59.7	4.2	4.2	5.1		5		-			
						6.6	0.5	94	25.8		7.9		26.9		59.7		4.2		5.1		4		-			
SR1A	Misty	Moderate	11:55	4.4	Surface	1.0	0.1	59	25.5	25.5	7.9	7.9	27.8	27.8	56.6	56.6	4.0	4.0	4.8	4.9	3	3	-	-	819982	812664
						1.0	0.1	61	25.5		7.9		27.8		56.5		4.0		4.8		3		-			
					Middle	2.2	0.0	41	-	-	-	-	-	-	-	-	-		-		-		-			
						2.2	0.0	38	-		-		-		-		-		-		-		-			
					Bottom	3.4	0.1	80	25.5	25.6	7.9	7.9	27.8	27.7	56.9	56.9	4.0	4.0	5.1		3		-			
						3.4	0.1	83	25.6		7.9		27.7		56.9		4.0		5.1		4		-			
SR2	Misty	Moderate	12:11	5.0	Surface	1.0	0.5	64	25.9	25.9	7.9	7.9	26.9	27.0	63.6	63.5	4.4	4.4	3.2	3.9	4	3	-	-	821442	814185
						1.0	0.5	67	25.8		7.9		27.0		63.4		4.4		3.4		4		-			
					Middle	-	0.5	47	-	-	-	-	-	-	-	-	-		-		-		-			
						-	0.5	45	-		-		-		-		-		-		-		-			
					Bottom	4.0	0.4	61	25.2	25.3	7.9	7.9	28.3	28.2	64.3	64.5	4.5	4.5	4.4		2		-			
						4.0	0.4	66	25.3		7.9		28.2		64.6		4.5		4.5		3		-			
SR3	Cloudy	Rough	12:06	8.5	Surface	1.0	0.3	152	26.4	26.4	7.9	7.9	29.1	29.1	60.7	60.6	4.2	4.1	5.3	7.3	6	5	-	-	822126	807553
						1.0	0.3	154	26.4		7.9		29.2		60.5		4.1		5.4		5		-			
					Middle	4.3	0.3	148	25.8	25.8	7.9	7.9	30.7	30.8	59.0	59.0	4.0		7.0		6		-			
						4.3	0.3	154	25.8		7.9		30.8		59.0		4.0		7.2		6		-			
					Bottom	7.5	0.3	155	25.6	25.6	7.9	7.9	31.7	31.7	59.9	60.0	4.1	4.1	9.5		4		-			
						7.5	0.3	148	25.6		7.9		31.6		60.0		4.1		9.3		5		-			
SR4A	Rainy	Moderate	13:46	9.1	Surface	1.0	0.0	33	26.5	26.5	7.9	7.9	30.0	30.0	71.8	71.8	4.8	4.6	5.1	6.7	5	6	-	-	817181	807790
						1.0	0.1	35	26.5		7.9		30.0		71.8		4.8		5.1		6		-			
					Middle	4.6	0.0	25	25.6	25.6	7.9	7.9	31.3	31.3	63.3	63.3	4.3		7.7		6		-			
						4.6	0.0	18	25.6		7.9		31.3		63.3		4.3		7.8		6		-			
					Bottom	8.1	0.0	46	25.6	25.6	7.9	7.9	31.4	31.4	56.3	56.5	3.9	3.9	7.2		5		-			
						8.1	0.1	47	25.6		7.9		31.4		56.7		3.9		7.2		6		-			
SR8	Misty	Moderate	11:43	4.6	Surface	1.0	-	-	26.2	26.2	7.9	7.9	27.3	27.4	64.6	64.6	4.5	4.5	4.0	4.7	4	4	-	-	820391	811632
						1.0	-	-	26.1		7.9		27.4		64.6		4.5		4.0		3		-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-			
						-	-	-	-		-		-		-		-		-		-		-			
					Bottom	3.6	-	-	25.7	25.7	7.9	7.9	27.8	27.8	64.2	64.6	4.5	4.5	5.4		4		-			
						3.6	-	-	25.7		7.9		27.8		65.0		4.5		5.4		3		-			

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Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 August 23 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)		Total Alkalinity		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
C1	Cloudy	Moderate	05:28	8.6	Surface	1.0	0.2	39	26.0	26.0	7.9	7.9	30.2	30.2	67.1	67.1	4.6	4.2	4.0	6.9	7	6	-	-	815614	804230
						1.0	0.2	38	26.0		7.9		30.2		67.0		4.6		4.0		6		-			
					Middle	4.3	0.2	34	25.1	25.1	7.9	7.9	32.6	32.6	55.0	55.0	3.8		6.1		7		-			
						4.3	0.2	36	25.1		7.9		32.6		55.0		3.8		6.1		6		-			
					Bottom	7.6	0.2	16	25.1	25.1	7.9	7.9	32.6	32.6	54.6	54.7	3.7	3.7	10.6		5		-			
						7.6	0.2	10	25.1		7.9		32.6		54.8		3.7		10.6		4		-			
C2	Cloudy	Moderate	07:05	11.6	Surface	1.0	0.4	333	26.3	26.3	7.9	7.9	28.7	28.7	62.0	62.0	4.2	4.2	6.1	7.4	7	6	-	-	825658	806953
						1.0	0.4	332	26.3		7.9		28.7		62.0		4.2		6.1		6		-			
					Middle	5.8	0.5	347	26.1	26.1	7.9	7.9	29.3	29.3	61.7	61.7	4.2		6.2		5		-			
						5.8	0.5	352	26.1		7.9		29.3		61.7		4.2		6.2		6		-			
					Bottom	10.6	0.5	5	25.5	25.5	7.9	7.9	31.1	31.1	61.7	61.9	4.2	4.2	9.9		5		-			
						10.6	0.4	4	25.5		7.9		31.1		62.0		4.2		9.9		5		-			
C3	Misty	Moderate	06:46	10.8	Surface	1.0	0.6	264	24.8	24.8	7.9	7.9	29.3	29.3	59.7	59.7	4.2	4.1	1.1	1.9	4	3	-	-	822097	817797
						1.0	0.6	260	24.8		8.0		29.3		59.7		4.2		1.1		3		-			
					Middle	5.4	0.6	277	24.8	24.5	8.0	8.0	29.3	30.0	59.7	57.6	4.2		1.5		2		-			
						5.4	0.7	279	24.2		8.0		30.8		55.5		3.9		1.6		2		-			
					Bottom	9.8	0.6	264	24.2	24.2	8.0	8.0	30.8	30.9	55.5	56.5	3.9	4.0	2.9		2		-			
						9.8	0.6	257	24.1		8.0		31.1		57.4		4.0		3.0		3		-			
IM1	Rainy	Moderate	05:51	6.7	Surface	1.0	0.2	16	26.1	26.1	7.9	7.9	30.2	30.2	74.9	74.9	5.1	5.1	7.9	8.4	5	6	-	-	818362	806471
						1.0	0.2	21	26.1		7.9		30.2		74.8		5.1		7.8		7		-			
					Middle	3.4	0.2	21	25.5	25.5	7.9	7.9	32.3	32.3	75.9	75.7	5.2		8.8		7		-			
						3.4	0.2	19	25.4		7.9		32.3		75.5		5.1		8.8		6		-			
					Bottom	5.7	0.1	42	25.1	25.1	7.9	7.9	32.7	32.7	63.6	63.7	4.3	4.4	8.6		5		-			
						5.7	0.2	47	25.1		7.9		32.7		63.7		4.4		8.8		5		-			
IM2	Rainy	Moderate	05:56	6.9	Surface	1.0	0.2	359	26.0	26.0	8.0	8.0	31.0	30.9	78.2	78.1	5.3	5.1	5.2	7.8	3	6	-	-	819163	806245
						1.0	0.2	358	26.0		8.0		30.9		78.0		5.3		5.2		6		-			
					Middle	3.5	0.2	14	25.3	25.3	8.0	7.9	32.4	32.4	71.5	71.5	4.9		6.3		6		-			
						3.5	0.1	17	25.3		7.9		32.5		71.5		4.9		6.9		8		-			
					Bottom	5.9	0.1	337	25.1	25.1	7.9	7.9	32.8	32.8	66.9	67.1	4.6	4.6	11.7		6		-			
						5.9	0.1	337	25.1		7.9		32.8		67.2		4.6		11.6		5		-			
IM7	Rainy	Moderate	06:27	8.2	Surface	1.0	0.2	308	26.1	26.1	7.9	7.9	28.9	28.9	66.7	66.7	4.6	4.5	5.0	8.3	5	6	-	-	821328	806817
						1.0	0.3	313	26.0		7.9		28.9		66.6		4.6		5.2		6		-			
					Middle	4.1	0.2	298	25.4	25.4	7.9	7.9	31.5	31.5	64.7	64.6	4.4		8.9		6		-			
						4.1	0.2	294	25.4		7.9		31.6		64.5		4.4		9.9		5		-			
					Bottom	7.2	0.2	308	25.2	25.2	7.9	7.9	32.3	32.3	61.4	61.7	4.2	4.2	10.2		6		-			
						7.2	0.2	308	25.2		7.9		32.3		62.0		4.2		10.5		5		-			

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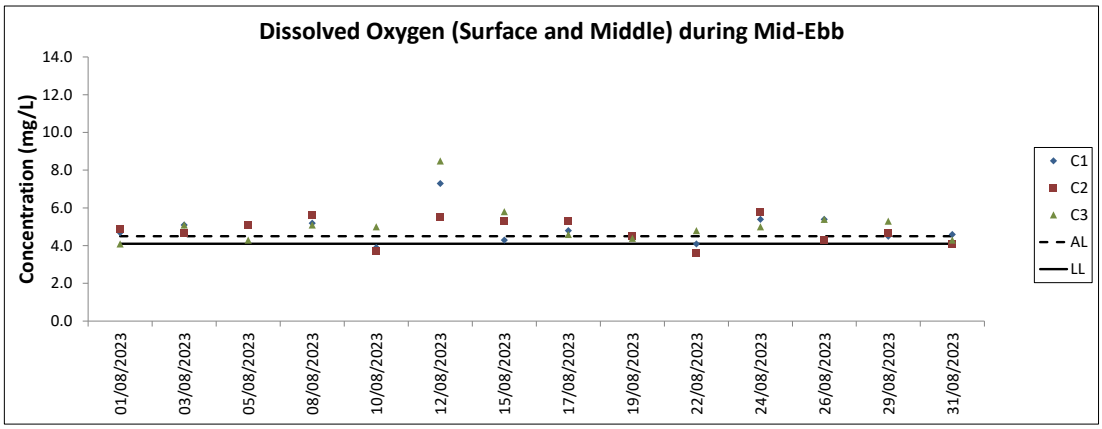
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 August 23 during Mid-Flood Tide

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)		Total Alkalinity		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA		
IM10	Misty	Moderate	08:03	9.8	Surface	1.0	0.5	300	26.5	26.5	7.9	7.9	25.3	25.3	65.4	65.4	4.6	4.4	4.1	5.7	5	4	-	-	822233	809817
						1.0	0.4	303	26.4		7.9		25.4		65.3		4.6		4.1		5		-			
					Middle	4.9	0.4	281	25.8	25.8	7.9	7.9	26.8	26.8	58.6	58.6	4.1		6.1		4		-			
						4.9	0.4	288	25.8		7.9		26.9		58.5		4.1		6.0		3		-			
					Bottom	8.8	0.4	313	25.7	25.7	7.9	7.9	27.1	27.1	59.0	59.1	4.1	4.1	7.0		4		-			
						8.8	0.4	307	25.7		7.9		27.1		59.1		4.1		7.1		4		-			
IM11	Misty	Moderate	07:56	8.0	Surface	1.0	0.5	290	26.2	26.2	7.9	7.9	25.2	25.2	65.1	65.0	4.6	4.3	4.9	6.2	3	3	-	-	821488	810538
						1.0	0.5	286	26.2		7.9		25.3		64.9		4.6		5.0		2		-			
					Middle	4.0	0.5	286	25.4	25.4	7.9	7.9	27.9	27.9	57.4	57.4	4.0		6.0		3		-			
						4.0	0.5	281	25.3		7.9		28.0		57.4		4.0		6.1		4		-			
					Bottom	7.0	0.6	261	25.1	25.1	7.9	7.9	28.6	28.6	57.9	58.0	4.1	4.1	7.6		5		-			
						7.0	0.5	258	25.1		7.9		28.6		58.0		4.1		7.6		3		-			
IM12	Misty	Moderate	07:49	8.2	Surface	1.0	0.6	296	26.0	26.0	7.9	7.9	26.4	26.4	62.1	62.1	4.3	4.3	2.7	3.6	4	4	-	-	821138	811505
						1.0	0.6	295	26.0		7.9		26.5		62.0		4.3		2.7		4		-			
					Middle	4.1	0.6	286	25.6	25.6	7.9	7.9	27.3	27.4	61.5	61.6	4.3		3.4		4		-			
						4.1	0.5	289	25.6		7.9		27.4		61.6		4.3		3.4		4		-			
					Bottom	7.2	0.6	281	25.1	25.1	7.9	7.9	28.5	28.5	62.9	63.1	4.4	4.4	4.9		4		-			
						7.2	0.6	282	25.1		7.9		28.5		63.2		4.4		4.8		4		-			
SR1A	Misty	Moderate	07:24	4.8	Surface	1.0	-	187	26.6	26.6	7.9	7.9	25.1	25.1	63.8	63.8	4.4	4.4	4.9	5.2	4	4	-	-	819971	812666
						1.0	0.0	188	26.6		7.9		25.1		63.8		4.4		4.9		4		-			
					Middle	2.4	0.0	183	-	-	-	-	-	-	-	-	-		-		-		-			
						2.4	0.0	178	-		-		-		-		-		-		-		-			
					Bottom	3.8	0.0	184	25.0	25.0	8.0	8.0	28.9	28.9	64.6	64.9	4.5	4.6	5.6		4		-			
						3.8	0.1	182	25.0		8.0		28.9		65.1		4.6		5.6		4		-			
SR2	Misty	Moderate	07:09	5.8	Surface	1.0	0.1	246	25.9	25.9	8.0	8.0	26.7	26.8	63.1	63.1	4.4	4.4	3.8	4.4	3	3	-	-	821485	814161
						1.0	0.1	246	25.9		8.0		26.8		63.1		4.4		3.7		3		-			
					Middle	-	0.1	262	-	-	-	-	-	-	-	-	-		-		-		-			
						-	0.1	267	-		-		-		-		-		-		-		-			
					Bottom	4.8	0.1	271	25.1	25.1	8.0	8.0	28.5	28.5	59.1	59.2	4.2	4.2	5.1		4		-			
						4.8	0.1	270	25.1		8.0		28.5		59.2		4.2		5.1		3		-			
SR3	Cloudy	Moderate	06:39	8.6	Surface	1.0	0.3	330	26.1	26.1	7.9	7.9	28.1	28.1	66.1	65.8	4.6	4.2	7.1	10.4	7	6	-	-	822144	807588
						1.0	0.3	329	26.0		7.9		28.2		65.4		4.5		7.7		7		-			
					Middle	4.3	0.3	334	25.4	25.4	7.9	7.9	31.6	31.6	57.1	57.2	3.9		10.8		5		-			
						4.3	0.3	334	25.4		7.9		31.6		57.2		3.9		10.4		6		-			
					Bottom	7.6	0.3	311	25.7	25.7	7.9	7.9	31.1	31.1	64.3	64.3	4.4	4.4	13.3		7		-			
						7.6	0.3	312	25.7		7.9		31.1		64.3		4.4		13.2		6		-			
SR4A	Cloudy	Moderate	04:59	8.9	Surface	1.0	0.0	266	26.2	26.2	7.8	7.8	29.7	29.7	70.2	70.2	4.8	4.6	4.8	7.3	6	6	-	-	817165	807825
						1.0	0.0	258	26.2		7.8		29.7		70.2		4.8		5.0		7		-			
					Middle	4.5	0.0	276	25.8	25.8	7.8	7.8	30.4	30.4	62.4	62.4	4.3		7.9		7		-			
						4.5	0.0	280	25.8		7.8		30.4		62.4		4.3		8.0		6		-			
					Bottom	7.9	0.0	257	25.6	25.6	7.8	7.8	31.1	31.1	52.5	52.6	3.6	3.6	9.2		6		-			
						7.9	0.1	253	25.6		7.8		31.1		52.6		3.6		9.2		6		-			
SR8	Misty	Moderate	07:44	5.2	Surface	1.0	-	-	25.6	25.6	7.9	7.9	27.8	27.9	61.5	61.6	4.3	4.3	6.3	6.7	3	3	-	-	820377	811616
						1.0	-	-	25.6		7.9		27.9		61.7		4.3		6.4		4		-			
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-			
						-	-	-	-		-		-		-		-		-		-		-			
					Bottom	4.2	-	-	25.1	25.1	7.9	7.9	28.6	28.6	63.5	63.8	4.5	4.5	7.0		2		-			
						4.2	-	-	25.1		7.9		28.6		64.1		4.5		7.1		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)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
08/08/2023
10/08/2023
12/08/2023
15/08/2023
17/08/2023
19/08/2023
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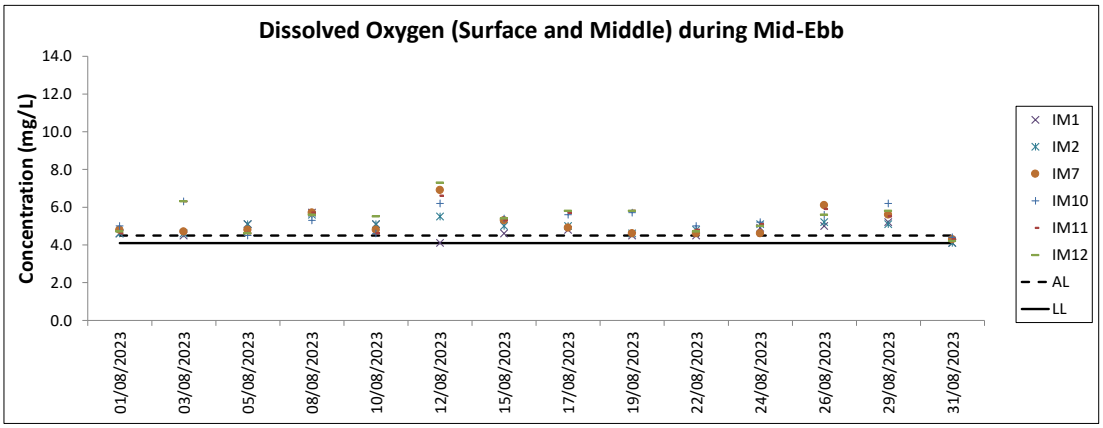
31/08/2023
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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0.0
01/08/2023
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17/08/2023
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IM1
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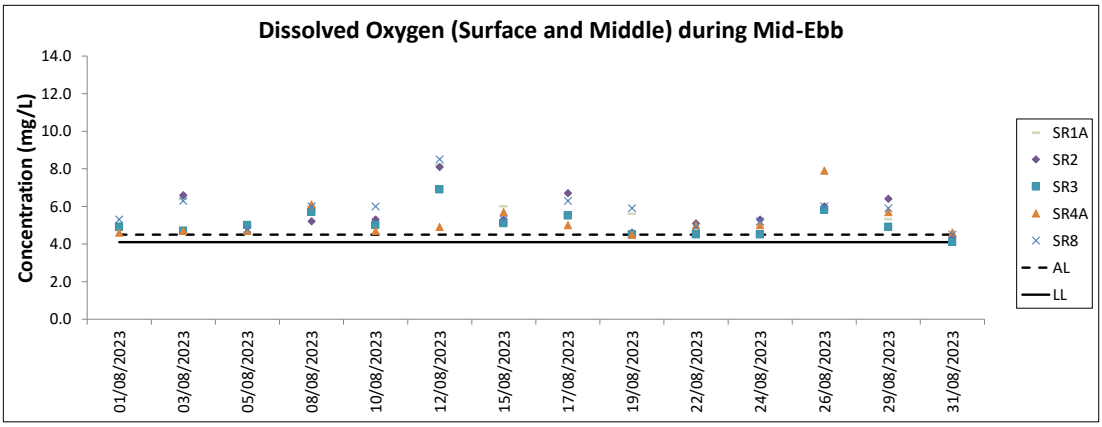
Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/08/2023
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05/08/2023
08/08/2023
10/08/2023
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17/08/2023
19/08/2023
22/08/2023
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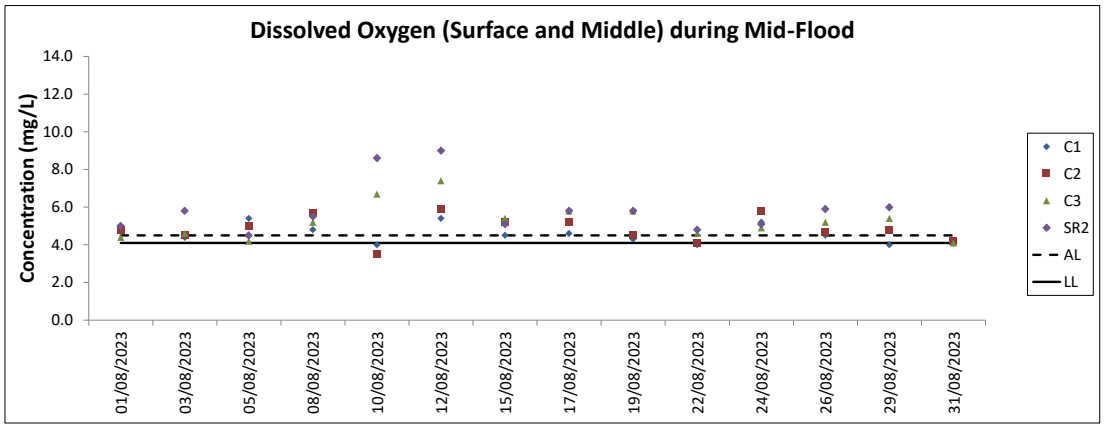
SR1A
SR2
SR3
SR4A
SR8
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
08/08/2023
10/08/2023
12/08/2023
15/08/2023
17/08/2023
19/08/2023
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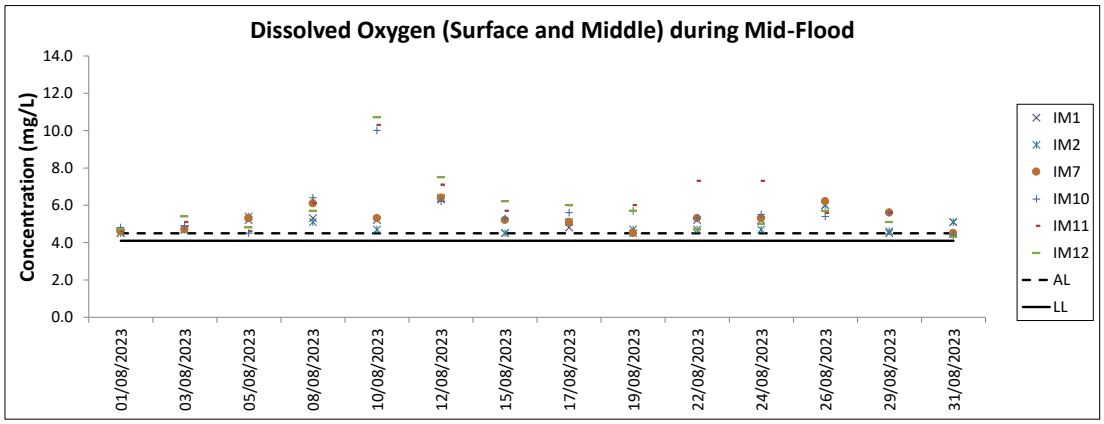
31/08/2023
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
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IM1
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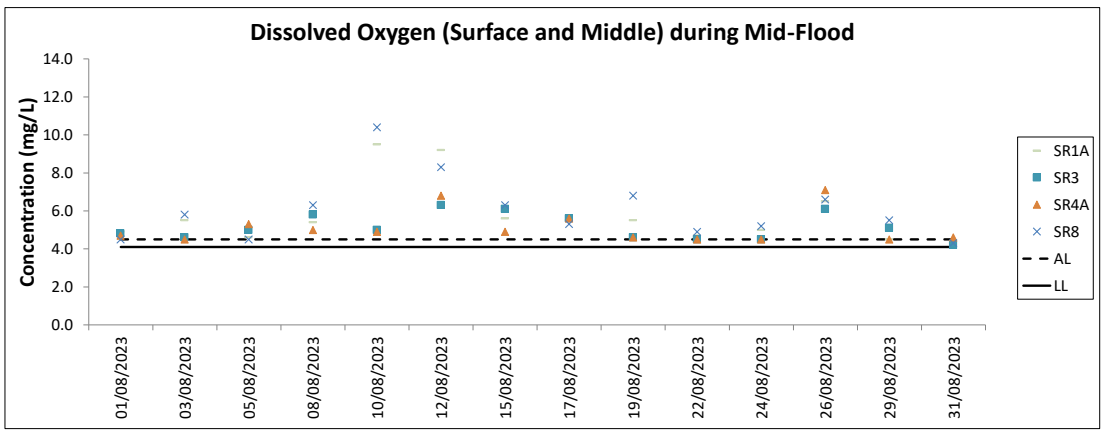
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
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17/08/2023
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SR1A
SR3
SR4A
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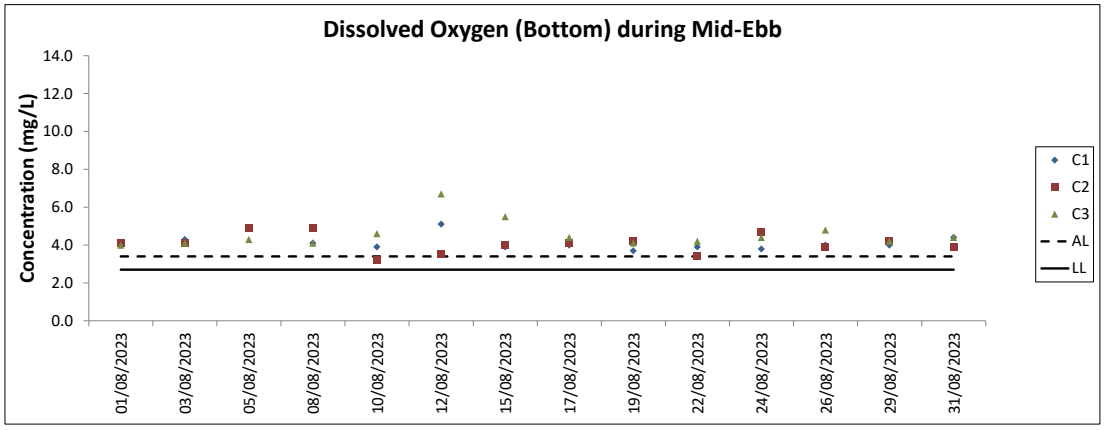
Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
08/08/2023
10/08/2023
12/08/2023
15/08/2023
17/08/2023
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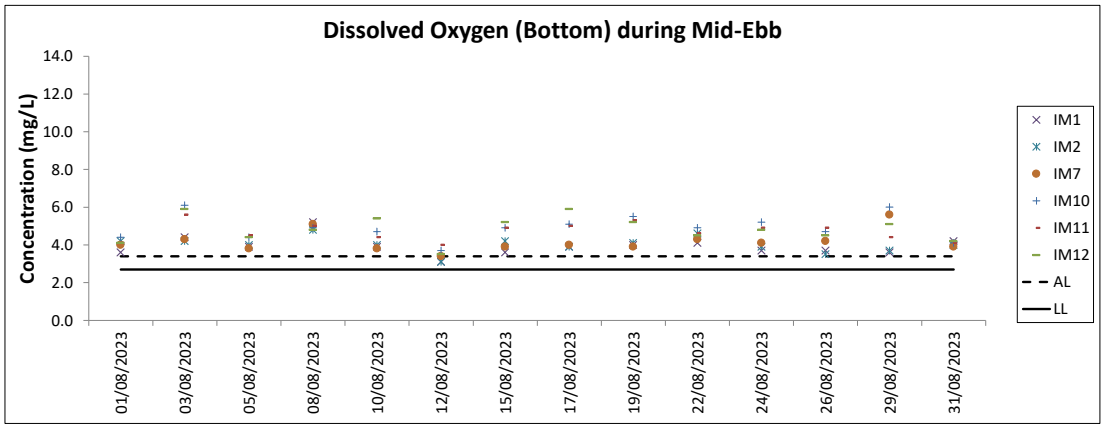
31/08/2023
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
01/08/2023
03/08/2023
05/08/2023
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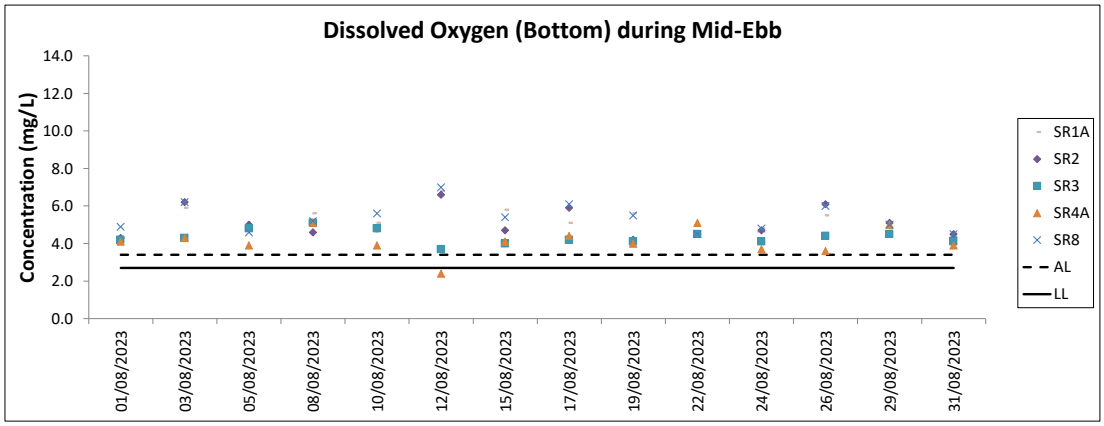
Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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4.0
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SR4A
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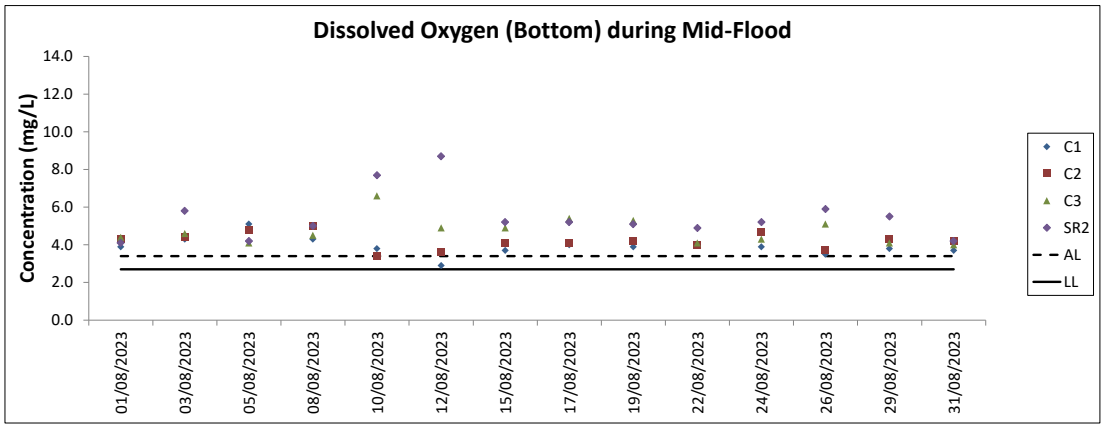
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
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01/08/2023
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31/08/2023
C1
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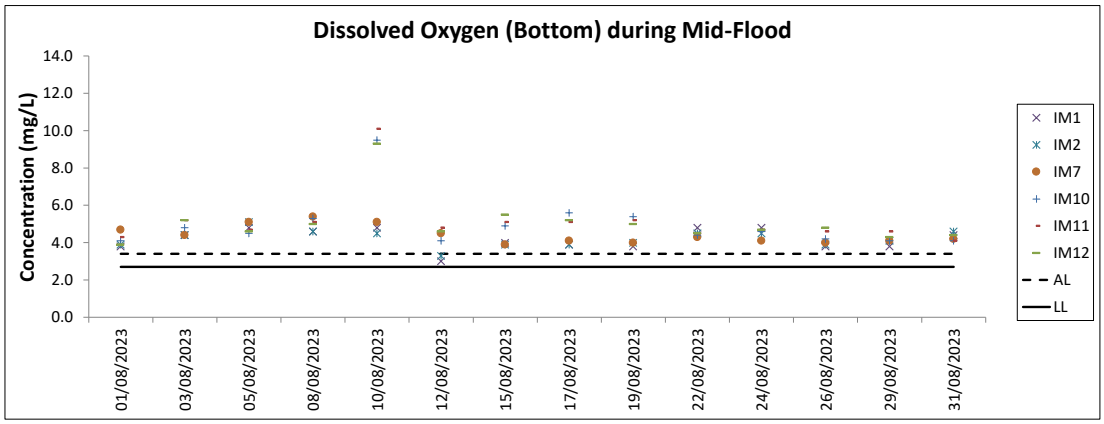
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2023
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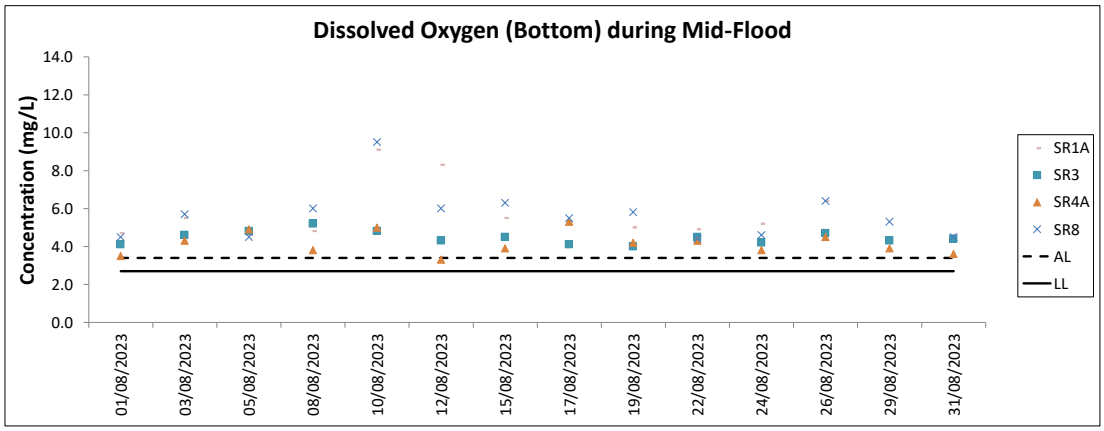
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
01/08/2023
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SR1A
SR3
SR4A
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AL
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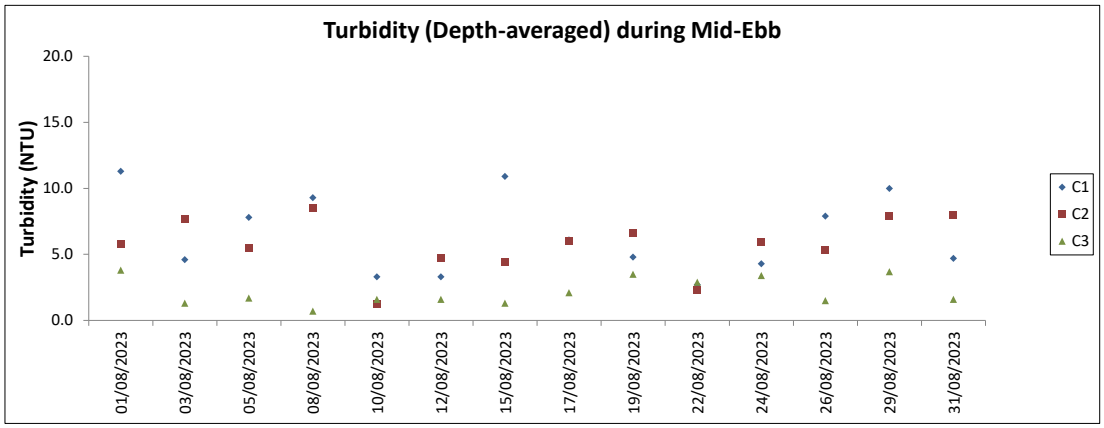
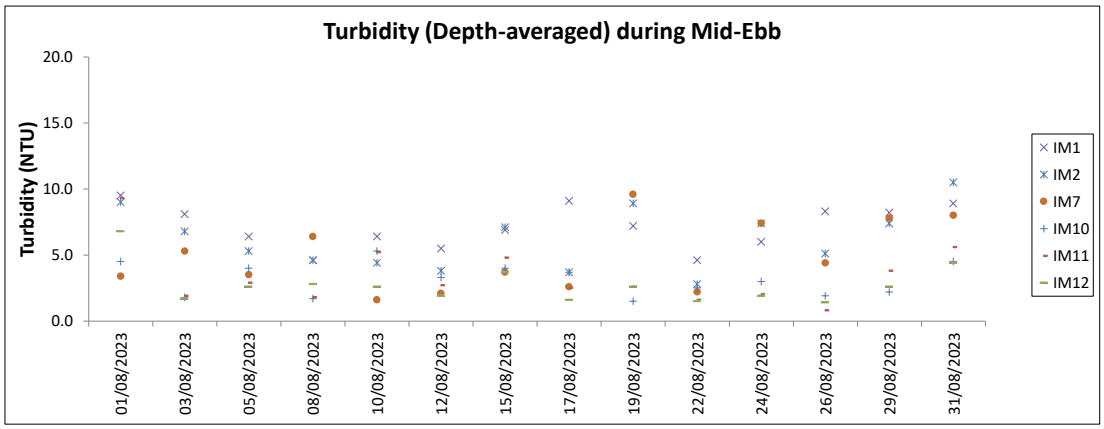
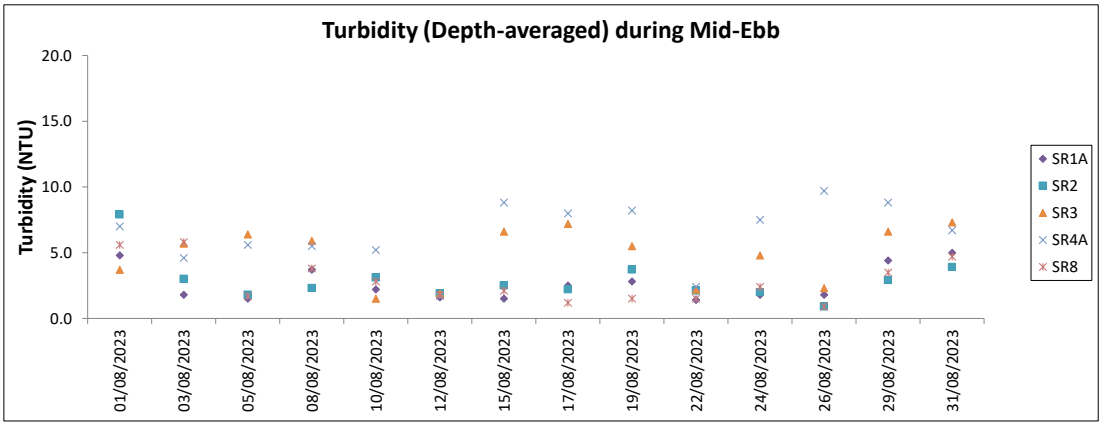
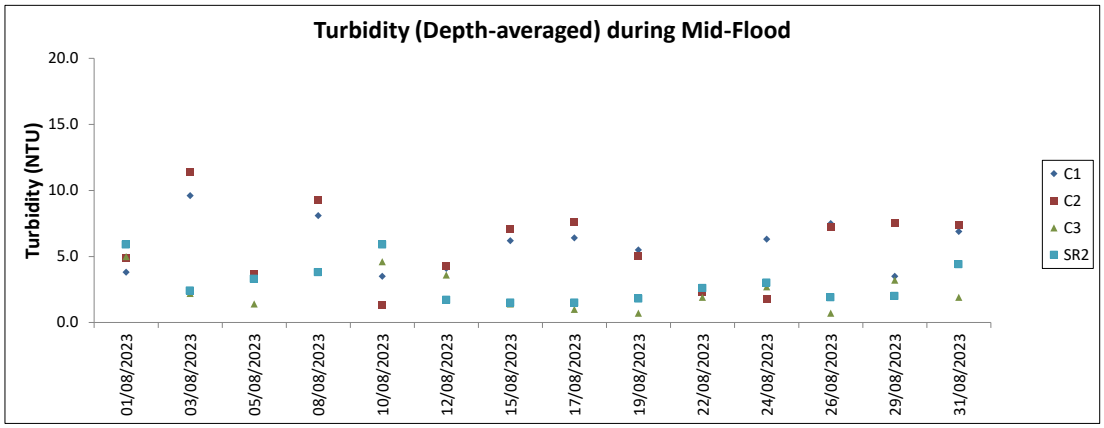
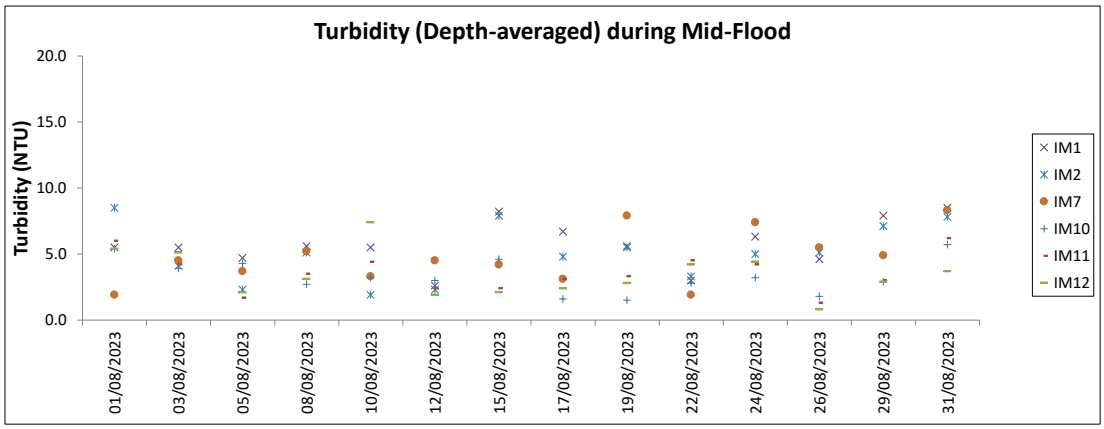


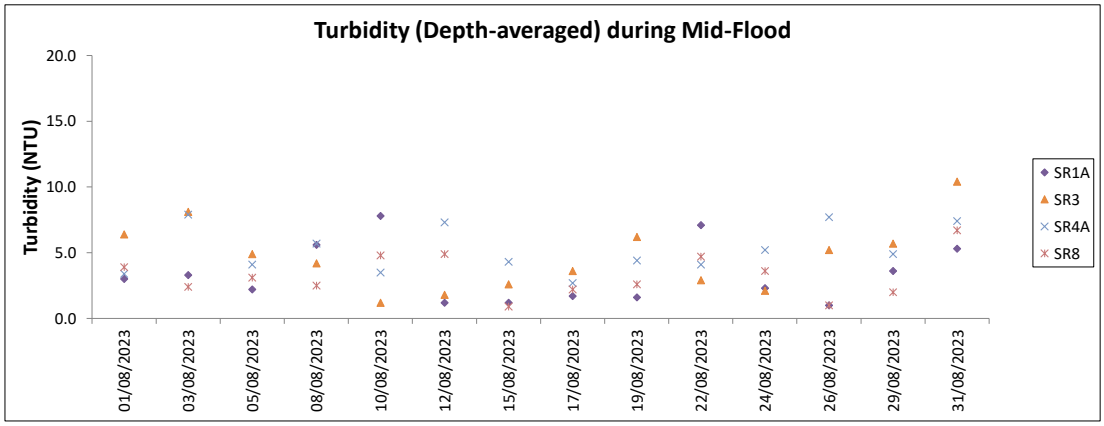




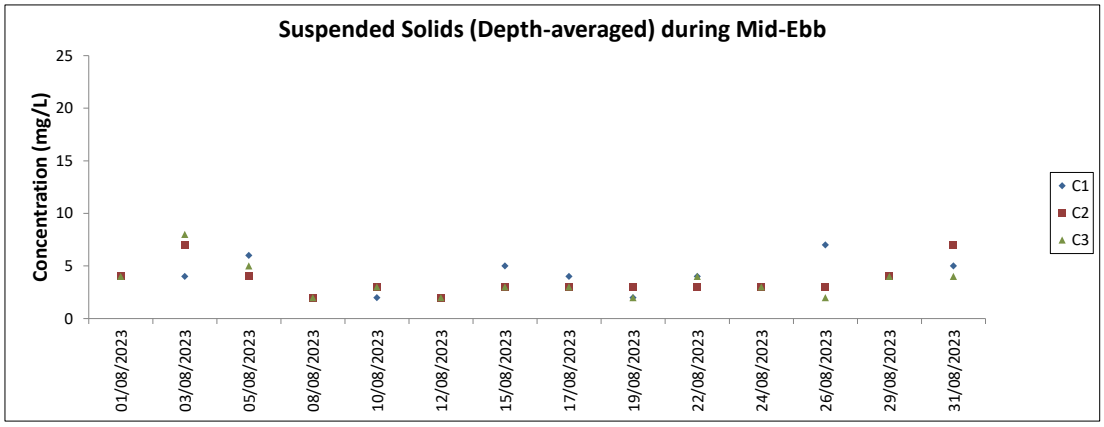
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

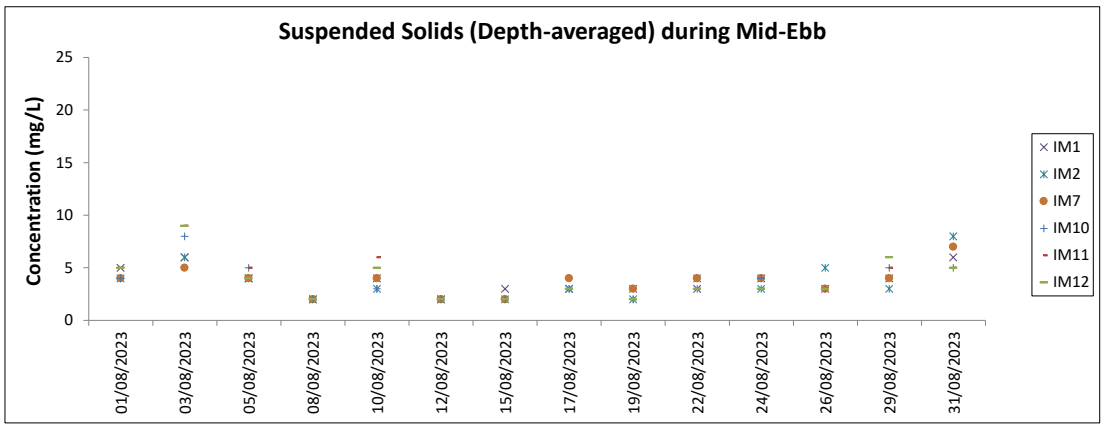


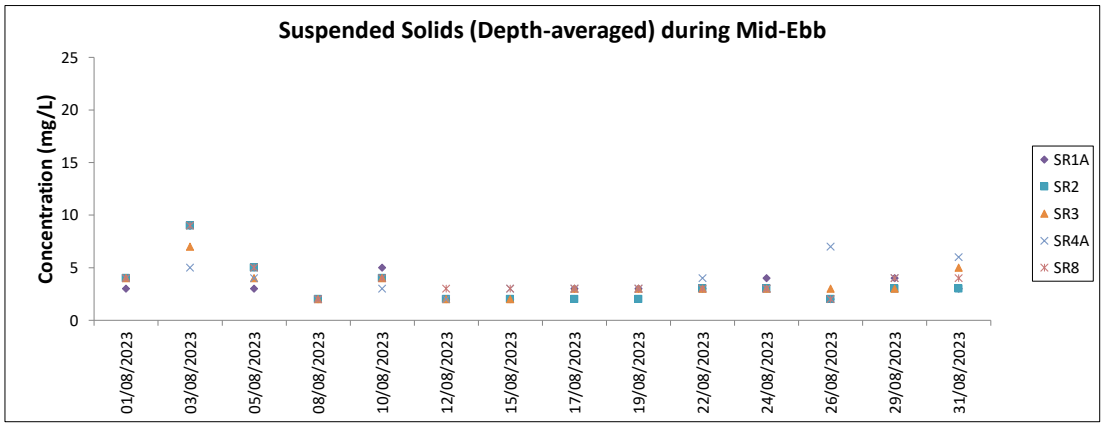




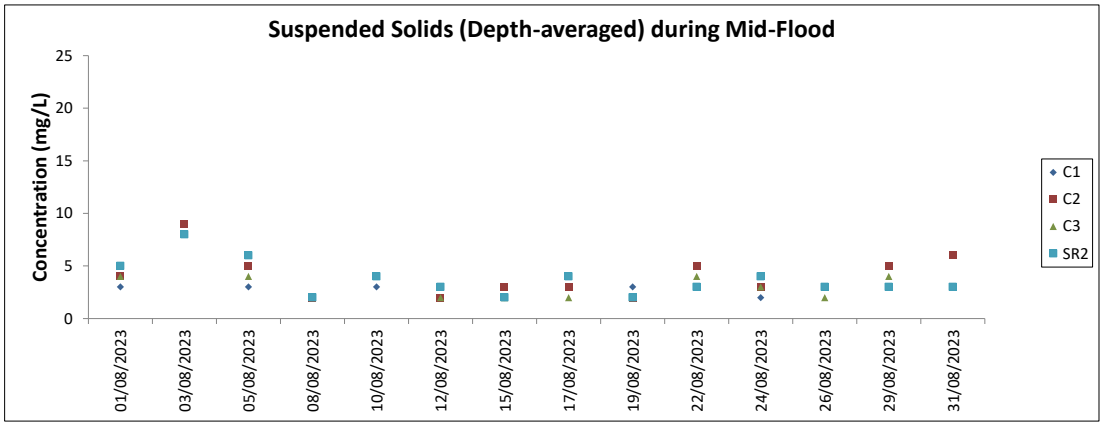
Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

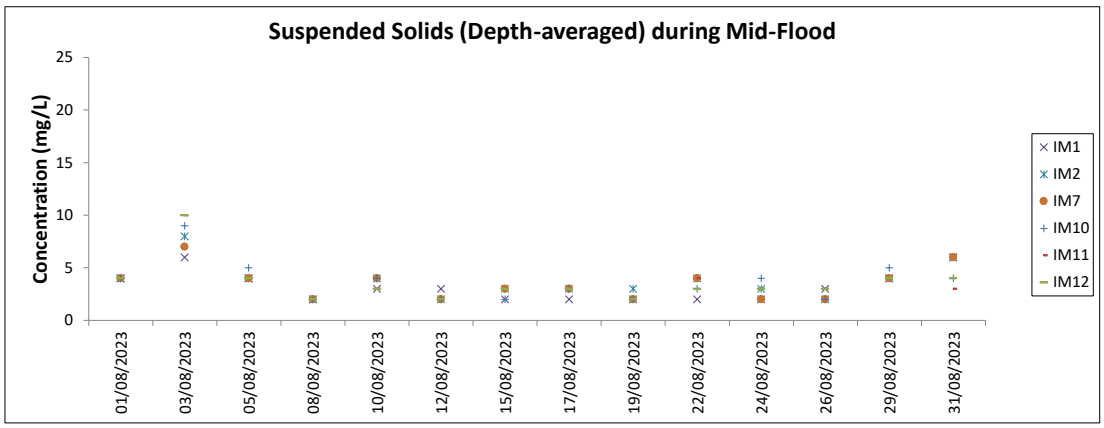


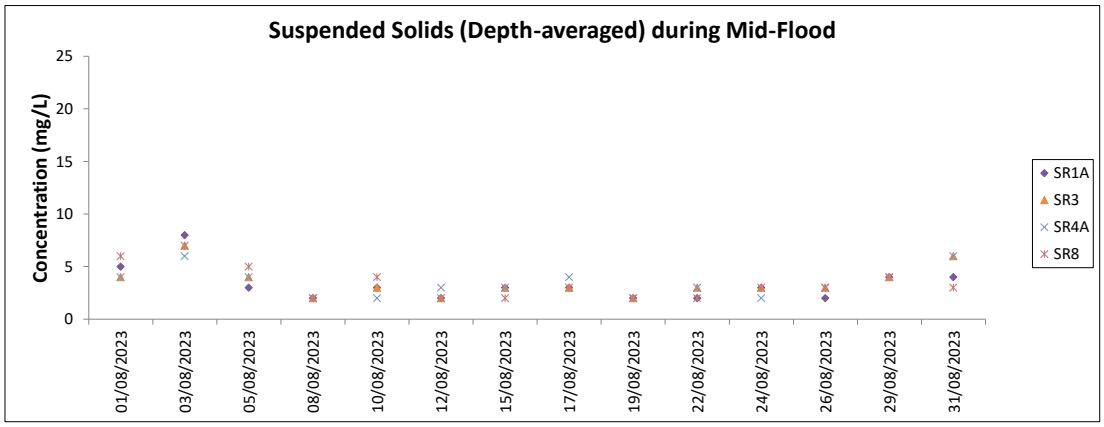




Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.







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
1-Jun-23	SWL	1	6.440	SUMMER	32166	3RS ET	P
1-Jun-23	SWL	2	34.380	SUMMER	32166	3RS ET	P
1-Jun-23	SWL	3	12.900	SUMMER	32166	3RS ET	P
1-Jun-23	SWL	2	15.380	SUMMER	32166	3RS ET	S
1-Jun-23	SWL	3	1.000	SUMMER	32166	3RS ET	S
2-Jun-23	WL	2	16.884	SUMMER	32166	3RS ET	P
2-Jun-23	WL	2	8.320	SUMMER	32166	3RS ET	S
2-Jun-23	AW	1	4.790	SUMMER	32166	3RS ET	P
5-Jun-23	NWL	2	3.480	SUMMER	32166	3RS ET	P
5-Jun-23	NWL	3	49.220	SUMMER	32166	3RS ET	P
5-Jun-23	NWL	4	10.900	SUMMER	32166	3RS ET	P
5-Jun-23	NWL	3	9.600	SUMMER	32166	3RS ET	S
5-Jun-23	NWL	4	2.500	SUMMER	32166	3RS ET	S
8-Jun-23	SWL	2	0.700	SUMMER	32166	3RS ET	P
8-Jun-23	SWL	3	51.824	SUMMER	32166	3RS ET	P
8-Jun-23	SWL	4	1.013	SUMMER	32166	3RS ET	P
8-Jun-23	SWL	2	1.800	SUMMER	32166	3RS ET	S
8-Jun-23	SWL	3	13.880	SUMMER	32166	3RS ET	S
9-Jun-23	AW	2	4.650	SUMMER	32166	3RS ET	P
9-Jun-23	WL	1	1.930	SUMMER	32166	3RS ET	P
9-Jun-23	WL	2	14.782	SUMMER	32166	3RS ET	P
9-Jun-23	WL	1	2.240	SUMMER	32166	3RS ET	S
9-Jun-23	WL	2	5.948	SUMMER	32166	3RS ET	S
9-Jun-23	WL	3	0.300	SUMMER	32166	3RS ET	S
13-Jun-23	NWL	2	59.180	SUMMER	32166	3RS ET	P
13-Jun-23	NWL	3	3.100	SUMMER	32166	3RS ET	P
13-Jun-23	NWL	2	12.420	SUMMER	32166	3RS ET	S
14-Jun-23	NEL	2	37.440	SUMMER	32166	3RS ET	P
14-Jun-23	NEL	2	10.060	SUMMER	32166	3RS ET	S
20-Jun-23	NEL	2	33.080	SUMMER	32166	3RS ET	P
20-Jun-23	NEL	3	4.120	SUMMER	32166	3RS ET	P
20-Jun-23	NEL	2	10.200	SUMMER	32166	3RS ET	S
4-Jul-23	NEL	2	34.860	SUMMER	32166	3RS ET	P
4-Jul-23	NEL	3	2.000	SUMMER	32166	3RS ET	P
4-Jul-23	NEL	2	10.040	SUMMER	32166	3RS ET	S
6-Jul-23	NWL	2	15.200	SUMMER	32166	3RS ET	P
6-Jul-23	NWL	3	48.600	SUMMER	32166	3RS ET	P
6-Jul-23	NWL	3	11.700	SUMMER	32166	3RS ET	S
7-Jul-23	AW	3	4.720	SUMMER	32166	3RS ET	P
7-Jul-23	WL	3	18.416	SUMMER	32166	3RS ET	P
7-Jul-23	WL	3	9.974	SUMMER	32166	3RS ET	S
7-Jul-23	WL	4	1.030	SUMMER	32166	3RS ET	S
10-Jul-23	NEL	2	10.000	SUMMER	32166	3RS ET	P
10-Jul-23	NEL	3	26.250	SUMMER	32166	3RS ET	P
10-Jul-23	NEL	2	3.950	SUMMER	32166	3RS ET	S
10-Jul-23	NEL	3	6.700	SUMMER	32166	3RS ET	S
11-Jul-23	WL	2	0.914	SUMMER	32166	3RS ET	P
11-Jul-23	WL	3	16.632	SUMMER	32166	3RS ET	P
11-Jul-23	WL	3	9.308	SUMMER	32166	3RS ET	S
11-Jul-23	AW	3	4.730	SUMMER	32166	3RS ET	P
12-Jul-23	SWL	2	42.491	SUMMER	32166	3RS ET	P
12-Jul-23	SWL	3	12.177	SUMMER	32166	3RS ET	P
12-Jul-23	SWL	2	12.122	SUMMER	32166	3RS ET	S
12-Jul-23	SWL	3	3.070	SUMMER	32166	3RS ET	S
13-Jul-23	SWL	2	31.460	SUMMER	32166	3RS ET	P
13-Jul-23	SWL	3	21.490	SUMMER	32166	3RS ET	P
13-Jul-23	SWL	2	12.180	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
13-Jul-23	SWL	3	4.500	SUMMER	32166	3RS ET	S
14-Jul-23	NWL	2	63.800	SUMMER	32166	3RS ET	P
14-Jul-23	NWL	2	11.700	SUMMER	32166	3RS ET	S
02-Aug-23	SWL	2	35.924	SUMMER	32166	3RS ET	P
02-Aug-23	SWL	3	14.605	SUMMER	32166	3RS ET	P
02-Aug-23	SWL	2	13.071	SUMMER	32166	3RS ET	S
02-Aug-23	SWL	3	2.370	SUMMER	32166	3RS ET	S
03-Aug-23	SWL	2	50.260	SUMMER	32166	3RS ET	P
03-Aug-23	SWL	3	3.500	SUMMER	32166	3RS ET	P
03-Aug-23	SWL	2	14.140	SUMMER	32166	3RS ET	S
03-Aug-23	SWL	3	1.100	SUMMER	32166	3RS ET	S
08-Aug-23	AW	2	4.770	SUMMER	32166	3RS ET	P
08-Aug-23	WL	2	5.650	SUMMER	32166	3RS ET	P
08-Aug-23	WL	3	13.958	SUMMER	32166	3RS ET	P
08-Aug-23	WL	2	3.236	SUMMER	32166	3RS ET	S
08-Aug-23	WL	3	6.443	SUMMER	32166	3RS ET	S
09-Aug-23	NWL	1	3.200	SUMMER	32166	3RS ET	P
09-Aug-23	NWL	2	58.200	SUMMER	32166	3RS ET	P
09-Aug-23	NWL	3	2.100	SUMMER	32166	3RS ET	P
09-Aug-23	NWL	1	12.2	SUMMER	32166	3RS ET	S
16-Aug-23	NEL	2	19.31	SUMMER	32166	3RS ET	P
16-Aug-23	NEL	3	17.6	SUMMER	32166	3RS ET	P
16-Aug-23	NEL	2	8.19	SUMMER	32166	3RS ET	S
16-Aug-23	NEL	3	1.8	SUMMER	32166	3RS ET	S
17-Aug-23	NEL	2	37.41	SUMMER	32166	3RS ET	P
17-Aug-23	NEL	2	9.99	SUMMER	32166	3RS ET	S
22-Aug-23	NWL	2	63.5	SUMMER	32166	3RS ET	P
22-Aug-23	NWL	2	12.2	SUMMER	32166	3RS ET	S
24-Aug-23	AW	2	4.8	SUMMER	32166	3RS ET	P
24-Aug-23	WL	2	13.49	SUMMER	32166	3RS ET	P
24-Aug-23	WL	3	6.15	SUMMER	32166	3RS ET	P
24-Aug-23	WL	2	6.47	SUMMER	32166	3RS ET	S
24-Aug-23	WL	3	3.42	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
1-Jun-23	1	1318	FP	4	SWL	2	385	ON	3RS ET	22.1541	113.8882	SUMMER	NONE	P
1-Jun-23	2	1505	CWD	3	SWL	2	79	ON	3RS ET	22.1936	113.8492	SUMMER	NONE	P
2-Jun-23	1	1054	CWD	3	WL	2	591	ON	3RS ET	22.2417	113.8469	SUMMER	NONE	P
2-Jun-23	2	1112	CWD	1	WL	2	698	ON	3RS ET	22.2410	113.8323	SUMMER	NONE	P
2-Jun-23	3	1130	CWD	9	WL	2	30	ON	3RS ET	22.2327	113.8374	SUMMER	NONE	P
2-Jun-23	4	1153	CWD	1	WL	2	336	ON	3RS ET	22.2247	113.8372	SUMMER	NONE	S
2-Jun-23	5	1206	CWD	4	WL	2	100	ON	3RS ET	22.2237	113.8276	SUMMER	NONE	P
2-Jun-23	6	1217	CWD	4	WL	2	161	ON	3RS ET	22.2184	113.8204	SUMMER	NONE	S
2-Jun-23	7	1250	CWD	1	WL	2	1085	ON	3RS ET	22.2053	113.8213	SUMMER	NONE	P
2-Jun-23	8	1259	CWD	5	WL	2	153	ON	3RS ET	22.1964	113.8373	SUMMER	NONE	P
2-Jun-23	9	1332	CWD	2	SWL	2	N/A	OFF	3RS ET	22.1932	113.8510	SUMMER	PURSE SEINER	N/A
8-Jun-23	1	1446	CWD	1	SWL	3	223	ON	3RS ET	22.1958	113.8591	SUMMER	NONE	P
8-Jun-23	2	1457	CWD	4	SWL	3	321	ON	3RS ET	22.1892	113.8596	SUMMER	NONE	P
9-Jun-23	1	1058	CWD	2	WL	1	191	ON	3RS ET	22.2579	113.8376	SUMMER	NONE	S
9-Jun-23	2	1137	CWD	3	WL	2	105	ON	3RS ET	22.2325	113.8282	SUMMER	PURSE SEINER	P
9-Jun-23	3	1154	CWD	1	WL	2	580	ON	3RS ET	22.2291	113.8379	SUMMER	NONE	S
9-Jun-23	4	1203	CWD	3	WL	2	1060	ON	3RS ET	22.2243	113.8275	SUMMER	NONE	P
9-Jun-23	5	1253	CWD	6	WL	2	280	ON	3RS ET	22.2062	113.8240	SUMMER	NONE	P
9-Jun-23	6	1315	CWD	4	WL	2	100	ON	3RS ET	22.1981	113.8271	SUMMER	NONE	S
9-Jun-23	7	1328	CWD	1	WL	2	22	ON	3RS ET	22.1879	113.8407	SUMMER	NONE	P
13-Jun-23	1	1128	CWD	1	NWL	2	137	ON	3RS ET	22.3690	113.8779	SUMMER	NONE	P
7-Jul-23	1	1101	CWD	1	WL	3	268	ON	3RS ET	22.2415	113.8368	SUMMER	NONE	P
7-Jul-23	2	1200	CWD	1	WL	3	91	ON	3RS ET	22.1961	113.8325	SUMMER	NONE	P
7-Jul-23	3	1215	CWD	15	WL	3	134	ON	3RS ET	22.1875	113.8401	SUMMER	NONE	P
11-Jul-23	1	1056	CWD	3	WL	3	275	ON	3RS ET	22.2416	113.8358	SUMMER	NONE	P
11-Jul-23	2	1133	CWD	4	WL	3	35	ON	3RS ET	22.2230	113.8247	SUMMER	NONE	P
11-Jul-23	3	1142	CWD	5	WL	3	6	ON	3RS ET	22.2160	113.8198	SUMMER	NONE	S
11-Jul-23	4	1214	CWD	3	WL	3	390	ON	3RS ET	22.2052	113.8313	SUMMER	NONE	P
11-Jul-23	5	1219	CWD	3	WL	3	170	ON	3RS ET	22.1975	113.8277	SUMMER	NONE	S
11-Jul-23	6	1248	CWD	1	WL	3	26	ON	3RS ET	22.1962	113.8345	SUMMER	NONE	P
11-Jul-23	7	1307	CWD	2	WL	3	339	ON	3RS ET	22.1881	113.8414	SUMMER	NONE	S
12-Jul-23	1	1047	FP	3	SWL	2	46	ON	3RS ET	22.1590	113.9357	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-23	2	1123	FP	2	SWL	2	39	ON	3RS ET	22.2022	113.9274	SUMMER	NONE	P
12-Jul-23	3	1145	FP	1	SWL	2	211	ON	3RS ET	22.1711	113.9188	SUMMER	NONE	P
12-Jul-23	4	1350	CWD	1	SWL	2	145	ON	3RS ET	22.1895	113.8769	SUMMER	NONE	P
13-Jul-23	1	1054	FP	1	SWL	2	34	ON	3RS ET	22.1510	113.9363	SUMMER	NONE	P
13-Jul-23	2	1227	CWD	1	SWL	2	61	ON	3RS ET	22.1894	113.9070	SUMMER	NONE	S
02-Aug-23	1	1023	CWD	1	SWL	2	477	ON	3RS ET	22.2085	113.9362	SUMMER	NONE	P
02-Aug-23	2	1202	FP	11	SWL	2	94	ON	3RS ET	22.1441	113.9176	SUMMER	NONE	P
02-Aug-23	3	1346	CWD	1	SWL	3	102	ON	3RS ET	22.2000	113.8881	SUMMER	NONE	P
02-Aug-23	4	1416	CWD	4	SWL	3	171	ON	3RS ET	22.1882	113.8786	SUMMER	NONE	P
02-Aug-23	5	1444	CWD	1	SWL	3	247	ON	3RS ET	22.1624	113.8689	SUMMER	NONE	P
02-Aug-23	6	1458	CWD	8	SWL	3	523	ON	3RS ET	22.1687	113.8688	SUMMER	NONE	P
02-Aug-23	7	1529	CWD	1	SWL	2	294	ON	3RS ET	22.1982	113.8684	SUMMER	PURSE SEINER	P
02-Aug-23	8	1549	CWD	3	SWL	2	225	ON	3RS ET	22.1934	113.8587	SUMMER	NONE	P
02-Aug-23	9	1605	CWD	2	SWL	2	202	ON	3RS ET	22.1849	113.8591	SUMMER	NONE	P
02-Aug-23	10	1630	CWD	8	SWL	2	272	ON	3RS ET	22.1906	113.8495	SUMMER	NONE	P
03-Aug-23	1	1152	FP	2	SWL	2	157	ON	3RS ET	22.1564	113.9173	SUMMER	NONE	P
03-Aug-23	2	1310	FP	3	SWL	2	208	ON	3RS ET	22.1495	113.8940	SUMMER	NONE	S
03-Aug-23	3	1352	CWD	4	SWL	2	346	ON	3RS ET	22.1949	113.8785	SUMMER	NONE	P
03-Aug-23	4	1523	CWD	5	SWL	3	343	ON	3RS ET	22.1889	113.8508	SUMMER	PURSE SEINER	P
08-Aug-23	1	1111	CWD	1	WL	2	108	ON	3RS ET	22.2234	113.8301	SUMMER	NONE	P
08-Aug-23	2	1131	CWD	2	WL	3	53	ON	3RS ET	22.2147	113.8289	SUMMER	NONE	P
08-Aug-23	3	1155	CWD	3	WL	2	473	ON	3RS ET	22.2055	113.8243	SUMMER	NONE	P
08-Aug-23	4	1213	CWD	3	WL	2	15	ON	3RS ET	22.2017	113.8238	SUMMER	NONE	S
08-Aug-23	5	1226	CWD	4	WL	3	23	ON	3RS ET	22.1974	113.8269	SUMMER	NONE	S
08-Aug-23	6	1256	CWD	6	WL	3	537	ON	3RS ET	22.1876	113.8326	SUMMER	NONE	P
24-Aug-23	1	1118	CWD	2	WL	3	108	ON	3RS ET	22.2176	113.8196	SUMMER	NONE	S
24-Aug-23	2	1147	CWD	2	WL	3	204	ON	3RS ET	22.2056	113.8286	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 449.06 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 19 on-effort sightings and total number of 61 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in August 2023 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in August 2023

$$STG = \frac{19}{449.06} \times 100 = 4.23$$

Encounter Rate by Number of Dolphins (ANI) in August 2023

$$ANI = \frac{61}{449.06} \times 100 = 13.58$$

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

A total of 1328.09 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 50 on-effort sightings and total number of 158 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)

$$STG = \frac{50}{1328.09} \times 100 = 3.76$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{158}{1328.09} \times 100 = 11.90$$

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

	
SLMM060_20230802_1_8	SLMM003_20230802_4_4
	
SLMM052_20230802_4_2	SLMM037_20230802_8_1
	
WLMM001_20230802_8_4	SLMM022_20230802_9_2
	
NLMM027_20230802_10_1	SLMM002_20230802_10_4

	
SLMM022_20230802_10_3	SLMM044_20230802_10_1
	
WLMM001_20230802_10_5	SLMM010_20230803_3_6
	
SLMM029_20230803_3_5	SLMM049_20230803_3_1
	
SLMM002_20230803_4_1	WLMM028_20230803_4_1

	
WLMM056_20230803_4_3	WLMM093_20230803_4_2
	
WLMM102_20230803_4_2	WLMM093_20230808_2_3
	
WLMM102_20230808_2_8	NLMM070_20230808_3_1
	
SLMM022_20230808_3_15	SLMM052_20230808_4_11

	
WLMM001_20230808_4_3	WLMM018_20230808_5_8
	
WLMM058_20230808_5_4	WLMM190_20230808_5_5
	
SLMM027_20230808_6_10	WLMM073_20230808_6_4
	
WLMM118_20230808_6_10	

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
15/Aug/23	Lung Kwu Chau	8:49	14:49	6:00	2	1	1	1
23/Aug/23	Sha Chau	10:39	16:39	6:00	2	1	0	0

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

Appendix D. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	: NICK SIN	WORK ORDER	: HK2315853
CLIENT	: MOTT MACDONALD HONG KONG LIMITED		
ADDRESS	: 3/F, MANULIFE PLACE, 348 KWUN TONG ROAD, KWUN TONG, KLN	SUB-BATCH	: 1
		DATE RECEIVED	: 25-APR-2023
		DATE OF ISSUE	: 9-MAY-2023
PROJECT	: CALIBIRATION/PERFORMANCE CHECK OF DUST METER	NO. OF SAMPLES	: 1
		CLIENT ORDER	: ---

General Comments

- **Sample(s) was/ were submitted by client. Sample(s) arrived laboratory in ambient condition. The result(s) related only to the item(s) tested.**
- **Sample information (Project name, Sample ID, Sampling date/time, etc.) is provided by client.**
- **Result(s) of sample(s) is/are reported on as received basis, unless otherwise specified.**
- **Calibration was subcontracted to and analysed by Action-United Environmental Services & Consulting (AUES).**

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	Managing Director

This report supersedes any previous report(s) with the same work order number.

All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the **ALS Laboratory Group**

11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 **www.alsglobal.com**

WORK ORDER : HK2315853
SUB-BATCH : 1
CLIENT : MOTT MACDONALD HONG KONG LIMITED
PROJECT : CALIBIRATION/PERFORMANCE CHECK OF DUST METER

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2315853-001	S/N:597337	Equipments	25-Apr-2023	S/N:597337

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	597337
Equipment Ref:	Nil
Job Order	HK2315853

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	27 February 2023

Equipment Verification Results:

Testing Date: 27&28 April 2023

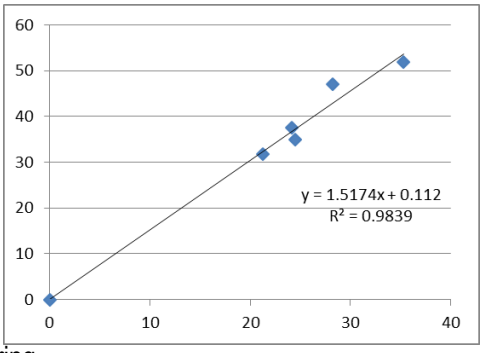
Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m^3 (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr01min	09:37 ~ 11:38	22.7	1015.2	31.8	2559	21.2
2hr01min	11:45 ~ 13:46	22.7	1015.2	34.9	2970	24.5
2hr03min	09:11 ~ 11:14	24.1	1013.8	37.5	2971	24.2
2hr07min	11:18 ~ 13:25	24.1	1013.8	51.9	4489	35.3
2hr01min	13:30 ~ 15:31	24.1	1013.8	47.1	3404	28.2

Linear Regression of Y or X

Slope (K-factor): 1.5174 (µg/m3)/CPM

Correlation Coefficient 0.9919

Date of Issue 4 May 2023



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 1.5174 (µg/m3)/CPM should be applied for TSP monitoring

*If R<0.5, repair or re-verification is required for the equipment

Operator : Fai So Signature : Date : 4 May 2023

QC Reviewer : Ben Tam Signature : Date : 4 May 2023

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	27-Feb-23
Location ID :	Calibration Room	Next Calibration Date:	27-May-23

CONDITIONS

Sea Level Pressure (hPa)	1024	Corrected Pressure (mm Hg)	768
Temperature (°C)	17.8	Temperature (K)	291

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.10977
Model->	5025A	Qstd Intercept ->	-0.03782
Calibration Date->	15-Dec-22	Expiry Date->	15-Dec-23

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6	6	12.0	1.689	55	55.97	Slope = 32.9819
13	4.8	4.8	9.6	1.512	48	48.85	Intercept = 0.0741
10	3.7	3.7	7.4	1.330	44	44.78	Corr. coeff. = 0.9968
8	2.6	2.6	5.2	1.118	37	37.65	
5	1.6	1.6	3.2	0.881	28	28.49	

Calculations :

Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]

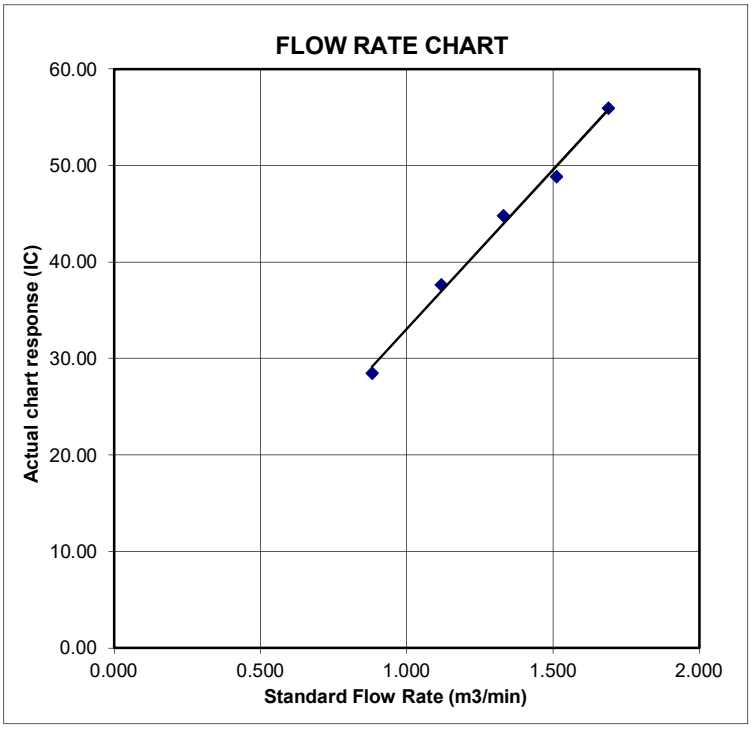
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
December 15, 2023

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	December 15, 2022	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 748.0	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **4064**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4430	3.2	2.00
2	3	4	1	1.0210	6.4	4.00
3	5	6	1	0.9170	7.9	5.00
4	7	8	1	0.8730	8.8	5.50
5	9	10	1	0.7210	12.8	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9900	0.6861	1.4101	0.9957	0.6900	0.8881
0.9858	0.9655	1.9943	0.9914	0.9711	1.2560
0.9838	1.0728	2.2296	0.9894	1.0790	1.4042
0.9826	1.1255	2.3385	0.9882	1.1320	1.4728
0.9772	1.3554	2.8203	0.9829	1.3632	1.7762
QSTD	**m=**	**2.10977**	**QA**	**m=**	**1.32110**
	b=	**-0.03782**		**b=**	**-0.02382**
	r=	**0.99998**		**r=**	**0.99998**

Calculations

Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime

For subsequent flow rate calculations:

Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$

Qa= $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg

Key
ΔH: calibrator manometer reading (in H2O)
ΔP: rootsmeter manometer reading (mm Hg)
Ta: actual absolute temperature (°K)
Pa: actual barometric pressure (mm Hg)
b: intercept
m: slope

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

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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	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-RS0347-23	Valid from 3 May 2023 to 1 Nov 2023
	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	490404	Receipt acknowledged by EPD on 10 Mar 2023
		Staging area of 3302	490407	Receipt acknowledged by EPD on 10 Mar 2023
			490408	Receipt acknowledged by EPD on 10 Mar 2023
			490409	Receipt acknowledged by EPD on 10 Mar 2023
	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-RS0301-23	Valid from 20 Apr 2023 to 19 Oct 2023
		Works area of 3302	GW-RS0336-23	Valid from 3 May 2023 to 2 Nov 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
	Construction Noise Permit (General Works)	Works area of 3305	GW-RS0423-23	Valid from 1 Jun 2023 to 30 Nov 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
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	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
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-RS0305-23	Valid from 17 Apr 2023 to 16 Oct 2023
3310	Notification of Construction Work under APCO	Works area of 3310	485057	Receipt acknowledged by EPD on 6 Oct 2022
	Registration as Chemical Waste Producer	Works area of 3310	5213-951-C4682-01	Completion of Registration on 21 Dec 2021
		Works area of 3310	5213-000-C3317-27	Completion of Registration on 31 Aug 2022
	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-RS0421-23	Valid from 24 May 2023 to 21 Nov 2023
		Works area of 3310 (Reclamation area)	GW-RS0502-23	Valid from 19 Jun 2023 to 15 Dec 2023
		Tsing Chau Wan	GW-RW0340-23	Valid from 26 May 2023 to 25 Nov 2023
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 11 Jan 2019
3403	Notification of Construction Work under APCO	Works area of 3403	485039	Receipt acknowledged by EPD on 06 Oct 2022
		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	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 Approved variation on 9 Jun 2022
	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-RS0136-23	Valid from 1 Mar 2023 to 31 Aug 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
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	484926	Receipt acknowledged by EPD on 30 Sep 2022
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020 Revised license was issued on 14 Jul 2023
	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 (General Works)	Works area of 3405	GW-RS0438-23	Valid from 1 Jun 2023 to 29 Nov 2023
3408	Notification of Construction Work under APCO	Works area of 3408	461958	Receipt acknowledged by EPD on 17 Nov 2020
		3408 CSA-CBP	488443	Receipt acknowledged by EPD on 13 Jan 2023
	Specified Process Licence (Cement Works)	3408 CSA-CBP	L-3-268(1)	Valid from 22 May 2023 to 21 May 2025
	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 10 Jul 2023 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-RS0627-23	Valid from 31 Jul 2023 to 31 Dec 2023
	Construction Noise Permit (Special Case)	Works area of 3408	GW-RS0332-23	Valid from 23 Apr 2023 to 16 Oct 2023
3508	Notification of Construction Work under APCO	Works area of 3508	459017	Receipt acknowledged by EPD on 27 Aug 2020
			459469	Receipt acknowledged by EPD on 4 Sep 2020
			493055	Receipt acknowledged by EPD on 30 May 2023
	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

Contract No.	Description	Location	Permit/ Reference No.	Status
			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-RS0513-23	Valid from 28 Jun 2023 to 27 Dec 2023
		Works area of 3508	GW-RS0437-23	Valid from 6 Jun 2023 to 5 Dec 2023
		Works area of 3508	GW-RS0229-23	Valid from 24 Mar 2023 to 21 Sep 2023
	Construction Noise Permit (Special Case)	Works area of 3508	GW-RS0535-23	Valid from 16 Jul 2023 to 30 Nov 2023
		Works area of 3508	GW-RS0361-23	Valid from 11 May 2023 to 17 Oct 2023
		Works area of 3508	GW-RS0534-23	Valid from 1 Jul 2023 to 30 Nov 2023
		Works area of 3508	GW-RS0603-23	Valid from 23 Jul 2023 to 1 Oct 2023
		Works area of 3508	GW-RS0373-23	Valid from 14 May 2023 to 17 Oct 2023
		Works area of 3508	GW-RS0635-23	Valid from 4 Aug 2023 to 31 Jan 2024
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-RS0356-23	Valid from 8 May 2023 to 7 Nov 2023
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
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
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0357-23	Valid from 23 May 2023 to 22 Nov 2023
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 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-RS0491-23	Valid from 19 Jun 2023 to 15 Dec 2023
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 Work under APCO	Works area of 3733	472772	Receipt acknowledged by EPD on 18 Oct 2021
	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-RS0395-23	Valid from 18 May 2023 to 15 Nov 2023
3801	Notification of Construction Work under APCO	Works area of 3801	488993	Receipt acknowledged by EPD on 2 Feb 2023
		Stockpiling area of 3801	454269	Receipt acknowledged by EPD on 12 Mar 2020
			450940	Receipt acknowledged by EPD on 13 Nov 2019
	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 area of 3801	WT00041429-2022	Valid from 16 Aug 2022 to 31 Aug 2027
		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-RS0096-23	Valid from 5 Feb 2023 to 2 Aug 2023
			GW-RS0646-23	Valid from 5 Aug 2023 to 2 Feb 2024
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	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 (Existing airport)	WT00039092-2021	Valid from 30 Nov 2021 to 31 Nov 2026
			WT00043143-2023	Valid from 17 Mar 2023 to 31 Mar 2028
			WT00041807-2022	Valid from 3 Oct 2022 to 31 Oct 2027
	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-RS0631-23	Valid from 31 Jul 2023 to 27 Jan 2024
		Works area of 3802 (Existing airport)	GW-RS0432-23	Valid from 5 Jun 2023 to 4 Dec 2023
		Works area of 3802 (Ventilation building)	GW-RS0632-23	Valid from 31 Jul 2023 to 26 Jan 2024
3804	Notification of Construction Work under APCO	Works area of 3804	487452	Receipt acknowledged by EPD on 14 Dec 2022
	Construction Noise Permit (General Works)	Works area of 3804	GW-RS0629-23	Valid from 31 Jul 2023 to 27 Jan 2024
	Registration as Chemical Waste Producer	Works area of 3804	WPN 5213-951-B2686-01	Completion of Registration on 4 Jan 2023
	Bill Account for disposal	Works area of 3804	A/C 7046121	Approval granted from EPD on 3 Jan 2023
	Discharge License under WPCO	Works area of 3804	WT00044391-2023	Valid from 17 Aug 2023 to 31 Aug 2028
3805	Notification of Construction Work under APCO	Works area of 3805	490065	Receipt acknowledged by EPD on 2 Mar 2023
	Registration as Chemical Waste Producer	Works area of 3805	WPN 5218-951-C4788-01	Completion of Registration on 31 Mar 2023
	Bill Account for disposal	Works area of 3805	A/C 7046828	Approval granted from EPD on 10 Mar 2023
	Discharge License under WPCO	Works area of 3805	WT00043804-2023	Valid from 15 Jun 2023 to 30 Jun 2028
	Construction Noise Permit (General Works)	Works area of 3805	GW-RS0509-23	Valid from 22 Jun 2023 to 20 Dec 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
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/0000443053	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 10 Feb 2023 to 9 Nov 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-RS0050-23	Valid from 5 Feb 2023 to 4 Aug 2023 Superseded by GW-RS0620-23
			GW-RS0620-23	Valid from 5 Aug 2023 to 4 Feb 2024
3901B	Air Pollution Control (Furnaces, Ovens and Chimneys) (Installation and Alteration) Regulations	Works area of 3901B	EP/RS/0000438488	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-RS0070-23	Valid from 5 Feb 2023 to 4 Aug 2023 Superseded by GW-RS0625-23
			GW-RS0625-23	Valid from 5 Aug 2023 to 4 Feb 2024
3913	Specified Process license under APCO	Works area of 3913	L-15-040 (1)	Valid from 29 Mar 2021 to 28 Mar 2025
	Registration as Chemical Waste Producer	Works area of 3913	5213-951-S4405-01	Completion of Registration on 22 Jul 2022, updated on 29 Mar 2023
	Bill Account for disposal	Works area of 3913	A/C 7044632	Approval granted from EPD on 18 Aug 2022
	Construction Noise Permit (General Works)	Works area of 3913	GW-RS0181-23	Valid from 20 Mar 2023 to 19 Sep 2023

Contract No.	Description	Location	Permit/ Reference No.	Status
132 kV Cable	Bill Account for disposal	Works area of 132 kV Cable	A/C 7039280	Approval granted from EPD on 8 Jan 2021

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	59	2	2

Appendix G. Data of SkyPier HSF Movements to/from Macau (between 1 and 31 August 2023)

Data of SkyPier HSF Movements to/from Macau (between 1 and 31 Aug 2023)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [YFT – Macao (Taipa)]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Aug	12:01	8S912	YFT	Arrival	12.7	-	-
01-Aug	12:44	8S193	YFT	Departure	12.5	-	-
02-Aug	11:52	8S912	YFT	Arrival	13	-	-
02-Aug	12:41	8S193	YFT	Departure	11.7	-	-
04-Aug	11:57	8S912	YFT	Arrival	12.8	-	-
04-Aug	12:53	8S193	YFT	Departure	12.7	-	-
08-Aug	12:05	8S912	YFT	Arrival	11.2	-	-
08-Aug	12:43	8S193	YFT	Departure	11.2	-	-
09-Aug	11:56	8S912	YFT	Arrival	12.3	-	-
09-Aug	12:43	8S193	YFT	Departure	13.1	-	-
11-Aug	12:04	8S912	YFT	Arrival	12.6	-	-
11-Aug	12:51	8S193	YFT	Departure	11.4	-	-
15-Aug	11:54	8S912	YFT	Arrival	12.7	-	-
15-Aug	12:47	8S193	YFT	Departure	12.4	-	-
16-Aug	12:03	8S912	YFT	Arrival	12.3	-	-
16-Aug	12:45	8S193	YFT	Departure	12.8	-	-
18-Aug	11:56	8S912	YFT	Arrival	13	-	-
18-Aug	12:50	8S193	YFT	Departure	13.3	-	-
22-Aug	12:01	8S912	YFT	Arrival	11.5**	-	-
22-Aug	12:43	8S193	YFT	Departure	11.7**	-	-
23-Aug	12:01	8S912	YFT	Arrival	12.2	-	-
23-Aug	12:43	8S193	YFT	Departure	12.7	-	-
25-Aug	12:03	8S912	YFT	Arrival	12.7	-	-
25-Aug	12:47	8S193	YFT	Departure	12.6	-	-
30-Aug	11:53	8S912	YFT	Arrival	13.2	-	-
30-Aug	12:52	8S193	YFT	Departure	12.9	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in Aug 2023, no instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded.

Two HSFs with insufficient transmission of AIS data were received in Aug 2023. Vessel captains were requested to provide the AIS plots to indicate the vessels entered the SCZ though the gate access points with no speeding in the SCZ.