MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.58 (For October 2020)

November 2020

Airport Authority Hong Kong

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This Monthly EM&A Report No. 58 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 13 November 2020

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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

13 November 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 58 (October 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 58 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 13 November 2020.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CNP	Construction Noise Permit
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EAR	Ecological Acoustic Recorder
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
FCZ	Fish Culture Zone
HDD	Horizontal Directional Drilling
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
MTCC	Marine Traffic Control Centre
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
SC	Sha Chau

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 58th 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 October 2020.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included deep cement mixing (DCM) works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on 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

		
Small Vessel Line-transect Survey of CWD Conducted by ET	Refresher Training of ET's Monitoring Team on CWD Monitoring hold by CWD Experts	Silt Curtain Deployed by Contractor for Piling Activities

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 suspended solids (SS), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, one of the testing results triggered the relevant Action Level, and the corresponding investigation was conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3205 DCM works

- DCM works.

Contract 3206 Main Reclamation Works

- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;

- Backfilling and reinstatement works;
- Piling and structure works;
- King post construction; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- Preparation works for box culvert construction;
- Pilling work;
- Construction of approach light; and
- Cable laying and ducting works.

Contract 3307 Fire Training Facility

- Excavation; and
- Drainage works.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Excavation and foundation works; and
- Installation of cable and lightning pit.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation; and
- Pilling work.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities road work; and
- Piling and structure works.

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Pre-drilling; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Drilling works and rebar fixing.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Foundation works;
- Erection of superstructure; and
- Site establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert and ventilation building;
- Cofferdam and king post installation for shaft; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Set up storage area and temporary haul road;
- Pre drilling; and
- Site establishment.

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure; and
- Concreting.

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	√		A complaint regarding solid waste and suspected open burning at 3RS was received on 6 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Site inspections and on-site investigation were also conducted by ET and IEC during which there was no related observation found on improper storage of solid waste or opening burning . All contractors were reminded to continue with the proper handling of general waste. The case was considered closed.
			A complaint regarding oil spillage from barges at 3RS project area was received on 15 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Regular site inspections and night-time *ad-hoc* inspections were also conducted by ET during which there was no observation indicating malpractice leading to oil spillage. All contractors were reminded to continue with their current proper practice in handling of oil and fuel to prevent spillage. The case was considered closed.
			A complaint regarding illegal fuel delivery at 3RS project area was received on 20 Oct 2020.	ET requested the relevant contractors for details related to the complaint. Regular site inspections and night-time *ad-hoc* inspections were also conducted by ET during which there was no observation indicating malpractice leading to fuel spillage. ET also conducted random check on contractors' fuel purchasing record of

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
				Ultra Low Sulphur Diesel (ULSD) or equivalent were purchased by the contractors. All contractors were reminded to continue with their current proper practice in handling fuel and implementation on their spill response plans. The case was considered closed.
Notification of any summons and status of prosecutions		√	No notification of summons or 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 updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in **Appendix A**.

1.2 Scope of this Report

This is the 58th 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 October 2020.

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**.

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environmental Compliance	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Reclamation Works:

Party	Position	Name	Telephone
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Steven Chan	6288 0189
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Alan Mong	3763 1352
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Albert Chan	9700 1083

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Alpha Chia	9626 1114
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

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Malcolm Leung	3973 0850
Contract 3508 Terminal 2 Expansion Works (Gammon Engineering & Construction Company Limited)	Project Director	Richard Ellis	6201 5637
	Environmental Officer	Gena Tsang	9511 2283

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	K F Li	9086 1793
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Yolanda Gao	5399 3509
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9049 3161
	Environmental Officer	Sampson Lo	9752 9118

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	Tony Wong	9642 8672
	Environmental Officer	Federick Wong	9842 2703
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Engineering & Construction Company Limited)	Project Director	John Adams	6111 6989
	Environmental Officer	Andy Leung	9489 0035

Construction Support (Services / Licences):

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

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

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

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been 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	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	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	On-going
Sewerage and Sewage Treatment	
Methodology for carrying out annual sewage flow monitoring for concerned gravity sewer	The proposed methodology of the annual sewage flow monitoring will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Details of the routine H_2S monitoring system for the sewerage system of 3RS	The details of the routine H_2S monitoring system will be prepared and submitted to EPD at least one year before commencement of operation of 3RS.
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Contamination Assessment Reports (CAR) for Terminal 2 Emergency Power Supply Systems	The CARs for Terminal 2 Emergency Power Supply System Nos.1 (Volumes 1 and 2), 2, 3, 4 and 5 were submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	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	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.

Parameters	Status
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	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, environmental trainings and regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Two skipper training session provided by ET: 14 and 28 October 2020;
- Sixteen environmental management meetings for EM&A review with works contracts: 9, 15, 19, 21, 22, 29, and 30 October 2020.

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 B**.

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 ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 2020	**Appendix E**
	SIBATA LD-3B-1 (Serial No. 597337)	27 May 2020	Monthly EM&A Report No. 57, 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 E**, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	18 - 50	306	500
AR2	20 - 49	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

Note:

(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)	24 Mar 2020	Monthly EM&A Report No. 52, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Jun 2020	Monthly EM&A Report No. 54, Appendix E
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	12 Sep 2020	Monthly EM&A Report No. 57, Appendix D
	Castle GA607 (Serial No. 040162)	4 Jul 2020	Monthly EM&A Report No. 55, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

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

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)	66 - 70	75
NM4(1)	60 - 66	70(2)
NM5(1)	62 - 70	75
NM6(1)	62 - 71	75

Notes:

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

(2) Reduced to 65dB(A) during school examination periods at NM4. No school examination took place during this reporting period.

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

3.5 Conclusion

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

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, suspended solids (SS), total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 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 and Parameters 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 DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
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(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
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	

Monitoring Station	Description	Coordinates		Parameters
SR5A	San Tau Beach SSSI	810696	816593	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR6A(5)	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8(6)	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) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

(3) 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.

(4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.

(5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.

(6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned 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 and regular DCM 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 and regular DCM monitoring are presented in **Table 4.3**.

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

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM 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 5mg/l for Fish Culture Zone (SR7) only	
		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	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/l	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/l	3.2		3.6	
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.

(4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**)

(5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, 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 6920V2 (Serial No. 0001C6A7)	22 Oct 2020	**Appendix E**
	YSI 6920V2 (Serial No. 00019CB2)	7 Sep 2020	Monthly EM&A Report No. 57, Appendix D
	YSI ProDSS (Serial No. 17E100747)	22 Oct 2020	**Appendix E**
	YSI ProDSS (Serial No. 17H105557)	7 Sep 2020	Monthly EM&A Report No. 57, Appendix D
	YSI ProDSS (Serial No. 16H104233)	7 Sep 2020	Monthly EM&A Report No. 57, Appendix D
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N64701)	31 Aug 2020	Monthly EM&A Report No. 57, Appendix D

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and 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). Accuracy check of the digital titrator was performed at least once per monitoring day.

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 and heavy metals 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 and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2µg/l
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2µg/l

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**. Monitoring sessions on 13 October 2020 and during mid-ebb tide on 24 October 2020 were cancelled due to No. 8 Northeast Gale or Storm Signal and Strong Wind Signal No. 3 in force respectively.

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

For SS, one of the testing results triggered the corresponding Action Level, and investigation was conducted accordingly.

Table 4.7 presents the summary of the SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

Table 4.7: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/10/2020																			
03/10/2020																			
06/10/2020																			
08/10/2020																			
10/10/2020																			
15/10/2020					D														
17/10/2020																			
20/10/2020																			
22/10/2020																			
27/10/2020																			
29/10/2020																			
31/10/2020																			
No. of result triggering Action or Limit Level	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix D**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
D	Monitoring result triggered the Action 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

One of the monitoring results triggered the corresponding Action Level on 15 Oct 2020. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractor were informed when the corresponding Action Level was triggered.

Investigation focusing on the case which occurred at monitoring station located downstream of the Project were carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring day were collected. Findings were summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of SS Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels of the Project in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
15/10/2020	Marine piling works	Around 1km	Silt curtain deployed	No	No	No

The investigation confirmed that marine piling works were operating normally with silt curtains deployed. The silt curtains were maintained properly and checked by ET regularly.

For SS result recorded in flood tide at IM5 on 15 October 2020 which triggered Action Level, no silt plume was observed at this monitoring station and appropriate mitigation measures were implemented properly by contractors. No construction vessel of the 3RS Project was observed in the vicinity when monitoring was conducted at this monitoring station. However, activities of a non-3RS registered vessel was observed near IM4. In addition, the SS result at IM5 was within its baseline range during baseline monitoring of the Project. The station was also located around 1km away from the nearest marine construction activities so it was unlikely to be affected. Therefore, the case was considered unlikely due to the Project.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only one result triggered the corresponding Action Level, and investigation was conducted accordingly.

Based on the investigation findings, the result that triggered the corresponding Action Level was 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. The case 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 during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling, and seawall construction as recommended in the Manual.

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 B**.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. Proactive measures have been undertaken during the re-configuration of T2 building. The contractor has established the recycling strategy for C&D materials with proper planning and design to maximize recycling and reuse. Dedicated recyclers were employed for different kinds of recyclable materials by the contractor, and ET and IEC have carried out site visit to recyclers' faciltities to review recycling process. Recycling materials before leaving the site are weighted by a weight bridge and monitored by CCTV system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as steel, reinforcement bar, structural steel, aluminum, copper, other metals and glass are sorted on-site and transported off-site for recycling. ET and IEC have carried out site audits regularly and reviewed the trip ticket system.

Table 5.2: Construction Waste Statistics

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
September 2020 [2][3]	5,822	*101,504	*1,952	1,842	50	9,000	1,534
October 2020[2][4]	7,439	82,820	1,663	10,267	60	1,800	2,242

Notes:

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

(2) Metals, paper and/or plastics were recycled in the reporting period.

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

(4) 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.

Along with the design and construction progress, further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project has been conducted according to the EIA recommendation.

5.3 Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and Waste Management Plan 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.

Sampling works for marine sediment generated from the reclaimed land area was on-going during the reporting period.

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
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 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 12, 14, 16, 19, 21, 27, 28 and 29 October 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

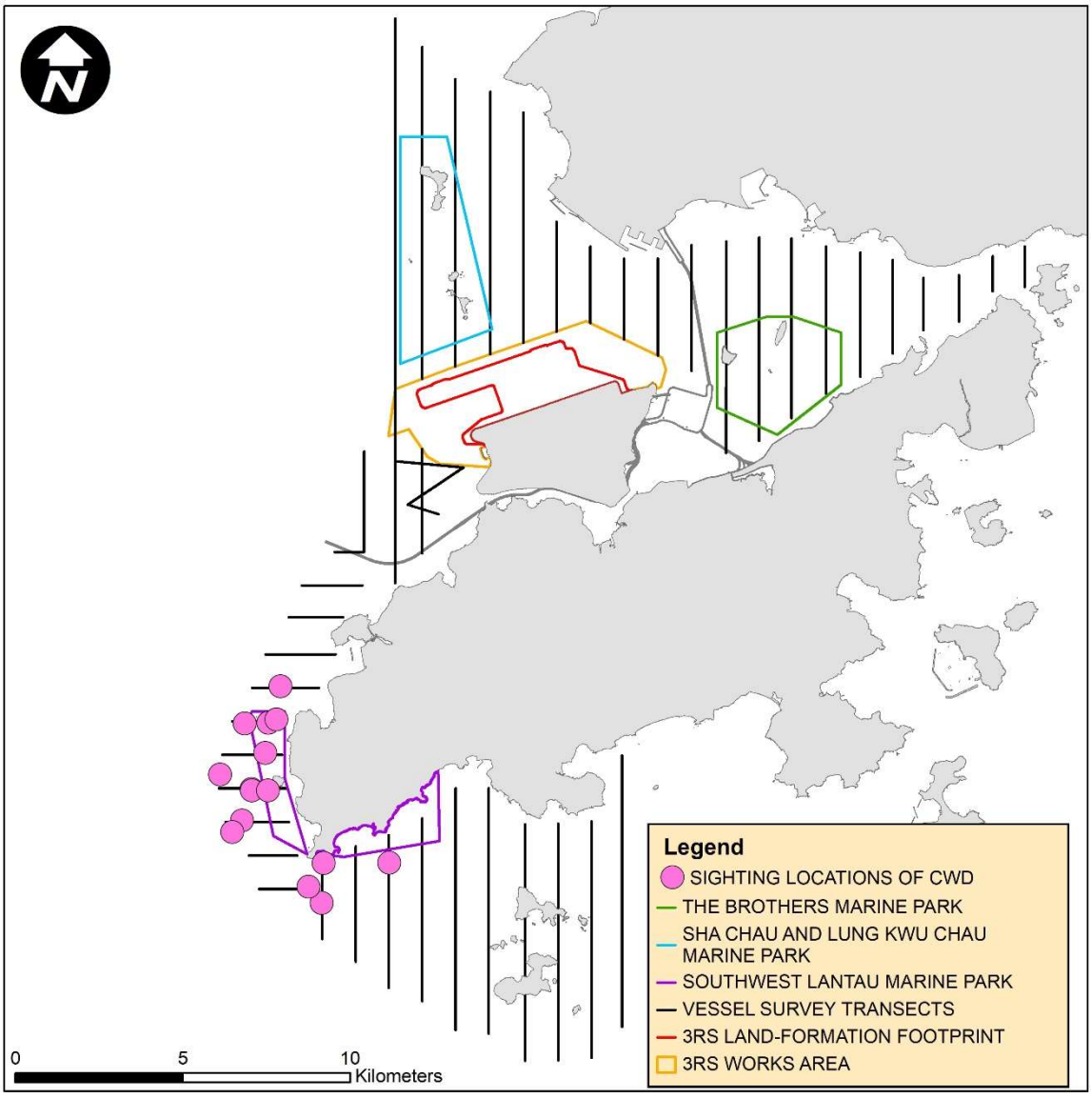
A total of around 452.89 km of survey effort was collected from these surveys and around 79.4% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In October 2020, 15 sightings with 65 dolphins were sighted. Amongst these sightings, 14 sightings with 64 dolphins are on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in October 2020 is illustrated in **Figure 6.3**. In WL, the CWD sightings clustered at the waters between from Yi O and Peaked Hill. In SWL, CWD sightings were recorded near Fan Lau and Fan Lau Tung Wan. No sightings of CWD were recorded in other survey areas.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 15 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 data from October 2020. 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 October 2020, a total of around 359.65 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 14 on-effort sightings with 64 dolphins were sighted under such condition. Calculation of the encounter rates in October 2020 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from August 2020 to October 2020), a total of around 1204.85 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 27 on-effort sightings and a total number of 115 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of October 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI remain above the Action Level, thus the Action Level is not triggered.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
October 2020	3.89	17.80
Running Quarter from August 2020 to October 2020(1)	2.24	9.54
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, i.e. the data from August 2020 to October 2020, 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 October 2020, 15 groups of 65 dolphins in total were sighted, and the average group size of CWDs was 4.3 dolphins per group. Sightings with medium group size (i.e. 3-9 dolphins) are dominant. There was one CWD sighting with large group size (i.e. 10 or more dolphins) recorded in SWL.

Activities and Association with Fishing Boats

One sighting of CWDs was recorded engaging in feeding activities in October 2020. No association with fishing boats was observed during the reporting period.

Mother-calf Pair

In October 2020, three CWD sightings were recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In October 2020, a total number of 32 different CWD individuals were identified for totally 40 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM002	21-Oct-20	4	SWL	WLMM018	21-Oct-20	3	SWL
SLMM003	27-Oct-20	9	WL	WLMM028	27-Oct-20	7	WL
SLMM007	27-Oct-20	6	WL	WLMM056	27-Oct-20	6	WL
SLMM010	21-Oct-20	4	SWL	WLMM060	27-Oct-20	1	WL
	27-Oct-20	7	WL			2	WL
SLMM012	21-Oct-20	4	SWL	WLMM065	19-Oct-20	1	WL
SLMM014	21-Oct-20	4	SWL	WLMM070	21-Oct-20	4	SWL
SLMM022	27-Oct-20	7	WL		27-Oct-20	1	WL
SLMM023	21-Oct-20	3	SWL	WLMM071	27-Oct-20	1	WL
		4	SWL			2	WL
SLMM025	21-Oct-20	3	SWL	WLMM073	21-Oct-20	3	SWL
		4	SWL			4	SWL
SLMM031	21-Oct-20	2	SWL	WLMM076	27-Oct-20	4	WL
SLMM049	27-Oct-20	6	WL	WLMM079	27-Oct-20	9	WL
SLMM050	21-Oct-20	4	SWL	WLMM085	27-Oct-20	8	WL
SLMM052	27-Oct-20	6	WL	WLMM114	21-Oct-20	4	SWL
SLMM059	21-Oct-20	4	SWL	WLMM131	27-Oct-20	4	WL
WLMM007	21-Oct-20	4	SWL	WLMM147	27-Oct-20	9	WL
	27-Oct-20	6	WL	WLMM150	27-Oct-20	7	WL
WLMM008	21-Oct-20	4	SWL	WLMM158	27-Oct-20	3	WL

6.4.3 Land-based Theodolite Tracking Survey

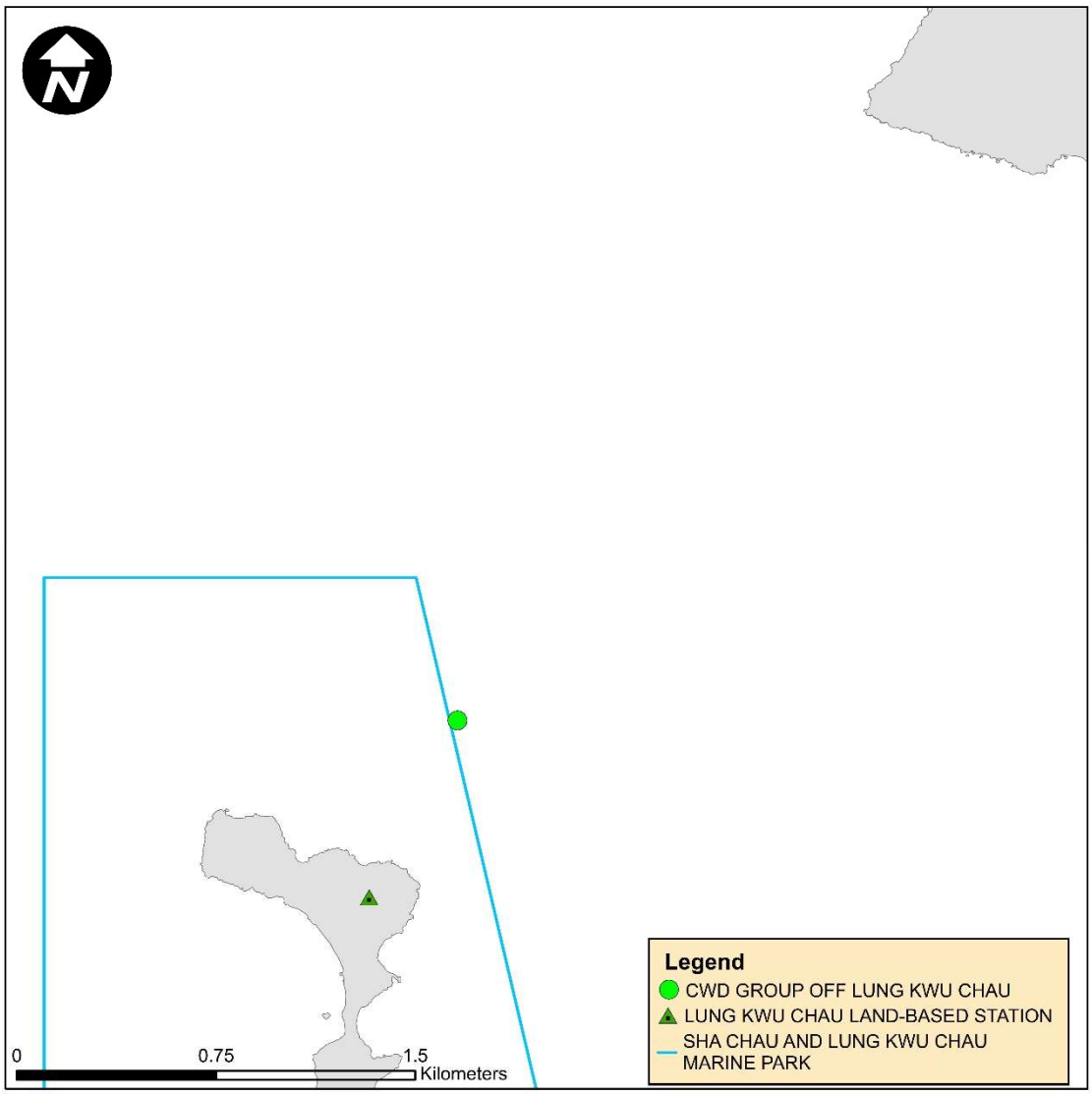
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 19 October 2020 and at SC on 27 October 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. One CWD group was tracked from Lung Kwu Chau station during the survey. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix D**. The first sighting locations of CWD group tracked at LKC station during land-based theodolite tracking survey in October 2020 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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	1	6:00	1	0.17
Sha Chau	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



Remark: Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

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. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 22 October 2020 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialised team of acousticians) involved manually browsing through spectrograms of every acoustic recording and logging the occurrence of dolphin signals. All potential dolphin detections will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 3 to 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 698 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** 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 as scheduled. 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 were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix C**. Bi-weekly site inspections were also conducted by the IEC. Besides, *ad-hoc* site inspections were 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 were 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 B**.

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix B**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period. The implementation status of the environmental protection measures are summarized below in **Table 7.1**. Examples of photographic record of landscape and visual mitigation measures are shown in **Table 7.2**.

Table 7.1: Landscape and Visual – Construction Phase Audit Summary

Landscape and Visual Mitigation Measures during construction	Implementation Status
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	Contractors confirmed the implementation during Environmental Management Meetings.
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 have been provided in the Contract Specification for implementation by the Contractors under the Project. The cumulative total number of retained trees under the 3RS Project as of the reporting period was 147. The Contractors' performance in the implementation of the trees maintenance and protection measures were regularly checked by the ET.
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 have been provided in the Contract Specification for implementation by the Contractors under the Project where trees will 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 cumulative total number of transplanted trees under the Project was five. The Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were regularly checked by the ET.
CM 10 – Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical	To be implemented around taxiways and runways as soon as practicable.

Table 7.2: Examples of Photographic Record of Landscape and Visual Mitigation Measures

	
General view of Tree Protection Zone for retained tree (CM8)	General view of a transplanted tree (CM9)

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 System Nos.1 (Volumes 1 and 2), 2, 3, 4 and 5 were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for all the CARs and required ET to submit additional photos for sides and bottom of some of sampling points after the removal of pipelines to reaffirm no leakage from the pipelines concerned. Afterwards, the potential land contamination concern of two concerned systems will be closed.

7.4 Audit of SkyPier High Speed Ferries

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

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. No ferry movements between HKIA SkyPier and Zhuhai and Macau was recorded in October 2020.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.3**. The daily movement of all SkyPier HSFs in this reporting period is zero. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

Table 7.3: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 October 2020
Total number of ferry movements recorded and audited	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap (including all SkyPier HSFs)	0 daily movement (within the maximum daily cap - 125 daily movements)

7.5 Audit of Construction and Associated Vessels

The updated Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) was submitted and approved in May 2020 by EPD 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:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Six skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 5 skippers were trained by ET and 14 skippers were trained by contractors' Environmental Officers. In total, 1651 skippers were trained from August 2016 to October 2020.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC 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 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM works and seawall construction according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.

During the reporting period, ET was notified that no dolphin sightings were recorded within the DEZ by the contractors. The ET checked the dolphin sighting record and relevant records by the contractors to audit the implementation of 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 7.4**.

Table 7.4: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.18	Landscape & Visual Plan	Submitted to EPD
2.19	Waste Management Plan	Accepted / approved by EPD
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 environmental licenses and permits which are valid in the reporting period are presented in **Appendix F**.

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

7.9.1 Complaints

A complaint was received on 6 October 2020 regarding solid waste and suspected open burning at the project area on 30 September 2020. Investigation was conducted by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET identified the potential related 3RS contractors and requested them for information regarding the complaint. Based on information provided by the contractors, no open burning was conducted within their respective construction sites. Besides, general waste was observed properly handled on site and toilets were cleaned by the workers regularly. Before formally receiving the complaint on 6 October 2020, IEC had conducted an *ad-hoc* site inspection in the alleged area on 30 September 2020. ET had also conducted an on-site investigation with IEC and contractor representatives on 5 October 2020. In both inspections, no opening burning, white smoke, or poor hygiene caused by storage of solid waste on site was observed. The security guards at the western pier and Environmental Officers

from the potential related contractors all reported no white smoke was observed at the alleged area on 30 September 2020. Furthermore, the ET checked the construction vessels of all potential related contractors and confirmed no open burning or maintenance works were carried out on the construction vessels on 30 September 2020. Nevertheless, the ET reminded all contractors to continue with the proper handling of general waste produced from the construction site including collection and disposal. ET and IEC would continue to check contractors' records on the proper handling of waste collection and disposal. Hence, the complaint case was considered closed.

A complaint was received on 15 October 2020 regarding oil spillage from barges at 3RS project area. No detail of the case such as date, time, location and name of the barge was provided in the complaint. Investigation was conducted by ET in accordance with the Manual and the Complaint Management Plan of the Project. ET investigated the related work contractors of 3RS Project on the reclaimed land. Based on information provided by the contractors, no oil spillage incident from bunkering barge was recorded in September and early October 2020. During regular site inspections and night-time *ad-hoc* inspections conducted by ET in September and early October, no occurrence regarding oil spillage onto sea surface was observed. It was also observed that oil and fuel containers were properly stored at designated storage area and drip trays were provided. Besides, it was noted that the water quality monitoring results of the Project from 1 September 2020 to 10 October 2020 were within the corresponding Action and Limit Levels at all monitoring stations. Nevertheless, the ET will continue to remind all contractors to continue with their current proper practice in handling of oil and fuel to prevent spillage. Hence, the complaint case was considered closed.

A complaint was received on 20 October 2020 regarding illegal fuel delivery leading to water pollution, air pollution and impact to CWDs at 3RS project area. Investigation was conducted by ET in accordance with the Manual and the Complaint Management Plan of the Project. The complainant mentioned that a barge pumping high sulphur diesel to oil drum and fuel tanker on the reclaimed land of 3RS construction site, which may cause air pollution. The complainant also mentioned that fuel spillage onto the sea surface was observed, which may cause impact to CWD. No further details of the case including date, time, location and name of barge could be provided. ET investigated the related work contractors of the Project on the reclaimed land and requested them for information regarding the case. Based on information provided by the contractors, no fuel spillage incident from bunkering barge was recorded in September and early October 2020. During the regular site inspections and night-time *ad-hoc* inspections conducted by ET in September and early October, no occurrence regarding fuel spillage onto sea surface was observed. It was also observed that oil and fuel containers were properly stored at designated storage area and drip trays were provided on site. No environmental malpractice leading to fuel spillage was observed. It was noted that 3RS water quality monitoring results from 1 September 2020 to 10 October 2020 were within the corresponding Action and Limit Levels at all monitoring stations. Moreover, the ET conducted random check on the fuel purchasing records of the related work contracts and all of them had purchased Ultra Low Sulphur Diesel (ULSD) or equivalent like EURO V. Nevertheless, the ET will continue to remind all contractors to continue with their current proper practice in handling fuel and implementation on their respective contract-specific spill response plans, including conducting regular spill drills and trainings. ET and IEC would continue to monitor 3RS water quality, air quality including the checking of contractors' ULSD purchasing records and CWD monitoring results. Hence, the complaint case was considered closed.

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 G**.

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

8.1 Construction Programme for the Coming Reporting Period

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

Reclamation Works:

Contract 3205 DCM works

- DCM works.

Contract 3206 Main Reclamation Works

- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works
- Piling and structure works;
- King post construction; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- Preparation works for box culvert construction;
- Pilling work;
- Construction of approach light; and
- Cable laying and ducting works.

Contract 3307 Fire Training Facility

- Excavation; and
- Drainage works.

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Excavation and foundation works; and

- Installation of cable and lightning pit.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation; and
- Pilling work.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities and road work; and
- Piling and structure works.

Contract 3508 Terminal 2 Expansion Works

- Excavation and footing construction;
- Pre-drilling; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Drilling works and rebar fixing.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Foundation works;
- Erection of superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of box culvert and ventilation building;
- Cofferdam and king post installation for shaft; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Set up storage area and temporary haul road;
- Pre drilling; and
- Site establishment.

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure; and

- Concreting.

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;
- Water quality from DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works), seawall construction and bored pilling for approach lights;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.2 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 C**.

8.3 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 included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

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

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

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

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

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. No HSF movements under the SkyPier Plan were recorded during the reporting period. Therefore, the daily movement of HSF was within the maximum daily cap of 125 daily movements in the reporting period.

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. Training has been provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor’s MTCC 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

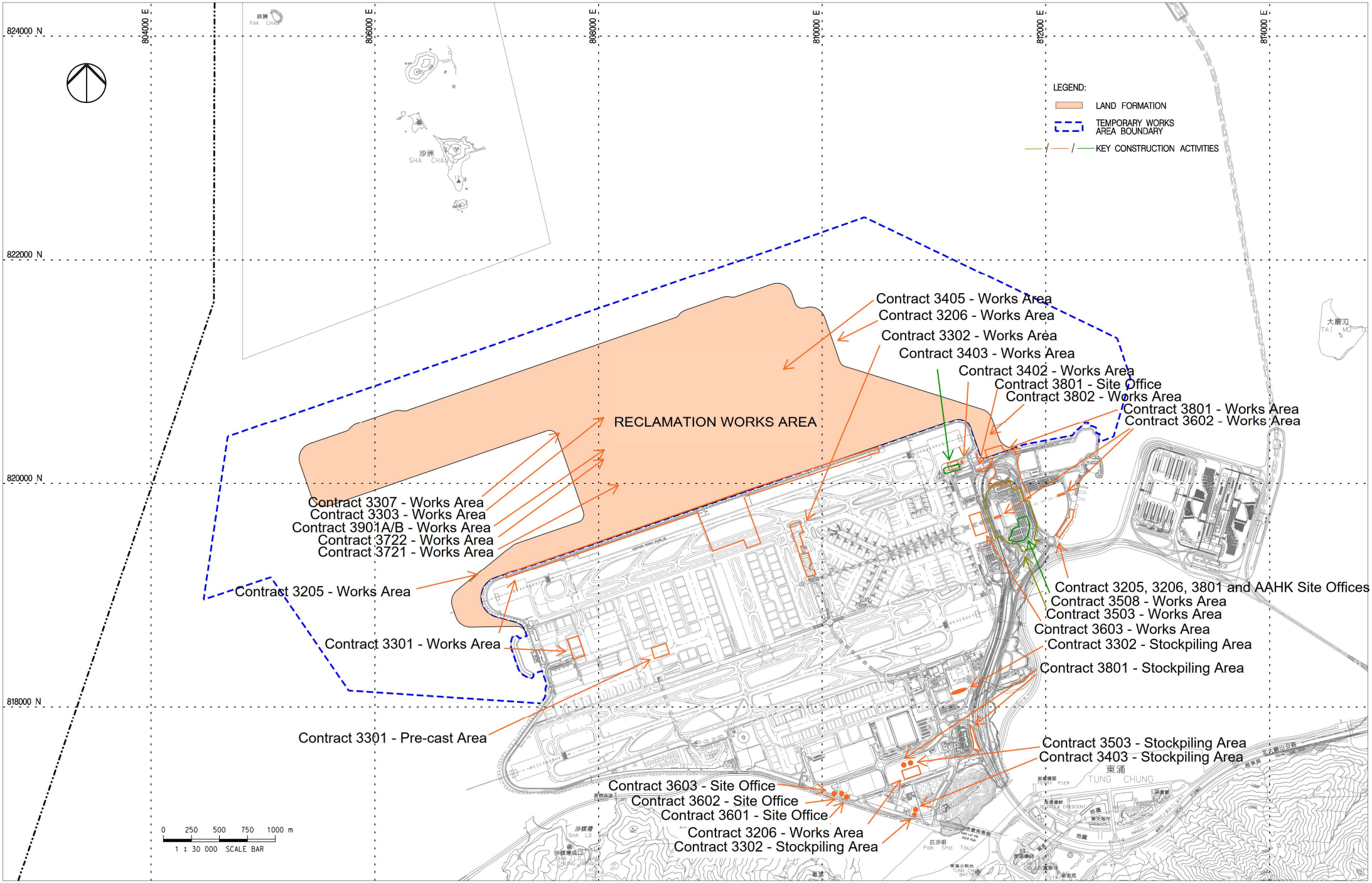
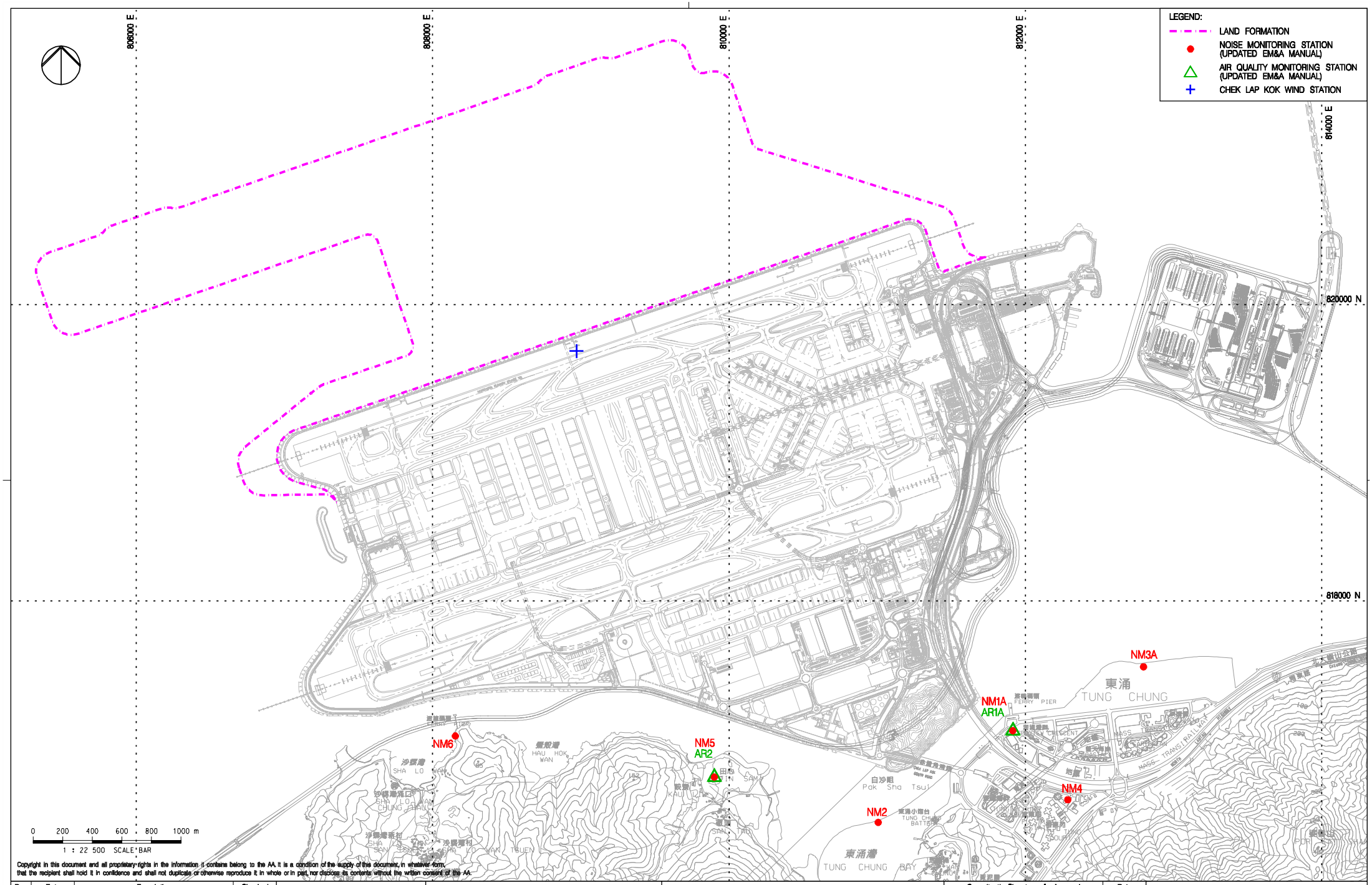


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

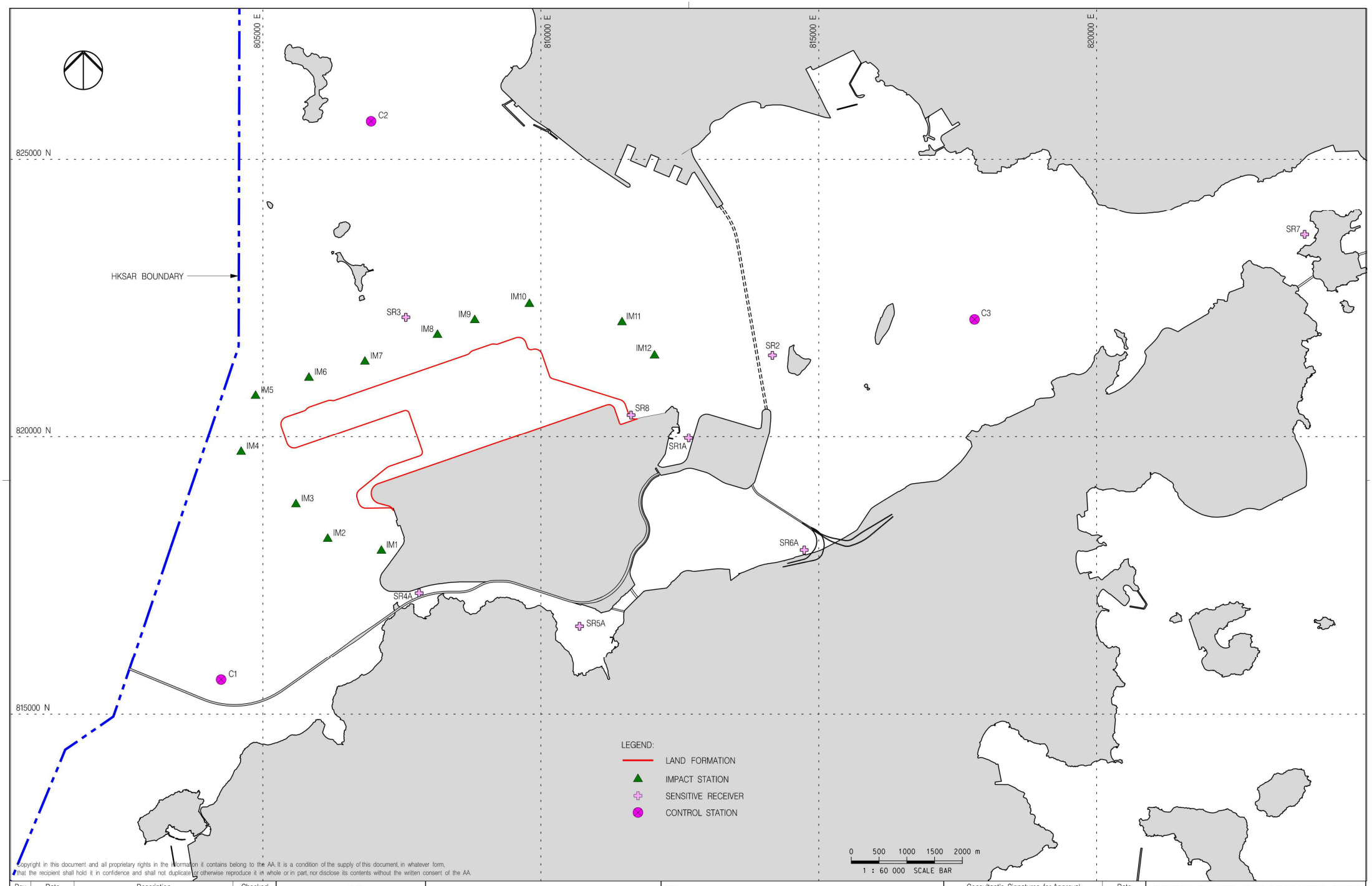
Drawing No.

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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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

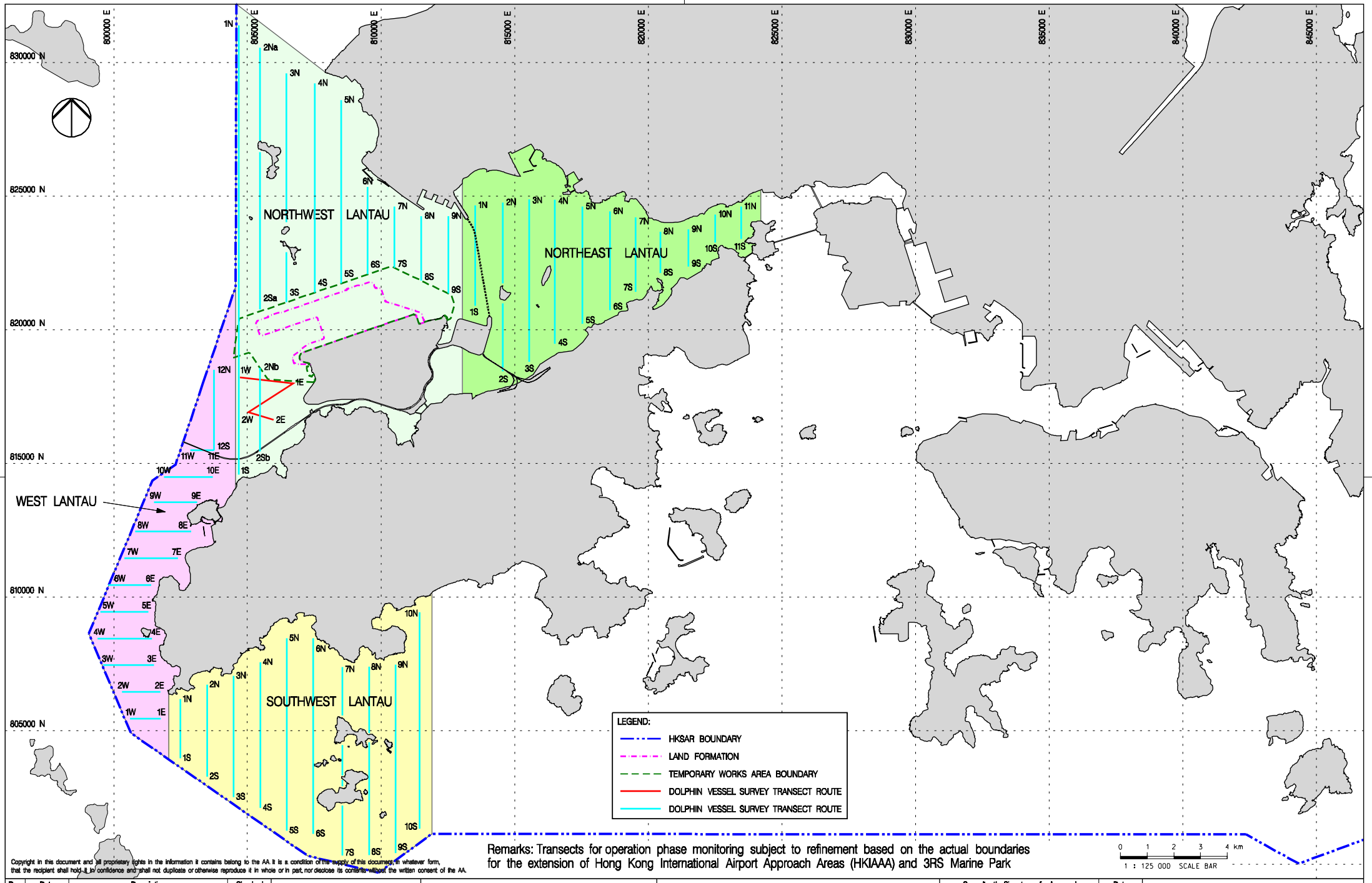
Drawing No.

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

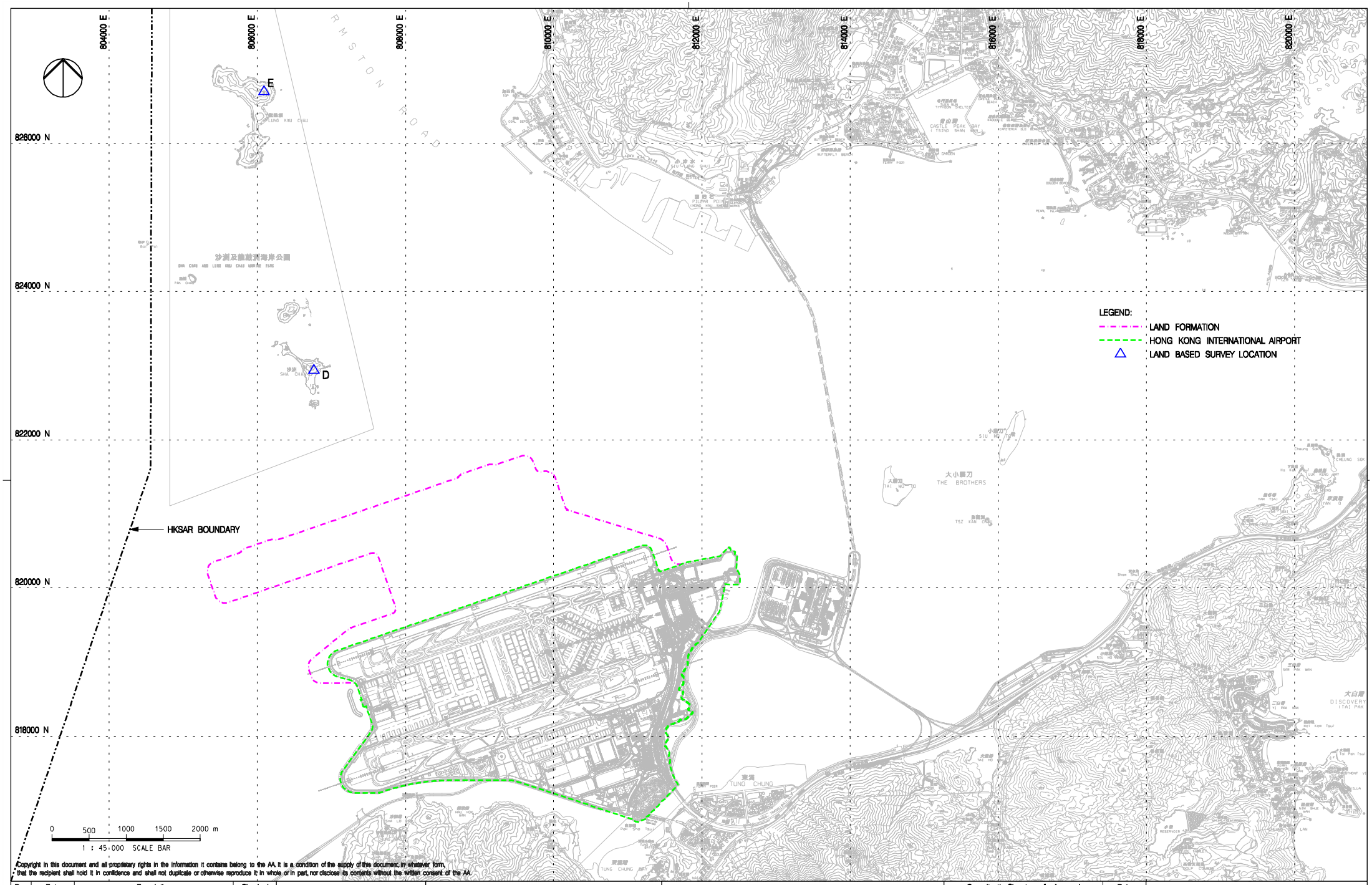
Drawing No.

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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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

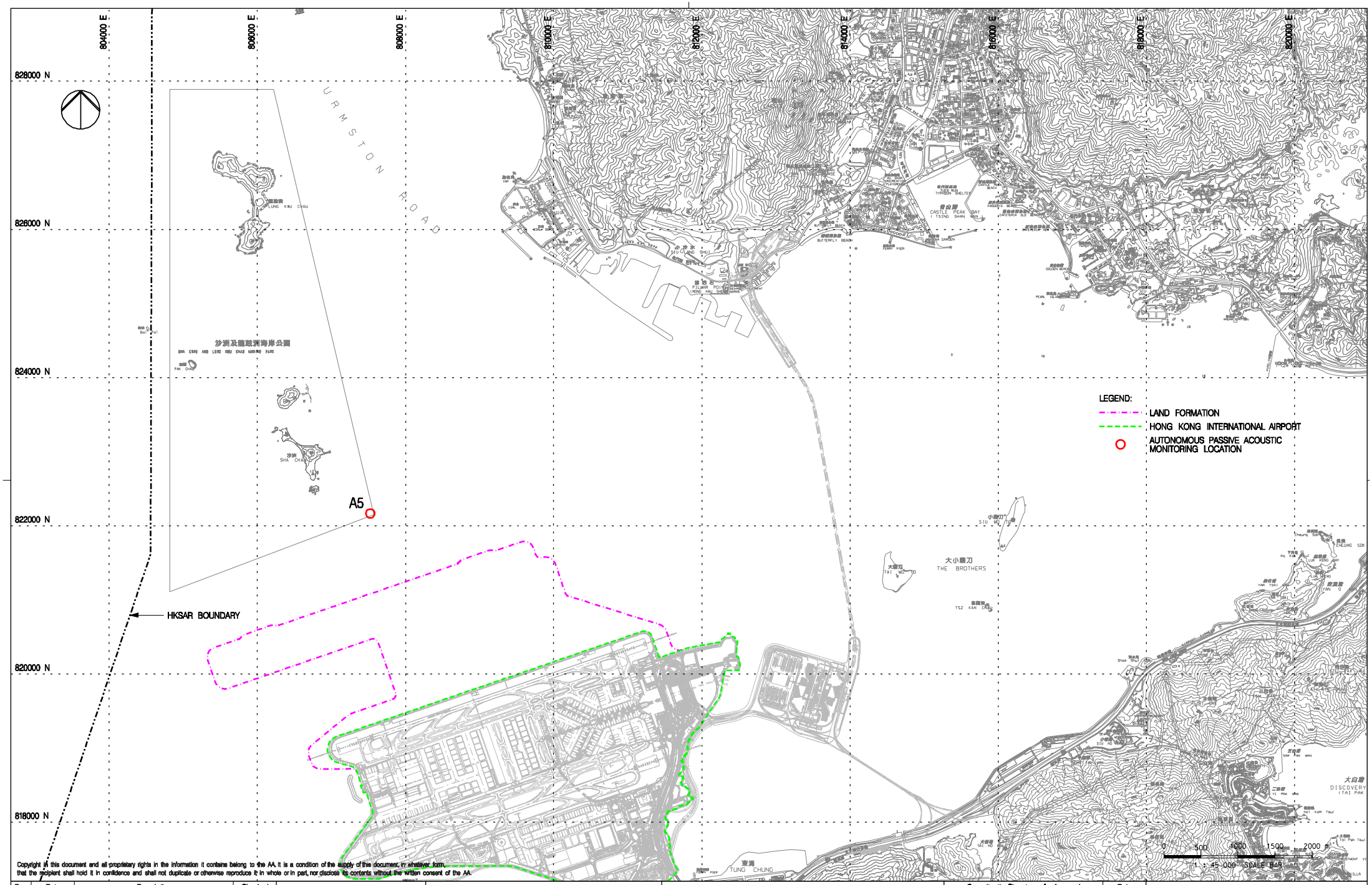
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
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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\EN\EMA\181029\FIG 2.11.dgn

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3206	Reclamation Contract	Zhen Hua Engineering Company Ltd.-China Communications Construction Company Ltd.-CCCC Dredging (Group) Company Ltd. Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	Fujita Corporation-China Harbour Engineering Company Ltd.-Zhen Hua Engineering Company Ltd. Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following:

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Foundation and structural works; • Cast-in / Underground electrical & mechanical works and utility services; and • All associated testing and commissioning works.
3303	Third Runway and Associated Works	Sinohydro Corporation Limited, Powerchina Airport Construction Company Limited, Paul Y. Construction Company Limited, and Rock-One Engineering Company Limited Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following: • New runway, taxiways, and associated works; • Infrastructure works; • Construction of ancillary buildings and facilities; • Set up of various airport systems; and • All associated testing and commissioning works.
3307	Fire Training Facility	Paul Y. Construction Company Limited	The works covered by the Contract 3307 comprise the construction of a Fire Training Facility on the new reclamation area to replace the existing facility at the Airport Island. The major construction activities include without limitation the following: • Building services works; • Civil works; and • All associated testing and temporary works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition; • Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following:

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Site clearance and demolition; • Building structure and envelope; • Building Services and Airport Systems; and • Utilities division and installations.
3405	Third Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	The works covered by the Contract 3405 comprise without limitation the following: • Piled foundation works; • Basement and tunnel structure works; • Associated internal reinforced concrete structures; • Backfilling and compaction of works area; and • Associated testing and temporary works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3508	Terminal 2 Expansion Works	Gammon Engineering and Construction Co., Ltd	The works covered by the Contract 3508 comprise the construction of T2, North Annex Building (NAB) and South Annex Building (SAB) with interconnecting bridges, landside transport infrastructure including viaducts and at grade roads, underground utility services, one sewage pumping station with the associated electrical building, footbridges, external works and modification works to existing facilities. The major construction activities include without limitation the following: • Superstructure, interior landscaping, building services and airport system of T2, NAB, SAB and associated footbridges;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Additions and Alteration (A&A) works of the existing Airport World Trade Centre (AWTC); • Modification of the existing APM and BHS tunnels; • External works and road networks around T2; and • Utilities.
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	The works covered by the Contract 3601 comprise the initial phase of the Automated People Mover (APM) system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following: • New 3-guideway APM system between TRC and T2; • Extension of the TRC Line into the new APM Depot; • APM associated sub-systems (communications, signalling, etc.) • Associated civil works; and • All associated testing, commissioning works.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	Vanderlande Industries Hong Kong Limited and Shun Hing Systems Integration Company Limited	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: • Project site road; • Utilities; • Cargo loading quays; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Security fencing and hoarding.
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: • Construction of support facilities; • Foundation and structural works; and • Building services works.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.
3802	APM and BHS Tunnels and Related Works	Gammon Construction Limited	The works covered by the Contract 3802 comprise the construction of the APM and BHS tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM/ BHS Tunnels; • Construction of ancillary buildings/ facilities; • Building services and airport systems; • Infrastructure Works; • Underground utilities and services; and • All associated testing and commissioning works.
3901A	Concrete Batching Facility	K. Wah Concrete Company Limited	The works covered by the Contract 3901A comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.
3901B	Concrete Batching Facility	Gammon Construction Limited	The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.

Appendix B. 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	N/A

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, stock piles 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	N/A

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	N/A
			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	N/A
			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	N/A
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	N/A

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	N/A
			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;	Within Concrete Batching Plant / Duration of the 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?^
			▪ 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 ▪ 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	N/A
			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	N/A
			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	N/A
			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	N/A
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:	Within Concrete Batching Plant / Duration of the 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?^
			Crushers ▪ 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
			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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			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. ▪ 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. ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			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
			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;	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?^
			▪ 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.		
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		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 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 sea bed 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 waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I
			▪ 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;		I
			▪ 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		N/A *(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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			<u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u> ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, I *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I
			<u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u> ▪ Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides;	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion ▪ 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
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
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	N/A
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	I
			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.		N/A
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 sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			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);		
			▪ 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		N/A
			▪ 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
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	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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.		
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	I
			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	I
			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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ 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;	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?^
			▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		▪ Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	▪ Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	▪ A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	▪ The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: ▪ 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	Project Site Area / 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?^
			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.		
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	▪ General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' 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.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ 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)
			▪ 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
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
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	I
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	I
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	I
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	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	▪ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of 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;		I
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		I
			▪ 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.		I
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		I
			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.		I
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
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.		I
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan**	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?^
			▪ 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.		
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; and ▪ 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	I
			▪ 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		I
			▪ 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.		I
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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
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		I
			▪ 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.		I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I

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	-	**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.	N/A
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		
			Health Impact – Aircraft Emissions		
			Not applicable.		
			Health Impact – Aircraft Noise		
			Not applicable.		

Notes:

I= implemented where applicable;

N/A= not applicable to the construction works implemented during the reporting month.

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Oct-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 WQ General & Regular DCM mid-ebb: 12:49 mid-flood: 06:26	**2**	**3** WQ General & Regular DCM mid-ebb: 13:48 mid-flood: 07:42
4	**5** Site Inspection NM4, NM6	**6** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 15:17 mid-flood: 09:39	**7** Site Inspection	**8** Site Inspection WQ General & Regular DCM mid-ebb: 16:30 mid-flood: 11:30	**9** Site Inspection	**10** WQ General & Regular DCM mid-ebb: 06:00 mid-flood: 18:35
11	**12** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**13** Site Inspection WQ General & Regular DCM[1] mid-ebb: 10:01 mid-flood: 17:18	**14** Site Inspection CWD Survey (Vessel)	**15** Site Inspection WQ General & Regular DCM mid-ebb: 11:44 mid-flood: 18:15	**16** Site Inspection CWD Survey (Vessel) NM4, NM6	**17** AR1A, AR2 WQ General & Regular DCM mid-ebb: 13:15 mid-flood: 07:03
18	**19** Site Inspection CWD Survey (Vessel, Land-based)	**20** Site Inspection WQ General & Regular DCM mid-ebb: 15:35 mid-flood: 09:56	**21** Site Inspection CWD Survey (Vessel) NM4, NM6	**22** Site Inspection WQ General & Regular DCM mid-ebb: 17:23 mid-flood: 12:17	**23** Site Inspection AR1A, AR2 NM1A, NM5	**24** WQ General & Regular DCM[2] mid-ebb: 06:39 mid-flood: 19:30
25	**26**	**27** Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 10:23 mid-flood: 17:29	**28** Site Inspection CWD Survey (Vessel)	**29** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 11:44 mid-flood: 18:10	**30** Site Inspection NM4, NM6	**31** WQ General & Regular DCM mid-ebb: 12:48 mid-flood: 06:57

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

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

WQ - Water Quality
DCM - Deep Cement Mixing

[1] Water quality monitoring session on 13 October 2020 was cancelled due to the No.8 Northeast Gale or Storm Signal in force.
[2] Water quality monitoring session during mid ebb tide on 24 October 2020 was cancelled due to Strong Wind Signal No.3 in force.

Tentative Monitoring Schedule of Next Reporting Period

Nov-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2** Site Inspection NM4, NM6	**3** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 14:22 mid-flood: 08:54	**4**	**5** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:31 mid-flood: 10:27	**6** Site Inspection	**7** WQ General & Regular DCM mid-ebb: 04:34 mid-flood: 16:56
8	**9** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**10** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 08:02 mid-flood: 15:56	**11** CWD Survey (Vessel)	**12** Site Inspection WQ General & Regular DCM mid-ebb: 10:25 mid-flood: 16:59	**13** Site Inspection	**14** AR1A, AR2 WQ General & Regular DCM mid-ebb: 12:08 mid-flood: 18:00
15	**16** Site Inspection CWD Survey (Land-based, vessel)	**17** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 14:34 mid-flood: 09:04	**18** CWD Survey (Vessel)	**19** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 16:07 mid-flood: 10:58	**20** Site Inspection AR1A, AR2 NM1A, NM5	**21** WQ General & Regular DCM mid-ebb: 05:03 mid-flood: 17:30
22	**23** Site Inspection	**24** Site Inspection WQ General & Regular DCM mid-ebb: 08:30 mid-flood: 16:09	**25** NM4, NM6	**26** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 10:25 mid-flood: 16:57	**27** Site Inspection	**28** WQ General & Regular DCM mid-ebb: 11:44 mid-flood: 17:36
29	**30** Site Inspection					

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality
DCM - Deep Cement Mixing

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 D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

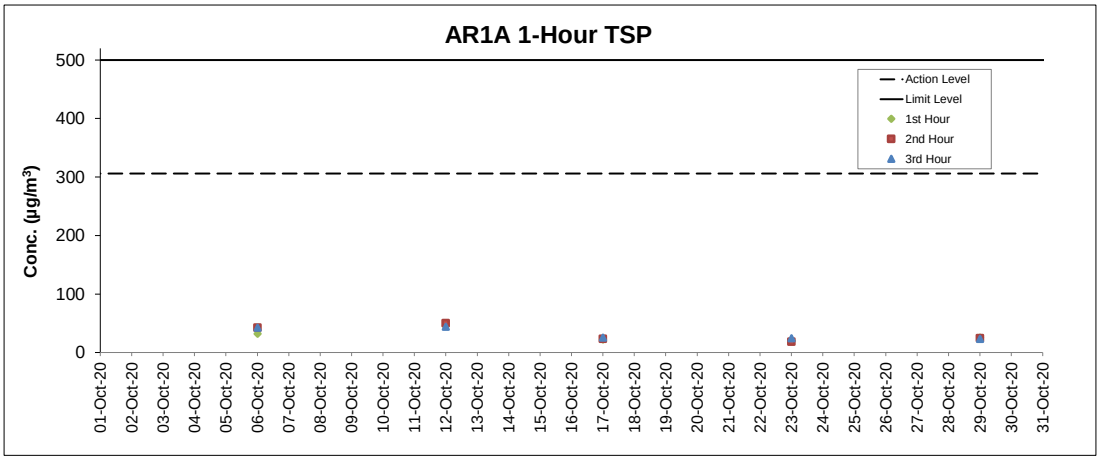
Station: AR1A- Man Tung Road Park

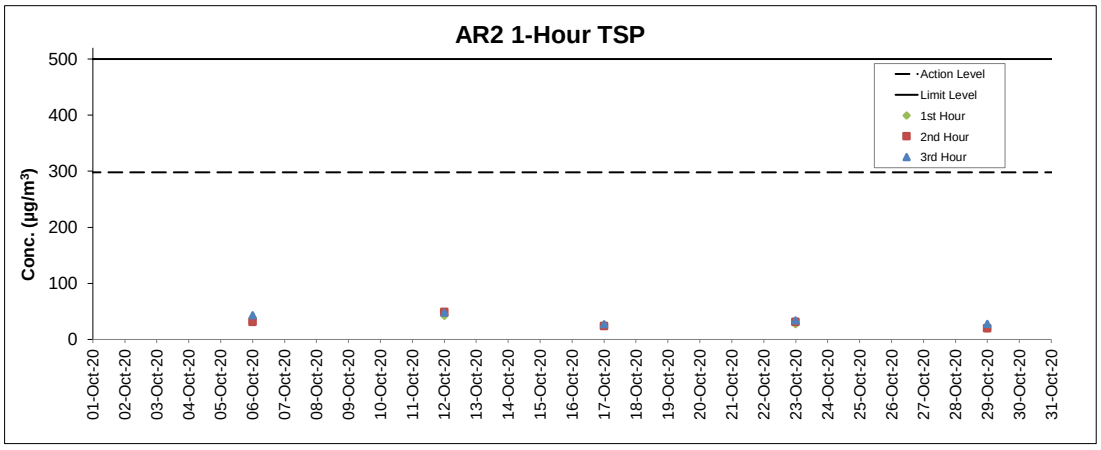
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
06-Oct-20	13:53	Cloudy	3.3	48	32	306	500
06-Oct-20	14:53	Cloudy	4.7	44	42	306	500
06-Oct-20	15:53	Cloudy	4.7	30	42	306	500
12-Oct-20	14:02	Cloudy	4.7	81	45	306	500
12-Oct-20	15:02	Cloudy	5.8	73	50	306	500
12-Oct-20	16:02	Cloudy	6.4	100	44	306	500
17-Oct-20	9:36	Cloudy	5.3	36	22	306	500
17-Oct-20	10:36	Cloudy	5.0	36	23	306	500
17-Oct-20	11:36	Cloudy	5.0	13	25	306	500
23-Oct-20	13:58	Sunny	5.3	16	20	306	500
23-Oct-20	14:58	Sunny	5.3	33	18	306	500
23-Oct-20	15:58	Sunny	4.7	26	24	306	500
29-Oct-20	14:07	Cloudy	3.3	28	25	306	500
29-Oct-20	15:07	Cloudy	3.1	22	24	306	500
29-Oct-20	16:07	Cloudy	3.1	9	23	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)
06-Oct-20	9:05	Cloudy	5.3	45	38	298	500
06-Oct-20	10:05	Cloudy	5.3	42	31	298	500
06-Oct-20	11:05	Cloudy	5.3	47	43	298	500
12-Oct-20	9:08	Cloudy	4.2	47	42	298	500
12-Oct-20	10:08	Cloudy	4.7	67	49	298	500
12-Oct-20	11:08	Cloudy	4.7	83	48	298	500
17-Oct-20	13:41	Cloudy	5.3	41	26	298	500
17-Oct-20	14:41	Cloudy	5.0	51	24	298	500
17-Oct-20	15:41	Cloudy	5.8	66	27	298	500
23-Oct-20	10:02	Sunny	6.7	28	27	298	500
23-Oct-20	11:02	Sunny	6.1	14	31	298	500
23-Oct-20	12:02	Sunny	5.8	30	34	298	500
29-Oct-20	9:16	Cloudy	3.9	41	20	298	500
29-Oct-20	10:16	Cloudy	4.2	31	20	298	500
29-Oct-20	11:16	Cloudy	3.3	31	28	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)
06-Oct-20	Cloudy	14:02	66.9	59.1	70
06-Oct-20	Cloudy	14:07	68.7	59.0	
06-Oct-20	Cloudy	14:12	74.2	59.9	
06-Oct-20	Cloudy	14:17	68.6	60.0	
06-Oct-20	Cloudy	14:22	69.9	61.3	
06-Oct-20	Cloudy	14:27	71.9	60.9	
12-Oct-20	Cloudy	14:05	66.7	56.9	66
12-Oct-20	Cloudy	14:10	66.9	56.9	
12-Oct-20	Cloudy	14:15	67.0	57.1	
12-Oct-20	Cloudy	14:20	61.0	52.2	
12-Oct-20	Cloudy	14:25	63.3	52.3	
12-Oct-20	Cloudy	14:30	68.0	57.7	
23-Oct-20	Sunny	14:01	65.8	58.2	68
23-Oct-20	Sunny	14:06	66.9	61.2	
23-Oct-20	Sunny	14:11	68.7	61.1	
23-Oct-20	Sunny	14:16	68.3	61.1	
23-Oct-20	Sunny	14:21	65.7	62.7	
23-Oct-20	Sunny	14:26	67.2	63.1	
29-Oct-20	Cloudy	14:13	65.0	60.8	69
29-Oct-20	Cloudy	14:18	70.2	63.9	
29-Oct-20	Cloudy	14:23	70.3	57.4	
29-Oct-20	Cloudy	14:28	69.3	58.0	
29-Oct-20	Cloudy	14:33	67.8	62.0	
29-Oct-20	Cloudy	14:38	66.3	56.7	

Remarks:

+3dB (A) correction 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)
05-Oct-20	Cloudy	13:09	61.4	54.0	66
05-Oct-20	Cloudy	13:14	64.7	58.1	
05-Oct-20	Cloudy	13:19	63.2	57.9	
05-Oct-20	Cloudy	13:24	64.5	58.2	
05-Oct-20	Cloudy	13:29	63.9	58.9	
05-Oct-20	Cloudy	13:34	64.8	59.0	
16-Oct-20	Cloudy	14:32	60.5	57.1	62
16-Oct-20	Cloudy	14:37	59.8	55.6	
16-Oct-20	Cloudy	14:42	61.5	56.7	
16-Oct-20	Cloudy	14:47	59.8	56.0	
16-Oct-20	Cloudy	14:52	61.4	55.7	
16-Oct-20	Cloudy	14:57	61.6	56.3	
21-Oct-20	Cloudy	13:02	63.1	57.6	60
21-Oct-20	Cloudy	13:07	63.4	58.6	
21-Oct-20	Cloudy	13:12	65.5	59.3	
21-Oct-20	Cloudy	13:17	64.7	59.8	
21-Oct-20	Cloudy	13:22	63.3	59.0	
21-Oct-20	Cloudy	13:27	62.9	59.5	
30-Oct-20	Cloudy	11:32	62.0	57.6	63
30-Oct-20	Cloudy	11:37	61.9	57.3	
30-Oct-20	Cloudy	11:42	61.3	57.2	
30-Oct-20	Cloudy	11:47	62.6	57.1	
30-Oct-20	Cloudy	11:52	60.6	57.4	
30-Oct-20	Cloudy	11:57	61.9	56.9	

Remarks:

+3dB (A) correction 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)
06-Oct-20	Cloudy	09:08	59.1	54.2	62
06-Oct-20	Cloudy	09:13	60.3	54.7	
06-Oct-20	Cloudy	09:18	61.5	54.5	
06-Oct-20	Cloudy	09:23	60.6	54.1	
06-Oct-20	Cloudy	09:28	64.5	55.9	
06-Oct-20	Cloudy	09:33	68.3	56.6	
12-Oct-20	Cloudy	10:28	69.9	53.3	64
12-Oct-20	Cloudy	10:33	62.0	56.3	
12-Oct-20	Cloudy	10:38	61.6	55.2	
12-Oct-20	Cloudy	10:43	59.3	51.9	
12-Oct-20	Cloudy	10:48	59.6	53.4	
12-Oct-20	Cloudy	10:53	60.7	53.7	
23-Oct-20	Sunny	10:05	57.6	51.0	70
23-Oct-20	Sunny	10:10	64.3	51.7	
23-Oct-20	Sunny	10:15	61.3	51.7	
23-Oct-20	Sunny	10:20	62.1	51.8	
23-Oct-20	Sunny	10:25	62.6	50.5	
23-Oct-20	Sunny	10:30	56.7	51.4	
29-Oct-20	Cloudy	9:25	60.6	55.2	64
29-Oct-20	Cloudy	9:30	62.8	55.6	
29-Oct-20	Cloudy	9:35	68.4	57.0	
29-Oct-20	Cloudy	9:40	66.4	56.5	
29-Oct-20	Cloudy	9:45	64.4	56.0	
29-Oct-20	Cloudy	9:50	61.5	56.2	

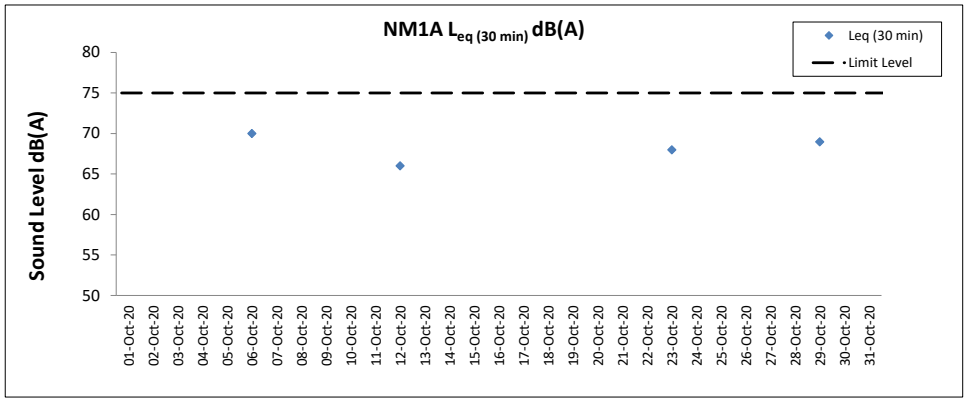
Remarks:
+3dB (A) correction was applied to free-field measurement.

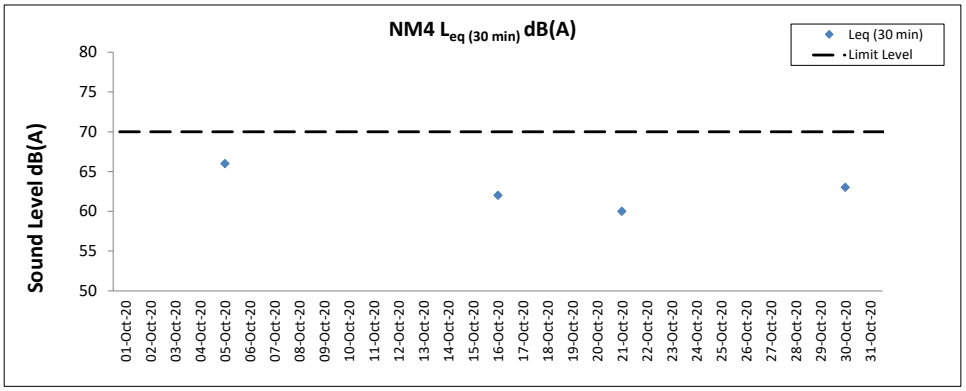
Noise Measurement Results

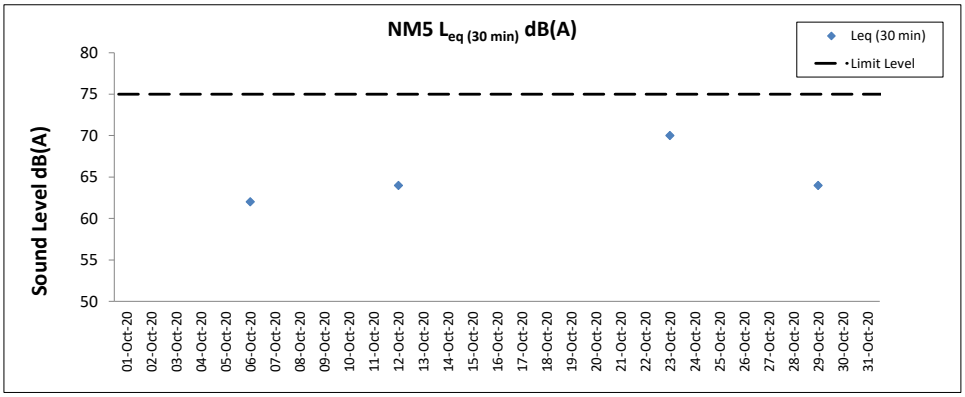
Station: NM6- House No.1 Sha Lo Wan

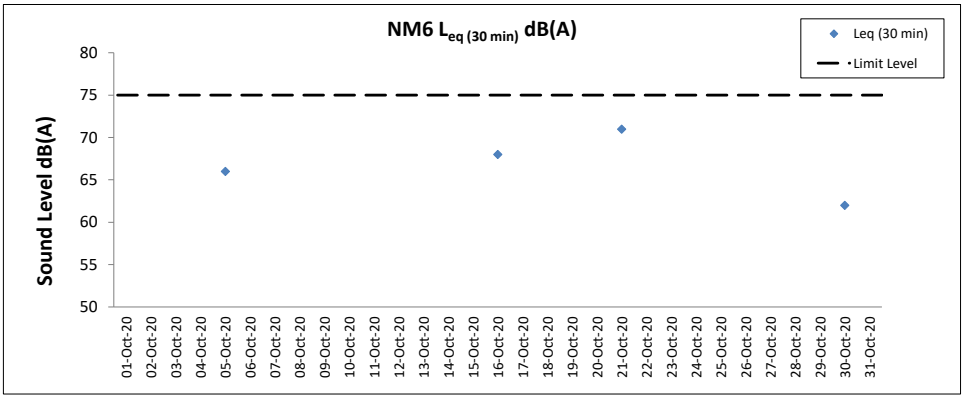
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
05-Oct-20	Cloudy	15:42	68.8	58.1	66
05-Oct-20	Cloudy	15:47	68.5	61.9	
05-Oct-20	Cloudy	15:52	70.6	65.1	
05-Oct-20	Cloudy	15:57	69.4	64.6	
05-Oct-20	Cloudy	16:02	66.7	63.3	
05-Oct-20	Cloudy	16:07	68.5	63.9	
16-Oct-20	Cloudy	15:42	72.4	54.0	68
16-Oct-20	Cloudy	15:47	67.5	44.7	
16-Oct-20	Cloudy	15:52	73.5	54.8	
16-Oct-20	Cloudy	15:57	65.8	51.4	
16-Oct-20	Cloudy	16:02	66.2	51.2	
16-Oct-20	Cloudy	16:07	55.5	50.9	
21-Oct-20	Cloudy	15:49	69.3	55.0	71
21-Oct-20	Cloudy	15:54	72.8	58.3	
21-Oct-20	Cloudy	15:59	79.2	54.5	
21-Oct-20	Cloudy	16:04	67.9	54.3	
21-Oct-20	Cloudy	16:09	68.7	55.4	
21-Oct-20	Cloudy	16:14	63.0	54.5	
30-Oct-20	Cloudy	9:46	69.1	60.7	62
30-Oct-20	Cloudy	9:51	65.1	58.8	
30-Oct-20	Cloudy	9:56	64.2	58.8	
30-Oct-20	Cloudy	10:01	65.2	58.8	
30-Oct-20	Cloudy	10:06	71.5	59.4	
30-Oct-20	Cloudy	10:11	65.8	60.2	

Remarks:
+3dB (A) correction was applied to free-field measurement.









Notes

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

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:13	9.6	Surface	1.0	0.9	15	29.2	29.2	8.3	8.3	29.1	29.1	92.4	92.4	6.0	6.0	5.5	8.6	6	7	89	92	815624	804253	<0.2	<0.2	0.6	0.5
						1.0	0.9	15	29.2		8.3		29.1		92.4		6.0		5.5		6		90				<0.2		0.5	
					Middle	4.8	1.0	8	29.0	29.0	8.3	8.3	30.0	30.0	90.2	90.2	5.9		5.4		7		93				<0.2		0.6	
						4.8	1.1	8	29.0		8.3		30.1		90.2		5.9		5.6		8		94				<0.2		0.5	
					Bottom	8.6	0.2	13	28.9	28.9	8.3	8.3	30.8	30.8	86.1	86.2	5.6	5.6	15.0		8		94				<0.2		0.5	
						8.6	0.3	13	28.9		8.3		30.8		86.2		5.6		14.8		8		94				<0.2		0.5	
C2	Sunny	Moderate	11:05	11.4	Surface	1.0	0.3	170	28.9	28.9	7.9	7.9	23.8	23.8	86.9	86.9	5.9	5.7	3.6	6.8	4	5	83	87	825694	806968	<0.2	<0.2	1.2	1.1
						1.0	0.3	172	28.9		7.9		23.8		86.9		5.9		3.5		4		83				<0.2		1.2	
					Middle	5.7	0.1	219	28.6	28.6	7.9	7.9	26.2	26.2	81.6	81.6	5.5		8.6		5		87				<0.2		1.1	
						5.7	0.1	237	28.6		7.9		26.2		81.5		5.5		8.5		6		87				<0.2		1.1	
					Bottom	10.4	0.1	150	28.6	28.6	8.0	8.0	27.7	27.7	78.7	78.7	5.2	5.2	8.2		7		91				<0.2		1.1	
						10.4	0.1	158	28.6		8.0		27.7		78.7		5.2		8.2		6		91				<0.2		1.1	
C3	Sunny	Moderate	13:03	12.6	Surface	1.0	0.4	58	28.8	28.8	7.9	7.9	26.7	26.7	87.4	87.4	5.8	5.7	3.8	4.9	5	5	84	88	822117	817801	<0.2	<0.2	0.9	1.0
						1.0	0.4	62	28.8		7.9		26.7		87.4		5.8		3.8		4		84				<0.2		0.9	
					Middle	6.3	0.3	85	28.6	28.6	7.9	7.9	27.4	27.4	83.1	83.1	5.5		4.1		6		87				<0.2		0.9	
						6.3	0.3	86	28.6		7.9		27.4		83.1		5.5		4.1		5		88				<0.2		1.0	
					Bottom	11.6	0.3	41	28.5	28.5	8.0	8.0	28.8	28.8	77.6	77.6	5.1	5.1	7.0		6		91				<0.2		1.0	
						11.6	0.3	44	28.5		8.0		28.8		77.6		5.1		6.8		6		92				<0.2		1.0	
IM1	Fine	Moderate	11:54	5.6	Surface	1.0	0.4	6	29.3	29.3	8.2	8.2	28.5	28.5	84.9	85.0	5.6	5.6	10.3	13.2	13	12	86	89	817951	807109	<0.2	<0.2	0.9	1.0
						1.0	0.4	6	29.3		8.2		28.5		85.0		5.6		10.3		12		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	1.2	31	29.1	29.1	8.3	8.3	29.7	29.7	86.2	86.7	5.6	5.7	17.1		12		92				<0.2		1.0	
						4.6	1.3	31	29.1		8.3		29.7		87.1		5.7		15.0		12		92				<0.2		1.0	
IM2	Fine	Moderate	11:46	7.1	Surface	1.0	0.4	175	29.3	29.3	8.2	8.2	28.1	28.1	87.5	87.5	5.7	5.7	6.4	11.5	11	9	86	89	818171	806168	<0.2	<0.2	1.0	1.0
						1.0	0.4	180	29.3		8.2		28.1		87.5		5.7		6.5		10		86				<0.2		1.0	
					Middle	3.6	0.8	166	29.0	29.0	8.3	8.3	29.8	29.8	85.5	85.4	5.6		9.5		9		90				<0.2		0.9	
						3.6	0.8	166	29.0		8.3		29.9		85.3		5.6		9.7		8		91				<0.2		0.9	
					Bottom	6.1	0.8	66	29.0	29.0	8.3	8.3	30.2	30.2	84.7	84.8	5.5	5.5	18.3		8		91				<0.2		1.0	
						6.1	0.8	67	29.0		8.3		30.2		84.8		5.5		18.5		6		92				<0.2		1.0	
IM3	Fine	Moderate	11:38	7.4	Surface	1.0	1.2	183	29.2	29.2	8.2	8.2	27.8	27.8	89.0	89.0	5.9	5.8	5.5	9.8	4	6	89	91	818760	805582	<0.2	<0.2	1.1	1.0
						1.0	1.2	198	29.2		8.2		27.8		89.0		5.9		5.5		4		88				<0.2		1.1	
					Middle	3.7	1.0	183	29.0	29.0	8.3	8.3	29.3	29.3	87.0	87.0	5.7		6.4		6		91				<0.2		1.0	
						3.7	1.1	188	29.0		8.3		29.3		86.9		5.7		6.4		5		91				<0.2		0.9	
					Bottom	6.4	0.4	107	29.0	29.0	8.3	8.3	30.1	30.1	85.8	85.9	5.6	5.6	17.7		7		92				<0.2		1.0	
						6.4	0.4	108	29.0		8.3		30.1		85.9		5.6		17.7		8		92				<0.2		0.9	
IM4	Fine	Moderate	11:28	8.3	Surface	1.0	0.6	327	29.2	29.2	8.2	8.2	27.5	27.5	87.0	87.1	5.7	5.7	6.2	8.4	8	7	88	90	819732	804625	<0.2	<0.2	1.0	1.0
						1.0	0.7	327	29.2		8.2		27.5		87.1		5.7		6.3		7		88				<0.2		1.0	
					Middle	4.2	0.8	357	29.0	29.0	8.3	8.3	29.6	29.6	86.0	85.9	5.6		7.9		7		90				<0.2		0.9	
						4.2	0.9	328	29.0		8.3		29.6		85.7		5.6		8.5		6		91				<0.2		1.0	
					Bottom	7.3	1.4	29	29.0	29.0	8.3	8.3	30.0	30.0	85.0	85.0	5.5	5.5	10.9		5		92				<0.2		0.8	
						7.3	1.5	29	29.0		8.3		30.0		85.0		5.5		10.9		6		92				<0.2		1.0	
IM5	Fine	Moderate	11:20	8.5	Surface	1.0	0.5	188	29.3	29.3	8.2	8.2	25.3	25.4	88.2	88.2	5.9	5.8	5.2	10.6	5	5	87	90	820749	804877	<0.2	<0.2	1.2	1.3
						1.0	0.5	200	29.3		8.2		25.5		88.1		5.9		5.4		4		87				<0.2		1.2	
					Middle	4.3	1.1	172	29.0	29.0	8.2	8.2	29.3	29.3	85.4	85.4	5.6		12.0		4		91				<0.2		1.4	
						4.3	1.2	188	29.0		8.2		29.3		85.4		5.6		12.0		5		91				<0.2		1.2	
					Bottom	7.5	0.6	150	29.0	29.0	8.2	8.2	29.6	29.6	85.4	85.6	5.6	5.6	14.4		5		92				<0.2		1.4	
						7.5	0.6	150	29.0		8.2		29.6		85.7		5.6		14.6		5		93				<0.2		1.2	
IM6	Fine	Moderate	11:14	8.3	Surface	1.0	0.9	8	29.3	29.3	8.2	8.2	24.9	24.9	88.1	88.0	5.9	5.8	5.0	10.8	6	6	87	90	821055	805810	<0.2	<0.2	1.2	1.2
						1.0	0.9	8	29.3		8.2		24.9		87.8		5.9		5.1		5		88				<0.2		1.2	
					Middle	4.2	0.7	334	29.1	29.1	8.2	8.2	28.7	28.7	84.7	84.7	5.6		11.2		6		90				<0.2		1.2	
						4.2	0.7	351	29.1		8.2		28.7		84.7		5.6		11.8		5		90				<0.2		1.4	
					Bottom	7.3	1.4	12	29.0	29.0	8.2	8.2	29.0	29.0	84.6	84.6	5.5	5.5	16.0		6		91				<0.2		1.2	
						7.3	1.4	12	29.0		8.2		29.0		84.6		5.5		15.9		7		91				<0.2		1.2	
IM7	Fine	Moderate	11:05	8.7	Surface	1.0	0.6	145	29.2	29.2	8.2	8.2	25.2	25.2	85.7	85.7	5.7	5.7	6.1	9.9	8	8	87	90	821359	806852	<0.2	<0.2	1.2	1.1
						1.0	0.7	157	29.2		8.2		25.2		85.6		5.7		6.2		7		88				<0.2		1.2	
					Middle	4.4	0.5	100	29.1	29.1	8.3	8.3	27.5	27.5	85.3	85.3	5.6		8.4		7		90				<0.2		1.1	
						4.4	0.5	101	29.1		8.3		27.5		85.3		5.6		8.4		8		90				<0.2		1.0	
					Bottom	7.7	0.3	85	29.1	29.1	8.3	8.3	28.6	28.7	83.6	83.6	5.5	5.5	15.3		8		92				<0.2		1.0	
						7.7	0.3	89	29.1		8.3		28.7		83.6		5.5		15.3		9		92				<0.2		1.0	
IM8	Sunny	Moderate	11:34	8.7	Surface	1.0	0.1	129	28.9	28.9	7.9	7.9	24.1	24.1	87.2	87.2	5.9	5.8	4.8	9.4	8	7	84	88	821811	808122	<0.2	<0.2	1.0	1.1
						1.0	0.1	134	28.9		7.9		24.1		87.2		5.9		4.8		7		84				<0.2		1.1	
					Middle	4.4	0.1	86	28.6	28.6	7.9	7.9	26.0	26.0	83.9	83.9	5.6		8.7		7		88				<0.2		1.1	
						4.4	0.1	86	28.6		7.9		26.0		83.9		5.6		8.8		7		88				<0.2		1.1	
					Bottom	7.7	0.2	48	28.6	28.6	8.0	8.0	27.7	27.7	84.4	84.4	5.6	5.6	14.9		6		91				<0.2		1.1	
						7.7	0.2	51	28.6		8.0		27.7		84.4		5.6		14.5		5		92				<0.2		1.1	

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 October 20 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 (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	Moderate	11:41	7.8	Surface	1.0	0.3	109	28.9	28.9	7.9	7.9	24.0	24.0	87.9	87.9	5.9	5.7	4.5	9.1	6	7	84	88	822096	808824	<0.2	<0.2	1.1	1.1
						1.0	0.3	110	28.9		7.9		24.0		87.9		5.9		4.5		5		84				<0.2		1.0	
					Middle	3.9	0.3	140	28.6	28.6	7.9	7.9	26.1	26.1	82.1	82.2	5.5		9.3		8		87				<0.2		1.0	
						3.9	0.3	145	28.6		7.9		26.1		82.3		5.5		9.3		7		88				<0.2		1.0	
					Bottom	6.8	0.3	122	28.6	28.6	8.0	8.0	27.2	27.2	84.3	84.3	5.6	5.6	13.4		8		91				<0.2		1.1	
						6.8	0.4	128	28.6		8.0		27.2		84.3		5.6		13.5		8		91				<0.2		1.1	
IM10	Sunny	Moderate	11:49	7.5	Surface	1.0	0.6	125	29.0	29.0	7.9	7.9	24.3	24.3	89.0	89.0	6.0	5.7	3.9	8.6	6	6	84	88	822377	809815	<0.2	<0.2	1.2	1.0
						1.0	0.6	126	29.0		7.9		24.3		88.9		6.0		3.9		6		83				<0.2		1.0	
					Middle	3.8	0.6	126	28.6	28.6	7.9	7.9	26.2	26.3	80.2	80.2	5.4		9.8		6		88				<0.2		0.9	
						3.8	0.6	126	28.6		7.9		26.3		80.2		5.4		9.3		5		88				<0.2		1.0	
					Bottom	6.5	0.4	118	28.6	28.6	7.9	7.9	26.8	26.8	83.0	83.0	5.5	5.6	12.3		6		92				<0.2		1.0	
						6.5	0.4	127	28.6		7.9		26.8		83.0		5.6		12.5		7		91				<0.2		1.0	
IM11	Sunny	Moderate	12:01	7.8	Surface	1.0	0.5	104	28.7	28.7	7.9	7.9	25.2	25.2	87.0	87.0	5.9	5.7	4.6	6.5	6	7	84	88	822078	811455	<0.2	<0.2	1.1	0.9
						1.0	0.5	106	28.7		7.9		25.2		86.9		5.8		4.6		7		84				<0.2		0.9	
					Middle	3.9	0.5	105	28.6	28.6	7.9	7.9	26.5	26.5	81.7	81.7	5.5		5.8		7		87				<0.2		0.9	
						3.9	0.6	115	28.6		7.9		26.5		81.6		5.5		5.8		8		88				<0.2		0.9	
					Bottom	6.8	0.3	103	28.6	28.6	7.9	7.9	27.6	27.6	79.6	79.6	5.3	5.3	9.1		7		92				<0.2		0.8	
						6.8	0.3	112	28.6		7.9		27.6		79.6		5.3		9.2		8		92				<0.2		0.8	
IM12	Sunny	Moderate	12:07	8.7	Surface	1.0	0.5	100	28.9	28.9	7.9	7.9	24.2	24.2	89.2	89.2	6.0	5.7	4.1	9.3	7	6	83	87	821471	812033	<0.2	<0.2	0.9	1.0
						1.0	0.5	102	28.9		7.9		24.2		89.1		6.0		4.1		7		84				<0.2		1.0	
					Middle	4.4	0.5	97	28.6	28.6	7.9	7.9	26.4	26.4	80.1	80.1	5.4		10.0		6		86				<0.2		1.1	
						4.4	0.5	98	28.6		7.9		26.4		80.1		5.4		10.0		7		87				<0.2		1.0	
					Bottom	7.7	0.2	93	28.6	28.6	7.9	7.9	26.6	26.6	80.0	80.1	5.4	5.4	13.7		5		91				<0.2		1.0	
						7.7	0.2	97	28.6		7.9		26.6		80.1		5.4		13.8		5		91				<0.2		1.0	
SR1A	Sunny	Moderate	12:28	5.4	Surface	1.0	-	-	28.7	28.7	7.9	7.9	25.0	25.0	88.1	88.1	5.9	5.9	4.6	4.3	6	8	-	-	819982	812663	-	-	-	-
						1.0	-	-	28.7		7.9		25.0		88.1		5.9		4.5		7		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.6	28.6	7.9	7.9	25.2	25.2	86.5	86.6	5.8	5.8	4.1		9		-				-		-	
						4.4	-	-	28.6		7.9		25.2		86.6		5.8		4.2		8		-				-		-	
SR2	Sunny	Moderate	12:41	5.2	Surface	1.0	0.4	67	28.8	28.8	8.0	8.0	24.9	24.9	88.1	88.1	5.9	5.9	4.2	7.3	6	7	83	85	821461	814177	<0.2	<0.2	1.0	1.0
						1.0	0.4	70	28.8		8.0		24.9		88.1		5.9		4.2		6		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	63	28.6	28.6	8.0	8.0	26.2	26.2	82.8	82.9	5.6	5.6	10.4		7		87				<0.2		1.0	
						4.2	0.3	64	28.6		8.0		26.2		82.9		5.6		10.4		8		87				<0.2		0.9	
SR3	Sunny	Moderate	11:28	9.8	Surface	1.0	0.2	213	28.9	28.9	7.9	7.9	23.9	23.9	88.4	88.4	6.0	5.8	4.7	9.6	6	6	-	-	822152	807575	-	-	-	-
						1.0	0.2	230	28.9		7.9		23.9		88.4		6.0		4.7		7		-				-		-	
					Middle	4.9	0.2	208	28.6	28.6	7.9	7.9	25.9	25.9	81.5	81.5	5.5		9.1		5		-				-		-	
						4.9	0.2	219	28.6		7.9		25.9		81.5		5.5		9.1		6		-				-		-	
					Bottom	8.8	0.2	32	28.5	28.5	8.0	8.0	28.0	28.0	84.5	84.5	5.6	5.6	14.8		5		-				-		-	
						8.8	0.2	33	28.5		8.0		28.0		84.5		5.6		14.9		6		-				-		-	
SR4A	Fine	Moderate	12:39	9.8	Surface	1.0	1.9	265	29.3	29.3	8.2	8.2	28.8	28.8	88.2	88.2	5.8	5.7	8.6	11.7	8	10	-	-	817182	807812	-	-	-	-
						1.0	2.0	273	29.2		8.2		28.9		88.1		5.8		8.8		9		-				-		-	
					Middle	4.9	1.7	267	29.1	29.1	8.2	8.2	29.7	29.7	83.8	83.9	5.5		12.3		9		-				-		-	
						4.9	1.8	279	29.1		8.2		29.7		83.9		5.5		12.4		10		-				-		-	
					Bottom	8.8	1.1	281	29.1	29.1	8.2	8.2	29.7	29.7	84.9	85.0	5.5	5.6	14.1		11		-				-		-	
						8.8	1.1	294	29.1		8.2		29.7		85.1		5.6		14.2		10		-				-		-	
SR5A	Fine	Calm	12:56	4.1	Surface	1.0	0.1	344	29.3	29.3	8.2	8.2	24.4	24.4	90.7	90.7	6.1	6.1	4.9	7.3	5	5	-	-	816592	810702	-	-	-	-
						1.0	0.1	344	29.3		8.2		24.4		90.7		6.1		5.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	55	29.2	29.2	8.2	8.2	25.8	25.8	84.8	85.0	5.6	5.7	9.7		6		-				-		-	
						3.1	0.1	57	29.2		8.2		25.8		85.1		5.7		9.4		5		-				-		-	
SR6A	Fine	Calm	13:35	4.2	Surface	1.0	0.0	249	29.3	29.3	8.1	8.1	24.9	24.9	89.3	89.2	6.0	6.0	4.3	7.6	5	4	-	-	817978	814762	-	-	-	-
						1.0	0.0	251	29.3		8.1		25.0		89.0		5.9		4.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	160	29.2	29.3	8.1	8.1	25.9	25.8	78.7	79.1	5.2	5.3	10.7		4		-				-		-	
						3.2	0.1	160	29.3		8.1		25.8		79.5		5.3		10.9		4		-				-		-	
SR7	Sunny	Moderate	13:33	14.7	Surface	1.0	0.9	72	28.7	28.7	7.9	7.9	27.2	27.2	88.8	88.8	5.9	5.7	2.4	3.8	5	6	-	-	823634	823741	-	-	-	-
						1.0	0.9	72	28.7		7.9		27.2		88.7		5.9		2.4		6		-				-		-	
					Middle	7.4	0.7	71	28.5	28.5	7.9	7.9	28.8	28.8	81.3	81.3	5.4		2.7		6		-				-		-	
						7.4	0.7	76	28.5		7.9		28.8		81.3		5.4		2.6		5		-				-		-	
					Bottom	13.7	0.4	45	28.5	28.5	8.0	8.0	29.2	29.2	78.9	78.9	5.2	5.2	6.2		7		-				-		-	
						13.7	0.4	46	28.5		8.0		29.2		78.9		5.2		6.3		6		-				-		-	
SR8	Sunny	Moderate	12:19	4.8	Surface	1.0	-	-	29.4	29.4	7.9	7.9	25.0	25.0	91.1	91.1	6.1	6.1	8.6	8.1	11	12	-	-	820398	811617	-	-	-	-
						1.0	-	-	29.4		7.9		25.0		91.1		6.1		8.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.9	28.9	7.9	7.9	25.1	25.1	88.3	88.3	5.9	5.9	7.6		12		-				-		-	
						3.8	-	-	28.9		7.9		25.1		88.2		5.9		7.6		12		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:01	9.3	Surface	1.0	0.4	40	28.9	28.9	8.3	8.3	29.9	29.9	86.3	86.3	5.6	5.6	11.2	13.8	14	13	86	88	815611	804249	<0.2	<0.2	0.4	0.6
						1.0	0.4	40	28.9		8.3		29.9		86.2		5.6		11.0		14		86				<0.2		0.5	
					Middle	4.7	1.0	22	28.9	28.9	8.2	8.2	30.3	30.3	85.4	85.4	5.6		13.9		13		89				<0.2		0.6	
						4.7	1.0	22	28.9		8.2		30.3		85.3		5.6		14.5		12		89				<0.2		0.6	
					Bottom	8.3	1.3	18	28.8	28.8	8.2	8.2	30.7	30.7	85.2	85.2	5.5	5.6	15.9		11		90				<0.2		0.6	
						8.3	1.4	19	28.8		8.2		30.7		85.2		5.6		15.9		12		90				<0.2		0.6	
C2	Sunny	Moderate	07:59	11.2	Surface	1.0	0.5	340	28.7	28.7	7.9	7.9	23.7	23.6	84.8	84.9	5.8	5.8	4.2	5.2	4	5	87	91	825678	806967	<0.2	<0.2	1.1	1.1
						1.0	0.5	355	28.7		7.9		23.6		84.9		5.8		4.1		5		86				<0.2		1.1	
					Middle	5.6	0.6	331	28.7	28.7	7.9	7.9	24.2	24.2	83.6	83.6	5.7		5.1		5		90				<0.2		1.1	
						5.6	0.6	358	28.7		7.9		24.3		83.6		5.7		5.1		5		91				<0.2		1.2	
					Bottom	10.2	0.4	339	28.7	28.7	8.0	8.0	24.5	24.5	82.6	82.7	5.6	5.6	6.2		6		95				<0.2		1.1	
						10.2	0.4	312	28.7		8.0		24.5		82.7		5.6		6.2		5		94				<0.2		1.2	
C3	Fine	Moderate	05:59	11.6	Surface	1.0	0.6	282	28.2	28.2	7.9	7.9	26.2	26.2	86.2	86.2	5.8	5.5	2.9	6.8	6	4	85	89	822105	817798	<0.2	<0.2	1.0	0.9
						1.0	0.6	307	28.2		7.9		26.2		86.2		5.8		2.9		6		85				<0.2		0.9	
					Middle	5.8	0.6	280	28.6	28.6	7.9	7.9	28.8	28.8	77.0	77.0	5.1		7.5		5		89				<0.2		0.8	
						5.8	0.6	294	28.6		7.9		28.8		77.0		5.1		7.5		4		89				<0.2		0.9	
					Bottom	10.6	0.3	282	28.6	28.6	7.9	7.9	28.9	28.9	76.6	76.6	5.1	5.1	9.8		3		93				<0.2		1.0	
						10.6	0.3	308	28.6		7.9		28.9		76.6		5.1		10.2		2		93				<0.2		0.8	
IM1	Cloudy	Moderate	07:22	5.2	Surface	1.0	0.2	342	29.1	29.1	8.2	8.2	28.1	28.2	84.7	84.8	5.6	5.6	10.8	11.0	14	14	85	87	817935	807152	<0.2	<0.2	0.8	0.8
						1.0	0.2	315	29.1		8.2		28.2		84.8		5.6		10.9		13		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	270	29.0	29.0	8.2	8.2	28.2	28.2	87.8	88.1	5.8	5.8	11.3		15		89				<0.2		0.8	
						4.2	0.2	296	29.0		8.2		28.2		88.3		5.8		11.2		15		86				<0.2		0.8	
IM2	Cloudy	Moderate	07:28	7.7	Surface	1.0	0.3	22	28.9	28.9	8.2	8.2	27.3	27.4	86.6	86.5	5.7	5.7	7.3	12.6	11	9	86	89	818171	806170	<0.2	<0.2	0.8	0.8
						1.0	0.4	22	28.9		8.2		27.5		86.4		5.7		7.8		10		89				<0.2		0.8	
					Middle	3.9	0.4	12	29.0	29.0	8.2	8.2	29.0	29.0	85.1	85.1	5.6		14.1		9		90				<0.2		0.8	
						3.9	0.4	12	29.0		8.2		29.0		85.0		5.6		13.8		9		90				<0.2		0.8	
					Bottom	6.7	0.3	339	29.0	29.0	8.2	8.2	29.8	29.8	85.2	85.4	5.6	5.6	16.5		8		91				<0.2		0.8	
						6.7	0.3	340	29.0		8.2		29.8		85.5		5.6		16.2		7		86				<0.2		0.8	
IM3	Cloudy	Moderate	07:33	7.6	Surface	1.0	0.5	18	28.9	28.9	8.2	8.2	27.6	27.6	87.1	87.1	5.8	5.7	7.2	9.9	8	10	87	89	818772	805575	<0.2	<0.2	0.8	1.0
						1.0	0.5	18	28.9		8.2		27.6		87.1		5.8		7.1		9		89				<0.2		0.9	
					Middle	3.8	0.4	321	29.0	29.0	8.2	8.2	29.5	29.5	84.9	85.0	5.6		10.1		10		90				<0.2		0.9	
						3.8	0.4	338	29.0		8.2		29.5		85.0		5.6		10.5		10		91				<0.2		1.0	
					Bottom	6.6	0.3	317	29.0	29.0	8.2	8.2	29.7	29.7	86.5	86.6	5.7	5.7	12.2		12		91				<0.2		1.1	
						6.6	0.4	319	29.0		8.2		29.7		86.7		5.7		12.0		12		87				<0.2		1.1	
IM4	Cloudy	Moderate	07:42	7.5	Surface	1.0	0.8	342	28.9	28.9	8.2	8.2	27.5	27.5	88.0	88.0	5.8	5.7	6.4	12.6	9	9	87	89	819712	804590	<0.2	<0.2	1.0	1.2
						1.0	0.9	359	28.9		8.2		27.5		87.9		5.8		6.4		8		90				<0.2		1.0	
					Middle	3.8	0.7	349	29.0	29.0	8.2	8.2	29.1	29.1	85.7	85.6	5.6		14.3		9		90				<0.2		1.1	
						3.8	0.7	352	29.0		8.2		29.2		85.5		5.6		14.3		9		90				<0.2		1.3	
					Bottom	6.5	0.6	341	29.0	29.0	8.2	8.2	29.5	29.5	85.2	85.3	5.6	5.6	17.3		10		91				<0.2		1.2	
						6.5	0.6	342	29.0		8.2		29.5		85.3		5.6		17.0		10		86				<0.2		1.3	
IM5	Cloudy	Moderate	07:48	7.2	Surface	1.0	1.1	12	29.0	29.0	8.2	8.2	26.9	26.9	85.5	85.5	5.7	5.7	8.0	12.6	8	11	86	89	820738	804843	<0.2	<0.2	0.9	0.9
						1.0	1.2	13	29.0		8.2		26.9		85.5		5.7		8.0		8		89				<0.2		0.9	
					Middle	3.6	0.9	3	29.0	29.0	8.2	8.2	28.4	28.4	85.2	85.2	5.6		13.8		11		90				<0.2		0.9	
						3.6	1.0	3	29.0		8.2		28.5		85.2		5.6		13.5		10		90				<0.2		0.9	
					Bottom	6.2	0.7	29	29.0	29.0	8.2	8.2	29.1	29.1	86.1	86.4	5.6	5.7	16.2		14		91				<0.2		0.9	
						6.2	0.8	31	29.0		8.2		29.1		86.6		5.7		16.3		14		86				<0.2		1.0	
IM6	Cloudy	Moderate	07:56	7.8	Surface	1.0	0.2	183	29.1	29.1	8.2	8.2	23.5	23.5	85.9	85.8	5.8	5.7	5.0	10.9	6	7	86	89	821053	805847	<0.2	<0.2	0.9	1.0
						1.0	0.2	190	29.1		8.2		23.5		85.7		5.8		5.0		8		89				<0.2		1.0	
					Middle	3.9	0.2	66	29.1	29.1	8.2	8.2	26.8	26.7	84.2	84.2	5.6		9.7		6		89				<0.2		1.0	
						3.9	0.2	67	29.1		8.2		26.7		84.2		5.6		9.3		7		89				<0.2		1.0	
					Bottom	6.8	0.1	43	29.1	29.1	8.2	8.2	28.3	28.2	83.3	83.4	5.5	5.5	18.2		7		90				<0.2		1.1	
						6.8	0.2	43	29.1		8.2		28.2		83.4		5.5		18.3		6		90				<0.2		1.0	
IM7	Cloudy	Moderate	08:04	8.2	Surface	1.0	0.1	200	29.2	29.2	8.1	8.1	23.5	23.5	85.3	85.3	5.7	5.7	5.0	9.6	7	6	87	89	821363	806829	<0.2	<0.2	1.0	1.1
						1.0	0.1	201	29.2		8.1		23.5		85.2		5.7		5.1		7		87				<0.2		1.1	
					Middle	4.1	0.2	123	29.1	29.1	8.2	8.2	24.2	24.2	85.0	85.0	5.7		7.4		6		89				<0.2		1.2	
						4.1	0.2	131	29.1		8.2		24.2		84.9		5.7		7.4		6		89				<0.2		1.1	
					Bottom	7.2	0.2	96	29.0	29.0	8.2	8.2	27.5	27.5	86.7	86.8	5.7	5.7	16.3		6		91				<0.2		1.2	
						7.2	0.3	105	29.0		8.2		27.5		86.9		5.7		16.5		6		91				<0.2		1.2	
IM8	Sunny	Moderate	07:31	7.9	Surface	1.0	0.1	204	28.7	28.7	7.9	7.9	23.4	23.4	86.4	86.4	5.9	5.8	4.9	9.1	11	10	86	90	821808	808158	<0.2	<0.2	1.2	1.2
						1.0	0.1	222	28.7		7.9		23.4		86.4		5.9		5.0		12		86				<0.2		1.2	
					Middle	4.0	0.0	237	28.7	28.7	7.9	7.9	24.1	24.1	84.7	84.7	5.7		8.8		9		91				<0.2		1.2	
						4.0	0.0	248	28.7		7.9		24.1		84.6		5.7		8.8		9		90				<0.2		1.1	
					Bottom	6.9	0.1	156	28.7	28.7	7.9	7.9	24.8	24.8	82.6	82.6	5.6	5.6	13.8		8		94				<0.2		1.2	
						6.9	0.1	161	28.7		7.9		24.8		82.6		5.6		13.6		8		95				<0.2		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**

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	07:23	7.6	Surface	1.0	0.5	68	28.7	28.7	7.9	7.9	23.6	23.6	86.1	86.1	5.8	5.8	6.1	8.5	9	10	87	90	822087	808832	<0.2	<0.2	1.1	1.2
						1.0	0.6	71	28.7		7.9		23.6		86.1		5.8		6.1		9		86				<0.2		1.2	
					Middle	3.8	0.5	80	28.6	28.6	7.9	7.9	23.7	23.7	85.7	85.7	5.8		7.7		10		90				<0.2		1.1	
						3.8	0.5	86	28.6		7.9		23.7		85.7		5.8		7.7		10		90				<0.2		1.1	
					Bottom	6.6	0.4	88	28.6	28.6	7.9	7.9	24.7	24.7	83.7	83.8	5.7	5.7	11.6		10		94				<0.2		1.2	
						6.6	0.4	91	28.6		7.9		24.7		83.8		5.7		11.5		11		94				<0.2		1.2	
IM10	Sunny	Moderate	07:13	8.2	Surface	1.0	0.3	338	28.5	28.5	7.9	7.9	23.8	23.8	86.7	86.7	5.9	5.9	6.3	6.4	13	11	86	90	822408	809778	<0.2	<0.2	1.1	1.1
						1.0	0.3	311	28.5		7.9		23.8		86.7		5.9		6.4		13		87				<0.2		1.1	
					Middle	4.1	0.3	309	28.4	28.4	7.9	7.9	24.8	24.7	86.7	86.7	5.9		5.8		12		90				<0.2		1.1	
						4.1	0.4	336	28.4		7.9		24.7		86.7		5.9		5.9		11		90				<0.2		1.1	
					Bottom	7.2	0.3	300	28.4	28.4	7.9	7.9	25.5	25.5	85.1	85.1	5.7	5.8	6.9		10		94				<0.2		1.0	
						7.2	0.3	314	28.4		7.9		25.5		85.1		5.8		6.9		9		94				<0.2		1.0	
IM11	Sunny	Moderate	07:03	7.8	Surface	1.0	0.6	312	28.5	28.5	7.9	7.9	25.7	25.7	82.9	82.9	5.6	5.5	7.1	10.9	11	10	86	90	822033	811469	<0.2	<0.2	0.9	1.0
						1.0	0.6	325	28.5		7.9		25.7		82.8		5.6		7.2		10		87				<0.2		0.9	
					Middle	3.9	0.4	316	28.6	28.6	7.9	7.9	26.6	26.6	80.4	80.4	5.4		10.2		9		90				<0.2		1.1	
						3.9	0.4	332	28.6		7.9		26.6		80.4		5.4		10.2		10		90				<0.2		1.1	
					Bottom	6.8	0.2	294	28.6	28.6	7.9	7.9	27.2	27.2	79.9	79.9	5.3	5.3	15.6		9		94				<0.2		0.9	
						6.8	0.2	319	28.6		7.9		27.2		79.9		5.3		15.4		8		94				<0.2		0.9	
IM12	Sunny	Moderate	06:56	8.9	Surface	1.0	0.4	298	28.5	28.5	7.9	7.9	25.9	25.9	82.9	82.9	5.6	5.6	6.8	9.5	10	11	86	90	821462	812037	<0.2	<0.2	0.9	0.9
						1.0	0.4	309	28.5		7.9		25.9		82.9		5.6		6.8		9		86				<0.2		1.0	
					Middle	4.5	0.5	292	28.5	28.5	7.9	7.9	26.2	26.2	81.3	81.3	5.5		8.4		10		91				<0.2		0.9	
						4.5	0.5	302	28.5		7.9		26.2		81.3		5.5		8.3		11		90				<0.2		1.0	
					Bottom	7.9	0.3	287	28.6	28.6	7.9	7.9	26.5	26.5	79.8	79.8	5.3	5.3	13.5		13		95				<0.2		0.8	
						7.9	0.4	310	28.6		7.9		26.5		79.8		5.3		13.5		12		94				<0.2		0.9	
SR1A	Sunny	Moderate	06:34	5.5	Surface	1.0	-	-	28.3	28.3	7.9	7.9	24.2	24.2	84.6	84.6	5.8	5.8	3.7	6.2	6	7	-	-	819974	812666	-	-	-	-
						1.0	-	-	28.3		7.9		24.2		84.6		5.8		3.7		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.4	28.4	7.9	7.9	24.8	24.8	82.2	82.3	5.6	5.6	8.6		8		-				-		-	
						4.5	-	-	28.4		7.9		24.8		82.3		5.6		8.6		7		-				-		-	
SR2	Fine	Moderate	06:20	5.0	Surface	1.0	0.2	107	28.5	28.5	7.9	7.9	26.0	26.0	81.8	81.8	5.5	5.5	7.6	7.9	8	9	86	88	821460	814159	<0.2	<0.2	0.9	0.9
						1.0	0.2	111	28.5		7.9		26.0		81.8		5.5		7.6		8		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	132	28.6	28.6	7.9	7.9	26.3	26.3	80.5	80.5	5.4	5.4	8.2		8		91				<0.2		0.9	
						4.0	0.2	143	28.6		7.9		26.4		80.5		5.4		8.3		10		90				<0.2		0.9	
SR3	Sunny	Moderate	07:37	8.2	Surface	1.0	0.1	284	28.6	28.6	7.9	7.9	23.5	23.5	86.3	86.3	5.9	5.8	5.4	8.7	5	7	-	-	822144	807584	-	-	-	-
						1.0	0.1	307	28.6		7.9		23.5		86.3		5.9		5.5		6		-				-		-	
					Middle	4.1	0.2	258	28.8	28.8	7.9	7.9	23.9	23.9	84.1	84.1	5.7		7.1		6		-				-		-	
						4.1	0.2	272	28.8		7.9		23.9		84.1		5.7		7.1		7		-				-		-	
					Bottom	7.2	0.1	89	28.7	28.7	7.9	7.9	25.0	25.0	81.7	81.7	5.5	5.5	13.7		9		-				-		-	
						7.2	0.1	94	28.7		7.9		24.9		81.7		5.5		13.3		8		-				-		-	
SR4A	Cloudy	Calm	06:39	8.1	Surface	1.0	1.7	213	28.9	28.9	8.3	8.3	24.4	24.4	85.0	84.9	5.7	5.6	5.9	11.3	10	8	-	-	817212	807816	-	-	-	-
						1.0	1.7	226	28.9		8.3		24.4		84.8		5.7		6.0		9		-				-		-	
					Middle	4.1	1.8	209	29.0	29.0	8.3	8.3	26.9	26.9	83.7	83.7	5.6		10.1		7		-				-		-	
						4.1	1.8	211	29.0		8.3		26.9		83.6		5.5		10.2		8		-				-		-	
					Bottom	7.1	1.5	229	29.1	29.1	8.3	8.3	27.7	27.7	83.8	83.8	5.5	5.5	17.7		8		-				-		-	
						7.1	1.6	231	29.1		8.3		27.7		83.8		5.5		17.7		7		-				-		-	
SR5A	Cloudy	Calm	05:55	3.8	Surface	1.0	0.1	341	28.8	28.8	8.2	8.2	24.4	24.4	85.7	85.8	5.8	5.8	5.7	6.1	6	6	-	-	816607	810685	-	-	-	-
						1.0	0.1	314	28.8		8.2		24.4		85.8		5.8		5.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	13	28.8	28.8	8.2	8.2	24.6	24.6	87.4	87.5	5.9	5.9	6.5		7		-				-		-	
						2.8	0.1	14	28.8		8.2		24.6		87.6		5.9		6.3		7		-				-		-	
SR6A	Cloudy	Calm	05:26	4.7	Surface	1.0	0.1	216	28.7	28.7	8.2	8.2	24.5	24.6	82.0	81.9	5.5	5.5	3.8	4.4	6	5	-	-	817944	814729	-	-	-	-
						1.0	0.1	225	28.7		8.2		24.6		81.7		5.5		3.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	225	29.2	29.2	8.2	8.2	25.6	25.6	80.0	80.0	5.3	5.3	4.9		5		-				-		-	
						3.7	0.1	230	29.2		8.2		25.6		79.9		5.3		4.9		4		-				-		-	
SR7	Fine	Moderate	05:30	14.9	Surface	1.0	0.1	15	28.5	28.5	7.9	7.9	28.0	28.0	80.4	80.4	5.3	5.3	3.4	4.7	3	4	-	-	823638	823727	-	-	-	-
						1.0	0.1	15	28.5		7.9		28.0		80.4		5.3		3.4		3		-				-		-	
					Middle	7.5	0.3	76	28.5	28.5	7.9	7.9	28.8	28.8	78.7	78.7	5.2		5.1		4		-				-		-	
						7.5	0.3	78	28.5		7.9		28.9		78.7		5.2		5.1		4		-				-		-	
					Bottom	13.9	0.1	81	28.5	28.5	7.9	7.9	29.1	29.1	78.7	78.7	5.2	5.2	5.7		5		-				-		-	
						13.9	0.1	81	28.5		7.9		29.1		78.7		5.2		5.7		6		-				-		-	
SR8	Sunny	Moderate	06:45	5.2	Surface	1.0	-	-	28.7	28.7	7.9	7.9	25.7	25.7	82.4	82.4	5.5	5.5	10.7	11.4	17	19	-	-	820380	811599	-	-	-	-
						1.0	-	-	28.7		7.9		25.7		82.3		5.5		10.7		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.6	28.6	7.9	7.9	26.3	26.3	80.6	80.6	5.4	5.4	12.1		21		-				-		-	
						4.2	-	-	28.6		7.9		26.3		80.6		5.4		12.0		20		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	13:11	8.7	Surface	1.0	0.2	214	28.5	28.5	8.2	8.2	25.7	25.7	92.2	92.1	6.2	6.1	7.3	8.6	6	5	88	91	815624	804235	<0.2	<0.2	1.2	1.2
						1.0	0.2	225	28.5		8.2		25.7		92.0		6.2		7.5		6		88				<0.2		1.3	
					Middle	4.4	0.2	184	28.2	28.2	8.2	8.2	29.2	29.2	90.2	90.3	6.0		7.9		5		92				<0.2		1.2	
						4.4	0.2	189	28.2		8.2		29.3		90.3		6.0		8.1		5		92				<0.2		1.1	
					Bottom	7.7	0.3	204	28.2	28.2	8.2	8.2	29.5	29.5	92.6	92.7	6.1	6.1	10.6		3		93				<0.2		1.1	
						7.7	0.3	216	28.2		8.2		29.5		92.8		6.1		10.5		3		93				<0.2		1.1	
C2	Sunny	Moderate	12:04	11.5	Surface	1.0	0.2	135	29.5	29.5	8.1	8.1	23.8	23.8	84.8	84.8	5.7	5.6	5.0	9.5	6	6	86	88	825663	806965	<0.2	<0.2	1.3	1.2
						1.0	0.2	146	29.5		8.1		23.8		84.8		5.7		4.9		6		85				<0.2		1.2	
					Middle	5.8	0.5	154	28.9	28.9	8.1	8.1	27.4	27.4	83.1	83.1	5.5		10.8		6		87				<0.2		1.1	
						5.8	0.5	162	28.9		8.1		27.4		83.0		5.5		10.7		6		88				<0.2		1.1	
					Bottom	10.5	0.5	144	29.0	29.0	8.2	8.2	27.6	27.6	81.1	81.1	5.4	5.4	12.6		7		91				<0.2		1.3	
						10.5	0.5	154	29.0		8.2		27.6		81.1		5.4		12.8		7		90				<0.2		1.3	
C3	Sunny	Moderate	13:52	10.8	Surface	1.0	0.4	286	29.1	29.1	8.1	8.1	27.3	27.3	84.1	84.1	5.6	5.5	5.8	12.5	4	5	84	86	822130	817815	<0.2	<0.2	0.9	0.8
						1.0	0.4	294	29.1		8.1		27.3		84.1		5.6		5.8		4		84				<0.2		0.8	
					Middle	5.4	0.2	257	29.0	29.0	8.1	8.1	28.2	28.2	80.9	80.9	5.3		16.9		5		86				<0.2		0.9	
						5.4	0.2	277	29.0		8.1		28.2		80.9		5.3		16.8		5		85				<0.2		0.8	
					Bottom	9.8	0.1	120	29.0	29.0	8.2	8.2	28.5	28.5	81.1	81.2	5.3	5.3	14.8		7		88				<0.2		0.8	
						9.8	0.1	126	29.0		8.2		28.5		81.2		5.3		14.8		7		88				<0.2		0.8	
IM1	Fine	Moderate	12:51	5.2	Surface	1.0	0.1	168	28.6	28.6	8.2	8.2	26.9	26.9	91.7	91.5	6.1	6.1	3.9	10.4	8	7	87	89	817959	807140	<0.2	<0.2	1.6	1.6
						1.0	0.1	180	28.5		8.2		27.0		91.2		6.1		3.9		7		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	156	28.4	28.4	8.2	8.2	27.8	27.8	90.7	90.8	6.1	6.1	16.7		6		90				<0.2		1.7	
						4.2	0.2	160	28.4		8.2		27.8		90.9		6.1		16.9		6		91				<0.2		1.6	
IM2	Fine	Moderate	12:43	7.2	Surface	1.0	0.2	159	28.7	28.7	8.2	8.2	26.5	26.5	91.6	91.5	6.1	6.0	4.9	11.0	5	6	87	90	818160	806174	<0.2	<0.2	1.8	1.7
						1.0	0.2	162	28.7		8.2		26.5		91.4		6.1		4.8		5		86				<0.2		1.7	
					Middle	3.6	0.1	183	28.3	28.3	8.2	8.2	27.8	27.8	88.0	88.0	5.9		9.8		6		90				<0.2		1.8	
						3.6	0.1	185	28.3		8.2		27.9		88.0		5.9		9.9		6		91				<0.2		1.7	
					Bottom	6.2	0.2	185	28.2	28.2	8.2	8.2	28.1	28.0	88.1	88.2	5.9	5.9	18.1		7		91				<0.2		1.6	
						6.2	0.2	185	28.2		8.2		28.0		88.2		5.9		18.6		7		92				<0.2		1.5	
IM3	Fine	Moderate	12:37	7.4	Surface	1.0	0.2	139	28.8	28.8	8.2	8.2	25.6	25.6	93.0	93.0	6.2	6.1	4.0	8.1	6	6	89	91	818791	805617	<0.2	<0.2	2.0	1.8
						1.0	0.2	148	28.8		8.2		25.6		92.9		6.2		4.1		6		89				<0.2		1.9	
					Middle	3.7	0.2	147	28.3	28.3	8.2	8.2	27.8	27.8	87.9	87.9	5.9		8.2		6		91				<0.2		1.8	
						3.7	0.2	147	28.3		8.2		27.8		87.9		5.9		8.4		6		92				<0.2		1.7	
					Bottom	6.4	0.2	149	28.3	28.3	8.2	8.2	27.9	27.9	90.2	90.3	6.0	6.0	12.0		6		92				<0.2		1.7	
						6.4	0.2	156	28.3		8.2		27.9		90.4		6.0		12.1		5		92				<0.2		1.8	
IM4	Fine	Moderate	12:27	8.5	Surface	1.0	0.3	182	28.5	28.5	8.2	8.2	25.9	25.9	88.4	88.4	5.9	5.9	4.3	8.7	5	5	87	89	819737	804629	<0.2	<0.2	1.7	1.4
						1.0	0.4	193	28.5		8.2		25.9		88.4		5.9		4.4		5		87				<0.2		1.6	
					Middle	4.3	0.2	161	28.3	28.3	8.2	8.2	27.8	27.8	86.6	86.6	5.8		11.2		5		89				<0.2		1.7	
						4.3	0.2	170	28.3		8.2		27.8		86.6		5.8		11.2		5		90				<0.2		1.6	
					Bottom	7.5	0.2	146	28.3	28.3	8.2	8.2	28.4	28.4	87.8	87.9	5.8	5.8	10.7		5		91				<0.2		0.9	
						7.5	0.2	153	28.3		8.2		28.4		87.9		5.8		10.8		5		91				<0.2		1.1	
IM5	Fine	Moderate	12:19	8.0	Surface	1.0	0.3	230	28.4	28.4	8.2	8.2	25.8	25.9	88.8	88.7	6.0	5.9	4.2	10.0	4	5	86	89	820727	804880	<0.2	<0.2	1.7	1.5
						1.0	0.3	245	28.4		8.2		25.9		88.6		6.0		4.5		4		86				<0.2		1.6	
					Middle	4.0	0.3	205	28.3	28.3	8.2	8.2	27.9	27.9	86.8	86.8	5.8		9.2		5		90				<0.2		1.4	
						4.0	0.3	223	28.3		8.2		27.8		86.8		5.8		9.3		5		90				<0.2		1.5	
					Bottom	7.0	0.2	189	28.3	28.3	8.2	8.2	28.3	28.3	87.8	87.9	5.8	5.9	16.5		7		91				<0.2		1.4	
						7.0	0.2	196	28.3		8.2		28.3		88.0		5.9		16.6		7		91				<0.2		1.5	
IM6	Fine	Moderate	12:12	7.9	Surface	1.0	0.2	226	28.4	28.4	8.2	8.2	25.8	25.7	89.0	89.0	6.0	6.0	4.7	7.6	6	7	86	89	821058	805833	<0.2	<0.2	1.6	1.6
						1.0	0.2	239	28.4		8.2		25.7		89.0		6.0		4.7		6		87				<0.2		1.7	
					Middle	4.0	0.2	217	28.3	28.3	8.2	8.2	27.3	27.3	87.5	87.5	5.9		8.6		7		89				<0.2		1.5	
						4.0	0.2	222	28.3		8.2		27.3		87.5		5.9		8.7		7		89				<0.2		1.4	
					Bottom	6.9	0.2	193	28.3	28.3	8.2	8.2	27.3	27.3	87.8	87.8	5.9	5.9	9.6		8		90				<0.2		1.7	
						6.9	0.2	204	28.3		8.2		27.3		87.8		5.9		9.5		8		90				<0.2		1.6	
IM7	Fine	Moderate	12:03	8.9	Surface	1.0	0.2	231	28.7	28.7	8.2	8.2	24.8	24.8	88.9	88.9	6.0	6.0	4.5	7.0	7	8	87	90	821339	806838	<0.2	<0.2	2.0	1.8
						1.0	0.2	241	28.7		8.2		24.8		88.9		6.0		4.6		8		88				<0.2		1.8	
					Middle	4.5	0.1	190	28.3	28.3	8.2	8.2	27.0	27.0	87.5	87.6	5.9		7.8		8		90				<0.2		1.8	
						4.5	0.1	202	28.3		8.2		27.0		87.6		5.9		7.9		8		90				<0.2		1.8	
					Bottom	7.9	0.1	174	28.3	28.3	8.3	8.3	27.0	27.0	87.9	87.9	5.9	5.9	8.8		8		92				<0.2		1.8	
						7.9	0.1	182	28.3		8.3		27.0		87.9		5.9		8.7		8		92				<0.2		1.8	
IM8	Sunny	Moderate	12:28	8.0	Surface	1.0	1.1	30	29.3	29.4	8.1	8.1	24.8	24.7	86.7	86.8	5.8	5.7	5.3	8.7	8	7	82	84	821827	808130	<0.2	<0.2	1.1	1.2
						1.0	1.2	30	29.4		8.1		24.7		86.8		5.8		5.3		8		82				<0.2		1.1	
					Middle	4.0	1.3	24	28.9	28.9	8.1	8.1	26.6	26.6	84.2	84.2	5.6		9.7		7		84				<0.2		1.2	
						4.0	1.4	26	28.9		8.1		26.6		84.2		5.6		9.6		7		84				<0.2		1.2	
					Bottom	7.0	1.4	22	28.9	28.9	8.2	8.2	27.1	27.1	86.8	86.8	5.8	5.8	11.3		6		86				<0.2		1.2	
						7.0	1.4	23	28.9		8.2		27.1		86.8		5.8		11.3		6		86				<0.2		1.1	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	12:35	7.6	Surface	1.0	1.3	85	29.2	29.2	8.1	8.1	25.1	25.2	86.5	86.4	5.8	5.7	4.8	9.1	8	7	82	85	822081	808824	<0.2	<0.2	1.1	1.1
						1.0	1.4	87	29.1		8.1		25.3		86.2		5.8		4.9		8		83				<0.2		1.0	
					Middle	3.8	1.3	91	28.9	28.9	8.1	8.1	26.8	26.8	83.9	84.0	5.6		10.0		8		84				<0.2		1.0	
						3.8	1.3	99	28.9		8.1		26.8		84.0		5.6		10.0		7		86				<0.2		1.0	
					Bottom	6.6	1.3	93	28.9	28.9	8.2	8.2	27.0	27.0	86.4	86.5	5.7	5.7	12.3		6		87				<0.2		1.0	
						6.6	1.3	101	28.9		8.2		27.0		86.5		5.7		12.5		7		87				<0.2		1.2	
IM10	Sunny	Moderate	12:43	8.4	Surface	1.0	1.0	164	29.1	29.1	8.1	8.1	26.5	26.5	85.8	85.8	5.7	5.6	5.3	10.8	6	6	84	86	822385	809801	<0.2	<0.2	1.1	1.0
						1.0	1.1	165	29.1		8.1		26.5		85.7		5.7		5.4		6		84				<0.2		0.9	
					Middle	4.2	1.0	174	28.9	28.9	8.1	8.1	27.2	27.2	82.6	82.6	5.5		10.9		6		85				<0.2		1.0	
						4.2	1.0	188	28.9		8.1		27.2		82.5		5.5		10.9		6		86				<0.2		1.0	
					Bottom	7.4	0.9	178	29.0	29.0	8.1	8.1	27.2	27.2	82.2	82.3	5.4	5.5	16.1		7		87				<0.2		1.0	
						7.4	1.0	187	29.0		8.1		27.2		82.3		5.5		16.2		7		87				<0.2		1.1	
IM11	Sunny	Moderate	12:53	8.9	Surface	1.0	1.6	155	29.2	29.2	8.1	8.1	26.0	26.0	86.1	86.1	5.7	5.6	4.9	9.9	8	7	82	85	822038	811443	<0.2	<0.2	0.8	0.9
						1.0	1.6	170	29.2		8.1		26.0		86.1		5.7		5.0		8		83				<0.2		0.9	
					Middle	4.5	1.2	157	28.9	28.9	8.1	8.1	26.9	26.9	82.7	82.7	5.5		11.7		7		84				<0.2		0.9	
						4.5	1.3	159	28.9		8.1		26.9		82.7		5.5		11.6		7		85				<0.2		1.0	
					Bottom	7.9	1.3	163	29.0	29.0	8.1	8.1	27.0	27.0	83.1	83.2	5.5	5.5	13.3		5		87				<0.2		1.0	
						7.9	1.3	166	29.0		8.1		27.0		83.2		5.5		13.2		5		86				<0.2		0.9	
IM12	Sunny	Moderate	13:00	8.3	Surface	1.0	0.5	95	29.3	29.3	8.1	8.1	24.8	24.8	87.2	87.2	5.8	5.7	4.7	11.3	6	7	82	85	821451	812056	<0.2	<0.2	1.0	1.0
						1.0	0.5	101	29.3		8.1		24.8		87.2		5.8		4.8		6		82				<0.2		1.0	
					Middle	4.2	0.4	116	28.9	28.9	8.1	8.1	26.8	26.8	83.3	83.3	5.5		12.3		7		84				<0.2		1.0	
						4.2	0.4	121	28.9		8.1		26.8		83.3		5.5		12.4		7		85				<0.2		1.0	
					Bottom	7.3	0.2	92	28.9	28.9	8.1	8.1	26.9	26.9	83.8	83.9	5.6	5.6	16.5		8		87				<0.2		0.8	
						7.3	0.3	99	28.9		8.1		26.9		83.9		5.6		16.9		8		88				<0.2		0.9	
SR1A	Sunny	Moderate	13:21	5.6	Surface	1.0	-	-	29.3	29.3	8.1	8.1	25.5	25.5	87.9	88.0	5.8	5.9	5.7	5.7	9	9	-	-	819982	812664	-	-	-	-
						1.0	-	-	29.3		8.1		25.5		88.0		5.9		6.0		9		-				-		-	
					Middle	2.8	-	-	-	-		-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-				-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	29.0	29.0	8.1	8.1	26.5	26.5	86.1	86.1	5.7	5.7	5.6		8		-				-		-	
						4.6	-	-	29.0		8.1		26.5		86.0		5.7		5.7		8		-				-		-	
SR2	Sunny	Moderate	13:34	4.6	Surface	1.0	0.4	83	29.0	29.0	8.2	8.2	26.7	26.7	83.9	83.9	5.6	5.6	7.1	12.4	9	8	82	83	821451	814182	<0.2	<0.2	1.0	1.0
						1.0	0.5	90	29.0		8.2		26.7		83.9		5.6		7.1		9		82				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	78	29.0	29.0	8.2	8.2	26.9	26.9	83.7	83.7	5.5	5.6	17.7		7		83				<0.2		1.1	
						3.6	0.3	85	29.0		8.2		26.9		83.7		5.6		17.7		7		84				<0.2		1.0	
SR3	Sunny	Moderate	12:21	8.8	Surface	1.0	0.9	29	29.1	29.2	8.1	8.1	25.2	25.2	86.1	86.1	5.7	5.7	5.2	9.2	7	7	-	-	822126	807586	-	-	-	-
						1.0	1.0	31	29.2		8.1		25.2		86.1		5.8		5.2		7		-				-		-	
					Middle	4.4	0.8	40	28.9	28.9	8.1	8.1	26.4	26.4	84.3	84.3	5.6		7.3		7		-				-		-	
						4.4	0.8	43	28.9		8.1		26.4		84.3		5.6		7.3		6		-				-		-	
					Bottom	7.8	0.9	24	29.0	29.0	8.2	8.2	27.0	27.0	86.8	86.8	5.8	5.8	15.0		6		-				-		-	
						7.8	0.9	25	29.0		8.2		27.0		86.8		5.8		15.2		6		-				-		-	
SR4A	Cloudy	Calm	13:34	9.0	Surface	1.0	0.2	68	28.6	28.6	8.2	8.2	26.6	26.6	92.1	92.0	6.2	6.1	4.4	7.7	7	6	-	-	817209	807805	-	-	-	-
						1.0	0.2	69	28.6		8.2		26.6		91.8		6.1		4.7		7		-				-		-	
					Middle	4.5	0.3	74	28.4	28.4	8.2	8.2	27.5	27.5	89.7	89.8	6.0		8.1		6		-				-		-	
						4.5	0.3	81	28.4		8.2		27.5		89.8		6.0		8.3		6		-				-		-	
					Bottom	8.0	0.1	58	28.4	28.4	8.2	8.2	27.5	27.5	91.6	91.8	6.1	6.1	10.0		5		-				-		-	
						8.0	0.1	58	28.4		8.2		27.5		91.9		6.1		10.7		5		-				-		-	
SR5A	Cloudy	Calm	13:52	5.1	Surface	1.0	0.1	62	29.0	29.0	8.1	8.1	26.6	26.6	95.9	95.9	6.4	6.4	3.8	6.6	6	8	-	-	816610	810679	-	-	-	-
						1.0	0.1	67	29.0		8.1		26.6		95.9		6.4		3.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	12	28.6	28.6	8.1	8.1	27.2	27.2	95.6	95.8	6.4	6.4	9.3		10		-				-		-	
						4.1	0.1	13	28.6		8.1		27.2		96.0		6.4		9.4		10		-				-		-	
SR6A	Cloudy	Calm	14:35	4.3	Surface	1.0	0.0	69	28.7	28.7	8.1	8.1	26.0	26.0	91.1	91.1	6.1	6.1	7.5	7.9	9	10	-	-	817956	814718	-	-	-	-
						1.0	0.0	69	28.7		8.1		26.0		91.0		6.1		7.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	261	28.4	28.5	8.0	8.0	26.5	26.5	90.5	90.6	6.1	6.1	8.5		12		-				-		-	
						3.3	0.0	275	28.5		8.0		26.5		90.7		6.1		8.2		12		-				-		-	
SR7	Sunny	Moderate	14:20	14.6	Surface	1.0	0.6	61	29.2	29.2	8.1	8.1	28.0	28.0	85.2	85.3	5.6	5.6	3.6	4.6	9	7	-	-	823621	823750	-	-	-	-
						1.0	0.7	66	29.2		8.1		28.0		85.4		5.6		3.5		9		-				-		-	
					Middle	7.3	0.2	14	29.1	29.1	8.1	8.1	28.4	28.4	83.5	83.5	5.5		3.9		7		-				-		-	
						7.3	0.2	14	29.1		8.1		28.4		83.4		5.5		4.0		7		-				-		-	
					Bottom	13.6	0.2	55	29.1	29.1	8.2	8.2	28.7	28.7	82.6	82.7	5.4	5.4	6.2		6		-				-		-	
						13.6	0.2	57	29.1		8.2		28.7		82.7		5.4		6.5		6		-				-		-	
SR8	Sunny	Moderate	13:12	4.3	Surface	1.0	-	-	29.3	29.3	8.1	8.1	25.8	25.8	86.8	86.8	5.8	5.8	7.8	8.9	8	9	-	-	820378	811618	-	-	-	-
						1.0	-	-	29.3		8.1		25.8		86.8		5.8		7.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	29.5	29.5	8.1	8.1	26.5	26.5	86.7	86.7	5.7	5.7	10.1		9		-				-		-	
						3.3	-	-	29.5		8.1		26.5		86.7		5.7		10.1		9		-				-		-	

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 October 20 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	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	08:12	8.9	Surface	1.0	0.6	55	28.2	28.2	8.2	8.2	25.3	25.3	87.1	87.1	5.9	5.9	6.9	8.1	6	6	85	88	815606	804261	<0.2	<0.2	1.0	1.2
						1.0	0.6	60	28.2		8.2		25.3		87.1		5.9		6.9		6		86				<0.2		1.0	
					Middle	4.5	0.6	54	28.3	28.3	8.2	8.2	28.7	28.7	86.7	86.7	5.8		7.3		6		89				<0.2		1.1	
						4.5	0.7	55	28.3		8.2		28.8		86.7		5.8		7.3		6		89				<0.2		1.3	
					Bottom	7.9	0.4	49	28.3	28.3	8.2	8.2	28.8	28.8	87.4	87.5	5.8	5.8	10.0		7		89				<0.2		1.2	
						7.9	0.5	53	28.3		8.2		28.8		87.5		5.8		10.0		7		89				<0.2		1.3	
C2	Sunny	Moderate	08:28	12.5	Surface	1.0	0.3	350	29.0	29.0	8.1	8.1	21.1	21.1	80.5	80.5	5.5	5.5	4.3	8.0	6	6	86	89	825684	806957	<0.2	<0.2	1.2	1.3
						1.0	0.3	322	29.0		8.1		21.1		80.5		5.5		4.3		5		87				<0.2		1.2	
					Middle	6.3	0.4	28	29.1	29.1	8.1	8.1	25.0	25.0	81.1	81.1	5.4		5.9		6		88				<0.2		1.3	
						6.3	0.4	30	29.1		8.1		25.0		81.1		5.4		5.9		6		89				<0.2		1.4	
					Bottom	11.5	0.4	346	29.1	29.1	8.2	8.2	25.5	25.5	80.0	80.0	5.3	5.3	13.7		6		91				<0.2		1.2	
						11.5	0.4	318	29.1		8.2		25.5		80.0		5.3		14.0		6		90				<0.2		1.2	
C3	Sunny	Moderate	06:39	10.8	Surface	1.0	0.3	241	28.9	28.9	8.2	8.2	27.1	27.1	82.6	82.6	5.5	5.4	4.9	7.2	7	6	85	88	822104	817786	<0.2	<0.2	1.0	0.9
						1.0	0.3	241	28.9		8.2		27.1		82.5		5.5		4.9		6		84				<0.2		0.9	
					Middle	5.4	0.4	252	29.0	29.0	8.2	8.2	28.0	28.0	80.0	80.0	5.3		4.7		6		89				<0.2		1.0	
						5.4	0.4	265	29.0		8.2		28.0		80.0		5.3		4.6		6		89				<0.2		0.8	
					Bottom	9.8	0.4	266	29.0	29.0	8.2	8.2	28.5	28.5	78.7	78.8	5.2	5.2	12.0		5		90				<0.2		0.8	
						9.8	0.4	274	29.0		8.2		28.5		78.8		5.2		12.0		5		90				<0.2		0.8	
IM1	Cloudy	Moderate	08:32	5.4	Surface	1.0	0.1	322	28.3	28.3	8.2	8.2	28.1	28.1	87.7	87.7	5.8	5.8	10.7	10.8	12	14	84	87	817943	807118	<0.2	<0.2	1.2	1.2
						1.0	0.2	348	28.3		8.2		28.1		87.7		5.8		10.7		12		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	349	28.3	28.3	8.2	8.2	28.2	28.2	88.5	88.5	5.9	5.9	11.0		17		89				<0.2		1.1	
						4.4	0.2	321	28.3		8.2		28.2		88.5		5.9		11.0		16		89				<0.2		1.1	
IM2	Cloudy	Moderate	08:40	7.4	Surface	1.0	0.4	27	28.2	28.2	8.2	8.2	26.8	26.8	89.2	89.2	6.0	6.0	5.8	10.5	8	9	85	88	818167	806184	<0.2	<0.2	1.3	1.3
						1.0	0.4	27	28.2		8.2		26.8		89.1		6.0		5.8		8		86				<0.2		1.2	
					Middle	3.7	0.3	20	28.2	28.2	8.2	8.2	27.7	27.7	88.7	88.8	5.9		11.1		9		89				<0.2		1.2	
						3.7	0.3	21	28.2		8.2		27.7		88.8		5.9		11.4		9		89				<0.2		1.2	
					Bottom	6.4	0.2	330	28.2	28.2	8.2	8.2	27.9	27.8	92.3	92.5	6.2	6.2	14.5		10		90				<0.2		1.3	
						6.4	0.2	346	28.2		8.2		27.8		92.6		6.2		14.4		10		90				<0.2		1.3	
IM3	Cloudy	Moderate	08:47	7.6	Surface	1.0	0.4	5	28.3	28.3	8.2	8.2	27.3	27.4	87.9	87.9	5.9	5.9	10.9	13.5	10	9	85	88	818772	805612	<0.2	<0.2	1.2	1.2
						1.0	0.4	5	28.3		8.2		27.4		87.8		5.9		11.1		9		86				<0.2		1.3	
					Middle	3.8	0.3	9	28.3	28.3	8.2	8.2	27.7	27.7	87.9	88.0	5.9		13.5		10		89				<0.2		1.1	
						3.8	0.3	9	28.3		8.2		27.7		88.0		5.9		13.6		9		89				<0.2		1.2	
					Bottom	6.6	0.3	349	28.3	28.3	8.2	8.2	27.7	27.7	89.4	89.7	6.0	6.0	15.9		8		90				<0.2		1.2	
						6.6	0.3	353	28.3		8.2		27.7		89.9		6.0		15.9		8		91				<0.2		1.2	
IM4	Cloudy	Moderate	08:55	7.9	Surface	1.0	0.9	347	28.3	28.3	8.2	8.2	26.7	26.7	87.9	87.9	5.9	5.9	10.6	12.2	9	9	86	89	819701	804622	<0.2	<0.2	1.3	1.4
						1.0	0.9	351	28.3		8.2		26.7		87.9		5.9		10.5		9		87				<0.2		1.3	
					Middle	4.0	0.7	341	28.3	28.3	8.2	8.2	27.4	27.4	87.2	87.3	5.8		13.7		9		89				<0.2		1.3	
						4.0	0.7	344	28.3		8.2		27.4		87.3		5.8		13.5		9		90				<0.2		1.4	
					Bottom	6.9	0.5	336	28.3	28.3	8.2	8.2	27.4	27.4	87.9	88.1	5.9	5.9	12.7		10		90				<0.2		1.5	
						6.9	0.6	350	28.3		8.2		27.4		88.2		5.9		12.6		10		91				<0.2		1.4	
IM5	Cloudy	Moderate	09:02	8.1	Surface	1.0	1.0	26	28.3	28.3	8.2	8.2	26.8	26.8	87.7	87.7	5.9	5.9	12.3	14.8	10	11	85	88	820747	804852	<0.2	<0.2	1.3	1.4
						1.0	1.1	26	28.3		8.2		26.8		87.6		5.9		12.3		10		85				<0.2		1.3	
					Middle	4.1	0.9	25	28.3	28.3	8.2	8.2	27.5	27.5	86.9	86.9	5.8		14.2		10		89				<0.2		1.4	
						4.1	0.9	26	28.3		8.2		27.5		86.9		5.8		14.3		10		89				<0.2		1.4	
					Bottom	7.1	0.6	30	28.3	28.3	8.2	8.2	27.6	27.6	87.2	87.2	5.8	5.8	17.9		12		90				<0.2		1.4	
						7.1	0.7	30	28.3		8.2		27.6		87.2		5.8		17.7		12		90				<0.2		1.4	
IM6	Cloudy	Moderate	09:11	7.9	Surface	1.0	0.1	174	28.4	28.4	8.1	8.1	22.4	22.4	85.0	85.0	5.8	5.9	4.0	6.9	5	6	87	89	821054	805824	<0.2	<0.2	1.4	1.5
						1.0	0.1	186	28.4		8.1		22.4		85.0		5.8		4.0		6		87				<0.2		1.4	
					Middle	4.0	0.2	90	28.3	28.3	8.2	8.2	25.4	25.4	87.0	87.1	5.9		6.8		6		90				<0.2		1.4	
						4.0	0.2	91	28.3		8.2		25.4		87.1		5.9		6.6		6		90				<0.2		1.6	
					Bottom	6.9	0.2	79	28.2	28.2	8.2	8.2	27.0	27.0	88.9	89.1	6.0	6.0	9.9		6		91				<0.2		1.6	
						6.9	0.2	81	28.2		8.2		27.0		89.2		6.0		9.9		6		91				<0.2		1.6	
IM7	Cloudy	Moderate	09:20	9.1	Surface	1.0	0.1	204	28.4	28.4	8.1	8.1	22.3	22.3	84.6	84.7	5.8	5.9	4.1	8.0	8	7	88	90	821344	806811	<0.2	<0.2	1.2	1.2
						1.0	0.1	222	28.4		8.1		22.3		84.7		5.8		4.1		8		88				<0.2		1.2	
					Middle	4.6	0.2	89	28.3	28.3	8.1	8.1	24.6	24.6	87.6	87.7	6.0		8.0		7		90				<0.2		1.0	
						4.6	0.2	89	28.3		8.1		24.6		87.8		6.0		8.0		7		90				<0.2		1.0	
					Bottom	8.1	0.1	85	28.2	28.2	8.1	8.1	27.0	27.0	90.2	90.3	6.1	6.1	12.0		7		92				<0.2		1.5	
						8.1	0.1	87	28.2		8.1		27.0		90.3		6.1		12.0		7		92				<0.2		1.4	
IM8	Sunny	Moderate	08:02	7.8	Surface	1.0	1.7	313	28.9	28.9	8.1	8.1	23.1	23.1	82.4	82.4	5.6	5.6	5.1	6.6	8	8	84	88	821810	808145	<0.2	<0.2	1.1	1.2
						1.0	1.9	321	28.9		8.1		23.1		82.4		5.6		5.2		8		85				<0.2		1.1	
					Middle	3.9	1.6	312	28.9	28.9	8.1	8.1	23.5	23.5	82.2	82.2	5.6		5.4		8		87				<0.2		1.1	
						3.9	1.6	338	28.9		8.1		23.5		82.2		5.6		5.4		8		88				<0.2		1.3	
					Bottom	6.8	1.8	305	28.9	28.9	8.1	8.1	25.0	25.0	84.0	84.0	5.6	5.6	9.2		9		90				<0.2		1.1	
						6.8	1.8	317	28.9		8.1		25.0		84.0		5.6		9.1		8		91				<0.2		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	07:55	7.5	Surface	1.0	0.7	221	28.9	28.9	8.1	8.1	24.9	24.9	83.7	83.7	5.6	5.6	9.2	13.6	14	13	84	87	822080	808790	<0.2	<0.2	1.2	1.1
						1.0	0.8	230	28.9		8.1		24.9		83.7		5.6		9.2		14		83				<0.2		1.1	
					Middle	3.8	0.8	208	28.9	28.9	8.1	8.1	25.3	25.3	83.6	83.6	5.6		14.3		13		87				<0.2		1.0	
						3.8	0.8	222	28.9		8.1		25.3		83.6		5.6		14.2		13		87				<0.2		1.1	
					Bottom	6.5	1.0	185	28.9	28.9	8.1	8.1	25.4	25.4	83.6	83.6	5.6	5.6	17.2		12		90				<0.2		1.1	
						6.5	1.1	187	28.9		8.1		25.4		83.6		5.6		17.4		12		90				<0.2		1.1	
IM10	Sunny	Moderate	07:48	8.0	Surface	1.0	0.6	320	28.9	28.9	8.2	8.2	26.1	26.1	84.2	84.2	5.6	5.6	13.0	13.3	18	21	83	86	822399	809790	<0.2	<0.2	1.0	1.0
						1.0	0.6	345	28.9		8.2		26.1		84.2		5.6		12.8		18		81				<0.2		0.9	
					Middle	4.0	0.4	311	28.9	28.9	8.2	8.2	26.1	26.1	84.2	84.2	5.6		13.0		20		82				<0.2		1.1	
						4.0	0.4	313	28.9		8.2		26.1		84.2		5.6		12.8		20		83				<0.2		1.1	
					Bottom	7.0	0.5	308	28.9	28.9	8.2	8.2	26.1	26.1	84.3	84.4	5.6	5.6	14.0		24		93				<0.2		1.0	
						7.0	0.5	315	28.9		8.2		26.1		84.4		5.6		14.1		24		93				<0.2		0.9	
IM11	Sunny	Moderate	07:38	8.8	Surface	1.0	1.2	280	28.9	28.9	8.2	8.2	26.5	26.5	84.0	84.0	5.6	5.6	10.7	13.5	12	15	83	86	822063	811454	<0.2	<0.2	0.9	1.0
						1.0	1.2	299	28.9		8.2		26.5		84.0		5.6		10.4		12		82				<0.2		1.0	
					Middle	4.4	1.1	285	28.9	28.9	8.2	8.2	26.6	26.6	83.6	83.6	5.6		13.2		15		87				<0.2		0.9	
						4.4	1.1	289	28.9		8.2		26.6		83.6		5.6		13.3		16		87				<0.2		1.0	
					Bottom	7.8	1.1	284	28.9	28.9	8.2	8.2	26.6	26.6	83.7	83.7	5.6	5.6	16.8		16		90				<0.2		1.2	
						7.8	1.1	296	28.9		8.2		26.6		83.7		5.6		16.6		16		89				<0.2		1.1	
IM12	Sunny	Moderate	07:31	8.6	Surface	1.0	0.9	276	28.9	28.9	8.2	8.2	26.7	26.7	83.4	83.4	5.5	5.5	14.4	15.3	8	12	85	89	821442	812063	<0.2	<0.2	1.0	1.0
						1.0	0.9	292	28.9		8.2		26.7		83.4		5.5		14.3		9		85				<0.2		0.9	
					Middle	4.3	0.9	287	28.9	28.9	8.2	8.2	26.7	26.7	82.8	82.8	5.5		15.2		11		89				<0.2		0.9	
						4.3	1.0	293	28.9		8.2		26.8		82.8		5.5		15.2		11		90				<0.2		0.9	
					Bottom	7.6	1.1	299	28.9	28.9	8.2	8.2	26.8	26.8	82.7	82.8	5.5	5.5	16.4		16		92				<0.2		1.0	
						7.6	1.1	316	28.9		8.2		26.8		82.8		5.5		16.4		17		92				<0.2		1.0	
SR1A	Sunny	Moderate	07:12	5.1	Surface	1.0	-	-	28.8	28.8	8.2	8.2	26.4	26.3	83.2	83.2	5.6	5.6	3.9	4.4	7	6	-	-	819979	812660	-	-	-	-
						1.0	-	-	28.8		8.2		26.3		83.2		5.6		3.9		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.8	28.8	8.2	8.2	26.5	26.5	81.2	81.2	5.4	5.4	5.0		5		-				-		-	
						4.1	-	-	28.8		8.2		26.5		81.2		5.4		4.9		5		-				-		-	
SR2	Sunny	Moderate	06:59	4.6	Surface	1.0	0.2	80	28.9	28.9	8.2	8.2	27.0	27.0	82.6	82.6	5.5	5.5	10.8	10.9	6	7	85	86	821458	814156	<0.2	<0.2	1.0	1.1
						1.0	0.2	82	28.9		8.2		27.0		82.6		5.5		10.6		6		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	65	28.9	28.9	8.2	8.2	27.0	27.0	82.3	82.3	5.5	5.5	11.2		8		88				<0.2		1.1	
						3.6	0.2	69	28.9		8.2		27.0		82.3		5.5		11.2		8		87				<0.2		1.0	
SR3	Sunny	Moderate	08:08	9.1	Surface	1.0	1.5	302	28.9	28.9	8.1	8.1	22.9	22.9	82.7	82.7	5.6	5.6	4.2	5.2	6	8	-	-	822144	807562	-	-	-	-
						1.0	1.6	308	28.9		8.1		22.9		82.7		5.6		4.2		6		-				-		-	
					Middle	4.6	1.4	270	29.0	29.0	8.1	8.1	23.1	23.1	81.2	81.2	5.5		4.3		8		-				-		-	
						4.6	1.5	292	29.0		8.1		23.1		81.2		5.5		4.3		8		-				-		-	
					Bottom	8.1	1.3	262	29.1	29.1	8.1	8.1	24.1	24.2	80.7	80.7	5.4	5.4	7.0		10		-				-		-	
						8.1	1.4	268	29.1		8.1		24.2		80.7		5.4		7.0		10		-				-		-	
SR4A	Cloudy	Calm	07:47	9.2	Surface	1.0	0.1	75	28.2	28.2	8.2	8.2	27.1	27.1	86.8	86.8	5.8	5.8	6.8	8.0	12	11	-	-	817200	807817	-	-	-	-
						1.0	0.1	78	28.2		8.2		27.2		86.7		5.8		6.9		12		-				-		-	
					Middle	4.6	0.1	92	28.2	28.2	8.2	8.2	27.2	27.2	86.5	86.5	5.8		8.3		12		-				-		-	
						4.6	0.1	97	28.2		8.2		27.2		86.5		5.8		8.5		12		-				-		-	
					Bottom	8.2	0.2	80	28.2	28.2	8.3	8.3	27.2	27.2	87.2	87.3	5.9	5.9	8.8		10		-				-		-	
						8.2	0.2	80	28.2		8.3		27.2		87.3		5.9		8.9		10		-				-		-	
SR5A	Cloudy	Calm	07:28	4.4	Surface	1.0	0.2	316	28.2	28.2	8.1	8.1	26.7	26.7	86.4	86.5	5.8	5.8	5.1	5.1	8	8	-	-	816594	810718	-	-	-	-
						1.0	0.2	322	28.2		8.1		26.7		86.5		5.8		5.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	318	28.2	28.2	8.1	8.1	26.7	26.7	87.2	87.2	5.9	5.9	5.1		8		-				-		-	
						3.4	0.2	327	28.2		8.1		26.7		87.2		5.9		5.1		8		-				-		-	
SR6A	Cloudy	Calm	06:59	4.7	Surface	1.0	0.0	268	28.2	28.2	8.1	8.1	26.3	26.3	82.5	82.5	5.6	5.6	3.9	6.3	5	5	-	-	817947	814746	-	-	-	-
						1.0	0.0	278	28.2		8.1		26.3		82.5		5.6		3.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	255	28.4	28.4	8.1	8.1	26.9	26.9	81.5	81.7	5.5	5.5	8.8		5		-				-		-	
						3.7	0.0	261	28.4		8.1		26.9		81.8		5.5		8.8		5		-				-		-	
SR7	Sunny	Moderate	06:12	14.5	Surface	1.0	0.0	116	28.8	28.8	8.2	8.2	27.2	27.2	83.5	83.5	5.5	5.5	3.6	5.3	6	6	-	-	823654	823741	-	-	-	-
						1.0	0.0	120	28.8		8.2		27.2		83.4		5.5		3.7		6		-				-		-	
					Middle	7.3	0.1	184	28.9	28.9	8.2	8.2	27.5	27.5	82.2	82.2	5.4		4.5		6		-				-		-	
						7.3	0.1	202	28.9		8.2		27.5		82.2		5.4		4.4		6		-				-		-	
					Bottom	13.5	0.1	76	28.9	28.9	8.2	8.2	28.0	28.0	80.7	80.8	5.3	5.3	8.1		7		-				-		-	
						13.5	0.1	83	28.9		8.2		28.0		80.8		5.3		7.3		7		-				-		-	
SR8	Sunny	Moderate	07:22	4.4	Surface	1.0	-	-	28.9	28.9	8.2	8.2	25.8	25.8	84.7	84.7	5.7	5.7	6.6	8.6	9	9	-	-	820406	811619	-	-	-	-
						1.0	-	-	28.9		8.2		25.9		84.7		5.7		6.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	28.9	28.9	8.2	8.2	26.1	26.1	84.5	84.5	5.6	5.6	10.3		8		-				-		-	
						3.4	-	-	28.9		8.2		26.1		84.5		5.6		10.5		8		-				-		-	

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 06 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:34	9.3	Surface	1.0	2.3	352	28.8	28.8	8.1	8.1	27.1	27.1	92.5	92.4	6.2	6.0	1.5	3.6	3	4	87	91	815598	804243	<0.2	<0.2	0.7	0.9
						1.0	2.5	324	28.8		8.1		27.1		92.2		6.1		1.5		4		88				<0.2		0.7	
					Middle	4.7	2.4	350	28.7	28.7	8.2	8.2	29.7	29.7	88.0	87.9	5.8		4.1		4		90				<0.2		0.9	
						4.7	2.5	322	28.7		8.2		29.8		87.7		5.8		4.3		3		91				<0.2		1.0	
					Bottom	8.3	2.1	352	28.8	28.8	8.2	8.2	30.4	30.4	87.2	87.4	5.7	5.7	5.0		4		94				<0.2		1.1	
						8.3	2.2	352	28.8		8.2		30.4		87.5		5.7		5.1		5		95				<0.2		1.0	
C2	Cloudy	Moderate	13:33	11.7	Surface	1.0	0.3	64	28.6	28.6	8.2	8.2	23.3	23.3	88.6	88.6	6.0	5.8	8.1	9.3	4	4	87	89	825660	806965	<0.2	<0.2	1.1	1.1
						1.0	0.3	69	28.5		8.2		23.3		88.5		6.0		8.7		4		88				<0.2		1.1	
					Middle	5.9	0.3	117	28.5	28.5	8.2	8.2	25.9	25.9	83.0	82.9	5.6		10.1		4		88				<0.2		1.1	
						5.9	0.3	120	28.5		8.2		25.9		82.8		5.6		10.2		5		89				<0.2		1.0	
					Bottom	10.7	0.2	133	28.5	28.5	8.2	8.2	26.5	26.5	81.8	81.9	5.5	5.5	9.3		5		90				<0.2		1.1	
						10.7	0.2	141	28.5		8.2		26.5		81.9		5.5		9.6		4		91				<0.2		1.0	
C3	Cloudy	Moderate	15:22	12.6	Surface	1.0	0.5	69	28.5	28.5	8.2	8.2	26.3	26.4	88.6	88.5	5.9	5.9	3.5	4.0	4	3	86	88	822090	817823	<0.2	<0.2	0.8	0.9
						1.0	0.5	71	28.5		8.2		26.4		88.4		5.9		3.5		4		87				<0.2		0.8	
					Middle	6.3	0.5	89	28.5	28.5	8.2	8.2	27.6	27.6	86.8	86.8	5.8		4.1		2		88				<0.2		1.2	
						6.3	0.5	97	28.5		8.2		27.6		86.8		5.8		4.1		3		89				<0.2		1.1	
					Bottom	11.6	0.4	100	28.5	28.5	8.2	8.2	27.9	27.9	87.2	87.3	5.8	5.8	4.4		2		90				<0.2		0.8	
						11.6	0.4	104	28.5		8.2		27.9		87.3		5.8		4.4		2		90				<0.2		0.8	
IM1	Cloudy	Moderate	14:15	5.5	Surface	1.0	1.9	311	28.7	28.7	8.1	8.1	27.6	27.6	88.6	88.4	5.9	5.9	2.3	3.3	3	3	88	90	817945	807129	<0.2	<0.2	0.6	0.6
						1.0	2.0	339	28.7		8.1		27.7		88.1		5.8		2.6		2		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	1.3	312	28.6	28.6	8.1	8.1	28.1	28.0	89.1	89.3	5.9	5.9	4.2		4		91				<0.2		0.5	
						4.5	1.3	328	28.6		8.1		28.0		89.5		5.9		4.0		4		91				<0.2		0.5	
IM2	Cloudy	Moderate	14:08	7.9	Surface	1.0	1.6	295	28.8	28.8	8.1	8.1	27.7	27.8	90.2	90.1	6.0	5.9	4.6	6.0	4	4	85	89	818147	806167	<0.2	<0.2	0.6	0.8
						1.0	1.7	306	28.8		8.1		27.9		90.0		6.0		4.8		3		86				<0.2		0.7	
					Middle	4.0	1.6	298	28.8	28.8	8.1	8.1	28.9	28.9	85.8	85.9	5.7		5.6		4		87				<0.2		0.8	
						4.0	1.6	322	28.8		8.1		28.9		85.9		5.7		5.7		3		90				<0.2		0.8	
					Bottom	6.9	1.7	300	28.8	28.8	8.1	8.1	29.2	29.2	85.9	86.0	5.6	5.7	7.6		4		93				<0.2		0.8	
						6.9	1.9	311	28.8		8.1		29.2		86.0		5.7		7.8		4		94				<0.2		0.8	
IM3	Cloudy	Moderate	14:02	8.0	Surface	1.0	0.8	113	28.8	28.8	8.1	8.1	27.9	28.0	88.0	87.7	5.8	5.7	4.1	5.5	4	5	83	89	818763	805614	<0.2	<0.2	0.8	0.8
						1.0	0.8	115	28.8		8.1		28.2		87.3		5.8		4.2		4		84				<0.2		0.9	
					Middle	4.0	0.9	120	28.8	28.8	8.1	8.1	29.2	29.2	85.9	85.9	5.6		5.8		6		91				<0.2		0.7	
						4.0	0.9	121	28.8		8.1		29.2		85.9		5.6		5.9		5		91				<0.2		0.8	
					Bottom	7.0	1.6	111	28.7	28.7	8.1	8.1	29.3	29.3	87.1	87.2	5.7	5.7	6.5		6		93				<0.2		0.8	
						7.0	1.7	120	28.7		8.1		29.3		87.3		5.7		6.7		7		94				<0.2		0.6	
IM4	Cloudy	Moderate	13:53	9.0	Surface	1.0	0.6	287	28.8	28.8	8.1	8.1	27.3	27.3	91.6	91.4	6.1	5.9	2.2	4.1	4	3	87	89	819714	804614	<0.2	<0.2	0.8	0.8
						1.0	0.7	287	28.8		8.1		27.3		91.2		6.1		2.3		4		87				<0.2		0.8	
					Middle	4.5	1.5	257	28.8	28.8	8.1	8.1	29.3	29.3	86.5	86.5	5.7		4.3		3		90				<0.2		0.8	
						4.5	1.6	261	28.8		8.1		29.3		86.4		5.7		4.4		3		90				<0.2		0.8	
					Bottom	8.0	1.3	261	28.8	28.8	8.1	8.1	29.3	29.3	87.4	87.6	5.7	5.8	5.6		2		91				<0.2		0.8	
						8.0	1.4	271	28.8		8.1		29.3		87.7		5.8		5.6		3		91				<0.2		0.8	
IM5	Cloudy	Moderate	13:46	8.4	Surface	1.0	1.2	342	28.9	28.9	8.1	8.1	25.2	25.1	89.7	89.7	6.0	5.8	2.1	4.6	4	4	86	90	820715	804849	<0.2	<0.2	0.7	0.7
						1.0	1.2	359	28.9		8.1		25.0		89.6		6.0		2.0		4		87				<0.2		0.7	
					Middle	4.2	1.1	345	28.8	28.8	8.1	8.1	28.9	28.9	85.5	85.5	5.6		5.3		2		90				<0.2		0.6	
						4.2	1.2	346	28.8		8.1		28.9		85.5		5.6		5.3		4		91				<0.2		0.7	
					Bottom	7.4	1.3	12	28.8	28.8	8.1	8.1	28.9	28.9	85.7	85.8	5.6	5.7	6.6		4		93				<0.2		0.8	
						7.4	1.4	12	28.8		8.1		28.9		85.8		5.7		6.4		3		93				<0.2		0.8	
IM6	Cloudy	Moderate	13:40	8.2	Surface	1.0	1.1	6	28.9	28.9	8.1	8.1	24.4	24.5	88.2	88.2	5.9	5.8	2.0	3.8	3	4	86	90	821065	805832	<0.2	<0.2	0.5	0.5
						1.0	1.1	6	28.9		8.1		24.7		88.1		5.9		2.0		4		87				<0.2		0.5	
					Middle	4.1	1.3	17	28.8	28.8	8.1	8.1	28.1	28.1	85.6	85.6	5.7		4.0		3		90				<0.2		0.5	
						4.1	1.3	17	28.8		8.1		28.1		85.6		5.7		4.1		4		90				<0.2		0.5	
					Bottom	7.2	1.0	20	28.8	28.8	8.1	8.1	28.1	28.1	85.9	86.0	5.7	5.7	5.6		4		93				<0.2		0.6	
						7.2	1.0	20	28.8		8.1		28.1		86.1		5.7		5.4		4		94				<0.2		0.5	
IM7	Cloudy	Moderate	13:33	9.3	Surface	1.0	2.1	140	29.0	29.0	8.1	8.1	23.6	23.6	87.3	87.3	5.9	5.8	1.5	3.9	5	4	84	90	821335	806853	<0.2	<0.2	0.5	0.5
						1.0	2.2	145	29.0		8.1		23.6		87.2		5.9		1.6		4		86				<0.2		0.5	
					Middle	4.7	2.2	136	28.8	28.8	8.1	8.1	27.6	27.6	85.3	85.4	5.7		4.2		4		90				<0.2		0.5	
						4.7	2.3	138	28.8		8.1		27.6		85.4		5.7		4.3		4		91				<0.2		0.5	
					Bottom	8.3	2.0	131	28.8	28.8	8.1	8.1	27.9	27.9	85.1	85.2	5.6	5.6	6.0		3		93				<0.2		0.6	
						8.3	2.2	132	28.8		8.1		27.9		85.3		5.6		6.0		4		94				<0.2		0.5	
IM8	Cloudy	Moderate	13:59	8.4	Surface	1.0	0.1	63	28.5	28.5	8.1	8.1	22.5	22.5	90.0	89.9	6.2	6.1	4.7	8.2	2	3	86	88	821816	808159	<0.2	<0.2	1.0	1.1
						1.0	0.1	69	28.5		8.2		22.5		89.8		6.2		4.8		2		86				<0.2		1.1	
					Middle	4.2	0.3	64	28.4	28.4	8.2	8.2	25.7	25.7	88.6	88.6	6.0		7.9		4		87				<0.2		1.1	
						4.2	0.3	69	28.3		8.2		25.7		88.6		6.0		8.0		3		88				<0.2		1.0	
					Bottom	7.4	0.3	37	28.2	28.2	8.2	8.2	27.3	27.3	89.0	89.1	6.0	6.0	11.9		2		90				<0.2		1.1	
						7.4	0.3	37	28.2		8.2		27.3		89.1		6.0		11.8		4		90				<0.2		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:07	8.0	Surface	1.0	0.3	106	28.6	28.6	8.1	8.1	22.6	22.6	90.4	90.3	6.2	6.1	3.9	8.2	2	3	87	88	822111	808797	<0.2	<0.2	1.1	1.1
						1.0	0.3	115	28.6		8.1		22.6		90.2		6.2		4.0		3		86				<0.2		1.1	
					Middle	4.0	0.3	81	28.3	28.3	8.2	8.2	23.8	23.8	87.9	87.9	6.0		7.9		3		87				<0.2		1.2	
						4.0	0.3	85	28.3		8.2		23.7		87.9		6.0		8.5		3		88				<0.2		1.0	
					Bottom	7.0	0.4	77	28.2	28.2	8.2	8.2	27.0	27.0	88.5	88.6	5.9	6.0	12.4		4		90				<0.2		1.2	
						7.0	0.4	81	28.2		8.2		27.0		88.7		6.0		12.7		4		90				<0.2		1.2	
IM10	Cloudy	Moderate	14:14	8.3	Surface	1.0	0.5	93	28.4	28.4	8.1	8.1	22.9	22.9	87.4	87.3	6.0	6.0	5.9	9.5	3	2	87	89	822398	809789	<0.2	<0.2	1.1	1.2
						1.0	0.5	93	28.4		8.1		22.9		87.2		6.0		6.1		2		87				<0.2		1.2	
					Middle	4.2	0.4	104	28.3	28.3	8.2	8.2	26.1	26.1	87.0	87.0	5.9		9.5		3		88				<0.2		1.2	
						4.2	0.4	105	28.3		8.2		26.2		87.0		5.9		10.1		2		89				<0.2		1.1	
					Bottom	7.3	0.3	94	28.2	28.2	8.2	8.2	26.7	26.7	88.0	88.1	5.9	5.9	12.9		2		90				<0.2		1.2	
						7.3	0.3	98	28.2		8.2		26.7		88.2		5.9		12.8		2		91				<0.2		1.2	
IM11	Cloudy	Moderate	14:23	8.7	Surface	1.0	0.6	100	28.5	28.5	8.1	8.1	23.8	23.8	88.6	88.6	6.0	5.9	4.5	5.3	3	3	87	88	822080	811445	<0.2	<0.2	1.0	1.1
						1.0	0.7	102	28.5		8.1		23.8		88.6		6.0		4.5		3		86				<0.2		1.1	
					Middle	4.4	0.5	100	28.5	28.5	8.1	8.1	25.1	25.2	86.4	86.3	5.8		5.2		3		88				<0.2		1.1	
						4.4	0.5	100	28.5		8.1		25.3		86.2		5.8		5.2		4		88				<0.2		1.0	
					Bottom	7.7	0.3	111	28.5	28.5	8.1	8.1	26.3	26.3	86.3	86.3	5.8	5.8	6.1		3		90				<0.2		1.0	
						7.7	0.3	117	28.5		8.1		26.3		86.3		5.8		6.1		4		91				<0.2		1.1	
IM12	Cloudy	Moderate	14:31	9.0	Surface	1.0	0.5	109	28.5	28.5	8.1	8.1	24.3	24.3	87.0	87.0	5.9	5.9	4.7	5.5	4	3	87	88	821452	812028	<0.2	<0.2	1.1	1.0
						1.0	0.5	118	28.5		8.1		24.3		86.9		5.9		4.8		2		86				<0.2		1.1	
					Middle	4.5	0.5	99	28.5	28.5	8.1	8.1	26.3	26.3	88.1	88.2	5.9		5.6		3		88				<0.2		1.0	
						4.5	0.5	107	28.5		8.1		26.3		88.2		5.9		5.6		3		89				<0.2		0.9	
					Bottom	8.0	0.2	90	28.2	28.2	8.1	8.1	26.6	26.6	90.0	90.3	6.1	6.1	6.1		3		90				<0.2		1.0	
						8.0	0.2	93	28.2		8.1		26.6		90.5		6.1		6.1		3		90				<0.2		0.9	
SR1A	Cloudy	Moderate	14:50	5.4	Surface	1.0	-	-	28.5	28.5	8.1	8.1	25.8	25.8	86.4	86.4	5.8	5.8	8.0	11.4	5	5	-	-	819983	812654	-	-	-	-
						1.0	-	-	28.5		8.1		25.9		86.4		5.8		8.5		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.2	28.2	8.1	8.1	26.7	26.7	88.2	88.5	5.9	6.0	14.9		4		-				-		-	
						4.4	-	-	28.1		8.1		26.7		88.8		6.0		14.2		5		-				-		-	
SR2	Cloudy	Moderate	15:02	5.1	Surface	1.0	0.4	91	28.5	28.5	8.1	8.1	26.2	26.2	84.5	84.4	5.7	5.7	5.6	6.9	4	4	87	89	821443	814182	<0.2	<0.2	1.0	0.9
						1.0	0.5	96	28.5		8.1		26.3		84.3		5.7		5.8		5		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.3	75	28.5	28.5	8.1	8.1	27.0	27.0	84.2	84.3	5.6	5.6	8.1		4		90				<0.2		0.8	
						4.1	0.3	75	28.5		8.1		27.0		84.3		5.6		8.1		4		90				<0.2		0.8	
SR3	Cloudy	Moderate	13:53	9.1	Surface	1.0	0.1	123	28.5	28.5	8.1	8.1	22.9	22.9	87.9	87.9	6.0	6.0	4.5	8.4	4	4	-	-	822136	807568	-	-	-	-
						1.0	0.1	133	28.5		8.1		22.9		87.8		6.0		4.5		3		-				-		-	
					Middle	4.6	0.2	113	28.4	28.4	8.2	8.2	24.3	24.3	86.9	87.0	5.9		9.1		3		-				-		-	
						4.6	0.2	114	28.4		8.2		24.3		87.0		5.9		9.1		4		-				-		-	
					Bottom	8.1	0.3	38	28.3	28.3	8.2	8.2	27.8	27.8	88.9	89.0	5.9	5.9	11.8		4		-				-		-	
						8.1	0.3	41	28.3		8.2		27.8		89.0		5.9		11.6		3		-				-		-	
SR4A	Cloudy	Calm	14:54	10.0	Surface	1.0	2.9	62	28.7	28.7	8.1	8.1	27.9	27.9	86.9	86.9	5.8	5.8	5.8	6.5	2	4	-	-	817202	807802	-	-	-	-
						1.0	3.1	64	28.7		8.1		27.9		86.9		5.8		5.8		2		-				-		-	
					Middle	5.0	3.0	63	28.6	28.6	8.1	8.1	27.9	27.9	86.2	86.1	5.7		6.2		4		-				-		-	
						5.0	3.1	68	28.6		8.1		28.0		86.0		5.7		6.4		4		-				-		-	
					Bottom	9.0	3.0	62	28.6	28.6	8.1	8.1	28.3	28.2	86.1	86.4	5.7	5.7	7.3		6		-				-		-	
						9.0	3.1	65	28.6		8.1		28.2		86.6		5.7		7.3		5		-				-		-	
SR5A	Cloudy	Calm	15:09	4.2	Surface	1.0	0.1	311	28.8	28.8	8.1	8.1	26.1	26.2	87.7	87.7	5.9	5.9	4.1	5.3	3	3	-	-	816575	810683	-	-	-	-
						1.0	0.1	340	28.8		8.1		26.3		87.6		5.8		4.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	278	28.7	28.7	8.1	8.1	26.8	26.7	88.3	88.5	5.9	5.9	6.5		<2		-				-		-	
						3.2	0.0	305	28.7		8.1		26.6		88.7		5.9		6.5		<2		-				-		-	
SR6A	Cloudy	Calm	15:47	5.1	Surface	1.0	1.8	208	28.9	28.9	8.1	8.1	24.8	24.8	86.0	86.0	5.8	5.8	8.2	7.9	5	5	-	-	817985	814746	-	-	-	-
						1.0	2.0	222	28.9		8.1		24.8		86.0		5.8		8.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	1.9	212	28.9	28.9	8.1	8.1	24.9	24.9	86.3	86.4	5.8	5.8	7.5		6		-				-		-	
						4.1	1.9	218	28.9		8.1		24.9		86.4		5.8		7.8		5		-				-		-	
SR7	Cloudy	Moderate	15:52	16.7	Surface	1.0	0.6	67	28.5	28.5	8.2	8.2	27.9	27.9	85.4	85.4	5.7	5.7	3.4	3.6	4	4	-	-	823624	823723	-	-	-	-
						1.0	0.6	70	28.5		8.2		27.9		85.3		5.7		3.5		4		-				-		-	
					Middle	8.4	0.3	39	28.5	28.5	8.2	8.2	28.6	28.6	84.4	84.4	5.6		3.6		2		-				-		-	
						8.4	0.3	41	28.5		8.2		28.6		84.4		5.6		3.6		4		-				-		-	
					Bottom	15.7	0.4	11	28.4	28.4	8.2	8.2	28.6	28.6	85.5	85.6	5.7	5.7	3.8		3		-				-		-	
						15.7	0.4	11	28.4		8.2		28.7		85.6		5.7		3.8		4		-				-		-	
SR8	Cloudy	Moderate	14:42	4.7	Surface	1.0	-	-	28.8	28.8	8.3	8.3	25.7	25.7	87.5	87.5	5.9	5.9	6.8	7.3	6	6	-	-	820371	811601	-	-	-	-
						1.0	-	-	28.7		8.3		25.7		87.4		5.9		7.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.5	28.5	8.1	8.1	25.9	25.9	86.1	86.3	5.8	5.8	7.6		6		-				-		-	
						3.7	-	-	28.5		8.1		25.9		86.4		5.8		7.7		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 06 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:57	9.0	Surface	1.0	2.3	150	28.7	28.7	8.1	8.1	26.9	26.9	86.9	86.9	5.8	5.8	3.1	5.9	6	5	87	90	815608	804264	<0.2	<0.2	0.9	0.7
						1.0	2.4	159	28.7		8.1		26.9		86.8		5.8		3.2		5		88				<0.2		0.8	
					Middle	4.5	2.7	151	28.7	28.7	8.1	8.1	28.9	28.8	86.2	86.2	5.7		6.7		5		91				<0.2		0.5	
						4.5	2.9	163	28.7		8.1		28.8		86.2		5.7		6.6		4		92				<0.2		0.6	
					Bottom	8.0	2.5	152	28.7	28.7	8.1	8.1	29.6	29.6	85.7	85.7	5.6	5.6	7.8		4		92				<0.2		0.6	
						8.0	2.7	159	28.7		8.1		29.6		85.7		5.6		7.9		5		92				<0.2		0.7	
C2	Cloudy	Moderate	10:40	12.4	Surface	1.0	0.2	338	28.6	28.6	8.1	8.1	21.8	21.8	85.8	85.7	5.9	5.8	4.8	6.9	4	4	86	88	825682	806933	<0.2	<0.2	1.0	0.9
						1.0	0.2	311	28.6		8.1		21.8		85.5		5.9		4.8		4		86				<0.2		0.9	
					Middle	6.2	0.4	29	28.5	28.5	8.1	8.1	23.7	23.7	83.2	83.2	5.7		7.3		4		88				<0.2		1.0	
						6.2	0.4	29	28.5		8.1		23.7		83.2		5.7		7.3		4		88				<0.2		0.9	
					Bottom	11.4	0.3	5	28.5	28.5	8.1	8.1	26.8	26.8	81.7	81.8	5.5	5.5	8.3		3		90				<0.2		0.9	
						11.4	0.3	5	28.5		8.1		26.8		81.9		5.5		8.6		3		90				<0.2		0.9	
C3	Cloudy	Moderate	08:49	11.7	Surface	1.0	0.6	242	28.5	28.5	8.2	8.2	25.8	25.9	83.8	83.8	5.6	5.6	4.3	6.3	3	4	86	88	822088	817820	<0.2	<0.2	0.9	0.9
						1.0	0.6	246	28.5		8.2		25.9		83.7		5.6		4.3		3		87				<0.2		1.0	
					Middle	5.9	0.5	236	28.6	28.6	8.2	8.2	27.1	27.1	82.7	82.7	5.5		5.0		3		88				<0.2		0.9	
						5.9	0.5	250	28.6		8.2		27.2		82.7		5.5		5.0		4		88				<0.2		0.8	
					Bottom	10.7	0.2	249	28.5	28.5	8.2	8.2	27.9	27.9	85.0	85.1	5.7	5.7	9.6		5		90				<0.2		0.9	
						10.7	0.3	271	28.5		8.2		27.9		85.2		5.7		9.6		6		90				<0.2		0.9	
IM1	Cloudy	Calm	10:16	5.3	Surface	1.0	2.5	338	28.6	28.6	8.1	8.1	28.8	28.8	84.0	84.0	5.5	5.5	5.9	6.8	6	7	86	88	817929	807154	<0.2	<0.2	0.6	0.6
						1.0	2.5	339	28.6		8.1		28.8		83.9		5.5		5.9		5		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	2.3	342	28.6	28.6	8.1	8.1	28.9	28.9	83.5	83.6	5.5	5.5	7.6		8		90				<0.2		0.6	
						4.3	2.3	315	28.6		8.1		28.9		83.7		5.5		7.8		7		90				<0.2		0.6	
IM2	Cloudy	Moderate	10:24	7.4	Surface	1.0	2.1	174	28.8	28.8	8.1	8.1	26.2	26.2	87.6	87.5	5.9	5.7	3.5	6.0	14	11	86	89	818161	806188	<0.2	<0.2	0.9	0.9
						1.0	2.1	184	28.8		8.1		26.2		87.4		5.8		3.6		13		86				<0.2		1.0	
					Middle	3.7	2.0	171	28.8	28.8	8.1	8.1	28.3	28.3	84.7	84.7	5.6		6.5		11		90				<0.2		0.8	
						3.7	2.1	181	28.7		8.1		28.4		84.6		5.6		6.6		10		90				<0.2		0.9	
					Bottom	6.4	2.2	175	28.7	28.7	8.1	8.1	28.7	28.7	84.4	84.4	5.6	5.6	8.0		8		91				<0.2		0.9	
						6.4	2.4	179	28.7		8.1		28.7		84.4		5.6		7.9		7		91				<0.2		0.9	
IM3	Cloudy	Moderate	10:30	7.6	Surface	1.0	2.2	272	28.8	28.8	8.1	8.1	26.3	26.3	85.7	85.5	5.7	5.6	6.6	7.6	6	7	87	89	818796	805606	<0.2	<0.2	1.0	0.9
						1.0	2.3	273	28.8		8.1		26.3		85.2		5.7		6.9		6		87				<0.2		1.1	
					Middle	3.8	1.9	272	28.8	28.8	8.1	8.1	28.5	28.5	84.1	84.1	5.6		7.3		7		89				<0.2		0.8	
						3.8	2.0	272	28.8		8.1		28.5		84.0		5.5		7.4		7		89				<0.2		0.9	
					Bottom	6.6	2.1	268	28.7	28.7	8.1	8.1	29.1	29.0	83.4	83.5	5.5	5.5	8.7		8		90				<0.2		0.8	
						6.6	2.2	279	28.7		8.1		29.0		83.6		5.5		8.9		9		91				<0.2		0.8	
IM4	Cloudy	Moderate	10:39	8.4	Surface	1.0	2.2	149	28.8	28.8	8.1	8.1	26.3	26.3	87.2	86.9	5.8	5.7	4.3	5.5	6	7	86	89	819747	804605	<0.2	<0.2	0.8	0.9
						1.0	2.3	157	28.8		8.1		26.3		86.6		5.8		4.3		7		86				<0.2		0.9	
					Middle	4.2	2.5	149	28.8	28.8	8.1	8.1	28.4	28.4	84.7	84.8	5.6		5.0		7		89				<0.2		0.9	
						4.2	2.5	149	28.8		8.1		28.4		84.8		5.6		5.1		7		89				<0.2		0.9	
					Bottom	7.4	2.8	150	28.8	28.8	8.1	8.1	28.5	28.5	85.1	85.2	5.6	5.6	7.3		7		91				<0.2		0.9	
						7.4	2.8	160	28.8		8.1		28.5		85.2		5.6		7.2		7		91				<0.2		0.9	
IM5	Cloudy	Moderate	10:46	7.1	Surface	1.0	3.2	336	28.9	28.9	8.1	8.1	26.1	26.1	87.4	87.1	5.8	5.7	3.8	5.5	7	9	86	89	820752	804846	<0.2	<0.2	1.0	0.9
						1.0	3.4	347	28.9		8.1		26.1		86.8		5.8		4.0		8		87				<0.2		0.9	
					Middle	3.6	3.2	339	28.8	28.8	8.1	8.1	28.4	28.5	84.1	84.1	5.5		5.8		8		89				<0.2		0.9	
						3.6	3.4	312	28.8		8.1		28.5		84.1		5.5		5.9		9		89				<0.2		0.9	
					Bottom	6.1	3.2	335	28.8	28.8	8.1	8.1	28.6	28.6	84.4	84.5	5.6	5.6	6.8		10		90				<0.2		0.9	
						6.1	3.4	351	28.8		8.1		28.6		84.6		5.6		6.8		9		90				<0.2		0.8	
IM6	Cloudy	Moderate	10:53	7.7	Surface	1.0	2.5	277	28.9	28.9	8.0	8.0	23.7	23.7	87.2	87.2	5.9	5.9	2.6	5.3	7	6	85	88	821049	805807	<0.2	<0.2	0.8	0.8
						1.0	2.7	298	28.8		8.0		23.7		87.1		5.9		2.8		6		88				<0.2		0.8	
					Middle	3.9	2.4	276	28.7	28.7	8.1	8.1	26.8	26.8	86.6	86.6	5.8		6.0		6		89				<0.2		0.6	
						3.9	2.4	293	28.7		8.1		26.9		86.6		5.8		6.0		7		89				<0.2		0.6	
					Bottom	6.7	2.6	279	28.7	28.7	8.1	8.1	27.4	27.4	86.7	86.8	5.8	5.8	7.3		5		90				<0.2		0.9	
						6.7	2.8	287	28.7		8.1		27.4		86.8		5.8		7.4		6		85				<0.2		0.8	
IM7	Cloudy	Moderate	11:00	9.1	Surface	1.0	1.8	144	29.0	29.0	8.0	8.0	22.6	22.6	86.2	86.2	5.9	5.9	1.8	3.4	7	6	86	89	821346	806850	<0.2	<0.2	0.8	0.8
						1.0	1.9	155	29.0		8.0		22.6		86.2		5.9		1.9		6		89				<0.2		0.8	
					Middle	4.6	2.0	140	28.9	28.9	8.1	8.1	24.1	24.1	85.3	85.3	5.8		3.1		6		89				<0.2		0.8	
						4.6	2.1	151	28.8		8.1		24.1		85.2		5.8		3.3		5		90				<0.2		0.8	
					Bottom	8.1	1.8	136	28.7	28.7	8.1	8.1	27.6	27.6	85.0	85.2	5.6	5.7	5.1		5		91				<0.2		0.9	
						8.1	1.9	136	28.7		8.1		27.6		85.3		5.7		5.2		6		86				<0.2		0.9	
IM8	Cloudy	Moderate	10:14	8.0	Surface	1.0	0.2	102	28.5	28.5	8.1	8.1	23.2	23.2	86.9	86.9	5.9	5.9	5.0	5.6	10	8	86	88	821823	808131	<0.2	<0.2	1.1	1.1
						1.0	0.2	103	28.5		8.1		23.3		86.9		5.9		5.0		9		86				<0.2		1.1	
					Middle	4.0	0.1	104	28.5	28.5	8.1	8.1	23.4	23.4	86.6	86.6	5.9		5.3		7		88				<0.2		1.1	
						4.0	0.1	111	28.5		8.1		23.4		86.6		5.9		5.3		8		87				<0.2		1.1	
					Bottom	7.0	0.1	269	28.5	28.5	8.1	8.1	23.6	23.6	87.5	87.6	6.0	6.0	6.4		7		90				<0.2		1.1	
						7.0	0.1	286	28.5		8.1		23.6		87.7		6.0		6.5		7		90				<0.2		1.0	

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 06 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:08	7.6	Surface	1.0	0.1	195	28.4	28.4	8.1	8.1	23.6	23.6	86.5	86.5	5.9	5.9	7.4	10.8	9	9	85	89	822091	808822	<0.2	<0.2	1.0	1.1
						1.0	0.1	203	28.4		8.1		23.6		86.4		5.9		7.6		8		87				<0.2		1.0	
					Middle	3.8	0.2	215	28.4	28.4	8.1	8.1	23.7	23.7	86.2	86.2	5.9		10.6		10		88				<0.2		1.1	
						3.8	0.2	217	28.4		8.1		23.7		86.2		5.9		10.9		9		88				<0.2		1.1	
					Bottom	6.6	0.1	168	28.4	28.4	8.1	8.1	23.8	23.8	86.9	86.9	5.9	5.9	14.1		10		90				<0.2		1.1	
						6.6	0.1	182	28.4		8.1		23.8		86.9		5.9		14.3		10		98				<0.2		1.1	
IM10	Cloudy	Moderate	10:01	8.3	Surface	1.0	0.6	289	28.4	28.4	8.1	8.1	24.4	24.4	87.2	87.2	5.9	5.9	5.6	10.5	6	7	86	89	822383	809808	<0.2	<0.2	0.9	0.9
						1.0	0.6	313	28.4		8.1		24.4		87.2		5.9		5.6		7		87				<0.2		0.9	
					Middle	4.2	0.6	285	28.4	28.4	8.1	8.1	24.6	24.6	86.1	86.1	5.8		11.7		6		88				<0.2		0.9	
						4.2	0.6	294	28.4		8.1		24.6		86.1		5.8		11.5		7		89				<0.2		0.9	
					Bottom	7.3	0.4	289	28.4	28.4	8.1	8.1	24.6	24.6	87.3	87.4	5.9	5.9	14.8		7		90				<0.2		0.8	
						7.3	0.4	300	28.4		8.1		24.6		87.5		5.9		13.7		8		91				<0.2		0.9	
IM11	Cloudy	Moderate	09:50	8.0	Surface	1.0	0.4	316	28.4	28.4	8.2	8.1	25.0	25.0	85.9	85.9	5.8	5.8	5.1	8.9	6	5	86	88	822047	811450	<0.2	<0.2	0.9	0.9
						1.0	0.5	334	28.4		8.1		25.0		85.8		5.8		5.1		7		87				<0.2		0.9	
					Middle	4.0	0.5	307	28.4	28.4	8.1	8.1	25.2	25.2	84.7	84.7	5.7		7.7		5		88				<0.2		0.8	
						4.0	0.5	323	28.4		8.1		25.3		84.6		5.7		8.3		4		88				<0.2		0.8	
					Bottom	7.0	0.3	304	28.4	28.4	8.1	8.1	25.6	25.6	84.0	84.1	5.7	5.7	13.7		4		90				<0.2		0.8	
						7.0	0.3	331	28.4		8.1		25.6		84.1		5.7		13.6		4		90				<0.2		0.9	
IM12	Cloudy	Moderate	09:44	8.5	Surface	1.0	0.6	282	28.4	28.4	8.2	8.2	25.1	25.1	85.8	85.7	5.8	5.8	7.5	10.4	7	7	86	88	821481	812062	<0.2	<0.2	0.9	0.9
						1.0	0.6	306	28.4		8.2		25.2		85.5		5.8		8.6		8		87				<0.2		0.9	
					Middle	4.3	0.5	286	28.4	28.4	8.2	8.2	25.4	25.4	85.0	85.0	5.7		11.8		8		88				<0.2		0.9	
						4.3	0.5	305	28.4		8.2		25.4		84.9		5.7		11.9		7		87				<0.2		0.8	
					Bottom	7.5	0.3	305	28.4	28.4	8.1	8.1	25.5	25.5	84.1	84.2	5.7	5.7	11.5		6		90				<0.2		0.8	
						7.5	0.3	324	28.4		8.1		25.6		84.2		5.7		11.2		7		90				<0.2		0.8	
SR1A	Cloudy	Moderate	09:23	5.1	Surface	1.0	-	-	28.3	28.3	8.1	8.1	24.5	24.5	85.3	85.3	5.8	5.8	4.8	4.9	10	9	-	-	819975	812663	-	-	-	-
						1.0	-	-	28.3		8.1		24.5		85.2		5.8		4.9		10		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.3	28.3	8.1	8.1	24.5	24.5	85.5	85.9	5.8	5.9	4.9		7		-				-		-	
						4.1	-	-	28.3		8.1		24.5		86.3		5.9		4.9		7		-				-		-	
SR2	Cloudy	Moderate	09:10	4.8	Surface	1.0	0.2	12	28.4	28.4	8.2	8.2	25.6	25.6	85.9	86.0	5.8	5.8	8.9	8.3	8	10	88	89	821465	814180	<0.2	<0.2	0.9	0.9
						1.0	0.2	12	28.4		8.2		25.6		86.0		5.8		9.0		9		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	29	28.4	28.4	8.1	8.1	25.7	25.7	87.6	87.7	5.9	5.9	7.6		10		90				<0.2		0.8	
						3.8	0.1	30	28.4		8.1		25.7		87.7		5.9		7.8		11		90				<0.2		0.9	
SR3	Cloudy	Moderate	10:20	9.2	Surface	1.0	0.1	76	28.5	28.5	8.1	8.1	23.0	23.0	85.4	85.4	5.8	5.8	8.2	10.3	6	6	-	-	822153	807576	-	-	-	-
						1.0	0.1	77	28.5		8.1		23.0		85.4		5.8		8.2		6		-				-		-	
					Middle	4.6	0.0	90	28.5	28.5	8.1	8.1	23.2	23.2	85.5	85.6	5.8		10.2		6		-				-		-	
						4.6	0.0	95	28.5		8.1		23.2		85.6		5.8		10.2		5		-				-		-	
					Bottom	8.2	0.1	279	28.5	28.5	8.1	8.1	23.4	23.4	87.2	87.3	5.9	6.0	12.1		5		-				-		-	
						8.2	0.1	297	28.5		8.1		23.4		87.3		6.0		13.0		5		-				-		-	
SR4A	Cloudy	Calm	09:36	9.4	Surface	1.0	1.4	62	28.8	28.8	8.1	8.1	26.2	26.2	83.7	83.6	5.6	5.6	5.3	6.7	6	7	-	-	817200	807815	-	-	-	-
						1.0	1.5	63	28.8		8.1		26.3		83.5		5.6		5.5		7		-				-		-	
					Middle	4.7	2.1	57	28.7	28.7	8.1	8.1	27.1	27.2	83.2	83.2	5.5		6.7		8		-				-		-	
						4.7	2.3	57	28.7		8.1		27.2		83.2		5.5		6.8		7		-				-		-	
					Bottom	8.4	1.9	43	28.5	28.5	8.1	8.1	28.7	28.7	83.3	83.4	5.5	5.5	7.8		8		-				-		-	
						8.4	2.1	46	28.5		8.1		28.7		83.4		5.5		8.0		8		-				-		-	
SR5A	Cloudy	Calm	09:20	3.3	Surface	1.0	0.1	281	28.7	28.7	8.1	8.1	25.2	25.2	84.0	84.0	5.7	5.7	4.3	5.6	5	5	-	-	816586	810717	-	-	-	-
						1.0	0.1	287	28.7		8.1		25.2		84.0		5.7		4.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	283	28.7	28.7	8.0	8.0	25.2	25.2	84.2	84.2	5.7	5.7	6.9		4		-				-		-	
						2.3	0.1	286	28.7		8.0		25.2		84.2		5.7		6.8		4		-				-		-	
SR6A	Cloudy	Calm	08:54	4.2	Surface	1.0	0.1	205	28.9	28.9	8.1	8.1	24.9	24.9	82.2	82.2	5.5	5.5	2.5	3.4	6	5	-	-	817950	814738	-	-	-	-
						1.0	0.1	209	28.9		8.1		25.0		82.1		5.5		2.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	199	29.1	29.1	8.1	8.1	25.8	25.8	77.4	77.4	5.2	5.2	4.3		3		-				-		-	
						3.2	0.1	204	29.1		8.1		25.8		77.3		5.2		4.2		4		-				-		-	
SR7	Cloudy	Moderate	08:21	16.3	Surface	1.0	0.2	337	28.4	28.4	8.2	8.2	26.3	26.4	83.7	83.6	5.6	5.6	4.3	5.8	5	6	-	-	823653	823748	-	-	-	-
						1.0	0.2	345	28.4		8.2		26.4		83.5		5.6		4.4		5		-				-		-	
					Middle	8.2	0.3	70	28.5	28.5	8.2	8.2	28.0	28.0	82.3	82.3	5.5	5.6	6.4		5		-				-		-	
						8.2	0.3	75	28.5		8.2		28.1		82.2		5.5		6.4		5		-				-		-	
					Bottom	15.3	0.2	81	28.4	28.4	8.2	8.2	28.4	28.4	84.1	84.3	5.6	5.6	6.7		7		-				-		-	
						15.3	0.2	81	28.4		8.2		28.4		84.5		5.6		6.8		6		-				-		-	
SR8	Cloudy	Moderate	09:34	4.5	Surface	1.0	-	-	28.4	28.4	8.2	8.2	24.6	24.7	85.1	84.9	5.8	5.8	10.4	12.3	6	8	-	-	820400	811616	-	-	-	-
						1.0	-	-	28.4		8.2		24.8		84.7		5.7		11.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.4	28.4	8.1	8.1	25.3	25.3	84.4	84.5	5.7	5.7	13.4		9		-				-		-	
						3.5	-	-	28.4		8.1		25.3		84.5		5.7		14.2		10		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	15:53	8.5	Surface	1.0	0.2	231	28.2	28.2	8.0	8.0	31.6	31.6	96.5	96.5	6.3	6.2	1.7	5.0	4	5	87	89	815603	804227	<0.2	<0.2	0.5	0.4
						1.0	0.2	252	28.2		8.0		31.6		96.4		6.3		1.7		4		87				<0.2		0.4	
					Middle	4.3	0.2	200	28.2	28.2	8.1	8.1	31.8	31.8	93.6	93.6	6.1		3.3		5		90				<0.2		0.4	
						4.3	0.2	202	28.2		8.1		31.8		93.6		6.1		3.4		4		89				<0.2		0.4	
					Bottom	7.5	0.2	186	28.2	28.2	8.2	8.2	31.9	31.9	91.8	91.8	6.0	6.0	9.8		5		91				<0.2		0.3	
						7.5	0.2	196	28.2		8.2		31.9		91.8		6.0		10.0		6		92				<0.2		0.3	
C2	Cloudy	Moderate	14:46	12.1	Surface	1.0	0.0	284	27.8	27.8	8.2	8.2	27.0	27.0	93.3	93.3	6.3	6.2	3.3	6.3	3	5	87	90	825704	806935	<0.2	<0.2	0.7	0.7
						1.0	0.0	311	27.7		8.2		27.0		93.3		6.3		3.3		3		88				<0.2		0.7	
					Middle	6.1	0.1	42	27.6	27.6	8.3	8.3	27.6	27.6	91.0	90.9	6.1		5.9		4		90				<0.2		0.7	
						6.1	0.1	44	27.6		8.3		27.7		90.7		6.1		6.5		4		90				<0.2		0.7	
					Bottom	11.1	0.3	62	27.6	27.6	8.3	8.3	28.1	28.1	91.2	91.4	6.2	6.2	9.6		7		92				<0.2		0.8	
						11.1	0.3	62	27.6		8.3		28.1		91.6		6.2		9.1		6		92				<0.2		0.8	
C3	Cloudy	Moderate	16:36	12.2	Surface	1.0	0.2	77	28.0	28.0	8.2	8.2	30.4	30.4	86.8	86.7	5.7	5.7	3.5	4.8	5	4	88	91	822100	817818	<0.2	<0.2	0.8	0.6
						1.0	0.2	79	28.0		8.2		30.4		86.6		5.7		3.6		4		89				<0.2		0.6	
					Middle	6.1	0.2	79	27.9	27.9	8.2	8.2	30.7	30.7	85.8	85.9	5.7		5.8		4		91				<0.2		0.5	
						6.1	0.2	83	27.9		8.2		30.7		85.9		5.7		5.8		4		90				<0.2		0.5	
					Bottom	11.2	0.1	56	27.9	27.9	8.2	8.2	30.6	30.6	86.5	86.6	5.7	5.7	5.2		3		94				<0.2		0.6	
						11.2	0.1	57	27.9		8.2		30.6		86.7		5.7		5.1		4		94				<0.2		0.6	
IM1	Fine	Moderate	15:32	4.7	Surface	1.0	0.1	121	28.1	28.1	8.2	8.2	29.9	29.9	98.6	98.5	6.5	6.5	1.0	1.6	4	4	87	88	817965	807130	<0.2	<0.2	0.5	0.5
						1.0	0.1	127	28.1		8.2		29.9		98.4		6.5		1.1		5		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	217	28.3	28.3	8.2	8.2	30.7	30.7	95.1	95.0	6.2	6.2	2.1		3		89				<0.2		0.5	
						3.7	0.2	233	28.3		8.2		30.7		94.9		6.2		2.2		4		89				<0.2		0.5	
IM2	Fine	Rough	15:24	6.9	Surface	1.0	0.1	165	28.1	28.1	8.0	8.0	29.8	29.8	97.5	97.5	6.5	6.3	1.2	4.6	4	5	85	88	818154	806167	<0.2	<0.2	0.5	0.5
						1.0	0.1	172	28.1		8.0		29.8		97.4		6.5		1.2		5		85				<0.2		0.5	
					Middle	3.5	0.2	213	28.0	28.0	8.0	8.0	30.2	30.3	92.0	91.9	6.1		4.7		5		88				<0.2		0.5	
						3.5	0.2	233	28.0		8.0		30.3		91.8		6.1		5.0		4		88				<0.2		0.5	
					Bottom	5.9	0.1	190	27.9	27.9	8.0	8.0	30.5	30.5	90.8	90.8	6.0	6.0	7.6		5		90				<0.2		0.5	
						5.9	0.1	193	27.9		8.0		30.5		90.8		6.0		7.6		5		89				<0.2		0.5	
IM3	Fine	Rough	15:17	7.1	Surface	1.0	0.1	156	28.1	28.1	8.1	8.1	29.8	29.8	96.3	96.3	6.4	6.2	1.8	6.0	7	5	85	88	818789	805573	<0.2	<0.2	0.4	0.5
						1.0	0.1	167	28.1		8.1		29.8		96.2		6.4		1.8		6		85				<0.2		0.4	
					Middle	3.6	0.2	143	28.0	28.0	8.1	8.1	30.5	30.5	89.5	89.5	5.9		5.8		5		88				<0.2		0.4	
						3.6	0.2	144	28.0		8.1		30.5		89.5		5.9		5.8		6		88				<0.2		0.4	
					Bottom	6.1	0.1	171	28.0	28.0	8.0	8.0	30.9	30.9	89.2	89.2	5.9	5.9	10.4		4		90				<0.2		0.6	
						6.1	0.1	172	28.0		8.0		30.9		89.2		5.9		10.4		4		90				<0.2		0.5	
IM4	Fine	Rough	15:08	8.3	Surface	1.0	0.3	193	28.0	28.0	8.2	8.2	29.8	29.8	96.9	96.8	6.4	6.2	1.9	5.2	6	6	85	88	819715	804630	<0.2	<0.2	0.7	0.7
						1.0	0.3	211	28.0		8.2		29.8		96.7		6.4		1.9		6		86				<0.2		0.7	
					Middle	4.2	0.1	172	28.0	28.0	8.1	8.1	30.9	30.9	89.7	89.8	5.9		4.3		5		88				<0.2		0.7	
						4.2	0.1	178	28.0		8.1		30.9		89.8		5.9		4.2		6		88				<0.2		0.6	
					Bottom	7.3	0.1	98	28.0	28.0	8.1	8.1	30.9	30.9	89.9	89.9	5.9	5.9	9.5		5		90				<0.2		0.7	
						7.3	0.1	99	28.0		8.1		30.9		89.9		5.9		9.5		6		90				<0.2		0.8	
IM5	Fine	Moderate	14:59	7.8	Surface	1.0	0.2	244	28.1	28.1	8.2	8.2	29.9	29.9	94.3	94.2	6.2	6.2	2.8	7.3	2	5	85	88	820745	804855	<0.2	<0.2	0.7	0.7
						1.0	0.2	255	28.1		8.2		29.9		94.0		6.2		3.1		4		85				<0.2		0.8	
					Middle	3.9	0.1	254	28.1	28.1	8.2	8.2	30.3	30.3	91.7	91.8	6.1		8.3		5		88				<0.2		0.6	
						3.9	0.1	270	28.1		8.2		30.3		91.8		6.1		8.0		6		88				<0.2		0.6	
					Bottom	6.8	0.1	198	28.1	28.1	8.2	8.2	30.6	30.6	89.8	89.9	5.9	5.9	11.0		8		90				<0.2		0.6	
						6.8	0.1	198	28.1		8.2		30.6		90.0		5.9		10.8		7		90				<0.2		0.7	
IM6	Fine	Rough	14:51	7.2	Surface	1.0	0.3	231	28.2	28.2	8.1	8.1	28.2	28.2	94.7	94.7	6.3	6.3	1.7	2.4	3	4	85	88	821047	805821	<0.2	<0.2	0.8	0.8
						1.0	0.3	243	28.2		8.1		28.2		94.6		6.3		1.8		2		85				<0.2		1.0	
					Middle	3.6	0.2	242	28.1	28.1	8.1	8.1	28.8	28.8	94.2	94.2	6.3		2.0		4		88				<0.2		0.7	
						3.6	0.2	254	28.1		8.1		28.8		94.2		6.3		2.0		3		89				<0.2		0.7	
					Bottom	6.2	0.1	179	28.0	28.0	8.1	8.1	30.0	30.0	92.1	92.1	6.1	6.1	3.6		4		90				<0.2		0.7	
						6.2	0.1	196	28.0		8.1		30.0		92.1		6.1		3.6		5		90				<0.2		0.7	
IM7	Fine	Moderate	14:46	8.7	Surface	1.0	0.1	247	28.3	28.3	8.0	8.0	27.7	27.7	93.7	93.8	6.3	6.3	1.5	2.5	3	4	85	88	821363	806834	<0.2	<0.2	0.7	0.7
						1.0	0.1	250	28.3		8.0		27.7		93.8		6.3		1.5		4		86				<0.2		0.6	
					Middle	4.4	0.1	162	28.1	28.1	8.0	8.0	29.0	29.0	94.3	94.3	6.3		2.5		4		88				<0.2		0.7	
						4.4	0.1	169	28.1		8.1		29.0		94.3		6.3		2.4		4		89				<0.2		0.7	
					Bottom	7.7	0.1	200	28.0	28.0	8.1	8.1	29.6	29.6	93.6	93.6	6.2	6.2	3.6		4		90				<0.2		0.7	
						7.7	0.1	213	28.0		8.1		29.6		93.6		6.2		3.5		4		90				<0.2		0.7	
IM8	Cloudy	Moderate	15:09	8.1	Surface	1.0	0.1	62	27.6	27.6	8.2	8.2	27.2	27.2	94.4	94.3	6.4	6.4	3.7	5.4	3	3	87	89	821829	808163	<0.2	<0.2	0.7	0.7
						1.0	0.1	62	27.6		8.2		27.2		94.2		6.4		3.7		2		88				<0.2		0.7	
					Middle	4.1	0.2	76	27.5	27.5	8.2	8.2	27.8	27.9	92.7	92.7	6.3		4.5		3		89				<0.2		0.8	
						4.1	0.2	79	27.5		8.2		28.0		92.7		6.3		4.8		3		88				<0.2		0.7	
					Bottom	7.1	0.2	52	27.5	27.5	8.2	8.2	29.3	29.3	93.0	93.1	6.2	6.2	7.9		4		92				<0.2		0.6	
						7.1	0.2	53	27.5		8.2		29.3		93.1		6.2		8.1		4		92				<0.2		0.6	

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 08 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	15:15	7.5	Surface	1.0	0.2	71	27.6	27.6	8.2	8.2	27.3	27.3	94.5	94.5	6.4	6.3	3.8	5.7	4	5	88	90	822109	808830	<0.2	<0.2	0.7	0.6
						1.0	0.2	72	27.6		8.2		27.3		94.4		6.4		3.8		5		87				<0.2		0.7	
					Middle	3.8	0.2	72	27.5	27.5	8.2	8.2	27.7	27.7	91.2	91.2	6.2		5.6		5		90				<0.2		0.6	
						3.8	0.2	72	27.5		8.2		27.7		91.2		6.2		6.0		4		90				<0.2		0.6	
					Bottom	6.5	0.2	75	27.5	27.5	8.2	8.2	27.9	27.9	92.3	92.4	6.2	6.3	7.4		5		92				<0.2		0.6	
						6.5	0.2	77	27.5		8.2		27.9		92.5		6.3		7.4		5		92				<0.2		0.6	
IM10	Cloudy	Moderate	15:23	7.8	Surface	1.0	0.2	75	27.7	27.7	8.2	8.2	27.4	27.4	94.2	94.2	6.4	6.3	3.7	4.7	6	5	89	90	822378	809798	<0.2	<0.2	0.7	0.7
						1.0	0.2	81	27.7		8.2		27.4		94.1		6.4		3.8		5		87				<0.2		0.6	
					Middle	3.9	0.2	70	27.6	27.6	8.2	8.2	27.6	27.6	90.6	90.5	6.1		4.6		5		90				<0.2		0.6	
						3.9	0.2	74	27.6		8.2		27.6		90.4		6.1		4.6		4		90				<0.2		0.7	
					Bottom	6.8	0.1	113	27.7	27.7	8.2	8.2	28.2	28.2	89.3	89.4	6.0	6.0	5.8		4		92				<0.2		0.7	
						6.8	0.1	123	27.7		8.2		28.2		89.5		6.0		5.8		3		92				<0.2		0.6	
IM11	Cloudy	Moderate	15:35	7.4	Surface	1.0	0.1	241	27.7	27.7	8.2	8.2	28.1	28.1	91.4	91.4	6.2	6.0	3.9	4.3	4	3	88	90	822057	811455	<0.2	<0.2	0.6	0.6
						1.0	0.1	255	27.7		8.2		28.1		91.3		6.1		3.8		5		88				<0.2		0.6	
					Middle	3.7	0.0	129	27.8	27.8	8.2	8.2	28.8	28.9	87.7	87.7	5.9		4.3		4		90				<0.2		0.6	
						3.7	0.0	130	27.8		8.2		28.9		87.7		5.9		4.3		3		91				<0.2		0.6	
					Bottom	6.4	0.1	138	27.8	27.9	8.2	8.2	29.2	29.2	88.4	88.5	5.9	5.9	4.8		2		92				<0.2		0.6	
						6.4	0.1	146	27.9		8.2		29.2		88.6		5.9		4.9		2		93				<0.2		0.6	
IM12	Cloudy	Moderate	15:41	9.8	Surface	1.0	0.2	165	27.8	27.8	8.2	8.2	28.6	28.6	87.6	87.6	5.9	5.8	4.8	6.3	3	4	88	91	821469	812050	<0.2	<0.2	0.7	0.6
						1.0	0.2	167	27.8		8.2		28.6		87.5		5.9		4.8		4		89				<0.2		0.6	
					Middle	4.9	0.1	121	27.8	27.8	8.2	8.2	29.2	29.2	85.6	85.7	5.7		6.9		4		90				<0.2		0.6	
						4.9	0.1	128	27.8		8.2		29.2		85.7		5.7		7.1		3		91				<0.2		0.5	
					Bottom	8.8	0.2	126	27.8	27.8	8.2	8.2	29.2	29.2	87.4	87.5	5.8	5.9	7.0		4		93				<0.2		0.6	
						8.8	0.2	126	27.8		8.2		29.2		87.6		5.9		6.8		4		93				<0.2		0.6	
SR1A	Cloudy	Calm	16:01	5.0	Surface	1.0	-	-	27.6	27.6	8.2	8.2	27.1	27.1	87.4	87.3	5.9	5.9	4.6	5.4	7	8	-	-	819975	812659	-	-	-	-
						1.0	-	-	27.6		8.2		27.2		87.1		5.9		4.6		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.7	27.7	8.2	8.2	28.0	28.0	87.5	87.6	5.9	5.9	6.1		9		-				-		-	
						4.0	-	-	27.7		8.2		28.0		87.7		5.9		6.2		8		-				-		-	
SR2	Cloudy	Moderate	16:14	4.4	Surface	1.0	0.2	12	27.8	27.8	8.2	8.2	28.4	28.4	89.1	89.2	6.0	6.0	4.1	4.4	9	7	90	91	821463	814145	<0.2	<0.2	0.6	0.6
						1.0	0.2	12	27.8		8.2		28.5		89.3		6.0		4.3		8		89				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	7	27.8	27.8	8.2	8.2	28.6	28.5	92.6	92.7	6.2	6.2	4.6		6		93				<0.2		0.6	
						3.4	0.2	7	27.8		8.2		28.5		92.8		6.2		4.5		4		93				<0.2		0.6	
SR3	Cloudy	Moderate	15:04	9.6	Surface	1.0	0.1	144	27.6	27.6	8.3	8.3	27.3	27.4	95.2	95.3	6.4	6.5	3.7	5.3	4	5	-	-	822126	807571	-	-	-	-
						1.0	0.1	146	27.6		8.3		27.4		95.3		6.4		3.7		3		-				-		-	
					Middle	4.8	0.1	86	27.6	27.6	8.3	8.3	28.5	28.5	96.4	96.5	6.5		5.6		5		-				-		-	
						4.8	0.1	86	27.6		8.3		28.6		96.5		6.5		5.9		4		-				-		-	
					Bottom	8.6	0.2	60	27.6	27.6	8.3	8.3	28.9	28.9	97.1	97.2	6.5	6.5	6.6		7		-				-		-	
						8.6	0.2	62	27.6		8.3		28.9		97.2		6.5		6.5		6		-				-		-	
SR4A	Fine	Calm	16:15	9.4	Surface	1.0	0.1	78	28.1	28.1	8.1	8.1	29.5	29.5	100.4	100.3	6.7	6.5	1.0	2.8	5	5	-	-	817197	807801	-	-	-	-
						1.0	0.1	78	28.1		8.1		29.6		100.2		6.6		1.0		4		-				-		-	
					Middle	4.7	0.1	79	28.0	28.0	8.1	8.1	30.3	30.4	96.2	96.2	6.4		3.0		4		-				-		-	
						4.7	0.2	79	28.0		8.1		30.4		96.1		6.4		3.1		5		-				-		-	
					Bottom	8.4	0.2	54	27.9	27.9	8.2	8.2	30.4	30.4	95.7	95.7	6.3	6.3	4.3		6		-				-		-	
						8.4	0.2	54	27.9		8.2		30.4		95.7		6.3		4.3		6		-				-		-	
SR5A	Fine	Calm	16:32	3.5	Surface	1.0	0.1	11	28.1	28.1	8.0	8.0	27.3	27.3	96.5	96.5	6.5	6.5	5.0	5.7	6	8	-	-	816608	810681	-	-	-	-
						1.0	0.1	11	28.1		8.0		27.4		96.4		6.5		5.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	284	27.8	27.8	8.1	8.1	27.6	27.6	89.1	89.1	6.0	6.0	6.4		9		-				-		-	
						2.5	0.1	290	27.8		8.1		27.6		89.1		6.0		6.5		9		-				-		-	
SR6A	Fine	Calm	16:58	4.1	Surface	1.0	0.0	261	28.2	28.2	8.1	8.1	26.7	26.7	90.0	90.0	6.1	6.1	6.7	8.0	6	7	-	-	817951	814747	-	-	-	-
						1.0	0.0	261	28.2		8.1		26.7		90.0		6.1		6.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	237	28.0	28.0	8.2	8.2	27.4	27.4	89.1	89.1	6.0	6.0	9.4		8		-				-		-	
						3.1	0.1	238	28.0		8.2		27.4		89.1		6.0		9.1		9		-				-		-	
SR7	Cloudy	Moderate	17:09	15.9	Surface	1.0	0.1	87	27.9	27.9	8.3	8.3	30.8	30.8	85.2	85.2	5.6	5.6	4.2	4.6	4	4	-	-	823626	823736	-	-	-	-
						1.0	0.1	89	27.9		8.3		30.8		85.1		5.6		4.2		4		-				-		-	
					Middle	8.0	0.1	38	27.9	27.9	8.2	8.2	30.8	30.8	85.0	85.1	5.6		4.7		4		-				-		-	
						8.0	0.1	38	27.9		8.2		30.8		85.1		5.6		4.7		5		-				-		-	
					Bottom	14.9	0.2	39	27.9	27.9	8.2	8.2	30.8	30.8	85.3	85.4	5.6	5.6	4.7		5		-				-		-	
						14.9	0.2	42	27.9		8.2		30.8		85.4		5.6		4.8		4		-				-		-	
SR8	Cloudy	Moderate	15:52	4.7	Surface	1.0	-	-	28.4	28.4	8.3	8.3	28.0	28.0	91.2	91.2	6.1	6.1	7.8	7.3	5	7	-	-	820378	811615	-	-	-	-
						1.0	-	-	28.3		8.3		28.0		91.1		6.1		7.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	27.8	27.8	8.2	8.2	28.4	28.4	86.0	86.1	5.8	5.8	6.9		8		-				-		-	
						3.7	-	-	27.8		8.3		28.4		86.1		5.8		6.9		8		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:58	8.6	Surface	1.0	0.4	32	27.8	27.8	8.0	8.0	30.0	30.0	92.0	91.9	6.1	6.0	2.1	5.4	7	7	85	88	815616	804257	<0.2	<0.2	0.5	0.5
						1.0	0.4	33	27.8		8.0		30.0		91.8		6.1		2.2		6		86				<0.2		0.5	
					Middle	4.3	0.4	28	28.1	28.1	8.0	8.0	31.3	31.3	89.0	89.0	5.9		5.6		6		88				<0.2		0.4	
						4.3	0.5	28	28.1		8.0		31.3		89.0		5.9		5.4		7		89				<0.2		0.4	
					Bottom	7.6	0.2	22	28.1	28.1	8.0	8.0	31.4	31.4	89.1	89.2	5.9	5.9	8.5		9		90				<0.2		0.5	
						7.6	0.2	24	28.1		8.0		31.4		89.2		5.9		8.3		8		91				<0.2		0.7	
C2	Cloudy	Moderate	12:19	12.0	Surface	1.0	0.2	13	27.7	27.7	8.2	8.2	26.9	26.9	89.4	89.5	6.1	6.0	3.5	12.5	6	5	87	89	825679	806942	<0.2	<0.2	0.6	0.7
						1.0	0.2	13	27.7		8.2		26.9		89.5		6.1		3.5		5		87				<0.2		0.6	
					Middle	6.0	0.4	6	27.7	27.7	8.3	8.3	27.5	27.5	86.7	86.6	5.9		3.5		5		89				<0.2		0.8	
						6.0	0.4	6	27.7		8.3		27.5		86.4		5.8		3.5		4		88				<0.2		0.8	
					Bottom	11.0	0.3	322	27.8	27.8	8.3	8.3	28.7	28.7	85.7	85.8	5.7	5.8	29.5		4		91				<0.2		0.7	
						11.0	0.3	323	27.8		8.3		28.6		85.9		5.8		31.7		4		91				<0.2		0.7	
C3	Cloudy	Moderate	10:30	11.3	Surface	1.0	0.4	270	27.3	27.3	8.3	8.3	28.1	28.1	87.4	87.3	5.9	5.7	3.5	4.3	3	5	85	87	822129	817822	<0.2	<0.2	0.6	0.7
						1.0	0.4	270	27.3		8.3		28.1		87.2		5.9		3.5		4		85				<0.2		0.6	
					Middle	5.7	0.3	277	27.9	27.9	8.3	8.3	29.6	29.6	83.0	83.0	5.5		4.1		3		88				<0.2		0.6	
						5.7	0.3	301	27.9		8.3		29.6		83.0		5.5		4.3		4		87				<0.2		0.7	
					Bottom	10.3	0.3	292	28.0	28.0	8.3	8.3	30.4	30.4	82.9	82.9	5.5	5.5	5.2		6		90				<0.2		0.7	
						10.3	0.3	295	28.0		8.3		30.4		82.9		5.5		5.2		7		89				<0.2		0.8	
IM1	Fine	Moderate	12:18	4.7	Surface	1.0	0.1	312	28.2	28.2	8.1	8.1	30.8	30.8	91.2	91.2	6.0	6.0	2.8	5.4	4	7	86	88	817962	807121	<0.2	<0.2	0.7	0.7
						1.0	0.1	331	28.2		8.1		30.8		91.1		6.0		2.8		6		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	346	28.1	28.1	8.1	8.1	30.9	30.9	87.8	87.8	5.8	5.8	8.2		8		89				<0.2		0.7	
						3.7	0.1	318	28.1		8.1		30.9		87.8		5.8		7.8		8		89				<0.2		0.7	
IM2	Fine	Rough	12:27	7.0	Surface	1.0	0.3	10	27.9	27.9	8.1	8.1	29.6	29.6	94.1	94.1	6.3	6.3	1.6	2.9	6	7	85	87	818158	806184	<0.2	<0.2	0.6	0.6
						1.0	0.3	10	27.9		8.1		29.6		94.1		6.3		1.6		5		84				<0.2		0.4	
					Middle	3.5	0.3	332	27.8	27.8	8.1	8.1	29.8	29.8	94.0	94.0	6.3		1.5		6		87				<0.2		0.7	
						3.5	0.3	358	27.8		8.1		29.8		93.9		6.3		1.5		7		87				<0.2		0.6	
					Bottom	6.0	0.2	340	27.9	27.9	8.1	8.1	30.2	30.2	92.8	92.8	6.2	6.2	5.5		9		89				<0.2		0.6	
						6.0	0.2	313	27.9		8.1		30.2		92.8		6.2		5.7		8		88				<0.2		0.6	
IM3	Fine	Rough	12:35	7.2	Surface	1.0	0.3	336	27.9	27.9	8.2	8.2	29.6	29.6	92.0	91.9	6.1	6.0	3.3	9.0	4	4	84	87	818785	805608	<0.2	<0.2	0.5	0.5
						1.0	0.3	355	27.9		8.2		29.6		91.8		6.1		3.3		5		84				<0.2		0.5	
					Middle	3.6	0.3	8	28.1	28.1	8.1	8.1	30.5	30.5	88.9	88.9	5.9		8.9		4		88				<0.2		0.5	
						3.6	0.3	8	28.1		8.1		30.5		88.9		5.9		8.8		4		88				<0.2		0.6	
					Bottom	6.2	0.2	317	28.1	28.1	8.1	8.1	30.7	30.7	87.8	87.8	5.8	5.8	14.7		3		88				<0.2		0.5	
						6.2	0.2	348	28.1		8.1		30.7		87.8		5.8		14.8		3		89				<0.2		0.5	
IM4	Fine	Rough	12:44	8.4	Surface	1.0	0.6	4	27.8	27.8	8.2	8.2	28.9	28.9	93.3	93.3	6.2	6.1	2.1	6.1	5	6	84	87	819744	804599	<0.2	<0.2	0.6	0.6
						1.0	0.6	4	27.8		8.2		28.9		93.2		6.2		2.1		5		84				<0.2		0.6	
					Middle	4.2	0.4	346	28.1	28.1	8.1	8.1	30.3	30.3	89.3	89.3	5.9		6.3		6		88				<0.2		0.6	
						4.2	0.4	346	28.1		8.1		30.3		89.3		5.9		5.8		6		87				<0.2		0.6	
					Bottom	7.4	0.2	322	28.2	28.2	8.1	8.1	30.6	30.6	87.9	88.0	5.8	5.8	10.3		8		88				<0.2		0.5	
						7.4	0.3	346	28.2		8.1		30.6		88.0		5.8		10.3		8		89				<0.2		0.6	
IM5	Fine	Moderate	12:52	7.5	Surface	1.0	0.9	330	27.9	27.9	8.1	8.1	29.0	29.1	92.0	91.9	6.1	6.0	2.7	7.6	5	6	84	87	820756	804877	<0.2	<0.2	0.6	0.6
						1.0	0.9	338	27.9		8.1		29.1		91.7		6.1		2.7		4		84				<0.2		0.5	
					Middle	3.8	0.7	9	28.0	28.0	8.1	8.1	30.3	30.3	89.3	89.3	5.9		8.3		6		88				<0.2		0.6	
						3.8	0.8	9	28.0		8.1		30.3		89.3		5.9		8.6		6		88				<0.2		0.6	
					Bottom	6.5	0.5	17	28.0	28.0	8.0	8.0	30.4	30.4	89.4	89.5	5.9	5.9	11.9		7		88				<0.2		0.5	
						6.5	0.6	18	28.0		8.1		30.4		89.5		5.9		11.7		6		89				<0.2		0.6	
IM6	Fine	Moderate	13:00	7.1	Surface	1.0	0.1	213	28.3	28.3	8.2	8.2	27.6	27.7	91.6	91.6	6.1	6.1	1.7	2.7	7	5	83	87	821077	805819	<0.2	<0.2	0.5	0.6
						1.0	0.1	227	28.3		8.2		27.7		91.6		6.1		1.8		6		84				<0.2		0.5	
					Middle	3.6	0.1	176	28.1	28.1	8.2	8.2	28.8	28.8	91.2	91.2	6.1		2.5		5		88				<0.2		0.6	
						3.6	0.1	181	28.1		8.2		28.8		91.2		6.1		2.5		4		89				<0.2		0.6	
					Bottom	6.1	0.1	142	28.0	28.0	8.2	8.2	29.8	29.8	90.5	90.6	6.0	6.0	4.0		4		89				<0.2		0.5	
						6.1	0.1	143	28.0		8.2		29.8		90.6		6.0		4.0		2		88				<0.2		0.6	
IM7	Fine	Moderate	13:09	8.3	Surface	1.0	0.1	311	28.2	28.2	8.1	8.1	27.5	27.5	91.4	91.4	6.1	6.1	1.5	2.5	3	4	84	87	821331	806812	<0.2	<0.2	0.7	0.7
						1.0	0.1	336	28.2		8.1		27.5		91.4		6.1		1.5		2		84				<0.2		0.7	
					Middle	4.2	0.1	98	28.0	28.0	8.1	8.1	27.8	27.8	90.3	90.3	6.1		1.8		5		88				<0.2		0.8	
						4.2	0.1	101	28.0		8.1		27.8		90.3		6.1		1.8		4		88				<0.2		0.8	
					Bottom	7.3	0.1	62	28.0	28.0	8.1	8.1	29.8	29.8	88.5	88.5	5.9	5.9	4.2		6		89				<0.2		0.7	
						7.3	0.1	62	28.0		8.1		29.8		88.5		5.9		4.2		4		90				<0.2		0.7	
IM8	Cloudy	Moderate	11:52	7.4	Surface	1.0	0.1	294	27.4	27.4	8.2	8.2	27.3	27.3	89.2	89.2	6.1	6.1	5.2	5.2	8	6	87	90	821809	808120	<0.2	<0.2	0.7	0.7
						1.0	0.1	302	27.4		8.2		27.3		89.2		6.1		5.2		7		87				<0.2		0.7	
					Middle	3.7	0.0	1	27.3	27.3	8.2	8.2	27.4	27.4	88.9	88.9	6.0		5.0		6		90				<0.2		0.6	
						3.7	0.0	1	27.3		8.2		27.4		88.9		6.0		5.0		6		90				<0.2		0.6	
					Bottom	6.4	0.1	38	27.3	27.3	8.2	8.2	27.5	27.5	90.7	90.8	6.2	6.2	5.2		5		91				<0.2		0.8	
						6.4	0.1	38	27.3		8.2		27.5		90.9		6.2		5.2		6		92				<0.2		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 08 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:46	7.1	Surface	1.0	0.3	213	27.3	27.3	8.3	8.3	27.3	27.3	88.5	88.5	6.0	6.0	6.7	7.9	9	9	86	89	822072	808806	<0.2	<0.2	0.7	0.7
						1.0	0.3	229	27.3		8.3		27.3		88.5		6.0		6.7		8		87				<0.2		0.6	
					Middle	3.6	0.3	224	27.3	27.3	8.3	8.3	27.3	27.3	88.5	88.6	6.0		8.1		9		88				<0.2		0.8	
						3.6	0.3	237	27.3		8.3		27.3		88.6		6.0		8.2		8		89				<0.2		0.7	
					Bottom	6.1	0.1	212	27.3	27.3	8.3	8.2	27.3	27.3	89.9	90.1	6.1	6.1	8.9		10		90				<0.2		0.6	
						6.1	0.2	223	27.3		8.2		27.3		90.3		6.1		8.9		9		91				<0.2		0.6	
IM10	Cloudy	Moderate	11:39	7.0	Surface	1.0	0.5	323	27.4	27.4	8.2	8.2	27.5	27.5	89.0	89.0	6.0	6.0	5.1	7.0	9	7	86	89	822371	809773	<0.2	<0.2	0.7	0.7
						1.0	0.5	332	27.4		8.2		27.5		89.0		6.0		5.2		8		87				<0.2		0.7	
					Middle	3.5	0.4	325	27.4	27.4	8.2	8.2	27.7	27.7	88.5	88.5	6.0		7.3		6		89				<0.2		0.6	
						3.5	0.4	345	27.4		8.2		27.7		88.5		6.0		7.6		6		88				<0.2		0.6	
					Bottom	6.0	0.4	327	27.4	27.4	8.2	8.2	27.7	27.7	90.0	90.2	6.1	6.1	8.4		6		91				<0.2		0.7	
						6.0	0.4	345	27.4		8.2		27.7		90.4		6.1		8.4		5		92				<0.2		0.6	
IM11	Cloudy	Moderate	11:29	7.9	Surface	1.0	0.4	314	27.5	27.5	8.2	8.2	27.8	27.8	86.9	86.9	5.9	5.9	7.3	8.2	9	8	85	88	822034	811478	<0.2	<0.2	0.6	0.7
						1.0	0.4	332	27.5		8.2		27.8		86.8		5.9		7.3		8		86				<0.2		0.6	
					Middle	4.0	0.4	319	27.5	27.5	8.2	8.2	27.8	27.8	86.0	86.0	5.8		7.1		7		88				<0.2		0.8	
						4.0	0.4	324	27.5		8.2		27.9		85.9		5.8		7.3		8		88				<0.2		0.6	
					Bottom	6.9	0.3	307	27.7	27.7	8.2	8.2	28.5	28.5	84.9	85.0	5.7	5.7	9.9		6		91				<0.2		0.7	
						6.9	0.3	321	27.7		8.2		28.5		85.1		5.7		10.1		7		90				<0.2		0.7	
IM12	Cloudy	Moderate	11:22	8.4	Surface	1.0	0.5	293	27.5	27.5	8.2	8.2	28.0	28.0	85.5	85.5	5.8	5.8	9.0	10.8	7	8	85	88	821466	812030	<0.2	<0.2	0.6	0.7
						1.0	0.5	295	27.5		8.2		28.0		85.5		5.8		9.1		7		86				<0.2		0.7	
					Middle	4.2	0.4	295	27.6	27.6	8.2	8.2	28.2	28.2	84.6	84.6	5.7		10.5		9		86				<0.2		0.6	
						4.2	0.4	311	27.6		8.2		28.3		84.5		5.7		10.7		8		89				<0.2		0.7	
					Bottom	7.4	0.3	280	27.7	27.7	8.2	8.2	28.6	28.6	84.9	85.0	5.7	5.7	12.8		8		90				<0.2		0.7	
						7.4	0.3	301	27.7		8.2		28.6		85.0		5.7		12.5		9		90				<0.2		0.7	
SR1A	Cloudy	Calm	11:02	4.2	Surface	1.0	-	-	27.4	27.4	8.2	8.2	27.1	27.1	82.9	83.0	5.6	5.6	5.4	5.4	7	7	-	-	819975	812660	-	-	-	-
						1.0	-	-	27.4		8.2		27.1		83.0		5.6		5.4		7		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	27.4	27.4	8.2	8.2	27.1	27.1	85.1	85.2	5.8	5.8	5.4		7		-				-		-	
						3.2	-	-	27.4		8.2		27.1		85.3		5.8		5.4		6		-				-		-	
SR2	Cloudy	Moderate	10:50	4.6	Surface	1.0	0.1	133	27.7	27.7	8.3	8.3	28.5	28.5	84.6	84.6	5.7	5.7	6.6	8.2	8	9	87	88	821440	814184	<0.2	<0.2	0.6	0.6
						1.0	0.2	136	27.7		8.3		28.5		84.6		5.7		6.6		7		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	138	27.7	27.7	8.3	8.4	28.6	28.6	84.5	84.5	5.7	5.7	9.7		10		89				<0.2		0.6	
						3.6	0.2	143	27.7		8.4		28.6		84.5		5.7		9.8		9		89				<0.2		0.6	
SR3	Cloudy	Moderate	11:57	8.9	Surface	1.0	0.1	129	27.5	27.5	8.2	8.2	27.0	27.0	89.9	89.9	6.1	6.1	3.8	5.2	6	5	-	-	822160	807569	-	-	-	-
						1.0	0.1	140	27.5		8.2		27.0		89.8		6.1		4.0		6		-				-		-	
					Middle	4.5	0.0	295	27.4	27.4	8.2	8.2	27.3	27.3	89.2	89.2	6.1		5.0		4		-				-		-	
						4.5	0.0	307	27.4		8.2		27.3		89.2		6.1		5.2		4		-				-		-	
					Bottom	7.9	0.1	330	27.4	27.4	8.2	8.2	27.6	27.6	90.0	90.2	6.1	6.1	6.7		4		-				-		-	
						7.9	0.1	341	27.4		8.2		27.6		90.3		6.1		6.7		3		-				-		-	
SR4A	Fine	Calm	11:36	9.3	Surface	1.0	0.2	221	27.6	27.6	8.1	8.1	28.1	28.1	87.1	87.1	5.9	5.9	3.0	6.4	8	7	-	-	817206	807821	-	-	-	-
						1.0	0.2	242	27.6		8.1		28.2		87.1		5.9		3.1		9		-				-		-	
					Middle	4.7	0.3	234	27.8	27.8	8.1	8.1	30.6	30.6	88.7	88.8	5.9		6.3		7		-				-		-	
						4.7	0.3	248	27.8		8.1		30.6		88.8		5.9		6.6		7		-				-		-	
					Bottom	8.3	0.1	247	27.8	27.8	8.2	8.2	30.8	30.8	89.2	89.2	5.9	5.9	9.7		6		-				-		-	
						8.3	0.2	254	27.8		8.2		30.8		89.2		5.9		9.6		6		-				-		-	
SR5A	Fine	Calm	11:18	3.3	Surface	1.0	0.1	270	27.6	27.6	8.1	8.1	27.4	27.4	87.7	87.7	5.9	5.9	3.1	3.6	6	8	-	-	816579	810685	-	-	-	-
						1.0	0.1	293	27.5		8.1		27.4		87.7		5.9		3.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	266	27.5	27.5	8.1	8.1	27.4	27.4	88.2	88.3	6.0	6.0	4.1		9		-				-		-	
						2.3	0.1	280	27.5		8.1		27.4		88.3		6.0		4.2		10		-				-		-	
SR6A	Cloudy	Calm	10:43	4.4	Surface	1.0	0.0	216	27.7	27.7	8.1	8.1	26.8	26.8	83.9	84.0	5.7	5.7	5.0	6.0	10	8	-	-	817981	814745	-	-	-	-
						1.0	0.0	218	27.7		8.1		26.8		84.1		5.7		5.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	337	27.6	27.6	8.1	8.1	27.5	27.5	85.1	85.2	5.8	5.8	7.0		7		-				-		-	
						3.4	0.0	339	27.6		8.1		27.5		85.2		5.8		6.9		7		-				-		-	
SR7	Cloudy	Moderate	10:00	15.7	Surface	1.0	0.1	195	27.5	27.5	8.2	8.2	28.9	28.9	86.8	86.8	5.8	5.7	3.5	4.0	9	7	-	-	823635	823744	-	-	-	-
						1.0	0.1	212	27.5		8.2		28.9		86.7		5.8		3.5		9		-				-		-	
					Middle	7.9	0.2	62	27.8	27.8	8.2	8.2	29.9	29.9	84.0	84.0	5.6		4.1		6		-				-		-	
						7.9	0.2	65	27.8		8.2		30.0		84.0		5.6		4.2		7		-				-		-	
					Bottom	14.7	0.2	71	27.9	27.9	8.2	8.2	30.2	30.2	85.0	85.1	5.6	5.6	4.4		5		-				-		-	
						14.7	0.2	74	27.9		8.2		30.1		85.1		5.6		4.4		5		-				-		-	
SR8	Cloudy	Calm	11:13	4.8	Surface	1.0	-	-	27.5	27.5	8.2	8.2	27.5	27.5	87.0	87.0	5.9	5.9	7.4	7.7	9	10	-	-	820391	811606	-	-	-	-
						1.0	-	-	27.5		8.2		27.6		87.0		5.9		7.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.5	27.5	8.2	8.2	27.8	27.8	87.7	87.8	5.9	6.0	8.1		10		-				-		-	
						3.8	-	-	27.5		8.2		27.8		87.9		6.0		7.9		10		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	05:44	8.5	Surface	1.0	0.2	207	27.0	27.0	8.3	8.3	31.7	31.7	93.6	93.6	6.2	6.2	6.2	6.5	8	9	86	87	815607	804257	<0.2	<0.2	0.3	0.3
						1.0	0.2	225	27.0		8.3		31.7		93.6		6.2		6.2		8		85				<0.2		0.4	
					Middle	4.3	0.2	207	27.1	27.1	8.3	8.3	31.7	31.7	93.6	93.7	6.2	6.2	6.4		9		87				<0.2		0.4	
						4.3	0.2	216	27.0		8.3		31.7		93.7		6.2		6.5		8		87				<0.2		0.3	
					Bottom	7.5	0.3	204	27.0	27.0	8.3	8.3	31.7	31.7	94.2	94.2	6.3	6.3	6.8		10		89				<0.2		0.3	
						7.5	0.3	221	27.0		8.3		31.7		94.2		6.3		6.8		9		89				<0.2		0.3	
C2	Sunny	Moderate	07:10	10.9	Surface	1.0	0.3	64	27.7	27.7	8.1	8.1	31.3	31.3	93.4	93.5	6.2	6.2	6.7	8.7	5	7	84	89	825700	806948	<0.2	<0.2	0.4	0.5
						1.0	0.3	64	27.7		8.1		31.3		93.5		6.2		6.7		6		85				<0.2		0.5	
					Middle	5.5	0.3	117	27.6	27.6	8.2	8.2	31.7	31.7	93.6	93.6	6.2		9.1		7		89				<0.2		0.5	
						5.5	0.3	125	27.6		8.2		31.7		93.5		6.2		9.2		7		89				<0.2		0.5	
					Bottom	9.9	0.2	133	28.2	28.2	8.1	8.1	33.0	33.0	87.8	87.8	5.7	5.7	10.2		8		93				<0.2		0.6	
						9.9	0.3	140	28.2		8.1		33.0		87.8		5.7		10.2		7		93				<0.2		0.5	
C3	Fine	Moderate	04:51	12.3	Surface	1.0	0.5	69	27.8	27.8	8.2	8.2	32.8	32.8	90.3	90.3	5.9	5.8	6.2	6.8	8	8	85	89	822119	817825	<0.2	<0.2	0.4	0.5
						1.0	0.5	75	27.8		8.2		32.8		90.3		5.9		6.2		8		85				<0.2		0.4	
					Middle	6.2	0.5	89	28.2	28.2	8.2	8.2	33.5	33.5	87.8	87.8	5.7		7.0		8		89				<0.2		0.5	
						6.2	0.5	92	28.2		8.2		33.5		87.7		5.7		7.0		8		90				<0.2		0.6	
					Bottom	11.3	0.4	100	28.3	28.3	8.2	8.2	33.5	33.5	87.9	87.9	5.7	5.7	7.1		8		94				<0.2		0.6	
						11.3	0.4	105	28.3		8.2		33.5		87.9		5.7		7.1		9		93				<0.2		0.6	
IM1	Cloudy	Moderate	06:07	5.6	Surface	1.0	0.2	192	27.2	27.2	8.3	8.3	31.5	31.5	91.3	91.3	6.1	6.1	6.1	7.8	10	9	87	88	817964	807151	<0.2	<0.2	0.3	0.4
						1.0	0.2	202	27.2		8.3		31.5		91.3		6.1		6.1		11		87				<0.2		0.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	161	27.2	27.2	8.3	8.3	31.6	31.6	91.4	91.5	6.1	6.1	9.8		7		89				<0.2		0.4	
						4.6	0.1	164	27.2		8.3		31.6		91.5		6.1		9.4		8		89				<0.2		0.4	
IM2	Cloudy	Moderate	06:15	7.5	Surface	1.0	0.2	194	27.0	27.0	8.3	8.3	31.1	31.1	94.6	94.6	6.3	6.3	5.2	7.1	7	8	87	88	818145	806160	<0.2	<0.2	0.3	0.4
						1.0	0.2	206	27.0		8.3		31.1		94.5		6.3		5.3		6		86				<0.2		0.3	
					Middle	3.8	0.2	171	27.1	27.1	8.3	8.3	31.5	31.5	93.5	93.5	6.2		7.6		8		87				<0.2		0.4	
						3.8	0.2	180	27.1		8.3		31.5		93.5		6.2		7.8		9		87				<0.2		0.4	
					Bottom	6.5	0.2	134	27.1	27.1	8.3	8.3	31.6	31.6	93.2	93.3	6.2	6.2	8.6		9		89				<0.2		0.4	
						6.5	0.2	147	27.1		8.3		31.6		93.3		6.2		8.4		8		89				<0.2		0.4	
IM3	Cloudy	Moderate	06:22	7.7	Surface	1.0	0.3	150	26.9	26.9	8.3	8.3	31.1	31.1	94.0	94.0	6.3	6.3	6.4	7.9	8	10	86	87	818797	805586	<0.2	<0.2	0.4	0.4
						1.0	0.3	151	26.9		8.3		31.1		94.0		6.3		6.7		9		85				<0.2		0.4	
					Middle	3.9	0.2	126	27.0	27.0	8.3	8.3	31.3	31.3	93.6	93.6	6.3		7.1		10		87				<0.2		0.3	
						3.9	0.2	135	27.0		8.3		31.3		93.6		6.3		6.4		9		87				<0.2		0.3	
					Bottom	6.7	0.2	138	27.0	27.0	8.3	8.3	31.4	31.4	93.6	93.6	6.3	6.3	10.1		10		89				<0.2		0.4	
						6.7	0.2	150	27.0		8.3		31.4		93.6		6.3		10.8		11		90				<0.2		0.3	
IM4	Cloudy	Moderate	06:33	8.5	Surface	1.0	0.7	191	26.8	26.8	8.3	8.3	31.1	31.1	94.5	94.5	6.4	6.3	5.3	6.9	8	9	85	87	819729	804602	<0.2	<0.2	0.4	0.4
						1.0	0.7	198	26.8		8.3		31.1		94.5		6.3		5.4		9		85				<0.2		0.4	
					Middle	4.3	0.6	193	26.9	26.9	8.3	8.3	31.3	31.3	94.4	94.4	6.3		6.4		8		87				<0.2		0.4	
						4.3	0.6	207	26.9		8.3		31.3		94.4		6.3		6.6		9		86				<0.2		0.4	
					Bottom	7.5	0.5	182	26.9	26.9	8.3	8.3	31.3	31.3	94.6	94.6	6.3	6.3	8.6		9		90				<0.2		0.4	
						7.5	0.6	189	26.9		8.3		31.3		94.6		6.3		8.8		10		89				<0.2		0.4	
IM5	Cloudy	Moderate	06:42	8.0	Surface	1.0	0.5	193	26.9	26.9	8.3	8.3	31.4	31.4	94.8	94.8	6.4	6.4	6.2	6.6	9	7	85	87	820757	804862	<0.2	<0.2	0.3	0.3
						1.0	0.5	205	26.9		8.3		31.4		94.8		6.4		6.3		8		85				<0.2		0.4	
					Middle	4.0	0.5	195	26.8	26.8	8.3	8.3	31.4	31.4	94.8	94.8	6.4		6.8		7		87				<0.2		0.4	
						4.0	0.5	199	26.8		8.3		31.4		94.8		6.4		6.8		6		86				<0.2		0.3	
					Bottom	7.0	0.5	206	26.8	26.8	8.3	8.3	31.4	31.4	94.9	94.9	6.4	6.4	6.9		6		89				<0.2		0.3	
						7.0	0.5	216	26.8		8.3		31.4		94.9		6.4		6.8		6		89				<0.2		0.3	
IM6	Cloudy	Moderate	06:51	7.5	Surface	1.0	0.4	232	26.8	26.8	8.3	8.3	31.0	31.1	95.1	95.1	6.4	6.4	5.4	7.3	6	8	86	88	821055	805847	<0.2	<0.2	0.5	0.4
						1.0	0.4	249	26.8		8.3		31.1		95.1		6.4		5.5		6		85				<0.2		0.4	
					Middle	3.8	0.4	223	26.8	26.8	8.3	8.3	31.4	31.4	95.1	95.1	6.4		7.5		8		87				<0.2		0.4	
						3.8	0.4	238	26.8		8.3		31.4		95.1		6.4		7.6		7		88				<0.2		0.5	
					Bottom	6.5	0.3	217	26.8	26.8	8.3	8.3	31.3	31.3	95.3	95.3	6.4	6.4	8.8		10		90				<0.2		0.4	
						6.5	0.3	219	26.8		8.3		31.3		95.3		6.4		8.9		9		90				<0.2		0.4	
IM7	Cloudy	Moderate	07:00	8.0	Surface	1.0	0.3	224	26.8	26.8	8.3	8.3	29.5	29.5	95.9	95.9	6.5	6.4	3.8	4.9	7	8	85	87	821332	806840	<0.2	<0.2	0.5	0.5
						1.0	0.3	243	26.8		8.3		29.6		95.8		6.5		3.8		7		86				<0.2		0.6	
					Middle	4.0	0.1	238	26.9	27.0	8.3	8.3	31.0	31.1	94.1	94.1	6.3		5.2		7		88				<0.2		0.5	
						4.0	0.1	260	27.0		8.3		31.1		94.0		6.3		5.3		8		87				<0.2		0.5	
					Bottom	7.0	0.0	205	27.0	27.0	8.3	8.3	31.4	31.4	93.8	93.8	6.3	6.3	5.9		9		89				<0.2		0.5	
						7.0	0.0	218	27.0		8.3		31.4		93.8		6.3		5.9		8		89				<0.2		0.4	
IM8	Sunny	Moderate	06:36	8.3	Surface	1.0	0.2	133	27.5	27.5	8.2	8.2	31.4	31.4	96.1	96.1	6.4	6.4	6.6	7.4	8	8	85	89	821824	808148	<0.2	<0.2	0.5	0.6
						1.0	0.2	140	27.5		8.2		31.4		96.1		6.4		6.6		9		85				<0.2		0.6	
					Middle	4.2	0.2	72	27.5	27.5	8.2	8.2	31.7	31.7	97.2	97.2	6.4		7.1		8		90				<0.2		0.5	
						4.2	0.2	76	27.5		8.2		31.7		97.1		6.4		7.2		8		89				<0.2		0.6	
					Bottom	7.3	0.2	56	27.6	27.6	8.2	8.2	33.2	33.2	95.6	95.7	6.3	6.3	8.6		6		94				<0.2		0.6	
						7.3	0.2	61	27.6		8.2		33.2		95.7		6.3		8.5		6		93				<0.2		0.6	

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**
Note: The monitoring session on 13 October 2020 was cancelled due to No. 8 Northeast Gale or Storm Signal.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	06:29	8.7	Surface	1.0	0.3	106	27.5	27.5	8.2	8.2	31.4	31.4	96.9	96.9	6.4	6.4	6.8	7.8	3	5	85	90	822102	808828	<0.2	<0.2	0.6	0.6
						1.0	0.3	106	27.5		8.2		31.4		96.9		6.4		6.8		4		86				<0.2		0.6	
					Middle	4.4	0.3	91	27.5	27.5	8.2	8.2	31.9	31.9	96.8	96.8	6.4		7.4		5		89				<0.2		0.5	
						4.4	0.3	91	27.5		8.2		32.0		96.8		6.4		7.4		6		90				<0.2		0.6	
					Bottom	7.7	0.3	61	27.6	27.6	8.2	8.2	33.0	33.0	96.1	96.1	6.3	6.3	9.1		6		94				<0.2		0.5	
						7.7	0.3	65	27.6		8.2		33.0		96.1		6.3		9.1		6		93				<0.2		0.5	
IM10	Sunny	Moderate	06:20	8.4	Surface	1.0	0.5	109	27.5	27.5	8.2	8.2	31.5	31.5	96.0	96.1	6.4	6.4	6.9	8.0	8	7	85	89	822362	809797	<0.2	<0.2	0.6	0.6
						1.0	0.5	117	27.5		8.2		31.5		96.2		6.4		6.9		8		85				<0.2		0.6	
					Middle	4.2	0.5	97	27.6	27.6	8.2	8.2	31.9	31.9	96.9	97.0	6.4		7.4		6		90				<0.2		0.6	
						4.2	0.5	98	27.6		8.2		31.9		97.0		6.4		7.5		7		89				<0.2		0.6	
					Bottom	7.4	0.3	82	27.6	27.6	8.2	8.2	32.9	32.9	95.9	95.9	6.3	6.3	9.5		7		93				<0.2		0.6	
						7.4	0.4	85	27.6		8.2		32.9		95.8		6.3		9.5		6		93				<0.2		0.6	
IM11	Sunny	Moderate	06:05	7.8	Surface	1.0	0.5	113	27.7	27.7	8.1	8.1	31.8	31.8	93.4	93.4	6.2	6.0	7.3	8.4	11	9	85	89	822058	811476	<0.2	<0.2	0.5	0.6
						1.0	0.5	119	27.7		8.1		31.8		93.3		6.1		7.3		10		85				<0.2		0.6	
					Middle	3.9	0.4	106	28.0	28.0	8.1	8.1	32.4	32.4	88.8	88.8	5.8		8.4		9		89				<0.2		0.6	
						3.9	0.4	112	28.0		8.1		32.4		88.8		5.8		8.4		8		90				<0.2		0.6	
					Bottom	6.8	0.2	113	28.2	28.2	8.1	8.1	32.7	32.7	86.8	86.8	5.7	5.7	9.5		7		93				<0.2		0.6	
						6.8	0.3	114	28.2		8.1		32.7		86.8		5.7		9.5		7		94				<0.2		0.6	
IM12	Sunny	Moderate	05:56	8.2	Surface	1.0	0.3	92	27.9	27.9	8.1	8.1	32.0	32.0	86.7	86.6	5.7	5.6	8.0	8.6	12	11	85	90	821440	812065	<0.2	<0.2	0.6	0.6
						1.0	0.4	98	27.9		8.1		32.0		86.5		5.7		8.0		12		89				<0.2		0.5	
					Middle	4.1	0.4	86	28.3	28.3	8.1	8.1	32.4	32.4	84.2	84.1	5.5		8.3		10		89				<0.2		0.6	
						4.1	0.4	94	28.3		8.1		32.4		84.0		5.5		8.3		10		89				<0.2		0.5	
					Bottom	7.2	0.2	89	28.3	28.3	8.1	8.1	32.8	32.8	85.2	85.3	5.5	5.5	9.5		9		94				<0.2		0.6	
						7.2	0.2	91	28.3		8.1		32.8		85.3		5.5		9.5		10		93				<0.2		0.6	
SR1A	Fine	Moderate	05:31	5.5	Surface	1.0	-	-	27.8	27.8	8.1	8.1	31.5	31.5	84.6	84.7	5.6	5.6	7.6	8.1	6	7	-	-	819982	812654	-	-	-	-
						1.0	-	-	27.8		8.1		31.5		84.7		5.6		7.6		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.3	28.3	8.1	8.1	32.7	32.7	84.1	84.1	5.5	5.5	8.5		7		-				-		-	
						4.5	-	-	28.3		8.1		32.7		84.1		5.5		8.5		8		-				-		-	
SR2	Fine	Moderate	05:18	5.3	Surface	1.0	0.2	87	27.7	27.7	8.1	8.1	32.1	32.1	87.4	87.4	5.8	5.8	7.2	7.6	6	7	85	87	821450	814175	<0.2	<0.2	0.6	0.5
						1.0	0.2	89	27.7		8.1		32.1		87.3		5.7		7.2		7		85				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	95	28.3	28.3	8.1	8.1	33.1	33.1	85.7	85.7	5.6	5.6	8.0		8		90				<0.2		0.5	
						4.3	0.1	98	28.3		8.1		33.1		85.7		5.6		8.0		7		89				<0.2		0.5	
SR3	Sunny	Moderate	06:44	8.6	Surface	1.0	0.3	158	27.4	27.4	8.2	8.2	31.1	31.0	97.1	97.1	6.5	6.5	6.2	7.2	6	6	-	-	822153	807554	-	-	-	-
						1.0	0.3	162	27.4		8.2		31.0		97.1		6.5		6.2		6		-				-		-	
					Middle	4.3	0.1	161	27.8	27.8	8.2	8.2	31.9	31.9	96.6	96.7	6.4		7.4		7		-				-		-	
						4.3	0.1	170	27.8		8.2		31.9		96.7		6.4		7.4		6		-				-		-	
					Bottom	7.6	0.1	25	27.5	27.5	8.2	8.2	32.8	32.8	96.4	96.5	6.3	6.4	8.0		5		-				-		-	
						7.6	0.1	25	27.5		8.2		32.8		96.6		6.4		8.1		6		-				-		-	
SR4A	Cloudy	Moderate	05:22	8.1	Surface	1.0	2.9	62	26.8	26.9	8.3	8.3	30.9	31.0	92.1	92.1	6.2	6.2	5.8	6.6	6	9	-	-	817194	807831	-	-	-	-
						1.0	3.0	63	26.9		8.3		31.0		92.0		6.2		5.9		7		-				-		-	
					Middle	4.1	3.0	63	27.2	27.2	8.3	8.3	31.6	31.6	91.8	91.8	6.1		7.0		8		-				-		-	
						4.1	3.0	68	27.2		8.3		31.6		91.8		6.1		6.9		10		-				-		-	
					Bottom	7.1	3.0	62	27.2	27.2	8.3	8.3	31.7	31.7	91.6	91.6	6.1	6.1	7.0		10		-				-		-	
						7.1	3.1	62	27.2		8.3		31.7		91.6		6.1		7.1		11		-				-		-	
SR5A	Cloudy	Moderate	05:03	4.3	Surface	1.0	0.0	227	26.9	27.0	8.3	8.3	28.5	28.4	93.9	93.8	6.4	6.4	6.6	7.3	8	7	-	-	816581	810719	-	-	-	-
						1.0	0.0	230	27.0		8.3		28.4		93.6		6.4		6.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	333	27.3	27.3	8.3	8.3	30.1	30.1	92.3	92.4	6.2	6.2	7.9		6		-				-		-	
						3.3	0.1	333	27.3		8.3		30.2		92.4		6.2		8.1		5		-				-		-	
SR6A	Cloudy	Moderate	04:33	4.5	Surface	1.0	0.1	59	27.7	27.7	8.2	8.2	29.3	29.4	85.4	85.4	5.7	5.7	7.5	7.0	4	6	-	-	817979	814717	-	-	-	-
						1.0	0.1	61	27.7		8.2		29.4		85.4		5.7		7.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	90	27.7	27.7	8.2	8.2	29.8	29.9	84.8	84.8	5.7	5.7	6.9		7		-				-		-	
						3.5	0.0	94	27.7		8.2		29.9		84.7		5.6		7.1		7		-				-		-	
SR7	Fine	Moderate	04:16	14.8	Surface	1.0	0.6	67	28.1	28.1	8.1	8.1	33.4	33.4	89.2	89.3	5.8	5.8	6.4	6.8	4	5	-	-	823623	823756	-	-	-	-
						1.0	0.6	72	28.1		8.1		33.4		89.3		5.8		6.4		5		-				-		-	
					Middle	7.4	0.3	39	28.2	28.2	8.1	8.1	33.5	33.5	87.7	87.7	5.7		6.9		5		-				-		-	
						7.4	0.3	39	28.2		8.1		33.5		87.7		5.7		6.9		5		-				-		-	
					Bottom	13.8	0.4	11	28.3	28.3	8.1	8.1	33.6	33.6	87.4	87.4	5.6	5.6	7.1		6		-				-		-	
						13.8	0.4	11	28.3		8.1		33.6		87.3		5.6		7.1		5		-				-		-	
SR8	Fine	Moderate	05:45	4.8	Surface	1.0	-	-	28.3	28.3	8.1	8.1	31.8	31.8	89.9	90.0	5.9	5.9	7.9	7.8	6	7	-	-	820380	811632	-	-	-	-
						1.0	-	-	28.3		8.1		31.8		90.0		5.9		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.8	27.8	8.1	8.1	32.0	32.0	90.1	90.1	5.9	5.9	7.7		7		-				-		-	
						3.8	-	-	27.8		8.1		32.0		90.1		5.9		7.7		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**
Note: The monitoring session on 13 October 2020 was cancelled due to No. 8 Northeast Gale or Storm Signal.

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Water Quality Monitoring
Water Quality Monitoring Results on 10 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	18:05	8.1	Surface	1.0	0.3	58	26.9	26.9	7.9	7.9	31.1	31.1	98.8	98.8	6.6	6.6	5.1	6.3	5	4	87	88	815642	804234	<0.2	<0.2	0.4	0.4
						1.0	0.3	62	26.9		7.9		31.1		98.7		6.6		5.2		4		86				<0.2		0.3	
					Middle	4.1	0.1	84	26.9	26.9	7.9	7.9	31.2	31.2	98.2	98.3	6.6		5.7		4		87				<0.2		0.4	
						4.1	0.1	91	26.9		7.9		31.2		98.4		6.6		5.7		5		88				<0.2		0.4	
					Bottom	7.1	0.1	3	26.8	26.8	7.9	7.9	31.4	31.4	95.4	95.5	6.4	6.4	7.8		4		90				<0.2		0.4	
						7.1	0.1	3	26.8		7.9		31.4		95.5		6.4		8.2		3		89				<0.2		0.4	
C2	Sunny	Moderate	16:53	11.5	Surface	1.0	0.4	189	27.7	27.7	8.1	8.1	31.3	31.3	93.3	93.3	6.2	6.2	6.6	8.6	4	5	86	91	825664	806949	<0.2	<0.2	0.6	0.6
						1.0	0.5	191	27.7		8.1		31.3		93.3		6.2		6.6		4		87				<0.2		0.5	
					Middle	5.8	0.2	181	27.7	27.7	8.2	8.2	31.9	31.9	92.2	92.3	6.1		8.7		5		90				<0.2		0.6	
						5.8	0.2	192	27.7		8.2		31.9		92.3		6.1		8.8		5		91				<0.2		0.5	
					Bottom	10.5	0.3	5	28.2	28.2	8.1	8.1	33.0	33.0	87.7	87.8	5.7	5.7	10.5		5		94				<0.2		0.5	
						10.5	0.4	5	28.2		8.1		33.0		87.9		5.7		10.5		5		95				<0.2		0.6	
C3	Fine	Moderate	19:21	10.8	Surface	1.0	0.0	92	28.1	28.1	8.2	8.2	32.2	32.2	97.0	97.0	6.3	6.0	6.1	8.0	6	7	86	90	822093	817819	<0.2	<0.2	0.5	0.5
						1.0	0.0	99	28.1		8.2		32.2		97.0		6.3		6.1		6		87				<0.2		0.5	
					Middle	5.4	0.0	229	28.2	28.2	8.1	8.1	33.0	33.0	87.0	87.0	5.7		7.1		7		90				<0.2		0.5	
						5.4	0.0	250	28.2		8.1		33.0		87.0		5.6		7.0		6		90				<0.2		0.4	
					Bottom	9.8	0.1	287	28.3	28.3	8.1	8.1	33.5	33.5	87.0	87.2	5.6	5.7	10.9		7		94				<0.2		0.4	
						9.8	0.1	295	28.3		8.1		33.5		87.4		5.7		11.0		7		94				<0.2		0.4	
IM1	Cloudy	Moderate	17:44	5.1	Surface	1.0	0.1	311	27.3	27.3	8.3	8.3	31.5	31.5	95.5	95.4	6.4	6.4	4.7	6.6	4	6	86	88	817942	807108	<0.2	<0.2	0.4	0.5
						1.0	0.1	341	27.3		8.3		31.5		95.3		6.3		4.7		4		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	260	27.3	27.3	8.2	8.3	31.5	31.5	90.6	90.6	6.0	6.0	8.4		7		89				<0.2		0.5	
						4.1	0.1	276	27.3		8.3		31.5		90.6		6.0		8.4		8		90				<0.2		0.5	
IM2	Cloudy	Moderate	17:37	7.0	Surface	1.0	0.3	5	27.1	27.1	8.3	8.3	31.0	31.0	99.0	99.0	6.6	6.6	5.1	5.9	4	5	85	87	818179	806159	<0.2	<0.2	0.4	0.4
						1.0	0.4	5	27.1		8.3		31.0		99.0		6.6		5.1		3		85				<0.2		0.4	
					Middle	3.5	0.4	342	27.0	27.0	8.3	8.3	31.2	31.2	98.4	98.3	6.6		6.0		6		87				<0.2		0.4	
						3.5	0.5	315	27.0		8.3		31.2		98.2		6.6		6.1		5		87				<0.2		0.4	
					Bottom	6.0	0.4	316	27.0	27.0	8.3	8.3	31.3	31.3	98.6	98.7	6.6	6.6	6.7		7		89				<0.2		0.4	
						6.0	0.4	335	27.0		8.3		31.3		98.8		6.6		6.5		6		89				<0.2		0.4	
IM3	Cloudy	Moderate	17:30	6.7	Surface	1.0	0.5	322	26.9	26.9	8.3	8.3	30.9	30.9	98.5	98.4	6.6	6.6	5.9	8.1	4	5	85	87	818801	805579	<0.2	<0.2	0.5	0.4
						1.0	0.5	349	26.9		8.3		30.9		98.3		6.6		6.0		4		85				<0.2		0.4	
					Middle	3.4	0.5	318	26.9	26.9	8.3	8.3	31.2	31.2	96.5	96.5	6.5		8.3		6		87				<0.2		0.4	
						3.4	0.5	339	26.9		8.3		31.2		96.5		6.5		8.2		6		86				<0.2		0.5	
					Bottom	5.7	0.3	294	26.9	26.9	8.3	8.3	31.2	31.2	98.3	98.5	6.6	6.6	10.3		6		89				<0.2		0.4	
						5.7	0.3	310	26.9		8.3		31.2		98.7		6.6		10.1		6		89				<0.2		0.4	
IM4	Cloudy	Moderate	17:21	7.4	Surface	1.0	0.5	311	27.1	27.1	8.3	8.3	31.2	31.2	97.2	97.2	6.5	6.5	5.5	7.4	5	5	85	88	819724	804613	<0.2	<0.2	0.4	0.4
						1.0	0.5	320	27.1		8.3		31.2		97.2		6.5		5.4		6		86				<0.2		0.4	
					Middle	3.7	0.5	298	27.1	27.1	8.3	8.3	31.2	31.2	97.1	97.2	6.5		5.7		5		88				<0.2		0.4	
						3.7	0.6	325	27.1		8.3		31.2		97.2		6.5		6.0		4		88				<0.2		0.4	
					Bottom	6.4	0.2	327	27.1	27.1	8.3	8.3	31.3	31.3	98.0	98.2	6.6	6.6	10.6		4		90				<0.2		0.4	
						6.4	0.2	359	27.1		8.3		31.3		98.3		6.6		11.4		4		89				<0.2		0.4	
IM5	Cloudy	Moderate	17:13	6.8	Surface	1.0	0.2	283	27.2	27.2	8.3	8.3	29.8	29.8	98.3	98.3	6.6	6.6	4.4	4.9	6	5	85	87	820749	804883	<0.2	<0.2	0.5	0.5
						1.0	0.2	300	27.2		8.3		29.8		98.3		6.6		4.5		5		85				<0.2		0.5	
					Middle	3.4	0.3	280	27.2	27.2	8.3	8.3	29.8	29.8	98.4	98.5	6.6		4.7		5		87				<0.2		0.6	
						3.4	0.3	297	27.2		8.3		29.8		98.5		6.6		4.8		6		88				<0.2		0.5	
					Bottom	5.8	0.2	303	27.2	27.2	8.3	8.3	29.8	29.8	99.7	99.8	6.7	6.7	5.4		4		90				<0.2		0.5	
						5.8	0.2	310	27.2		8.3		29.8		99.8		6.7		5.3		3		89				<0.2		0.5	
IM6	Cloudy	Moderate	17:06	7.1	Surface	1.0	0.4	266	27.3	27.3	8.3	8.3	29.7	29.7	97.7	97.7	6.6	6.6	4.0	4.4	2	3	85	87	821038	805839	<0.2	<0.2	0.5	0.5
						1.0	0.4	274	27.3		8.3		29.7		97.7		6.6		4.1		3		85				<0.2		0.5	
					Middle	3.6	0.3	282	27.3	27.3	8.3	8.3	29.7	29.7	97.9	97.9	6.6		4.4		2		87				<0.2		0.5	
						3.6	0.3	300	27.3		8.3		29.7		97.9		6.6		4.4		3		87				<0.2		0.5	
					Bottom	6.1	0.1	291	27.2	27.2	8.3	8.3	29.9	29.9	99.5	99.6	6.7	6.7	4.9		5		89				<0.2		0.5	
						6.1	0.1	299	27.2		8.3		29.9		99.6		6.7		4.8		4		89				<0.2		0.6	
IM7	Cloudy	Moderate	16:58	8.1	Surface	1.0	0.4	252	27.4	27.4	8.3	8.3	29.5	29.6	97.1	97.2	6.5	6.5	3.4	4.1	3	3	85	87	821340	806831	<0.2	<0.2	0.7	0.6
						1.0	0.4	259	27.4		8.3		29.6		97.2		6.5		3.5		2		84				<0.2		0.5	
					Middle	4.1	0.4	268	27.3	27.3	8.3	8.3	29.8	29.8	97.3	97.3	6.5		4.1		3		87				<0.2		0.6	
						4.1	0.4	282	27.3		8.3		29.9		97.3		6.5		4.2		2		88				<0.2		0.6	
					Bottom	7.1	0.2	266	27.2	27.2	8.4	8.4	30.1	30.1	97.2	97.3	6.5	6.5	5.0		4		89				<0.2		0.5	
						7.1	0.2	275	27.2		8.4		30.1		97.4		6.5		4.4		3		90				<0.2		0.6	
IM8	Sunny	Moderate	17:23	8.0	Surface	1.0	0.3	210	28.1	28.1	8.1	8.1	31.2	31.2	97.6	97.6	6.4	6.5	5.9	6.4	<2	3	88	91	821834	808146	<0.2	<0.2	0.5	0.6
						1.0	0.3	212	28.1		8.1		31.2		97.6		6.4		5.9		3		87				<0.2		0.6	
					Middle	4.0	0.2	208	28.0	28.0	8.2	8.2	31.6	31.6	98.9	98.9	6.5		6.3		<2		90				<0.2		0.6	
						4.0	0.2	222	28.0		8.2		31.7		98.9		6.5		6.4		3		91				<0.2		0.6	
					Bottom	7.0	0.2	221	27.8	27.8	8.2	8.2	32.0	32.0	97.7	97.6	6.4	6.4	7.0		3		94				<0.2		0.6	
						7.0	0.2	236	27.8		8.2		32.0		97.5		6.4		7.0		4		95				<0.2		0.6	

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**
Note: The monitoring session on 13 October 2020 was cancelled due to No. 8 Northeast Gale or Storm Signal.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	17:30	7.6	Surface	1.0	0.2	205	28.2	28.2	8.2	8.2	31.9	31.9	98.3	98.3	6.4	6.5	6.1	7.0	5	4	87	91	822099	808807	<0.2	<0.2	0.6	0.6
						1.0	0.2	207	28.2		8.2		31.9		98.3		6.4		6.1		4		87				<0.2		0.7	
					Middle	3.8	0.1	250	27.9	27.9	8.2	8.2	31.9	31.9	98.4	98.5	6.5		6.6		3		90				<0.2		0.7	
						3.8	0.2	268	27.9		8.2		31.9		98.5		6.5		6.6		4		91				<0.2		0.6	
					Bottom	6.6	0.0	245	27.8	27.8	8.2	8.2	32.0	32.0	97.9	98.0	6.4	6.4	8.2		3		94				<0.2		0.6	
						6.6	0.0	260	27.8		8.2		32.0		98.0		6.4		8.3		3		95				<0.2		0.6	
IM10	Sunny	Moderate	17:39	8.4	Surface	1.0	0.0	264	28.2	28.2	8.2	8.2	31.9	31.9	98.9	98.9	6.5	6.5	6.0	6.9	5	4	87	91	822388	809808	<0.2	<0.2	0.6	0.7
						1.0	0.0	277	28.2		8.2		31.9		98.9		6.5		6.1		4		87				<0.2		0.7	
					Middle	4.2	0.1	330	28.0	28.0	8.2	8.2	31.9	31.9	98.5	98.5	6.5		6.6		4		91				<0.2		0.7	
						4.2	0.1	337	28.0		8.2		31.9		98.5		6.5		6.6		4		90				<0.2		0.7	
					Bottom	7.4	0.2	341	27.8	27.8	8.1	8.1	32.0	32.0	96.3	96.4	6.3	6.3	7.9		2		94				<0.2		0.7	
						7.4	0.2	350	27.8		8.1		32.0		96.4		6.3		7.9		3		95				<0.2		0.7	
IM11	Sunny	Moderate	18:13	8.9	Surface	1.0	0.1	269	28.0	28.0	8.2	8.2	32.0	32.0	100.7	100.7	6.6	6.6	6.9	8.2	5	4	86	91	822036	811441	<0.2	<0.2	0.7	0.6
						1.0	0.1	278	28.0		8.2		32.0		100.7		6.6		6.9		4		87				<0.2		0.6	
					Middle	4.5	0.1	294	27.9	27.9	8.2	8.2	32.0	32.0	98.8	98.8	6.5		6.5		3		91				<0.2		0.6	
						4.5	0.1	318	27.9		8.2		32.0		98.8		6.5		6.5		4		91				<0.2		0.6	
					Bottom	7.9	0.1	289	27.6	27.6	8.2	8.2	32.1	32.1	96.0	96.0	6.3	6.3	11.1		3		94				<0.2		0.6	
						7.9	0.2	303	27.6		8.2		32.1		95.9		6.3		11.2		2		95				<0.2		0.6	
IM12	Sunny	Moderate	18:21	8.3	Surface	1.0	0.2	252	27.6	27.6	8.2	8.2	31.8	31.8	103.3	103.3	6.8	6.7	6.4	7.0	2	3	87	91	821463	812046	<0.2	<0.2	0.6	0.6
						1.0	0.2	257	27.6		8.2		31.8		103.3		6.8		6.4		3		87				<0.2		0.6	
					Middle	4.2	0.3	268	27.5	27.5	8.2	8.2	31.8	31.8	98.3	98.3	6.5		7.1		3		91				<0.2		0.6	
						4.2	0.3	271	27.5		8.2		31.8		98.3		6.5		7.1		4		91				<0.2		0.6	
					Bottom	7.3	0.2	275	27.5	27.5	8.2	8.2	31.9	31.9	96.9	96.9	6.4	6.4	7.5		4		94				<0.2		0.6	
						7.3	0.3	286	27.5		8.2		31.9		96.9		6.4		7.5		2		95				<0.2		0.6	
SR1A	Sunny	Moderate	18:42	5.6	Surface	1.0	-	-	28.4	28.4	8.1	8.1	31.3	31.3	91.2	91.2	6.0	6.0	6.8	6.9	5	7	-	-	819976	812659	-	-	-	-
						1.0	-	-	28.4		8.1		31.3		91.2		6.0		6.8		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	28.1	28.1	8.1	8.1	31.7	31.7	91.7	91.7	6.0	6.0	6.9		8		-				-		-	
						4.6	-	-	28.1		8.1		31.7		91.7		6.0		6.9		9		-				-		-	
SR2	Sunny	Moderate	18:56	4.6	Surface	1.0	0.2	193	28.0	28.0	8.2	8.2	31.9	31.9	101.4	101.4	6.7	6.7	8.4	8.0	3	4	87	89	821484	814157	<0.2	<0.2	0.6	0.6
						1.0	0.2	199	28.0		8.2		31.9		101.3		6.6		8.4		3		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	204	27.9	27.9	8.2	8.2	32.0	32.0	100.8	100.9	6.6	6.6	7.6		4		90				<0.2		0.6	
						3.6	0.2	208	27.9		8.2		32.0		100.9		6.6		7.6		4		90				<0.2		0.5	
SR3	Sunny	Moderate	17:17	8.8	Surface	1.0	0.3	220	27.9	27.9	8.1	8.1	31.0	31.0	96.3	96.4	6.4	6.4	6.0	6.9	5	5	-	-	822148	807552	-	-	-	-
						1.0	0.4	241	27.9		8.1		31.0		96.4		6.4		6.0		4		-				-		-	
					Middle	4.4	0.2	236	27.9	27.9	8.1	8.1	31.6	31.6	96.8	96.8	6.4		6.5		4		-				-		-	
						4.4	0.2	259	27.9		8.1		31.6		96.8		6.4		6.5		5		-				-		-	
					Bottom	7.8	0.2	283	27.8	27.8	8.2	8.2	31.9	31.9	96.9	96.9	6.4	6.4	8.2		5		-				-		-	
						7.8	0.2	288	27.8		8.2		31.9		96.9		6.4		8.2		5		-				-		-	
SR4A	Cloudy	Moderate	18:25	8.2	Surface	1.0	0.2	85	27.5	27.5	8.3	8.3	29.3	29.3	102.9	103.0	6.9	6.7	5.1	5.7	3	5	-	-	817205	807786	-	-	-	-
						1.0	0.2	85	27.5		8.3		29.3		103.0		6.9		5.1		3		-				-		-	
					Middle	4.1	0.1	99	27.3	27.3	8.4	8.4	30.1	30.1	97.6	97.6	6.5		5.4		5		-				-		-	
						4.1	0.1	106	27.3		8.4		30.1		97.5		6.5		5.5		6		-				-		-	
					Bottom	7.2	0.1	71	27.3	27.3	8.4	8.4	30.5	30.5	97.3	97.4	6.5	6.5	6.5		5		-				-		-	
						7.2	0.1	78	27.3		8.4		30.5		97.4		6.5		6.6		6		-				-		-	
SR5A	Cloudy	Moderate	18:42	3.8	Surface	1.0	0.1	106	27.4	27.4	8.4	8.4	28.9	28.9	108.1	108.1	7.3	7.3	8.2	9.0	4	5	-	-	816595	810719	-	-	-	-
						1.0	0.1	109	27.4		8.4		28.9		108.1		7.3		8.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	118	27.4	27.4	8.4	8.4	28.9	28.9	108.4	108.5	7.3	7.3	9.7		6		-				-		-	
						2.8	0.1	123	27.4		8.4		28.9		108.5		7.3		9.7		6		-				-		-	
SR6A	Cloudy	Moderate	19:23	4.0	Surface	1.0	0.0	168	27.8	27.8	8.4	8.4	29.8	29.8	100.0	99.7	6.7	6.7	6.0	6.3	7	7	-	-	817939	814746	-	-	-	-
						1.0	0.0	179	27.8		8.4		29.8		99.4		6.6		6.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	2	27.8	27.8	8.4	8.4	30.2	30.2	95.7	95.9	6.4	6.4	6.6		6		-				-		-	
						3.0	0.0	2	27.8		8.4		30.2		96.0		6.4		6.6		5		-				-		-	
SR7	Fine	Moderate	19:57	14.6	Surface	1.0	0.0	239	28.3	28.3	8.2	8.2	32.9	32.9	92.9	92.9	6.0	5.9	5.9	6.7	3	5	-	-	823639	823720	-	-	-	-
						1.0	0.0	255	28.3		8.2		32.9		92.9		6.0		5.9		3		-				-		-	
					Middle	7.3	0.1	17	28.2	28.2	8.1	8.1	33.4	33.4	88.1	88.1	5.7		7.2		6		-				-		-	
						7.3	0.1	18	28.2		8.1		33.4		88.1		5.7		7.1		5		-				-		-	
					Bottom	13.6	0.0	163	28.2	28.2	8.1	8.1	33.4	33.4	87.5	87.5	5.7	5.7	7.1		5		-				-		-	
						13.6	0.0	163	28.2		8.1		33.4		87.5		5.7		7.1		6		-				-		-	
SR8	Sunny	Moderate	18:31	4.3	Surface	1.0	-	-	27.7	27.7	8.2	8.2	31.6	31.6	105.3	105.3	7.0	7.0	7.0	8.8	7	7	-	-	820394	811634	-	-	-	-
						1.0	-	-	27.7		8.2		31.6		105.3		7.0		6.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	27.5	27.5	8.2	8.2	31.6	31.6	103.7	103.7	6.9	6.9	10.5		8		-				-		-	
						3.3	-	-	27.5		8.2		31.6		103.7		6.9		10.6		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The monitoring session on 13 October 2020 was cancelled due to No. 8 Northeast Gale or Storm Signal.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:36	9.0	Surface	1.0	0.5	239	27.2	27.2	8.2	8.2	34.0	34.0	95.7	95.7	6.3	6.3	6.1	10.0	12	13	86	89	815639	804227	<0.2	<0.2	0.6	0.6
						1.0	0.5	257	27.2		8.2		34.0		95.6		6.3		6.2		13		85				<0.2		0.6	
					Middle	4.5	0.4	238	27.1	27.1	8.2	8.2	34.0	34.0	93.7	93.8	6.2		9.9		12		90				<0.2		0.6	
						4.5	0.4	260	27.1		8.2		34.0		93.8		6.2		10.1		12		89				<0.2		0.7	
					Bottom	8.0	0.4	236	27.1	27.1	8.2	8.2	34.0	34.0	94.0	94.0	6.2	6.2	13.8		13		93				<0.2		0.6	
						8.0	0.4	254	27.1		8.2		34.0		94.0		6.2		13.6		14		93				<0.2		0.6	
C2	Cloudy	Rough	12:49	11.5	Surface	1.0	1.1	171	26.9	26.9	8.3	8.3	30.0	30.0	102.1	102.1	6.9	6.7	4.9	8.6	7	9	88	91	825683	806932	<0.2	<0.2	0.9	0.9
						1.0	1.1	179	26.9		8.3		30.0		102.1		6.9		4.9		6		88				<0.2		0.9	
					Middle	5.8	0.9	166	26.8	26.8	8.3	8.3	30.4	30.4	96.9	96.9	6.5		8.5		10		91				<0.2		0.9	
						5.8	0.9	174	26.7		8.3		30.4		96.9		6.5		8.7		9		92				<0.2		0.8	
					Bottom	10.5	0.7	168	26.6	26.7	8.3	8.3	30.5	30.5	96.8	96.8	6.5	6.5	12.1		12		93				<0.2		0.8	
						10.5	0.7	181	26.7		8.3		30.5		96.8		6.5		12.2		12		94				<0.2		0.8	
C3	Cloudy	Moderate	10:35	12.1	Surface	1.0	0.6	100	27.1	27.1	8.3	8.3	31.4	31.4	91.8	91.7	6.1	6.0	5.2	6.0	9	9	85	89	822113	817819	<0.2	<0.2	0.8	0.8
						1.0	0.6	104	27.1		8.3		31.4		91.5		6.1		5.3		8		86				<0.2		0.9	
					Middle	6.1	0.5	93	27.2	27.2	8.3	8.3	31.6	31.6	87.8	87.8	5.8		6.3		8		90				<0.2		0.8	
						6.1	0.5	94	27.2		8.3		31.6		87.7		5.8		6.6		9		90				<0.2		0.7	
					Bottom	11.1	0.3	91	27.2	27.2	8.4	8.4	31.7	31.7	88.0	88.1	5.9	5.9	6.5		9		92				<0.2		0.7	
						11.1	0.3	99	27.2		8.4		31.7		88.1		5.9		6.4		9		92				<0.2		0.7	
IM1	Fine	Moderate	12:00	5.2	Surface	1.0	0.2	188	26.8	26.8	8.2	8.2	33.7	33.7	99.0	99.1	6.6	6.6	4.1	5.7	11	11	87	90	817925	807148	<0.2	<0.2	0.6	0.6
						1.0	0.2	202	26.8		8.2		33.7		99.1		6.6		4.1		12		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	185	26.8	26.8	8.2	8.2	33.8	33.8	99.6	99.7	6.6	6.6	7.2		10		92				<0.2		0.6	
						4.2	0.1	196	26.8		8.2		33.8		99.8		6.6		7.2		9		91				<0.2		0.6	
IM2	Fine	Moderate	12:08	7.1	Surface	1.0	0.2	177	26.9	26.9	8.2	8.2	33.7	33.7	100.8	100.8	6.7	6.7	1.6	4.2	8	8	87	90	818142	806167	<0.2	<0.2	0.7	0.6
						1.0	0.2	178	26.9		8.2		33.7		100.8		6.7		1.6		8		87				<0.2		0.6	
					Middle	3.6	0.2	162	26.9	26.9	8.2	8.2	33.7	33.7	100.3	100.3	6.6		2.7		8		90				<0.2		0.6	
						3.6	0.2	178	26.9		8.2		33.7		100.2		6.6		2.8		8		90				<0.2		0.7	
					Bottom	6.1	0.3	155	26.9	26.9	8.2	8.2	34.0	34.0	98.9	99.0	6.5	6.5	8.1		9		93				<0.2		0.6	
						6.1	0.3	165	26.9		8.2		34.0		99.1		6.5		8.1		8		94				<0.2		0.6	
IM3	Fine	Moderate	12:16	7.3	Surface	1.0	0.4	128	27.0	27.0	8.2	8.2	33.4	33.4	100.3	100.3	6.6	6.6	11.7	14.5	9	12	87	90	818793	805595	<0.2	<0.2	0.6	0.6
						1.0	0.4	131	27.0		8.2		33.4		100.2		6.6		11.9		8		86				<0.2		0.6	
					Middle	3.7	0.4	115	26.9	26.9	8.2	8.2	33.4	33.4	99.1	99.1	6.6		14.4		11		91				<0.2		0.6	
						3.7	0.4	117	27.0		8.2		33.4		99.1		6.6		14.7		12		90				<0.2		0.7	
					Bottom	6.3	0.4	122	26.9	26.9	8.2	8.2	33.4	33.4	99.8	99.8	6.6	6.6	17.2		14		94				<0.2		0.6	
						6.3	0.4	133	26.9		8.2		33.4		99.8		6.6		17.0		15		93				<0.2		0.6	
IM4	Fine	Moderate	12:28	8.0	Surface	1.0	1.0	201	27.2	27.2	8.2	8.2	33.9	33.9	98.6	98.6	6.5	6.5	9.2	10.7	14	16	87	90	819715	804626	<0.2	<0.2	0.6	0.6
						1.0	1.0	216	27.2		8.2		33.9		98.6		6.5		9.1		14		87				<0.2		0.6	
					Middle	4.0	0.9	201	27.2	27.2	8.2	8.2	33.9	33.9	97.9	97.9	6.4		10.4		16		90				<0.2		0.7	
						4.0	0.9	213	27.2		8.2		33.9		97.9		6.4		10.6		18		90				<0.2		0.6	
					Bottom	7.0	0.7	197	27.1	27.1	8.2	8.2	33.9	33.9	98.0	98.0	6.4	6.4	12.4		18		94				<0.2		0.6	
						7.0	0.8	212	27.1		8.2		33.9		97.9		6.4		12.3		18		93				<0.2		0.6	
IM5	Fine	Moderate	12:40	6.9	Surface	1.0	1.1	216	27.3	27.3	8.2	8.2	32.9	32.9	104.3	104.2	6.9	6.8	3.6	6.9	12	11	87	90	820723	804875	<0.2	<0.2	0.6	0.6
						1.0	1.1	229	27.3		8.2		32.9		104.1		6.9		3.7		13		87				<0.2		0.6	
					Middle	3.5	0.9	209	27.2	27.2	8.2	8.2	33.7	33.7	100.9	100.9	6.6		7.0		11		90				<0.2		0.6	
						3.5	1.0	222	27.2		8.2		33.7		100.9		6.6		7.2		10		90				<0.2		0.6	
					Bottom	5.9	0.9	209	27.1	27.1	8.2	8.2	33.9	33.9	100.7	100.7	6.6	6.6	10.0		9		93				<0.2		0.7	
						5.9	0.9	224	27.1		8.2		33.9		100.7		6.6		10.1		10		93				<0.2		0.7	
IM6	Fine	Moderate	12:51	7.2	Surface	1.0	0.8	229	27.3	27.3	8.2	8.2	32.6	32.6	104.7	104.8	6.9	6.8	3.2	7.7	11	9	87	91	821058	805815	<0.2	<0.2	0.6	0.7
						1.0	0.8	239	27.3		8.2		32.6		104.8		6.9		3.3		11		88				<0.2		0.7	
					Middle	3.6	0.7	219	27.1	27.1	8.2	8.2	33.2	33.2	100.0	100.0	6.6		7.3		9		90				<0.2		0.8	
						3.6	0.7	230	27.1		8.2		33.2		99.9		6.6		7.5		10		91				<0.2		0.8	
					Bottom	6.2	0.6	220	27.1	27.1	8.2	8.2	33.3	33.3	100.4	100.4	6.6	6.6	12.3		7		93				<0.2		0.7	
						6.2	0.6	224	27.1		8.2		33.3		100.4		6.6		12.3		8		94				<0.2		0.7	
IM7	Cloudy	Moderate	13:02	8.4	Surface	1.0	0.6	253	27.5	27.5	8.2	8.2	32.3	32.3	105.6	105.6	7.0	6.9	1.9	5.3	10	8	87	91	821328	806817	<0.2	<0.2	0.6	0.7
						1.0	0.7	256	27.5		8.2		32.3		105.6		7.0		2.0		9		87				<0.2		0.8	
					Middle	4.2	0.6	267	27.3	27.3	8.2	8.2	32.6	32.6	103.8	103.7	6.9		4.0		9		90				<0.2		0.7	
						4.2	0.6	269	27.3		8.2		32.6		103.5		6.8		4.1		8		91				<0.2		0.7	
					Bottom	7.4	0.5	275	26.9	26.9	8.2	8.2	33.6	33.6	99.0	99.0	6.6	6.6	9.8		7		94				<0.2		0.8	
						7.4	0.5	282	26.9		8.2		33.6		98.9		6.5		9.7		7		94				<0.2		0.7	
IM8	Cloudy	Moderate	12:17	7.8	Surface	1.0	0.2	156	26.6	26.6	8.3	8.3	30.8	30.8	100.8	100.8	6.8	6.7	5.8	9.4	12	11	88	92	821826	808131	<0.2	<0.2	0.7	0.7
						1.0	0.2	160	26.6		8.3		30.8		100.7		6.8		5.9		12		89				<0.2		0.8	
					Middle	3.9	0.2	138	26.4	26.4	8.3	8.3	31.4	31.4	96.4	96.4	6.5		11.5		10		93				<0.2		0.7	
						3.9	0.2	149	26.4		8.3		31.4		96.4		6.5		11.4		10		92				<0.2		0.7	
					Bottom	6.8	0.1	185	26.4	26.4	8.3	8.3	31.5	31.5	95.9	95.9	6.5	6.5	10.9		9		94				<0.2		0.7	
						6.8	0.1	198	26.4		8.3		31.5		95.9		6.5		11.0		10		94				<0.2		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**
Note: The flood tide monitoring session on 12 September 2020 was cancelled due to thunderstorm warning.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:10	7.7	Surface	1.0	0.4	98	26.5	26.5	8.3	8.3	30.9	30.9	99.4	99.4	6.7	6.6	7.8	11.1	13	12	88	91	822079	808813	<0.2	<0.2	0.6	0.7
						1.0	0.4	104	26.5		8.3		30.9		99.3		6.7		7.8		12		88				<0.2		0.7	
					Middle	3.9	0.4	95	26.4	26.4	8.3	8.3	31.4	31.4	95.4	95.4	6.4		11.1		11		91				<0.2		0.7	
						3.9	0.4	100	26.4		8.3		31.4		95.4		6.4		11.1		12		92				<0.2		0.7	
					Bottom	6.7	0.4	99	26.4	26.4	8.3	8.3	31.4	31.4	95.6	95.7	6.5	6.5	14.2		10		92				<0.2		0.8	
						6.7	0.4	107	26.4		8.3		31.4		95.7		6.5		14.4		11		93				<0.2		0.7	
IM10	Cloudy	Moderate	12:00	8.1	Surface	1.0	0.7	118	26.6	26.6	8.3	8.3	30.8	30.8	100.8	100.8	6.8	6.7	6.6	10.7	10	9	87	91	822366	809793	<0.2	<0.2	0.7	0.7
						1.0	0.7	124	26.6		8.3		30.8		100.7		6.8		6.8		10		88				<0.2		0.7	
					Middle	4.1	0.6	110	26.4	26.4	8.3	8.3	31.0	31.0	95.6	95.6	6.5		10.6		9		91				<0.2		0.7	
						4.1	0.7	118	26.4		8.3		31.0		95.6		6.5		10.5		8		92				<0.2		0.8	
					Bottom	7.1	0.6	117	26.4	26.4	8.3	8.3	31.1	31.1	96.0	96.1	6.5	6.5	14.9		8		94				<0.2		0.7	
						7.1	0.6	117	26.4		8.3		31.1		96.1		6.5		14.9		9		94				<0.2		0.7	
IM11	Cloudy	Moderate	11:46	7.8	Surface	1.0	0.7	127	26.5	26.5	8.3	8.3	30.7	30.7	100.1	100.1	6.8	6.7	6.6	10.6	10	10	86	89	822076	811468	<0.2	<0.2	0.7	0.8
						1.0	0.7	139	26.5		8.3		30.7		100.0		6.8		6.7		11		86				<0.2		0.8	
					Middle	3.9	0.7	123	26.5	26.5	8.3	8.3	30.8	30.8	97.5	97.5	6.6		8.3		9		90				<0.2		0.8	
						3.9	0.7	128	26.5		8.3		30.8		97.4		6.6		8.2		10		89				<0.2		0.8	
					Bottom	6.8	0.4	119	26.5	26.5	8.3	8.3	30.8	30.8	96.5	96.6	6.5	6.5	16.9		9		90				<0.2		0.8	
						6.8	0.4	129	26.5		8.3		30.8		96.6		6.5		16.8		10		90				<0.2		0.9	
IM12	Cloudy	Moderate	11:37	9.1	Surface	1.0	0.6	109	26.5	26.5	8.3	8.3	30.7	30.7	97.2	97.2	6.6	6.6	12.0	13.9	11	16	85	89	821471	812045	<0.2	<0.2	0.8	0.8
						1.0	0.6	113	26.5		8.3		30.7		97.2		6.6		12.1		11		86				<0.2		0.9	
					Middle	4.6	0.5	119	26.4	26.4	8.3	8.3	30.7	30.7	96.5	96.5	6.5		12.1		16		89				<0.2		0.9	
						4.6	0.6	119	26.4		8.3		30.7		96.5		6.5		12.0		17		90				<0.2		0.7	
					Bottom	8.1	0.5	108	26.4	26.4	8.3	8.3	30.7	30.7	96.6	96.7	6.6	6.6	17.8		19		92				<0.2		0.8	
						8.1	0.6	117	26.4		8.3		30.7		96.7		6.6		17.6		20		93				<0.2		0.8	
SR1A	Cloudy	Moderate	11:15	4.7	Surface	1.0	-	-	26.5	26.5	8.3	8.3	30.8	30.8	95.4	95.4	6.5	6.5	6.8	6.9	8	10	-	-	819972	812653	-	-	-	-
						1.0	-	-	26.5		8.3		30.8		95.4		6.5		6.9		8		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	26.5	26.5	8.3	8.3	30.8	30.8	95.2	95.2	6.4	6.4	7.0		12		-				-		-	
						3.7	-	-	26.5		8.3		30.8		95.1		6.4		6.9		11		-				-		-	
SR2	Cloudy	Moderate	11:01	4.8	Surface	1.0	0.4	79	26.6	26.6	8.4	8.4	30.9	30.9	96.4	96.3	6.5	6.5	7.4	8.7	8	8	88	90	821446	814156	<0.2	<0.2	0.8	0.8
						1.0	0.4	85	26.6		8.4		30.9		96.1		6.5		7.8		7		89				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	72	26.6	26.6	8.4	8.4	30.9	30.9	95.2	95.2	6.4	6.4	9.8		8		90				<0.2		0.8	
						3.8	0.3	73	26.6		8.4		30.9		95.2		6.4		9.9		9		91				<0.2		0.7	
SR3	Cloudy	Moderate	12:24	9.1	Surface	1.0	0.4	184	26.9	26.9	8.3	8.3	30.2	30.2	103.1	103.1	6.9	6.9	4.7	7.1	10	8	-	-	822127	807592	-	-	-	-
						1.0	0.5	201	26.9		8.3		30.2		103.0		6.9		4.7		10		-				-		-	
					Middle	4.6	0.3	184	26.7	26.7	8.3	8.3	30.7	30.7	100.9	100.8	6.8		5.2		8		-				-		-	
						4.6	0.3	197	26.7		8.3		30.7		100.6		6.8		5.3		7		-				-		-	
					Bottom	8.1	0.1	255	26.5	26.6	8.3	8.3	31.3	31.2	98.3	98.4	6.6	6.6	11.6		5		-				-		-	
						8.1	0.1	271	26.6		8.3		31.2		98.4		6.6		11.3		6		-				-		-	
SR4A	Fine	Calm	11:14	9.3	Surface	1.0	0.2	89	26.9	26.9	8.2	8.2	33.9	33.9	95.5	95.6	6.3	6.3	4.2	4.1	10	11	-	-	817179	807830	-	-	-	-
						1.0	0.2	92	26.9		8.2		33.9		95.6		6.3		4.3		11		-				-		-	
					Middle	4.7	0.2	74	26.9	26.9	8.2	8.2	34.0	34.0	95.8	95.8	6.3		4.0		11		-				-		-	
						4.7	0.2	75	26.9		8.2		34.0		95.8		6.3		4.0		10		-				-		-	
					Bottom	8.3	0.2	84	26.9	26.9	8.2	8.2	34.0	34.0	96.6	96.7	6.4	6.4	4.0		11		-				-		-	
						8.3	0.2	86	26.9		8.2		34.0		96.7		6.4		4.0		11		-				-		-	
SR5A	Cloudy	Calm	10:56	3.5	Surface	1.0	0.1	29	26.8	26.8	8.2	8.2	32.8	32.8	101.4	101.5	6.7	6.8	1.7	1.8	7	8	-	-	816569	810697	-	-	-	-
						1.0	0.1	29	26.8		8.2		32.8		101.6		6.8		1.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	119	26.8	26.8	8.2	8.2	32.9	32.9	100.2	100.2	6.7	6.7	1.9		9		-				-		-	
						2.5	0.1	119	26.8		8.2		32.9		100.1		6.7		1.8		10		-				-		-	
SR6A	Fine	Calm	10:25	4.1	Surface	1.0	0.1	96	26.8	26.8	8.1	8.1	32.1	32.1	98.2	98.2	6.6	6.6	4.0	4.6	11	12	-	-	817969	814741	-	-	-	-
						1.0	0.1	103	26.8		8.1		32.1		98.1		6.6		4.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	93	26.9	26.9	8.1	8.1	32.6	32.6	99.8	100.0	6.6	6.7	5.0		13		-				-		-	
						3.1	0.1	101	26.9		8.1		32.6		100.1		6.7		5.1		12		-				-		-	
SR7	Cloudy	Moderate	10:00	15.9	Surface	1.0	0.1	359	27.2	27.2	8.3	8.3	31.6	31.6	88.3	88.3	5.9	5.9	4.4	4.9	9	7	-	-	823626	823748	-	-	-	-
						1.0	0.2	330	27.2		8.3		31.6		88.2		5.9		4.4		8		-				-		-	
					Middle	8.0	0.3	48	27.2	27.2	8.3	8.3	31.7	31.7	87.6	87.6	5.8		4.9		8		-				-		-	
						8.0	0.3	48	27.2		8.3		31.7		87.6		5.8		5.0		7		-				-		-	
					Bottom	14.9	0.4	50	27.1	27.1	8.3	8.3	31.7	31.7	88.0	88.1	5.9	5.9	5.4		5		-				-		-	
						14.9	0.4	50	27.1		8.3		31.7		88.1		5.9		5.4		6		-				-		-	
SR8	Cloudy	Moderate	11:26	5.5	Surface	1.0	-	-	26.8	26.8	8.3	8.3	30.9	30.9	97.0	96.9	6.5	6.5	7.7	8.7	6	7	-	-	820366	811625	-	-	-	-
						1.0	-	-	26.7		8.3		30.9		96.8		6.5		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	26.7	26.7	8.3	8.3	30.9	30.9	96.6	96.7	6.5	6.5	9.6		8		-				-		-	
						4.5	-	-	26.7		8.3		30.9		96.7		6.5		9.7		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**
Note: The flood tide monitoring session on 12 September 2020 was cancelled due to thunderstorm warning.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	17:44	8.2	Surface	1.0	0.3	34	27.4	27.4	8.2	8.2	33.3	33.3	103.3	103.3	6.8	6.7	7.8	11.3	9	10	86	89	815614	804259	<0.2	<0.2	0.8	0.7
						1.0	0.3	35	27.4		8.2		33.3		103.2		6.8		7.9		9		86				<0.2		0.8	
					Middle	4.1	0.4	35	27.3	27.3	8.2	8.2	33.8	33.8	99.7	99.7	6.5		11.0		9		89				<0.2		0.6	
						4.1	0.4	37	27.3		8.2		33.8		99.7		6.5		11.2		10		89				<0.2		0.7	
					Bottom	7.2	0.4	31	27.3	27.3	8.2	8.2	33.9	33.9	99.8	99.9	6.6	6.6	15.0		11		92				<0.2		0.6	
						7.2	0.4	32	27.3		8.2		33.9		99.9		6.6		14.9		11		92				<0.2		0.5	
C2	Cloudy	Moderate	16:32	10.8	Surface	1.0	0.4	190	27.4	27.4	8.3	8.3	28.6	28.6	98.8	98.7	6.7	6.2	7.1	11.2	8	8	88	91	825702	806938	<0.2	<0.2	1.2	1.0
						1.0	0.5	192	27.4		8.3		28.7		98.6		6.7		7.5		8		89				<0.2		1.0	
					Middle	5.4	0.2	186	27.1	27.1	8.3	8.3	29.8	29.8	85.1	84.7	5.7		14.8		8		91				<0.2		1.1	
						5.4	0.2	199	27.1		8.3		29.8		84.3		5.7		14.7		8		92				<0.2		1.1	
					Bottom	9.8	0.3	11	27.0	27.0	8.3	8.3	30.0	30.0	51.0	52.4	3.4	3.5	11.5		9		94				<0.2		0.8	
						9.8	0.3	11	27.0		8.3		30.0		53.8		3.6		11.7		8		94				<0.2		0.9	
C3	Cloudy	Moderate	18:45	12.8	Surface	1.0	0.5	276	27.1	27.1	8.3	8.3	31.3	31.3	95.1	95.1	6.4	6.4	11.9	13.8	10	11	86	90	822108	817809	<0.2	<0.2	0.6	0.6
						1.0	0.5	291	27.1		8.3		31.3		95.1		6.4		12.0		9		86				<0.2		0.7	
					Middle	6.4	0.5	274	27.1	27.1	8.3	8.3	31.2	31.2	95.2	95.2	6.4		12.7		11		89				<0.2		0.6	
						6.4	0.6	291	27.1		8.3		31.2		95.2		6.4		12.6		12		90				<0.2		0.7	
					Bottom	11.8	0.4	274	27.1	27.1	8.3	8.3	31.2	31.2	95.1	95.1	6.4	6.4	16.8		13		93				<0.2		0.6	
						11.8	0.5	290	27.1		8.3		31.2		95.1		6.4		16.8		13		94				<0.2		0.6	
IM1	Fine	Moderate	17:21	4.4	Surface	1.0	0.1	312	27.4	27.4	8.2	8.2	33.7	33.7	104.2	104.3	6.8	6.9	3.5	7.6	8	10	87	89	817939	807114	<0.2	<0.2	0.5	0.5
						1.0	0.1	338	27.4		8.2		33.7		104.4		6.9		3.6		9		87				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	275	27.1	27.1	8.2	8.2	33.8	33.8	102.5	102.6	6.8	6.8	11.5		11		91				<0.2		0.4	
						3.4	0.1	290	27.1		8.2		33.8		102.6		6.8		11.8		12		92				<0.2		0.4	
IM2	Fine	Moderate	17:12	6.5	Surface	1.0	0.3	8	27.3	27.3	8.2	8.2	33.3	33.3	104.6	104.6	6.9	6.8	6.9	10.5	13	13	86	89	818166	806144	<0.2	<0.2	0.6	0.5
						1.0	0.3	8	27.3		8.2		33.3		104.5		6.9		7.0		14		85				<0.2		0.7	
					Middle	3.3	0.4	339	27.2	27.2	8.2	8.2	33.6	33.6	101.9	101.9	6.7		10.4		13		90				<0.2		0.5	
						3.3	0.5	352	27.2		8.2		33.6		101.8		6.7		10.4		12		89				<0.2		0.5	
					Bottom	5.5	0.4	324	27.1	27.1	8.2	8.2	33.6	33.6	99.7	99.7	6.6	6.6	14.0		11		92				<0.2		0.4	
						5.5	0.5	335	27.1		8.2		33.6		99.7		6.6		14.0		12		93				<0.2		0.4	
IM3	Fine	Moderate	17:04	6.7	Surface	1.0	0.5	318	27.2	27.2	8.2	8.2	33.7	33.7	100.8	100.8	6.6	6.6	14.6	18.7	9	12	87	90	818775	805598	<0.2	<0.2	0.6	0.5
						1.0	0.5	346	27.2		8.2		33.7		100.8		6.6		15.0		9		86				<0.2		0.6	
					Middle	3.4	0.5	320	27.2	27.2	8.2	8.2	33.7	33.7	99.9	99.9	6.6		19.0		10		89				<0.2		0.4	
						3.4	0.5	324	27.2		8.2		33.7		99.8		6.6		19.1		12		90				<0.2		0.4	
					Bottom	5.7	0.3	299	27.1	27.1	8.2	8.2	33.7	33.7	98.6	98.6	6.5	6.5	22.2		15		93				<0.2		0.4	
						5.7	0.4	316	27.1		8.2		33.7		98.6		6.5		22.4		14		92				<0.2		0.4	
IM4	Fine	Moderate	16:52	7.8	Surface	1.0	0.5	301	27.4	27.4	8.2	8.2	33.5	33.5	106.9	107.0	7.0	7.0	1.5	2.1	9	10	86	90	819715	804625	<0.2	<0.2	0.6	0.5
						1.0	0.5	319	27.4		8.2		33.5		107.0		7.0		1.6		9		87				<0.2		0.6	
					Middle	3.9	0.5	284	27.1	27.1	8.2	8.2	33.6	33.6	105.9	105.9	7.0		2.4		10		90				<0.2		0.4	
						3.9	0.6	298	27.1		8.2		33.6		105.9		7.0		2.4		9		90				<0.2		0.5	
					Bottom	6.8	0.2	314	27.1	27.1	8.2	8.2	33.6	33.6	106.0	106.0	7.0	7.0	2.2		11		93				<0.2		0.5	
						6.8	0.2	336	27.1		8.2		33.6		106.0		7.0		2.2		11		93				<0.2		0.5	
IM5	Fine	Moderate	16:43	7.1	Surface	1.0	0.2	276	27.6	27.6	8.2	8.2	32.2	32.2	103.1	103.2	6.8	6.8	11.1	12.7	25	24	86	90	820745	804866	<0.2	<0.2	0.6	0.6
						1.0	0.2	300	27.6		8.2		32.2		103.2		6.8		11.2		25		87				<0.2		0.6	
					Middle	3.6	0.3	271	27.6	27.6	8.2	8.2	32.2	32.2	102.9	102.9	6.8		11.2		24		90				<0.2		0.6	
						3.6	0.3	290	27.6		8.2		32.2		102.9		6.8		11.4		23		89				<0.2		0.5	
					Bottom	6.1	0.2	296	27.6	27.6	8.2	8.2	32.2	32.2	103.1	103.2	6.8	6.8	15.6		23		93				<0.2		0.6	
						6.1	0.2	307	27.6		8.2		32.2		103.2		6.8		15.6		22		93				<0.2		0.6	
IM6	Fine	Moderate	16:36	7.3	Surface	1.0	0.4	253	27.6	27.6	8.2	8.2	32.1	32.1	102.7	102.9	6.8	6.8	12.2	13.6	16	19	86	90	821075	805848	<0.2	<0.2	0.6	0.6
						1.0	0.5	277	27.6		8.2		32.1		103.0		6.8		12.2		17		87				<0.2		0.6	
					Middle	3.7	0.3	280	27.6	27.6	8.2	8.2	32.1	32.1	102.4	102.6	6.8		13.7		20		91				<0.2		0.6	
						3.7	0.3	304	27.6		8.2		32.1		102.7		6.8		13.8		19		90				<0.2		0.6	
					Bottom	6.3	0.1	282	27.6	27.6	8.2	8.2	32.1	32.1	102.3	102.4	6.8	6.8	14.9		21		94				<0.2		0.6	
						6.3	0.1	284	27.6		8.2		32.1		102.5		6.8		15.0		22		93				<0.2		0.5	
IM7	Fine	Moderate	16:30	8.5	Surface	1.0	0.4	249	27.6	27.6	8.2	8.2	32.1	32.1	102.8	102.8	6.8	6.8	7.8	10.3	12	14	87	90	821361	806841	<0.2	<0.2	0.6	0.6
						1.0	0.5	256	27.6		8.2		32.1		102.7		6.8		7.9		12		87				<0.2		0.7	
					Middle	4.3	0.4	252	27.6	27.6	8.2	8.2	32.1	32.1	102.6	102.6	6.8		10.0		13		90				<0.2		0.6	
						4.3	0.5	259	27.6		8.2		32.1		102.6		6.8		10.3		14		91				<0.2		0.6	
					Bottom	7.5	0.2	268	27.5	27.5	8.2	8.2	32.3	32.3	102.6	102.6	6.8	6.8	13.1		16		94				<0.2		0.6	
						7.5	0.2	293	27.5		8.2		32.3		102.6		6.8		12.9		15		93				<0.2		0.6	
IM8	Cloudy	Moderate	16:59	7.5	Surface	1.0	0.3	216	27.1	27.1	8.3	8.3	30.1	30.1	99.4	99.4	6.7	6.7	8.3	11.3	10	11	85	91	821830	808123	<0.2	<0.2	0.7	0.7
						1.0	0.3	223	27.1		8.3		30.1		99.4		6.7		8.4		9		87				<0.2		0.7	
					Middle	3.8	0.2	205	27.0	27.0	8.3	8.3	30.3	30.3	98.9	98.9	6.6		11.3		12		92				<0.2		0.7	
						3.8	0.2	224	27.0		8.3		30.3		98.8		6.6		11.7		11		92				<0.2		0.7	
					Bottom	6.5	0.2	235	27.0	27.0	8.3	8.3	30.4	30.4	97.9	97.8	6.6	6.6	14.2		12		93				<0.2		0.7	
						6.5	0.2	247	27.0		8.3		30.4		97.7		6.6		14.2		12		94				<0.2		0.8	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	17:06	7.2	Surface	1.0	0.4	248	27.2	27.2	8.3	8.3	30.1	30.1	101.8	101.8	6.8	6.8	6.4	7.7	10	11	88	90	822071	808795	<0.2	<0.2	0.6	0.6
						1.0	0.4	262	27.2		8.3		30.1		101.8		6.8		6.4		9		88				<0.2		0.5	
					Middle	3.6	0.4	257	27.1	27.1	8.3	8.3	30.4	30.4	100.6	100.6	6.8		6.9		12		91				<0.2		0.6	
						3.6	0.4	279	27.1		8.3		30.4		100.5		6.8		7.1		11		91				<0.2		0.6	
					Bottom	6.2	0.3	262	27.1	27.1	8.3	8.3	30.4	30.4	99.8	99.8	6.7	6.7	9.6		13		92				<0.2		0.6	
						6.2	0.3	285	27.1		8.3		30.4		99.8		6.7		9.7		12		92				<0.2		0.7	
IM10	Cloudy	Moderate	17:17	7.7	Surface	1.0	0.7	288	27.2	27.2	8.3	8.3	30.4	30.4	102.7	102.7	6.9	6.9	5.4	8.8	10	9	87	91	822375	809814	<0.2	<0.2	0.5	0.6
						1.0	0.7	290	27.2		8.3		30.4		102.7		6.9		5.5		10		88				<0.2		0.6	
					Middle	3.9	0.5	297	27.0	27.0	8.3	8.3	30.6	30.6	101.0	101.0	6.8		8.5		10		91				<0.2		0.6	
						3.9	0.6	318	27.0		8.3		30.6		100.9		6.8		8.9		9		92				<0.2		0.5	
					Bottom	6.7	0.4	303	27.0	27.0	8.3	8.3	30.6	30.6	99.9	99.9	6.7	6.7	12.4		8		93				<0.2		0.6	
						6.7	0.5	324	27.0		8.3		30.6		99.9		6.7		12.3		9		93				<0.2		0.7	
IM11	Cloudy	Moderate	17:33	7.5	Surface	1.0	0.7	289	27.1	27.1	8.3	8.3	30.6	30.6	106.3	106.2	7.1	7.0	4.6	7.7	7	8	85	91	822057	811446	<0.2	<0.2	0.5	0.6
						1.0	0.7	295	27.1		8.3		30.6		106.1		7.1		4.6		8		85				<0.2		0.6	
					Middle	3.8	0.7	302	26.9	26.9	8.3	8.3	30.8	30.8	101.8	101.7	6.8		7.6		8		92				<0.2		0.6	
						3.8	0.7	304	26.9		8.3		30.8		101.5		6.8		8.0		9		93				<0.2		0.6	
					Bottom	6.5	0.5	307	26.8	26.8	8.3	8.3	30.8	30.8	100.1	100.1	6.7	6.7	10.7		8		94				<0.2		0.6	
						6.5	0.6	309	26.8		8.3		30.8		100.1		6.7		10.6		9		98				<0.2		0.6	
IM12	Cloudy	Moderate	17:43	8.1	Surface	1.0	0.6	293	26.9	26.9	8.4	8.4	30.8	30.8	108.1	108.1	7.3	7.1	4.7	7.1	8	7	87	90	821463	812060	<0.2	<0.2	0.5	0.5
						1.0	0.7	302	26.8		8.4		30.8		108.1		7.3		4.8		7		87				<0.2		0.6	
					Middle	4.1	0.6	288	26.7	26.7	8.3	8.3	30.9	30.9	104.7	103.2	7.1		7.3		7		88				<0.2		0.5	
						4.1	0.6	292	26.7		8.3		30.9		101.6		6.8		7.8		6		91				<0.2		0.5	
					Bottom	7.1	0.4	285	26.6	26.6	8.3	8.3	30.9	30.9	100.6	100.7	6.8	6.8	9.1		5		93				<0.2		0.5	
						7.1	0.4	292	26.6		8.3		30.9		100.7		6.8		8.8		6		93				<0.2		0.5	
SR1A	Cloudy	Moderate	18:05	5.0	Surface	1.0	-	-	26.8	26.8	8.3	8.3	30.7	30.7	101.3	101.3	6.8	6.8	5.1	5.4	6	6	-	-	819979	812656	-	-	-	-
						1.0	-	-	26.8		8.3		30.7		101.3		6.8		5.1		6		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	26.7	26.7	8.3	8.3	30.9	30.9	100.5	100.5	6.8	6.8	5.6		6		-				-		-	
						4.0	-	-	26.6		8.3		30.9		100.4		6.8		5.7		6		-				-		-	
SR2	Cloudy	Moderate	18:19	4.2	Surface	1.0	0.2	92	26.7	26.7	8.3	8.3	30.9	30.9	101.3	101.3	6.8	6.8	12.9	14.2	18	17	91	93	821468	814181	<0.2	<0.2	0.5	0.5
						1.0	0.2	92	26.7		8.3		30.9		101.3		6.8		12.7		18		92				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	91	26.7	26.7	8.3	8.3	30.9	30.9	100.4	100.4	6.8	6.8	15.3		16		93				<0.2		0.4	
						3.2	0.2	92	26.7		8.3		30.9		100.4		6.8		15.9		15		94				<0.2		0.5	
SR3	Cloudy	Moderate	16:52	8.5	Surface	1.0	0.3	219	27.3	27.3	8.3	8.3	29.6	29.6	99.6	99.5	6.7	6.7	8.6	11.4	12	10	-	-	822127	807573	-	-	-	-
						1.0	0.3	223	27.2		8.3		29.7		99.4		6.7		8.7		11		-				-		-	
					Middle	4.3	0.2	240	27.1	27.1	8.3	8.3	29.9	29.9	98.0	98.0	6.6		10.7		10		-				-		-	
						4.3	0.2	248	27.1		8.3		29.9		97.9		6.6		10.9		9		-				-		-	
					Bottom	7.5	0.2	286	27.0	27.1	8.3	8.3	30.0	29.9	97.2	97.2	6.6	6.6	14.9		7		-				-		-	
						7.5	0.2	305	27.1		8.3		29.9		97.2		6.5		14.8		8		-				-		-	
SR4A	Fine	Calm	18:05	8.6	Surface	1.0	0.2	249	27.1	27.1	8.2	8.2	33.0	33.0	106.1	106.1	7.0	7.0	5.6	5.9	10	12	-	-	817211	807825	-	-	-	-
						1.0	0.2	272	27.1		8.2		33.0		106.0		7.0		5.7		10		-				-		-	
					Middle	4.3	0.2	242	27.1	27.1	8.2	8.2	33.0	33.0	105.8	105.9	7.0		5.8		12		-				-		-	
						4.3	0.2	260	27.1		8.2		33.0		106.0		7.0		5.7		13		-				-		-	
					Bottom	7.6	0.2	236	27.1	27.1	8.2	8.2	33.0	33.0	104.9	104.9	6.9	6.9	6.3		14		-				-		-	
						7.6	0.2	248	27.1		8.2		33.0		104.9		6.9		6.3		14		-				-		-	
SR5A	Fine	Calm	18:26	3.3	Surface	1.0	0.1	273	27.2	27.2	8.2	8.2	32.7	32.7	104.3	104.3	6.9	6.9	3.4	3.8	8	9	-	-	816614	810692	-	-	-	-
						1.0	0.1	289	27.2		8.2		32.7		104.3		6.9		3.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	287	27.2	27.2	8.2	8.2	32.7	32.7	103.6	103.6	6.8	6.8	4.2		10		-				-		-	
						2.3	0.1	289	27.2		8.2		32.7		103.6		6.8		4.2		10		-				-		-	
SR6A	Fine	Calm	19:12	4.1	Surface	1.0	0.0	144	27.5	27.5	8.3	8.3	32.7	32.7	110.3	110.3	7.3	7.3	6.5	6.8	12	14	-	-	817976	814729	-	-	-	-
						1.0	0.0	156	27.5		8.3		32.7		110.3		7.3		6.4		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	178	27.5	27.5	8.2	8.2	32.8	32.8	109.0	109.1	7.2	7.2	7.2		16		-				-		-	
						3.1	0.1	183	27.5		8.2		32.8		109.1		7.2		7.2		16		-				-		-	
SR7	Cloudy	Moderate	19:31	15.8	Surface	1.0	0.1	35	27.2	27.2	8.3	8.3	31.4	31.4	92.1	92.1	6.1	6.1	6.0	8.4	14	12	-	-	823625	823719	-	-	-	-
						1.0	0.1	36	27.2		8.3		31.4		92.0		6.1		6.0		14		-				-		-	
					Middle	7.9	0.2	37	27.2	27.2	8.3	8.3	31.5	31.5	90.2	90.2	6.0		9.1		12		-				-		-	
						7.9	0.2	38	27.2		8.3		31.5		90.2		6.0		9.1		13		-				-		-	
					Bottom	14.8	0.1	27	27.2	27.2	8.3	8.3	31.6	31.5	90.6	90.7	6.0	6.0	10.4		10		-				-		-	
						14.8	0.1	28	27.2		8.3		31.5		90.8		6.0		10.0		11		-				-		-	
SR8	Cloudy	Moderate	17:54	5.1	Surface	1.0	-	-	27.1	27.1	8.4	8.4	30.6	30.6	106.3	106.3	7.1	7.1	6.7	7.2	11	9	-	-	820405	811617	-	-	-	-
						1.0	-	-	27.1		8.4		30.6		106.3		7.1		6.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.9	26.9	8.3	8.3	30.8	30.8	104.7	104.7	7.0	7.0	7.8		7		-				-		-	
						4.1	-	-	26.9		8.3		30.8		104.6		7.0		7.7		8		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	12:35	8.4	Surface	1.0	0.4	202	26.3	26.3	8.3	8.3	32.0	32.0	91.6	91.6	6.2	6.2	12.0	11.9	13	16	85	87	815636	804259	<0.2	<0.2	0.6	0.6
						1.0	0.4	209	26.3		8.3		32.0		91.6		6.2		12.0		14		86				<0.2		0.6	
					Middle	4.2	0.3	208	26.3	26.3	8.3	8.3	32.0	32.0	91.9	92.0	6.2		11.4		14		87				<0.2		0.6	
						4.2	0.4	228	26.3		8.3		32.0		92.0		6.2		11.9		16		88				<0.2		0.6	
					Bottom	7.4	0.3	209	26.3	26.3	8.3	8.3	32.0	32.0	93.5	93.7	6.3	6.3	12.1		18		89				<0.2		0.5	
						7.4	0.3	222	26.3		8.3		32.0		93.8		6.3		12.1		19		89				<0.2		0.9	
C2	Cloudy	Moderate	11:30	11.4	Surface	1.0	0.6	163	27.0	27.0	8.2	8.2	32.1	32.1	96.3	96.3	6.4	6.4	4.6	9.1	11	13	83	86	825704	806962	<0.2	<0.2	0.7	0.7
						1.0	0.6	173	27.0		8.2		32.1		96.3		6.4		4.6		11		82				<0.2		0.6	
					Middle	5.7	0.5	151	26.9	26.9	8.2	8.2	32.8	32.8	94.1	94.2	6.3		8.4		13		86				<0.2		0.7	
						5.7	0.6	156	26.9		8.2		32.8		94.2		6.3		8.9		14		86				<0.2		0.7	
					Bottom	10.4	0.3	134	26.8	26.8	8.2	8.2	33.1	33.1	92.9	92.9	6.2	6.2	14.0		15		91				<0.2		0.7	
						10.4	0.4	146	26.8		8.2		33.1		92.9		6.2		14.0		14		90				<0.2		0.5	
C3	Fine	Moderate	13:18	12.6	Surface	1.0	0.3	121	27.4	27.4	8.2	8.2	33.2	33.2	94.3	94.3	6.2	6.2	6.7	10.5	14	16	83	87	822120	817799	<0.2	<0.2	0.4	0.5
						1.0	0.3	133	27.4		8.2		33.2		94.3		6.2		6.7		15		83				<0.2		0.5	
					Middle	6.3	0.3	107	27.4	27.4	8.2	8.2	33.2	33.2	93.0	92.9	6.1		14.1		15		87				<0.2		0.5	
						6.3	0.3	107	27.4		8.2		33.2		92.7		6.1		14.2		16		87				<0.2		0.5	
					Bottom	11.6	0.3	54	27.4	27.4	8.2	8.2	33.2	33.2	93.1	93.1	6.1	6.1	10.5		18		90				<0.2		0.5	
						11.6	0.3	54	27.4		8.2		33.2		93.1		6.1		10.5		18		91				<0.2		0.4	
IM1	Cloudy	Moderate	12:14	5.5	Surface	1.0	0.1	173	26.3	26.3	8.3	8.3	31.4	31.4	94.5	94.5	6.4	6.4	9.7	9.6	9	10	87	88	817957	807136	<0.2	<0.2	0.5	0.5
						1.0	0.1	176	26.3		8.3		31.4		94.5		6.4		9.8		10		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	196	26.0	26.0	8.3	8.3	31.5	31.5	95.1	95.3	6.5	6.5	9.2		11		90				<0.2		0.6	
						4.5	0.1	200	26.0		8.3		31.6		95.4		6.5		9.5		11		89				<0.2		0.5	
IM2	Cloudy	Moderate	12:07	8.0	Surface	1.0	0.2	173	26.3	26.3	8.3	8.3	31.2	31.2	93.9	93.9	6.4	6.4	7.8	8.3	10	11	85	87	818147	806144	<0.2	<0.2	0.5	0.5
						1.0	0.2	187	26.3		8.3		31.2		93.8		6.4		7.8		10		85				<0.2		0.5	
					Middle	4.0	0.1	166	26.2	26.2	8.3	8.3	31.4	31.4	92.7	92.8	6.3		8.9		11		86				<0.2		0.6	
						4.0	0.1	170	26.2		8.3		31.4		92.8		6.3		8.4		12		87				<0.2		0.4	
					Bottom	7.0	0.1	155	26.0	26.0	8.3	8.3	31.5	31.5	93.6	93.8	6.4	6.4	8.6		12		89				<0.2		0.6	
						7.0	0.1	159	26.0		8.3		31.5		93.9		6.4		8.5		12		89				<0.2		0.5	
IM3	Cloudy	Moderate	12:01	8.1	Surface	1.0	0.2	158	26.3	26.3	8.3	8.3	31.4	31.4	91.5	91.5	6.2	6.2	10.1	12.1	13	14	85	87	818771	805598	<0.2	<0.2	0.5	0.5
						1.0	0.2	159	26.3		8.3		31.4		91.4		6.2		10.2		13		86				<0.2		0.6	
					Middle	4.1	0.1	146	26.3	26.3	8.3	8.3	31.6	31.6	91.7	91.8	6.2		12.7		15		87				<0.2		0.6	
						4.1	0.1	157	26.3		8.3		31.6		91.8		6.2		12.3		14		86				<0.2		0.4	
					Bottom	7.1	0.1	121	26.2	26.2	8.3	8.3	31.7	31.7	92.5	92.6	6.3	6.3	13.9		15		89				<0.2		0.6	
						7.1	0.1	127	26.1		8.3		31.7		92.6		6.3		13.4		14		89				<0.2		0.5	
IM4	Cloudy	Moderate	11:52	8.2	Surface	1.0	0.2	164	26.3	26.3	8.3	8.3	31.3	31.3	91.9	91.9	6.2	6.2	13.1	13.9	11	12	86	87	819725	804618	<0.2	<0.2	0.7	0.6
						1.0	0.2	170	26.3		8.3		31.3		91.8		6.2		13.3		11		85				<0.2		0.6	
					Middle	4.1	0.2	190	26.3	26.3	8.3	8.3	31.4	31.4	91.4	91.4	6.2		13.5		12		87				<0.2		0.7	
						4.1	0.2	195	26.3		8.3		31.4		91.4		6.2		13.7		11		87				<0.2		0.4	
					Bottom	7.2	0.1	179	26.3	26.3	8.3	8.3	31.5	31.5	93.2	93.3	6.3	6.3	14.9		12		89				<0.2		0.5	
						7.2	0.1	179	26.3		8.3		31.5		93.4		6.3		14.6		12		90				<0.2		0.5	
IM5	Cloudy	Rough	11:44	8.8	Surface	1.0	0.2	220	26.4	26.4	8.3	8.3	31.0	31.0	94.5	94.5	6.4	6.4	8.4	10.6	10	12	85	87	820754	804889	<0.2	<0.2	0.4	0.5
						1.0	0.2	231	26.4		8.3		31.0		94.4		6.4		8.6		8		86				<0.2		0.6	
					Middle	4.4	0.2	218	26.3	26.3	8.3	8.3	31.2	31.2	93.4	93.4	6.3		10.7		11		87				<0.2		0.6	
						4.4	0.2	232	26.3		8.3		31.2		93.4		6.3		10.9		12		87				<0.2		0.6	
					Bottom	7.8	0.2	195	26.3	26.3	8.3	8.3	31.2	31.2	94.8	94.9	6.4	6.4	12.5		14		89				<0.2		0.5	
						7.8	0.2	206	26.3		8.3		31.2		95.0		6.4		12.5		14		90				<0.2		0.5	
IM6	Cloudy	Rough	11:38	8.4	Surface	1.0	0.2	247	26.5	26.5	8.3	8.3	30.6	30.6	95.1	95.1	6.4	6.4	7.4	9.4	8	9	85	87	821064	805842	<0.2	<0.2	0.7	0.7
						1.0	0.2	251	26.4		8.3		30.6		95.0		6.4		7.4		8		86				<0.2		0.8	
					Middle	4.2	0.2	246	26.4	26.4	8.3	8.3	30.8	30.8	94.2	94.2	6.4		8.2		10		87				<0.2		0.7	
						4.2	0.2	260	26.4		8.3		30.8		94.2		6.4		8.5		9		87				<0.2		0.8	
					Bottom	7.4	0.1	215	26.3	26.3	8.3	8.3	30.9	30.9	96.1	96.1	6.5	6.5	12.6		11		90				<0.2		0.6	
						7.4	0.1	216	26.3		8.3		30.9		96.1		6.5		12.6		10		89				<0.2		0.7	
IM7	Cloudy	Rough	11:30	8.6	Surface	1.0	0.2	236	26.4	26.4	8.4	8.4	30.9	30.9	95.3	95.2	6.5	6.4	7.1	7.7	9	10	85	88	821362	806854	<0.2	<0.2	0.8	0.8
						1.0	0.2	256	26.4		8.4		30.9		95.1		6.4		7.2		10		86				<0.2		0.7	
					Middle	4.3	0.2	249	26.3	26.3	8.4	8.4	31.1	31.1	93.7	93.7	6.3		7.4		10		87				<0.2		0.7	
						4.3	0.2	270	26.3		8.4		31.1		93.6		6.3		7.5		10		88				<0.2		0.7	
					Bottom	7.6	0.1	277	26.3	26.3	8.4	8.4	31.2	31.2	94.1	94.2	6.4	6.4	8.7		11		89				<0.2		0.8	
						7.6	0.1	294	26.3		8.4		31.2		94.3		6.4		8.6		12		90				<0.2		0.8	
IM8	Cloudy	Moderate	11:56	7.7	Surface	1.0	0.1	126	27.0	27.0	8.2	8.2	32.6	32.6	96.2	96.2	6.4	6.4	11.5	11.7	10	8	84	87	821827	808141	<0.2	<0.2	0.6	0.6
						1.0	0.1	137	27.0		8.2		32.6		96.1		6.4		11.6		9		83				<0.2		0.6	
					Middle	3.9	0.2	137	27.0	27.0	8.2	8.2	32.6	32.6	95.6	95.6	6.4		7.5		8		87				<0.2		0.7	
						3.9	0.2	145	27.0		8.2		32.6		95.5		6.3		7.4		7		87				<0.2		0.6	
					Bottom	6.7	0.1	67	26.9	26.9	8.2	8.2	33.1	33.1	94.2	94.2	6.3	6.3	16.2		8		90				<0.2		0.6	
						6.7	0.1	71	26.9		8.2		33.1		94.2		6.3		16.2		7		91				<0.2		0.6	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:03	7.8	Surface	1.0	0.3	110	27.1	27.1	8.2	8.2	32.1	32.1	98.7	98.7	6.6	6.5	2.3	5.1	6	7	83	87	822076	808796	<0.2	<0.2	0.7	0.7
						1.0	0.3	111	27.1		8.2		32.2		98.7		6.6		2.3		6		83				<0.2		0.6	
					Middle	3.9	0.2	102	27.1	27.1	8.2	8.2	32.3	32.3	96.8	96.8	6.4		4.0		7		86				<0.2		0.7	
						3.9	0.2	103	27.1		8.2		32.3		96.8		6.4		3.8		6		87				<0.2		0.6	
					Bottom	6.8	0.2	107	27.0	27.0	8.2	8.2	32.4	32.4	95.8	96.0	6.4	6.4	9.0		8		91				<0.2		0.8	
						6.8	0.2	108	27.0		8.2		32.4		96.1		6.4		9.4		8		91				<0.2		0.6	
IM10	Cloudy	Moderate	12:11	7.5	Surface	1.0	0.7	112	27.1	27.1	8.2	8.2	32.1	32.1	98.9	98.9	6.6	6.5	2.8	8.2	11	10	83	87	822376	809798	<0.2	<0.2	0.6	0.7
						1.0	0.7	114	27.1		8.2		32.1		98.9		6.6		2.9		11		82				<0.2		0.7	
					Middle	3.8	0.6	106	27.0	27.0	8.2	8.2	32.5	32.5	95.4	95.4	6.3		9.8		9		87				<0.2		0.7	
						3.8	0.6	106	27.0		8.2		32.5		95.3		6.3		9.8		9		88				<0.2		0.6	
					Bottom	6.5	0.5	104	27.0	27.0	8.2	8.2	32.7	32.7	94.6	94.7	6.3	6.3	11.7		9		91				<0.2		0.7	
						6.5	0.5	109	27.0		8.2		32.7		94.7		6.3		11.9		8		91				<0.2		0.7	
IM11	Cloudy	Moderate	12:20	7.8	Surface	1.0	0.9	127	27.2	27.2	8.2	8.2	32.4	32.4	98.7	98.7	6.5	6.4	2.3	4.1	12	9	83	87	822036	811471	<0.2	<0.2	0.6	0.6
						1.0	1.0	131	27.2		8.2		32.4		98.6		6.5		2.3		11		83				<0.2		0.6	
					Middle	3.9	0.9	119	27.2	27.2	8.2	8.2	32.6	32.6	95.4	95.4	6.3		3.8		9		87				<0.2		0.6	
						3.9	0.9	126	27.2		8.2		32.6		95.4		6.3		3.8		8		87				<0.2		0.6	
					Bottom	6.8	0.6	104	27.2	27.2	8.2	8.2	32.8	32.8	96.0	96.0	6.4	6.4	6.3		8		91				<0.2		0.6	
						6.8	0.6	107	27.2		8.2		32.8		96.0		6.3		6.3		8		91				<0.2		0.6	
IM12	Fine	Moderate	12:26	8.7	Surface	1.0	0.6	105	27.2	27.2	8.2	8.2	32.2	32.2	99.6	99.6	6.6	6.5	1.6	4.4	6	7	82	87	821476	812068	<0.2	<0.2	0.6	0.6
						1.0	0.6	105	27.2		8.2		32.2		99.6		6.6		1.6		5		83				<0.2		0.6	
					Middle	4.4	0.6	112	27.3	27.3	8.2	8.2	32.7	32.7	96.4	96.5	6.4		3.4		7		86				<0.2		0.6	
						4.4	0.6	113	27.3		8.2		32.7		96.5		6.4		3.5		7		87				<0.2		0.7	
					Bottom	7.7	0.4	102	27.2	27.2	8.2	8.2	32.9	32.9	95.7	95.8	6.3	6.3	8.1		8		90				<0.2		0.6	
						7.7	0.4	110	27.2		8.2		32.9		95.8		6.3		8.2		7		91				<0.2		0.5	
SR1A	Fine	Moderate	12:46	5.4	Surface	1.0	-	-	27.2	27.2	8.2	8.2	33.0	33.0	96.9	96.9	6.4	6.4	3.3	3.2	10	11	-	-	819976	812658	-	-	-	-
						1.0	-	-	27.2		8.2		33.0		96.8		6.4		3.4		11		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.1	27.1	8.2	8.2	33.0	33.0	96.4	96.5	6.4	6.4	3.0		12		-				-		-	
						4.4	-	-	27.1		8.2		33.0		96.5		6.4		3.0		11		-				-		-	
SR2	Fine	Moderate	12:59	5.2	Surface	1.0	0.6	83	27.4	27.4	8.2	8.2	33.3	33.3	93.3	93.2	6.1	6.1	7.0	8.2	10	11	83	85	821478	814172	<0.2	<0.2	0.4	0.5
						1.0	0.6	89	27.4		8.2		33.3		93.1		6.1		6.2		10		83				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.4	72	27.4	27.4	8.2	8.2	33.3	33.3	93.0	93.1	6.1	6.1	9.7		11		86				<0.2		0.5	
						4.2	0.5	72	27.4		8.2		33.3		93.1		6.1		9.7		12		87				<0.2		0.5	
SR3	Cloudy	Moderate	11:51	9.4	Surface	1.0	0.0	220	27.1	27.1	8.2	8.2	32.4	32.4	97.2	97.2	6.5	6.4	4.0	7.8	9	9	-	-	822155	807592	-	-	-	-
						1.0	0.0	224	27.1		8.2		32.4		97.2		6.5		4.0		10		-				-		-	
					Middle	4.7	0.0	292	26.9	26.9	8.2	8.2	32.8	32.8	94.3	94.3	6.3		8.4		8		-				-		-	
						4.7	0.0	305	26.9		8.2		32.8		94.3		6.3		8.5		9		-				-		-	
					Bottom	8.4	0.1	88	26.9	26.9	8.2	8.2	33.0	33.0	93.8	93.8	6.2	6.2	10.9		8		-				-		-	
						8.4	0.1	94	26.9		8.2		33.0		93.7		6.2		11.1		8		-				-		-	
SR4A	Cloudy	Moderate	12:58	8.0	Surface	1.0	0.2	67	26.3	26.3	8.3	8.3	31.4	31.4	92.1	92.1	6.2	6.3	10.6	11.2	14	15	-	-	817207	807793	-	-	-	-
						1.0	0.2	70	26.3		8.3		31.4		92.1		6.2		10.7		14		-				-		-	
					Middle	4.0	0.2	81	26.3	26.3	8.3	8.3	31.4	31.4	92.6	92.7	6.3		11.1		14		-				-		-	
						4.0	0.2	82	26.3		8.3		31.4		92.7		6.3		11.2		15		-				-		-	
					Bottom	7.0	0.1	74	26.2	26.2	8.3	8.3	31.5	31.5	93.7	93.8	6.4	6.4	11.8		17		-				-		-	
						7.0	0.2	77	26.1		8.3		31.5		93.8		6.4		11.9		17		-				-		-	
SR5A	Cloudy	Moderate	13:14	3.8	Surface	1.0	0.1	338	26.5	26.5	8.3	8.3	31.3	31.3	99.7	99.9	6.7	6.8	6.9	6.8	11	12	-	-	816576	810700	-	-	-	-
						1.0	0.1	311	26.5		8.3		31.3		100.0		6.8		6.8		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	9	26.2	26.2	8.3	8.3	31.4	31.4	101.3	101.5	6.9	6.9	6.7		14		-				-		-	
						2.8	0.1	9	26.2		8.3		31.5		101.6		6.9		6.7		12		-				-		-	
SR6A	Cloudy	Moderate	13:48	4.4	Surface	1.0	0.0	303	26.6	26.6	8.3	8.3	30.8	30.8	96.9	96.9	6.6	6.6	7.1	7.2	7	8	-	-	817967	814760	-	-	-	-
						1.0	0.0	326	26.6		8.3		30.8		96.9		6.6		7.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	236	26.6	26.6	8.3	8.3	30.8	30.8	97.4	97.5	6.6	6.6	7.3		9		-				-		-	
						3.4	0.0	251	26.6		8.3		30.8		97.5		6.6		7.3		9		-				-		-	
SR7	Fine	Moderate	13:47	14.7	Surface	1.0	0.4	62	27.5	27.5	8.1	8.1	33.5	33.5	88.2	88.3	5.8	5.9	14.0	9.7	9	9	-	-	823639	823729	-	-	-	-
						1.0	0.4	67	27.5		8.1		33.5		88.3		5.8		14.0		8		-				-		-	
					Middle	7.4	0.4	68	27.5	27.5	8.1	8.1	33.5	33.5	89.3	89.3	5.9		2.0		9		-				-		-	
						7.4	0.4	73	27.5		8.1		33.5		89.3		5.9		2.0		9		-				-		-	
					Bottom	13.7	0.3	25	27.5	27.5	8.1	8.1	33.5	33.5	87.4	87.4	5.7	5.7	13.1		10		-				-		-	
						13.7	0.3	25	27.5		8.1		33.5		87.4		5.7		13.3		9		-				-		-	
SR8	Fine	Moderate	12:37	5.2	Surface	1.0	-	-	27.7	27.7	8.2	8.2	32.8	32.8	98.4	98.4	6.4	6.4	2.8	3.5	9	10	-	-	820376	811613	-	-	-	-
						1.0	-	-	27.7		8.2		32.8		98.4		6.4		2.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.3	27.3	8.2	8.2	33.0	33.0	96.3	96.2	6.4	6.4	4.3		10		-				-		-	
						4.2	-	-	27.3		8.2		33.0		96.1		6.3		4.3		10		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	07:06	8.2	Surface	1.0	0.5	203	25.9	25.9	8.3	8.3	31.9	31.9	94.5	94.5	6.4	6.4	20.0	19.2	28	29	85	88	815601	804244	<0.2	<0.2	0.6	0.5
						1.0	0.5	216	25.9		8.3		31.9		94.5		6.4		19.7		26		86				<0.2		0.6	
					Middle	4.1	0.5	180	25.8	25.8	8.3	8.3	31.8	31.8	94.6	94.6	6.4		20.2		30		87				<0.2		0.5	
						4.1	0.5	192	25.8		8.3		31.8		94.6		6.4		20.1		30		88				<0.2		0.4	
					Bottom	7.2	0.3	172	25.8	25.8	8.3	8.3	31.7	31.7	94.6	94.6	6.4	6.4	17.8		31		89				<0.2		0.5	
						7.2	0.3	179	25.8		8.3		31.7		94.6		6.4		17.8		30		90				<0.2		0.4	
C2	Fine	Moderate	07:47	11.2	Surface	1.0	0.5	3	26.9	26.9	8.2	8.2	32.9	32.9	96.1	96.1	6.4	6.4	9.9	10.9	19	18	86	90	825664	806928	<0.2	<0.2	0.7	0.8
						1.0	0.5	3	26.9		8.2		32.9		96.1		6.4		9.9		19		86				<0.2		0.6	
					Middle	5.6	0.5	357	26.9	26.9	8.2	8.2	32.9	32.9	94.9	94.9	6.3		10.8		16		90				<0.2		0.8	
						5.6	0.6	328	26.9		8.2		32.9		94.9		6.3		10.8		18		90				<0.2		0.8	
					Bottom	10.2	0.6	19	26.9	26.9	8.2	8.2	33.0	33.0	94.4	94.4	6.3	6.3	12.1		17		94				<0.2		1.0	
						10.2	0.6	19	26.9		8.2		33.0		94.4		6.3		12.0		16		93				<0.2		1.0	
C3	Fine	Moderate	05:49	10.6	Surface	1.0	0.6	255	27.5	27.5	8.1	8.1	33.4	33.4	89.7	89.7	5.9	5.9	10.3	12.0	18	16	85	89	822106	817806	<0.2	<0.2	0.7	0.7
						1.0	0.6	264	27.5		8.1		33.4		89.7		5.9		10.5		17		85				<0.2		0.7	
					Middle	5.3	0.7	261	27.4	27.4	8.1	8.1	33.5	33.5	88.6	88.6	5.8		8.9		16		89				<0.2		0.7	
						5.3	0.8	277	27.4		8.1		33.5		88.6		5.8		9.1		15		89				<0.2		0.9	
					Bottom	9.6	0.5	263	27.5	27.5	8.1	8.1	33.5	33.5	87.5	87.5	5.7	5.7	16.4		15		93				<0.2		0.7	
						9.6	0.5	288	27.5		8.1		33.5		87.5		5.7		16.9		15		92				<0.2		0.7	
IM1	Cloudy	Rough	07:26	5.8	Surface	1.0	0.2	159	26.2	26.2	8.3	8.3	31.4	31.4	92.7	92.7	6.3	6.3	8.5	10.6	10	12	87	89	817972	807140	<0.2	<0.2	0.7	0.8
						1.0	0.2	163	26.2		8.3		31.4		92.7		6.3		8.6		11		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.2	133	26.2	26.2	8.3	8.3	31.4	31.4	93.6	93.7	6.3	6.3	12.6		13		90				<0.2		0.8	
						4.8	0.3	135	26.2		8.3		31.4		93.7		6.3		12.9		12		90				<0.2		0.7	
IM2	Cloudy	Rough	07:33	8.0	Surface	1.0	0.2	189	26.3	26.3	8.3	8.3	31.3	31.3	91.3	91.3	6.2	6.2	15.7	15.8	18	16	87	88	818145	806174	<0.2	<0.2	0.9	1.0
						1.0	0.2	198	26.2		8.3		31.3		91.2		6.2		15.9		17		85				<0.2		0.9	
					Middle	4.0	0.2	157	26.2	26.2	8.3	8.3	31.4	31.4	90.5	90.5	6.1		16.1		16		87				<0.2		1.0	
						4.0	0.2	170	26.2		8.3		31.4		90.5		6.1		16.8		16		88				<0.2		0.9	
					Bottom	7.0	0.2	149	26.2	26.2	8.3	8.3	31.3	31.3	89.8	89.8	6.1	6.1	15.1		14		89				<0.2		1.0	
						7.0	0.2	157	26.2		8.3		31.2		89.8		6.1		15.1		15		90				<0.2		1.0	
IM3	Cloudy	Rough	07:39	8.0	Surface	1.0	0.2	207	26.3	26.3	8.3	8.3	31.2	31.2	91.3	91.3	6.2	6.2	10.5	11.5	11	12	86	87	818779	805574	<0.2	<0.2	1.1	1.1
						1.0	0.2	222	26.3		8.3		31.2		91.2		6.2		10.7		12		85				<0.2		0.9	
					Middle	4.0	0.2	219	26.2	26.2	8.3	8.3	31.3	31.3	91.3	91.4	6.2		12.4		11		86				<0.2		0.9	
						4.0	0.2	222	26.2		8.3		31.3		91.4		6.2		12.2		12		87				<0.2		1.1	
					Bottom	7.0	0.1	211	26.2	26.2	8.3	8.3	31.3	31.3	92.3	92.4	6.3	6.3	11.9		13		89				<0.2		1.1	
						7.0	0.1	221	26.2		8.3		31.3		92.5		6.3		11.5		13		89				<0.2		1.2	
IM4	Cloudy	Rough	07:48	7.9	Surface	1.0	0.6	239	26.3	26.3	8.3	8.3	30.9	30.9	92.9	92.9	6.3	6.3	10.0	9.2	14	13	86	88	819738	804620	<0.2	<0.2	0.8	0.8
						1.0	0.6	253	26.3		8.3		30.9		92.8		6.3		9.9		13		86				<0.2		0.7	
					Middle	4.0	0.4	232	26.3	26.3	8.3	8.3	31.3	31.3	91.0	91.0	6.2		9.5		12		87				<0.2		0.8	
						4.0	0.4	249	26.3		8.3		31.3		91.0		6.2		9.3		13		88				<0.2		0.8	
					Bottom	6.9	0.4	222	26.3	26.3	8.3	8.3	31.4	31.4	91.1	91.1	6.2	6.2	8.1		12		89				<0.2		0.8	
						6.9	0.4	223	26.3		8.3		31.4		91.1		6.2		8.6		12		89				<0.2		0.8	
IM5	Cloudy	Rough	07:55	7.9	Surface	1.0	0.4	324	26.3	26.3	8.3	8.3	31.2	31.2	91.7	91.7	6.2	6.2	17.8	19.7	16	18	85	87	820736	804884	<0.2	<0.2	0.8	0.9
						1.0	0.4	344	26.3		8.3		31.2		91.7		6.2		17.2		16		86				<0.2		0.8	
					Middle	4.0	0.5	359	26.3	26.3	8.3	8.3	31.3	31.3	91.9	92.0	6.2		20.7		18		87				<0.2		0.9	
						4.0	0.5	338	26.3		8.3		31.3		92.0		6.2		21.0		18		88				<0.2		1.0	
					Bottom	6.9	0.2	39	26.2	26.2	8.3	8.3	31.3	31.3	92.3	92.4	6.3	6.3	20.6		20		89				<0.2		1.1	
						6.9	0.3	41	26.2		8.3		31.3		92.4		6.3		20.7		20		89				<0.2		1.0	
IM6	Cloudy	Rough	08:03	8.0	Surface	1.0	0.3	280	26.4	26.4	8.3	8.3	30.6	30.6	94.4	94.4	6.4	6.4	8.3	8.4	12	12	87	88	821062	805832	<0.2	<0.2	1.1	0.9
						1.0	0.4	296	26.4		8.3		30.6		94.4		6.4		8.3		11		86				<0.2		0.9	
					Middle	4.0	0.1	325	26.3	26.3	8.3	8.3	30.8	30.8	94.4	94.5	6.4		8.2		11		87				<0.2		0.9	
						4.0	0.1	350	26.3		8.3		30.8		94.5		6.4		8.3		12		88				<0.2		0.9	
					Bottom	7.0	0.1	64	26.3	26.3	8.3	8.3	31.0	31.0	95.0	95.1	6.4	6.5	8.6		12		90				<0.2		0.8	
						7.0	0.1	69	26.3		8.3		31.0		95.1		6.5		8.7		13		90				<0.2		0.9	
IM7	Cloudy	Rough	08:10	7.9	Surface	1.0	0.4	232	26.4	26.4	8.3	8.3	30.7	30.7	95.1	95.1	6.5	6.4	8.3	9.9	10	11	87	88	821371	806825	<0.2	<0.2	0.9	0.9
						1.0	0.4	243	26.4		8.3		30.7		95.0		6.4		8.4		12		86				<0.2		0.8	
					Middle	4.0	0.4	258	26.3	26.3	8.3	8.3	31.0	31.0	94.6	94.7	6.4		10.7		11		88				<0.2		0.8	
						4.0	0.4	268	26.3		8.3		31.0		94.7		6.4		10.9		10		87				<0.2		0.9	
					Bottom	6.9	0.2	190	26.3	26.3	8.3	8.3	31.1	31.1	95.2	95.3	6.5	6.5	10.4		10		90				<0.2		0.9	
						6.9	0.2	190	26.3		8.3		31.1		95.4		6.5		10.6		10		89				<0.2		0.8	
IM8	Fine	Moderate	07:17	7.9	Surface	1.0	0.2	82	27.1	27.1	8.2	8.2	31.8	31.8	96.9	97.0	6.5	6.5	4.1	8.5	11	11	85	90	821807	808134	<0.2	<0.2	0.8	0.8
						1.0	0.2	83	27.1		8.2		31.8		97.0		6.5		4.0		11		86				<0.2		0.8	
					Middle	4.0	0.2	79	27.0	27.0	8.2	8.2	32.0	32.0	95.8	95.8	6.4		5.2		10		90				<0.2		0.8	
						4.0	0.2	81	27.0		8.2		32.0		95.8		6.4		5.3		11		89				<0.2		0.8	
					Bottom	6.9	0.1	91	26.9	26.9	8.2	8.2	33.0	33.0	94.2	94.3	6.3	6.3	16.3		10		94				<0.2		0.8	
						6.9	0.1	92	26.9		8.2		33.0		94.3		6.3		16.0		10		94				<0.2		0.8	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:10	8.2	Surface	1.0	0.4	81	27.1	27.1	8.2	8.2	31.9	31.9	96.2	96.3	6.4	6.4	3.3	5.2	13	11	86	90	822114	808802	<0.2	<0.2	0.9	0.8
						1.0	0.4	83	27.1		8.2		31.9		96.3		6.4		3.2		12		86				<0.2		0.8	
					Middle	4.1	0.4	82	27.1	27.1	8.2	8.2	32.2	32.2	94.3	94.3	6.3		4.7		10		90				<0.2		0.8	
						4.1	0.4	87	27.1		8.2		32.2		94.2		6.3		4.8		10		89				<0.2		0.8	
					Bottom	7.2	0.4	74	27.0	27.0	8.2	8.2	32.7	32.7	94.0	94.0	6.2	6.2	7.7		10		94				<0.2		0.8	
						7.2	0.4	80	27.0		8.2		32.7		94.0		6.2		7.5		9		94				<0.2		0.7	
IM10	Fine	Moderate	07:02	8.2	Surface	1.0	0.8	307	27.2	27.2	8.2	8.2	33.0	33.0	94.8	94.8	6.3	6.3	6.2	8.0	13	14	86	90	822380	809776	<0.2	<0.2	0.7	0.7
						1.0	0.8	334	27.2		8.2		33.0		94.8		6.3		6.2		13		86				<0.2		0.8	
					Middle	4.1	0.7	310	27.2	27.2	8.2	8.2	33.0	33.0	94.6	94.6	6.2		6.8		14		90				<0.2		0.7	
						4.1	0.7	336	27.2		8.2		33.0		94.6		6.3		6.8		14		89				<0.2		0.6	
					Bottom	7.2	0.6	306	27.2	27.2	8.2	8.2	33.0	33.0	94.8	94.7	6.3	6.3	11.0		15		93				<0.2		0.7	
						7.2	0.6	320	27.2		8.2		33.0		94.6		6.3		11.1		16		94				<0.2		0.8	
IM11	Fine	Moderate	06:50	7.8	Surface	1.0	0.8	290	27.2	27.2	8.2	8.2	32.9	32.9	95.6	95.6	6.3	6.3	7.1	9.2	16	17	85	89	822067	811444	<0.2	<0.2	0.7	0.7
						1.0	0.9	294	27.2		8.2		32.9		95.6		6.3		7.1		15		86				<0.2		0.6	
					Middle	3.9	0.7	296	27.2	27.2	8.2	8.2	32.9	32.9	94.4	94.4	6.2		9.6		18		89				<0.2		0.6	
						3.9	0.7	315	27.2		8.2		32.9		94.3		6.2		9.7		17		90				<0.2		0.6	
					Bottom	6.8	0.4	294	27.2	27.2	8.2	8.2	32.9	32.9	94.1	94.1	6.2	6.2	10.7		18		93				<0.2		0.7	
						6.8	0.4	321	27.2		8.2		32.9		94.1		6.2		10.8		18		93				<0.2		0.7	
IM12	Fine	Moderate	06:42	8.9	Surface	1.0	0.9	279	27.3	27.3	8.2	8.2	33.0	33.0	94.6	94.6	6.2	6.2	6.5	9.3	11	13	86	90	821470	812053	<0.2	<0.2	0.8	0.7
						1.0	1.0	298	27.3		8.2		33.0		94.5		6.2		6.5		11		85				<0.2		0.7	
					Middle	4.5	0.7	279	27.3	27.3	8.2	8.2	33.0	33.0	93.6	93.5	6.2		8.1		13		90				<0.2		0.7	
						4.5	0.8	289	27.3		8.2		33.0		93.3		6.2		8.0		14		90				<0.2		0.7	
					Bottom	7.9	0.5	282	27.3	27.3	8.2	8.2	33.0	33.0	93.1	93.1	6.1	6.1	13.3		13		94				<0.2		0.7	
						7.9	0.6	299	27.3		8.2		33.0		93.1		6.1		13.3		14		94				<0.2		0.6	
SR1A	Fine	Moderate	06:21	5.5	Surface	1.0	-	-	27.0	27.0	8.2	8.2	33.0	33.0	93.7	93.8	6.2	6.2	3.8	4.5	11	10	-	-	819981	812656	-	-	-	-
						1.0	-	-	27.0		8.2		33.0		93.8		6.2		3.9		12		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	27.0	27.0	8.2	8.2	33.0	33.0	92.9	92.9	6.2	6.2	5.1		9		-				-		-	
						4.5	-	-	27.0		8.2		33.0		92.9		6.2		5.1		9		-				-		-	
SR2	Fine	Moderate	06:09	5.0	Surface	1.0	0.1	11	27.2	27.2	8.2	8.2	33.0	33.0	94.1	94.1	6.2	6.2	8.1	9.2	16	17	85	88	821454	814149	<0.2	<0.2	0.7	0.7
						1.0	0.1	11	27.2		8.2		33.0		94.1		6.2		8.2		16		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	14	27.2	27.2	8.2	8.2	33.0	33.0	93.2	93.3	6.2	6.2	10.4		18		90				<0.2		0.8	
						4.0	0.1	14	27.2		8.2		33.0		93.3		6.2		10.1		18		90				<0.2		0.7	
SR3	Fine	Moderate	07:24	8.2	Surface	1.0	0.2	64	27.0	27.0	8.2	8.2	32.3	32.3	96.3	96.3	6.4	6.4	8.1	10.7	10	12	-	-	822132	807592	-	-	-	-
						1.0	0.2	68	27.0		8.2		32.3		96.2		6.4		8.1		8		-				-		-	
					Middle	4.1	0.2	76	26.9	26.9	8.2	8.2	32.9	32.9	95.4	95.4	6.3		10.3		12		-				-		-	
						4.1	0.2	82	26.9		8.2		32.9		95.3		6.3		10.2		13		-				-		-	
					Bottom	7.2	0.3	80	26.9	26.9	8.2	8.2	33.0	33.0	94.9	94.9	6.3	6.3	13.7		13		-				-		-	
						7.2	0.3	85	26.9		8.2		33.0		94.8		6.3		13.6		14		-				-		-	
SR4A	Cloudy	Moderate	06:42	8.5	Surface	1.0	0.5	239	26.2	26.2	8.3	8.3	31.4	31.4	92.0	92.0	6.2	6.2	16.2	16.9	18	20	-	-	817168	807816	-	-	-	-
						1.0	0.5	262	26.2		8.3		31.4		91.9		6.2		16.6		19		-				-		-	
					Middle	4.3	0.4	216	26.2	26.2	8.3	8.3	31.4	31.4	91.8	91.8	6.2		16.9		20		-				-		-	
						4.3	0.4	237	26.2		8.3		31.4		91.8		6.2		16.0		20		-				-		-	
					Bottom	7.5	0.3	214	26.2	26.2	8.3	8.3	31.4	31.4	91.9	91.9	6.2	6.2	18.0		21		-				-		-	
						7.5	0.4	223	26.2		8.3		31.4		91.9		6.2		17.8		21		-				-		-	
SR5A	Cloudy	Moderate	06:23	3.0	Surface	1.0	0.4	271	26.3	26.3	8.3	8.3	31.2	31.2	92.1	92.1	6.2	6.2	8.9	9.2	14	13	-	-	816604	810706	-	-	-	-
						1.0	0.4	288	26.3		8.3		31.2		92.1		6.2		8.8		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.0	0.2	227	26.3	26.3	8.3	8.3	31.2	31.2	91.9	91.9	6.2	6.2	9.8		12		-				-		-	
						2.0	0.2	236	26.3		8.3		31.2		91.8		6.2		9.4		11		-				-		-	
SR6A	Cloudy	Moderate	05:54	4.3	Surface	1.0	0.1	190	26.5	26.5	8.3	8.3	31.0	31.0	93.4	93.4	6.3	6.3	7.5	7.5	12	10	-	-	817975	814754	-	-	-	-
						1.0	0.1	197	26.5		8.3		31.0		93.3		6.3		7.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	230	26.5	26.5	8.3	8.3	31.0	31.0	93.3	93.4	6.3	6.3	7.4		8		-				-		-	
						3.3	0.1	243	26.5		8.3		31.0		93.4		6.3		7.5		9		-				-		-	
SR7	Fine	Moderate	05:20	14.9	Surface	1.0	0.1	328	27.4	27.4	8.1	8.1	33.4	33.4	89.9	89.9	5.9	5.9	4.8	10.3	10	11	-	-	823645	823734	-	-	-	-
						1.0	0.1	348	27.4		8.1		33.4		89.9		5.9		4.8		9		-				-		-	
					Middle	7.5	0.3	91	27.5	27.5	8.1	8.1	33.4	33.4	88.8	88.8	5.8		12.7		11		-				-		-	
						7.5	0.3	96	27.5		8.1		33.4		88.8		5.8		12.7		12		-				-		-	
					Bottom	13.9	0.2	66	27.5	27.5	8.1	8.1	33.4	33.4	88.4	88.3	5.8	5.8	13.2		11		-				-		-	
						13.9	0.2	68	27.5		8.1		33.4		88.2		5.8		13.3		12		-				-		-	
SR8	Fine	Moderate	06:32	5.2	Surface	1.0	-	-	27.3	27.3	8.2	8.2	32.8	32.8	97.2	97.2	6.4	6.4	4.5	4.8	12	14	-	-	820377	811607	-	-	-	-
						1.0	-	-	27.3		8.2		32.8		97.1		6.4		4.5		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.2	27.2	8.2	8.2	32.9	32.9	97.1	97.2	6.4	6.4	5.0		15		-				-		-	
						4.2	-	-	27.2		8.2		32.9		97.2		6.4		5.0		15		-				-		-	

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 20 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Rough	14:55	8.6	Surface	1.0	0.5	126	25.8	25.8	8.3	8.3	30.1	30.1	94.6	94.6	6.5	6.4	7.6	8.5	5	8	87	90	815636	804227	<0.2	<0.2	1.4	1.5
						1.0	0.5	128	25.8		8.3		30.1		94.5		6.5		7.6		6		87				<0.2		1.6	
					Middle	4.3	0.3	120	25.6	25.7	8.3	8.3	31.0	31.1	91.1	91.1	6.2		8.4		9		91				<0.2		1.4	
						4.3	0.4	125	25.7		8.3		31.2		91.0		6.2		8.4		8		91				<0.2		1.5	
					Bottom	7.6	0.1	174	25.7	25.7	8.2	8.2	32.0	32.0	91.6	91.8	6.2	6.3	9.3		10		92				<0.2		1.3	
						7.6	0.1	187	25.7		8.2		32.0		92.0		6.3		9.4		9		93				<0.2		1.5	
C2	Cloudy	Rough	13:50	12.7	Surface	1.0	0.2	166	26.5	26.5	8.2	8.2	32.2	32.2	96.7	96.6	6.5	6.5	6.1	9.7	10	10	86	88	825659	806948	<0.2	<0.2	0.6	0.7
						1.0	0.2	175	26.5		8.2		32.2		96.5		6.5		6.2		9		85				<0.2		0.7	
					Middle	6.4	0.2	170	26.5	26.5	8.2	8.2	32.6	32.6	95.1	95.1	6.4		9.4		9		88				<0.2		0.8	
						6.4	0.2	175	26.5		8.2		32.6		95.1		6.4		9.4		10		87				<0.2		0.7	
					Bottom	11.7	0.3	164	26.4	26.4	8.1	8.1	32.6	32.6	95.8	95.8	6.4	6.4	13.6		12		90				<0.2		0.6	
						11.7	0.3	177	26.4		8.1		32.6		95.8		6.4		13.6		12		90				<0.2		0.6	
C3	Cloudy	Moderate	15:44	12.8	Surface	1.0	0.4	67	27.0	27.0	8.2	8.2	33.2	33.2	88.9	88.9	5.9	5.9	6.9	9.1	10	11	86	88	822118	817824	<0.2	<0.2	0.6	0.5
						1.0	0.5	70	27.0		8.2		33.2		88.9		5.9		6.9		10		87				<0.2		0.5	
					Middle	6.4	0.5	91	26.9	26.9	8.1	8.1	33.4	33.4	87.6	87.6	5.8		7.8		11		88				<0.2		0.6	
						6.4	0.5	97	26.9		8.1		33.4		87.6		5.8		7.8		10		89				<0.2		0.5	
					Bottom	11.8	0.5	92	26.8	26.8	8.1	8.1	33.6	33.6	86.4	86.4	5.7	5.7	12.5		11		90				<0.2		0.5	
						11.8	0.5	97	26.8		8.1		33.6		86.4		5.7		12.5		12		90				<0.2		0.5	
IM1	Sunny	Rough	14:34	5.5	Surface	1.0	0.3	175	26.0	26.0	8.3	8.3	30.6	30.6	96.2	96.2	6.6	6.6	8.5	8.7	7	11	87	89	817940	807140	<0.2	<0.2	1.1	1.4
						1.0	0.3	176	26.0		8.3		30.6		96.1		6.6		8.4		8		88				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	163	26.0	26.0	8.2	8.2	30.7	30.7	95.7	95.8	6.5	6.5	8.9		14		91				<0.2		1.6	
						4.5	0.3	163	26.0		8.2		30.7		95.8		6.5		8.9		14		91				<0.2		1.6	
IM2	Sunny	Rough	14:27	7.7	Surface	1.0	0.3	125	25.7	25.7	8.3	8.3	30.4	30.4	93.5	93.5	6.4	6.4	7.5	8.6	12	14	85	88	818186	806156	<0.2	<0.2	2.0	1.7
						1.0	0.4	129	25.7		8.3		30.4		93.4		6.4		7.6		12		88				<0.2		2.0	
					Middle	3.9	0.1	76	25.7	25.7	8.3	8.3	30.4	30.5	92.7	92.6	6.4		8.6		13		89				<0.2		1.9	
						3.9	0.1	77	25.7		8.3		30.5		92.5		6.4		8.8		14		89				<0.2		1.9	
					Bottom	6.7	0.0	158	25.6	25.6	8.3	8.2	30.8	30.8	92.6	92.9	6.4	6.4	9.6		16		90				<0.2		1.2	
						6.7	0.0	172	25.6		8.2		30.8		93.2		6.4		9.7		16		85				<0.2		1.2	
IM3	Sunny	Rough	14:22	8.0	Surface	1.0	0.2	58	25.8	25.8	8.3	8.3	30.5	30.5	93.6	93.6	6.4	6.4	7.5	9.3	7	8	86	88	818766	805597	<0.2	<0.2	1.3	1.3
						1.0	0.2	60	25.8		8.3		30.5		93.6		6.4		7.6		8		89				<0.2		1.4	
					Middle	4.0	0.2	116	25.7	25.7	8.3	8.3	30.5	30.5	92.9	92.9	6.4		8.9		8		89				<0.2		1.2	
						4.0	0.2	119	25.7		8.3		30.5		92.8		6.4		8.9		8		90				<0.2		1.2	
					Bottom	7.0	0.1	120	25.6	25.6	8.3	8.3	30.9	30.9	91.3	91.6	6.3	6.3	11.4		8		90				<0.2		1.3	
						7.0	0.1	129	25.6		8.3		30.9		91.8		6.3		11.5		9		85				<0.2		1.3	
IM4	Sunny	Rough	14:13	8.9	Surface	1.0	0.1	130	25.7	25.7	8.3	8.3	30.7	30.7	92.7	92.7	6.4	6.4	10.2	11.2	10	9	86	88	819719	804589	<0.2	<0.2	1.0	1.0
						1.0	0.1	130	25.7		8.3		30.7		92.7		6.4		10.3		10		86				<0.2		1.0	
					Middle	4.5	0.1	133	25.7	25.7	8.3	8.3	30.7	30.7	92.2	92.2	6.3		11.2		8		88				<0.2		0.9	
						4.5	0.1	133	25.7		8.3		30.7		92.2		6.3		11.4		9		89				<0.2		1.0	
					Bottom	7.9	0.2	164	25.7	25.7	8.3	8.3	30.7	30.7	92.1	92.2	6.3	6.3	12.1		8		90				<0.2		1.0	
						7.9	0.2	180	25.7		8.3		30.7		92.2		6.3		12.2		7		90				<0.2		0.9	
IM5	Sunny	Rough	14:06	8.4	Surface	1.0	0.1	333	25.8	25.8	8.3	8.3	30.5	30.4	93.7	93.7	6.4	6.4	9.9	10.9	8	9	85	88	820749	804878	<0.2	<0.2	1.0	1.0
						1.0	0.1	335	25.8		8.3		30.4		93.6		6.4		9.9		8		88				<0.2		0.9	
					Middle	4.2	0.2	338	25.7	25.7	8.3	8.3	30.7	30.7	91.3	91.3	6.3		10.1		8		88				<0.2		1.0	
						4.2	0.2	311	25.7		8.3		30.7		91.3		6.3		10.2		9		88				<0.2		1.0	
					Bottom	7.4	0.3	264	25.7	25.7	8.2	8.2	30.7	30.7	92.2	92.3	6.3	6.3	12.4		10		89				<0.2		0.9	
						7.4	0.3	282	25.7		8.2		30.7		92.3		6.3		12.6		9		89				<0.2		0.9	
IM6	Sunny	Rough	13:58	8.2	Surface	1.0	0.5	120	26.1	26.1	8.3	8.3	30.2	30.2	94.5	94.5	6.5	6.4	7.6	8.6	8	10	86	89	821078	805821	<0.2	<0.2	1.1	1.4
						1.0	0.5	121	26.1		8.3		30.2		94.4		6.5		7.6		8		89				<0.2		1.2	
					Middle	4.1	0.2	165	25.8	25.8	8.3	8.3	30.5	30.5	92.0	91.9	6.3		8.4		10		89				<0.2		1.8	
						4.1	0.2	171	25.8		8.3		30.6		91.7		6.3		8.5		9		90				<0.2		1.9	
					Bottom	7.2	0.2	138	25.7	25.7	8.2	8.2	30.7	30.7	92.4	92.5	6.3	6.4	9.5		12		91				<0.2		1.2	
						7.2	0.2	142	25.7		8.2		30.7		92.6		6.4		9.7		12		86				<0.2		1.1	
IM7	Sunny	Rough	13:50	9.2	Surface	1.0	0.1	165	26.0	26.0	8.3	8.3	29.9	29.9	93.1	93.0	6.4	6.3	6.7	7.8	8	10	85	88	821328	806850	<0.2	<0.2	1.2	1.0
						1.0	0.1	170	26.0		8.3		30.0		92.8		6.4		6.7		8		88				<0.2		1.3	
					Middle	4.6	0.0	165	25.9	25.9	8.3	8.3	30.3	30.4	91.4	91.3	6.3		7.8		10		89				<0.2		1.1	
						4.6	0.0	171	25.8		8.3		30.4		91.1		6.2		7.8		11		89				<0.2		1.0	
					Bottom	8.2	0.3	129	25.7	25.7	8.3	8.3	30.9	30.9	90.5	90.6	6.2	6.2	8.7		12		90				<0.2		0.7	
						8.2	0.3	138	25.7		8.3		30.9		90.7		6.2		8.9		12		85				<0.2		0.6	
IM8	Cloudy	Rough	14:17	8.0	Surface	1.0	0.1	112	26.6	26.6	8.2	8.2	32.0	32.0	96.9	96.9	6.5	6.5	4.6	8.5	11	10	87	89	821839	808134	<0.2	<0.2	0.9	0.9
						1.0	0.1	121	26.6		8.2		32.0		96.9		6.5		4.6		11		87				<0.2		0.9	
					Middle	4.0	0.2	99	26.6	26.6	8.1	8.1	32.1	32.1	96.1	96.1	6.4		7.6		10		89				<0.2		1.0	
						4.0	0.2	107	26.6		8.1		32.1		96.1		6.4		7.6		9		90				<0.2		1.0	
					Bottom	7.0	0.2	62	26.4	26.4	8.1	8.1	32.4	32.4	96.4	96.4	6.5	6.5	13.2		9		90				<0.2		0.8	
						7.0	0.2	66	26.4		8.1		32.4		96.4		6.5		13.2		9		91				<0.2		0.8	

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 20 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	14:23	7.6	Surface	1.0	0.3	109	26.6	26.6	8.1	8.1	31.9	31.9	96.2	96.3	6.5	6.5	8.5	9.3	8	9	88	89	822073	808806	<0.2	<0.2	0.9	0.9
						1.0	0.3	111	26.6		8.1		31.9		96.3		6.5		8.8		9		87				<0.2		0.8	
					Middle	3.8	0.3	104	26.5	26.5	8.1	8.1	32.1	32.1	94.9	94.9	6.4		9.9		9		89				<0.2		0.8	
						3.8	0.3	113	26.5		8.1		32.1		94.9		6.4		9.9		9		90				<0.2		0.9	
					Bottom	6.6	0.2	84	26.4	26.4	8.1	8.1	32.2	32.2	96.1	96.1	6.5	6.5	9.4		9		90				<0.2		0.9	
						6.6	0.3	87	26.4		8.1		32.2		96.1		6.5		9.4		9		91				<0.2		0.9	
IM10	Cloudy	Rough	14:30	8.1	Surface	1.0	0.5	123	26.6	26.6	8.2	8.2	31.9	31.9	96.8	96.8	6.5	6.5	6.7	10.2	8	9	86	88	822403	809790	<0.2	<0.2	0.7	0.8
						1.0	0.5	124	26.6		8.2		31.9		96.8		6.5		6.7		8		86				<0.2		0.9	
					Middle	4.1	0.6	106	26.6	26.6	8.1	8.1	32.0	32.0	96.0	96.0	6.4		12.8		8		88				<0.2		0.8	
						4.1	0.6	107	26.6		8.1		32.0		96.0		6.4		12.8		10		89				<0.2		0.8	
					Bottom	7.1	0.3	100	26.5	26.5	8.1	8.1	32.2	32.2	96.2	96.3	6.5	6.5	11.1		11		90				<0.2		0.9	
						7.1	0.3	107	26.5		8.1		32.2		96.3		6.5		11.1		10		90				<0.2		0.7	
IM11	Cloudy	Rough	14:40	8.2	Surface	1.0	0.6	110	26.7	26.7	8.2	8.2	32.0	32.0	96.2	96.2	6.4	6.4	3.3	3.7	9	10	86	88	822063	811480	<0.2	<0.2	0.8	0.7
						1.0	0.6	119	26.7		8.2		32.0		96.2		6.4		3.3		9		87				<0.2		0.8	
					Middle	4.1	0.5	122	26.7	26.7	8.2	8.2	32.5	32.5	94.9	94.9	6.3		4.4		8		88				<0.2		0.6	
						4.1	0.5	122	26.7		8.2		32.5		94.9		6.3		4.4		10		88				<0.2		0.7	
					Bottom	7.2	0.3	116	26.7	26.7	8.1	8.1	32.5	32.4	97.8	98.0	6.5	6.6	3.4		11		90				<0.2		0.7	
						7.2	0.3	117	26.7		8.1		32.4		98.1		6.6		3.4		10		91				<0.2		0.7	
IM12	Cloudy	Rough	14:47	8.3	Surface	1.0	0.4	88	26.8	26.8	8.2	8.2	32.7	32.7	94.1	94.1	6.3	6.3	2.4	3.0	8	7	87	89	821478	812061	<0.2	<0.2	0.8	0.8
						1.0	0.4	89	26.8		8.2		32.7		94.1		6.3		2.4		8		87				<0.2		0.9	
					Middle	4.2	0.3	83	26.8	26.8	8.2	8.2	32.7	32.7	93.5	93.5	6.2		3.0		7		88				<0.2		0.7	
						4.2	0.4	83	26.8		8.2		32.7		93.5		6.2		3.0		7		89				<0.2		0.8	
					Bottom	7.3	0.3	92	26.8	26.8	8.1	8.1	32.7	32.7	95.1	95.1	6.3	6.3	3.6		6		90				<0.2		0.6	
						7.3	0.3	95	26.8		8.1		32.7		95.1		6.3		3.6		7		91				<0.2		0.7	
SR1A	Cloudy	Moderate	15:08	5.0	Surface	1.0	-	-	26.7	26.7	8.1	8.1	32.6	32.6	95.1	95.1	6.4	6.4	5.8	5.7	6	8	-	-	819977	812654	-	-	-	-
						1.0	-	-	26.7		8.1		32.6		95.1		6.4		5.8		7		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	26.7	26.7	8.1	8.1	32.6	32.6	98.6	98.6	6.6	6.6	5.6		10		-				-		-	
						4.0	-	-	26.7		8.1		32.6		98.6		6.6		5.6		10		-				-		-	
SR2	Cloudy	Moderate	15:21	5.0	Surface	1.0	0.7	100	26.8	26.8	8.1	8.1	32.9	32.9	93.1	93.1	6.2	6.2	9.0	9.1	12	12	89	89	821486	814156	<0.2	<0.2	0.8	0.8
						1.0	0.7	104	26.8		8.1		32.9		93.1		6.2		9.0		12		88				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.4	50	26.8	26.8	8.1	8.1	32.9	32.9	95.1	95.1	6.3	6.3	9.2		12		90				<0.2		0.8	
						4.0	0.4	52	26.8		8.1		32.9		95.1		6.3		9.2		12		90				<0.2		0.8	
SR3	Cloudy	Rough	14:11	9.1	Surface	1.0	0.1	204	26.5	26.5	8.1	8.1	32.0	32.0	94.7	94.7	6.4	6.4	8.6	10.5	11	10	-	-	822138	807587	-	-	-	-
						1.0	0.1	208	26.5		8.1		32.0		94.6		6.4		8.8		12		-				-		-	
					Middle	4.6	0.2	167	26.4	26.4	8.1	8.1	32.1	32.1	94.8	94.8	6.4		11.2		11		-				-		-	
						4.6	0.2	179	26.4		8.1		32.1		94.8		6.4		11.2		10		-				-		-	
					Bottom	8.1	0.1	186	26.3	26.3	8.1	8.1	32.3	32.3	95.9	95.9	6.5	6.5	11.5		9		-				-		-	
						8.1	0.1	188	26.3		8.1		32.3		95.9		6.5		11.5		9		-				-		-	
SR4A	Sunny	Calm	15:17	8.8	Surface	1.0	0.4	77	25.9	25.9	8.3	8.3	30.5	30.5	95.1	95.0	6.5	6.5	8.6	10.2	7	10	-	-	817180	807832	-	-	-	-
						1.0	0.4	83	25.9		8.3		30.5		94.9		6.5		8.9		8		-				-		-	
					Middle	4.4	0.3	71	25.8	25.8	8.3	8.3	30.6	30.6	93.9	93.9	6.4		10.1		10		-				-		-	
						4.4	0.3	75	25.8		8.3		30.6		93.8		6.4		10.3		10		-				-		-	
					Bottom	7.8	0.2	72	25.8	25.8	8.3	8.2	30.7	30.7	93.4	93.6	6.4	6.4	11.7		11		-				-		-	
						7.8	0.2	76	25.8		8.2		30.7		93.7		6.4		11.6		11		-				-		-	
SR5A	Sunny	Calm	15:32	4.3	Surface	1.0	0.1	2	26.1	26.1	8.3	8.3	30.7	30.7	93.0	92.9	6.3	6.3	8.9	9.6	8	9	-	-	816601	810699	-	-	-	-
						1.0	0.1	2	26.1		8.3		30.7		92.8		6.3		9.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	333	26.0	26.0	8.3	8.2	30.7	30.7	92.3	92.3	6.3	6.3	10.1		10		-				-		-	
						3.3	0.1	341	26.0		8.2		30.7		92.3		6.3		10.1		9		-				-		-	
SR6A	Sunny	Calm	16:09	4.4	Surface	1.0	0.1	16	26.4	26.4	8.3	8.3	30.7	30.7	94.3	94.3	6.4	6.4	9.6	10.2	10	11	-	-	817959	814724	-	-	-	-
						1.0	0.1	16	26.4		8.3		30.7		94.3		6.4		9.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	50	26.4	26.4	8.3	8.3	30.7	30.7	94.2	94.2	6.4	6.4	10.8		12		-				-		-	
						3.4	0.1	51	26.4		8.3		30.7		94.2		6.4		10.9		11		-				-		-	
SR7	Cloudy	Moderate	16:12	16.4	Surface	1.0	0.6	88	27.0	27.0	8.2	8.2	33.5	33.5	90.0	90.0	5.9	5.9	0.7	1.4	9	8	-	-	823612	823757	-	-	-	-
						1.0	0.7	96	27.0		8.2		33.5		90.0		5.9		0.7		9		-				-		-	
					Middle	8.2	0.3	52	27.0	27.0	8.2	8.2	33.5	33.5	88.6	88.6	5.9		1.0		8		-				-		-	
						8.2	0.3	54	27.0		8.2		33.5		88.6		5.9		1.0		8		-				-		-	
					Bottom	15.4	0.4	32	26.9	26.9	8.1	8.1	33.6	33.6	87.1	87.1	5.8	5.8	2.6		6		-				-		-	
						15.4	0.4	32	26.9		8.1		33.6		87.1		5.8		2.6		6		-				-		-	
SR8	Cloudy	Moderate	14:59	5.1	Surface	1.0	-	-	26.7	26.7	8.2	8.2	32.5	32.5	94.9	94.9	6.3	6.3	5.2	5.2	7	9	-	-	820400	811600	-	-	-	-
						1.0	-	-	26.7		8.2		32.5		94.9		6.3		5.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.6	26.6	8.1	8.1	32.5	32.5	97.5	97.5	6.5	6.5	5.2		10		-				-		-	
						4.1	-	-	26.6		8.1		32.5		97.5		6.5		5.2		9		-				-		-	

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 20 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Rough	10:08	8.2	Surface	1.0	0.5	82	25.6	25.6	8.3	8.3	31.1	31.1	91.7	91.7	6.3	6.3	10.0	10.8	7	8	87	91	815602	804270	<0.2	<0.2	1.1	1.0
						1.0	0.5	88	25.6		8.3		31.1		91.6		6.3		10.1		7		87				<0.2		1.0	
					Middle	4.1	0.5	72	25.6	25.6	8.3	8.3	31.2	31.2	91.0	91.0	6.2		10.4		8		91				<0.2		0.9	
						4.1	0.5	77	25.6		8.3		31.2		91.0		6.2		10.6		9		91				<0.2		1.0	
					Bottom	7.2	0.5	63	25.6	25.6	8.3	8.3	31.2	31.2	91.0	91.0	6.2	6.2	12.0		10		94				<0.2		1.1	
						7.2	0.5	67	25.6		8.3		31.2		91.0		6.2		12.0		8		95				<0.2		1.1	
C2	Cloudy	Moderate	11:02	13.2	Surface	1.0	0.4	21	26.6	26.6	8.1	8.1	31.2	31.2	94.7	94.8	6.4	6.4	3.2	4.7	6	8	86	89	825703	806930	<0.2	<0.2	0.8	0.9
						1.0	0.4	22	26.6		8.1		31.2		94.8		6.4		3.3		6		88				<0.2		0.9	
					Middle	6.6	0.4	1	26.6	26.6	8.1	8.1	31.4	31.4	93.9	93.9	6.3		4.9		8		89				<0.2		0.9	
						6.6	0.4	1	26.6		8.1		31.4		93.9		6.3		4.9		9		88				<0.2		0.8	
					Bottom	12.2	0.4	349	26.6	26.6	8.1	8.1	31.5	31.5	94.6	94.6	6.4	6.4	5.8		9		90				<0.2		0.9	
						12.2	0.4	321	26.6		8.1		31.5		94.6		6.4		5.8		10		91				<0.2		0.9	
C3	Cloudy	Moderate	09:05	11.3	Surface	1.0	0.5	277	26.7	26.7	8.2	8.2	32.9	32.9	90.4	90.4	6.0	6.0	3.6	14.4	13	12	86	88	822122	817815	<0.2	<0.2	0.8	0.8
						1.0	0.5	304	26.7		8.2		32.9		90.4		6.0		3.6		14		87				<0.2		0.8	
					Middle	5.7	0.4	281	26.7	26.7	8.1	8.1	32.9	32.9	89.5	89.5	6.0		19.4		11		88				<0.2		0.8	
						5.7	0.5	286	26.7		8.1		32.9		89.5		6.0		19.4		12		88				<0.2		0.8	
					Bottom	10.3	0.3	277	26.7	26.7	8.1	8.1	32.9	32.9	89.6	89.6	6.0	6.0	20.1		10		89				<0.2		0.8	
						10.3	0.4	285	26.7		8.1		32.9		89.6		6.0		20.4		9		90				<0.2		0.9	
IM1	Sunny	Moderate	10:27	5.4	Surface	1.0	0.1	113	25.7	25.7	8.3	8.3	31.0	31.0	91.6	91.6	6.3	6.3	9.5	10.7	11	10	88	89	817959	807146	<0.2	<0.2	1.1	1.1
						1.0	0.1	117	25.7		8.3		31.0		91.6		6.3		9.5		10		88				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	14	25.6	25.6	8.3	8.3	31.0	31.0	90.9	91.0	6.2	6.3	11.9		9		90				<0.2		1.1	
						4.4	0.1	14	25.6		8.3		31.0		91.1		6.3		12.0		8		90				<0.2		1.1	
IM2	Sunny	Moderate	10:34	7.2	Surface	1.0	0.2	8	25.8	25.8	8.3	8.3	30.4	30.4	92.9	92.8	6.4	6.4	11.0	12.2	16	14	86	90	818151	806156	<0.2	<0.2	1.1	1.1
						1.0	0.2	8	25.7		8.3		30.4		92.7		6.4		11.0		16		87				<0.2		1.1	
					Middle	3.6	0.2	348	25.7	25.7	8.3	8.3	30.5	30.5	91.8	91.8	6.3		12.2		15		90				<0.2		1.0	
						3.6	0.2	320	25.7		8.3		30.5		91.8		6.3		12.2		14		90				<0.2		1.0	
					Bottom	6.2	0.2	323	25.7	25.7	8.3	8.2	30.6	30.6	91.8	92.0	6.3	6.3	13.3		11		93				<0.2		1.2	
						6.2	0.2	325	25.7		8.2		30.6		92.1		6.3		13.4		12		94				<0.2		1.1	
IM3	Sunny	Moderate	10:40	7.5	Surface	1.0	0.5	5	25.7	25.7	8.3	8.3	30.3	30.3	92.7	92.6	6.4	6.4	12.4	13.0	16	14	86	90	818774	805577	<0.2	<0.2	1.1	1.0
						1.0	0.5	5	25.7		8.3		30.3		92.5		6.4		12.5		16		87				<0.2		1.1	
					Middle	3.8	0.3	2	25.6	25.6	8.3	8.3	30.5	30.5	91.6	91.6	6.3		13.0		14		90				<0.2		0.8	
						3.8	0.3	2	25.6		8.3		30.5		91.6		6.3		13.1		14		90				<0.2		0.9	
					Bottom	6.5	0.2	354	25.6	25.6	8.3	8.3	30.5	30.5	91.6	91.7	6.3	6.3	13.5		12		94				<0.2		1.0	
						6.5	0.3	326	25.6		8.3		30.5		91.7		6.3		13.7		13		93				<0.2		0.9	
IM4	Sunny	Moderate	10:52	8.6	Surface	1.0	0.5	358	25.6	25.6	8.3	8.3	30.3	30.3	91.5	91.5	6.3	6.3	10.5	11.5	9	9	83	89	819723	804597	<0.2	<0.2	0.9	1.0
						1.0	0.5	329	25.6		8.3		30.4		91.4		6.3		10.5		8		84				<0.2		0.9	
					Middle	4.3	0.5	1	25.6	25.6	8.3	8.3	30.4	30.4	91.1	91.1	6.3		11.2		8		91				<0.2		0.8	
						4.3	0.5	1	25.6		8.3		30.4		91.1		6.3		11.3		9		91				<0.2		0.8	
					Bottom	7.6	0.5	2	25.6	25.6	8.2	8.2	30.4	30.4	91.5	91.7	6.3	6.3	12.9		9		93				<0.2		1.2	
						7.6	0.5	2	25.6		8.2		30.4		91.8		6.3		12.9		10		94				<0.2		1.2	
IM5	Sunny	Rough	10:59	8.0	Surface	1.0	0.6	8	25.7	25.7	8.3	8.3	30.4	30.4	91.7	91.7	6.3	6.3	10.1	11.4	12	11	85	89	820732	804846	<0.2	<0.2	1.0	1.6
						1.0	0.6	8	25.7		8.3		30.4		91.7		6.3		10.3		11		86				<0.2		1.2	
					Middle	4.0	0.7	356	25.7	25.7	8.2	8.2	30.4	30.4	91.7	91.7	6.3		11.4		11		87				<0.2		1.8	
						4.0	0.7	328	25.7		8.2		30.4		91.7		6.3		11.5		10		90				<0.2		1.9	
					Bottom	7.0	0.5	12	25.7	25.7	8.2	8.2	30.4	30.4	92.4	92.5	6.4	6.4	12.7		10		93				<0.2		1.6	
						7.0	0.5	12	25.7		8.2		30.4		92.6		6.4		12.7		9		94				<0.2		1.8	
IM6	Sunny	Rough	11:06	7.8	Surface	1.0	0.0	72	25.9	25.9	8.3	8.3	30.0	30.1	92.4	92.4	6.3	6.3	8.3	10.3	10	11	87	90	821059	805842	<0.2	<0.2	1.5	1.7
						1.0	0.0	76	25.9		8.3		30.1		92.3		6.3		8.5		10		87				<0.2		1.6	
					Middle	3.9	0.2	103	25.8	25.8	8.3	8.3	30.5	30.5	91.6	91.6	6.3		9.9		11		90				<0.2		1.8	
						3.9	0.2	107	25.8		8.3		30.5		91.5		6.3		10.2		10		91				<0.2		1.9	
					Bottom	6.8	0.2	79	25.7	25.7	8.3	8.3	30.8	30.8	91.0	91.1	6.2	6.2	12.4		12		93				<0.2		1.8	
						6.8	0.2	81	25.7		8.3		30.8		91.1		6.2		12.5		11		94				<0.2		1.7	
IM7	Sunny	Moderate	11:14	9.0	Surface	1.0	0.1	167	25.9	25.9	8.3	8.3	29.9	29.9	91.6	91.6	6.3	6.3	10.4	11.3	10	11	84	90	821351	806814	<0.2	<0.2	1.5	1.6
						1.0	0.1	169	25.9		8.3		29.9		91.5		6.3		10.3		11		86				<0.2		1.4	
					Middle	4.5	0.2	161	25.8	25.8	8.3	8.3	30.2	30.2	91.1	91.1	6.3		10.9		11		90				<0.2		1.7	
						4.5	0.2	169	25.8		8.3		30.3		91.0		6.2		11.7		10		91				<0.2		1.6	
					Bottom	8.0	0.2	95	25.7	25.7	8.3	8.3	30.9	30.9	90.7	90.8	6.2	6.2	12.4		12		93				<0.2		1.5	
						8.0	0.2	98	25.7		8.3		30.9		90.8		6.2		12.3		11		94				<0.2		1.6	
IM8	Cloudy	Moderate	10:34	7.5	Surface	1.0	0.2	66	26.5	26.5	8.2	8.2	31.8	31.8	94.2	94.2	6.3	6.3	5.0	5.5	15	13	86	89	821823	808116	<0.2	<0.2	0.9	0.9
						1.0	0.2	72	26.5		8.2		31.8		94.2		6.3		5.0		16		86				<0.2		0.8	
					Middle	3.8	0.1	60	26.4	26.4	8.2	8.2	31.8	31.8	93.6	93.6	6.3		6.1		12		88				<0.2		0.9	
						3.8	0.1	60	26.4		8.2		31.8		93.6		6.3		6.1		13		98				<0.2		0.9	
					Bottom	6.5	0.0	111	26.4	26.4	8.2	8.2	32.1	32.1	94.3	94.3	6.3	6.3	5.5		10		90				<0.2		0.9	
						6.5	0.0	113	26.4		8.2		32.1		94.3		6.3		5.5		10		88				<0.2		0.8	

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 20 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:26	7.2	Surface	1.0	0.1	100	26.4	26.4	8.2	8.2	32.3	32.3	93.8	93.8	6.3	6.3	6.9	9.2	15	13	85	88	822103	808813	<0.2	<0.2	0.8	0.8
						1.0	0.1	101	26.4		8.2		32.3		93.7		6.3		7.0		14		87				<0.2		0.8	
					Middle	3.6	0.1	93	26.4	26.4	8.2	8.2	32.3	32.3	93.5	93.5	6.3		8.7		12		87				<0.2		0.8	
						3.6	0.1	99	26.4		8.2		32.3		93.5		6.3		8.7		13		88				<0.2		0.8	
					Bottom	6.2	0.2	85	26.3	26.3	8.1	8.1	32.3	32.3	95.3	95.3	6.4	6.4	11.9		12		90				<0.2		0.7	
						6.2	0.2	92	26.3		8.1		32.3		95.3		6.4		11.9		10		90				<0.2		0.8	
IM10	Cloudy	Moderate	10:19	7.4	Surface	1.0	0.5	315	26.3	26.3	8.2	8.2	32.3	32.3	93.3	93.3	6.3	6.3	12.3	14.7	22	19	86	88	822407	809803	<0.2	<0.2	0.8	0.8
						1.0	0.6	344	26.3		8.2		32.3		93.3		6.3		12.3		21		86				<0.2		0.8	
					Middle	3.7	0.5	315	26.3	26.3	8.2	8.2	32.3	32.3	92.3	92.3	6.2		15.1		19		88				<0.2		0.8	
						3.7	0.5	319	26.3		8.2		32.3		92.3		6.2		15.1		20		89				<0.2		0.7	
					Bottom	6.4	0.5	311	26.3	26.3	8.2	8.2	32.3	32.3	93.4	93.4	6.3	6.3	16.7		17		90				<0.2		0.9	
						6.4	0.5	333	26.3		8.2		32.3		93.4		6.3		16.7		16		91				<0.2		0.8	
IM11	Cloudy	Moderate	10:08	8.3	Surface	1.0	0.6	306	26.5	26.5	8.2	8.2	32.5	32.5	92.9	92.9	6.2	6.2	10.7	12.1	13	15	87	89	822074	811445	<0.2	<0.2	0.7	0.8
						1.0	0.6	333	26.5		8.2		32.5		92.9		6.2		10.7		12		87				<0.2		0.8	
					Middle	4.2	0.5	318	26.5	26.5	8.2	8.2	32.6	32.6	92.2	92.3	6.2		12.2		15		88				<0.2		0.8	
						4.2	0.5	347	26.5		8.2		32.6		92.4		6.2		12.2		14		88				<0.2		0.7	
					Bottom	7.3	0.4	327	26.5	26.5	8.2	8.2	32.6	32.6	92.5	92.5	6.2	6.2	13.3		17		90				<0.2		0.9	
						7.3	0.4	347	26.5		8.2		32.6		92.5		6.2		13.3		17		91				<0.2		0.7	
IM12	Cloudy	Moderate	10:01	8.1	Surface	1.0	0.5	306	26.5	26.5	8.2	8.2	32.5	32.5	93.6	93.6	6.3	6.3	12.3	14.3	12	17	86	88	821457	812030	<0.2	<0.2	0.8	0.8
						1.0	0.6	336	26.5		8.2		32.5		93.6		6.3		12.3		13		86				<0.2		0.8	
					Middle	4.1	0.5	308	26.4	26.4	8.2	8.2	32.5	32.5	93.7	93.7	6.3		15.1		18		88				<0.2		0.8	
						4.1	0.5	308	26.4		8.2		32.5		93.7		6.3		15.1		17		89				<0.2		0.7	
					Bottom	7.1	0.4	306	26.4	26.4	8.2	8.2	32.5	32.5	97.6	97.6	6.6	6.6	15.4		19		90				<0.2		0.9	
						7.1	0.4	331	26.4		8.2		32.5		97.6		6.6		15.4		20		90				<0.2		0.8	
SR1A	Cloudy	Moderate	09:41	4.8	Surface	1.0	-	-	26.4	26.4	8.1	8.1	32.6	32.6	90.1	90.1	6.0	6.0	5.5	7.2	12	12	-	-	819972	812657	-	-	-	-
						1.0	-	-	26.4		8.1		32.6		90.1		6.0		5.5		13		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.4	26.4	8.1	8.1	32.6	32.6	90.0	90.0	6.0	6.0	9.0		10		-				-		-	
						3.8	-	-	26.4		8.1		32.6		89.9		6.0		8.6		11		-				-		-	
SR2	Cloudy	Moderate	09:26	4.5	Surface	1.0	0.4	75	26.4	26.4	8.2	8.2	32.5	32.5	92.9	92.9	6.2	6.2	13.0	15.2	10	13	89	89	821473	814164	<0.2	<0.2	0.7	0.8
						1.0	0.4	76	26.4		8.2		32.5		92.9		6.2		13.0		11		88				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	71	26.4	26.4	8.1	8.1	32.5	32.5	93.5	93.6	6.3	6.3	17.3		15		90				<0.2		0.8	
						3.5	0.3	74	26.4		8.1		32.5		93.7		6.3		17.6		15		90				<0.2		0.8	
SR3	Cloudy	Moderate	10:41	9.0	Surface	1.0	0.0	338	26.6	26.6	8.1	8.1	31.5	31.5	94.1	94.1	6.3	6.3	3.9	4.6	12	9	-	-	822163	807554	-	-	-	-
						1.0	0.0	311	26.6		8.1		31.5		94.1		6.3		3.9		11		-				-		-	
					Middle	4.5	0.1	40	26.5	26.5	8.1	8.1	31.5	31.5	93.3	93.3	6.3		4.4		9		-				-		-	
						4.5	0.1	43	26.5		8.1		31.5		93.3		6.3		4.5		9		-				-		-	
					Bottom	8.0	0.1	48	26.5	26.5	8.1	8.1	31.5	31.5	93.5	93.5	6.3	6.3	5.5		8		-				-		-	
						8.0	0.1	52	26.5		8.1		31.5		93.5		6.3		5.5		7		-				-		-	
SR4A	Sunny	Calm	09:45	9.0	Surface	1.0	0.1	65	25.6	25.6	8.3	8.3	30.7	30.7	89.0	89.0	6.1	6.1	9.6	11.6	10	12	-	-	817191	807818	-	-	-	-
						1.0	0.1	66	25.6		8.3		30.7		88.9		6.1		9.7		9		-				-		-	
					Middle	4.5	0.2	67	25.6	25.6	8.3	8.3	30.7	30.7	88.4	88.4	6.1		12.3		11		-				-		-	
						4.5	0.2	67	25.6		8.3		30.7		88.4		6.1		12.4		12		-				-		-	
					Bottom	8.0	0.1	66	25.6	25.6	8.2	8.2	30.7	30.7	88.7	88.8	6.1	6.1	12.9		14		-				-		-	
						8.0	0.1	70	25.6		8.2		30.7		88.8		6.1		12.8		14		-				-		-	
SR5A	Sunny	Calm	09:28	3.1	Surface	1.0	0.1	296	25.7	25.7	8.3	8.3	30.7	30.7	88.3	88.3	6.1	6.1	12.9	12.8	9	8	-	-	816572	810710	-	-	-	-
						1.0	0.1	304	25.7		8.3		30.7		88.3		6.1		12.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	286	25.7	25.7	8.2	8.2	30.7	30.7	88.5	88.6	6.1	6.1	12.6		6		-				-		-	
						2.1	0.1	304	25.7		8.2		30.7		88.6		6.1		12.9		7		-				-		-	
SR6A	Sunny	Calm	08:57	4.1	Surface	1.0	0.1	238	25.8	25.8	8.3	8.3	30.7	30.7	89.9	89.9	6.2	6.2	6.5	6.7	8	9	-	-	817985	814735	-	-	-	-
						1.0	0.1	244	25.8		8.3		30.7		89.9		6.2		6.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	248	25.7	25.7	8.3	8.3	30.7	30.7	90.3	90.4	6.2	6.2	6.8		10		-				-		-	
						3.1	0.1	251	25.7		8.3		30.7		90.5		6.2		6.9		9		-				-		-	
SR7	Cloudy	Moderate	08:36	16.7	Surface	1.0	0.1	1	26.8	26.8	8.1	8.1	33.4	33.4	87.3	87.3	5.8	5.8	7.8	11.3	12	14	-	-	823651	823746	-	-	-	-
						1.0	0.1	1	26.8		8.1		33.4		87.3		5.8		7.8		13		-				-		-	
					Middle	8.4	0.2	28	26.8	26.8	8.1	8.1	33.4	33.4	86.2	86.2	5.7		11.4		14		-				-		-	
						8.4	0.2	28	26.8		8.1		33.4		86.2		5.7		11.4		14		-				-		-	
					Bottom	15.7	0.2	18	26.9	26.9	8.1	8.1	33.4	33.4	86.5	86.5	5.7	5.7	14.6		14		-				-		-	
						15.7	0.2	18	26.9		8.1		33.4		86.5		5.7		14.6		15		-				-		-	
SR8	Cloudy	Moderate	09:52	4.8	Surface	1.0	-	-	26.5	26.5	8.2	8.2	32.3	32.3	93.2	93.2	6.3	6.3	7.3	7.3	17	14	-	-	820401	811619	-	-	-	-
						1.0	-	-	26.5		8.2		32.3		93.2		6.3		7.3		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.4	26.4	8.1	8.1	32.4	32.4	96.3	96.4	6.5	6.5	7.3		12		-				-		-	
						3.8	-	-	26.4		8.1		32.4		96.4		6.5		7.2		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	17:09	8.3	Surface	1.0	0.1	231	25.5	25.5	8.0	8.0	31.8	31.8	97.9	97.9	6.7	6.7	5.6	7.6	10	9	87	91	815640	804268	<0.2	<0.2	0.5	0.5
						1.0	0.1	252	25.5		8.0		31.8		97.9		6.7		5.6		9		88				<0.2		0.5	
					Middle	4.2	0.1	254	25.5	25.5	8.1	8.1	32.0	32.0	97.3	97.3	6.7		6.9		9		90				<0.2		0.6	
						4.2	0.1	270	25.5		8.1		32.0		97.2		6.7		7.0		8		90				<0.2		0.5	
					Bottom	7.3	0.1	184	25.4	25.4	8.1	8.1	33.5	33.5	95.9	96.0	6.5	6.5	10.3		9		94				<0.2		0.5	
						7.3	0.1	196	25.4		8.1		33.5		96.0		6.5		10.2		8		94				<0.2		0.5	
C2	Fine	Rough	16:06	12.2	Surface	1.0	0.1	292	25.3	25.3	8.2	8.2	30.2	30.2	95.1	95.1	6.6	6.6	6.5	8.1	10	9	88	91	825689	806947	<0.2	<0.2	0.6	0.7
						1.0	0.1	316	25.3		8.2		30.2		95.1		6.6		6.5		10		90				<0.2		0.8	
					Middle	6.1	0.1	348	25.3	25.3	8.2	8.2	30.2	30.2	95.4	95.4	6.6		6.8		10		91				<0.2		0.7	
						6.1	0.1	320	25.3		8.2		30.2		95.4		6.6		7.1		9		92				<0.2		0.7	
					Bottom	11.2	0.3	23	25.0	25.0	8.3	8.3	30.4	30.4	94.7	94.7	6.6	6.6	11.0		9		93				<0.2		0.6	
						11.2	0.3	25	25.0		8.3		30.4		94.7		6.6		11.0		8		93				<0.2		0.6	
C3	Fine	Moderate	18:01	12.5	Surface	1.0	0.0	233	25.6	25.6	8.2	8.2	32.2	32.2	88.2	88.2	6.0	6.0	4.4	4.6	6	7	89	91	822118	817813	<0.2	<0.2	0.6	0.7
						1.0	0.0	243	25.6		8.2		32.2		88.2		6.0		4.4		6		89				<0.2		0.7	
					Middle	6.3	0.0	253	25.6	25.6	8.2	8.2	32.2	32.2	88.3	88.4	6.0		4.6		7		91				<0.2		0.6	
						6.3	0.0	258	25.6		8.2		32.2		88.4		6.0		4.6		6		90				<0.2		0.7	
					Bottom	11.5	0.1	299	25.6	25.6	8.2	8.2	32.2	32.2	89.7	89.8	6.1	6.1	4.7		8		94				<0.2		0.7	
						11.5	0.1	310	25.6		8.2		32.2		89.9		6.1		4.6		9		94				<0.2		0.6	
IM1	Fine	Rough	16:48	5.4	Surface	1.0	0.1	201	25.7	25.7	8.0	8.0	31.6	31.6	99.4	99.4	6.8	6.8	8.8	11.3	12	11	88	89	817925	807117	<0.2	<0.2	0.6	0.6
						1.0	0.1	201	25.7		8.0		31.6		99.4		6.8		8.9		11		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	197	25.7	25.7	7.9	7.9	31.6	31.6	98.7	98.7	6.7	6.7	13.8		9		90				<0.2		0.6	
						4.4	0.1	199	25.7		7.9		31.6		98.7		6.7		13.5		10		91				<0.2		0.6	
IM2	Fine	Rough	16:40	7.2	Surface	1.0	0.0	17	25.5	25.5	8.2	8.2	31.5	31.5	97.2	97.2	6.7	6.7	9.9	12.7	10	12	85	89	818150	806143	<0.2	<0.2	0.5	0.6
						1.0	0.0	18	25.5		8.2		31.5		97.1		6.7		9.9		11		86				<0.2		0.5	
					Middle	3.6	0.0	104	25.5	25.5	8.2	8.2	31.5	31.5	95.9	95.9	6.6		12.3		12		89				<0.2		0.6	
						3.6	0.0	114	25.5		8.2		31.5		95.8		6.6		12.5		13		88				<0.2		0.7	
					Bottom	6.2	0.1	25	25.4	25.4	8.2	8.2	31.8	31.8	94.5	94.5	6.5	6.5	15.9		12		93				<0.2		0.5	
						6.2	0.1	26	25.4		8.2		31.8		94.5		6.5		15.7		12		93				<0.2		0.5	
IM3	Fine	Rough	16:32	7.5	Surface	1.0	0.1	57	25.4	25.4	8.1	8.1	31.6	31.6	96.1	96.1	6.6	6.6	12.5	15.8	9	12	86	89	818799	805600	<0.2	<0.2	0.6	0.6
						1.0	0.1	58	25.4		8.1		31.6		96.1		6.6		12.5		10		85				<0.2		0.5	
					Middle	3.8	0.2	301	25.5	25.5	8.0	8.0	31.6	31.6	96.1	96.1	6.6		15.9		12		89				<0.2		0.6	
						3.8	0.2	312	25.5		8.0		31.6		96.0		6.6		16.0		13		89				<0.2		0.6	
					Bottom	6.5	0.2	18	25.5	25.5	8.0	8.0	32.1	32.1	95.2	95.3	6.5	6.5	19.1		15		93				<0.2		0.6	
						6.5	0.2	18	25.5		8.0		32.1		95.3		6.5		18.9		15		93				<0.2		0.7	
IM4	Fine	Rough	16:22	8.6	Surface	1.0	0.0	284	25.6	25.6	8.2	8.2	31.6	31.6	98.2	98.2	6.7	6.6	7.6	9.4	11	13	85	89	819726	804624	<0.2	<0.2	0.6	0.6
						1.0	0.0	284	25.6		8.2		31.6		98.2		6.7		7.6		11		85				<0.2		0.6	
					Middle	4.3	0.1	114	25.5	25.5	8.2	8.2	31.9	31.9	95.6	95.6	6.5		9.5		13		88				<0.2		0.6	
						4.3	0.1	115	25.5		8.2		32.0		95.5		6.5		9.6		12		89				<0.2		0.6	
					Bottom	7.6	0.1	23	25.5	25.5	8.2	8.2	32.4	32.4	94.6	94.6	6.5	6.5	11.1		14		93				<0.2		0.7	
						7.6	0.1	24	25.5		8.2		32.4		94.6		6.5		10.8		16		93				<0.2		0.6	
IM5	Fine	Rough	16:13	7.7	Surface	1.0	0.2	37	25.5	25.5	8.2	8.2	31.5	31.5	97.0	97.0	6.7	6.6	11.2	14.7	11	13	85	89	820743	804857	<0.2	<0.2	0.6	0.6
						1.0	0.2	37	25.5		8.2		31.5		97.0		6.6		11.3		10		85				<0.2		0.6	
					Middle	3.9	0.1	19	25.5	25.5	8.1	8.1	31.5	31.5	96.6	96.7	6.6		14.6		13		88				<0.2		0.6	
						3.9	0.1	19	25.5		8.1		31.5		96.7		6.6		14.8		12		88				<0.2		0.7	
					Bottom	6.7	0.3	78	25.5	25.5	8.0	8.0	31.6	31.6	96.2	96.2	6.6	6.6	17.8		16		92				<0.2		0.6	
						6.7	0.3	84	25.5		8.0		31.6		96.1		6.6		18.2		15		93				<0.2		0.6	
IM6	Fine	Rough	16:05	7.5	Surface	1.0	0.2	238	25.8	25.8	8.2	8.2	31.4	31.4	96.3	96.3	6.6	6.6	10.1	10.7	10	11	85	89	821082	805844	<0.2	<0.2	0.6	0.6
						1.0	0.2	252	25.8		8.2		31.4		96.2		6.6		10.2		11		85				<0.2		0.7	
					Middle	3.8	0.1	236	25.8	25.8	8.2	8.2	31.4	31.4	96.2	96.2	6.6		10.8		10		88				<0.2		0.7	
						3.8	0.1	255	25.8		8.2		31.4		96.2		6.6		10.8		11		89				<0.2		0.6	
					Bottom	6.5	0.1	225	25.8	25.8	8.1	8.1	31.3	31.3	96.1	96.1	6.6	6.6	11.5		12		92				<0.2		0.6	
						6.5	0.1	237	25.8		8.1		31.3		96.1		6.6		10.6		13		92				<0.2		0.6	
IM7	Fine	Rough	15:57	8.9	Surface	1.0	0.2	206	25.9	25.9	8.1	8.1	31.2	31.2	95.8	95.8	6.5	6.5	3.7	6.0	8	9	86	89	821341	806832	<0.2	<0.2	0.6	0.6
						1.0	0.2	207	25.9		8.1		31.2		95.8		6.5		3.7		7		86				<0.2		0.6	
					Middle	4.5	0.1	176	25.9	25.9	8.1	8.1	31.3	31.3	95.3	95.4	6.5		5.4		9		88				<0.2		0.5	
						4.5	0.1	189	25.9		8.1		31.3		95.4		6.5		5.5		8		89				<0.2		0.7	
					Bottom	7.9	0.1	213	25.6	25.6	8.2	8.2	31.6	31.6	95.7	95.7	6.5	6.5	8.8		10		92				<0.2		0.6	
						7.9	0.1	225	25.6		8.2		31.6		95.7		6.5		8.8		9		92				<0.2		0.7	
IM8	Fine	Moderate	16:32	8.1	Surface	1.0	0.4	67	25.0	25.0	8.2	8.2	30.3	30.3	95.7	95.7	6.7	6.7	9.5	10.0	13	13	88	91	821846	808120	<0.2	<0.2	0.7	0.7
						1.0	0.4	68	25.0		8.2		30.3		95.7		6.7		9.5		12		89				<0.2		0.7	
					Middle	4.1	0.3	63	25.0	25.0	8.2	8.2	30.4	30.4	95.4	95.4	6.6		9.9		13		90				<0.2		0.6	
						4.1	0.3	69	25.0		8.2		30.4		95.4		6.6		9.8		13		90				<0.2		0.6	
					Bottom	7.1	0.2	50	25.0	25.0	8.2	8.2	30.5	30.5	95.5	95.6	6.6	6.6	10.5		14		93				<0.2		0.7	
						7.1	0.3	52	25.0		8.2		30.5		95.6		6.6		10.5		14		93				<0.2		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 22 October 20 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 (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	16:39	7.6	Surface	1.0	0.1	56	25.5	25.5	8.2	8.2	30.2	30.2	95.6	95.6	6.6	6.6	7.5	7.4	14	13	89	91	822112	808827	<0.2	<0.2	0.7	0.7
						1.0	0.1	61	25.5		8.2		30.2		95.5		6.6		7.5		13		89				<0.2		0.7	
					Middle	3.8	0.2	45	25.4	25.4	8.2	8.2	30.2	30.2	95.4	95.5	6.6		7.3		12		91				<0.2		0.7	
						3.8	0.2	46	25.4		8.2		30.2		95.5		6.6		7.3		13		91				<0.2		0.7	
					Bottom	6.6	0.2	35	25.4	25.4	8.2	8.2	30.2	30.2	95.7	95.7	6.6	6.6	7.3		11		93				<0.2		0.7	
						6.6	0.2	38	25.4		8.2		30.2		95.7		6.6		7.3		12		93				<0.2		0.6	
IM10	Fine	Moderate	16:47	8.4	Surface	1.0	0.2	84	25.3	25.3	8.2	8.2	30.4	30.4	94.2	94.1	6.5	6.5	5.6	5.7	14	13	90	91	822371	809796	<0.2	<0.2	0.8	0.7
						1.0	0.2	88	25.3		8.2		30.5		94.0		6.5		5.6		13		88				<0.2		0.6	
					Middle	4.2	0.1	65	25.5	25.5	8.2	8.2	30.8	30.8	92.8	92.8	6.4		5.8		12		90				<0.2		0.7	
						4.2	0.1	68	25.5		8.2		30.8		92.7		6.4		5.8		13		91				<0.2		0.6	
					Bottom	7.4	0.0	63	25.6	25.6	8.2	8.2	31.0	31.0	93.4	93.5	6.4	6.4	5.7		12		93				<0.2		0.7	
						7.4	0.0	68	25.6		8.2		31.0		93.5		6.4		5.8		11		93				<0.2		0.7	
IM11	Fine	Moderate	16:58	8.3	Surface	1.0	0.0	130	25.7	25.7	8.2	8.2	31.4	31.4	90.9	90.9	6.2	6.1	5.6	6.4	12	10	89	91	822078	811444	<0.2	<0.2	0.6	0.6
						1.0	0.0	130	25.7		8.2		31.4		90.8		6.2		5.6		13		89				<0.2		0.6	
					Middle	4.2	0.1	181	25.7	25.7	8.2	8.2	31.5	31.5	88.3	88.1	6.0		6.4		11		91				<0.2		0.6	
						4.2	0.1	197	25.7		8.2		31.5		87.9		6.0		6.7		10		92				<0.2		0.6	
					Bottom	7.3	0.1	166	25.7	25.7	8.2	8.2	31.7	31.7	89.3	89.5	6.1	6.1	7.1		8		93				<0.2		0.7	
						7.3	0.2	174	25.7		8.2		31.7		89.6		6.1		7.0		7		94				<0.2		0.6	
IM12	Fine	Moderate	17:05	9.4	Surface	1.0	0.2	136	25.6	25.6	8.2	8.2	31.1	31.1	91.3	91.2	6.3	6.2	5.5	6.0	5	7	89	92	821457	812043	<0.2	<0.2	0.6	0.7
						1.0	0.2	140	25.6		8.2		31.2		91.1		6.2		5.5		6		90				<0.2		0.6	
					Middle	4.7	0.1	144	25.7	25.7	8.2	8.2	31.4	31.4	90.6	90.6	6.2		6.0		7		91				<0.2		0.7	
						4.7	0.1	152	25.7		8.2		31.4		90.6		6.2		6.0		7		92				<0.2		0.7	
					Bottom	8.4	0.1	170	25.7	25.7	8.2	8.2	31.3	31.3	91.4	91.5	6.2	6.3	6.4		8		94				<0.2		0.6	
						8.4	0.1	173	25.7		8.2		31.3		91.6		6.3		6.6		8		94				<0.2		0.7	
SR1A	Fine	Moderate	17:25	5.4	Surface	1.0	-	-	25.6	25.6	8.2	8.2	30.8	30.8	92.4	92.5	6.3	6.4	6.7	6.8	9	8	-	-	819971	812662	-	-	-	-
						1.0	-	-	25.6		8.2		30.8		92.5		6.4		6.7		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	25.6	25.6	8.2	8.2	30.8	30.8	93.2	93.3	6.4	6.4	6.9		6		-				-		-	
						4.4	-	-	25.6		8.2		30.8		93.3		6.4		6.8		7		-				-		-	
SR2	Fine	Moderate	17:38	5.1	Surface	1.0	0.1	359	25.6	25.6	8.2	8.2	31.3	31.3	92.6	92.5	6.3	6.3	4.6	5.1	8	8	90	92	821461	814171	<0.2	<0.2	0.7	0.7
						1.0	0.1	330	25.6		8.2		31.4		92.3		6.3		4.6		7		89				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	14	25.7	25.7	8.2	8.2	31.7	31.7	91.8	91.9	6.3	6.3	5.5		9		93				<0.2		0.5	
						4.1	0.1	15	25.7		8.2		31.7		92.0		6.3		5.7		8		94				<0.2		0.6	
SR3	Fine	Rough	16:27	9.1	Surface	1.0	0.3	126	25.4	25.4	8.2	8.2	30.2	30.2	95.4	95.4	6.6	6.6	5.9	9.6	8	8	-	-	822167	807569	-	-	-	-
						1.0	0.3	137	25.4		8.2		30.2		95.3		6.6		5.9		8		-				-		-	
					Middle	4.6	0.3	122	25.4	25.4	8.2	8.2	30.2	30.2	95.1	95.1	6.6		6.5		7		-				-		-	
						4.6	0.3	129	25.4		8.2		30.2		95.0		6.6		6.6		8		-				-		-	
					Bottom	8.1	0.2	80	25.1	25.1	8.2	8.2	30.3	30.3	94.6	94.6	6.6	6.6	16.5		7		-				-		-	
						8.1	0.2	87	25.1		8.2		30.3		94.6		6.6		16.3		7		-				-		-	
SR4A	Fine	Calm	17:32	9.5	Surface	1.0	0.3	63	25.6	25.6	8.1	8.1	31.5	31.5	98.7	98.7	6.8	6.8	9.6	10.9	10	9	-	-	817170	807823	-	-	-	-
						1.0	0.3	64	25.6		8.1		31.5		98.6		6.8		9.7		9		-				-		-	
					Middle	4.8	0.2	71	25.6	25.6	8.1	8.1	31.6	31.6	98.6	98.6	6.7		10.8		9		-				-		-	
						4.8	0.3	73	25.6		8.1		31.6		98.5		6.7		10.9		10		-				-		-	
					Bottom	8.5	0.2	74	25.6	25.6	8.1	8.1	31.6	31.6	98.6	98.6	6.7	6.7	12.0		9		-				-		-	
						8.5	0.2	77	25.6		8.1		31.6		98.6		6.7		12.1		9		-				-		-	
SR5A	Fine	Calm	17:49	3.9	Surface	1.0	0.1	321	25.9	25.9	8.1	8.1	31.4	31.4	95.2	95.2	6.5	6.5	7.2	7.5	10	12	-	-	816611	810681	-	-	-	-
						1.0	0.1	337	25.9		8.1		31.4		95.1		6.5		7.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	334	25.9	25.9	8.0	8.0	31.4	31.4	96.0	95.9	6.5	6.5	7.7		12		-				-		-	
						2.9	0.1	356	25.9		8.0		31.4		95.8		6.5		7.7		14		-				-		-	
SR6A	Fine	Calm	18:18	4.5	Surface	1.0	0.1	26	26.2	26.2	8.1	8.1	31.8	31.8	97.1	97.1	6.6	6.6	7.3	7.5	12	11	-	-	817952	814720	-	-	-	-
						1.0	0.1	28	26.2		8.1		31.8		97.1		6.6		7.4		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	27	26.2	26.2	8.0	8.0	31.7	31.7	97.3	97.3	6.6	6.6	7.6		9		-				-		-	
						3.5	0.0	27	26.2		8.0		31.7		97.3		6.6		7.6		10		-				-		-	
SR7	Fine	Moderate	18:39	15.9	Surface	1.0	0.1	7	25.6	25.6	8.2	8.2	32.2	32.2	88.0	88.0	6.0	6.0	4.3	4.5	4	6	-	-	823631	823759	-	-	-	-
						1.0	0.1	7	25.6		8.2		32.2		88.0		6.0		4.4		5		-				-		-	
					Middle	8.0	0.1	7	25.6	25.6	8.2	8.2	32.2	32.2	88.0	88.0	6.0		4.5		7		-				-		-	
						8.0	0.1	7	25.6		8.2		32.2		88.0		6.0		4.5		6		-				-		-	
					Bottom	14.9	0.1	284	25.6	25.6	8.2	8.2	32.2	32.2	89.5	89.6	6.1	6.1	4.5		7		-				-		-	
						14.9	0.1	292	25.6		8.2		32.2		89.7		6.1		4.5		7		-				-		-	
SR8	Fine	Moderate	17:17	5.2	Surface	1.0	-	-	25.8	25.8	8.2	8.2	30.8	30.8	94.2	94.2	6.5	6.5	6.4	6.4	8	10	-	-	820371	811642	-	-	-	-
						1.0	-	-	25.7		8.2		30.8		94.1		6.5		6.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	25.6	25.6	8.2	8.2	30.8	30.8	94.4	94.6	6.5	6.5	6.5		11		-				-		-	
						4.2	-	-	25.6		8.2		30.8		94.7		6.5		6.5		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	12:46	8.0	Surface	1.0	0.3	93	25.5	25.5	8.2	8.2	31.8	31.8	96.4	96.4	6.6	6.6	6.8	10.3	9	10	87	90	815628	804229	<0.2	<0.2	0.6	0.7
						1.0	0.3	95	25.5		8.2		31.8		96.3		6.6		6.9		9		87				<0.2		0.7	
					Middle	4.0	0.3	64	25.5	25.5	8.2	8.2	32.1	32.1	95.8	95.9	6.6		10.3		10		89				<0.2		0.8	
						4.0	0.3	68	25.5		8.2		32.1		95.9		6.6		10.6		10		89				<0.2		0.8	
					Bottom	7.0	0.2	77	25.5	25.5	8.2	8.2	32.6	32.6	94.6	94.6	6.4	6.4	13.7		12		93				<0.2		0.6	
						7.0	0.2	77	25.5		8.2		32.6		94.6		6.4		13.6		11		92				<0.2		0.7	
C2	Cloudy	Rough	13:21	11.7	Surface	1.0	0.2	348	25.3	25.3	8.2	8.2	29.9	29.9	93.6	93.6	6.5	6.4	6.1	9.1	8	9	88	90	825661	806932	<0.2	<0.2	0.6	0.7
						1.0	0.2	320	25.3		8.2		29.9		93.5		6.5		6.1		8		87				<0.2		0.6	
					Middle	5.9	0.4	344	25.4	25.4	8.2	8.2	30.2	30.2	91.3	91.3	6.3		5.8		9		90				<0.2		0.8	
						5.9	0.4	316	25.4		8.2		30.3		91.2		6.3		5.9		8		89				<0.2		0.7	
					Bottom	10.7	0.4	324	25.4	25.4	8.2	8.2	30.4	30.4	91.3	91.4	6.3	6.3	15.3		11		92				<0.2		0.6	
						10.7	0.4	338	25.4		8.2		30.4		91.4		6.3		15.2		10		92				<0.2		0.6	
C3	Cloudy	Moderate	11:25	9.8	Surface	1.0	0.4	277	25.7	25.7	8.2	8.2	31.4	31.4	89.3	89.2	6.1	6.1	4.5	7.8	6	7	85	88	822102	817799	<0.2	<0.2	0.7	0.6
						1.0	0.4	287	25.7		8.2		31.4		89.1		6.1		4.5		7		86				<0.2		0.6	
					Middle	4.9	0.4	270	25.6	25.6	8.2	8.2	31.5	31.5	87.4	87.3	6.0		7.3		7		89				<0.2		0.6	
						4.9	0.4	288	25.6		8.2		31.5		87.2		6.0		7.4		8		88				<0.2		0.6	
					Bottom	8.8	0.2	278	25.7	25.7	8.2	8.2	31.7	31.7	86.8	86.7	5.9	5.9	11.8		8		90				<0.2		0.7	
						8.8	0.3	283	25.7		8.2		31.7		86.6		5.9		11.5		8		90				<0.2		0.6	
IM1	Fine	Rough	13:06	5.3	Surface	1.0	0.1	19	25.6	25.6	8.2	8.2	31.6	31.6	96.2	96.2	6.6	6.6	11.8	13.5	10	11	88	89	817970	807128	<0.2	<0.2	0.7	0.7
						1.0	0.1	19	25.6		8.2		31.6		96.1		6.6		11.9		10		88				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	21	25.4	25.4	7.9	7.9	31.7	31.7	95.1	95.1	6.5	6.5	15.0		12		90				<0.2		0.8	
						4.3	0.2	22	25.4		7.9		31.7		95.1		6.5		15.3		11		90				<0.2		0.6	
IM2	Fine	Rough	13:19	7.1	Surface	1.0	0.2	351	25.5	25.5	8.2	8.2	31.2	31.2	97.0	96.9	6.7	6.6	7.2	12.1	8	8	86	89	818180	806185	<0.2	<0.2	0.6	0.7
						1.0	0.3	323	25.5		8.2		31.2		96.8		6.6		7.2		7		86				<0.2		0.7	
					Middle	3.6	0.1	11	25.5	25.5	8.1	8.1	31.3	31.3	95.6	95.6	6.6		11.4		8		88				<0.2		0.8	
						3.6	0.1	12	25.5		8.1		31.3		95.6		6.6		11.7		8		88				<0.2		0.6	
					Bottom	6.1	0.2	359	25.3	25.3	8.0	8.0	31.7	31.7	94.4	94.5	6.5	6.5	17.7		8		91				<0.2		0.6	
						6.1	0.2	330	25.3		8.0		31.7		94.5		6.5		17.6		9		92				<0.2		0.8	
IM3	Fine	Rough	13:25	7.3	Surface	1.0	0.2	4	25.5	25.5	8.2	8.2	31.1	31.1	97.3	97.3	6.7	6.6	7.8	11.5	9	9	86	88	818777	805615	<0.2	<0.2	0.7	0.7
						1.0	0.3	4	25.5		8.2		31.1		97.2		6.7		7.9		8		86				<0.2		0.7	
					Middle	3.7	0.3	31	25.4	25.4	8.2	8.2	31.3	31.3	95.2	95.2	6.5		9.8		9		88				<0.2		0.9	
						3.7	0.3	32	25.4		8.2		31.3		95.2		6.5		10.0		8		88				<0.2		0.7	
					Bottom	6.3	0.4	9	25.3	25.3	8.2	8.2	31.5	31.5	94.6	94.6	6.5	6.5	16.7		10		91				<0.2		0.7	
						6.3	0.4	9	25.3		8.2		31.5		94.6		6.5		16.6		10		91				<0.2		0.7	
IM4	Fine	Rough	13:35	8.4	Surface	1.0	0.2	17	25.6	25.6	8.2	8.2	31.1	31.1	96.2	96.2	6.6	6.6	10.4	15.6	11	11	86	88	819717	804620	<0.2	<0.2	0.6	0.7
						1.0	0.2	18	25.6		8.2		31.1		96.2		6.6		10.4		12		86				<0.2		0.7	
					Middle	4.2	0.3	17	25.6	25.6	8.1	8.1	31.2	31.2	95.2	95.2	6.5		15.9		10		88				<0.2		0.8	
						4.2	0.3	17	25.6		8.1		31.2		95.2		6.5		16.2		10		88				<0.2		0.7	
					Bottom	7.4	0.3	36	25.4	25.4	8.0	8.0	31.6	31.6	94.4	94.5	6.5	6.5	20.3		10		91				<0.2		0.8	
						7.4	0.3	36	25.4		8.0		31.6		94.5		6.5		20.5		10		91				<0.2		0.7	
IM5	Fine	Rough	13:43	6.6	Surface	1.0	0.5	11	25.5	25.5	8.1	8.1	31.0	31.0	96.2	96.3	6.6	6.6	11.6	13.5	14	15	86	88	820740	804850	<0.2	<0.2	0.8	0.8
						1.0	0.5	11	25.5		8.1		31.0		96.3		6.6		11.7		14		86				<0.2		0.8	
					Middle	3.3	0.4	7	25.4	25.4	8.0	8.0	31.1	31.1	95.2	95.3	6.6		13.2		16		88				<0.2		0.7	
						3.3	0.4	7	25.4		8.0		31.1		95.3		6.6		13.2		15		88				<0.2		0.8	
					Bottom	5.6	0.5	17	25.4	25.4	8.0	8.0	31.1	31.1	94.9	95.0	6.5	6.5	15.7		17		91				<0.2		1.0	
						5.6	0.5	18	25.4		8.0		31.1		95.0		6.5		15.6		16		91				<0.2		0.8	
IM6	Fine	Rough	13:50	7.4	Surface	1.0	0.2	238	25.8	25.8	8.1	8.1	31.4	31.4	95.5	95.5	6.5	6.5	5.3	6.8	12	11	86	88	821060	805820	<0.2	<0.2	0.6	0.7
						1.0	0.2	257	25.8		8.1		31.4		95.5		6.5		5.3		11		85				<0.2		0.6	
					Middle	3.7	0.1	269	25.8	25.8	8.0	8.0	31.4	31.4	95.3	95.4	6.5		6.3		11		88				<0.2		0.7	
						3.7	0.1	294	25.8		8.0		31.4		95.4		6.5		6.2		12		88				<0.2		0.8	
					Bottom	6.4	0.0	191	25.6	25.6	8.0	8.0	31.5	31.5	95.3	95.4	6.5	6.5	8.8		10		91				<0.2		0.8	
						6.4	0.0	203	25.6		8.0		31.5		95.4		6.5		8.9		11		91				<0.2		0.8	
IM7	Fine	Rough	13:59	8.7	Surface	1.0	0.1	235	25.9	25.9	8.2	8.2	31.2	31.2	94.6	94.6	6.5	6.4	4.5	6.6	8	8	86	89	821352	806823	<0.2	<0.2	0.6	0.7
						1.0	0.1	241	25.9		8.2		31.2		94.5		6.4		4.5		8		85				<0.2		0.7	
					Middle	4.4	0.0	108	25.8	25.8	8.1	8.1	31.3	31.3	94.0	94.0	6.4		6.8		8		88				<0.2		0.7	
						4.4	0.0	113	25.8		8.1		31.3		93.9		6.4		6.8		7		89				<0.2		0.7	
					Bottom	7.7	0.1	161	25.6	25.6	8.1	8.1	31.6	31.6	94.2	94.2	6.4	6.4	8.5		8		91				<0.2		0.8	
						7.7	0.1	168	25.6		8.1		31.6		94.1		6.4		8.5		7		92				<0.2		0.7	
IM8	Cloudy	Moderate	12:52	7.6	Surface	1.0	0.2	95	25.4	25.4	8.2	8.2	30.3	30.3	92.9	92.9	6.4	6.4	12.1	12.3	10	12	87	90	821852	808155	<0.2	<0.2	0.6	0.7
						1.0	0.2	99	25.4		8.2		30.3		92.8		6.4		12.3		12		88				<0.2		0.7	
					Middle	3.8	0.2	69	25.4	25.4	8.2	8.2	30.3	30.3	92.7	92.7	6.4		13.9		11		91				<0.2		1.0	
						3.8	0.2	75	25.4		8.2		30.3		92.7		6.4		13.4		12		91				<0.2		0.7	
					Bottom	6.6	0.1	54	25.4	25.4	8.2	8.2	30.4	30.4	92.9	93.0	6.4	6.4	10.9		14		92				<0.2		0.6	
						6.6	0.2	57	25.4		8.2		30.4		93.0		6.4		10.9		13		93				<0.2		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 22 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:45	7.0	Surface	1.0	0.1	47	25.1	25.1	8.2	8.2	30.1	30.1	93.6	93.6	6.5	6.5	8.4	9.2	9	7	87	89	822078	808820	<0.2	<0.2	0.7	0.7
						1.0	0.1	47	25.1		8.2		30.1		93.6		6.5		8.4		8		87				<0.2		0.7	
					Middle	3.5	0.1	30	25.1	25.1	8.2	8.2	30.1	30.1	93.4	93.4	6.5		9.0		7		89				<0.2		0.7	
						3.5	0.1	32	25.1		8.2		30.1		93.4		6.5		8.9		6		90				<0.2		0.7	
					Bottom	6.0	0.1	358	25.1	25.1	8.2	8.2	30.1	30.1	94.6	94.9	6.6	6.6	10.1		6		91				<0.2		0.6	
						6.0	0.1	329	25.0		8.2		30.2		95.1		6.6		10.2		5		92				<0.2		0.7	
IM10	Cloudy	Moderate	12:37	7.3	Surface	1.0	0.4	297	25.4	25.4	8.2	8.2	30.4	30.4	93.6	93.5	6.5	6.4	6.1	9.3	6	8	87	90	822379	809770	<0.2	<0.2	0.8	0.7
						1.0	0.5	323	25.4		8.2		30.4		93.3		6.4		6.6		7		88				<0.2		0.6	
					Middle	3.7	0.4	298	25.4	25.4	8.2	8.2	30.7	30.7	91.8	91.9	6.3		10.1		8		90				<0.2		0.7	
						3.7	0.5	309	25.4		8.2		30.7		91.9		6.3		10.0		7		89				<0.2		0.7	
					Bottom	6.3	0.4	297	25.4	25.4	8.2	8.2	30.7	30.7	93.7	93.8	6.5	6.5	11.5		9		92				<0.2		0.7	
						6.3	0.4	320	25.3		8.2		30.8		93.9		6.5		11.4		9		93				<0.2		0.7	
IM11	Cloudy	Moderate	12:26	7.6	Surface	1.0	0.4	290	25.5	25.5	8.2	8.2	31.0	31.0	91.1	91.1	6.3	6.3	8.0	11.2	6	6	86	89	822063	811465	<0.2	<0.2	0.8	0.7
						1.0	0.5	296	25.5		8.2		31.0		91.0		6.3		8.1		5		87				<0.2		0.7	
					Middle	3.8	0.5	292	25.5	25.5	8.2	8.2	31.0	31.0	90.8	90.8	6.2		12.1		6		89				<0.2		0.7	
						3.8	0.5	298	25.5		8.2		31.0		90.8		6.3		12.5		6		89				<0.2		0.7	
					Bottom	6.6	0.4	301	25.5	25.5	8.2	8.2	31.0	31.0	91.4	91.5	6.3	6.3	13.7		7		92				<0.2		0.8	
						6.6	0.4	317	25.5		8.2		31.0		91.5		6.3		13.0		8		91				<0.2		0.6	
IM12	Cloudy	Moderate	12:19	8.5	Surface	1.0	0.6	281	25.6	25.6	8.2	8.2	31.0	31.0	91.7	91.6	6.3	6.3	6.6	9.6	6	8	85	88	821455	812043	<0.2	<0.2	0.7	0.7
						1.0	0.6	303	25.6		8.2		31.0		91.4		6.3		7.2		7		86				<0.2		0.8	
					Middle	4.3	0.6	283	25.5	25.5	8.2	8.2	31.1	31.1	90.2	90.2	6.2		9.5		8		87				<0.2		0.7	
						4.3	0.6	307	25.5		8.2		31.1		90.2		6.2		9.1		8		89				<0.2		0.7	
					Bottom	7.5	0.5	281	25.5	25.5	8.2	8.2	31.1	31.1	90.7	90.9	6.2	6.3	12.6		9		90				<0.2		0.6	
						7.5	0.5	300	25.5		8.2		31.1		91.0		6.3		12.6		10		90				<0.2		0.7	
SR1A	Cloudy	Moderate	11:58	5.1	Surface	1.0	-	-	25.5	25.5	8.2	8.2	30.8	30.8	88.1	88.1	6.1	6.1	7.0	7.9	7	8	-	-	819971	812665	-	-	-	-
						1.0	-	-	25.5		8.2		30.8		88.0		6.1		7.3		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	25.5	25.5	8.2	8.2	30.8	30.8	89.3	89.5	6.2	6.2	8.7		9		-				-		-	
						4.1	-	-	25.5		8.2		30.8		89.7		6.2		8.6		10		-				-		-	
SR2	Cloudy	Moderate	11:45	4.3	Surface	1.0	0.2	63	25.4	25.4	8.2	8.2	30.8	30.8	91.5	91.5	6.3	6.3	6.7	7.4	8	8	88	89	821464	814188	<0.2	<0.2	0.8	0.7
						1.0	0.2	63	25.4		8.2		30.8		91.4		6.3		6.7		9		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	47	25.4	25.4	8.2	8.2	30.9	30.9	91.5	91.6	6.3	6.3	7.9		8		90				<0.2		0.6	
						3.3	0.2	49	25.4		8.2		30.9		91.6		6.3		8.1		8		90				<0.2		0.7	
SR3	Cloudy	Moderate	12:59	8.7	Surface	1.0	0.2	137	25.5	25.5	8.2	8.2	30.2	30.2	94.1	94.1	6.5	6.5	5.1	6.8	17	15	-	-	822145	807566	-	-	-	-
						1.0	0.2	139	25.5		8.2		30.2		94.0		6.5		5.2		16		-				-		-	
					Middle	4.4	0.1	81	25.4	25.4	8.2	8.2	30.4	30.4	93.5	93.5	6.5		5.8		15		-				-		-	
						4.4	0.1	82	25.4		8.2		30.4		93.5		6.5		6.5		15		-				-		-	
					Bottom	7.7	0.1	334	25.3	25.3	8.2	8.2	30.5	30.5	94.4	94.5	6.5	6.5	8.9		13		-				-		-	
						7.7	0.1	307	25.3		8.2		30.6		94.6		6.5		9.4		12		-				-		-	
SR4A	Fine	Calm	12:22	8.8	Surface	1.0	0.1	50	25.8	25.8	8.2	8.2	31.3	31.3	93.9	93.9	6.4	6.4	7.5	9.4	9	10	-	-	817203	807803	-	-	-	-
						1.0	0.1	53	25.8		8.2		31.3		93.9		6.4		7.6		9		-				-		-	
					Middle	4.4	0.2	73	25.4	25.4	8.2	8.2	31.6	31.6	93.6	93.6	6.4		9.3		10		-				-		-	
						4.4	0.2	78	25.4		8.2		31.6		93.6		6.4		9.4		9		-				-		-	
					Bottom	7.8	0.3	72	25.4	25.4	8.2	8.2	31.7	31.7	93.3	93.3	6.4	6.4	11.4		10		-				-		-	
						7.8	0.3	72	25.4		8.2		31.7		93.3		6.4		11.2		10		-				-		-	
SR5A	Fine	Calm	12:03	3.2	Surface	1.0	0.0	302	25.9	25.8	8.1	8.1	31.5	31.5	93.8	93.8	6.4	6.4	5.6	6.9	10	9	-	-	816587	810699	-	-	-	-
						1.0	0.0	309	25.8		8.1		31.5		93.8		6.4		5.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.0	312	25.8	25.8	8.0	8.0	31.5	31.5	91.9	91.9	6.3	6.3	8.2		9		-				-		-	
						2.2	0.0	341	25.8		8.0		31.5		91.9		6.3		8.1		8		-				-		-	
SR6A	Fine	Calm	11:27	4.3	Surface	1.0	0.0	211	26.1	26.1	8.2	8.2	31.8	31.8	95.9	96.0	6.5	6.5	5.8	6.6	8	10	-	-	817964	814722	-	-	-	-
						1.0	0.0	228	26.1		8.2		31.8		96.0		6.5		5.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	219	26.1	26.1	8.1	8.1	31.8	31.8	97.1	97.2	6.6	6.6	7.3		12		-				-		-	
						3.3	0.0	232	26.1		8.1		31.8		97.2		6.6		7.3		10		-				-		-	
SR7	Cloudy	Moderate	10:52	15.8	Surface	1.0	0.1	11	25.7	25.7	8.2	8.2	32.0	32.0	86.4	86.4	5.9	5.9	4.7	5.5	4	6	-	-	823651	823737	-	-	-	-
						1.0	0.1	11	25.7		8.2		32.0		86.3		5.9		4.8		5		-				-		-	
					Middle	7.9	0.2	20	25.7	25.7	8.2	8.2	32.0	32.0	86.1	86.1	5.9		5.8		7		-				-		-	
						7.9	0.2	21	25.7		8.2		32.0		86.1		5.9		5.7		6		-				-		-	
					Bottom	14.8	0.2	17	25.7	25.7	8.2	8.2	32.0	32.0	86.4	86.5	5.9	5.9	6.0		8		-				-		-	
						14.8	0.2	18	25.7		8.2		32.0		86.5		5.9		5.7		8		-				-		-	
SR8	Cloudy	Moderate	12:08	4.9	Surface	1.0	-	-	25.8	25.7	8.2	8.2	29.8	29.8	94.9	94.8	6.5	6.5	7.9	10.0	10	12	-	-	820372	811637	-	-	-	-
						1.0	-	-	25.6		8.2		29.9		94.7		6.5		8.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	25.2	25.2	8.2	8.2	30.5	30.6	93.8	94.0	6.5	6.5	12.0		13		-				-		-	
						3.9	-	-	25.1		8.2		30.6		94.1		6.5		11.8		13		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	18:56	8.5	Surface	1.0	0.2	247	24.4	24.4	8.2	8.2	32.6	32.6	92.7	92.7	6.4	6.4	13.4	12.8	9	12	86	88	815619	804254	<0.2	<0.2	0.7	0.8
						1.0	0.3	248	24.4		8.2		32.6		92.6		6.4		13.5		10		87				<0.2		0.7	
					Middle	4.3	0.2	246	24.4	24.4	8.2	8.2	32.6	32.6	92.6	92.6	6.4		11.9		11		88				<0.2		0.8	
						4.3	0.2	266	24.4		8.2		32.6		92.6		6.4		11.3		12		88				<0.2		0.9	
					Bottom	7.5	0.1	215	24.4	24.4	8.2	8.2	32.6	32.6	92.7	92.7	6.4	6.4	13.2		13		90				<0.2		0.8	
						7.5	0.1	228	24.4		8.2		32.6		92.7		6.4		13.4		14		89				<0.2		0.7	
C2	Fine	Moderate	17:47	12.5	Surface	1.0	0.2	202	24.7	24.7	8.2	8.2	32.1	32.1	95.2	95.2	6.6	6.5	4.6	6.8	6	5	86	89	825698	806957	<0.2	<0.2	1.1	1.1
						1.0	0.2	221	24.7		8.2		32.1		95.1		6.6		4.6		5		86				<0.2		1.2	
					Middle	6.3	0.2	329	25.1	25.1	8.2	8.2	32.7	32.7	93.3	93.3	6.4		6.3		5		89				<0.2		1.1	
						6.3	0.2	332	25.1		8.2		32.7		93.3		6.4		6.2		5		89				<0.2		1.0	
					Bottom	11.5	0.3	329	24.9	24.9	8.1	8.1	32.9	32.9	95.4	95.5	6.6	6.6	9.6		4		92				<0.2		0.9	
						11.5	0.3	338	24.9		8.1		32.9		95.5		6.6		9.7		5		91				<0.2		1.0	
C3	Fine	Moderate	19:44	12.9	Surface	1.0	0.1	94	25.5	25.5	8.1	8.1	33.7	33.7	89.8	89.8	6.1	6.1	2.4	2.8	7	9	87	90	822117	817826	<0.2	<0.2	0.7	0.7
						1.0	0.1	100	25.5		8.1		33.7		89.8		6.1		2.5		7		86				<0.2		0.8	
					Middle	6.5	0.1	73	25.5	25.5	8.1	8.1	33.7	33.7	89.9	89.9	6.1		2.9		7		90				<0.2		0.7	
						6.5	0.1	77	25.5		8.1		33.7		89.8		6.1		3.0		8		90				<0.2		0.7	
					Bottom	11.9	0.1	62	25.5	25.5	8.1	8.1	33.7	33.7	90.3	90.3	6.1	6.1	3.0		11		92				<0.2		0.7	
						11.9	0.2	64	25.5		8.1		33.7		90.3		6.1		3.0		12		92				<0.2		0.7	
IM1	Cloudy	Moderate	18:35	5.8	Surface	1.0	0.2	220	23.7	23.7	8.3	8.3	32.2	32.2	96.3	96.3	6.8	6.8	6.2	7.0	10	9	86	88	817943	807109	<0.2	<0.2	0.8	0.7
						1.0	0.2	241	23.7		8.3		32.2		96.3		6.8		6.2		10		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.2	195	23.8	23.8	8.3	8.3	32.3	32.3	96.1	96.1	6.8	6.8	7.7		8		89				<0.2		0.5	
						4.8	0.2	210	23.8		8.3		32.3		96.1		6.8		7.9		8		89				<0.2		0.5	
IM2	Cloudy	Moderate	18:27	7.6	Surface	1.0	0.2	164	24.0	24.0	8.3	8.3	32.5	32.5	94.5	94.5	6.6	6.6	8.8	9.5	9	12	85	87	818172	806170	<0.2	<0.2	0.7	0.6
						1.0	0.3	165	24.0		8.3		32.5		94.5		6.6		8.8		10		86				<0.2		0.7	
					Middle	3.8	0.2	176	24.0	24.0	8.3	8.3	32.5	32.5	94.4	94.4	6.6		9.3		12		88				<0.2		0.8	
						3.8	0.2	180	24.0		8.3		32.5		94.4		6.6		9.4		13		87				<0.2		0.6	
					Bottom	6.6	0.1	179	24.1	24.1	8.3	8.3	32.5	32.5	94.6	94.7	6.6	6.6	10.5		14		89				<0.2		0.5	
						6.6	0.1	179	24.0		8.3		32.5		94.7		6.6		10.3		13		89				<0.2		0.4	
IM3	Cloudy	Moderate	18:20	7.6	Surface	1.0	0.2	158	24.0	24.0	8.2	8.2	32.5	32.5	94.9	94.9	6.6	6.6	8.9	9.8	13	14	87	88	818787	805599	<0.2	<0.2	0.5	0.5
						1.0	0.2	167	24.0		8.2		32.5		94.9		6.6		9.0		12		85				<0.2		0.5	
					Middle	3.8	0.1	146	24.0	24.0	8.2	8.2	32.5	32.5	94.8	94.8	6.6		9.6		14		88				<0.2		0.5	
						3.8	0.1	149	24.0		8.2		32.5		94.8		6.6		9.7		14		87				<0.2		0.4	
					Bottom	6.6	0.1	121	24.0	24.0	8.2	8.2	32.5	32.5	94.7	94.7	6.6	6.6	10.9		14		89				<0.2		0.5	
						6.6	0.1	124	24.0		8.2		32.5		94.6		6.6		10.9		16		89				<0.2		0.6	
IM4	Cloudy	Moderate	18:09	8.5	Surface	1.0	0.2	173	24.0	24.0	8.2	8.2	32.5	32.5	94.4	94.4	6.6	6.6	10.8	12.2	17	15	85	87	819747	804625	<0.2	<0.2	0.6	0.6
						1.0	0.2	175	24.0		8.2		32.5		94.4		6.6		10.7		16		85				<0.2		0.6	
					Middle	4.3	0.1	166	24.0	24.0	8.2	8.2	32.5	32.5	94.4	94.4	6.6		12.0		15		87				<0.2		0.7	
						4.3	0.1	175	24.0		8.2		32.5		94.4		6.6		12.1		14		88				<0.2		0.6	
					Bottom	7.5	0.1	155	24.0	24.0	8.2	8.2	32.5	32.5	94.1	94.1	6.6	6.6	13.8		13		89				<0.2		0.6	
						7.5	0.1	155	24.0		8.2		32.5		94.1		6.6		13.9		14		89				<0.2		0.6	
IM5	Cloudy	Moderate	18:00	8.2	Surface	1.0	0.3	338	23.9	23.9	8.2	8.2	32.4	32.4	95.4	95.4	6.7	6.7	9.0	9.6	10	12	85	87	820728	804879	<0.2	<0.2	0.6	0.5
						1.0	0.4	352	23.9		8.2		32.4		95.4		6.7		9.1		10		85				<0.2		0.5	
					Middle	4.1	0.6	350	23.9	23.9	8.2	8.2	32.4	32.4	95.3	95.3	6.7		9.6		11		87				<0.2		0.5	
						4.1	0.6	322	23.9		8.2		32.4		95.3		6.7		9.7		12		87				<0.2		0.5	
					Bottom	7.2	0.4	359	23.9	23.9	8.2	8.2	32.4	32.4	95.0	95.0	6.7	6.7	10.0		14		90				<0.2		0.5	
						7.2	0.4	330	23.9		8.2		32.4		95.0		6.7		10.1		13		89				<0.2		0.5	
IM6	Cloudy	Moderate	17:54	7.9	Surface	1.0	0.4	202	24.1	24.1	8.2	8.2	31.7	31.7	96.3	96.3	6.8	6.8	8.1	9.2	13	11	85	87	821073	805842	<0.2	<0.2	1.0	1.0
						1.0	0.4	208	24.1		8.2		31.8		96.3		6.8		8.2		12		85				<0.2		1.1	
					Middle	4.0	0.3	208	24.1	24.1	8.2	8.2	31.9	31.9	96.2	96.2	6.7		8.8		11		87				<0.2		1.2	
						4.0	0.3	214	24.1		8.2		31.9		96.2		6.7		8.8		12		86				<0.2		1.0	
					Bottom	6.9	0.3	209	24.0	24.0	8.2	8.2	32.1	32.1	95.3	95.2	6.7	6.7	11.0		8		89				<0.2		0.7	
						6.9	0.3	225	24.0		8.2		32.1		95.0		6.7		10.2		9		89				<0.2		0.9	
IM7	Cloudy	Moderate	17:46	8.4	Surface	1.0	0.2	67	24.3	24.3	8.2	8.2	31.4	31.4	95.7	95.7	6.7	6.7	4.8	7.4	8	8	86	88	821365	806821	<0.2	<0.2	0.7	0.8
						1.0	0.2	68	24.3		8.2		31.4		95.7		6.7		4.8		9		87				<0.2		0.8	
					Middle	4.2	0.2	81	24.2	24.2	8.2	8.2	31.6	31.6	95.5	95.5	6.7		6.7		9		87				<0.2		0.8	
						4.2	0.3	86	24.1		8.2		31.6		95.4		6.7		7.1		8		88				<0.2		0.9	
					Bottom	7.4	0.1	74	24.0	24.0	8.2	8.2	32.0	32.0	95.0	95.0	6.7	6.7	10.4		6		89				<0.2		0.7	
						7.4	0.1	76	24.0		8.2		32.0		94.9		6.7		10.4		5		90				<0.2		0.7	
IM8	Fine	Moderate	18:15	8.4	Surface	1.0	0.2	79	24.7	24.7	8.1	8.1	32.7	32.7	96.5	96.5	6.7	6.7	5.0	5.1	6	7	85	88	821843	808120	<0.2	<0.2	0.8	0.8
						1.0	0.2	80	24.7		8.1		32.7		96.5		6.7		5.1		6		85				<0.2		0.8	
					Middle	4.2	0.2	68	24.7	24.7	8.1	8.1	32.7	32.7	96.7	96.7	6.7	6.7	5.2		7		88				<0.2		0.7	
						4.2	0.2	72	24.7		8.1		32.7		96.7		6.7		5.3		6		88				<0.2		0.7	
					Bottom	7.4	0.2	81	24.7	24.7	8.1	8.1	32.7	32.7	96.6	96.6	6.7	6.7	5.1		7		90				<0.2		0.7	
						7.4	0.2	85	24.7		8.1		32.7		96.6		6.7		5.1		8		90				<0.2		0.8	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The ebb tide monitoring session on 24 October 2020 was cancelled due to Strong Wind Signal No. 3.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	18:22	7.9	Surface	1.0	0.2	51	24.6	24.6	8.1	8.1	32.7	32.7	96.4	96.4	6.7	6.7	5.0	6.9	6	5	84	87	822083	808820	<0.2	<0.2	0.7	0.7
						1.0	0.2	51	24.6		8.1		32.7		96.4		6.7		5.0		5		84				<0.2		0.9	
					Middle	4.0	0.2	34	24.6	24.6	8.1	8.1	32.7	32.7	96.7	96.7	6.7		6.7		5		88				<0.2		0.6	
						4.0	0.2	37	24.6		8.1		32.7		96.6		6.7		6.8		4		88				<0.2		0.6	
					Bottom	6.9	0.2	38	24.6	24.6	8.1	8.1	32.7	32.7	96.9	96.9	6.7	6.7	9.0		5		90				<0.2		0.8	
						6.9	0.2	38	24.6		8.1		32.7		96.8		6.7		8.9		4		90				<0.2		0.7	
IM10	Fine	Moderate	18:30	8.6	Surface	1.0	0.1	328	25.1	25.1	8.1	8.1	33.1	33.1	92.1	92.2	6.3	6.3	4.3	5.3	5	4	85	88	822389	809804	<0.2	<0.2	0.6	0.6
						1.0	0.1	352	25.1		8.1		33.1		92.3		6.3		4.3		5		85				<0.2		0.7	
					Middle	4.3	0.2	314	25.1	25.1	8.1	8.1	33.1	33.1	92.3	92.4	6.3		5.6		5		88				<0.2		0.6	
						4.3	0.2	325	25.1		8.1		33.1		92.4		6.3		5.5		4		88				<0.2		0.6	
					Bottom	7.6	0.2	322	25.1	25.1	8.1	8.1	33.1	33.1	92.7	92.8	6.3	6.3	6.0		4		90				<0.2		0.5	
						7.6	0.2	350	25.1		8.1		33.1		92.8		6.3		6.0		3		90				<0.2		0.5	
IM11	Fine	Moderate	18:42	8.1	Surface	1.0	0.1	215	25.3	25.3	8.1	8.1	33.3	33.3	92.3	92.3	6.3	6.3	2.8	3.0	4	4	85	88	822065	811473	<0.2	<0.2	0.5	0.6
						1.0	0.1	234	25.3		8.1		33.3		92.3		6.3		2.8		3		85				<0.2		0.7	
					Middle	4.1	0.1	224	25.3	25.3	8.1	8.1	33.3	33.3	92.4	92.5	6.3		3.4		4		89				<0.2		0.6	
						4.1	0.1	228	25.3		8.1		33.3		92.5		6.3		3.5		3		89				<0.2		0.6	
					Bottom	7.1	0.1	280	25.3	25.3	8.1	8.1	33.3	33.3	93.4	93.4	6.4	6.4	2.7		4		91				<0.2		0.5	
						7.1	0.1	297	25.3		8.2		33.3		93.4		6.4		2.7		5		91				<0.2		0.5	
IM12	Fine	Moderate	18:49	10.3	Surface	1.0	0.2	79	25.2	25.2	8.1	8.1	33.2	33.2	92.1	92.1	6.3	6.3	4.0	4.4	3	5	86	88	821440	812035	<0.2	<0.2	0.7	0.6
						1.0	0.2	79	25.2		8.1		33.2		92.0		6.3		4.0		4		85				<0.2		0.6	
					Middle	5.2	0.2	68	25.3	25.3	8.1	8.1	33.3	33.3	91.5	91.5	6.2		4.5		5		89				<0.2		0.5	
						5.2	0.2	69	25.3		8.1		33.3		91.5		6.2		4.6		4		89				<0.2		0.6	
					Bottom	9.3	0.2	81	25.3	25.3	8.1	8.1	33.4	33.4	91.8	91.9	6.3	6.3	4.7		6		90				<0.2		0.6	
						9.3	0.2	88	25.3		8.1		33.4		91.9		6.3		4.6		7		91				<0.2		0.6	
SR1A	Fine	Calm	19:05	5.4	Surface	1.0	-	-	24.8	24.8	8.1	8.1	32.3	32.3	92.3	92.3	6.4	6.4	4.2	4.1	10	9	-	-	819979	812655	-	-	-	-
						1.0	-	-	24.8		8.1		32.3		92.3		6.4		4.2		10		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	24.8	24.8	8.1	8.1	32.4	32.4	92.5	92.5	6.4	6.4	4.0		8		-				-		-	
						4.4	-	-	24.8		8.1		32.4		92.5		6.4		4.0		8		-				-		-	
SR2	Fine	Moderate	19:21	5.1	Surface	1.0	0.1	87	25.2	25.2	8.1	8.1	33.4	33.4	91.4	91.5	6.2	6.2	3.3	4.1	4	6	87	88	821470	814142	<0.2	<0.2	0.7	0.7
						1.0	0.1	88	25.2		8.1		33.4		91.5		6.2		3.3		5		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	85	25.4	25.4	8.1	8.1	33.4	33.4	92.0	92.1	6.3	6.3	4.9		8		89				<0.2		0.7	
						4.1	0.1	91	25.4		8.1		33.4		92.1		6.3		5.0		7		89				<0.2		0.7	
SR3	Fine	Moderate	18:08	9.4	Surface	1.0	0.1	94	24.8	24.8	8.1	8.1	32.5	32.5	96.0	96.0	6.6	6.6	2.4	5.2	7	5	-	-	822129	807562	-	-	-	-
						1.0	0.1	98	24.8		8.1		32.5		96.0		6.6		2.4		6		-				-		-	
					Middle	4.7	0.1	73	24.7	24.7	8.2	8.2	32.8	32.8	95.9	96.0	6.6		5.0		5		-				-		-	
						4.7	0.1	75	24.7		8.2		32.8		96.0		6.6		5.1		6		-				-		-	
					Bottom	8.4	0.1	62	24.4	24.4	8.1	8.1	33.1	33.1	95.6	95.7	6.6	6.6	8.1		4		-				-		-	
						8.4	0.2	62	24.4		8.1		33.1		95.7		6.6		8.3		2		-				-		-	
SR4A	Cloudy	Moderate	19:17	8.8	Surface	1.0	0.2	236	23.8	23.8	8.2	8.2	32.3	32.3	96.4	96.4	6.8	6.8	6.7	6.5	11	10	-	-	817170	807789	-	-	-	-
						1.0	0.2	256	23.8		8.2		32.3		96.3		6.8		6.7		10		-				-		-	
					Middle	4.4	0.2	249	23.8	23.8	8.2	8.2	32.3	32.3	95.9	95.9	6.7		6.2		10		-				-		-	
						4.4	0.2	254	23.8		8.2		32.3		95.9		6.7		6.3		10		-				-		-	
					Bottom	7.8	0.1	277	23.8	23.8	8.2	8.2	32.3	32.3	95.8	95.8	6.7	6.7	6.4		9		-				-		-	
						7.8	0.1	300	23.8		8.2		32.4		95.8		6.7		6.5		9		-				-		-	
SR5A	Cloudy	Moderate	19:33	4.4	Surface	1.0	0.1	173	23.9	23.9	8.2	8.2	31.0	31.0	94.7	94.7	6.7	6.7	6.2	6.9	8	8	-	-	816612	810673	-	-	-	-
						1.0	0.1	175	23.9		8.2		31.0		94.6		6.7		6.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	196	23.9	23.9	8.2	8.2	31.3	31.3	94.0	94.1	6.6	6.6	7.4		8		-				-		-	
						3.4	0.1	211	23.9		8.2		31.3		94.1		6.6		7.5		9		-				-		-	
SR6A	Cloudy	Moderate	20:08	4.3	Surface	1.0	0.1	190	24.3	24.3	8.2	8.2	31.3	31.3	93.0	93.0	6.5	6.5	12.0	14.4	6	8	-	-	817952	814721	-	-	-	-
						1.0	0.1	207	24.3		8.2		31.3		93.0		6.5		12.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	232	24.5	24.5	8.2	8.2	31.6	31.6	92.6	92.6	6.4	6.5	16.5		10		-				-		-	
						3.3	0.1	245	24.5		8.2		31.6		92.6		6.5		16.8		10		-				-		-	
SR7	Fine	Moderate	20:19	15.8	Surface	1.0	0.1	107	25.5	25.5	8.2	8.2	33.7	33.7	90.2	90.2	5.3	5.0	3.3	2.9	7	5	-	-	823622	823722	-	-	-	-
						1.0	0.1	107	25.5		8.2		33.7		90.2		5.3		3.3		6		-				-		-	
					Middle	7.9	0.1	235	25.5	25.5	8.2	8.2	33.8	33.8	90.8	90.8	4.6		2.7		5		-				-		-	
						7.9	0.1	255	25.5		8.2		33.8		90.8		4.6		2.6		5		-				-		-	
					Bottom	14.8	0.1	124	25.5	25.5	8.2	8.2	33.8	33.8	90.9	90.9	4.3	4.3	2.8		4		-				-		-	
						14.8	0.1	135	25.5		8.2		33.8		90.9		4.4		2.8		3		-				-		-	
SR8	Fine	Moderate	19:03	5.7	Surface	1.0	-	-	24.8	24.8	8.1	8.1	32.3	32.3	92.3	92.3	6.4	6.4	4.2	4.5	5	4	-	-	819759	812543	-	-	-	-
						1.0	-	-	24.8		8.1		32.3		92.3		6.4		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	-	-	24.9	24.9	8.1	8.1	32.4	32.4	93.1	93.2	6.4	6.4	4.8		4		-				-		-	
						4.7	-	-	24.9		8.1		32.4		93.2		6.4		4.7		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The ebb tide monitoring session on 24 October 2020 was cancelled due to Strong Wind Signal No. 3.
Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:16	8.4	Surface	1.0	0.1	235	24.3	24.3	8.2	8.2	31.5	31.5	91.4	91.4	6.4	6.4	4.2	7.7	5	4	86	89	815596	804234	<0.2	<0.2	0.9	0.9
						1.0	0.1	248	24.3		8.2		31.5		91.3		6.4		4.3		6		88				<0.2		0.9	
					Middle	4.2	0.1	250	24.3	24.3	8.2	8.2	31.8	31.8	90.8	90.9	6.4		7.7		4		88				<0.2		0.9	
						4.2	0.1	269	24.3		8.2		31.8		90.9		6.4		8.0		3		89				<0.2		1.0	
					Bottom	7.4	0.1	190	24.3	24.3	8.2	8.2	32.4	32.4	89.6	89.6	6.3	6.3	11.1		4		91				<0.2		0.9	
						7.4	0.1	205	24.3		8.2		32.4		89.6		6.3		11.0		3		90				<0.2		1.0	
C2	Sunny	Moderate	11:26	11.6	Surface	1.0	0.7	177	24.8	24.8	8.3	8.3	29.0	29.0	98.8	98.8	7.0	6.7	3.1	6.5	3	4	85	88	825703	806926	<0.2	<0.2	0.9	0.6
						1.0	0.8	178	24.8		8.3		29.0		98.7		6.9		3.2		4		86				<0.2		0.9	
					Middle	5.8	0.4	173	24.5	24.5	8.2	8.2	31.8	31.8	91.8	91.8	6.4		7.9		3		87				<0.2		0.5	
						5.8	0.5	181	24.5		8.2		31.8		91.7		6.4		8.0		4		89				<0.2		0.5	
					Bottom	10.6	0.2	165	24.5	24.5	8.2	8.2	31.9	31.9	91.5	91.5	6.4	6.4	8.5		5		90				<0.2		0.5	
						10.6	0.2	178	24.5		8.2		31.9		91.4		6.4		8.7		6		91				<0.2		0.5	
C3	Sunny	Moderate	09:15	12.4	Surface	1.0	0.3	71	24.7	24.7	8.2	8.2	32.3	32.3	91.5	91.5	6.3	6.3	3.4	3.9	4	4	86	88	822095	817825	<0.2	<0.2	0.5	0.4
						1.0	0.3	71	24.7		8.2		32.3		91.4		6.3		3.4		5		87				<0.2		0.4	
					Middle	6.2	0.3	66	24.6	24.6	8.2	8.2	32.4	32.4	90.1	90.1	6.2		3.6		3		88				<0.2		0.4	
						6.2	0.3	71	24.6		8.2		32.4		90.1		6.2		3.6		4		88				<0.2		0.4	
					Bottom	11.4	0.2	71	24.6	24.6	8.2	8.2	32.4	32.4	90.1	90.2	6.2	6.3	4.5		3		90				<0.2		0.4	
						11.4	0.2	77	24.6		8.2		32.4		90.2		6.3		4.6		4		90				<0.2		0.4	
IM1	Cloudy	Moderate	10:36	5.2	Surface	1.0	0.1	200	24.4	24.4	8.1	8.1	31.4	31.4	100.7	100.7	7.0	7.0	9.2	10.9	3	3	88	89	817970	807132	<0.2	<0.2	0.9	0.9
						1.0	0.1	201	24.4		8.1		31.4		100.6		7.0		9.3		2		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	198	24.2	24.2	7.9	7.8	31.5	31.5	99.6	99.6	7.0	7.0	12.4		4		90				<0.2		0.9	
						4.2	0.1	200	24.2		7.8		31.5		99.6		7.0		12.7		4		90				<0.2		0.9	
IM2	Cloudy	Moderate	10:49	7.2	Surface	1.0	0.0	23	24.3	24.3	8.1	8.1	31.0	31.0	101.5	101.4	7.1	7.1	4.6	9.5	4	5	86	88	818153	806161	<0.2	<0.2	0.9	1.0
						1.0	0.0	25	24.3		8.1		31.0		101.3		7.1		4.6		4		87				<0.2		1.0	
					Middle	3.6	0.0	109	24.3	24.3	8.0	8.0	31.1	31.1	100.1	100.1	7.0		8.8		4		87				<0.2		0.9	
						3.6	0.0	111	24.3		8.0		31.1		100.1		7.0		9.1		5		88				<0.2		1.0	
					Bottom	6.2	0.1	21	24.1	24.1	7.9	7.9	31.5	31.5	98.9	99.0	6.9	6.9	15.1		5		90				<0.2		0.9	
						6.2	0.1	21	24.1		7.9		31.5		99.0		6.9		15.0		5		91				<0.2		1.0	
IM3	Cloudy	Moderate	10:55	7.7	Surface	1.0	0.1	58	24.3	24.3	8.2	8.2	30.9	30.9	101.8	101.8	7.1	7.1	5.2	8.9	5	6	86	88	818767	805606	<0.2	<0.2	0.8	0.9
						1.0	0.1	60	24.3		8.2		30.9		101.7		7.1		5.3		4		86				<0.2		1.0	
					Middle	3.9	0.1	297	24.2	24.2	8.2	8.2	31.1	31.1	99.7	99.7	7.0		7.2		6		88				<0.2		0.9	
						3.9	0.1	322	24.2		8.2		31.1		99.7		7.0		7.4		5		87				<0.2		0.9	
					Bottom	6.7	0.2	17	24.1	24.1	8.1	8.1	31.3	31.3	99.1	99.1	7.0	7.0	14.1		6		91				<0.2		0.9	
						6.7	0.2	17	24.1		8.1		31.3		99.1		7.0		14.0		7		90				<0.2		0.9	
IM4	Cloudy	Moderate	11:05	8.0	Surface	1.0	0.0	275	24.4	24.4	8.1	8.1	30.9	30.9	100.7	100.7	7.0	7.0	7.8	13.0	6	5	87	88	819748	804589	<0.2	<0.2	1.0	0.9
						1.0	0.0	295	24.4		8.1		30.9		100.7		7.0		7.8		6		86				<0.2		0.9	
					Middle	4.0	0.1	111	24.4	24.4	8.1	8.1	30.9	30.9	99.7	99.7	7.0		13.3		5		88				<0.2		0.9	
						4.0	0.1	112	24.4		8.1		30.9		99.7		7.0		13.6		6		88				<0.2		1.0	
					Bottom	7.0	0.1	29	24.2	24.2	7.9	7.9	31.3	31.3	98.9	99.0	6.9	6.9	17.7		4		90				<0.2		0.9	
						7.0	0.1	30	24.2		7.9		31.3		99.0		6.9		17.9		4		90				<0.2		0.9	
IM5	Cloudy	Moderate	11:13	7.0	Surface	1.0	0.2	45	24.3	24.3	8.0	8.0	30.8	30.8	100.7	100.8	7.1	7.1	9.0	10.9	2	3	86	88	820736	804878	<0.2	<0.2	0.9	0.9
						1.0	0.2	46	24.3		8.1		30.8		100.8		7.1		9.1		3		87				<0.2		0.8	
					Middle	3.5	0.2	25	24.2	24.2	8.0	8.0	30.8	30.8	99.7	99.8	7.0		10.6		3		88				<0.2		0.8	
						3.5	0.2	27	24.2		8.0		30.8		99.8		7.0		10.6		2		87				<0.2		0.9	
					Bottom	6.0	0.3	77	24.2	24.2	7.9	7.9	30.8	30.8	99.4	99.5	7.0	7.0	13.1		4		90				<0.2		0.9	
						6.0	0.3	82	24.2		7.9		30.8		99.5		7.0		13.0		3		90				<0.2		0.8	
IM6	Cloudy	Moderate	11:20	7.7	Surface	1.0	0.2	246	24.6	24.6	8.0	8.0	31.1	31.1	100.0	100.0	7.0	7.0	2.7	4.2	3	3	86	89	821068	805815	<0.2	<0.2	0.9	0.9
						1.0	0.2	270	24.6		8.0		31.1		100.0		7.0		2.7		2		87				<0.2		0.8	
					Middle	3.9	0.1	231	24.6	24.6	8.0	8.0	31.2	31.2	99.8	99.9	6.9		3.7		4		88				<0.2		1.0	
						3.9	0.1	248	24.6		8.0		31.2		99.9		7.0		3.6		3		89				<0.2		0.8	
					Bottom	6.7	0.1	211	24.4	24.4	7.9	7.9	31.3	31.3	99.8	99.9	7.0	7.0	6.2		3		90				<0.2		0.9	
						6.7	0.1	215	24.4		7.9		31.3		99.9		7.0		6.3		4		91				<0.2		0.9	
IM7	Cloudy	Moderate	11:30	8.2	Surface	1.0	0.2	200	24.7	24.7	8.1	8.1	30.9	30.9	99.1	99.1	6.9	6.9	1.9	4.0	2	3	86	89	821343	806840	<0.2	<0.2	0.9	0.9
						1.0	0.2	213	24.7		8.1		30.9		99.0		6.9		1.9		3		87				<0.2		0.9	
					Middle	4.1	0.1	171	24.6	24.6	8.1	8.1	31.1	31.1	98.5	98.5	6.9		4.2		3		88				<0.2		0.9	
						4.1	0.1	180	24.6		8.1		31.1		98.4		6.9		4.2		4		89				<0.2		0.9	
					Bottom	7.2	0.1	224	24.4	24.4	8.1	8.1	31.4	31.4	98.7	98.7	6.9	6.9	5.9		4		90				<0.2		0.9	
						7.2	0.1	228	24.4		8.1		31.4		98.6		6.9		5.9		4		92				<0.2		0.9	
IM8	Sunny	Moderate	10:54	7.5	Surface	1.0	0.2	179	24.7	24.7	8.3	8.3	29.4	29.4	100.3	100.3	7.1	7.0	2.8	3.9	2	3	86	88	821818	808149	<0.2	<0.2	0.9	0.9
						1.0	0.2	180	24.7		8.3		29.4		100.2		7.0		2.9		2		87				<0.2		0.9	
					Middle	3.8	0.1	147	24.6	24.6	8.3	8.3	30.7	30.8	98.0	97.9	6.9		3.9		3		88				<0.2		0.9	
						3.8	0.1	152	24.5		8.3		30.9		97.7		6.8		4.1		2		88				<0.2		0.8	
					Bottom	6.5	0.1	29	24.5	24.5	8.3	8.3	31.6	31.6	97.6	97.8	6.8	6.8	4.8		3		90				<0.2		0.9	
						6.5	0.2	29	24.5		8.3		31.6		97.9		6.8		4.8		4		90				<0.2		0.9	

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 27 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	10:48	7.2	Surface	1.0	0.2	132	24.7	24.7	8.3	8.3	29.8	29.9	99.8	99.8	7.0	7.0	3.2	3.9	2	3	85	88	822110	808793	<0.2	<0.2	1.0	0.7
						1.0	0.2	133	24.6		8.3		30.0		99.7		7.0		3.3		2		87				<0.2		0.9	
					Middle	3.6	0.3	95	24.6	24.6	8.3	8.3	30.5	30.5	99.3	99.3	7.0		3.3		3		88				<0.2		0.5	
						3.6	0.3	103	24.6		8.3		30.5		99.2		7.0		3.3		3		87				<0.2		0.5	
					Bottom	6.2	0.2	62	24.5	24.5	8.3	8.3	30.9	30.9	98.6	98.6	6.9	6.9	4.8		3		90				<0.2		0.5	
						6.2	0.3	62	24.5		8.3		30.9		98.6		6.9		5.2		4		89				<0.2		0.6	
IM10	Sunny	Moderate	10:39	7.3	Surface	1.0	0.5	140	24.6	24.6	8.3	8.3	30.2	30.3	98.5	98.4	6.9	6.9	3.7	5.3	3	4	86	88	822361	809780	<0.2	<0.2	0.9	0.9
						1.0	0.5	142	24.6		8.3		30.3		98.2		6.9		4.1		3		85				<0.2		0.9	
					Middle	3.7	0.5	120	24.5	24.5	8.3	8.3	30.7	30.7	97.7	97.7	6.8		5.2		3		88				<0.2		0.9	
						3.7	0.5	129	24.5		8.3		30.7		97.7		6.8		5.6		4		88				<0.2		0.8	
					Bottom	6.3	0.3	101	24.5	24.5	8.3	8.3	30.9	30.9	98.2	98.3	6.9	6.9	6.6		4		90				<0.2		0.8	
						6.3	0.4	103	24.5		8.3		30.9		98.3		6.9		6.5		4		89				<0.2		0.8	
IM11	Sunny	Moderate	10:26	7.8	Surface	1.0	0.6	134	24.7	24.7	8.3	8.3	30.1	30.1	98.8	98.8	6.9	6.9	3.0	4.6	2	2	85	88	822072	811436	<0.2	<0.2	0.9	0.9
						1.0	0.6	144	24.7		8.3		30.0		98.8		6.9		3.0		2		86				<0.2		0.8	
					Middle	3.9	0.6	129	24.5	24.5	8.3	8.3	30.6	30.6	97.6	97.6	6.8		3.9		2		87				<0.2		0.9	
						3.9	0.6	131	24.5		8.3		30.7		97.5		6.8		4.0		2		87				<0.2		0.8	
					Bottom	6.8	0.4	123	24.5	24.5	8.2	8.2	31.0	31.0	96.6	96.7	6.8	6.8	6.6		<2		90				<0.2		0.9	
						6.8	0.4	134	24.5		8.2		31.0		96.7		6.8		7.0		<2		90				<0.2		0.8	
IM12	Sunny	Moderate	10:18	9.0	Surface	1.0	0.6	113	24.6	24.6	8.2	8.2	30.5	30.6	97.7	97.6	6.8	6.8	3.3	4.2	<2	3	85	87	821445	812058	<0.2	<0.2	0.5	0.7
						1.0	0.6	116	24.6		8.2		30.7		97.4		6.8		3.4		<2		86				<0.2		0.5	
					Middle	4.5	0.4	98	24.5	24.5	8.2	8.2	31.3	31.3	95.9	95.8	6.7		4.3		3		87				<0.2		0.8	
						4.5	0.5	105	24.5		8.2		31.4		95.7		6.7		4.5		3		87				<0.2		0.9	
					Bottom	8.0	0.2	95	24.5	24.5	8.2	8.2	31.5	31.5	95.6	95.7	6.7	6.7	5.0		3		89				<0.2		0.8	
						8.0	0.3	96	24.5		8.2		31.5		95.8		6.7		4.9		2		90				<0.2		0.8	
SR1A	Sunny	Moderate	09:56	5.5	Surface	1.0	-	-	24.5	24.5	8.2	8.2	32.0	32.0	94.3	94.4	6.6	6.6	4.4	4.8	2	2	-	-	819973	812662	-	-	-	-
						1.0	-	-	24.5		8.2		32.0		94.4		6.6		4.5		2		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	24.5	24.5	8.2	8.2	32.0	32.0	94.8	94.9	6.6	6.6	5.2		2		-				-		-	
						4.5	-	-	24.5		8.2		32.0		94.9		6.6		5.3		2		-				-		-	
SR2	Sunny	Moderate	09:41	4.2	Surface	1.0	0.3	61	24.5	24.5	8.2	8.2	31.9	31.9	95.9	95.9	6.7	6.7	4.3	5.0	<2	3	88	89	821457	814157	<0.2	<0.2	0.5	0.5
						1.0	0.4	64	24.5		8.2		31.9		95.8		6.7		4.4		<2		87				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	59	24.5	24.5	8.2	8.2	31.9	31.9	95.6	95.7	6.7	6.7	5.8		3		90				<0.2		0.5	
						3.2	0.3	60	24.5		8.2		31.9		95.7		6.7		5.3		3		89				<0.2		0.5	
SR3	Sunny	Moderate	11:00	8.8	Surface	1.0	0.2	199	24.6	24.6	8.3	8.3	30.0	30.0	99.7	99.7	7.0	6.9	3.0	5.4	2	3	-	-	822160	807575	-	-	-	-
						1.0	0.2	216	24.6		8.3		30.0		99.6		7.0		3.0		3		-				-		-	
					Middle	4.4	0.0	275	24.5	24.5	8.3	8.3	30.9	31.0	97.3	96.7	6.8		5.4		2		-				-		-	
						4.4	0.0	301	24.4		8.3		31.2		96.1		6.7		5.6		3		-				-		-	
					Bottom	7.8	0.1	58	24.4	24.5	8.3	8.3	31.5	31.4	95.1	95.7	6.6	6.7	7.7		2		-				-		-	
						7.8	0.1	62	24.5		8.3		31.3		96.3		6.7		7.5		3		-				-		-	
SR4A	Cloudy	Moderate	09:52	8.2	Surface	1.0	0.3	74	24.6	24.6	8.1	8.1	31.1	31.1	88.9	88.9	6.2	6.2	4.9	6.8	3	3	-	-	817186	807787	-	-	-	-
						1.0	0.3	76	24.6		8.1		31.1		88.9		6.2		5.0		3		-				-		-	
					Middle	4.1	0.3	70	24.2	24.2	8.1	8.1	31.3	31.3	88.6	88.6	6.2		6.7		3		-				-		-	
						4.1	0.3	71	24.2		8.1		31.3		88.6		6.2		6.8		2		-				-		-	
					Bottom	7.2	0.2	85	24.2	24.2	8.1	8.1	31.4	31.4	88.3	88.3	6.2	6.2	8.8		3		-				-		-	
						7.2	0.2	89	24.2		8.1		31.4		88.3		6.2		8.6		4		-				-		-	
SR5A	Cloudy	Moderate	09:33	3.5	Surface	1.0	0.1	317	24.7	24.6	8.0	8.0	31.3	31.3	88.8	88.8	6.2	6.2	3.0	4.3	4	4	-	-	816578	810716	-	-	-	-
						1.0	0.1	340	24.6		8.0		31.3		88.8		6.2		3.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	338	24.6	24.6	8.0	8.0	31.3	31.3	86.9	86.9	6.1	6.1	5.6		4		-				-		-	
						2.5	0.1	311	24.6		8.0		31.3		86.9		6.1		5.5		4		-				-		-	
SR6A	Cloudy	Moderate	08:57	4.7	Surface	1.0	0.1	28	24.9	24.9	8.1	8.1	31.5	31.5	90.9	91.0	6.3	6.3	3.2	4.0	4	4	-	-	817948	814715	-	-	-	-
						1.0	0.1	28	24.9		8.1		31.5		91.0		6.3		3.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	34	24.9	24.9	8.1	8.1	31.5	31.5	92.1	92.2	6.4	6.4	4.7		4		-				-		-	
						3.7	0.0	36	24.9		8.1		31.5		92.2		6.4		4.7		4		-				-		-	
SR7	Sunny	Moderate	08:38	16.2	Surface	1.0	0.3	24	24.9	24.9	8.2	8.2	32.5	32.5	87.7	87.7	6.0	6.0	3.7	3.6	3	4	-	-	823633	823747	-	-	-	-
						1.0	0.4	25	24.9		8.2		32.5		87.7		6.0		3.7		4		-				-		-	
					Middle	8.1	0.3	12	24.9	24.9	8.2	8.2	32.5	32.5	87.6	87.6	6.0		3.5		5		-				-		-	
						8.1	0.3	12	24.9		8.2		32.5		87.5		6.0		3.6		4		-				-		-	
					Bottom	15.2	0.2	354	24.9	24.9	8.2	8.2	32.5	32.5	87.5	87.5	6.0	6.0	3.5		4		-				-		-	
						15.2	0.3	326	24.9		8.2		32.5		87.5		6.0		3.5		5		-				-		-	
SR8	Sunny	Moderate	10:08	5.1	Surface	1.0	-	-	24.8	24.8	8.3	8.3	31.7	31.7	96.2	96.1	6.7	6.7	5.6	7.4	4	4	-	-	820381	811606	-	-	-	-
						1.0	-	-	24.7		8.3		31.7		96.0		6.7		6.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.6	24.6	8.2	8.2	31.8	31.8	95.5	95.6	6.6	6.6	8.8		3		-				-		-	
						4.1	-	-	24.6		8.2		31.8		95.6		6.6		9.4		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 27 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:01	8.7	Surface	1.0	0.4	99	24.5	24.5	8.0	8.0	31.5	31.5	107.9	107.9	7.5	7.5	3.0	5.0	3	3	87	89	815625	804246	<0.2	<0.2	0.8	0.9
						1.0	0.4	104	24.5		8.0		31.5		107.9		7.5		3.0		3		88				<0.2		0.9	
					Middle	4.4	0.3	60	24.5	24.5	8.1	8.1	31.7	31.6	107.3	107.3	7.5		4.3		3		89				<0.2		0.9	
						4.4	0.3	65	24.5		8.1		31.6		107.2		7.5		4.4		3		90				<0.2		0.9	
					Bottom	7.7	0.2	72	24.4	24.4	8.1	8.1	33.1	33.1	105.9	106.0	7.3	7.3	7.7		4		91				<0.2		0.9	
						7.7	0.2	72	24.4		8.1		33.1		106.0		7.3		7.6		4		91				<0.2		1.0	
C2	Cloudy	Moderate	15:45	11.2	Surface	1.0	0.3	219	25.0	25.0	8.2	8.2	27.2	27.2	100.4	100.3	7.1	6.8	3.5	5.9	2	3	86	89	825690	806924	<0.2	<0.2	0.6	0.7
						1.0	0.3	227	24.9		8.2		27.2		100.1		7.1		3.6		3		88				<0.2		0.6	
					Middle	5.6	0.3	242	24.6	24.6	8.2	8.2	30.6	30.6	92.3	92.3	6.5		5.1		4		89				<0.2		0.7	
						5.6	0.3	254	24.6		8.2		30.6		92.2		6.5		5.1		3		88				<0.2		0.7	
					Bottom	10.2	0.2	289	24.6	24.6	8.2	8.2	31.2	31.2	91.7	91.7	6.4	6.4	9.2		4		90				<0.2		0.6	
						10.2	0.2	311	24.6		8.2		31.2		91.7		6.4		9.3		3		91				<0.2		0.7	
C3	Cloudy	Moderate	17:39	11.8	Surface	1.0	0.5	262	24.7	24.7	8.2	8.2	31.8	31.8	98.3	98.2	6.8	6.6	2.9	5.0	5	4	86	88	822094	817822	<0.2	<0.2	0.7	0.7
						1.0	0.5	276	24.7		8.2		31.9		98.0		6.8		3.1		4		87				<0.2		0.7	
					Middle	5.9	0.5	258	24.6	24.6	8.2	8.2	32.2	32.2	92.8	92.8	6.4		5.1		4		88				<0.2		0.7	
						5.9	0.5	275	24.6		8.2		32.2		92.8		6.4		5.3		3		89				<0.2		0.7	
					Bottom	10.8	0.4	254	24.6	24.7	8.2	8.2	32.2	32.2	93.4	93.5	6.5	6.5	6.8		3		90				<0.2		0.7	
						10.8	0.4	257	24.7		8.2		32.2		93.6		6.5		7.0		2		90				<0.2		0.7	
IM1	Cloudy	Moderate	16:40	5.3	Surface	1.0	0.1	18	24.7	24.7	8.0	8.0	31.3	31.3	109.4	109.4	7.6	7.6	6.2	8.7	4	4	89	90	817938	807119	<0.2	<0.2	0.9	1.0
						1.0	0.1	18	24.7		8.0		31.3		109.4		7.6		6.3		4		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	25	24.7	24.7	7.9	7.9	31.2	31.2	108.7	108.7	7.6	7.6	11.2		3		91				<0.2		1.0	
						4.3	0.1	26	24.7		7.9		31.2		108.7		7.6		10.9		3		91				<0.2		0.9	
IM2	Cloudy	Moderate	16:32	7.8	Surface	1.0	0.3	342	24.5	24.5	8.2	8.2	31.1	31.1	107.2	107.2	7.5	7.5	7.3	10.1	2	3	87	89	818179	806148	<0.2	<0.2	0.9	0.9
						1.0	0.3	353	24.5		8.2		31.1		107.1		7.5		7.3		3		87				<0.2		1.0	
					Middle	3.9	0.1	14	24.5	24.5	8.2	8.2	31.2	31.2	105.9	105.9	7.4		9.7		2		88				<0.2		0.9	
						3.9	0.1	14	24.5		8.2		31.2		105.8		7.4		9.9		4		90				<0.2		0.9	
					Bottom	6.8	0.2	348	24.4	24.4	8.2	8.2	31.5	31.5	104.5	104.5	7.3	7.3	13.3		4		91				<0.2		0.9	
						6.8	0.2	320	24.4		8.2		31.5		104.5		7.3		13.1		4		91				<0.2		0.9	
IM3	Cloudy	Moderate	16:22	7.6	Surface	1.0	0.2	8	24.4	24.4	8.1	8.1	31.3	31.3	106.1	106.1	7.4	7.4	9.9	13.2	3	4	88	90	818792	805599	<0.2	<0.2	0.9	0.9
						1.0	0.3	8	24.4		8.1		31.3		106.1		7.4		9.9		4		88				<0.2		0.9	
					Middle	3.8	0.3	37	24.5	24.5	8.0	8.0	31.3	31.3	106.1	106.1	7.4		13.3		4		89				<0.2		0.9	
						3.8	0.3	37	24.5		8.0		31.3		106.0		7.4		13.4		5		90				<0.2		0.9	
					Bottom	6.6	0.4	13	24.5	24.5	8.0	7.9	31.7	31.7	105.2	105.3	7.3	7.3	16.5		4		91				<0.2		1.0	
						6.6	0.4	13	24.5		7.9		31.7		105.3		7.3		16.3		5		92				<0.2		0.9	
IM4	Cloudy	Moderate	16:12	8.7	Surface	1.0	0.2	23	24.6	24.6	8.2	8.2	31.3	31.3	108.2	108.2	7.5	7.4	5.0	6.8	3	2	87	89	819747	804625	<0.2	<0.2	0.9	0.9
						1.0	0.2	23	24.6		8.2		31.3		108.2		7.5		5.0		2		88				<0.2		0.9	
					Middle	4.4	0.3	11	24.5	24.5	8.2	8.2	31.6	31.6	105.6	105.6	7.3		6.9		2		89				<0.2		0.9	
						4.4	0.3	11	24.5		8.2		31.6		105.5		7.3		7.0		2		90				<0.2		0.9	
					Bottom	7.7	0.2	48	24.5	24.5	8.2	8.2	32.0	32.0	104.6	104.6	7.3	7.3	8.5		2		91				<0.2		1.0	
						7.7	0.2	50	24.5		8.2		32.0		104.6		7.3		8.2		2		91				<0.2		0.9	
IM5	Cloudy	Moderate	16:03	8.1	Surface	1.0	0.5	13	24.5	24.5	8.1	8.1	31.1	31.1	107.0	107.0	7.5	7.5	8.6	12.1	3	4	87	89	820737	804846	<0.2	<0.2	0.9	0.9
						1.0	0.5	13	24.5		8.1		31.1		107.0		7.5		8.7		3		88				<0.2		0.9	
					Middle	4.1	0.4	9	24.5	24.5	8.0	8.0	31.1	31.1	106.6	106.7	7.4		12.0		3		89				<0.2		1.0	
						4.1	0.4	9	24.5		8.0		31.1		106.7		7.4		12.2		4		89				<0.2		0.9	
					Bottom	7.1	0.5	20	24.5	24.5	8.0	8.0	31.2	31.2	106.2	106.2	7.4	7.4	15.2		5		91				<0.2		0.9	
						7.1	0.5	20	24.5		8.0		31.2		106.1		7.4		15.6		5		91				<0.2		1.0	
IM6	Cloudy	Moderate	15:55	7.8	Surface	1.0	0.2	231	24.8	24.8	8.1	8.1	31.0	31.0	106.3	106.3	7.4	7.4	7.5	8.1	6	5	87	89	821075	805811	<0.2	<0.2	1.0	0.9
						1.0	0.2	246	24.8		8.1		31.0		106.2		7.4		7.6		6		88				<0.2		1.0	
					Middle	3.9	0.1	275	24.8	24.8	8.1	8.1	31.0	31.0	106.2	106.2	7.4		8.2		4		89				<0.2		0.9	
						3.9	0.1	301	24.8		8.1		31.0		106.2		7.4		8.2		6		89				<0.2		0.8	
					Bottom	6.8	0.0	198	24.8	24.8	8.1	8.1	31.0	31.0	106.1	106.1	7.4	7.4	8.9		5		91				<0.2		0.9	
						6.8	0.0	200	24.8		8.1		31.0		106.1		7.4		8.0		5		92				<0.2		0.9	
IM7	Cloudy	Moderate	15:47	8.2	Surface	1.0	0.1	223	24.9	24.9	8.1	8.1	30.9	30.9	105.8	105.8	7.3	7.3	1.1	3.4	2	3	87	89	821336	806822	<0.2	<0.2	0.9	0.9
						1.0	0.1	230	24.9		8.1		30.9		105.8		7.3		1.1		3		88				<0.2		0.9	
					Middle	4.1	0.0	109	24.9	24.9	8.1	8.1	31.0	31.0	105.3	105.4	7.3		2.8		2		90				<0.2		0.9	
						4.1	0.0	115	24.9		8.1		31.0		105.4		7.3		2.9		2		89				<0.2		0.9	
					Bottom	7.2	0.1	171	24.6	24.6	8.2	8.2	31.3	31.3	105.7	105.7	7.4	7.4	6.2		3		91				<0.2		0.9	
						7.2	0.1	180	24.6		8.2		31.3		105.7		7.4		6.2		3		91				<0.2		0.9	
IM8	Cloudy	Moderate	15:59	7.2	Surface	1.0	0.2	230	25.4	25.4	8.3	8.3	26.6	26.6	105.7	105.7	7.5	7.4	3.1	5.5	<2	2	86	89	821809	808127	<0.2	<0.2	1.4	1.4
						1.0	0.2	250	25.4		8.3		26.6		105.6		7.5		3.1		<2		87				<0.2		1.3	
					Middle	3.6	0.3	257	25.2	25.2	8.3	8.3	28.3	28.3	103.7	103.7	7.3		4.2		2		88				<0.2		1.4	
						3.6	0.3	272	25.2		8.3		28.3		103.7		7.3		4.6		2		89				<0.2		1.4	
					Bottom	6.2	0.3	282	25.1	25.1	8.3	8.3	29.3	29.3	102.7	102.6	7.2	7.2	8.8		3		90				<0.2		1.4	
						6.2	0.4	302	25.1		8.3		29.4		102.5		7.2		9.5		2		91				<0.2		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 27 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:05	7.1	Surface	1.0	0.4	288	25.4	25.4	8.3	8.3	26.7	26.7	105.8	105.7	7.5	7.3	3.1	3.5	4	3	86	88	822079	808818	<0.2	<0.2	1.4	1.4
						1.0	0.4	297	25.4		8.3		26.7		105.6		7.4		3.1		3		87				<0.2		1.3	
					Middle	3.6	0.4	294	25.2	25.2	8.3	8.3	28.7	28.8	103.5	103.4	7.2		3.3		2		88				<0.2		1.4	
						3.6	0.4	307	25.2		8.3		28.9		103.2		7.2		3.4		3		88				<0.2		1.4	
					Bottom	6.1	0.3	293	25.1	25.1	8.3	8.3	29.7	29.7	102.0	102.0	7.1	7.1	4.0		2		90				<0.2		1.4	
						6.1	0.3	317	25.1		8.3		29.7		101.9		7.1		4.0		2		90				<0.2		1.4	
IM10	Cloudy	Moderate	16:10	7.2	Surface	1.0	0.4	275	25.3	25.3	8.3	8.3	29.5	29.5	104.9	104.8	7.3	7.3	3.0	3.5	<2	<2	86	89	822398	809791	<0.2	<0.2	0.9	1.0
						1.0	0.5	295	25.3		8.3		29.5		104.7		7.3		3.1		<2		87				<0.2		0.9	
					Middle	3.6	0.5	274	25.1	25.1	8.3	8.3	29.9	29.9	103.4	103.2	7.2		3.4		<2		88				<0.2		0.9	
						3.6	0.6	286	25.1		8.3		29.9		103.0		7.2		3.5		<2		89				<0.2		1.0	
					Bottom	6.2	0.4	273	25.1	25.1	8.3	8.3	30.0	30.0	102.0	102.0	7.1	7.1	4.0		<2		90				<0.2		1.0	
						6.2	0.4	295	25.1		8.3		30.0		101.9		7.1		4.0		<2		91				<0.2		1.0	
IM11	Cloudy	Moderate	16:27	7.5	Surface	1.0	0.4	287	25.0	25.0	8.3	8.3	30.0	30.0	105.8	105.1	7.4	7.2	3.0	4.0	4	4	87	89	822058	811467	<0.2	<0.2	0.9	0.9
						1.0	0.5	313	24.9		8.3		30.1		104.4		7.3		2.9		5		87				<0.2		1.0	
					Middle	3.8	0.5	299	24.8	24.8	8.3	8.3	30.3	30.3	102.0	101.9	7.1		3.7		3		88				<0.2		0.9	
						3.8	0.5	322	24.7		8.3		30.3		101.7		7.1		3.8		3		89				<0.2		0.9	
					Bottom	6.5	0.4	306	24.7	24.7	8.3	8.3	30.4	30.4	100.7	100.7	7.0	7.0	5.2		3		90				<0.2		1.0	
						6.5	0.4	324	24.7		8.3		30.4		100.6		7.0		5.2		3		92				<0.2		0.9	
IM12	Cloudy	Moderate	16:35	8.2	Surface	1.0	0.2	176	25.0	25.0	8.3	8.3	30.0	30.1	105.6	105.4	7.4	7.3	2.8	5.4	4	3	86	88	821444	812055	<0.2	<0.2	1.0	0.9
						1.0	0.2	180	25.0		8.3		30.1		105.1		7.3		2.9		3		86				<0.2		0.9	
					Middle	4.1	0.1	181	24.9	24.9	8.3	8.3	30.8	30.8	103.0	103.0	7.2		4.7		4		87				<0.2		0.9	
						4.1	0.1	188	24.9		8.3		30.9		102.9		7.2		4.7		3		89				<0.2		0.9	
					Bottom	7.2	0.2	185	24.8	24.8	8.3	8.3	31.6	31.6	97.9	98.0	6.8	6.8	8.7		2		90				<0.2		0.9	
						7.2	0.2	188	24.8		8.3		31.6		98.0		6.8		8.8		2		91				<0.2		0.9	
SR1A	Cloudy	Moderate	16:59	5.1	Surface	1.0	-	-	25.2	25.2	8.3	8.3	30.7	30.7	106.2	105.8	7.3	7.3	3.3	3.5	4	3	-	-	819980	812658	-	-	-	-
						1.0	-	-	25.2		8.3		30.8		105.4		7.3		3.4		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	25.2	25.2	8.3	8.3	31.1	31.1	101.2	101.3	7.0	7.0	3.7		2		-				-		-	
						4.1	-	-	25.2		8.3		31.1		101.3		7.0		3.7		2		-				-		-	
SR2	Cloudy	Moderate	17:12	3.7	Surface	1.0	0.2	178	24.8	24.9	8.3	8.3	31.3	31.3	100.7	100.7	7.0	7.0	4.5	4.6	2	3	88	89	821475	814178	<0.2	<0.2	0.8	0.7
						1.0	0.2	180	24.9		8.3		31.3		100.6		7.0		4.5		2		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.2	177	24.9	24.9	8.3	8.3	31.3	31.3	99.5	99.3	6.9	6.9	4.7		4		90				<0.2		0.7	
						2.7	0.2	189	24.9		8.3		31.3		99.0		6.9		4.7		4		90				<0.2		0.7	
SR3	Cloudy	Moderate	15:53	8.0	Surface	1.0	0.2	145	25.3	25.3	8.3	8.3	26.2	26.1	103.9	103.7	7.4	7.2	3.4	4.3	4	3	-	-	822129	807548	-	-	-	-
						1.0	0.2	155	25.2		8.3		26.1		103.4		7.3		3.4		3		-				-		-	
					Middle	4.0	0.1	87	25.0	25.0	8.3	8.3	28.9	28.9	101.5	101.5	7.1		4.3		3		-				-		-	
						4.0	0.1	89	25.0		8.3		28.9		101.4		7.1		4.6		4		-				-		-	
					Bottom	7.0	0.1	330	25.0	25.0	8.3	8.3	29.0	29.0	100.9	100.9	7.1	7.1	5.2		2		-				-		-	
						7.0	0.1	335	25.0		8.3		29.0		100.8		7.1		5.1		2		-				-		-	
SR4A	Cloudy	Moderate	17:37	9.3	Surface	1.0	0.1	55	24.6	24.6	8.1	8.1	31.2	31.2	108.7	108.7	7.6	7.6	7.0	8.3	3	4	-	-	817200	807813	-	-	-	-
						1.0	0.1	59	24.6		8.1		31.2		108.6		7.6		7.1		4		-				-		-	
					Middle	4.7	0.2	76	24.6	24.6	8.1	8.1	31.3	31.3	108.6	108.6	7.5		8.2		4		-				-		-	
						4.7	0.2	77	24.6		8.1		31.3		108.5		7.5		8.3		4		-				-		-	
					Bottom	8.3	0.3	89	24.6	24.6	8.0	8.0	31.3	31.3	108.6	108.6	7.5	7.5	9.4		5		-				-		-	
						8.3	0.3	94	24.6		8.0		31.3		108.6		7.5		9.5		5		-				-		-	
SR5A	Cloudy	Moderate	17:54	3.8	Surface	1.0	0.0	300	24.9	24.9	8.0	8.0	31.1	31.1	105.2	105.2	7.3	7.3	4.6	4.9	4	4	-	-	816597	810716	-	-	-	-
						1.0	0.0	326	24.9		8.0		31.1		105.1		7.3		4.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	308	24.9	24.9	8.0	8.0	31.1	31.1	106.0	105.9	7.3	7.3	5.1		3		-				-		-	
						2.8	0.0	317	24.9		8.0		31.1		105.8		7.3		5.1		4		-				-		-	
SR6A	Cloudy	Moderate	18:23	4.7	Surface	1.0	0.0	214	25.2	25.2	8.0	8.0	31.4	31.4	107.1	107.1	7.4	7.4	4.7	4.9	2	4	-	-	817948	814740	-	-	-	-
						1.0	0.0	216	25.2		8.0		31.4		107.1		7.4		4.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	227	25.2	25.2	8.0	7.9	31.4	31.4	107.3	107.3	7.4	7.4	5.0		4		-				-		-	
						3.7	0.0	247	25.2		7.9		31.4		107.3		7.4		5.0		5		-				-		-	
SR7	Cloudy	Moderate	18:21	16.5	Surface	1.0	0.1	350	24.9	24.9	8.2	8.2	32.3	32.3	91.2	91.1	6.3	6.3	3.4	3.8	4	3	-	-	823647	823742	-	-	-	-
						1.0	0.1	322	24.9		8.2		32.4		91.0		6.3		3.4		4		-				-		-	
					Middle	8.3	0.1	44	24.9	24.9	8.2	8.2	32.4	32.4	90.2	90.2	6.2		3.8		3		-				-		-	
						8.3	0.1	44	24.9		8.2		32.4		90.1		6.2		3.8		3		-				-		-	
					Bottom	15.5	0.2	34	24.9	24.9	8.2	8.2	32.4	32.4	89.8	89.9	6.2	6.2	4.1		3		-				-		-	
						15.5	0.2	34	24.9		8.2		32.4		89.9		6.2		4.0		2		-				-		-	
SR8	Cloudy	Moderate	16:50	5.0	Surface	1.0	-	-	25.1	25.1	8.3	8.3	30.3	30.3	104.4	104.4	7.3	7.3	5.5	6.7	3	4	-	-	820381	811644	-	-	-	-
						1.0	-	-	25.1		8.3		30.3		104.4		7.3		5.5		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.9	24.9	8.3	8.3	30.8	30.8	100.6	100.6	7.0	7.0	7.7		5		-				-		-	
						4.0	-	-	24.9		8.3		30.8		100.6		7.0		7.9		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 29 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:39	8.7	Surface	1.0	0.3	214	24.8	24.8	8.2	8.2	33.1	33.1	96.7	96.7	6.6	6.6	3.0	6.9	6	7	86	88	815599	804229	<0.2	<0.2	0.6	0.8
						1.0	0.3	227	24.8		8.2		33.1		96.6		6.6		3.1		8		85				<0.2		0.6	
					Middle	4.4	0.3	218	24.8	24.8	8.2	8.2	33.3	33.3	94.4	94.5	6.5		6.4		7		88				<0.2		0.8	
						4.4	0.3	225	24.8		8.2		33.3		94.5		6.5		6.3		7		87				<0.2		0.8	
					Bottom	7.7	0.3	206	24.8	24.8	8.2	8.2	33.4	33.4	94.2	94.2	6.5	6.5	11.3		7		90				<0.2		0.8	
						7.7	0.3	218	24.8		8.2		33.4		94.2		6.5		11.3		7		91				<0.2		1.0	
C2	Cloudy	Moderate	12:33	12.4	Surface	1.0	0.3	165	24.7	24.7	8.2	8.2	29.9	29.9	93.6	93.6	6.6	6.6	4.7	5.5	4	5	85	88	825689	806924	<0.2	<0.2	0.9	0.8
						1.0	0.3	177	24.7		8.2		29.9		93.5		6.6		4.8		4		86				<0.2		0.9	
					Middle	6.2	0.1	210	24.7	24.7	8.2	8.2	30.1	30.1	93.1	93.1	6.5		5.2		4		87				<0.2		0.8	
						6.2	0.1	218	24.7		8.2		30.1		93.0		6.5		5.3		5		89				<0.2		0.8	
					Bottom	11.4	0.1	161	24.7	24.7	8.2	8.2	31.2	31.2	91.1	91.2	6.3	6.4	6.5		6		90				<0.2		0.7	
						11.4	0.2	165	24.7		8.2		31.2		91.2		6.4		6.5		5		91				<0.2		0.7	
C3	Cloudy	Moderate	10:34	12.5	Surface	1.0	0.4	67	24.7	24.7	8.2	8.2	31.7	31.7	90.8	90.8	6.3	6.2	3.7	6.4	7	7	86	88	822096	817816	0.4	0.4	0.6	0.7
						1.0	0.4	71	24.7		8.2		31.7		90.7		6.3		4.0		8		87				0.4		0.5	
					Middle	6.3	0.3	88	24.7	24.7	8.2	8.2	32.1	32.1	87.5	87.5	6.1		8.2		6		88				0.3		0.8	
						6.3	0.3	96	24.7		8.2		32.1		87.5		6.1		8.5		7		88				0.4		0.8	
					Bottom	11.5	0.3	43	24.8	24.8	8.2	8.2	32.3	32.3	87.0	87.1	6.0	6.0	7.3		6		90				0.5		0.7	
						11.5	0.3	45	24.8		8.2		32.3		87.1		6.0		6.8		5		90				0.4		0.7	
IM1	Cloudy	Moderate	12:03	5.1	Surface	1.0	0.1	182	24.9	24.9	8.2	8.2	32.6	32.6	97.3	97.3	6.7	6.7	3.5	4.3	9	10	87	88	817950	807152	<0.2	<0.2	0.5	0.6
						1.0	0.1	182	24.9		8.2		32.6		97.2		6.7		3.5		9		88				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	273	24.9	24.9	8.2	8.2	32.7	32.7	95.8	95.9	6.6	6.6	5.1		12		89				<0.2		0.6	
						4.1	0.1	294	24.9		8.2		32.7		95.9		6.6		4.9		11		89				<0.2		0.6	
IM2	Cloudy	Moderate	12:12	7.0	Surface	1.0	0.2	172	24.9	24.9	8.2	8.2	32.6	32.6	98.3	98.2	6.8	6.8	1.8	6.3	7	7	85	88	818175	806163	<0.2	<0.2	0.5	0.5
						1.0	0.2	185	24.9		8.2		32.6		98.1		6.8		1.9		6		86				<0.2		0.5	
					Middle	3.5	0.1	171	24.8	24.8	8.2	8.2	32.6	32.6	97.0	97.0	6.7		5.3		6		88				<0.2		0.5	
						3.5	0.1	171	24.8		8.2		32.6		97.0		6.7		5.1		7		87				<0.2		0.5	
					Bottom	6.0	0.1	141	24.8	24.8	8.2	8.2	32.8	32.8	93.9	93.9	6.5	6.5	11.9		7		90				<0.2		0.5	
						6.0	0.1	152	24.8		8.2		32.9		93.9		6.5		11.9		8		90				<0.2		0.6	
IM3	Cloudy	Moderate	12:20	7.2	Surface	1.0	0.4	132	24.9	24.9	8.2	8.2	32.2	32.2	96.7	96.7	6.7	6.7	3.5	4.9	8	7	86	88	818780	805610	<0.2	<0.2	0.6	0.6
						1.0	0.4	140	24.9		8.2		32.2		96.7		6.7		3.6		9		85				<0.2		0.5	
					Middle	3.6	0.3	133	24.9	24.9	8.2	8.2	32.4	32.4	95.5	95.5	6.6		4.8		8		88				<0.2		0.6	
						3.6	0.3	144	24.9		8.2		32.4		95.4		6.6		4.9		7		88				<0.2		0.6	
					Bottom	6.2	0.2	105	24.8	24.8	8.2	8.2	32.8	32.8	94.4	94.4	6.5	6.5	6.3		6		90				<0.2		0.6	
						6.2	0.2	106	24.8		8.2		32.8		94.4		6.5		6.3		6		90				<0.2		0.6	
IM4	Cloudy	Moderate	12:31	8.4	Surface	1.0	0.7	182	24.9	24.9	8.2	8.2	32.3	32.3	98.5	98.5	6.8	6.8	3.4	4.3	7	9	85	88	819720	804616	<0.2	<0.2	0.6	0.6
						1.0	0.7	190	24.9		8.2		32.3		98.5		6.8		3.4		8		85				<0.2		0.6	
					Middle	4.2	0.6	179	24.9	24.9	8.2	8.2	32.3	32.3	98.3	98.4	6.8		4.2		8		87				<0.2		0.6	
						4.2	0.7	195	24.9		8.2		32.3		98.4		6.8		4.2		9		88				<0.2		0.6	
					Bottom	7.4	0.6	180	24.9	24.9	8.2	8.2	32.3	32.3	98.3	98.3	6.8	6.8	5.1		10		90				<0.2		0.5	
						7.4	0.6	193	24.9		8.2		32.3		98.3		6.8		5.2		10		90				<0.2		0.5	
IM5	Cloudy	Moderate	12:44	6.9	Surface	1.0	0.7	202	24.9	24.9	8.2	8.2	31.9	31.9	99.5	99.4	6.9	6.9	2.1	3.0	10	8	86	88	820738	804847	<0.2	<0.2	0.5	0.6
						1.0	0.8	212	24.9		8.2		31.9		99.3		6.9		2.1		11		86				<0.2		0.6	
					Middle	3.5	0.6	204	24.9	24.9	8.2	8.2	32.1	32.1	98.6	98.6	6.8		2.8		8		88				<0.2		0.6	
						3.5	0.6	215	24.9		8.2		32.1		98.6		6.8		2.9		8		88				<0.2		0.5	
					Bottom	5.9	0.5	208	24.9	24.9	8.2	8.2	32.2	32.2	98.1	98.1	6.8	6.8	4.1		6		91				<0.2		0.6	
						5.9	0.5	220	24.9		8.2		32.2		98.1		6.8		4.1		6		90				<0.2		0.5	
IM6	Cloudy	Moderate	12:53	7.2	Surface	1.0	0.5	229	25.2	25.2	8.2	8.2	30.9	30.9	100.6	100.6	7.0	7.0	0.7	1.8	4	6	85	88	821083	805821	<0.2	<0.2	0.6	0.6
						1.0	0.6	242	25.2		8.2		30.9		100.6		7.0		0.7		5		86				<0.2		0.5	
					Middle	3.6	0.5	230	25.1	25.1	8.2	8.2	31.4	31.4	99.8	99.8	6.9		1.3		5		88				<0.2		0.6	
						3.6	0.5	235	25.1		8.2		31.4		99.7		6.9		1.4		6		88				<0.2		0.6	
					Bottom	6.2	0.4	231	24.9	24.9	8.2	8.2	32.1	32.1	98.5	98.5	6.8	6.8	3.3		8		90				<0.2		0.7	
						6.2	0.4	236	24.9		8.2		32.1		98.5		6.8		3.3		7		91				<0.2		0.7	
IM7	Cloudy	Moderate	13:03	8.1	Surface	1.0	0.4	238	25.1	25.1	8.2	8.2	30.9	30.9	100.2	100.2	6.9	6.9	0.8	1.5	4	5	86	88	821337	806822	<0.2	<0.2	0.7	0.7
						1.0	0.4	257	25.1		8.2		30.9		100.1		6.9		0.8		4		85				<0.2		0.7	
					Middle	4.1	0.3	254	25.1	25.1	8.2	8.2	31.5	31.5	98.7	98.7	6.8		1.5		5		88				<0.2		0.8	
						4.1	0.3	257	25.1		8.2		31.5		98.7		6.8		1.5		6		88				<0.2		0.6	
					Bottom	7.1	0.2	256	24.9	24.9	8.2	8.2	32.3	32.3	97.3	97.3	6.7	6.7	2.2		5		91				<0.2		0.6	
						7.1	0.3	276	24.9		8.2		32.3		97.3		6.7		2.3		6		91				<0.2		0.6	
IM8	Cloudy	Moderate	12:05	7.5	Surface	1.0	0.1	122	24.6	24.6	8.3	8.3	30.5	30.5	95.9	95.9	6.7	6.7	4.6	6.0	6	5	86	88	821809	808126	<0.2	<0.2	0.6	0.7
						1.0	0.1	124	24.5		8.3		30.5		95.9		6.7		4.7		4		87				<0.2		0.7	
					Middle	3.8	0.1	89	24.4	24.4	8.3	8.3	31.0	31.0	95.2	95.2	6.7		5.8		4		88				<0.2		0.5	
						3.8	0.1	95	24.4		8.3		31.0		95.1		6.7		6.0		5		89				<0.2		0.6	
					Bottom	6.5	0.2	43	24.3	24.3	8.3	8.3	31.5	31.5	95.0	95.1	6.6	6.6	7.4		4		90				<0.2		0.8	
						6.5	0.2	43	24.3		8.3		31.5		95.1		6.6		7.4		4		90				<0.2		0.8	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:00	7.4	Surface	1.0	0.3	100	24.6	24.6	8.3	8.3	30.4	30.4	95.7	95.7	6.7	6.7	4.7	6.7	5	6	86	88	822095	808799	<0.2	<0.2	0.8	0.7
						1.0	0.4	101	24.5		8.3		30.4		95.6		6.7		4.8		5		87				<0.2		0.8	
					Middle	3.7	0.3	132	24.4	24.4	8.3	8.3	31.0	31.0	94.8	94.8	6.6		6.8		7		88				<0.2		0.7	
						3.7	0.3	145	24.4		8.3		31.1		94.8		6.6		7.1		6		87				<0.2		0.6	
					Bottom	6.4	0.3	126	24.3	24.3	8.3	8.3	31.4	31.4	94.6	94.6	6.6	6.6	8.5		6		90				<0.2		0.6	
						6.4	0.4	127	24.3		8.3		31.4		94.6		6.6		8.5		6		90				<0.2		0.5	
IM10	Cloudy	Moderate	11:53	7.6	Surface	1.0	0.6	122	24.6	24.6	8.3	8.3	30.3	30.3	95.8	95.7	6.7	6.7	4.5	7.9	9	6	86	88	822400	809813	<0.2	<0.2	0.8	0.6
						1.0	0.6	132	24.6		8.3		30.3		95.6		6.7		4.8		9		85				<0.2		0.8	
					Middle	3.8	0.6	146	24.4	24.4	8.3	8.3	30.9	30.9	94.8	94.9	6.6		9.0		6		88				<0.2		0.7	
						3.8	0.6	159	24.4		8.3		30.9		94.9		6.6		9.2		5		88				<0.2		0.6	
					Bottom	6.6	0.4	122	24.4	24.4	8.3	8.3	31.0	31.0	95.6	95.7	6.7	6.7	10.1		4		90				<0.2		0.5	
						6.6	0.4	128	24.4		8.3		31.0		95.8		6.7		9.9		5		89				<0.2		0.4	
IM11	Cloudy	Moderate	11:39	7.4	Surface	1.0	0.5	116	24.6	24.6	8.3	8.3	30.3	30.3	95.9	95.9	6.7	6.7	3.9	5.5	5	6	86	88	822076	811449	<0.2	<0.2	0.8	0.8
						1.0	0.5	122	24.6		8.3		30.3		95.8		6.7		3.9		4		86				<0.2		0.7	
					Middle	3.7	0.5	100	24.6	24.6	8.3	8.3	30.4	30.4	95.2	95.2	6.7		4.4		6		87				<0.2		0.7	
						3.7	0.6	105	24.6		8.3		30.4		95.1		6.7		4.6		6		87				<0.2		0.8	
					Bottom	6.4	0.2	115	24.5	24.5	8.3	8.3	30.6	30.6	94.3	94.3	6.6	6.6	8.2		6		90				<0.2		0.8	
						6.4	0.3	124	24.5		8.3		30.6		94.3		6.6		8.3		7		90				<0.2		0.7	
IM12	Cloudy	Moderate	11:32	9.5	Surface	1.0	0.5	106	24.5	24.5	8.3	8.3	30.4	30.4	94.6	94.6	6.6	6.6	5.5	8.3	6	7	85	87	821448	812030	<0.2	<0.2	0.8	0.7
						1.0	0.5	108	24.5		8.3		30.4		94.6		6.6		5.5		5		86				<0.2		0.6	
					Middle	4.8	0.5	99	24.5	24.5	8.3	8.3	30.5	30.5	93.5	93.5	6.6		9.8		6		87				<0.2		0.8	
						4.8	0.5	104	24.5		8.3		30.5		93.5		6.6		9.8		6		87				<0.2		0.8	
					Bottom	8.5	0.2	101	24.6	24.6	8.2	8.2	30.8	30.8	92.6	92.6	6.5	6.5	9.7		8		89				<0.2		0.6	
						8.5	0.3	105	24.6		8.2		30.8		92.6		6.5		9.5		10		90				<0.2		0.7	
SR1A	Cloudy	Moderate	11:12	5.5	Surface	1.0	-	-	24.6	24.6	8.3	8.3	30.9	30.9	95.0	95.0	6.6	6.6	3.4	4.8	6	7	-	-	819981	812658	-	-	-	-
						1.0	-	-	24.6		8.3		30.9		95.0		6.6		3.4		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	24.6	24.6	8.3	8.3	31.0	31.0	93.4	93.5	6.5	6.5	6.1		8		-				-		-	
						4.5	-	-	24.5		8.3		31.0		93.5		6.5		6.1		7		-				-		-	
SR2	Cloudy	Moderate	11:00	5.1	Surface	1.0	0.4	66	24.6	24.6	8.2	8.2	31.3	31.3	93.3	93.3	6.5	6.5	3.6	3.9	7	6	88	89	821458	814164	<0.2	<0.2	0.6	0.7
						1.0	0.4	70	24.6		8.2		31.3		93.3		6.5		3.7		6		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	76	24.6	24.6	8.2	8.2	31.5	31.4	93.8	93.9	6.5	6.5	4.1		4		90				<0.2		0.7	
						4.1	0.3	77	24.6		8.2		31.4		93.9		6.5		4.0		5		90				<0.2		0.8	
SR3	Cloudy	Moderate	12:10	8.5	Surface	1.0	0.2	204	24.5	24.5	8.3	8.3	30.0	30.0	97.5	97.5	6.9	6.8	3.5	5.7	2	4	-	-	822129	807568	-	-	-	-
						1.0	0.3	222	24.5		8.3		30.0		97.5		6.9		3.5		3		-				-		-	
					Middle	4.3	0.2	197	24.5	24.5	8.3	8.3	30.2	30.2	96.3	96.2	6.8		4.9		5		-				-		-	
						4.3	0.2	201	24.5		8.3		30.3		96.1		6.7		5.0		5		-				-		-	
					Bottom	7.5	0.1	37	24.4	24.4	8.3	8.3	31.0	31.0	96.2	96.3	6.7	6.8	8.6		6		-				-		-	
						7.5	0.2	37	24.4		8.3		31.0		96.4		6.8		8.9		5		-				-		-	
SR4A	Cloudy	Calm	11:18	9.6	Surface	1.0	0.2	73	24.8	24.8	8.2	8.2	32.8	32.8	96.2	96.2	6.6	6.6	2.6	2.8	5	7	-	-	817194	807790	-	-	-	-
						1.0	0.2	77	24.8		8.2		32.8		96.2		6.6		2.6		6		-				-		-	
					Middle	4.8	0.2	60	24.8	24.8	8.2	8.2	32.8	32.8	96.0	96.0	6.6		2.7		7		-				-		-	
						4.8	0.2	60	24.8		8.2		32.8		96.0		6.6		2.8		7		-				-		-	
					Bottom	8.6	0.2	64	24.7	24.7	8.2	8.2	32.8	32.8	96.0	96.0	6.6	6.6	3.1		9		-				-		-	
						8.6	0.2	66	24.7		8.2		32.8		96.0		6.6		3.1		10		-				-		-	
SR5A	Cloudy	Calm	11:00	3.7	Surface	1.0	0.1	355	25.0	25.0	8.1	8.1	32.2	32.2	98.2	98.2	6.8	6.8	3.0	3.1	10	9	-	-	816590	810693	-	-	-	-
						1.0	0.1	327	25.0		8.1		32.2		98.2		6.8		3.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	345	25.0	25.0	8.2	8.2	32.3	32.3	98.2	98.2	6.8	6.8	3.1		8		-				-		-	
						2.7	0.1	317	25.0		8.2		32.3		98.2		6.8		3.1		7		-				-		-	
SR6A	Cloudy	Calm	10:25	4.5	Surface	1.0	0.1	90	24.9	24.9	8.2	8.2	31.7	31.7	94.4	94.4	6.5	6.5	2.2	2.0	6	6	-	-	817955	814738	-	-	-	-
						1.0	0.1	90	24.9		8.2		31.7		94.4		6.5		2.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	87	24.9	24.9	8.1	8.1	31.7	31.7	94.3	94.3	6.5	6.5	1.7		6		-				-		-	
						3.5	0.1	91	24.9		8.1		31.7		94.3		6.5		1.7		6		-				-		-	
SR7	Cloudy	Moderate	09:59	16.6	Surface	1.0	0.9	70	24.7	24.7	8.2	8.2	32.2	32.2	88.1	88.1	6.1	6.1	4.3	4.5	8	6	-	-	823628	823736	-	-	-	-
						1.0	1.0	73	24.7		8.2		32.2		88.0		6.1		4.4		7		-				-		-	
					Middle	8.3	0.7	87	24.7	24.7	8.2	8.2	32.3	32.3	87.8	87.8	6.1		4.5		6		-				-		-	
						8.3	0.7	87	24.7		8.2		32.3		87.8		6.1		4.6		5		-				-		-	
					Bottom	15.6	0.4	53	24.7	24.7	8.3	8.3	32.3	32.3	87.7	87.7	6.1	6.1	4.5		4		-				-		-	
						15.6	0.4	56	24.7		8.3		32.3		87.7		6.1		4.5		5		-				-		-	
SR8	Cloudy	Moderate	11:23	5.3	Surface	1.0	-	-	24.6	24.6	8.3	8.3	30.8	30.8	94.2	94.2	6.6	6.6	6.9	7.4	8	9	-	-	820407	811618	-	-	-	-
						1.0	-	-	24.6		8.3		30.8		94.2		6.6		7.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	24.6	24.6	8.3	8.3	30.9	30.9	94.7	94.8	6.6	6.6	7.6		10		-				-		-	
						4.3	-	-	24.6		8.3		30.9		94.8		6.6		8.1		10		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:38	7.8	Surface	1.0	0.3	84	24.9	24.9	8.2	8.2	32.2	32.2	99.1	99.1	6.8	6.8	4.2	5.6	8	9	86	88	815613	804252	<0.2	<0.2	0.6	0.5
						1.0	0.3	89	24.9		8.2		32.2		99.0		6.8		4.4		8		85				<0.2		0.5	
					Middle	3.9	0.2	59	24.9	24.9	8.2	8.2	32.5	32.5	97.4	97.3	6.7		6.1		9		88				<0.2		0.4	
						3.9	0.2	61	24.9		8.2		32.5		97.2		6.7		6.0		8		88				<0.2		0.5	
					Bottom	6.8	0.3	31	24.9	24.9	8.2	8.2	32.7	32.7	96.1	96.1	6.6	6.6	6.4		10		91				<0.2		0.6	
						6.8	0.3	34	24.9		8.2		32.7		96.1		6.6		6.5		9		91				<0.2		0.5	
C2	Cloudy	Moderate	16:35	11.1	Surface	1.0	0.5	344	24.8	24.8	8.3	8.3	28.5	28.4	97.8	97.8	6.9	6.8	2.8	5.1	5	5	86	89	825666	806944	<0.2	<0.2	0.6	0.8
						1.0	0.5	316	24.8		8.3		28.4		97.8		6.9		2.8		4		88				<0.2		0.7	
					Middle	5.6	0.6	321	24.7	24.7	8.3	8.3	29.9	29.9	95.0	95.0	6.7		4.2		6		89				<0.2		0.8	
						5.6	0.6	349	24.7		8.3		29.9		95.0		6.7		4.2		5		88				<0.2		0.9	
					Bottom	10.1	0.4	333	24.7	24.7	8.3	8.3	30.2	30.2	93.2	93.2	6.5	6.5	8.2		6		90				<0.2		0.9	
						10.1	0.4	349	24.7		8.3		30.2		93.2		6.5		8.6		5		91				<0.2		0.8	
C3	Cloudy	Moderate	18:25	12.2	Surface	1.0	0.6	280	24.6	24.6	8.3	8.3	31.1	31.2	93.3	93.3	6.5	6.4	3.4	5.1	6	6	86	88	822108	817796	<0.2	<0.2	1.1	1.0
						1.0	0.6	306	24.6		8.3		31.2		93.2		6.5		3.5		5		87				<0.2		1.0	
					Middle	6.1	0.5	286	24.7	24.7	8.2	8.2	31.7	31.8	89.6	89.6	6.2		4.6		7		88				<0.2		1.0	
						6.1	0.6	295	24.7		8.2		31.8		89.6		6.2		4.7		6		89				<0.2		1.0	
					Bottom	11.2	0.3	289	24.7	24.7	8.2	8.2	31.9	31.9	89.8	89.9	6.2	6.2	7.2		7		90				<0.2		1.0	
						11.2	0.3	295	24.7		8.2		31.9		89.9		6.2		7.4		6		90				<0.2		1.0	
IM1	Cloudy	Moderate	17:16	4.6	Surface	1.0	0.2	331	24.9	24.9	8.2	8.2	32.5	32.5	100.3	100.2	6.9	6.9	1.3	2.6	4	5	86	88	817955	807110	<0.2	<0.2	0.8	0.8
						1.0	0.2	336	24.9		8.2		32.5		100.1		6.9		1.3		5		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	279	24.9	24.9	8.2	8.2	32.7	32.7	96.0	96.0	6.6	6.6	3.8		5		89				<0.2		0.8	
						3.6	0.2	295	24.9		8.2		32.7		95.9		6.6		4.2		5		88				<0.2		0.6	
IM2	Cloudy	Moderate	17:08	6.4	Surface	1.0	0.3	28	25.0	25.0	8.2	8.2	32.0	32.0	101.2	101.2	7.0	7.0	2.9	5.4	7	7	84	87	818179	806187	<0.2	<0.2	0.8	0.8
						1.0	0.4	30	25.0		8.2		32.0		101.2		7.0		3.0		7		84				<0.2		0.8	
					Middle	3.2	0.4	11	25.0	25.0	8.2	8.2	32.1	32.1	100.6	100.6	6.9		3.9		8		87				<0.2		0.7	
						3.2	0.4	11	25.0		8.2		32.1		100.6		6.9		3.8		7		86				<0.2		0.7	
					Bottom	5.4	0.3	327	24.9	24.9	8.2	8.2	32.6	32.6	97.7	97.7	6.7	6.7	9.5		8		89				<0.2		0.7	
						5.4	0.3	356	24.9		8.2		32.6		97.7		6.7		9.3		6		90				<0.2		0.8	
IM3	Cloudy	Moderate	16:59	6.6	Surface	1.0	0.5	22	25.0	25.0	8.2	8.2	31.9	31.9	100.5	100.5	6.9	6.9	2.7	4.6	6	6	85	87	818773	805613	<0.2	<0.2	0.9	0.8
						1.0	0.6	22	25.0		8.2		31.9		100.4		6.9		2.7		5		84				<0.2		0.8	
					Middle	3.3	0.4	316	25.0	25.0	8.2	8.2	32.1	32.1	98.2	98.1	6.8		3.4		5		86				<0.2		0.8	
						3.3	0.4	342	25.0		8.2		32.1		98.0		6.8		3.6		6		87				<0.2		0.7	
					Bottom	5.6	0.4	310	24.9	24.9	8.2	8.2	32.5	32.5	95.8	95.8	6.6	6.6	7.5		7		89				<0.2		0.7	
						5.6	0.4	335	24.9		8.2		32.5		95.7		6.6		7.6		7		89				<0.2		0.7	
IM4	Cloudy	Moderate	16:49	7.8	Surface	1.0	0.8	340	25.1	25.1	8.2	8.2	31.3	31.3	99.9	99.9	6.9	6.9	1.8	2.6	6	5	84	87	819717	804608	<0.2	<0.2	0.7	0.7
						1.0	0.9	348	25.1		8.2		31.3		99.8		6.9		1.8		5		85				<0.2		0.7	
					Middle	3.9	0.7	336	25.0	25.0	8.2	8.2	31.6	31.6	99.1	99.1	6.8		2.5		5		87				<0.2		0.7	
						3.9	0.7	309	25.0		8.2		31.6		99.1		6.8		2.4		4		87				<0.2		0.8	
					Bottom	6.8	0.6	332	25.0	25.0	8.2	8.2	32.0	32.0	97.9	97.9	6.8	6.8	3.4		5		89				<0.2		0.7	
						6.8	0.6	305	25.0		8.2		32.0		97.9		6.7		3.5		4		89				<0.2		0.7	
IM5	Cloudy	Moderate	16:42	7.1	Surface	1.0	1.1	18	25.1	25.1	8.2	8.2	31.0	31.0	100.3	100.3	6.9	6.9	2.5	5.1	7	7	84	87	820733	804867	<0.2	<0.2	0.8	0.8
						1.0	1.1	18	25.1		8.2		31.0		100.3		6.9		2.5		8		85				<0.2		0.8	
					Middle	3.6	0.9	10	25.1	25.1	8.2	8.2	31.0	31.0	100.0	100.0	6.9		5.6		7		87				<0.2		0.8	
						3.6	0.9	10	25.1		8.2		31.0		99.9		6.9		5.6		6		86				<0.2		0.7	
					Bottom	6.1	0.7	22	25.1	25.1	8.2	8.2	31.0	31.0	99.7	99.7	6.9	6.9	7.2		6		90				<0.2		0.7	
						6.1	0.8	22	25.1		8.2		31.0		99.7		6.9		7.4		6		90				<0.2		0.7	
IM6	Cloudy	Moderate	16:35	6.9	Surface	1.0	0.2	188	25.1	25.1	8.2	8.2	30.8	30.8	100.2	100.2	6.9	6.9	3.2	4.7	8	7	84	87	821062	805824	<0.2	<0.2	0.7	0.7
						1.0	0.2	198	25.1		8.2		30.8		100.2		6.9		3.5		8		85				<0.2		0.6	
					Middle	3.5	0.2	62	25.1	25.1	8.2	8.2	30.9	30.9	99.9	99.9	6.9		5.8		6		88				<0.2		0.7	
						3.5	0.2	64	25.1		8.2		30.9		99.9		6.9		5.6		7		87				<0.2		0.8	
					Bottom	5.9	0.1	41	25.1	25.1	8.2	8.2	30.9	30.9	99.8	99.8	6.9	6.9	5.2		5		90				<0.2		0.6	
						5.9	0.2	45	25.1		8.2		30.9		99.7		6.9		5.0		6		90				<0.2		0.7	
IM7	Cloudy	Moderate	16:27	8.0	Surface	1.0	0.1	194	25.2	25.2	8.2	8.2	30.9	30.9	99.8	99.8	6.9	6.9	1.9	3.6	5	5	85	88	821325	806846	<0.2	<0.2	0.6	0.7
						1.0	0.1	206	25.2		8.2		30.9		99.8		6.9		2.0		6		85				<0.2		0.6	
					Middle	4.0	0.2	122	25.2	25.2	8.2	8.2	30.9	30.9	99.6	99.6	6.9		2.4		4		87				<0.2		0.7	
						4.0	0.2	133	25.2		8.2		30.9		99.6		6.9		2.4		5		88				<0.2		0.7	
					Bottom	7.0	0.2	97	25.1	25.1	8.2	8.2	31.1	31.1	98.9	98.9	6.8	6.8	6.3		4		90				<0.2		0.7	
						7.0	0.2	97	25.1		8.2		31.1		98.9		6.8		6.2		4		90				<0.2		0.7	
IM8	Cloudy	Moderate	17:00	6.8	Surface	1.0	0.1	201	24.8	24.8	8.2	8.2	29.9	29.9	98.1	98.1	6.9	6.9	3.4	5.3	3	3	86	89	821834	808149	<0.2	<0.2	0.8	0.9
						1.0	0.1	206	24.8		8.2		29.9		98.1		6.9		3.4		2		87				<0.2		0.8	
					Middle	3.4	0.0	226	24.8	24.8	8.2	8.2	30.0	30.0	98.2	98.2	6.9		3.9		3		88				<0.2		0.9	
						3.4	0.0	235	24.8		8.2		30.0		98.2		6.9		4.1		3		89				<0.2		0.8	
					Bottom	5.8	0.1	167	24.8	24.8	8.2	8.2	30.2	30.1	98.7	98.7	6.9	6.9	8.6		4		90				<0.2		0.9	
						5.8	0.1	183	24.8		8.2		30.1		98.7		6.9		8.3		5		91				<0.2		0.9	

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 October 20 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	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	17:05	6.9	Surface	1.0	0.5	70	24.8	24.8	8.2	8.2	30.0	30.0	97.5	97.5	6.8	6.8	3.6	4.6	3	5	86	89	822096	808797	<0.2	<0.2	0.8	0.8
						1.0	0.6	74	24.8		8.2		30.0		97.5		6.8		3.6		4		88				<0.2		0.9	
					Middle	3.5	0.5	85	24.8	24.8	8.2	8.2	30.2	30.2	97.8	97.9	6.8		4.5		4		89				<0.2		0.8	
						3.5	0.5	90	24.8		8.2		30.2		97.9		6.8		4.6		5		89				<0.2		0.9	
					Bottom	5.9	0.5	96	24.7	24.7	8.3	8.3	30.3	30.2	98.3	98.3	6.9	6.9	5.7		6		92				<0.2		0.9	
						5.9	0.5	104	24.7		8.3		30.2		98.3		6.9		5.8		6		92				<0.2		0.7	
IM10	Cloudy	Moderate	17:12	6.5	Surface	1.0	0.3	321	24.9	24.9	8.2	8.2	30.1	30.1	97.4	97.4	6.8	6.8	3.1	3.5	4	5	86	89	822408	809787	<0.2	<0.2	0.8	0.8
						1.0	0.3	349	24.9		8.2		30.1		97.4		6.8		3.1		4		87				<0.2		0.8	
					Middle	3.3	0.3	314	24.9	24.9	8.2	8.2	30.2	30.2	97.4	97.4	6.8		3.2		4		88				<0.2		0.8	
						3.3	0.3	335	24.8		8.2		30.2		97.4		6.8		3.3		4		89				<0.2		0.8	
					Bottom	5.5	0.3	299	24.8	24.8	8.3	8.3	30.3	30.3	98.0	98.1	6.8	6.9	4.1		6		90				<0.2		0.8	
						5.5	0.3	303	24.8		8.3		30.3		98.1		6.9		4.3		6		91				<0.2		0.8	
IM11	Cloudy	Moderate	17:23	7.2	Surface	1.0	0.6	301	24.6	24.6	8.3	8.3	30.4	30.4	98.3	98.3	6.9	6.9	4.2	5.5	7	5	87	89	822063	811449	<0.2	<0.2	0.9	0.8
						1.0	0.7	311	24.6		8.3		30.4		98.3		6.9		4.2		7		87				<0.2		0.9	
					Middle	3.6	0.4	311	24.6	24.6	8.3	8.3	30.4	30.4	98.3	98.3	6.9		4.8		6		88				<0.2		0.9	
						3.6	0.5	316	24.6		8.3		30.4		98.3		6.9		5.0		5		89				<0.2		0.8	
					Bottom	6.2	0.2	289	24.6	24.6	8.3	8.3	30.4	30.4	98.5	98.6	6.9	6.9	7.2		3		90				<0.2		0.8	
						6.2	0.2	314	24.6		8.3		30.4		98.6		6.9		7.3		4		92				<0.2		0.7	
IM12	Cloudy	Moderate	17:29	9.0	Surface	1.0	0.4	280	24.6	24.6	8.3	8.3	30.3	30.3	97.8	97.8	6.9	6.8	7.3	9.1	3	4	86	88	821471	812053	<0.2	<0.2	0.8	0.8
						1.0	0.4	299	24.6		8.3		30.4		97.7		6.8		8.0		3		87				<0.2		0.8	
					Middle	4.5	0.5	298	24.6	24.6	8.3	8.3	30.4	30.4	97.3	97.3	6.8		9.1		4		87				<0.2		0.7	
						4.5	0.5	327	24.6		8.3		30.4		97.3		6.8		9.0		4		89				<0.2		0.7	
					Bottom	8.0	0.3	284	24.6	24.6	8.3	8.3	30.4	30.4	97.8	97.9	6.9	6.9	10.6		4		90				<0.2		0.9	
						8.0	0.4	298	24.6		8.3		30.4		97.9		6.9		10.4		5		91				<0.2		0.9	
SR1A	Cloudy	Moderate	17:47	5.1	Surface	1.0	-	-	24.6	24.6	8.3	8.3	30.6	30.6	98.0	98.0	6.9	6.9	3.9	4.4	7	6	-	-	819980	812658	-	-	-	-
						1.0	-	-	24.6		8.3		30.6		98.0		6.9		3.9		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.5	24.5	8.3	8.3	30.9	30.9	98.0	98.2	6.9	6.9	4.8		5		-				-		-	
						4.1	-	-	24.4		8.3		30.9		98.3		6.9		4.9		6		-				-		-	
SR2	Cloudy	Moderate	18:00	4.6	Surface	1.0	0.2	109	24.6	24.6	8.3	8.3	30.7	30.7	96.3	96.3	6.7	6.7	6.0	6.3	7	7	88	89	821465	814183	<0.2	<0.2	0.7	0.8
						1.0	0.2	110	24.6		8.3		30.7		96.3		6.7		6.0		7		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	140	24.3	24.3	8.3	8.3	30.8	30.8	97.8	97.8	6.9	6.9	6.5		7		90				<0.2		0.7	
						3.6	0.2	142	24.3		8.3		30.8		97.8		6.9		6.5		8		90				<0.2		0.9	
SR3	Cloudy	Moderate	16:53	8.6	Surface	1.0	0.1	287	24.7	24.7	8.3	8.3	29.8	29.8	97.9	97.9	6.9	6.9	3.6	4.1	3	4	-	-	822163	807576	-	-	-	-
						1.0	0.1	300	24.7		8.3		29.8		97.9		6.9		3.7		3		-				-		-	
					Middle	4.3	0.2	245	24.7	24.7	8.3	8.3	29.8	29.8	97.9	97.9	6.9		3.8		4		-				-		-	
						4.3	0.2	268	24.7		8.3		29.8		97.9		6.9		3.9		4		-				-		-	
					Bottom	7.6	0.1	94	24.7	24.7	8.3	8.3	29.9	29.9	98.1	98.2	6.9	6.9	4.4		6		-				-		-	
						7.6	0.1	97	24.7		8.3		29.9		98.2		6.9		5.0		5		-				-		-	
SR4A	Cloudy	Calm	17:59	8.8	Surface	1.0	0.3	250	25.0	25.0	8.2	8.2	32.4	32.4	98.2	98.2	6.8	6.8	4.2	4.9	9	8	-	-	817178	807804	-	-	-	-
						1.0	0.4	265	25.0		8.2		32.4		98.2		6.8		4.2		8		-				-		-	
					Middle	4.4	0.3	249	25.0	25.0	8.2	8.2	32.5	32.5	98.0	98.0	6.7		4.6		7		-				-		-	
						4.4	0.3	253	25.0		8.2		32.5		98.0		6.7		4.6		8		-				-		-	
					Bottom	7.8	0.2	247	25.0	25.0	8.2	8.2	32.5	32.5	97.8	97.8	6.7	6.7	6.0		7		-				-		-	
						7.8	0.2	266	25.0		8.2		32.5		97.8		6.7		5.9		7		-				-		-	
SR5A	Cloudy	Calm	18:17	3.5	Surface	1.0	0.3	284	25.1	25.1	8.2	8.2	32.1	32.1	99.2	99.2	6.8	6.8	3.7	4.2	9	8	-	-	816603	810701	-	-	-	-
						1.0	0.3	308	25.1		8.2		32.1		99.1		6.8		3.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	292	25.1	25.1	8.2	8.2	32.1	32.1	99.0	99.0	6.8	6.8	4.7		7		-				-		-	
						2.5	0.2	316	25.1		8.2		32.1		99.0		6.8		4.7		7		-				-		-	
SR6A	Cloudy	Calm	18:48	4.4	Surface	1.0	0.1	253	25.1	25.1	8.3	8.3	31.6	31.6	97.8	97.8	6.7	6.7	5.6	6.3	6	8	-	-	817976	814751	-	-	-	-
						1.0	0.1	258	25.1		8.3		31.6		97.8		6.7		5.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	262	25.1	25.1	8.2	8.2	31.6	31.6	97.8	97.8	6.7	6.7	6.9		10		-				-		-	
						3.4	0.1	287	25.1		8.2		31.6		97.7		6.7		6.9		9		-				-		-	
SR7	Cloudy	Moderate	19:07	16.5	Surface	1.0	0.1	11	24.7	24.7	8.2	8.2	31.9	31.9	89.6	89.6	6.2	6.2	4.5	5.1	5	6	-	-	823617	823750	-	-	-	-
						1.0	0.1	11	24.7		8.2		31.9		89.6		6.2		4.5		4		-				-		-	
					Middle	8.3	0.2	87	24.7	24.7	8.2	8.2	32.1	32.1	89.4	89.4	6.2		5.3		6		-				-		-	
						8.3	0.2	94	24.7		8.2		32.1		89.4		6.2		5.3		5		-				-		-	
					Bottom	15.5	0.1	80	24.7	24.7	8.2	8.2	32.1	32.1	91.2	91.4	6.3	6.3	5.5		8		-				-		-	
						15.5	0.1	85	24.7		8.2		32.1		91.5		6.3		5.6		8		-				-		-	
SR8	Cloudy	Moderate	17:38	5.5	Surface	1.0	-	-	24.8	24.8	8.3	8.3	30.3	30.3	100.2	100.3	7.0	7.0	5.3	5.1	12	12	-	-	820389	811621	-	-	-	-
						1.0	-	-	24.8		8.3		30.3		100.3		7.0		5.3		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	24.6	24.6	8.3	8.3	30.3	30.3	100.6	100.7	7.1	7.1	4.9		11		-				-		-	
						4.5	-	-	24.6		8.3		30.4		100.7		7.1		5.0		11		-				-		-	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:16	9.0	Surface	1.0	0.2	225	24.6	24.6	8.2	8.2	33.0	33.0	96.5	96.5	6.7	6.6	4.4	7.7	8	7	84	89	815628	804253	<0.2	<0.2	0.5	0.5
						1.0	0.2	239	24.6		8.2		33.0		96.5		6.7		4.2		7		85				<0.2		0.5	
					Middle	4.5	0.1	214	24.5	24.5	8.2	8.2	33.2	33.2	94.6	94.6	6.5		5.3		7		90				<0.2		0.5	
						4.5	0.1	216	24.5		8.2		33.2		94.6		6.5		5.3		6		89				<0.2		0.5	
					Bottom	8.0	0.1	181	24.5	24.5	8.2	8.2	33.3	33.3	93.6	93.6	6.5	6.5	13.5		6		93				<0.2		0.5	
						8.0	0.1	195	24.5		8.2		33.3		93.6		6.5		13.5		6		93				<0.2		0.4	
C2	Cloudy	Moderate	11:06	12.0	Surface	1.0	0.2	135	24.4	24.4	8.3	8.3	30.9	30.9	93.9	93.9	6.6	6.6	5.9	7.2	6	5	85	88	825661	806957	<0.2	<0.2	0.6	0.7
						1.0	0.2	137	24.4		8.3		31.0		93.9		6.6		5.8		5		87				<0.2		0.6	
					Middle	6.0	0.5	154	24.2	24.2	8.3	8.3	31.3	31.3	94.4	94.4	6.6		6.5		5		89				<0.2		0.8	
						6.0	0.5	163	24.2		8.3		31.3		94.4		6.6		6.5		5		88				<0.2		0.7	
					Bottom	11.0	0.5	144	24.2	24.2	8.3	8.3	31.5	31.5	95.1	95.2	6.7	6.7	9.2		5		90				<0.2		0.5	
						11.0	0.5	156	24.2		8.3		31.5		95.2		6.7		9.3		5		90				<0.2		0.7	
C3	Cloudy	Moderate	12:51	12.5	Surface	1.0	0.4	286	24.6	24.6	8.3	8.3	31.7	31.7	89.8	89.7	6.2	6.2	3.8	5.5	3	3	86	88	822125	817780	<0.2	<0.2	0.7	0.6
						1.0	0.4	293	24.6		8.3		31.8		89.5		6.2		3.8		3		87				<0.2		0.6	
					Middle	6.3	0.2	257	24.5	24.5	8.2	8.2	32.1	32.1	87.7	87.7	6.1		4.1		2		88				<0.2		0.6	
						6.3	0.2	271	24.5		8.2		32.1		87.7		6.1		4.1		3		89				<0.2		0.6	
					Bottom	11.5	0.1	120	24.5	24.5	8.3	8.3	32.2	32.2	88.3	88.3	6.1	6.1	8.9		2		90				<0.2		0.5	
						11.5	0.1	131	24.5		8.3		32.2		88.3		6.1		8.2		2		90				<0.2		0.6	
IM1	Fine	Moderate	11:56	5.4	Surface	1.0	0.1	185	24.6	24.6	8.2	8.2	32.6	32.6	96.5	96.5	6.7	6.7	2.5	3.4	5	5	87	90	817927	807135	<0.2	<0.2	0.7	0.7
						1.0	0.1	192	24.6		8.2		32.6		96.5		6.7		2.5		6		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	151	24.6	24.6	8.2	8.2	32.6	32.6	95.0	95.0	6.6	6.6	4.2		5		92				<0.2		0.6	
						4.4	0.1	155	24.6		8.2		32.6		95.0		6.6		4.3		5		93				<0.2		0.8	
IM2	Fine	Moderate	11:48	7.8	Surface	1.0	0.1	232	24.7	24.7	8.2	8.2	32.6	32.6	96.6	96.6	6.7	6.7	3.5	5.1	7	6	86	90	818179	806174	<0.2	<0.2	0.6	0.7
						1.0	0.1	244	24.7		8.2		32.6		96.6		6.7		3.5		6		87				<0.2		0.7	
					Middle	3.9	0.1	208	24.6	24.6	8.2	8.2	32.7	32.7	96.0	96.0	6.6		3.7		7		90				<0.2		0.7	
						3.9	0.1	209	24.6		8.2		32.7		96.0		6.6		3.7		6		90				<0.2		0.7	
					Bottom	6.8	0.1	84	24.6	24.6	8.2	8.2	32.9	32.9	94.7	94.7	6.5	6.5	8.2		6		93				<0.2		0.7	
						6.8	0.1	89	24.6		8.2		32.9		94.7		6.5		8.4		6		94				<0.2		0.6	
IM3	Fine	Moderate	11:40	8.1	Surface	1.0	0.1	243	24.6	24.6	8.2	8.2	32.7	32.7	96.6	96.6	6.7	6.7	4.0	6.3	9	9	85	89	818767	805614	<0.2	<0.2	0.8	0.8
						1.0	0.1	254	24.6		8.2		32.7		96.6		6.7		3.9		9		86				<0.2		0.8	
					Middle	4.1	0.0	79	24.6	24.6	8.2	8.2	32.8	32.8	95.5	95.5	6.6		6.2		9		89				<0.2		0.8	
						4.1	0.0	79	24.6		8.2		32.8		95.5		6.6		6.2		8		89				<0.2		0.9	
					Bottom	7.1	0.1	94	24.5	24.5	8.2	8.2	32.9	32.9	94.8	94.8	6.6	6.6	8.9		8		94				<0.2		0.9	
						7.1	0.1	96	24.5		8.2		32.9		94.8		6.6		8.9		8		93				<0.2		0.8	
IM4	Fine	Moderate	11:27	8.2	Surface	1.0	0.0	294	24.6	24.6	8.2	8.2	32.8	32.8	95.3	95.3	6.6	6.6	7.2	9.0	12	11	84	89	819711	804628	<0.2	<0.2	0.8	0.8
						1.0	0.0	302	24.6		8.2		32.8		95.3		6.6		7.1		13		85				<0.2		0.7	
					Middle	4.1	0.0	226	24.6	24.6	8.2	8.2	32.8	32.8	94.9	94.9	6.6		8.2		11		89				<0.2		0.8	
						4.1	0.0	236	24.6		8.2		32.8		94.8		6.6		8.4		11		89				<0.2		0.9	
					Bottom	7.2	0.0	232	24.6	24.6	8.2	8.2	32.8	32.8	94.6	94.6	6.5	6.5	11.5		10		94				<0.2		0.9	
						7.2	0.0	253	24.6		8.2		32.8		94.6		6.5		11.4		11		93				<0.2		0.8	
IM5	Fine	Moderate	11:19	7.6	Surface	1.0	0.1	295	24.7	24.7	8.2	8.2	32.1	32.1	96.6	96.6	6.7	6.7	3.0	5.7	7	7	86	89	820720	804889	<0.2	<0.2	0.8	0.8
						1.0	0.1	310	24.7		8.2		32.1		96.6		6.7		2.8		8		87				<0.2		0.7	
					Middle	3.8	0.0	5	24.7	24.7	8.2	8.2	32.2	32.2	95.9	95.9	6.6		4.0		7		90				<0.2		0.8	
						3.8	0.0	5	24.7		8.2		32.2		95.9		6.6		4.2		6		90				<0.2		0.8	
					Bottom	6.6	0.0	300	24.6	24.6	8.2	8.2	32.8	32.8	94.9	95.0	6.6	6.6	10.3		6		91				<0.2		0.6	
						6.6	0.0	319	24.6		8.2		32.7		95.0		6.6		10.0		7		91				<0.2		0.8	
IM6	Cloudy	Moderate	11:11	7.8	Surface	1.0	0.2	249	24.9	24.9	8.2	8.2	31.6	31.6	96.3	96.3	6.7	6.7	1.7	2.8	5	4	84	89	821061	805840	<0.2	<0.2	0.9	0.8
						1.0	0.2	257	24.9		8.2		31.6		96.3		6.7		1.7		4		85				<0.2		0.9	
					Middle	3.9	0.1	184	24.8	24.8	8.2	8.2	31.9	31.9	95.5	95.5	6.6		2.9		4		90				<0.2		0.9	
						3.9	0.1	188	24.8		8.2		31.9		95.5		6.6		2.9		4		92				<0.2		0.8	
					Bottom	6.8	0.1	231	24.7	24.7	8.2	8.2	32.3	32.3	94.8	94.8	6.6	6.6	3.8		4		92				<0.2		0.7	
						6.8	0.1	244	24.7		8.2		32.3		94.8		6.6		3.8		3		93				<0.2		0.7	
IM7	Cloudy	Moderate	11:04	8.8	Surface	1.0	0.1	286	24.9	24.9	8.2	8.2	31.6	31.6	96.3	96.3	6.7	6.7	2.0	2.9	3	3	85	90	821359	806822	<0.2	<0.2	0.7	0.9
						1.0	0.1	296	24.9		8.2		31.6		96.3		6.7		2.0		3		86				<0.2		0.9	
					Middle	4.4	0.1	324	24.8	24.8	8.2	8.2	31.7	31.7	95.7	95.7	6.6		2.2		3		89				<0.2		0.9	
						4.4	0.1	327	24.8		8.2		31.7		95.7		6.6		2.3		3		90				<0.2		0.9	
					Bottom	7.8	0.1	296	24.8	24.8	8.2	8.2	32.1	32.1	94.6	94.6	6.5	6.5	4.5		4		94				<0.2		1.0	
						7.8	0.1	301	24.8		8.2		32.1		94.6		6.5		4.4		4		93				<0.2		0.8	
IM8	Cloudy	Moderate	11:31	8.3	Surface	1.0	0.3	60	24.3	24.3	8.3	8.3	31.1	31.1	95.1	95.1	6.7	6.7	5.4	7.8	4	4	86	88	821845	808152	<0.2	<0.2	1.0	0.9
						1.0	0.3	60	24.3		8.3		31.1		95.0		6.7		5.6		4		87				<0.2		0.9	
					Middle	4.2	0.3	58	24.2	24.2	8.3	8.3	31.4	31.4	95.3	95.4	6.7		6.0		4		88				<0.2		0.9	
						4.2	0.3	60	24.2		8.3		31.4		95.4		6.7		6.1		5		88				<0.2		1.0	
					Bottom	7.3	0.4	67	24.2	24.2	8.3	8.3	31.5	31.4	96.1	96.2	6.7	6.8	11.9		4		90				<0.2		0.8	
						7.3	0.4	73	24.2		8.3		31.4		96.3		6.8		11.7		5		91				<0.2		1.0	

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 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:37	8.0	Surface	1.0	0.4	60	24.4	24.4	8.3	8.3	30.9	30.9	95.2	95.2	6.7	6.7	5.7	6.9	4	4	86	89	822096	808825	<0.2	<0.2	0.8	0.7
						1.0	0.4	64	24.4		8.3		31.0		95.2		6.7		5.7		4		87				<0.2		0.7	
					Middle	4.0	0.4	76	24.3	24.3	8.3	8.3	31.1	31.1	95.0	95.0	6.7		5.7		4		88				<0.2		0.7	
						4.0	0.4	77	24.3		8.3		31.1		95.0		6.7		5.8		4		88				<0.2		0.8	
					Bottom	7.0	0.3	74	24.2	24.2	8.3	8.3	31.3	31.3	96.3	96.4	6.8	6.8	9.2		4		92				<0.2		0.6	
						7.0	0.4	79	24.2		8.3		31.3		96.5		6.8		9.4		5		91				<0.2		0.6	
IM10	Cloudy	Moderate	11:44	8.4	Surface	1.0	0.5	106	24.4	24.4	8.3	8.3	31.0	31.0	94.7	94.7	6.6	6.6	5.2	7.9	4	4	86	88	822392	809780	<0.2	<0.2	0.7	0.7
						1.0	0.5	106	24.4		8.3		31.0		94.7		6.6		5.2		4		87				<0.2		0.8	
					Middle	4.2	0.5	100	24.3	24.3	8.3	8.3	31.1	31.1	94.0	94.0	6.6		7.9		4		88				<0.2		0.7	
						4.2	0.5	102	24.3		8.3		31.1		94.0		6.6		8.0		5		88				<0.2		0.7	
					Bottom	7.4	0.4	94	24.3	24.3	8.3	8.3	31.1	31.1	96.3	96.4	6.8	6.8	10.9		4		90				<0.2		0.7	
						7.4	0.4	99	24.3		8.3		31.1		96.4		6.8		10.2		5		90				<0.2		0.7	
IM11	Cloudy	Moderate	11:55	8.7	Surface	1.0	0.5	96	24.5	24.5	8.3	8.3	31.3	31.3	92.7	92.7	6.5	6.5	4.6	5.0	4	6	86	88	822062	811446	<0.2	<0.2	0.9	0.8
						1.0	0.5	97	24.5		8.3		31.3		92.7		6.5		4.6		5		86				<0.2		0.8	
					Middle	4.4	0.3	106	24.4	24.4	8.3	8.3	31.3	31.3	92.6	92.6	6.5		5.0		6		87				<0.2		0.6	
						4.4	0.3	108	24.4		8.3		31.3		92.6		6.5		5.1		5		88				<0.2		0.7	
					Bottom	7.7	0.4	107	24.4	24.4	8.3	8.3	31.3	31.3	94.6	94.8	6.6	6.6	5.2		6		89				<0.2		0.7	
						7.7	0.4	108	24.4		8.3		31.3		95.0		6.6		5.2		7		91				<0.2		0.8	
IM12	Cloudy	Moderate	12:01	9.3	Surface	1.0	0.5	95	24.5	24.5	8.3	8.3	31.4	31.4	93.2	93.2	6.5	6.5	5.9	7.6	4	4	85	87	821482	812028	<0.2	<0.2	0.6	0.7
						1.0	0.5	103	24.5		8.3		31.4		93.2		6.5		5.8		5		86				<0.2		0.7	
					Middle	4.7	0.4	116	24.4	24.4	8.3	8.3	31.4	31.4	93.5	93.6	6.5		3.5		5		86				<0.2		0.9	
						4.7	0.4	117	24.4		8.3		31.4		93.6		6.5		3.5		4		88				<0.2		0.7	
					Bottom	8.3	0.2	92	24.4	24.4	8.3	8.3	31.4	31.4	94.9	94.9	6.6	6.6	13.7		4		89				<0.2		0.7	
						8.3	0.2	92	24.4		8.3		31.4		94.9		6.6		13.4		4		90				<0.2		0.8	
SR1A	Cloudy	Moderate	12:20	4.8	Surface	1.0	-	-	24.4	24.4	8.3	8.3	31.2	31.2	95.7	95.7	6.7	6.7	5.6	6.0	4	5	-	-	819972	812661	-	-	-	-
						1.0	-	-	24.4		8.3		31.2		95.7		6.7		5.6		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	24.4	24.4	8.3	8.3	31.2	31.2	97.1	97.3	6.8	6.8	6.5		5		-				-		-	
						3.8	-	-	24.4		8.3		31.2		97.5		6.8		6.2		6		-				-		-	
SR2	Cloudy	Moderate	12:33	4.3	Surface	1.0	0.3	54	24.5	24.5	8.3	8.3	31.3	31.3	95.3	95.3	6.7	6.7	4.1	4.3	4	6	88	89	821484	814152	<0.2	<0.2	0.6	0.7
						1.0	0.4	59	24.5		8.3		31.3		95.3		6.7		4.1		5		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	50	24.5	24.5	8.3	8.3	31.3	31.3	98.9	98.9	6.9	6.9	4.5		8		90				<0.2		0.6	
						3.3	0.3	52	24.5		8.3		31.3		98.9		6.9		4.6		8		90				<0.2		0.7	
SR3	Cloudy	Moderate	11:24	9.2	Surface	1.0	0.2	209	24.4	24.4	8.3	8.3	30.8	30.8	94.4	94.4	6.6	6.6	4.8	7.0	7	6	-	-	822132	807558	-	-	-	-
						1.0	0.3	218	24.4		8.3		30.8		94.3		6.6		4.8		8		-				-		-	
					Middle	4.6	0.2	199	24.2	24.2	8.3	8.3	31.3	31.3	94.2	94.2	6.6		7.7		6		-				-		-	
						4.6	0.2	214	24.2		8.3		31.3		94.2		6.6		7.9		6		-				-		-	
					Bottom	8.2	0.2	134	24.2	24.2	8.3	8.3	31.4	31.4	95.5	95.8	6.7	6.7	8.4		4		-				-		-	
						8.2	0.2	142	24.2		8.3		31.4		96.0		6.7		8.6		5		-				-		-	
SR4A	Fine	Calm	12:39	9.5	Surface	1.0	0.3	74	24.7	24.7	8.2	8.2	32.6	32.6	95.2	95.2	6.6	6.6	4.0	5.2	7	6	-	-	817208	807825	-	-	-	-
						1.0	0.3	74	24.7		8.2		32.6		95.2		6.6		4.0		7		-				-		-	
					Middle	4.8	0.3	75	24.6	24.6	8.2	8.2	32.7	32.7	94.6	94.6	6.5		4.7		6		-				-		-	
						4.8	0.3	81	24.6		8.2		32.7		94.5		6.5		4.8		5		-				-		-	
					Bottom	8.5	0.2	71	24.6	24.6	8.2	8.2	32.7	32.7	93.7	93.8	6.5	6.5	6.9		6		-				-		-	
						8.5	0.2	71	24.6		8.2		32.7		93.8		6.5		7.0		5		-				-		-	
SR5A	Fine	Calm	12:56	5.7	Surface	1.0	0.1	25	25.0	25.0	8.2	8.2	32.2	32.2	97.5	97.5	6.7	6.7	2.9	5.5	6	5	-	-	816605	810687	-	-	-	-
						1.0	0.1	25	25.0		8.2		32.2		97.5		6.7		3.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.0	92	24.7	24.7	8.2	8.2	32.4	32.4	94.7	94.8	6.5	6.6	8.0		5		-				-		-	
						4.7	0.0	96	24.7		8.2		32.4		94.8		6.6		8.0		4		-				-		-	
SR6A	Fine	Calm	13:31	4.7	Surface	1.0	0.0	87	25.0	25.0	8.2	8.2	31.4	31.4	94.5	94.5	6.5	6.5	2.6	3.5	4	5	-	-	817977	814720	-	-	-	-
						1.0	0.0	88	25.0		8.2		31.4		94.4		6.5		2.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	262	25.0	25.0	8.2	8.2	31.7	31.7	93.2	93.3	6.4	6.4	4.2		5		-				-		-	
						3.7	0.1	268	25.0		8.2		31.7		93.3		6.4		4.3		5		-				-		-	
SR7	Cloudy	Moderate	13:19	16.8	Surface	1.0	0.6	61	24.6	24.6	8.2	8.2	32.0	32.0	89.6	89.6	6.2	6.2	3.4	4.2	3	3	-	-	823618	823757	-	-	-	-
						1.0	0.7	63	24.6		8.2		32.0		89.6		6.2		3.4		3		-				-		-	
					Middle	8.4	0.2	14	24.6	24.6	8.2	8.2	32.1	32.1	89.1	89.2	6.2		4.2		2		-				-		-	
						8.4	0.2	15	24.6		8.2		32.1		89.2		6.2		4.2		2		-				-		-	
					Bottom	15.8	0.2	55	24.5	24.5	8.3	8.3	32.1	32.1	92.0	92.1	6.4	6.4	4.9		3		-				-		-	
						15.8	0.2	58	24.5		8.3		32.1		92.2		6.4		4.9		2		-				-		-	
SR8	Cloudy	Moderate	12:12	5.4	Surface	1.0	-	-	24.6	24.6	8.3	8.3	31.3	31.3	94.3	94.4	6.6	6.6	6.2	6.1	4	4	-	-	820396	811614	-	-	-	-
						1.0	-	-	24.6		8.3		31.3		94.4		6.6		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	24.5	24.6	8.3	8.3	31.3	31.3	96.2	96.3	6.7	6.7	6.1		4		-				-		-	
						4.4	-	-	24.6		8.3		31.3		96.3		6.7		6.0		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**
Note: Due to safety concern, the monitoring at SR8 was shifted to the closest safe and accessible location as a precautionary measure.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 20 during Mid-Flood Tide

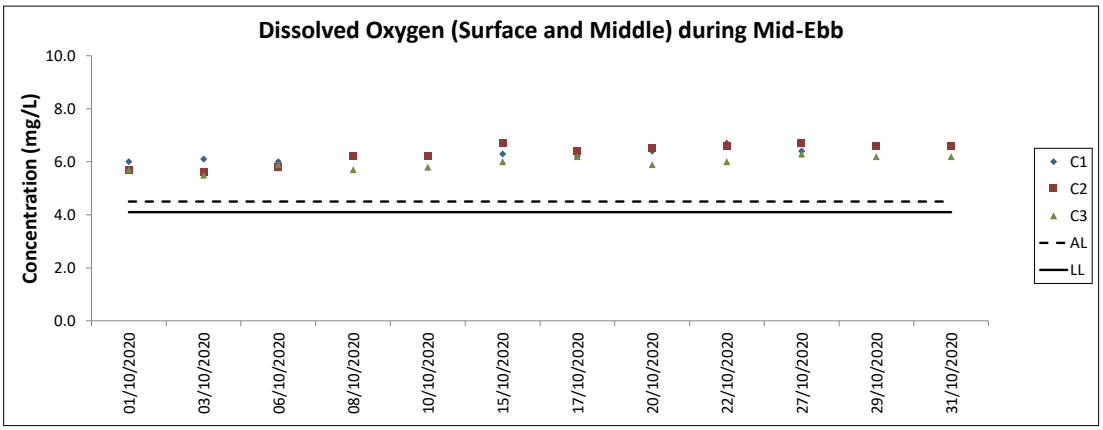
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	07:12	9.5	Surface	1.0	0.4	34	24.5	24.5	8.2	8.2	32.9	32.9	94.6	94.6	6.5	6.5	23.2	27.4	7	7	86	90	815609	804246	<0.2	<0.2	0.6	0.7
						1.0	0.4	35	24.5		8.2		32.9		94.6		6.5		23.3		7		87				<0.2		0.6	
					Middle	4.8	0.4	33	24.5	24.5	8.2	8.2	33.3	33.3	93.7	93.7	6.5		48.3		7		90				<0.2		0.7	
						4.8	0.4	35	24.5		8.2		33.3		93.7		6.5		42.4		7		89				<0.2		0.7	
					Bottom	8.5	0.3	15	24.5	24.5	8.2	8.2	33.3	33.3	93.5	93.5	6.4	6.4	12.9		7		93				<0.2		0.8	
						8.5	0.3	15	24.5		8.2		33.3		93.5		6.4		14.4		8		93				<0.2		0.9	
C2	Cloudy	Moderate	08:26	11.9	Surface	1.0	0.3	350	24.5	24.5	8.2	8.2	30.4	30.4	93.2	93.2	6.5	6.5	5.9	8.1	7	8	85	88	825661	806933	<0.2	<0.2	0.7	0.8
						1.0	0.3	322	24.5		8.2		30.4		93.2		6.5		5.9		8		86				<0.2		0.8	
					Middle	6.0	0.4	28	24.4	24.4	8.2	8.2	30.6	30.6	93.3	93.3	6.5		7.6		8		87				<0.2		0.8	
						6.0	0.4	29	24.4		8.2		30.6		93.3		6.6		7.7		8		89				<0.2		0.9	
					Bottom	10.9	0.4	346	24.4	24.4	8.3	8.3	30.7	30.7	94.3	94.3	6.6	6.6	10.4		9		89				<0.2		0.9	
						10.9	0.4	357	24.4		8.3		30.7		94.3		6.6		10.9		8		91				<0.2		0.9	
C3	Cloudy	Moderate	06:39	11.8	Surface	1.0	0.3	241	24.6	24.6	8.3	8.3	31.7	31.8	88.0	88.0	6.1	6.1	6.3	8.8	3	4	86	88	822090	817810	<0.2	<0.2	0.9	0.9
						1.0	0.3	263	24.6		8.3		31.8		87.9		6.1		6.4		3		87				<0.2		0.8	
					Middle	5.9	0.4	252	24.6	24.6	8.3	8.3	31.9	31.9	87.8	87.8	6.1		9.5		4		88				<0.2		0.8	
						5.9	0.4	269	24.6		8.3		31.9		87.8		6.1		9.6		4		88				<0.2		0.9	
					Bottom	10.8	0.4	266	24.6	24.6	8.4	8.4	31.9	31.9	87.9	87.9	6.1	6.1	10.8		4		90				<0.2		0.8	
						10.8	0.4	266	24.6		8.4		31.9		87.9		6.1		10.1		5		90				<0.2		0.9	
IM1	Cloudy	Moderate	07:34	5.7	Surface	1.0	0.1	357	24.6	24.6	8.2	8.2	32.8	32.8	94.4	94.4	6.5	6.5	4.6	5.1	7	9	88	91	817947	807146	<0.2	<0.2	0.9	0.9
						1.0	0.1	328	24.6		8.2		32.8		94.4		6.5		4.6		7		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	--	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	25	24.7	24.7	8.2	8.2	32.8	32.8	94.4	94.4	6.5	6.5	5.5		10		94				<0.2		0.9	
						4.7	0.1	26	24.7		8.2		32.8		94.4		6.5		5.6		11		94				<0.2		0.8	
IM2	Cloudy	Moderate	07:41	8.0	Surface	1.0	0.2	339	24.6	24.6	8.2	8.2	32.7	32.7	94.9	94.9	6.6	6.6	7.9	9.6	10	12	88	91	818156	806176	<0.2	<0.2	0.9	1.0
						1.0	0.2	341	24.6		8.2		32.7		94.8		6.6		8.0		10		88				<0.2		0.9	
					Middle	4.0	0.2	352	24.6	24.6	8.2	8.2	32.7	32.7	94.7	94.7	6.5		8.9		12		92				<0.2		0.9	
						4.0	0.2	324	24.6		8.2		32.7		94.7		6.5		8.7		11		92				<0.2		0.9	
					Bottom	7.0	0.2	13	24.6	24.6	8.2	8.2	32.7	32.7	94.6	94.6	6.5	6.5	12.1		13		93				<0.2		1.1	
						7.0	0.2	13	24.6		8.2		32.7		94.6		6.5		12.0		14		93				<0.2		1.2	
IM3	Cloudy	Moderate	07:49	8.2	Surface	1.0	0.5	18	24.6	24.6	8.2	8.2	32.7	32.7	94.7	94.7	6.5	6.5	14.9	19.7	19	20	88	91	818767	805598	<0.2	<0.2	0.9	0.8
						1.0	0.5	19	24.6		8.2		32.7		94.7		6.5		14.9		20		88				<0.2		0.8	
					Middle	4.1	0.4	321	24.6	24.6	8.2	8.2	32.7	32.7	94.6	94.6	6.5		19.0		20		91				<0.2		0.8	
						4.1	0.4	330	24.6		8.2		32.7		94.6		6.5		19.0		19		91				<0.2		0.7	
					Bottom	7.2	0.3	317	24.6	24.6	8.2	8.2	32.7	32.7	94.6	94.6	6.5	6.5	25.2		20		94				<0.2		0.8	
						7.2	0.4	348	24.6		8.2		32.7		94.6		6.5		25.3		20		94				<0.2		0.9	
IM4	Cloudy	Moderate	07:57	8.2	Surface	1.0	0.8	342	24.6	24.6	8.2	8.2	32.7	32.7	94.8	94.8	6.6	6.6	15.2	16.2	18	19	88	91	819704	804586	<0.2	<0.2	0.8	0.9
						1.0	0.8	315	24.6		8.2		32.7		94.8		6.6		15.5		18		88				<0.2		0.9	
					Middle	4.1	0.7	349	24.6	24.6	8.2	8.2	32.7	32.7	94.8	94.8	6.6		14.8		18		92				<0.2		0.8	
						4.1	0.7	321	24.6		8.2		32.7		94.8		6.6		14.6		18		91				<0.2		0.8	
					Bottom	7.2	0.6	341	24.6	24.6	8.2	8.2	32.7	32.7	94.8	94.8	6.6	6.6	18.7		20		94				<0.2		0.9	
						7.2	0.6	314	24.6		8.2		32.7		94.8		6.6		18.5		19		94				<0.2		0.9	
IM5	Cloudy	Moderate	08:05	7.6	Surface	1.0	1.1	12	24.6	24.6	8.2	8.2	32.5	32.5	95.0	95.0	6.6	6.6	23.7	25.5	6	7	88	92	820725	804878	<0.2	<0.2	0.9	1.1
						1.0	1.2	12	24.6		8.2		32.5		95.0		6.6		23.9		7		89				<0.2		1.0	
					Middle	3.8	0.9	3	24.6	24.6	8.2	8.2	32.6	32.6	94.9	94.9	6.6		25.7		7		93				<0.2		1.1	
						3.8	0.9	3	24.6		8.2		32.6		94.9		6.6		25.6		6		93				<0.2		1.2	
					Bottom	6.6	0.7	29	24.6	24.6	8.2	8.2	32.6	32.6	94.8	94.8	6.6	6.6	27.1		7		94				<0.2		1.2	
						6.6	0.8	31	24.6		8.2		32.6		94.8		6.6		27.2		8		95				<0.2		1.0	
IM6	Cloudy	Moderate	08:13	7.7	Surface	1.0	0.2	183	24.9	24.9	8.2	8.2	31.5	31.5	95.1	95.1	6.6	6.6	2.0	3.4	6	5	88	91	821056	805828	<0.2	<0.2	1.2	1.1
						1.0	0.2	196	24.9		8.2		31.5		95.1		6.6		2.0		5		88				<0.2		1.4	
					Middle	3.9	0.2	66	24.8	24.8	8.2	8.2	31.9	31.9	94.8	94.9	6.6		3.1		5		92				<0.2		1.1	
						3.9	0.2	70	24.8		8.2		31.9		94.9		6.6		3.1		4		92				<0.2		1.1	
					Bottom	6.7	0.1	43	24.7	24.7	8.2	8.2	32.3	32.3	94.8	94.8	6.6	6.6	5.3		5		94				<0.2		0.9	
						6.7	0.2	46	24.7		8.2		32.3		94.8		6.6		5.2		4		94				<0.2		0.9	
IM7	Cloudy	Moderate	08:25	8.7	Surface	1.0	0.1	200	25.0	25.0	8.2	8.2	31.4	31.4	94.9	94.9	6.6	6.6	2.0	3.8	3	5	88	91	821352	806834	<0.2	<0.2	1.5	1.3
						1.0	0.1	216	25.0		8.2		31.4		94.9		6.6		2.0		4		88				<0.2		1.5	
					Middle	4.4	0.2	123	24.9	24.9	8.2	8.2	31.7	31.7	94.7	94.7	6.6		4.5		5		92				<0.2		1.3	
						4.4	0.2	132	24.9		8.2		31.7		94.7		6.6		4.4		5		92				<0.2		1.2	
					Bottom	7.7	0.2	96	24.7	24.7	8.2	8.2	32.2	32.2	94.9	94.9	6.6	6.6	4.9		5		94				<0.2		1.0	
						7.7	0.3	96	24.7		8.2		32.2		94.9		6.6		4.8		6		94				<0.2		1.0	
IM8	Cloudy	Moderate	07:58	8.1	Surface	1.0	0.1	158	24.3	24.3	8.2	8.2	31.1	31.1	95.3	95.4	6.7	6.8	8.7	8.7	12	11	86	88	821822	808124	<0.2	<0.2	0.8	0.8
						1.0	0.1	167	24.3		8.2		31.1		95.5		6.7		8.7		13		86				<0.2		0.8	
					Middle	4.1	0.2	102	24.3	24.3	8.2	8.2	31.1	31.1	96.7	96.8	6.8		8.9		11		88				<0.2		0.9	
						4.1	0.2	109	24.3		8.2		31.1		96.8		6.8		8.9		10		88				<0.2		0.8	
					Bottom	7.1	0.1	209	24.3	24.3	8.2	8.2	31.1	31.1	98.3	98.5	6.9	6.9	8.4		10		90				<0.2		0.8	
						7.1	0.1	224	24.3		8.2		31.1		98.7		6.9		8.7		10		90				<0.2		0.8	

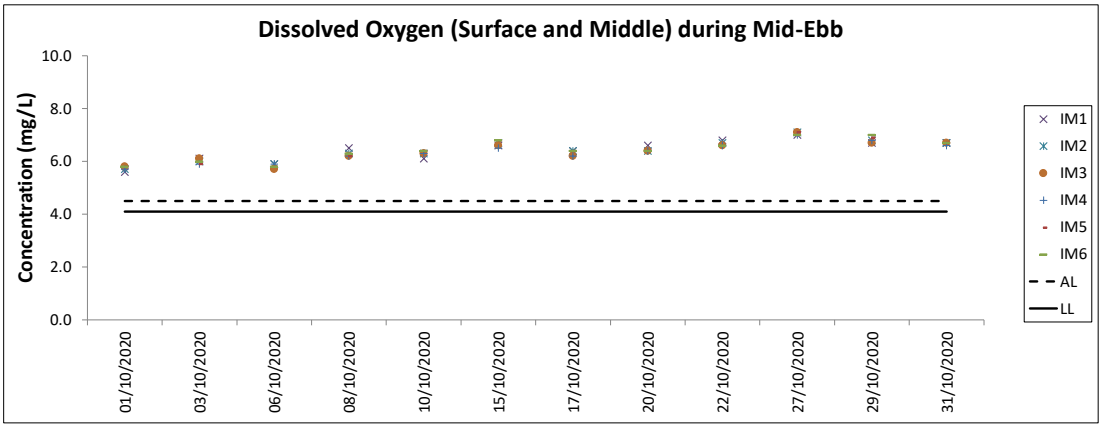
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 20 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 (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	07:51	7.4	Surface	1.0	0.2	68	24.3	24.3	8.3	8.3	31.1	31.1	93.3	93.3	6.5	6.6	8.8	11.9	14	14	85	88	822082	808798	<0.2	<0.2	0.8	0.9
						1.0	0.3	68	24.3		8.3		31.1		93.3		6.5		8.9		13		86				<0.2		0.9	
					Middle	3.7	0.3	79	24.3	24.3	8.3	8.3	31.1	31.1	94.2	94.3	6.6		12.1		14		88				<0.2		0.8	
						3.7	0.3	84	24.3		8.3		31.1		94.3		6.6		12.3		14		87				<0.2		0.9	
					Bottom	6.4	0.2	76	24.4	24.4	8.3	8.3	31.1	31.1	95.0	95.1	6.7	6.7	14.7		14		90				<0.2		0.9	
						6.4	0.2	77	24.4		8.3		31.1		95.1		6.7		14.8		14		89				<0.2		0.9	
IM10	Cloudy	Moderate	07:44	7.8	Surface	1.0	0.5	329	24.4	24.4	8.3	8.3	31.2	31.2	92.5	92.5	6.5	6.5	9.4	11.5	12	14	86	87	822394	809776	<0.2	<0.2	0.9	1.0
						1.0	0.6	329	24.4		8.3		31.2		92.5		6.5		9.5		13		85				<0.2		0.9	
					Middle	3.9	0.4	332	24.4	24.4	8.2	8.2	31.2	31.2	92.7	92.7	6.5		11.8		15		87				<0.2		0.9	
						3.9	0.4	350	24.4		8.2		31.2		92.7		6.5		12.1		14		87				<0.2		0.9	
					Bottom	6.8	0.3	332	24.4	24.4	8.3	8.3	31.2	31.2	93.5	93.6	6.5	6.6	13.1		14		89				<0.2		1.1	
						6.8	0.3	336	24.4		8.3		31.2		93.7		6.6		13.2		15		89				<0.2		1.2	
IM11	Cloudy	Moderate	07:34	8.3	Surface	1.0	0.5	306	24.4	24.4	8.3	8.3	31.3	31.3	92.8	92.8	6.5	6.5	8.7	9.5	11	12	85	87	822063	811468	<0.2	<0.2	0.9	0.9
						1.0	0.6	306	24.4		8.3		31.3		92.8		6.5		8.6		10		85				<0.2		0.9	
					Middle	4.2	0.5	310	24.4	24.4	8.3	8.3	31.3	31.3	92.8	92.8	6.5		10.0		12		87				<0.2		1.0	
						4.2	0.5	336	24.4		8.3		31.3		92.8		6.5		10.1		12		86				<0.2		0.9	
					Bottom	7.3	0.4	307	24.4	24.4	8.2	8.2	31.3	31.3	93.1	93.2	6.5	6.5	9.9		14		90				<0.2		0.9	
						7.3	0.5	318	24.4		8.2		31.3		93.2		6.5		9.7		14		89				<0.2		0.9	
IM12	Cloudy	Moderate	07:28	8.4	Surface	1.0	0.5	301	24.4	24.4	8.2	8.2	31.3	31.3	91.9	91.9	6.4	6.5	9.7	11.0	12	12	85	87	821474	812028	<0.2	<0.2	0.9	0.9
						1.0	0.5	317	24.4		8.2		31.3		91.9		6.4		9.8		12		86				<0.2		0.8	
					Middle	4.2	0.4	302	24.4	24.4	8.2	8.2	31.3	31.3	92.5	92.6	6.5		11.8		13		86				<0.2		0.8	
						4.2	0.4	306	24.4		8.2		31.3		92.6		6.5		11.9		12		87				<0.2		0.9	
					Bottom	7.4	0.3	298	24.4	24.4	8.3	8.3	31.3	31.3	94.1	94.2	6.6	6.6	11.3		11		89				<0.2		0.8	
						7.4	0.3	324	24.4		8.3		31.3		94.2		6.6		11.7		11		90				<0.2		0.9	
SR1A	Cloudy	Moderate	07:11	5.1	Surface	1.0	-	-	24.2	24.2	8.3	8.3	31.3	31.3	95.9	95.9	6.7	6.7	9.2	7.0	10	11	-	-	819980	812661	-	-	-	-
						1.0	-	-	24.2		8.3		31.3		95.9		6.7		9.1		10		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.1	24.1	8.3	8.3	31.3	31.3	98.1	98.2	6.9	6.9	5.0		11		-				-		-	
						4.1	-	-	24.1		8.3		31.3		98.3		6.9		4.6		12		-				-		-	
SR2	Cloudy	Moderate	06:59	5.0	Surface	1.0	0.1	260	24.4	24.4	8.3	8.3	31.3	31.3	93.9	94.0	6.6	6.6	9.2	9.0	11	11	88	88	821473	814149	<0.2	<0.2	1.0	1.1
						1.0	0.1	282	24.4		8.3		31.3		94.0		6.6		9.1		11		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	257	24.4	24.4	8.3	8.3	31.2	31.2	95.2	95.4	6.7	6.7	9.0		11		89				<0.2		1.1	
						4.0	0.1	262	24.4		8.3		31.2		95.6		6.7		8.8		12		89				<0.2		1.2	
SR3	Cloudy	Moderate	08:04	8.7	Surface	1.0	0.1	144	24.4	24.4	8.2	8.2	30.8	30.8	93.4	93.4	6.5	6.6	5.7	7.9	9	10	-	-	822163	807547	-	-	-	-
						1.0	0.1	147	24.4		8.2		30.8		93.4		6.5		5.7		10		-				-		-	
					Middle	4.4	0.1	157	24.4	24.4	8.2	8.2	31.0	31.0	93.5	93.5	6.6		7.5		10		-				-		-	
						4.4	0.1	170	24.4		8.2		31.0		93.5		6.6		7.6		9		-				-		-	
					Bottom	7.7	0.0	250	24.3	24.3	8.3	8.3	31.0	31.0	94.2	94.3	6.6	6.6	10.3		11		-				-		-	
						7.7	0.0	268	24.3		8.3		31.0		94.3		6.6		10.6		11		-				-		-	
SR4A	Fine	Calm	06:48	10.0	Surface	1.0	0.3	69	24.7	24.7	8.2	8.2	32.5	32.5	94.0	94.0	6.5	6.5	3.3	5.5	5	7	-	-	817186	807807	-	-	-	-
						1.0	0.3	73	24.7		8.2		32.5		94.0		6.5		3.3		6		-				-		-	
					Middle	5.0	0.4	76	24.7	24.7	8.2	8.2	32.8	32.8	93.4	93.4	6.4		5.7		7		-				-		-	
						5.0	0.4	83	24.7		8.2		32.8		93.4		6.4		5.7		8		-				-		-	
					Bottom	9.0	0.3	67	24.7	24.7	8.2	8.2	32.8	32.8	93.4	93.4	6.4	6.4	7.6		8		-				-		-	
						9.0	0.3	72	24.7		8.2		32.8		93.4		6.4		7.6		7		-				-		-	
SR5A	Fine	Calm	06:30	5.0	Surface	1.0	0.1	318	24.8	24.8	8.2	8.2	32.2	32.2	93.6	93.6	6.5	6.5	2.7	3.3	9	7	-	-	816600	810718	-	-	-	-
						1.0	0.1	339	24.8		8.2		32.2		93.6		6.5		2.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	323	24.8	24.8	8.2	8.2	32.2	32.2	93.5	93.5	6.5	6.5	3.8		6		-				-		-	
						4.0	0.1	354	24.8		8.2		32.2		93.5		6.5		3.8		5		-				-		-	
SR6A	Fine	Calm	05:59	4.7	Surface	1.0	0.0	232	24.9	24.9	8.2	8.2	31.9	31.9	90.7	90.7	6.3	6.3	3.2	4.8	6	6	-	-	817946	814722	-	-	-	-
						1.0	0.0	252	24.9		8.2		31.9		90.7		6.3		3.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	193	25.0	25.0	8.2	8.2	32.2	32.2	89.5	89.5	6.2	6.2	6.4		6		-				-		-	
						3.7	0.1	195	25.0		8.2		32.2		89.5		6.2		6.4		5		-				-		-	
SR7	Cloudy	Moderate	06:12	16.5	Surface	1.0	0.0	116	24.5	24.5	8.2	8.2	31.9	31.9	88.2	88.2	6.1	6.1	4.3	4.8	4	6	-	-	823646	823764	-	-	-	-
						1.0	0.0	116	24.5		8.2		31.9		88.2		6.1		4.3		4		-				-		-	
					Middle	8.3	0.1	184	24.5	24.5	8.2	8.2	31.9	31.9	88.3	88.4	6.1		5.1		6		-				-		-	
						8.3	0.1	199	24.5		8.2		31.9		88.4		6.1		5.1		7		-				-		-	
					Bottom	15.5	0.1	76	24.5	24.5	8.2	8.2	31.9	31.9	91.2	91.5	6.3	6.4	4.9		8		-				-		-	
						15.5	0.1	78	24.5		8.2		31.9		91.8		6.4		5.1		8		-				-		-	
SR8	Cloudy	Moderate	07:19	5.3	Surface	1.0	-	-	24.4	24.4	8.2	8.2	31.3	31.3	94.6	94.7	6.6	6.6	8.7	8.7	12	12	-	-	820391	811626	-	-	-	-
						1.0	-	-	24.4		8.2		31.3		94.7		6.6		8.7		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	24.4	24.4	8.2	8.2	31.2	31.2	97.3	97.4	6.8	6.8	8.6		11		-				-		-	
						4.3	-	-	24.4		8.2		31.2		97.5		6.8		8.6		12		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
27/10/2020
29/10/2020
31/10/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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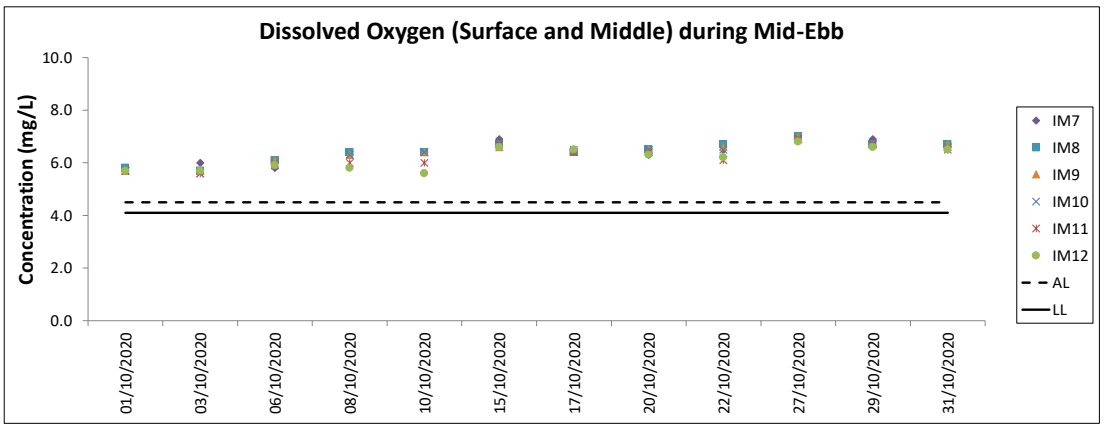
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
27/10/2020
29/10/2020
31/10/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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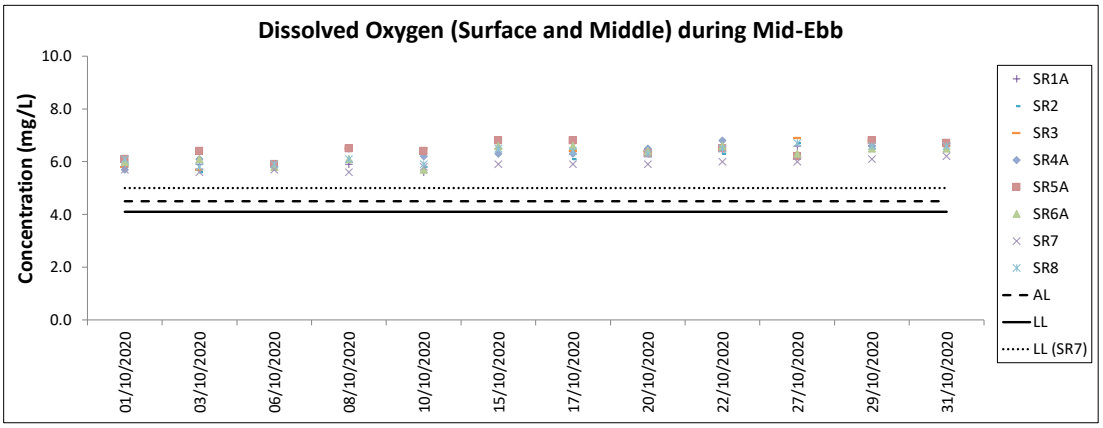
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
27/10/2020
29/10/2020
31/10/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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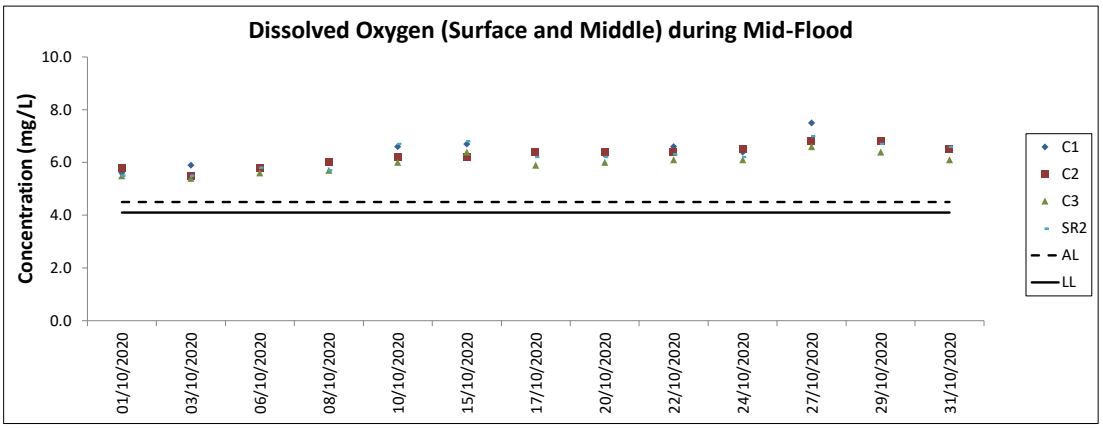
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
27/10/2020
29/10/2020
31/10/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


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
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
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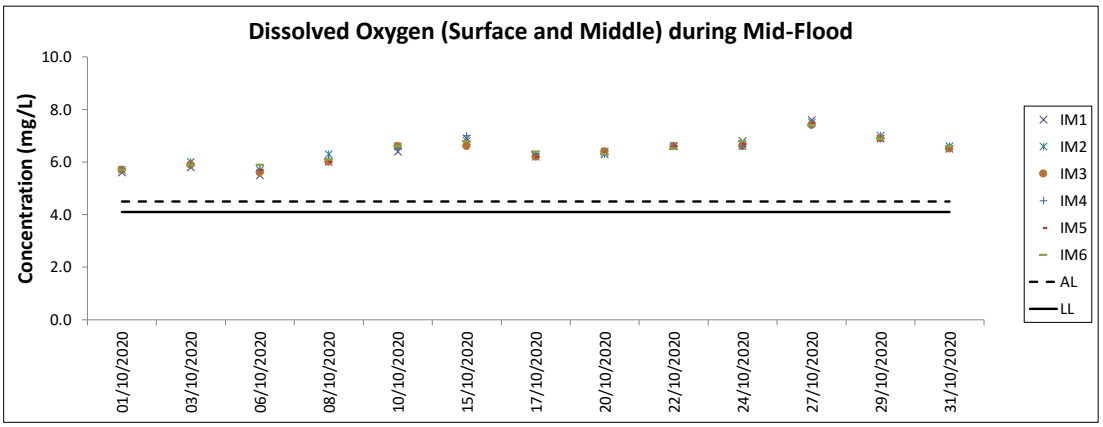
29/10/2020
31/10/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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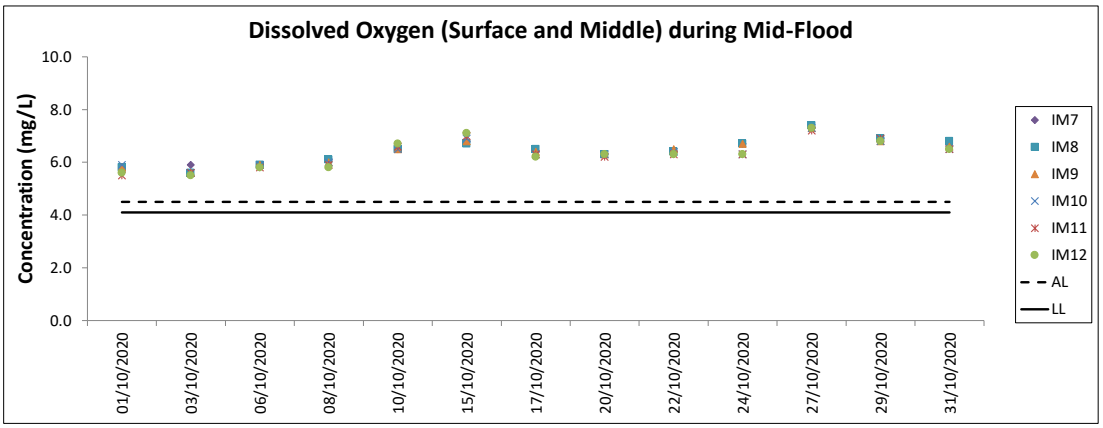
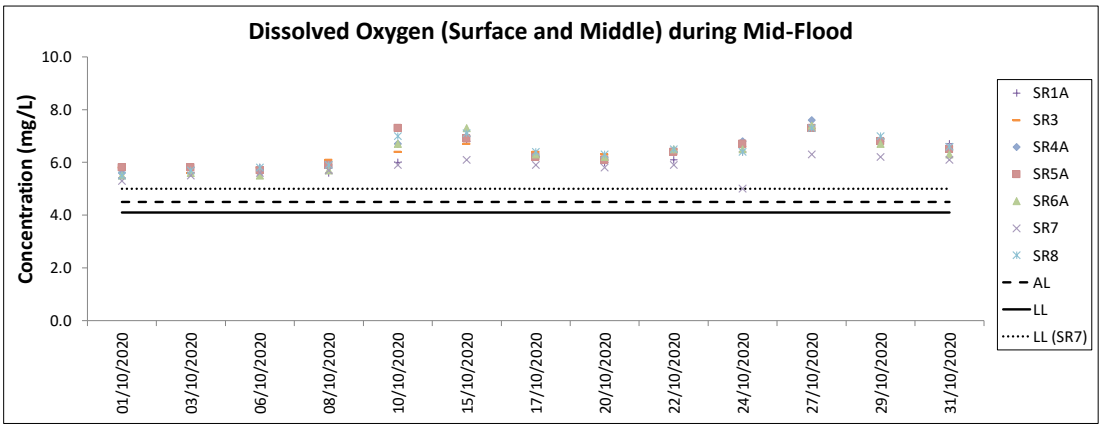
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
27/10/2020
29/10/2020
31/10/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
27/10/2020
29/10/2020
31/10/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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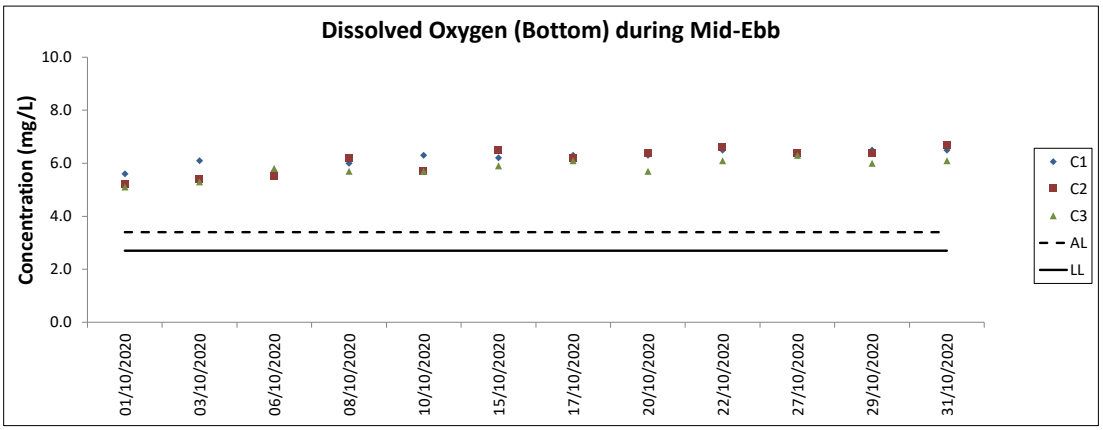
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
27/10/2020
29/10/2020
31/10/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
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22/10/2020
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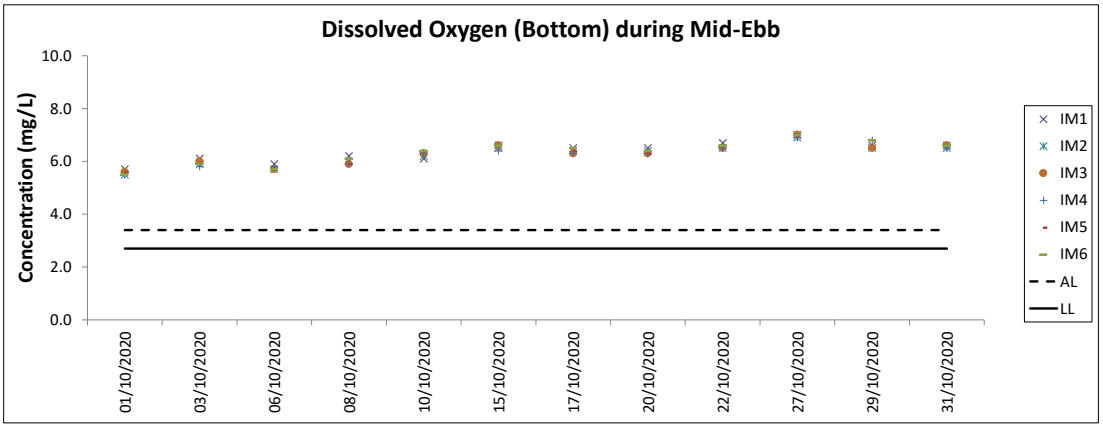
29/10/2020
31/10/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
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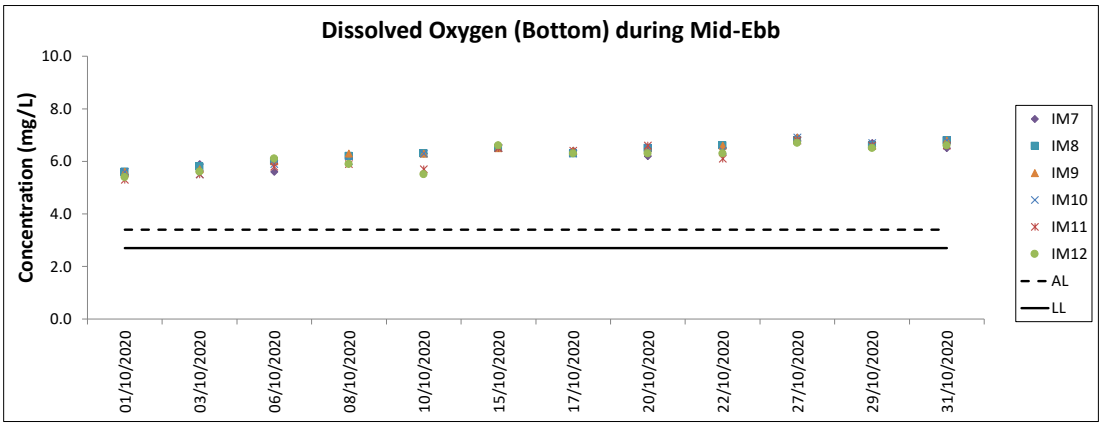
31/10/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
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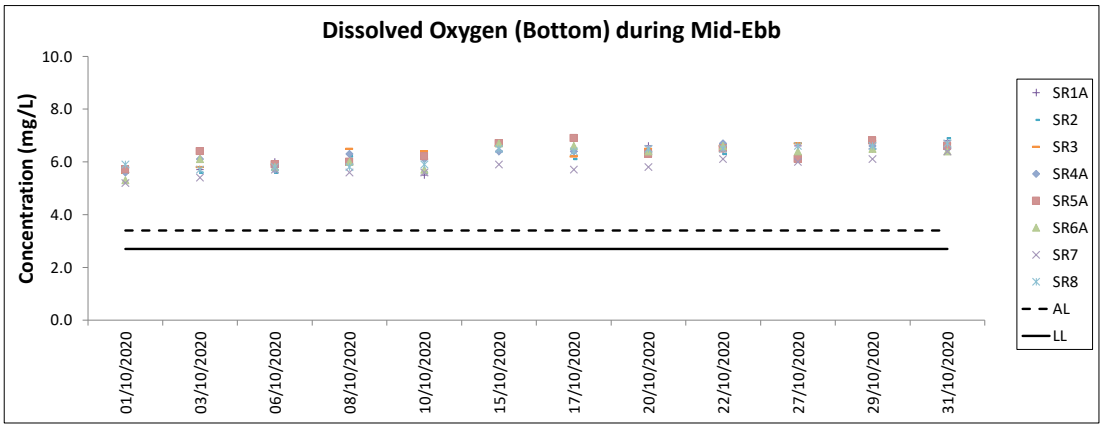
29/10/2020
31/10/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
27/10/2020
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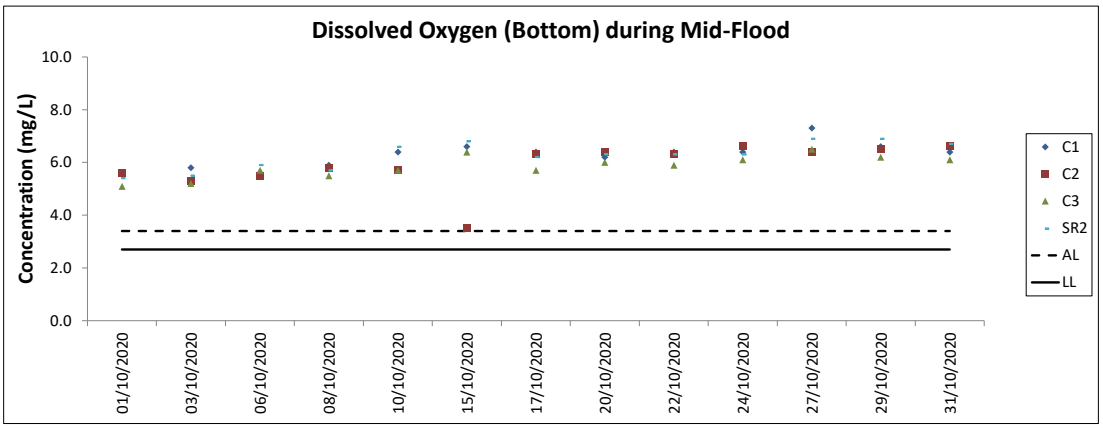
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
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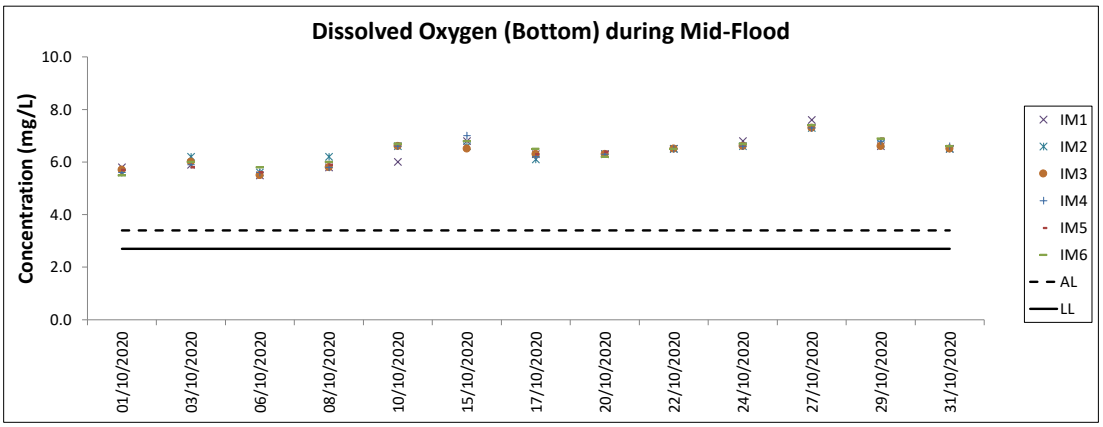
29/10/2020
31/10/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
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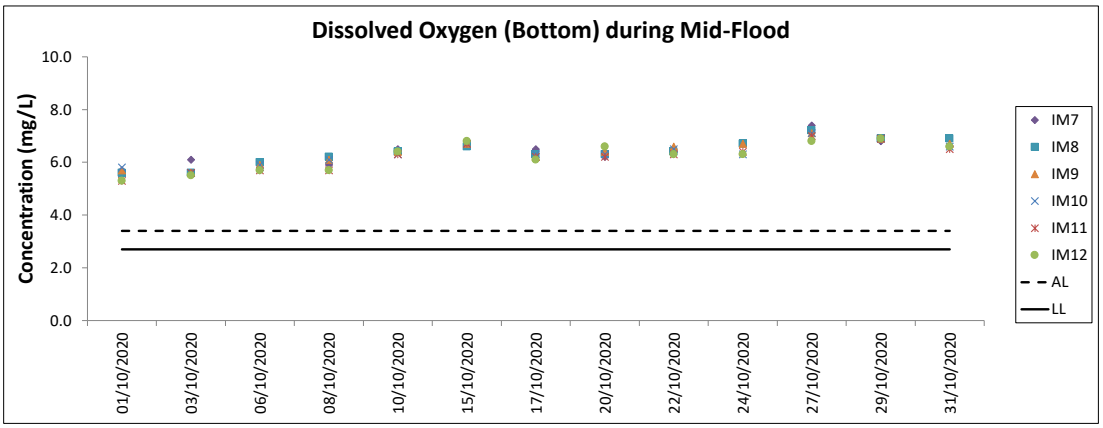
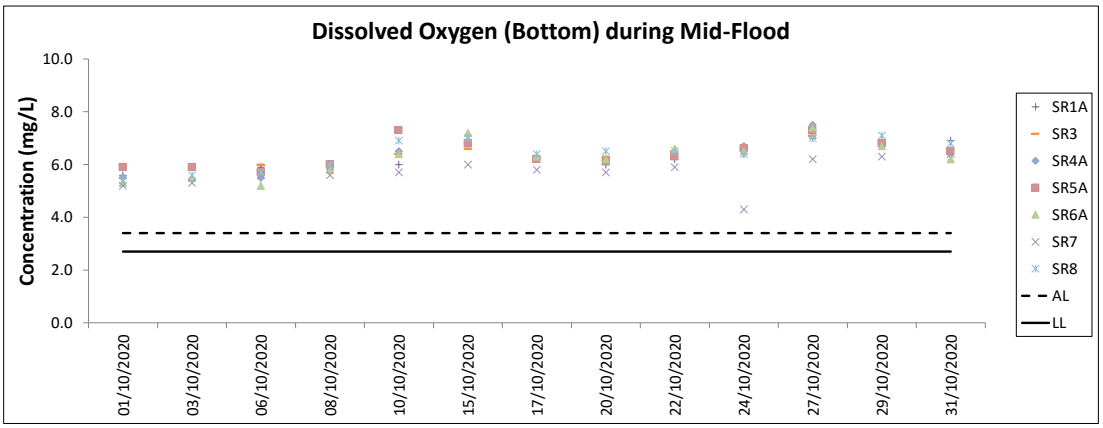
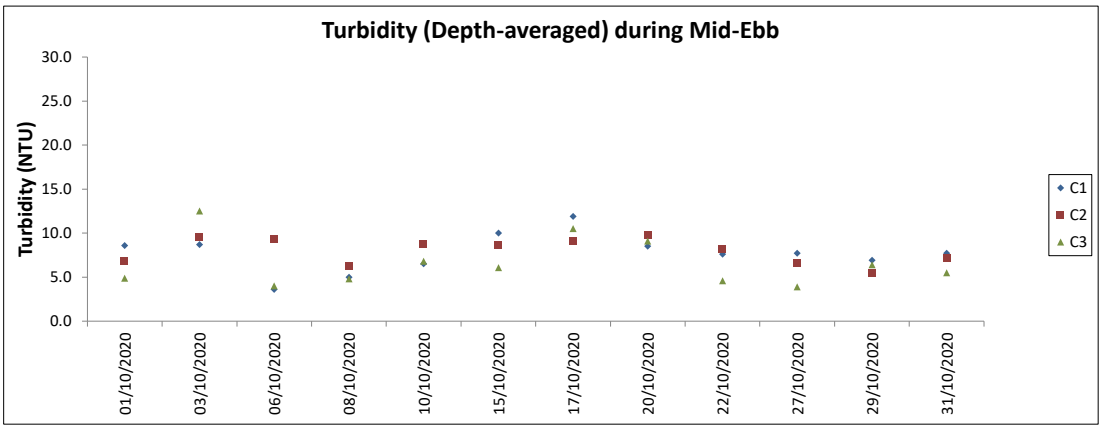
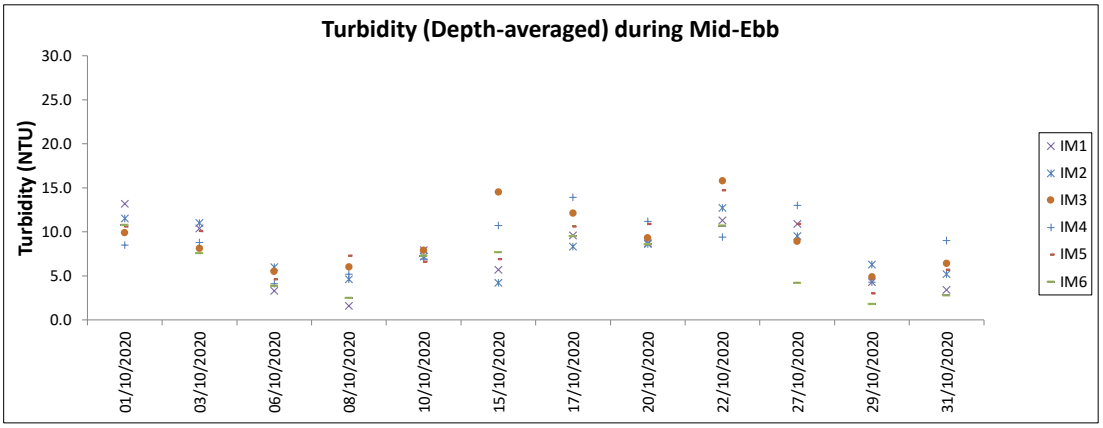
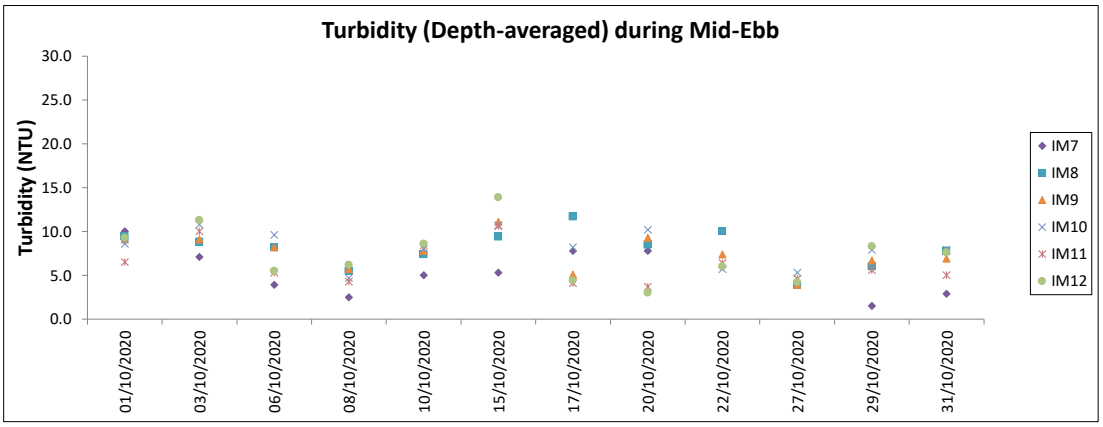
29/10/2020
31/10/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

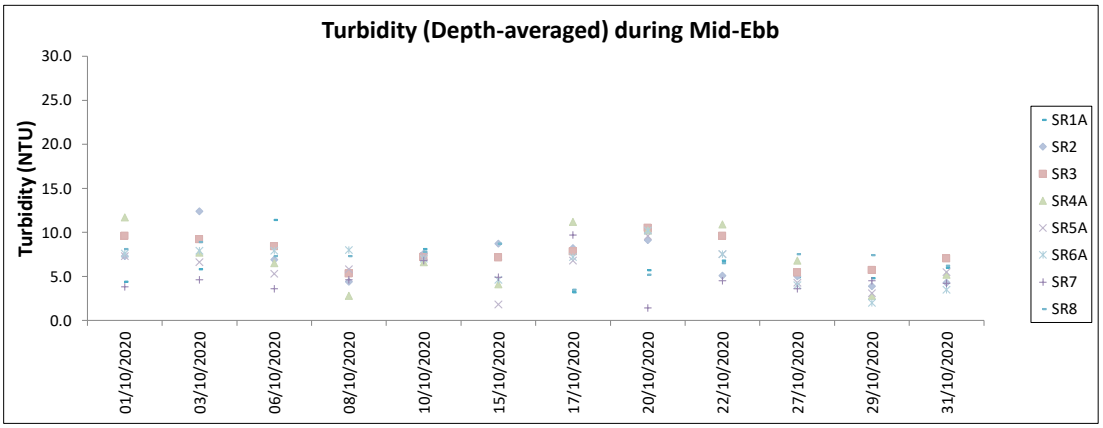

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
27/10/2020
29/10/2020
31/10/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2020
03/10/2020
06/10/2020
08/10/2020
10/10/2020
15/10/2020
17/10/2020
20/10/2020
22/10/2020
24/10/2020
27/10/2020
29/10/2020
31/10/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

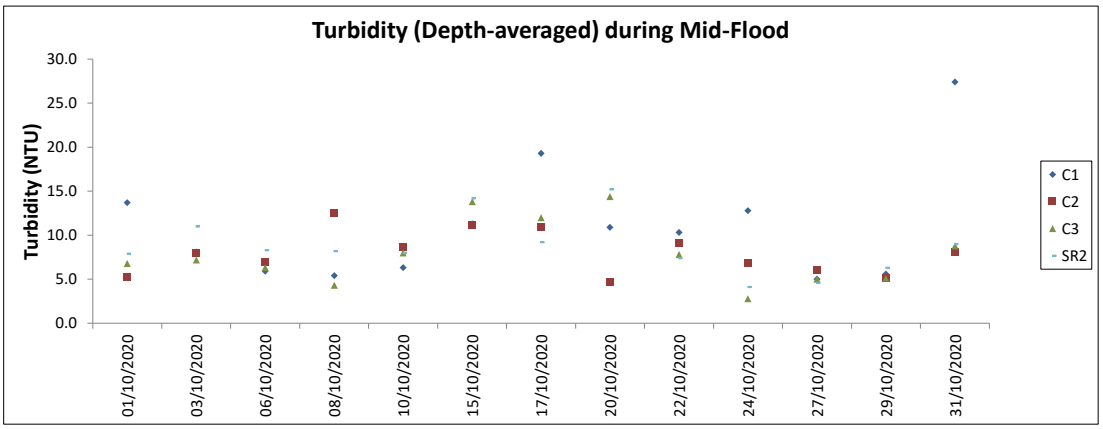


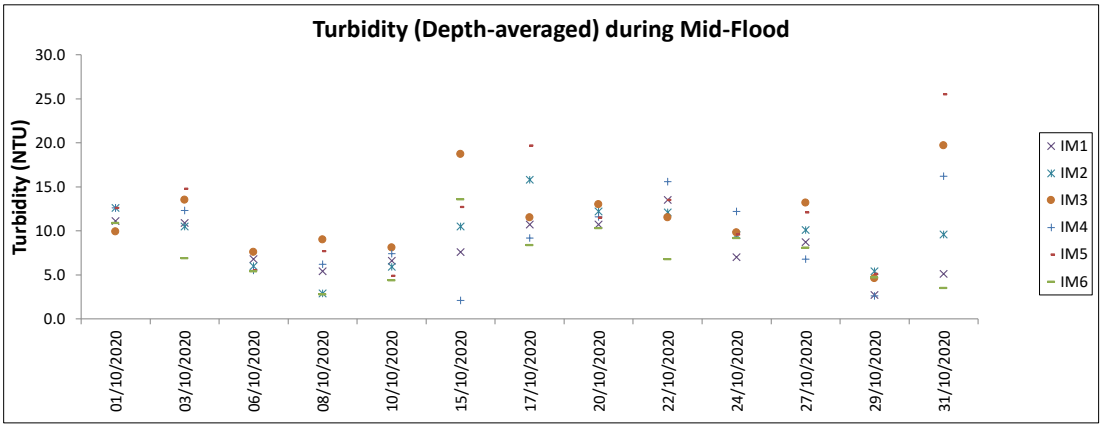


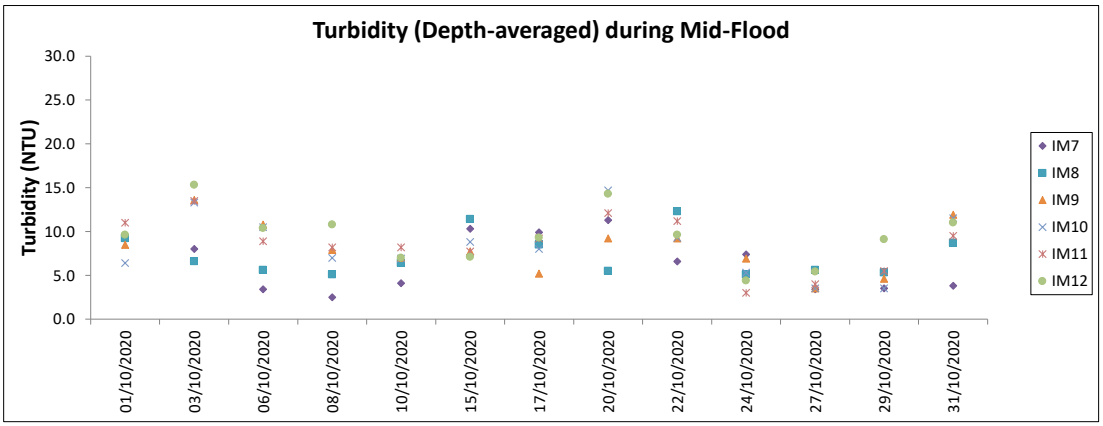


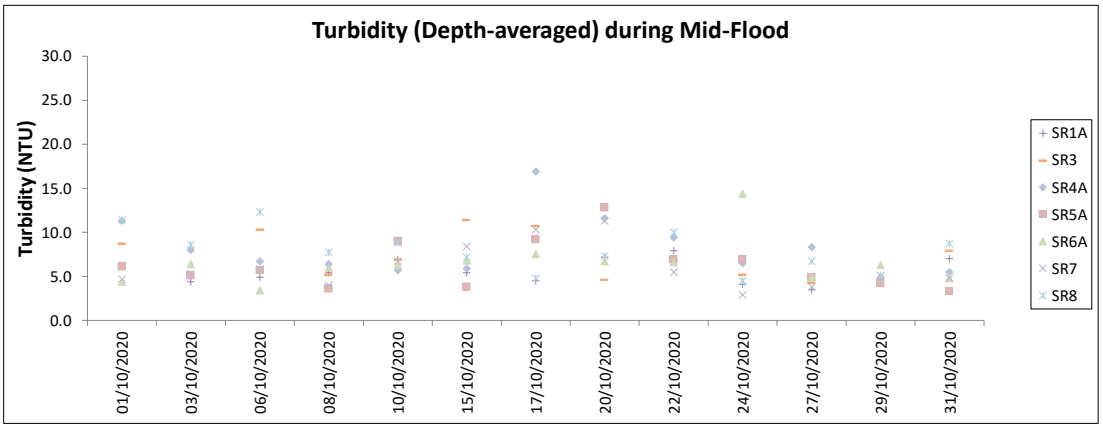


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

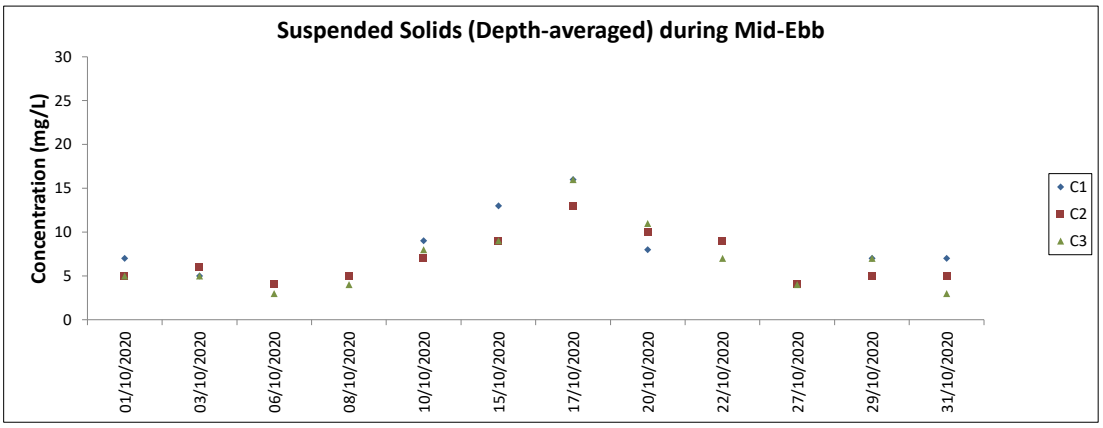


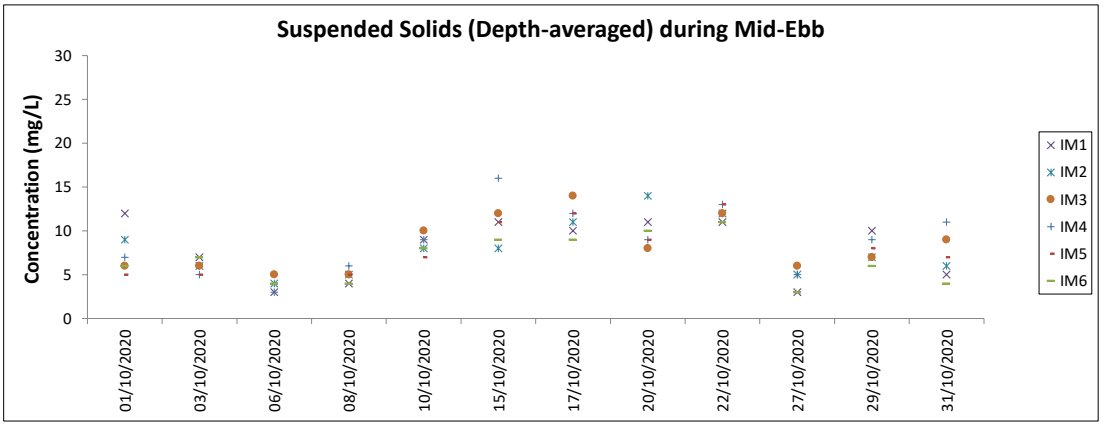


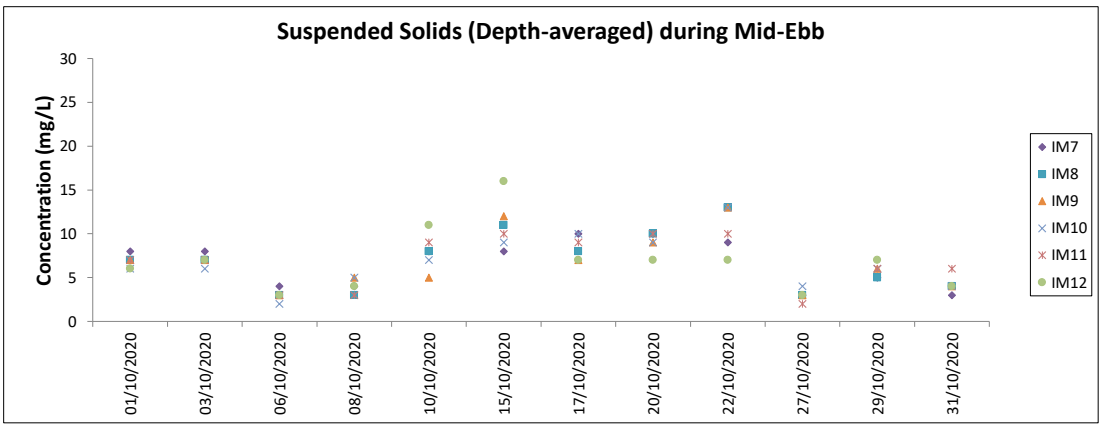


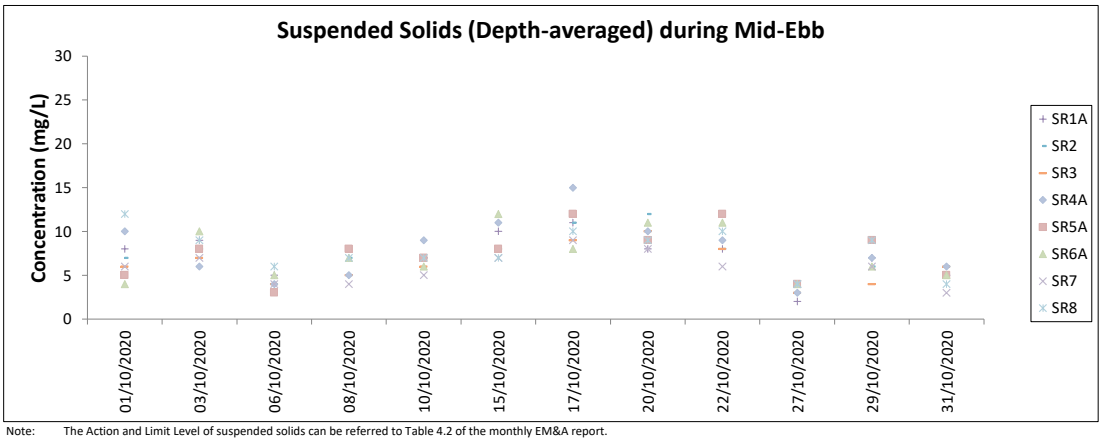


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

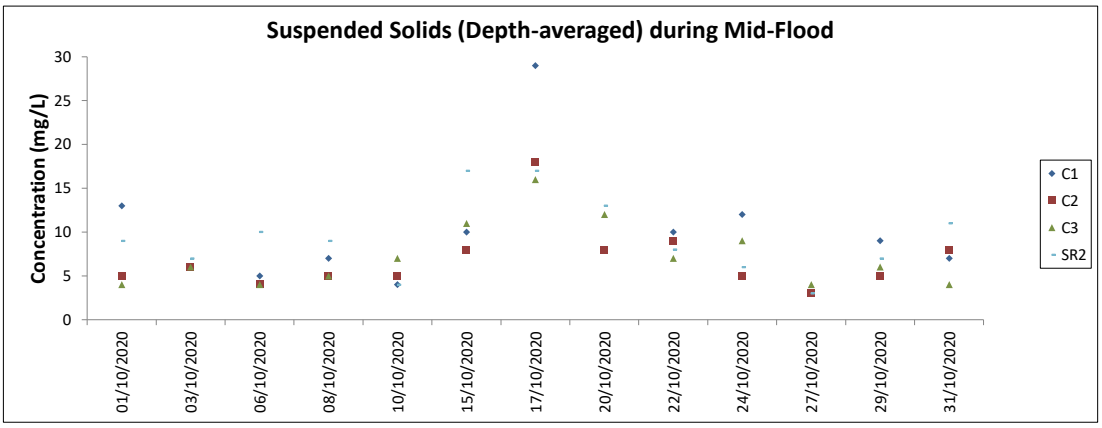


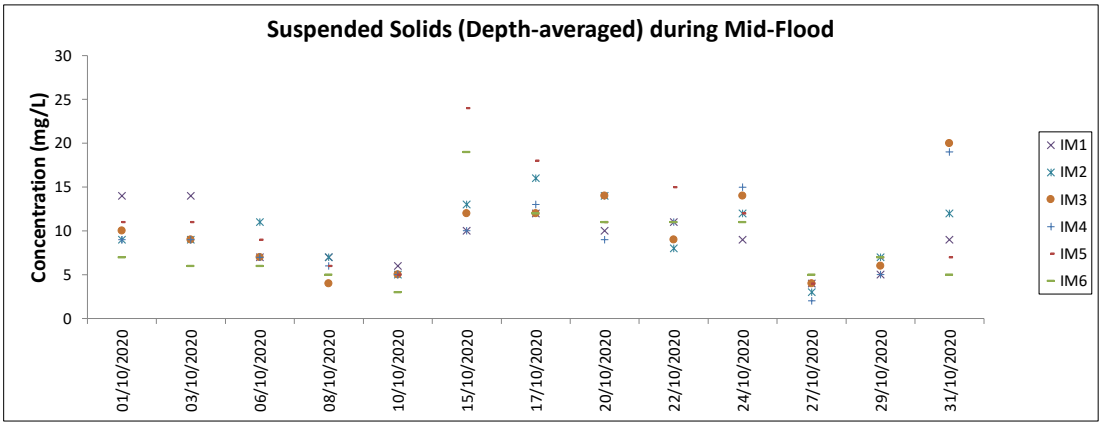


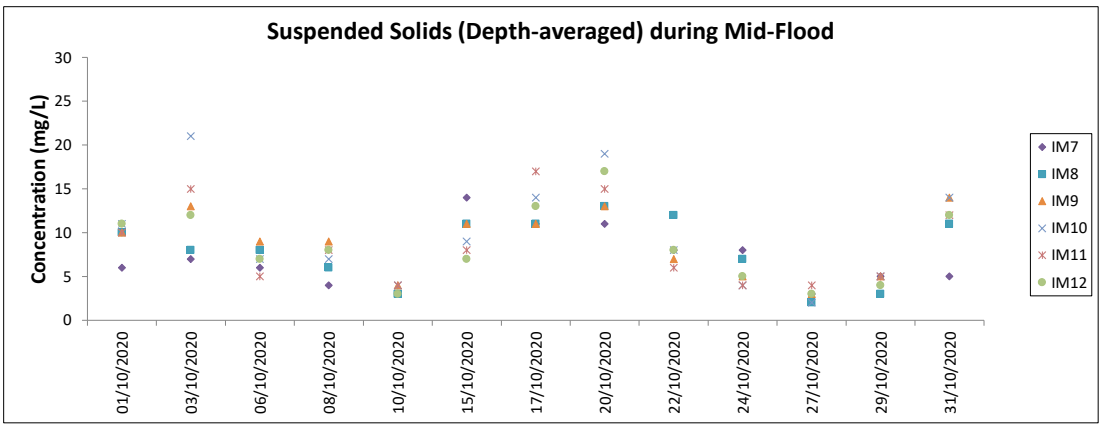


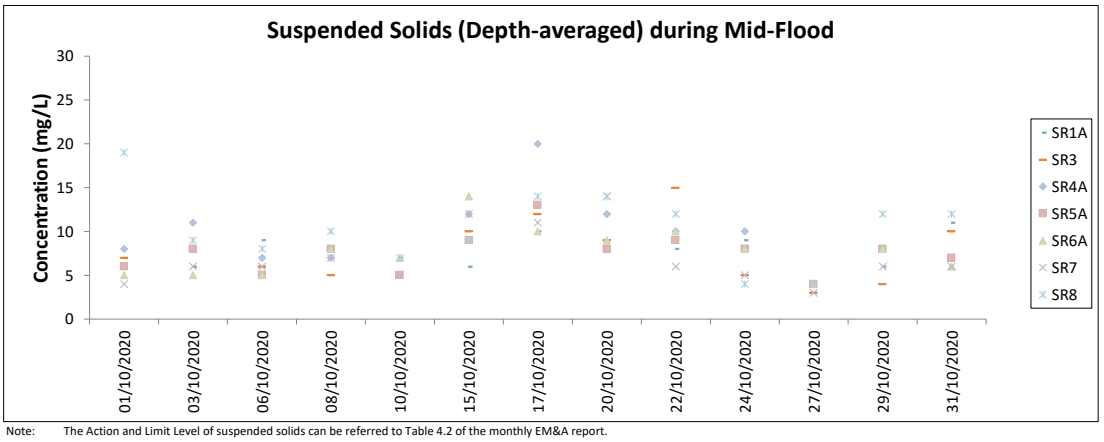


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

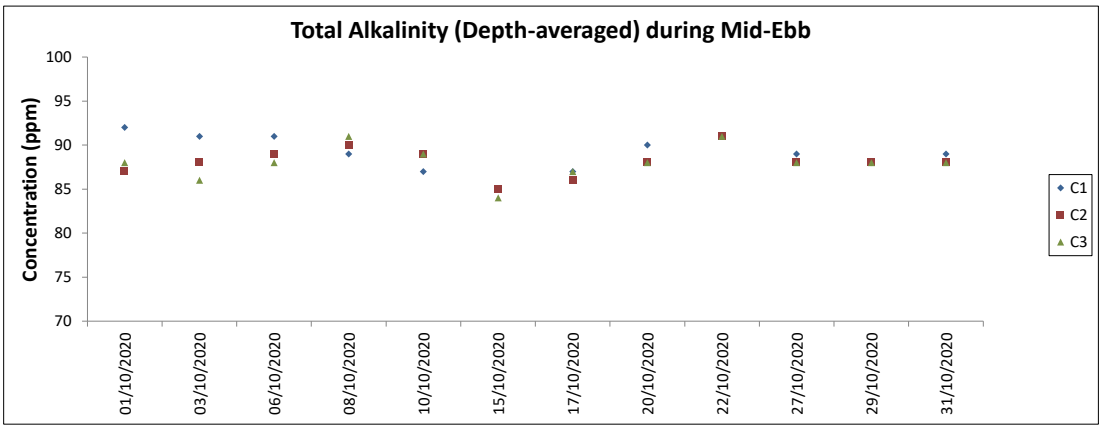


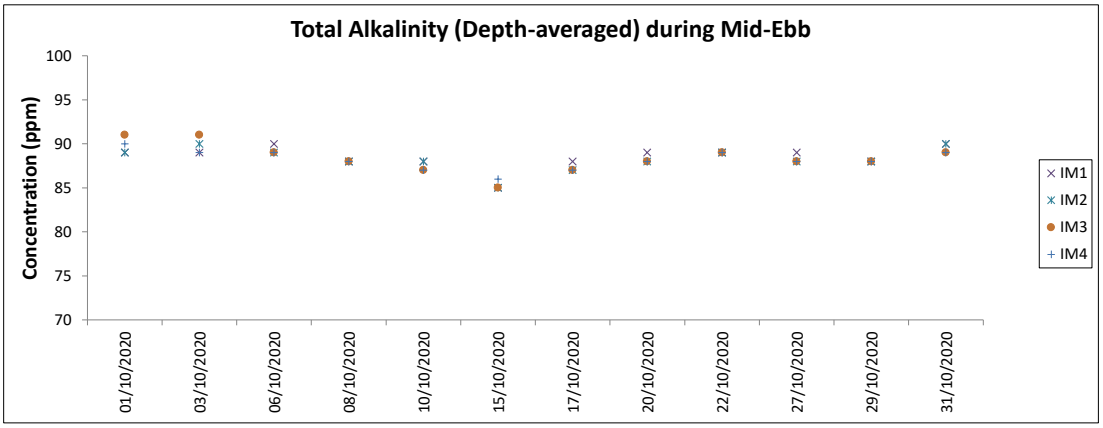


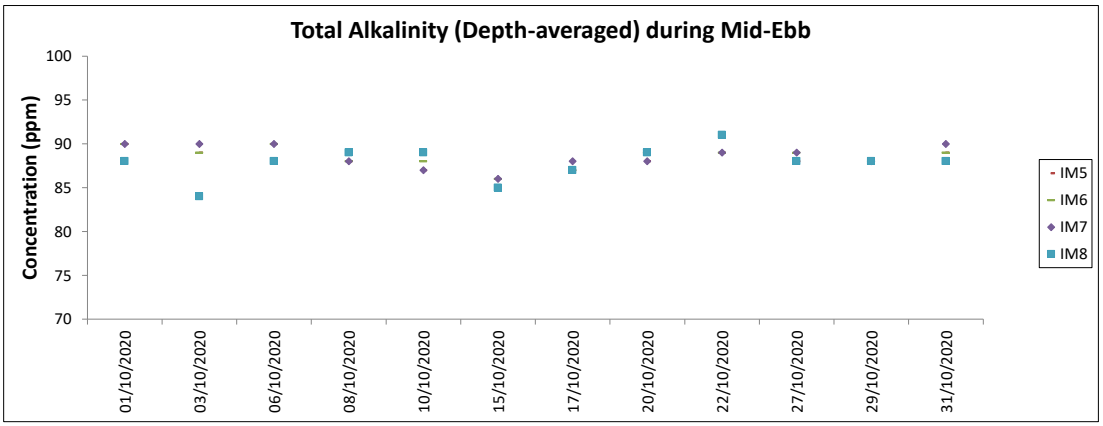


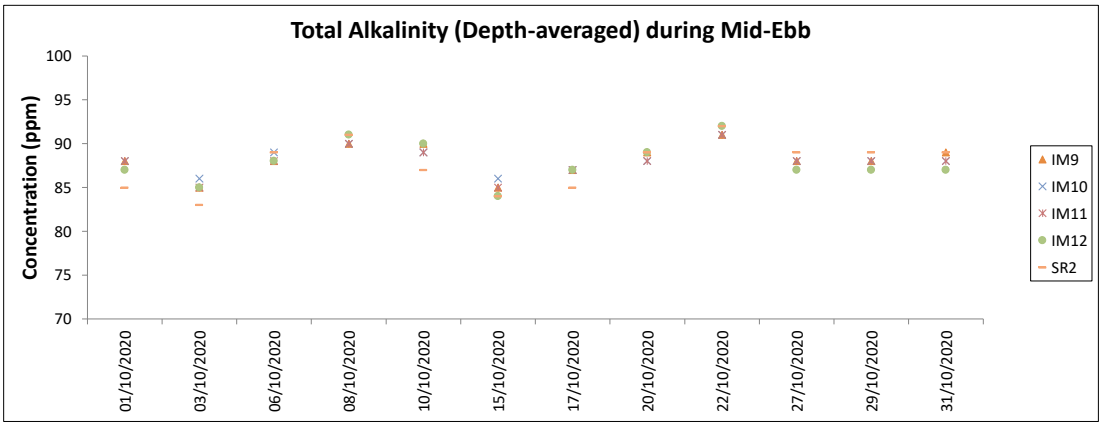


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

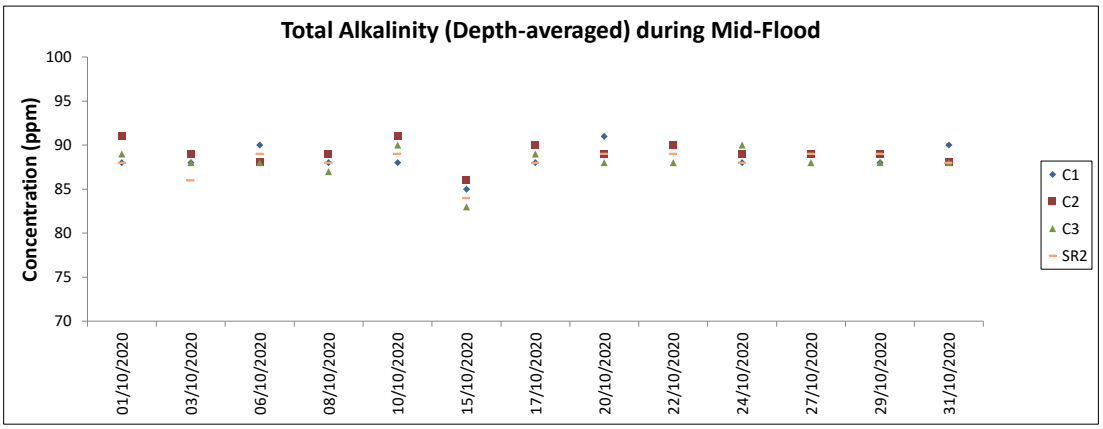


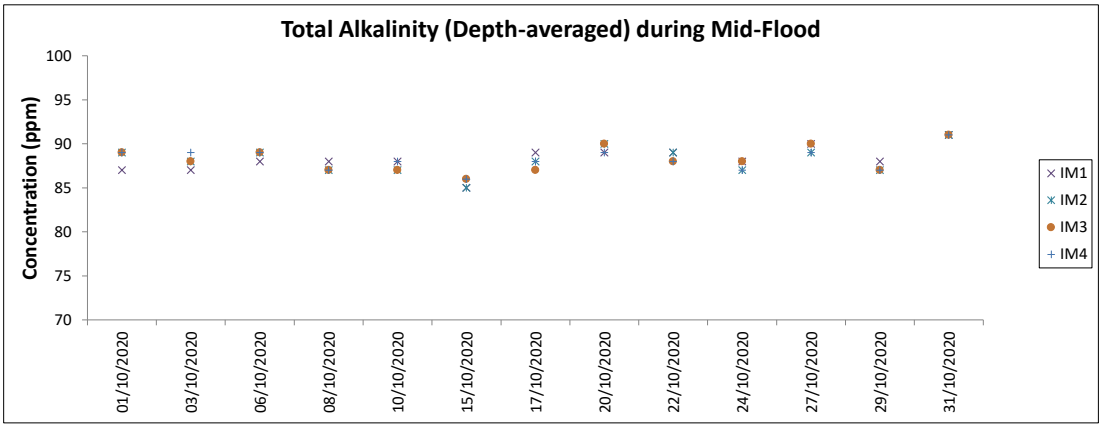


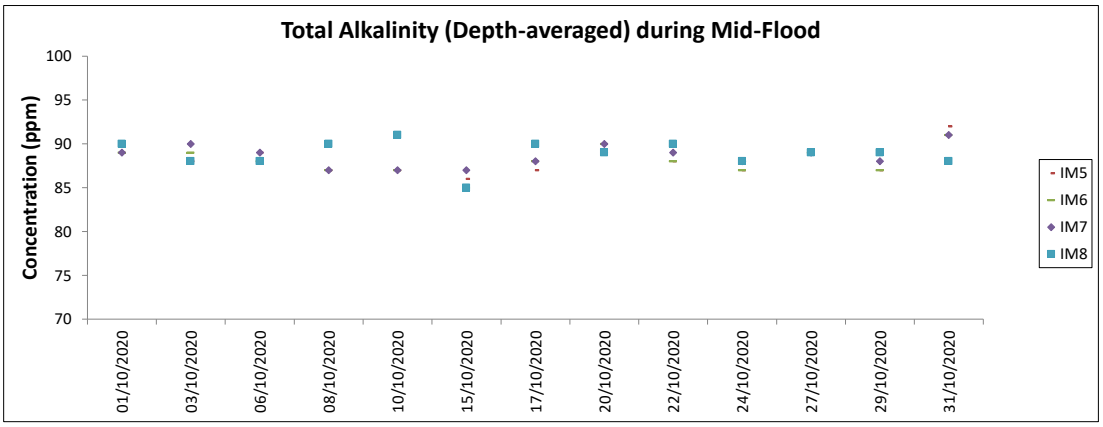


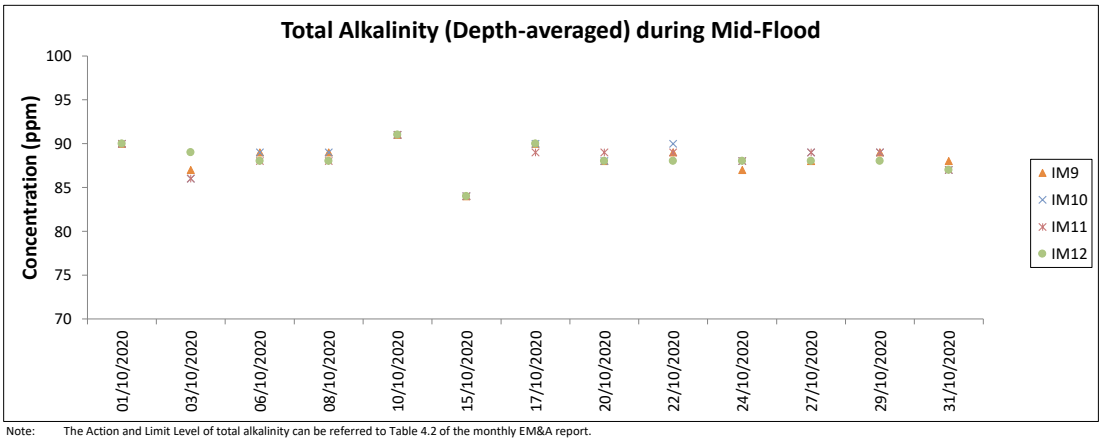


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

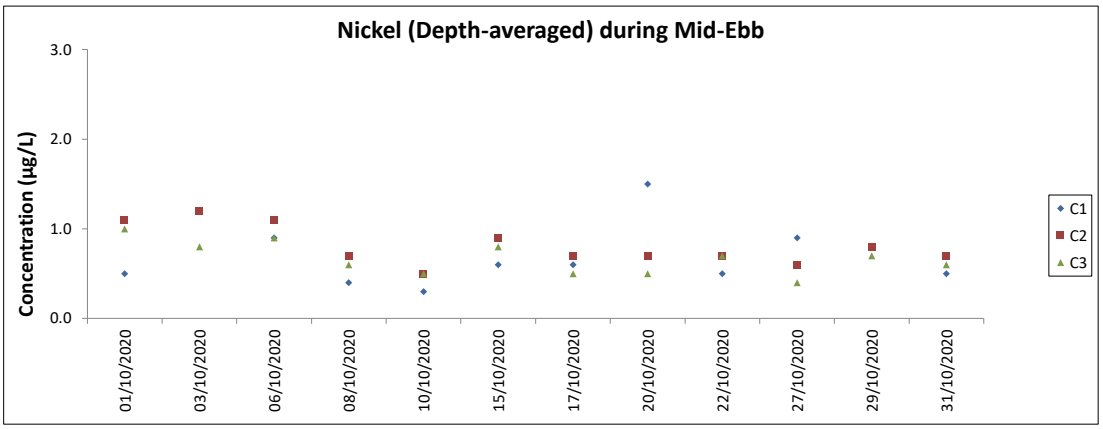


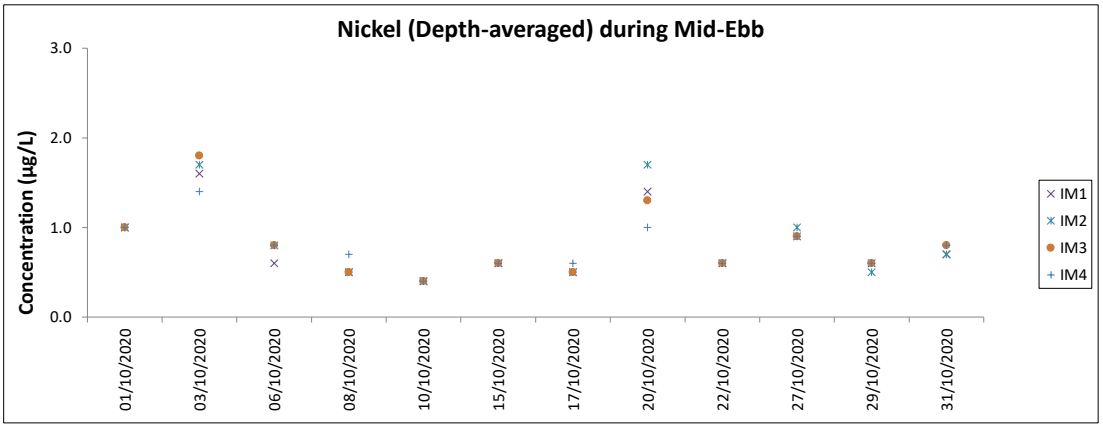


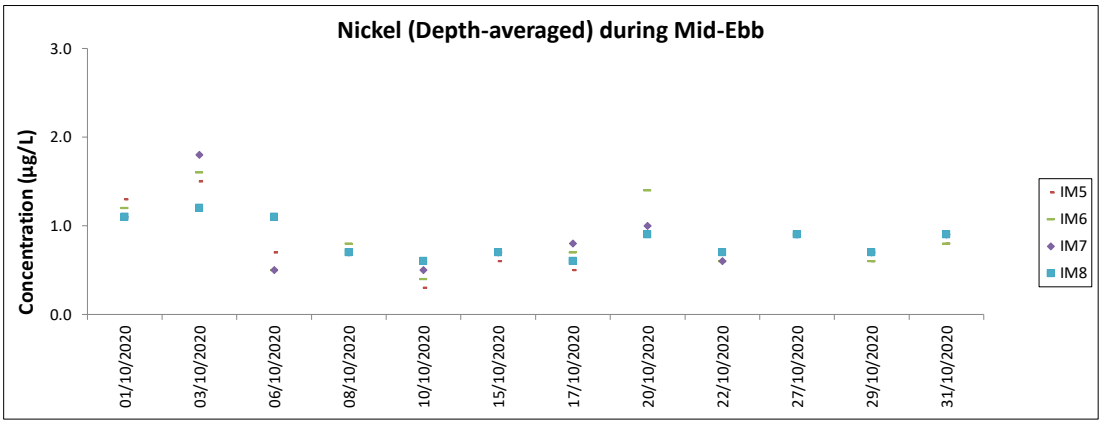


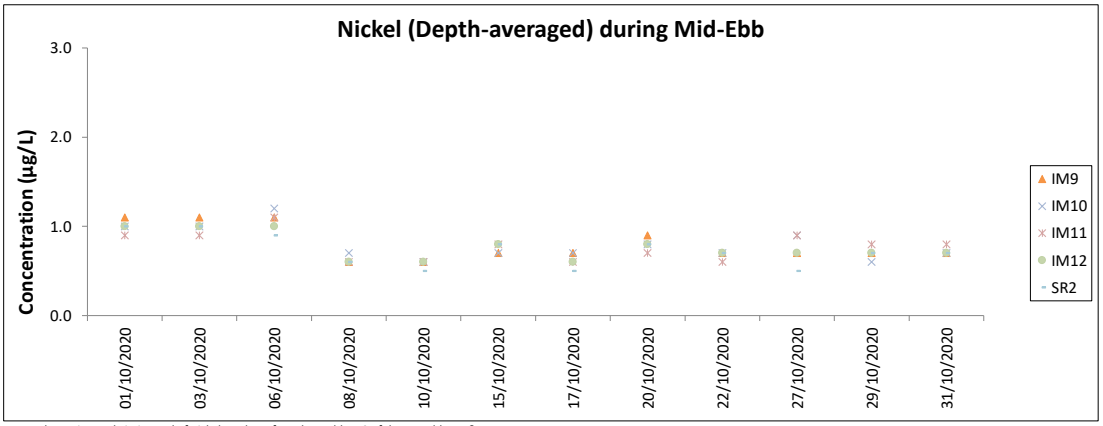


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

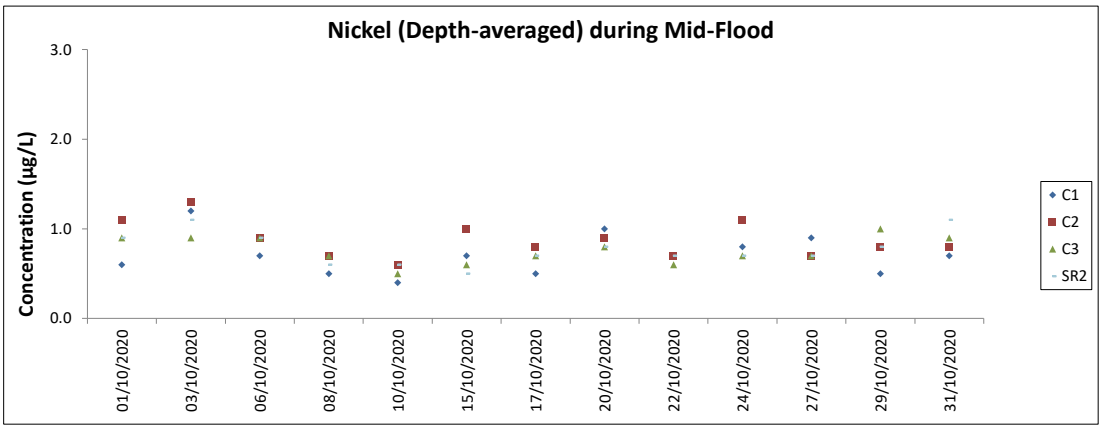


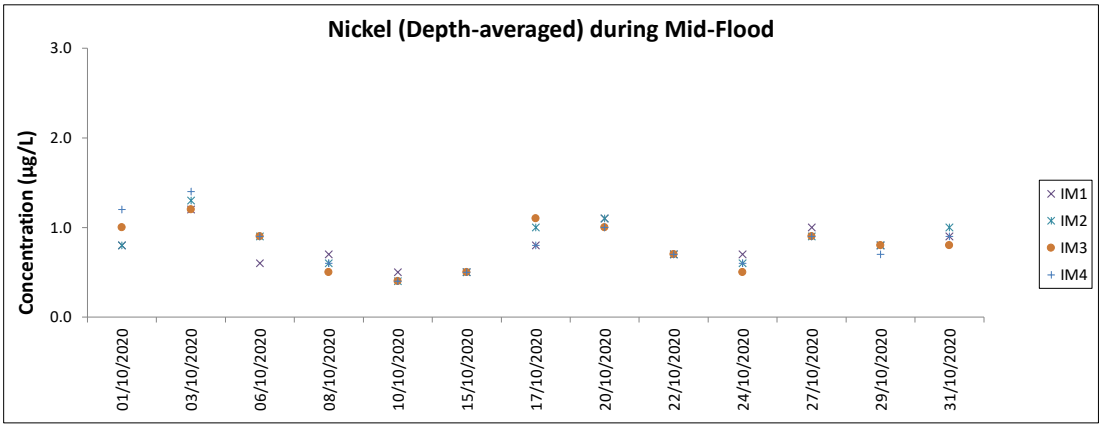


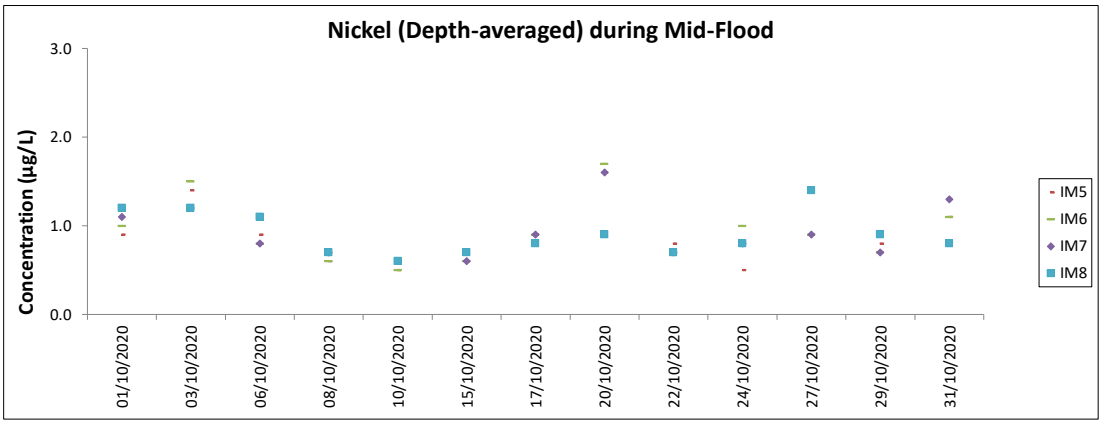


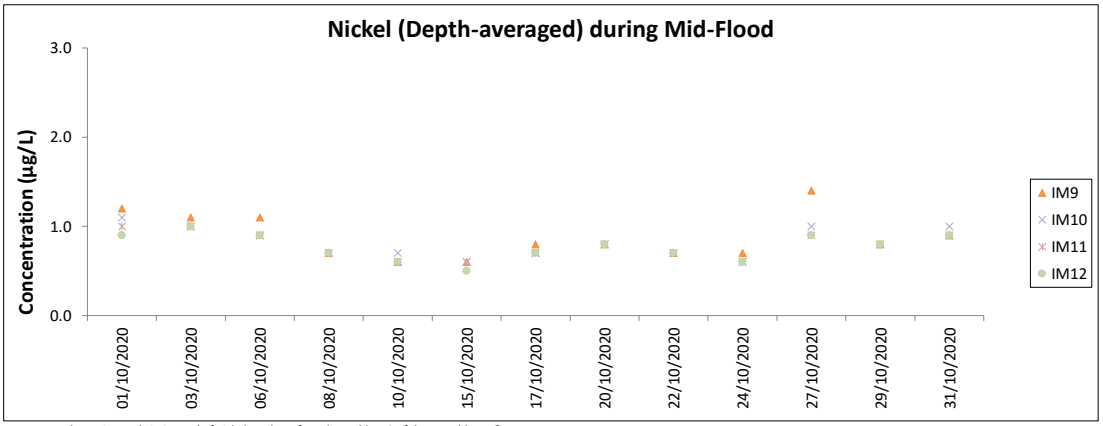


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

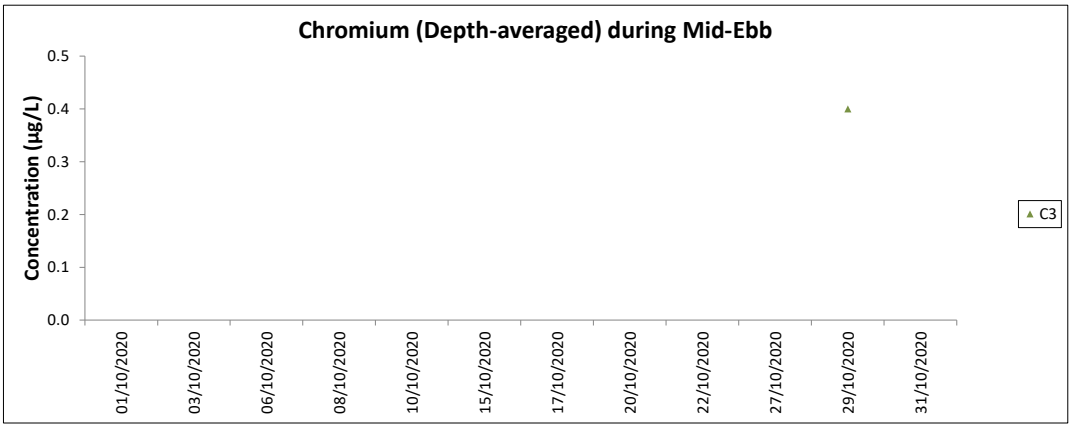








Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/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



Note: The Action and Limit Level of chromium can be referred to Table 4.2 of the monthly EM&A report.
All other chromium in the reporting period was below the reporting limit 0.2 µg/L.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Aug-20	AW	2	4.830	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	11.333	SUMMER	32166	3RS ET	P
7-Aug-20	WL	3	8.330	SUMMER	32166	3RS ET	P
7-Aug-20	WL	2	2.260	SUMMER	32166	3RS ET	S
7-Aug-20	WL	3	4.810	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	2	36.803	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	3	14.500	SUMMER	32166	3RS ET	P
10-Aug-20	SWL	2	13.697	SUMMER	32166	3RS ET	S
10-Aug-20	SWL	3	3.100	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	2	18.930	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	3	41.090	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	4	3.780	SUMMER	32166	3RS ET	P
11-Aug-20	NWL	2	5.600	SUMMER	32166	3RS ET	S
11-Aug-20	NWL	3	6.200	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	2	16.500	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	3	19.360	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	4	1.500	SUMMER	32166	3RS ET	P
12-Aug-20	NEL	2	5.270	SUMMER	32166	3RS ET	S
12-Aug-20	NEL	3	4.770	SUMMER	32166	3RS ET	S
17-Aug-20	AW	2	1.860	SUMMER	32166	3RS ET	P
17-Aug-20	AW	3	3.020	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	0.520	SUMMER	32166	3RS ET	P
17-Aug-20	WL	3	17.310	SUMMER	32166	3RS ET	P
17-Aug-20	WL	4	1.510	SUMMER	32166	3RS ET	P
17-Aug-20	WL	2	4.080	SUMMER	32166	3RS ET	S
17-Aug-20	WL	3	4.590	SUMMER	32166	3RS ET	S
17-Aug-20	WL	4	0.717	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	2	29.590	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	3	7.650	SUMMER	32166	3RS ET	P
18-Aug-20	NEL	2	9.100	SUMMER	32166	3RS ET	S
18-Aug-20	NEL	3	0.860	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	2	35.344	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	3	19.010	SUMMER	32166	3RS ET	P
24-Aug-20	SWL	2	11.416	SUMMER	32166	3RS ET	S
24-Aug-20	SWL	3	4.500	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	2	13.100	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	3	31.500	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	4	16.400	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	5	2.300	SUMMER	32166	3RS ET	P
26-Aug-20	NWL	2	4.200	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	3	6.300	SUMMER	32166	3RS ET	S
26-Aug-20	NWL	4	1.000	SUMMER	32166	3RS ET	S
4-Sep-20	SWL	2	25.320	AUTUMN	32166	3RS ET	P
4-Sep-20	SWL	3	29.549	AUTUMN	32166	3RS ET	P
4-Sep-20	SWL	2	8.590	AUTUMN	32166	3RS ET	S
4-Sep-20	SWL	3	6.451	AUTUMN	32166	3RS ET	S
7-Sep-20	SWL	2	25.950	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Sep-20	SWL	3	28.860	AUTUMN	32166	3RS ET	P
7-Sep-20	SWL	2	12.590	AUTUMN	32166	3RS ET	S
7-Sep-20	SWL	3	3.400	AUTUMN	32166	3RS ET	S
8-Sep-20	NWL	2	41.020	AUTUMN	32166	3RS ET	P
8-Sep-20	NWL	3	21.980	AUTUMN	32166	3RS ET	P
8-Sep-20	NWL	2	7.700	AUTUMN	32166	3RS ET	S
8-Sep-20	NWL	3	4.200	AUTUMN	32166	3RS ET	S
9-Sep-20	AW	2	4.940	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	1	1.240	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	2	12.810	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	3	5.833	AUTUMN	32166	3RS ET	P
9-Sep-20	WL	2	7.540	AUTUMN	32166	3RS ET	S
9-Sep-20	WL	3	3.077	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	1	0.600	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	2	20.910	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	3	29.290	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	4	12.600	AUTUMN	32166	3RS ET	P
14-Sep-20	NWL	2	4.100	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	3	5.700	AUTUMN	32166	3RS ET	S
14-Sep-20	NWL	4	1.900	AUTUMN	32166	3RS ET	S
15-Sep-20	AW	2	3.010	AUTUMN	32166	3RS ET	P
15-Sep-20	AW	3	1.940	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	2	9.663	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	3	9.010	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	4	0.900	AUTUMN	32166	3RS ET	P
15-Sep-20	WL	2	5.657	AUTUMN	32166	3RS ET	S
15-Sep-20	WL	3	5.440	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	2	7.670	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	3	19.980	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	4	9.600	AUTUMN	32166	3RS ET	P
17-Sep-20	NEL	2	2.050	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	3	5.500	AUTUMN	32166	3RS ET	S
17-Sep-20	NEL	4	3.100	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	2	4.100	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	3	28.500	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	4	5.000	AUTUMN	32166	3RS ET	P
22-Sep-20	NEL	2	2.800	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	3	6.900	AUTUMN	32166	3RS ET	S
22-Sep-20	NEL	4	0.300	AUTUMN	32166	3RS ET	S
12-Oct-20	NEL	2	25.180	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	3	11.540	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	2	7.680	AUTUMN	32166	3RS ET	S
12-Oct-20	NEL	3	3.000	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	2	1.400	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	8.600	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	4	20.650	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	5	6.550	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	4.100	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	4	6.000	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
16-Oct-20	NWL	2	9.200	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	3	47.000	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	4	6.800	AUTUMN	32166	3RS ET	P
16-Oct-20	NWL	2	3.100	AUTUMN	32166	3RS ET	S
16-Oct-20	NWL	3	9.200	AUTUMN	32166	3RS ET	S
19-Oct-20	AW	3	1.970	AUTUMN	32166	3RS ET	P
19-Oct-20	AW	4	3.000	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	3	19.136	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	4	0.760	AUTUMN	32166	3RS ET	P
19-Oct-20	WL	2	1.200	AUTUMN	32166	3RS ET	S
19-Oct-20	WL	3	9.374	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	3	21.246	AUTUMN	32166	3RS ET	P
21-Oct-20	SWL	4	14.620	AUTUMN	32166	3RS ET	P
21-Oct-20	SWL	5	16.990	AUTUMN	32166	3RS ET	P
21-Oct-20	SWL	3	4.817	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	4	10.860	AUTUMN	32166	3RS ET	S
21-Oct-20	SWL	5	1.000	AUTUMN	32166	3RS ET	S
27-Oct-20	AW	2	4.820	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	2	5.659	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	3	12.127	AUTUMN	32166	3RS ET	P
27-Oct-20	WL	2	2.431	AUTUMN	32166	3RS ET	S
27-Oct-20	WL	3	7.380	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	2	0.500	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	3	49.653	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	4	3.790	AUTUMN	32166	3RS ET	P
28-Oct-20	SWL	2	0.800	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	3	13.537	AUTUMN	32166	3RS ET	S
28-Oct-20	SWL	4	2.220	AUTUMN	32166	3RS ET	S
29-Oct-20	NWL	2	17.120	AUTUMN	32166	3RS ET	P
29-Oct-20	NWL	3	46.080	AUTUMN	32166	3RS ET	P
29-Oct-20	NWL	2	1.200	AUTUMN	32166	3RS ET	S
29-Oct-20	NWL	3	10.600	AUTUMN	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
7-Aug-20	1	1006	CWD	1	WL	2	57	ON	3RS ET	22.2972	113.8611	SUMMER	NONE	P
7-Aug-20	2	1033	CWD	2	WL	2	96	ON	3RS ET	22.2768	113.8514	SUMMER	NONE	S
7-Aug-20	3	1158	CWD	3	WL	3	8	ON	3RS ET	22.2174	113.8200	SUMMER	NONE	S
7-Aug-20	4	1228	CWD	13	WL	3	111	ON	3RS ET	22.2140	113.8303	SUMMER	NONE	P
7-Aug-20	5	1337	CWD	1	WL	3	235	ON	3RS ET	22.1955	113.8396	SUMMER	NONE	P
10-Aug-20	1	1122	FP	4	SWL	2	59	ON	3RS ET	22.1802	113.9280	SUMMER	NONE	P
10-Aug-20	2	1515	CWD	2	SWL	3	3	ON	3RS ET	22.1883	113.8491	SUMMER	NONE	P
10-Aug-20	3	1528	CWD	1	SWL	3	37	ON	3RS ET	22.1931	113.8499	SUMMER	NONE	P
17-Aug-20	1	1102	CWD	9	WL	3	229	ON	3RS ET	22.2408	113.8378	SUMMER	NONE	P
17-Aug-20	2	1222	CWD	1	WL	4	304	ON	3RS ET	22.1928	113.8424	SUMMER	NONE	S
24-Aug-20	1	1054	FP	2	SWL	2	61	ON	3RS ET	22.1462	113.9319	SUMMER	NONE	S
24-Aug-20	2	1318	FP	8	SWL	2	63	ON	3RS ET	22.1565	113.8876	SUMMER	NONE	P
4-Sep-20	1	1111	FP	3	SWL	2	93	ON	3RS ET	22.1500	113.9273	AUTUMN	NONE	P
4-Sep-20	2	1129	FP	6	SWL	2	328	ON	3RS ET	22.1869	113.9273	AUTUMN	NONE	P
4-Sep-20	3	1225	FP	1	SWL	2	47	ON	3RS ET	22.1547	113.9040	AUTUMN	NONE	S
4-Sep-20	4	1330	FP	7	SWL	3	15	ON	3RS ET	22.1493	113.8977	AUTUMN	NONE	P
9-Sep-20	1	1030	CWD	2	WL	2	189	ON	3RS ET	22.2632	113.8568	AUTUMN	NONE	S
9-Sep-20	2	1213	CWD	8	WL	3	323	ON	3RS ET	22.1965	113.8398	AUTUMN	NONE	P
15-Sep-20	1	1053	CWD	2	WL	2	85	ON	3RS ET	22.2689	113.8508	AUTUMN	NONE	P
15-Sep-20	2	1158	CWD	2	WL	3	20	ON	3RS ET	22.2320	113.8378	AUTUMN	NONE	P
15-Sep-20	3	1242	CWD	5	WL	3	225	ON	3RS ET	22.2058	113.8398	AUTUMN	NONE	S
19-Oct-20	1	1103	CWD	3	WL	3	22	ON	3RS ET	22.2419	113.8371	AUTUMN	NONE	P
19-Oct-20	2	1133	CWD	1	WL	3	10	ON	3RS ET	22.2239	113.8328	AUTUMN	NONE	P
19-Oct-20	3	1148	CWD	1	WL	3	226	ON	3RS ET	22.2181	113.8197	AUTUMN	NONE	S
21-Oct-20	1	1116	FP	1	SWL	3	404	ON	3RS ET	22.1478	113.9271	AUTUMN	NONE	P
21-Oct-20	2	1447	CWD	1	SWL	4	270	ON	3RS ET	22.1945	113.8687	AUTUMN	NONE	P
21-Oct-20	3	1527	CWD	6	SWL	3	60	ON	3RS ET	22.1836	113.8492	AUTUMN	NONE	P
21-Oct-20	4	1547	CWD	15	SWL	3	1340	ON	3RS ET	22.1944	113.8498	AUTUMN	NONE	P
27-Oct-20	1	1123	CWD	6	WL	3	104	ON	3RS ET	22.2318	113.8268	AUTUMN	NONE	P
27-Oct-20	2	1138	CWD	4	WL	3	378	ON	3RS ET	22.2320	113.8336	AUTUMN	NONE	P
27-Oct-20	3	1149	CWD	3	WL	3	92	ON	3RS ET	22.2329	113.8360	AUTUMN	NONE	P
27-Oct-20	4	1213	CWD	3	WL	3	337	ON	3RS ET	22.2142	113.8288	AUTUMN	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
27-Oct-20	5	1228	CWD	3	WL	3	387	ON	3RS ET	22.2138	113.8289	AUTUMN	NONE	P
27-Oct-20	6	1232	CWD	8	WL	3	624	ON	3RS ET	22.2138	113.8336	AUTUMN	NONE	P
27-Oct-20	7	1302	CWD	7	WL	3	147	ON	3RS ET	22.2058	113.8261	AUTUMN	NONE	P
27-Oct-20	8	1320	CWD	1	WL	3	838	ON	3RS ET	22.2027	113.8233	AUTUMN	NONE	S
27-Oct-20	9	1341	CWD	3	WL	2	693	ON	3RS ET	22.1880	113.8454	AUTUMN	NONE	S
28-Oct-20	1	1306	FP	2	SWL	3	35	ON	3RS ET	22.1577	113.8977	AUTUMN	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 359.650 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 14 on-effort sightings and total number of 64 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in October 2020 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in October 2020

$$STG = \frac{14}{359.650}\ x\ 100 = 3.89$$

Encounter Rate by Number of Dolphins (ANI) in October 2020

$$ANI = \frac{64}{359.650}\ x\ 100 = 17.80$$

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

A total of 1204.853 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 27 on-effort sightings and total number of 115 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

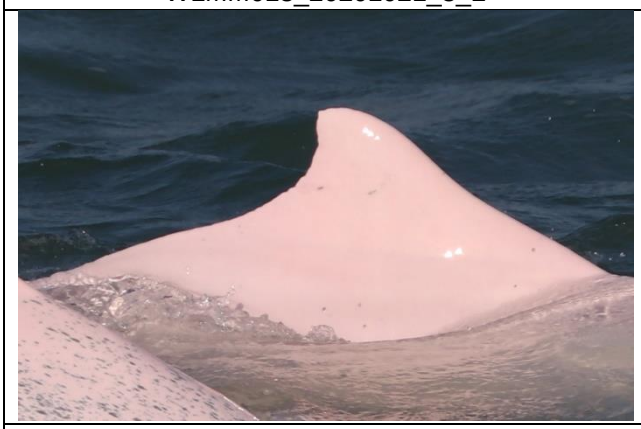
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{27}{1204.853}\ x\ 100 = 2.24$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{115}{1204.853}\ x\ 100 = 9.54$$

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

	
WLMM065_20201019_1_4	SLMM031_20201021_2_3
	
SLMM023_20201021_3_3	SLMM025_20201021_3_1
	
WLMM018_20201021_3_2	WLMM073_20201021_3_1
	
SLMM002_20201021_4_3	SLMM010_20201021_4_1

	
SLMM012_20201021_4_3	SLMM014_20201021_4_2
	
SLMM023_20201021_4_3	SLMM025_20201021_4_6
	
SLMM050_20201021_4_3	SLMM059_20201021_4_3
	
WLMM007_20201021_4_3	WLMM008_20201021_4_4

	
WLMM070_20201021_4_3	WLMM073_20201021_4_6
	
WLMM114_20201021_4_2	WLMM060_20201027_1_2
	
WLMM070_20201027_1_4	WLMM071_20201027_1_10
	
WLMM060_20201027_2_2	WLMM071_20201027_2_1

	
WLMM158_20201027_3_1	WLMM076_20201027_4_9
	
WLMM131_20201027_4_1	SLMM007_20201027_6_2
	
SLMM049_20201027_6_1	SLMM052_20201027_6_1
	
WLMM007_20201027_6_2	WLMM056_20201027_6_6

	
SLMM010_20201027_7_3	SLMM022_20201027_7_4
	
WLMM028_20201027_7_5	WLMM150_20201027_7_1
	
WLMM085_20201027_8_3	SLMM003_20201027_9_10
	
WLMM079_20201027_9_1	WLMM147_20201027_9_1_Right

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
19/Oct/20	Lung Kwu Chau	9:03	15:03	6:00	2-3	3	1	1
27/Oct/20	Sha Chau	10:52	16:52	6:00	2	2-3	0	-

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

Appendix E. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	:	VANIA CHU	WORK ORDER	: **HK2039261**
CLIENT	:	**MOTT MACDONALD HONG KONG LIMITED**		
ADDRESS	:	3/F INTERNATIONAL TRADE TOWER, 348 KWUN TONG ROAD, KWUN TONG, KOWLOON, HONG KONG	SUB-BATCH DATE RECEIVED DATE OF ISSUE	: 1 : 14-OCT-2020 : 27-OCT-2020
PROJECT	:	CALIBIRATION/PERFORMANCE CHECK OF DUST METER (S/N: 296098)	NO. OF SAMPLES CLIENT ORDER	: 1 : ----

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., if any) is provided by client.**
- **Calibration was subcontracted to and analysed by Action United Enviro Services.**

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 is the Final Report and supersedes any preliminary report with this batch 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	:	HK2039261
SUB-BATCH	:	1
CLIENT	:	MOTT MACDONALD HONG KONG LIMITED
PROJECT	:	CALIBIRATION/PERFORMANCE CHECK OF DUST METER (S/N: 296098)

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK2039261-001	S/N: 296098	Equipments	14-Oct-2020	S/N: 296098

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	296098
Equipment Ref:	Nil
Job Order	HK2039261

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	8 October 2020

Equipment Verification Results:

Testing Date: 20 & 21 October 2020

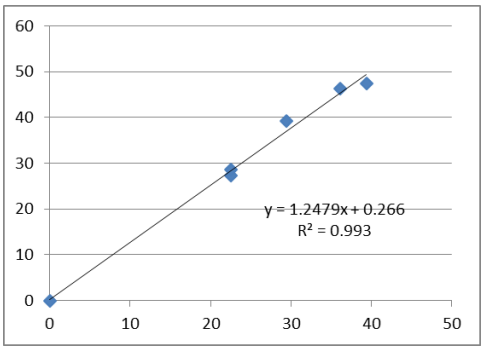
Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr	09:23 ~ 11:23	25	1015	27	2700	22.5
2hr03min	11:25 ~ 13:28	25	1015	29	2773	22.5
2hr01min	13:30 ~ 15:31	25	1015	47	4772	39.4
2hr13min	09:18 ~ 11:31	24.5	1011.8	39	3921	29.4
2hr10min	11:33 ~ 13:43	24.5	1011.8	46	4707	36.2

Linear Regression of Y or X

Slope (K-factor): 1.2479 (µg/m3)/CPM

Correlation Coefficient 0.9965

Date of Issue 27 October 2020



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 1.2479 (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 : 27 October 2020

QC Reviewer : Ben Tam Signature : Date : 27 October 2020

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	8-Oct-20
Location ID :	Calibration Room	Next Calibration Date:	8-Jan-21

CONDITIONS

Sea Level Pressure (hPa)	1015.2	Corrected Pressure (mm Hg)	761.4
Temperature (°C)	25.5	Temperature (K)	299

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.03014
Model->	5025A	Qstd Intercept ->	-0.04616
Calibration Date->	7-Feb-20	Expiry Date->	7-Feb-21

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.4	6.4	12.8	1.785	56	56.00	Slope = 38.0056
13	5.1	5.1	10.2	1.596	49	49.00	Intercept = -11.6655
10	4	4	8.0	1.416	42	42.00	Corr. coeff. = 0.9991
8	2.5	2.5	5.0	1.124	32	32.00	
5	1.5	1.5	3.0	0.876	21	21.00	

Calculations :

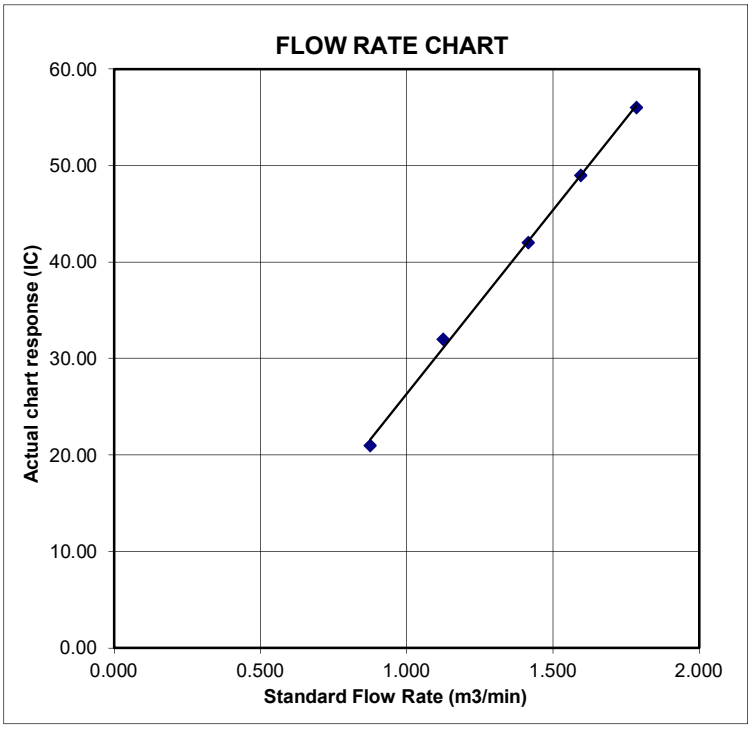
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

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:
February 7, 2021

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	February 7, 2020	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 745.5	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1612**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.3730	3.2	2.00
2	3	4	1	0.9820	6.4	4.00
3	5	6	1	0.8780	8.0	5.00
4	7	8	1	0.8340	8.8	5.50
5	9	10	1	0.6900	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)
0.9866	0.7186	1.4078	0.9957	0.7252	0.8896
0.9824	1.0004	1.9909	0.9914	1.0096	1.2581
0.9802	1.1165	2.2259	0.9893	1.1267	1.4066
0.9792	1.1741	2.3345	0.9882	1.1849	1.4753
0.9739	1.4114	2.8155	0.9828	1.4244	1.7792
QSTD	**m=**	**2.03014**	**QA**	**m=**	**1.27124**
	b=	**-0.04616**		**b=**	**-0.02917**
	r=	**0.99995**		**r=**	**0.99995**

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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Village of Cleves, OH 45002

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

Report No. : AJ100093
Date of Issue : 23 October 2020

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Oct 22, 2020
Date of Calibration	:	Oct 22, 2020
Date of Next Calibration[(a)]	:	Jan 21, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510 B
Salinity	APHA 21e 2520 B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS[(b,c)]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[(d)] (pH Unit)	Tolerance[(e)](pH Unit)	Results
4.00	3.92	-0.08	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	10.12	0.11	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.00	Satisfactory
20	20.1	0.10	Satisfactory
45	45.1	0.10	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

(a) *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.*
(b) *The results relate only to the calibrated equipment as received*
(c) *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
(d) *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
(e) *The "Tolerance Limit" mentioned is referenced to YSI product specifications.*

LEE Chun-ning, Desmond
Senior Chemist

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ100093
Date of Issue : 23 October 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.32	0.16	Satisfactory
3.19	3.37	0.18	Satisfactory
6.20	6.40	0.20	Satisfactory
8.10	8.11	0.01	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	155.1	5.58	Satisfactory
0.01	1412	1480	4.82	Satisfactory
0.1	12890	12794	-0.74	Satisfactory
0.5	58670	57248	-2.42	Satisfactory
1.0	111900	110736	-1.04	Satisfactory

Tolerance limit of conductivity should be less than ±10.0 (%)

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.92	-0.80	Satisfactory
20	19.88	-0.60	Satisfactory
30	30.41	1.37	Satisfactory

Tolerance limit of salinity should be less than ±10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.11	--	Satisfactory
10	10.20	2.0	Satisfactory
20	20.36	1.8	Satisfactory
100	104.42	4.4	Satisfactory
800	793.77	-0.8	Satisfactory

Tolerance limit of turbidity should be less than ±10.0 (%)

~ END OF REPORT ~

Remark(s): -

(f) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

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

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

Report No. : AJ100092
Date of Issue : 23 October 2020

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	Oct 22, 2020
Date of Calibration	:	Oct 22, 2020
Date of Next Calibration[a]	:	Jan 21, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510 B
Salinity	APHA 21e 2520 B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.13	0.12	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.03	0.03	Satisfactory
20	20.08	0.08	Satisfactory
45	45.20	0.20	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.*
[b] *The results relate only to the calibrated equipment as received*
[c] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[d] *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
[e] *The "Tolerance Limit" mentioned is referenced to YSI product specifications.*

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ100092
Date of Issue : 23 October 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.16	0.34	0.18	Satisfactory
3.19	3.48	0.29	Satisfactory
6.20	6.45	0.25	Satisfactory
8.10	8.23	0.13	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	154.7	5.31	Satisfactory
0.01	1412	1477	4.60	Satisfactory
0.1	12890	12815	-0.58	Satisfactory
0.5	58670	57692	-1.67	Satisfactory
1.0	111900	110899	-0.89	Satisfactory

Tolerance limit of conductivity should be less than ±10.0 (%)

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.14	1.40	Satisfactory
20	20.24	1.20	Satisfactory
30	30.59	1.97	Satisfactory

Tolerance limit of salinity should be less than ±10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	Satisfactory
10	9.9	-1.0	Satisfactory
20	20.3	1.5	Satisfactory
100	105.8	5.8	Satisfactory
800	795.6	-0.5	Satisfactory

Tolerance limit of turbidity should be less than ±10.0 (%)

~ END OF REPORT ~

Remark(s): -

(f) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

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

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
3205	Notification of Construction Work under APCO	Works area of 3205	453653	Receipt acknowledged by EPD on 25 Feb 2020
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0657-20	Valid from 16 Sep 2020 to 13 Mar 2021
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	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
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0423-20	Superseded by GW-RS0659-20
			GW-RS0659-20	Valid from 17 Sep 2020 to 10 Mar 2021
			GW-RS0501-20	Valid from 20 Jul 2020 to 20 Dec 2020
		Works Area of 3206 (Area 11)	GW-RS0621-20	Valid from 6 Sep 2020 to 1 Mar 2021
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022

Contract No.	Description	Location	Permit/ Reference No.	Status
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301	GW-RS0212-20	Valid until from 12 Apr 2020 to 11 Oct 2020
			GW-RS0740-20	Valid until from 12 Oct 2020 to 11 Apr 2021
	Construction Noise Permit (Special Case)	Works area of 3301 (Cable ducting works)	GW-RS0617-20	Valid until from 14 Sep 2020 to 13 Mar 2021
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	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-RS0438-20	Valid from 7 Jul 2020 to 6 Jan 2021
			GW-RS0447-20	Valid from 7 Jul 2020 to 6 Jan 2021
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0335-20	Valid from 27 May 2020 to 15 Nov 2020
		Works area of 3303 (Reclamation area)	GW-RS0563-20	Valid from 26 Aug 2020 to 9 Feb 2021
		Works area of 3303 (South East Quay)	GW-RS0655-20	Valid from 16 Sep 2020 to 6 Mar 2021
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0532-20	Valid from 9 Aug 2020 to 6 Feb 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
3402	Notification of Construction Work under APCO	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
		Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0334-20	Valid from 29 May 2020 to 28 Nov 2020
	Construction Noise Permit (Special Case)	Works area of 3403	GW-RS0635-20	Valid from 18 Sep 2020 to 17 Mar 2021
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	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-RS0665-20	Superseded by GW-RS0769-20
			GW-RS0769-20	Valid from 16 Oct 2020 to 11 Apr 2021
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	454450	Receipt acknowledged by EPD on 17 Mar 2020
		Stockpiling area of 3503	449570	Receipt acknowledged by EPD on 30 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
			WT00036551-2020	Valid from 17 Sep 2020 to 30 Sep 2025
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0351-20	Superseded by GW-RS0789-20
		Works area of 3503	GW-RS0789-20	Valid from 24 Oct 2020 to 15 Apr 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Stockpiling area of 3503	GW-RS0385-20	Valid from 11 Jul 2020 to 31 Dec 2020
		Works area of 3503 (Special Case)	GW-RS0442-20	Valid from 2 Jul 2020 to 31 Dec 2020
			GW-RS0619-20	Valid from 6 Sep 2020 to 30 Nov 2020
3508	Notification of Construction Work under APCO	Works area of 3508	459469	Receipt acknowledged by EPD on 4 Sep 2020
	Registration as Chemical Waste Producer	Works area of 3508	WPN-5218-951-G2898-01	Completion of Registration on 28 Sep 2020
	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-RS0774-20	Valid from 24 Oct 2020 to 12 Apr 2021
		Works area of 3508(Area 3)	GW-RS0802-20	Valid from 27 Oct 2020 to 23 Apr 2021
3601	Notification of Construction Work under APCO	Works area of 3601	451765	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
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
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0692-20	Valid from 1 Oct 2020 to 30 Mar 2021
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0165-20	Superseded by GW-RS0681-20
			GW-RS0681-20	Valid from 6 Oct 2020 to 5 Apr 2021
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
			GW-RS0419-20	Superseded by GW-RS0706-20

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0706-20	Valid from 28 Sep 2020 to 25 Mar 2021
3722	Notification of Construction Work under APCO	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
		Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722D	453675	Receipt acknowledged by EPD on 25 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3722A	WPN 5218-951-T3863-01	Completion of Registration on 18 Mar 2020
		Works area of 3722B	WPN 5218-951-T3864-01	Completion of Registration on 18 Mar 2020
		Works area of 3722C	WPN 5218-951-T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951-T3865-01	Completion of Registration on 18 Mar 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0304-20	Superseded by GW-RS0677-20
			GW-RS0677-20	Valid from 18 Sep 2020 to 14 Mar 2021
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	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 and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	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-RS0475-20	Superseded by GW-RS0826-20
			GW-RS0826-20	Valid from 31 Oct 2020 to 27 Apr 2021
	Construction Noise Permit (Special case)	Works area of 3801	GW-RS0633-20	Valid from 10 Sep 2020 to 3 Mar 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
3901A	Notification of Construction Work under APCO	Works area of 3901A	456240	Receipt acknowledged by EPD on 18 May 2020
	Specified Process license under APCO	Works area of 3901A	443180	Receipt acknowledged by EPD on 15 Mar 2019
	Specified Process license under APCO	Works area of 3901A	L-3-261(1)	Valid from 14 Sep 2020 to 13 Sep 2024
	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	7037889	Approval granted from EPD on 20 Jul 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0298-20	Valid from 25 May 2020 to 24 Nov 2020
3901B	Notification of Construction Work under APCO	Works area of 3901B	452168	Receipt acknowledged by EPD on 23 Dec 2019
	Specified Process license under APCO	Works area of 3901B	443181	Receipt acknowledged by EPD on 15 Mar 2019
	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-RS0658-20	Valid from 18 Sep 2020 to 13 Mar 2021

Appendix G. 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	0
	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	3	0	0
From 28 December 2015 to end of the reporting period	23	1	1