MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.59 (For November 2020)

December 2020

Airport Authority Hong Kong

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Construction Phase Monthly EM&A Report No.59 (For November 2020)

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This Monthly EM&A Report No. 59 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 14 December 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

14 December 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 59 (November 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 59 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 December 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 59th 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 30 November 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.

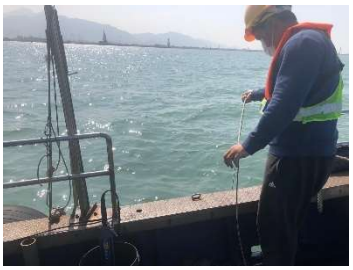
EM&A Activities Conducted in the Reporting Period

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	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

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

Snapshots of EM&A Activities in the Reporting Period

		
Impact Water Quality Monitoring conducted by ET	Impact Air Quality Monitoring Conducted by ET in Man Tung Road Park	Contract-specific Environmental Management Meeting conducted by AAHK, ET and Contractor to discuss Site Environmental Issues

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, water quality, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3205 DCM works

- Trimming.

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;
- Pilling work;
- Pre-drilling; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Concrete work 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;
- Pilling work; 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 dust issue at 3RS construction site area was received on 6 Nov 2020.	ET requested the relevant contractor to provide information related to the complaint. During regular site inspections, no dust issue was recorded at the alleged area. The Contractor has reviewed and updated the dust control management plan to enhance water spraying to strengthen their dust suppression measure All contractors were reminded to properly and adequately implement dust suppression measures especially in the current dry season to prevent air pollution on site. The case was considered closed.
			A complaint regarding illegal refuel delivery leading to water pollution at 3RS project area was received on 19 Nov 2020.	ET requested the relevant contractors to provide information related to the complaint. Regular site inspections and night-time *ad-hoc* inspections were also conducted by ET during which no occurrence regarding oil spillage onto sea surface was observed. ET also conducted a night-time inspection along the reclaimed land during which no oil spillage onto the sea surface from fuel transfer activities was observed. All contractors were reminded to continue with their current proper handling of oil and fuel on site and implementation on their spill response plans. The case was considered closed.
			A complaint regarding illegal cement discharge and domestic waste disposal from marine vessel was received on 19 Nov 2020.	The complaint is under investigation. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
			A complaint regarding smoke and dust from a contractor was received on 27 Nov 2020.	The complaint is under investigation. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.
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 of Construction Phase Monthly EM&A Report No. 58.

1.2 Scope of this Report

This is the 59th 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 30 November 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, Sustainability	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	Jasmine Tso	5968 6926
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:

- One skipper training session provided by ET: 11 November 2020;
- One dolphin observer training session provided by ET: 27 November 2020;
- Eighteen environmental management meetings for EM&A review with works contracts: 5, 6, 10, 16, 17, 18, 23, 26, 27 and 30 November 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 A**.

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level ($\mu g/m^3$)	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	Monthly EM&A Report No. 58, 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 of Construction Phase Monthly EM&A Report No. 58, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	17 - 52	306	500
AR2	19 - 53	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 B**.

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	65 - 72	75
NM4(1)	62 - 64	70(2)
NM5(1)	52 - 59	75
NM6(1)	62 - 68	75

Notes:

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

(2) Reduced to 65dB(A) during school examination periods at NM4. School examination took place from 23 to 27 November 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	Monthly EM&A Report No. 58, 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	Monthly EM&A Report No. 58, 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 B**.

The water quality monitoring results for all parameters (i.e. DO, total alkalinity, turbidity, SS, chromium, and nickel) obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

4.5 Conclusion

During the reporting period, all monitoring results were within their corresponding Action and Limit Levels. 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 A**.

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)
October 2020 [2][3]	*7,679	*121,985	*1,724	10,267	60	1,800	2,242
November 2020[2][4]	7,611	83,211	31	30,995	1,297	3,600	1,545

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 5, 6, 9, 10, 16, 17, 18 and 19 November 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

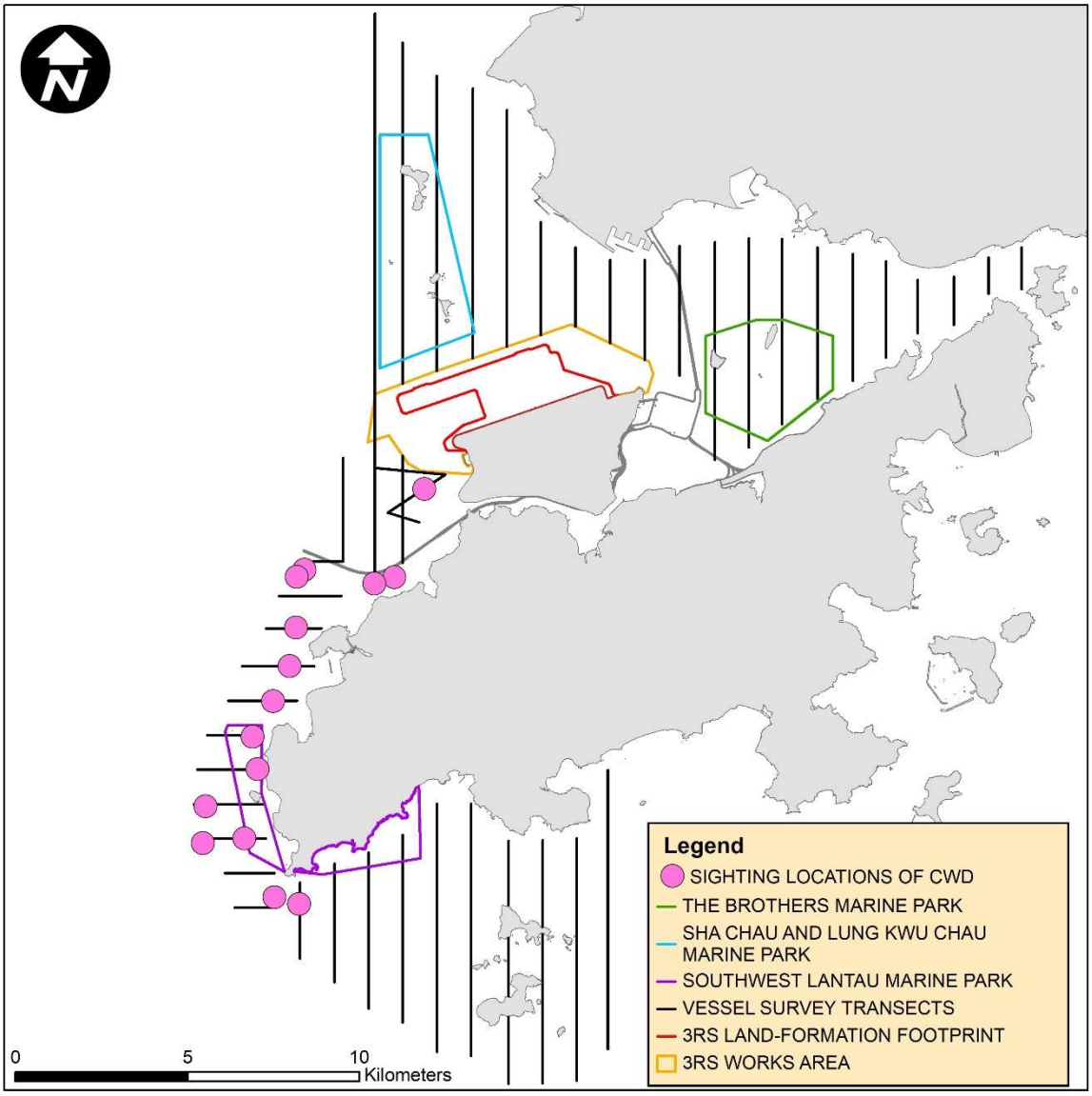
A total of around 445.81 km of survey effort was collected from these surveys and around 95.1% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In November 2020, 15 sightings with 45 dolphins were sighted. Amongst these sightings, 14 sightings with 44 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 C**.

Distribution of all CWD sightings recorded in November 2020 is illustrated in **Figure 6.3**. In NWL, there were three sightings located at the southwestern part of the survey area including the AW transects. In WL, the CWD sightings scattered amongst the entire survey area from the waters between Hong Kong – Zhuhai – Macao Bridge and Fan Lau. In SWL, the only CWD sighting was recorded off Fan Lau. No sightings of CWD were recorded in NEL.

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 November 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 November 2020, a total of around 424.11 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 44 dolphins were sighted under such condition. Calculation of the encounter rates in November 2020 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from September 2020 to November 2020), a total of around 1207.63 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 33 on-effort sightings and a total number of 127 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of November 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)
November 2020	3.30	10.37
Running Quarter from September 2020 to November 2020(1)	2.73	10.52
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 September 2020 to November 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 November 2020, 15 groups of 45 dolphins in total were sighted, and the average group size of CWDs was 3.0 dolphins per group. Sightings with medium group size (i.e. 3-9 dolphins) are dominant. There were no CWD sightings with large group size (i.e. 10 or more dolphins) recorded.

Activities and Association with Fishing Boats

Three sightings of CWDs was recorded engaging in feeding activities in November 2020. One of these sighting was associated with operating gillnetter.

Mother-calf Pair

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

6.4.2 Photo Identification

In November 2020, a total number of 22 different CWD individuals were identified for totally 29 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM003	06-Nov-20	3	WL	WLMM073	16-Nov-20	5	WL
SLMM007	16-Nov-20	4	WL	WLMM079	06-Nov-20	3	WL
SLMM010	06-Nov-20	6	WL		16-Nov-20	3	WL
	17-Nov-20	1	NWL	WLMM080	16-Nov-20	1	AW
	19-Nov-20	2	SWL	WLMM107	06-Nov-20	1	WL
SLMM012	19-Nov-20	2	SWL	WLMM114	06-Nov-20	3	WL
SLMM023	16-Nov-20	3	WL		16-Nov-20	6	WL
SLMM037	16-Nov-20	6	WL	WLMM135	06-Nov-20	1	WL
	19-Nov-20	2	SWL	WLMM147	06-Nov-20	3	WL
SLMM049	19-Nov-20	2	SWL		16-Nov-20	3	WL
SLMM052	16-Nov-20	3	WL	WLMM149	06-Nov-20	1	WL
SLMM064	06-Nov-20	1	WL	WLMM150	06-Nov-20	5	WL
SLMM073	16-Nov-20	4	WL	WLMM160	06-Nov-20	5	WL
WLMM007	06-Nov-20	5	WL	WLMM163	06-Nov-20	5	WL
		6	WL				

6.4.3 Land-based Theodolite Tracking Survey

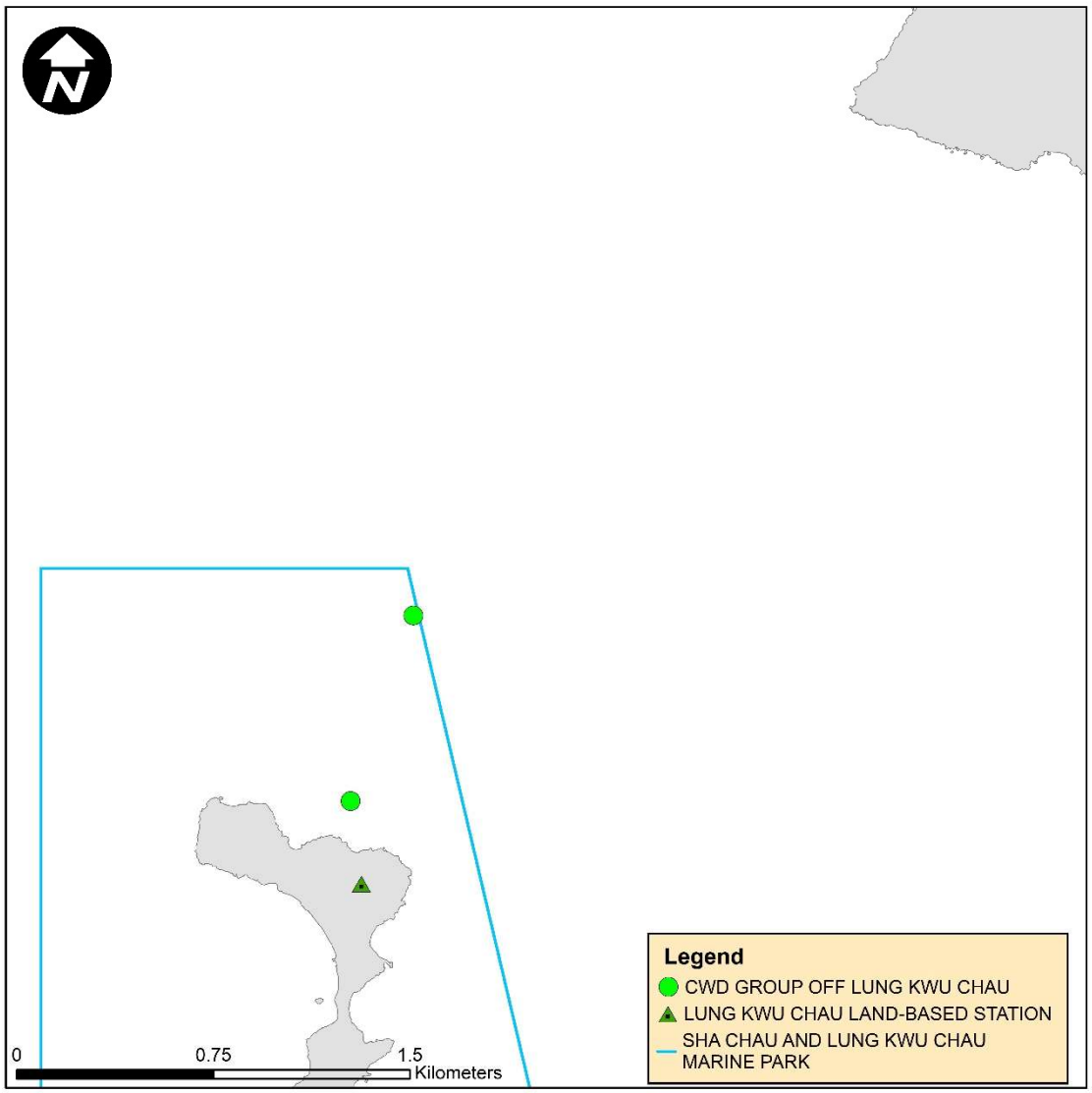
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 16 November 2020 and at SC on 4 November 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Two 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 C**. The first sighting locations of CWD group tracked at LKC station during land-based theodolite tracking survey in November 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	2	0.33
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**2**	**0.17**

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 remained underwater 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, 4 to 7 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 703 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 B**. 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 A**.

7.2 Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix A**) was monitored in accordance with the Manual. The implementation status of the environmental protection measures are summarized below in **Table 7.1**. Examples 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	Relevant Contract(s) in the Reporting Period
CM1- The construction area and contractor's temporary works areas shall be minimised to avoid impacts on adjacent landscape.	The implementation of mitigation measures were checked by ET during weekly site inspection and clarified by the Contractors during the monthly Environmental Management Meetings. Implementation of the measures CM5, CM6 and CM7 by Contractors was observed.	3RS Project contracts
CM2 – Reduction of construction period to practical minimum.		
CM3 – Phasing of the construction stage to reduce visual impacts during the construction phase.		
CM4 – Construction traffic (land and sea) including construction plants, construction vessels and barges shall be kept to a practical minimum.		
CM5 – Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.		
CM6 – Avoidance of excessive height and bulk of site buildings and structures		
CM7 – Control of night-time lighting by hooding all lights and through minimisation of night working periods		
CM8 – All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas	Tree Protection Specifications have been provided in the relevant Contract Specifications respectively for implementation by the Contractors under the Project. The Contractors' performance on the implementation of the trees maintenance and protection measures were observed and checked by the ET weekly during construction period.	3302, 3503, 3602, 3801 3508 (To be implemented)
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 relevant Contract Specifications respectively 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 Contractors' performance on the implementation of trees maintenance and protection measures on transplanted trees were observed and checked by the ET bi-monthly during the 12-month establishment period respectively. Long-term management of the transplanted trees were monitored by ET annually during the first 10 years after the establishment period.	3503, 3801 3508 (To be implemented)
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.	To be implemented

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

		
Erection of site hoardings around works area in unobtrusive colors (CM5)	Avoidance of excessive height and bulk of site buildings (CM6)	Control of night-time lighting by hooding and minimisation of night working period (CM7)
		
General view of Tree Protection Zone for retained tree (CM8)	General view of a transplanted tree (CM9)	

In accordance with the EM&A Manual, all existing trees shall be protected carefully during construction. Trees unavoidably affected by the works shall be transplanted where practical. In this reporting period, the updated cumulative total number of retained and transplanted trees under the Project were 147 and 5, respectively. Details of the retained trees, transplanted trees and to-be-transplanted trees under the Project are summarized in **Table 7.3** and **Table 7.4** respectively. Photos of transplanted trees are presented in **Table 7.5**.

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

Table 7.3: Summary of the Number of Retained, Transplanted and To-be-transplanted Trees in the Reporting Period

Existing			
Contract	**Retain (nos.)**	**Transplanted (nos.)**	**To-be-transplanted (nos.)**
3302	9	0	0
3503	19	3	6
3602	2	0	0
3801	117	2[(1)]	0
Sub-total	147	5	6

Provisional			
Contract	**Retain (nos.)**	**Transplanted (nos.)**	**To-be-transplanted (nos.)**
3508(2)	155	0	22
Sub-total	155	0	22
Grand Total	**302**	**5**	**28**

Notes:

(1) CT1253 and CT276 were handed over to Southern Landside Petrol Filling Station (SLPS) on 5 Jun 2019. Another 3 transplanted trees (CT1194, CT1794 and CT1795) were subsequently fell after transplantation. Please refer **Table 7.4** for details.
(2) Actual tree number is subject to confirmation after initial tree survey is conducted by the Contractor.

Table 7.4: Summary of the Transplanted Trees Updated in the Reporting Period

Tree ID	Transplant date	Establishment period	Remarks
CT276	3 May 2018	Jun 2018 - Jun 2019 (1)	Under the 10-year long-term management
CT1253	4 May 2018	Jun 2018 - Jun 2019 (1)	(i.e. Jul 2019 – Jul 2029)
T835	22 Jan 2020	Jan 2020 - Jan 2021(2)	Under the 12-month establishment period
T836	13 Dec 2019	Jan 2020 - Jan 2021(2)	
T838	22 Jan 2020	Jan 2020 - Jan 2021(2)	
CT1194	4 May 2018	Jun 2018 - Jun 2019	Uprooted and collapsed due to Typhoon Higos on 18 August 2020. Tree removal was conducted to remove the potential risk as recommended by Contractor's tree specialist.
CT1794	3 May 2018	Jun 2018 - Jun 2019	Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.
CT1795	3 May 2018	Jun 2018 - Jun 2019	Removed as the land was acquired by the government for construction of temporary emergency hospital to handle COVID-19 pandemic in early Sep 2020.

Notes:

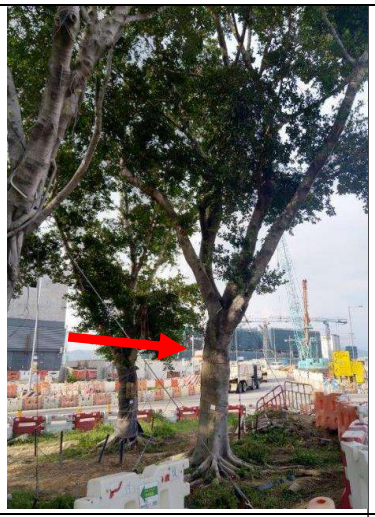
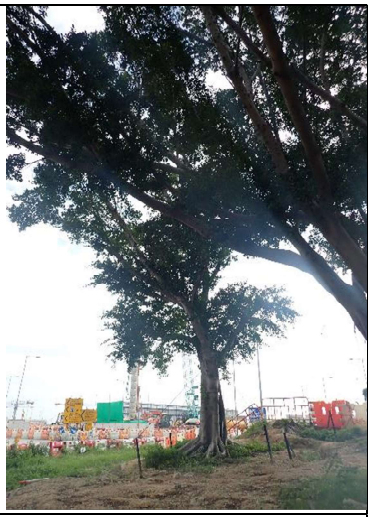
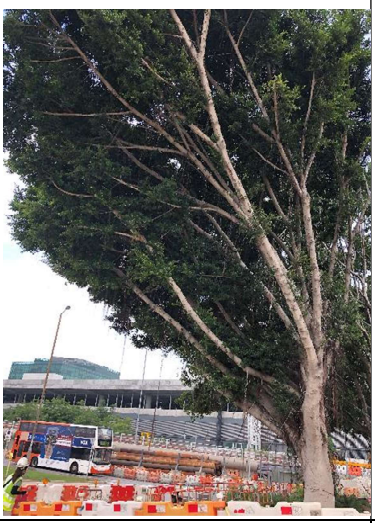
(1) Completed by contract 3801 and handed over to SLPS.
(2) The trees are managed by contract 3503.

Table 7.5: Photos of the Existing Transplanted Trees in the Reporting Period

Under 12-month Establishment Period:		
		
T835	T836	T838
Under 10-year Long-term Management:		
		
CT276	CT1253	

A total of six to-be-transplanted trees (i.e. T812, T814, T815, T829, T830 and T831) were checked by ET under contract 3503 during the reporting period. The tentative transplant date for T812, T815 and T830 is around December 2020 – subject to construction programme. The transplant date of other to-be-transplanted trees is to be confirmed. Photos of the to-be-transplanted trees are presented in **Table 7.6**.

Table 7.6: Photos of the To-be-transplanted Trees in the Reporting Period

		
T812	T814	T815
		
T829	T830	T831

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.

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 7.7**. The daily movement of all SkyPier HSFs in this reporting period (i.e., 1 to 3 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the Annual EM&A Report.

In total, 2 ferry movements between HKIA SkyPier and Macau were recorded in November 2020 and the data are presented in **Appendix F**. The time spent by the SkyPier HSFs travelling through the SCZ in November 2020 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for November 2020

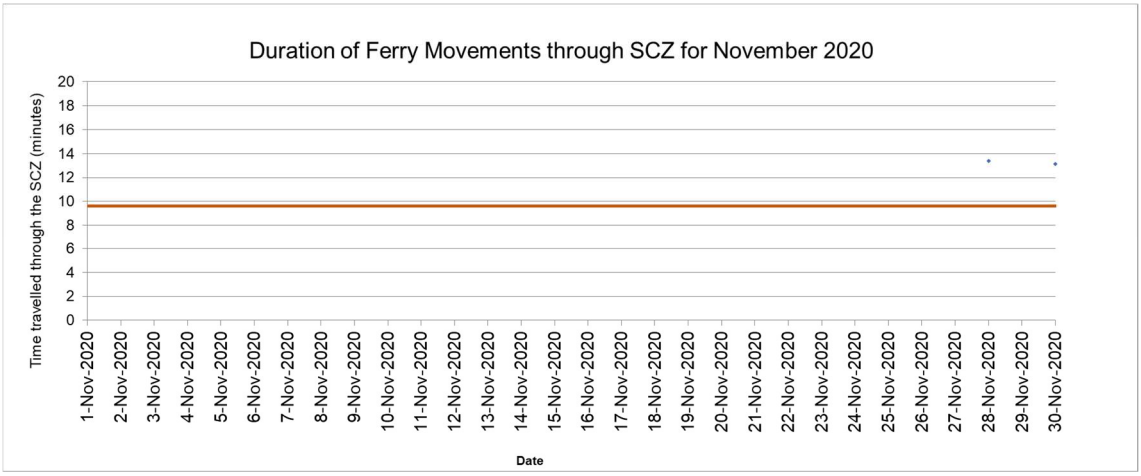


Table 7.7: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 30 November 2020
Total number of ferry movements recorded and audited	2
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling the SCZ ranged from 10.8 to 11.0 knots. All HSFs travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	1 to 3 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.
- Three skipper training session 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, 9 skippers were trained by ET and 3 skippers were trained by contractors' Environmental Officers. In total, 1663 skippers were trained from August 2016 to November 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 7.8**.

Table 7.8: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	

EP Condition	Submission	Status
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	
2.20	Supplementary Contamination Assessment Plan	Accepted / approved by EPD
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 D**.

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

7.9.1 Complaints

A complaint was received on 6 November 2020 regarding dust issue at 3RS construction site area. Investigation was conducted by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET identified the related 3RS contractor and requested the Contractor to provide more information regarding the complaint. According to the information provided by the Contractor, ground improvement works and filling material transferring activities were carried out at the alleged area. The watering of vehicular accesses following the circuits as set out in the contractor's dust control management plan had been arranged. Based on ET's regular site inspections, no dust issue was recorded at the alleged area. During the joint *ad-hoc* inspection of ET and IEC in the morning of 4 November 2020, dust emission from the vehicular movements was observed and the Contractor was advised to provide dust suppression mitigation measures to prevent fugitive dust generation. The Contractor also updated the dust control management plan to expand the water spray coverage at the alleged area. ET further conducted on-site investigations and observed that the exposed reclaimed land area and construction materials at the alleged area were in dry conditions. ET reminded the Contractor again to strictly follow the relevant requirements to prevent fugitive dust generation. The Contractor followed up to provide water spraying at the alleged area according to updated dust control management plan. It was noted that 3RS water quality monitoring results from 1 October 2020 to 8 November 2020 were within the corresponding Action and Limit Levels at all monitoring stations, except one case of SS triggered the corresponding Action Level at IM5 on 15 October 2020. Based on the investigation on the exceedance, the case was considered not due to the Project. Nevertheless, ET reminded the Contractor to strengthen their dust suppression measures, and requested the Contractor to strengthen their dust suppression measures, proactively and timely review their management plan for dust control. ET will continue to remind all contractors to properly and adequately implement dust suppression measures especially in the current dry season and to prevent air pollution on site. Hence, the complaint case was considered closed.

A complaint was received on 19 November 2020 regarding illegal refuel delivery leading to water pollution. Investigation was conducted by ET in accordance with the Manual and the Complaint Management Plan of the Project. No detail of the case such as location and name of the barge was provided in the complaint. ET investigated the related work contractors of 3RS Project on the reclaimed land. Based on the information provided by the contractors, no oil spillage incident from fuel transfer activities was recorded in October and up to early November 2020. During regular environmental site inspections and night-time *ad-hoc* inspections conducted by ET in October and early November 2020 , no occurrence regarding oil spillage onto sea surface was observed. In addition, a night-time inspection along the reclaimed land in particular the western pier and north eastern pier was conducted on 24 November 2020 during which no oil spillage onto the sea surface from fuel transfer activities was observed. Regarding the reporting of oil and/or fuel spillage incident for the period from October and up to early November 2020, the ET did not receive any such reporting from the related work contractors. It was noted that 3RS water quality monitoring results from 1 October 2020 to 6 November 2020 were within the corresponding Action and Limit Levels at all monitoring stations, except one case of SS triggered the corresponding Action Level at IM5 on 15 October 2020. Based on the investigation on the exceedance, the case was considered not due to the Project. Nevertheless, the ET will continue to remind all contractors to properly handle oil and fuel on site and implement their respective contract-specific spill response plan including the conducting of regular spill drills and trainings, and to provide sufficient spill kits on site. ET and IEC would continue to monitor 3RS water quality. Hence, the complaint case was considered closed.

A complaint was received on 19 November 2020 regarding illegal cement discharge and domestic waste disposal from marine vessel and is being investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.

A complaint was received on 27 November 2020 regarding smoke and dust from a contractor and is being investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The findings of investigation for the complaint will be reported in the next Monthly EM&A Report.

7.9.2 Notifications of Summons or Status of Prosecution

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

7.9.3 Cumulative Statistics

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

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

- Trimming.

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;
- Pilling work;
- Pre-drilling; and
- Builders' works.

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

Contract 3601 New Automated People Mover System (TRC Line)

- Concreting work 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;
- Pilling work; and
- Site establishment.

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure; and
- Concreting.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- 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.

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period 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, water quality, construction waste, and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in November 2020 were in the range of 1 to 3 daily movements, which are within the maximum daily cap of 125 daily movements. A total of two HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 10.8 to 11.0 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. Zero deviation from the diverted route in November 2020 were recorded in the HSF monitoring. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. 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

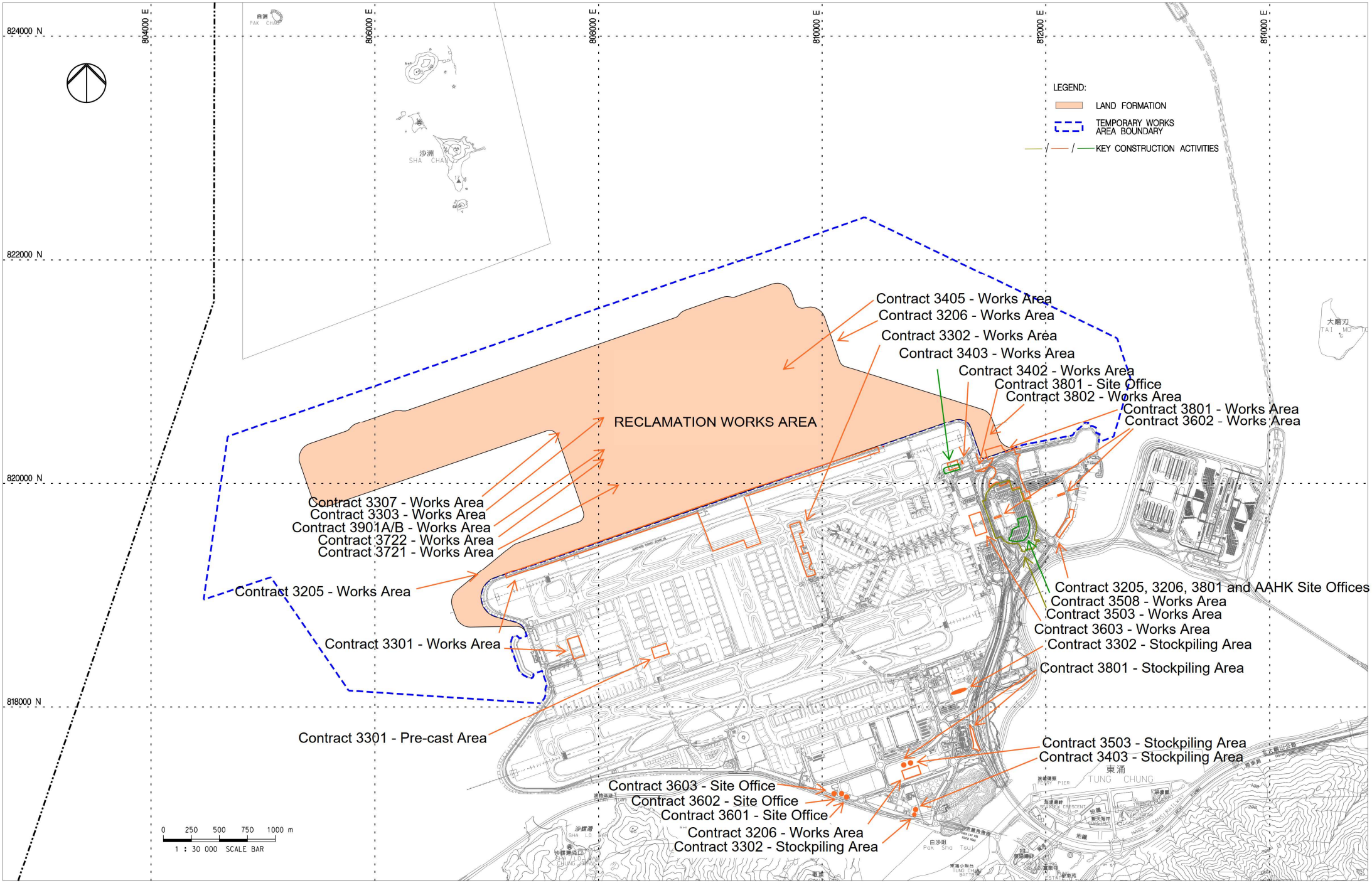
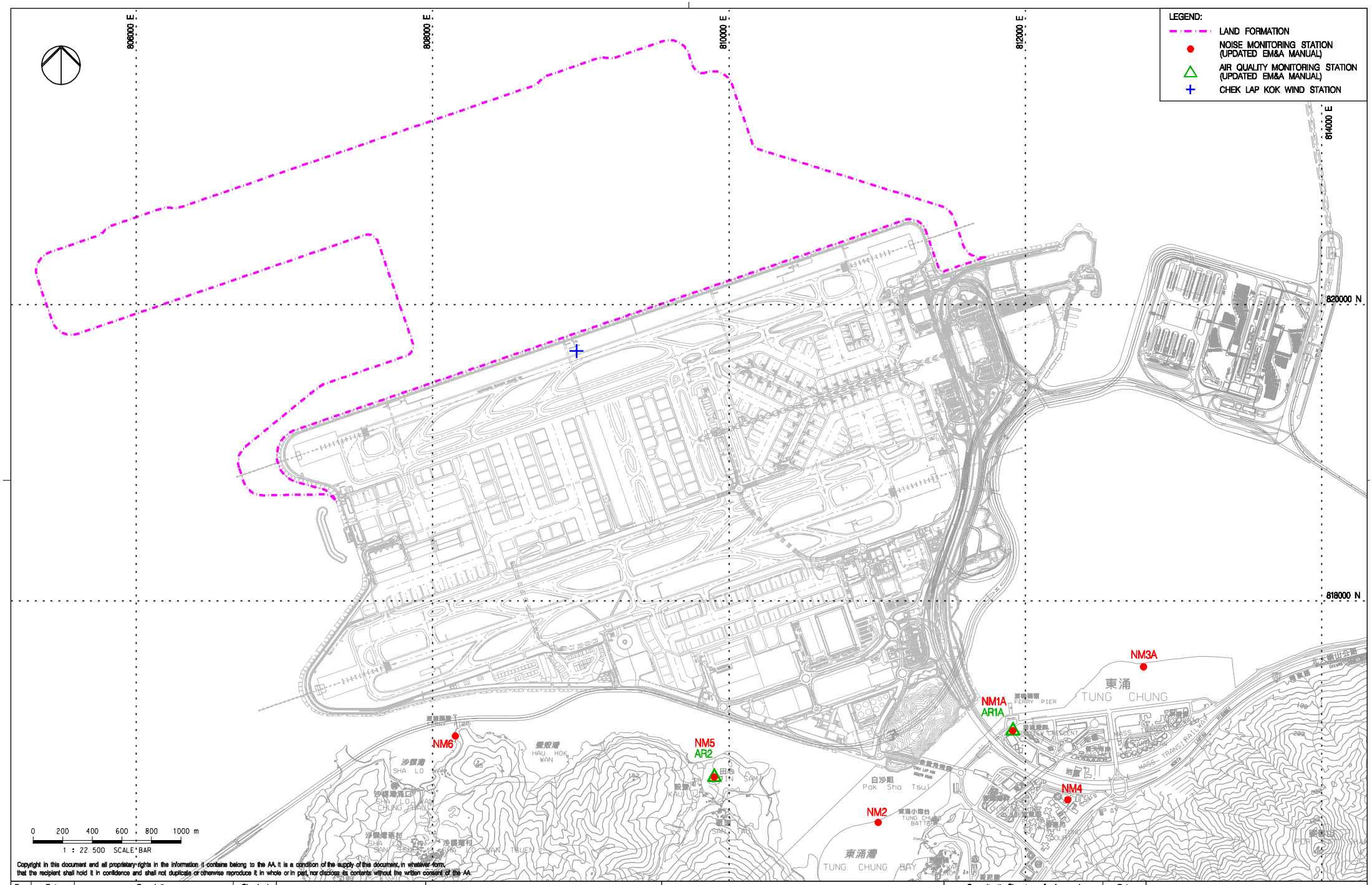


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

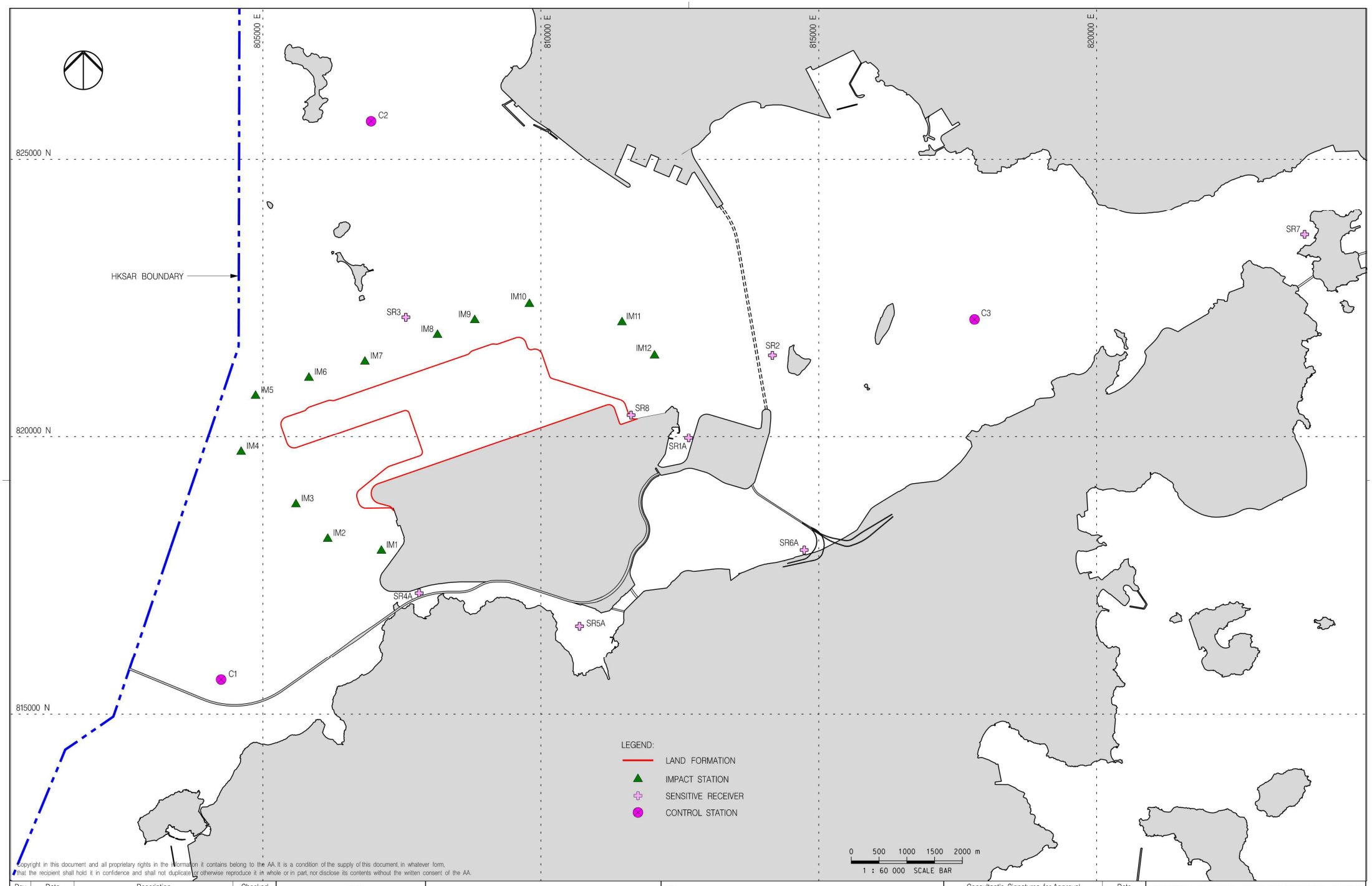
Drawing No.

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

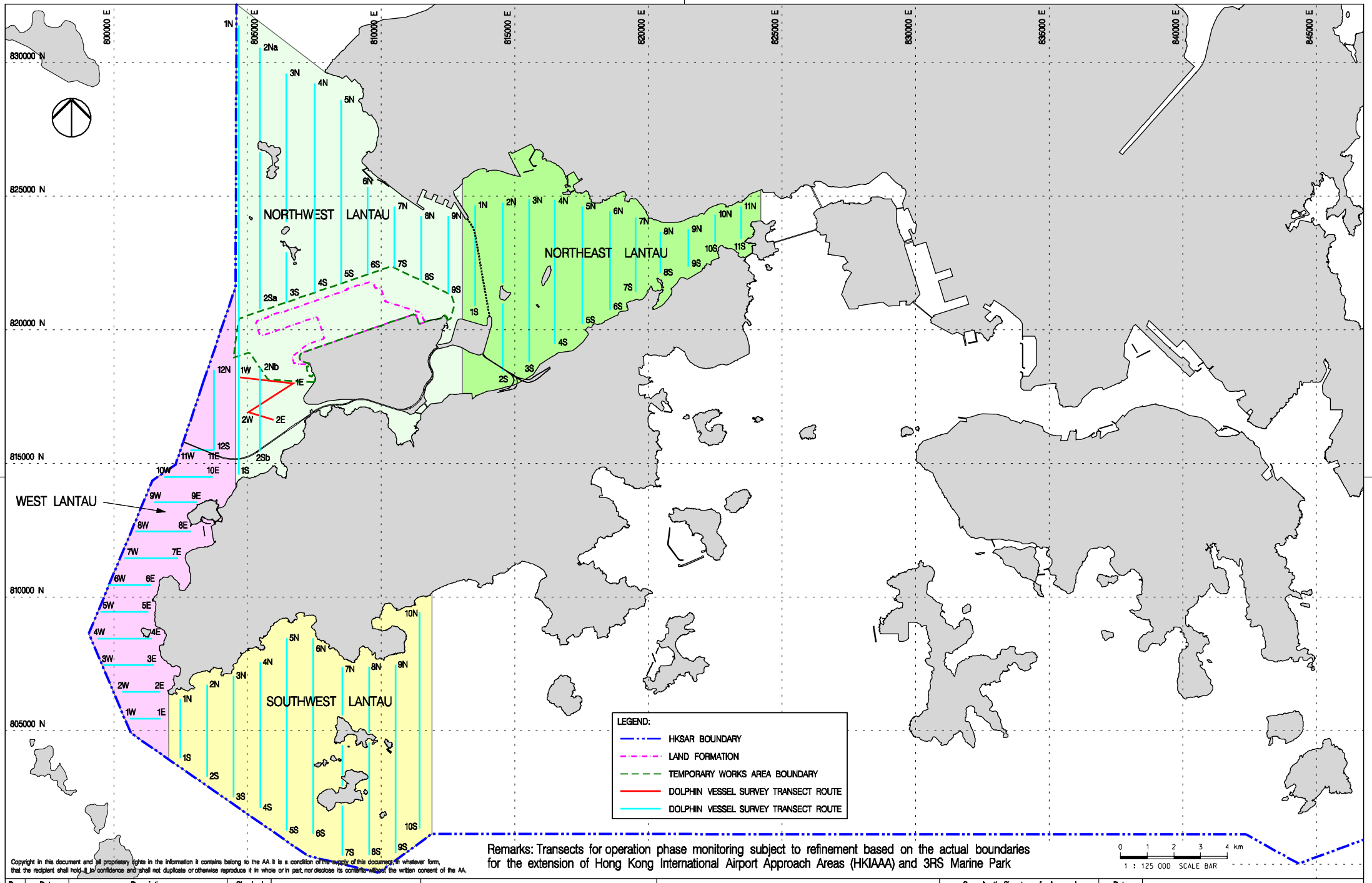
Drawing No.

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

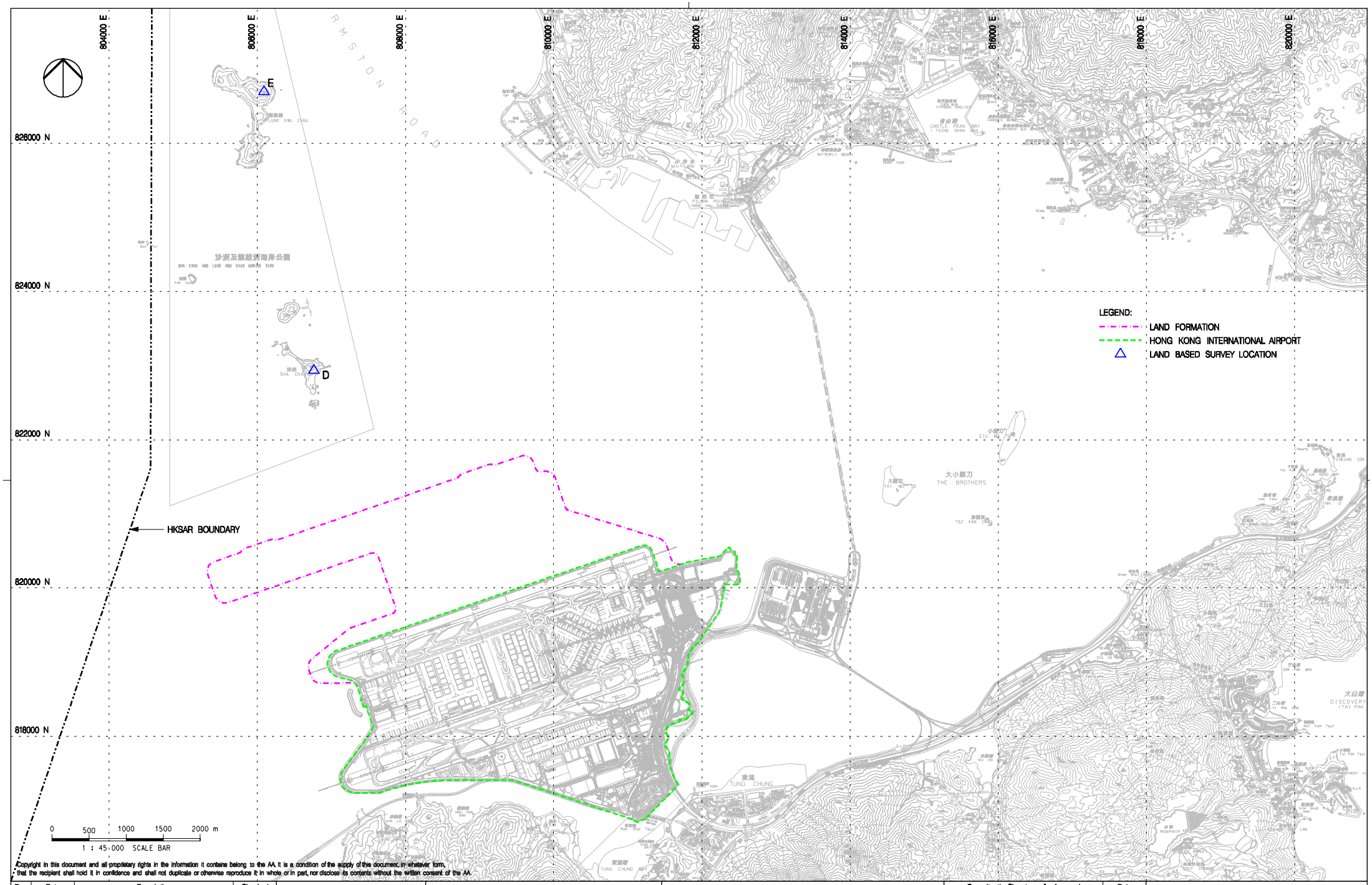
Drawing No.

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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C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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Approver	EC	29OCT18

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

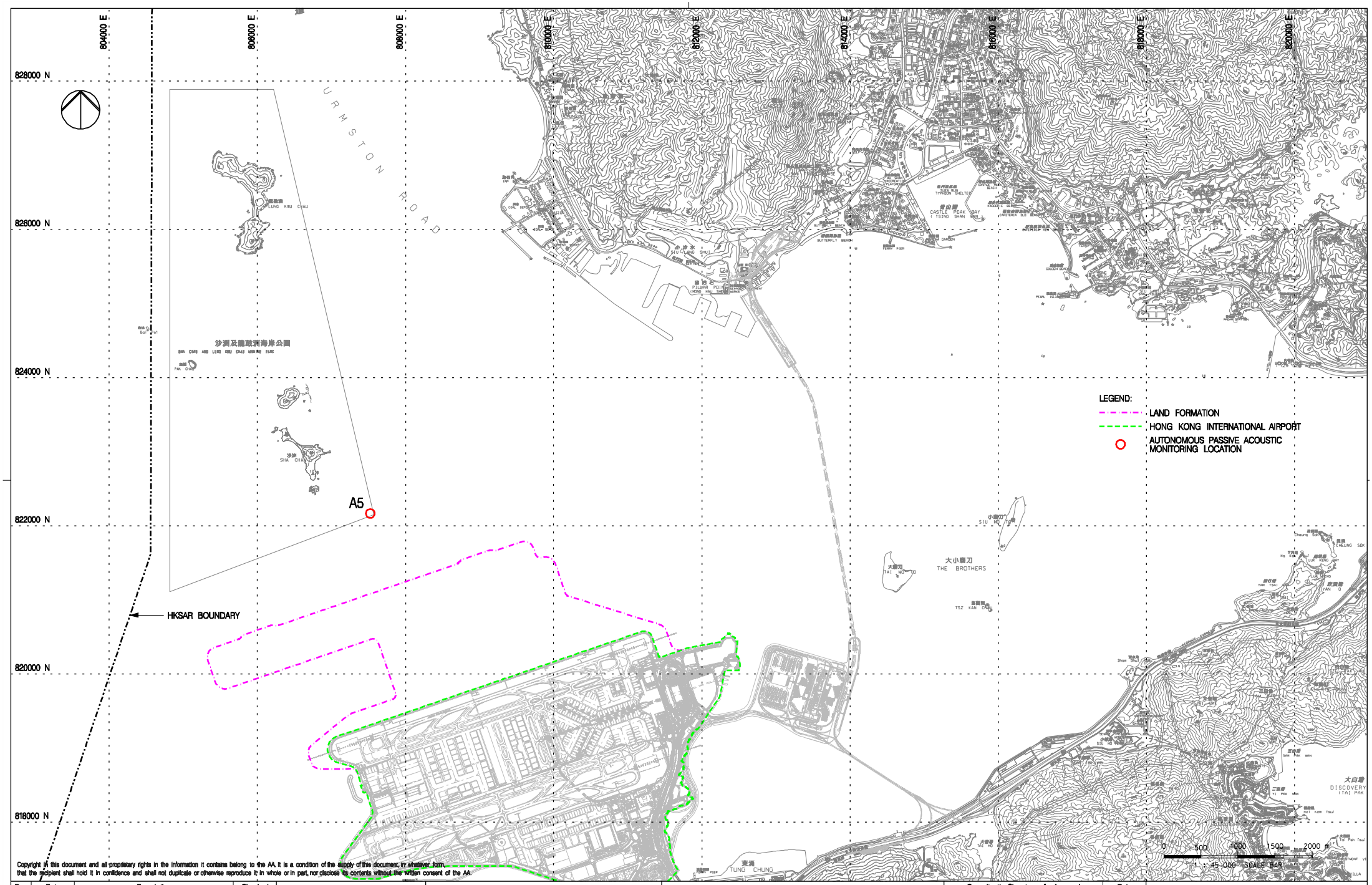
Drawing No.

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

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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. 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?^
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		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
			Specific Measures to be Applied to Land Formation Activities during Marine Filling Works ▪ 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 B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Nov-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	**2** Site Inspection NM4, NM6	**3** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 14:22 mid-flood: 8:54	**4** CWD Survey (Land-based)	**5** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:31 mid-flood: 10:27	**6** Site Inspection CWD Survey (Vessel)	**7** WQ General & Regular DCM mid-ebb: 4:34 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: 8:02 mid-flood: 15:56	**11**	**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: 9:04	**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: 5:03 mid-flood: 17:30
22	**23** Site Inspection NM4, NM6	**24** Site Inspection WQ General & Regular DCM mid-ebb: 8:30 mid-flood: 16:09	**25**	**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

Tentative Monitoring Schedule of Next Reporting Period

Dec-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Site Inspection WQ General & Regular DCM mid-ebb: 13:29 mid-flood: 8:13	**2** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM5	**3** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 14:39 mid-flood: 9:37	**4** Site Inspection CWD Survey (Vessel)	**5** WQ General & Regular DCM mid-ebb: 16:01 mid-flood: 11:16
6	**7** Site Inspection	**8** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 6:08 mid-flood: 14:19	**9** CWD Survey (Vessel) NM4, NM6	**10** Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 8:47 mid-flood: 15:36	**11** Site Inspection CWD Survey (Vessel)	**12** WQ General & Regular DCM mid-ebb: 10:58 mid-flood: 16:46
13	**14** Site Inspection AR1A, AR2 NM1A, NM5	**15** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 13:37 mid-flood: 8:15	**16** CWD Survey (Vessel)	**17** Site Inspection WQ General & Regular DCM mid-ebb: 15:04 mid-flood: 9:54	**18** Site Inspection CWD Survey (Vessel)	**19** AR1A, AR2 WQ General & Regular DCM mid-ebb: 16:40 mid-flood: 11:34
20	**21** Site Inspection	**22** Site Inspection WQ General & Regular DCM mid-ebb: 6:10 mid-flood: 14:19	**23** NM4, NM6	**24** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 8:14 mid-flood: 15:24	**25**	**26** WQ General & Regular DCM mid-ebb: 10:24 mid-flood: 16:16
27	**28** Site Inspection	**29** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 12:34 mid-flood: 7:32	**30** AR1A, AR2 NM1A, NM5	**31** Site Inspection WQ General & Regular DCM mid-ebb: 13:49 mid-flood: 8:49		

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 C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

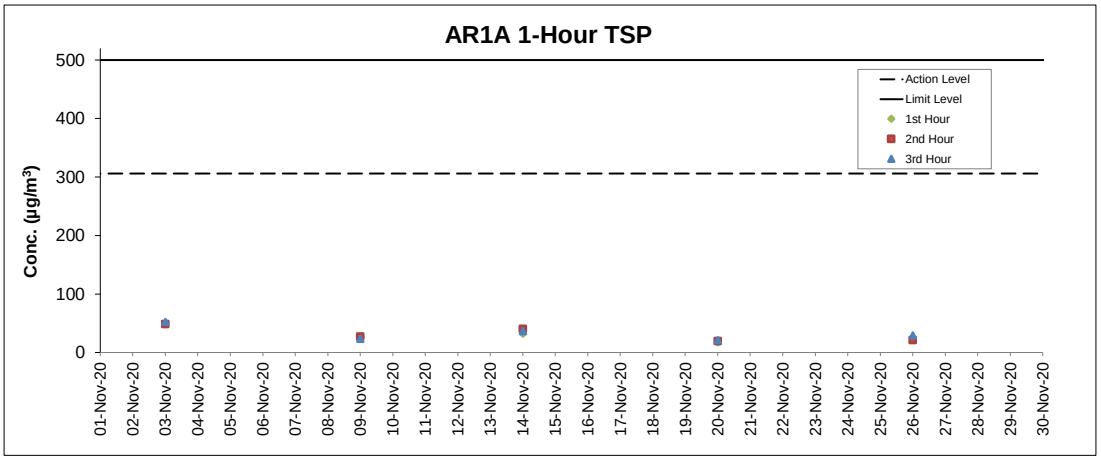
Station: AR1A- Man Tung Road Park

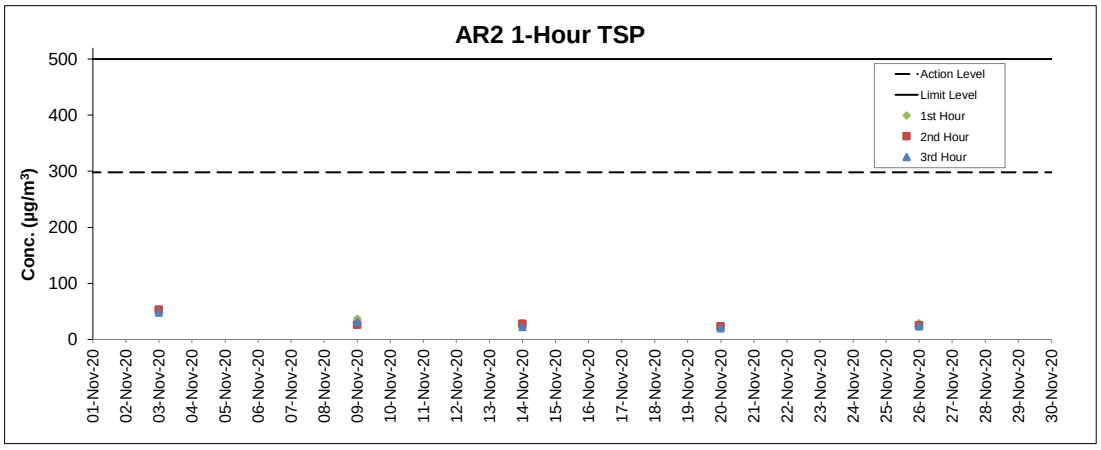
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
03-Nov-20	14:23	Cloudy	2.8	45	48	306	500
03-Nov-20	15:23	Cloudy	3.3	54	48	306	500
03-Nov-20	16:23	Cloudy	3.9	33	52	306	500
09-Nov-20	13:43	Cloudy	3.6	54	26	306	500
09-Nov-20	14:43	Cloudy	3.9	46	27	306	500
09-Nov-20	15:43	Cloudy	4.2	68	23	306	500
14-Nov-20	9:04	Cloudy	4.4	41	32	306	500
14-Nov-20	10:04	Cloudy	4.2	45	40	306	500
14-Nov-20	11:04	Cloudy	4.4	42	36	306	500
20-Nov-20	13:50	Cloudy	4.4	258	17	306	500
20-Nov-20	14:50	Cloudy	5.0	244	19	306	500
20-Nov-20	15:50	Cloudy	4.2	255	21	306	500
26-Nov-20	14:08	Cloudy	4.7	288	24	306	500
26-Nov-20	15:08	Cloudy	4.4	233	21	306	500
26-Nov-20	16:08	Cloudy	2.8	238	29	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)
03-Nov-20	13:01	Cloudy	3.3	346	52	298	500
03-Nov-20	14:01	Cloudy	2.2	71	53	298	500
03-Nov-20	15:01	Cloudy	4.2	43	48	298	500
09-Nov-20	9:41	Cloudy	5.3	36	37	298	500
09-Nov-20	10:41	Cloudy	3.3	40	26	298	500
09-Nov-20	11:41	Cloudy	4.2	44	31	298	500
14-Nov-20	13:05	Cloudy	3.3	15	28	298	500
14-Nov-20	14:05	Cloudy	3.9	41	28	298	500
14-Nov-20	15:05	Cloudy	4.2	21	22	298	500
20-Nov-20	13:34	Cloudy	4.2	254	19	298	500
20-Nov-20	14:34	Cloudy	5.0	243	23	298	500
20-Nov-20	15:34	Cloudy	5.0	246	20	298	500
26-Nov-20	9:33	Cloudy	3.1	61	29	298	500
26-Nov-20	10:33	Cloudy	2.5	62	25	298	500
26-Nov-20	11:33	Cloudy	2.2	72	23	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)
03-Nov-20	Cloudy	15:33	70.3	51.4	72
03-Nov-20	Cloudy	15:38	74.3	53.3	
03-Nov-20	Cloudy	15:43	73.1	51.5	
03-Nov-20	Cloudy	15:48	73.2	51.1	
03-Nov-20	Cloudy	15:53	73.8	51.9	
03-Nov-20	Cloudy	15:58	73.5	51.6	
09-Nov-20	Cloudy	14:32	65.3	54.8	65
09-Nov-20	Cloudy	14:37	64.5	53.8	
09-Nov-20	Cloudy	14:42	65.2	53.8	
09-Nov-20	Cloudy	14:47	64.2	53.1	
09-Nov-20	Cloudy	14:52	68.0	52.1	
09-Nov-20	Cloudy	14:57	67.8	57.0	
20-Nov-20	Cloudy	10:38	68.0	60.9	70
20-Nov-20	Cloudy	10:43	72.1	57.4	
20-Nov-20	Cloudy	10:48	69.3	61.7	
20-Nov-20	Cloudy	10:53	64.9	60.8	
20-Nov-20	Cloudy	10:58	66.8	61.4	
20-Nov-20	Cloudy	11:03	68.3	62.5	
26-Nov-20	Cloudy	14:25	62.1	54.7	65
26-Nov-20	Cloudy	14:30	59.9	54.7	
26-Nov-20	Cloudy	14:35	66.8	56.5	
26-Nov-20	Cloudy	14:40	66.6	60.4	
26-Nov-20	Cloudy	14:45	64.8	54.4	
26-Nov-20	Cloudy	14:50	64.5	56.2	

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)
02-Nov-20	Cloudy	13:00	63.2	57.0	64
02-Nov-20	Cloudy	13:05	61.5	57.1	
02-Nov-20	Cloudy	13:10	63.4	57.0	
02-Nov-20	Cloudy	13:15	62.8	56.8	
02-Nov-20	Cloudy	13:20	62.9	56.2	
02-Nov-20	Cloudy	13:25	61.6	58.3	
10-Nov-20	Cloudy	13:04	64.1	58.5	64
10-Nov-20	Cloudy	13:09	61.3	57.8	
10-Nov-20	Cloudy	13:14	62.9	58.4	
10-Nov-20	Cloudy	13:19	63.7	57.5	
10-Nov-20	Cloudy	13:24	62.6	58.2	
10-Nov-20	Cloudy	13:29	61.7	57.9	
19-Nov-20	Cloudy	13:02	61.5	57.2	63
19-Nov-20	Cloudy	13:07	60.5	57.3	
19-Nov-20	Cloudy	13:12	61.3	57.3	
19-Nov-20	Cloudy	13:17	63.0	57.8	
19-Nov-20	Cloudy	13:22	60.0	57.7	
19-Nov-20	Cloudy	13:27	60.5	57.0	
23-Nov-20	Cloudy	10:17	60.6	56.6	62
23-Nov-20	Cloudy	10:22	61.2	56.7	
23-Nov-20	Cloudy	10:27	62.1	56.3	
23-Nov-20	Cloudy	10:32	61.0	56.0	
23-Nov-20	Cloudy	10:37	59.5	55.6	
23-Nov-20	Cloudy	10:42	60.7	55.5	

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)
03-Nov-20	Cloudy	13:01	52.8	47.3	52
03-Nov-20	Cloudy	13:06	47.7	45.3	
03-Nov-20	Cloudy	13:11	49.7	45.9	
03-Nov-20	Cloudy	13:16	48.4	44.4	
03-Nov-20	Cloudy	13:21	53.8	44.6	
03-Nov-20	Cloudy	13:26	47.3	44.5	
09-Nov-20	Cloudy	10:27	52.7	42.1	53
09-Nov-20	Cloudy	10:32	57.2	47.1	
09-Nov-20	Cloudy	10:37	54.5	48.0	
09-Nov-20	Cloudy	10:42	57.0	49.8	
09-Nov-20	Cloudy	10:47	62.4	49.4	
09-Nov-20	Cloudy	10:52	58.1	49.2	
20-Nov-20	Cloudy	14:16	58.6	54.8	59
20-Nov-20	Cloudy	14:21	58.4	55.0	
20-Nov-20	Cloudy	14:26	59.6	54.4	
20-Nov-20	Cloudy	14:31	57.5	54.1	
20-Nov-20	Cloudy	14:36	57.0	54.3	
20-Nov-20	Cloudy	14:41	60.6	54.1	
26-Nov-20	Cloudy	09:51	59.6	56.6	53
26-Nov-20	Cloudy	09:56	58.9	56.2	
26-Nov-20	Cloudy	10:01	58.9	56.0	
26-Nov-20	Cloudy	10:06	58.3	56.2	
26-Nov-20	Cloudy	10:11	60.9	53.8	
26-Nov-20	Cloudy	10:16	55.5	53.3	

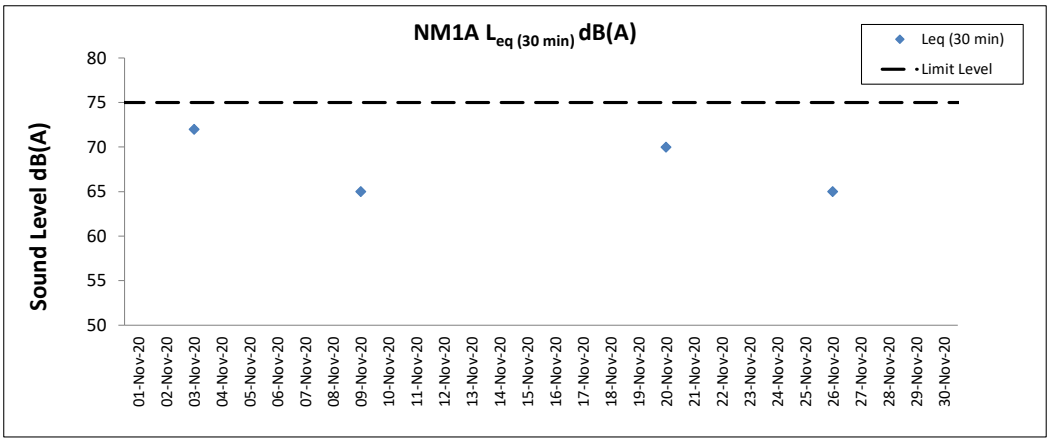
Remarks:
+3dB (A) correction was applied to free-field measurement.

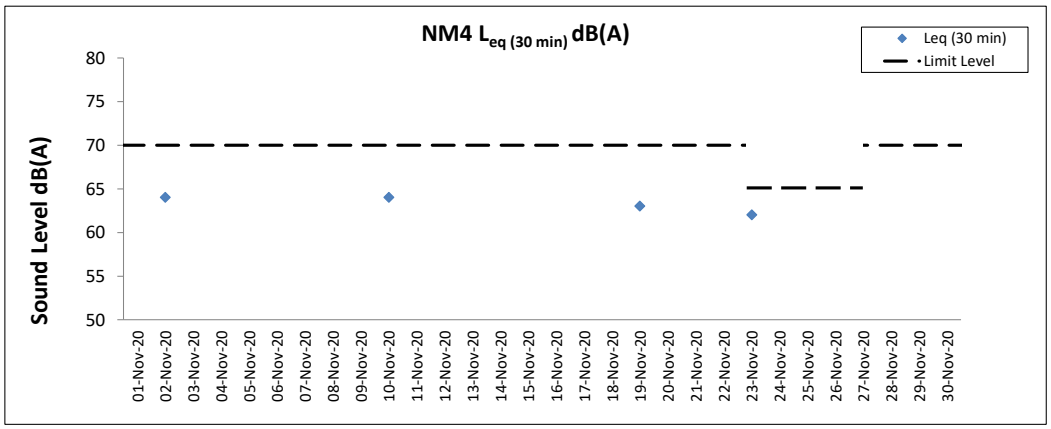
Noise Measurement Results

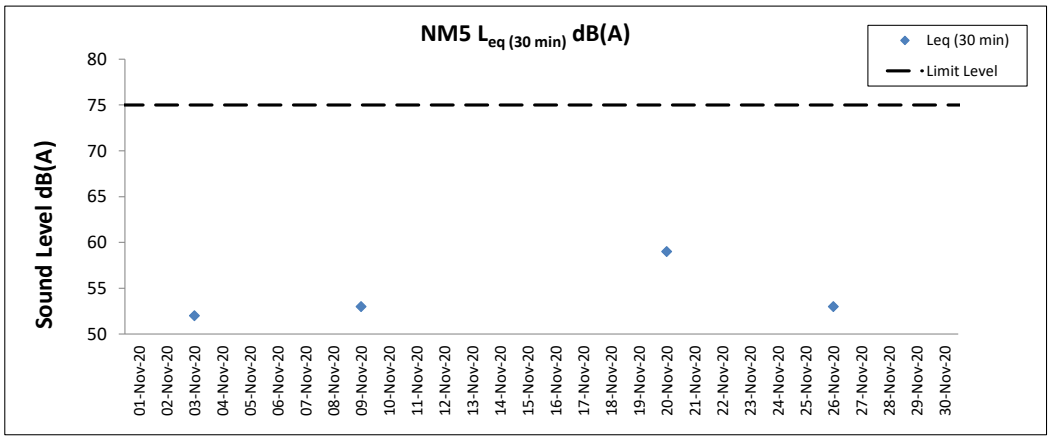
Station: NM6- House No.1 Sha Lo Wan

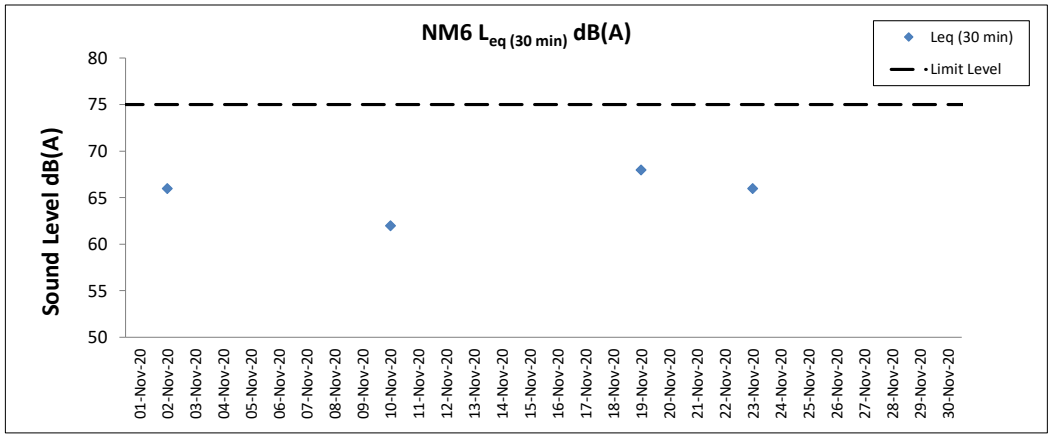
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
02-Nov-20	Cloudy	15:50	66.7	57.8	66
02-Nov-20	Cloudy	15:55	64.9	57.6	
02-Nov-20	Cloudy	16:00	67.2	57.4	
02-Nov-20	Cloudy	16:05	66.1	57.9	
02-Nov-20	Cloudy	16:10	65.6	57.8	
02-Nov-20	Cloudy	16:15	65.6	57.7	
10-Nov-20	Cloudy	15:49	65.7	57.4	62
10-Nov-20	Cloudy	15:54	74.2	57.9	
10-Nov-20	Cloudy	15:59	56.0	51.0	
10-Nov-20	Cloudy	16:04	67.2	53.4	
10-Nov-20	Cloudy	16:09	67.0	53.9	
10-Nov-20	Cloudy	16:14	68.1	51.8	
19-Nov-20	Cloudy	15:47	70.6	52.7	68
19-Nov-20	Cloudy	15:52	75.7	56.6	
19-Nov-20	Cloudy	15:57	71.1	51.1	
19-Nov-20	Cloudy	16:02	69.5	54.8	
19-Nov-20	Cloudy	16:07	64.9	56.0	
19-Nov-20	Cloudy	16:12	73.7	54.4	
23-Nov-20	Cloudy	11:40	65.6	57.5	66
23-Nov-20	Cloudy	11:45	62.1	56.3	
23-Nov-20	Cloudy	11:50	62.1	57.6	
23-Nov-20	Cloudy	11:55	63.6	56.8	
23-Nov-20	Cloudy	12:00	68.7	57.8	
23-Nov-20	Cloudy	12:05	63.3	58.1	

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 03 November 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	13:44	8.8	Surface	1.0	0.2	257	24.0	24.0	8.3	8.3	31.6	31.7	100.7	99.8	7.1	6.9	4.6	7.0	3	4	85	87	815601	804257	<0.2	<0.2	0.7	0.8
						1.0	0.2	280	24.0		8.3		31.8		98.9		7.0		5.0		4		85				<0.2		0.7	
					Middle	4.4	0.1	229	23.8	23.8	8.3	8.3	32.3	32.3	96.6	96.6	6.8		6.3		4		87				<0.2		0.9	
						4.4	0.1	239	23.8		8.3		32.4		96.5		6.8		6.4		3		88				<0.2		0.9	
					Bottom	7.8	0.1	187	23.8	23.8	8.3	8.3	32.6	32.6	96.7	96.8	6.8	6.8	9.9		4		89				<0.2		0.8	
						7.8	0.1	202	23.8		8.3		32.6		96.9		6.8		9.9		3		89				<0.2		0.9	
C2	Fine	Moderate	12:38	11.8	Surface	1.0	0.2	21	24.9	24.9	8.2	8.2	31.8	31.8	101.2	101.1	7.0	7.0	1.4	3.1	4	4	85	88	825671	806935	<0.2	<0.2	0.8	0.8
						1.0	0.2	21	24.9		8.2		31.8		101.0		7.0		1.4		4		88				<0.2		0.8	
					Middle	5.9	0.2	353	24.9	24.9	8.2	8.2	32.0	32.0	101.6	101.4	7.0		2.2		4		88				<0.2		0.8	
						5.9	0.2	325	24.9		8.2		32.0		101.2		7.0		2.5		4		89				<0.2		0.8	
					Bottom	10.8	0.3	27	24.7	24.7	8.2	8.2	32.5	32.5	100.5	100.5	6.9	6.9	5.4		4		90				<0.2		0.9	
						10.8	0.3	29	24.7		8.2		32.5		100.4		6.9		5.6		4		85				<0.2		0.8	
C3	Fine	Moderate	14:22	12.8	Surface	1.0	0.5	70	25.0	25.0	8.1	8.1	33.8	33.8	91.7	91.6	6.3	6.2	-	2.4	3	3	87	90	822093	817810	<0.2	<0.2	0.8	0.8
						1.0	0.6	71	25.0		8.1		33.8		91.5		6.2		0.1		3		87				<0.2		0.9	
					Middle	6.4	0.4	73	25.0	25.0	8.1	8.1	33.8	33.8	90.3	90.3	6.2		1.2		3		90				<0.2		0.8	
						6.4	0.5	78	25.0		8.1		33.8		90.2		6.2		1.3		3		91				<0.2		0.7	
					Bottom	11.8	0.4	82	24.9	24.9	8.1	8.1	33.9	33.9	89.4	89.4	6.1	6.1	4.7		3		91				<0.2		0.8	
						11.8	0.4	87	24.9		8.1		33.9		89.4		6.1		4.8		4		91				<0.2		0.8	
IM1	Cloudy	Moderate	13:23	4.8	Surface	1.0	0.1	199	24.4	24.4	8.3	8.3	31.1	31.1	105.8	105.8	7.4	7.4	4.3	5.4	3	4	87	88	817937	807152	<0.2	<0.2	0.7	0.7
						1.0	0.1	214	24.4		8.3		31.1		105.8		7.4		4.3		3		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	160	24.0	24.0	8.3	8.3	31.0	31.0	100.4	100.4	7.1	7.1	6.8		4		89				<0.2		0.7	
						3.8	0.1	165	24.0		8.3		31.0		100.4		7.1		6.3		4		89				<0.2		0.6	
IM2	Cloudy	Moderate	13:15	7.4	Surface	1.0	0.0	294	24.1	24.1	8.3	8.3	31.3	31.3	99.8	99.8	7.0	7.0	6.4	10.0	5	6	85	88	818150	806157	<0.2	<0.2	0.6	0.7
						1.0	0.0	313	24.1		8.3		31.3		99.7		7.0		6.4		5		86				<0.2		0.8	
					Middle	3.7	0.1	35	24.0	24.0	8.3	8.3	31.4	31.4	98.7	98.7	6.9		11.5		4		87				<0.2		0.6	
						3.7	0.1	37	24.0		8.3		31.4		98.7		6.9		11.9		5		88				<0.2		0.6	
					Bottom	6.4	0.1	89	24.3	24.3	8.3	8.3	31.2	31.2	98.9	99.0	6.9	6.9	12.0		7		90				<0.2		0.8	
						6.4	0.1	90	24.3		8.3		31.2		99.0		6.9		11.6		7		90				<0.2		0.6	
IM3	Cloudy	Moderate	13:09	7.5	Surface	1.0	0.0	229	24.1	24.1	8.3	8.3	31.2	31.2	100.1	100.1	7.0	7.0	6.2	8.3	6	5	86	88	818803	805590	<0.2	<0.2	0.8	0.9
						1.0	0.0	237	24.1		8.3		31.2		100.0		7.0		6.2		5		87				<0.2		0.9	
					Middle	3.8	0.0	56	24.0	24.0	8.3	8.3	31.4	31.4	99.1	99.1	7.0		5.5		5		88				<0.2		0.8	
						3.8	0.0	59	24.0		8.3		31.4		99.1		7.0		5.5		5		88				<0.2		0.9	
					Bottom	6.5	0.0	90	24.0	24.0	8.3	8.3	31.4	31.4	98.9	98.9	7.0	7.0	13.1		3		90				<0.2		1.0	
						6.5	0.0	96	24.0		8.3		31.4		98.9		7.0		13.7		4		90				<0.2		1.0	
IM4	Cloudy	Moderate	13:00	7.9	Surface	1.0	0.2	342	24.0	24.0	8.3	8.3	31.3	31.3	98.2	98.2	6.9	6.9	8.2	11.6	6	4	86	88	819703	804618	<0.2	<0.2	0.8	0.9
						1.0	0.2	348	24.0		8.3		31.3		98.1		6.9		8.4		5		85				<0.2		0.8	
					Middle	4.0	0.2	30	23.9	23.9	8.3	8.3	31.5	31.5	98.0	98.0	6.9		12.4		5		88				<0.2		0.9	
						4.0	0.2	32	23.9		8.3		31.5		98.0		6.9		12.7		4		88				<0.2		0.9	
					Bottom	6.9	0.2	12	23.9	23.9	8.3	8.3	31.5	31.5	98.8	98.9	7.0	7.0	13.9		2		90				<0.2		0.9	
						6.9	0.2	12	23.9		8.3		31.5		99.0		7.0		13.7		3		89				<0.2		0.9	
IM5	Cloudy	Moderate	12:50	8.0	Surface	1.0	0.3	345	24.0	24.0	8.3	8.3	31.1	31.1	98.6	98.6	6.9	6.9	7.9	10.5	4	5	85	87	820758	804863	<0.2	<0.2	1.1	1.0
						1.0	0.3	317	24.0		8.3		31.1		98.5		6.9		8.1		5		85				<0.2		1.1	
					Middle	4.0	0.2	29	24.0	24.0	8.3	8.3	31.2	31.2	98.5	98.5	6.9		10.6		4		87				<0.2		0.9	
						4.0	0.2	30	24.0		8.3		31.2		98.5		6.9		10.8		4		88				<0.2		0.9	
					Bottom	7.0	0.1	0	24.0	24.0	8.3	8.3	31.3	31.3	99.0	99.1	7.0	7.0	12.8		5		90				<0.2		0.9	
						7.0	0.1	0	24.0		8.3		31.3		99.1		7.0		12.8		5		89				<0.2		0.9	
IM6	Cloudy	Moderate	12:43	7.8	Surface	1.0	0.1	264	24.2	24.2	8.3	8.3	30.5	30.5	101.2	101.2	7.1	7.1	5.2	5.5	5	5	85	88	821056	805838	<0.2	<0.2	0.9	1.0
						1.0	0.1	285	24.2		8.3		30.5		101.2		7.1		5.2		5		86				<0.2		0.9	
					Middle	3.9	0.2	294	24.2	24.2	8.3	8.3	30.7	30.7	100.8	100.8	7.1		5.2		5		87				<0.2		1.0	
						3.9	0.2	295	24.1		8.3		30.7		100.7		7.1		5.2		6		88				<0.2		1.1	
					Bottom	6.8	0.0	200	24.1	24.1	8.3	8.3	30.8	30.8	100.9	101.0	7.1	7.1	6.0		5		89				<0.2		1.1	
						6.8	0.0	209	24.1		8.3		30.8		101.0		7.1		6.1		5		90				<0.2		1.1	
IM7	Cloudy	Moderate	12:37	7.8	Surface	1.0	0.2	217	24.4	24.4	8.4	8.4	30.0	30.1	101.3	101.3	7.1	7.1	4.0	4.5	5	4	86	88	821338	806833	<0.2	<0.2	0.8	0.9
						1.0	0.2	223	24.4		8.4		30.1		101.3		7.1		4.1		5		86				<0.2		0.8	
					Middle	3.9	0.1	181	24.2	24.2	8.4	8.4	30.6	30.6	100.6	100.7	7.1		4.6		4		87				<0.2		1.0	
						3.9	0.1	189	24.2		8.4		30.7		100.7		7.1		4.6		5		88				<0.2		1.0	
					Bottom	6.8	0.2	184	24.1	24.1	8.4	8.4	30.8	30.7	101.3	101.4	7.1	7.1	4.8		4		89				<0.2		0.8	
						6.8	0.2	187	24.1		8.4		30.7		101.4		7.1		4.7		3		89				<0.2		0.9	
IM8	Fine	Moderate	13:04	8.4	Surface	1.0	0.6	85	25.0	24.9	8.2	8.2	32.0	32.0	102.7	102.5	7.1	7.1	1.9	3.2	3	4	85	87	821828	808163	<0.2	<0.2	0.7	0.8
						1.0	0.6	85	24.9		8.2		32.0		102.2		7.1		2.0		4		88				<0.2		0.9	
					Middle	4.2	0.4	75	24.8	24.8	8.2	8.2	32.3	32.3	101.9	101.9	7.0		3.2		4		88				<0.2		0.9	
						4.2	0.4	82	24.8		8.2		32.3		101.9		7.0		3.3		3		89				<0.2		0.7	
					Bottom	7.4	0.3	50	24.7	24.7	8.2	8.2	32.5	32.5	100.5	100.5	6.9	6.9	4.2		4		89				<0.2		0.7	
						7.4	0.3	50	24.7		8.2		32.5		100.5		6.9		4.3		4		84				<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 03 November 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	Fine	Moderate	13:09	8.0	Surface	1.0	0.3	75	25.2	25.2	8.2	8.2	31.6	31.7	103.2	103.2	7.1	7.1	1.0	1.7	3	4	87	89	822079	808791	<0.2	<0.2	0.7	0.8
						1.0	0.3	75	25.2		8.2		31.7		103.2		7.1		1.0		4		87				<0.2		0.9	
					Middle	4.0	0.3	78	24.9	24.9	8.2	8.2	32.1	32.1	102.0	101.8	7.0		1.6		3		90				<0.2		0.9	
						4.0	0.4	78	24.9		8.2		32.1		101.6		7.0		1.7		4		90				<0.2		0.7	
					Bottom	7.0	0.3	74	24.7	24.7	8.2	8.2	32.5	32.4	100.7	100.6	7.0	7.0	2.3		4		90				<0.2		0.8	
						7.0	0.3	74	24.8		8.2		32.4		100.5		6.9		2.4		3		91				<0.2		0.8	
IM10	Fine	Moderate	13:16	7.8	Surface	1.0	0.4	95	25.1	25.1	8.2	8.2	31.6	31.6	101.7	101.8	7.0	7.0	0.4	0.6	4	4	85	88	822364	809789	<0.2	<0.2	0.8	0.8
						1.0	0.4	98	25.1		8.2		31.6		101.8		7.0		0.4		3		85				<0.2		0.8	
					Middle	3.9	0.4	92	25.0	25.0	8.2	8.2	31.8	31.8	101.1	101.0	7.0		0.7		4		89				<0.2		0.7	
						3.9	0.4	96	25.0		8.2		31.8		100.8		7.0		0.7		3		89				<0.2		0.8	
					Bottom	6.8	0.2	90	25.0	25.0	8.2	8.2	32.4	32.4	100.2	100.3	6.9	6.9	0.8		3		90				<0.2		0.9	
						6.8	0.2	90	25.0		8.2		32.4		100.3		6.9		0.9		4		90				<0.2		0.8	
IM11	Fine	Moderate	13:26	10.0	Surface	1.0	0.2	84	25.1	25.1	8.2	8.2	32.9	32.9	99.4	99.4	6.8	6.8	0.4	0.5	3	3	84	87	822043	811447	<0.2	<0.2	0.7	0.8
						1.0	0.2	91	25.1		8.2		32.9		99.3		6.8		0.4		4		87				<0.2		0.8	
					Middle	5.0	0.1	84	25.0	25.0	8.2	8.2	32.9	32.9	97.8	97.9	6.7		0.5		3		87				<0.2		0.8	
						5.0	0.2	86	25.0		8.2		32.9		98.0		6.7		0.5		3		87				<0.2		0.8	
					Bottom	9.0	0.1	90	25.0	25.0	8.1	8.1	33.0	33.0	97.6	97.8	6.7	6.7	0.5		3		88				<0.2		0.9	
						9.0	0.1	97	25.0		8.1		33.0		98.0		6.7		0.5		4		88				<0.2		0.7	
IM12	Fine	Moderate	13:32	9.6	Surface	1.0	0.2	143	25.2	25.2	8.2	8.2	32.8	32.8	100.5	100.5	6.9	6.9	0.4	0.4	4	3	85	87	821467	812044	<0.2	<0.2	0.8	0.8
						1.0	0.2	146	25.2		8.2		32.8		100.4		6.9		0.4		3		86				<0.2		0.8	
					Middle	4.8	0.1	117	25.2	25.2	8.2	8.2	32.9	32.9	98.7	98.7	6.8		0.3		4		87				<0.2		0.7	
						4.8	0.2	128	25.2		8.2		32.9		98.7		6.8		0.3		3		88				<0.2		0.9	
					Bottom	8.6	0.2	147	25.0	25.0	8.1	8.1	32.9	32.9	98.2	98.2	6.7	6.7	0.4		3		89				<0.2		0.8	
						8.6	0.2	156	25.0		8.1		32.9		98.2		6.7		0.4		2		89				<0.2		1.0	
SR1A	Fine	Calm	13:51	5.2	Surface	1.0	-	-	25.1	25.1	8.2	8.2	32.6	32.6	102.3	102.3	7.0	7.0	0.2	0.2	2	3	-	-	819973	812661	-	-	-	-
						1.0	-	-	25.1		8.2		32.7		102.3		7.0		0.2		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	25.0	25.0	8.2	8.2	32.7	32.7	101.5	101.5	7.0	7.0	0.1		3		-				-		-	
						4.2	-	-	25.0		8.2		32.7		101.5		7.0		0.1		3		-				-		-	
SR2	Fine	Calm	14:02	5.0	Surface	1.0	0.3	82	25.1	25.1	8.2	8.2	32.9	32.9	96.6	96.5	6.6	6.6	0.5	0.7	3	3	85	87	821458	814150	<0.2	<0.2	0.8	0.9
						1.0	0.3	89	25.1		8.2		32.9		96.4		6.6		0.5		3		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	72	25.0	25.0	8.1	8.1	33.3	33.3	98.0	98.2	6.7	6.7	0.8		3		89				<0.2		1.0	
						4.0	0.2	76	25.0		8.1		33.3		98.3		6.7		0.8		2		89				<0.2		0.9	
SR3	Fine	Moderate	12:59	10.0	Surface	1.0	0.4	150	25.1	25.1	8.2	8.2	31.5	31.5	101.5	101.5	7.0	7.0	2.0	4.3	2	3	-	-	822147	807554	-	-	-	-
						1.0	0.4	160	25.1		8.2		31.5		101.5		7.0		2.2		2		-				-		-	
					Middle	5.0	0.3	129	24.9	24.8	8.2	8.2	32.0	32.0	100.4	100.5	6.9		4.9		3		-				-		-	
						5.0	0.3	130	24.8		8.2		32.0		100.5		6.9		5.0		3		-				-		-	
					Bottom	9.0	0.3	104	24.7	24.7	8.2	8.2	32.5	32.5	100.3	100.3	6.9	6.9	5.7		3		-				-		-	
						9.0	0.3	113	24.7		8.2		32.5		100.3		6.9		5.8		3		-				-		-	
SR4A	Cloudy	Moderate	14:07	8.4	Surface	1.0	0.3	66	24.1	24.1	8.3	8.3	31.3	31.3	101.3	101.3	7.1	7.1	6.0	6.4	3	4	-	-	817195	807812	-	-	-	-
						1.0	0.3	71	24.1		8.3		31.3		101.2		7.1		6.0		3		-				-		-	
					Middle	4.2	0.3	73	24.1	24.1	8.3	8.3	31.3	31.3	101.1	101.1	7.1		6.4		3		-				-		-	
						4.2	0.3	77	24.1		8.3		31.3		101.1		7.1		6.4		3		-				-		-	
					Bottom	7.4	0.2	64	24.1	24.1	8.3	8.3	31.3	31.3	101.4	101.5	7.1	7.1	6.8		5		-				-		-	
						7.4	0.2	64	24.1		8.3		31.3		101.6		7.1		6.8		4		-				-		-	
SR5A	Cloudy	Moderate	14:23	3.9	Surface	1.0	0.0	11	24.6	24.6	8.3	8.3	31.1	31.1	106.7	106.7	7.4	7.4	6.2	6.3	4	5	-	-	816571	810690	-	-	-	-
						1.0	0.0	11	24.6		8.3		31.1		106.6		7.4		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	2	24.6	24.6	8.3	8.3	31.1	31.1	105.9	105.9	7.4	7.4	6.4		6		-				-		-	
						2.9	0.1	2	24.6		8.3		31.1		105.8		7.4		6.4		5		-				-		-	
SR6A	Cloudy	Moderate	14:51	4.1	Surface	1.0	0.1	53	24.7	24.7	8.3	8.3	30.8	30.8	101.8	101.9	7.1	7.1	10.6	12.5	6	5	-	-	817975	814744	-	-	-	-
						1.0	0.1	57	24.7		8.3		30.8		102.0		7.1		10.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	70	24.5	24.5	8.3	8.3	30.9	30.9	103.3	103.3	7.2	7.2	14.4		4		-				-		-	
						3.1	0.0	73	24.5		8.3		30.9		103.3		7.2		14.5		3		-				-		-	
SR7	Fine	Moderate	14:51	22.0	Surface	1.0	0.5	64	25.0	25.0	8.1	8.1	33.7	33.7	90.9	90.9	6.2	6.2	2.1	2.7	<2	<2	-	-	823651	823727	-	-	-	-
						1.0	0.5	64	25.0		8.1		33.7		90.8		6.2		2.2		<2		-				-		-	
					Middle	11.0	0.4	49	24.9	24.9	8.1	8.1	33.9	33.9	89.4	89.4	6.1		2.7		<2		-				-		-	
						11.0	0.4	50	24.9		8.1		33.9		89.3		6.1		2.8		<2		-				-		-	
					Bottom	21.0	0.3	33	24.9	24.9	8.1	8.1	34.0	34.0	87.8	87.8	6.0	6.0	3.2		<2		-				-		-	
						21.0	0.3	34	24.9		8.1		34.0		87.8		6.0		3.4		<2		-				-		-	
SR8	Fine	Calm	13:42	4.5	Surface	1.0	-	-	25.5	25.5	8.2	8.2	32.5	32.5	101.1	101.2	6.9	6.9	1.4	1.6	4	4	-	-	820406	811617	-	-	-	-
						1.0	-	-	25.5		8.2		32.5		101.2		6.9		1.4		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	25.1	25.1	8.2	8.2	32.6	32.6	100.7	100.5	6.9	6.9	1.7		4		-				-		-	
						3.5	-	-	25.1		8.2		32.6		100.2		6.9		1.9		3		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 November 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	09:07	8.2	Surface	1.0	0.5	41	23.9	23.9	8.3	8.3	31.5	31.5	96.0	96.0	6.8	6.8	8.7	8.5	6	6	86	87	815625	804268	<0.2	<0.2	0.7	0.7
						1.0	0.5	44	23.9		8.3		31.5		95.9		6.8		9.0		7		84				<0.2		0.6	
					Middle	4.1	0.5	34	23.9	23.9	8.3	8.3	31.5	31.5	96.0	96.0	6.8		8.1		6		88				<0.2		0.7	
						4.1	0.5	35	23.9		8.3		31.5		96.0		6.8		8.2		5		86				<0.2		0.7	
					Bottom	7.2	0.5	34	23.9	23.9	8.3	8.3	31.5	31.5	97.0	97.1	6.8	6.8	8.6		4		89				<0.2		0.8	
						7.2	0.5	36	23.9		8.3		31.5		97.1		6.8		8.2		5		89				<0.2		0.7	
C2	Cloudy	Moderate	09:25	12.0	Surface	1.0	0.4	342	24.9	24.9	8.1	8.1	31.3	31.3	97.0	96.8	6.7	6.7	2.1	4.1	4	5	84	88	825695	806955	<0.2	<0.2	0.8	0.8
						1.0	0.4	315	24.9		8.1		31.3		96.6		6.7		2.3		5		85				<0.2		0.7	
					Middle	6.0	0.4	337	24.9	24.9	8.1	8.1	31.3	31.3	95.8	95.8	6.6		4.7		4		86				<0.2		0.8	
						6.0	0.4	339	24.9		8.1		31.3		95.7		6.6		4.9		5		89				<0.2		0.8	
					Bottom	11.0	0.3	341	25.0	25.0	8.1	8.1	31.5	31.5	96.3	96.4	6.7	6.7	5.4		4		92				<0.2		0.9	
						11.0	0.3	357	25.0		8.1		31.5		96.5		6.7		5.4		5		93				<0.2		0.9	
C3	Cloudy	Moderate	07:44	11.4	Surface	1.0	0.4	264	24.8	24.8	8.2	8.2	32.7	32.7	95.1	94.9	6.5	6.4	2.6	4.9	3	3	86	90	822094	817820	<0.2	<0.2	0.9	0.9
						1.0	0.5	289	24.8		8.2		32.7		94.6		6.5		2.7		4		87				<0.2		1.0	
					Middle	5.7	0.4	267	24.9	24.9	8.1	8.1	32.9	32.9	92.6	92.4	6.4		5.8		3		89				<0.2		1.0	
						5.7	0.5	274	24.9		8.1		32.9		92.1		6.3		5.9		4		90				<0.2		0.9	
					Bottom	10.4	0.5	272	25.0	25.0	8.1	8.1	33.3	33.3	92.6	92.6	6.3	6.3	6.2		3		93				<0.2		0.8	
						10.4	0.5	283	25.0		8.1		33.3		92.6		6.3		6.3		2		94				<0.2		1.0	
IM1	Cloudy	Moderate	09:27	5.1	Surface	1.0	0.1	66	24.1	24.1	8.3	8.3	31.1	31.1	98.8	98.9	7.0	7.0	7.4	8.2	6	6	85	87	817971	807114	<0.2	<0.2	0.8	0.9
						1.0	0.1	70	24.1		8.3		31.1		98.9		7.0		7.5		6		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	40	24.1	24.1	8.3	8.3	31.1	31.1	99.6	99.7	7.0	7.0	9.1		5		88				<0.2		0.9	
						4.1	0.2	41	24.1		8.3		31.1		99.7		7.0		8.9		5		89				<0.2		0.9	
IM2	Cloudy	Moderate	09:34	6.9	Surface	1.0	0.2	6	23.9	23.9	8.3	8.3	31.0	31.0	97.9	97.9	6.9	6.9	7.8	9.6	5	5	85	87	818184	806169	<0.2	<0.2	0.9	0.8
						1.0	0.3	6	23.9		8.3		31.0		97.9		6.9		7.8		5		85				<0.2		0.8	
					Middle	3.5	0.2	351	23.9	23.9	8.3	8.3	31.0	31.0	97.9	97.9	6.9		9.1		5		87				<0.2		0.8	
						3.5	0.3	359	23.9		8.3		31.0		97.9		6.9		9.1		4		88				<0.2		0.7	
					Bottom	5.9	0.2	5	23.9	23.9	8.3	8.3	31.0	31.0	98.7	98.8	7.0	7.0	12.0		4		89				<0.2		1.0	
						5.9	0.2	5	23.9		8.3		31.0		98.8		7.0		12.1		4		89				<0.2		0.8	
IM3	Cloudy	Rough	09:42	7.4	Surface	1.0	0.3	335	24.0	24.0	8.3	8.3	30.8	30.8	96.5	96.5	6.8	6.8	10.5	10.2	4	5	86	87	818777	805571	<0.2	<0.2	0.8	0.8
						1.0	0.3	344	24.0		8.3		30.8		96.5		6.8		10.9		5		85				<0.2		0.8	
					Middle	3.7	0.2	348	24.0	24.0	8.3	8.3	30.8	30.8	95.9	95.9	6.8		9.8		6		87				<0.2		0.8	
						3.7	0.2	320	24.0		8.3		30.8		95.9		6.8		9.7		4		88				<0.2		0.9	
					Bottom	6.4	0.3	337	24.0	24.0	8.3	8.3	30.8	30.8	94.6	94.6	6.7	6.7	10.4		6		89				<0.2		0.9	
						6.4	0.3	349	24.0		8.3		30.8		94.5		6.7		10.1		7		89				<0.2		0.7	
IM4	Cloudy	Rough	09:51	7.8	Surface	1.0	0.4	6	24.0	24.0	8.3	8.3	30.6	30.6	98.5	98.5	7.0	7.0	8.6	10.2	6	5	86	88	819705	804603	<0.2	<0.2	0.9	0.8
						1.0	0.5	6	24.0		8.3		30.6		98.5		7.0		8.6		7		86				<0.2		0.9	
					Middle	3.9	0.5	352	24.0	24.0	8.3	8.3	30.5	30.5	99.3	99.3	7.0		9.4		5		87				<0.2		0.8	
						3.9	0.5	324	24.0		8.3		30.5		99.3		7.0		9.9		4		88				<0.2		0.8	
					Bottom	6.8	0.4	7	24.0	24.0	8.3	8.3	30.5	30.5	100.0	100.1	7.1	7.1	12.5		4		90				<0.2		0.8	
						6.8	0.4	7	24.0		8.3		30.5		100.1		7.1		12.2		4		89				<0.2		0.8	
IM5	Cloudy	Rough	09:58	7.3	Surface	1.0	0.7	10	24.0	24.0	8.3	8.3	30.6	30.6	98.3	98.3	6.9	7.0	12.1	11.4	7	5	85	87	820739	804855	<0.2	<0.2	0.9	0.9
						1.0	0.7	10	24.0		8.3		30.6		98.3		6.9		12.1		6		86				<0.2		0.8	
					Middle	3.7	0.5	34	24.0	24.0	8.3	8.3	30.6	30.6	99.1	99.1	7.0		10.8		5		87				<0.2		1.0	
						3.7	0.5	37	24.0		8.3		30.6		99.1		7.0		10.8		4		88				<0.2		1.0	
					Bottom	6.3	0.3	29	24.0	24.0	8.3	8.3	30.6	30.6	99.7	99.7	7.0	7.0	11.7		4		89				<0.2		0.9	
						6.3	0.4	30	24.0		8.3		30.6		99.7		7.0		10.7		3		89				<0.2		0.8	
IM6	Cloudy	Rough	10:05	7.4	Surface	1.0	0.1	332	24.2	24.2	8.3	8.3	30.4	30.4	99.2	99.2	7.0	7.0	5.2	5.9	3	4	85	88	821072	805840	<0.2	<0.2	0.7	0.8
						1.0	0.1	336	24.2		8.3		30.4		99.2		7.0		5.4		4		86				<0.2		0.8	
					Middle	3.7	0.2	45	24.1	24.1	8.3	8.3	30.6	30.6	99.2	99.3	7.0		6.1		4		87				<0.2		0.7	
						3.7	0.2	46	24.1		8.3		30.6		99.3		7.0		6.1		3		88				<0.2		0.9	
					Bottom	6.4	0.2	61	24.1	24.1	8.3	8.3	30.7	30.7	99.9	99.9	7.1	7.1	6.4		4		90				<0.2		0.8	
						6.4	0.2	62	24.1		8.3		30.7		99.9		7.1		6.4		3		90				<0.2		0.8	
IM7	Cloudy	Rough	10:14	8.6	Surface	1.0	0.1	263	24.3	24.3	8.3	8.3	30.0	30.0	98.6	98.6	7.0	7.0	4.9	5.4	3	3	86	87	821352	806851	<0.2	<0.2	0.9	0.8
						1.0	0.1	282	24.3		8.3		30.1		98.6		7.0		4.9		3		85				<0.2		0.8	
					Middle	4.3	0.1	141	24.2	24.2	8.3	8.3	30.2	30.2	98.9	98.9	7.0		5.1		3		87				<0.2		0.8	
						4.3	0.1	150	24.2		8.3		30.2		98.9		7.0		5.2		3		88				<0.2		0.8	
					Bottom	7.6	0.2	160	24.1	24.1	8.3	8.3	30.8	30.8	99.8	99.9	7.0	7.0	6.2		3		89				<0.2		0.8	
						7.6	0.2	161	24.1		8.3		30.8		99.9		7.0		6.1		3		89				<0.2		0.9	
IM8	Cloudy	Moderate	09:00	7.6	Surface	1.0	0.1	240	24.7	24.7	8.2	8.2	32.0	32.0	97.8	97.9	6.8	6.8	2.5	3.5	9	7	83	89	821842	808123	<0.2	<0.2	0.8	1.0
						1.0	0.1	242	24.7		8.2		32.0		98.0		6.8		2.6		9		83				<0.2		0.9	
					Middle	3.8	0.0	129	24.7	24.7	8.2	8.2	32.0	32.0	97.9	97.9	6.8		3.0		7		90				<0.2		1.0	
						3.8	0.0	131	24.7		8.2		32.0		97.9		6.8		3.1		6		90				<0.2		0.9	
					Bottom	6.6	0.1	295	24.8	24.8	8.2	8.2	32.1	32.1	97.7	97.7	6.8	6.8	4.8		5		92				<0.2		1.1	
						6.6	0.1	317	24.8		8.2		32.1		97.7		6.8		4.9		6		93				<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 November 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	08:55	7.6	Surface	1.0	0.3	230	24.7	24.7	8.2	8.2	32.1	32.1	98.2	98.3	6.8	6.8	5.2	6.0	8	8	83	89	822117	808801	<0.2	<0.2	1.0	1.1
						1.0	0.3	242	24.7		8.2		32.1		98.3		6.8		4.8		7		85				<0.2		1.1	
					Middle	3.8	0.2	252	24.7	24.7	8.2	8.2	32.1	32.1	97.8	97.9	6.8		5.5		9		89				<0.2		1.1	
						3.8	0.2	256	24.7		8.2		32.1		97.9		6.8		5.8		9		90				<0.2		1.1	
					Bottom	6.6	0.2	216	24.7	24.7	8.2	8.2	32.1	32.1	98.4	98.4	6.8	6.8	7.3		9		92				<0.2		1.0	
						6.6	0.2	228	24.7		8.2		32.1		98.4		6.8		7.5		8		93				<0.2		1.1	
IM10	Cloudy	Moderate	08:49	7.0	Surface	1.0	0.5	328	24.8	24.8	8.2	8.2	32.1	32.1	98.3	98.2	6.8	6.8	3.9	4.7	8	7	86	89	822386	809781	<0.2	<0.2	1.1	1.1
						1.0	0.5	357	24.8		8.2		32.1		98.0		6.8		4.1		8		86				<0.2		1.0	
					Middle	3.5	0.5	322	24.8	24.8	8.2	8.2	32.1	32.1	98.0	98.1	6.8		4.5		6		89				<0.2		1.1	
						3.5	0.6	325	24.8		8.2		32.1		98.1		6.8		4.6		7		90				<0.2		1.1	
					Bottom	6.0	0.5	319	24.7	24.7	8.2	8.2	32.1	32.1	98.3	98.3	6.8	6.8	5.5		8		92				<0.2		1.0	
						6.0	0.5	334	24.7		8.2		32.1		98.2		6.8		5.3		7		93				<0.2		1.0	
IM11	Cloudy	Moderate	08:40	8.1	Surface	1.0	0.6	287	24.7	24.7	8.2	8.2	32.2	32.2	98.1	98.0	6.8	6.8	3.6	5.3	5	5	85	89	822065	811461	<0.2	<0.2	0.9	0.9
						1.0	0.6	302	24.7		8.2		32.2		97.9		6.8		3.6		5		86				<0.2		1.0	
					Middle	4.1	0.6	291	24.7	24.7	8.2	8.2	32.4	32.4	97.4	97.5	6.7		5.5		5		89				<0.2		0.9	
						4.1	0.6	301	24.7		8.2		32.4		97.6		6.7		5.6		5		89				<0.2		0.9	
					Bottom	7.1	0.5	296	24.8	24.8	8.2	8.2	32.6	32.6	97.1	97.2	6.7	6.7	6.6		5		93				<0.2		0.9	
						7.1	0.5	320	24.8		8.2		32.6		97.3		6.7		6.7		4		92				<0.2		0.8	
IM12	Cloudy	Moderate	08:33	8.8	Surface	1.0	0.6	276	24.8	24.8	8.2	8.2	32.7	32.7	96.7	96.7	6.7	6.7	5.4	7.1	7	8	85	89	821465	812027	<0.2	<0.2	0.7	0.9
						1.0	0.6	285	24.8		8.2		32.7		96.7		6.7		5.5		7		86				<0.2		0.9	
					Middle	4.4	0.6	280	24.8	24.8	8.2	8.2	32.7	32.7	97.2	97.2	6.7		7.4		7		89				<0.2		0.8	
						4.4	0.6	288	24.8		8.2		32.7		97.1		6.7		7.6		8		89				<0.2		1.0	
					Bottom	7.8	0.6	273	24.8	24.8	8.2	8.2	32.6	32.6	96.6	96.8	6.7	6.7	8.4		9		92				<0.2		0.9	
						7.8	0.6	293	24.8		8.2		32.6		97.0		6.7		8.5		8		93				<0.2		1.0	
SR1A	Cloudy	Calm	08:14	4.8	Surface	1.0	-	-	24.8	24.8	8.2	8.2	32.5	32.5	96.9	96.8	6.7	6.7	0.9	0.9	5	5	-	-	819973	812662	-	-	-	-
						1.0	-	-	24.8		8.2		32.5		96.7		6.7		0.9		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	24.8	24.8	8.2	8.2	32.6	32.6	96.7	96.8	6.7	6.7	0.9		4		-				-		-	
						3.8	-	-	24.8		8.2		32.6		96.8		6.7		1.0		5		-				-		-	
SR2	Cloudy	Calm	08:03	4.4	Surface	1.0	0.2	74	24.7	24.7	8.2	8.2	32.5	32.5	97.3	97.5	6.7	6.7	5.0	4.8	6	6	89	91	821474	814175	<0.2	<0.2	1.2	1.2
						1.0	0.2	78	24.7		8.2		32.5		97.6		6.7		5.2		6		90				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	75	24.7	24.7	8.2	8.2	32.5	32.5	97.4	97.4	6.7	6.7	4.5		7		92				<0.2		1.2	
						3.4	0.2	76	24.7		8.2		32.5		97.3		6.7		4.5		6		92				<0.2		1.1	
SR3	Cloudy	Moderate	09:06	9.0	Surface	1.0	0.1	284	24.9	24.9	8.1	8.1	31.3	31.3	97.0	97.0	6.7	6.7	2.3	3.3	5	5	-	-	822128	807553	-	-	-	-
						1.0	0.1	287	24.9		8.1		31.4		97.0		6.7		2.4		6		-				-		-	
					Middle	4.5	0.0	295	25.0	25.0	8.1	8.1	31.5	31.5	96.9	96.8	6.7		3.4		6		-				-		-	
						4.5	0.0	298	25.0		8.1		31.5		96.6		6.7		3.5		5		-				-		-	
					Bottom	8.0	0.1	351	24.9	24.9	8.1	8.1	31.7	31.7	96.4	96.4	6.7	6.7	4.0		5		-				-		-	
						8.0	0.1	356	24.9		8.1		31.7		96.4		6.7		4.2		5		-				-		-	
SR4A	Cloudy	Moderate	08:44	8.3	Surface	1.0	0.1	83	24.2	24.2	8.3	8.3	31.0	31.0	98.5	98.5	6.9	6.9	5.6	5.6	3	5	-	-	817206	807822	-	-	-	-
						1.0	0.1	83	24.2		8.3		31.0		98.5		6.9		5.6		4		-				-		-	
					Middle	4.2	0.1	139	24.2	24.2	8.3	8.3	31.1	31.1	98.7	98.7	6.9		5.5		6		-				-		-	
						4.2	0.1	142	24.2		8.3		31.1		98.7		6.9		5.5		6		-				-		-	
					Bottom	7.3	0.1	136	24.2	24.2	8.3	8.3	31.1	31.1	99.8	99.9	7.0	7.0	5.6		6		-				-		-	
						7.3	0.1	148	24.2		8.3		31.1		100.0		7.0		5.7		7		-				-		-	
SR5A	Cloudy	Moderate	08:26	3.2	Surface	1.0	0.1	277	24.2	24.2	8.3	8.3	31.1	31.1	100.8	100.8	7.1	7.1	10.5	9.5	5	4	-	-	816596	810709	-	-	-	-
						1.0	0.1	283	24.2		8.3		31.1		100.8		7.1		10.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	278	24.2	24.2	8.3	8.3	31.1	31.1	101.6	101.6	7.1	7.1	8.1		3		-				-		-	
						2.2	0.1	289	24.2		8.3		31.1		101.6		7.1		8.8		2		-				-		-	
SR6A	Cloudy	Moderate	07:59	4.6	Surface	1.0	0.1	229	24.3	24.3	8.3	8.3	30.7	30.7	96.4	96.4	6.8	6.8	6.8	6.7	3	4	-	-	817951	814747	-	-	-	-
						1.0	0.1	239	24.3		8.3		30.7		96.4		6.8		6.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	226	24.3	24.3	8.2	8.2	30.8	30.7	97.5	97.6	6.9	6.9	6.5		3		-				-		-	
						3.6	0.1	243	24.3		8.2		30.7		97.6		6.9		6.4		4		-				-		-	
SR7	Cloudy	Calm	07:15	20.1	Surface	1.0	0.3	13	24.9	24.9	8.1	8.1	33.0	33.0	92.7	92.7	6.4	6.3	1.3	2.8	2	3	-	-	823625	823734	-	-	-	-
						1.0	0.3	13	24.9		8.1		33.0		92.6		6.4		1.4		3		-				-		-	
					Middle	10.1	0.3	20	24.9	24.9	8.1	8.1	33.4	33.4	89.9	89.9	6.2		2.6		2		-				-		-	
						10.1	0.4	21	24.9		8.1		33.4		89.8		6.1		2.7		3		-				-		-	
					Bottom	19.1	0.3	37	25.0	25.0	8.1	8.1	33.7	33.7	87.7	87.8	6.0	6.0	4.2		3		-				-		-	
						19.1	0.3	39	25.0		8.1		33.7		87.9		6.0		4.4		3		-				-		-	
SR8	Cloudy	Calm	08:24	5.1	Surface	1.0	-	-	25.0	25.0	8.1	8.1	32.0	32.0	98.6	98.6	6.8	6.8	3.5	4.5	5	5	-	-	820385	811605	-	-	-	-
						1.0	-	-	25.0		8.1		32.0		98.6		6.8		3.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.7	24.7	8.2	8.2	32.1	32.1	97.6	97.7	6.8	6.8	5.5		6		-				-		-	
						4.1	-	-	24.7		8.2		32.1		97.8		6.8		5.4		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 November 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	15:00	9.1	Surface	1.0	0.0	247	24.9	24.9	8.2	8.2	32.8	32.8	107.6	107.6	7.4	7.1	1.0	4.5	3	3	87	90	815634	804251	<0.2	<0.2	0.9	0.9
						1.0	0.0	249	24.9		8.2		32.8		107.5		7.4		1.1		3		87				<0.2		0.7	
					Middle	4.6	0.1	180	24.3	24.3	8.1	8.1	34.2	34.2	99.1	99.1	6.8		4.4		3		89				<0.2		1.0	
						4.6	0.1	188	24.3		8.1		34.2		99.0		6.8		4.5		4		89				<0.2		0.9	
					Bottom	8.1	0.1	181	24.3	24.3	8.1	8.1	34.4	34.4	98.2	98.3	6.8	6.8	8.0		3		92				<0.2		0.9	
						8.1	0.1	182	24.3		8.1		34.4		98.3		6.8		8.0		4		93				<0.2		0.7	
C2	Cloudy	Moderate	13:50	12.5	Surface	1.0	0.1	315	24.8	24.8	8.0	8.0	31.4	31.4	105.8	105.9	7.3	7.3	2.3	3.7	2	3	88	91	825689	806935	<0.2	<0.2	0.8	0.8
						1.0	0.1	345	24.8		8.0		31.4		105.9		7.3		2.3		3		88				<0.2		0.9	
					Middle	6.3	0.2	50	24.7	24.7	8.0	8.0	31.7	31.7	105.1	105.1	7.3		4.0		2		91				<0.2		1.0	
						6.3	0.2	54	24.7		8.0		31.7		105.1		7.3		4.2		3		92				<0.2		0.8	
					Bottom	11.5	0.4	74	24.5	24.5	8.0	8.0	32.5	32.5	104.3	104.3	7.2	7.2	4.7		5		94				<0.2		0.8	
						11.5	0.4	78	24.5		8.0		32.5		104.3		7.2		4.8		4		94				<0.2		0.7	
C3	Cloudy	Moderate	15:47	12.5	Surface	1.0	0.4	84	24.9	24.9	8.0	8.0	32.6	32.6	99.1	99.1	6.8	6.6	1.6	4.4	4	4	88	91	822128	817801	<0.2	<0.2	0.7	0.9
						1.0	0.4	91	24.9		8.0		32.6		99.0		6.8		1.6		5		88				<0.2		0.6	
					Middle	6.3	0.4	105	24.7	24.7	8.0	8.0	32.9	32.9	92.5	92.5	6.4		3.6		4		91				<0.2		1.2	
						6.3	0.4	111	24.7		8.0		32.9		92.5		6.4		3.7		3		92				<0.2		1.0	
					Bottom	11.5	0.2	98	24.7	24.7	8.0	8.0	33.1	33.1	91.0	91.0	6.3	6.3	7.9		3		93				<0.2		0.7	
						11.5	0.2	105	24.7		8.0		33.1		90.9		6.3		7.8		3		94				<0.2		0.9	
IM1	Fine	Moderate	14:39	5.3	Surface	1.0	0.1	184	24.8	24.8	8.2	8.2	33.8	33.8	109.0	109.0	7.5	7.5	1.9	2.3	4	4	87	89	817934	807115	<0.2	<0.2	1.1	1.1
						1.0	0.1	188	24.8		8.2		33.8		108.9		7.4		1.9		4		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	162	24.4	24.4	8.2	8.2	33.9	33.9	105.4	105.5	7.3	7.3	2.6		4		90				<0.2		1.0	
						4.3	0.1	168	24.4		8.2		33.9		105.5		7.3		2.6		4		90				<0.2		1.1	
IM2	Fine	Moderate	14:30	7.3	Surface	1.0	0.1	136	24.6	24.6	8.2	8.2	33.6	33.6	102.0	102.0	7.0	7.0	3.4	4.6	4	4	85	89	818183	806184	<0.2	<0.2	0.4	0.6
						1.0	0.1	140	24.6		8.2		33.6		102.0		7.0		3.4		4		86				<0.2		0.4	
					Middle	3.7	0.1	123	24.3	24.3	8.2	8.2	33.8	33.8	99.5	99.5	6.9		4.4		4		88				<0.2		0.8	
						3.7	0.1	134	24.3		8.2		33.8		99.5		6.9		4.4		3		88				<0.2		0.8	
					Bottom	6.3	0.0	195	24.3	24.3	8.1	8.1	33.9	33.9	99.4	99.4	6.9	6.9	5.8		4		92				<0.2		0.6	
						6.3	0.0	209	24.3		8.1		33.9		99.4		6.9		5.9		4		92				<0.2		0.6	
IM3	Fine	Moderate	14:23	7.4	Surface	1.0	0.1	25	24.8	24.8	8.2	8.2	33.0	33.0	107.4	107.4	7.4	7.3	1.2	1.7	2	4	86	89	818761	805586	<0.2	<0.2	0.6	0.7
						1.0	0.1	26	24.8		8.2		33.0		107.4		7.4		1.2		3		87				<0.2		0.7	
					Middle	3.7	0.1	30	24.5	24.5	8.2	8.2	33.5	33.5	104.0	104.0	7.2		1.4		4		88				<0.2		0.6	
						3.7	0.1	32	24.5		8.2		33.5		103.9		7.2		1.5		4		88				<0.2		0.7	
					Bottom	6.4	0.1	352	24.5	24.5	8.2	8.2	33.8	33.8	102.5	102.6	7.1	7.1	2.5		4		92				<0.2		0.6	
						6.4	0.1	353	24.5		8.2		33.9		102.6		7.1		2.5		5		93				<0.2		0.7	
IM4	Fine	Moderate	14:12	8.8	Surface	1.0	0.1	16	24.8	24.8	8.2	8.2	32.7	32.7	108.1	108.1	7.5	7.3	1.2	1.6	4	4	86	89	819747	804613	<0.2	<0.2	0.8	0.8
						1.0	0.1	17	24.8		8.2		32.7		108.0		7.4		1.2		5		86				<0.2		1.0	
					Middle	4.4	0.1	10	24.4	24.4	8.2	8.2	33.6	33.6	102.3	102.3	7.1		1.8		4		88				<0.2		1.0	
						4.4	0.1	10	24.4		8.2		33.6		102.3		7.1		1.8		4		88				<0.2		1.0	
					Bottom	7.8	0.1	357	24.4	24.4	8.2	8.2	33.8	33.8	102.0	102.0	7.0	7.0	1.7		5		92				<0.2		0.5	
						7.8	0.1	328	24.4		8.2		33.8		102.0		7.0		1.7		4		93				<0.2		0.6	
IM5	Fine	Moderate	14:01	8.0	Surface	1.0	0.2	5	24.4	24.4	8.2	8.2	33.4	33.4	100.5	100.6	6.9	6.9	2.8	2.9	3	5	85	88	820755	804871	<0.2	<0.2	0.8	0.6
						1.0	0.2	5	24.4		8.2		33.4		100.6		7.0		2.8		4		86				<0.2		0.9	
					Middle	4.0	0.2	1	24.3	24.3	8.2	8.2	33.4	33.4	100.1	100.1	6.9		3.1		6		88				<0.2		0.6	
						4.0	0.2	1	24.3		8.2		33.4		100.0		6.9		2.9		6		88				<0.2		0.5	
					Bottom	7.0	0.2	340	24.3	24.3	8.1	8.1	33.4	33.4	99.6	99.7	6.9	6.9	3.0		5		91				<0.2		0.5	
						7.0	0.2	342	24.3		8.1		33.4		99.7		6.9		3.0		6		92				<0.2		0.4	
IM6	Fine	Moderate	13:53	7.8	Surface	1.0	0.1	250	24.8	24.8	8.2	8.2	32.8	32.8	107.8	107.8	7.4	7.4	1.1	1.5	5	5	86	89	821041	805813	<0.2	<0.2	0.6	0.7
						1.0	0.1	256	24.9		8.2		32.7		107.8		7.4		1.1		4		87				<0.2		0.7	
					Middle	3.9	0.0	304	24.6	24.6	8.2	8.2	33.2	33.2	105.3	105.3	7.3		1.4		4		87				<0.2		0.6	
						3.9	0.0	324	24.6		8.2		33.2		105.3		7.3		1.4		5		88				<0.2		0.8	
					Bottom	6.8	0.1	31	24.5	24.5	8.2	8.2	33.5	33.5	103.0	103.0	7.1	7.1	2.1		4		92				<0.2		0.6	
						6.8	0.1	31	24.5		8.2		33.5		103.0		7.1		2.1		5		92				<0.2		0.8	
IM7	Fine	Moderate	13:47	8.5	Surface	1.0	0.2	211	24.9	24.9	8.2	8.2	32.4	32.4	107.1	107.1	7.4	7.3	1.7	2.3	3	4	85	89	821338	806815	<0.2	<0.2	0.7	0.8
						1.0	0.2	226	24.9		8.2		32.4		107.1		7.4		1.6		4		86				<0.2		0.7	
					Middle	4.3	0.1	139	24.7	24.7	8.2	8.2	32.9	32.9	105.0	104.9	7.2		3.1		3		88				<0.2		0.8	
						4.3	0.1	148	24.7		8.2		32.9		104.7		7.2		3.2		4		88				<0.2		0.9	
					Bottom	7.5	0.1	265	24.5	24.5	8.1	8.1	33.4	33.4	104.2	104.1	7.2	7.2	2.0		4		92				<0.2		0.8	
						7.5	0.1	273	24.5		8.1		33.4		104.0		7.2		2.1		3		92				<0.2		0.8	
IM8	Cloudy	Moderate	14:19	7.9	Surface	1.0	0.2	98	24.9	24.9	8.0	8.0	31.5	31.5	105.9	105.9	7.3	7.3	2.2	3.1	4	3	85	91	821837	808129	<0.2	<0.2	0.9	0.7
						1.0	0.2	104	24.9		8.0		31.5		105.8		7.3		2.2		4		87				<0.2		0.7	
					Middle	4.0	0.3	101	24.6	24.6	8.0	8.0	32.0	32.0	104.0	104.0	7.2		3.2		4		91				<0.2		0.5	
						4.0	0.3	103	24.6		8.0		32.0		103.9		7.2		3.2		3		92				<0.2		0.6	
					Bottom	6.9	0.2	79	24.4	24.4	8.0	8.0	32.5	32.5	102.5	102.5	7.1	7.1	3.8		2		94				<0.2		0.7	
						6.9	0.2	86	24.4		8.0		32.5		102.5		7.1		3.8		3		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**

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 November 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	14:25	7.3	Surface	1.0	0.3	74	24.8	24.8	8.0	8.0	31.6	31.6	101.8	101.8	7.1	7.1	1.9	2.2	4	3	87	91	822081	808797	<0.2	<0.2	0.8	0.8
						1.0	0.4	74	24.8		8.0		31.6		101.7		7.1		1.9		3		88				<0.2		0.8	
					Middle	3.7	0.3	84	24.6	24.5	8.0	8.0	31.9	31.9	100.4	100.5	7.0		2.2		4		91				<0.2		0.6	
						3.7	0.3	87	24.5		8.0		32.0		100.6		7.0		2.2		3		91				<0.2		0.8	
					Bottom	6.3	0.2	73	24.5	24.5	8.0	8.0	32.2	32.1	101.1	101.1	7.0	7.0	2.4		3		93				<0.2		0.8	
						6.3	0.3	77	24.5		8.0		32.1		101.1		7.0		2.4		3		94				<0.2		0.7	
IM10	Cloudy	Moderate	14:32	8.2	Surface	1.0	0.4	94	24.9	24.9	8.0	8.0	31.5	31.5	104.5	104.5	7.2	7.2	1.6	1.8	4	3	87	91	822392	809812	<0.2	<0.2	0.8	0.7
						1.0	0.5	98	24.9		8.0		31.5		104.5		7.2		1.6		3		88				<0.2		0.7	
					Middle	4.1	0.3	96	24.7	24.7	8.0	8.0	32.0	32.0	103.0	103.0	7.1		1.9		3		91				<0.2		0.7	
						4.1	0.3	101	24.7		8.0		32.0		103.0		7.1		1.9		4		91				<0.2		0.8	
					Bottom	7.2	0.1	97	24.7	24.7	8.0	8.0	32.1	32.1	103.0	103.0	7.1	7.1	1.9		3		97				<0.2		0.7	
						7.2	0.1	100	24.7		8.0		32.1		103.0		7.1		1.9		3		93				<0.2		0.6	
IM11	Cloudy	Moderate	14:43	8.0	Surface	1.0	0.3	94	24.8	24.7	8.0	8.0	32.3	32.3	102.9	102.9	7.1	7.1	1.8	1.8	3	3	85	91	822052	811446	<0.2	<0.2	0.7	0.8
						1.0	0.3	97	24.7		8.0		32.3		102.8		7.1		1.6		2		86				<0.2		0.8	
					Middle	4.0	0.2	103	24.7	24.7	8.0	8.0	32.4	32.4	102.3	102.3	7.1		1.8		3		93				<0.2		0.8	
						4.0	0.2	110	24.7		8.0		32.4		102.2		7.1		1.8		4		93				<0.2		0.7	
					Bottom	7.0	0.2	106	24.6	24.6	8.0	8.0	32.4	32.4	102.0	102.0	7.1	7.1	1.9		3		93				<0.2		0.7	
						7.0	0.2	108	24.6		8.0		32.4		101.9		7.1		2.0		3		93				<0.2		0.8	
IM12	Cloudy	Moderate	14:50	9.6	Surface	1.0	0.2	128	24.7	24.7	8.0	8.0	32.4	32.4	101.7	101.7	7.0	7.0	1.4	1.5	4	3	87	90	821444	812058	<0.2	<0.2	0.7	0.7
						1.0	0.2	137	24.7		8.0		32.4		101.7		7.0		1.4		3		87				<0.2		0.7	
					Middle	4.8	0.2	123	24.7	24.7	8.0	8.0	32.4	32.4	100.8	100.9	7.0		1.6		3		88				<0.2		0.7	
						4.8	0.2	127	24.7		8.0		32.4		100.9		7.0		1.7		3		91				<0.2		0.7	
					Bottom	8.6	0.2	110	24.7	24.7	8.0	8.0	32.4	32.4	100.7	100.8	7.0	7.0	1.4		2		94				<0.2		0.7	
						8.6	0.2	115	24.7		8.0		32.4		100.8		7.0		1.4		3		94				<0.2		0.7	
SR1A	Cloudy	Moderate	15:11	5.1	Surface	1.0	-	-	24.8	24.8	8.0	8.0	32.3	32.3	101.9	101.9	7.0	7.0	2.1	2.3	4	3	-	-	819973	812658	-	-	-	-
						1.0	-	-	24.8		8.0		32.3		101.8		7.0		2.1		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.6	24.6	8.0	8.0	32.3	32.3	101.1	101.1	7.0	7.0	2.5		3		-				-		-	
						4.1	-	-	24.6		8.0		32.3		101.1		7.0		2.6		3		-				-		-	
SR2	Cloudy	Moderate	15:24	4.8	Surface	1.0	0.2	119	24.8	24.8	8.0	8.0	32.4	32.4	103.2	103.2	7.1	7.1	2.0	1.9	3	3	91	93	821469	814166	<0.2	<0.2	0.5	0.5
						1.0	0.2	120	24.8		8.0		32.4		103.2		7.1		2.1		4		91				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	114	24.8	24.8	8.0	8.0	32.4	32.4	103.0	103.0	7.1	7.1	1.8		3		94				<0.2		0.4	
						3.8	0.2	114	24.8		8.0		32.4		102.9		7.1		1.6		3		95				<0.2		0.6	
SR3	Cloudy	Moderate	14:13	9.2	Surface	1.0	0.2	98	24.8	24.8	8.0	8.0	31.7	31.7	106.8	106.8	7.4	7.3	3.2	5.3	3	4	-	-	822144	807574	-	-	-	-
						1.0	0.2	101	24.8		8.0		31.7		106.7		7.4		3.1		3		-				-		-	
					Middle	4.6	0.2	103	24.5	24.5	8.0	8.0	32.3	32.3	102.9	102.9	7.1		5.6		3		-				-		-	
						4.6	0.2	113	24.5		8.0		32.3		102.9		7.1		5.8		3		-				-		-	
					Bottom	8.2	0.3	84	24.4	24.4	8.0	8.0	32.5	32.5	102.8	102.8	7.1	7.1	7.1		6		-				-		-	
						8.2	0.3	84	24.4		8.0		32.5		102.8		7.1		7.0		5		-				-		-	
SR4A	Fine	Calm	15:21	9.4	Surface	1.0	0.3	78	24.7	24.7	8.2	8.2	33.7	33.7	107.7	107.7	7.4	7.3	1.0	1.9	5	5	-	-	817177	807823	-	-	-	-
						1.0	0.3	78	24.7		8.2		33.7		107.6		7.4		1.0		4		-				-		-	
					Middle	4.7	0.3	69	24.5	24.5	8.2	8.2	33.8	33.8	105.3	105.3	7.3		1.3		4		-				-		-	
						4.7	0.3	73	24.5		8.2		33.8		105.3		7.2		1.3		5		-				-		-	
					Bottom	8.4	0.3	64	24.4	24.4	8.2	8.2	33.8	33.8	102.8	102.9	7.1	7.1	3.3		5		-				-		-	
						8.4	0.3	68	24.4		8.2		33.8		103.0		7.1		3.3		4		-				-		-	
SR5A	Fine	Calm	15:37	3.6	Surface	1.0	0.0	47	24.9	24.9	8.2	8.2	33.2	33.2	107.3	107.2	7.4	7.4	2.3	3.0	4	4	-	-	816615	810678	-	-	-	-
						1.0	0.0	49	24.9		8.2		33.2		107.1		7.3		2.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	173	24.6	24.6	8.1	8.1	33.3	33.3	103.7	103.7	7.1	7.1	3.5		4		-				-		-	
						2.6	0.0	174	24.6		8.1		33.3		103.7		7.1		3.7		3		-				-		-	
SR6A	Fine	Calm	16:18	4.5	Surface	1.0	0.0	306	25.0	25.0	8.1	8.1	32.9	32.9	102.8	102.8	7.0	7.1	5.0	4.9	5	4	-	-	817959	814751	-	-	-	-
						1.0	0.0	331	25.0		8.1		32.9		102.8		7.1		5.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	284	24.9	24.9	8.1	8.1	33.1	33.1	102.8	102.9	7.1	7.1	4.8		4		-				-		-	
						3.5	0.0	302	24.9		8.1		33.1		102.9		7.1		4.8		3		-				-		-	
SR7	Cloudy	Moderate	16:21	15.7	Surface	1.0	0.2	65	24.8	24.8	8.0	8.0	33.0	33.0	93.7	93.7	6.5	6.4	0.8	1.1	3	3	-	-	823652	823723	-	-	-	-
						1.0	0.2	65	24.8		8.0		33.0		93.7		6.4		0.8		3		-				-		-	
					Middle	7.9	0.1	36	24.7	24.7	8.0	8.0	33.0	33.0	93.4	93.5	6.4		1.5		3		-				-		-	
						7.9	0.2	39	24.7		8.0		33.0		93.5		6.4		1.5		2		-				-		-	
					Bottom	14.7	0.2	347	24.7	24.7	8.1	8.1	33.0	33.0	94.4	94.5	6.5	6.5	0.9		3		-				-		-	
						14.7	0.2	319	24.7		8.1		33.0		94.6		6.5		0.9		2		-				-		-	
SR8	Cloudy	Moderate	15:01	5.3	Surface	1.0	-	-	25.4	25.4	8.0	8.0	32.2	32.2	104.4	104.4	7.1	7.1	5.2	4.2	3	3	-	-	820383	811641	-	-	-	-
						1.0	-	-	25.4		8.0		32.2		104.3		7.1		5.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	24.7	24.7	8.0	8.0	32.4	32.4	102.0	102.1	7.1	7.1	3.0		3		-				-		-	
						4.3	-	-	24.7		8.0		32.4		102.1		7.1		3.2		3		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 November 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	10:59	8.6	Surface	1.0	0.4	50	24.3	24.3	8.1	8.1	33.9	33.9	99.0	99.0	6.8	6.8	5.8	8.3	4	6	86	89	815642	804248	<0.2	<0.2	0.6	0.6
						1.0	0.4	52	24.3		8.1		33.9		98.9		6.8		5.9		5		86				<0.2		0.7	
					Middle	4.3	0.3	55	24.3	24.3	8.1	8.1	33.9	33.9	98.1	98.1	6.8		8.6		6		88				<0.2		0.7	
						4.3	0.3	55	24.3		8.1		33.9		98.1		6.8		8.8		5		88				<0.2		0.6	
					Bottom	7.6	0.3	36	24.2	24.2	8.1	8.1	34.0	34.0	98.7	98.7	6.8	6.8	10.3		6		93				<0.2		0.5	
						7.6	0.4	36	24.2		8.1		34.0		98.7		6.8		10.4		7		93				<0.2		0.5	
C2	Cloudy	Moderate	11:54	12.2	Surface	1.0	0.3	354	25.1	25.1	7.9	7.9	31.2	31.2	103.1	103.1	7.1	7.0	1.8	3.4	3	3	87	91	825688	806946	<0.2	<0.2	0.6	0.8
						1.0	0.3	326	25.1		7.9		31.2		103.0		7.1		1.8		4		88				<0.2		0.8	
					Middle	6.1	0.3	340	24.9	24.9	8.0	8.0	31.4	31.4	99.6	99.6	6.9		3.7		4		91				<0.2		0.7	
						6.1	0.3	356	24.9		8.0		31.4		99.5		6.9		3.8		3		91				<0.2		0.7	
					Bottom	11.2	0.3	329	24.7	24.7	8.0	8.0	31.5	31.5	99.2	99.2	6.9	6.9	4.5		3		94				<0.2		1.1	
						11.2	0.3	342	24.7		8.0		31.5		99.2		6.9		4.5		3		94				<0.2		1.1	
C3	Cloudy	Moderate	09:58	11.3	Surface	1.0	0.3	254	24.6	24.6	8.0	8.0	32.5	32.5	95.8	95.9	6.6	6.6	2.8	3.6	4	5	87	91	822122	817804	<0.2	<0.2	1.2	1.1
						1.0	0.4	264	24.6		8.0		32.5		95.9		6.6		2.9		5		88				<0.2		1.2	
					Middle	5.7	0.3	253	24.6	24.6	8.0	8.0	32.5	32.5	95.5	95.5	6.6		4.0		4		92				<0.2		1.1	
						5.7	0.3	258	24.6		8.0		32.5		95.5		6.6		4.0		5		92				<0.2		0.9	
					Bottom	10.3	0.3	250	24.6	24.6	8.0	8.0	32.5	32.5	97.2	97.3	6.7	6.7	4.0		5		94				<0.2		1.0	
						10.3	0.3	272	24.6		8.0		32.5		97.3		6.7		4.0		4		94				<0.2		1.0	
IM1	Fine	Moderate	11:19	5.1	Surface	1.0	0.1	348	24.4	24.4	8.1	8.1	33.8	33.8	101.4	101.4	7.0	7.0	2.1	3.7	8	6	88	90	817961	807142	<0.2	<0.2	0.6	0.6
						1.0	0.1	355	24.4		8.1		33.8		101.3		7.0		2.1		6		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	12	24.2	24.2	8.1	8.1	33.9	33.9	100.4	100.4	6.9	6.9	5.2		5		91				<0.2		0.6	
						4.1	0.1	12	24.2		8.1		33.9		100.4		6.9		5.2		5		92				<0.2		0.5	
IM2	Fine	Moderate	11:27	7.2	Surface	1.0	0.2	5	24.4	24.4	8.1	8.1	33.5	33.5	102.0	102.1	7.0	7.0	2.3	3.5	5	5	85	89	818174	806154	<0.2	<0.2	0.6	0.6
						1.0	0.2	5	24.4		8.1		33.5		102.1		7.0		2.3		6		86				<0.2		0.5	
					Middle	3.6	0.2	358	24.3	24.3	8.1	8.1	33.6	33.6	99.9	100.0	6.9		3.7		6		88				<0.2		0.6	
						3.6	0.3	329	24.3		8.1		33.6		100.0		6.9		3.7		5		88				<0.2		0.6	
					Bottom	6.2	0.2	349	24.3	24.3	8.1	8.1	33.6	33.6	100.2	100.3	6.9	6.9	4.6		5		92				<0.2		0.6	
						6.2	0.2	321	24.3		8.1		33.6		100.4		6.9		4.6		4		92				<0.2		0.6	
IM3	Fine	Moderate	11:34	7.4	Surface	1.0	0.3	353	24.5	24.5	8.2	8.2	33.4	33.4	101.4	101.4	7.0	7.0	2.4	4.9	5	5	85	89	818764	805613	<0.2	<0.2	0.6	0.6
						1.0	0.3	354	24.5		8.2		33.4		101.4		7.0		2.5		6		85				<0.2		0.6	
					Middle	3.7	0.3	336	24.3	24.3	8.1	8.1	33.4	33.4	99.7	99.8	6.9		4.5		6		88				<0.2		0.6	
						3.7	0.3	348	24.3		8.1		33.4		99.8		6.9		4.5		5		88				<0.2		0.6	
					Bottom	6.4	0.3	330	24.3	24.3	8.1	8.1	33.5	33.5	99.9	99.9	6.9	6.9	7.7		4		92				<0.2		0.7	
						6.4	0.3	344	24.3		8.1		33.5		99.9		6.9		7.7		5		93				<0.2		0.7	
IM4	Fine	Moderate	11:44	8.3	Surface	1.0	0.5	358	24.4	24.4	8.2	8.2	33.3	33.3	101.9	101.9	7.0	7.0	2.1	2.6	5	6	85	88	819709	804618	<0.2	<0.2	0.6	0.6
						1.0	0.5	329	24.4		8.2		33.3		101.9		7.0		2.1		6		85				<0.2		0.6	
					Middle	4.2	0.5	356	24.3	24.3	8.1	8.1	33.3	33.3	100.7	100.7	7.0		3.0		6		88				<0.2		0.6	
						4.2	0.5	328	24.3		8.1		33.3		100.7		7.0		3.0		5		88				<0.2		0.7	
					Bottom	7.3	0.4	358	24.3	24.3	8.1	8.1	33.3	33.3	100.7	100.8	7.0	7.0	2.8		5		92				<0.2		0.6	
						7.3	0.4	329	24.3		8.1		33.3		100.8		7.0		2.8		6		92				<0.2		0.6	
IM5	Fine	Moderate	11:51	7.8	Surface	1.0	0.6	15	24.4	24.4	8.1	8.1	33.3	33.3	101.6	101.5	7.0	7.0	2.6	3.1	6	7	84	88	820746	804870	<0.2	<0.2	0.6	0.6
						1.0	0.7	15	24.4		8.1		33.3		101.4		7.0		2.3		5		85				<0.2		0.6	
					Middle	3.9	0.6	10	24.4	24.4	8.1	8.1	33.3	33.3	101.2	101.2	7.0		2.6		6		87				<0.2		0.5	
						3.9	0.6	10	24.4		8.1		33.3		101.2		7.0		2.7		7		88				<0.2		0.6	
					Bottom	6.8	0.5	17	24.4	24.4	8.1	8.1	33.3	33.3	101.3	101.3	7.0	7.0	4.1		8		92				<0.2		0.5	
						6.8	0.5	17	24.4		8.1		33.3		101.3		7.0		4.1		7		92				<0.2		0.6	
IM6	Fine	Moderate	11:59	7.4	Surface	1.0	0.1	297	24.8	24.8	8.2	8.2	32.6	32.6	104.5	104.5	7.2	7.2	1.5	2.1	5	4	85	89	821037	805821	<0.2	<0.2	0.8	0.8
						1.0	0.1	323	24.8		8.2		32.6		104.4		7.2		1.5		6		86				<0.2		0.7	
					Middle	3.7	0.1	15	24.6	24.6	8.2	8.2	33.1	33.1	103.7	103.6	7.2		2.0		3		88				<0.2		0.8	
						3.7	0.1	15	24.6		8.2		33.1		103.5		7.1		2.0		3		89				<0.2		0.7	
					Bottom	6.4	0.2	28	24.4	24.4	8.1	8.1	33.5	33.5	101.5	101.6	7.0	7.0	2.6		2		92				<0.2		0.7	
						6.4	0.2	28	24.4		8.1		33.5		101.7		7.0		2.7		3		93				<0.2		0.8	
IM7	Fine	Moderate	12:08	8.8	Surface	1.0	0.1	64	24.8	24.8	8.1	8.1	32.2	32.2	103.5	103.5	7.2	7.1	1.3	2.3	3	3	85	89	821357	806821	<0.2	<0.2	0.7	0.8
						1.0	0.1	68	24.8		8.1		32.2		103.4		7.1		1.3		2		86				<0.2		0.8	
					Middle	4.4	0.2	86	24.6	24.6	8.1	8.1	32.7	32.7	101.4	101.5	7.0		2.5		2		89				<0.2		0.8	
						4.4	0.2	88	24.6		8.1		32.7		101.6		7.0		2.5		3		89				<0.2		0.8	
					Bottom	7.8	0.2	91	24.4	24.4	8.1	8.1	33.4	33.4	100.7	100.7	7.0	7.0	3.0		3		92				<0.2		0.8	
						7.8	0.2	92	24.4		8.1		33.4		100.6		7.0		3.0		2		92				<0.2		0.8	
IM8	Cloudy	Moderate	11:28	7.5	Surface	1.0	0.1	64	24.7	24.7	8.0	8.0	31.7	31.7	100.4	100.4	7.0	7.0	2.4	2.9	4	5	88	92	821806	808136	<0.2	<0.2	0.7	0.8
						1.0	0.1	70	24.7		8.0		31.7		100.3		7.0		2.5		5		88				<0.2		0.7	
					Middle	3.8	0.1	87	24.6	24.6	8.0	8.0	31.9	31.9	99.8	99.7	6.9		2.9		5		93				<0.2		0.7	
						3.8	0.1	94	24.6		8.0		31.9		99.6		6.9		3.0		5		92				<0.2		0.8	
					Bottom	6.5	0.1	271	24.5	24.5	8.0	8.0	32.2	32.2	99.8	99.9	6.9	6.9	3.4		5		94				<0.2		0.9	
						6.5	0.1	276	24.5		8.0		32.1		99.9		6.9		3.4		4		94				<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 05 November 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	11:20	7.2	Surface	1.0	0.0	242	24.5	24.5	8.0	8.0	32.3	32.3	99.5	99.5	6.9	6.9	3.0	3.7	5	4	88	91	822090	808795	<0.2	<0.2	0.6	0.7
						1.0	0.0	262	24.5		8.0		32.3		99.4		6.9		3.0		4		88				<0.2		0.7	
					Middle	3.6	0.1	115	24.4	24.4	8.0	8.0	32.3	32.3	99.0	99.1	6.9		3.6		4		91				<0.2		0.7	
						3.6	0.1	121	24.4		8.0		32.3		99.2		6.9		3.5		4		92				<0.2		0.7	
					Bottom	6.2	0.1	82	24.4	24.4	8.0	8.0	32.3	32.3	98.8	98.9	6.9	6.9	4.6		4		94				<0.2		0.9	
						6.2	0.1	82	24.4		8.0		32.3		98.9		6.9		4.7		5		95				<0.2		0.8	
IM10	Cloudy	Moderate	11:11	6.7	Surface	1.0	0.5	295	24.4	24.4	8.0	8.0	32.4	32.4	100.0	100.0	6.9	6.9	3.0	3.2	4	4	88	91	822390	809814	<0.2	<0.2	0.6	0.8
						1.0	0.5	311	24.4		8.0		32.4		100.0		6.9		2.9		5		89				<0.2		0.5	
					Middle	3.4	0.4	296	24.4	24.4	8.0	8.0	32.4	32.4	99.7	99.8	6.9		3.0		4		91				<0.2		0.9	
						3.4	0.4	299	24.4		8.0		32.4		99.8		6.9		3.0		3		91				<0.2		0.8	
					Bottom	5.7	0.3	297	24.4	24.4	8.0	8.0	32.4	32.4	100.1	100.1	7.0	7.0	3.5		4		94				<0.2		1.1	
						5.7	0.4	303	24.4		8.0		32.4		100.1		7.0		3.6		3		94				<0.2		1.1	
IM11	Cloudy	Moderate	11:00	8.5	Surface	1.0	0.5	307	24.5	24.5	8.0	8.0	32.4	32.4	99.1	99.1	6.9	6.9	2.8	2.8	6	5	88	91	822078	811476	<0.2	<0.2	0.8	0.9
						1.0	0.5	311	24.5		8.0		32.4		99.1		6.9		2.8		7		88				<0.2		0.8	
					Middle	4.3	0.4	308	24.5	24.5	8.0	8.0	32.4	32.4	99.3	99.3	6.9		2.8		5		92				<0.2		0.7	
						4.3	0.4	315	24.5		8.0		32.4		99.2		6.9		2.8		4		91				<0.2		0.7	
					Bottom	7.5	0.4	309	24.4	24.4	8.0	8.0	32.4	32.4	99.6	99.6	6.9	6.9	2.7		4		92				<0.2		1.1	
						7.5	0.5	326	24.4		8.0		32.4		99.6		6.9		2.7		4		92				<0.2		1.2	
IM12	Cloudy	Moderate	10:54	7.7	Surface	1.0	0.5	287	24.5	24.5	8.0	8.0	32.4	32.4	98.8	98.8	6.9	6.9	4.1	7.7	4	5	88	91	821480	812067	<0.2	<0.2	0.7	0.9
						1.0	0.5	300	24.5		8.0		32.4		98.8		6.9		4.1		5		88				<0.2		0.6	
					Middle	3.9	0.5	289	24.5	24.5	8.0	8.0	32.4	32.4	98.7	98.7	6.9		5.9		4		91				<0.2		0.8	
						3.9	0.6	296	24.5		8.0		32.4		98.7		6.9		6.0		4		92				<0.2		1.1	
					Bottom	6.7	0.4	284	24.5	24.5	8.0	8.0	32.4	32.4	99.1	99.2	6.9	6.9	13.3		6		94				<0.2		1.1	
						6.7	0.4	308	24.5		8.0		32.4		99.2		6.9		13.0		6		95				<0.2		0.8	
SR1A	Cloudy	Calm	10:33	4.7	Surface	1.0	-	-	24.5	24.5	8.0	8.0	32.3	32.3	96.3	96.3	6.7	6.7	2.5	2.7	5	5	-	-	819971	812656	-	-	-	-
						1.0	-	-	24.5		8.0		32.3		96.2		6.7		2.5		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	24.5	24.5	8.0	8.0	32.3	32.3	96.4	96.6	6.7	6.7	2.8		5		-				-		-	
						3.7	-	-	24.5		8.0		32.3		96.8		6.7		2.8		4		-				-		-	
SR2	Cloudy	Moderate	10:20	4.5	Surface	1.0	0.1	63	24.5	24.5	8.0	8.0	32.3	32.3	100.1	100.2	6.9	7.0	3.7	4.2	5	5	90	92	821485	814179	<0.2	<0.2	1.0	1.0
						1.0	0.1	63	24.5		8.0		32.3		100.2		7.0		3.8		4		91				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	55	24.5	24.5	8.0	8.0	32.3	32.3	102.0	102.1	7.1	7.1	4.8		6		92				<0.2		0.9	
						3.5	0.1	55	24.5		8.0		32.4		102.2		7.1		4.6		5		93				<0.2		1.0	
SR3	Cloudy	Moderate	11:35	8.9	Surface	1.0	0.1	25	24.8	24.8	8.0	8.0	31.6	31.6	100.4	100.4	7.0	7.0	2.8	2.8	3	4	-	-	822149	807575	-	-	-	-
						1.0	0.1	27	24.8		8.0		31.6		100.3		7.0		2.8		3		-				-		-	
					Middle	4.5	0.1	27	24.6	24.6	8.0	8.0	31.6	31.6	100.1	100.1	7.0		2.8		3		-				-		-	
						4.5	0.1	28	24.6		8.0		31.6		100.0		7.0		2.8		3		-				-		-	
					Bottom	7.9	0.1	286	24.5	24.5	8.0	8.0	32.1	32.1	100.2	100.2	7.0	7.0	2.7		4		-				-		-	
						7.9	0.1	300	24.5		8.0		32.1		100.2		7.0		2.7		5		-				-		-	
SR4A	Fine	Calm	10:35	9.5	Surface	1.0	0.1	124	24.4	24.4	8.1	8.1	33.3	33.3	100.6	100.6	7.0	6.9	1.8	3.2	6	5	-	-	817210	807821	-	-	-	-
						1.0	0.1	132	24.4		8.1		33.3		100.5		6.9		1.8		5		-				-		-	
					Middle	4.8	0.1	105	24.4	24.4	8.1	8.1	33.3	33.3	99.8	99.8	6.9		5.8		5		-				-		-	
						4.8	0.1	110	24.4		8.1		33.3		99.7		6.9		6.0		4		-				-		-	
					Bottom	8.5	0.1	79	24.2	24.2	8.1	8.1	33.4	33.4	98.3	98.3	6.8	6.8	1.9		4		-				-		-	
						8.5	0.1	84	24.2		8.1		33.4		98.3		6.8		1.8		5		-				-		-	
SR5A	Fine	Calm	10:16	3.6	Surface	1.0	0.1	288	24.5	24.5	8.1	8.1	33.1	33.1	98.7	98.8	6.8	6.8	2.0	2.4	5	5	-	-	816583	810685	-	-	-	-
						1.0	0.1	309	24.5		8.1		33.1		98.9		6.8		2.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	293	24.4	24.4	8.1	8.1	33.2	33.2	99.6	99.6	6.9	6.9	2.7		4		-				-		-	
						2.6	0.1	297	24.4		8.1		33.2		99.6		6.9		2.7		5		-				-		-	
SR6A	Fine	Calm	09:48	4.3	Surface	1.0	0.1	232	24.5	24.5	8.2	8.2	33.0	33.0	95.5	95.6	6.6	6.6	1.9	1.9	5	5	-	-	817961	814749	-	-	-	-
						1.0	0.1	239	24.5		8.2		33.0		95.6		6.6		1.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	228	24.5	24.5	8.2	8.2	33.0	33.0	95.7	95.7	6.6	6.6	1.9		5		-				-		-	
						3.3	0.1	231	24.5		8.2		33.0		95.7		6.6		2.0		4		-				-		-	
SR7	Cloudy	Moderate	09:28	15.9	Surface	1.0	0.2	58	24.7	24.7	7.9	7.9	33.1	33.1	89.9	89.9	6.2	6.2	1.9	2.7	5	5	-	-	823625	823739	-	-	-	-
						1.0	0.2	60	24.7		7.9		33.1		89.8		6.2		2.0		4		-				-		-	
					Middle	8.0	0.2	71	24.6	24.6	7.9	7.9	33.1	33.1	90.0	90.0	6.2		2.4		5		-				-		-	
						8.0	0.2	73	24.6		7.9		33.1		90.0		6.2		2.4		5		-				-		-	
					Bottom	14.9	0.2	74	24.6	24.6	7.8	7.8	33.1	33.1	90.2	90.2	6.2	6.2	3.7		5		-				-		-	
						14.9	0.2	74	24.6		7.8		33.1		90.2		6.2		3.8		4		-				-		-	
SR8	Cloudy	Calm	10:43	5.1	Surface	1.0	-	-	24.7	24.7	8.0	8.0	32.1	32.1	99.4	99.5	6.9	6.9	4.2	4.0	4	4	-	-	820407	811638	-	-	-	-
						1.0	-	-	24.7		8.0		32.1		99.5		6.9		4.4		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.4	24.4	8.0	8.0	32.3	32.3	99.2	99.2	6.9	6.9	3.6		5		-				-		-	
						4.1	-	-	24.4		8.0		32.3		99.2		6.9		3.6		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 November 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	04:31	8.8	Surface	1.0	0.2	231	24.7	24.7	8.3	8.3	29.8	29.8	113.9	113.7	8.0	7.5	1.7	5.7	4	3	86	87	815642	804234	<0.2	<0.2	1.1	1.0
						1.0	0.2	250	24.6		8.3		29.9		113.5		8.0		1.9		4		85				<0.2		0.8	
					Middle	4.4	0.2	200	24.3	24.3	8.2	8.2	32.2	32.2	100.1	100.1	7.0		7.7		2		87				<0.2		1.0	
						4.4	0.2	208	24.3		8.2		32.2		100.1		7.0		7.7		3		87				<0.2		1.0	
					Bottom	7.8	0.2	186	24.3	24.3	8.3	8.3	32.3	32.3	101.4	101.5	7.1	7.1	8.0		2		89				<0.2		1.0	
						7.8	0.2	196	24.3		8.3		32.3		101.6		7.1		7.3		2		89				<0.2		1.0	
C2	Fine	Moderate	05:40	12.1	Surface	1.0	0.0	284	25.0	25.0	8.1	8.1	29.6	29.6	116.6	116.6	8.1	7.9	3.5	4.7	2	2	84	87	825669	806942	<0.2	<0.2	0.9	1.0
						1.0	0.0	291	25.0		8.1		29.6		116.5		8.1		3.6		2		84				<0.2		1.0	
					Middle	6.1	0.1	42	24.8	24.8	8.1	8.1	30.5	30.5	110.9	110.9	7.7		4.3		2		87				<0.2		1.1	
						6.1	0.1	45	24.8		8.1		30.5		110.9		7.7		4.3		2		87				<0.2		0.9	
					Bottom	11.1	0.3	62	24.8	24.8	8.1	8.1	31.1	31.1	106.0	106.0	7.4	7.4	6.3		2		91				<0.2		1.0	
						11.1	0.3	64	24.8		8.1		31.1		106.0		7.4		6.4		2		90				<0.2		1.0	
C3	Fine	Moderate	03:44	11.3	Surface	1.0	0.2	77	24.8	24.8	8.1	8.1	31.4	31.4	110.8	110.7	7.7	7.3	1.4	2.9	3	2	86	89	822109	817820	<0.2	<0.2	0.8	0.9
						1.0	0.2	79	24.8		8.1		31.4		110.6		7.7		1.4		2		86				<0.2		0.9	
					Middle	5.7	0.2	79	24.7	24.7	8.1	8.1	32.4	32.4	99.5	99.5	6.9		1.3		2		89				<0.2		0.8	
						5.7	0.2	83	24.7		8.1		32.4		99.5		6.9		1.3		3		89				<0.2		0.9	
					Bottom	10.3	0.1	56	24.7	24.7	8.0	8.0	32.7	32.7	97.1	97.2	6.7	6.7	5.8		2		91				<0.2		0.8	
						10.3	0.1	58	24.7		8.0		32.7		97.2		6.7		5.9		2		92				<0.2		0.9	
IM1	Cloudy	Moderate	04:52	5.1	Surface	1.0	0.1	121	25.0	25.0	8.4	8.4	30.3	30.3	125.7	125.7	8.8	8.8	0.3	1.0	2	2	87	88	817969	807140	<0.2	<0.2	1.0	0.9
						1.0	0.1	132	25.0		8.4		30.3		125.6		8.7		0.3		2		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	217	25.0	25.0	8.3	8.3	30.6	30.6	123.8	123.5	8.6	8.6	1.7		2		89				<0.2		0.8	
						4.1	0.1	224	25.0		8.3		30.6		123.1		8.6		1.5		2		89				<0.2		0.9	
IM2	Cloudy	Moderate	04:59	6.8	Surface	1.0	0.1	165	24.7	24.7	8.3	8.3	30.5	30.5	121.8	121.8	8.5	8.5	1.0	3.4	2	2	85	87	818164	806168	<0.2	<0.2	0.9	0.8
						1.0	0.1	173	24.7		8.3		30.6		121.8		8.5		0.9		2		86				<0.2		0.8	
					Middle	3.4	0.2	213	24.6	24.6	8.3	8.3	30.7	30.7	121.4	121.4	8.5		0.9		2		87				<0.2		0.9	
						3.4	0.2	227	24.6		8.3		30.7		121.3		8.5		0.9		2		86				<0.2		0.8	
					Bottom	5.8	0.1	190	24.6	24.6	8.3	8.3	31.0	31.0	119.2	118.8	8.3	8.3	8.2		<2		89				<0.2		0.8	
						5.8	0.1	200	24.6		8.3		30.9		118.3		8.3		8.2		<2		89				<0.2		0.8	
IM3	Cloudy	Moderate	05:07	7.0	Surface	1.0	0.1	156	24.6	24.6	8.3	8.3	30.8	30.8	116.6	116.6	8.1	8.1	1.7	5.3	2	3	85	87	818797	805589	<0.2	<0.2	0.8	0.8
						1.0	0.1	160	24.6		8.3		30.8		116.5		8.1		1.8		2		85				<0.2		0.9	
					Middle	3.5	0.2	143	24.6	24.6	8.3	8.3	31.0	31.1	115.7	115.6	8.1		4.0		4		87				<0.2		0.8	
						3.5	0.2	157	24.6		8.3		31.1		115.5		8.1		4.2		4		87				<0.2		0.8	
					Bottom	6.0	0.1	171	24.7	24.7	8.3	8.3	31.2	31.1	113.0	112.9	7.9	7.9	10.2		4		89				<0.2		0.8	
						6.0	0.1	187	24.7		8.3		31.1		112.8		7.9		10.0		3		89				<0.2		0.7	
IM4	Cloudy	Moderate	05:16	8.1	Surface	1.0	0.3	193	24.7	24.7	8.3	8.3	30.4	30.5	116.4	116.2	8.1	7.9	1.2	1.7	2	3	85	88	819746	804609	<0.2	<0.2	1.0	0.9
						1.0	0.3	206	24.7		8.3		30.5		115.9		8.1		1.3		3		85				<0.2		0.9	
					Middle	4.1	0.1	172	24.5	24.5	8.3	8.3	30.9	30.9	109.8	109.8	7.7		1.8		3		88				<0.2		1.0	
						4.1	0.1	189	24.5		8.3		30.9		109.7		7.7		1.8		2		88				<0.2		0.9	
					Bottom	7.1	0.1	98	24.5	24.5	8.3	8.3	30.9	30.9	109.2	109.2	7.6	7.6	2.1		2		90				<0.2		0.8	
						7.1	0.1	98	24.5		8.3		30.9		109.1		7.6		2.2		3		90				<0.2		0.8	
IM5	Cloudy	Moderate	05:23	7.6	Surface	1.0	0.2	244	24.7	24.7	8.3	8.3	30.7	30.8	115.2	115.0	8.0	8.0	2.0	2.4	2	2	86	88	820717	804887	<0.2	<0.2	1.1	0.9
						1.0	0.2	258	24.6		8.3		30.8		114.8		8.0		2.2		2		86				<0.2		0.8	
					Middle	3.8	0.1	254	24.6	24.6	8.3	8.3	31.0	31.0	114.0	114.0	8.0		2.6		2		88				<0.2		0.8	
						3.8	0.1	264	24.6		8.3		31.0		113.9		8.0		2.6		2		87				<0.2		0.9	
					Bottom	6.6	0.1	198	24.6	24.7	8.3	8.3	31.0	30.9	113.3	113.2	7.9	7.9	2.5		2		89				<0.2		0.9	
						6.6	0.1	199	24.7		8.3		30.9		113.1		7.9		2.4		3		89				<0.2		1.0	
IM6	Cloudy	Moderate	05:31	7.4	Surface	1.0	0.3	231	25.0	25.0	8.3	8.3	30.0	30.0	125.2	125.2	8.7	8.7	3.9	5.7	3	3	85	88	821046	805849	<0.2	<0.2	1.1	0.9
						1.0	0.3	244	25.0		8.3		30.0		125.1		8.7		3.9		4		86				<0.2		0.8	
					Middle	3.7	0.2	242	24.9	24.9	8.3	8.3	30.4	30.4	123.8	123.6	8.6		3.7		2		87				<0.2		0.8	
						3.7	0.2	249	24.9		8.3		30.5		123.4		8.6		3.7		3		88				<0.2		0.8	
					Bottom	6.4	0.1	179	24.9	24.9	8.3	8.3	30.7	30.7	116.7	116.8	8.1	8.1	9.6		2		90				<0.2		0.9	
						6.4	0.1	196	24.9		8.3		30.7		116.9		8.1		9.4		2		89				<0.2		0.9	
IM7	Cloudy	Moderate	05:38	7.8	Surface	1.0	0.1	247	24.9	24.9	8.3	8.3	29.7	29.7	121.9	121.4	8.5	8.3	6.4	6.9	3	2	86	88	821354	806838	<0.2	<0.2	0.8	0.9
						1.0	0.1	266	24.9		8.3		29.7		120.9		8.5		6.5		2		86				<0.2		1.0	
					Middle	3.9	0.1	162	24.8	24.8	8.3	8.3	30.2	30.3	115.8	115.7	8.1		6.9		2		87				<0.2		0.8	
						3.9	0.1	162	24.8		8.3		30.4		115.5		8.1		6.2		2		88				<0.2		0.9	
					Bottom	6.8	0.1	200	24.9	25.0	8.3	8.3	30.6	30.5	113.5	113.4	7.9	7.9	7.4		2		90				<0.2		0.9	
						6.8	0.1	217	25.0		8.3		30.5		113.2		7.9		8.0		2		89				<0.2		0.8	
IM8	Fine	Moderate	05:13	7.6	Surface	1.0	0.1	62	24.9	24.9	8.1	8.1	30.0	30.0	119.8	119.8	8.4	8.4	2.6	3.5	3	3	85	88	821823	808121	<0.2	<0.2	0.8	0.8
						1.0	0.1	66	24.9		8.1		30.0		119.8		8.4		2.7		2		85				<0.2		0.8	
					Middle	3.8	0.2	76	24.8	24.8	8.2	8.2	30.1	30.0	117.9	118.0	8.3		3.4		3		87				<0.2		0.8	
						3.8	0.2	78	24.8		8.2		30.0		118.0		8.3		3.3		3		88				<0.2		0.8	
					Bottom	6.6	0.2	52	24.8	24.8	8.2	8.2	30.1	30.1	113.3	113.2	7.9	7.9	4.3		3		91				<0.2		0.7	
						6.6	0.2	56	24.8		8.2		30.1		113.1		7.9		4.4		3		91				<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 07 November 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	Fine	Moderate	05:07	7.1	Surface	1.0	0.2	71	24.9	24.9	8.2	8.2	29.9	29.9	119.8	119.8	8.4	8.3	3.2	4.9	3	2	85	88	822088	808794	<0.2	<0.2	0.9	0.8
						1.0	0.2	71	24.9		8.2		29.9		119.7		8.4		3.2		2		84				<0.2		0.8	
					Middle	3.6	0.2	72	24.7	24.7	8.2	8.2	30.0	30.0	117.5	117.5	8.2		3.8		2		87				<0.2		0.8	
						3.6	0.2	73	24.7		8.2		30.0		117.5		8.2		3.9		2		87				<0.2		0.8	
					Bottom	6.1	0.2	75	24.7	24.7	8.2	8.2	30.0	30.0	116.2	116.1	8.1	8.1	7.4		2		91				<0.2		0.8	
						6.1	0.2	77	24.7		8.2		30.0		116.0		8.1		7.6		2		91				<0.2		0.8	
IM10	Fine	Moderate	04:58	7.3	Surface	1.0	0.2	75	25.0	25.0	8.2	8.2	30.5	30.5	118.5	118.4	8.2	8.1	3.6	6.4	3	3	85	89	822391	809803	<0.2	<0.2	0.8	0.8
						1.0	0.2	75	25.0		8.2		30.5		118.3		8.2		3.7		3		89				<0.2		0.8	
					Middle	3.7	0.2	70	24.8	24.8	8.2	8.2	31.2	31.2	114.2	114.3	7.9		6.2		4		88				<0.2		0.8	
						3.7	0.2	74	24.8		8.2		31.2		114.3		7.9		6.4		3		88				<0.2		0.9	
					Bottom	6.3	0.1	113	24.7	24.7	8.2	8.2	31.3	31.3	113.1	113.1	7.9	7.9	9.1		3		91				<0.2		0.8	
						6.3	0.1	122	24.7		8.2		31.3		113.1		7.9		9.1		3		92				<0.2		0.8	
IM11	Fine	Moderate	04:48	8.0	Surface	1.0	0.1	241	24.9	24.9	8.2	8.2	31.2	31.2	118.8	118.8	8.2	8.2	2.6	3.3	3	3	85	88	822045	811441	<0.2	<0.2	0.7	0.8
						1.0	0.1	253	24.9		8.2		31.2		118.7		8.2		2.6		3		85				<0.2		0.9	
					Middle	4.0	0.0	129	24.9	24.9	8.2	8.2	31.2	31.2	118.5	118.5	8.2		2.9		2		88				<0.2		0.7	
						4.0	0.0	140	24.9		8.2		31.2		118.4		8.2		2.9		2		88				<0.2		0.9	
					Bottom	7.0	0.1	138	24.8	24.8	8.2	8.2	31.4	31.4	112.8	112.9	7.8	7.8	4.5		2		91				<0.2		0.7	
						7.0	0.1	145	24.8		8.2		31.4		112.9		7.8		4.5		3		91				<0.2		0.9	
IM12	Fine	Moderate	04:41	8.9	Surface	1.0	0.2	165	25.0	25.0	8.2	8.2	30.9	30.9	118.7	118.7	8.2	8.1	2.8	5.7	3	4	85	88	821452	812065	<0.2	<0.2	0.7	0.8
						1.0	0.2	172	25.0		8.2		30.9		118.6		8.2		2.8		4		85				<0.2		0.8	
					Middle	4.5	0.1	121	24.8	24.8	8.1	8.1	31.1	31.1	114.4	114.4	8.0		5.5		3		88				<0.2		0.7	
						4.5	0.1	125	24.8		8.1		31.1		114.4		8.0		5.7		4		88				<0.2		0.8	
					Bottom	7.9	0.2	126	24.7	24.7	8.0	8.0	31.2	31.2	111.5	111.5	7.8	7.8	8.5		3		91				<0.2		0.8	
						7.9	0.2	127	24.7		8.0		31.2		111.5		7.8		8.7		4		91				<0.2		0.8	
SR1A	Fine	Moderate	04:18	5.1	Surface	1.0	-	-	24.9	24.9	8.2	8.2	30.2	30.2	119.7	119.7	8.3	8.3	2.1	3.1	3	3	-	-	819973	812655	-	-	-	-
						1.0	-	-	24.9		8.2		30.2		119.7		8.3		2.1		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.8	24.8	8.2	8.2	31.4	31.4	115.0	115.0	8.0	8.0	4.1		3		-				-		-	
						4.1	-	-	24.8		8.2		31.4		115.0		8.0		4.1		4		-				-		-	
SR2	Fine	Moderate	04:06	4.7	Surface	1.0	0.2	12	24.8	24.8	8.1	8.1	31.1	31.1	115.8	115.8	8.0	8.0	9.4	11.6	3	3	87	88	821454	814180	<0.2	<0.2	1.0	0.9
						1.0	0.3	12	24.8		8.1		31.1		115.8		8.0		9.7		3		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	7	24.8	24.8	8.1	8.1	31.5	31.5	114.2	114.2	7.9	7.9	13.6		3		90				<0.2		0.8	
						3.7	0.2	7	24.8		8.1		31.5		114.2		7.9		13.5		2		90				<0.2		0.9	
SR3	Fine	Moderate	05:20	9.0	Surface	1.0	0.1	144	25.2	25.2	8.1	8.1	29.9	29.9	115.8	115.8	8.1	8.0	2.3	4.1	4	3	-	-	822136	807585	-	-	-	-
						1.0	0.1	145	25.2		8.1		29.9		115.8		8.1		2.3		3		-				-		-	
					Middle	4.5	0.1	86	24.9	24.9	8.1	8.1	30.1	30.1	112.4	112.3	7.8		3.1		4		-				-		-	
						4.5	0.1	86	24.9		8.1		30.1		112.2		7.8		3.1		2		-				-		-	
					Bottom	8.0	0.2	60	24.8	24.8	8.1	8.1	30.5	30.5	108.5	108.5	7.6	7.6	6.9		3		-				-		-	
						8.0	0.2	65	24.8		8.1		30.5		108.5		7.6		6.8		3		-				-		-	
SR4A	Cloudy	Moderate	04:08	8.4	Surface	1.0	0.1	78	24.8	24.9	8.3	8.3	30.8	30.8	120.7	120.6	8.4	8.1	0.9	1.4	<2	2	-	-	817188	807822	-	-	-	-
						1.0	0.1	85	24.9		8.3		30.9		120.4		8.4		0.9		<2		-				-		-	
					Middle	4.2	0.1	79	24.9	24.9	8.3	8.3	31.3	31.3	113.1	113.1	7.8		1.7		2		-				-		-	
						4.2	0.1	82	24.9		8.3		31.3		113.0		7.8		1.7		3		-				-		-	
					Bottom	7.4	0.2	54	24.8	24.8	8.3	8.3	31.4	31.4	111.2	111.3	7.7	7.7	1.6		2		-				-		-	
						7.4	0.2	54	24.8		8.3		31.4		111.4		7.7		1.6		3		-				-		-	
SR5A	Cloudy	Moderate	03:51	3.5	Surface	1.0	0.1	11	24.9	24.9	8.3	8.3	31.4	31.4	113.3	113.3	7.8	7.8	2.1	3.1	4	4	-	-	816582	810716	-	-	-	-
						1.0	0.1	11	24.9		8.3		31.4		113.3		7.8		2.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	284	25.0	25.0	8.3	8.3	31.3	31.3	111.8	111.8	7.7	7.7	4.1		4		-				-		-	
						2.5	0.1	303	25.0		8.3		31.3		111.8		7.7		4.1		4		-				-		-	
SR6A	Cloudy	Moderate	03:23	4.1	Surface	1.0	0.0	261	24.9	24.9	8.3	8.3	30.7	30.7	122.3	122.3	8.5	8.5	2.9	2.2	<2	3	-	-	817965	814737	-	-	-	-
						1.0	0.0	263	24.9		8.3		30.7		122.3		8.5		2.7		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	237	25.0	25.0	8.3	8.3	30.6	30.6	122.9	122.9	8.5	8.5	1.7		4		-				-		-	
						3.1	0.1	247	25.0		8.3		30.6		122.9		8.5		1.7		3		-				-		-	
SR7	Fine	Moderate	03:15	15.1	Surface	1.0	0.1	87	24.7	24.7	8.1	8.1	31.9	31.9	106.3	106.3	7.4	7.1	1.8	2.5	2	2	-	-	823650	823728	-	-	-	-
						1.0	0.2	95	24.7		8.1		31.9		106.3		7.4		1.8		3		-				-		-	
					Middle	7.6	0.1	38	24.6	24.6	8.0	8.0	32.6	32.6	98.6	98.6	6.8		2.3		2		-				-		-	
						7.6	0.1	38	24.6		8.0		32.6		98.6		6.8		2.3		3		-				-		-	
					Bottom	14.1	0.2	39	24.6	24.6	8.0	8.0	32.7	32.7	97.2	97.3	6.7	6.7	3.4		2		-				-		-	
						14.1	0.2	40	24.6		8.0		32.7		97.3		6.7		3.2		2		-				-		-	
SR8	Fine	Moderate	04:29	4.8	Surface	1.0	-	-	24.8	24.8	8.1	8.1	30.8	30.8	115.0	115.0	8.0	8.0	4.6	6.2	5	4	-	-	820369	811605	-	-	-	-
						1.0	-	-	24.8		8.1		30.8		115.0		8.0		4.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	24.6	24.6	8.1	8.1	31.3	31.3	110.6	110.6	7.7	7.7	7.7		3		-				-		-	
						3.8	-	-	24.6		8.1		31.3		110.5		7.7		7.8		4		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 07 November 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	16:22	8.4	Surface	1.0	0.1	34	24.5	24.5	8.4	8.4	29.8	29.8	118.3	117.8	8.3	7.7	1.3	2.6	<2	2	84	88	815627	804230	<0.2	<0.2	1.0	0.8
						1.0	0.1	34	24.5		8.4		29.8		117.3		8.3		1.4		<2		86				<0.2		0.8	
					Middle	4.2	0.0	77	24.3	24.3	8.2	8.2	32.2	32.2	100.8	100.7	7.0		2.5		<2		87				<0.2		0.9	
						4.2	0.0	77	24.3		8.2		32.2		100.6		7.0		2.6		<2		88				<0.2		0.7	
					Bottom	7.4	0.0	236	24.3	24.3	8.3	8.3	32.5	32.4	101.4	101.6	7.1	7.1	4.0		3		90				<0.2		0.8	
						7.4	0.0	244	24.3		8.3		32.4		101.7		7.1		3.8		2		90				<0.2		0.7	
C2	Fine	Moderate	15:13	12.2	Surface	1.0	0.2	13	25.2	25.2	8.2	8.2	29.9	29.9	125.2	125.2	8.7	8.3	1.8	3.0	2	3	85	87	825703	806956	<0.2	<0.2	1.0	1.0
						1.0	0.2	13	25.2		8.2		29.9		125.2		8.7		1.7		3		84				<0.2		1.0	
					Middle	6.1	0.4	6	24.8	24.8	8.2	8.2	30.7	30.7	112.4	112.2	7.8		3.1		2		87				<0.2		1.0	
						6.1	0.4	6	24.8		8.2		30.7		112.0		7.8		3.1		3		88				<0.2		1.0	
					Bottom	11.2	0.3	322	24.8	24.8	8.1	8.1	31.1	31.1	105.7	105.7	7.4	7.4	4.2		3		90				<0.2		1.0	
						11.2	0.3	343	24.8		8.1		31.1		105.7		7.4		4.2		2		90				<0.2		1.0	
C3	Fine	Moderate	16:59	13.1	Surface	1.0	0.4	270	24.9	24.9	8.0	8.0	32.5	32.5	104.0	103.8	7.2	6.9	0.9	2.6	<2	2	86	89	822122	817792	<0.2	<0.2	1.0	1.0
						1.0	0.4	284	24.9		8.0		32.5		103.6		7.1		0.9		<2		86				<0.2		1.1	
					Middle	6.6	0.3	277	24.7	24.7	8.0	8.0	33.0	33.0	96.7	96.8	6.7		1.5		3		89				<0.2		0.9	
						6.6	0.3	298	24.7		8.0		33.0		96.8		6.7		1.5		2		89				<0.2		1.0	
					Bottom	12.1	0.3	292	24.6	24.6	7.9	7.9	33.0	33.0	96.7	96.8	6.7	6.7	5.6		2		92				<0.2		1.0	
						12.1	0.3	306	24.6		7.9		33.0		96.8		6.7		5.3		2		93				<0.2		1.0	
IM1	Cloudy	Moderate	16:00	5.1	Surface	1.0	0.1	249	25.2	25.2	8.4	8.4	30.2	30.2	130.3	130.3	9.0	9.0	5.2	6.7	2	3	87	88	817935	807121	<0.2	<0.2	0.8	0.8
						1.0	0.1	266	25.2		8.4		30.2		130.3		9.0		5.1		3		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	329	25.2	25.2	8.3	8.3	30.3	30.3	125.4	125.1	8.7	8.7	8.4		3		89				<0.2		0.9	
						4.1	0.1	336	25.1		8.3		30.3		124.7		8.7		8.2		3		89				<0.2		0.7	
IM2	Cloudy	Moderate	15:53	7.1	Surface	1.0	0.1	67	24.9	24.9	8.4	8.4	30.1	30.2	123.7	123.5	8.6	8.5	0.5	4.1	4	4	86	87	818158	806160	<0.2	<0.2	0.8	0.8
						1.0	0.1	70	24.9		8.4		30.2		123.3		8.6		0.5		3		85				<0.2		0.8	
					Middle	3.6	0.1	77	24.8	24.8	8.3	8.3	30.9	30.9	120.4	120.3	8.4		3.1		4		87				<0.2		0.8	
						3.6	0.1	79	24.8		8.3		30.9		120.2		8.4		3.2		4		87				<0.2		0.7	
					Bottom	6.1	0.1	82	24.9	24.9	8.3	8.3	31.0	31.0	119.3	119.2	8.3	8.3	8.6		4		89				<0.2		0.8	
						6.1	0.1	88	24.9		8.3		31.0		119.1		8.3		8.6		4		89				<0.2		0.8	
IM3	Cloudy	Moderate	15:46	7.0	Surface	1.0	0.2	344	24.8	24.8	8.3	8.3	30.1	30.2	122.7	122.7	8.6	8.3	0.9	4.6	4	3	86	87	818768	805603	<0.2	<0.2	0.9	0.9
						1.0	0.2	357	24.8		8.3		30.2		122.6		8.6		1.0		3		85				<0.2		0.9	
					Middle	3.5	0.1	343	24.7	24.7	8.3	8.3	31.0	31.0	115.6	115.6	8.1		5.3		4		87				<0.2		0.8	
						3.5	0.1	316	24.7		8.3		31.0		115.5		8.0		5.6		4		88				<0.2		1.0	
					Bottom	6.0	0.1	308	24.8	24.8	8.3	8.3	31.1	31.1	114.7	114.6	8.0	8.0	6.9		3		89				<0.2		0.8	
						6.0	0.1	324	24.8		8.3		31.1		114.5		8.0		7.7		2		89				<0.2		0.8	
IM4	Cloudy	Moderate	15:36	8.1	Surface	1.0	0.3	3	24.6	24.6	8.3	8.3	30.6	30.6	118.0	117.7	8.3	7.9	1.4	2.7	2	3	85	88	819713	804592	<0.2	<0.2	0.9	0.9
						1.0	0.3	3	24.6		8.3		30.7		117.4		8.2		1.6		3		86				<0.2		0.9	
					Middle	4.1	0.2	345	24.5	24.5	8.3	8.3	31.1	31.1	108.6	108.6	7.6		2.1		3		87				<0.2		1.0	
						4.1	0.2	317	24.5		8.3		31.1		108.5		7.6		2.3		3		88				<0.2		0.8	
					Bottom	7.1	0.2	340	24.5	24.5	8.3	8.3	31.2	31.2	109.0	109.0	7.6	7.6	4.1		4		89				<0.2		0.9	
						7.1	0.2	313	24.5		8.3		31.2		109.0		7.6		4.5		3		93				<0.2		0.9	
IM5	Cloudy	Moderate	15:28	7.4	Surface	1.0	0.4	356	24.8	24.8	8.3	8.3	30.4	30.4	120.7	120.7	8.4	8.4	0.8	1.2	3	4	86	88	820729	804884	<0.2	<0.2	1.0	0.9
						1.0	0.4	328	24.8		8.3		30.4		120.7		8.4		0.8		4		86				<0.2		0.8	
					Middle	3.7	0.4	355	24.8	24.8	8.3	8.3	30.7	30.7	120.4	120.4	8.4		0.9		3		87				<0.2		0.8	
						3.7	0.4	327	24.8		8.3		30.7		120.4		8.4		1.0		4		88				<0.2		0.9	
					Bottom	6.4	0.2	11	24.7	24.7	8.3	8.3	30.8	30.8	119.6	119.6	8.3	8.3	1.7		4		90				<0.2		0.8	
						6.4	0.3	12	24.7		8.3		30.8		119.5		8.3		1.7		3		90				<0.2		0.8	
IM6	Cloudy	Moderate	15:21	7.3	Surface	1.0	0.1	301	25.0	25.0	8.3	8.3	29.9	29.9	124.9	124.7	8.7	8.6	0.6	1.3	3	4	85	87	821043	805823	<0.2	<0.2	1.1	1.1
						1.0	0.2	312	25.0		8.3		29.9		124.5		8.7		0.6		4		86				<0.2		1.1	
					Middle	3.7	0.1	269	24.9	24.9	8.3	8.3	30.5	30.6	121.7	121.5	8.5		1.3		4		87				<0.2		1.1	
						3.7	0.1	294	24.8		8.3		30.6		121.3		8.4		1.5		4		87				<0.2		1.0	
					Bottom	6.3	0.0	319	24.8	24.8	8.3	8.3	31.0	31.0	114.5	114.5	8.0	8.0	1.7		3		89				<0.2		1.0	
						6.3	0.0	330	24.8		8.3		31.0		114.5		8.0		1.9		3		89				<0.2		1.0	
IM7	Cloudy	Moderate	15:12	8.3	Surface	1.0	0.2	70	25.0	25.0	8.3	8.3	29.8	29.8	122.0	121.8	8.5	8.4	0.6	2.0	4	4	85	87	821362	806816	<0.2	<0.2	1.0	1.1
						1.0	0.2	70	25.0		8.3		29.9		121.5		8.5		0.6		4		85				<0.2		1.1	
					Middle	4.2	0.1	174	24.8	24.8	8.3	8.3	30.3	30.4	117.9	117.6	8.2		1.1		3		87				<0.2		1.1	
						4.2	0.1	184	24.8		8.3		30.4		117.3		8.2		1.0		4		87				<0.2		1.1	
					Bottom	7.3	0.2	126	24.8	24.8	8.3	8.3	30.9	30.9	115.8	115.8	8.1	8.1	4.2		4		89				<0.2		1.0	
						7.3	0.2	131	24.8		8.3		30.9		115.8		8.1		4.5		5		89				<0.2		1.0	
IM8	Fine	Moderate	15:36	7.8	Surface	1.0	0.1	294	25.1	25.1	8.2	8.2	30.0	30.0	122.0	122.0	8.5	8.4	0.8	1.3	3	4	85	88	821848	808120	<0.2	<0.2	1.0	1.1
						1.0	0.1	306	25.1		8.2		30.0		121.9		8.5		0.8		4		85				<0.2		1.1	
					Middle	3.9	0.0	1	25.0	25.0	8.2	8.2	30.0	30.0	119.3	119.3	8.3		1.2		4		88				<0.2		1.0	
						3.9	0.0	1	25.0		8.2		30.0		119.3		8.3		1.2		4		88				<0.2		1.2	
					Bottom	6.8	0.1	38	24.9	24.9	8.1	8.1	30.1	30.1	115.8	115.8	8.1	8.1	1.8		4		91				<0.2		1.0	
						6.8	0.1	40	24.9		8.1		30.1		115.7		8.1		1.7		3		91				<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 07 November 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	15:42	7.5	Surface	1.0	0.3	213	25.0	25.0	8.1	8.1	30.1	30.1	121.8	121.7	8.5	8.5	1.8	1.8	6	6	85	88	822073	808795	<0.2	<0.2	1.1	1.1
						1.0	0.3	225	25.0		8.1		30.1		121.6		8.5		1.9		6		85				<0.2		1.2	
					Middle	3.8	0.3	224	25.0	25.0	8.2	8.2	30.1	30.1	121.2	121.3	8.5		1.7		5		88				<0.2		1.0	
						3.8	0.3	237	25.0		8.2		30.1		121.3		8.5		1.7		6		88				<0.2		1.0	
					Bottom	6.5	0.1	212	25.0	24.9	8.1	8.1	30.1	30.1	120.2	120.2	8.4	8.4	1.8		6		91				<0.2		1.0	
						6.5	0.1	229	24.9		8.1		30.1		120.2		8.4		1.9		5		90				<0.2		1.2	
IM10	Fine	Moderate	15:49	7.2	Surface	1.0	0.5	323	25.0	25.0	8.1	8.1	30.3	30.3	124.1	124.1	8.6	8.6	2.4	2.6	5	4	85	88	822369	809812	<0.2	<0.2	1.0	1.0
						1.0	0.5	336	25.0		8.1		30.3		124.0		8.6		2.3		4		84				<0.2		1.0	
					Middle	3.6	0.4	325	25.0	25.0	8.1	8.1	30.8	30.8	122.1	122.1	8.5		2.4		4		88				<0.2		1.0	
						3.6	0.4	344	25.0		8.1		30.8		122.0		8.5		2.5		4		88				<0.2		1.1	
					Bottom	6.2	0.4	327	24.8	24.8	8.0	8.0	31.2	31.2	113.7	113.8	7.9	7.9	3.0		5		91				<0.2		1.1	
						6.2	0.4	354	24.8		8.0		31.2		113.8		7.9		3.0		4		91				<0.2		1.0	
IM11	Fine	Moderate	15:59	8.1	Surface	1.0	0.4	314	24.9	24.9	8.1	8.1	31.4	31.4	118.5	118.4	8.2	8.0	2.3	2.2	5	4	84	88	822061	811448	<0.2	<0.2	1.0	1.0
						1.0	0.4	336	24.9		8.1		31.4		118.3		8.2		2.2		5		85				<0.2		1.1	
					Middle	4.1	0.4	319	24.9	24.9	8.1	8.1	31.5	31.5	110.8	110.7	7.7		1.9		5		88				<0.2		1.0	
						4.1	0.4	329	24.9		8.1		31.5		110.5		7.7		1.9		4		88				<0.2		1.0	
					Bottom	7.1	0.3	307	24.7	24.7	8.0	8.0	32.2	32.2	105.1	105.1	7.3	7.3	2.5		4		92				<0.2		1.0	
						7.1	0.3	327	24.7		8.0		32.2		105.1		7.3		2.5		3		91				<0.2		1.1	
IM12	Fine	Moderate	16:06	9.7	Surface	1.0	0.5	293	24.9	24.9	8.1	8.1	31.2	31.2	119.3	119.3	8.3	8.1	2.7	3.8	5	4	85	88	821451	812047	<0.2	<0.2	0.9	1.0
						1.0	0.5	297	24.9		8.1		31.2		119.2		8.3		2.7		5		85				<0.2		1.0	
					Middle	4.9	0.4	295	24.8	24.8	8.1	8.1	31.3	31.3	112.5	112.5	7.8		3.1		4		89				<0.2		1.0	
						4.9	0.4	316	24.8		8.1		31.3		112.5		7.8		3.1		4		88				<0.2		1.0	
					Bottom	8.7	0.3	280	24.7	24.7	8.1	8.1	31.7	31.7	110.5	110.5	7.7	7.7	5.6		4		92				<0.2		1.0	
						8.7	0.3	294	24.7		8.1		31.7		110.5		7.7		5.7		3		91				<0.2		1.0	
SR1A	Fine	Moderate	16:26	5.2	Surface	1.0	-	-	25.1	25.1	8.2	8.2	31.1	31.1	124.8	124.9	8.6	8.6	1.9	1.8	4	5	-	-	819978	812656	-	-	-	-
						1.0	-	-	25.1		8.2		31.1		124.9		8.6		1.8		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	25.1	25.1	8.1	8.1	31.4	31.4	122.2	122.1	8.4	8.4	1.6		5		-				-		-	
						4.2	-	-	25.1		8.1		31.4		122.0		8.4		1.7		5		-				-		-	
SR2	Fine	Moderate	16:38	4.9	Surface	1.0	0.1	133	25.1	25.1	8.1	8.1	31.5	31.5	114.7	114.5	7.9	7.9	1.6	2.2	4	4	86	88	821478	814167	<0.2	<0.2	0.9	1.0
						1.0	0.1	136	25.1		8.1		31.5		114.2		7.9		1.6		4		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	138	24.7	24.7	8.0	8.0	32.4	32.4	109.6	109.8	7.6	7.6	2.8		4		89				<0.2		0.9	
						3.9	0.2	145	24.7		8.0		32.4		110.0		7.6		2.8		4		90				<0.2		1.0	
SR3	Fine	Moderate	15:30	9.1	Surface	1.0	0.1	129	25.1	25.1	8.2	8.2	30.1	30.1	125.2	125.2	8.7	8.7	1.2	2.2	5	4	-	-	822150	807565	-	-	-	-
						1.0	0.1	131	25.1		8.2		30.1		125.2		8.7		1.2		5		-				-		-	
					Middle	4.6	0.0	295	25.1	25.1	8.2	8.2	30.3	30.3	124.2	124.3	8.6		1.7		4		-				-		-	
						4.6	0.0	307	25.1		8.2		30.3		124.4		8.6		1.8		3		-				-		-	
					Bottom	8.1	0.1	330	24.9	24.9	8.2	8.2	30.8	30.8	120.8	120.7	8.4	8.4	3.5		4		-				-		-	
						8.1	0.1	351	24.9		8.2		30.8		120.6		8.4		3.5		3		-				-		-	
SR4A	Cloudy	Moderate	16:43	8.4	Surface	1.0	0.4	67	25.1	25.1	8.4	8.4	30.2	30.2	130.7	130.7	9.1	9.1	0.6	1.8	3	4	-	-	817172	807795	-	-	-	-
						1.0	0.4	67	25.1		8.4		30.2		130.6		9.1		0.6		4		-				-		-	
					Middle	4.2	0.3	69	25.0	25.0	8.4	8.4	30.4	30.4	128.8	128.8	9.0		1.8		3		-				-		-	
						4.2	0.4	74	24.9		8.4		30.4		128.8		9.0		2.0		4		-				-		-	
					Bottom	7.4	0.3	60	24.9	24.9	8.4	8.4	30.5	30.5	121.4	121.3	8.5	8.5	2.9		4		-				-		-	
						7.4	0.3	65	24.9		8.4		30.5		121.2		8.4		2.9		4		-				-		-	
SR5A	Cloudy	Moderate	16:58	4.5	Surface	1.0	0.0	308	25.1	25.1	8.3	8.3	31.3	31.3	116.9	116.8	8.1	8.1	2.6	2.6	4	4	-	-	816569	810690	-	-	-	-
						1.0	0.0	314	25.0		8.3		31.3		116.6		8.1		2.7		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	312	25.0	25.0	8.3	8.3	31.3	31.3	116.0	115.9	8.0	8.0	2.6		3		-				-		-	
						3.5	0.1	331	25.0		8.3		31.3		115.8		8.0		2.5		4		-				-		-	
SR6A	Cloudy	Moderate	17:26	4.6	Surface	1.0	0.1	346	25.3	25.3	8.4	8.4	30.4	30.4	130.1	129.9	9.0	9.0	4.4	4.6	4	4	-	-	817949	814758	-	-	-	-
						1.0	0.1	318	25.3		8.4		30.4		129.6		9.0		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	59	25.4	25.5	8.4	8.4	30.4	30.4	123.9	123.7	8.6	8.6	4.7		4		-				-		-	
						3.6	0.1	59	25.5		8.4		30.4		123.5		8.5		4.8		4		-				-		-	
SR7	Fine	Moderate	17:30	15.8	Surface	1.0	0.1	195	24.8	24.7	8.0	8.0	32.8	32.8	100.7	100.7	6.9	6.8	1.9	4.1	3	4	-	-	823641	823750	-	-	-	-
						1.0	0.1	196	24.7		8.0		32.8		100.6		6.9		1.9		4		-				-		-	
					Middle	7.9	0.2	62	24.7	24.7	8.0	8.0	32.9	32.9	97.1	97.1	6.7		3.5		4		-				-		-	
						7.9	0.2	66	24.7		8.0		32.9		97.0		6.7		3.6		4		-				-		-	
					Bottom	14.8	0.2	71	24.6	24.6	7.9	7.9	33.1	33.1	95.5	95.5	6.6	6.6	6.7		4		-				-		-	
						14.8	0.3	71	24.6		7.9		33.1		95.4		6.6		6.8		5		-				-		-	
SR8	Fine	Moderate	16:17	5.0	Surface	1.0	-	-	24.9	24.9	8.2	8.2	31.3	31.3	116.2	116.2	8.1	8.1	2.7	3.2	6	7	-	-	820391	811610	-	-	-	-
						1.0	-	-	24.9		8.2		31.3		116.1		8.1		2.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.8	24.8	8.1	8.1	31.3	31.3	113.3	113.3	7.9	7.9	3.7		7		-				-		-	
						4.0	-	-	24.8		8.1		31.3		113.2		7.9		3.5		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 10 November 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	08:19	8.6	Surface	1.0	0.4	210	23.6	23.6	8.2	8.2	34.0	34.0	101.8	101.9	7.1	7.1	2.5	3.1	4	4	86	88	815643	804229	<0.2	<0.2	0.4	0.6
						1.0	0.4	225	23.6		8.2		34.0		101.9		7.1		2.5		4		86				<0.2		0.6	
					Middle	4.3	0.4	210	23.6	23.6	8.2	8.2	34.0	34.0	101.4	101.5	7.1		3.0		4		89				<0.2		0.8	
						4.3	0.4	210	23.6		8.2		34.0		101.6		7.1		3.0		4		89				<0.2		0.8	
					Bottom	7.6	0.4	209	23.6	23.6	8.2	8.2	34.0	34.0	101.3	101.3	7.1		3.7		5		90				<0.2		0.6	
						7.6	0.4	218	23.6		8.2		34.0		101.3		7.1		3.7		5		90				<0.2		0.6	
C2	Cloudy	Moderate	09:00	11.6	Surface	1.0	1.5	180	24.0	24.0	8.3	8.3	31.7	31.7	112.9	112.7	7.9	7.9	1.0	3.3	4	4	85	88	825664	806926	<0.2	<0.2	0.8	0.7
						1.0	1.6	191	24.0		8.3		31.7		112.5		7.9		1.0		4		85				<0.2		0.8	
					Middle	5.8	1.6	181	24.0	24.0	8.3	8.3	31.8	31.8	111.3	111.3	7.8		2.0		4		89				<0.2		0.7	
						5.8	1.8	184	24.0		8.3		31.8		111.2		7.8		2.3		4		90				<0.2		0.8	
					Bottom	10.6	1.7	183	23.9	23.9	8.3	8.3	31.8	31.8	110.1	110.1	7.7	7.7	6.7		3		90				<0.2		0.6	
						10.6	1.8	200	23.9		8.3		31.8		110.0		7.7		6.7		3		91				<0.2		0.7	
C3	Fine	Moderate	06:57	12.4	Surface	1.0	1.2	155	24.1	24.1	8.3	8.3	32.2	32.2	103.7	103.7	7.3	7.3	0.3	0.7	2	2	83	89	822130	817793	<0.2	<0.2	0.7	0.6
						1.0	1.3	162	24.1		8.3		32.2		103.7		7.3		0.3		2		85				<0.2		0.6	
					Middle	6.2	1.3	156	24.1	24.1	8.3	8.2	32.2	32.2	102.9	102.8	7.2		0.3		2		89				<0.2		0.6	
						6.2	1.4	169	24.1		8.2		32.2		102.7		7.2		0.3		2		90				<0.2		0.6	
					Bottom	11.4	1.3	155	24.3	24.3	8.2	8.2	32.5	32.5	102.3	102.4	7.1	7.1	1.6		2		92				<0.2		0.6	
						11.4	1.3	163	24.3		8.2		32.5		102.4		7.1		1.6		3		93				<0.2		0.6	
IM1	Cloudy	Moderate	08:44	5.0	Surface	1.0	0.1	188	23.8	23.8	8.3	8.3	33.8	33.8	112.7	112.7	7.8	7.8	2.7	2.8	12	11	87	88	817956	807111	<0.2	<0.2	0.5	0.5
						1.0	0.1	196	23.8		8.3		33.8		112.7		7.8		2.7		12		87				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	187	23.8	23.8	8.3	8.3	33.8	33.8	108.7	108.6	7.6	7.6	3.0		10		89				<0.2		0.5	
						4.0	0.1	194	23.8		8.3		33.8		108.5		7.6		2.9		10		89				<0.2		0.6	
IM2	Cloudy	Moderate	08:52	6.7	Surface	1.0	0.2	154	23.7	23.7	8.3	8.3	33.8	33.8	110.2	110.2	7.7	7.7	0.7	1.1	6	6	85	88	818162	806142	<0.2	<0.2	0.4	0.4
						1.0	0.2	163	23.7		8.3		33.8		110.2		7.7		0.7		7		86				<0.2		0.4	
					Middle	3.4	0.2	155	23.7	23.7	8.3	8.3	33.8	33.8	109.0	108.9	7.6		1.1		6		88				<0.2		0.4	
						3.4	0.2	164	23.7		8.3		33.8		108.8		7.6		1.1		6		89				<0.2		0.4	
					Bottom	5.7	0.2	152	23.7	23.7	8.3	8.3	33.9	33.9	107.4	107.4	7.5	7.5	1.5		5		90				<0.2		0.4	
						5.7	0.2	163	23.7		8.3		33.9		107.4		7.5		1.5		5		90				<0.2		0.4	
IM3	Cloudy	Moderate	09:02	6.8	Surface	1.0	0.4	117	23.7	23.7	8.3	8.3	33.8	33.8	108.0	108.0	7.5	7.5	6.6	9.1	10	8	86	89	818804	805572	<0.2	<0.2	0.5	0.5
						1.0	0.5	127	23.7		8.3		33.8		108.0		7.5		6.8		10		86				<0.2		0.5	
					Middle	3.4	0.4	114	23.7	23.7	8.3	8.3	33.8	33.8	107.5	107.5	7.5		8.4		8		89				<0.2		0.5	
						3.4	0.4	116	23.7		8.3		33.8		107.5		7.5		8.5		7		89				<0.2		0.5	
					Bottom	5.8	0.4	112	23.7	23.7	8.3	8.3	33.8	33.8	107.2	107.2	7.5	7.5	12.2		6		90				<0.2		0.5	
						5.8	0.4	119	23.7		8.3		33.8		107.2		7.5		12.2		6		91				<0.2		0.5	
IM4	Cloudy	Moderate	09:15	8.0	Surface	1.0	0.6	186	23.7	23.7	8.3	8.3	33.6	33.6	107.6	107.6	7.5	7.5	3.2	4.1	5	7	86	89	819733	804619	<0.2	<0.2	0.5	0.5
						1.0	0.6	198	23.7		8.3		33.6		107.6		7.5		3.2		4		87				<0.2		0.5	
					Middle	4.0	0.5	183	23.7	23.7	8.3	8.3	33.6	33.6	106.9	106.9	7.5		4.4		7		89				<0.2		0.4	
						4.0	0.6	189	23.7		8.3		33.6		106.9		7.5		4.5		7		90				<0.2		0.4	
					Bottom	7.0	0.5	186	23.7	23.7	8.3	8.3	33.6	33.6	106.4	106.4	7.4	7.4	4.7		10		90				<0.2		0.5	
						7.0	0.5	194	23.7		8.3		33.6		106.4		7.4		4.7		10		91				<0.2		0.5	
IM5	Cloudy	Moderate	09:25	7.6	Surface	1.0	0.7	211	23.6	23.6	8.3	8.3	33.5	33.5	109.9	109.9	7.7	7.7	2.0	2.2	4	5	85	88	820733	804859	<0.2	<0.2	0.6	0.6
						1.0	0.7	230	23.6		8.3		33.5		109.9		7.7		2.1		5		86				<0.2		0.5	
					Middle	3.8	0.6	211	23.6	23.6	8.3	8.3	33.5	33.5	108.9	108.9	7.6		2.1		5		89				<0.2		0.6	
						3.8	0.7	214	23.6		8.3		33.5		108.9		7.6		2.1		5		89				<0.2		0.6	
					Bottom	6.6	0.6	212	23.6	23.6	8.3	8.3	33.5	33.5	107.6	107.6	7.5	7.5	2.3		5		90				<0.2		0.5	
						6.6	0.6	226	23.6		8.3		33.5		107.6		7.5		2.3		6		90				<0.2		0.5	
IM6	Cloudy	Moderate	09:36	6.8	Surface	1.0	0.5	237	23.9	23.9	8.3	8.3	33.3	33.3	113.3	113.3	7.9	7.8	0.5	1.2	6	8	87	89	821065	805816	<0.2	<0.2	0.5	0.6
						1.0	0.5	238	23.9		8.3		33.3		113.3		7.9		0.5		6		87				<0.2		0.6	
					Middle	3.4	0.4	235	23.8	23.8	8.3	8.3	33.5	33.5	108.8	108.8	7.6		1.3		6		89				<0.2		0.6	
						3.4	0.5	244	23.8		8.3		33.5		108.8		7.6		1.3		6		87				<0.2		0.5	
					Bottom	5.8	0.4	246	23.7	23.7	8.3	8.3	33.6	33.6	108.5	108.5	7.6	7.6	1.9		12		92				<0.2		0.6	
						5.8	0.4	249	23.7		8.3		33.6		108.5		7.6		1.9		11		92				<0.2		0.6	
IM7	Cloudy	Moderate	09:46	8.1	Surface	1.0	0.4	233	23.8	23.8	8.3	8.3	33.3	33.3	113.5	113.5	7.9	7.9	0.3	0.9	4	5	88	91	821354	806839	<0.2	<0.2	0.5	0.6
						1.0	0.5	241	23.8		8.3		33.3		113.5		7.9		0.3		5		89				<0.2		0.5	
					Middle	4.1	0.4	252	23.8	23.8	8.3	8.3	33.4	33.4	111.1	111.1	7.8		0.8		5		90				<0.2		0.6	
						4.1	0.4	258	23.8		8.3		33.4		111.1		7.8		0.8		5		91				<0.2		0.5	
					Bottom	7.1	0.3	255	23.8	23.8	8.3	8.3	33.6	33.6	110.2	110.2	7.7	7.7	1.6		5		92				<0.2		0.6	
						7.1	0.3	259	23.8		8.3		33.6		110.2		7.7		1.6		5		93				<0.2		0.6	
IM8	Cloudy	Moderate	08:32	7.9	Surface	1.0	0.9	181	23.9	23.9	8.4	8.3	31.9	31.9	114.9	114.7	8.1	8.0	0.8	1.7	5	5	88	90	821834	808131	<0.2	<0.2	0.6	0.6
						1.0	1.0	192	23.9		8.3		32.0		114.4		8.0		0.8		5		88				<0.2		0.6	
					Middle	4.0	1.2	186	23.8	23.8	8.3	8.3	32.1	32.1	112.0	111.7	7.9		0.9		5		90				<0.2		0.7	
						4.0	1.3	191	23.8		8.3		32.1		111.4		7.8		1.0		5		90				<0.2		0.7	
					Bottom	6.9	1.1	189	23.7	23.7	8.3	8.3	32.5	32.5	109.0	109.0	7.7	7.7	3.2		4		91				<0.2		0.5	
						6.9	1.2	200	23.7		8.3		32.5		108.9		7.7		3.3		4		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 10 November 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	08:26	7.4	Surface	1.0	0.9	184	23.9	23.9	8.3	8.3	32.0	32.0	113.8	113.6	8.0	7.9	0.8	1.6	4	4	86	88	822084	808790	<0.2	<0.2	0.7	0.7
						1.0	0.9	197	23.8		8.3		32.0		113.3		8.0		0.9		4		86				<0.2		0.6	
					Middle	3.7	1.1	184	23.8	23.8	8.3	8.3	32.2	32.2	111.3	111.1	7.8		1.5		4		88				<0.2		0.7	
						3.7	1.2	200	23.8		8.3		32.3		110.9		7.8		1.5		4		88				<0.2		0.7	
					Bottom	6.4	1.0	182	23.7	23.7	8.3	8.3	32.4	32.4	109.3	109.3	7.7	7.7	2.6		5		90				<0.2		0.6	
						6.4	1.1	187	23.7		8.3		32.4		109.3		7.7		2.6		4		90				<0.2		0.6	
IM10	Cloudy	Moderate	08:18	7.5	Surface	1.0	0.7	220	24.0	24.0	8.3	8.3	31.9	31.9	114.8	114.8	8.1	8.0	0.6	1.5	4	4	85	88	822390	809792	<0.2	<0.2	0.6	0.6
						1.0	0.8	233	24.0		8.3		31.9		114.7		8.0		0.5		3		88				<0.2		0.6	
					Middle	3.8	0.8	225	24.0	24.0	8.3	8.3	31.9	31.9	113.5	113.3	8.0		1.0		3		88				<0.2		0.6	
						3.8	0.9	226	24.0		8.3		31.9		113.0		7.9		1.1		4		88				<0.2		0.6	
					Bottom	6.5	0.6	223	23.8	23.8	8.3	8.3	32.2	32.2	110.1	110.0	7.7	7.7	2.7		6		89				<0.2		0.7	
						6.5	0.7	243	23.8		8.3		32.2		109.9		7.7		2.9		6		89				<0.2		0.7	
IM11	Cloudy	Moderate	08:05	7.6	Surface	1.0	0.9	176	24.1	24.1	8.3	8.3	31.8	31.8	113.9	113.9	8.0	8.0	1.3	2.2	7	5	86	89	822049	811438	<0.2	<0.2	0.7	0.7
						1.0	1.0	186	24.1		8.3		31.8		113.8		8.0		1.4		7		87				<0.2		0.7	
					Middle	3.8	1.2	186	24.0	24.0	8.3	8.3	31.8	31.8	113.2	113.1	7.9		2.1		3		89				<0.2		0.7	
						3.8	1.3	198	24.0		8.3		31.9		112.9		7.9		2.0		4		89				<0.2		0.6	
					Bottom	6.6	1.1	184	23.9	23.9	8.3	8.3	31.9	31.9	110.5	110.3	7.8	7.8	3.1		4		90				<0.2		0.6	
						6.6	1.1	189	23.9		8.3		31.9		110.1		7.7		3.0		4		90				<0.2		0.6	
IM12	Cloudy	Moderate	07:57	9.0	Surface	1.0	0.8	157	24.1	24.1	8.3	8.3	31.8	31.8	114.0	113.9	8.0	8.0	1.7	2.5	6	6	86	89	821451	812053	<0.2	<0.2	0.6	0.6
						1.0	0.9	167	24.1		8.3		31.8		113.8		8.0		1.8		7		87				<0.2		0.6	
					Middle	4.5	0.8	165	24.1	24.1	8.3	8.3	31.8	31.8	112.8	112.7	7.9		3.0		6		89				<0.2		0.5	
						4.5	0.8	165	24.0		8.3		31.8		112.6		7.9		2.8		6		90				<0.2		0.6	
					Bottom	8.0	0.8	169	24.0	24.0	8.3	8.3	31.9	31.9	110.8	110.5	7.8	7.8	2.8		6		91				<0.2		0.7	
						8.0	0.8	173	24.0		8.3		31.9		110.2		7.7		2.8		6		91				<0.2		0.6	
SR1A	Cloudy	Calm	07:37	5.2	Surface	1.0	-	-	24.3	24.3	8.3	8.3	31.5	31.6	109.5	109.3	7.7	7.7	1.1	2.0	2	2	-	-	819980	812658	-	-	-	-
						1.0	-	-	24.3		8.3		31.6		109.1		7.6		1.2		2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	24.4	24.4	8.2	8.2	32.2	32.2	99.5	99.6	6.9	6.9	3.0		2		-				-		-	
						4.2	-	-	24.4		8.2		32.2		99.7		6.9		2.7		3		-				-		-	
SR2	Cloudy	Calm	07:23	5.0	Surface	1.0	0.3	76	24.2	24.2	8.3	8.3	31.9	32.0	108.6	108.4	7.6	7.6	1.0	1.4	3	3	85	87	821482	814181	<0.2	<0.2	0.7	0.7
						1.0	0.3	82	24.2		8.3		32.0		108.1		7.5		1.2		2		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	83	24.2	24.2	8.2	8.2	32.2	32.2	103.7	103.8	7.2	7.2	1.7		3		89				<0.2		0.7	
						4.0	0.3	87	24.2		8.2		32.2		103.8		7.2		1.7		3		89				<0.2		0.7	
SR3	Cloudy	Moderate	08:37	9.0	Surface	1.0	1.2	149	23.9	23.9	8.3	8.3	31.8	31.8	117.0	116.9	8.2	8.0	0.6	1.4	5	5	-	-	822141	807558	-	-	-	-
						1.0	1.2	160	23.9		8.3		31.9		116.8		8.2		0.7		5		-				-		-	
					Middle	4.5	1.5	143	23.8	23.8	8.3	8.3	32.2	32.2	109.9	109.7	7.7		1.5		4		-				-		-	
						4.5	1.5	156	23.8		8.3		32.2		109.5		7.7		1.7		5		-				-		-	
					Bottom	8.0	1.7	140	23.7	23.7	8.3	8.3	32.4	32.4	108.3	108.3	7.6	7.6	2.0		5		-				-		-	
						8.0	1.8	153	23.7		8.3		32.4		108.3		7.6		2.0		4		-				-		-	
SR4A	Cloudy	Moderate	07:58	8.6	Surface	1.0	0.1	74	23.8	23.8	8.3	8.3	33.9	33.9	106.9	106.9	7.4	7.4	1.1	1.5	6	5	-	-	817207	807815	-	-	-	-
						1.0	0.1	75	23.8		8.3		33.9		106.9		7.4		1.2		6		-				-		-	
					Middle	4.3	0.1	73	23.8	23.8	8.3	8.3	34.0	34.0	106.1	106.1	7.4		1.7		5		-				-		-	
						4.3	0.1	76	23.8		8.3		34.0		106.1		7.4		1.7		5		-				-		-	
					Bottom	7.6	0.0	114	23.9	23.9	8.3	8.3	34.0	34.0	105.0	105.0	7.3	7.3	1.8		5		-				-		-	
						7.6	0.0	123	23.9		8.3		34.0		105.0		7.3		1.7		5		-				-		-	
SR5A	Cloudy	Moderate	07:40	3.5	Surface	1.0	0.0	276	24.2	24.2	8.3	8.3	33.6	33.6	113.8	113.8	7.9	7.9	2.0	2.2	5	10	-	-	816609	810690	-	-	-	-
						1.0	0.0	287	24.2		8.3		33.6		113.8		7.9		2.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	276	24.1	24.1	8.3	8.3	33.6	33.6	110.2	110.2	7.6	7.6	2.3		15		-				-		-	
						2.5	0.0	292	24.1		8.3		33.6		110.1		7.6		2.3		15		-				-		-	
SR6A	Cloudy	Moderate	07:11	4.3	Surface	1.0	0.1	62	24.5	24.5	8.3	8.3	32.3	32.3	112.8	112.8	7.8	7.8	8.1	9.0	5	6	-	-	817949	814752	-	-	-	-
						1.0	0.1	65	24.5		8.3		32.3		112.7		7.8		8.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	214	24.5	24.5	8.3	8.3	32.6	32.6	111.7	111.7	7.7	7.7	9.8		8		-				-		-	
						3.3	0.0	229	24.5		8.3		32.6		111.6		7.7		9.8		7		-				-		-	
SR7	Fine	Calm	06:19	20.2	Surface	1.0	2.5	324	24.4	24.4	8.2	8.2	32.7	32.7	102.4	102.5	7.1	7.1	0.2	0.6	2	2	-	-	823639	823725	-	-	-	-
						1.0	2.7	334	24.4		8.2		32.7		102.5		7.1		0.2		2		-				-		-	
					Middle	10.1	2.6	324	24.4	24.4	8.2	8.2	32.7	32.7	102.4	102.5	7.1		0.4		3		-				-		-	
						10.1	2.7	347	24.4		8.2		32.7		102.5		7.1		0.4		2		-				-		-	
					Bottom	19.2	2.9	321	24.3	24.3	8.2	8.2	32.8	32.8	102.1	102.1	7.1	7.1	1.1		3		-				-		-	
						19.2	3.1	335	24.3		8.2		32.8		102.1		7.1		1.2		2		-				-		-	
SR8	Cloudy	Calm	07:47	4.9	Surface	1.0	-	-	24.4	24.4	8.3	8.3	31.7	31.7	106.9	107.0	7.5	7.5	2.4	2.3	5	4	-	-	820391	811602	-	-	-	-
						1.0	-	-	24.4		8.3		31.7		107.0		7.5		2.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	24.2	24.2	8.3	8.3	31.8	31.8	105.8	105.8	7.4	7.4	2.2		3		-				-		-	
						3.9	-	-	24.2		8.3		31.8		105.7		7.4		2.3		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 10 November 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	15:25	8.5	Surface	1.0	0.4	31	23.7	23.7	8.3	8.3	34.1	34.1	113.7	113.7	7.9	7.9	5.4	7.1	3	4	87	89	815622	804249	<0.2	<0.2	0.6	0.7
						1.0	0.4	32	23.7		8.3		34.1		113.7		7.9		5.4		3		86				<0.2		0.7	
					Middle	4.3	0.4	28	23.7	23.7	8.3	8.3	34.1	34.1	112.3	112.3	7.8		7.4		3		88				<0.2		0.7	
						4.3	0.4	29	23.7		8.3		34.1		112.3		7.8		7.4		4		89				<0.2		0.8	
					Bottom	7.5	0.4	20	23.7	23.7	8.3	8.3	34.1	34.1	111.2	111.2	7.7	7.7	8.4		4		92				<0.2		0.7	
						7.5	0.4	21	23.7		8.3		34.1		111.2		7.7		8.6		4		92				<0.2		0.6	
C2	Cloudy	Moderate	14:12	11.3	Surface	1.0	3.6	130	24.2	24.2	8.3	8.3	31.3	31.3	118.1	118.0	8.3	8.1	1.1	1.9	4	4	85	88	825705	806957	<0.2	<0.2	0.8	0.8
						1.0	3.9	139	24.2		8.3		31.3		117.9		8.3		1.1		4		85				<0.2		0.7	
					Middle	5.7	3.6	128	24.2	24.2	8.3	8.3	31.5	31.5	112.9	112.9	7.9		1.6		4		89				<0.2		0.8	
						5.7	3.6	136	24.2		8.3		31.5		112.8		7.9		1.7		4		89				<0.2		0.8	
					Bottom	10.3	3.5	128	24.2	24.2	8.3	8.3	31.6	31.6	112.5	112.5	7.9	7.9	3.0		4		90				<0.2		0.9	
						10.3	3.8	128	24.2		8.3		31.6		112.5		7.9		3.2		3		90				<0.2		0.7	
C3	Cloudy	Moderate	16:10	12.0	Surface	1.0	1.9	288	24.3	24.3	8.3	8.3	32.3	32.3	111.6	111.3	7.8	7.5	0.8	4.0	5	5	85	88	822121	817823	<0.2	<0.2	0.6	0.6
						1.0	2.1	293	24.3		8.3		32.3		111.0		7.7		0.8		5		88				<0.2		0.5	
					Middle	6.0	2.1	286	24.3	24.3	8.3	8.3	32.4	32.4	105.0	105.0	7.3		4.3		5		88				<0.2		0.7	
						6.0	2.1	308	24.3		8.3		32.4		104.9		7.3		4.5		4		89				<0.2		0.6	
					Bottom	11.0	2.0	287	24.3	24.3	8.3	8.3	32.4	32.4	105.2	105.3	7.3	7.3	6.7		4		90				<0.2		0.6	
						11.0	2.1	299	24.3		8.3		32.4		105.4		7.3		6.8		4		85				<0.2		0.7	
IM1	Cloudy	Moderate	15:03	4.6	Surface	1.0	0.2	338	24.0	24.0	8.3	8.3	33.7	33.7	124.7	124.7	8.7	8.7	1.7	1.9	7	8	87	88	817948	807155	<0.2	<0.2	0.7	0.6
						1.0	0.2	353	24.0		8.3		33.7		124.7		8.7		1.8		7		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	313	23.9	23.9	8.3	8.3	33.8	33.8	116.3	116.3	8.1	8.1	2.0		9		89				<0.2		0.6	
						3.6	0.1	319	23.9		8.3		33.8		116.3		8.1		2.0		9		90				<0.2		0.6	
IM2	Cloudy	Moderate	14:55	6.7	Surface	1.0	0.2	324	23.9	23.9	8.3	8.3	33.7	33.7	124.0	124.0	8.6	8.4	4.1	5.3	12	10	85	88	818168	806183	<0.2	<0.2	0.7	0.6
						1.0	0.2	332	23.9		8.3		33.7		124.0		8.6		4.1		12		85				<0.2		0.7	
					Middle	3.4	0.2	332	23.8	23.8	8.3	8.3	33.8	33.8	117.6	117.6	8.2		5.9		11		89				<0.2		0.6	
						3.4	0.2	338	23.8		8.3		33.8		117.6		8.2		5.9		10		90				<0.2		0.6	
					Bottom	5.7	0.2	324	23.8	23.8	8.3	8.3	33.8	33.8	115.7	115.7	8.1	8.1	6.0		6		90				<0.2		0.5	
						5.7	0.2	342	23.8		8.3		33.8		115.7		8.1		6.0		6		91				<0.2		0.6	
IM3	Cloudy	Moderate	14:48	7.0	Surface	1.0	0.3	337	23.9	23.9	8.4	8.4	33.5	33.5	129.5	129.4	9.0	8.9	0.9	4.3	11	9	84	88	818799	805610	<0.2	<0.2	0.6	0.6
						1.0	0.3	350	23.9		8.4		33.5		129.2		9.0		1.0		11		86				<0.2		0.6	
					Middle	3.5	0.3	336	23.9	23.9	8.4	8.4	33.5	33.5	125.3	125.2	8.7		2.9		8		88				<0.2		0.5	
						3.5	0.3	344	23.9		8.4		33.5		125.1		8.7		3.0		8		89				<0.2		0.5	
					Bottom	6.0	0.3	335	23.8	23.8	8.3	8.3	33.7	33.7	121.3	121.3	8.5	8.5	9.1		7		91				<0.2		0.5	
						6.0	0.3	308	23.8		8.3		33.7		121.3		8.5		9.1		7		91				<0.2		0.6	
IM4	Cloudy	Moderate	14:39	7.5	Surface	1.0	0.5	345	23.9	23.9	8.4	8.4	33.5	33.5	124.8	124.8	8.7	8.6	1.4	2.6	9	8	86	88	819745	804593	<0.2	<0.2	0.7	0.7
						1.0	0.5	317	23.9		8.4		33.5		124.8		8.7		1.4		9		86				<0.2		0.8	
					Middle	3.8	0.4	343	23.8	23.8	8.3	8.3	33.7	33.7	120.6	120.6	8.4		3.4		8		88				<0.2		0.5	
						3.8	0.4	352	23.8		8.3		33.7		120.6		8.4		3.4		8		89				<0.2		0.7	
					Bottom	6.5	0.3	338	23.8	23.8	8.3	8.3	33.8	33.8	119.6	119.6	8.3	8.3	2.9		6		90				<0.2		0.5	
						6.5	0.3	311	23.8		8.3		33.8		119.6		8.3		2.9		6		90				<0.2		0.7	
IM5	Cloudy	Moderate	14:29	7.1	Surface	1.0	0.6	353	23.9	23.9	8.3	8.3	33.7	33.7	121.7	121.7	8.5	8.5	6.5	6.8	5	8	85	88	820724	804863	<0.2	<0.2	0.6	0.6
						1.0	0.6	325	23.9		8.3		33.7		121.7		8.5		6.5		6		85				<0.2		0.5	
					Middle	3.6	0.5	356	23.9	23.9	8.3	8.3	33.7	33.7	120.4	120.4	8.4		6.5		8		89				<0.2		0.6	
						3.6	0.5	328	23.9		8.3		33.7		120.4		8.4		6.5		8		89				<0.2		0.5	
					Bottom	6.1	0.4	1	23.9	23.9	8.3	8.3	33.7	33.7	118.3	118.3	8.2	8.2	7.4		11		90				<0.2		0.6	
						6.1	0.4	1	23.9		8.3		33.7		118.3		8.2		7.4		11		90				<0.2		0.8	
IM6	Cloudy	Moderate	14:20	6.9	Surface	1.0	0.1	337	24.2	24.2	8.3	8.3	33.2	33.2	124.1	124.1	8.6	8.6	1.0	0.8	4	7	85	88	821059	805846	<0.2	<0.2	0.6	0.7
						1.0	0.1	358	24.2		8.3		33.2		124.1		8.6		1.0		4		86				<0.2		0.5	
					Middle	3.5	0.1	325	24.2	24.2	8.3	8.3	33.2	33.2	121.8	121.9	8.5		0.7		6		88				<0.2		0.8	
						3.5	0.1	328	24.2		8.3		33.2		121.9		8.5		0.8		6		88				<0.2		0.7	
					Bottom	5.9	0.1	334	24.2	24.2	8.3	8.3	33.2	33.2	119.0	119.0	8.3	8.3	0.7		10		89				<0.2		0.7	
						5.9	0.1	343	24.2		8.3		33.2		119.0		8.3		0.7		10		89				<0.2		0.8	
IM7	Cloudy	Moderate	14:12	8.0	Surface	1.0	0.2	240	24.4	24.4	8.3	8.3	32.9	32.9	124.2	124.2	8.6	8.5	1.2	2.2	2	5	86	89	821360	806821	<0.2	<0.2	0.4	0.5
						1.0	0.2	253	24.4		8.3		32.9		124.2		8.6		1.2		2		87				<0.2		0.6	
					Middle	4.0	0.2	257	24.3	24.3	8.3	8.3	33.0	33.0	121.8	121.8	8.4		2.0		6		89				<0.2		0.6	
						4.0	0.2	276	24.3		8.3		33.0		121.8		8.4		2.0		6		89				<0.2		0.5	
					Bottom	7.0	0.1	279	24.3	24.3	8.3	8.3	33.1	33.1	120.8	120.8	8.4	8.4	3.3		6		91				<0.2		0.5	
						7.0	0.2	301	24.3		8.3		33.1		120.8		8.4		3.3		6		91				<0.2		0.6	
IM8	Cloudy	Moderate	14:35	7.4	Surface	1.0	2.5	282	24.1	24.1	8.4	8.4	32.0	32.0	129.2	128.9	9.0	8.9	1.6	2.6	4	5	86	88	821848	808134	<0.2	<0.2	0.8	0.7
						1.0	2.7	287	24.1		8.4		32.0		128.6		9.0		1.7		4		89				<0.2		0.7	
					Middle	3.7	2.5	281	24.1	24.1	8.4	8.4	32.0	32.0	126.1	125.9	8.8		2.9		5		89				<0.2		0.6	
						3.7	2.6	307	24.0		8.4		32.0		125.6		8.8		3.0		4		90				<0.2		0.6	
					Bottom	6.4	2.6	281	24.0	24.0	8.4	8.4	32.0	32.0	124.3	124.2	8.7	8.7	3.4		7		90				<0.2		0.6	
						6.4	2.7	307	24.0		8.4		32.0		124.0		8.7		3.3		7		85				<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 10 November 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	14:44	6.6	Surface	1.0	2.2	285	24.0	24.0	8.4	8.4	31.9	31.9	127.2	127.1	8.9	8.9	1.5	2.2	5	6	85	88	822089	808796	<0.2	<0.2	0.8	0.7
						1.0	2.4	293	24.0		8.4		31.9		127.0		8.9		1.6		5		88				<0.2		0.6	
					Middle	3.3	2.2	283	24.0	24.0	8.4	8.4	31.9	31.9	126.0	125.8	8.8		1.8		6		89				<0.2		0.6	
						3.3	2.4	285	24.0		8.4		31.9		125.6		8.8		2.0		6		89				<0.2		0.6	
					Bottom	5.6	2.6	281	24.0	24.0	8.4	8.4	32.0	32.0	123.9	123.9	8.7	8.7	3.1		6		90				<0.2		0.7	
						5.6	2.9	308	24.0		8.4		32.0		123.8		8.7		3.2		7		85				<0.2		0.6	
IM10	Cloudy	Moderate	14:51	7.8	Surface	1.0	2.9	309	24.0	24.0	8.4	8.4	32.0	32.0	131.0	130.8	9.2	9.1	1.6	2.5	8	8	86	89	822388	809793	<0.2	<0.2	0.6	0.6
						1.0	3.1	327	24.0		8.4		32.0		130.6		9.2		1.7		9		86				<0.2		0.7	
					Middle	3.9	2.8	310	24.0	24.0	8.4	8.4	32.0	32.0	129.0	128.9	9.1		2.5		8		90				<0.2		0.6	
						3.9	2.9	327	24.0		8.4		32.0		128.7		9.0		2.6		8		90				<0.2		0.7	
					Bottom	6.8	2.3	309	23.9	24.0	8.4	8.4	32.0	32.0	127.2	127.1	8.9	8.9	3.2		6		91				<0.2		0.6	
						6.8	2.3	309	24.0		8.4		32.0		127.0		8.9		3.1		6		92				<0.2		0.6	
IM11	Cloudy	Moderate	15:04	7.0	Surface	1.0	0.9	66	24.2	24.2	8.4	8.4	31.8	31.8	126.7	126.6	8.8	8.8	1.5	2.7	5	6	87	89	822055	811449	<0.2	<0.2	0.6	0.7
						1.0	0.9	71	24.2		8.4		31.8		126.5		8.9		1.6		5		87				<0.2		0.5	
					Middle	3.5	0.7	71	24.2	24.2	8.4	8.4	31.8	31.8	124.6	124.5	8.7		3.2		5		89				<0.2		0.6	
						3.5	0.8	72	24.2		8.4		31.8		124.3		8.7		3.5		5		90				<0.2		0.7	
					Bottom	6.0	1.1	98	24.1	24.1	8.4	8.4	31.8	31.8	123.8	123.7	8.7	8.7	3.5		7		91				<0.2		0.8	
						6.0	1.2	99	24.1		8.4		31.8		123.6		8.7		3.1		7		91				<0.2		0.8	
IM12	Cloudy	Moderate	15:11	9.0	Surface	1.0	1.8	301	24.2	24.2	8.4	8.4	31.8	31.8	125.4	125.4	8.8	8.8	2.6	4.2	7	8	85	89	821455	812053	<0.2	<0.2	0.6	0.6
						1.0	1.9	324	24.2		8.4		31.8		125.3		8.8		2.6		7		86				<0.2		0.8	
					Middle	4.5	1.8	296	24.2	24.2	8.4	8.4	31.8	31.8	124.4	124.3	8.7		4.1		8		89				<0.2		0.5	
						4.5	2.0	314	24.2		8.4		31.8		124.2		8.7		4.2		8		90				<0.2		0.7	
					Bottom	8.0	2.7	297	24.2	24.2	8.4	8.4	31.8	31.8	123.5	123.5	8.6	8.6	5.8		9		92				<0.2		0.6	
						8.0	2.9	320	24.2		8.4		31.8		123.4		8.6		5.9		9		93				<0.2		0.6	
SR1A	Cloudy	Calm	15:30	5.0	Surface	1.0	-	-	24.4	24.4	8.4	8.4	31.5	31.5	122.7	122.6	8.6	8.6	3.1	3.4	7	8	-	-	819980	812657	-	-	-	-
						1.0	-	-	24.4		8.4		31.5		122.5		8.5		3.2		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.4	24.4	8.4	8.4	31.6	31.6	121.1	121.2	8.5	8.5	3.8		8		-				-		-	
						4.0	-	-	24.4		8.4		31.6		121.2		8.5		3.7		8		-				-		-	
SR2	Cloudy	Calm	15:43	3.8	Surface	1.0	0.2	48	24.3	24.3	8.3	8.3	32.0	32.0	124.7	124.6	8.7	8.7	2.1	2.4	9	9	86	88	821453	814147	<0.2	<0.2	0.6	0.7
						1.0	0.2	51	24.3		8.3		32.0		124.4		8.7		2.3		9		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	46	24.2	24.2	8.3	8.3	32.0	32.1	123.8	123.7	8.7	8.7	2.6		8		89				<0.2		0.7	
						2.8	0.2	47	24.1		8.3		32.1		123.6		8.7		2.6		8		89				<0.2		0.6	
SR3	Cloudy	Moderate	14:30	8.9	Surface	1.0	2.1	282	24.5	24.5	8.4	8.4	31.7	31.7	129.4	129.3	9.0	8.9	0.5	0.9	8	7	-	-	822168	807565	-	-	-	-
						1.0	2.2	309	24.5		8.4		31.7		129.1		9.0		0.6		8		-				-		-	
					Middle	4.5	2.3	281	24.4	24.4	8.4	8.4	31.8	31.8	127.3	127.1	8.9		0.9		7		-				-		-	
						4.5	2.5	299	24.4		8.4		31.8		126.8		8.8		1.0		7		-				-		-	
					Bottom	7.9	2.6	280	24.3	24.3	8.3	8.3	31.9	31.9	119.9	120.0	8.4	8.4	1.3		5		-				-		-	
						7.9	2.7	307	24.3		8.3		31.9		120.0		8.4		1.2		5		-				-		-	
SR4A	Cloudy	Moderate	15:46	8.9	Surface	1.0	0.1	211	24.2	24.2	8.4	8.4	33.2	33.2	130.2	130.2	9.0	9.0	2.5	2.7	6	8	-	-	817212	807822	-	-	-	-
						1.0	0.1	225	24.2		8.4		33.2		130.2		9.0		2.5		6		-				-		-	
					Middle	4.5	0.0	206	24.2	24.2	8.4	8.4	33.3	33.3	128.7	128.7	8.9		2.8		8		-				-		-	
						4.5	0.0	216	24.2		8.4		33.3		128.7		8.9		2.8		9		-				-		-	
					Bottom	7.9	0.0	29	24.1	24.1	8.4	8.4	33.3	33.3	125.0	125.0	8.7	8.7	2.7		10		-				-		-	
						7.9	0.0	30	24.1		8.4		33.3		125.0		8.7		2.7		10		-				-		-	
SR5A	Cloudy	Moderate	16:03	4.1	Surface	1.0	0.0	264	24.4	24.4	8.4	8.4	32.9	32.9	132.0	132.0	9.1	9.2	1.9	2.2	9	6	-	-	816587	810680	-	-	-	-
						1.0	0.0	278	24.4		8.4		32.9		132.0		9.2		1.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	244	24.4	24.4	8.4	8.4	32.9	32.9	127.1	127.0	8.8	8.8	2.5		3		-				-		-	
						3.1	0.0	246	24.4		8.4		32.9		126.8		8.8		2.5		5		-				-		-	
SR6A	Cloudy	Moderate	16:32	4.8	Surface	1.0	0.1	143	24.4	24.4	8.4	8.4	32.9	32.9	123.9	123.9	8.6	8.6	11.7	12.0	5	6	-	-	817985	814730	-	-	-	-
						1.0	0.1	143	24.4		8.4		32.9		123.8		8.6		11.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	119	24.4	24.4	8.4	8.4	32.9	32.9	122.5	122.5	8.5	8.5	12.3		7		-				-		-	
						3.8	0.0	119	24.4		8.4		32.9		122.5		8.5		12.3		7		-				-		-	
SR7	Cloudy	Moderate	16:50	18.8	Surface	1.0	1.4	257	24.3	24.3	8.3	8.3	32.4	32.4	106.1	106.0	7.4	7.3	0.6	1.2	6	5	-	-	823625	823747	-	-	-	-
						1.0	1.4	281	24.3		8.3		32.4		105.8		7.4		0.6		6		-				-		-	
					Middle	9.4	1.4	256	24.3	24.3	8.3	8.3	32.5	32.5	103.7	103.7	7.2		1.4		5		-				-		-	
						9.4	1.5	264	24.3		8.3		32.5		103.7		7.2		1.3		5		-				-		-	
					Bottom	17.8	1.5	258	24.3	24.3	8.2	8.2	32.5	32.5	104.3	104.4	7.3	7.3	1.6		4		-				-		-	
						17.8	1.6	269	24.3		8.2		32.5		104.5		7.3		1.5		4		-				-		-	
SR8	Cloudy	Calm	15:21	4.6	Surface	1.0	-	-	24.3	24.3	8.4	8.4	31.8	31.8	127.1	126.8	8.9	8.9	1.4	1.5	10	11	-	-	820412	811623	-	-	-	-
						1.0	-	-	24.3		8.4		31.8		126.5		8.8		1.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	24.2	24.2	8.4	8.4	31.8	31.8	124.7	124.5	8.7	8.7	1.5		12		-				-		-	
						3.6	-	-	24.2		8.4		31.8		124.3		8.7		1.5		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 12 November 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	10:10	8.9	Surface	1.0	0.4	209	23.5	23.5	8.3	8.3	33.5	33.5	108.9	108.9	7.6	7.6	3.8	6.0	6	6	89	91	815604	804257	<0.2	<0.2	0.7	0.6
						1.0	0.4	220	23.5		8.3		33.5		108.8		7.6		3.9		6		88				<0.2		0.7	
					Middle	4.5	0.3	212	23.5	23.5	8.0	8.0	33.5	33.5	108.2	108.2	7.6		6.5		6		91				<0.2		0.5	
						4.5	0.4	230	23.5		8.0		33.5		108.1		7.6		6.6		6		91				<0.2		0.7	
					Bottom	7.9	0.3	218	23.5	23.5	8.0	8.0	33.5	33.5	107.6	107.6	7.5	7.5	7.8		6		93				<0.2		0.5	
						7.9	0.4	231	23.5		8.0		33.5		107.5		7.5		7.5		6		93				<0.2		0.7	
C2	Cloudy	Moderate	11:39	11.4	Surface	1.0	2.6	302	24.0	24.0	8.3	8.3	31.7	31.7	127.2	127.0	8.9	8.4	0.8	9.7	3	3	88	91	825693	806926	<0.2	<0.2	0.5	0.6
						1.0	2.8	325	24.0		8.3		31.7		126.8		8.9		0.8		3		89				<0.2		0.6	
					Middle	5.7	3.3	310	23.9	23.9	8.2	8.2	32.1	32.1	112.6	112.6	7.9		8.9		3		91				<0.2		0.6	
						5.7	3.5	339	23.9		8.2		32.1		112.5		7.9		9.9		3		92				<0.2		0.7	
					Bottom	10.4	3.2	311	23.9	23.9	8.2	8.2	32.1	32.1	111.5	111.5	7.8	7.8	18.8		3		94				<0.2		0.7	
						10.4	3.4	324	23.9		8.2		32.1		111.5		7.8		19.1		3		94				<0.2		0.6	
C3	Cloudy	Moderate	09:18	12.1	Surface	1.0	3.3	144	24.1	24.1	8.2	8.2	32.5	32.5	103.2	103.2	7.2	7.2	0.9	1.2	4	4	88	92	822132	817795	<0.2	<0.2	0.5	0.6
						1.0	3.5	150	24.1		8.2		32.5		103.1		7.2		0.9		3		89				<0.2		0.6	
					Middle	6.1	3.4	144	24.1	24.1	8.2	8.2	32.6	32.6	102.7	102.7	7.2		1.1		4		93				<0.2		0.6	
						6.1	3.7	151	24.1		8.2		32.6		102.6		7.2		1.1		3		93				<0.2		0.6	
					Bottom	11.1	3.4	145	24.1	24.1	8.2	8.2	32.6	32.6	103.0	103.1	7.2	7.2	1.8		4		94				<0.2		0.6	
						11.1	3.4	154	24.1		8.2		32.6		103.2		7.2		1.6		3		94				<0.2		0.5	
IM1	Fine	Moderate	10:34	5.1	Surface	1.0	0.1	180	23.5	23.5	8.3	8.3	33.4	33.4	125.2	125.1	8.8	8.8	3.6	5.5	2	4	89	91	817961	807117	<0.2	<0.2	0.4	0.5
						1.0	0.1	180	23.5		8.3		33.4		125.0		8.8		3.7		3		89				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	194	23.4	23.4	8.3	8.3	33.4	33.4	119.9	119.9	8.4	8.4	7.2		6		92				<0.2		0.4	
						4.1	0.2	195	23.4		8.3		33.4		119.8		8.4		7.3		6		92				<0.2		0.5	
IM2	Fine	Moderate	10:42	6.9	Surface	1.0	0.2	163	23.4	23.4	8.3	8.3	33.3	33.3	122.0	121.9	8.6	8.5	1.8	3.3	5	5	88	91	818156	806184	<0.2	<0.2	0.5	0.5
						1.0	0.3	168	23.4		8.3		33.3		121.8		8.6		1.8		5		88				<0.2		0.6	
					Middle	3.5	0.2	158	23.4	23.4	8.2	8.2	33.3	33.3	118.4	118.3	8.3		3.0		4		91				<0.2		0.5	
						3.5	0.2	172	23.4		8.2		33.3		118.1		8.3		3.0		4		90				<0.2		0.5	
					Bottom	5.9	0.2	165	23.4	23.4	8.2	8.2	33.4	33.4	114.0	114.1	8.0	8.0	5.0		5		93				<0.2		0.6	
						5.9	0.2	181	23.4		8.2		33.4		114.2		8.0		5.1		6		93				<0.2		0.5	
IM3	Fine	Moderate	10:51	7.0	Surface	1.0	0.5	125	23.5	23.5	8.2	8.2	33.1	33.1	121.7	121.6	8.6	8.5	6.2	9.6	11	11	88	90	818796	805594	<0.2	<0.2	0.6	0.5
						1.0	0.5	129	23.5		8.2		33.1		121.4		8.5		6.7		12		87				<0.2		0.5	
					Middle	3.5	0.4	122	23.5	23.5	8.2	8.2	33.1	33.1	120.6	120.5	8.5		9.7		11		90				<0.2		0.5	
						3.5	0.4	127	23.5		8.2		33.1		120.4		8.5		9.8		12		90				<0.2		0.5	
					Bottom	6.0	0.5	124	23.5	23.5	8.2	8.2	33.1	33.1	118.6	118.6	8.3	8.3	12.6		8		92				<0.2		0.5	
						6.0	0.5	134	23.5		8.2		33.1		118.6		8.3		12.6		9		92				<0.2		0.6	
IM4	Fine	Moderate	11:04	7.8	Surface	1.0	0.8	189	23.3	23.3	8.2	8.2	33.1	33.1	115.8	115.9	8.2	8.2	5.6	6.9	10	9	87	90	819724	804595	<0.2	<0.2	0.4	0.5
						1.0	0.9	197	23.3		8.2		33.1		115.9		8.2		5.6		11		87				<0.2		0.5	
					Middle	3.9	0.8	188	23.3	23.3	8.2	8.2	33.1	33.1	115.4	115.4	8.1		7.2		9		89				<0.2		0.5	
						3.9	0.8	203	23.3		8.2		33.1		115.4		8.1		7.2		8		90				<0.2		0.6	
					Bottom	6.8	0.7	187	23.3	23.3	8.1	8.1	33.1	33.1	114.5	114.5	8.1	8.1	7.9		9		92				<0.2		0.6	
						6.8	0.7	194	23.3		8.1		33.1		114.5		8.1		7.8		8		92				<0.2		0.5	
IM5	Fine	Moderate	11:15	7.4	Surface	1.0	0.8	207	23.3	23.3	8.1	8.1	33.0	33.0	115.0	115.0	8.1	8.1	3.4	5.1	7	7	87	89	820712	804884	<0.2	<0.2	0.6	0.5
						1.0	0.8	215	23.3		8.1		33.0		115.0		8.1		3.4		7		87				<0.2		0.5	
					Middle	3.7	0.7	208	23.3	23.3	8.2	8.2	33.0	33.0	114.3	114.3	8.1		5.2		6		90				<0.2		0.5	
						3.7	0.7	224	23.3		8.2		33.0		114.2		8.1		5.4		7		89				<0.2		0.5	
					Bottom	6.4	0.7	206	23.3	23.3	8.2	8.2	33.0	33.0	112.6	112.7	8.0	8.0	6.4		8		92				<0.2		0.6	
						6.4	0.7	219	23.3		8.2		33.0		112.7		8.0		6.5		9		91				<0.2		0.5	
IM6	Fine	Moderate	11:25	6.9	Surface	1.0	0.6	229	23.4	23.4	8.1	8.1	33.1	33.1	119.5	119.5	8.4	8.4	2.0	2.7	4	5	87	90	821062	805812	<0.2	<0.2	0.6	0.6
						1.0	0.6	246	23.4		8.1		33.1		119.5		8.4		2.1		5		87				<0.2		0.6	
					Middle	3.5	0.5	237	23.4	23.4	8.1	8.1	33.2	33.2	118.7	118.7	8.4		3.2		4		90				<0.2		0.5	
						3.5	0.5	250	23.4		8.1		33.2		118.7		8.4		3.1		5		90				<0.2		0.6	
					Bottom	5.9	0.5	239	23.4	23.4	8.1	8.1	33.2	33.2	115.6	115.6	8.1	8.1	2.7		6		91				<0.2		0.6	
						5.9	0.5	256	23.4		8.1		33.2		115.5		8.1		2.8		7		92				<0.2		0.6	
IM7	Fine	Moderate	11:35	8.2	Surface	1.0	0.4	237	23.8	23.8	8.2	8.2	32.8	32.8	123.7	123.6	8.7	8.6	1.3	2.3	5	5	86	89	821361	806830	<0.2	<0.2	0.5	0.6
						1.0	0.4	258	23.8		8.2		32.8		123.5		8.7		1.3		4		87				<0.2		0.6	
					Middle	4.1	0.3	243	23.5	23.5	8.2	8.2	33.0	33.0	119.2	119.3	8.4		3.8		5		89				<0.2		0.5	
						4.1	0.4	262	23.5		8.2		33.0		119.3		8.4		3.9		4		89				<0.2		0.5	
					Bottom	7.2	0.2	250	23.4	23.4	8.2	8.2	33.2	33.2	117.5	117.5	8.3	8.3	1.6		6		92				<0.2		0.7	
						7.2	0.3	255	23.4		8.2		33.2		117.5		8.3		1.6		7		91				<0.2		0.7	
IM8	Cloudy	Moderate	11:04	7.5	Surface	1.0	2.5	175	23.7	23.7	8.3	8.3	32.2	32.2	123.4	123.4	8.7	8.7	1.1	2.1	6	4	88	92	821813	808156	<0.2	<0.2	0.7	0.7
						1.0	2.6	181	23.7		8.3		32.2		123.4		8.7		1.1		5		89				<0.2		0.5	
					Middle	3.8	2.4	172	23.6	23.6	8.3	8.3	32.2	32.2	122.5	122.3	8.6		1.2		4		93				<0.2		0.6	
						3.8	2.6	179	23.6		8.3		32.2		122.1		8.6		1.4		4		92				<0.2		0.6	
					Bottom	6.5	2.5	176	23.5	23.5	8.3	8.3	32.3	32.3	118.9	118.8	8.4	8.4	3.7		3		94				<0.2		0.8	
						6.5	2.6	189	23.5		8.3		32.3		118.6		8.4		3.8		4		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 November 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	10:57	7.2	Surface	1.0	2.8	191	23.8	23.8	8.3	8.3	32.1	32.1	124.5	124.5	8.8	8.8	1.0	2.0	4	4	88	92	822075	808820	<0.2	<0.2	0.7	0.6
						1.0	2.9	202	23.8		8.3		32.1		124.4		8.8		1.0		3		88				<0.2		0.6	
					Middle	3.6	3.1	191	23.7	23.7	8.3	8.3	32.2	32.2	123.5	123.4	8.7		1.0		3		92				<0.2		0.5	
						3.6	3.3	199	23.7		8.3		32.2		123.2		8.7		1.0		4		92				<0.2		0.6	
					Bottom	6.2	2.8	191	23.5	23.5	8.3	8.3	32.4	32.4	117.9	117.8	8.3	8.3	4.2		4		94				<0.2		0.7	
						6.2	3.0	204	23.5		8.3		32.4		117.7		8.3		3.9		5		95				<0.2		0.6	
IM10	Cloudy	Moderate	10:48	7.6	Surface	1.0	2.9	179	23.7	23.7	8.3	8.3	32.2	32.2	121.8	121.6	8.6	8.5	1.7	3.6	6	5	88	91	822391	809817	<0.2	<0.2	0.6	0.6
						1.0	3.0	185	23.7		8.3		32.2		121.4		8.6		1.8		7		89				<0.2		0.7	
					Middle	3.8	2.9	178	23.6	23.6	8.3	8.3	32.2	32.2	119.4	119.3	8.4		4.1		5		91				<0.2		0.6	
						3.8	3.2	186	23.6		8.3		32.2		119.2		8.4		4.3		4		92				<0.2		0.6	
					Bottom	6.6	2.9	183	23.6	23.6	8.3	8.3	32.3	32.3	118.1	117.9	8.3	8.3	4.7		4		94				<0.2		0.6	
						6.6	3.0	200	23.6		8.3		32.3		117.7		8.3		5.0		4		94				<0.2		0.6	
IM11	Cloudy	Moderate	10:32	7.0	Surface	1.0	2.9	181	23.8	23.8	8.3	8.3	32.1	32.1	118.6	118.5	8.3	8.3	3.5	6.9	7	7	89	92	822034	811470	<0.2	<0.2	0.8	0.7
						1.0	3.0	182	23.8		8.3		32.1		118.4		8.3		3.9		7		90				<0.2		0.8	
					Middle	3.5	3.0	181	23.8	23.8	8.3	8.3	32.1	32.1	117.1	117.0	8.2		7.3		8		93				<0.2		0.7	
						3.5	3.2	195	23.8		8.3		32.1		116.8		8.2		7.7		7		93				<0.2		0.6	
					Bottom	6.0	3.1	181	23.8	23.8	8.3	8.3	32.1	32.1	114.9	114.8	8.1	8.1	9.7		7		94				<0.2		0.6	
						6.0	3.2	181	23.7		8.3		32.2		114.7		8.1		9.4		8		93				<0.2		0.7	
IM12	Cloudy	Moderate	10:23	9.1	Surface	1.0	2.8	164	23.7	23.7	8.3	8.3	32.1	32.1	116.7	116.6	8.2	8.2	3.6	6.2	5	7	89	92	821477	812067	<0.2	<0.2	0.6	0.6
						1.0	3.0	173	23.7		8.3		32.1		116.5		8.2		3.8		6		89				<0.2		0.6	
					Middle	4.6	2.9	164	23.7	23.7	8.3	8.3	32.1	32.1	115.6	115.5	8.1		6.7		6		92				<0.2		0.6	
						4.6	3.0	172	23.7		8.3		32.1		115.4		8.1		7.2		7		93				<0.2		0.6	
					Bottom	8.1	3.1	160	23.7	23.7	8.3	8.3	32.1	32.1	113.7	113.6	8.0	8.0	8.0		7		93				<0.2		0.6	
						8.1	3.3	162	23.7		8.3		32.1		113.5		8.0		7.8		8		94				<0.2		0.6	
SR1A	Cloudy	Calm	10:01	5.0	Surface	1.0	-	-	23.9	23.9	8.3	8.3	32.0	32.0	112.2	112.1	7.9	7.9	1.4	1.6	3	4	-	-	819970	812664	-	-	-	-
						1.0	-	-	23.9		8.3		32.0		112.0		7.9		1.5		3		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	23.9	23.9	8.2	8.2	32.1	32.1	110.9	110.8	7.8	7.8	1.7		4		-				-		-	
						4.0	-	-	23.9		8.2		32.1		110.7		7.8		1.7		4		-				-		-	
SR2	Cloudy	Moderate	09:46	5.2	Surface	1.0	0.3	117	24.0	24.0	8.2	8.2	32.3	32.3	107.8	107.7	7.6	7.6	1.2	1.3	3	3	92	93	821443	814149	0.2	0.2	0.6	0.6
						1.0	0.3	125	24.0		8.2		32.3		107.6		7.5		1.3		3		92				0.3		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	118	23.8	23.8	8.2	8.2	32.4	32.4	107.3	107.3	7.5	7.5	1.4		4		94				<0.2		0.6	
						4.2	0.3	123	23.8		8.2		32.5		107.3		7.5		1.4		3		94				<0.2		0.6	
SR3	Cloudy	Moderate	11:10	8.8	Surface	1.0	3.0	252	23.6	23.6	8.3	8.3	32.2	32.2	124.1	124.0	8.8	8.5	1.3	3.2	3	4	-	-	822166	807567	-	-	-	-
						1.0	3.1	270	23.6		8.3		32.2		123.9		8.7		1.4		4		-				-		-	
					Middle	4.4	3.0	256	23.4	23.4	8.3	8.3	32.4	32.4	115.3	115.3	8.2		3.9		4		-				-		-	
						4.4	3.1	277	23.4		8.3		32.4		115.3		8.1		4.0		3		-				-		-	
					Bottom	7.8	3.0	256	23.4	23.4	8.3	8.3	32.4	32.4	114.7	114.7	8.1	8.1	4.5		4		-				-		-	
						7.8	3.1	256	23.4		8.3		32.4		114.7		8.1		4.5		3		-				-		-	
SR4A	Fine	Calm	09:48	9.7	Surface	1.0	0.2	67	23.4	23.4	8.0	8.0	33.4	33.4	110.4	110.5	7.8	7.8	3.5	4.9	5	6	-	-	817202	807794	-	-	-	-
						1.0	0.2	67	23.4		8.0		33.4		110.5		7.8		3.6		6		-				-		-	
					Middle	4.9	0.2	66	23.4	23.4	8.2	8.2	33.4	33.4	110.2	110.2	7.7		4.0		7		-				-		-	
						4.9	0.2	67	23.4		8.2		33.4		110.2		7.7		4.1		7		-				-		-	
					Bottom	8.7	0.2	68	23.4	23.4	8.1	8.1	33.4	33.4	109.3	109.4	7.7	7.7	7.2		6		-				-		-	
						8.7	0.2	72	23.4		8.1		33.4		109.4		7.7		7.0		7		-				-		-	
SR5A	Fine	Calm	09:28	3.5	Surface	1.0	0.1	338	23.7	23.7	8.0	8.0	33.0	33.0	120.1	120.1	8.4	8.4	4.8	4.4	7	7	-	-	816612	810691	-	-	-	-
						1.0	0.1	311	23.7		8.1		33.0		120.0		8.4		4.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	330	23.6	23.6	8.2	8.2	33.0	33.0	117.3	117.3	8.2	8.2	3.9		7		-				-		-	
						2.5	0.1	350	23.6		8.2		33.0		117.2		8.2		3.9		7		-				-		-	
SR6A	Fine	Calm	08:59	4.4	Surface	1.0	0.0	147	23.9	23.9	8.2	8.2	32.8	32.8	111.0	111.0	7.8	7.8	3.4	2.9	5	6	-	-	817943	814742	-	-	-	-
						1.0	0.0	148	23.9		8.2		32.8		111.0		7.8		3.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	71	23.9	23.9	8.1	8.1	32.9	32.9	109.3	109.3	7.6	7.6	2.4		6		-				-		-	
						3.4	0.0	76	23.9		8.1		32.9		109.3		7.6		2.4		6		-				-		-	
SR7	Cloudy	Moderate	08:42	15.9	Surface	1.0	3.2	111	24.1	24.1	8.2	8.2	32.6	32.6	100.2	100.2	7.0	7.0	1.1	1.2	2	3	-	-	823647	823756	-	-	-	-
						1.0	3.4	116	24.1		8.2		32.6		100.2		7.0		1.2		3		-				-		-	
					Middle	8.0	3.4	110	24.1	24.1	8.1	8.1	32.6	32.6	100.3	100.3	7.0		1.2		3		-				-		-	
						8.0	3.6	114	24.1		8.1		32.6		100.3		7.0		1.1		3		-				-		-	
					Bottom	14.9	3.0	113	24.1	24.1	8.1	8.1	32.6	32.6	100.2	100.4	7.0	7.0	1.2		3		-				-		-	
						14.9	3.1	118	24.1		8.1		32.7		100.5		7.0		1.2		3		-				-		-	
SR8	Cloudy	Moderate	10:13	5.3	Surface	1.0	-	-	23.9	23.9	8.3	8.3	32.1	32.1	113.4	113.3	8.0	8.0	2.0	2.0	3	4	-	-	820381	811646	-	-	-	-
						1.0	-	-	23.9		8.3		32.1		113.1		7.9		2.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	23.9	23.9	8.2	8.2	32.1	32.1	112.2	112.1	7.9	7.9	2.1		3		-				-		-	
						4.3	-	-	23.9		8.2		32.1		111.9		7.9		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 12 November 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	16:29	8.4	Surface	1.0	0.4	36	23.6	23.6	8.1	8.1	33.1	33.1	120.9	120.9	8.5	8.5	8.4	12.0	7	6	89	91	815634	804248	<0.2	<0.2	0.5	0.6
						1.0	0.4	37	23.6		8.1		33.1		120.9		8.5		8.2		8		89				<0.2		0.6	
					Middle	4.2	0.5	34	23.7	23.7	8.1	8.1	33.3	33.3	120.4	120.5	8.4		11.9		7		91				<0.2		0.6	
						4.2	0.5	34	23.7		8.1		33.3		120.5		8.4		12.1		6		91				<0.2		0.5	
					Bottom	7.4	0.5	30	23.7	23.7	8.1	8.1	33.3	33.3	117.7	117.6	8.2	8.2	15.7		5		93				<0.2		0.5	
						7.4	0.5	31	23.7		8.1		33.3		117.4		8.2		15.9		5		94				<0.2		0.6	
C2	Cloudy	Moderate	15:15	11.8	Surface	1.0	4.0	246	24.2	24.2	8.3	8.3	30.5	30.5	130.9	130.7	9.2	8.8	0.7	2.4	4	4	89	92	825666	806962	<0.2	<0.2	0.9	0.8
						1.0	4.0	253	24.2		8.3		30.5		130.5		9.2		0.7		3		89				<0.2		0.7	
					Middle	5.9	3.7	245	24.0	24.0	8.3	8.3	31.4	31.4	118.3	118.2	8.3		1.6		4		92				<0.2		0.8	
						5.9	3.7	249	24.0		8.3		31.4		118.1		8.3		1.8		3		93				<0.2		0.8	
					Bottom	10.8	3.8	247	24.0	24.0	8.3	8.3	31.5	31.5	116.9	116.9	8.2	8.2	4.7		5		94				<0.2		0.8	
						10.8	4.1	267	24.0		8.3		31.5		116.9		8.2		5.0		4		94				<0.2		0.9	
C3	Cloudy	Moderate	17:17	12.5	Surface	1.0	2.5	288	24.2	24.2	8.2	8.2	32.5	32.5	105.3	105.3	7.3	7.3	2.0	5.0	8	7	89	92	822126	817813	<0.2	<0.2	0.8	0.7
						1.0	2.5	297	24.2		8.2		32.5		105.2		7.3		2.1		9		89				<0.2		0.8	
					Middle	6.3	2.6	290	24.2	24.2	8.2	8.2	32.5	32.5	104.8	104.8	7.3		4.4		9		92				<0.2		0.7	
						6.3	2.8	310	24.2		8.2		32.5		104.8		7.3		4.6		8		93				<0.2		0.6	
					Bottom	11.5	2.7	292	24.2	24.2	8.2	8.2	32.5	32.5	104.6	104.7	7.3	7.3	8.3		5		93				<0.2		0.6	
						11.5	2.9	299	24.2		8.2		32.5		104.7		7.3		8.2		4		93				<0.2		0.6	
IM1	Fine	Moderate	16:06	4.9	Surface	1.0	0.1	49	23.9	23.9	8.2	8.2	33.1	33.1	128.2	128.2	9.0	9.0	6.7	7.8	6	6	89	90	817931	807154	<0.2	<0.2	0.6	0.6
						1.0	0.1	51	23.9		8.2		33.1		128.2		9.0		6.8		5		90				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	63	23.8	23.8	8.2	8.2	33.2	33.2	122.1	122.0	8.5	8.5	8.9		6		91				<0.2		0.6	
						3.9	0.1	67	23.8		8.2		33.2		121.9		8.5		8.7		7		91				<0.2		0.5	
IM2	Fine	Moderate	15:58	6.7	Surface	1.0	0.3	4	23.6	23.6	8.2	8.2	33.1	33.1	129.1	129.1	9.1	9.0	3.4	4.7	10	8	89	91	818181	806171	<0.2	<0.2	0.6	0.7
						1.0	0.3	4	23.6		8.2		33.1		129.0		9.0		3.5		9		88				<0.2		0.7	
					Middle	3.4	0.3	347	23.6	23.6	8.2	8.2	33.2	33.2	126.4	126.4	8.9		5.1		8		90				<0.2		0.7	
						3.4	0.3	319	23.6		8.2		33.2		126.3		8.9		5.2		8		91				<0.2		0.6	
					Bottom	5.7	0.3	358	23.6	23.6	8.2	8.2	33.2	33.2	124.6	124.6	8.7	8.7	5.6		7		92				<0.2		0.7	
						5.7	0.3	329	23.6		8.2		33.2		124.5		8.7		5.6		6		93				<0.2		0.6	
IM3	Fine	Moderate	15:50	7.0	Surface	1.0	0.3	344	23.8	23.8	8.2	8.2	32.9	32.9	132.8	132.8	9.3	9.2	4.4	7.1	8	8	89	91	818760	805610	<0.2	<0.2	0.6	0.6
						1.0	0.4	316	23.8		8.2		32.9		132.7		9.3		4.4		9		89				<0.2		0.6	
					Middle	3.5	0.3	337	23.7	23.7	8.2	8.2	33.0	33.0	129.4	129.4	9.1		6.9		8		91				<0.2		0.7	
						3.5	0.3	310	23.7		8.2		33.0		129.3		9.1		7.0		9		90				<0.2		0.6	
					Bottom	6.0	0.3	329	23.7	23.7	8.2	8.2	33.0	33.0	126.1	126.0	8.8	8.8	9.9		6		93				<0.2		0.6	
						6.0	0.3	355	23.7		8.2		33.0		125.8		8.8		9.8		7		92				<0.2		0.5	
IM4	Fine	Moderate	15:39	8.0	Surface	1.0	0.6	337	23.9	23.9	8.2	8.2	33.0	33.0	136.5	136.4	9.5	9.1	3.7	5.7	11	11	88	91	819738	804595	<0.2	<0.2	0.6	0.6
						1.0	0.7	354	23.9		8.2		33.0		136.3		9.5		3.8		11		89				<0.2		0.5	
					Middle	4.0	0.6	331	23.6	23.5	8.2	8.2	33.1	33.1	124.3	124.2	8.7		5.2		10		91				<0.2		0.6	
						4.0	0.6	305	23.5		8.2		33.1		124.0		8.7		5.4		11		90				<0.2		0.5	
					Bottom	7.0	0.5	333	23.5	23.5	8.2	8.2	33.2	33.2	122.2	122.2	8.6	8.6	8.0		13		92				<0.2		0.7	
						7.0	0.5	346	23.5		8.2		33.2		122.2		8.6		8.0		12		93				<0.2		0.8	
IM5	Fine	Moderate	15:29	7.3	Surface	1.0	0.5	3	23.8	23.8	8.2	8.2	33.2	33.2	133.9	133.9	9.4	9.3	7.9	9.8	8	7	88	91	820748	804851	<0.2	<0.2	0.7	0.7
						1.0	0.5	3	23.8		8.2		33.2		133.8		9.4		7.8		9		89				<0.2		0.7	
					Middle	3.7	0.5	7	23.8	23.8	8.2	8.2	33.2	33.2	132.6	132.4	9.3		9.8		7		90				<0.2		0.8	
						3.7	0.5	7	23.8		8.2		33.2		132.2		9.2		9.9		8		91				<0.2		0.7	
					Bottom	6.3	0.4	6	23.8	23.8	8.2	8.2	33.2	33.2	129.8	129.7	9.1	9.1	11.6		6		92				<0.2		0.7	
						6.3	0.5	6	23.8		8.2		33.2		129.6		9.1		11.7		6		93				<0.2		0.7	
IM6	Fine	Moderate	15:20	7.0	Surface	1.0	0.2	277	24.1	24.1	8.2	8.2	32.5	32.5	127.3	127.2	8.9	8.9	2.7	3.3	7	7	88	90	821041	805843	<0.2	<0.2	0.9	0.8
						1.0	0.2	282	24.1		8.2		32.5		127.1		8.9		2.7		6		88				<0.2		0.8	
					Middle	3.5	0.2	294	24.0	24.0	8.2	8.2	32.6	32.6	126.1	126.1	8.8		3.7		7		90				<0.2		1.0	
						3.5	0.2	297	24.0		8.2		32.6		126.1		8.8		3.7		7		89				<0.2		0.9	
					Bottom	6.0	0.2	287	24.0	24.0	8.2	8.2	32.6	32.6	124.6	124.5	8.7	8.7	3.6		7		92				<0.2		0.7	
						6.0	0.2	302	24.0		8.2		32.6		124.4		8.7		3.6		7		91				<0.2		0.7	
IM7	Fine	Moderate	15:14	8.1	Surface	1.0	0.4	240	24.2	24.2	8.3	8.3	32.0	32.0	128.8	128.7	9.0	8.9	1.6	3.9	5	7	88	90	821333	806820	<0.2	<0.2	0.7	0.6
						1.0	0.4	249	24.2		8.3		32.0		128.6		9.0		1.7		6		87				<0.2		0.6	
					Middle	4.1	0.3	255	24.1	24.1	8.3	8.3	32.5	32.5	125.0	125.1	8.7		3.3		5		89				<0.2		0.6	
						4.1	0.3	262	24.1		8.3		32.5		125.1		8.7		3.3		6		90				<0.2		0.6	
					Bottom	7.1	0.3	273	24.0	24.0	8.3	8.3	32.6	32.6	122.5	122.4	8.6	8.6	6.7		8		92				<0.2		0.7	
						7.1	0.3	297	24.0		8.3		32.6		122.3		8.5		6.8		9		91				<0.2		0.6	
IM8	Cloudy	Moderate	15:37	7.4	Surface	1.0	2.3	263	24.1	24.1	8.3	8.3	31.9	31.9	131.2	131.2	9.2	9.2	1.3	6.3	5	6	86	91	821817	808162	<0.2	<0.2	1.0	0.9
						1.0	2.3	283	24.1		8.3		31.9		131.1		9.2		1.4		6		87				<0.2		0.9	
					Middle	3.7	2.5	263	24.1	24.1	8.3	8.3	32.0	32.0	129.5	129.4	9.1		6.3		5		92				<0.2		1.0	
						3.7	2.6	277	24.1		8.3		32.0		129.2		9.1		6.7		6		93				<0.2		1.0	
					Bottom	6.4	2.7	262	24.0	24.0	8.3	8.3	32.0	32.0	125.5	125.1	8.8	8.8	11.0		6		93				<0.2		0.9	
						6.4	3.0	278	24.0		8.3		32.0		124.6		8.7		11.0		7		93				<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 12 November 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	15:44	6.9	Surface	1.0	3.1	15	23.9	23.9	8.3	8.3	32.2	32.2	131.3	131.2	9.2	9.2	3.0	4.1	10	9	88	91	822087	808821	<0.2	<0.2	0.8	0.8
						1.0	3.2	16	23.9		8.3		32.2		131.1		9.2		3.0		9		88				<0.2		0.9	
					Middle	3.5	2.9	16	23.9	23.9	8.3	8.3	32.2	32.2	129.5	129.4	9.1		4.4		8		92				<0.2		0.7	
						3.5	3.1	17	23.9		8.3		32.2		129.3		9.1		4.6		8		92				<0.2		0.8	
					Bottom	5.9	2.8	17	23.9	23.9	8.3	8.3	32.2	32.2	126.2	125.8	8.9	8.9	4.8		9		94				<0.2		0.8	
						5.9	3.1	18	23.9		8.3		32.2		125.3		8.8		4.9		8		94				<0.2		0.7	
IM10	Cloudy	Moderate	15:52	7.6	Surface	1.0	2.7	6	23.8	23.8	8.3	8.3	32.0	32.0	131.6	131.6	9.3	9.2	4.1	5.1	12	11	88	92	822404	809776	<0.2	<0.2	0.7	0.6
						1.0	3.0	6	23.8		8.3		32.0		131.5		9.3		4.3		11		88				<0.2		0.6	
					Middle	3.8	2.8	8	23.8	23.8	8.3	8.3	32.0	32.0	129.7	129.6	9.1		5.1		10		92				<0.2		0.6	
						3.8	2.9	8	23.8		8.3		32.0		129.5		9.1		5.1		10		92				<0.2		0.6	
					Bottom	6.6	2.9	10	23.8	23.9	8.3	8.3	32.0	32.0	126.0	125.7	8.9	8.9	5.9		10		98				<0.2		0.6	
						6.6	3.2	10	23.9		8.3		32.0		125.3		8.8		5.9		10		94				<0.2		0.7	
IM11	Cloudy	Moderate	16:08	7.5	Surface	1.0	2.9	8	24.2	24.2	8.3	8.3	32.1	32.1	136.9	136.8	9.6	9.5	1.5	3.3	6	6	86	91	822038	811472	<0.2	<0.2	0.8	0.7
						1.0	3.1	8	24.2		8.3		32.1		136.6		9.5		1.5		7		87				<0.2		0.8	
					Middle	3.8	2.8	7	24.1	24.1	8.3	8.3	32.1	32.1	134.4	134.5	9.4		2.3		7		93				<0.2		0.6	
						3.8	3.0	7	24.1		8.3		32.1		134.5		9.4		2.4		6		94				<0.2		0.7	
					Bottom	6.5	2.9	9	24.0	24.0	8.3	8.3	32.1	32.1	127.1	126.8	8.9	8.9	5.9		6		94				<0.2		0.7	
						6.5	3.1	9	24.0		8.3		32.1		126.5		8.9		6.0		6		94				<0.2		0.7	
IM12	Cloudy	Moderate	16:16	9.0	Surface	1.0	2.3	256	24.1	24.1	8.3	8.3	32.1	32.1	124.4	124.4	8.7	8.7	3.6	8.1	7	8	88	91	821465	812032	<0.2	<0.2	0.8	0.7
						1.0	2.4	269	24.1		8.3		32.1		124.4		8.7		3.5		8		88				<0.2		0.8	
					Middle	4.5	2.4	250	24.0	24.0	8.3	8.3	32.1	32.1	124.1	124.1	8.7		6.0		9		89				<0.2		0.6	
						4.5	2.4	251	23.9		8.3		32.1		124.0		8.7		6.0		8		92				<0.2		0.7	
					Bottom	8.0	2.5	254	23.9	23.9	8.3	8.3	32.1	32.1	123.3	123.2	8.7	8.7	14.5		8		93				<0.2		0.6	
						8.0	2.5	257	23.9		8.3		32.1		123.1		8.6		15.3		9		94				<0.2		0.6	
SR1A	Cloudy	Calm	16:36	5.2	Surface	1.0	-	-	24.2	24.2	8.3	8.3	32.0	32.0	122.7	122.6	8.6	8.6	2.6	2.8	7	7	-	-	819980	812661	-	-	-	-
						1.0	-	-	24.2		8.3		32.0		122.5		8.6		2.7		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	24.2	24.2	8.3	8.3	32.0	32.0	119.1	119.0	8.3	8.3	2.9		8		-				-		-	
						4.2	-	-	24.2		8.3		32.0		118.8		8.3		2.9		8		-				-		-	
SR2	Cloudy	Moderate	16:50	4.8	Surface	1.0	0.4	1	24.1	24.1	8.3	8.3	32.2	32.2	120.0	119.9	8.4	8.4	7.7	9.2	8	9	92	93	821465	814147	<0.2	<0.2	0.7	0.6
						1.0	0.4	1	24.1		8.3		32.2		119.8		8.4		7.9		9		92				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	4	24.1	24.1	8.2	8.2	32.2	32.2	117.2	117.0	8.2	8.2	10.7		8		93				<0.2		0.6	
						3.8	0.3	4	24.1		8.2		32.2		116.8		8.2		10.5		9		93				<0.2		0.6	
SR3	Cloudy	Moderate	15:31	8.6	Surface	1.0	2.4	57	24.2	24.2	8.3	8.3	31.0	31.0	135.4	135.3	9.5	9.3	0.6	0.9	3	4	-	-	822126	807575	-	-	-	-
						1.0	2.5	61	24.2		8.3		31.0		135.2		9.5		0.5		4		-				-		-	
					Middle	4.3	2.7	57	24.2	24.2	8.3	8.3	31.4	31.4	129.3	129.1	9.1		0.8		4		-				-		-	
						4.3	2.9	61	24.2		8.3		31.4		128.8		9.0		0.9		4		-				-		-	
					Bottom	7.6	2.6	52	24.1	24.1	8.3	8.3	31.8	31.7	126.8	126.8	8.9	8.9	1.4		6		-				-		-	
						7.6	2.8	53	24.1		8.3		31.7		126.8		8.9		1.4		5		-				-		-	
SR4A	Fine	Calm	16:49	8.8	Surface	1.0	0.2	66	23.9	23.9	8.2	8.2	33.0	33.0	128.2	128.2	9.0	9.0	3.9	5.5	8	9	-	-	817212	807803	-	-	-	-
						1.0	0.2	67	23.9		8.2		33.0		128.2		9.0		4.0		9		-				-		-	
					Middle	4.4	0.2	71	23.9	23.9	8.2	8.2	33.0	33.0	128.5	128.6	9.0		5.3		9		-				-		-	
						4.4	0.2	74	23.9		8.2		33.0		128.6		9.0		5.4		8		-				-		-	
					Bottom	7.8	0.1	88	23.9	23.9	8.2	8.2	33.1	33.1	126.1	126.1	8.8	8.8	7.1		10		-				-		-	
						7.8	0.1	90	23.9		8.2		33.1		126.1		8.8		7.2		9		-				-		-	
SR5A	Fine	Calm	17:06	3.6	Surface	1.0	0.1	211	24.2	24.2	8.2	8.2	32.8	32.8	126.1	126.1	8.8	8.8	6.5	6.6	8	10	-	-	816608	810683	-	-	-	-
						1.0	0.1	223	24.2		8.2		32.8		126.0		8.8		6.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	176	24.2	24.2	8.2	8.2	32.8	32.8	121.9	121.8	8.5	8.5	6.7		11		-				-		-	
						2.6	0.1	181	24.2		8.2		32.8		121.6		8.5		6.8		10		-				-		-	
SR6A	Fine	Calm	17:48	4.2	Surface	1.0	0.1	198	24.3	24.3	8.1	8.1	32.8	32.8	123.2	123.3	8.6	8.6	5.6	5.7	8	9	-	-	817955	814755	-	-	-	-
						1.0	0.1	216	24.3		8.1		32.8		123.3		8.6		5.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	182	24.3	24.3	8.1	8.1	32.8	32.8	122.9	122.9	8.5	8.5	5.7		10		-				-		-	
						3.2	0.1	188	24.3		8.1		32.8		122.8		8.5		5.7		9		-				-		-	
SR7	Cloudy	Moderate	17:57	15.7	Surface	1.0	1.4	299	24.2	24.2	8.2	8.2	32.5	32.5	103.9	103.9	7.2	7.2	1.3	1.7	8	7	-	-	823646	823735	-	-	-	-
						1.0	1.5	322	24.2		8.2		32.5		103.8		7.2		1.5		8		-				-		-	
					Middle	7.9	1.5	299	24.2	24.2	8.2	8.2	32.5	32.5	103.2	103.2	7.2		1.5		8		-				-		-	
						7.9	1.7	321	24.2		8.2		32.5		103.1		7.2		1.6		8		-				-		-	
					Bottom	14.7	1.8	299	24.2	24.2	8.2	8.2	32.6	32.6	102.5	102.6	7.1	7.1	2.1		6		-				-		-	
						14.7	1.8	304	24.2		8.2		32.6		102.6		7.1		2.2		6		-				-		-	
SR8	Cloudy	Moderate	16:27	5.1	Surface	1.0	-	-	24.1	24.1	8.3	8.3	32.1	32.1	131.0	130.8	9.2	9.2	2.1	2.5	9	9	-	-	820370	811618	-	-	-	-
						1.0	-	-	24.1		8.3		32.1		130.5		9.1		2.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.0	24.0	8.3	8.3	32.1	32.1	125.1	124.7	8.8	8.8	2.9		10		-				-		-	
						4.1	-	-	24.0		8.3		32.1		124.3		8.7		2.9		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 14 November 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	12:21	8.0	Surface	1.0	0.5	215	23.2	23.2	8.2	8.2	32.5	32.5	101.9	101.7	7.2	7.1	4.1	6.7	7	8	86	88	815606	804228	<0.2	<0.2	0.4	0.5
						1.0	0.5	220	23.2		8.2		32.5		101.5		7.2		4.3		7		87				<0.2		0.5	
					Middle	4.0	0.5	221	23.2	23.2	8.2	8.2	32.6	32.6	99.4	99.3	7.0		5.7		8		87				<0.2		0.4	
						4.0	0.5	242	23.2		8.2		32.6		99.2		7.0		5.9		9		88				<0.2		0.4	
					Bottom	7.0	0.4	219	23.2	23.2	8.2	8.2	32.7	32.7	98.8	98.8	7.0	7.0	10.0		8		89				<0.2		0.4	
						7.0	0.5	235	23.2		8.2		32.7		98.8		7.0		10.3		9		90				<0.2		0.6	
C2	Cloudy	Moderate	13:41	10.7	Surface	1.0	0.2	135	23.7	23.7	8.1	8.1	32.1	32.1	120.2	120.2	8.5	8.3	2.9	11.0	4	5	83	87	825689	806921	<0.2	<0.2	0.7	0.7
						1.0	0.2	147	23.7		8.1		32.1		120.2		8.5		2.9		5		83				<0.2		0.6	
					Middle	5.4	0.5	154	23.5	23.5	8.0	8.0	32.5	32.5	112.8	112.8	8.0		10.7		5		87				<0.2		0.7	
						5.4	0.5	159	23.5		8.0		32.5		112.8		8.0		10.8		6		87				<0.2		0.6	
					Bottom	9.7	0.5	144	23.5	23.5	8.0	8.0	32.7	32.7	110.6	110.6	7.8	7.8	19.2		6		91				<0.2		0.7	
						9.7	0.5	145	23.5		8.0		32.7		110.6		7.8		19.3		5		91				<0.2		0.6	
C3	Cloudy	Moderate	11:08	12.4	Surface	1.0	0.4	286	24.0	24.0	8.1	8.1	33.2	33.2	101.0	101.0	7.0	7.0	5.5	7.4	3	3	83	88	822126	817784	<0.2	0.2	0.5	0.7
						1.0	0.4	300	24.0		8.1		33.2		101.0		7.0		5.5		2		84				<0.2		0.6	
					Middle	6.2	0.2	257	24.0	24.0	8.1	8.1	33.2	33.2	99.3	99.3	6.9		6.2		3		87				0.3		0.6	
						6.2	0.2	261	24.0		8.1		33.2		99.2		6.9		6.2		3		88				0.2		0.7	
					Bottom	11.4	0.1	120	23.9	23.9	8.1	8.1	33.2	33.2	97.6	97.6	6.8	6.8	10.4		5		92				<0.2		0.9	
						11.4	0.1	121	23.9		8.1		33.2		97.6		6.8		10.5		4		91				<0.2		0.7	
IM1	Cloudy	Moderate	12:45	4.9	Surface	1.0	0.1	192	23.3	23.3	8.3	8.3	32.4	32.5	113.9	113.7	8.1	8.1	6.6	8.7	5	6	87	88	817938	807152	<0.2	<0.2	0.4	0.5
						1.0	0.1	207	23.3		8.3		32.5		113.5		8.0		7.2		5		88				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	209	23.2	23.2	8.2	8.2	32.6	32.6	107.7	107.8	7.6	7.6	10.8		8		89				<0.2		0.4	
						3.9	0.1	212	23.2		8.2		32.6		107.8		7.6		10.4		7		89				<0.2		0.6	
IM2	Cloudy	Moderate	12:53	6.7	Surface	1.0	0.3	133	23.3	23.3	8.3	8.3	32.3	32.3	109.6	109.5	7.8	7.8	2.6	4.0	9	8	85	88	818150	806151	<0.2	<0.2	0.6	0.5
						1.0	0.3	133	23.3		8.3		32.3		109.4		7.8		2.6		9		87				<0.2		0.5	
					Middle	3.4	0.2	143	23.2	23.2	8.3	8.3	32.4	32.4	108.7	108.7	7.7		2.8		9		87				<0.2		0.6	
						3.4	0.2	157	23.2		8.3		32.4		108.6		7.7		2.9		9		88				<0.2		0.5	
					Bottom	5.7	0.1	150	23.2	23.2	8.3	8.3	32.5	32.5	108.3	108.3	7.7	7.7	6.4		7		89				<0.2		0.6	
						5.7	0.1	158	23.2		8.3		32.5		108.2		7.7		6.4		7		89				<0.2		0.4	
IM3	Cloudy	Moderate	13:01	6.9	Surface	1.0	0.5	135	23.4	23.4	8.3	8.3	32.2	32.2	112.5	112.5	8.0	8.0	6.0	7.0	6	6	86	88	818775	805585	<0.2	<0.2	0.5	0.6
						1.0	0.5	148	23.4		8.3		32.2		112.4		8.0		6.4		5		86				<0.2		0.6	
					Middle	3.5	0.5	130	23.4	23.4	8.3	8.3	32.2	32.2	112.0	112.0	7.9		7.6		6		87				<0.2		0.5	
						3.5	0.6	142	23.4		8.3		32.2		111.9		7.9		7.2		6		87				<0.2		0.6	
					Bottom	5.9	0.5	122	23.4	23.4	8.3	8.3	32.2	32.2	111.5	111.5	7.9	7.9	7.5		6		90				<0.2		0.5	
						5.9	0.5	130	23.4		8.3		32.2		111.4		7.9		7.7		6		90				<0.2		0.6	
IM4	Cloudy	Moderate	13:13	7.4	Surface	1.0	0.9	185	23.3	23.3	8.3	8.3	32.2	32.2	108.2	108.2	7.7	7.7	7.3	9.2	7	10	86	88	819714	804602	<0.2	<0.2	0.5	0.5
						1.0	1.0	189	23.3		8.3		32.2		108.2		7.7		7.2		6		86				<0.2		0.5	
					Middle	3.7	0.9	185	23.3	23.3	8.3	8.3	32.2	32.2	108.0	108.0	7.7		8.6		10		88				<0.2		0.5	
						3.7	0.9	189	23.3		8.3		32.2		108.0		7.7		8.4		11		88				<0.2		0.5	
					Bottom	6.4	0.7	184	23.3	23.3	8.3	8.3	32.2	32.2	107.4	107.4	7.6	7.6	11.7		12		90				<0.2		0.5	
						6.4	0.8	192	23.3		8.3		32.2		107.3		7.6		11.7		13		89				<0.2		0.5	
IM5	Cloudy	Moderate	13:24	7.2	Surface	1.0	0.9	209	23.2	23.2	8.3	8.3	32.2	32.2	107.7	107.7	7.6	7.6	8.8	10.2	14	13	86	88	820728	804874	<0.2	<0.2	0.4	0.5
						1.0	1.0	210	23.2		8.3		32.2		107.7		7.6		8.4		13		87				<0.2		0.5	
					Middle	3.6	0.9	210	23.2	23.2	8.3	8.3	32.2	32.2	107.3	107.3	7.6		9.2		14		88				<0.2		0.5	
						3.6	0.9	217	23.2		8.3		32.2		107.2		7.6		9.4		13		87				<0.2		0.5	
					Bottom	6.2	0.8	209	23.2	23.2	8.3	8.3	32.2	32.2	106.5	106.5	7.6	7.6	12.7		13		90				<0.2		0.5	
						6.2	0.8	228	23.2		8.3		32.2		106.4		7.6		12.7		12		90				<0.2		0.5	
IM6	Cloudy	Moderate	13:34	7.4	Surface	1.0	0.7	237	23.3	23.3	8.3	8.3	32.2	32.2	110.9	110.9	7.9	7.9	6.4	9.7	12	13	86	88	821046	805818	<0.2	<0.2	0.5	0.5
						1.0	0.8	237	23.3		8.3		32.2		110.8		7.9		6.6		12		87				<0.2		0.6	
					Middle	3.7	0.6	235	23.3	23.3	8.3	8.3	32.2	32.2	110.3	110.2	7.8		8.3		12		88				<0.2		0.5	
						3.7	0.7	239	23.3		8.3		32.2		110.1		7.8		8.9		13		89				<0.2		0.5	
					Bottom	6.4	0.6	235	23.3	23.3	8.3	8.3	32.2	32.2	109.2	109.2	7.7	7.7	13.9		16		90				<0.2		0.6	
						6.4	0.6	242	23.3		8.3		32.2		109.1		7.7		13.8		15		90				<0.2		0.5	
IM7	Cloudy	Moderate	13:43	8.0	Surface	1.0	0.5	245	23.3	23.3	8.3	8.3	32.2	32.2	110.7	110.4	7.8	7.8	3.4	6.0	12	12	86	88	821337	806858	<0.2	<0.2	0.5	0.5
						1.0	0.5	255	23.3		8.3		32.2		110.1		7.8		3.7		12		87				<0.2		0.6	
					Middle	4.0	0.4	245	23.3	23.3	8.3	8.3	32.3	32.3	108.7	108.6	7.7		5.7		12		87				<0.2		0.5	
						4.0	0.5	261	23.3		8.3		32.3		108.5		7.7		6.5		13		89				<0.2		0.5	
					Bottom	7.0	0.4	255	23.3	23.3	8.3	8.3	32.3	32.3	108.0	108.0	7.7	7.7	8.2		13		90				<0.2		0.5	
						7.0	0.4	279	23.2		8.3		32.3		108.0		7.7		8.5		12		91				<0.2		0.6	
IM8	Cloudy	Moderate	13:08	7.8	Surface	1.0	2.4	172	23.4	23.4	8.0	8.0	32.8	32.8	111.7	111.8	7.9	7.9	3.3	4.2	8	7	83	87	821829	808138	<0.2	<0.2	0.6	0.6
						1.0	2.6	188	23.4		8.0		32.8		111.8		7.9		3.4		8		83				<0.2		0.6	
					Middle	3.9	2.4	176	23.4	23.4	8.0	8.0	32.8	32.8	111.5	111.5	7.9		3.8		6		88				<0.2		0.6	
						3.9	2.4	179	23.4		8.0		32.8		111.5		7.9		3.8		7		87				<0.2		0.6	
					Bottom	6.8	2.5	170	23.3	23.3	8.0	8.0	32.9	32.9	109.9	109.9	7.8	7.8	5.4		7		92				<0.2		0.7	
						6.8	2.5	182	23.3		8.0		32.9		109.9		7.8		5.4		6		91				<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 14 November 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	13:01	7.1	Surface	1.0	2.6	153	23.4	23.4	8.0	8.0	32.8	32.8	113.0	113.0	8.0	8.0	2.6	3.7	6	7	83	88	822086	808830	<0.2	<0.2	0.6	0.6
						1.0	2.7	155	23.4		8.0		32.8		113.0		8.0		2.7		7		84				<0.2		0.6	
					Middle	3.6	2.7	154	23.4	23.4	8.0	8.0	32.8	32.8	111.8	111.8	7.9		3.5		7		87				<0.2		0.6	
						3.6	2.9	156	23.4		8.0		32.8		111.7		7.9		3.5		8		88				<0.2		0.6	
					Bottom	6.1	2.8	150	23.3	23.3	8.0	8.0	32.8	32.8	108.9	109.0	7.7	7.7	4.8		7		92				<0.2		0.6	
						6.1	2.9	159	23.3		8.0		32.8		109.0		7.7		4.9		8		91				<0.2		0.6	
IM10	Cloudy	Moderate	12:51	8.3	Surface	1.0	1.9	209	23.2	23.2	8.0	8.0	32.7	32.7	112.0	112.0	7.9	7.9	3.5	12.3	12	12	83	87	822398	809817	<0.2	0.2	0.7	0.6
						1.0	2.1	222	23.2		8.0		32.7		112.0		7.9		3.6		11		83				<0.2		0.6	
					Middle	4.2	2.0	212	23.3	23.3	8.0	8.0	32.7	32.7	112.1	112.0	7.9		11.4		11		88				<0.2		0.6	
						4.2	2.1	226	23.3		8.0		32.7		111.9		7.9		11.7		12		87				<0.2		0.5	
					Bottom	7.3	1.5	219	23.2	23.2	8.0	8.0	32.7	32.7	111.4	111.4	7.9	7.9	22.1		14		91				0.3		0.6	
						7.3	1.6	229	23.2		8.0		32.7		111.4		7.9		21.7		13		91				0.3		0.6	
IM11	Cloudy	Moderate	12:30	7.5	Surface	1.0	2.5	212	23.6	23.6	8.0	8.0	32.7	32.7	113.9	113.9	8.0	8.0	9.9	10.4	12	9	83	88	822068	811451	<0.2	<0.2	0.7	0.7
						1.0	2.6	212	23.6		8.0		32.7		113.8		8.0		10.1		11		83				<0.2		0.7	
					Middle	3.8	2.4	212	23.6	23.6	8.0	8.0	32.7	32.7	113.8	113.8	8.0		7.9		9		88				<0.2		0.7	
						3.8	2.6	219	23.6		8.0		32.7		113.8		8.0		7.9		8		88				<0.2		0.7	
					Bottom	6.5	2.5	217	23.6	23.6	8.0	8.0	32.7	32.7	112.8	112.9	7.9	7.9	13.2		8		91				<0.2		0.7	
						6.5	2.5	231	23.6		8.0		32.7		112.9		7.9		13.4		8		92				<0.2		0.8	
IM12	Cloudy	Moderate	12:21	9.6	Surface	1.0	1.9	181	23.5	23.5	8.0	8.0	32.5	32.5	115.0	115.0	8.1	8.1	7.3	12.6	9	7	83	88	821471	812049	<0.2	<0.2	0.9	0.9
						1.0	2.0	196	23.5		8.0		32.5		115.0		8.1		7.2		8		87				<0.2		0.8	
					Middle	4.8	2.2	185	23.5	23.5	8.0	8.0	32.6	32.6	113.8	113.8	8.0		11.6		7		88				<0.2		0.9	
						4.8	2.3	190	23.5		8.0		32.6		113.8		8.0		11.9		7		87				<0.2		0.9	
					Bottom	8.6	2.1	189	23.4	23.4	8.0	8.0	32.6	32.6	112.3	112.3	7.9	7.9	19.3		6		92				<0.2		0.8	
						8.6	2.2	207	23.4		8.0		32.6		112.2		7.9		18.5		7		91				<0.2		0.8	
SR1A	Cloudy	Moderate	11:59	5.5	Surface	1.0	-	-	23.7	23.7	8.0	8.0	32.9	32.9	111.4	111.4	7.8	7.8	4.0	4.3	7	6	-	-	819978	812663	-	-	-	-
						1.0	-	-	23.7		8.0		32.9		111.4		7.8		4.0		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-				-		-				-		-	
						2.8	-	-	-		-		-		-		-				-		-				-		-	
					Bottom	4.5	-	-	23.7	23.7	8.0	8.0	32.9	32.9	109.5	109.5	7.7	7.7	4.5		5		-				-		-	
						4.5	-	-	23.7		8.0		32.9		109.5		7.7		4.5		4		-				-		-	
SR2	Cloudy	Moderate	11:38	4.8	Surface	1.0	0.4	96	23.8	23.8	8.1	8.1	33.0	33.0	108.5	108.5	7.6	7.6	7.5	8.8	5	5	83	85	821484	814166	<0.2	<0.2	0.7	0.7
						1.0	0.4	99	23.8		8.1		33.0		108.5		7.6		7.6		4		83				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	96	23.8	23.8	8.1	8.1	33.0	33.0	106.5	106.5	7.4	7.4	9.9		5		88				<0.2		0.6	
						3.8	0.3	97	23.8		8.1		33.0		106.5		7.4		10.0		6		87				<0.2		0.8	
SR3	Cloudy	Moderate	13:14	8.4	Surface	1.0	2.9	220	23.3	23.3	8.0	8.0	32.8	32.8	110.9	110.9	7.8	7.8	4.6	6.3	7	7	-	-	822156	807561	-	-	-	-
						1.0	2.9	228	23.3		8.0		32.8		110.9		7.8		4.6		6		-				-		-	
					Middle	4.2	2.9	220	23.3	23.3	8.0	8.0	32.8	32.8	109.7	109.6	7.7		6.2		7		-				-		-	
						4.2	3.1	234	23.3		8.0		32.8		109.5		7.7		6.2		6		-				-		-	
					Bottom	7.4	3.0	218	23.3	23.3	8.0	8.0	32.9	32.9	108.8	108.8	7.7	7.7	8.1		9		-				-		-	
						7.4	3.0	223	23.3		8.0		32.9		108.8		7.7		8.1		8		-				-		-	
SR4A	Cloudy	Moderate	11:59	8.9	Surface	1.0	0.2	82	23.3	23.3	8.3	8.3	32.3	32.3	108.2	108.0	7.7	7.6	3.5	4.4	8	7	-	-	817201	807815	-	-	-	-
						1.0	0.2	83	23.3		8.3		32.3		107.8		7.6		3.6		7		-				-		-	
					Middle	4.5	0.2	75	23.3	23.3	8.3	8.3	32.3	32.3	106.2	106.1	7.5		4.1		8		-				-		-	
						4.5	0.2	81	23.3		8.3		32.3		106.0		7.5		4.2		7		-				-		-	
					Bottom	7.9	0.2	65	23.2	23.2	8.3	8.2	32.4	32.4	104.6	104.7	7.4	7.4	5.7		7		-				-		-	
						7.9	0.2	70	23.2		8.2		32.4		104.7		7.4		5.5		6		-				-		-	
SR5A	Cloudy	Moderate	11:38	3.3	Surface	1.0	0.0	354	23.6	23.6	8.3	8.3	32.4	32.4	114.7	114.7	8.1	8.1	4.5	5.3	8	10	-	-	816574	810692	-	-	-	-
						1.0	0.0	359	23.6		8.3		32.4		114.7		8.1		4.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	7	23.6	23.6	8.2	8.2	32.4	32.4	113.4	113.4	8.0	8.0	6.3		11		-				-		-	
						2.3	0.0	7	23.6		8.2		32.4		113.3		8.0		6.1		10		-				-		-	
SR6A	Cloudy	Moderate	11:07	4.8	Surface	1.0	0.1	113	23.8	23.8	8.2	8.2	32.2	32.2	106.0	106.0	7.5	7.5	5.4	5.9	9	10	-	-	817961	814738	-	-	-	-
						1.0	0.1	120	23.8		8.2		32.2		105.9		7.4		5.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	102	23.8	23.8	8.2	8.2	32.2	32.2	105.7	105.7	7.4	7.4	6.4		10		-				-		-	
						3.8	0.0	103	23.8		8.2		32.2		105.7		7.4		6.5		10		-				-		-	
SR7	Cloudy	Moderate	10:24	14.6	Surface	1.0	0.6	61	23.9	23.9	8.0	8.0	33.3	33.3	96.0	96.0	6.7	6.7	5.5	6.4	8	7	-	-	823641	823763	-	-	-	-
						1.0	0.7	63	23.9		8.0		33.3		96.0		6.7		5.5		7		-				-		-	
					Middle	7.3	0.2	14	23.9	23.9	8.0	8.0	33.3	33.3	95.6	95.6	6.7		6.7		6		-				-		-	
						7.3	0.2	14	23.9		8.0		33.3		95.5		6.7		6.7		7		-				-		-	
					Bottom	13.6	0.2	55	23.9	23.9	8.0	8.0	33.3	33.3	95.7	95.7	6.7	6.7	7.1		6		-				-		-	
						13.6	0.2	56	23.9		8.0		33.3		95.6		6.7		7.1		7		-				-		-	
SR8	Cloudy	Moderate	12:10	5.3	Surface	1.0	-	-	23.9	23.9	8.0	8.0	32.9	32.9	111.4	111.4	7.8	7.8	4.4	4.4	8	9	-	-	820406	811614	-	-	-	-
						1.0	-	-	23.9		8.0		32.9		111.4		7.8		4.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	23.7	23.7	8.0	8.0	32.9	32.9	111.0	111.0	7.8	7.8	4.3		9		-				-		-	
						4.3	-	-	23.7		8.0		32.9		111.0		7.8		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 14 November 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	17:27	8.7	Surface	1.0	0.5	28	23.2	23.2	8.3	8.3	32.1	32.1	107.9	107.9	7.7	7.7	6.6	9.1	14	16	86	88	815633	804259	<0.2	<0.2	0.5	0.6
						1.0	0.5	29	23.2		8.3		32.1		107.9		7.7		6.7		15		87				<0.2		0.5	
					Middle	4.4	0.5	23	23.2	23.2	8.3	8.3	32.1	32.1	106.7	106.7	7.6		8.1		16		88				<0.2		0.5	
						4.4	0.5	23	23.2		8.3		32.1		106.6		7.6		8.7		17		89				<0.2		0.6	
					Bottom	7.7	0.5	38	23.2	23.2	8.2	8.2	32.2	32.2	105.8	105.8	7.5	7.5	12.4		17		90				<0.2		0.6	
						7.7	0.5	39	23.2		8.2		32.2		105.8		7.5		12.1		16		90				<0.2		0.6	
C2	Cloudy	Moderate	16:23	10.5	Surface	1.0	0.4	190	23.6	23.6	8.1	8.1	31.8	31.8	117.7	117.7	8.3	8.2	1.6	8.5	5	7	85	89	825661	806960	<0.2	<0.2	0.7	0.7
						1.0	0.5	190	23.6		8.1		31.8		117.7		8.3		1.6		6		85				<0.2		0.7	
					Middle	5.3	0.2	186	23.5	23.5	8.1	8.1	32.1	32.1	112.9	112.9	8.0		6.3		8		88				<0.2		0.7	
						5.3	0.2	204	23.5		8.1		32.1		112.8		8.0		6.4		8		89				<0.2		0.8	
					Bottom	9.5	0.3	11	23.6	23.6	8.1	8.1	32.3	32.3	111.1	111.1	7.8	7.8	17.8		9		92				<0.2		0.7	
						9.5	0.3	11	23.6		8.1		32.3		111.1		7.8		17.3		8		93				<0.2		0.7	
C3	Cloudy	Moderate	18:39	11.8	Surface	1.0	0.3	241	23.8	23.8	8.0	8.0	33.0	33.0	104.8	104.8	7.3	7.3	3.9	10.7	6	6	85	89	822094	817807	<0.2	<0.2	0.7	0.7
						1.0	0.3	252	23.8		8.0		33.0		104.8		7.3		3.9		7		85				<0.2		0.7	
					Middle	5.9	0.4	252	23.8	23.8	8.0	8.0	33.0	33.0	104.5	104.6	7.3		10.9		7		89				<0.2		0.7	
						5.9	0.4	258	23.8		8.0		33.0		104.6		7.3		10.0		6		88				<0.2		0.7	
					Bottom	10.8	0.4	266	23.8	23.8	8.0	8.0	33.0	33.0	104.2	104.2	7.3	7.3	17.5		4		93				<0.2		0.7	
						10.8	0.4	285	23.8		8.0		33.0		104.2		7.3		17.7		4		92				<0.2		0.7	
IM1	Cloudy	Moderate	17:00	4.7	Surface	1.0	0.4	291	23.2	23.2	8.3	8.3	32.4	32.4	110.3	110.2	7.8	7.8	6.5	8.2	12	12	89	89	817956	807120	<0.2	<0.2	0.6	0.6
						1.0	0.4	292	23.2		8.3		32.4		110.1		7.8		6.8		12		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	289	23.2	23.2	8.3	8.3	32.4	32.5	108.8	108.7	7.7	7.7	9.9		13		90				<0.2		0.6	
						3.7	0.4	311	23.1		8.3		32.5		108.5		7.7		9.6		12		90				<0.2		0.6	
IM2	Cloudy	Moderate	16:53	7.0	Surface	1.0	0.3	8	23.3	23.3	8.3	8.3	32.2	32.2	113.5	113.5	8.0	8.0	6.8	10.6	15	17	86	89	818157	806174	<0.2	<0.2	0.6	0.6
						1.0	0.4	8	23.3		8.3		32.2		113.5		8.0		7.1		15		87				<0.2		0.7	
					Middle	3.5	0.4	339	23.3	23.3	8.3	8.3	32.2	32.2	112.0	112.0	7.9		11.4		17		87				<0.2		0.5	
						3.5	0.4	341	23.3		8.3		32.2		111.9		7.9		11.1		18		89				<0.2		0.6	
					Bottom	6.0	0.4	324	23.3	23.3	8.3	8.3	32.2	32.2	110.7	110.6	7.8	7.8	13.2		18		91				<0.2		0.6	
						6.0	0.4	348	23.3		8.3		32.2		110.4		7.8		14.0		19		91				<0.2		0.6	
IM3	Cloudy	Moderate	16:46	6.6	Surface	1.0	0.5	318	23.3	23.3	8.3	8.3	32.2	32.2	112.5	112.5	8.0	8.0	8.7	10.7	12	13	87	89	818778	805606	<0.2	<0.2	0.7	0.6
						1.0	0.5	321	23.3		8.3		32.2		112.5		8.0		9.2		14		88				<0.2		0.6	
					Middle	3.3	0.5	320	23.3	23.3	8.3	8.3	32.2	32.2	111.5	111.5	7.9		11.4		14		89				<0.2		0.6	
						3.3	0.5	335	23.3		8.3		32.2		111.4		7.9		12.1		13		89				<0.2		0.6	
					Bottom	5.6	0.3	299	23.3	23.3	8.3	8.3	32.2	32.2	109.4	109.2	7.8	7.8	11.2		13		90				<0.2		0.6	
						5.6	0.4	323	23.3		8.3		32.2		109.0		7.7		11.8		12		92				<0.2		0.6	
IM4	Cloudy	Moderate	16:37	7.4	Surface	1.0	0.5	301	23.4	23.4	8.3	8.3	32.1	32.1	114.7	114.7	8.1	8.1	8.7	11.2	16	16	87	89	819729	804598	<0.2	<0.2	0.6	0.7
						1.0	0.5	310	23.4		8.3		32.1		114.6		8.1		9.0		15		87				<0.2		0.6	
					Middle	3.7	0.5	284	23.4	23.4	8.3	8.3	32.1	32.1	114.1	114.1	8.1		11.5		16		89				<0.2		0.7	
						3.7	0.6	305	23.4		8.3		32.1		114.0		8.1		11.5		15		89				<0.2		0.6	
					Bottom	6.4	0.2	314	23.4	23.4	8.3	8.3	32.1	32.1	113.2	113.1	8.0	8.0	13.2		15		91				<0.2		0.7	
						6.4	0.2	324	23.4		8.3		32.1		113.0		8.0		13.3		16		91				<0.2		0.7	
IM5	Cloudy	Moderate	16:31	7.4	Surface	1.0	0.2	276	23.4	23.4	8.3	8.3	31.9	31.9	112.1	112.1	8.0	7.9	10.7	13.1	18	15	86	89	820728	804855	<0.2	<0.2	0.6	0.6
						1.0	0.2	286	23.4		8.3		31.9		112.0		7.9		11.0		18		88				<0.2		0.6	
					Middle	3.7	0.3	271	23.4	23.4	8.3	8.3	31.9	31.9	111.5	111.5	7.9		13.1		15		88				<0.2		0.7	
						3.7	0.3	289	23.4		8.3		31.9		111.4		7.9		13.4		14		89				<0.2		0.6	
					Bottom	6.4	0.2	296	23.4	23.4	8.3	8.3	31.9	31.9	110.4	110.3	7.8	7.8	15.5		13		90				<0.2		0.7	
						6.4	0.2	310	23.4		8.3		31.9		110.2		7.8		15.0		14		90				<0.2		0.6	
IM6	Cloudy	Moderate	16:24	7.2	Surface	1.0	0.4	250	23.4	23.4	8.3	8.3	31.9	31.9	112.5	112.5	8.0	8.0	13.1	14.6	11	15	87	89	821071	805833	<0.2	<0.2	0.8	0.7
						1.0	0.4	257	23.4		8.3		31.9		112.5		8.0		13.6		11		87				<0.2		0.6	
					Middle	3.6	0.4	248	23.4	23.4	8.3	8.3	31.9	31.9	112.2	112.2	8.0		15.7		16		87				<0.2		0.7	
						3.6	0.4	271	23.4		8.3		31.9		112.2		8.0		15.7		17		89				<0.2		0.7	
					Bottom	6.2	0.4	252	23.4	23.4	8.3	8.3	31.9	31.9	111.7	111.6	7.9	7.9	14.8		18		91				<0.2		0.8	
						6.2	0.4	268	23.4		8.3		31.9		111.5		7.9		14.9		19		92				<0.2		0.8	
IM7	Cloudy	Moderate	16:18	7.8	Surface	1.0	0.3	50	23.5	23.5	8.3	8.3	31.9	31.9	116.1	116.1	8.2	8.2	4.4	10.6	7	9	86	89	821353	806819	<0.2	<0.2	0.8	0.8
						1.0	0.4	51	23.5		8.3		31.9		116.1		8.2		4.5		8		88				<0.2		0.9	
					Middle	3.9	0.3	57	23.5	23.5	8.3	8.3	31.9	31.9	114.9	114.9	8.1		11.3		8		89				<0.2		0.8	
						3.9	0.3	59	23.5		8.3		31.9		114.9		8.1		12.1		9		89				<0.2		0.7	
					Bottom	6.8	0.3	48	23.5	23.5	8.3	8.3	32.0	32.0	114.3	114.3	8.1	8.1	15.7		10		91				<0.2		0.8	
						6.8	0.3	50	23.5		8.3		32.0		114.3		8.1		15.5		9		91				<0.2		0.7	
IM8	Cloudy	Moderate	16:49	7.9	Surface	1.0	0.3	216	23.6	23.6	8.0	8.0	32.6	32.6	114.6	114.6	8.1	8.1	4.1	6.8	7	7	86	89	821822	808124	<0.2	<0.2	1.0	0.9
						1.0	0.3	235	23.6		8.0		32.6		114.6		8.1		4.1		8		85				<0.2		0.8	
					Middle	4.0	0.2	205	23.6	23.6	8.0	8.0	32.6	32.6	114.0	114.1	8.0		6.6		7		89				<0.2		0.9	
						4.0	0.2	212	23.6		8.0		32.6		114.2		8.0		6.7		6		89				<0.2		0.9	
					Bottom	6.9	0.2	235	23.6	23.6	8.0	8.0	32.6	32.6	113.1	113.1	8.0	8.0	9.5		6		93				<0.2		0.9	
						6.9	0.2	252	23.6		8.0		32.6		113.1		8.0		9.7		7		93				<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 14 November 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	16:56	7.3	Surface	1.0	0.4	248	23.6	23.6	8.0	8.0	32.5	32.5	114.9	115.0	8.1	8.1	2.6	4.1	6	5	85	89	822095	808791	<0.2	<0.2	0.7	0.8
						1.0	0.4	253	23.6		8.0		32.5		115.0		8.1		2.5		6		85				<0.2		0.9	
					Middle	3.7	0.4	257	23.6	23.6	8.0	8.0	32.6	32.6	113.9	114.0	8.0		3.8		5		89				<0.2		0.8	
						3.7	0.4	260	23.6		8.0		32.6		114.1		8.0		3.8		6		89				<0.2		0.8	
					Bottom	6.3	0.3	262	23.6	23.6	8.0	8.0	32.6	32.6	112.7	112.8	7.9	7.9	5.9		4		93				<0.2		0.8	
						6.3	0.3	268	23.6		8.0		32.6		112.8		7.9		5.9		5		93				<0.2		0.8	
IM10	Cloudy	Moderate	17:05	7.5	Surface	1.0	0.7	288	23.6	23.6	8.0	8.0	32.6	32.6	113.5	113.5	8.0	8.0	2.5	3.4	5	5	85	89	822373	809809	<0.2	<0.2	0.8	0.8
						1.0	0.7	314	23.6		8.0		32.6		113.5		8.0		2.5		6		85				<0.2		0.8	
					Middle	3.8	0.5	297	23.6	23.6	8.0	8.0	32.6	32.6	112.8	112.8	7.9		3.1		5		89				<0.2		0.8	
						3.8	0.5	300	23.6		8.0		32.6		112.8		7.9		3.1		6		89				<0.2		0.9	
					Bottom	6.5	0.4	303	23.6	23.6	8.0	8.0	32.6	32.6	111.4	111.4	7.8	7.8	4.6		5		92				<0.2		0.8	
						6.5	0.5	323	23.6		8.0		32.6		111.4		7.8		4.7		4		93				<0.2		0.8	
IM11	Cloudy	Moderate	17:24	8.3	Surface	1.0	1.4	206	23.4	23.4	8.0	8.0	32.7	32.7	112.7	112.7	8.0	8.0	2.7	4.9	4	4	85	89	822054	811452	<0.2	<0.2	1.0	0.9
						1.0	1.4	217	23.4		8.0		32.7		112.7		8.0		2.8		3		85				<0.2		0.9	
					Middle	4.2	1.5	205	23.4	23.4	8.0	8.0	32.7	32.7	112.0	112.0	7.9		4.0		4		89				<0.2		0.8	
						4.2	1.5	219	23.4		8.0		32.7		111.9		7.9		4.0		4		89				<0.2		0.8	
					Bottom	7.3	1.5	201	23.4	23.4	8.0	8.0	32.7	32.7	110.7	110.7	7.8	7.8	7.7		4		93				<0.2		0.8	
						7.3	1.6	218	23.4		8.0		32.7		110.7		7.8		7.9		4		93				<0.2		0.9	
IM12	Cloudy	Moderate	17:34	7.8	Surface	1.0	2.0	311	23.3	23.3	8.0	8.0	32.7	32.7	112.1	112.1	7.9	7.9	4.2	6.1	6	5	85	89	821459	812057	<0.2	<0.2	0.7	0.7
						1.0	2.1	322	23.3		8.0		32.7		112.0		7.9		4.2		5		85				<0.2		0.7	
					Middle	3.9	2.1	313	23.3	23.3	8.0	8.0	32.7	32.7	111.8	111.7	7.9		4.2		6		89				<0.2		0.7	
						3.9	2.3	336	23.3		8.0		32.7		111.6		7.9		4.3		5		89				<0.2		0.7	
					Bottom	6.8	1.8	294	23.4	23.4	8.0	8.0	32.7	32.7	111.0	111.0	7.8	7.8	10.0		5		92				<0.2		0.9	
						6.8	1.8	320	23.4		8.0		32.7		110.9		7.8		9.7		5		93				<0.2		0.7	
SR1A	Cloudy	Moderate	17:56	5.2	Surface	1.0	-	-	23.6	23.6	8.0	8.0	32.9	32.9	108.2	108.2	7.6	7.6	6.3	6.4	8	8	-	-	819980	812662	-	-	-	-
						1.0	-	-	23.6		8.0		32.9		108.2		7.6		6.3		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-				-		-				-		-	
						2.6	-	-	-		-		-		-		-				-		-				-		-	
					Bottom	4.2	-	-	23.6	23.6	8.0	8.0	32.9	32.9	107.8	107.8	7.6	7.6	6.5		8		-				-		-	
						4.2	-	-	23.6		8.0		32.9		107.7		7.6		6.6		8		-				-		-	
SR2	Cloudy	Moderate	18:13	4.8	Surface	1.0	0.4	140	23.6	23.6	8.0	8.0	32.8	32.8	110.0	110.0	7.7	7.7	18.0	25.8	25	21	85	87	821455	814161	<0.2	<0.2	0.8	0.8
						1.0	0.4	150	23.6		8.0		32.8		110.0		7.7		18.2		26		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	145	23.6	23.6	8.0	8.0	32.8	32.8	109.7	109.8	7.7	7.7	33.3		17		88				<0.2		0.8	
						3.8	0.3	147	23.6		8.0		32.8		109.8		7.7		33.6		17		88				<0.2		0.9	
SR3	Cloudy	Moderate	16:31	8.8	Surface	1.0	0.3	219	23.6	23.6	8.1	8.1	32.4	32.4	117.2	117.2	8.3	8.3	6.0	11.3	9	9	-	-	822139	807560	-	-	-	-
						1.0	0.3	236	23.6		8.1		32.4		117.2		8.3		6.1		9		-				-		-	
					Middle	4.4	0.2	240	23.6	23.6	8.1	8.1	32.4	32.4	116.8	116.9	8.2		6.6		9		-				-		-	
						4.4	0.2	262	23.6		8.1		32.4		116.9		8.2		6.6		9		-				-		-	
					Bottom	7.8	0.2	286	23.5	23.5	8.1	8.1	32.5	32.5	115.3	115.3	8.1	8.1	20.9		9		-				-		-	
						7.8	0.2	303	23.5		8.1		32.5		115.2		8.1		21.3		9		-				-		-	
SR4A	Cloudy	Moderate	17:49	8.6	Surface	1.0	0.1	221	23.4	23.4	8.3	8.3	32.4	32.4	107.4	107.4	7.6	7.6	8.8	11.7	11	10	-	-	817212	807809	-	-	-	-
						1.0	0.1	240	23.4		8.3		32.4		107.4		7.6		9.2		11		-				-		-	
					Middle	4.3	0.2	63	23.4	23.4	8.3	8.3	32.4	32.4	107.1	107.1	7.6		11.9		11		-				-		-	
						4.3	0.2	68	23.4		8.3		32.4		107.1		7.6		12.1		10		-				-		-	
					Bottom	7.6	0.1	69	23.4	23.4	8.3	8.3	32.4	32.4	106.6	106.6	7.5	7.5	14.0		8		-				-		-	
						7.6	0.1	69	23.4		8.3		32.4		106.6		7.5		14.0		9		-				-		-	
SR5A	Cloudy	Moderate	18:08	3.5	Surface	1.0	0.2	307	23.5	23.5	8.3	8.3	32.4	32.4	107.4	107.4	7.6	7.6	10.9	11.8	11	9	-	-	816573	810707	-	-	-	-
						1.0	0.2	308	23.5		8.3		32.4		107.3		7.6		10.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	293	23.5	23.5	8.3	8.3	32.4	32.4	106.8	106.8	7.5	7.5	12.5		7		-				-		-	
						2.5	0.2	321	23.5		8.3		32.4		106.8		7.5		12.9		8		-				-		-	
SR6A	Cloudy	Moderate	18:56	4.7	Surface	1.0	0.1	201	23.7	23.7	8.2	8.2	32.3	32.3	107.5	107.4	7.6	7.6	7.9	13.2	6	7	-	-	817951	814760	-	-	-	-
						1.0	0.1	203	23.7		8.2		32.3		107.2		7.5		7.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	223	23.7	23.7	8.2	8.2	32.3	32.3	106.3	106.2	7.5	7.5	18.6		6		-				-		-	
						3.7	0.1	232	23.7		8.2		32.3		106.1		7.5		18.5		7		-				-		-	
SR7	Cloudy	Moderate	19:24	14.4	Surface	1.0	0.0	116	23.9	23.9	7.9	7.9	33.2	33.2	96.7	96.7	6.7	6.8	8.3	8.3	10	10	-	-	823628	823718	-	-	-	-
						1.0	0.0	117	23.9		7.9		33.2		96.6		6.7		8.3		9		-				-		-	
					Middle	7.2	0.1	184	23.9	23.9	7.9	7.9	33.2	33.2	96.8	96.9	6.8		7.3		11		-				-		-	
						7.2	0.1	195	23.9		7.9		33.2		96.9		6.8		6.7		10		-				-		-	
					Bottom	13.4	0.1	76	23.9	23.9	7.9	7.9	33.2	33.2	97.0	97.1	6.8	6.8	9.9		10		-				-		-	
						13.4	0.1	78	23.9		7.9		33.2		97.1		6.8		9.5		11		-				-		-	
SR8	Cloudy	Moderate	17:45	4.4	Surface	1.0	-	-	23.7	23.7	8.0	8.0	32.7	32.7	110.4	110.4	7.8	7.8	7.9	9.5	11	10	-	-	820404	811610	-	-	-	-
						1.0	-	-	23.7		8.0		32.7		110.3		7.8		8.0		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	23.6	23.6	8.0	8.0	32.7	32.7	108.8	108.8	7.7	7.7	11.1		9		-				-		-	
						3.4	-	-	23.6		8.0		32.7		108.8		7.7		11.1		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 November 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	13:52	8.6	Surface	1.0	2.2	130	23.6	23.6	8.3	8.3	30.8	30.8	100.0	99.8	7.1	7.0	6.2	8.1	6	8	86	88	815629	804233	<0.2	<0.2	0.7	0.7
						1.0	2.3	130	23.5		8.3		30.8		99.6		7.1		6.3		7		86				<0.2		0.7	
					Middle	4.3	2.0	127	23.2	23.2	8.3	8.3	31.6	31.6	97.0	96.9	6.9		6.9		8		87				<0.2		0.7	
						4.3	2.0	127	23.2		8.3		31.7		96.8		6.9		7.5		9		88				<0.2		0.7	
					Bottom	7.6	2.0	131	23.2	23.2	8.3	8.3	32.0	32.0	96.5	96.7	6.9	6.9	10.6		8		89				<0.2		0.7	
						7.6	2.0	135	23.2		8.3		32.0		96.8		6.9		11.1		9		89				<0.2		0.7	
C2	Fine	Moderate	12:51	13.0	Surface	1.0	0.2	348	23.9	23.9	8.0	8.0	31.2	31.2	100.5	100.5	7.1	7.1	6.0	7.4	7	7	88	89	825691	806947	<0.2	<0.2	0.7	0.7
						1.0	0.2	348	23.9		8.0		31.2		100.5		7.1		6.0		7		87				<0.2		0.8	
					Middle	6.5	0.2	13	23.9	23.9	8.0	8.0	31.3	31.3	100.5	100.4	7.1		6.7		7		89				<0.2		0.8	
						6.5	0.2	13	23.9		8.0		31.3		100.3		7.1		6.7		7		89				<0.2		0.7	
					Bottom	12.0	0.3	48	23.9	23.9	8.0	8.0	31.5	31.5	100.4	100.5	7.1	7.1	9.4		7		91				<0.2		0.7	
						12.0	0.3	49	23.9		8.0		31.5		100.5		7.1		9.4		6		91				<0.2		0.6	
C3	Fine	Moderate	14:42	12.1	Surface	1.0	0.3	72	23.9	23.9	8.0	8.0	32.6	32.6	98.5	98.6	6.9	6.9	3.1	5.2	5	4	88	90	822105	817785	<0.2	<0.2	0.8	0.9
						1.0	0.3	79	23.9		8.0		32.6		98.6		6.9		3.1		5		88				<0.2		1.0	
					Middle	6.1	0.3	85	23.8	23.8	8.0	8.0	32.7	32.7	96.4	96.5	6.8		5.4		4		90				<0.2		0.8	
						6.1	0.3	92	23.8		8.0		32.7		96.5		6.8		5.5		4		90				<0.2		0.8	
					Bottom	11.1	0.5	101	23.7	23.7	8.0	8.0	32.8	32.8	94.5	94.5	6.6	6.6	7.1		4		92				<0.2		0.8	
						11.1	0.5	105	23.7		8.0		32.8		94.4		6.6		7.1		4		92				<0.2		0.9	
IM1	Cloudy	Moderate	13:33	5.0	Surface	1.0	0.1	174	23.6	23.6	8.3	8.3	31.6	31.6	101.2	101.1	7.2	7.2	7.1	9.1	11	11	87	88	817925	807133	<0.2	<0.2	0.6	0.6
						1.0	0.1	189	23.6		8.3		31.6		101.0		7.2		7.6		10		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	185	23.5	23.5	8.3	8.3	31.7	31.7	97.5	97.8	6.9	6.9	10.8		10		89				<0.2		0.6	
						4.0	0.1	194	23.5		8.3		31.7		98.0		6.9		11.0		11		89				<0.2		0.6	
IM2	Cloudy	Moderate	13:26	6.8	Surface	1.0	2.7	287	23.7	23.7	8.3	8.3	31.3	31.3	101.1	101.0	7.2	7.1	7.6	9.6	10	11	85	87	818180	806176	<0.2	<0.2	0.7	0.6
						1.0	2.9	302	23.7		8.3		31.3		100.9		7.1		7.9		11		86				<0.2		0.6	
					Middle	3.4	2.6	288	23.5	23.5	8.3	8.3	31.4	31.4	99.2	99.1	7.0		7.5		11		87				<0.2		0.6	
						3.4	2.9	294	23.5		8.3		31.4		98.9		7.0		7.9		11		88				<0.2		0.6	
					Bottom	5.8	2.8	287	23.4	23.4	8.3	8.3	31.5	31.5	98.4	98.5	7.0	7.0	13.3		11		89				<0.2		0.6	
						5.8	3.0	299	23.4		8.3		31.5		98.6		7.0		13.7		12		89				<0.2		0.6	
IM3	Cloudy	Moderate	13:20	7.1	Surface	1.0	2.7	321	23.7	23.7	8.3	8.3	31.4	31.4	100.8	100.8	7.1	7.1	6.5	8.4	8	8	86	88	818771	805579	<0.2	<0.2	0.6	0.6
						1.0	2.8	349	23.7		8.3		31.4		100.7		7.1		6.6		8		87				<0.2		0.6	
					Middle	3.6	2.7	324	23.6	23.6	8.3	8.3	31.4	31.4	99.8	99.7	7.1		7.0		8		88				<0.2		0.6	
						3.6	2.9	348	23.6		8.3		31.4		99.6		7.1		7.1		7		88				<0.2		0.6	
					Bottom	6.1	2.6	326	23.4	23.4	8.3	8.3	31.5	31.5	97.7	97.8	6.9	6.9	11.7		7		90				<0.2		0.6	
						6.1	2.6	345	23.4		8.3		31.5		97.8		6.9		11.6		7		90				<0.2		0.8	
IM4	Cloudy	Moderate	13:10	8.0	Surface	1.0	1.8	349	23.4	23.4	8.3	8.3	31.4	31.4	98.0	98.0	7.0	7.0	8.9	8.9	10	8	85	88	819711	804607	<0.2	<0.2	0.8	0.7
						1.0	1.9	321	23.4		8.3		31.4		98.0		7.0		8.9		10		87				<0.2		0.8	
					Middle	4.0	2.3	352	23.4	23.4	8.3	8.3	31.4	31.4	98.1	98.2	7.0		8.7		9		87				<0.2		0.7	
						4.0	2.5	357	23.4		8.3		31.4		98.2		7.0		8.7		9		88				<0.2		0.8	
					Bottom	7.0	2.3	352	23.5	23.5	8.3	8.3	31.3	31.3	98.4	98.5	7.0	7.0	9.0		6		90				<0.2		0.6	
						7.0	2.4	324	23.5		8.3		31.3		98.5		7.0		9.0		6		89				<0.2		0.7	
IM5	Cloudy	Moderate	13:03	7.7	Surface	1.0	2.0	277	23.6	23.6	8.3	8.3	31.3	31.3	100.3	100.3	7.1	7.1	8.2	11.3	6	6	86	87	820720	804843	<0.2	<0.2	0.8	0.8
						1.0	2.1	288	23.6		8.3		31.3		100.2		7.1		8.5		7		85				<0.2		0.7	
					Middle	3.9	2.5	279	23.6	23.6	8.3	8.3	31.3	31.3	99.6	99.6	7.1		10.7		6		87				<0.2		0.8	
						3.9	2.6	295	23.6		8.3		31.3		99.5		7.1		11.1		5		88				<0.2		0.9	
					Bottom	6.7	2.7	283	23.6	23.6	8.3	8.3	31.3	31.3	99.9	100.0	7.1	7.1	14.5		5		89				<0.2		0.8	
						6.7	2.8	303	23.6		8.3		31.3		100.0		7.1		14.9		6		89				<0.2		0.7	
IM6	Cloudy	Moderate	12:55	7.3	Surface	1.0	2.7	235	23.7	23.7	8.3	8.3	31.0	31.0	101.1	101.1	7.2	7.2	4.0	5.4	6	7	85	87	821042	805847	<0.2	<0.2	0.7	0.8
						1.0	2.9	253	23.7		8.3		31.0		101.0		7.2		4.0		5		86				<0.2		0.7	
					Middle	3.7	3.1	242	23.7	23.7	8.3	8.3	31.1	31.1	100.3	100.3	7.1		5.2		7		87				<0.2		0.8	
						3.7	3.2	251	23.7		8.3		31.1		100.3		7.1		5.6		8		87				<0.2		0.8	
					Bottom	6.3	3.0	231	23.7	23.7	8.3	8.3	31.2	31.2	100.5	100.6	7.1	7.1	7.0		8		89				<0.2		0.8	
						6.3	3.2	240	23.7		8.3		31.2		100.6		7.1		6.9		7		89				<0.2		0.8	
IM7	Cloudy	Moderate	12:50	8.2	Surface	1.0	1.9	38	23.8	23.8	8.3	8.3	31.0	31.0	101.6	101.6	7.2	7.2	4.1	6.0	8	8	87	88	821358	806820	<0.2	<0.2	0.8	0.9
						1.0	1.9	41	23.8		8.3		31.0		101.6		7.2		4.1		8		86				<0.2		0.8	
					Middle	4.1	1.9	40	23.6	23.6	8.3	8.3	31.2	31.3	99.7	99.7	7.1		6.3		8		88				<0.2		0.9	
						4.1	2.0	41	23.6		8.3		31.3		99.6		7.1		6.5		8		88				<0.2		0.9	
					Bottom	7.2	1.7	40	23.5	23.5	8.3	8.3	31.4	31.4	99.4	99.4	7.1	7.1	7.7		7		89				<0.2		0.9	
						7.2	1.7	42	23.5		8.3		31.4		99.4		7.1		7.6		8		89				<0.2		1.0	
IM8	Fine	Moderate	13:17	7.9	Surface	1.0	0.3	88	23.9	23.9	8.0	8.0	31.5	31.5	101.0	101.0	7.1	7.1	7.5	9.9	6	6	87	89	821816	808136	<0.2	<0.2	0.8	0.7
						1.0	0.3	89	23.9		8.0		31.5		100.9		7.1		7.6		6		86				<0.2		0.8	
					Middle	4.0	0.3	75	23.6	23.6	8.0	8.0	31.7	31.7	99.6	99.7	7.0		9.2		6		89				<0.2		0.8	
						4.0	0.3	81	23.6		8.0		31.7		99.7		7.0		9.3		7		89				<0.2		0.7	
					Bottom	6.9	0.3	61	23.5	23.5	8.0	8.0	32.0	32.0	99.5	99.5	7.0	7.0	12.9		6		90				<0.2		0.6	
						6.9	0.3	66	23.5		8.0		32.0		99.5		7.0		12.8		6		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 November 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	Fine	Moderate	13:23	7.2	Surface	1.0	0.4	56	23.8	23.8	8.0	8.0	31.5	31.5	102.1	102.1	7.2	7.2	7.3	9.8	6	6	87	89	822106	808825	<0.2	<0.2	0.8	0.8
						1.0	0.4	58	23.8		8.0		31.5		102.1		7.2		7.4		7		86				<0.2		0.6	
					Middle	3.6	0.4	71	23.8	23.8	8.0	8.0	31.6	31.6	100.7	100.7	7.1		9.4		6		88				<0.2		0.8	
						3.6	0.4	73	23.8		8.0		31.6		100.7		7.1		9.5		6		89				<0.2		0.9	
					Bottom	6.2	0.4	65	23.6	23.6	8.0	8.0	31.9	31.9	100.1	100.1	7.1	7.1	12.5		5		91				<0.2		0.7	
						6.2	0.4	70	23.6		8.0		31.9		100.0		7.1		12.7		6		91				<0.2		0.7	
IM10	Fine	Moderate	13:31	8.2	Surface	1.0	0.4	86	23.9	23.9	8.0	8.0	31.4	31.4	101.6	101.7	7.2	7.1	7.4	10.3	6	6	86	89	822382	809772	<0.2	<0.2	0.7	0.7
						1.0	0.4	92	23.9		8.0		31.4		101.7		7.2		7.5		6		87				<0.2		0.7	
					Middle	4.1	0.4	88	23.8	23.8	8.0	8.0	31.5	31.5	99.8	99.8	7.0		10.3		6		89				<0.2		0.6	
						4.1	0.5	96	23.8		8.0		31.5		99.7		7.0		10.5		6		89				<0.2		0.6	
					Bottom	7.2	0.3	91	23.5	23.5	8.0	8.0	32.0	32.0	98.2	98.2	7.0	7.0	12.8		6		91				<0.2		0.8	
						7.2	0.3	95	23.5		8.0		32.0		98.2		7.0		13.2		6		92				<0.2		0.8	
IM11	Fine	Moderate	13:42	8.0	Surface	1.0	0.4	98	23.8	23.8	8.0	8.0	32.1	32.1	101.4	101.4	7.1	7.1	3.9	5.6	6	7	87	89	822052	811478	<0.2	<0.2	0.8	0.8
						1.0	0.4	99	23.8		8.0		32.1		101.4		7.1		3.9		8		87				<0.2		0.8	
					Middle	4.0	0.4	107	23.6	23.6	8.0	8.0	32.1	32.1	99.8	99.8	7.0		5.1		7		88				<0.2		0.8	
						4.0	0.4	110	23.6		8.0		32.1		99.8		7.0		5.1		7		89				<0.2		0.8	
					Bottom	7.0	0.3	109	23.6	23.6	8.0	8.0	32.1	32.1	99.7	99.7	7.0	7.0	7.6		6		91				<0.2		0.9	
						7.0	0.3	110	23.6		8.0		32.1		99.7		7.0		7.9		7		91				<0.2		0.8	
IM12	Fine	Moderate	13:48	9.8	Surface	1.0	0.2	98	23.8	23.8	8.0	8.0	32.1	32.1	101.9	101.9	7.2	7.2	4.6	6.7	7	7	87	89	821444	812067	<0.2	<0.2	0.9	0.9
						1.0	0.3	104	23.8		8.0		32.1		101.8		7.2		4.6		7		87				<0.2		0.9	
					Middle	4.9	0.3	108	23.7	23.7	8.0	8.0	32.2	32.2	100.5	100.5	7.1		5.6		7		88				<0.2		0.9	
						4.9	0.3	113	23.7		8.0		32.2		100.4		7.1		5.7		7		88				<0.2		0.9	
					Bottom	8.8	0.3	98	23.7	23.7	8.0	8.0	32.2	32.2	100.2	100.2	7.1	7.1	9.8		6		91				<0.2		0.7	
						8.8	0.3	106	23.7		8.0		32.2		100.2		7.1		9.7		7		91				<0.2		0.9	
SR1A	Fine	Moderate	14:08	5.3	Surface	1.0	-	-	23.7	23.7	8.0	8.0	32.3	32.3	100.4	100.4	7.1	7.1	4.5	4.7	5	6	-	-	819981	812665	-	-	-	-
						1.0	-	-	23.7		8.0		32.3		100.4		7.1		4.5		6		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	23.6	23.6	8.0	8.0	32.4	32.4	99.1	99.1	7.0	7.0	5.0		7		-				-		-	
						4.3	-	-	23.6		8.0		32.4		99.0		7.0		4.9		7		-				-		-	
SR2	Fine	Moderate	14:22	4.7	Surface	1.0	0.3	74	23.9	23.9	8.1	8.1	32.2	32.2	103.2	103.2	7.2	7.2	3.2	3.6	6	6	88	90	821448	814186	<0.2	<0.2	0.8	0.8
						1.0	0.3	79	23.9		8.1		32.2		103.2		7.2		3.2		5		89				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	73	23.8	23.8	8.1	8.1	32.3	32.3	101.4	101.4	7.1	7.1	4.1		6		91				<0.2		0.7	
						3.7	0.3	78	23.8		8.1		32.3		101.4		7.1		3.9		5		90				<0.2		0.9	
SR3	Fine	Moderate	13:10	9.4	Surface	1.0	0.2	153	23.9	23.9	8.0	8.0	31.2	31.2	99.4	99.3	7.0	7.0	5.2	7.4	6	7	-	-	822126	807557	-	-	-	-
						1.0	0.2	156	23.9		8.0		31.2		99.2		7.0		5.3		7		-				-		-	
					Middle	4.7	0.2	145	23.7	23.7	8.0	8.0	31.5	31.5	98.5	98.6	7.0		7.0		7		-				-		-	
						4.7	0.3	154	23.7		8.0		31.5		98.6		7.0		7.1		7		-				-		-	
					Bottom	8.4	0.2	123	23.5	23.5	8.0	8.0	31.8	31.8	97.8	97.8	6.9	6.9	9.8		8		-				-		-	
						8.4	0.2	127	23.5		8.0		31.8		97.8		6.9		9.7		7		-				-		-	
SR4A	Cloudy	Moderate	14:14	8.7	Surface	1.0	2.0	8	23.6	23.6	8.3	8.3	31.4	31.4	99.6	99.5	7.1	7.1	7.4	9.0	10	10	-	-	817187	807793	-	-	-	-
						1.0	2.0	8	23.6		8.3		31.4		99.4		7.1		7.5		9		-				-		-	
					Middle	4.4	2.1	11	23.5	23.5	8.3	8.3	31.4	31.4	98.3	98.3	7.0		9.3		10		-				-		-	
						4.4	2.2	11	23.5		8.3		31.4		98.3		7.0		9.3		9		-				-		-	
					Bottom	7.7	2.2	6	23.5	23.5	8.3	8.3	31.4	31.4	98.5	98.6	7.0	7.0	10.2		10		-				-		-	
						7.7	2.4	6	23.5		8.3		31.4		98.6		7.0		10.2		10		-				-		-	
SR5A	Cloudy	Moderate	14:31	3.3	Surface	1.0	0.1	17	23.7	23.7	8.3	8.3	31.7	31.7	99.8	99.8	7.0	7.0	10.0	10.8	7	8	-	-	816603	810673	-	-	-	-
						1.0	0.1	18	23.7		8.3		31.7		99.8		7.0		10.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	5	23.8	23.8	8.3	8.3	31.7	31.7	100.4	100.4	7.1	7.1	11.7		8		-				-		-	
						2.3	0.1	5	23.8		8.3		31.7		100.4		7.1		11.5		7		-				-		-	
SR6A	Cloudy	Moderate	15:11	4.1	Surface	1.0	0.0	54	23.9	23.9	8.4	8.4	31.7	31.7	101.3	101.3	7.1	7.1	6.5	7.0	9	9	-	-	817961	814735	-	-	-	-
						1.0	0.0	55	23.9		8.4		31.7		101.2		7.1		6.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	76	23.9	23.9	8.4	8.4	31.7	31.7	101.2	101.4	7.1	7.1	7.6		9		-				-		-	
						3.1	0.0	83	23.9		8.4		31.7		101.5		7.1		7.4		10		-				-		-	
SR7	Fine	Moderate	15:11	15.6	Surface	1.0	0.3	72	23.7	23.7	8.0	8.0	32.8	32.8	95.3	95.3	6.7	6.7	4.1	5.1	4	4	-	-	823640	823738	-	-	-	-
						1.0	0.3	74	23.7		8.0		32.8		95.2		6.7		4.1		5		-				-		-	
					Middle	7.8	0.3	51	23.7	23.7	8.0	8.0	32.8	32.8	95.5	95.6	6.7		5.2		4		-				-		-	
						7.8	0.3	54	23.7		8.0		32.8		95.6		6.7		5.3		4		-				-		-	
					Bottom	14.6	0.2	25	23.7	23.7	8.0	8.0	32.8	32.8	95.1	95.2	6.7	6.7	5.9		4		-				-		-	
						14.6	0.2	26	23.7		8.0		32.8		95.2		6.7		5.9		4		-				-		-	
SR8	Fine	Moderate	13:59	4.9	Surface	1.0	-	-	23.8	23.8	8.0	8.0	32.2	32.2	101.4	101.5	7.1	7.1	7.7	7.5	7	8	-	-	820380	811612	-	-	-	-
						1.0	-	-	23.8		8.0		32.2		101.5		7.1		7.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	23.6	23.6	8.0	8.0	32.2	32.2	100.2	100.2	7.1	7.1	7.2		8		-				-		-	
						3.9	-	-	23.6		8.0		32.2		100.2		7.1		7.2		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 17 November 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	09:46	8.0	Surface	1.0	2.4	31	23.2	23.2	8.3	8.3	31.0	31.1	97.0	97.0	6.9	6.9	7.9	10.4	14	14	84	87	815618	804238	<0.2	<0.2	0.8	0.8
						1.0	2.4	31	23.2		8.3		31.1		97.0		6.9		8.0		14		86				<0.2		0.9	
					Middle	4.0	2.5	31	23.2	23.2	8.3	8.3	31.5	31.5	96.8	96.8	6.9		10.8		14		87				<0.2		1.0	
						4.0	2.5	31	23.2		8.3		31.5		96.8		6.9		10.8		14		87				<0.2		0.8	
					Bottom	7.0	2.4	33	23.2	23.2	8.3	8.3	31.6	31.6	97.3	97.4	6.9	6.9	13.0		14		89				<0.2		0.7	
						7.0	2.6	33	23.2		8.3		31.6		97.4		6.9		12.1		13		89				<0.2		0.8	
C2	Sunny	Moderate	10:10	12.1	Surface	1.0	0.5	328	23.8	23.8	8.1	8.1	30.9	30.9	99.6	99.6	7.1	7.0	5.9	7.4	8	7	88	90	825705	806928	<0.2	<0.2	0.8	0.8
						1.0	0.5	353	23.8		8.1		30.9		99.6		7.1		5.9		6		87				<0.2		0.8	
					Middle	6.1	0.4	345	23.7	23.7	8.1	8.1	31.0	31.0	98.1	98.1	7.0		7.1		7		90				<0.2		0.7	
						6.1	0.4	353	23.7		8.1		31.0		98.1		6.9		7.4		7		90				<0.2		0.8	
					Bottom	11.1	0.3	21	23.5	23.5	8.1	8.1	31.6	31.6	97.9	97.9	6.9	6.9	9.1		7		92				<0.2		0.8	
						11.1	0.4	22	23.6		8.1		31.6		97.9		6.9		8.9		7		91				<0.2		0.7	
C3	Cloudy	Moderate	08:20	11.2	Surface	1.0	0.4	239	23.6	23.6	8.1	8.1	32.2	32.2	99.6	99.6	7.0	7.0	6.0	8.9	5	6	88	90	822111	817785	<0.2	<0.2	0.7	0.7
						1.0	0.4	245	23.6		8.1		32.2		99.6		7.0		6.1		6		88				<0.2		0.7	
					Middle	5.6	0.4	245	23.6	23.6	8.1	8.1	32.2	32.2	99.2	99.2	7.0		9.0		6		90				<0.2		0.6	
						5.6	0.5	251	23.6		8.1		32.2		99.2		7.0		9.2		6		90				<0.2		0.8	
					Bottom	10.2	0.4	255	23.6	23.6	8.1	8.1	32.3	32.3	98.8	98.8	7.0	7.0	11.6		6		92				<0.2		0.6	
						10.2	0.4	270	23.6		8.1		32.3		98.7		7.0		11.5		7		93				<0.2		0.7	
IM1	Cloudy	Moderate	10:05	4.7	Surface	1.0	0.2	353	23.3	23.3	8.3	8.3	31.5	31.5	97.1	97.0	6.9	6.9	15.4	16.0	13	16	85	87	817930	807112	<0.2	<0.2	0.8	1.0
						1.0	0.2	325	23.3		8.3		31.5		96.9		6.9		16.0		14		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	358	23.3	23.3	8.3	8.3	31.5	31.5	96.5	96.5	6.9	6.9	16.3		18		89				<0.2		1.0	
						3.7	0.2	329	23.3		8.3		31.5		96.5		6.9		16.3		18		88				<0.2		1.2	
IM2	Cloudy	Moderate	10:13	6.7	Surface	1.0	1.7	4	23.5	23.5	8.3	8.3	31.2	31.2	99.8	99.8	7.1	7.1	14.6	15.2	14	15	86	88	818166	806161	<0.2	<0.2	0.6	0.8
						1.0	1.7	4	23.5		8.3		31.2		99.8		7.1		15.1		14		87				<0.2		0.6	
					Middle	3.4	1.7	357	23.5	23.5	8.3	8.3	31.3	31.3	99.8	99.9	7.1		15.4		14		87				<0.2		0.8	
						3.4	1.8	328	23.5		8.3		31.3		99.9		7.1		15.8		15		88				<0.2		0.9	
					Bottom	5.7	1.8	358	23.5	23.6	8.3	8.3	31.3	31.3	100.4	100.5	7.1	7.1	15.0		16		89				<0.2		0.9	
						5.7	1.9	329	23.6		8.3		31.3		100.6		7.1		15.2		17		89				<0.2		0.8	
IM3	Cloudy	Moderate	10:19	7.0	Surface	1.0	2.7	28	23.5	23.5	8.3	8.3	31.2	31.2	99.2	99.2	7.0	7.0	17.5	17.3	16	18	85	87	818790	805617	<0.2	<0.2	0.6	0.7
						1.0	3.0	28	23.5		8.3		31.2		99.2		7.0		17.8		18		86				<0.2		0.7	
					Middle	3.5	2.8	29	23.5	23.5	8.3	8.3	31.3	31.3	99.2	99.2	7.0		16.8		18		87				<0.2		0.8	
						3.5	2.8	29	23.5		8.3		31.3		99.2		7.1		16.2		17		87				<0.2		0.7	
					Bottom	6.0	2.6	28	23.5	23.5	8.3	8.3	31.3	31.3	99.8	100.0	7.1	7.1	17.7		21		89				<0.2		0.7	
						6.0	2.8	29	23.5		8.3		31.3		100.1		7.1		17.6		20		89				<0.2		0.7	
IM4	Cloudy	Moderate	10:27	7.2	Surface	1.0	3.0	40	23.5	23.5	8.3	8.3	31.1	31.1	98.7	98.7	7.0	7.0	10.7	11.2	21	16	86	87	819725	804595	<0.2	<0.2	0.6	0.7
						1.0	3.1	40	23.5		8.3		31.1		98.6		7.0		10.8		21		85				<0.2		0.7	
					Middle	3.6	2.9	39	23.5	23.5	8.3	8.3	31.1	31.1	98.6	98.7	7.0		10.1		18		87				<0.2		0.6	
						3.6	3.0	41	23.5		8.3		31.1		98.7		7.0		10.5		17		87				<0.2		0.7	
					Bottom	6.2	3.0	43	23.5	23.5	8.3	8.3	31.1	31.1	99.2	99.3	7.1	7.1	12.8		10		89				<0.2		0.7	
						6.2	3.2	43	23.5		8.3		31.1		99.4		7.1		12.3		11		87				<0.2		0.8	
IM5	Cloudy	Moderate	10:33	6.5	Surface	1.0	2.5	266	23.6	23.6	8.3	8.3	31.3	31.3	99.5	99.5	7.1	7.1	11.4	11.0	11	11	87	88	820747	804881	<0.2	<0.2	0.8	0.8
						1.0	2.5	292	23.6		8.3		31.3		99.5		7.1		11.9		11		87				<0.2		0.7	
					Middle	3.3	2.3	267	23.6	23.6	8.3	8.3	31.3	31.3	99.7	99.7	7.1		11.3		11		87				<0.2		0.8	
						3.3	2.3	268	23.6		8.3		31.3		99.7		7.1		11.1		12		88				<0.2		0.9	
					Bottom	5.5	2.5	263	23.6	23.6	8.3	8.3	31.3	31.2	100.6	100.8	7.1	7.2	10.1		12		90				<0.2		0.9	
						5.5	2.7	266	23.6		8.3		31.2		101.0		7.2		10.3		11		89				<0.2		0.8	
IM6	Cloudy	Moderate	10:41	7.2	Surface	1.0	2.6	265	23.7	23.7	8.3	8.3	31.0	31.0	100.9	100.9	7.2	7.2	5.0	9.3	9	10	86	87	821057	805838	<0.2	<0.2	0.8	0.9
						1.0	2.7	279	23.7		8.3		31.0		100.8		7.2		5.1		9		85				<0.2		0.8	
					Middle	3.6	2.7	266	23.6	23.6	8.3	8.3	31.1	31.1	100.3	100.3	7.1		6.8		9		87				<0.2		0.8	
						3.6	2.8	268	23.6		8.3		31.1		100.3		7.1		7.1		9		87				<0.2		0.9	
					Bottom	6.2	2.9	268	23.5	23.5	8.3	8.3	31.2	31.2	101.0	101.1	7.2	7.2	15.5		10		89				<0.2		0.9	
						6.2	3.0	292	23.5		8.3		31.2		101.2		7.2		16.0		11		89				<0.2		0.9	
IM7	Cloudy	Moderate	10:48	8.2	Surface	1.0	2.7	248	23.7	23.7	8.3	8.3	30.8	30.8	100.4	100.4	7.1	7.1	5.8	7.5	10	11	85	87	821327	806852	<0.2	<0.2	0.9	0.9
						1.0	2.7	269	23.7		8.3		30.8		100.4		7.1		5.9		11		86				<0.2		0.9	
					Middle	4.1	2.8	248	23.6	23.6	8.3	8.3	31.0	31.0	100.0	100.0	7.1		7.1		11		87				<0.2		0.8	
						4.1	3.0	256	23.6		8.3		31.1		100.0		7.1		7.1		11		87				<0.2		0.8	
					Bottom	7.2	2.4	248	23.5	23.5	8.3	8.3	31.3	31.3	99.8	99.9	7.1	7.1	9.7		10		89				<0.2		0.9	
						7.2	2.7	265	23.5		8.3		31.3		100.0		7.1		9.6		11		89				<0.2		0.8	
IM8	Cloudy	Moderate	09:44	7.7	Surface	1.0	0.1	78	23.7	23.7	8.1	8.1	31.0	31.0	98.7	98.7	7.0	7.0	7.8	9.3	24	23	86	88	821817	808117	<0.2	<0.2	0.7	0.7
						1.0	0.1	81	23.7		8.1		31.0		98.6		7.0		7.8		23		87				<0.2		0.8	
					Middle	3.9	0.1	90	23.7	23.7	8.1	8.1	31.1	31.1	97.8	97.9	6.9		8.5		22		88				<0.2		0.7	
						3.9	0.1	96	23.7		8.1		31.1		97.9		6.9		8.6		23		88				<0.2		0.8	
					Bottom	6.7	0.1	83	23.7	23.7	8.1	8.1	31.3	31.3	97.8	97.9	6.9	6.9	11.6		23		90				<0.2		0.7	
						6.7	0.1	87	23.7		8.1		31.3		98.0		6.9		11.6		22		89				<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 17 November 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	09:38	7.1	Surface	1.0	0.2	146	23.6	23.6	8.1	8.1	31.6	31.6	97.9	98.0	6.9	6.9	10.1	11.1	20	23	87	88	822099	808826	<0.2	<0.2	0.8	0.8
						1.0	0.2	157	23.6		8.1		31.6		98.1		6.9		10.1		19		87				<0.2		0.8	
					Middle	3.6	0.2	150	23.6	23.6	8.1	8.1	31.6	31.6	97.6	97.6	6.9		11.8		24		88				<0.2		0.7	
						3.6	0.2	158	23.6		8.1		31.6		97.5		6.9		11.2		25		88				<0.2		0.7	
					Bottom	6.1	0.2	127	23.6	23.6	8.1	8.1	31.6	31.6	97.6	97.6	6.9	6.9	11.7		24		90				<0.2		0.8	
						6.1	0.2	137	23.6		8.1		31.6		97.6		6.9		11.8		24		90				<0.2		0.8	
IM10	Cloudy	Moderate	09:31	7.2	Surface	1.0	0.5	301	23.5	23.5	8.1	8.1	32.0	32.0	98.2	98.1	6.9	6.9	13.1	15.7	18	19	87	88	822369	809816	<0.2	<0.2	0.8	0.8
						1.0	0.6	308	23.5		8.1		32.0		98.0		6.9		12.8		18		87				<0.2		0.8	
					Middle	3.6	0.5	299	23.5	23.5	8.1	8.1	32.0	32.0	97.6	97.6	6.9		15.1		18		88				<0.2		0.7	
						3.6	0.5	308	23.5		8.1		32.0		97.6		6.9		14.9		19		88				<0.2		0.7	
					Bottom	6.2	0.5	302	23.5	23.5	8.1	8.1	32.0	32.0	97.6	97.6	6.9	6.9	18.9		21		90				<0.2		0.7	
						6.2	0.5	325	23.5		8.1		32.0		97.6		6.9		19.2		20		90				<0.2		0.8	
IM11	Cloudy	Moderate	09:20	7.8	Surface	1.0	0.5	288	23.5	23.5	8.1	8.1	32.1	32.1	98.9	98.9	7.0	7.0	12.5	14.3	15	16	87	89	822047	811463	<0.2	<0.2	0.6	0.7
						1.0	0.5	300	23.5		8.1		32.1		98.9		7.0		12.6		16		88				<0.2		0.7	
					Middle	3.9	0.4	295	23.5	23.5	8.1	8.1	32.2	32.2	98.9	98.9	7.0		14.1		17		88				<0.2		0.7	
						3.9	0.4	298	23.5		8.1		32.2		98.8		7.0		14.2		16		89				<0.2		0.7	
					Bottom	6.8	0.3	306	23.5	23.5	8.1	8.1	32.2	32.2	98.7	98.8	7.0	7.0	16.2		17		90				<0.2		0.8	
						6.8	0.4	329	23.5		8.1		32.2		98.8		7.0		15.9		16		90				<0.2		0.7	
IM12	Cloudy	Moderate	09:14	7.7	Surface	1.0	0.6	283	23.5	23.5	8.1	8.1	32.2	32.2	99.1	99.2	7.0	7.0	14.2	17.4	9	12	87	89	821468	812059	<0.2	<0.2	0.8	0.7
						1.0	0.6	291	23.5		8.1		32.2		99.2		7.0		14.4		10		87				<0.2		0.7	
					Middle	3.9	0.5	284	23.5	23.5	8.1	8.1	32.2	32.2	99.0	99.0	7.0		17.0		13		89				<0.2		0.8	
						3.9	0.6	285	23.5		8.1		32.2		99.0		7.0		17.3		12		89				<0.2		0.7	
					Bottom	6.7	0.4	270	23.5	23.5	8.1	8.1	32.2	32.2	98.5	98.5	7.0	7.0	20.8		13		91				<0.2		0.8	
						6.7	0.4	273	23.5		8.1		32.2		98.4		7.0		20.6		12		90				<0.2		0.6	
SR1A	Cloudy	Calm	08:52	5.1	Surface	1.0	-	-	23.4	23.4	8.1	8.1	32.4	32.4	95.5	95.5	6.8	6.8	12.7	14.3	14	14	-	-	819982	812656	-	-	-	-
						1.0	-	-	23.4		8.1		32.4		95.5		6.7		12.9		13		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	23.4	23.4	8.1	8.1	32.4	32.4	95.2	95.2	6.7	6.7	15.5		14		-				-		-	
						4.1	-	-	23.4		8.1		32.4		95.2		6.7		15.9		13		-				-		-	
SR2	Cloudy	Moderate	08:40	4.3	Surface	1.0	0.2	93	23.5	23.5	8.1	8.1	32.1	32.1	98.6	98.7	7.0	7.0	9.3	11.2	11	9	89	90	821454	814151	<0.2	<0.2	0.7	0.7
						1.0	0.2	93	23.5		8.1		32.1		98.7		7.0		9.7		10		89				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	89	23.5	23.5	8.1	8.1	32.1	32.1	98.3	98.3	7.0	7.0	12.8		8		91				<0.2		0.7	
						3.3	0.2	94	23.5		8.1		32.1		98.3		7.0		12.9		7		91				<0.2		0.6	
SR3	Cloudy	Moderate	09:50	9.0	Surface	1.0	0.1	351	23.7	23.7	8.1	8.1	30.9	30.9	99.4	99.4	7.0	7.0	7.9	10.6	16	15	-	-	822152	807563	-	-	-	-
						1.0	0.2	323	23.7		8.1		30.9		99.3		7.0		8.0		15		-				-		-	
					Middle	4.5	0.2	36	23.7	23.7	8.1	8.1	31.0	31.0	98.5	98.6	7.0		9.8		15		-				-		-	
						4.5	0.2	36	23.7		8.1		31.0		98.6		7.0		10.0		14		-				-		-	
					Bottom	8.0	0.2	44	23.7	23.7	8.1	8.1	31.0	31.0	98.3	98.3	7.0	7.0	13.9		15		-				-		-	
						8.0	0.2	44	23.7		8.1		31.0		98.2		7.0		13.9		14		-				-		-	
SR4A	Cloudy	Moderate	09:22	8.7	Surface	1.0	1.3	102	23.2	23.2	8.3	8.3	31.5	31.5	97.3	97.3	6.9	6.9	13.2	13.8	23	22	-	-	817182	807812	-	-	-	-
						1.0	1.4	109	23.2		8.3		31.5		97.2		6.9		13.3		24		-				-		-	
					Middle	4.4	1.3	105	23.2	23.2	8.3	8.3	31.6	31.6	96.2	96.2	6.9		13.8		24		-				-		-	
						4.4	1.4	113	23.2		8.3		31.6		96.1		6.9		13.4		24		-				-		-	
					Bottom	7.7	1.1	113	23.1	23.1	8.3	8.3	31.7	31.7	95.9	95.9	6.8	6.8	15.0		17		-				-		-	
						7.7	1.3	118	23.1		8.3		31.7		95.9		6.8		14.2		18		-				-		-	
SR5A	Cloudy	Moderate	09:03	3.1	Surface	1.0	0.1	73	23.4	23.4	8.3	8.3	31.9	31.9	97.8	97.8	6.9	6.9	9.7	9.2	14	16	-	-	816614	810711	-	-	-	-
						1.0	0.1	78	23.4		8.3		31.9		97.8		6.9		9.7		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	98	23.4	23.4	8.3	8.3	31.9	31.9	97.9	97.9	6.9	6.9	8.7		17		-				-		-	
						2.1	0.1	98	23.4		8.3		31.9		97.9		6.9		8.8		18		-				-		-	
SR6A	Cloudy	Moderate	08:34	4.9	Surface	1.0	0.1	214	23.5	23.5	8.2	8.2	31.8	31.8	98.1	98.2	7.0	7.0	8.1	9.0	10	11	-	-	817952	814727	-	-	-	-
						1.0	0.1	231	23.5		8.2		31.8		98.2		7.0		8.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	242	23.4	23.4	8.2	8.2	31.9	31.9	99.4	99.5	7.0	7.1	10.1		12		-				-		-	
						3.9	0.1	264	23.4		8.2		31.9		99.6		7.1		9.6		12		-				-		-	
SR7	Cloudy	Moderate	07:53	15.9	Surface	1.0	0.1	297	23.6	23.6	8.1	8.1	32.6	32.6	97.7	97.7	6.9	6.9	12.1	14.6	16	17	-	-	823641	823763	-	-	-	-
						1.0	0.2	311	23.6		8.1		32.6		97.6		6.9		12.3		17		-				-		-	
					Middle	8.0	0.1	342	23.6	23.6	8.1	8.1	32.6	32.6	97.6	97.6	6.9		14.3		17		-				-		-	
						8.0	0.1	315	23.6		8.1		32.6		97.5		6.9		14.3		18		-				-		-	
					Bottom	14.9	0.2	1	23.6	23.6	8.0	8.0	32.7	32.7	97.3	97.3	6.9	6.9	17.3		18		-				-		-	
						14.9	0.2	1	23.6		8.0		32.7		97.3		6.8		17.5		18		-				-		-	
SR8	Cloudy	Moderate	09:04	4.7	Surface	1.0	-	-	23.6	23.6	8.1	8.1	31.8	31.8	98.0	98.1	6.9	6.9	9.2	11.0	15	14	-	-	820408	811628	-	-	-	-
						1.0	-	-	23.7		8.1		31.8		98.1		6.9		9.3		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	23.5	23.5	8.1	8.1	32.1	32.1	97.5	97.5	6.9	6.9	12.5		13		-				-		-	
						3.7	-	-	23.5		8.1		32.1		97.5		6.9		12.8		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 19 November 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	15:36	8.0	Surface	1.0	2.8	153	24.1	24.0	8.0	8.0	29.5	29.5	96.8	96.8	6.9	6.8	6.1	7.8	6	6	88	92	815633	804249	<0.2	<0.2	1.0	1.2
						1.0	2.8	162	24.0		8.0		29.5		96.8		6.9		6.1		7		89				<0.2		1.1	
					Middle	4.0	2.6	153	23.6	23.6	8.0	8.0	31.0	31.0	94.7	94.7	6.7		7.6		6		92				<0.2		1.0	
						4.0	2.7	155	23.6		8.0		31.0		94.7		6.7		7.6		6		92				<0.2		1.1	
					Bottom	7.0	2.9	150	23.6	23.6	8.0	8.0	31.4	31.4	94.5	94.5	6.7	6.7	9.8		5		95				<0.2		1.3	
						7.0	3.1	152	23.6		8.0		31.4		94.5		6.7		9.7		4		94				<0.2		1.4	
C2	Cloudy	Moderate	14:26	11.5	Surface	1.0	0.3	98	24.5	24.5	8.1	8.1	28.7	28.7	94.6	94.6	6.7	6.7	6.6	9.1	4	5	89	92	825688	806954	<0.2	<0.2	1.4	1.4
						1.0	0.3	101	24.5		8.1		28.7		94.6		6.7		6.8		5		89				<0.2		1.4	
					Middle	5.8	0.2	99	24.2	24.2	8.2	8.2	30.0	30.0	93.5	93.6	6.6		8.1		5		92				<0.2		1.4	
						5.8	0.2	102	24.2		8.2		30.0		93.7		6.6		8.0		5		93				<0.2		1.4	
					Bottom	10.5	0.2	93	24.2	24.2	8.1	8.1	30.1	30.1	94.0	93.9	6.6	6.6	12.5		5		94				<0.2		1.3	
						10.5	0.2	98	24.2		8.1		30.1		93.8		6.6		12.3		5		95				<0.2		1.4	
C3	Cloudy	Moderate	16:13	12.3	Surface	1.0	0.3	74	24.3	24.3	8.2	8.2	30.9	30.8	98.0	98.0	6.9	6.7	2.3	3.5	4	4	89	92	822093	817821	<0.2	<0.2	1.5	1.4
						1.0	0.3	75	24.3		8.2		30.8		98.0		6.9		2.4		5		89				<0.2		1.4	
					Middle	6.2	0.1	110	24.2	24.2	8.2	8.2	31.5	31.5	93.0	92.9	6.5		1.8		5		92				<0.2		1.4	
						6.2	0.1	116	24.1		8.2		31.5		92.7		6.5		1.9		4		93				<0.2		1.3	
					Bottom	11.3	0.1	88	24.0	24.0	8.2	8.2	31.6	31.6	92.6	92.7	6.5	6.5	6.4		4		93				<0.2		1.4	
						11.3	0.2	95	24.0		8.2		31.6		92.8		6.5		6.3		4		93				<0.2		1.4	
IM1	Fine	Moderate	15:14	4.7	Surface	1.0	0.0	202	24.6	24.6	8.0	8.0	29.8	29.8	100.4	100.5	7.1	7.1	6.3	8.0	6	6	89	91	817965	807120	<0.2	<0.2	1.1	1.2
						1.0	0.0	205	24.6		8.0		29.8		100.5		7.1		6.5		5		89				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	266	24.8	24.8	8.0	8.0	30.6	30.6	101.0	101.0	7.0	7.0	9.5		6		92				<0.2		1.4	
						3.7	0.2	285	24.8		8.0		30.6		101.0		7.0		9.7		6		92				<0.2		1.3	
IM2	Fine	Moderate	15:06	6.8	Surface	1.0	2.8	137	24.0	24.0	8.0	8.0	30.3	30.2	97.1	97.0	6.9	6.9	4.5	7.5	4	5	86	90	818176	806185	<0.2	<0.2	1.0	1.2
						1.0	2.9	137	24.0		8.0		30.2		96.9		6.9		4.6		5		87				<0.2		1.0	
					Middle	3.4	2.5	139	24.2	24.2	8.0	8.0	31.1	31.0	96.9	96.9	6.8		7.8		5		90				<0.2		1.1	
						3.4	2.5	141	24.2		8.0		31.0		96.8		6.8		7.9		6		90				<0.2		1.1	
					Bottom	5.8	2.9	141	24.1	24.1	8.0	8.0	31.2	31.2	95.1	95.2	6.7	6.7	10.0		5		94				<0.2		1.4	
						5.8	3.0	152	24.1		8.0		31.2		95.2		6.7		10.1		6		94				<0.2		1.4	
IM3	Fine	Moderate	14:59	7.0	Surface	1.0	2.7	148	24.2	24.2	7.9	7.9	30.1	30.1	96.3	96.3	6.8	6.8	6.7	8.7	6	6	86	90	818784	805600	<0.2	<0.2	1.0	1.2
						1.0	2.8	158	24.2		7.9		30.1		96.3		6.8		6.6		7		86				<0.2		0.9	
					Middle	3.5	2.7	152	23.9	23.9	7.9	7.9	31.0	31.0	95.3	95.3	6.7		8.5		6		91				<0.2		1.2	
						3.5	2.8	157	23.9		7.9		31.0		95.2		6.7		8.6		6		91				<0.2		1.3	
					Bottom	6.0	2.7	149	24.0	24.0	7.9	7.9	31.3	31.3	94.9	95.0	6.7	6.7	11.0		5		93				<0.2		1.2	
						6.0	2.9	154	24.0		7.9		31.3		95.0		6.7		10.8		6		94				<0.2		1.4	
IM4	Fine	Moderate	14:50	8.1	Surface	1.0	1.6	24	24.1	24.1	8.0	8.0	30.5	30.5	96.0	96.0	6.8	6.8	7.4	9.1	6	6	87	90	819741	804626	<0.2	<0.2	1.3	1.3
						1.0	1.7	25	24.1		8.0		30.5		95.9		6.8		7.3		5		87				<0.2		1.4	
					Middle	4.1	1.6	13	23.9	23.9	8.0	8.0	31.0	31.0	94.9	94.9	6.7		9.6		6		89				<0.2		1.4	
						4.1	1.7	13	23.9		8.0		31.0		94.9		6.7		9.7		6		90				<0.2		1.2	
					Bottom	7.1	1.7	25	23.9	23.9	8.0	8.0	31.2	31.2	94.7	94.7	6.7	6.7	10.4		6		93				<0.2		1.2	
						7.1	1.7	25	23.9		8.0		31.2		94.7		6.7		10.4		6		93				<0.2		1.4	
IM5	Fine	Moderate	14:41	7.4	Surface	1.0	2.0	51	24.6	24.6	8.0	8.0	29.9	29.9	98.3	98.3	6.9	6.9	5.5	6.7	6	5	87	90	820715	804866	<0.2	<0.2	1.3	1.3
						1.0	2.1	51	24.6		8.0		29.9		98.2		6.9		5.6		5		88				<0.2		1.3	
					Middle	3.7	2.0	46	24.2	24.2	8.0	8.0	30.7	30.7	96.7	96.8	6.8		7.0		5		90				<0.2		1.2	
						3.7	2.1	48	24.2		8.0		30.7		96.8		6.8		7.1		4		91				<0.2		1.4	
					Bottom	6.4	1.8	38	24.1	24.1	8.0	8.0	30.9	30.9	96.5	96.5	6.8	6.8	7.5		5		93				<0.2		1.3	
						6.4	1.9	39	24.1		8.0		30.9		96.4		6.8		7.6		5		93				<0.2		1.4	
IM6	Fine	Moderate	14:33	7.3	Surface	1.0	2.0	50	24.5	24.5	8.0	8.0	29.5	29.5	98.0	97.9	6.9	6.9	4.2	6.6	4	5	86	90	821060	805822	<0.2	<0.2	1.4	1.4
						1.0	2.2	52	24.5		8.0		29.5		97.8		6.9		4.2		4		87				<0.2		1.4	
					Middle	3.7	1.9	46	24.3	24.3	8.0	8.0	30.1	30.1	96.9	96.9	6.8		6.7		5		90				<0.2		1.4	
						3.7	2.1	46	24.3		8.0		30.1		96.9		6.8		6.8		6		90				<0.2		1.4	
					Bottom	6.3	2.1	51	24.1	24.1	8.0	8.0	31.1	31.1	96.1	96.1	6.8	6.8	8.7		5		93				<0.2		1.4	
						6.3	2.1	55	24.1		8.0		31.1		96.1		6.8		8.9		6		93				<0.2		1.4	
IM7	Fine	Moderate	14:27	8.5	Surface	1.0	2.1	82	25.0	25.0	8.0	8.0	28.3	28.3	98.0	98.0	6.9	6.8	4.5	6.9	5	5	87	91	821351	806829	<0.2	<0.2	1.3	1.4
						1.0	2.1	87	25.0		8.0		28.3		98.0		6.9		4.5		4		88				<0.2		1.2	
					Middle	4.3	2.3	83	24.1	24.1	8.1	8.1	30.9	30.9	95.5	95.5	6.7		6.6		4		91				<0.2		1.4	
						4.3	2.4	85	24.1		8.1		30.9		95.5		6.7		6.6		4		91				<0.2		1.4	
					Bottom	7.5	2.2	79	24.0	24.0	8.1	8.1	31.1	31.1	94.9	94.9	6.7	6.7	9.7		5		93				<0.2		1.4	
						7.5	2.3	80	24.0		8.1		31.1		94.9		6.7		9.6		5		94				<0.2		1.5	
IM8	Cloudy	Moderate	14:50	7.7	Surface	1.0	0.2	71	24.7	24.7	8.2	8.2	28.3	28.3	97.7	97.6	6.9	6.8	3.6	6.7	6	8	86	91	821852	808142	<0.2	<0.2	1.5	1.4
						1.0	0.2	73	24.7		8.2		28.3		97.5		6.9		3.7		7		88				<0.2		1.5	
					Middle	3.9	0.2	75	24.2	24.2	8.2	8.2	29.7	29.8	95.5	95.5	6.8		6.8		9		93				<0.2		1.3	
						3.9	0.3	79	24.2		8.2		29.9		95.4		6.7		6.8		9		93				<0.2		1.4	
					Bottom	6.7	0.2	19	24.2	24.2	8.2	8.2	30.4	30.4	95.2	95.2	6.7	6.7	9.5		9		94				<0.2		1.3	
						6.7	0.2	20	24.2		8.2		30.4		95.2		6.7		9.6		10		94				<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 19 November 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	14:55	7.1	Surface	1.0	0.3	101	24.5	24.5	8.2	8.2	28.4	28.4	96.0	96.0	6.8	6.8	4.7	7.0	4	5	88	92	822106	808808	<0.2	<0.2	1.4	1.4
						1.0	0.3	105	24.5		8.2		28.4		96.0		6.8		4.8		4		89				<0.2		1.4	
					Middle	3.6	0.3	94	24.4	24.4	8.2	8.2	29.2	29.4	95.6	95.6	6.8		6.2		4		92				<0.2		1.4	
						3.6	0.3	99	24.3		8.2		29.5		95.5		6.8		6.2		5		92				<0.2		1.4	
					Bottom	6.1	0.2	64	24.2	24.2	8.2	8.2	30.4	30.3	95.2	95.3	6.7	6.7	10.3		6		94				<0.2		1.4	
						6.1	0.2	64	24.2		8.2		30.3		95.3		6.7		10.0		6		94				<0.2		1.3	
IM10	Cloudy	Moderate	15:02	7.6	Surface	1.0	0.3	104	24.2	24.2	8.2	8.2	29.1	29.2	92.5	92.3	6.6	6.5	7.1	7.6	5	4	88	92	822406	809775	<0.2	<0.2	1.3	1.4
						1.0	0.3	114	24.2		8.2		29.3		92.1		6.5		7.4		4		88				<0.2		1.3	
					Middle	3.8	0.2	90	24.1	24.1	8.2	8.2	29.9	30.0	91.4	91.4	6.5		8.3		5		92				<0.2		1.6	
						3.8	0.3	96	24.1		8.2		30.0		91.4		6.5		8.3		4		92				<0.2		1.4	
					Bottom	6.6	0.1	85	24.2	24.2	8.2	8.2	30.4	30.4	92.6	92.7	6.5	6.5	7.4		4		98				<0.2		1.3	
						6.6	0.1	92	24.2		8.2		30.4		92.7		6.5		7.3		4		94				<0.2		1.3	
IM11	Cloudy	Moderate	15:13	7.7	Surface	1.0	0.2	94	24.3	24.3	8.2	8.2	29.9	30.0	96.7	96.6	6.8	6.8	3.7	4.1	6	5	86	91	822049	811478	<0.2	<0.2	1.5	1.4
						1.0	0.2	102	24.3		8.2		30.0		96.4		6.8		3.7		5		87				<0.2		1.4	
					Middle	3.9	0.1	74	24.2	24.2	8.2	8.2	30.4	30.5	95.0	94.9	6.7		3.8		5		93				<0.2		1.4	
						3.9	0.1	78	24.2		8.2		30.5		94.7		6.7		3.9		4		94				<0.2		1.4	
					Bottom	6.7	0.1	138	24.1	24.1	8.2	8.2	30.6	30.6	93.5	93.6	6.6	6.6	4.7		5		94				<0.2		1.4	
						6.7	0.1	139	24.1		8.2		30.6		93.6		6.6		4.7		4		94				<0.2		1.3	
IM12	Cloudy	Moderate	15:18	9.3	Surface	1.0	0.2	83	24.6	24.6	8.2	8.2	30.0	30.0	98.9	99.0	6.9	6.8	3.4	6.5	7	5	88	91	821454	812024	<0.2	<0.2	1.4	1.4
						1.0	0.2	90	24.6		8.2		30.0		99.0		7.0		3.4		6		88				<0.2		1.4	
					Middle	4.7	0.1	100	24.1	24.1	8.2	8.2	30.5	30.5	94.0	94.1	6.6		7.6		4		89				<0.2		1.5	
						4.7	0.1	103	24.1		8.2		30.5		94.2		6.6		7.8		4		92				<0.2		1.3	
					Bottom	8.3	0.1	88	24.2	24.2	8.2	8.2	30.5	30.5	94.5	94.6	6.7	6.7	8.5		5		94				<0.2		1.4	
						8.3	0.1	88	24.2		8.2		30.5		94.7		6.7		8.3		4		94				<0.2		1.5	
SR1A	Cloudy	Calm	15:38	4.5	Surface	1.0	-	-	24.4	24.4	8.2	8.2	30.4	30.4	96.3	96.1	6.8	6.8	4.2	5.2	6	7	-	-	819982	812660	-	-	-	-
						1.0	-	-	24.4		8.2		30.4		95.9		6.7		4.2		6		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	24.3	24.3	8.2	8.2	30.6	30.6	94.3	94.3	6.6	6.6	6.1		7		-				-		-	
						3.5	-	-	24.3		8.2		30.6		94.3		6.6		6.4		8		-				-		-	
SR2	Cloudy	Moderate	15:50	4.0	Surface	1.0	0.1	51	24.3	24.3	8.2	8.2	30.4	30.4	96.8	96.7	6.8	6.8	3.4	3.5	6	7	92	93	821444	814173	<0.2	<0.2	1.4	1.4
						1.0	0.1	52	24.3		8.2		30.4		96.6		6.8		3.4		6		93				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	117	24.3	24.3	8.2	8.2	30.5	30.5	95.7	95.7	6.7	6.7	3.7		7		94				<0.2		1.4	
						3.0	0.0	126	24.3		8.2		30.5		95.7		6.7		3.7		8		94				<0.2		1.4	
SR3	Cloudy	Moderate	14:44	9.3	Surface	1.0	0.2	138	24.5	24.5	8.1	8.1	28.4	28.5	96.3	96.4	6.8	6.8	4.6	9.6	9	10	-	-	822131	807549	-	-	-	-
						1.0	0.2	142	24.5		8.1		28.6		96.4		6.8		4.5		8		-				-		-	
					Middle	4.7	0.2	117	24.3	24.3	8.1	8.1	29.5	29.6	94.0	94.1	6.7		9.0		10		-				-		-	
						4.7	0.2	117	24.3		8.1		29.6		94.1		6.7		9.0		9		-				-		-	
					Bottom	8.3	0.1	44	24.3	24.3	8.1	8.1	30.1	30.1	94.5	94.6	6.7	6.7	15.1		11		-				-		-	
						8.3	0.1	45	24.3		8.1		30.1		94.6		6.7		15.5		10		-				-		-	
SR4A	Fine	Calm	15:56	9.4	Surface	1.0	1.9	213	24.7	24.6	8.0	8.0	30.0	30.0	98.7	98.7	6.9	6.9	8.0	10.5	5	6	-	-	817186	807814	-	-	-	-
						1.0	2.0	230	24.6		8.0		30.0		98.7		6.9		8.2		6		-				-		-	
					Middle	4.7	1.8	214	24.3	24.3	8.0	8.0	30.7	30.7	97.6	97.6	6.9		11.2		5		-				-		-	
						4.7	1.9	228	24.3		8.0		30.7		97.5		6.9		11.2		6		-				-		-	
					Bottom	8.4	1.9	221	24.1	24.1	8.0	8.0	31.0	31.0	95.9	96.0	6.8	6.8	12.2		5		-				-		-	
						8.4	1.9	232	24.1		8.0		31.0		96.0		6.8		12.2		6		-				-		-	
SR5A	Fine	Calm	16:12	3.5	Surface	1.0	0.1	355	24.8	24.8	7.9	7.9	31.6	31.6	98.1	98.1	6.8	6.8	17.5	17.1	9	8	-	-	816597	810711	-	-	-	-
						1.0	0.1	327	24.8		7.9		31.6		98.0		6.8		17.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	355	24.8	24.8	7.9	7.9	31.6	31.6	97.5	97.5	6.8	6.8	16.6		6		-				-		-	
						2.5	0.1	358	24.8		7.9		31.6		97.5		6.8		16.7		7		-				-		-	
SR6A	Fine	Calm	16:55	4.1	Surface	1.0	0.0	15	24.7	24.7	8.1	8.1	31.3	31.3	98.2	98.1	6.8	6.8	10.6	10.5	5	6	-	-	817969	814757	-	-	-	-
						1.0	0.0	15	24.7		8.1		31.3		98.0		6.8		10.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	86	24.5	24.5	8.0	8.0	31.5	31.5	96.9	96.9	6.8	6.8	10.4		7		-				-		-	
						3.1	0.1	89	24.5		8.0		31.5		96.8		6.8		10.5		7		-				-		-	
SR7	Cloudy	Moderate	16:43	15.7	Surface	1.0	0.3	73	24.2	24.2	8.2	8.2	31.4	31.4	93.6	93.5	6.6	6.5	2.4	3.0	5	4	-	-	823636	823722	-	-	-	-
						1.0	0.3	78	24.2		8.2		31.4		93.4		6.6		2.3		4		-				-		-	
					Middle	7.9	0.1	336	24.0	24.0	8.2	8.2	31.6	31.6	91.2	91.2	6.4		3.2		5		-				-		-	
						7.9	0.1	309	24.0		8.2		31.6		91.2		6.4		3.3		4		-				-		-	
					Bottom	14.7	0.1	316	24.0	24.0	8.2	8.2	31.6	31.6	91.8	91.9	6.5	6.5	3.4		4		-				-		-	
						14.7	0.1	334	24.0		8.2		31.6		92.0		6.5		3.4		4		-				-		-	
SR8	Cloudy	Moderate	15:28	4.2	Surface	1.0	-	-	24.8	24.8	8.2	8.2	30.2	30.2	97.2	97.1	6.8	6.8	5.6	5.7	5	5	-	-	820397	811607	-	-	-	-
						1.0	-	-	24.7		8.2		30.2		97.0		6.8		5.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	24.3	24.3	8.2	8.2	30.3	30.3	95.7	95.7	6.7	6.7	5.7		4		-				-		-	
						3.2	-	-	24.3		8.2		30.3		95.7		6.7		5.8		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 November 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	11:31	8.2	Surface	1.0	2.2	320	23.7	23.7	8.1	8.1	30.2	30.2	94.2	94.2	6.7	6.7	12.5	14.7	8	9	89	92	815641	804237	<0.2	<0.2	0.9	0.9
						1.0	2.2	321	23.7		8.1		30.2		94.2		6.7		12.6		9		90				<0.2		0.9	
					Middle	4.1	2.3	312	23.7	23.7	8.1	8.1	30.7	30.7	94.3	94.4	6.7		15.0		9		91				<0.2		0.8	
						4.1	2.4	316	23.7		8.1		30.7		94.4		6.7		15.2		10		92				<0.2		1.0	
					Bottom	7.2	2.3	304	23.8	23.8	8.1	8.1	31.0	31.0	94.4	94.4	6.7	6.7	16.4		9		94				<0.2		0.9	
						7.2	2.4	305	23.8		8.1		31.0		94.4		6.7		16.3		10		94				<0.2		1.0	
C2	Cloudy	Moderate	12:19	11.9	Surface	1.0	0.3	44	24.3	24.3	8.2	8.2	28.1	28.1	93.6	93.5	6.7	6.7	5.5	10.6	6	6	88	92	825679	806958	<0.2	<0.2	0.8	0.7
						1.0	0.3	44	24.3		8.2		28.1		93.4		6.7		5.8		5		89				<0.2		0.8	
					Middle	6.0	0.3	45	24.2	24.2	8.2	8.2	29.0	29.1	92.7	92.8	6.6		12.3		5		92				<0.2		0.7	
						6.0	0.3	48	24.2		8.2		29.1		92.8		6.6		12.5		6		92				<0.2		0.7	
					Bottom	10.9	0.2	2	24.1	24.1	8.2	8.2	29.6	29.6	94.0	94.1	6.7	6.7	13.8		7		94				<0.2		0.7	
						10.9	0.2	2	24.1		8.2		29.5		94.2		6.7		13.9		6		95				<0.2		0.7	
C3	Cloudy	Moderate	10:30	11.0	Surface	1.0	0.5	258	24.1	24.1	8.2	8.2	30.5	30.5	95.0	95.0	6.7	6.7	3.1	6.5	8	7	89	92	822131	817798	<0.2	<0.2	0.7	0.7
						1.0	0.5	265	24.1		8.2		30.5		94.9		6.7		3.2		7		89				<0.2		0.7	
					Middle	5.5	0.5	249	24.0	24.0	8.2	8.2	30.7	30.7	94.5	94.5	6.7		7.7		7		93				<0.2		0.7	
						5.5	0.6	265	24.0		8.2		30.7		94.5		6.7		7.9		7		93				<0.2		0.7	
					Bottom	10.0	0.4	259	24.0	24.0	8.2	8.2	30.9	30.8	95.5	95.6	6.7	6.8	8.5		7		94				<0.2		0.7	
						10.0	0.4	279	24.0		8.2		30.8		95.6		6.8		8.7		8		94				<0.2		0.8	
IM1	Cloudy	Moderate	11:50	4.4	Surface	1.0	0.1	13	24.2	24.2	8.1	8.1	31.2	31.2	97.1	97.1	6.8	6.8	7.6	8.1	10	10	91	92	817933	807143	<0.2	<0.2	0.9	0.9
						1.0	0.1	14	24.2		8.1		31.2		97.1		6.8		7.6		9		91				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	323	24.1	24.1	8.0	8.0	31.3	31.3	96.7	96.7	6.8	6.8	8.6		10		92				<0.2		0.9	
						3.4	0.0	325	24.1		8.0		31.3		96.7		6.8		8.7		11		92				<0.2		0.9	
IM2	Cloudy	Moderate	11:59	6.5	Surface	1.0	2.1	208	24.1	24.1	8.0	8.0	30.9	30.9	95.3	95.3	6.7	6.7	11.9	14.9	9	10	88	91	818170	806172	<0.2	<0.2	0.9	1.0
						1.0	2.2	214	24.1		8.0		30.9		95.2		6.7		12.1		10		88				<0.2		0.9	
					Middle	3.3	2.1	208	23.9	23.9	8.1	8.1	31.1	31.1	95.0	95.1	6.7		14.8		10		90				<0.2		1.0	
						3.3	2.2	224	23.9		8.1		31.1		95.1		6.7		14.9		10		91				<0.2		0.8	
					Bottom	5.5	1.9	213	23.9	23.9	8.1	8.1	31.1	31.1	95.1	95.2	6.7	6.7	17.8		10		93				<0.2		1.1	
						5.5	2.0	230	23.9		8.1		31.1		95.2		6.7		17.8		11		94				<0.2		1.1	
IM3	Cloudy	Moderate	12:05	6.7	Surface	1.0	2.0	15	24.0	24.0	8.0	8.0	30.8	30.8	94.6	94.6	6.7	6.7	12.1	14.7	11	10	88	91	818791	805612	<0.2	<0.2	1.0	1.0
						1.0	2.1	15	24.0		8.0		30.8		94.6		6.7		12.3		10		88				<0.2		1.0	
					Middle	3.4	2.3	17	23.9	23.9	8.0	8.0	30.9	30.9	94.3	94.3	6.7		14.3		10		90				<0.2		0.9	
						3.4	2.4	17	23.9		8.0		30.9		94.3		6.7		14.5		10		91				<0.2		0.9	
					Bottom	5.7	2.2	22	23.9	23.9	8.1	8.1	31.0	31.0	94.1	94.1	6.7	6.7	17.4		10		93				<0.2		0.9	
						5.7	2.4	22	23.9		8.1		31.0		94.0		6.6		17.3		9		93				<0.2		1.0	
IM4	Cloudy	Moderate	12:15	7.9	Surface	1.0	2.0	174	24.0	24.0	8.0	8.0	30.9	30.9	93.7	93.7	6.6	6.6	12.2	15.0	10	10	87	91	819741	804611	<0.2	<0.2	1.0	0.9
						1.0	2.1	174	24.0		8.0		30.9		93.6		6.6		12.4		11		88				<0.2		0.9	
					Middle	4.0	1.7	180	23.9	23.9	8.0	8.0	30.9	30.9	93.7	93.7	6.6		15.8		10		91				<0.2		0.9	
						4.0	1.7	194	23.9		8.0		30.9		93.7		6.6		15.8		10		92				<0.2		0.9	
					Bottom	6.9	1.8	183	23.9	23.9	8.1	8.1	30.9	30.9	93.8	93.8	6.6	6.6	16.8		10		94				<0.2		0.9	
						6.9	1.9	195	23.9		8.1		30.9		93.8		6.6		16.7		9		94				<0.2		1.0	
IM5	Cloudy	Moderate	12:22	7.2	Surface	1.0	2.6	100	24.2	24.2	8.0	8.0	30.4	30.4	95.4	95.4	6.7	6.7	12.5	15.2	11	11	88	90	820752	804881	<0.2	<0.2	0.9	0.9
						1.0	2.7	101	24.2		8.0		30.4		95.4		6.7		12.5		11		88				<0.2		0.9	
					Middle	3.6	2.8	102	23.9	23.9	8.0	8.0	31.0	31.0	94.2	94.2	6.7		15.4		11		90				<0.2		0.8	
						3.6	3.0	108	23.9		8.0		31.0		94.1		6.6		15.5		11		90				<0.2		1.0	
					Bottom	6.2	2.7	95	23.9	23.9	8.0	8.0	31.0	31.0	94.6	94.6	6.7	6.7	17.6		12		93				<0.2		1.0	
						6.2	2.8	97	23.9		8.0		31.0		94.6		6.7		17.7		12		93				<0.2		1.0	
IM6	Cloudy	Moderate	12:30	7.0	Surface	1.0	1.8	81	24.4	24.4	8.0	8.0	28.9	28.9	96.9	96.9	6.9	6.9	6.0	8.5	10	11	87	91	821066	805806	<0.2	<0.2	1.0	1.0
						1.0	1.9	87	24.4		8.0		28.9		96.9		6.9		6.1		11		88				<0.2		1.0	
					Middle	3.5	1.9	76	24.2	24.2	8.1	8.1	30.7	30.7	97.3	97.3	6.8		8.9		11		91				<0.2		0.9	
						3.5	2.0	83	24.2		8.1		30.7		97.2		6.8		9.0		10		91				<0.2		0.9	
					Bottom	6.0	1.8	80	24.2	24.2	8.1	8.1	31.1	31.1	97.0	97.1	6.8	6.8	10.7		10		93				<0.2		1.0	
						6.0	2.0	84	24.2		8.1		31.1		97.1		6.8		10.4		11		93				<0.2		0.9	
IM7	Cloudy	Moderate	12:40	8.1	Surface	1.0	2.0	331	24.3	24.3	8.0	8.0	28.6	28.6	94.9	94.9	6.8	6.8	6.6	9.1	11	9	87	90	821354	806829	<0.2	<0.2	1.5	1.4
						1.0	2.2	305	24.3		8.0		28.6		94.9		6.8		6.7		10		87				<0.2		1.4	
					Middle	4.1	2.0	340	24.1	24.1	8.1	8.1	30.8	30.8	95.7	95.8	6.8		8.8		8		91				<0.2		1.4	
						4.1	2.1	345	24.1		8.1		30.8		95.8		6.8		8.8		9		91				<0.2		1.4	
					Bottom	7.1	2.1	335	24.0	24.0	8.1	8.1	31.2	31.2	95.5	95.5	6.7	6.7	11.7		7		93				<0.2		1.4	
						7.1	2.2	352	24.0		8.1		31.2		95.5		6.7		11.9		8		93				<0.2		1.4	
IM8	Cloudy	Moderate	11:54	7.9	Surface	1.0	0.2	78	24.3	24.3	8.2	8.2	28.0	28.0	93.8	93.8	6.7	6.7	5.5	8.7	8	7	89	92	821817	808126	<0.2	<0.2	1.4	1.4
						1.0	0.2	83	24.3		8.2		28.0		93.7		6.7		5.7		7		89				<0.2		1.4	
					Middle	4.0	0.2	79	24.2	24.2	8.2	8.2	28.1	28.1	93.6	93.7	6.7		9.0		7		94				<0.2		1.5	
						4.0	0.2	83	24.2		8.2		28.1		93.7		6.7		9.4		6		93				<0.2		1.4	
					Bottom	6.9	0.1	68	24.2	24.2	8.2	8.2	28.2	28.2	94.7	94.8	6.8	6.8	11.6		6		94				<0.2		1.4	
						6.9	0.2	69	24.2		8.2		28.2		94.9		6.8		11.3		7		95				<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 19 November 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	11:48	6.5	Surface	1.0	0.2	42	24.3	24.3	8.2	8.2	28.2	28.2	94.1	94.0	6.7	6.7	5.7	6.9	7	7	89	92	822070	808794	<0.2	<0.2	1.3	1.4
						1.0	0.2	44	24.3		8.2		28.2		93.8		6.7		6.0		8		89				<0.2		1.3	
					Middle	3.3	0.2	58	24.2	24.2	8.2	8.2	28.3	28.3	93.4	93.5	6.7		6.4		7		92				<0.2		1.4	
						3.3	0.2	60	24.2		8.2		28.3		93.5		6.7		6.4		6		93				<0.2		1.5	
					Bottom	5.5	0.0	13	24.2	24.2	8.2	8.2	28.7	28.7	93.3	93.3	6.6	6.6	8.3		7		95				<0.2		1.6	
						5.5	0.0	13	24.2		8.2		28.7		93.3		6.6		8.5		6		95				<0.2		1.4	
IM10	Cloudy	Moderate	11:40	7.4	Surface	1.0	0.4	311	24.1	24.1	8.2	8.2	29.5	29.5	93.5	93.5	6.6	6.7	8.2	10.2	7	7	89	92	822364	809773	<0.2	<0.2	1.5	1.1
						1.0	0.4	325	24.1		8.2		29.5		93.5		6.6		9.1		8		90				<0.2		1.3	
					Middle	3.7	0.4	303	24.0	24.0	8.2	8.2	30.0	30.0	93.7	93.8	6.7		11.4		7		92				<0.2		0.9	
						3.7	0.4	314	24.0		8.2		30.0		93.9		6.7		11.5		8		92				<0.2		0.8	
					Bottom	6.4	0.2	290	24.0	24.0	8.2	8.2	30.0	30.0	94.8	94.9	6.7	6.7	10.4		6		94				<0.2		0.9	
						6.4	0.2	311	24.0		8.2		30.0		95.0		6.7		10.7		7		95				<0.2		0.9	
IM11	Cloudy	Moderate	11:29	7.5	Surface	1.0	0.4	284	24.1	24.1	8.2	8.2	30.2	30.2	94.7	94.7	6.7	6.7	6.3	8.5	9	10	89	92	822052	811469	<0.2	<0.2	0.9	0.9
						1.0	0.4	309	24.1		8.2		30.2		94.7		6.7		6.4		9		90				<0.2		0.8	
					Middle	3.8	0.4	290	24.0	24.0	8.2	8.2	30.5	30.5	94.5	94.5	6.7		8.5		10		93				<0.2		0.8	
						3.8	0.4	309	24.0		8.2		30.6		94.5		6.7		8.7		10		93				<0.2		1.0	
					Bottom	6.5	0.2	311	24.0	24.0	8.2	8.2	30.7	30.7	94.9	95.0	6.7	6.7	10.6		11		94				<0.2		0.8	
						6.5	0.3	327	24.0		8.2		30.6		95.0		6.7		10.3		10		93				<0.2		0.9	
IM12	Cloudy	Moderate	11:23	8.2	Surface	1.0	0.5	288	24.0	24.0	8.2	8.2	30.6	30.6	94.3	94.3	6.7	6.7	9.9	10.7	9	9	89	92	821445	812056	<0.2	<0.2	0.7	0.8
						1.0	0.6	300	24.0		8.2		30.6		94.3		6.7		9.9		9		89				<0.2		0.9	
					Middle	4.1	0.4	288	24.0	24.0	8.2	8.2	30.6	30.6	94.2	94.2	6.7		10.3		9		92				<0.2		0.8	
						4.1	0.4	311	24.0		8.2		30.6		94.1		6.7		10.3		9		94				<0.2		0.9	
					Bottom	7.2	0.2	299	24.0	24.0	8.2	8.2	30.8	30.8	95.0	95.1	6.7	6.7	11.8		9		93				<0.2		0.9	
						7.2	0.2	310	24.0		8.2		30.8		95.2		6.7		12.1		9		94				<0.2		0.8	
SR1A	Cloudy	Calm	11:03	4.5	Surface	1.0	-	-	24.1	24.1	8.2	8.2	30.5	30.5	94.4	94.3	6.7	6.7	6.4	8.6	7	6	-	-	819976	812657	-	-	-	-
						1.0	-	-	24.1		8.2		30.5		94.2		6.6		6.8		7		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	24.1	24.1	8.2	8.2	31.0	31.0	93.9	94.1	6.6	6.6	10.8		5		-				-		-	
						3.5	-	-	24.1		8.2		31.0		94.2		6.6		10.7		6		-				-		-	
SR2	Cloudy	Moderate	10:51	4.1	Surface	1.0	0.3	103	24.1	24.1	8.2	8.2	30.3	30.3	95.3	95.3	6.7	6.7	6.7	8.3	6	7	92	93	821449	814185	<0.2	<0.2	0.9	0.9
						1.0	0.3	112	24.1		8.2		30.3		95.3		6.7		6.7		7		93				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	100	24.1	24.1	8.2	8.2	30.4	30.4	96.1	96.2	6.8	6.8	9.9		7		94				<0.2		0.9	
						3.1	0.2	109	24.1		8.2		30.4		96.2		6.8		9.9		6		94				<0.2		0.9	
SR3	Cloudy	Moderate	11:59	8.6	Surface	1.0	0.1	43	24.3	24.3	8.2	8.2	28.0	28.0	94.4	94.4	6.7	6.8	3.8	9.4	8	7	-	-	822151	807549	-	-	-	-
						1.0	0.2	45	24.3		8.2		28.0		94.4		6.7		3.9		8		-				-		-	
					Middle	4.3	0.2	100	24.1	24.1	8.2	8.2	29.5	29.6	95.1	95.2	6.8		12.0		7		-				-		-	
						4.3	0.2	104	24.1		8.2		29.7		95.3		6.8		11.9		7		-				-		-	
					Bottom	7.6	0.3	93	24.1	24.1	8.2	8.2	30.4	30.4	95.6	95.6	6.8	6.8	12.5		7		-				-		-	
						7.6	0.3	100	24.1		8.2		30.4		95.6		6.8		12.5		7		-				-		-	
SR4A	Cloudy	Calm	11:06	8.8	Surface	1.0	2.7	109	24.0	24.0	8.1	8.1	31.3	31.3	96.2	96.1	6.8	6.8	11.8	14.5	11	11	-	-	817179	807792	-	-	-	-
						1.0	2.9	117	24.0		8.1		31.3		96.0		6.8		11.8		11		-				-		-	
					Middle	4.4	2.7	110	23.9	23.9	8.0	8.0	31.5	31.5	94.4	94.5	6.7		15.5		11		-				-		-	
						4.4	2.7	111	23.9		8.0		31.5		94.5		6.7		15.7		11		-				-		-	
					Bottom	7.8	2.5	110	23.9	23.9	8.0	8.0	31.5	31.5	94.4	94.4	6.6	6.6	16.0		10		-				-		-	
						7.8	2.7	118	23.9		8.0		31.5		94.4		6.6		16.1		11		-				-		-	
SR5A	Cloudy	Calm	10:46	3.1	Surface	1.0	0.1	118	24.1	24.1	8.0	8.0	31.9	31.9	94.1	94.1	6.6	6.6	12.4	11.8	11	11	-	-	816578	810687	-	-	-	-
						1.0	0.1	127	24.1		8.0		31.9		94.1		6.6		12.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	100	24.1	24.1	7.9	7.9	31.9	31.9	94.0	94.0	6.6	6.6	11.1		11		-				-		-	
						2.1	0.1	104	24.1		7.9		31.9		94.0		6.6		11.2		11		-				-		-	
SR6A	Cloudy	Calm	10:18	3.9	Surface	1.0	0.0	117	24.1	24.1	8.0	8.0	31.5	31.5	94.5	94.6	6.6	6.6	6.6	6.7	10	11	-	-	817977	814735	-	-	-	-
						1.0	0.0	127	24.1		8.0		31.5		94.6		6.6		6.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	141	24.0	24.0	8.0	8.0	31.6	31.6	94.2	94.2	6.6	6.6	6.7		12		-				-		-	
						2.9	0.0	152	24.0		8.0		31.6		94.2		6.6		6.7		12		-				-		-	
SR7	Cloudy	Moderate	10:01	15.8	Surface	1.0	0.1	38	24.0	24.0	8.2	8.2	31.2	31.2	92.8	92.8	6.5	6.5	5.8	8.2	11	11	-	-	823656	823738	-	-	-	-
						1.0	0.1	38	24.0		8.2		31.2		92.7		6.5		5.8		10		-				-		-	
					Middle	7.9	0.2	17	23.9	24.0	8.2	8.2	31.3	31.3	92.1	92.1	6.5		8.9		11		-				-		-	
						7.9	0.2	17	24.0		8.2		31.3		92.1		6.5		8.8		12		-				-		-	
					Bottom	14.8	0.2	26	24.0	24.0	8.2	8.2	31.3	31.3	92.1	92.1	6.5	6.5	9.8		12		-				-		-	
						14.8	0.2	26	24.0		8.2		31.3		92.1		6.5		9.8		11		-				-		-	
SR8	Cloudy	Moderate	11:14	4.9	Surface	1.0	-	-	24.3	24.3	8.2	8.2	29.7	29.7	94.0	94.0	6.7	6.7	11.5	12.9	7	8	-	-	820395	811635	-	-	-	-
						1.0	-	-	24.2		8.2		29.8		94.0		6.6		11.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	24.0	24.0	8.2	8.2	30.1	30.1	94.2	94.4	6.7	6.7	14.3		9		-				-		-	
						3.9	-	-	24.0		8.2		30.1		94.5		6.7		14.2		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 21 November 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	04:37	8.9	Surface	1.0	0.6	196	24.0	24.0	8.2	8.2	29.9	29.9	94.1	94.1	6.7	6.6	5.1	12.5	11	9	85	87	815606	804270	<0.2	<0.2	0.9	0.9
						1.0	0.6	200	24.0		8.2		29.9		94.1		6.7		5.1		11		85						0.9	
					Middle	4.5	0.4	237	23.9	23.9	8.2	8.2	30.5	30.5	91.8	91.9	6.5		15.7		8		87						0.9	
						4.5	0.5	239	23.9		8.2		30.5		91.9		6.5		15.4		8		87						0.9	
					Bottom	7.9	0.4	229	23.8	23.8	8.2	8.2	30.6	30.6	91.6	91.6	6.5	6.5	16.9		8		88						0.9	
						7.9	0.4	229	23.8		8.2		30.6		91.6		6.5		17.0		7		89						0.9	
C2	Cloudy	Moderate	06:02	11.9	Surface	1.0	1.0	192	24.9	24.9	7.9	7.9	27.9	27.9	91.3	91.3	6.5	6.3	4.3	6.8	7	8	85	87	825666	806943	<0.2	<0.2	1.5	1.5
						1.0	1.0	208	24.9		7.9		27.9		91.2		6.4		4.3		6		84						1.6	
					Middle	6.0	0.4	198	24.5	24.5	8.0	8.0	28.9	28.9	88.1	88.1	6.2		5.8		7		87						1.4	
						6.0	0.5	214	24.5		8.0		28.9		88.0		6.2		6.0		6		87						1.5	
					Bottom	10.9	0.2	170	24.3	24.3	8.0	8.0	30.0	30.0	86.7	86.7	6.1	6.1	10.0		11		90						1.5	
						10.9	0.2	180	24.3		8.0		30.0		86.7		6.1		10.2		10		89						1.5	
C3	Cloudy	Moderate	04:14	11.1	Surface	1.0	0.3	96	24.6	24.6	8.0	8.0	29.7	29.7	92.2	92.2	6.5	6.4	3.5	6.6	10	8	85	88	822087	817820	<0.2	<0.2	1.6	1.5
						1.0	0.3	97	24.6		8.0		29.7		92.2		6.5		3.6		10		85						1.4	
					Middle	5.6	0.3	86	24.4	24.4	8.0	8.0	30.3	30.3	88.2	88.1	6.2		6.6		8		88						1.5	
						5.6	0.3	92	24.4		8.0		30.4		88.0		6.2		6.8		7		88						1.5	
					Bottom	10.1	0.2	91	24.2	24.2	8.0	8.0	31.3	31.3	86.7	86.8	6.1	6.1	9.7		7		91						1.4	
						10.1	0.2	91	24.2		8.0		31.3		86.8		6.1		9.6		6		91						1.4	
IM1	Cloudy	Moderate	04:59	5.1	Surface	1.0	0.1	206	24.5	24.5	8.2	8.2	29.9	29.9	94.2	94.2	6.6	6.6	7.5	7.9	12	13	82	84	817963	807112	<0.2	<0.2	1.1	1.0
						1.0	0.1	226	24.5		8.2		29.9		94.2		6.6		7.5		13		82						1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	224	24.5	24.5	8.2	8.2	29.9	29.9	94.3	94.3	6.6	6.6	8.4		12		85				<0.2		1.0	
						4.1	0.1	227	24.5		8.2		29.9		94.3		6.6		8.3		13		86				<0.2		1.0	
IM2	Cloudy	Moderate	05:06	7.2	Surface	1.0	0.1	129	24.4	24.4	8.2	8.2	29.2	29.2	95.0	95.0	6.7	6.6	6.5	9.2	14	12	86	89	818170	806176	<0.2	<0.2	0.9	1.0
						1.0	0.1	135	24.4		8.2		29.2		94.9		6.7		6.5		14		86				<0.2		0.7	
					Middle	3.6	0.2	120	24.2	24.2	8.2	8.2	29.5	29.5	92.3	92.3	6.5		9.6		12		89				<0.2		0.9	
						3.6	0.2	131	24.2		8.2		29.5		92.3		6.5		9.6		11		89				<0.2		0.9	
					Bottom	6.2	0.1	88	24.1	24.1	8.2	8.2	29.6	29.6	91.1	91.1	6.5	6.5	11.5		11		91				<0.2		1.2	
						6.2	0.1	95	24.1		8.2		29.6		91.1		6.5		11.6		11		90				<0.2		1.1	
IM3	Cloudy	Moderate	05:13	7.3	Surface	1.0	0.1	187	24.4	24.4	8.2	8.2	29.1	29.1	95.7	95.7	6.8	6.7	5.5	10.0	9	10	85	88	818765	805573	<0.2	<0.2	1.0	1.1
						1.0	0.1	203	24.4		8.2		29.1		95.7		6.8		5.5		10		86				<0.2		1.0	
					Middle	3.7	0.1	166	24.3	24.3	8.2	8.2	29.2	29.2	93.9	93.9	6.7		6.7		10		88				<0.2		1.1	
						3.7	0.1	181	24.3		8.2		29.3		93.8		6.6		6.7		10		88				<0.2		1.1	
					Bottom	6.3	0.2	86	24.1	24.1	8.2	8.2	29.7	29.7	90.6	90.6	6.4	6.4	17.8		10		90				<0.2		1.1	
						6.3	0.2	87	24.1		8.2		29.7		90.6		6.4		17.9		11		91				<0.2		1.1	
IM4	Cloudy	Moderate	05:22	7.4	Surface	1.0	1.1	195	24.4	24.4	8.2	8.2	29.1	29.1	95.5	95.5	6.8	6.8	6.1	9.4	9	10	85	88	819742	804616	<0.2	<0.2	1.0	1.0
						1.0	1.2	199	24.4		8.2		29.1		95.5		6.8		6.2		10		86				<0.2		1.0	
					Middle	3.7	1.0	197	24.3	24.3	8.2	8.2	29.1	29.1	94.4	94.4	6.7		9.0		10		87				<0.2		1.0	
						3.7	1.0	203	24.3		8.2		29.1		94.3		6.7		9.4		11		88				<0.2		1.0	
					Bottom	6.4	0.5	179	24.3	24.3	8.2	8.2	29.2	29.2	93.6	93.6	6.6	6.6	12.8		10		91				<0.2		1.0	
						6.4	0.6	193	24.3		8.2		29.2		93.6		6.6		12.7		11		91				<0.2		1.0	
IM5	Cloudy	Moderate	05:29	7.0	Surface	1.0	1.0	204	24.4	24.4	8.2	8.2	29.0	29.0	94.9	94.9	6.7	6.7	6.3	9.1	12	11	86	89	820742	804854	<0.2	<0.2	1.1	1.2
						1.0	1.0	219	24.4		8.2		29.0		94.8		6.7		6.3		12		87				<0.2		1.2	
					Middle	3.5	0.9	223	24.3	24.3	8.2	8.2	29.1	29.1	93.5	93.5	6.6		9.4		12		89				<0.2		1.2	
						3.5	0.9	240	24.3		8.2		29.1		93.4		6.6		9.5		12		89				<0.2		1.2	
					Bottom	6.0	0.5	211	24.3	24.3	8.2	8.2	29.2	29.2	92.6	92.7	6.6	6.6	11.7		8		90				<0.2		1.2	
						6.0	0.5	217	24.3		8.2		29.2		92.7		6.6		11.7		7		90				<0.2		1.1	
IM6	Cloudy	Moderate	05:37	6.7	Surface	1.0	0.5	246	24.6	24.6	8.2	8.2	28.0	28.0	94.7	94.7	6.7	6.7	4.1	5.8	8	8	86	89	821038	805843	<0.2	<0.2	1.3	1.2
						1.0	0.5	255	24.6		8.2		28.0		94.7		6.7		4.2		8		86				<0.2		1.2	
					Middle	3.4	0.5	243	24.6	24.6	8.2	8.2	28.4	28.4	94.5	94.5	6.7		5.2		7		89				<0.2		1.1	
						3.4	0.5	258	24.6		8.2		28.4		94.5		6.7		5.2		8		89				<0.2		1.0	
					Bottom	5.7	0.5	243	24.6	24.6	8.2	8.2	29.1	29.2	94.5	94.5	6.7	6.7	8.1		7		91				<0.2		1.2	
						5.7	0.5	260	24.6		8.2		29.2		94.5		6.7		8.1		8		90				<0.2		1.2	
IM7	Cloudy	Moderate	05:46	8.1	Surface	1.0	0.6	245	24.7	24.7	8.2	8.2	27.7	27.7	93.1	93.1	6.6	6.6	4.5	4.7	8	8	85	88	821372	806847	<0.2	<0.2	1.4	1.3
						1.0	0.6	247	24.7		8.2		27.7		93.1		6.6		4.4		9		86				<0.2		1.3	
					Middle	4.1	0.6	258	24.7	24.7	8.1	8.1	27.8	27.8	92.9	92.9	6.6		4.6		8		88				<0.2		1.4	
						4.1	0.7	272	24.7		8.1		27.8		92.9		6.6		4.7		7		89				<0.2		1.2	
					Bottom	7.1	0.3	253	24.6	24.6	8.2	8.2	28.3	28.3	93.0	93.0	6.6	6.6	5.0		7		90				<0.2		1.1	
						7.1	0.3	271	24.6		8.2		28.3		93.0		6.6		5.0		7		91				<0.2		1.2	
IM8	Cloudy	Moderate	05:37	7.8	Surface	1.0	0.3	172	24.6	24.6	8.0	8.0	28.8	28.8	94.1	94.2	6.7	6.7	6.4	7.4	12	13	84	87	821824	808130	<0.2	<0.2	1.5	1.5
						1.0	0.3	174	24.6		8.0		28.8		94.2		6.7		6.5		11		84				<0.2		1.4	
					Middle	3.9	0.2	171	24.6	24.6	8.0	8.0	28.9	28.9	93.9	93.9	6.6		7.6		13		87				<0.2		1.4	
						3.9	0.2	187	24.6		8.0		28.9		93.8		6.6		7.7		13		86				<0.2		1.5	
					Bottom	6.8	0.0	129	24.6	24.6	8.0	8.0	28.9	28.9	93.8	93.8	6.6	6.6	8.2		14		89				<0.2		1.4	
						6.8	0.0	131	24.6		8.0		28.9		93.7		6.6		8.1		13		90				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 November 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	05:31	7.0	Surface	1.0	0.4	132	24.6	24.6	8.0	8.0	28.7	28.7	94.1	94.2	6.7	6.7	8.8	10.6	13	15	85	87	822109	808793	<0.2	<0.2	1.5	1.4
						1.0	0.4	142	24.6		8.0		28.7		94.2		6.7		8.8		14		84				<0.2		1.3	
					Middle	3.5	0.4	118	24.6	24.6	8.0	8.0	28.8	28.8	93.9	93.9	6.6		10.9		16		87				<0.2		1.6	
						3.5	0.4	120	24.6		8.0		28.8		93.8		6.6		10.9		16		86				<0.2		1.5	
					Bottom	6.0	0.3	93	24.6	24.6	8.0	8.0	28.8	28.8	93.3	93.4	6.6	6.6	11.8		16		89				<0.2		1.3	
						6.0	0.3	93	24.6		8.0		28.8		93.4		6.6		12.1		16		90				<0.2		1.4	
IM10	Cloudy	Moderate	05:25	7.1	Surface	1.0	0.6	113	24.5	24.5	8.0	8.0	29.3	29.3	93.1	93.1	6.6	6.6	10.6	13.5	19	17	84	87	822379	809806	<0.2	<0.2	1.6	1.6
						1.0	0.7	122	24.5		8.0		29.3		93.1		6.6		10.6		18		85				<0.2		1.8	
					Middle	3.6	0.5	104	24.5	24.5	8.0	8.0	29.4	29.4	93.0	93.0	6.6		13.4		18		87				<0.2		1.4	
						3.6	0.6	112	24.5		8.0		29.4		92.9		6.6		13.4		17		86				<0.2		1.6	
					Bottom	6.1	0.4	119	24.5	24.5	8.0	8.0	29.5	29.5	92.9	92.9	6.6	6.6	16.5		14		89				<0.2		1.5	
						6.1	0.5	124	24.5		8.0		29.5		92.8		6.6		16.7		15		89				<0.2		1.4	
IM11	Cloudy	Moderate	05:13	8.5	Surface	1.0	0.7	132	24.5	24.5	8.0	8.0	29.6	29.6	91.5	91.5	6.4	6.4	11.5	13.5	15	16	84	87	822080	811448	<0.2	<0.2	1.5	1.6
						1.0	0.7	141	24.5		8.0		29.6		91.5		6.5		11.7		16		85				<0.2		1.5	
					Middle	4.3	0.5	127	24.5	24.5	8.0	8.0	29.7	29.7	91.2	91.2	6.4		13.8		16		86				<0.2		1.5	
						4.3	0.5	132	24.5		8.0		29.7		91.2		6.4		14.0		14		87				<0.2		1.6	
					Bottom	7.5	0.4	133	24.5	24.5	8.0	8.0	29.7	29.7	91.2	91.2	6.4	6.4	15.1		17		89				<0.2		1.6	
						7.5	0.4	140	24.5		8.0		29.7		91.1		6.4		15.1		18		89				<0.2		1.6	
IM12	Cloudy	Moderate	05:07	8.0	Surface	1.0	0.6	128	24.5	24.5	8.0	8.0	29.8	29.8	91.8	91.8	6.5	6.5	13.8	16.3	7	12	84	87	821469	812036	<0.2	<0.2	1.5	1.5
						1.0	0.6	133	24.5		8.0		29.8		91.8		6.5		14.0		8		84				<0.2		1.4	
					Middle	4.0	0.5	130	24.5	24.5	8.0	8.0	29.8	29.8	91.5	91.5	6.4		16.3		12		87				<0.2		1.6	
						4.0	0.5	140	24.5		8.0		29.8		91.5		6.4		16.6		13		86				<0.2		1.5	
					Bottom	7.0	0.3	116	24.5	24.5	8.0	8.0	29.8	29.8	91.2	91.2	6.4	6.4	18.5		15		90				<0.2		1.4	
						7.0	0.3	122	24.5		8.0		29.8		91.2		6.4		18.7		16		89				<0.2		1.6	
SR1A	Cloudy	Moderate	04:47	4.9	Surface	1.0	-	-	24.5	24.5	8.0	8.0	29.7	29.7	89.9	89.9	6.3	6.3	8.9	10.5	5	7	-	-	819976	812665	-	-	-	-
						1.0	-	-	24.5		8.0		29.7		89.9		6.3		9.0		5		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	24.6	24.6	8.0	8.0	30.2	30.2	89.8	89.9	6.3	6.3	12.0		9		-				-		-	
						3.9	-	-	24.6		8.0		30.2		89.9		6.3		12.0		8		-				-		-	
SR2	Cloudy	Moderate	04:34	4.3	Surface	1.0	0.3	91	24.5	24.5	8.0	8.0	29.7	29.7	91.4	91.4	6.4	6.4	15.2	16.5	5	5	86	88	821446	814149	<0.2	<0.2	1.5	1.5
						1.0	0.4	93	24.5		8.0		29.7		91.4		6.4		15.3		6		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	66	24.5	24.5	8.0	8.0	29.7	29.7	91.4	91.4	6.4	6.4	17.7		5		89				<0.2		1.4	
						3.3	0.2	68	24.5		8.0		29.7		91.3		6.4		17.9		5		89				<0.2		1.5	
SR3	Cloudy	Moderate	05:43	8.8	Surface	1.0	0.5	190	24.7	24.7	8.0	8.0	28.5	28.5	92.0	92.0	6.5	6.5	9.9	13.0	9	12	-	-	822146	807561	-	-	-	-
						1.0	0.5	192	24.7		8.0		28.5		92.0		6.5		9.9		10		-				-		-	
					Middle	4.4	0.2	221	24.7	24.7	8.0	8.0	28.5	28.5	91.8	91.8	6.5		12.9		12		-				-		-	
						4.4	0.2	228	24.7		8.0		28.5		91.8		6.5		13.0		13		-				-		-	
					Bottom	7.8	0.1	308	24.6	24.6	8.0	8.0	28.5	28.5	91.7	91.7	6.5	6.5	15.9		13		-				-		-	
						7.8	0.1	336	24.6		8.0		28.5		91.7		6.5		16.1		12		-				-		-	
SR4A	Cloudy	Calm	04:14	9.2	Surface	1.0	0.1	82	24.9	24.9	8.2	8.2	29.6	29.6	92.3	92.3	6.5	6.5	7.4	8.4	14	14	-	-	817176	807795	-	-	-	-
						1.0	0.1	89	24.9		8.2		29.6		92.3		6.5		7.3		12		-				-		-	
					Middle	4.6	0.2	60	24.9	24.9	8.2	8.2	29.6	29.6	91.4	91.4	6.4		7.5		15		-				-		-	
						4.6	0.2	65	24.9		8.2		29.6		91.4		6.4		7.6		15		-				-		-	
					Bottom	8.2	0.1	68	24.8	24.8	8.2	8.2	29.7	29.7	90.5	90.5	6.3	6.3	10.9		15		-				-		-	
						8.2	0.1	73	24.8		8.2		29.7		90.5		6.3		10.1		14		-				-		-	
SR5A	Cloudy	Calm	03:57	4.6	Surface	1.0	0.1	12	24.8	24.8	8.2	8.2	29.7	29.7	91.7	91.7	6.4	6.4	10.0	10.2	14	16	-	-	816578	810708	-	-	-	-
						1.0	0.1	12	24.8		8.2		29.7		91.7		6.4		10.0		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	31	24.8	24.8	8.1	8.1	29.7	29.7	91.4	91.4	6.4	6.4	10.1		17		-				-		-	
						3.6	0.1	33	24.8		8.1		29.7		91.3		6.4		10.8		17		-				-		-	
SR6A	Cloudy	Calm	03:29	5.1	Surface	1.0	0.0	171	24.6	24.6	8.2	8.2	29.7	29.7	89.4	89.4	6.3	6.3	9.5	10.3	19	19	-	-	817951	814753	-	-	-	-
						1.0	0.0	178	24.6		8.2		29.7		89.4		6.3		9.5		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	232	24.6	24.6	8.2	8.2	29.7	29.7	89.9	89.9	6.3	6.3	11.4		20		-				-		-	
						4.1	0.0	241	24.6		8.2		29.7		89.9		6.3		10.9		20		-				-		-	
SR7	Cloudy	Moderate	03:45	15.8	Surface	1.0	0.4	91	24.4	24.4	8.0	8.0	30.3	30.3	89.6	89.6	6.3	6.3	3.3	4.0	5	6	-	-	823613	823752	-	-	-	-
						1.0	0.4	91	24.4		8.0		30.3		89.6		6.3		3.3		5		-				-		-	
					Middle	7.9	0.1	64	24.3	24.3	8.0	8.0	30.5	30.5	89.4	89.4	6.3		3.2		5		-				-		-	
						7.9	0.1	64	24.3		8.0		30.5		89.4		6.3		3.3		6		-				-		-	
					Bottom	14.8	0.1	52	24.2	24.2	8.0	8.0	31.2	31.2	88.0	88.0	6.2	6.2	5.5		7		-				-		-	
						14.8	0.1	54	24.2		8.0		31.2		88.0		6.2		5.4		6		-				-		-	
SR8	Cloudy	Moderate	04:57	4.7	Surface	1.0	-	-	24.8	24.8	8.0	8.0	29.0	29.0	93.7	93.7	6.6	6.6	9.4	11.7	5	5	-	-	820392	811645	-	-	-	-
						1.0	-	-	24.8		8.0		29.0		93.6		6.6		9.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	24.5	24.5	8.0	8.0	29.7	29.6	92.4	92.4	6.5	6.5	13.9		5		-				-		-	
						3.7	-	-	24.5		8.0		29.6		92.4		6.5		13.9		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 November 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	16:58	9.0	Surface	1.0	1.7	237	24.1	24.1	8.2	8.2	29.5	29.5	95.9	95.9	6.8	6.8	4.2	6.8	12	9	86	89	815605	804233	<0.2	<0.2	0.9	1.0
						1.0	1.8	241	24.1		8.2		29.5		95.9		6.8		4.2		11		86				<0.2		0.9	
					Middle	4.5	1.7	235	24.0	24.0	8.2	8.2	30.4	30.3	95.7	95.8	6.8		4.7		8		90				<0.2		0.9	
						4.5	1.7	235	24.0		8.2		30.3		95.8		6.8		4.7		9		91				<0.2		0.9	
					Bottom	8.0	1.8	232	23.9	23.9	8.2	8.2	31.4	31.4	96.7	96.7	6.8		11.7		7		91				<0.2		1.0	
						8.0	2.0	246	23.9		8.2		31.4		96.7		6.8		11.6		7		92				<0.2		1.1	
C2	Cloudy	Moderate	15:48	12.1	Surface	1.0	0.3	350	24.7	24.7	8.0	8.0	27.5	27.5	92.8	92.8	6.6	6.5	5.7	7.7	6	6	85	87	825699	806966	<0.2	<0.2	1.4	1.5
						1.0	0.3	322	24.7		8.0		27.5		92.8		6.6		5.7		6		84				<0.2		1.5	
					Middle	6.1	0.4	28	24.6	24.6	8.0	8.0	29.1	29.1	91.0	90.9	6.4		7.2		6		88				<0.2		1.6	
						6.1	0.4	28	24.6		8.0		29.1		90.8		6.4		7.4		6		88				<0.2		1.5	
					Bottom	11.1	0.4	346	24.4	24.4	8.0	8.0	29.9	29.9	89.1	89.2	6.3	6.3	9.9		5		90				<0.2		1.7	
						11.1	0.4	318	24.4		8.0		29.9		89.2		6.3		10.2		6		89				<0.2		1.5	
C3	Cloudy	Moderate	17:46	12.3	Surface	1.0	0.3	241	24.2	24.2	8.0	8.0	31.2	31.2	88.8	88.8	6.2	6.2	2.1	5.3	9	7	85	89	822096	817802	<0.2	<0.2	1.7	1.6
						1.0	0.3	253	24.2		8.0		31.2		88.8		6.2		2.1		8		86				<0.2		1.7	
					Middle	6.2	0.4	252	24.2	24.2	8.0	8.0	31.7	31.7	86.9	86.9	6.1		4.9		7		88				<0.2		1.6	
						6.2	0.4	274	24.2		8.0		31.7		86.9		6.1		4.9		6		89				<0.2		1.5	
					Bottom	11.3	0.4	266	24.1	24.1	8.0	8.0	31.8	31.8	87.1	87.1	6.1	6.1	9.0		6		92				<0.2		1.6	
						11.3	0.4	271	24.1		8.0		31.8		87.0		6.1		9.0		5		91				<0.2		1.6	
IM1	Cloudy	Moderate	16:38	4.6	Surface	1.0	0.0	240	24.6	24.6	8.2	8.2	29.8	29.8	94.3	94.3	6.6	6.6	8.8	9.7	10	10	86	88	817942	807151	<0.2	<0.2	0.9	1.0
						1.0	0.0	241	24.6		8.2		29.8		94.3		6.6		8.6		11		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	302	24.4	24.4	8.2	8.2	29.9	29.9	91.6	91.6	6.5	6.5	11.0		9		89				<0.2		1.0	
						3.6	0.0	326	24.4		8.2		29.9		91.6		6.5		10.3		8		90				<0.2		1.1	
IM2	Cloudy	Moderate	16:30	6.6	Surface	1.0	1.6	15	24.4	24.4	8.2	8.2	29.4	29.4	96.0	96.0	6.8	6.7	6.5	12.1	10	9	87	90	818139	806154	<0.2	<0.2	1.0	1.2
						1.0	1.7	15	24.4		8.2		29.4		95.9		6.8		6.3		9		87				<0.2		1.1	
					Middle	3.3	1.6	20	24.0	24.0	8.2	8.2	30.0	30.0	92.4	92.4	6.5		9.2		8		90				<0.2		1.2	
						3.3	1.6	20	24.0		8.2		30.0		92.3		6.5		9.3		9		90				<0.2		1.1	
					Bottom	5.6	1.7	27	23.9	23.9	8.2	8.2	30.3	30.3	91.1	91.1	6.5	6.5	20.6		8		91				<0.2		1.4	
						5.6	1.7	27	23.9		8.2		30.3		91.1		6.5		20.5		8		92				<0.2		1.5	
IM3	Cloudy	Moderate	16:21	6.9	Surface	1.0	2.3	245	24.4	24.4	8.2	8.2	29.3	29.3	97.2	97.2	6.9	6.8	5.0	9.4	9	9	86	89	818797	805615	<0.2	<0.2	1.0	1.1
						1.0	2.4	252	24.4		8.2		29.3		97.2		6.9		4.9		9		87				<0.2		1.2	
					Middle	3.5	2.3	244	24.2	24.2	8.2	8.2	29.5	29.5	94.3	94.3	6.7		7.3		9		90				<0.2		1.1	
						3.5	2.5	247	24.2		8.2		29.5		94.3		6.7		7.2		9		90				<0.2		1.2	
					Bottom	5.9	2.4	240	24.0	24.0	8.2	8.2	30.1	30.1	91.9	91.9	6.5	6.5	16.1		7		91				<0.2		1.1	
						5.9	2.5	260	24.0		8.2		30.1		91.9		6.5		16.1		8		92				<0.2		1.2	
IM4	Cloudy	Moderate	16:09	7.1	Surface	1.0	2.9	252	24.2	24.2	8.2	8.2	29.5	29.5	95.0	95.1	6.7	6.7	6.5	9.1	13	10	87	89	819721	804595	<0.2	<0.2	1.1	1.3
						1.0	2.9	258	24.2		8.2		29.5		95.1		6.7		6.5		13		88				<0.2		1.1	
					Middle	3.6	2.7	254	24.1	24.1	8.2	8.2	29.9	29.9	93.8	93.8	6.6		9.0		9		89				<0.2		1.2	
						3.6	2.7	263	24.1		8.2		29.9		93.8		6.6		9.0		9		90				<0.2		1.3	
					Bottom	6.1	2.9	254	24.1	24.1	8.2	8.2	29.9	29.9	93.4	93.4	6.6	6.6	11.9		9		91				<0.2		1.4	
						6.1	3.1	271	24.1		8.2		29.9		93.4		6.6		11.8		9		91				<0.2		1.4	
IM5	Cloudy	Moderate	15:59	6.7	Surface	1.0	2.0	276	24.2	24.2	8.2	8.2	29.4	29.4	94.6	94.6	6.7	6.7	7.6	8.0	9	9	86	89	820747	804847	<0.2	<0.2	1.3	1.3
						1.0	2.1	283	24.2		8.2		29.4		94.6		6.7		7.5		10		87				<0.2		1.2	
					Middle	3.4	2.0	270	24.2	24.2	8.2	8.2	29.4	29.4	94.4	94.4	6.7		7.8		8		89				<0.2		1.3	
						3.4	2.0	293	24.2		8.2		29.4		94.3		6.7		7.8		10		90				<0.2		1.3	
					Bottom	5.7	1.9	272	24.2	24.2	8.2	8.2	29.4	29.4	94.1	94.1	6.7	6.7	8.7		9		90				<0.2		1.3	
						5.7	2.0	286	24.2		8.2		29.4		94.1		6.7		8.7		9		91				<0.2		1.4	
IM6	Cloudy	Moderate	15:51	6.8	Surface	1.0	1.8	43	24.7	24.7	8.2	8.2	28.1	28.1	95.3	95.3	6.8	6.8	4.2	6.1	9	9	86	89	821069	805839	<0.2	<0.2	1.3	1.4
						1.0	1.8	45	24.7		8.2		28.1		95.3		6.8		4.1		10		87				<0.2		1.3	
					Middle	3.4	2.0	47	24.5	24.5	8.2	8.2	29.0	29.0	94.7	94.7	6.7		6.5		9		90				<0.2		1.4	
						3.4	2.0	47	24.5		8.2		29.0		94.7		6.7		6.6		9		90				<0.2		1.3	
					Bottom	5.8	2.1	49	24.5	24.5	8.2	8.2	29.4	29.4	93.6	93.6	6.6	6.6	7.6		8		91				<0.2		1.4	
						5.8	2.3	50	24.5		8.2		29.4		93.6		6.6		7.7		9		92				<0.2		1.4	
IM7	Cloudy	Moderate	15:46	7.9	Surface	1.0	2.4	299	24.7	24.7	8.2	8.2	28.0	28.0	94.5	94.5	6.7	6.7	3.8	4.8	8	7	86	89	821366	806814	<0.2	<0.2	1.4	1.5
						1.0	2.4	328	24.7		8.2		28.0		94.5		6.7		3.8		7		86				<0.2		1.4	
					Middle	4.0	2.5	300	24.7	24.7	8.2	8.2	28.1	28.1	94.1	94.1	6.7		4.2		7		89				<0.2		1.6	
						4.0	2.7	301	24.7		8.2		28.1		94.1		6.7		4.2		7		89				<0.2		1.4	
					Bottom	6.9	2.3	301	24.5	24.5	8.2	8.2	29.2	29.2	93.5	93.5	6.6	6.6	6.3		8		91				<0.2		1.7	
						6.9	2.5	327	24.5		8.2		29.2		93.4		6.6		6.4		7		92				<0.2		1.6	
IM8	Cloudy	Moderate	16:12	7.9	Surface	1.0	0.2	62	24.7	24.7	8.0	8.0	28.5	28.5	94.7	94.7	6.7	6.7	5.8	7.8	6	6	85	88	821819	808137	<0.2	<0.2	1.5	1.5
						1.0	0.2	66	24.7		8.0		28.5		94.7		6.7		5.9		7		85				<0.2		1.6	
					Middle	4.0	0.1	91	24.7	24.7	8.0	8.0	28.5	28.5	94.6	94.6	6.7		7.9		6		88				<0.2		1.5	
						4.0	0.1	92	24.7		8.0		28.5		94.5		6.7		7.9		5		89				<0.2		1.5	
					Bottom	6.9	0.1	121	24.6	24.6	8.0	8.0	29.0	29.0	93.9	93.9	6.6	6.6	9.7		6		90				<0.2		1.5	
						6.9	0.1	122	24.6		8.0		29.0		93.9		6.6		9.7		5		91				<0.2		1.5	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 November 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	16:19	7.4	Surface	1.0	0.1	27	24.6	24.6	8.0	8.0	28.6	28.6	94.4	94.4	6.7	6.7	6.3	8.1	6	7	85	88	822109	808808	<0.2	<0.2	1.6	1.6
						1.0	0.1	27	24.6		8.0		28.6		94.4		6.7		6.4		6		84				<0.2		1.6	
					Middle	3.7	0.1	47	24.6	24.6	8.0	8.0	28.7	28.7	93.6	93.6	6.6		8.0		6		88				<0.2		1.6	
						3.7	0.1	49	24.6		8.0		28.7		93.6		6.6		8.1		7		88				<0.2		1.4	
					Bottom	6.4	0.1	346	24.5	24.5	8.0	8.0	29.3	29.3	92.4	92.4	6.5	6.5	10.2		7		90				<0.2		1.5	
						6.4	0.1	318	24.5		8.0		29.3		92.4		6.5		9.8		7		90				<0.2		1.6	
IM10	Cloudy	Moderate	16:27	7.7	Surface	1.0	0.1	295	24.5	24.5	8.0	8.0	29.8	29.8	92.0	92.0	6.5	6.5	9.5	10.6	6	7	85	88	822365	809808	<0.2	<0.2	1.6	1.6
						1.0	0.1	317	24.5		8.0		29.8		91.9		6.5		9.6		6		84				<0.2		1.6	
					Middle	3.9	0.2	292	24.5	24.5	8.0	8.0	29.8	29.8	92.0	92.0	6.5		10.3		6		89				<0.2		1.6	
						3.9	0.2	294	24.5		8.0		29.8		92.0		6.5		10.2		7		89				<0.2		1.5	
					Bottom	6.7	0.2	292	24.5	24.5	8.0	8.0	29.8	29.8	92.7	92.7	6.5	6.5	11.8		7		91				<0.2		1.6	
						6.7	0.2	313	24.5		8.0		29.8		92.7		6.5		12.0		7		90				<0.2		1.7	
IM11	Cloudy	Moderate	16:40	7.5	Surface	1.0	0.2	315	24.4	24.4	8.0	8.0	30.1	30.1	90.3	90.3	6.4	6.4	7.8	9.2	6	7	85	88	822037	811480	<0.2	<0.2	1.6	1.6
						1.0	0.2	336	24.4		8.0		30.1		90.3		6.4		7.8		6		84				<0.2		1.5	
					Middle	3.8	0.2	293	24.4	24.4	8.0	8.0	30.2	30.2	89.7	89.7	6.3		8.9		7		88				<0.2		1.6	
						3.8	0.2	304	24.4		8.0		30.2		89.7		6.3		8.9		7		89				<0.2		1.6	
					Bottom	6.5	0.0	193	24.4	24.4	8.0	8.0	30.3	30.3	90.3	90.3	6.4	6.4	11.0		7		91				<0.2		1.5	
						6.5	0.0	211	24.4		8.0		30.3		90.3		6.4		11.0		7		91				<0.2		1.6	
IM12	Cloudy	Moderate	16:47	9.5	Surface	1.0	0.3	257	24.5	24.5	8.0	8.0	29.9	29.9	92.1	92.1	6.5	6.5	7.4	9.1	7	7	84	88	821444	812059	<0.2	<0.2	1.6	1.6
						1.0	0.3	259	24.5		8.0		29.9		92.1		6.5		7.4		6		85				<0.2		1.7	
					Middle	4.8	0.2	243	24.5	24.5	8.0	8.0	30.2	30.2	91.5	91.5	6.4		10.2		6		87				<0.2		1.6	
						4.8	0.2	245	24.5		8.0		30.2		91.5		6.4		10.1		7		88				<0.2		1.7	
					Bottom	8.5	0.2	229	24.5	24.5	8.0	8.0	30.2	30.2	92.2	92.3	6.5	6.5	9.7		7		91				<0.2		1.6	
						8.5	0.2	242	24.5		8.0		30.2		92.3		6.5		9.6		7		90				<0.2		1.5	
SR1A	Cloudy	Moderate	17:08	5.2	Surface	1.0	-	-	24.5	24.5	8.0	8.0	30.1	30.1	91.9	91.9	6.5	6.5	7.5	9.3	7	7	-	-	819979	812655	-	-	-	-
						1.0	-	-	24.5		8.0		30.1		91.9		6.5		7.5		9		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	24.5	24.5	8.0	8.0	30.1	30.1	91.2	91.3	6.4	6.4	11.1		6		-				-		-	
						4.2	-	-	24.5		8.0		30.1		91.3		6.4		11.2		7		-				-		-	
SR2	Cloudy	Moderate	17:23	4.8	Surface	1.0	0.0	81	24.4	24.4	8.0	8.0	30.1	30.1	91.3	91.3	6.4	6.4	6.1	7.5	6	6	86	88	821442	814148	<0.2	<0.2	1.5	1.6
						1.0	0.0	82	24.4		8.0		30.1		91.3		6.4		6.1		5		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	114	24.4	24.4	8.0	8.0	30.4	30.4	91.1	91.1	6.4	6.4	8.8		7		89				<0.2		1.7	
						3.8	0.0	114	24.4		8.0		30.4		91.1		6.4		8.9		6		89				<0.2		1.6	
SR3	Cloudy	Moderate	16:07	9.6	Surface	1.0	0.0	140	24.7	24.7	8.0	8.0	28.3	28.3	93.2	93.2	6.6	6.6	7.2	9.8	6	6	-	-	822123	807579	-	-	-	-
						1.0	0.0	144	24.7		8.0		28.3		93.2		6.6		7.2		5		-				-		-	
					Middle	4.8	0.1	105	24.6	24.6	8.0	8.0	28.5	28.5	92.5	92.6	6.5		9.5		6		-				-		-	
						4.8	0.1	113	24.6		8.0		28.5		92.6		6.5		9.6		6		-				-		-	
					Bottom	8.6	0.1	224	24.5	24.5	8.0	8.0	29.0	29.0	93.6	93.6	6.6	6.6	12.6		6		-				-		-	
						8.6	0.1	238	24.5		8.0		29.0		93.6		6.6		12.8		7		-				-		-	
SR4A	Cloudy	Calm	17:22	8.5	Surface	1.0	1.8	36	24.7	24.7	8.2	8.2	29.2	29.2	98.6	98.6	6.9	6.8	6.1	8.8	9	8	-	-	817166	807810	-	-	-	-
						1.0	1.9	37	24.7		8.2		29.2		98.5		6.9		6.3		8		-				-		-	
					Middle	4.3	1.9	37	24.5	24.5	8.2	8.2	29.3	29.3	94.8	94.8	6.7		10.4		7		-				-		-	
						4.3	2.1	40	24.5		8.2		29.3		94.8		6.7		10.3		7		-				-		-	
					Bottom	7.5	1.8	38	24.5	24.5	8.2	8.2	29.5	29.5	93.4	93.5	6.6	6.6	9.9		7		-				-		-	
						7.5	2.0	41	24.5		8.2		29.5		93.5		6.6		9.8		7		-				-		-	
SR5A	Cloudy	Calm	17:39	4.8	Surface	1.0	0.0	341	24.8	24.8	8.2	8.2	29.7	29.7	92.5	92.5	6.5	6.5	7.7	7.8	10	11	-	-	816596	810691	-	-	-	-
						1.0	0.0	314	24.7		8.2		29.7		92.5		6.5		7.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	344	24.7	24.7	8.2	8.2	29.7	29.7	92.4	92.4	6.5	6.5	7.8		12		-				-		-	
						3.8	0.0	316	24.7		8.2		29.7		92.4		6.5		7.8		12		-				-		-	
SR6A	Cloudy	Calm	18:08	4.2	Surface	1.0	0.0	192	24.6	24.6	8.2	8.2	29.2	29.2	92.5	92.5	6.5	6.5	11.0	17.6	20	15	-	-	817972	814746	-	-	-	-
						1.0	0.0	200	24.6		8.2		29.2		92.5		6.5		11.0		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	127	24.6	24.6	8.2	8.2	29.4	29.4	91.4	91.4	6.4	6.4	24.1		10		-				-		-	
						3.2	0.1	135	24.6		8.2		29.4		91.4		6.4		24.4		10		-				-		-	
SR7	Cloudy	Moderate	18:20	15.6	Surface	1.0	0.0	116	24.1	24.1	8.0	8.0	31.5	31.5	86.4	86.4	6.1	6.1	3.6	3.7	3	3	-	-	823629	823752	-	-	-	-
						1.0	0.0	120	24.1		8.0		31.5		86.4		6.1		3.5		4		-				-		-	
					Middle	7.8	0.1	184	24.2	24.2	8.0	8.0	31.8	31.8	87.4	87.5	6.1		3.7		3		-				-		-	
						7.8	0.1	198	24.2		8.0		31.8		87.6		6.1		3.7		4		-				-		-	
					Bottom	14.6	0.1	76	24.1	24.1	8.0	8.0	31.9	31.9	87.7	87.7	6.1	6.1	3.8		3		-				-		-	
						14.6	0.1	83	24.1		8.0		31.9		87.6		6.1		3.8		3		-				-		-	
SR8	Cloudy	Moderate	16:59	5.0	Surface	1.0	-	-	24.9	24.9	8.0	8.0	29.7	29.7	92.2	92.2	6.5	6.5	12.2	13.9	6	7	-	-	820401	811641	-	-	-	-
						1.0	-	-	24.9		8.0		29.7		92.1		6.4		12.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.5	24.5	8.0	8.0	29.9	29.9	91.8	91.8	6.5	6.5	15.5		9		-				-		-	
						4.0	-	-	24.5		8.0		29.9		91.8		6.5		15.5		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 24 November 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	08:47	8.0	Surface	1.0	1.1	99	23.8	23.8	8.3	8.3	30.8	30.8	97.5	97.5	6.9	6.9	1.4	4.5	5	5	85	88	815625	804246	<0.2	<0.2	0.8	0.9
						1.0	1.2	104	23.8		8.3		30.9		97.4		6.9		1.6		4		87				<0.2		0.9	
					Middle	4.0	1.3	102	24.0	24.0	8.3	8.3	31.4	31.4	97.0	97.0	6.8		4.1		5		88				<0.2		0.9	
						4.0	1.4	102	24.0		8.3		31.5		96.9		6.8		4.3		4		88				<0.2		1.0	
					Bottom	7.0	1.0	103	24.0	24.0	8.3	8.3	31.8	31.8	96.5	96.4	6.8	6.8	7.6		5		91				<0.2		0.9	
						7.0	1.1	103	24.0		8.3		31.8		96.3		6.8		8.0		4		90				<0.2		0.8	
C2	Cloudy	Rough	09:25	11.7	Surface	1.0	0.6	150	24.4	24.4	7.9	7.9	29.3	29.3	90.0	89.9	6.4	6.3	3.2	4.5	3	3	86	89	825660	806962	<0.2	<0.2	1.3	1.3
						1.0	0.6	159	24.4		7.9		29.3		89.7		6.3		3.0		3		86				<0.2		1.4	
					Middle	5.9	0.5	153	24.3	24.3	7.9	7.9	30.6	30.7	87.9	87.9	6.2		4.1		4		89				<0.2		1.3	
						5.9	0.6	157	24.3		7.9		30.7		87.8		6.2		4.2		3		90				<0.2		1.1	
					Bottom	10.7	0.3	153	24.3	24.3	7.9	7.9	31.0	31.0	88.9	89.4	6.2	6.3	6.3		3		90				<0.2		1.3	
						10.7	0.3	157	24.3		7.9		31.0		89.9		6.3		6.3		4		91				<0.2		1.3	
C3	Cloudy	Moderate	07:24	12.0	Surface	1.0	0.3	117	24.2	24.2	7.9	7.9	30.5	30.5	87.5	87.3	6.2	6.1	1.7	2.4	4	4	87	89	822117	817788	<0.2	<0.2	1.3	1.7
						1.0	0.3	119	24.2		7.9		30.5		87.0		6.1		1.8		4		87				<0.2		1.3	
					Middle	6.0	0.2	92	24.2	24.2	7.9	7.9	31.2	31.2	86.5	86.5	6.1		2.2		4		89				<0.2		2.0	
						6.0	0.2	92	24.2		7.9		31.2		86.5		6.1		2.2		4		90				<0.2		2.1	
					Bottom	11.0	0.2	68	24.2	24.2	7.9	7.9	31.7	31.7	88.0	88.1	6.2	6.2	3.1		3		91				<0.2		1.9	
						11.0	0.2	68	24.2		7.9		31.7		88.1		6.2		3.1		3		91				<0.2		1.7	
IM1	Cloudy	Moderate	09:11	4.8	Surface	1.0	0.1	205	24.0	24.0	8.2	8.2	30.7	30.7	94.1	94.1	6.6	6.6	3.0	6.8	4	4	86	88	817964	807145	<0.2	<0.2	1.1	1.2
						1.0	0.1	222	24.0		8.2		30.8		94.0		6.6		3.1		4		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	202	24.1	24.1	8.2	8.2	30.9	30.8	93.6	93.6	6.6	6.6	10.7		3		89				<0.2		1.3	
						3.8	0.1	214	24.0		8.2		30.8		93.6		6.6		10.2		4		89				<0.2		1.3	
IM2	Cloudy	Moderate	09:19	6.3	Surface	1.0	1.2	101	24.0	24.0	8.2	8.2	30.6	30.6	95.2	95.2	6.7	6.7	2.4	4.3	3	4	87	89	818156	806166	<0.2	<0.2	1.3	1.2
						1.0	1.3	105	24.0		8.2		30.6		95.1		6.7		2.4		3		86				<0.2		1.1	
					Middle	3.2	1.4	96	24.0	24.0	8.2	8.2	30.8	30.8	94.5	94.5	6.7		3.5		5		88				<0.2		1.1	
						3.2	1.5	104	24.0		8.2		30.8		94.4		6.7		3.9		4		89				<0.2		1.1	
					Bottom	5.3	1.6	97	24.0	24.0	8.2	8.2	31.1	31.1	94.9	95.0	6.7	6.7	6.7		6		91				<0.2		1.1	
						5.3	1.7	105	24.0		8.2		31.1		95.0		6.7		6.7		5		90				<0.2		1.2	
IM3	Cloudy	Moderate	09:27	6.8	Surface	1.0	1.2	323	24.1	24.1	8.3	8.3	30.8	30.8	93.0	92.9	6.6	6.3	3.9	7.1	2	3	86	88	818782	805602	<0.2	<0.2	1.2	1.1
						1.0	1.3	338	24.1		8.3		30.8		92.7		6.5		4.0		2		87				<0.2		1.0	
					Middle	3.4	1.0	316	24.1	24.1	8.2	8.2	30.9	30.9	86.3	86.4	6.1		8.1		4		88				<0.2		1.1	
						3.4	1.0	335	24.1		8.2		30.9		86.4		6.1		8.1		3		88				<0.2		1.1	
					Bottom	5.8	1.1	320	24.1	24.1	8.2	8.2	31.0	31.0	94.3	94.3	6.6	6.6	9.6		4		91				<0.2		1.0	
						5.8	1.1	320	24.1		8.2		31.0		94.3		6.6		9.2		4		90				<0.2		1.1	
IM4	Cloudy	Moderate	09:38	7.8	Surface	1.0	2.3	143	24.0	24.0	8.2	8.2	29.8	29.8	95.5	95.5	6.8	6.8	2.8	4.3	5	4	85	87	819720	804607	<0.2	<0.2	1.1	0.9
						1.0	2.4	156	24.0		8.2		29.9		95.5		6.8		2.9		4		86				<0.2		0.9	
					Middle	3.9	2.1	143	24.0	24.0	8.2	8.2	30.7	30.7	95.1	95.1	6.7		4.8		4		88				<0.2		0.9	
						3.9	2.2	144	24.0		8.2		30.7		95.1		6.7		4.9		5		87				<0.2		0.7	
					Bottom	6.8	2.3	136	24.0	24.0	8.2	8.2	30.8	30.8	95.2	95.2	6.7	6.7	5.2		3		90				<0.2		0.9	
						6.8	2.5	147	24.0		8.2		30.8		95.2		6.7		5.2		3		88				<0.2		0.9	
IM5	Cloudy	Moderate	09:48	7.2	Surface	1.0	2.1	178	24.1	24.1	8.2	8.2	29.0	29.0	95.2	95.2	6.8	6.8	2.9	3.7	3	3	86	88	820725	804863	<0.2	<0.2	1.0	0.9
						1.0	2.1	187	24.1		8.2		29.0		95.2		6.8		3.1		3		86				<0.2		0.9	
					Middle	3.6	2.3	179	24.0	24.0	8.2	8.2	30.9	30.9	95.2	95.2	6.7		4.0		2		88				<0.2		0.9	
						3.6	2.3	185	24.0		8.2		30.9		95.2		6.7		4.0		3		87				<0.2		0.8	
					Bottom	6.2	2.2	173	24.0	24.0	8.2	8.2	30.9	30.9	95.6	95.7	6.7	6.8	4.1		3		91				<0.2		0.9	
						6.2	2.4	175	24.0		8.2		30.9		95.8		6.8		4.1		2		90				<0.2		0.9	
IM6	Cloudy	Moderate	09:58	6.8	Surface	1.0	0.8	28	24.2	24.2	8.2	8.2	28.8	28.8	94.2	94.2	6.7	6.7	2.3	3.5	2	3	87	88	821041	805838	<0.2	<0.2	0.9	0.8
						1.0	0.8	29	24.2		8.2		28.9		94.2		6.7		2.3		3		86				<0.2		0.9	
					Middle	3.4	1.0	19	24.1	24.1	8.2	8.2	29.6	29.7	94.5	94.6	6.7		3.3		2		88				<0.2		0.8	
						3.4	1.0	20	24.1		8.2		29.8		94.6		6.7		3.6		3		88				<0.2		0.8	
					Bottom	5.8	0.9	25	24.0	24.0	8.2	8.2	30.4	30.4	95.3	95.4	6.7	6.7	4.8		3		91				<0.2		0.8	
						5.8	0.9	27	24.0		8.2		30.4		95.4		6.7		4.7		3		90				<0.2		0.8	
IM7	Cloudy	Moderate	10:08	8.0	Surface	1.0	2.4	281	24.2	24.2	8.2	8.2	28.8	28.9	93.9	94.0	6.7	6.7	2.6	3.6	4	4	86	88	821367	806820	<0.2	<0.2	0.8	0.8
						1.0	2.5	294	24.2		8.2		28.9		94.0		6.7		2.7		3		86				<0.2		0.9	
					Middle	4.0	2.1	280	24.1	24.1	8.2	8.2	30.1	30.2	94.3	94.4	6.7		3.6		4		88				<0.2		0.8	
						4.0	2.1	299	24.1		8.2		30.3		94.4		6.7		3.8		3		88				<0.2		0.8	
					Bottom	7.0	2.2	279	24.1	24.1	8.2	8.2	30.8	30.8	94.9	95.0	6.7	6.7	4.5		5		91				<0.2		0.8	
						7.0	2.2	290	24.1		8.2		30.8		95.0		6.7		4.6		4		90				<0.2		0.9	
IM8	Cloudy	Moderate	08:56	7.7	Surface	1.0	0.1	162	24.3	24.3	7.9	7.9	29.3	29.3	92.5	92.6	6.6	6.6	2.7	3.5	4	4	87	89	821842	808160	<0.2	<0.2	1.3	1.4
						1.0	0.1	176	24.3		7.9		29.3		92.7		6.6		2.7		3		88				<0.2		1.2	
					Middle	3.9	0.1	135	24.2	24.2	7.9	7.8	29.5	29.5	93.5	93.7	6.6		3.1		4		89				<0.2		1.4	
						3.9	0.1	136	24.2		7.7		29.5		93.8		6.6		3.2		3		90				<0.2		1.3	
					Bottom	6.7	0.2	57	24.1	24.1	7.9	7.9	31.4	31.4	95.2	95.2	6.7	6.7	4.5		3		90				<0.2		1.5	
						6.7	0.2	60	24.1		7.9		31.4		95.2		6.7		4.5		4		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 24 November 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	08:51	7.2	Surface	1.0	0.3	119	24.3	24.3	7.9	7.8	29.5	29.5	92.4	92.6	6.5	6.6	3.1	4.1	4	4	85	88	822095	808812	<0.2	<0.2	1.2	1.3
						1.0	0.3	124	24.3		7.7		29.5		92.8		6.6		3.2		3		85				<0.2		1.3	
					Middle	3.6	0.3	95	24.3	24.2	7.9	7.9	29.6	29.6	93.4	93.6	6.6		3.7		3		88				<0.2		1.4	
						3.6	0.3	100	24.2		7.9		29.6		93.7		6.6		3.8		4		89				<0.2		1.2	
					Bottom	6.2	0.2	65	24.1	24.1	7.9	7.9	31.2	31.2	94.4	94.4	6.6	6.6	5.3		3		90				<0.2		1.4	
						6.2	0.2	66	24.1		7.9		31.2		94.3		6.6		5.2		4		91				<0.2		1.4	
IM10	Cloudy	Moderate	08:43	7.5	Surface	1.0	0.4	134	24.3	24.3	7.9	7.9	29.4	29.4	92.7	92.7	6.6	6.6	3.2	4.4	4	3	85	88	822392	809780	<0.2	<0.2	1.3	1.3
						1.0	0.4	134	24.3		7.9		29.4		92.7		6.6		3.2		3		85				<0.2		1.2	
					Middle	3.8	0.4	133	24.3	24.3	7.9	7.9	29.4	29.4	93.6	93.7	6.6		4.4		3		89				<0.2		1.2	
						3.8	0.4	142	24.3		7.9		29.4		93.7		6.6		4.5		4		89				<0.2		1.3	
					Bottom	6.5	0.4	106	24.2	24.2	8.0	7.9	31.1	31.1	95.6	95.6	6.7	6.7	5.6		3		89				<0.2		1.3	
						6.5	0.4	106	24.2		7.8		31.1		95.6		6.7		5.5		3		90				<0.2		1.3	
IM11	Cloudy	Moderate	08:30	7.6	Surface	1.0	0.4	130	24.3	24.3	7.9	7.9	29.7	29.7	90.9	90.9	6.4	6.4	4.1	5.5	4	4	85	88	822069	811483	<0.2	<0.2	1.1	1.2
						1.0	0.5	130	24.3		7.9		29.7		90.9		6.4		4.3		4		85				<0.2		1.2	
					Middle	3.8	0.4	126	24.3	24.3	7.9	7.9	30.0	30.0	89.8	89.7	6.3		5.7		4		89				<0.2		1.2	
						3.8	0.5	136	24.3		7.9		30.0		89.6		6.3		5.9		3		89				<0.2		1.2	
					Bottom	6.6	0.3	114	24.3	24.3	7.9	7.9	30.4	30.4	90.9	91.0	6.4	6.4	6.4		3		90				<0.2		1.3	
						6.6	0.3	125	24.3		7.9		30.4		91.0		6.4		6.3		3		91				<0.2		1.4	
IM12	Cloudy	Moderate	08:23	9.0	Surface	1.0	0.3	111	24.3	24.3	7.9	7.9	29.7	29.7	87.6	87.4	6.2	6.2	3.8	4.7	3	3	84	88	821449	812046	<0.2	<0.2	1.1	1.2
						1.0	0.4	114	24.3		7.9		29.7		87.1		6.2		4.0		3		85				<0.2		1.3	
					Middle	4.5	0.4	117	24.4	24.4	7.9	7.9	30.2	30.2	86.3	86.4	6.1		5.0		2		88				<0.2		1.2	
						4.5	0.4	128	24.4		7.9		30.2		86.4		6.1		5.0		3		89				<0.2		1.2	
					Bottom	8.0	0.3	120	24.4	24.4	7.9	7.9	30.7	30.7	88.9	89.4	6.2	6.3	5.3		4		90				<0.2		1.2	
						8.0	0.3	120	24.4		7.9		30.7		89.8		6.3		5.2		3		90				<0.2		1.3	
SR1A	Cloudy	Calm	08:02	5.0	Surface	1.0	-	-	24.3	24.3	7.9	7.9	29.4	29.4	88.1	88.0	6.2	6.2	3.0	3.3	2	3	-	-	819975	812665	-	-	-	-
						1.0	-	-	24.3		7.9		29.5		87.9		6.2		3.0		3		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.4	24.4	7.9	7.9	29.8	29.8	88.5	89.1	6.2	6.3	3.5		4		-				-		-	
						4.0	-	-	24.4		7.9		29.8		89.7		6.3		3.5		4		-				-		-	
SR2	Cloudy	Moderate	07:49	4.9	Surface	1.0	0.3	104	24.3	24.3	7.9	7.9	29.6	29.6	91.4	91.5	6.5	6.5	4.2	3.9	4	4	85	88	821456	814162	<0.2	<0.2	1.1	1.2
						1.0	0.3	107	24.3		7.9		29.6		91.5		6.5		4.0		4		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	97	24.4	24.3	7.9	7.9	30.2	30.1	94.6	95.2	6.7	6.8	3.5		4		90				<0.2		1.2	
						3.9	0.2	97	24.3		7.9		30.1		95.7		6.8		3.7		3		90				<0.2		1.1	
SR3	Cloudy	Moderate	09:02	9.0	Surface	1.0	0.2	209	24.2	24.2	7.9	7.9	29.2	29.2	92.8	92.8	6.6	6.6	3.0	3.5	3	3	-	-	822167	807587	-	-	-	-
						1.0	0.2	224	24.2		7.9		29.2		92.8		6.6		3.0		3		-				-		-	
					Middle	4.5	0.1	199	24.3	24.3	7.9	7.9	29.6	29.6	92.9	93.0	6.6		3.5		4		-				-		-	
						4.5	0.1	205	24.3		7.9		29.6		93.0		6.6		3.5		3		-				-		-	
					Bottom	8.0	0.2	49	24.0	24.0	8.0	8.0	31.4	31.4	94.4	94.5	6.6	6.6	4.0		3		-				-		-	
						8.0	0.2	53	24.0		8.0		31.4		94.5		6.6		4.2		4		-				-		-	
SR4A	Cloudy	Moderate	08:26	8.8	Surface	1.0	1.2	243	24.1	24.1	8.2	8.2	30.8	30.8	94.5	94.5	6.7	6.7	3.3	3.9	2	5	-	-	817199	807799	-	-	-	-
						1.0	1.3	254	24.1		8.2		30.8		94.4		6.7		3.4		3		-				-		-	
					Middle	4.4	1.4	244	24.1	24.1	8.2	8.2	31.0	31.0	94.0	94.0	6.6		4.1		4		-				-		-	
						4.4	1.5	265	24.1		8.2		31.0		94.0		6.6		4.0		4		-				-		-	
					Bottom	7.8	1.0	238	24.1	24.1	8.2	8.2	31.0	31.0	93.9	94.0	6.6	6.6	4.2		4		-				-		-	
						7.8	1.1	248	24.1		8.2		31.0		94.0		6.6		4.2		15		-				-		-	
SR5A	Cloudy	Moderate	08:07	3.4	Surface	1.0	0.0	324	24.3	24.3	8.2	8.2	30.3	30.3	90.4	90.4	6.4	6.4	12.1	13.1	2	3	-	-	816590	810685	-	-	-	-
						1.0	0.0	334	24.3		8.2		30.3		90.4		6.4		13.1		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.0	7	24.1	24.1	8.2	8.2	30.7	30.7	90.4	90.5	6.4	6.4	14.0		4		-				-		-	
						2.4	0.0	7	24.1		8.2		30.7		90.5		6.4		13.5		5		-				-		-	
SR6A	Cloudy	Moderate	07:37	4.3	Surface	1.0	0.1	49	24.3	24.3	8.2	8.2	29.4	29.4	84.8	84.8	6.0	6.0	13.7	14.9	3	12	-	-	817954	814718	-	-	-	-
						1.0	0.1	53	24.3		8.2		29.4		84.7		6.0		13.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	44	24.3	24.3	8.2	8.2	29.5	29.5	84.8	84.9	6.0	6.0	16.1		20		-				-		-	
						3.3	0.1	45	24.3		8.2		29.5		84.9		6.0		16.1		21		-				-		-	
SR7	Cloudy	Calm	06:48	18.4	Surface	1.0	0.4	99	24.0	24.0	7.9	7.9	31.3	31.3	86.1	86.1	6.1	6.1	1.3	1.7	4	4	-	-	823656	823724	-	-	-	-
						1.0	0.4	103	24.1		7.9		31.3		86.1		6.1		1.3		4		-				-		-	
					Middle	9.2	0.1	107	24.1	24.1	7.9	7.9	31.9	31.9	85.4	85.4	6.0		1.3		4		-				-		-	
						9.2	0.1	116	24.1		7.9		31.9		85.4		6.0		1.3		4		-				-		-	
					Bottom	17.4	0.1	87	24.1	24.1	7.9	7.9	31.9	31.9	85.4	85.4	6.0	6.0	2.4		4		-				-		-	
						17.4	0.1	91	24.1		7.9		31.9		85.4		6.0		2.4		4		-				-		-	
SR8	Cloudy	Calm	08:13	5.3	Surface	1.0	-	-	24.6	24.6	7.9	7.9	29.4	29.4	91.8	91.9	6.5	6.5	3.5	3.7	4	3	-	-	820399	811624	-	-	-	-
						1.0	-	-	24.6		7.9		29.4		92.0		6.5		3.5		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	24.4	24.4	7.9	7.9	29.5	29.5	95.2	95.3	6.7	6.7	4.0		3		-				-		-	
						4.3	-	-	24.4		7.9		29.5		95.4		6.7		3.9		3		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 November 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	15:44	8.0	Surface	1.0	0.1	353	24.2	24.2	8.3	8.3	31.4	31.4	98.5	98.5	6.9	6.9	5.8	10.2	5	5	86	88	815631	804231	<0.2	<0.2	0.9	0.9
						1.0	0.1	3	24.2		8.3		31.4		98.5		6.9		5.9		4		85				<0.2		0.9	
					Middle	4.0	0.1	27	24.1	24.1	8.3	8.3	31.8	31.8	97.8	97.8	6.8		9.0		6		88				<0.2		0.9	
						4.0	0.1	27	24.1		8.3		31.8		97.8		6.8		9.3		5		87				<0.2		1.0	
					Bottom	7.0	0.1	10	24.2	24.2	8.3	8.3	31.8	31.8	97.7	97.7	6.8	6.8	15.4		5		91				<0.2		0.8	
						7.0	0.1	10	24.2		8.3		31.8		97.7		6.8		15.7		6		90				<0.2		0.8	
C2	Fine	Moderate	14:24	11.9	Surface	1.0	0.0	151	24.7	24.7	8.0	8.0	28.5	28.5	87.6	87.5	6.2	6.2	3.1	4.8	5	5	85	88	825663	806948	<0.2	<0.2	1.2	1.3
						1.0	0.0	165	24.6		8.0		28.6		87.3		6.2		3.2		4		86				<0.2		1.2	
					Middle	6.0	0.2	308	24.5	24.5	8.0	8.0	30.2	30.2	86.1	86.1	6.1		4.9		5		89				<0.2		1.3	
						6.0	0.2	324	24.5		8.0		30.2		86.1		6.1		5.1		4		89				<0.2		1.4	
					Bottom	10.9	0.3	331	24.4	24.4	8.0	8.0	30.5	30.5	85.7	85.8	6.0	6.0	6.1		6		90				<0.2		1.2	
						10.9	0.3	342	24.4		8.0		30.5		85.9		6.0		6.2		5		91				<0.2		1.4	
C3	Fine	Moderate	16:12	12.0	Surface	1.0	0.4	276	24.4	24.4	8.0	8.0	30.3	30.3	88.7	88.4	6.2	6.1	2.0	2.9	7	5	86	88	822101	817798	<0.2	<0.2	1.7	1.6
						1.0	0.4	285	24.4		8.0		30.3		88.1		6.2		2.0		6		86				<0.2		1.7	
					Middle	6.0	0.5	267	24.2	24.2	8.0	7.9	31.6	31.6	85.5	85.6	6.0		3.1		3		88				<0.2		1.5	
						6.0	0.5	268	24.2		7.9		31.6		85.6		6.0		3.3		3		88				<0.2		1.6	
					Bottom	11.0	0.2	276	24.2	24.2	8.0	8.0	31.7	31.7	87.3	87.4	6.1	6.1	3.5		4		90				<0.2		1.7	
						11.0	0.2	281	24.2		8.0		31.7		87.4		6.1		3.5		4		90				<0.2		1.6	
IM1	Cloudy	Moderate	15:13	4.6	Surface	1.0	2.1	342	24.4	24.4	8.2	8.2	30.8	30.8	96.4	96.3	6.8	6.8	6.0	8.2	3	4	87	88	817962	807125	<0.2	<0.2	0.9	0.9
						1.0	2.3	354	24.4		8.2		30.8		96.2		6.7		6.4		4		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	2.2	344	24.3	24.3	8.2	8.2	30.9	30.9	96.1	96.2	6.7	6.8	10.1		4		89				<0.2		0.8	
						3.6	2.2	350	24.3		8.2		30.9		96.3		6.8		10.3		5		90				<0.2		0.9	
IM2	Cloudy	Moderate	15:06	6.6	Surface	1.0	2.6	352	24.5	24.5	8.3	8.3	30.5	30.5	98.1	98.0	6.9	6.9	3.8	6.3	4	4	86	88	818151	806185	<0.2	<0.2	0.8	0.8
						1.0	2.7	324	24.5		8.3		30.5		97.8		6.9		4.1		5		85				<0.2		1.0	
					Middle	3.3	2.3	353	24.4	24.4	8.2	8.2	30.7	30.7	96.7	96.7	6.8		5.3		4		87				<0.2		0.8	
						3.3	2.4	325	24.4		8.2		30.7		96.6		6.8		5.8		4		88				<0.2		0.7	
					Bottom	5.6	2.2	353	24.3	24.3	8.2	8.2	30.8	30.8	95.5	95.5	6.7	6.7	9.0		4		91				<0.2		0.8	
						5.6	2.2	325	24.3		8.2		30.8		95.5		6.7		9.5		5		90				<0.2		0.9	
IM3	Cloudy	Moderate	14:59	6.8	Surface	1.0	2.1	290	24.3	24.3	8.2	8.2	30.6	30.6	95.9	95.8	6.7	6.7	4.6	8.1	4	4	86	87	818770	805616	<0.2	<0.2	0.9	1.0
						1.0	2.3	291	24.3		8.2		30.7		95.7		6.7		4.9		5		85				<0.2		1.0	
					Middle	3.4	2.1	285	24.3	24.3	8.2	8.2	30.8	30.8	95.4	95.4	6.7		6.7		5		87				<0.2		0.9	
						3.4	2.2	296	24.3		8.2		30.8		95.4		6.7		6.7		4		87				<0.2		0.8	
					Bottom	5.8	2.1	286	24.2	24.2	8.2	8.2	30.9	30.9	95.6	95.6	6.7	6.7	12.4		3		89				<0.2		1.0	
						5.8	2.2	299	24.2		8.2		30.9		95.6		6.7		13.0		4		89				<0.2		1.1	
IM4	Cloudy	Moderate	14:49	7.9	Surface	1.0	2.6	273	24.4	24.4	8.2	8.2	30.3	30.4	97.4	97.5	6.9	6.8	3.1	8.0	3	4	86	88	819741	804595	<0.2	<0.2	0.8	0.9
						1.0	2.9	274	24.4		8.2		30.4		97.5		6.9		3.5		3		85				<0.2		0.9	
					Middle	4.0	2.6	271	24.1	24.1	8.2	8.2	30.9	30.9	94.7	94.8	6.7		8.6		3		87				<0.2		0.8	
						4.0	2.9	283	24.1		8.2		30.9		94.8		6.7		9.0		3		88				<0.2		0.8	
					Bottom	6.9	2.8	269	24.1	24.1	8.2	8.2	31.0	31.0	95.5	95.6	6.7	6.7	11.8		2		89				<0.2		1.0	
						6.9	2.9	284	24.1		8.2		31.0		95.6		6.7		11.9		9		90				<0.2		0.8	
IM5	Cloudy	Moderate	14:39	7.2	Surface	1.0	2.4	299	24.2	24.2	8.2	8.2	30.8	30.8	95.6	95.6	6.7	6.7	7.5	8.5	5	6	84	88	820720	804854	<0.2	<0.2	0.9	0.9
						1.0	2.5	299	24.2		8.2		30.8		95.5		6.7		7.8		10		86				<0.2		0.8	
					Middle	3.6	2.4	298	24.2	24.2	8.2	8.2	30.8	30.8	95.4	95.4	6.7		8.4		8		88				<0.2		0.9	
						3.6	2.5	320	24.2		8.2		30.8		95.4		6.7		8.4		4		87				<0.2		0.8	
					Bottom	6.2	2.4	299	24.2	24.2	8.2	8.2	30.8	30.8	95.8	95.9	6.7	6.8	9.0		3		90				<0.2		0.8	
						6.2	2.7	301	24.2		8.2		30.8		96.0		6.8		10.0		5		90				<0.2		0.9	
IM6	Cloudy	Moderate	14:31	7.0	Surface	1.0	1.8	0	24.8	24.8	8.2	8.2	28.9	28.9	94.8	94.8	6.7	6.7	3.7	4.3	6	5	85	88	821050	805836	<0.2	<0.2	0.7	0.8
						1.0	1.8	0	24.7		8.2		28.9		94.8		6.7		3.9		7		85				<0.2		0.7	
					Middle	3.5	1.8	5	24.7	24.7	8.2	8.2	28.9	28.9	94.7	94.7	6.7		4.4		6		87				<0.2		0.8	
						3.5	1.8	5	24.7		8.2		28.9		94.7		6.7		4.4		2		88				<0.2		0.7	
					Bottom	6.0	2.2	3	24.7	24.7	8.2	8.2	28.9	28.9	94.7	94.8	6.7	6.7	4.7		3		91				<0.2		0.9	
						6.0	2.2	3	24.7		8.2		28.9		94.8		6.7		4.7		5		90				<0.2		0.9	
IM7	Cloudy	Moderate	14:24	8.1	Surface	1.0	1.9	293	25.0	25.0	8.2	8.2	28.8	28.8	93.2	93.2	6.5	6.6	8.5	4.8	5	4	84	88	821325	806839	<0.2	<0.2	0.8	0.8
						1.0	2.0	295	25.0		8.2		28.8		93.2		6.5		8.5		5		86				<0.2		0.9	
					Middle	4.1	1.8	292	25.0	25.0	8.2	8.2	28.9	28.9	93.3	93.3	6.6		2.2		5		87				<0.2		0.8	
						4.1	1.9	297	24.9		8.2		28.9		93.3		6.6		2.3		4		88				<0.2		0.8	
					Bottom	7.1	1.7	295	24.9	24.9	8.1	8.1	28.9	28.9	93.9	94.0	6.6	6.6	3.5		3		91				<0.2		0.9	
						7.1	1.9	319	24.9		8.1		28.9		94.0		6.6		3.5		4		90				<0.2		0.8	
IM8	Fine	Moderate	14:45	7.4	Surface	1.0	0.1	249	24.6	24.6	8.0	8.0	29.4	29.4	94.9	94.9	6.7	6.7	4.3	5.3	3	5	86	89	821827	808137	<0.2	<0.2	1.4	1.5
						1.0	0.1	261	24.6		8.0		29.4		94.8		6.7		4.3		4		86				<0.2		1.6	
					Middle	3.7	0.2	255	24.5	24.5	8.0	8.0	29.4	29.4	94.7	94.7	6.7		5.2		6		89				<0.2		1.5	
						3.7	0.2	276	24.6		8.0		29.5		94.7		6.7		5.2		5		90				<0.2		1.5	
					Bottom	6.4	0.1	242	24.6	24.6	8.0	8.0	29.5	29.5	95.7	95.8	6.7	6.8	6.3		6		90				<0.2		1.6	
						6.4	0.1	247	24.6		8.0		29.5		95.8		6.8		6.4		5		91				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 November 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	14:50	7.0	Surface	1.0	0.2	253	24.5	24.5	8.0	8.0	29.5	29.5	94.0	94.0	6.6	6.6	8.5	9.0	7	6	86	89	822089	808814	<0.2	<0.2	1.3	1.2
						1.0	0.2	261	24.5		8.0		29.5		94.0		6.6		8.5		6		86				<0.2		1.2	
					Middle	3.5	0.2	230	24.5	24.5	8.0	8.0	29.5	29.5	94.1	94.2	6.6		9.3		6		89				<0.2		1.2	
						3.5	0.2	245	24.5		8.0		29.5		94.2		6.6		9.3		7		89				<0.2		1.2	
					Bottom	6.0	0.2	237	24.5	24.5	8.0	8.0	29.5	29.5	95.4	95.6	6.7	6.7	9.3		6		90				<0.2		1.1	
						6.0	0.2	253	24.5		8.0		29.5		95.7		6.7		9.1		6		91				<0.2		1.2	
IM10	Fine	Moderate	14:58	7.4	Surface	1.0	0.3	289	24.6	24.6	8.0	8.0	29.5	29.5	94.9	94.7	6.7	6.7	5.2	7.9	9	7	85	88	822385	809808	<0.2	<0.2	1.2	1.2
						1.0	0.3	299	24.6		8.0		29.5		94.5		6.7		5.5		10		85				<0.2		1.2	
					Middle	3.7	0.3	280	24.4	24.4	8.0	8.0	29.6	29.6	94.4	94.3	6.7		9.6		7		88				<0.2		1.2	
						3.7	0.3	283	24.4		8.0		29.6		94.2		6.7		9.5		6		89				<0.2		1.2	
					Bottom	6.4	0.3	277	24.4	24.4	8.0	8.0	29.6	29.6	95.3	95.3	6.7	6.7	8.8		5		90				<0.2		1.2	
						6.4	0.3	279	24.4		8.0		29.6		95.3		6.7		8.8		6		90				<0.2		1.2	
IM11	Fine	Moderate	15:10	7.2	Surface	1.0	0.4	289	24.6	24.6	8.0	8.0	29.8	29.8	93.2	92.9	6.6	6.5	4.1	6.1	8	7	84	87	822053	811457	<0.2	<0.2	1.4	1.2
						1.0	0.4	292	24.6		8.0		29.8		92.6		6.5		4.4		8		85				<0.2		1.2	
					Middle	3.6	0.3	303	24.4	24.4	8.0	7.5	29.9	29.9	91.5	91.6	6.5		6.9		7		86				<0.2		1.2	
						3.6	0.3	323	24.4		7.1		29.9		91.6		6.5		6.9		6		87				<0.2		1.1	
					Bottom	6.2	0.3	289	24.3	24.3	8.0	8.0	29.9	29.9	93.0	93.3	6.6	6.6	7.1		5		89				<0.2		1.1	
						6.2	0.3	314	24.4		8.0		29.9		93.5		6.6		7.1		5		89				<0.2		1.2	
IM12	Fine	Moderate	15:17	9.0	Surface	1.0	0.2	308	24.7	24.7	8.0	8.0	29.8	29.8	92.7	92.4	6.5	6.4	5.4	6.1	6	7	85	87	821439	812031	<0.2	<0.2	1.2	1.2
						1.0	0.2	325	24.7		8.0		29.8		92.0		6.5		5.5		6		85				<0.2		1.2	
					Middle	4.5	0.3	311	24.6	24.6	8.0	8.0	30.1	30.1	90.0	89.9	6.3		5.9		7		88				<0.2		1.1	
						4.5	0.3	321	24.6		8.0		30.1		89.8		6.3		6.0		7		88				<0.2		1.2	
					Bottom	8.0	0.2	315	24.5	24.5	8.0	8.0	30.4	30.4	91.1	91.2	6.4	6.4	6.8		6		89				<0.2		1.3	
						8.0	0.2	325	24.5		8.0		30.4		91.3		6.4		6.9		7		89				<0.2		1.1	
SR1A	Fine	Calm	15:36	4.9	Surface	1.0	-	-	24.7	24.7	7.9	7.9	29.6	29.6	92.9	92.8	6.5	6.5	4.0	4.3	5	5	-	-	819970	812658	-	-	-	-
						1.0	-	-	24.7		7.9		29.6		92.7		6.5		4.0		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	24.7	24.7	7.9	7.9	29.8	29.8	94.5	94.6	6.6	6.6	4.6		6		-				-		-	
						3.9	-	-	24.7		7.9		29.8		94.7		6.6		4.6		6		-				-		-	
SR2	Fine	Calm	15:49	3.6	Surface	1.0	0.1	326	24.5	24.5	7.9	7.9	30.4	30.4	88.7	88.8	6.2	6.2	5.1	6.1	6	5	85	87	821484	814165	<0.2	<0.2	1.2	1.2
						1.0	0.1	356	24.5		7.9		30.4		88.8		6.2		5.3		7		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	315	24.4	24.4	7.9	7.9	30.6	30.6	89.1	89.1	6.3	6.3	7.0		4		88				<0.2		1.1	
						2.6	0.1	319	24.4		7.9		30.6		89.0		6.2		7.0		4		89				<0.2		1.1	
SR3	Fine	Moderate	14:40	8.0	Surface	1.0	0.2	206	24.9	24.9	8.0	8.0	29.4	29.4	93.1	93.2	6.5	6.6	2.3	3.8	4	5	-	-	822164	807574	-	-	-	-
						1.0	0.2	216	25.0		8.0		29.4		93.2		6.5		2.5		5		-				-		-	
					Middle	4.0	0.2	262	24.9	24.9	7.7	7.7	29.5	29.5	93.8	93.8	6.6		3.7		5		-				-		-	
						4.0	0.2	269	24.9		7.7		29.5		93.8		6.6		3.9		4		-				-		-	
					Bottom	7.0	0.1	274	24.8	24.8	8.0	8.0	29.7	29.7	94.3	94.4	6.6	6.6	5.2		7		-				-		-	
						7.0	0.1	291	24.8		8.0		29.7		94.5		6.6		5.0		6		-				-		-	
SR4A	Cloudy	Moderate	16:04	8.2	Surface	1.0	1.5	185	24.5	24.5	8.2	8.2	30.4	30.4	92.1	92.1	6.5	6.5	5.3	6.4	10	10	-	-	817165	807825	-	-	-	-
						1.0	1.5	203	24.4		8.2		30.4		92.0		6.5		5.3		11		-				-		-	
					Middle	4.1	1.9	191	24.4	24.4	8.2	8.2	30.4	30.4	91.5	91.5	6.4		6.1		12		-				-		-	
						4.1	1.9	202	24.4		8.2		30.5		91.4		6.4		6.3		6		-				-		-	
					Bottom	7.2	1.7	190	24.4	24.4	8.2	8.2	30.5	30.5	91.5	91.6	6.4	6.4	7.6		6		-				-		-	
						7.2	1.7	201	24.4		8.2		30.5		91.6		6.4		7.7		13		-				-		-	
SR5A	Cloudy	Moderate	16:21	4.5	Surface	1.0	0.1	295	24.7	24.7	8.2	8.2	29.8	29.8	93.1	93.2	6.5	6.5	7.4	7.9	6	6	-	-	816571	810695	-	-	-	-
						1.0	0.1	295	24.7		8.2		29.8		93.2		6.5		7.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	134	25.0	25.1	8.1	8.1	29.6	29.6	93.4	93.5	6.5	6.5	8.3		5		-				-		-	
						3.5	0.0	134	25.1		8.1		29.5		93.6		6.5		8.4		6		-				-		-	
SR6A	Cloudy	Moderate	17:09	4.8	Surface	1.0	0.0	38	24.7	24.7	8.2	8.2	29.2	29.2	93.0	93.1	6.6	6.6	16.2	16.2	8	6	-	-	817986	814738	-	-	-	-
						1.0	0.0	39	24.7		8.2		29.2		93.2		6.6		16.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	321	24.6	24.6	8.2	8.2	29.3	29.3	94.3	94.5	6.7	6.7	16.0		3		-				-		-	
						3.8	0.0	339	24.5		8.2		29.3		94.6		6.7		15.8		4		-				-		-	
SR7	Fine	Moderate	16:48	20.0	Surface	1.0	0.0	286	24.2	24.2	8.0	8.0	31.6	31.6	86.0	86.1	5.3	5.0	2.5	4.0	6	5	-	-	823634	823729	-	-	-	-
						1.0	0.0	299	24.1		8.0		31.6		86.1		5.3		2.7		5		-				-		-	
					Middle	10.0	0.1	82	24.1	24.1	8.0	8.0	32.0	32.0	85.8	85.8	4.6		4.0		6		-				-		-	
						10.0	0.1	86	24.1		8.0		32.0		85.8		4.6		4.3		5		-				-		-	
					Bottom	19.0	0.1	98	24.0	24.0	8.1	8.0	32.1	32.1	85.8	85.9	4.3	4.3	5.4		5		-				-		-	
						19.0	0.1	106	24.0		8.0		32.1		86.0		4.4		5.3		5		-				-		-	
SR8	Fine	Calm	15:27	5.1	Surface	1.0	-	-	24.7	24.7	7.9	7.9	29.5	29.5	94.7	94.6	6.7	6.7	11.1	12.0	6	7	-	-	820411	811636	-	-	-	-
						1.0	-	-	24.7		7.9		29.5		94.4		6.6		11.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.6	24.6	7.9	7.9	29.6	29.6	96.3	96.4	6.8	6.8	12.8		8		-				-		-	
						4.1	-	-	24.6		7.9		29.6		96.5		6.8		12.9		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 26 November 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	10:20	7.8	Surface	1.0	1.8	130	23.9	23.9	8.3	8.3	31.7	31.7	101.3	101.2	7.1	7.1	2.4	3.4	6	5	86	87	815617	804233	<0.2	<0.2	0.8	0.7
						1.0	1.8	130	23.9		8.3		31.7		101.0		7.1		2.4		5		85				<0.2		0.8	
					Middle	3.9	1.9	125	23.8	23.8	8.3	8.3	31.8	31.8	99.0	98.9	7.0		2.9		5		87				<0.2		0.6	
						3.9	2.1	126	23.8		8.3		31.8		98.8		7.0		3.1		5		87				<0.2		0.7	
					Bottom	6.8	2.4	137	23.7	23.7	8.2	8.2	31.8	31.8	97.8	97.9	6.9	6.9	4.6		4		89				<0.2		0.7	
						6.8	2.5	146	23.7		8.2		31.8		98.0		6.9		4.8		5		89				<0.2		0.8	
C2	Fine	Moderate	11:38	11.4	Surface	1.0	0.5	164	24.5	24.5	7.9	7.9	28.7	28.7	92.1	92.1	6.5	6.4	2.0	3.7	2	3	84	88	825704	806961	<0.2	<0.2	1.4	1.4
						1.0	0.6	171	24.5		7.9		28.7		92.0		6.5		2.0		3		84				<0.2		1.4	
					Middle	5.7	0.3	164	24.4	24.4	7.9	7.9	30.6	30.6	88.7	88.7	6.2		3.0		2		88				<0.2		1.5	
						5.7	0.3	165	24.4		7.9		30.6		88.7		6.2		3.1		3		88				<0.2		1.4	
					Bottom	10.4	0.2	151	24.3	24.3	8.0	8.0	30.9	30.9	88.3	88.4	6.2	6.2	6.2		3		91				<0.2		1.4	
						10.4	0.2	163	24.3		8.0		30.9		88.4		6.2		6.1		3		90				<0.2		1.4	
C3	Fine	Moderate	09:24	11.8	Surface	1.0	0.2	101	24.2	24.2	8.0	8.0	31.0	31.0	88.1	88.2	6.2	6.2	1.8	2.3	2	3	85	88	822092	817812	<0.2	<0.2	0.9	0.8
						1.0	0.2	101	24.2		8.0		31.0		88.2		6.2		1.8		2		85				<0.2		0.8	
					Middle	5.9	0.2	102	24.2	24.2	8.0	8.0	31.3	31.3	86.6	86.7	6.1		2.4		2		89				<0.2		0.8	
						5.9	0.3	109	24.2		8.0		31.3		86.7		6.1		2.4		3		88				<0.2		0.9	
					Bottom	10.8	0.2	94	24.1	24.1	8.0	8.0	31.5	31.5	88.3	88.3	6.2	6.2	2.7		3		91				<0.2		0.8	
						10.8	0.2	99	24.1		8.0		31.5		88.3		6.2		2.8		3		92				<0.2		0.8	
IM1	Cloudy	Moderate	10:42	5.2	Surface	1.0	0.1	190	24.2	24.2	8.2	8.2	31.3	31.3	98.2	98.1	6.9	6.9	4.3	9.4	3	2	85	88	817935	807128	<0.2	<0.2	0.8	0.8
						1.0	0.1	196	24.2		8.2		31.3		97.9		6.9		4.1		2		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	183	24.2	24.2	8.2	8.2	31.4	31.4	92.8	92.7	6.5	6.5	15.1		<2		89				<0.2		0.9	
						4.2	0.1	185	24.2		8.2		31.4		92.5		6.5		14.3		<2		89				<0.2		0.9	
IM2	Cloudy	Moderate	10:50	6.6	Surface	1.0	2.7	207	24.2	24.2	8.3	8.3	31.2	31.2	99.8	99.9	7.0	7.0	2.9	5.0	3	4	86	88	818139	806160	<0.2	<0.2	0.8	0.8
						1.0	2.9	226	24.2		8.3		31.2		99.9		7.0		2.9		3		86				<0.2		0.8	
					Middle	3.3	2.9	206	24.0	24.0	8.3	8.2	31.4	31.4	99.0	98.8	7.0		3.4		4		87				<0.2		0.8	
						3.3	3.0	212	24.0		8.2		31.4		98.6		6.9		3.5		4		88				<0.2		0.9	
					Bottom	5.6	2.7	206	24.0	24.0	8.2	8.2	31.6	31.6	97.1	97.2	6.8	6.8	8.5		4		89				<0.2		0.9	
						5.6	3.0	214	24.0		8.2		31.6		97.2		6.8		8.6		4		89				<0.2		0.8	
IM3	Cloudy	Moderate	10:56	6.6	Surface	1.0	1.5	8	24.1	24.1	8.3	8.3	31.1	31.1	99.3	99.2	7.0	7.0	3.1	4.1	4	3	85	88	818788	805596	<0.2	<0.2	0.8	0.8
						1.0	1.6	8	24.1		8.3		31.1		99.0		7.0		3.3		4		87				<0.2		0.8	
					Middle	3.3	1.7	2	24.0	24.0	8.3	8.3	31.3	31.3	98.0	97.9	6.9		3.9		2		88				<0.2		0.8	
						3.3	1.9	2	24.0		8.3		31.3		97.7		6.9		3.9		3		88				<0.2		0.8	
					Bottom	5.6	1.7	357	24.0	24.0	8.3	8.3	31.4	31.4	97.5	97.6	6.9	6.9	5.1		3		90				<0.2		0.8	
						5.6	1.8	328	24.0		8.3		31.4		97.7		6.9		5.1		3		90				<0.2		0.8	
IM4	Cloudy	Moderate	11:06	7.8	Surface	1.0	2.9	263	24.7	24.7	8.2	8.2	29.0	29.0	96.7	96.8	6.8	6.8	1.8	4.2	2	3	86	88	819701	804623	<0.2	<0.2	0.9	0.8
						1.0	3.0	267	24.7		8.2		29.0		96.8		6.8		1.8		2		87				<0.2		0.7	
					Middle	3.9	2.8	266	24.1	24.1	8.2	8.2	30.6	30.6	97.1	97.1	6.9		3.5		3		88				<0.2		0.8	
						3.9	2.8	272	24.1		8.2		30.6		97.0		6.8		3.7		4		87				<0.2		0.7	
					Bottom	6.8	2.6	266	24.0	24.0	8.2	8.2	31.1	31.1	96.7	96.8	6.8	6.8	7.1		4		90				<0.2		0.8	
						6.8	2.7	283	24.0		8.2		31.1		96.8		6.8		7.4		3		89				<0.2		0.8	
IM5	Cloudy	Moderate	11:17	7.4	Surface	1.0	2.9	160	24.4	24.4	8.2	8.2	29.3	29.4	97.7	97.7	6.9	6.9	2.0	2.8	2	3	85	88	820716	804888	<0.2	<0.2	0.9	0.9
						1.0	3.1	168	24.4		8.2		29.5		97.6		6.9		2.1		3		86				<0.2		0.8	
					Middle	3.7	2.9	158	24.2	24.2	8.2	8.2	30.2	30.2	97.2	97.2	6.9		2.5		3		87				<0.2		0.9	
						3.7	3.0	170	24.2		8.2		30.2		97.1		6.9		2.6		3		88				<0.2		0.9	
					Bottom	6.4	2.8	159	24.1	24.1	8.2	8.2	30.9	30.9	97.1	97.3	6.8	6.9	3.8		2		89				<0.2		0.8	
						6.4	2.9	161	24.1		8.2		30.9		97.5		6.9		3.7		3		90				<0.2		0.8	
IM6	Cloudy	Moderate	11:26	6.8	Surface	1.0	2.4	283	24.5	24.5	8.2	8.2	29.5	29.5	96.9	96.9	6.8	6.8	2.4	2.8	3	3	85	87	821073	805819	<0.2	<0.2	0.8	0.9
						1.0	2.4	294	24.4		8.2		29.5		96.9		6.8		2.4		2		86				<0.2		0.9	
					Middle	3.4	2.5	284	24.3	24.3	8.2	8.2	29.9	30.0	96.9	96.9	6.8		2.8		2		87				<0.2		0.8	
						3.4	2.7	290	24.3		8.2		30.1		96.9		6.8		2.9		3		86				<0.2		0.9	
					Bottom	5.8	2.1	288	24.1	24.1	8.2	8.2	31.0	30.9	96.9	96.9	6.8	6.8	3.2		4		89				<0.2		0.9	
						5.8	2.2	289	24.1		8.2		30.9		96.9		6.8		3.1		3		89				<0.2		0.9	
IM7	Cloudy	Moderate	11:35	7.4	Surface	1.0	2.4	272	24.6	24.6	8.2	8.2	29.0	29.1	95.6	95.6	6.8	6.8	2.0	3.4	3	3	85	87	821362	806848	<0.2	<0.2	0.7	0.8
						1.0	2.6	277	24.5		8.2		29.1		95.6		6.8		2.1		3		86				<0.2		0.8	
					Middle	3.7	2.3	275	24.4	24.4	8.2	8.2	29.6	29.7	95.7	95.7	6.8		3.0		3		87				<0.2		0.8	
						3.7	2.5	293	24.4		8.2		29.8		95.7		6.8		3.2		3		83				<0.2		0.8	
					Bottom	6.4	2.2	272	24.2	24.2	8.2	8.2	31.0	31.0	95.4	95.5	6.7	6.7	5.1		3		90				<0.2		0.8	
						6.4	2.2	296	24.2		8.2		31.0		95.5		6.7		5.1		2		90				<0.2		0.7	
IM8	Fine	Moderate	11:05	7.5	Surface	1.0	0.1	178	24.7	24.7	7.9	7.9	29.2	29.2	94.7	94.7	6.7	6.7	2.2	5.0	<2	<2	84	86	821809	808157	<0.2	<0.2	1.7	1.5
						1.0	0.1	178	24.7		7.9		29.2		94.6		6.7		2.3		<2		83				<0.2		1.6	
					Middle	3.8	0.0	313	24.5	24.5	7.9	7.9	29.8	29.8	94.4	94.5	6.7		4.7		<2		87				<0.2		1.4	
						3.8	0.0	314	24.5		7.9		29.8		94.5		6.7		4.9		<2		86				<0.2		1.4	
					Bottom	6.5	0.1	21	24.2	24.2	8.0	8.0	31.1	31.1	94.7	94.7	6.6	6.7	7.9		<2		89				<0.2		1.4	
						6.5	0.1	21	24.2		8.0		31.1		94.7		6.7		7.8		<2		89				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 November 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	10:58	7.2	Surface	1.0	0.2	124	24.7	24.7	7.9	7.9	29.0	29.0	93.9	93.9	6.6	6.6	2.1	4.7	3	2	84	86	822083	808824	<0.2	<0.2	1.4	1.5
						1.0	0.2	135	24.7		7.9		29.1		93.9		6.6		2.2		2		84				<0.2		1.5	
					Middle	3.6	0.2	98	24.5	24.5	7.9	7.9	29.7	29.7	93.2	93.2	6.6		4.3		2		86				<0.2		1.5	
						3.6	0.2	98	24.5		7.9		29.7		93.2		6.6		4.4		3		86				<0.2		1.4	
					Bottom	6.2	0.2	87	24.3	24.3	7.9	7.9	30.3	30.3	92.9	93.0	6.5	6.5	7.6		<2		89				<0.2		1.4	
						6.2	0.2	90	24.3		7.9		30.3		93.0		6.5		7.7		<2		89				<0.2		1.5	
IM10	Fine	Moderate	10:50	7.1	Surface	1.0	0.4	113	24.7	24.6	7.9	7.9	28.9	28.9	94.1	94.1	6.6	6.6	2.0	3.7	4	4	84	86	822367	809791	<0.2	<0.2	1.3	1.4
						1.0	0.4	123	24.6		7.9		28.9		94.1		6.6		2.0		4		84				<0.2		1.4	
					Middle	3.6	0.3	99	24.5	24.5	7.9	7.9	29.4	29.4	93.5	93.5	6.6		3.8		4		86				<0.2		1.5	
						3.6	0.4	107	24.5		7.9		29.4		93.5		6.6		3.8		5		86				<0.2		1.4	
					Bottom	6.1	0.3	88	24.4	24.4	7.9	7.9	29.9	29.8	94.2	94.2	6.6	6.6	5.2		4		89				<0.2		1.4	
						6.1	0.3	93	24.4		7.9		29.8		94.2		6.6		5.2		5		89				<0.2		1.5	
IM11	Fine	Moderate	10:34	7.9	Surface	1.0	0.4	128	24.5	24.5	7.9	7.9	30.0	30.0	93.0	93.0	6.5	6.5	2.3	3.6	4	3	84	87	822037	811477	<0.2	<0.2	1.2	1.2
						1.0	0.4	136	24.5		7.9		30.0		92.9		6.5		2.2		3		84				<0.2		1.1	
					Middle	4.0	0.4	122	24.4	24.4	7.9	7.9	30.2	30.2	92.4	92.4	6.5		3.6		3		86				<0.2		1.2	
						4.0	0.4	130	24.4		7.9		30.2		92.3		6.5		3.7		3		87				<0.2		1.2	
					Bottom	6.9	0.3	119	24.3	24.3	7.9	7.9	30.5	30.5	91.8	91.8	6.5	6.5	4.8		3		89				<0.2		1.2	
						6.9	0.3	119	24.3		7.9		30.5		91.8		6.5		4.8		3		89				<0.2		1.1	
IM12	Fine	Moderate	10:26	8.8	Surface	1.0	0.4	120	24.4	24.4	7.9	7.9	30.4	30.4	91.7	91.7	6.5	6.4	3.9	4.7	4	3	84	87	821436	812049	<0.2	<0.2	1.3	1.3
						1.0	0.4	121	24.4		7.9		30.4		91.7		6.5		3.9		3		83				<0.2		1.3	
					Middle	4.4	0.3	108	24.3	24.3	7.9	7.9	30.6	30.6	90.0	89.9	6.3		4.8		4		87				<0.2		1.3	
						4.4	0.3	110	24.3		7.9		30.6		89.8		6.3		4.9		3		87				<0.2		1.2	
					Bottom	7.8	0.2	107	24.3	24.3	7.9	7.9	30.7	30.7	90.0	90.1	6.3	6.3	5.4		2		90				<0.2		1.2	
						7.8	0.2	107	24.3		7.9		30.7		90.1		6.3		5.5		2		90				<0.2		1.2	
SR1A	Fine	Calm	10:05	4.7	Surface	1.0	-	-	24.5	24.5	7.9	7.9	30.5	30.5	88.6	88.6	6.2	6.2	3.1	4.3	5	4	-	-	819983	812657	-	-	-	-
						1.0	-	-	24.5		7.9		30.5		88.5		6.2		3.1		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	24.4	24.4	8.0	8.0	30.5	30.5	88.6	88.6	6.2	6.2	5.5		3		-				-		-	
						3.7	-	-	24.4		8.0		30.5		88.6		6.2		5.6		3		-				-		-	
SR2	Fine	Moderate	09:51	4.6	Surface	1.0	0.2	80	24.5	24.5	8.0	8.0	30.7	30.7	89.8	89.9	6.3	6.3	3.7	4.5	2	4	85	87	821480	814186	<0.2	<0.2	1.1	1.2
						1.0	0.2	86	24.5		8.0		30.7		89.9		6.3		3.7		3		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	71	24.3	24.3	8.0	8.0	30.9	30.9	90.4	90.5	6.4	6.4	5.2		5		89				<0.2		1.2	
						3.6	0.2	71	24.3		8.0		30.9		90.6		6.4		5.3		4		89				<0.2		1.1	
SR3	Fine	Moderate	11:11	8.8	Surface	1.0	0.3	170	24.6	24.6	7.9	7.9	28.9	28.9	94.4	94.4	6.7	6.7	1.5	3.8	<2	2	-	-	822131	807563	-	-	-	-
						1.0	0.3	184	24.6		7.9		28.9		94.4		6.7		1.5		<2		-				-		-	
					Middle	4.4	0.1	192	24.4	24.4	7.9	7.9	30.0	30.0	93.9	93.9	6.6		2.9		<2		-				-		-	
						4.4	0.1	208	24.4		7.9		30.0		93.9		6.6		3.0		<2		-				-		-	
					Bottom	7.8	0.1	335	24.1	24.1	8.0	8.0	31.4	31.4	94.6	94.6	6.6	6.6	6.8		3		-				-		-	
						7.8	0.1	308	24.1		8.0		31.4		94.6		6.6		6.8		3		-				-		-	
SR4A	Cloudy	Moderate	09:59	8.2	Surface	1.0	2.1	50	24.1	24.1	8.2	8.2	31.4	31.4	97.8	97.8	6.9	6.9	3.3	4.0	3	4	-	-	817211	807811	-	-	-	-
						1.0	2.2	51	24.1		8.2		31.4		97.7		6.9		3.3		4		-				-		-	
					Middle	4.1	2.3	59	24.1	24.1	8.2	8.2	31.4	31.4	97.3	97.2	6.8		3.6		5		-				-		-	
						4.1	2.3	61	24.1		8.2		31.4		97.1		6.8		3.8		4		-				-		-	
					Bottom	7.2	2.4	58	24.0	24.0	8.2	8.2	31.5	31.5	96.4	96.5	6.8	6.8	4.9		5		-				-		-	
						7.2	2.6	60	24.0		8.2		31.5		96.5		6.8		4.9		5		-				-		-	
SR5A	Cloudy	Moderate	09:41	3.5	Surface	1.0	0.1	329	24.4	24.4	8.2	8.2	30.5	30.5	94.7	94.7	6.7	6.7	5.2	6.9	4	4	-	-	816596	810700	-	-	-	-
						1.0	0.1	359	24.4		8.2		30.6		94.7		6.7		5.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	336	24.3	24.3	8.2	8.2	30.6	30.6	95.4	95.6	6.7	6.7	8.5		4		-				-		-	
						2.5	0.1	343	24.3		8.2		30.6		95.7		6.7		8.1		5		-				-		-	
SR6A	Cloudy	Moderate	09:13	4.2	Surface	1.0	0.0	137	24.3	24.3	8.1	8.1	30.0	30.0	88.2	88.3	6.2	6.2	7.9	9.3	3	4	-	-	817944	814752	-	-	-	-
						1.0	0.0	138	24.3		8.1		30.0		88.3		6.2		8.0		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	167	24.2	24.2	8.1	8.1	30.0	30.0	90.7	90.9	6.4	6.4	10.4		4		-				-		-	
						3.2	0.0	180	24.1		8.1		30.1		91.0		6.4		11.0		5		-				-		-	
SR7	Fine	Moderate	08:45	16.4	Surface	1.0	0.1	43	24.0	24.0	7.9	7.9	31.9	31.9	85.6	85.6	6.0	6.0	1.5	1.4	2	3	-	-	823657	823761	-	-	-	-
						1.0	0.1	43	24.0		7.9		31.9		85.5		6.0		1.5		3		-				-		-	
					Middle	8.2	0.1	46	24.0	24.0	7.9	7.9	31.9	31.9	85.7	85.7	6.0		1.3		2		-				-		-	
						8.2	0.1	46	24.0		7.9		31.9		85.7		6.0		1.3		3		-				-		-	
					Bottom	15.4	0.1	342	24.0	24.0	7.9	7.9	32.0	32.0	85.8	85.8	6.0	6.0	1.3		4		-				-		-	
						15.4	0.1	358	24.0		7.9		32.0		85.8		6.0		1.3		5		-				-		-	
SR8	Fine	Moderate	10:16	4.5	Surface	1.0	-	-	24.9	24.9	8.0	8.0	30.6	30.6	90.2	90.1	6.3	6.3	6.8	7.4	6	7	-	-	820396	811631	-	-	-	-
						1.0	-	-	24.9		8.0		30.6		90.0		6.3		6.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	24.3	24.3	8.0	8.0	30.7	30.7	87.8	87.8	6.2	6.2	7.8		7		-				-		-	
						3.5	-	-	24.3		8.0		30.7		87.7		6.2		8.0		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 26 November 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	16:21	8.2	Surface	1.0	0.7	212	24.3	24.3	8.3	8.3	30.7	30.8	103.1	103.1	7.2	7.1	2.6	5.8	3	3	85	88	815601	804261	<0.2	<0.2	0.9	0.9
						1.0	0.8	228	24.3		8.3		30.9		103.0		7.2		2.8		3		86				<0.2		1.0	
					Middle	4.1	1.3	237	24.1	24.1	8.3	8.3	31.6	31.6	100.7	100.6	7.1		6.2		3		87				<0.2		0.9	
						4.1	1.4	237	24.1		8.3		31.6		100.4		7.0		6.6		2		87				<0.2		0.9	
					Bottom	7.2	1.3	246	24.0	24.1	8.3	8.3	31.6	31.6	100.1	100.2	7.0	7.0	8.4		3		90				<0.2		0.8	
						7.2	1.4	260	24.1		8.3		31.6		100.2		7.0		8.4		3		90				<0.2		0.9	
C2	Fine	Moderate	15:12	11.3	Surface	1.0	0.2	191	25.2	25.2	7.9	7.9	27.4	27.4	93.2	93.1	6.6	6.4	1.5	2.5	3	4	84	87	825676	806943	<0.2	<0.2	1.8	1.8
						1.0	0.2	209	25.2		7.9		27.4		93.0		6.6		1.4		4		84				<0.2		1.9	
					Middle	5.7	0.1	233	24.5	24.5	7.9	7.9	29.4	29.4	88.4	88.4	6.2		1.9		4		88				<0.2		1.7	
						5.7	0.2	238	24.5		7.9		29.4		88.4		6.2		1.9		3		87				<0.2		1.8	
					Bottom	10.3	0.2	333	24.4	24.4	7.9	7.9	30.6	30.6	86.6	86.6	6.1	6.1	4.2		4		90				<0.2		1.9	
						10.3	0.3	354	24.4		7.9		30.6		86.6		6.1		4.1		4		90				<0.2		1.8	
C3	Fine	Moderate	17:14	12.2	Surface	1.0	0.5	292	24.5	24.5	7.9	7.9	31.0	31.0	88.4	88.3	6.2	6.1	5.1	6.3	6	3	85	88	822115	817788	<0.2	<0.2	0.9	0.9
						1.0	0.5	318	24.5		7.9		31.0		88.2		6.2		5.3		4		85				<0.2		0.9	
					Middle	6.1	0.5	293	24.1	24.1	7.9	7.9	31.6	31.6	86.2	86.3	6.0		6.4		3		88				<0.2		0.8	
						6.1	0.5	316	24.1		7.9		31.6		86.3		6.1		6.5		2		89				<0.2		0.9	
					Bottom	11.2	0.4	295	24.1	24.1	7.9	7.9	31.7	31.7	87.8	87.9	6.2	6.2	7.2		2		92				<0.2		0.8	
						11.2	0.4	314	24.1		7.9		31.7		87.9		6.2		7.2		2		91				<0.2		0.8	
IM1	Cloudy	Moderate	15:59	4.8	Surface	1.0	0.1	15	24.2	24.2	8.3	8.3	31.5	31.5	98.7	98.6	6.9	6.9	5.3	8.1	3	3	87	88	817945	807148	<0.2	<0.2	0.6	0.6
						1.0	0.1	15	24.2		8.3		31.5		98.4		6.9		5.6		3		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	16	24.1	24.1	8.3	8.3	31.5	31.5	98.1	98.2	6.9	6.9	10.7		3		89				<0.2		0.6	
						3.8	0.1	17	24.1		8.3		31.5		98.3		6.9		10.8		4		90				<0.2		0.6	
IM2	Cloudy	Moderate	15:51	6.6	Surface	1.0	2.3	280	24.8	24.9	8.3	8.3	31.0	31.0	104.4	104.4	7.3	7.2	2.8	4.6	5	5	86	88	818181	806160	<0.2	<0.2	0.6	0.6
						1.0	2.4	293	24.9		8.3		31.1		104.3		7.2		2.9		6		85				<0.2		0.7	
					Middle	3.3	2.2	285	24.7	24.6	8.3	8.3	31.3	31.3	103.1	102.8	7.2		3.4		6		87				<0.2		0.7	
						3.3	2.4	308	24.5		8.3		31.3		102.4		7.1		3.4		5		88				<0.2		0.6	
					Bottom	5.6	2.2	280	24.3	24.3	8.3	8.3	31.4	31.4	101.1	101.1	7.1	7.1	7.2		3		90				<0.2		0.6	
						5.6	2.3	299	24.3		8.3		31.4		101.0		7.1		7.7		4		90				<0.2		0.6	
IM3	Cloudy	Moderate	15:44	6.7	Surface	1.0	1.8	177	24.4	24.4	8.2	8.2	30.8	30.8	102.1	102.2	7.2	7.2	3.7	7.1	4	4	85	88	818777	805575	<0.2	<0.2	0.6	0.6
						1.0	1.9	188	24.4		8.2		30.9		102.2		7.2		3.8		5		86				<0.2		0.7	
					Middle	3.4	2.2	169	24.2	24.2	8.2	8.2	31.1	31.1	102.2	102.1	7.2		5.1		4		87				<0.2		0.6	
						3.4	2.2	177	24.2		8.2		31.2		101.9		7.2		5.6		4		88				<0.2		0.6	
					Bottom	5.7	2.1	173	24.1	24.1	8.2	8.2	31.4	31.4	96.3	96.4	6.8	6.8	12.2		5		90				<0.2		0.6	
						5.7	2.1	177	24.1		8.2		31.4		96.5		6.8		12.1		4		89				<0.2		0.6	
IM4	Cloudy	Moderate	15:34	7.7	Surface	1.0	2.4	154	24.3	24.3	8.2	8.2	30.6	30.6	97.3	97.2	6.8	6.8	9.1	12.0	4	5	86	88	819741	804596	<0.2	<0.2	0.6	0.7
						1.0	2.5	160	24.3		8.2		30.7		97.0		6.8		9.2		4		86				<0.2		0.6	
					Middle	3.9	2.4	156	24.1	24.1	8.2	8.2	31.0	31.0	96.0	96.0	6.8		15.8		4		87				<0.2		0.6	
						3.9	2.5	159	24.1		8.2		31.0		96.0		6.8		15.2		5		87				<0.2		0.7	
					Bottom	6.7	2.4	157	24.1	24.1	8.2	8.2	31.1	31.1	95.9	95.9	6.8	6.8	11.6		5		90				<0.2		0.7	
						6.7	2.5	165	24.1		8.2		31.1		95.9		6.8		11.5		6		90				<0.2		0.7	
IM5	Cloudy	Moderate	15:26	7.1	Surface	1.0	2.6	180	24.6	24.6	8.2	8.2	29.6	29.6	98.7	98.7	6.9	6.9	2.5	4.0	6	6	86	88	820740	804851	<0.2	<0.2	0.6	0.6
						1.0	2.8	185	24.6		8.2		29.7		98.7		6.9		2.7		7		87				<0.2		0.6	
					Middle	3.6	2.4	176	24.4	24.4	8.2	8.2	30.5	30.5	98.3	98.3	6.9		3.4		5		88				<0.2		0.6	
						3.6	2.6	190	24.4		8.2		30.5		98.3		6.9		3.4		6		87				<0.2		0.6	
					Bottom	6.1	2.6	176	24.2	24.2	8.2	8.2	31.1	31.1	97.6	97.7	6.9	6.9	6.0		5		90				<0.2		0.7	
						6.1	2.7	189	24.2		8.2		31.1		97.7		6.9		6.0		4		89				<0.2		0.6	
IM6	Cloudy	Moderate	15:19	6.8	Surface	1.0	2.6	336	24.8	24.8	8.2	8.2	28.7	28.7	97.0	97.0	6.8	6.8	2.5	2.9	4	4	85	88	821057	805805	<0.2	<0.2	0.7	0.7
						1.0	2.7	309	24.8		8.2		28.7		96.9		6.8		2.6		3		87				<0.2		0.7	
					Middle	3.4	2.6	336	24.7	24.7	8.2	8.2	29.0	29.1	96.2	96.2	6.8		2.9		4		88				<0.2		0.7	
						3.4	2.6	341	24.7		8.2		29.2		96.1		6.8		3.0		3		88				<0.2		0.7	
					Bottom	5.8	2.6	340	24.6	24.6	8.2	8.2	29.5	29.5	95.9	96.0	6.8	6.8	3.2		4		90				<0.2		0.7	
						5.8	2.7	349	24.6		8.2		29.5		96.0		6.8		3.3		5		90				<0.2		0.7	
IM7	Cloudy	Moderate	15:12	7.9	Surface	1.0	1.7	74	24.9	24.9	8.2	8.2	28.7	28.7	96.5	96.5	6.8	6.8	2.5	4.4	6	4	86	88	821355	806851	<0.2	<0.2	0.6	0.7
						1.0	1.8	78	24.9		8.2		28.7		96.5		6.8		2.6		5		86				<0.2		0.7	
					Middle	4.0	1.8	77	24.8	24.8	8.2	8.2	28.7	28.7	96.1	96.1	6.8		4.1		4		87				<0.2		0.7	
						4.0	1.9	83	24.8		8.2		28.7		96.1		6.8		4.3		4		88				<0.2		0.7	
					Bottom	6.9	1.7	75	24.8	24.8	8.2	8.2	28.7	28.7	96.1	96.1	6.8	6.8	6.4		4		90				<0.2		0.6	
						6.9	1.8	75	24.8		8.2		28.7		96.1		6.8		6.8		3		89				<0.2		0.6	
IM8	Fine	Moderate	15:36	7.3	Surface	1.0	0.2	245	25.3	25.3	7.9	7.9	29.4	29.4	97.4	97.4	6.8	6.8	0.9	1.1	6	5	84	87	821808	808143	<0.2	<0.2	1.2	1.2
						1.0	0.2	259	25.3		7.9		29.4		97.3		6.8		0.9		7		83				<0.2		1.2	
					Middle	3.7	0.2	253	25.0	25.0	7.9	7.9	29.5	29.5	96.7	96.7	6.8		1.2		6		88				<0.2		1.1	
						3.7	0.2	278	25.0		7.9		29.5		96.6		6.8		1.2		5		88				<0.2		1.2	
					Bottom	6.3	0.2	260	24.8	24.8	7.9	7.9	29.5	29.5	96.4	96.4	6.8	6.8	1.1		3		90				<0.2		1.1	
						6.3	0.2	285	24.8		7.9		29.5		96.3		6.8		1.1		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 26 November 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	Fine	Moderate	15:42	6.9	Surface	1.0	0.4	290	24.8	24.8	7.8	7.8	29.4	29.4	95.5	95.6	6.7	6.7	3.6	3.4	4	5	83	87	822100	808798	<0.2	<0.2	1.1	1.2
						1.0	0.4	312	24.8		7.8		29.4		95.7		6.7		3.5		5		83				<0.2		1.2	
					Middle	3.5	0.3	278	24.7	24.7	7.8	7.8	29.5	29.5	94.1	94.2	6.6		3.6		5		87				<0.2		1.3	
						3.5	0.3	292	24.7		7.8		29.5		94.2		6.6		3.7		4		88				<0.2		1.1	
					Bottom	5.9	0.2	272	24.7	24.7	7.9	7.9	29.6	29.6	95.0	95.0	6.7	6.7	2.9		7		90				<0.2		1.1	
						5.9	0.3	285	24.7		7.9		29.6		95.0		6.7		3.0		6		90				<0.2		1.2	
IM10	Fine	Moderate	15:51	7.4	Surface	1.0	0.5	275	24.8	24.8	7.8	7.8	29.5	29.5	95.4	95.4	6.7	6.7	2.3	5.9	4	6	83	87	822401	809771	<0.2	<0.2	1.1	1.2
						1.0	0.5	299	24.8		7.8		29.5		95.4		6.7		2.4		5		84				<0.2		1.2	
					Middle	3.7	0.5	281	24.6	24.6	7.8	7.8	29.6	29.6	93.5	93.5	6.6		6.7		6		88				<0.2		1.1	
						3.7	0.5	308	24.6		7.8		29.6		93.5		6.6		6.8		7		88				<0.2		1.1	
					Bottom	6.4	0.4	279	24.6	24.6	7.8	7.8	29.6	29.6	94.6	94.6	6.7	6.7	8.4		7		90				<0.2		1.2	
						6.4	0.4	281	24.6		7.8		29.6		94.6		6.7		8.7		8		91				<0.2		1.2	
IM11	Fine	Moderate	16:04	7.2	Surface	1.0	0.5	287	24.8	24.8	7.9	7.9	29.8	29.8	95.0	95.0	6.7	6.7	3.1	5.9	7	5	84	87	822065	811458	<0.2	<0.2	1.0	1.1
						1.0	0.5	307	24.8		7.9		29.8		95.0		6.7		3.1		6		84				<0.2		1.1	
					Middle	3.6	0.5	290	24.5	24.5	7.9	7.9	30.1	30.1	93.7	93.7	6.6		5.7		6		87				<0.2		1.2	
						3.6	0.5	297	24.5		7.9		30.1		93.7		6.6		5.8		5		88				<0.2		1.1	
					Bottom	6.2	0.4	288	24.4	24.4	7.9	7.9	30.2	30.2	94.0	94.1	6.6	6.6	8.9		4		90				<0.2		1.1	
						6.2	0.4	305	24.4		7.9		30.2		94.1		6.6		9.0		4		91				<0.2		1.1	
IM12	Fine	Moderate	16:11	9.1	Surface	1.0	0.3	309	24.9	24.9	7.9	7.9	29.7	29.7	97.5	97.5	6.8	6.7	2.9	5.1	5	5	84	87	821439	812026	<0.2	<0.2	1.1	1.1
						1.0	0.3	327	24.9		7.9		29.7		97.5		6.8		3.0		4		84				<0.2		1.1	
					Middle	4.6	0.4	304	24.6	24.6	7.9	7.9	30.0	30.0	93.6	93.6	6.6		5.7		5		87				<0.2		1.2	
						4.6	0.4	315	24.6		7.9		30.0		93.5		6.6		5.6		5		87				<0.2		1.1	
					Bottom	8.1	0.4	299	24.4	24.4	7.9	7.9	30.6	30.6	92.0	92.0	6.5	6.5	6.8		6		90				<0.2		1.0	
						8.1	0.4	314	24.4		7.9		30.6		92.0		6.5		6.8		5		91				<0.2		1.1	
SR1A	Fine	Calm	16:34	5.0	Surface	1.0	-	-	25.0	25.0	7.9	7.9	30.0	30.0	93.3	93.3	6.5	6.5	6.9	7.8	10	7	-	-	819976	812655	-	-	-	-
						1.0	-	-	25.0		7.9		30.0		93.3		6.5		7.1		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.9	24.9	7.8	7.8	30.4	30.4	91.6	91.7	6.4	6.4	8.5		4		-				-		-	
						4.0	-	-	24.9		7.8		30.4		91.7		6.4		8.7		4		-				-		-	
SR2	Fine	Moderate	16:48	4.5	Surface	1.0	0.1	257	24.6	24.6	7.9	7.9	30.6	30.6	92.1	92.1	6.4	6.4	8.7	9.4	6	6	85	87	821444	814174	<0.2	<0.2	0.9	0.9
						1.0	0.1	282	24.6		7.9		30.6		92.0		6.4		8.7		6		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	263	24.6	24.6	7.9	7.9	30.7	30.7	92.9	92.9	6.5	6.5	10.0		6		88				<0.2		0.8	
						3.5	0.1	268	24.6		7.9		30.7		92.9		6.5		10.1		7		88				<0.2		0.9	
SR3	Fine	Moderate	15:30	8.7	Surface	1.0	0.3	208	25.2	25.2	7.8	7.8	29.5	29.5	94.6	94.7	6.6	6.6	1.7	4.3	4	4	-	-	822156	807594	-	-	-	-
						1.0	0.3	216	25.2		7.8		29.5		94.7		6.6		1.8		5		-				-		-	
					Middle	4.4	0.3	227	25.1	25.1	7.9	7.9	29.5	29.5	94.2	94.2	6.6		4.0		3		-				-		-	
						4.4	0.3	241	25.1		7.9		29.5		94.1		6.6		4.1		4		-				-		-	
					Bottom	7.7	0.2	260	24.7	24.7	7.9	7.9	29.6	29.6	93.5	93.5	6.6	6.6	7.0		3		-				-		-	
						7.7	0.2	268	24.7		7.9		29.6		93.5		6.6		6.9		4		-				-		-	
SR4A	Cloudy	Moderate	16:42	9.1	Surface	1.0	2.2	254	24.8	24.8	8.2	8.2	30.7	30.7	99.8	99.6	7.0	6.8	4.3	4.7	9	8	-	-	817166	807823	-	-	-	-
						1.0	2.3	270	24.8		8.2		30.7		99.4		6.9		4.3		4		-				-		-	
					Middle	4.6	2.2	250	24.4	24.4	8.2	8.2	31.1	31.1	96.3	96.2	6.7		4.5		6		-				-		-	
						4.6	2.3	260	24.4		8.2		31.1		96.1		6.7		4.6		11		-				-		-	
					Bottom	8.1	1.9	250	24.4	24.4	8.2	8.2	31.2	31.2	95.9	96.0	6.7	6.7	5.2		5		-				-		-	
						8.1	2.1	259	24.4		8.2		31.2		96.0		6.7		5.2		10		-				-		-	
SR5A	Cloudy	Moderate	17:00	3.8	Surface	1.0	0.1	301	25.0	25.0	8.2	8.2	30.3	30.3	97.5	97.5	6.8	6.8	6.1	6.5	13	11	-	-	816573	810680	-	-	-	-
						1.0	0.1	310	25.0		8.2		30.3		97.4		6.8		6.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	301	25.0	25.0	8.2	8.2	30.3	30.3	97.2	97.2	6.8	6.8	6.9		11		-				-		-	
						2.8	0.1	326	25.0		8.2		30.3		97.2		6.8		6.9		11		-				-		-	
SR6A	Cloudy	Moderate	17:31	4.4	Surface	1.0	0.1	220	25.0	25.0	8.2	8.1	30.0	30.0	93.6	93.6	6.5	6.5	5.2	7.3	6	6	-	-	817939	814743	-	-	-	-
						1.0	0.1	225	25.0		8.1		30.1		93.5		6.5		5.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	248	24.7	24.8	8.1	8.1	30.1	30.1	89.0	89.2	6.2	6.3	9.0		6		-				-		-	
						3.4	0.1	251	24.8		8.1		30.1		89.4		6.3		9.1		7		-				-		-	
SR7	Cloudy	Moderate	17:54	17.0	Surface	1.0	0.2	353	24.3	24.3	7.9	7.9	31.5	31.5	87.2	87.2	6.1	6.1	2.2	4.1	7	5	-	-	823648	823725	-	-	-	-
						1.0	0.2	325	24.3		7.9		31.5		87.2		6.1		2.2		6		-				-		-	
					Middle	8.5	0.1	69	24.0	24.0	7.9	7.9	31.9	31.9	85.8	85.8	6.0		4.7		5		-				-		-	
						8.5	0.1	71	24.0		7.9		31.9		85.8		6.0		4.7		4		-				-		-	
					Bottom	16.0	0.1	64	24.0	24.0	7.9	7.9	32.0	32.0	86.4	86.4	6.1	6.1	5.5		4		-				-		-	
						16.0	0.1	65	24.0		7.9		32.0		86.3		6.1		5.3		4		-				-		-	
SR8	Fine	Moderate	16:22	4.7	Surface	1.0	-	-	25.2	25.2	7.9	7.9	29.5	29.5	96.8	96.8	6.8	6.8	6.1	7.5	6	7	-	-	820397	811628	-	-	-	-
						1.0	-	-	25.2		7.9		29.5		96.7		6.7		6.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	24.8	24.8	7.9	7.9	29.8	29.8	95.7	95.7	6.7	6.7	8.8		7		-				-		-	
						3.7	-	-	24.8		7.9		29.8		95.7		6.7		9.0		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 28 November 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	11:19	8.5	Surface	1.0	0.2	225	23.3	23.3	8.3	8.3	32.0	32.0	104.5	104.5	7.4	7.4	4.3	5.4	9	11	84	89	815605	804235	<0.2	<0.2	0.7	0.8
						1.0	0.2	239	23.3		8.3		32.0		104.5		7.4		4.3		8		85				<0.2		0.7	
					Middle	4.3	0.1	214	23.3	23.3	8.3	8.3	32.0	32.0	104.0	104.0	7.4		5.0		9		89				<0.2		0.8	
						4.3	0.1	216	23.3		8.3		32.0		104.0		7.4		5.1		10		89				<0.2		0.7	
					Bottom	7.5	0.1	181	23.3	23.3	8.3	8.3	32.0	32.0	103.2	103.2	7.3	7.3	6.9		14		93				<0.2		0.9	
						7.5	0.1	195	23.3		8.3		32.0		103.2		7.3		6.8		13		94				<0.2		0.9	
C2	Cloudy	Moderate	12:45	11.8	Surface	1.0	0.2	135	23.8	23.8	7.7	7.7	30.7	30.7	93.3	93.3	6.6	6.6	6.1	8.4	7	7	85	88	825679	806924	<0.2	<0.2	1.2	1.3
						1.0	0.2	137	23.8		7.7		30.7		93.3		6.6		6.1		7		86				<0.2		1.2	
					Middle	5.9	0.5	154	23.8	23.8	7.7	7.7	31.1	31.1	92.1	92.1	6.5		9.2		7		87				<0.2		1.4	
						5.9	0.5	163	23.8		7.7		31.1		92.1		6.5		9.2		7		88				<0.2		1.4	
					Bottom	10.8	0.5	144	23.8	23.8	7.7	7.7	31.3	31.3	92.9	93.2	6.6	6.6	10.0		5		91				<0.2		1.4	
						10.8	0.5	156	23.8		7.7		31.3		93.4		6.6		9.7		6		90				<0.2		1.4	
C3	Cloudy	Moderate	10:35	11.7	Surface	1.0	0.4	286	23.7	23.7	7.7	7.7	32.1	32.1	87.7	87.7	6.2	6.2	3.0	3.5	7	7	85	87	822105	817794	<0.2	<0.2	0.7	0.7
						1.0	0.4	293	23.7		7.7		32.1		87.7		6.2		3.0		8		85				<0.2		0.7	
					Middle	5.9	0.2	257	23.7	23.7	7.7	7.7	32.1	32.1	87.7	87.7	6.2		3.5		6		88				<0.2		0.6	
						5.9	0.2	271	23.7		7.7		32.1		87.7		6.2		3.5		7		87				<0.2		0.8	
					Bottom	10.7	0.1	120	23.7	23.7	7.7	7.7	32.1	32.1	88.4	88.4	6.2	6.2	4.0		6		89				<0.2		0.8	
						10.7	0.1	131	23.7		7.7		32.1		88.4		6.2		4.0		7		89				<0.2		0.7	
IM1	Fine	Moderate	11:43	5.1	Surface	1.0	0.1	185	23.6	23.6	8.3	8.3	31.0	31.0	100.4	100.4	7.1	7.1	6.2	8.8	9	9	89	91	817970	807149	<0.2	<0.2	0.4	0.5
						1.0	0.1	192	23.6		8.3		31.0		100.4		7.1		6.2		8		89				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	151	23.2	23.2	8.3	8.3	31.2	31.2	98.3	98.3	7.0	7.0	11.3		10		92				<0.2		0.6	
						4.1	0.1	155	23.2		8.3		31.2		98.3		7.0		11.3		10		93				<0.2		0.4	
IM2	Fine	Moderate	11:51	7.1	Surface	1.0	0.1	232	23.4	23.4	8.3	8.3	31.1	31.1	103.6	103.5	7.4	7.3	2.8	6.2	9	8	86	90	818175	806175	<0.2	<0.2	0.6	0.6
						1.0	0.1	244	23.4		8.3		31.1		103.4		7.4		2.8		10		86				<0.2		0.7	
					Middle	3.6	0.1	208	23.2	23.2	8.3	8.3	31.3	31.3	100.7	100.7	7.2		3.9		9		89				<0.2		0.6	
						3.6	0.1	209	23.2		8.3		31.3		100.7		7.2		4.0		9		90				<0.2		0.6	
					Bottom	6.1	0.1	84	23.1	23.1	8.3	8.3	31.6	31.6	99.8	99.8	7.1	7.1	11.9		6		93				<0.2		0.6	
						6.1	0.1	89	23.1		8.3		31.6		99.8		7.1		12.2		7		94				<0.2		0.6	
IM3	Fine	Moderate	11:58	7.2	Surface	1.0	0.1	243	23.4	23.4	8.3	8.3	31.1	31.1	103.5	103.5	7.4	7.3	2.6	6.3	11	8	86	90	818784	805574	<0.2	<0.2	0.8	0.7
						1.0	0.1	254	23.4		8.3		31.1		103.5		7.4		2.6		12		87				<0.2		0.6	
					Middle	3.6	0.0	79	23.2	23.2	8.3	8.3	31.4	31.4	101.0	101.0	7.2		4.1		6		90				<0.2		0.7	
						3.6	0.0	79	23.2		8.3		31.4		101.0		7.2		4.0		6		91				<0.2		0.7	
					Bottom	6.2	0.1	94	23.1	23.1	8.3	8.3	31.6	31.6	99.7	99.7	7.1	7.1	12.2		6		94				<0.2		0.7	
						6.2	0.1	96	23.1		8.3		31.6		99.7		7.1		12.3		5		93				<0.2		0.7	
IM4	Fine	Moderate	12:09	7.4	Surface	1.0	0.0	294	23.7	23.7	8.2	8.2	30.5	30.5	100.0	100.0	7.1	7.2	2.6	4.1	7	10	88	91	819721	804608	<0.2	<0.2	0.8	0.8
						1.0	0.0	302	23.7		8.2		30.5		100.0		7.1		2.6		8		89				<0.2		0.8	
					Middle	3.7	0.0	226	23.5	23.5	8.2	8.2	30.8	30.8	100.5	100.5	7.2		3.6		10		92				<0.2		0.7	
						3.7	0.0	236	23.5		8.2		30.9		100.5		7.2		3.6		10		92				<0.2		0.8	
					Bottom	6.4	0.0	232	23.2	23.2	8.2	8.2	31.4	31.4	99.7	99.7	7.1	7.1	6.2		11		93				<0.2		0.7	
						6.4	0.0	253	23.2		8.2		31.4		99.7		7.1		6.1		11		94				<0.2		0.8	
IM5	Fine	Moderate	12:19	7.0	Surface	1.0	0.1	295	23.6	23.6	8.3	8.3	30.8	30.8	101.2	101.2	7.2	7.2	3.1	3.8	6	7	87	89	820752	804866	<0.2	<0.2	0.8	0.8
						1.0	0.1	310	23.6		8.3		30.8		101.2		7.2		3.1		7		87				<0.2		0.8	
					Middle	3.5	0.0	5	23.4	23.4	8.3	8.3	31.0	31.0	100.7	100.7	7.2		3.5		7		88				<0.2		0.8	
						3.5	0.0	5	23.4		8.3		31.0		100.6		7.2		3.5		7		89				<0.2		0.8	
					Bottom	6.0	0.0	300	23.2	23.2	8.2	8.2	31.2	31.2	99.2	99.2	7.1	7.1	4.9		8		92				<0.2		0.8	
						6.0	0.0	319	23.2		8.2		31.2		99.2		7.1		4.9		7		92				<0.2		0.9	
IM6	Fine	Moderate	12:29	7.1	Surface	1.0	0.2	249	23.6	23.6	8.3	8.3	30.8	30.8	100.6	100.6	7.2	7.2	4.0	4.0	7	8	87	90	821036	805818	<0.2	<0.2	0.8	0.8
						1.0	0.2	257	23.6		8.3		30.8		100.6		7.2		3.9		8		86				<0.2		0.7	
					Middle	3.6	0.1	184	23.5	23.5	8.3	8.3	30.9	30.9	100.9	100.9	7.2		3.7		8		90				<0.2		0.8	
						3.6	0.1	188	23.5		8.3		30.9		100.9		7.2		3.8		7		91				<0.2		0.9	
					Bottom	6.1	0.1	231	23.3	23.3	8.2	8.2	31.1	31.1	100.1	100.1	7.1	7.1	4.3		9		93				<0.2		0.7	
						6.1	0.1	244	23.3		8.2		31.1		100.1		7.1		4.3		8		94				<0.2		0.8	
IM7	Fine	Moderate	12:39	7.9	Surface	1.0	0.1	286	23.6	23.7	8.3	8.3	30.5	30.5	100.9	100.8	7.2	7.2	2.6	3.6	7	6	84	90	821342	806847	<0.2	<0.2	0.9	0.9
						1.0	0.1	296	23.7		8.3		30.5		100.7		7.2		2.6		6		86				<0.2		0.9	
					Middle	4.0	0.1	324	23.6	23.6	8.2	8.2	30.6	30.6	101.1	101.1	7.2		3.5		6		89				<0.2		0.9	
						4.0	0.1	327	23.6		8.2		30.6		101.1		7.2		3.7		5		90				<0.2		0.9	
					Bottom	6.9	0.1	296	23.3	23.3	8.2	8.2	31.0	31.0	100.2	100.2	7.2	7.2	4.5		5		94				<0.2		0.9	
						6.9	0.1	301	23.3		8.2		31.0		100.2		7.2		4.5		4		94				<0.2		0.9	
IM8	Cloudy	Moderate	12:15	7.5	Surface	1.0	0.3	60	23.9	23.9	7.7	7.7	30.7	30.7	96.1	96.1	6.8	6.9	2.9	7.1	5	5	85	87	821819	808157	<0.2	<0.2	1.2	1.2
						1.0	0.3	60	23.9		7.7		30.7		96.1		6.8		2.9		6		84				<0.2		1.2	
					Middle	3.8	0.3	58	23.7	23.7	7.7	7.7	30.9	30.9	96.9	96.9	6.9		7.4		5		88				<0.2		1.2	
						3.8	0.3	60	23.7		7.7		30.9		96.9		6.9		7.4		5		87				<0.2		1.2	
					Bottom	6.5	0.4	67	23.5	23.5	7.7	7.7	31.3	31.3	97.1	97.1	6.9	6.9	11.1		3		90				<0.2		1.2	
						6.5	0.4	73	23.5		7.7		31.3		97.1		6.9		11.1		4		89				<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 28 November 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	12:08	7.1	Surface	1.0	0.4	60	23.7	23.7	7.7	7.7	30.8	30.8	97.2	97.2	6.9	6.9	2.3	5.0	5	7	86	88	822110	808787	<0.2	<0.2	1.1	1.2
						1.0	0.4	64	23.7		7.7		30.8		97.2		6.9		2.3		5		87				<0.2		1.1	
					Middle	3.6	0.4	76	23.6	23.6	7.7	7.7	31.0	31.0	97.5	97.5	6.9		4.5		8		88				<0.2		1.2	
						3.6	0.4	77	23.6		7.7		31.0		97.5		6.9		4.5		7		87				<0.2		1.2	
					Bottom	6.1	0.3	74	23.5	23.5	7.7	7.7	31.2	31.2	97.8	97.8	7.0	7.0	8.2		9		90				<0.2		1.1	
						6.1	0.4	79	23.5		7.7		31.2		97.8		7.0		8.2		10		90				<0.2		1.2	
IM10	Cloudy	Moderate	11:56	7.2	Surface	1.0	0.5	106	23.7	23.7	7.7	7.7	30.8	30.8	96.7	96.7	6.9	6.9	3.9	8.1	7	6	86	89	822383	809798	<0.2	<0.2	1.1	1.2
						1.0	0.5	106	23.7		7.7		30.8		96.7		6.9		3.9		6		86				<0.2		1.2	
					Middle	3.6	0.5	100	23.7	23.7	7.7	7.7	30.9	30.9	96.7	96.7	6.9		8.2		6		89				<0.2		1.2	
						3.6	0.5	102	23.7		7.7		30.9		96.7		6.9		8.2		7		90				<0.2		1.3	
					Bottom	6.2	0.4	94	23.6	23.6	7.7	7.7	31.0	31.0	97.3	97.3	6.9	6.9	12.1		5		90				<0.2		1.2	
						6.2	0.4	99	23.6		7.7		31.0		97.3		6.9		12.1		6		91				<0.2		1.3	
IM11	Cloudy	Moderate	11:41	7.3	Surface	1.0	0.5	96	24.0	24.0	7.6	7.6	31.1	31.1	91.1	91.1	6.4	6.4	5.2	6.3	7	6	86	88	822037	811478	<0.2	<0.2	1.1	1.1
						1.0	0.5	97	24.0		7.6		31.1		91.1		6.4		5.2		7		86				<0.2		1.1	
					Middle	3.7	0.3	106	23.9	23.9	7.6	7.6	31.1	31.1	90.4	90.4	6.4		6.7		7		89				<0.2		1.1	
						3.7	0.3	108	23.9		7.6		31.1		90.4		6.4		6.7		6		89				<0.2		1.1	
					Bottom	6.3	0.4	107	23.9	23.9	7.6	7.6	31.2	31.2	91.7	91.7	6.5	6.5	7.1		6		90				<0.2		1.1	
						6.3	0.4	108	23.9		7.6		31.2		91.7		6.5		7.1		5		89				<0.2		1.2	
IM12	Cloudy	Moderate	11:33	9.1	Surface	1.0	0.5	95	23.9	23.9	7.7	7.7	31.1	31.1	92.2	92.2	6.5	6.5	4.4	5.1	9	8	85	88	821455	812057	<0.2	<0.2	0.9	1.0
						1.0	0.5	103	23.9		7.7		31.1		92.2		6.5		4.4		8		85				<0.2		0.9	
					Middle	4.6	0.4	116	23.9	23.9	7.7	7.7	31.2	31.2	91.9	91.9	6.5		5.3		8		88				<0.2		1.1	
						4.6	0.4	117	23.9		7.7		31.2		91.9		6.5		5.3		9		88				<0.2		1.0	
					Bottom	8.1	0.2	92	23.8	23.8	7.7	7.7	31.4	31.4	94.6	94.6	6.7	6.7	5.6		6		90				<0.2		1.0	
						8.1	0.2	92	23.8		7.7		31.4		94.6		6.7		5.6		6		90				<0.2		1.0	
SR1A	Cloudy	Moderate	11:13	5.4	Surface	1.0	-	-	24.0	24.0	7.7	7.7	30.9	30.9	94.2	94.2	6.7	6.7	7.4	9.5	9	8	-	-	819977	812659	-	-	-	-
						1.0	-	-	24.0		7.7		30.9		94.2		6.7		7.4		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	23.9	23.9	7.7	7.7	30.9	30.9	96.3	96.3	6.8	6.8	11.5		8		-				-		-	
						4.4	-	-	23.9		7.7		30.9		96.3		6.8		11.5		8		-				-		-	
SR2	Cloudy	Moderate	10:59	4.9	Surface	1.0	0.3	54	23.9	23.9	7.6	7.6	31.4	31.4	89.3	89.3	6.3	6.3	8.3	10.6	9	8	88	89	821442	814149	<0.2	<0.2	0.9	0.8
						1.0	0.4	59	23.9		7.6		31.4		89.3		6.3		8.3		8		89				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	50	23.9	23.9	7.6	7.6	31.6	31.6	91.3	91.3	6.4	6.4	12.8		7		90				<0.2		0.7	
						3.9	0.3	52	23.9		7.6		31.6		91.3		6.4		12.8		6		90				<0.2		0.7	
SR3	Cloudy	Moderate	12:22	8.5	Surface	1.0	0.2	209	23.9	23.9	7.7	7.7	30.7	30.7	95.5	95.5	6.8	6.8	2.3	3.2	6	5	-	-	822157	807552	-	-	-	-
						1.0	0.3	218	23.9		7.7		30.7		95.5		6.8		2.3		5		-				-		-	
					Middle	4.3	0.2	199	23.8	23.8	7.7	7.7	30.8	30.8	95.8	95.8	6.8		3.1		5		-				-		-	
						4.3	0.2	214	23.8		7.7		30.8		95.8		6.8		3.1		6		-				-		-	
					Bottom	7.5	0.2	134	23.5	23.5	7.7	7.7	31.2	31.2	96.3	96.3	6.9	6.9	4.1		4		-				-		-	
						7.5	0.2	142	23.5		7.7		31.2		96.3		6.9		4.1		5		-				-		-	
SR4A	Cloudy	Calm	10:56	9.0	Surface	1.0	0.3	74	23.3	23.3	8.3	8.3	31.1	31.1	100.6	100.6	7.2	7.2	4.4	5.7	9	8	-	-	817199	807807	-	-	-	-
						1.0	0.3	74	23.3		8.3		31.1		100.6		7.2		4.5		8		-				-		-	
					Middle	4.5	0.3	75	23.3	23.3	8.3	8.3	31.1	31.1	99.5	99.5	7.1		5.8		8		-				-		-	
						4.5	0.3	81	23.3		8.3		31.1		99.5		7.1		5.8		7		-				-		-	
					Bottom	8.0	0.2	71	23.2	23.2	8.3	8.3	31.2	31.2	99.1	99.1	7.1	7.1	6.9		8		-				-		-	
						8.0	0.2	71	23.2		8.3		31.2		99.1		7.1		7.0		7		-				-		-	
SR5A	Cloudy	Calm	10:37	3.9	Surface	1.0	0.1	25	23.9	23.9	8.2	8.2	30.5	30.5	96.9	96.9	6.9	6.9	4.1	4.4	10	9	-	-	816597	810687	-	-	-	-
						1.0	0.1	25	23.9		8.2		30.5		96.9		6.9		4.1		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	92	23.9	23.9	8.2	8.2	30.6	30.6	96.7	96.7	6.9	6.9	4.5		7		-				-		-	
						2.9	0.0	96	23.9		8.2		30.6		96.6		6.9		4.8		6		-				-		-	
SR6A	Cloudy	Calm	10:07	4.2	Surface	1.0	0.0	87	24.1	24.1	8.2	8.2	30.1	30.1	90.8	90.8	6.4	6.4	10.5	11.8	15	18	-	-	817986	814742	-	-	-	-
						1.0	0.0	88	24.1		8.2		30.1		90.8		6.4		10.2		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	262	24.0	24.0	8.2	8.2	30.1	30.1	90.0	90.1	6.4	6.4	13.1		20		-				-		-	
						3.2	0.1	268	24.0		8.2		30.1		90.1		6.4		13.2		21		-				-		-	
SR7	Cloudy	Moderate	10:03	16.3	Surface	1.0	0.6	61	23.6	23.6	7.9	7.9	32.2	32.2	88.6	88.6	6.3	6.3	1.4	2.0	5	7	-	-	823640	823728	-	-	-	-
						1.0	0.7	63	23.6		7.9		32.2		88.6		6.3		1.4		4		-				-		-	
					Middle	8.2	0.2	14	23.6	23.6	7.9	7.9	32.3	32.3	88.5	88.5	6.2		2.4		6		-				-		-	
						8.2	0.2	15	23.6		7.9		32.3		88.5		6.2		2.4		7		-				-		-	
					Bottom	15.3	0.2	55	23.6	23.6	7.9	7.9	32.4	32.4	89.2	89.2	6.3	6.3	2.1		10		-				-		-	
						15.3	0.2	58	23.6		7.9		32.4		89.2		6.3		2.1		9		-				-		-	
SR8	Cloudy	Moderate	11:23	5.0	Surface	1.0	-	-	24.6	24.5	7.7	7.7	30.9	30.9	97.1	97.1	6.8	6.8	8.5	8.6	11	13	-	-	820409	811720	-	-	-	-
						1.0	-	-	24.5		7.7		30.9		97.1		6.8		8.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	24.0	24.0	7.7	7.7	31.0	31.0	101.3	101.3	7.1	7.1	8.7		15		-				-		-	
						4.0	-	-	24.0		7.7		31.0		101.3		7.1		8.7		16		-				-		-	

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 28 November 20 during Mid-Flood Tide

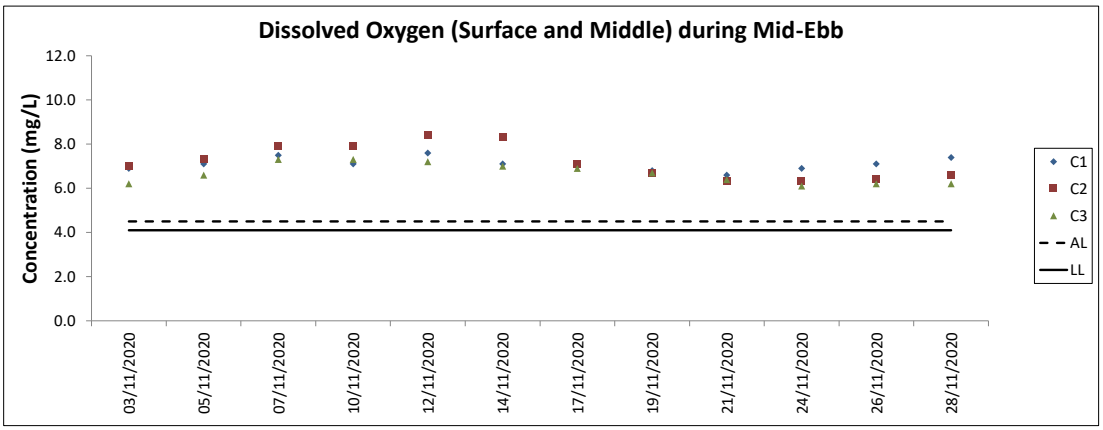
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	17:10	8.7	Surface	1.0	0.4	34	23.4	23.4	8.3	8.3	31.2	31.1	106.0	106.0	7.5	7.5	1.7	3.5	6	6	86	91	815612	804265	<0.2	<0.2	0.7	0.7
						1.0	0.4	35	23.4		8.3		31.1		106.0		7.5		1.8		6		87				<0.2		0.6	
					Middle	4.4	0.4	33	23.3	23.3	8.3	8.3	31.4	31.4	104.7	104.7	7.5		2.2		5		92				<0.2		0.7	
						4.4	0.4	35	23.3		8.3		31.5		104.6		7.4		2.3		6		93				<0.2		0.6	
					Bottom	7.7	0.3	15	23.3	23.3	8.3	8.3	31.7	31.7	102.7	102.7	7.3	7.3	6.5		5		95				<0.2		0.6	
						7.7	0.3	15	23.3		8.3		31.7		102.7		7.3		6.5		6		95				<0.2		0.7	
C2	Cloudy	Moderate	15:55	12.0	Surface	1.0	0.3	350	24.1	24.1	7.7	7.7	30.9	30.9	93.3	93.3	6.6	6.5	2.1	4.0	5	5	86	88	825692	806965	<0.2	<0.2	1.3	1.4
						1.0	0.3	322	24.1		7.7		30.9		93.3		6.6		2.1		5		87				<0.2		1.2	
					Middle	6.0	0.4	28	24.0	24.0	7.7	7.7	31.1	31.1	90.1	90.1	6.4		3.3		5		88				<0.2		1.4	
						6.0	0.4	29	24.0		7.7		31.1		90.1		6.4		3.3		5		89				<0.2		1.5	
					Bottom	11.0	0.4	346	23.9	23.9	7.7	7.7	31.6	31.6	91.6	91.7	6.5	6.5	6.7		6		90				<0.2		1.5	
						11.0	0.4	357	23.9		7.7		31.6		91.8		6.5		6.6		6		89				<0.2		1.4	
C3	Cloudy	Moderate	18:01	12.7	Surface	1.0	0.3	241	23.8	23.8	7.6	7.6	31.9	31.9	90.0	90.0	6.3	6.3	0.6	3.6	7	8	85	88	822119	817808	<0.2	<0.2	0.6	0.7
						1.0	0.3	263	23.8		7.6		31.9		90.0		6.3		0.6		6		86				<0.2		0.8	
					Middle	6.4	0.4	252	23.7	23.7	7.6	7.6	32.1	32.1	88.7	88.7	6.3		5.0		8		87				<0.2		0.7	
						6.4	0.4	269	23.7		7.6		32.1		88.7		6.3		5.0		8		88				<0.2		0.6	
					Bottom	11.7	0.4	266	23.6	23.6	7.6	7.6	32.2	32.2	90.0	90.0	6.3	6.3	5.3		8		92				<0.2		0.6	
						11.7	0.4	266	23.6		7.6		32.2		90.0		6.3		5.3		9		90				<0.2		0.6	
IM1	Cloudy	Moderate	16:47	5.1	Surface	1.0	0.1	357	23.5	23.5	8.3	8.3	31.1	31.1	103.6	103.6	7.4	7.4	6.0	8.2	5	5	89	90	817945	807125	<0.2	<0.2	0.6	0.7
						1.0	0.1	328	23.5		8.3		31.1		103.6		7.4		6.4		5		89				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	25	23.1	23.1	8.3	8.3	31.5	31.5	99.4	99.5	7.1	7.1	10.1		5		91				<0.2		0.7	
						4.1	0.1	26	23.1		8.3		31.5		99.5		7.1		10.3		5		91				<0.2		0.6	
IM2	Cloudy	Moderate	16:39	7.0	Surface	1.0	0.2	339	23.5	23.5	8.3	8.3	31.0	31.0	102.2	102.2	7.3	7.3	3.8	6.2	3	4	88	92	818178	806181	<0.2	<0.2	0.7	0.7
						1.0	0.2	341	23.5		8.3		31.0		102.2		7.3		4.1		3		89				<0.2		0.6	
					Middle	3.5	0.2	352	23.4	23.4	8.3	8.3	31.0	31.0	102.1	102.1	7.3		5.3		4		92				<0.2		0.6	
						3.5	0.2	324	23.4		8.3		31.0		102.0		7.3		5.7		4		93				<0.2		0.7	
					Bottom	6.0	0.2	13	23.2	23.2	8.3	8.3	31.5	31.5	99.6	99.6	7.1	7.1	9.0		3		96				<0.2		0.8	
						6.0	0.2	13	23.2		8.3		31.5		99.6		7.1		9.5		4		96				<0.2		0.7	
IM3	Cloudy	Moderate	16:31	7.4	Surface	1.0	0.5	18	23.4	23.4	8.3	8.3	30.9	30.9	101.2	101.3	7.2	7.2	4.5	8.0	5	5	88	92	818793	805594	<0.2	<0.2	0.7	0.7
						1.0	0.5	19	23.4		8.3		30.9		101.3		7.2		4.9		5		88				<0.2		0.7	
					Middle	3.7	0.4	321	23.2	23.2	8.3	8.3	31.3	31.3	100.2	100.2	7.1		6.8		4		91				<0.2		0.7	
						3.7	0.4	330	23.2		8.3		31.3		100.1		7.1		6.7		5		92				<0.2		0.8	
					Bottom	6.4	0.3	317	23.2	23.2	8.3	8.3	31.4	31.4	99.5	99.5	7.1	7.1	12.3		5		96				<0.2		0.8	
						6.4	0.4	348	23.2		8.3		31.4		99.5		7.1		12.9		4		96				<0.2		0.7	
IM4	Cloudy	Moderate	16:22	7.7	Surface	1.0	0.8	342	23.4	23.4	8.3	8.3	31.0	31.0	100.6	100.6	7.2	7.2	3.1	8.0	5	5	87	91	819727	804616	<0.2	<0.2	0.7	0.7
						1.0	0.8	315	23.4		8.3		31.0		100.5		7.2		3.6		5		87				<0.2		0.7	
					Middle	3.9	0.7	349	23.4	23.4	8.3	8.3	31.0	31.0	100.5	100.5	7.2		8.5		5		91				<0.2		0.7	
						3.9	0.7	321	23.4		8.3		31.0		100.5		7.2		8.9		5		91				<0.2		0.7	
					Bottom	6.7	0.6	341	23.3	23.3	8.3	8.3	31.2	31.2	100.4	100.4	7.2	7.2	11.8		4		96				<0.2		0.6	
						6.7	0.6	314	23.3		8.3		31.2		100.4		7.2		11.8		4		96				<0.2		0.7	
IM5	Cloudy	Moderate	16:13	7.0	Surface	1.0	1.1	12	23.5	23.5	8.3	8.3	30.7	30.7	101.4	101.4	7.2	7.2	7.5	8.5	4	4	88	92	820741	804853	<0.2	<0.2	0.8	0.9
						1.0	1.2	12	23.4		8.3		30.7		101.4		7.2		7.7		3		89				<0.2		0.9	
					Middle	3.5	0.9	3	23.4	23.4	8.2	8.2	30.8	30.8	101.3	101.3	7.2		8.4		5		92				<0.2		0.9	
						3.5	0.9	3	23.4		8.2		30.8		101.3		7.2		8.4		4		93				<0.2		0.9	
					Bottom	6.0	0.7	29	23.3	23.3	8.2	8.2	30.9	30.9	100.9	100.9	7.2	7.2	9.0		5		93				<0.2		0.9	
						6.0	0.8	31	23.3		8.2		30.9		100.9		7.2		9.9		4		94				<0.2		0.9	
IM6	Cloudy	Moderate	16:05	7.3	Surface	1.0	0.2	183	23.8	23.8	8.2	8.2	30.2	30.2	99.1	99.1	7.0	7.1	3.7	4.3	3	4	86	92	821037	805847	<0.2	<0.2	0.9	0.9
						1.0	0.2	196	23.8		8.2		30.2		99.1		7.0		3.8		3		87				<0.2		0.8	
					Middle	3.7	0.2	66	23.5	23.5	8.2	8.2	30.6	30.6	100.1	100.1	7.1		4.3		4		92				<0.2		0.9	
						3.7	0.2	70	23.5		8.2		30.6		100.1		7.1		4.3		4		94				<0.2		0.8	
					Bottom	6.3	0.1	43	23.4	23.4	8.2	8.2	30.8	30.8	100.5	100.5	7.2	7.2	4.7		4		94				<0.2		0.9	
						6.3	0.2	46	23.4		8.2		30.9		100.4		7.2		4.7		4		96				<0.2		0.9	
IM7	Cloudy	Moderate	15:53	8.1	Surface	1.0	0.1	200	23.8	23.8	8.2	8.2	30.3	30.3	98.8	98.9	7.0	7.1	8.5	4.8	4	5	88	91	821354	806827	<0.2	<0.2	0.8	0.8
						1.0	0.1	216	23.8		8.2		30.3		98.9		7.0		8.5		5		88				<0.2		0.8	
					Middle	4.1	0.2	123	23.6	23.6	8.2	8.2	30.5	30.5	99.8	99.8	7.1		2.3		4		90				<0.2		0.9	
						4.1	0.2	132	23.6		8.2		30.5		99.8		7.1		2.3		5		90				<0.2		0.8	
					Bottom	7.1	0.2	96	23.5	23.5	8.2	8.2	30.7	30.7	100.7	100.8	7.2	7.2	3.6		6		95				<0.2		0.9	
						7.1	0.3	96	23.5		8.2		30.7		100.8		7.2		3.4		5		94				<0.2		0.8	
IM8	Cloudy	Moderate	16:23	7.4	Surface	1.0	0.1	158	23.7	23.7	7.7	7.7	31.0	31.0	100.4	100.4	7.1	7.1	2.8	3.6	3	4	86	88	821815	808146	<0.2	<0.2	1.3	1.3
						1.0	0.1	167	23.7		7.7		31.0		100.4		7.1		2.8		3		85				<0.2		1.2	
					Middle	3.7	0.2	102	23.7	23.7	7.7	7.7	31.0	31.0	99.9	99.9	7.1		3.9		3		87				<0.2		1.2	
						3.7	0.2	109	23.7		7.7		31.0		99.9		7.1		3.9		4		88				<0.2		1.3	
					Bottom	6.4	0.1	209	23.6	23.6	7.7	7.7	31.0	31.0	99.9	99.9	7.1	7.1	4.0		4		89				<0.2		1.3	
						6.4	0.1	224	23.6		7.7		31.0		99.9		7.1		4.0		5		90				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 November 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	16:29	7.6	Surface	1.0	0.2	68	23.8	23.8	7.7	7.7	30.9	30.9	97.0	97.0	6.9	6.9	3.2	4.0	4	4	86	88	822112	808807	<0.2	<0.2	1.4	1.3
						1.0	0.3	68	23.8		7.7		30.9		97.0		6.9		3.2		4		86				<0.2		1.4	
					Middle	3.8	0.3	79	23.8	23.8	7.7	7.7	30.9	30.9	97.3	97.3	6.9		3.8		5		89				<0.2		1.4	
						3.8	0.3	84	23.8		7.7		30.9		97.3		6.9		3.8		4		87				<0.2		1.3	
					Bottom	6.6	0.2	76	23.7	23.7	7.7	7.7	30.9	30.9	97.9	97.9	6.9	6.9	5.1		4		91				<0.2		1.2	
						6.6	0.2	77	23.7		7.7		30.9		97.9		6.9		5.1		3		91				<0.2		1.3	
IM10	Cloudy	Moderate	16:40	7.2	Surface	1.0	0.5	329	23.8	23.8	7.7	7.7	30.9	30.9	96.8	96.8	6.9	6.9	3.8	4.1	5	5	85	88	822365	809794	<0.2	<0.2	1.2	1.3
						1.0	0.6	329	23.8		7.7		30.9		96.7		6.9		3.8		6		86				<0.2		1.2	
					Middle	3.6	0.4	332	23.8	23.8	7.7	7.7	30.9	30.9	96.6	96.6	6.8		4.2		5		87				<0.2		1.2	
						3.6	0.4	350	23.8		7.7		30.9		96.6		6.8		4.2		5		89				<0.2		1.4	
					Bottom	6.2	0.3	332	23.8	23.8	7.7	7.7	30.9	30.9	97.6	97.6	6.9	6.9	4.4		4		91				<0.2		1.4	
						6.2	0.3	336	23.8		7.7		30.9		97.6		6.9		4.4		3		91				<0.2		1.2	
IM11	Cloudy	Moderate	16:53	8.1	Surface	1.0	0.5	306	23.8	23.8	7.6	7.6	30.9	30.9	93.8	93.8	6.6	6.6	7.5	12.6	5	5	86	87	822069	811477	<0.2	<0.2	1.3	1.3
						1.0	0.6	306	23.8		7.6		30.9		93.8		6.6		7.5		5		85				<0.2		1.3	
					Middle	4.1	0.5	310	23.9	23.9	7.6	7.6	31.1	31.1	92.0	92.0	6.5		15.3		5		87				<0.2		1.2	
						4.1	0.5	336	23.9		7.6		31.1		92.0		6.5		15.3		5		88				<0.2		1.3	
					Bottom	7.1	0.4	307	23.9	23.9	7.6	7.6	31.1	31.1	92.7	92.7	6.6	6.6	15.1		6		90				<0.2		1.3	
						7.1	0.5	318	23.9		7.6		31.1		92.7		6.6		15.1		6		88				<0.2		1.2	
IM12	Cloudy	Moderate	17:00	9.0	Surface	1.0	0.5	301	23.9	23.9	7.6	7.6	30.9	30.9	92.3	92.3	6.5	6.5	4.2	5.9	4	4	85	88	821471	812028	<0.2	<0.2	1.2	1.2
						1.0	0.5	317	23.9		7.6		30.9		92.3		6.5		4.2		4		85				<0.2		1.2	
					Middle	4.5	0.4	302	23.9	23.9	7.6	7.6	31.0	31.0	91.1	91.1	6.4		6.4		3		86				<0.2		1.2	
						4.5	0.4	306	23.9		7.6		31.0		91.1		6.4		6.4		3		89				<0.2		1.3	
					Bottom	8.0	0.3	298	23.9	23.9	7.6	7.6	31.2	31.2	91.8	91.8	6.5	6.5	7.0		4		90				<0.2		1.3	
						8.0	0.3	324	23.9		7.6		31.2		91.8		6.5		7.0		4		91				<0.2		1.2	
SR1A	Cloudy	Moderate	17:20	4.5	Surface	1.0	-	-	24.1	24.1	7.6	7.6	30.8	30.8	95.1	95.1	6.7	6.7	5.1	5.4	5	6	-	-	819982	812658	-	-	-	-
						1.0	-	-	24.1		7.6		30.8		95.1		6.7		5.1		5		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	24.0	24.0	7.6	7.6	30.9	30.9	97.8	97.9	6.9	6.9	5.7		7		-				-		-	
						3.5	-	-	24.0		7.6		30.9		97.9		6.9		5.5		6		-				-		-	
SR2	Cloudy	Moderate	17:34	4.6	Surface	1.0	0.1	260	23.9	23.9	7.6	7.6	31.6	31.6	91.7	91.7	6.5	6.5	12.3	12.3	7	8	89	88	821465	814172	<0.2	<0.2	1.1	1.1
						1.0	0.1	282	23.9		7.6		31.6		91.7		6.5		12.3		8		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	257	23.8	23.8	7.6	7.6	31.7	31.7	96.3	96.3	6.8	6.8	12.3		8		89				<0.2		1.2	
						3.6	0.1	262	23.8		7.6		31.7		96.3		6.8		12.3		9		88				<0.2		1.1	
SR3	Cloudy	Moderate	16:18	8.4	Surface	1.0	0.1	144	23.8	23.8	7.7	7.7	30.7	30.7	98.3	98.3	7.0	7.0	1.9	2.7	4	3	-	-	822142	807578	-	-	-	-
						1.0	0.1	147	23.8		7.7		30.7		98.3		7.0		1.9		3		-				-		-	
					Middle	4.2	0.1	157	23.7	23.7	7.7	7.7	30.9	30.9	98.3	98.3	7.0		2.9		3		-				-		-	
						4.2	0.1	170	23.7		7.7		30.9		98.3		7.0		2.9		2		-				-		-	
					Bottom	7.4	0.0	250	23.6	23.6	7.7	7.7	31.0	31.0	98.4	98.4	7.0	7.0	3.3		2		-				-		-	
						7.4	0.0	268	23.6		7.7		31.0		98.4		7.0		3.3		3		-				-		-	
SR4A	Cloudy	Calm	17:32	9.4	Surface	1.0	0.3	69	23.5	23.5	8.3	8.3	31.0	31.0	102.3	102.3	7.3	7.2	3.4	4.0	4	4	-	-	817201	807800	-	-	-	-
						1.0	0.3	73	23.5		8.3		31.0		102.3		7.3		3.4		4		-				-		-	
					Middle	4.7	0.4	76	23.4	23.4	8.3	8.3	31.1	31.1	100.2	100.2	7.1		4.0		4		-				-		-	
						4.7	0.4	83	23.4		8.3		31.1		100.2		7.1		4.0		4		-				-		-	
					Bottom	8.4	0.3	67	23.4	23.4	8.3	8.3	31.1	31.1	99.6	99.6	7.1	7.1	4.4		3		-				-		-	
						8.4	0.3	72	23.4		8.3		31.1		99.6		7.1		4.6		3		-				-		-	
SR5A	Cloudy	Calm	17:51	4.2	Surface	1.0	0.1	318	24.0	24.0	8.2	8.2	30.5	30.5	98.7	98.7	7.0	7.0	6.8	5.5	5	5	-	-	816603	810699	-	-	-	-
						1.0	0.1	339	24.0		8.2		30.5		98.7		7.0		6.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	323	24.0	24.0	8.2	8.2	30.5	30.5	98.4	98.4	7.0	7.0	4.3		5		-				-		-	
						3.2	0.1	354	24.0		8.2		30.5		98.4		7.0		4.3		4		-				-		-	
SR6A	Cloudy	Calm	18:21	4.3	Surface	1.0	0.0	232	24.1	24.1	8.2	8.2	30.2	30.2	93.6	93.6	6.6	6.6	6.9	7.3	10	10	-	-	817942	814749	-	-	-	-
						1.0	0.0	252	24.1		8.2		30.2		93.6		6.6		6.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	193	24.1	24.1	8.2	8.2	30.2	30.2	93.7	93.7	6.6	6.6	7.7		10		-				-		-	
						3.3	0.1	195	24.0		8.2		30.2		93.7		6.6		7.8		10		-				-		-	
SR7	Cloudy	Moderate	18:42	16.7	Surface	1.0	0.0	116	23.6	23.6	7.6	7.6	32.2	32.2	88.0	88.0	6.2	6.2	1.3	3.0	4	4	-	-	823633	823740	-	-	-	-
						1.0	0.0	116	23.6		7.6		32.2		88.0		6.2		1.3		3		-				-		-	
					Middle	8.4	0.1	184	23.6	23.6	7.6	7.6	32.3	32.3	88.4	88.4	6.2		3.5		4		-				-		-	
						8.4	0.1	199	23.6		7.6		32.3		88.4		6.2		3.5		4		-				-		-	
					Bottom	15.7	0.1	76	23.6	23.6	7.7	7.7	32.3	32.3	88.8	88.8	6.3	6.3	4.2		4		-				-		-	
						15.7	0.1	78	23.6		7.7		32.3		88.8		6.3		4.2		3		-				-		-	
SR8	Cloudy	Moderate	17:10	4.3	Surface	1.0	-	-	24.2	24.2	7.7	7.7	30.8	30.8	96.1	96.1	6.8	6.8	12.9	14.8	8	8	-	-	820398	811644	-	-	-	-
						1.0	-	-	24.2		7.7		30.8		96.1		6.8		12.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	24.0	24.0	7.7	7.7	30.8	30.8	96.6	96.6	6.8	6.8	16.6		9		-				-		-	
						3.3	-	-	24.0		7.7		30.8		96.6		6.8		16.6		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**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
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21/11/2020
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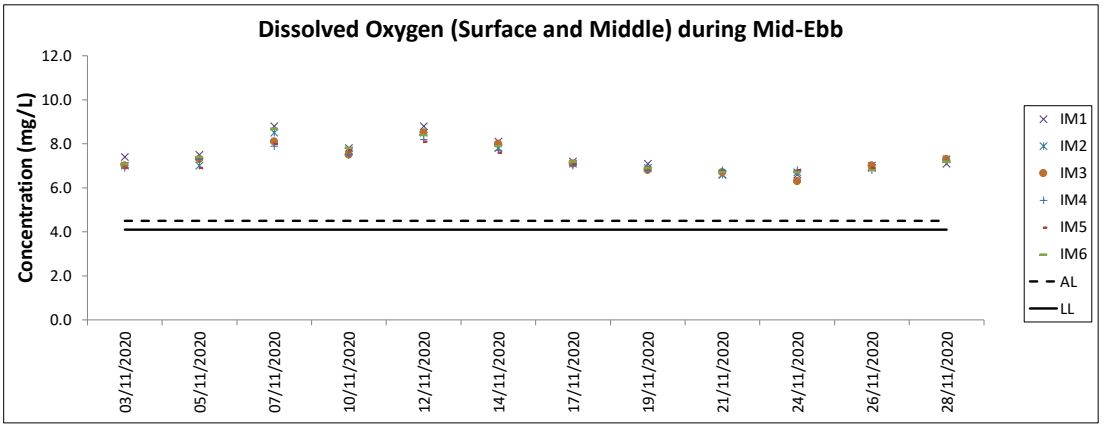
28/11/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
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03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
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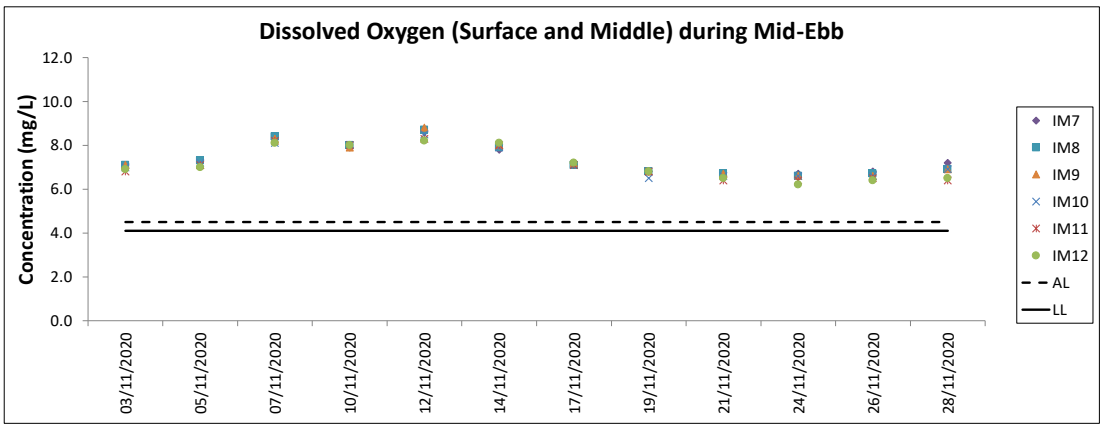
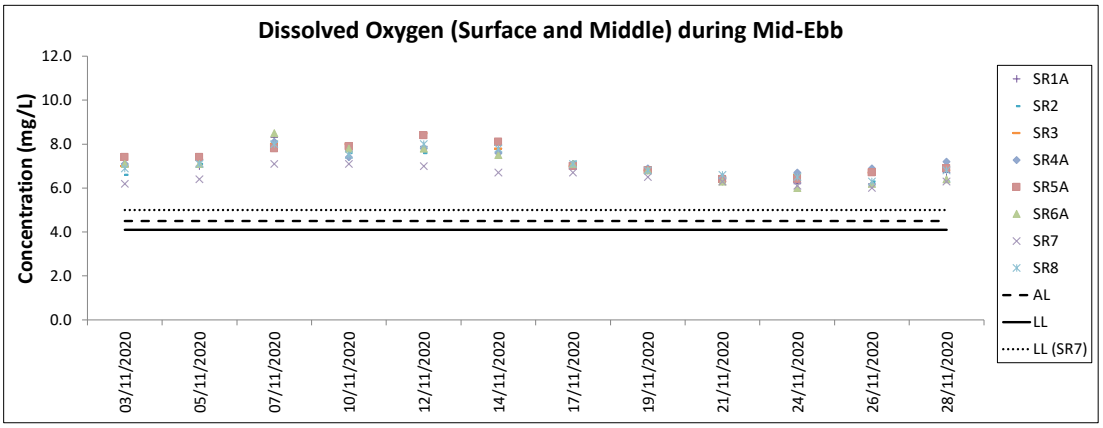
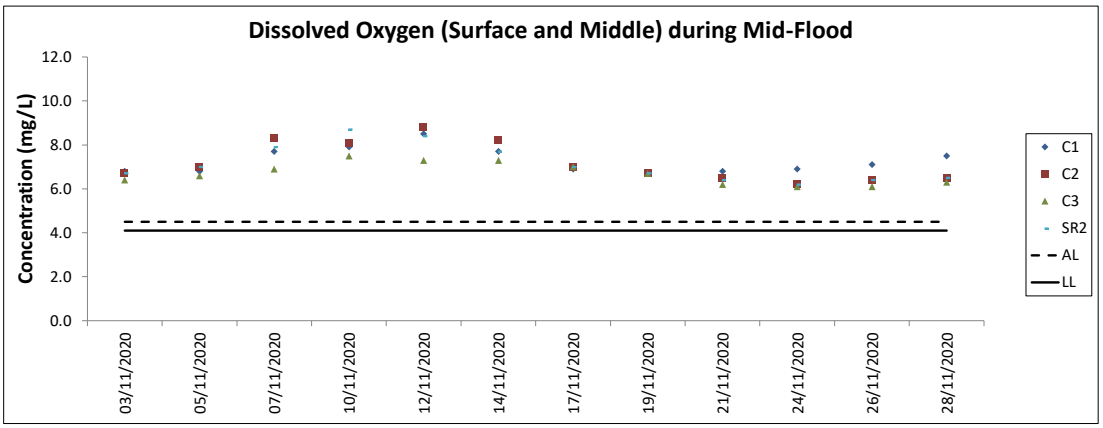
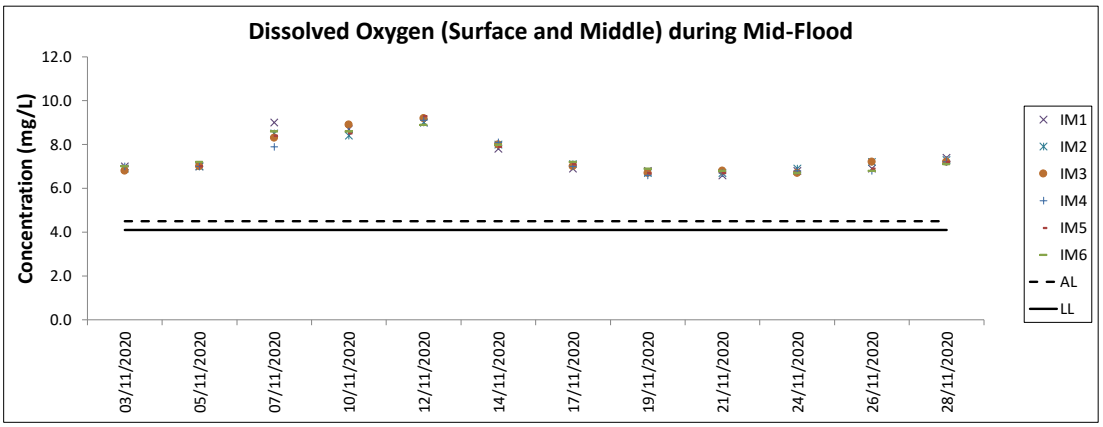
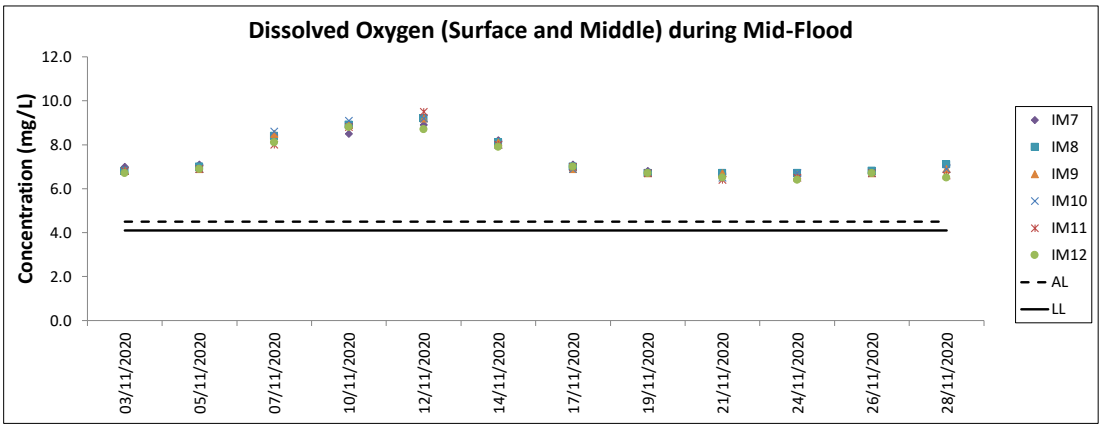
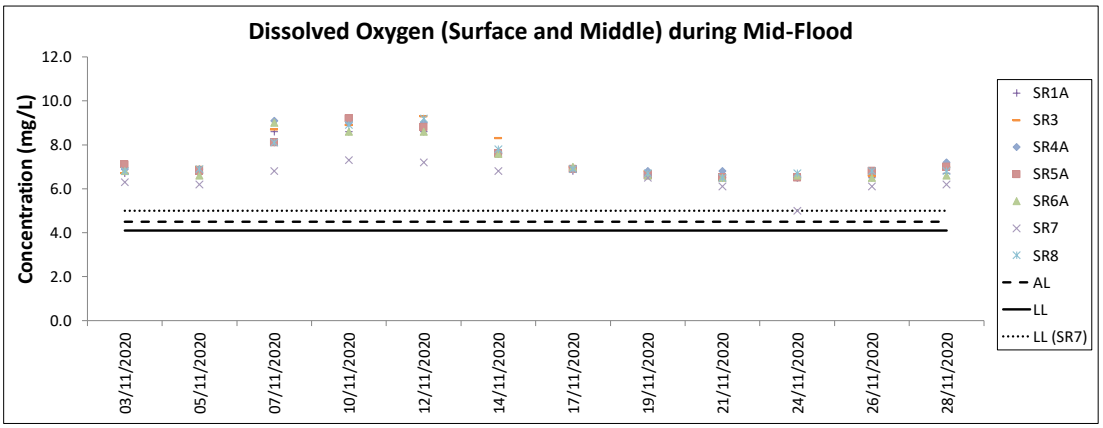

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
26/11/2020
28/11/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
26/11/2020
28/11/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
26/11/2020
28/11/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
26/11/2020
28/11/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
26/11/2020
28/11/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
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SR1A
SR3
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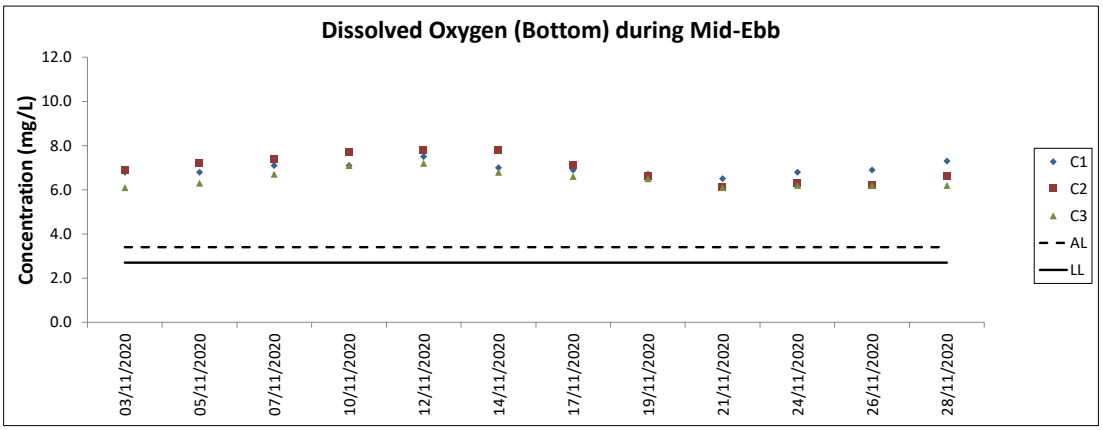
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
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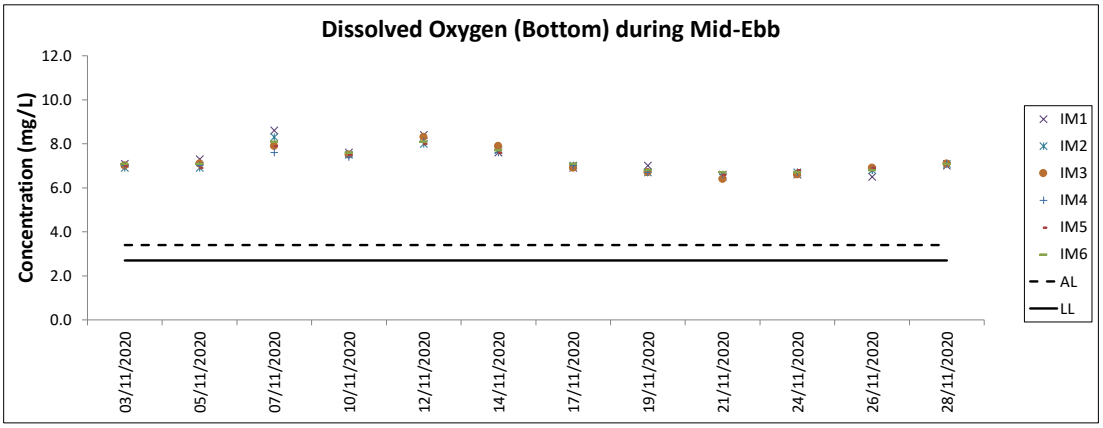
26/11/2020
28/11/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
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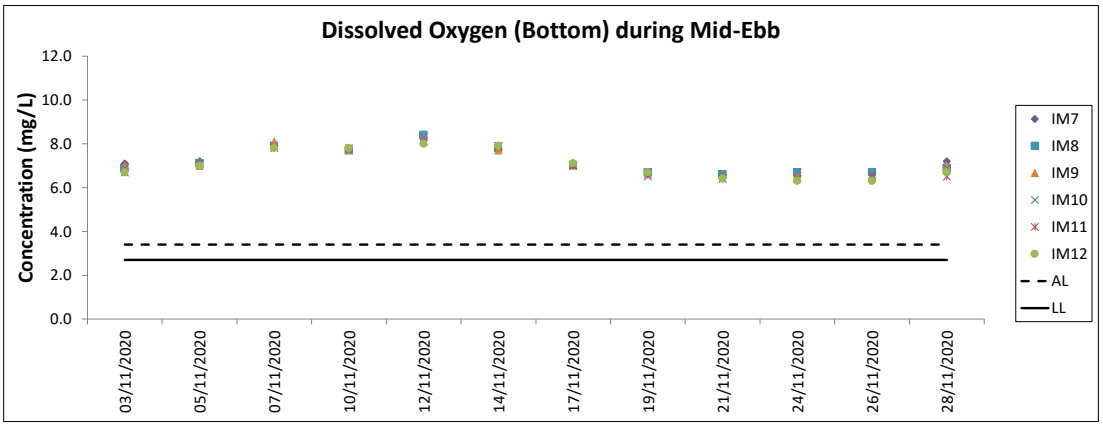
26/11/2020
28/11/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
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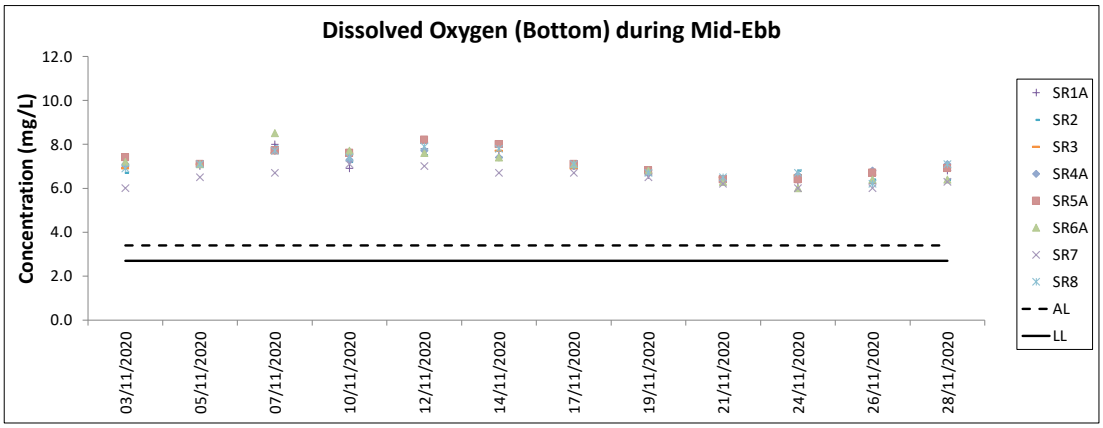
26/11/2020
28/11/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
24/11/2020
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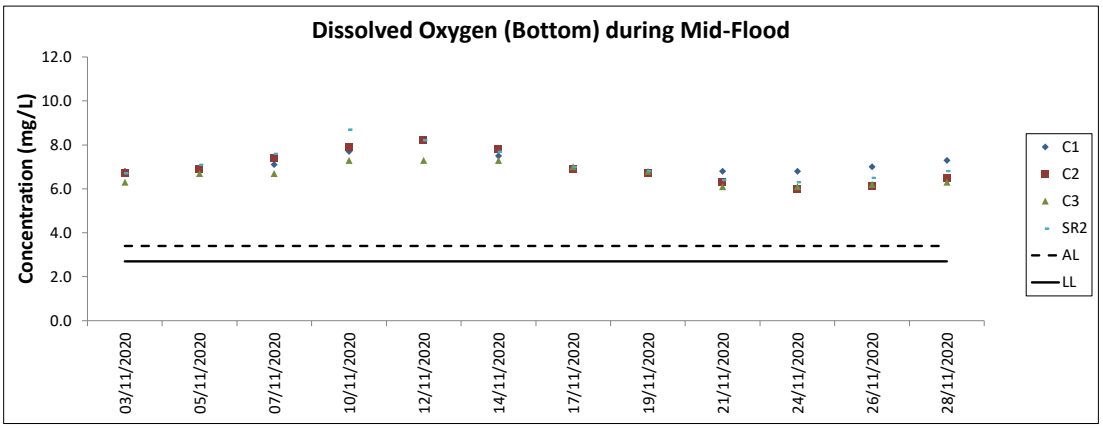
28/11/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
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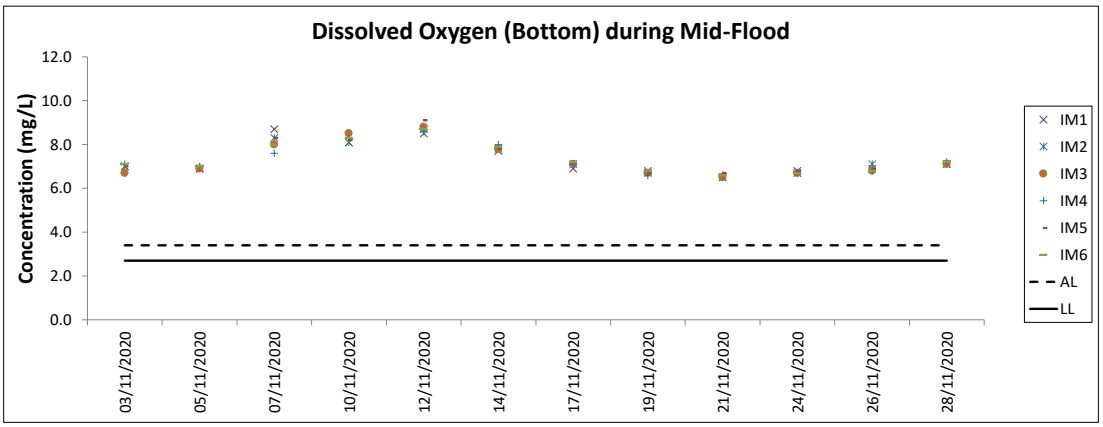
28/11/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
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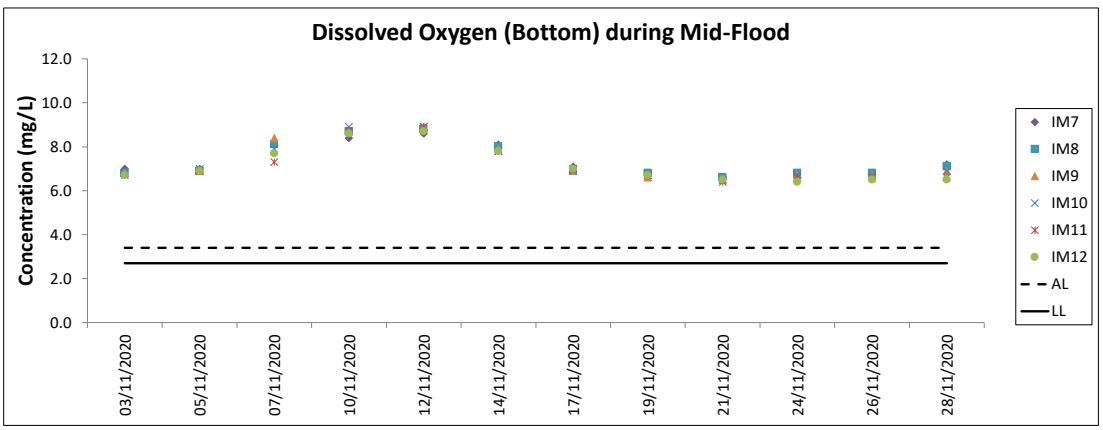
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
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19/11/2020
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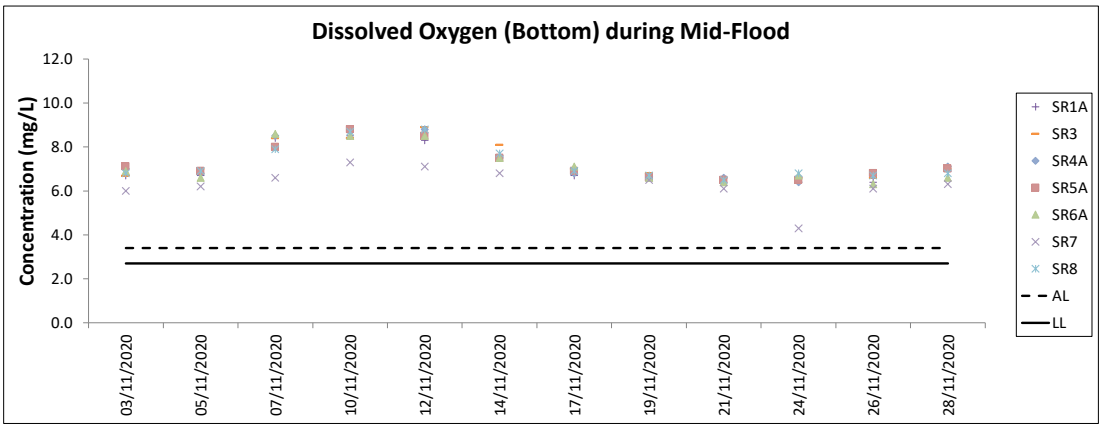
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
0.0
03/11/2020
05/11/2020
07/11/2020
10/11/2020
12/11/2020
14/11/2020
17/11/2020
19/11/2020
21/11/2020
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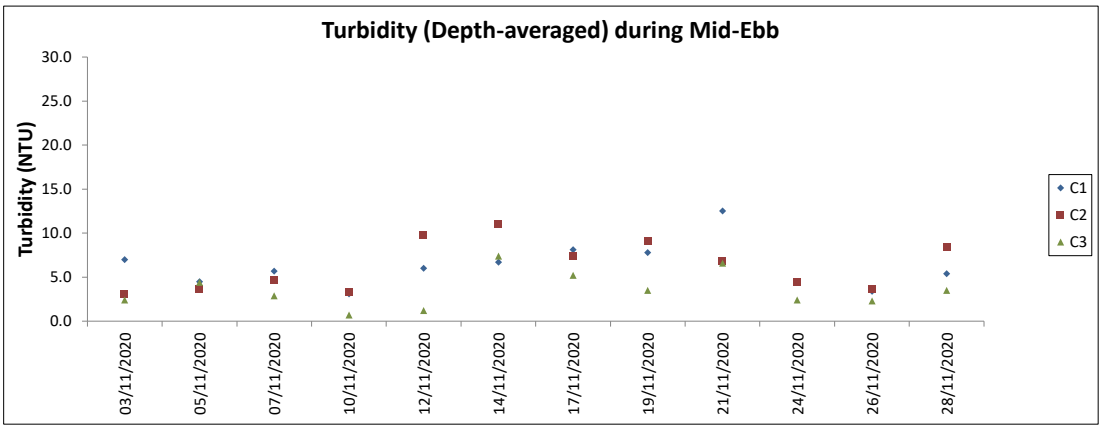
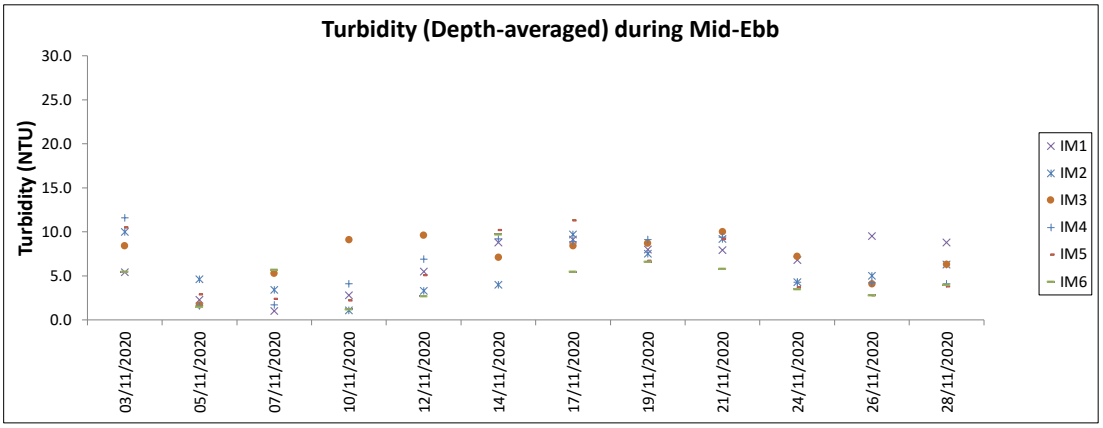
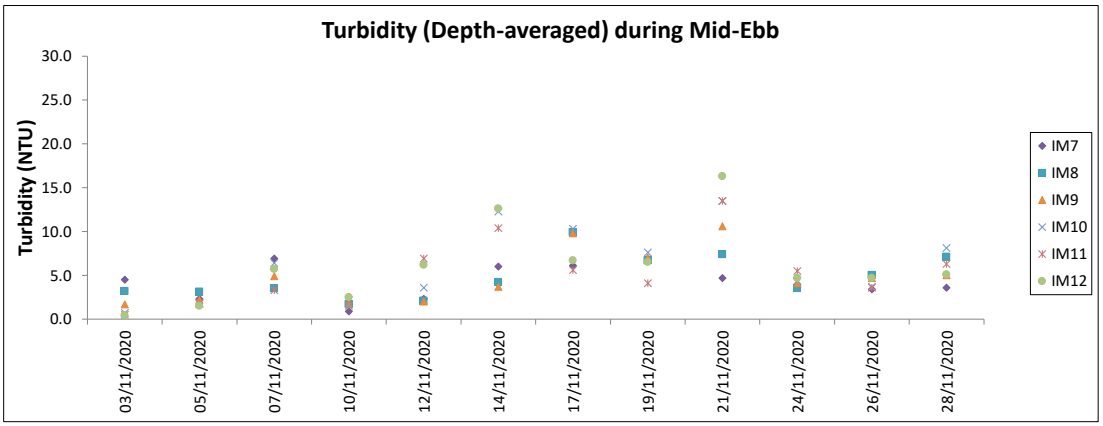
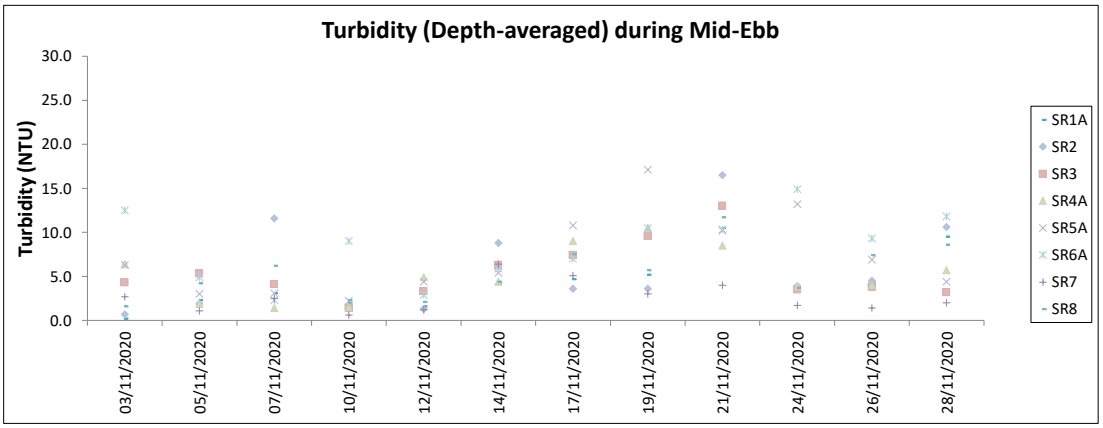
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

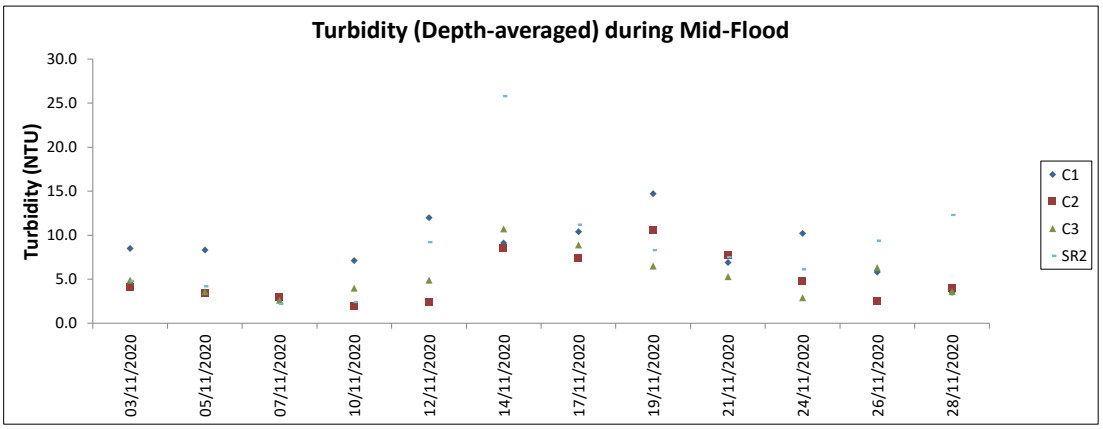


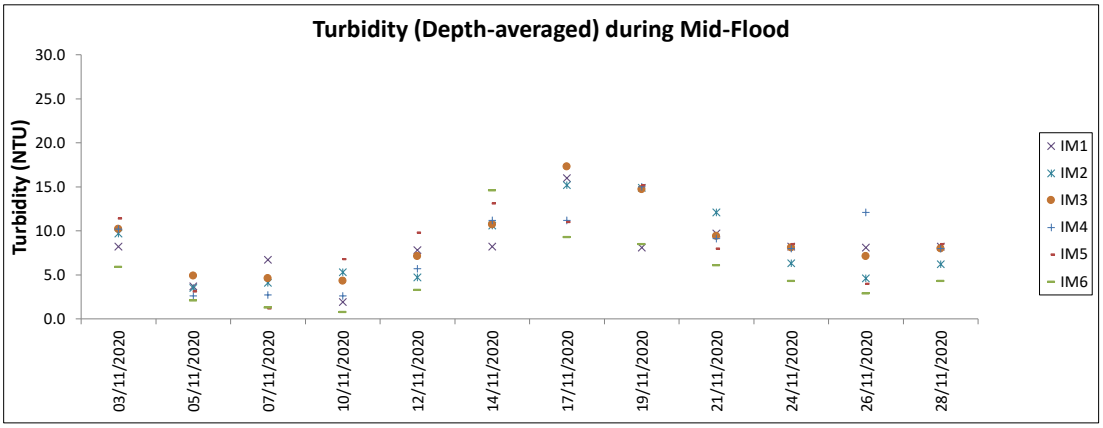


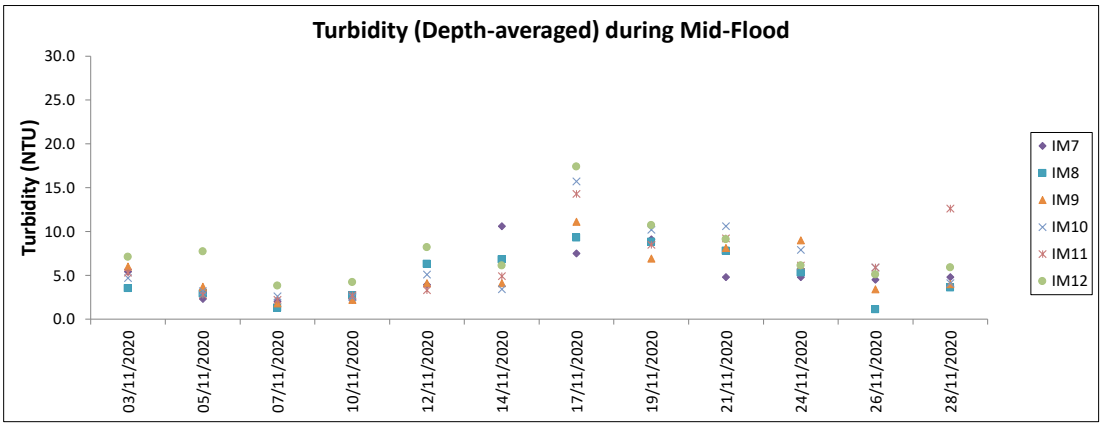


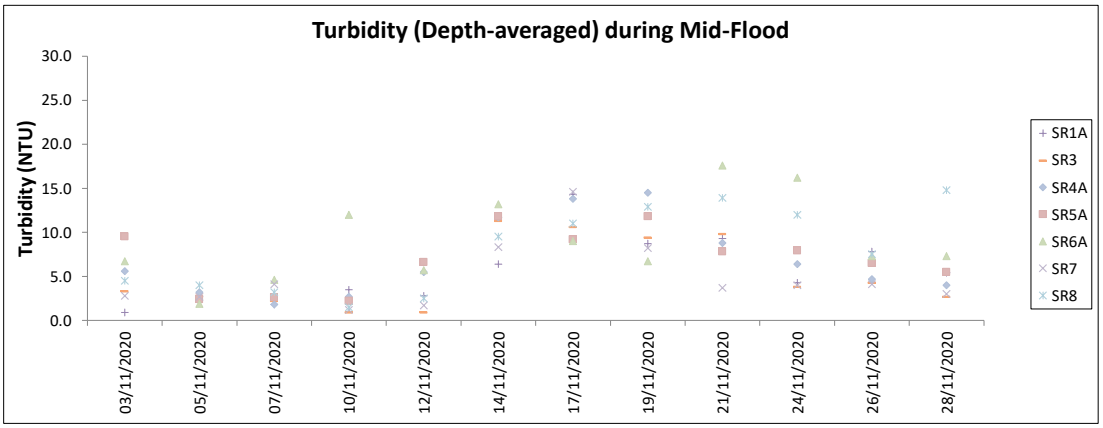


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

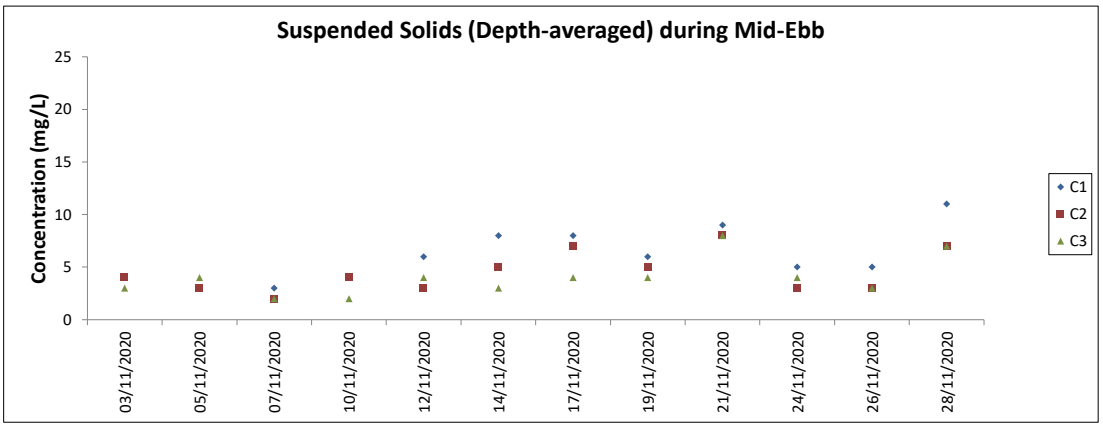


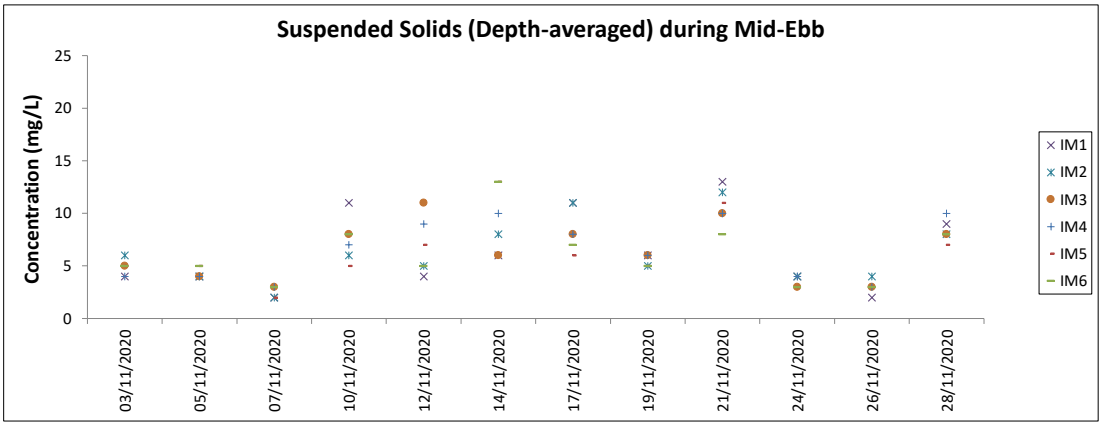


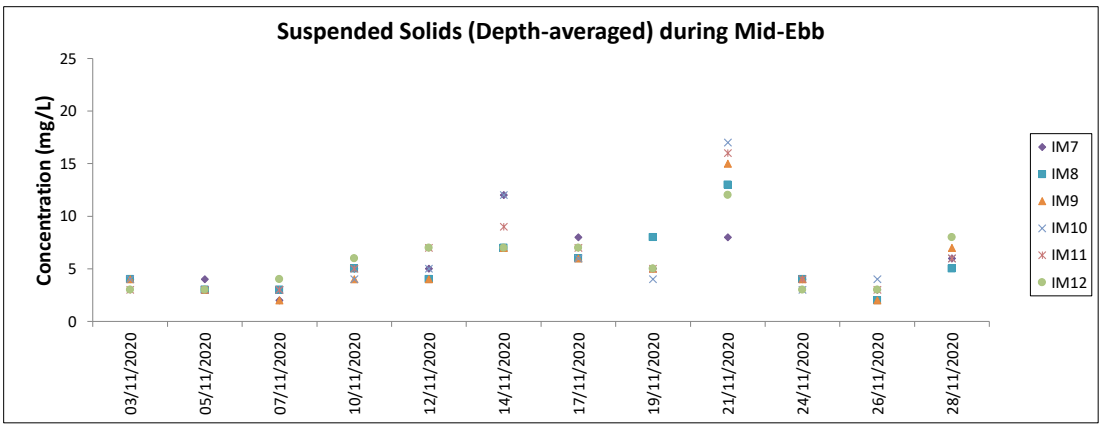


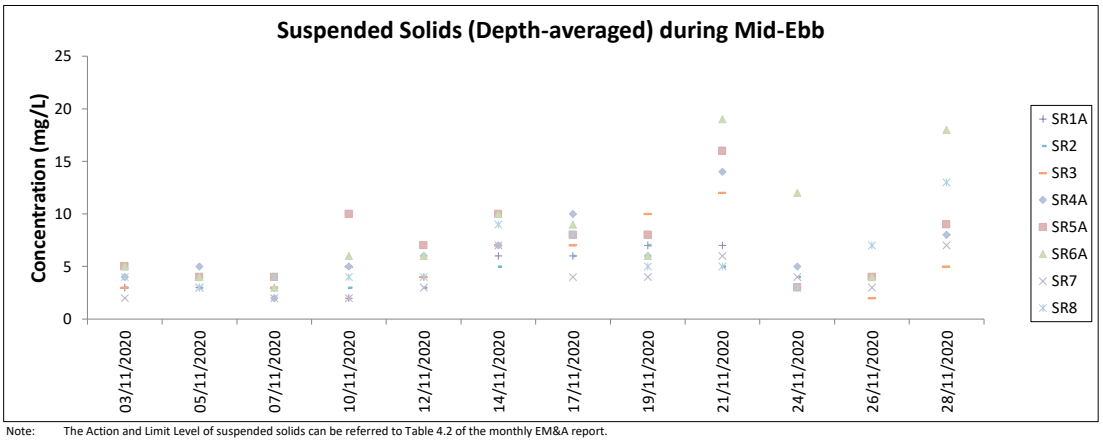


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

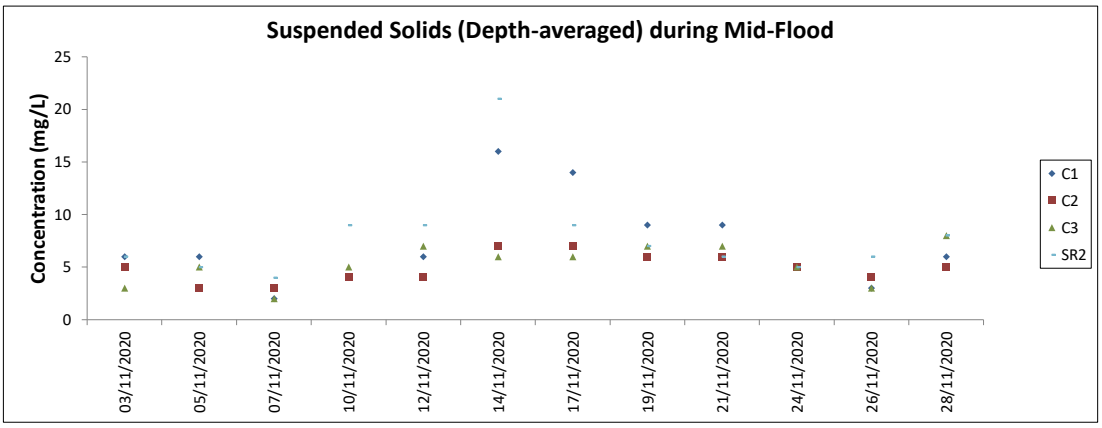


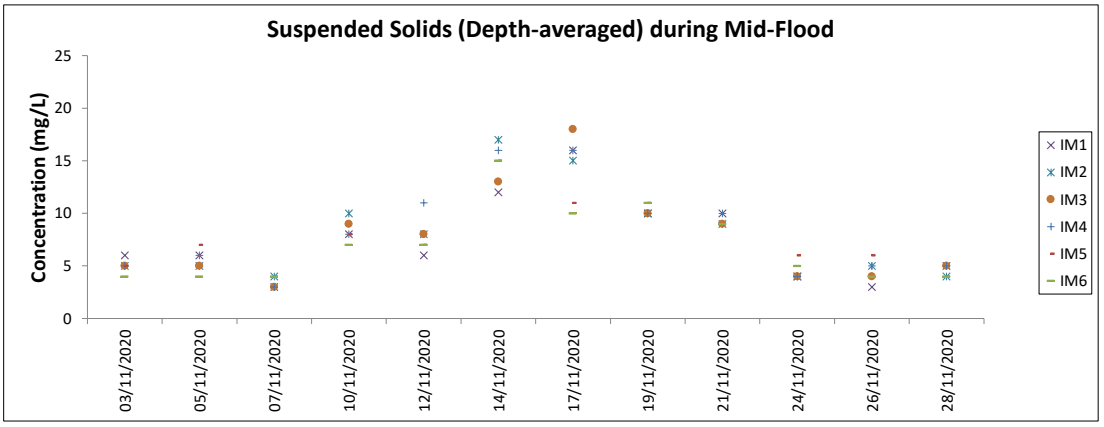


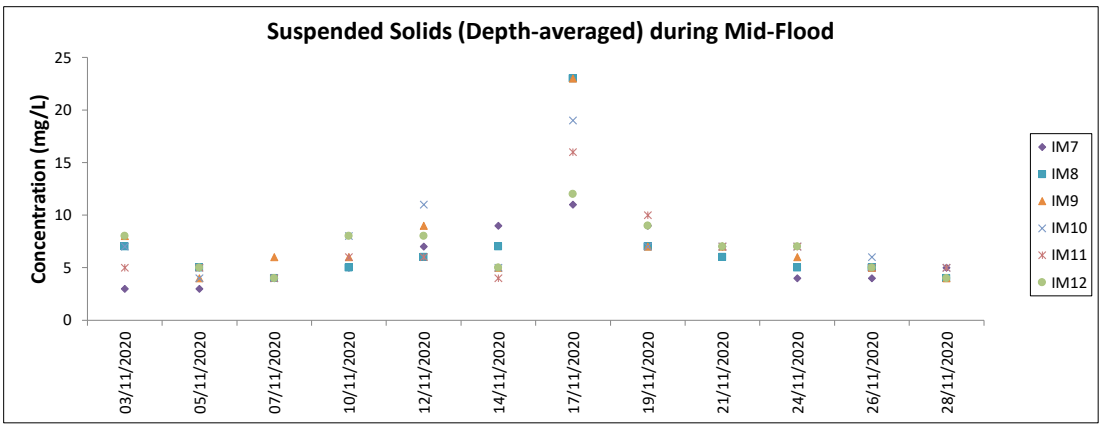


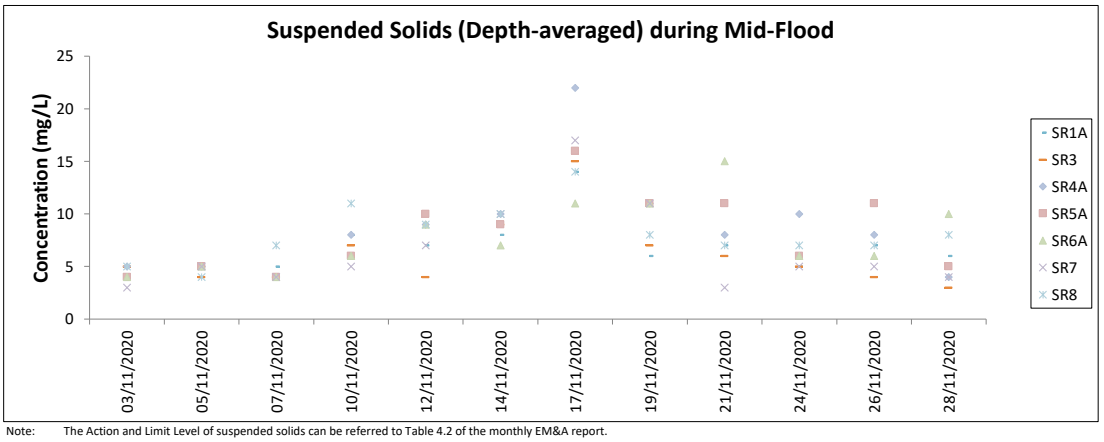


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

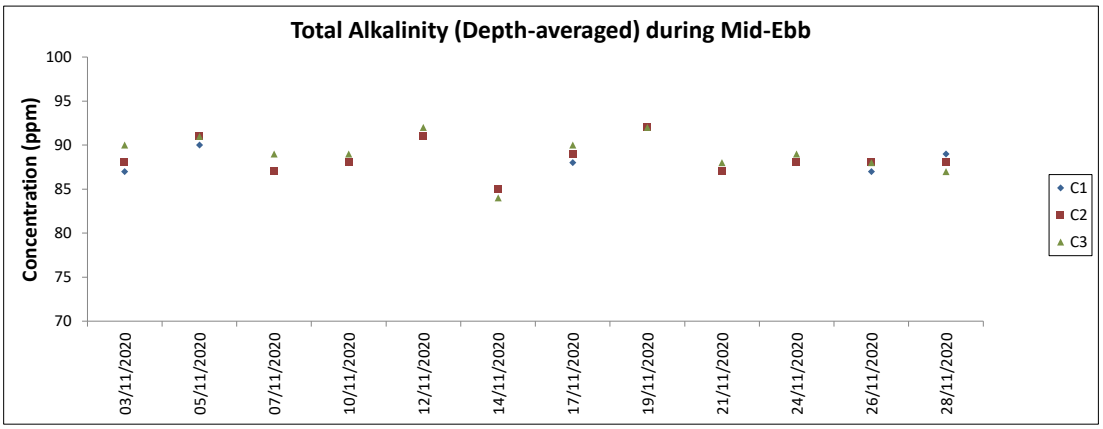


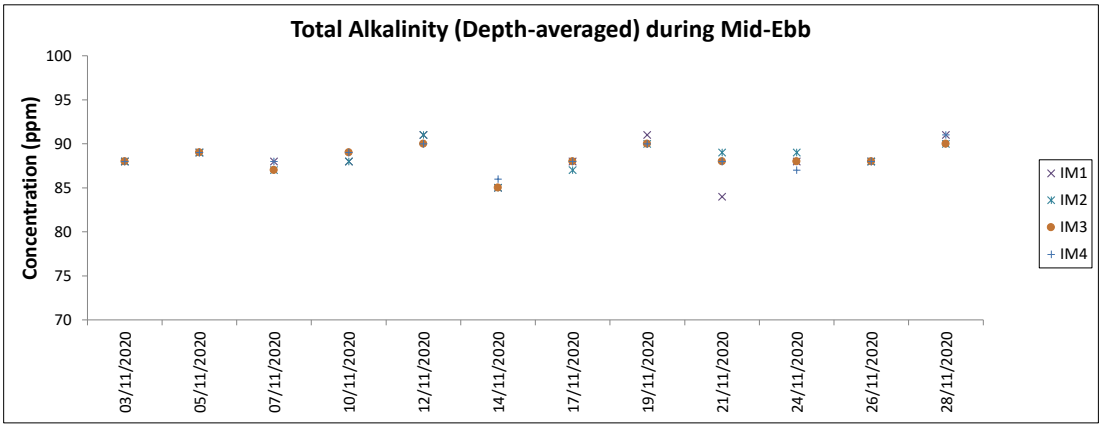


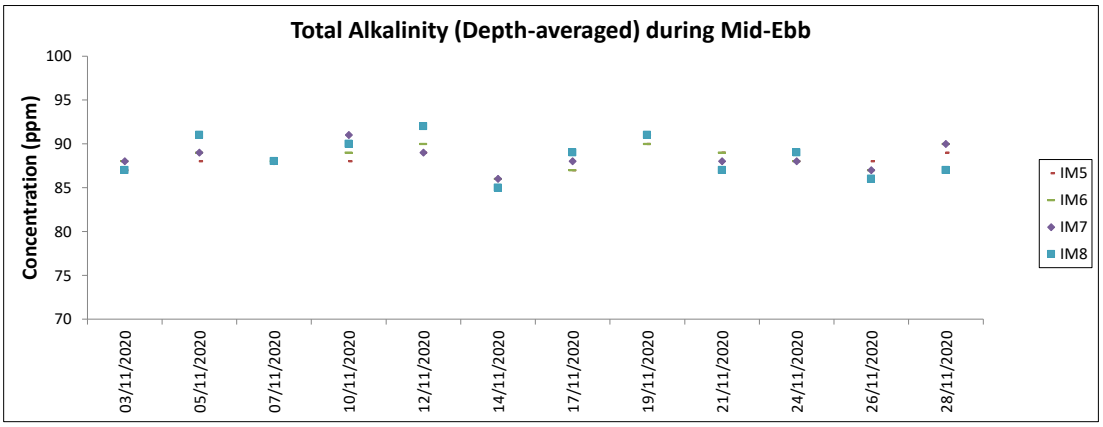


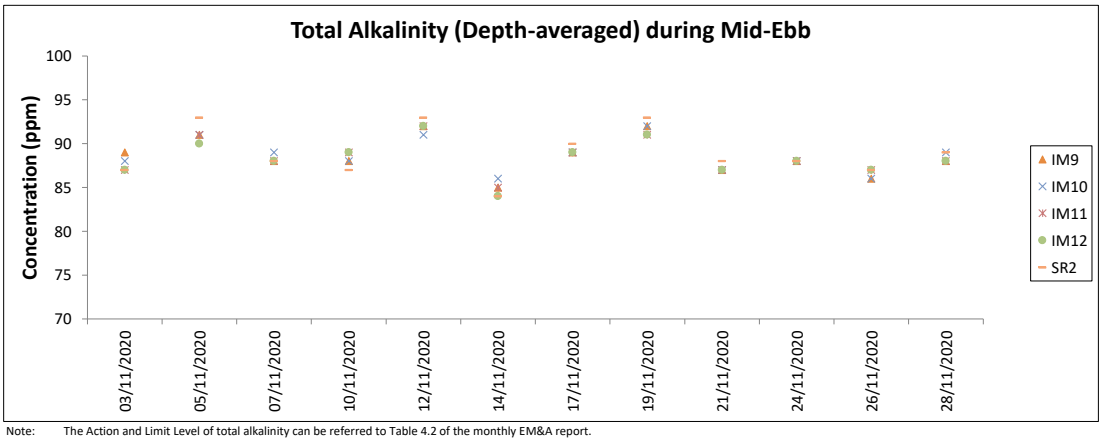


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

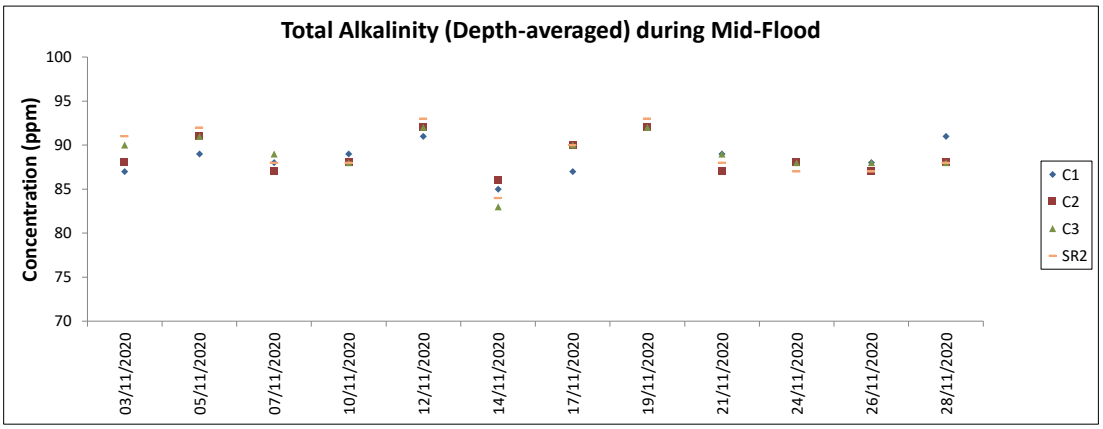


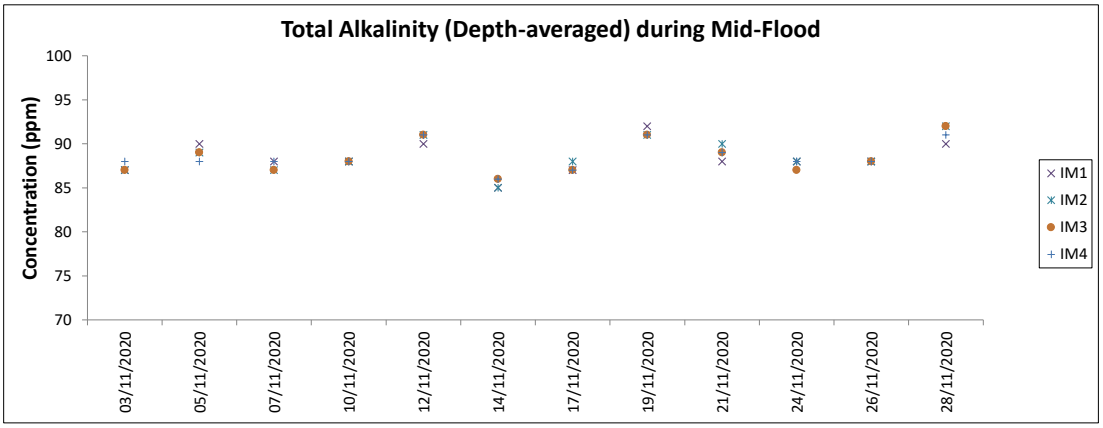


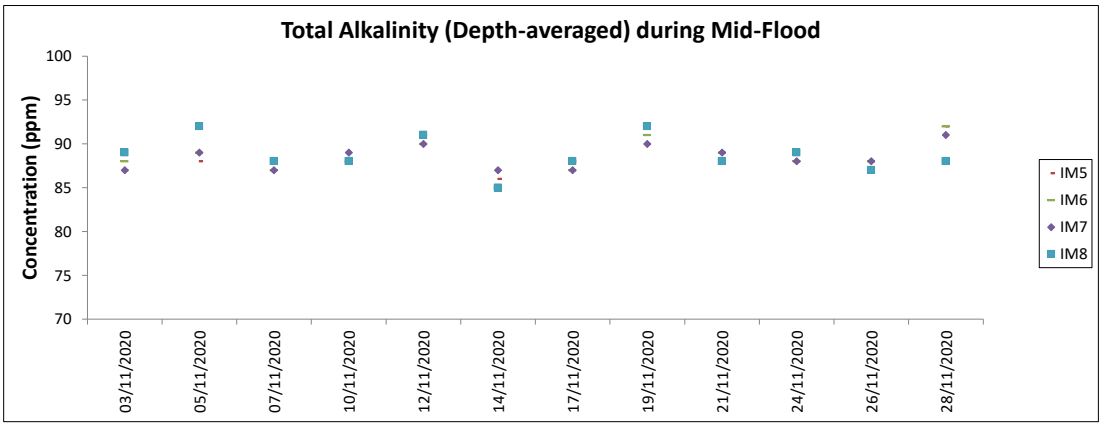


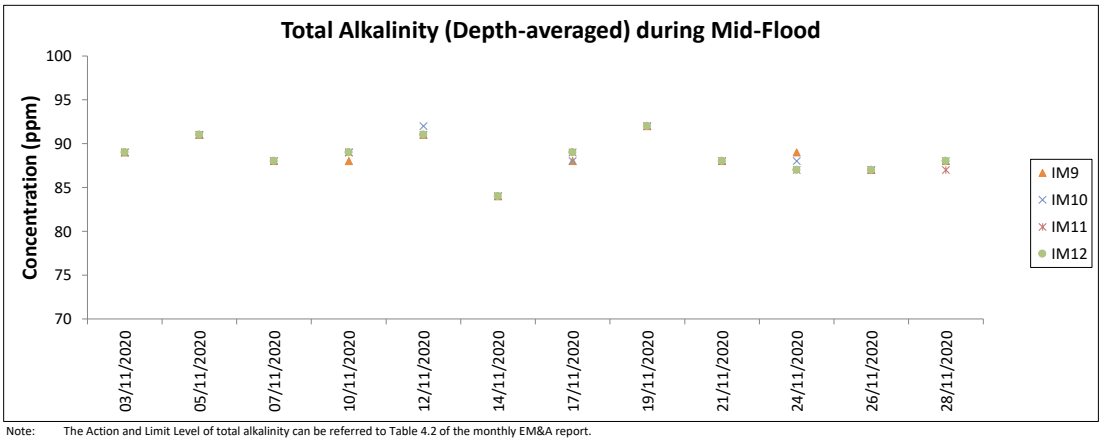


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

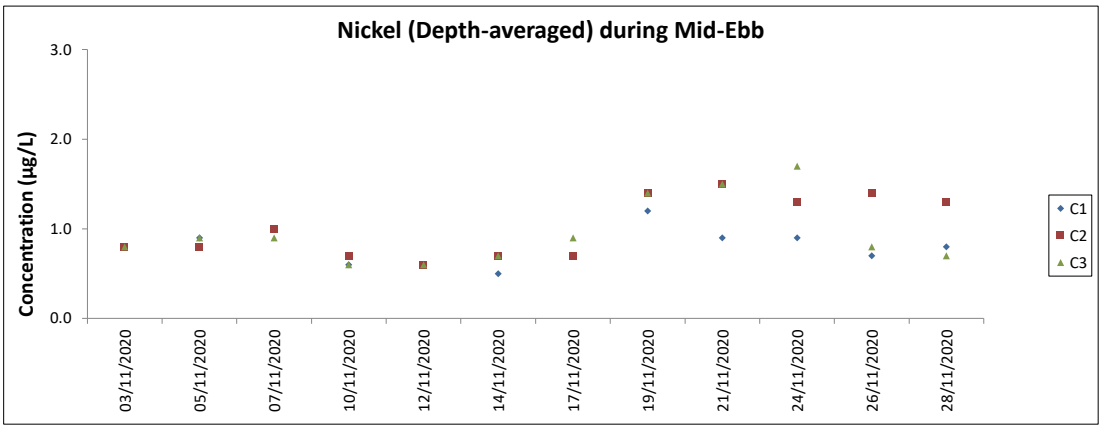


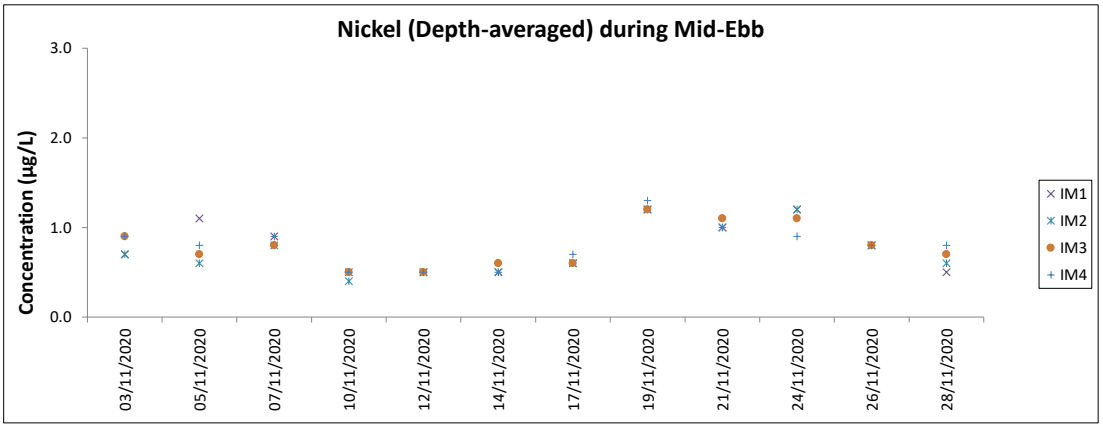


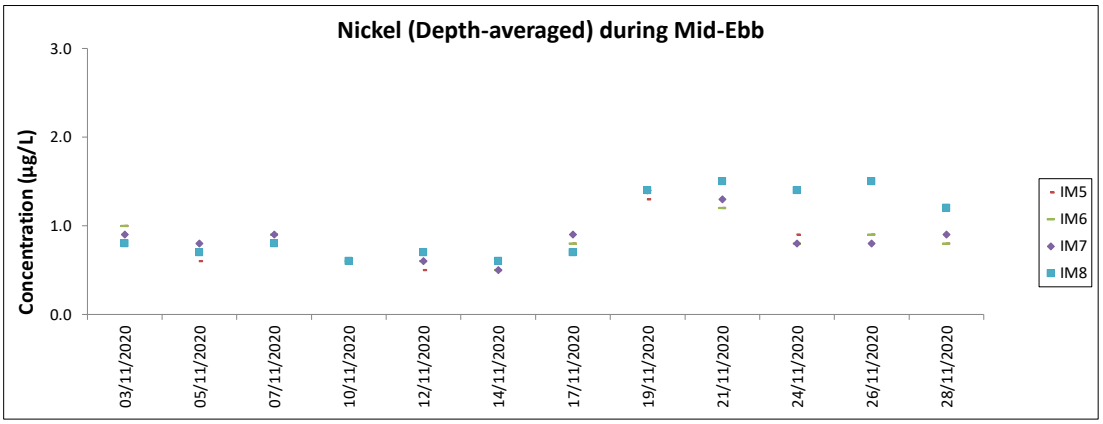


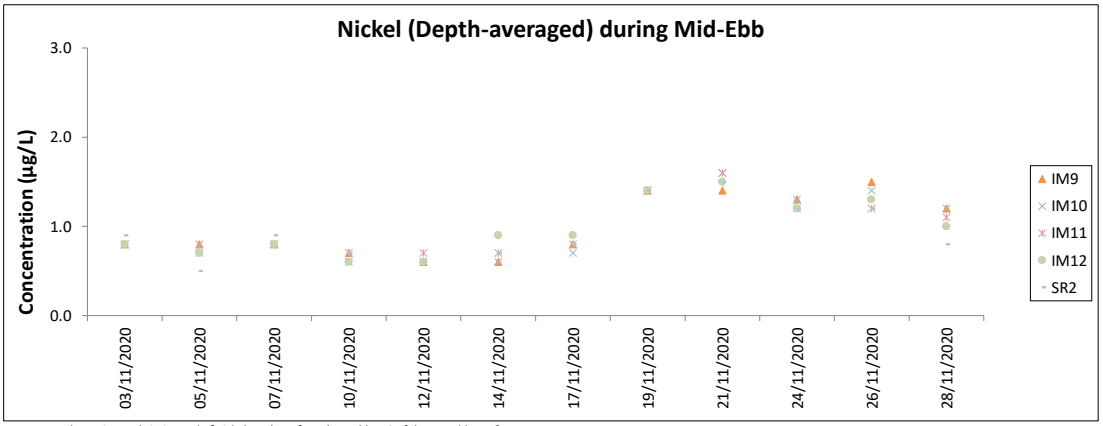


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

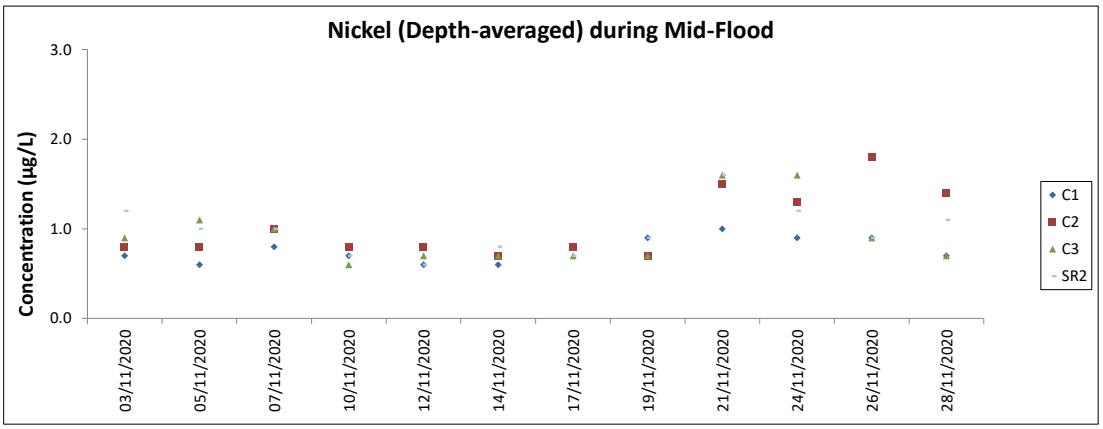


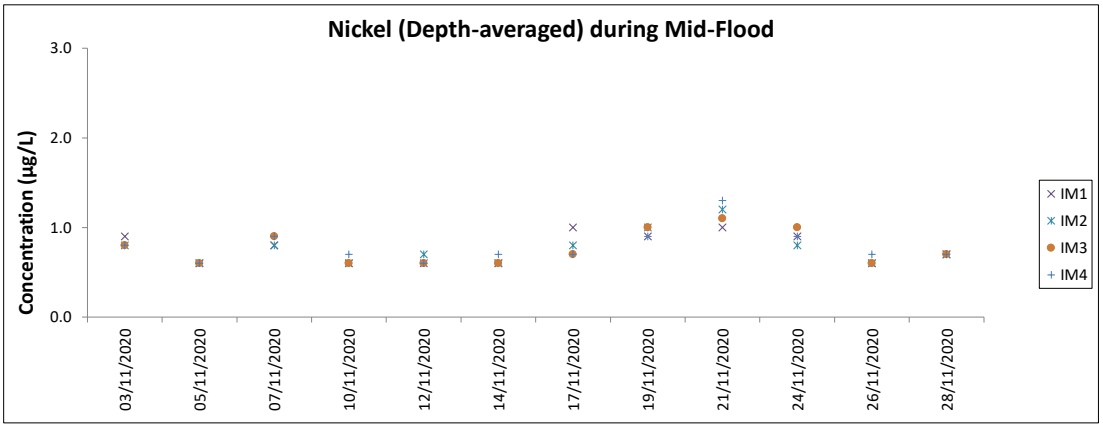


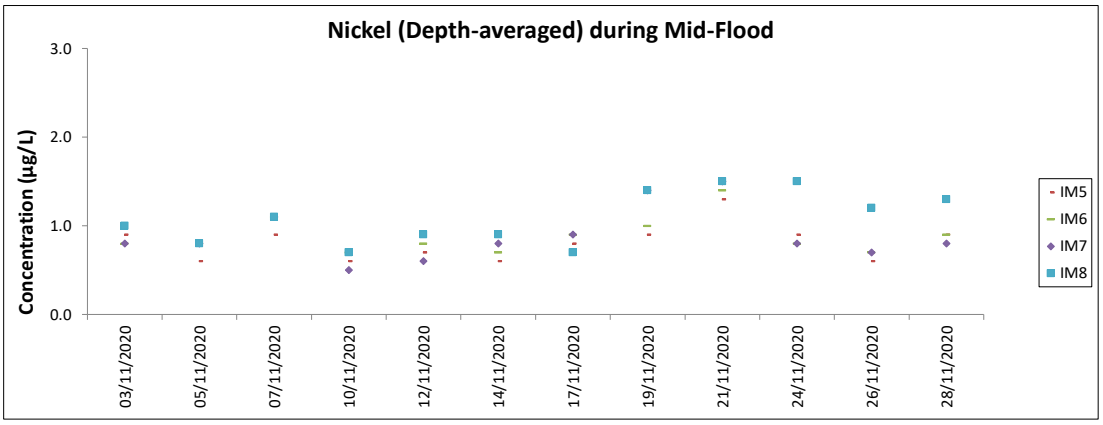


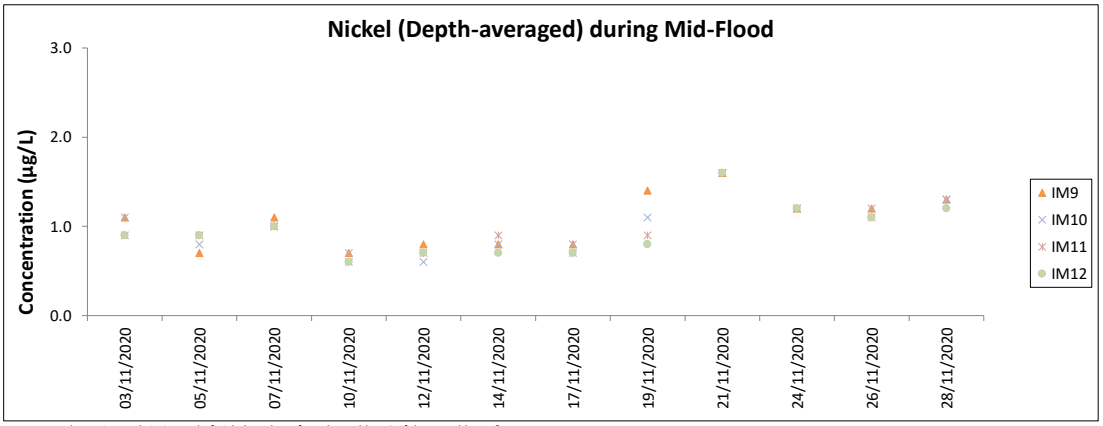


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

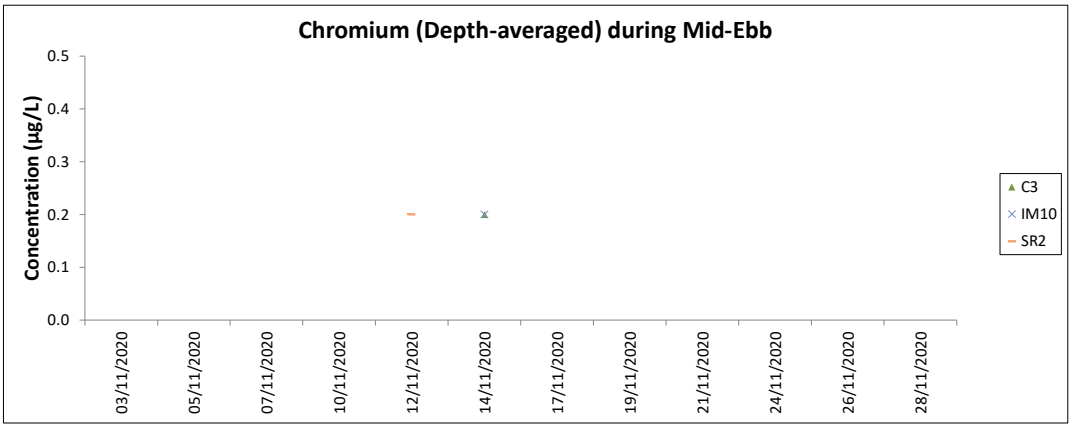








Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/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
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
5-Nov-20	NWL	2	6.540	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	3	53.550	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	4	3.300	AUTUMN	32166	3RS ET	P
5-Nov-20	NWL	2	3.910	AUTUMN	32166	3RS ET	S
5-Nov-20	NWL	3	7.300	AUTUMN	32166	3RS ET	S
6-Nov-20	AW	2	4.960	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	2	9.750	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	3	7.819	AUTUMN	32166	3RS ET	P
6-Nov-20	WL	2	3.905	AUTUMN	32166	3RS ET	S
6-Nov-20	WL	3	3.314	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
9-Nov-20	NEL	2	34.800	AUTUMN	32166	3RS ET	P
9-Nov-20	NEL	3	1.900	AUTUMN	32166	3RS ET	P
9-Nov-20	NEL	2	9.700	AUTUMN	32166	3RS ET	S
9-Nov-20	NEL	3	0.900	AUTUMN	32166	3RS ET	S
10-Nov-20	NEL	2	36.140	AUTUMN	32166	3RS ET	P
10-Nov-20	NEL	2	11.160	AUTUMN	32166	3RS ET	S
16-Nov-20	AW	2	2.550	AUTUMN	32166	3RS ET	P
16-Nov-20	AW	3	1.170	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	2	5.427	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	3	13.386	AUTUMN	32166	3RS ET	P
16-Nov-20	WL	2	3.583	AUTUMN	32166	3RS ET	S
16-Nov-20	WL	3	5.244	AUTUMN	32166	3RS ET	S
17-Nov-20	NWL	2	2.430	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	3	45.790	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	4	12.370	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	5	2.900	AUTUMN	32166	3RS ET	P
17-Nov-20	NWL	3	8.480	AUTUMN	32166	3RS ET	S
17-Nov-20	NWL	4	3.130	AUTUMN	32166	3RS ET	S
18-Nov-20	SWL	2	19.300	AUTUMN	32166	3RS ET	P
18-Nov-20	SWL	3	35.530	AUTUMN	32166	3RS ET	P
18-Nov-20	SWL	2	6.800	AUTUMN	32166	3RS ET	S
18-Nov-20	SWL	3	9.070	AUTUMN	32166	3RS ET	S
19-Nov-20	SWL	1	1.480	AUTUMN	32166	3RS ET	P
19-Nov-20	SWL	2	52.830	AUTUMN	32166	3RS ET	P
19-Nov-20	SWL	2	15.390	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
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
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
5-Nov-20	1	1044	CWD	1	NWL	3	112	ON	3RS ET	22.2740	113.8757	AUTUMN	NONE	S
6-Nov-20	1	1018	CWD	5	WL	2	821	ON	3RS ET	22.2759	113.8504	AUTUMN	NONE	S
6-Nov-20	2	1341	CWD	3	WL	3	206	ON	3RS ET	22.2506	113.8463	AUTUMN	NONE	P
6-Nov-20	3	1400	CWD	4	WL	2	236	ON	3RS ET	22.2414	113.8416	AUTUMN	NONE	P
6-Nov-20	4	1429	CWD	4	WL	3	246	ON	3RS ET	22.2321	113.8358	AUTUMN	NONE	P
6-Nov-20	5	1443	CWD	5	WL	2	216	ON	3RS ET	22.2236	113.8373	AUTUMN	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
6-Nov-20	6	1513	CWD	4	WL	2	500	ON	3RS ET	22.2042	113.8219	AUTUMN	NONE	S
16-Nov-20	1	0940	CWD	2	AW	2	475	ON	3RS ET	22.2971	113.8842	AUTUMN	GILLNETTER	P
16-Nov-20	2	1040	CWD	1	WL	3	800	ON	3RS ET	22.2740	113.8482	AUTUMN	NONE	S
16-Nov-20	3	1059	CWD	4	WL	3	14	ON	3RS ET	22.2607	113.8480	AUTUMN	NONE	P
16-Nov-20	4	1210	CWD	3	WL	3	232	ON	3RS ET	22.2139	113.8226	AUTUMN	NONE	P
16-Nov-20	5	1249	CWD	1	WL	2	285	ON	3RS ET	22.2055	113.8336	AUTUMN	NONE	P
16-Nov-20	6	1317	CWD	3	WL	2	608	ON	3RS ET	22.1901	113.8421	AUTUMN	NONE	S
17-Nov-20	1	1034	CWD	1	NWL	4	24	ON	3RS ET	22.2723	113.8701	AUTUMN	NONE	P
19-Nov-20	1	1202	FP	2	SWL	2	62	ON	3RS ET	22.1621	113.9184	AUTUMN	NONE	P
19-Nov-20	2	1514	CWD	4	SWL	2	71	ON	3RS ET	22.1883	113.8491	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 424.108 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 44 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in November 2020 are shown as below:

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

$$STG = \frac{14}{424.108}\ x\ 100 = 3.30$$

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

$$ANI = \frac{44}{424.108}\ x\ 100 = 10.37$$

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

A total of 1207.628 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 33 on-effort sightings and total number of 127 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)

$$STG = \frac{33}{1207.628}\ x\ 100 = 2.73$$

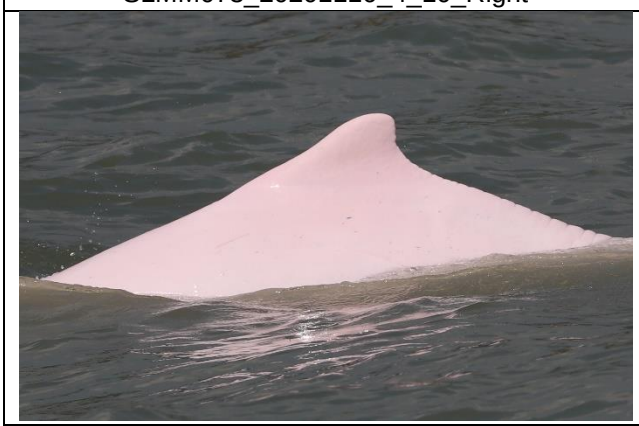
Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{127}{1207.628}\ x\ 100 = 10.52$$

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

	
SLMM064_20201106_1_2	WLMM107_20201106_1_9
	
WLMM135_20201106_1_2	WLMM149_20201106_1_8_Lower
	
SLMM003_20201106_3_8	WLMM079_20201106_3_8
	
WLMM114_20201106_3_5	WLMM147_20201106_3_2_Top

	
WLMM007_20201106_5_1	WLMM150_20201106_5_4
	
WLMM160_20201106_5_3	WLMM163_20201106_5_7
	
SLMM010_20201106_6_3	WLMM007_20201106_6_3
	
WLMM080_20201116_1_3	SLMM023_20201116_3_15

	
SLMM052_20201116_3_9	WLMM079_20201116_3_5
	
WLMM147_20201116_3_2	SLMM007_20201116_4_7_Left
	
SLMM073_20201116_4_10_Right	WLMM073_20201116_5_2
	
SLMM037_20201116_6_5	WLMM114_20201116_6_5

	
SLMM010_20201117_1_1	SLMM010_20201119_2_4
	
SLMM012_20201119_2_7	SLMM037_20201119_2_5
	
SLMM049_20201119_2_5	

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
4/Nov/20	Sha Chau	10:55	16:55	6:00	2-3	3	0	0
16/Nov/20	Lung Kwu Chau	8:57	14:57	6:00	2-3	3	2	2-3

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

Appendix D. 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	Superseded by GW-RS0851-20
			GW-RS0851-20	Valid from 16 Nov 2020 to 12 May 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-RS0659-20	Superseded by GW-RS0849-20
			GW-RS0849-20	Valid from 14 Nov 2020 to 1 May 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	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-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
			GW-RS0825-20	Valid from 16 Nov 2020 to 15 May 2021
		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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0532-20	Valid from 9 Aug 2020 to 6 Feb 2021
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
			GW-RS0822-20	Valid from 29 Nov 2020 to 28 May 2021
	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-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
			WT00031826-2018	Valid from 18 Sep 2018 to 30 Sep 2023
			WT00036551-2020	Valid from 17 Sep 2020 to 30 Sep 2025

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-RS0789-20	Valid from 24 Oct 2020 to 15 Apr 2021
		Stockpiling area of 3503	GW-RS0385-20	Superseded by GW-RS0768-20
			GW-RS0768-20	Superseded by GW-RS0870-20
			GW-RS0870-20	Valid from 25 Nov 2020 to 30 Apr 2021
		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
			GW-RS0869-20	Valid from 25 Nov 2020 to 31 Jan 2021
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	Superseded by GW-RS0882-20
		Works area of 3508	GW-RS0882-20	Valid from 26 Nov 2020 to 23 May 2021
		Works area of 3508(Area 3)	GW-RS0802-20	Valid from 27 Oct 2020 to 23 Apr 2021
		Works area of 3508	GW-RS0884-20	Valid from 27 Nov 2020 to 25 May 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-RS0681-20	Valid from 6 Oct 2020 to 5 Apr 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
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
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0706-20	Superseded by GW-RS0840-20
			GW-RS0840-20	Valid from 16 Nov 2020 to 12 May 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-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
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
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0860-20	Valid from 16 Nov 2020 to 12 May 2021
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	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	Superseded by GW-RS0850-20
			GW-RS0850-20	Valid from 25 Nov 2020 to 24 May 2021
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
			L-3-262(1)	Valid from 17 Nov 2020 to 16 Nov 2024
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0658-20	Valid from 18 Sep 2020 to 13 Mar 2021

Appendix E. 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	4	0	0
From 28 December 2015 to end of the reporting period	27	1	1

Appendix F. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 2020)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 2020)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUL - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Nov	12:42	8S215	XZM	Arrival	10.8	-	-
30-Nov	12:47	8S215	XZM	Arrival	11	-	-