MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.60 (For December 2020)

January 2021

Airport Authority Hong Kong

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This Monthly EM&A Report No. 60 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 January 2021

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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 January 2021

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 60 (December 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 60 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 January 2021.

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 60th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 December 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	36
Noise monitoring	20
Water quality monitoring	14
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of 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

		
Photo Shoot for Photo Identification of CWD	Noise Impact Monitoring Conducted by ET in Sha Lo Wan	On-site Checking of Construction Noise Permit conducted by ET

Results of Impact Monitoring

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

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

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

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

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

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

Contract 3303 Third Runway and Associated Works

- Footing and utilities work;
- 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;
- Pre-drilling; 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;
- Laying of drainage pipes and ducts; and
- Road works.

Contract 3722 Construction Support Facilities

- 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, working platform and ventilation ducts;
- Cofferdam for shaft; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Installation of storm drain pipes;
- Pre-drilling;
- Foundation; and
- Site establishment.

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure;
- Construction of drainage, pavement, fencing;
- Operation of concrete batching plant; 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		√	No construction activities–related complaint was received during the reporting period. For the complaint received on 19 November 2020, ET requested the relevant contractor to provide information related to the complaint. ET conducted day-time and night-time inspections on the concerned vessel after receiving the complaint and checked the site inspection records of the vessel around the alleged period, and no adverse observation was made. The Contractor had followed their contract-specific Spill Response Plan and provided spill kits on the vessel. To follow up, the relevant contractor was reminded to strictly follow the standard operation procedures for cement refilling works and the contract-specific Spill Response Plan. The case was considered closed. For the complaint received on 27 November 2020, ET requested the relevant contractors to provide information related to the complaint. During regular site inspections, dust generation from vehicular movements was observed in the alleged area on one occasion and was rectified by the Contractor	Nil

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
			afterwards. The Contractors implemented water spraying according to their dust control management plans. All contractors were reminded to properly and adequately implement dust suppression measures especially in the current dry season and to prevent air pollution on site. The case was considered closed.	
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

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

1 Introduction

1.1 Background

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

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

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of Construction Phase Monthly EM&A Report No. 58.

1.2 Scope of this Report

This is the 60th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 December 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 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: 23 December 2020;
- Two environmental briefing on EP and EM&A requirements of the 3RS Project provided by ET;
- Eighteen environmental management meetings for EM&A review with works contracts: 3, 4, 8, 11, 16, 17, 18, 23, 29, 30 and 31 December 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 (μg/m^3)	Limit Level (μg/m^3)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	20 Oct 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	25 - 77	306	500
AR2	35 - 71	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)	68 - 73	75
NM4(1)	60 - 62	70(2)
NM5(1)	57 - 67	75
NM6(1)	62 - 70	75

Notes:

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

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

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

3.5 Conclusion

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

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, suspended solids (SS), total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

Due to the completion of all marine-based DCM works within December 2020, regular DCM monitoring is proposed to be ceased at all monitoring stations starting within January 2021 and would be resumed if there are marine-based DCM works in the coming future.

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)

Monitoring Station	Description	Coordinates		Parameters
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	
SR5A	San Tau Beach SSSI	810696	816593	
SR6A[5]	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
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[6]	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.

(6) Due to the completion of all marine-based DCM works within December 2020, regular DCM monitoring is proposed to be ceased at all monitoring stations starting within January 2021 and would be resumed if there are marine-based DCM works in the coming future.

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 (1)	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)	2 Dec 2020	**Appendix D**
	YSI ProDSS (Serial No. 16H104233)	7 Sep 2020 (1)	Monthly EM&A Report No. 57, Appendix D
	YSI ProDSS (Serial No. 18A104824)	2 Dec 2020	**Appendix D**
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N64701)	30 Nov 2020	**Appendix D**

Note:

(1) The monitoring equipment was not used in the reporting period after the expiry date of the calibration certificate.

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, except SS and chromium, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix C**.

For SS and chromium, some of the testing results triggered the corresponding Action and Limit Levels, and investigations were conducted accordingly.

Table 4.7 to **Table 4.8** present the summary of the SS compliance status at IM and SR stations during mid-ebb and mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR2	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/12/2020																				
03/12/2020																				
05/12/2020																				
08/12/2020																				
10/12/2020																				
12/12/2020																				
15/12/2020																				
17/12/2020																		D		
19/12/2020		D	D	D																
22/12/2020																				
24/12/2020																				
26/12/2020																				
29/12/2020																				
31/12/2020																				
No. of result triggering Action or Limit Level	0	1	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0

Table 4.8: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/12/2020																			
03/12/2020																			
05/12/2020																			
08/12/2020																			
10/12/2020																			
12/12/2020																			
15/12/2020																			
17/12/2020										D									
19/12/2020					D	D			D	D									
22/12/2020																			
24/12/2020																			
26/12/2020																			
29/12/2020																			
31/12/2020																			
No. of result triggering Action or Limit Level	0	1	1	0	1	1	0	0	1	2	2	2	0	0	0	0	0	0	0

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

Monitoring results triggered the corresponding Action and Limit Levels on three monitoring days. In accordance with Event and Action Plan stipulated in the Manual, EPD, IEC and Contractor were informed when the corresponding Action or Limit Levels were triggered.

Investigation focusing on the case which occurred at monitoring station located downstream of the Project were carried out. Details of the Project's marine construction activities and site

observations on the concerned monitoring day were collected. Findings were summarized in **Table 4.9**.

Table 4.9: Summary of Findings from Investigation of SS Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
17/12/2020	Marine filling	At least 3.5km	Enhanced silt curtain deployed	Yes	No	No
19/12/2020	No marine construction works	Not applicable	Not applicable	No	No	No

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

For SS results recorded in ebb tide at SR6A and flood tide at IM10 on 17 December 2020 which triggered the corresponding Action Level, no silt plume was observed at these monitoring stations and appropriate mitigation measures were implemented properly by contractors. Construction vessels not registered under the Project were observed in the vicinity of SR6A during monitoring, however, there was no abnormal observation. For SS result recorded at SR6A during ebb tide, all monitoring results recorded at the IM stations, which are located closer to the active construction activities, were within the Action and Limit Levels. For the case at IM10 during flood tide, SS results recorded at IM5 and IM6, which are downstream impact monitoring stations closer to the active marine construction activities, were within the Action and Limit Level. Moreover, during the monitoring SR6A and IM10 were far away (i.e. at least 3.5km) from the nearest marine construction activities of the Project, so they were unlikely affected by the Project . Therefore, the cases were considered unlikely due to the Project.

For SS results recorded in ebb tide at IM2, IM3 and IM4, and flood tide at IM5, IM6, IM9 and IM10 on 19 December 2020 which triggered the corresponding Action or Limit Levels, no silt plume was observed at these monitoring stations and appropriate mitigation measures were implemented properly by contractors. No construction vessel was observed in the vicinity when monitoring was conducted at these monitoring stations. It is noted that no marine construction activity for the whole Project was conducted on that day. For the cases at IM2, IM3 and IM4 during ebb tide, SS results recorded at adjacent upstream impact stations, namely IM5, IM6 and IM7, also trigger the corresponding Action Level. For the cases at IM5 and IM6 during flood tide, SS results triggered the corresponding Action Level at these stations during ebb tide, when these stations were located upstream of the project. For the cases at IM9 and IM10 during flood tide, SS results recorded at adjacent upstream impact stations, namely IM11 and IM12, also triggered the corresponding Action Level. These suggested the presence of external source that might affect SS concentration in that area. Therefore, the cases were considered unlikely due to the Project.

Table 4.10 presents the summary of the chromium compliance status at IM stations during mid-ebb for the reporting period.

Table 4.10: Summary of Chromium Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/12/2020												
03/12/2020												
05/12/2020												
08/12/2020												
10/12/2020												
12/12/2020												
15/12/2020												
17/12/2020												
19/12/2020												
22/12/2020												
24/12/2020												
26/12/2020												
29/12/2020												
31/12/2020												
No. of result triggering Action or Limit Level	0	0	0	0	0	1	0	0	0	0	0	0

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

One of the monitoring results triggered the corresponding Action Level on 22 December 2020. In accordance with Event and Action Plan stipulated in the Manual, IEC and Contractor were informed when the corresponding Action Level was triggered.

The case occurred at a monitoring station upstream of the Project during ebb tide. Chromium is one of the DCM regular monitoring parameters. However, no DCM work was conducted when monitoring was carried out at this monitoring station. Therefore, the case was considered unlikely due to the Project.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only a minor number of results triggered the corresponding Action and Limit Levels, and investigations were conducted accordingly.

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

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

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

include maintaining mitigation measures properly for reclamation works including 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)
November 2020[2][3]	7,611	*100,368	31	30,995	1,297	3,600	1,545
December 2020[2][4]	20,497	52,073	4,879	4,027	240	5,980	2,223

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. The details of the marine sediment sampling, treatment and backfilling will be reported in the subsequent EM&A Reports upon completion.

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 4, 9, 10, 11, 15, 16, 18 and 21 December 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

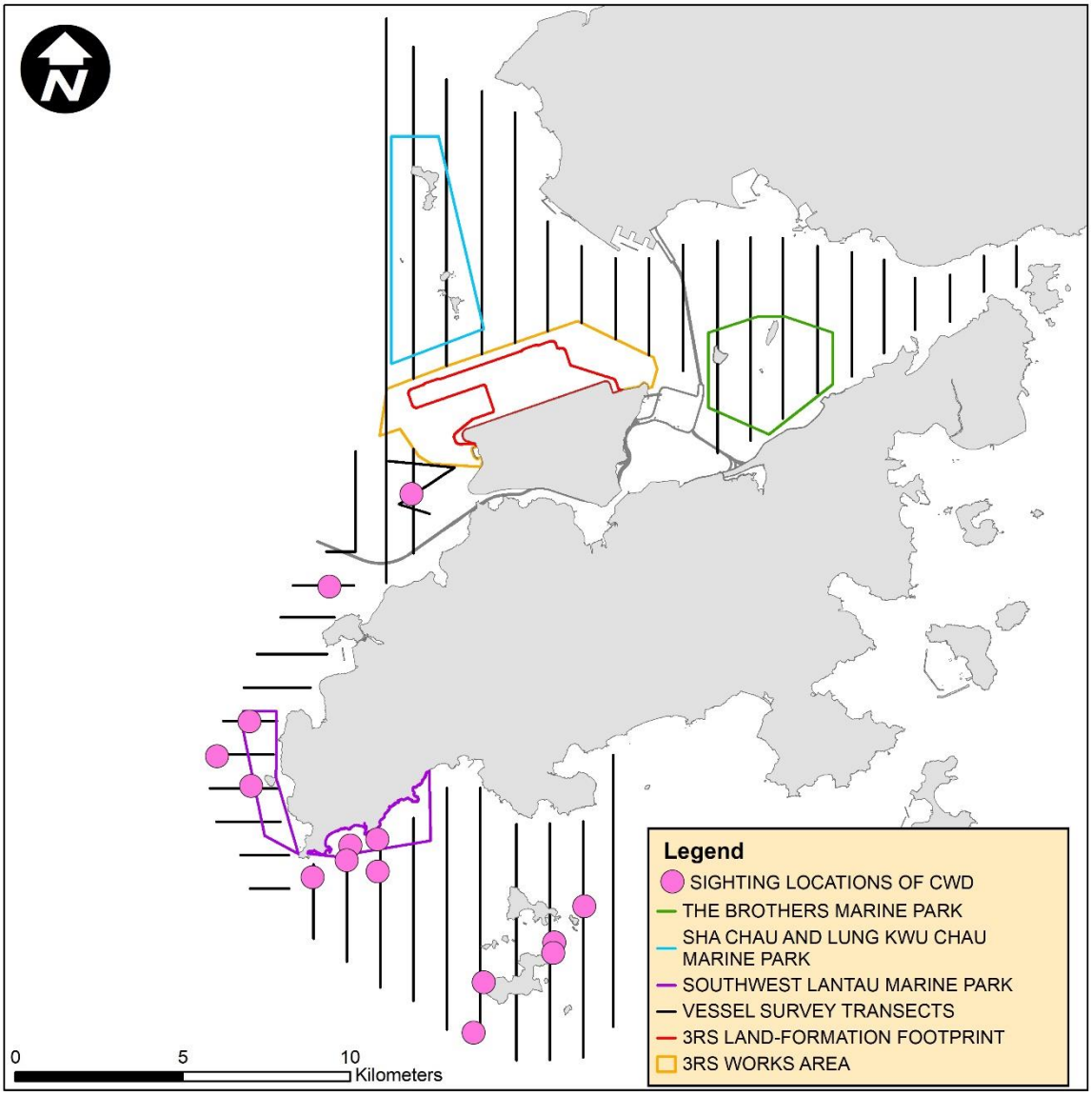
A total of around 451.40 km of survey effort was collected from these surveys and around 83.2% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In December 2020, 15 sightings with 27 dolphins were sighted. All these sightings 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 December 2020 is illustrated in **Figure 6.3**. In NWL including AW transects, there was one sighting located west of the airport island. In WL, most of the CWD sightings were recorded within or nearby the Southwest Lantau Marine Park, while one sighting was recorded at north of Tai O. In SWL, the CWD sightings were clustered in two areas, one within or in close vicinity of the Southwest Lantau Marine Park, and another around the Soko Islands. 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 December 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 December 2020, a total of around 375.68 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 15 on-effort sightings with 27 dolphins were sighted under such condition. Calculation of the encounter rates in December 2020 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from October 2020 to December 2020), a total of around 1159.44 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 43 on-effort sightings and a total number of 135 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 December 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)
December 2020	3.99	7.19
Running Quarter from October 2020 to December 2020(1)	3.71	11.64
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 October 2020 to December 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 December 2020, 15 groups of 27 dolphins in total were sighted, and the average group size of CWDs was 1.8 dolphins per group. Sightings with small group size (i.e. 1-2 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

No sightings of CWDs were recorded engaging in feeding activities in December 2020. No association with fishing boats was observed during the reporting period.

Mother-calf Pair

In December 2020, one CWD sighting was recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In December 2020, a total number of nine different CWD individuals were identified for totally 12 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	09-Dec-20	7	SWL	SLMM037	09-Dec-20	5	SWL
	10-Dec-20	4	SWL			7	SWL
SLMM010	10-Dec-20	4	SWL	WLMM028	10-Dec-20	7	SWL
SLMM014	10-Dec-20	5	SWL	WLMM029	10-Dec-20	7	SWL
SLMM035	09-Dec-20	1	SWL	WLMM063	16-Dec-20	1	AW
		5	SWL	WLMM064	16-Dec-20	2	WL

6.4.3 Land-based Theodolite Tracking Survey

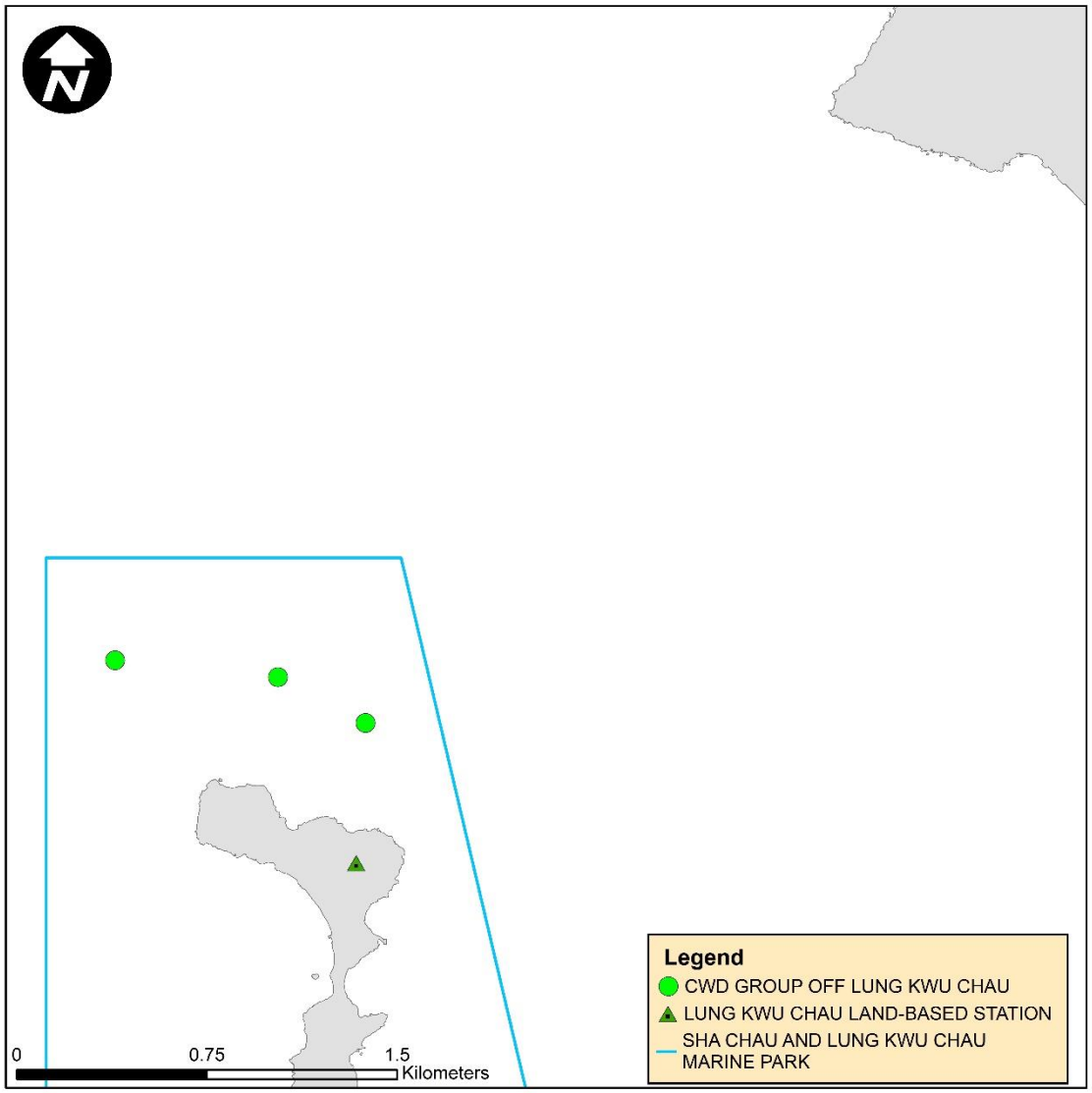
Survey Effort

Land-based theodolite tracking surveys were conducted at SC on 10 December 2020 and at LKC on 28 December 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. Three CWD groups were 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 December 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	3	0.5
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**3**	**0.25**

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



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

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was retrieved on 3 December 2020 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR will be deployed for about 4 weeks and retrieved in early January 2021 for annual data 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. The EAR will be replaced by F-POD/C-POD for deployment at the same monitoring location with effective from January 2021. 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, 3802 (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, 3802 (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 118 and 11, respectively. Six trees were transplanted to their corresponding receptor sites in December 2020. Three retained trees were removed due to damage by typhoon, 27 retained trees were updated as not located within Project's contract works area and 1 tree is updated to 'retain' under Contract 3801 during the reporting period. 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	9	0
3602	2	0	0

3801	88	2(1)	0
Sub-total	118	11	0
Provisional			
Contract	**Retain (nos.)**	**Transplanted (nos.)**	**To-be-transplanted (nos.)**
3508(2)	155	0	22
Sub-total	155	0	22
Grand Total	**273**	**11**	**22**

Notes:

(1) Two trees, namely 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.

A total of six trees under Contract 3503 (i.e. T812, T814, T815, T829, T830 and T831) were transplanted during the reporting period. Summary of the updated transplanted trees and photos are presented in **Table 7.4** and **Table 7.5** respectively.

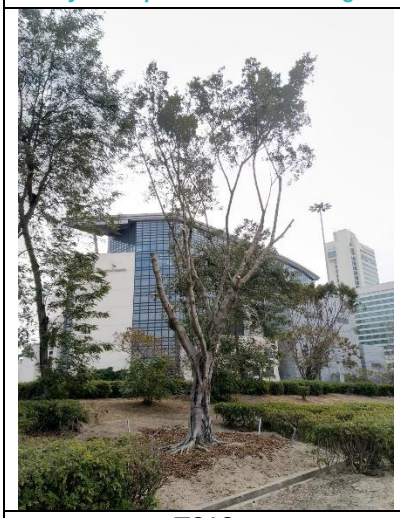
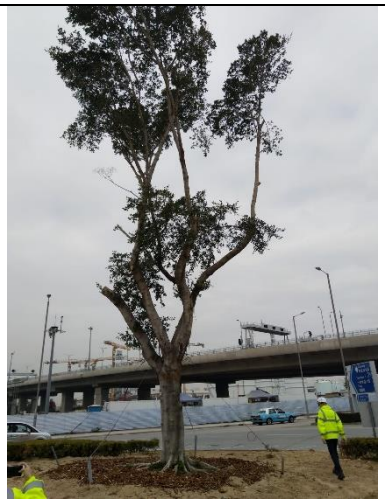
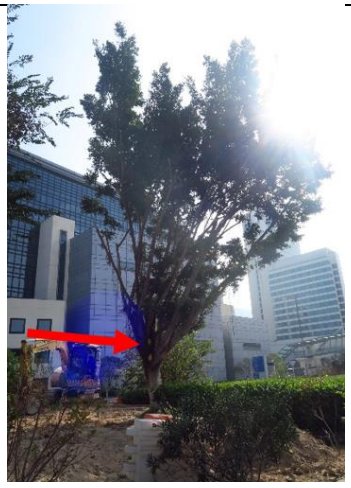
Table 7.4: Summary of the Transplanted Trees Updated in the Reporting Period

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.
Newly Transplanted Trees during the Reporting Period			
T812	21 Dec 2020	Dec 2020 – Dec 2021(2)	Under the 12-month establishment period
T814	20 Dec 2020	Dec 2020 – Dec 2021(2)	
T815	15 Dec 2020	Dec 2020 – Dec 2021(2)	
T829	18 Dec 2020	Dec 2020 – Dec 2021(2)	
T830	14 Dec 2020	Dec 2020 – Dec 2021(2)	
T831	19 Dec 2020	Dec 2020 – Dec 2021(2)	

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
Newly Transplanted Trees during the Reporting Period		
		
T812	T814	T815
		
T829	T830	T831

Under 10-year Long-term Management:	
	
CT276	CT1253

7.3 Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CARs for Golf Course and T2 Emergency Power Supply System Nos.1 (Volumes 1 and 2), 2, 3, 4 and 5 were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. EPD has issued no further comment for all the CARs and required ET to submit additional photos for sides and bottom of some of sampling points after the removal of pipelines to reaffirm no leakage from the pipelines concerned. Afterwards, the potential land contamination concern of two concerned systems will be closed.

7.4 Audit of SkyPier High Speed Ferries

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

Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No ferry movement between HKIA SkyPier and Zhuhai and Macau was recorded in December 2020. Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.6**.

The daily movement of all SkyPier HSFs, including those not using the diverted route, 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.

As informed by CLP Power, the construction works of the Hong Kong Offshore LNG Terminal Project may affect the route diversion operation of the SkyPier HSFs in Q1 2021. The captains were informed on the issue and ET will continue to closely monitor the implementation of the SkyPier Plan in the period.

Table 7.6: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 31 December 2020
Total number of ferry movements recorded and audited	0
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Daily Cap (including all SkyPier HSFs)	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.
- One skipper training session was held by contractor's Environmental Officer. Competency test was 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, 2 skippers were trained by ET and 1 skipper was trained by contractor's Environmental Officer. In total, 1666 skippers were trained from August 2016 to December 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 7.7**.

Table 7.7: Status of Submissions under Environmental Permit

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

7.8 Compliance with Other Statutory Environmental Requirements

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

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

7.9.1 Complaints

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

For the complaint received on 19 November 2020 regarding illegal cement discharge and domestic waste disposal from a marine vessel, the case was investigated 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, the identified marine vessel was responsible for cement mixing works and providing cement slurry for land improvement work during the alleged period from 29 to 31 August 2020. Although the Contractor had stopped operations on-board the vessel, ET conducted a night-time inspection on 23 November 2020 and day-time inspection on 24 November 2020. During both inspections, it was observed that the tops

of the cement silo tanks were covered and the cement pipes were closed with metal plates with no discharge of cement effluent. Moreover, in ET's inspections on the vessel on 18 August 2020 and 8 September 2020, it was observed that the set up on the vessel was properly in place and there was no environmental malpractice relating to the silo tank maintenance work as well as the handling of domestic waste. It was also noted that the Contractor had followed their contract-specific Spill Response Plan and provided spill kits on the vessel. No spill incident was reported by the Contractor during the alleged period. The environmental monitoring results for water quality, air quality and CWD monitoring in August 2020 were checked, where all the results were within the corresponding Action and Limit Levels except six cases of DO exceedances on 15 and 22 August 2020. Based on the investigation on the exceedances, the cases were considered not due to the Project. Following up on the complaint case, ET and IEC checked and noted the Contractor had executed corrective actions including conducting maintenance checking and inspections of vessels, provision of additional training for frontline staff, conducting an environmental emergency drill, and reviewing the implementation of their standard operating procedures in handling cement wastewater during maintenance works. The Contractor was also advised to implement suitable measures on issues regarding cement refilling works, spill response procedures and spill incident handling, and regular operation and maintenance. The ET would continue to remind all contractors to strictly follow both the standard operation procedures for cement refilling works and the contract-specific Spill Response Plan. ET and IEC would also conduct on-board inspections to ensure all similar cement mixing barges are maintaining good housekeeping and continue to monitor the Project's water quality, air quality, and CWD monitoring results. Hence, the complaint case was considered closed.

For the complaint received on 27 November 2020 regarding smoke and dust from a contractor during the alleged period from 2 to 16 November 2020, the case was investigated by ET in accordance with the Manual and the Complaint Management Plan of the Project. The ET identified the related 3RS contractors and requested the Contractors to provide more information regarding the complaint. According to the information provided by the Contractors, marine filling works and unloading of construction materials at an aggregate mixing plant were carried out at the alleged area during the alleged period. Water spraying by water truck and water hose as set out in the Contractors' dust control management plan were implemented at nearby haul road and stockpiling area. Sprinklers were also installed and operated at the stockpiling area of the aggregate mixing plant as dust suppression measure to further prevent fugitive dust. Based on ET's regular site inspections, water spraying were implemented at the alleged area according to the Contractors' dust control management plans. Around the alleged period, ET conducted regular site inspections in the alleged area on 3 and 17 November 2020, where on 3 November 2020 no smoke and dust emissions were observed at the alleged area. Dust generation from the vehicular movements was observed during the regular site inspection on 17 November 2020 and the related contractor was advised to implement sufficient dust suppression measures to keep haul roads in a damp condition. The Contractor subsequently rectified the issue by implementing water spraying on the concerned haul road. To follow up, ET reminded the related Contractors to continue implementing and strengthening their environmental mitigation measures for dust suppression measures. ET also reminded all contractors to properly and adequately implement dust suppression measures especially in the current dry season and to prevent air pollution on site. ET and IEC would continue to monitor the related contractors' environmental mitigation measures for dust suppression during the environmental site inspections. Hence, the complaint case was considered closed.

7.9.2 Notifications of Summons or Status of Prosecution

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

7.9.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Reclamation Works:

Contract 3206 Main Reclamation Works

- 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;
- 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;

- Pre-drilling; 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 ducts; and
- Road works.

Contract 3722 Construction Support Facilities

- 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, working platform and ventilation ducts;
- Cofferdam for shaft; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Installation of storm drain pipes;
- Pre-drilling;
- Foundation; and
- Site establishment.

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Erection of superstructure;

- Construction of drainage, pavement, fencing;
- Operation of concrete batching plant; 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 marine filling;
- DEZ monitoring for 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, construction waste, and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

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

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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in December 2020 were in the range of 1 to 3 daily movements, which are within the maximum daily cap of 125 daily movements. Due to the COVID-19 pandemic, all SkyPier HSF services to/from Zhuhai and Macau have been suspended from 25 March 2020 until further notice. No HSF movement under the SkyPier Plan were recorded during the reporting period. Therefore, no deviation was recorded in the HSF monitoring in the reporting period.

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

Figures

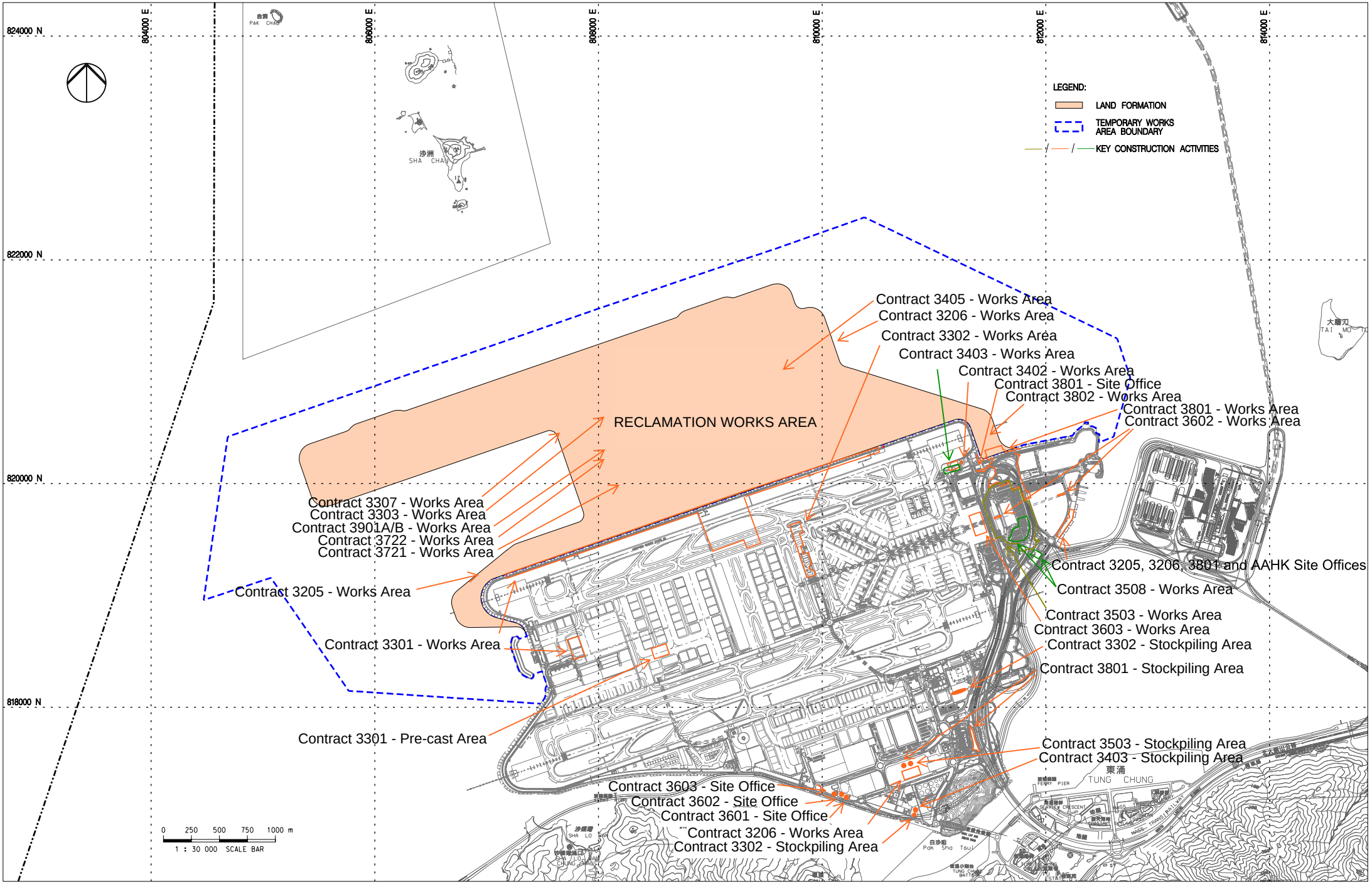
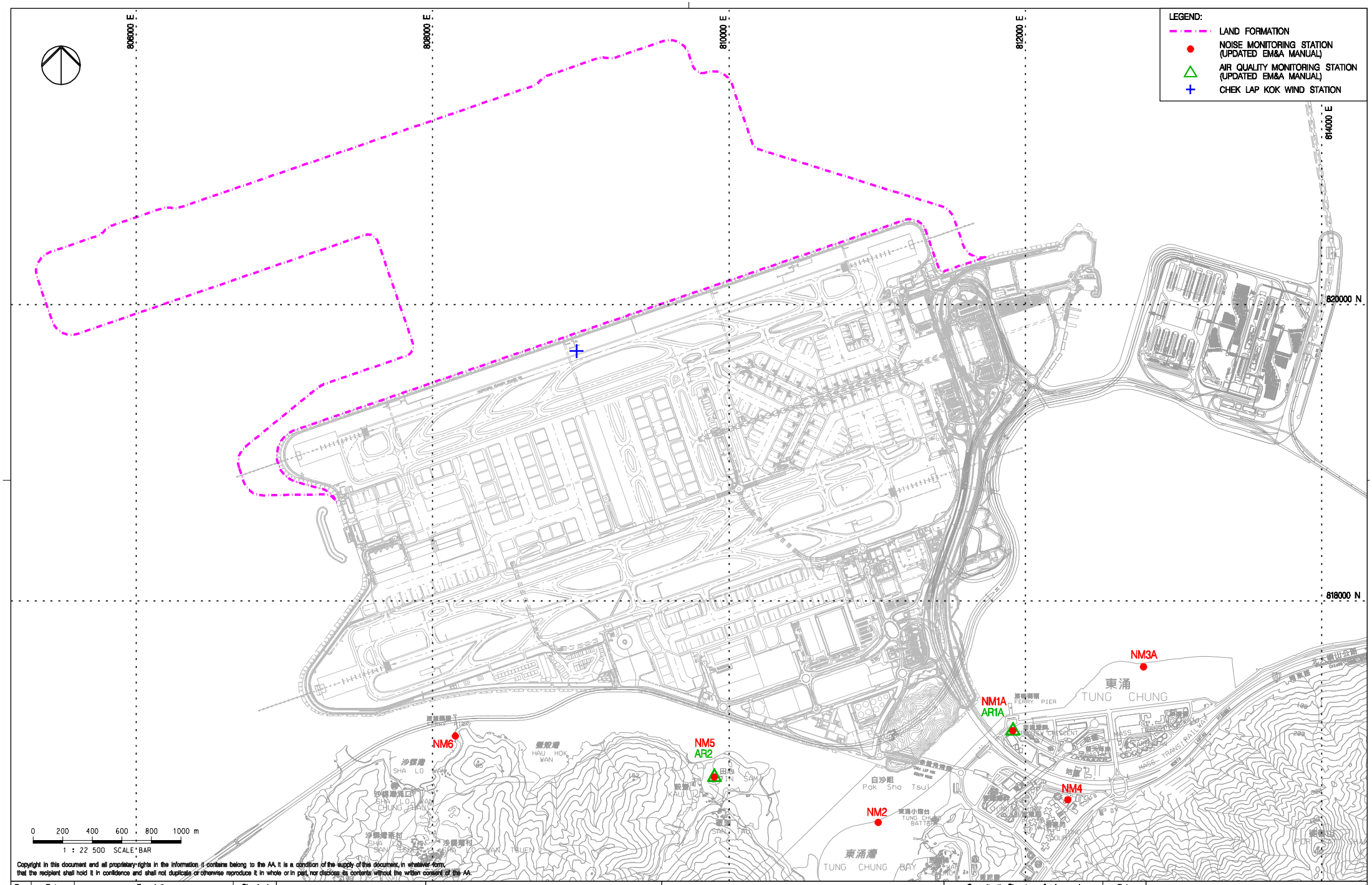


FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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



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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

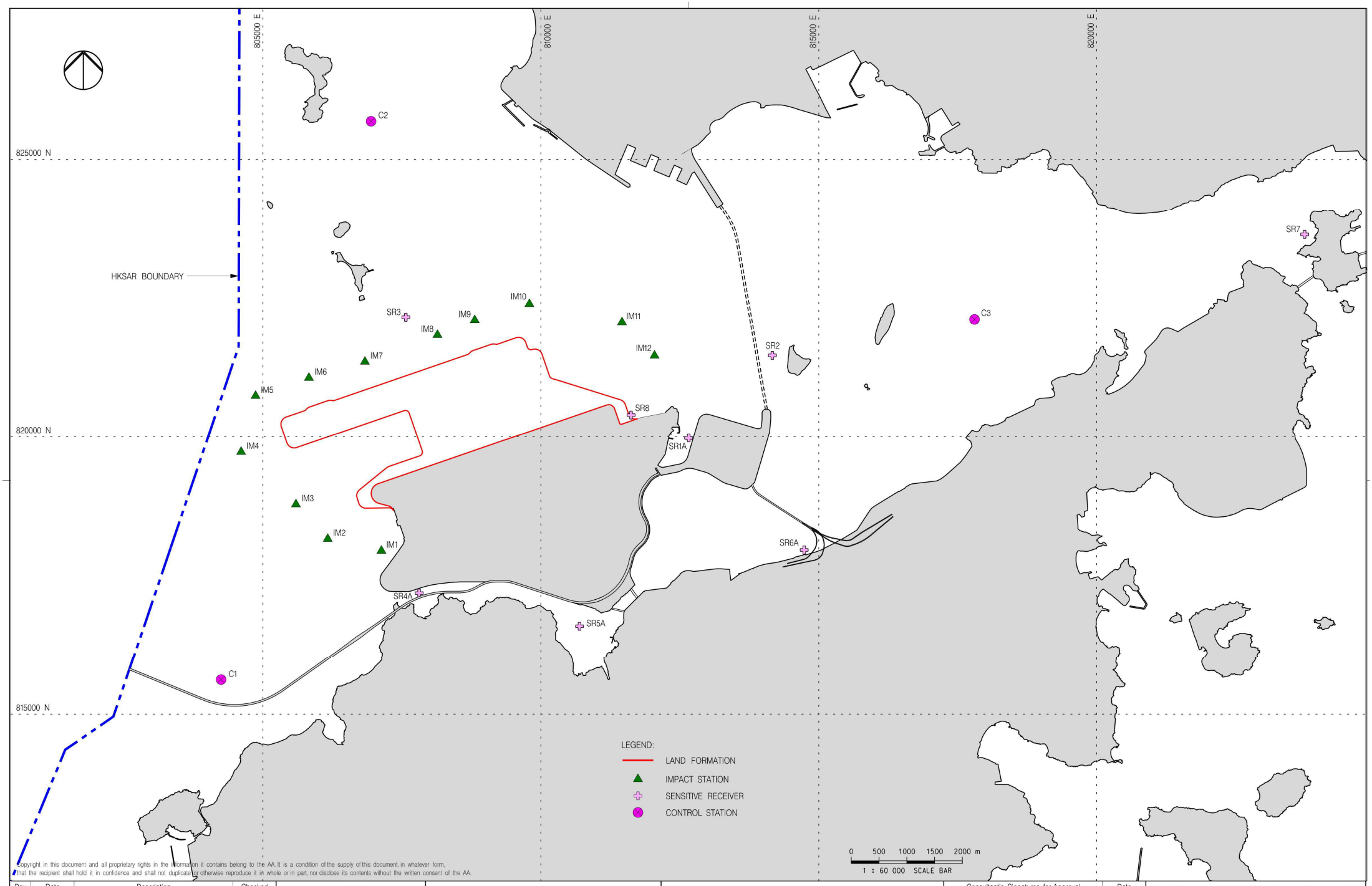
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



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A	21AUG19	FIRST ISSUE	VL

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
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

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

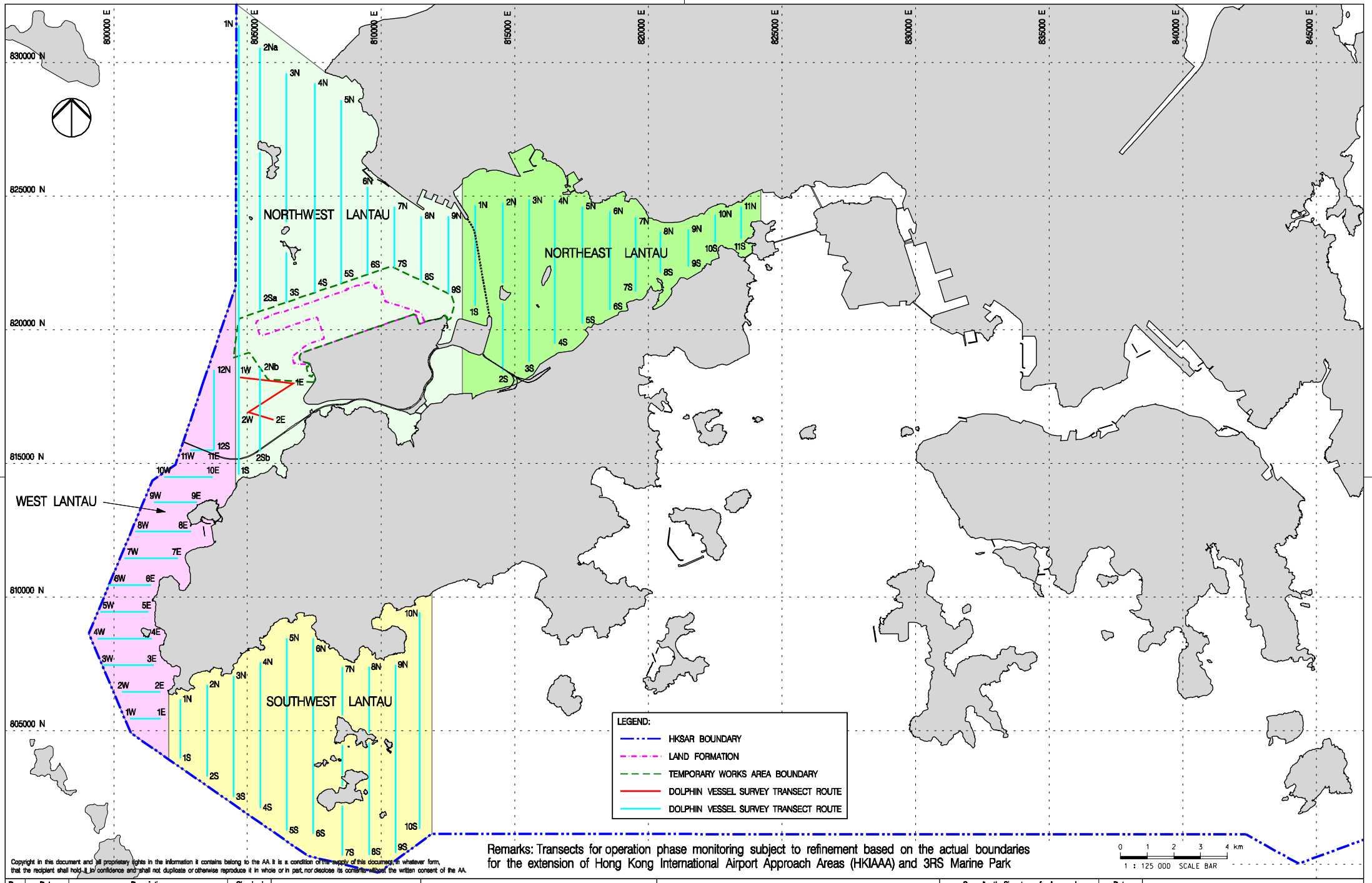
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

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



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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

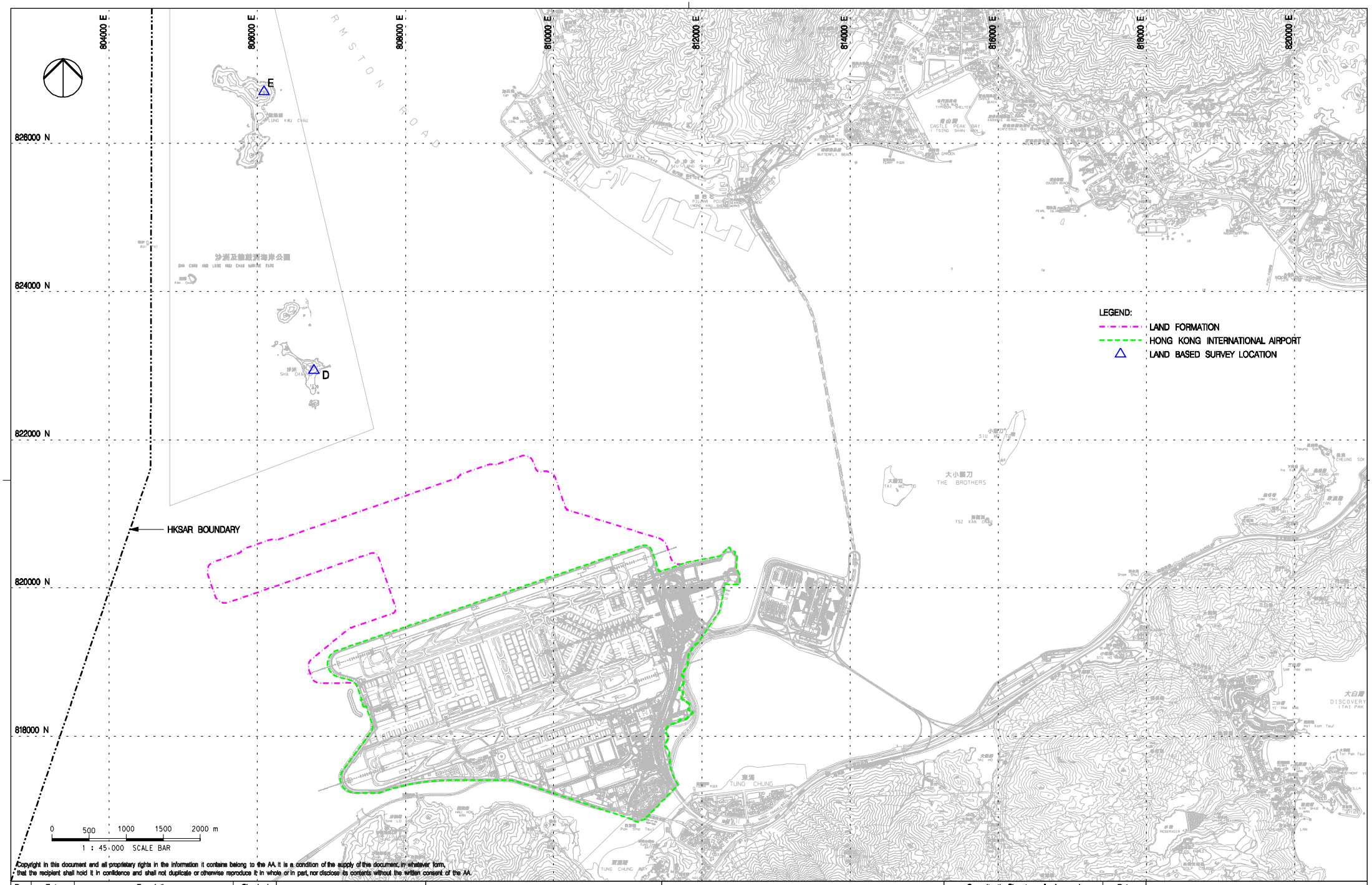
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



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A	02DEC15	FIRST ISSUE	JC
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C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

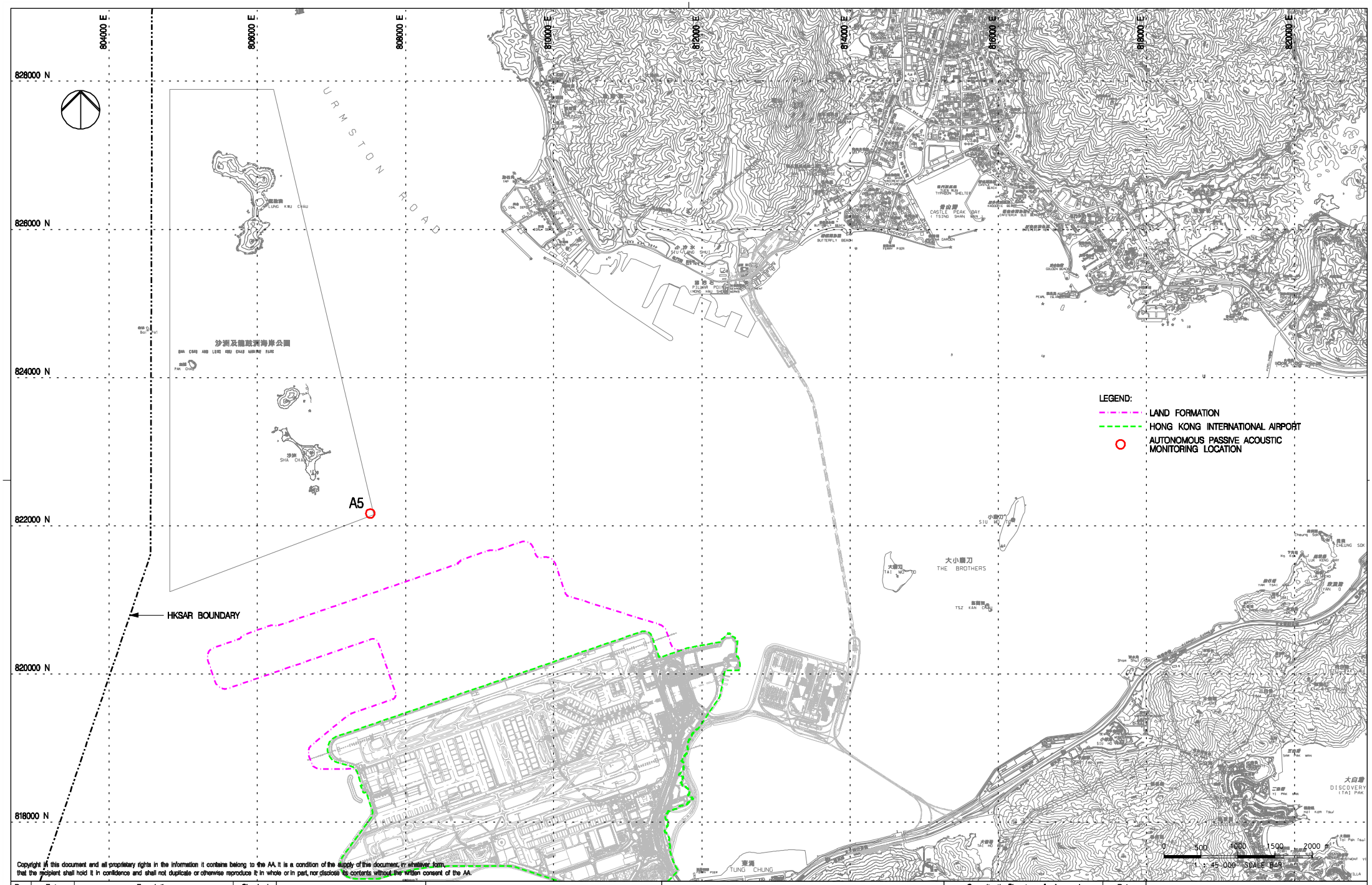
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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Approver	EC	29OCT18

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

Drawing No. FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.		
			Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, 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	I

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

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 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** Site Inspection 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** Site Inspection 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 CWD Survey (Vessel)	**22** Site Inspection WQ General & Regular DCM mid-ebb: 6:10 mid-flood: 14:19	**23** Site Inspection 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 CWD Survey (Land-based)	**29** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 12:34 mid-flood: 7:32	**30** Site Inspection 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			

Tentative Monitoring Schedule of Next Reporting Period

Jan-21

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2 WQ General & Regular DCM mid-ebb: 15:13 mid-flood: 10:08
3	4 Site Inspection NM4, NM6	5 Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 17:52 mid-flood: 12:21	6	7 Site Inspection WQ General & Regular DCM mid-ebb: 6:44 mid-flood: 13:56	8 Site Inspection	9 WQ General & Regular DCM mid-ebb: 9:42 mid-flood: 15:25
10	11 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	12 Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 12:43 mid-flood: 7:28	13 CWD Survey (Vessel)	14 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 14:08 mid-flood: 8:56	15 Site Inspection	16 AR1A, AR2 WQ General & Regular DCM mid-ebb: 15:29 mid-flood: 10:13
17	18 Site Inspection CWD Survey (Vessel, Land-baed)	19 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 17:48 mid-flood: 12:00	20 CWD Survey (Vessel)	21 Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 5:49 mid-flood: 13:13	22 Site Inspection AR1A, AR2 NM1A, NM5	23 WQ General & Regular DCM mid-ebb: 8:25 mid-flood: 14:21
24	25 Site Inspection CWD Survey (Vessel)	26 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 11:36 mid-flood: 6:47	27	28 Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 13:00 mid-flood: 7:56	29 Site Inspection NM4, NM6	30 WQ General & Regular DCM mid-ebb: 14:18 mid-flood: 9:03
31		**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

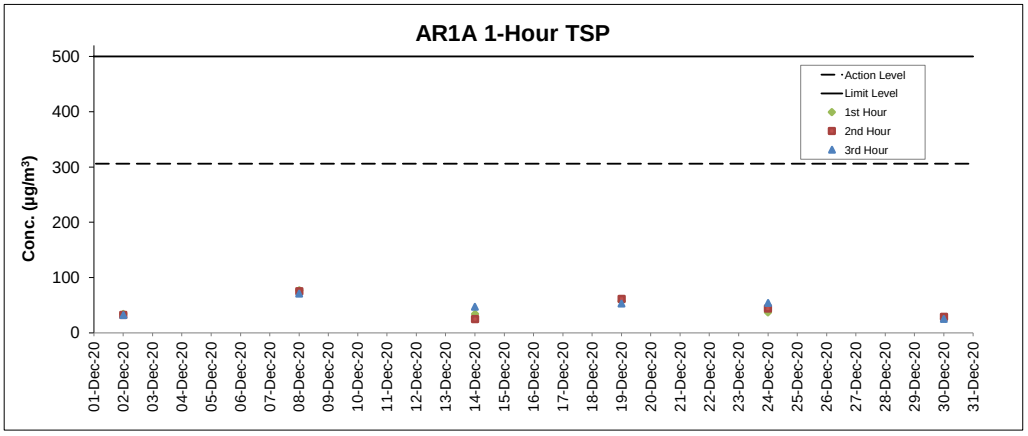
Station: AR1A- Man Tung Road Park

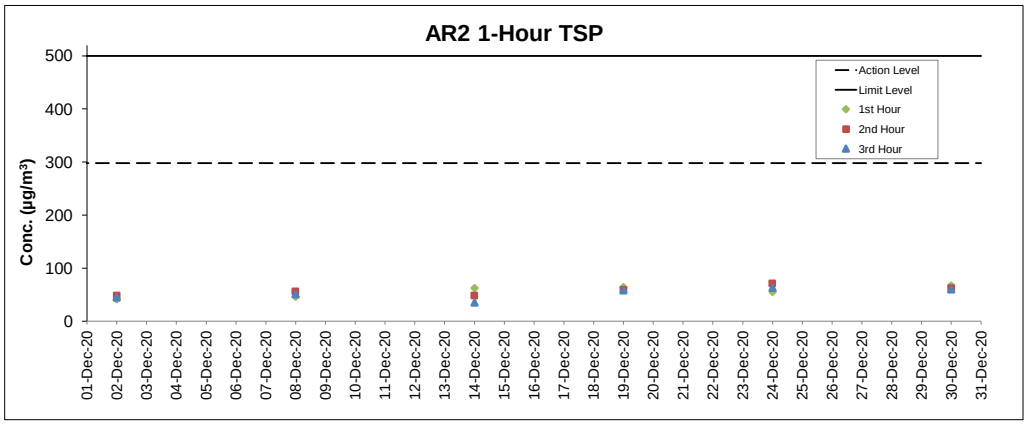
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
02-Dec-20	13:47	Cloudy	5.3	341	34	306	500
02-Dec-20	14:47	Cloudy	5.0	335	32	306	500
02-Dec-20	15:47	Cloudy	5.0	8	32	306	500
08-Dec-20	13:04	Cloudy	3.9	316	77	306	500
08-Dec-20	14:04	Cloudy	6.4	314	75	306	500
08-Dec-20	15:04	Cloudy	5.3	312	71	306	500
14-Dec-20	13:40	Cloudy	4.2	42	34	306	500
14-Dec-20	14:40	Cloudy	3.9	333	25	306	500
14-Dec-20	15:40	Cloudy	5.3	343	47	306	500
19-Dec-20	14:28	Cloudy	4.4	346	57	306	500
19-Dec-20	15:28	Cloudy	4.7	345	61	306	500
19-Dec-20	16:28	Cloudy	5.3	345	53	306	500
24-Dec-20	9:30	Sunny	2.5	339	37	306	500
24-Dec-20	10:30	Sunny	4.7	312	44	306	500
24-Dec-20	11:30	Sunny	5.3	317	54	306	500
30-Dec-20	13:46	Cloudy	8.3	355	26	306	500
30-Dec-20	14:46	Cloudy	7.8	357	29	306	500
30-Dec-20	15:46	Cloudy	6.7	358	25	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)
02-Dec-20	13:49	Cloudy	4.4	10	41	298	500
02-Dec-20	14:49	Cloudy	5.0	335	48	298	500
02-Dec-20	15:49	Cloudy	5.3	8	45	298	500
08-Dec-20	13:05	Cloudy	3.9	316	46	298	500
08-Dec-20	14:05	Cloudy	6.1	314	56	298	500
08-Dec-20	15:05	Cloudy	5.3	313	51	298	500
14-Dec-20	9:26	Cloudy	1.7	75	62	298	500
14-Dec-20	10:26	Cloudy	5.3	41	48	298	500
14-Dec-20	11:26	Cloudy	4.4	45	35	298	500
19-Dec-20	9:33	Cloudy	5.3	349	64	298	500
19-Dec-20	10:33	Cloudy	4.4	349	59	298	500
19-Dec-20	11:33	Cloudy	5.8	328	58	298	500
24-Dec-20	9:20	Cloudy	2.8	34	55	298	500
24-Dec-20	10:20	Cloudy	4.2	326	71	298	500
24-Dec-20	11:20	Cloudy	5.3	314	63	298	500
30-Dec-20	14:02	Cloudy	7.8	358	67	298	500
30-Dec-20	15:02	Cloudy	7.8	355	62	298	500
30-Dec-20	16:02	Cloudy	7.2	359	60	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)
02-Dec-20	Cloudy	17:03	70.5	55.2	68
02-Dec-20	Cloudy	17:08	70.7	59.8	
02-Dec-20	Cloudy	17:13	65.6	57.4	
02-Dec-20	Cloudy	17:18	63.9	58.2	
02-Dec-20	Cloudy	17:23	63.2	55.6	
02-Dec-20	Cloudy	17:28	63.2	56.4	
08-Dec-20	Cloudy	11:34	77.8	62.5	72
08-Dec-20	Cloudy	11:39	68.8	59.4	
08-Dec-20	Cloudy	11:44	70.8	61.3	
08-Dec-20	Cloudy	11:49	67.4	60.1	
08-Dec-20	Cloudy	11:54	70.7	60.8	
08-Dec-20	Cloudy	11:59	64.4	57.7	
14-Dec-20	Cloudy	14:10	73.0	52.3	72
14-Dec-20	Cloudy	14:15	73.2	50.6	
14-Dec-20	Cloudy	14:20	75.9	52.8	
14-Dec-20	Cloudy	14:25	74.1	53.7	
14-Dec-20	Cloudy	14:30	72.7	52.3	
14-Dec-20	Cloudy	14:35	73.4	51.5	
24-Dec-20	Sunny	9:46	73.9	53.5	73
24-Dec-20	Sunny	9:51	74.4	53.8	
24-Dec-20	Sunny	9:56	73.7	52.9	
24-Dec-20	Sunny	10:01	73.9	54.5	
24-Dec-20	Sunny	10:06	75.5	51.8	
24-Dec-20	Sunny	10:11	72.6	51.0	
30-Dec-20	Cloudy	15:03	74.9	56.1	73
30-Dec-20	Cloudy	15:08	74.2	56.3	
30-Dec-20	Cloudy	15:13	74.2	55.8	
30-Dec-20	Cloudy	15:18	73.9	56.5	
30-Dec-20	Cloudy	15:23	72.5	56.2	
30-Dec-20	Cloudy	15:28	72.6	55.5	

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)
03-Dec-20	Cloudy	13:37	61.0	56.4	62
03-Dec-20	Cloudy	13:42	59.0	54.1	
03-Dec-20	Cloudy	13:47	61.6	54.5	
03-Dec-20	Cloudy	13:52	63.5	54.5	
03-Dec-20	Cloudy	13:57	59.6	53.9	
03-Dec-20	Cloudy	14:02	62.0	53.9	
09-Dec-20	Cloudy	13:51	58.7	53.4	60
09-Dec-20	Cloudy	13:56	60.4	52.8	
09-Dec-20	Cloudy	14:01	58.8	54.4	
09-Dec-20	Cloudy	14:06	59.3	54.6	
09-Dec-20	Cloudy	14:11	60.1	53.8	
09-Dec-20	Cloudy	14:16	58.8	53.3	
15-Dec-20	Cloudy	13:01	60.1	56.3	62
15-Dec-20	Cloudy	13:06	60.9	55.3	
15-Dec-20	Cloudy	13:11	60.5	54.1	
15-Dec-20	Cloudy	13:16	59.8	54.7	
15-Dec-20	Cloudy	13:21	61.7	54.9	
15-Dec-20	Cloudy	13:26	59.3	55.2	
23-Dec-20	Cloudy	13:14	60.8	55.0	61
23-Dec-20	Cloudy	13:19	60.4	55.7	
23-Dec-20	Cloudy	13:24	61.1	56.2	
23-Dec-20	Cloudy	13:29	61.2	55.3	
23-Dec-20	Cloudy	13:34	60.3	54.8	
23-Dec-20	Cloudy	13:39	60.2	55.3	
29-Dec-20	Cloudy	13:02	59.7	54.5	61
29-Dec-20	Cloudy	13:07	61.0	55.6	
29-Dec-20	Cloudy	13:12	60.5	54.8	
29-Dec-20	Cloudy	13:17	59.0	54.7	
29-Dec-20	Cloudy	13:22	60.2	55.3	
29-Dec-20	Cloudy	13:27	60.8	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)
02-Dec-20	Cloudy	13:52	55.8	51.4	58
02-Dec-20	Cloudy	13:57	56.6	52.8	
02-Dec-20	Cloudy	14:02	57.7	52.8	
02-Dec-20	Cloudy	14:07	55.6	52.2	
02-Dec-20	Cloudy	14:12	56.5	53.0	
02-Dec-20	Cloudy	14:17	56.2	52.4	
08-Dec-20	Cloudy	14:05	62.0	55.2	67
08-Dec-20	Cloudy	14:10	62.5	53.5	
08-Dec-20	Cloudy	14:15	57.4	54.2	
08-Dec-20	Cloudy	14:20	63.7	55.1	
08-Dec-20	Cloudy	14:25	64.4	56.3	
08-Dec-20	Cloudy	14:30	65.5	54.6	
14-Dec-20	Cloudy	09:26	51.2	45.4	57
14-Dec-20	Cloudy	09:31	52.3	46.4	
14-Dec-20	Cloudy	09:36	53.3	46.2	
14-Dec-20	Cloudy	09:41	54.2	45.6	
14-Dec-20	Cloudy	09:46	64.3	45.8	
14-Dec-20	Cloudy	09:51	54.9	47.3	
24-Dec-20	Cloudy	10:03	52.7	45.5	61
24-Dec-20	Cloudy	10:08	52.8	45.0	
24-Dec-20	Cloudy	10:13	57.0	45.3	
24-Dec-20	Cloudy	10:18	54.9	46.2	
24-Dec-20	Cloudy	10:23	56.7	46.3	
24-Dec-20	Cloudy	10:28	54.7	46.7	
30-Dec-20	Cloudy	13:59	55.7	47.4	57
30-Dec-20	Cloudy	14:04	56.5	49.1	
30-Dec-20	Cloudy	14:09	54.4	49.3	
30-Dec-20	Cloudy	14:14	56.8	49.8	
30-Dec-20	Cloudy	14:19	65.3	51.2	
30-Dec-20	Cloudy	14:24	61.9	48.7	

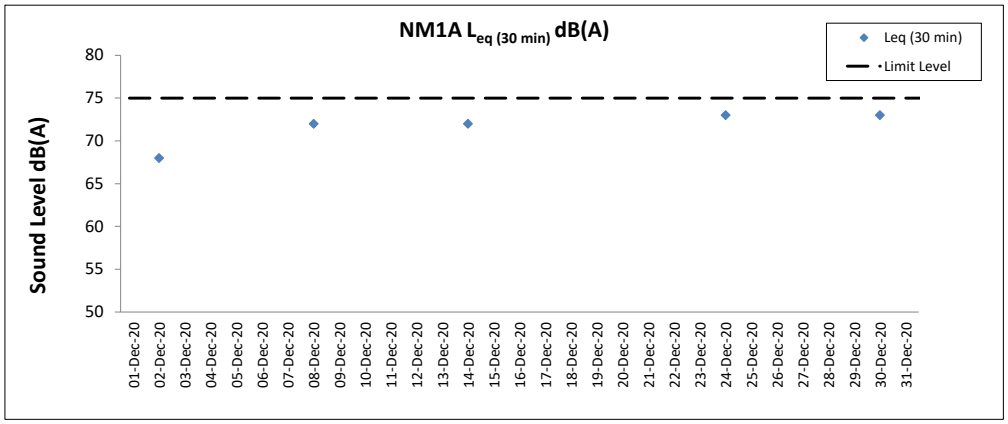
Remarks:
+3dB (A) correction was applied to free-field measurement.

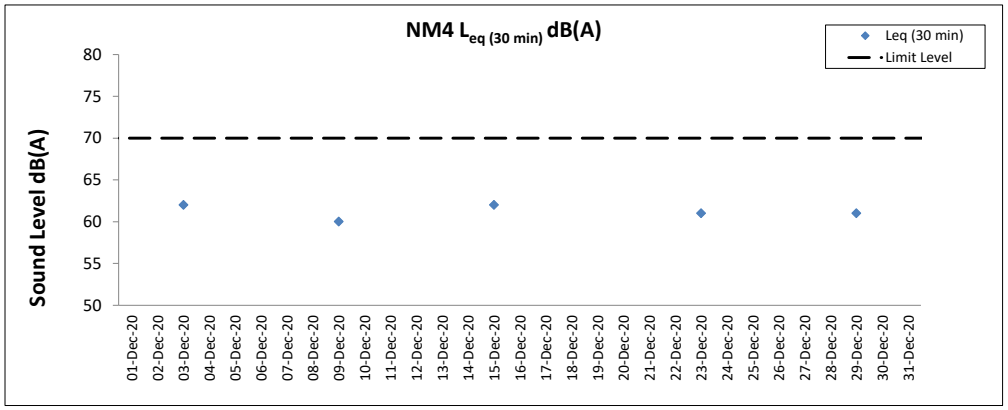
Noise Measurement Results

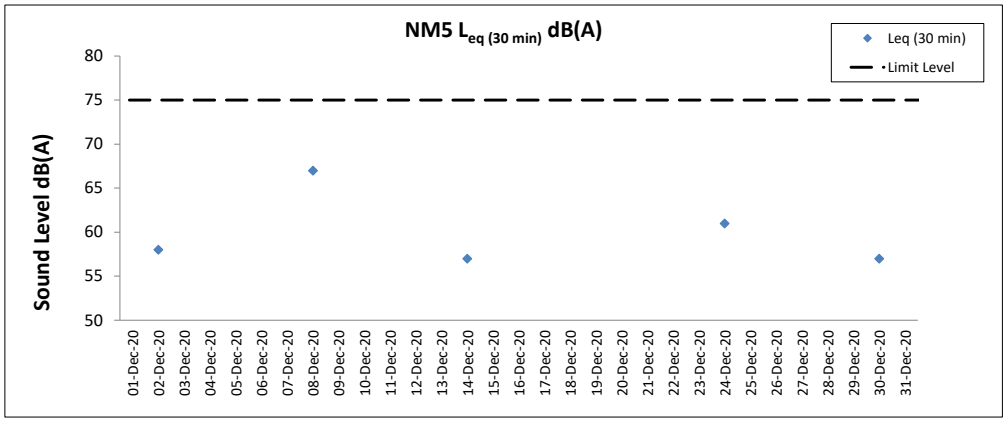
Station: NM6- House No.1 Sha Lo Wan

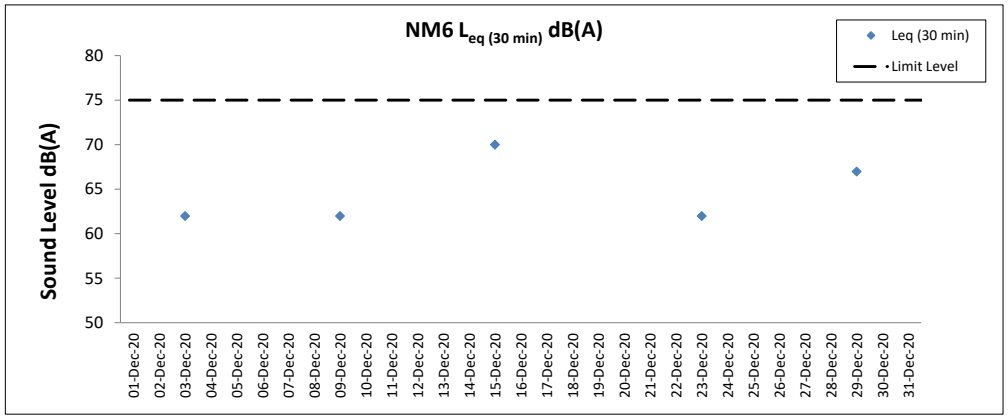
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Dec-20	Cloudy	15:47	73.1	61.0	62
03-Dec-20	Cloudy	15:52	66.8	55.1	
03-Dec-20	Cloudy	15:57	65.9	56.8	
03-Dec-20	Cloudy	16:02	66.2	54.7	
03-Dec-20	Cloudy	16:07	69.7	55.5	
03-Dec-20	Cloudy	16:12	67.1	58.0	
09-Dec-20	Cloudy	15:39	75.4	59.2	62
09-Dec-20	Cloudy	15:44	71.7	53.4	
09-Dec-20	Cloudy	15:49	63.6	46.2	
09-Dec-20	Cloudy	15:54	71.1	48.4	
09-Dec-20	Cloudy	15:59	61.1	49.6	
09-Dec-20	Cloudy	16:04	61.2	44.8	
15-Dec-20	Cloudy	15:51	67.1	55.7	70
15-Dec-20	Cloudy	15:56	67.4	55.4	
15-Dec-20	Cloudy	16:01	68.5	55.7	
15-Dec-20	Cloudy	16:06	72.5	52.9	
15-Dec-20	Cloudy	16:11	73.9	49.8	
15-Dec-20	Cloudy	16:16	76.6	56.0	
23-Dec-20	Cloudy	15:46	71.8	54.5	62
23-Dec-20	Cloudy	15:51	68.7	54.2	
23-Dec-20	Cloudy	15:56	68.8	54.2	
23-Dec-20	Cloudy	16:01	63.4	57.1	
23-Dec-20	Cloudy	16:06	72.2	60.1	
23-Dec-20	Cloudy	16:11	67.7	55.8	
29-Dec-20	Cloudy	15:48	64.8	57.0	67
29-Dec-20	Cloudy	15:53	65.6	56.9	
29-Dec-20	Cloudy	15:58	64.6	56.9	
29-Dec-20	Cloudy	16:03	65.4	57.0	
29-Dec-20	Cloudy	16:08	66.5	57.9	
29-Dec-20	Cloudy	16:13	70.6	59.2	

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









Notes

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

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	12:52	8.4	Surface	1.0	1.3	289	22.3	22.3	8.4	8.4	32.0	32.0	101.1	101.1	7.3	7.3	6.9	7.7	7	10	95	92	815616	804264	<0.2	<0.2	0.6	0.6
						1.0	1.3	310	22.3		8.4		32.0		101.0		7.3		7.1		7		95				<0.2		0.5	
					Middle	4.2	1.4	294	22.2	22.2	8.4	8.4	32.0	32.0	100.3	100.3	7.3		7.8		8		89				<0.2		0.5	
						4.2	1.5	314	22.2		8.4		32.0		100.3		7.3		7.9		19		88				<0.2		0.6	
					Bottom	7.4	1.5	292	22.2	22.2	8.3	8.3	32.1	32.1	100.0	100.1	7.2		8.1		11		92				<0.2		0.6	
						7.4	1.7	318	22.2		8.3		32.1		100.1		7.3		8.2		8		93				<0.2		0.6	
C2	Fine	Moderate	11:45	12.4	Surface	1.0	0.1	340	22.4	22.4	8.3	8.3	32.4	32.4	97.0	97.0	7.0	7.1	7.2	9.3	11	11	85	88	825691	806934	<0.2	<0.2	0.7	0.7
						1.0	0.1	313	22.4		8.3		32.4		96.9		7.0		7.3		10		85				<0.2		0.7	
					Middle	6.2	0.2	7	22.2	22.2	8.3	8.3	32.8	32.8	98.0	98.0	7.1		8.9		11		88				<0.2		0.7	
						6.2	0.2	7	22.2		8.3		32.8		97.9		7.1		9.1		10		87				<0.2		0.8	
					Bottom	11.4	0.2	27	22.1	22.1	8.3	8.3	32.9	32.9	100.2	100.2	7.2	7.2	11.7		11		90				<0.2		0.6	
						11.4	0.2	27	22.1		8.3		32.9		100.2		7.2		11.8		11		90				<0.2		0.7	
C3	Fine	Moderate	13:35	12.1	Surface	1.0	0.4	99	23.0	23.0	8.2	8.2	33.1	33.1	93.6	93.6	6.6	6.6	0.9	1.7	5	3	85	89	822093	817807	<0.2	<0.2	0.7	0.6
						1.0	0.5	104	23.0		8.2		33.1		93.6		6.6		0.9		4		86				<0.2		0.7	
					Middle	6.1	0.4	99	23.0	23.0	8.2	8.2	33.2	33.2	93.1	93.2	6.6		1.4		2		89				<0.2		0.6	
						6.1	0.4	102	23.0		8.2		33.2		93.2		6.6		1.5		3		89				<0.2		0.6	
					Bottom	11.1	0.4	100	23.0	23.0	8.2	8.2	33.1	33.1	93.3	93.4	6.6	6.6	2.7		2		91				<0.2		0.6	
						11.1	0.4	102	23.0		8.2		33.1		93.4		6.6		2.6		3		92				<0.2		0.6	
IM1	Fine	Moderate	12:32	5.4	Surface	1.0	1.3	141	22.1	22.1	8.4	8.4	31.8	31.8	105.1	104.9	7.6	7.6	4.2	5.1	16	10	87	89	817949	807112	<0.2	<0.2	0.5	0.6
						1.0	1.4	142	22.0		8.4		31.9		104.7		7.6		4.5		10		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	1.4	135	21.9	21.9	8.4	8.4	32.0	32.0	102.6	102.6	7.5	7.5	5.9		7		92				<0.2		0.7	
						4.4	1.6	138	21.9		8.4		32.0		102.6		7.5		6.0		8		91				<0.2		0.6	
IM2	Fine	Moderate	12:25	7.0	Surface	1.0	1.4	149	22.1	22.1	8.4	8.4	32.0	32.0	105.9	105.8	7.7	7.7	5.4	6.7	16	11	86	90	818172	806163	<0.2	<0.2	0.6	0.6
						1.0	1.5	150	22.1		8.4		32.0		105.7		7.7		5.5		7		87				<0.2		0.6	
					Middle	3.5	1.5	151	22.0	22.0	8.4	8.4	32.0	32.0	104.3	104.2	7.6		6.6		8		90				<0.2		0.6	
						3.5	1.6	156	22.0		8.4		32.0		104.1		7.6		6.9		8		91				<0.2		0.6	
					Bottom	6.0	1.7	155	21.9	21.9	8.4	8.4	32.0	32.0	104.2	104.4	7.6	7.6	8.2		9		94				<0.2		0.6	
						6.0	1.9	165	21.9		8.4		32.0		104.5		7.6		8.0		18		94				<0.2		0.6	
IM3	Fine	Moderate	12:19	7.4	Surface	1.0	1.4	140	22.1	22.1	8.4	8.4	32.0	32.0	104.8	104.8	7.6	7.6	5.8	6.8	7	11	86	90	818780	805584	<0.2	<0.2	0.6	0.6
						1.0	1.4	149	22.1		8.4		32.0		104.7		7.6		5.8		7		86				<0.2		0.6	
					Middle	3.7	1.7	143	22.1	22.1	8.4	8.4	32.0	32.0	104.5	104.5	7.6		6.1		7		89				<0.2		0.6	
						3.7	1.8	156	22.1		8.4		32.0		104.5		7.6		6.1		17		90				<0.2		0.6	
					Bottom	6.4	1.5	138	21.9	21.9	8.4	8.4	32.0	32.0	103.6	103.8	7.5	7.6	8.5		4		94				<0.2		0.6	
						6.4	1.5	145	21.9		8.4		32.0		103.9		7.6		8.3		21		93				<0.2		0.6	
IM4	Fine	Moderate	12:10	8.4	Surface	1.0	1.6	169	22.1	22.1	8.4	8.4	32.0	32.0	104.4	104.3	7.6	7.6	6.5	7.3	7	9	94	91	819717	804623	<0.2	<0.2	0.7	0.7
						1.0	1.6	181	22.1		8.4		32.0		104.1		7.6		6.6		8		95				<0.2		0.7	
					Middle	4.2	1.4	167	22.0	22.0	8.4	8.4	32.0	32.0	103.3	103.3	7.5		7.6		4		88				<0.2		0.6	
						4.2	1.4	173	21.9		8.4		32.0		103.3		7.5		7.5		16		88				<0.2		0.7	
					Bottom	7.4	1.4	172	21.9	21.9	8.4	8.4	32.0	32.0	103.8	103.9	7.6	7.6	7.8		13		92				<0.2		0.7	
						7.4	1.4	172	21.9		8.4		32.0		103.9		7.6		7.9		6		91				<0.2		0.6	
IM5	Fine	Moderate	12:02	7.9	Surface	1.0	1.2	127	22.0	22.0	8.4	8.4	32.0	32.0	104.3	104.3	7.6	7.6	8.4	9.0	12	10	94	91	820732	804872	<0.2	<0.2	0.6	0.7
						1.0	1.3	128	22.0		8.4		32.0		104.3		7.6		8.6		11		93				<0.2		0.6	
					Middle	4.0	1.4	129	22.0	22.0	8.4	8.4	32.0	32.0	104.1	104.1	7.6		9.0		10		89				<0.2		0.7	
						4.0	1.5	135	22.0		8.4		32.0		104.1		7.6		9.0		10		88				<0.2		0.7	
					Bottom	6.9	1.3	125	21.9	21.9	8.3	8.3	32.0	32.0	104.1	104.2	7.6	7.6	9.7		8		91				<0.2		0.7	
						6.9	1.3	125	21.9		8.3		32.0		104.2		7.6		9.5		9		92				<0.2		0.7	
IM6	Fine	Moderate	11:53	7.8	Surface	1.0	1.5	303	22.2	22.2	8.3	8.3	31.4	31.5	100.4	100.5	7.3	7.3	3.5	4.5	8	9	87	90	821079	805819	<0.2	<0.2	0.6	0.6
						1.0	1.5	328	22.2		8.3		31.5		100.5		7.3		3.7		8		88				<0.2		0.6	
					Middle	3.9	1.2	303	22.1	22.1	8.3	8.3	31.6	31.6	100.7	100.8	7.3		4.6		9		90				<0.2		0.7	
						3.9	1.3	307	22.0		8.3		31.6		100.8		7.3		4.8		10		91				<0.2		0.6	
					Bottom	6.8	1.6	307	21.9	21.9	8.3	8.3	31.7	31.7	101.1	101.2	7.4	7.4	5.1		10		91				<0.2		0.6	
						6.8	1.7	336	21.9		8.3		31.7		101.3		7.4		5.1		9		92				<0.2		0.6	
IM7	Fine	Moderate	11:45	8.8	Surface	1.0	1.2	316	22.0	22.0	8.3	8.3	31.7	31.7	101.5	101.6	7.4	7.4	5.4	5.8	9	10	84	90	821330	806815	<0.2	<0.2	0.6	0.6
						1.0	1.3	340	22.0		8.3		31.7		101.6		7.4		5.4		8		85				<0.2		0.6	
					Middle	4.4	1.2	316	22.0	22.0	8.3	8.3	31.7	31.7	101.6	101.6	7.4		5.3		9		90				<0.2		0.6	
						4.4	1.3	344	22.0		8.3		31.7		101.6		7.4		5.5		9		92				<0.2		0.8	
					Bottom	7.8	1.3	317	21.9	21.9	8.3	8.3	31.8	31.8	101.4	101.4	7.4	7.4	6.6		11		92				<0.2		0.6	
						7.8	1.5	327	21.9		8.3		31.8		101.4		7.4		6.8		11		94				<0.2		0.6	
IM8	Fine	Moderate	12:10	8.1	Surface	1.0	0.3	66	22.5	22.5	8.2	8.2	32.5	32.5	99.0	99.1	7.1	7.2	3.8	5.3	10	8	84	87	821847	808160	<0.2	<0.2	0.7	0.7
						1.0	0.3	71	22.5		8.2		32.5		99.1		7.1		3.8		10		85				<0.2		0.7	
					Middle	4.1	0.3	76	22.2	22.2	8.3	8.3	32.8	32.8	100.0	100.0	7.2		5.1		7		87				<0.2		0.8	
						4.1	0.3	77	22.2		8.3		32.8		100.0		7.2		5.2		6		86				<0.2		0.7	
					Bottom	7.1	0.3	83	22.0	22.0	8.3	8.3	33.1	33.1	99.1	99.1	7.2	7.2	7.0		7		90				<0.2		0.8	
						7.1	0.3	87	22.0		8.3		33.1		99.1		7.2		7.1		7		90				<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 01 December 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	12:17	7.5	Surface	1.0	0.4	64	22.5	22.5	8.2	8.2	32.5	32.5	96.4	96.4	6.9	7.0	5.7	7.0	6	8	85	87	822109	808832	<0.2	<0.2	0.6	0.6
						1.0	0.4	68	22.5		8.2		32.5		96.4		6.9		5.8		7		84				<0.2		0.6	
					Middle	3.8	0.4	66	22.3	22.3	8.2	8.2	32.7	32.7	96.8	96.8	7.0		6.3		8		87				<0.2		0.6	
						3.8	0.4	70	22.3		8.2		32.7		96.7		7.0		6.4		9		87				<0.2		0.7	
					Bottom	6.5	0.4	65	22.1	22.1	8.3	8.3	33.0	33.0	97.8	97.8	7.1	7.1	9.0		8		89				<0.2		0.6	
						6.5	0.4	66	22.1		8.3		33.0		97.7		7.1		8.9		9		89				<0.2		0.6	
IM10	Fine	Moderate	12:23	8.2	Surface	1.0	0.4	80	22.7	22.6	8.2	8.2	32.4	32.4	98.1	98.1	7.0	7.0	2.2	2.0	7	7	84	87	822365	809790	<0.2	<0.2	0.7	0.7
						1.0	0.4	86	22.6		8.2		32.4		98.1		7.0		2.2		7		84				<0.2		0.7	
					Middle	4.1	0.4	85	22.4	22.4	8.2	8.2	32.7	32.7	98.1	98.1	7.0		1.9		6		87				<0.2		0.7	
						4.1	0.4	89	22.4		8.2		32.7		98.1		7.0		1.9		7		88				<0.2		0.7	
					Bottom	7.2	0.2	83	22.3	22.3	8.3	8.3	32.8	32.8	98.1	98.0	7.1	7.1	1.9		6		89				<0.2		0.6	
						7.2	0.2	88	22.3		8.3		32.8		97.9		7.0		1.9		6		90				<0.2		0.7	
IM11	Fine	Moderate	12:34	8.3	Surface	1.0	0.2	92	22.6	22.6	8.2	8.2	32.8	32.8	96.0	96.0	6.9	6.9	2.2	3.0	6	5	84	87	822055	811445	<0.2	<0.2	0.6	0.6
						1.0	0.2	96	22.6		8.2		32.8		96.0		6.9		2.2		5		84				<0.2		0.6	
					Middle	4.2	0.2	90	22.6	22.6	8.2	8.2	32.9	32.9	95.6	95.6	6.8		3.0		5		86				<0.2		0.7	
						4.2	0.2	96	22.6		8.2		32.9		95.6		6.8		3.1		5		87				<0.2		0.6	
					Bottom	7.3	0.2	92	22.6	22.6	8.2	8.2	32.9	32.9	96.5	96.6	6.9	6.9	3.7		5		89				<0.2		0.6	
						7.3	0.2	92	22.6		8.2		32.9		96.6		6.9		3.7		5		89				<0.2		0.6	
IM12	Fine	Moderate	12:41	9.2	Surface	1.0	0.1	114	22.7	22.7	8.2	8.2	32.9	32.9	96.6	96.6	6.9	6.9	2.3	2.6	5	5	84	87	821453	812060	<0.2	<0.2	0.6	0.6
						1.0	0.1	119	22.7		8.2		32.9		96.6		6.9		2.3		5		84				<0.2		0.6	
					Middle	4.6	0.1	109	22.6	22.6	8.2	8.2	32.9	32.9	95.7	95.6	6.8		2.9		5		87				<0.2		0.6	
						4.6	0.1	112	22.6		8.2		32.9		95.5		6.8		2.9		5		87				<0.2		0.5	
					Bottom	8.2	0.1	126	22.6	22.6	8.2	8.2	32.9	32.9	95.5	95.5	6.8	6.8	2.6		6		89				<0.2		0.5	
						8.2	0.1	132	22.6		8.2		32.9		95.5		6.8		2.6		5		90				<0.2		0.5	
SR1A	Fine	Moderate	13:01	5.0	Surface	1.0	-	-	22.5	22.5	8.2	8.2	32.5	32.5	96.0	96.0	6.9	6.9	2.1	2.4	6	6	-	-	819979	812665	-	-	-	-
						1.0	-	-	22.5		8.2		32.5		95.9		6.9		2.1		5		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	22.4	22.4	8.2	8.2	32.5	32.5	96.0	96.1	6.9	6.9	2.8		7		-				-		-	
						4.0	-	-	22.4		8.2		32.5		96.1		6.9		2.7		7		-				-		-	
SR2	Fine	Moderate	13:14	4.4	Surface	1.0	0.2	89	22.9	22.9	8.2	8.2	33.0	33.0	97.2	97.3	6.9	6.9	1.2	1.6	6	6	86	88	821471	814180	<0.2	<0.2	0.5	0.5
						1.0	0.3	94	22.9		8.2		33.0		97.3		6.9		1.2		5		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	97	22.8	22.8	8.2	8.2	32.9	32.9	97.3	97.3	6.9	6.9	2.0		5		89				<0.2		0.5	
						3.4	0.2	101	22.8		8.2		32.9		97.3		6.9		2.0		6		89				<0.2		0.6	
SR3	Fine	Moderate	12:04	9.0	Surface	1.0	0.3	99	22.4	22.4	8.3	8.3	32.5	32.5	99.4	99.3	7.2	7.2	5.8	7.7	10	10	-	-	822157	807576	-	-	-	-
						1.0	0.3	102	22.4		8.3		32.5		99.2		7.1		5.9		11		-				-		-	
					Middle	4.5	0.4	83	22.1	22.1	8.3	8.3	32.9	32.9	99.7	99.7	7.2		7.7		10		-				-		-	
						4.5	0.4	84	22.1		8.3		32.9		99.6		7.2		7.8		9		-				-		-	
					Bottom	8.0	0.4	74	22.1	22.1	8.3	8.3	33.0	33.0	98.9	99.0	7.1	7.1	9.3		9		-				-		-	
						8.0	0.4	78	22.1		8.3		33.0		99.1		7.1		9.4		9		-				-		-	
SR4A	Fine	Calm	13:13	9.6	Surface	1.0	0.4	223	22.0	22.0	8.4	8.4	32.0	32.0	103.6	103.6	7.5	7.5	5.6	6.1	8	10	-	-	817188	807803	-	-	-	-
						1.0	0.4	228	22.0		8.4		32.0		103.5		7.5		5.7		9		-				-		-	
					Middle	4.8	0.3	231	21.9	21.9	8.4	8.4	32.0	32.0	103.1	103.1	7.5		5.9		19		-				-		-	
						4.8	0.3	248	21.9		8.4		32.0		103.1		7.5		5.9		6		-				-		-	
					Bottom	8.6	0.2	214	21.9	21.9	8.3	8.3	32.0	32.0	102.8	102.9	7.5	7.5	6.6		10		-				-		-	
						8.6	0.3	214	21.9		8.3		32.0		102.9		7.5		6.7		9		-				-		-	
SR5A	Fine	Calm	13:29	3.5	Surface	1.0	0.0	351	22.4	22.4	8.3	8.3	31.3	31.3	103.7	103.8	7.5	7.5	5.1	7.4	8	14	-	-	816584	810692	-	-	-	-
						1.0	0.0	323	22.4		8.3		31.3		103.8		7.5		5.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	350	22.3	22.3	8.3	8.3	31.3	31.3	104.0	104.0	7.5	7.5	9.2		19		-				-		-	
						2.5	0.0	322	22.3		8.3		31.3		104.0		7.5		10.0		19		-				-		-	
SR6A	Fine	Calm	14:07	4.7	Surface	1.0	0.1	19	22.8	22.8	8.3	8.3	31.2	31.2	95.2	95.3	6.9	6.9	9.9	10.3	7	11	-	-	817946	814718	-	-	-	-
						1.0	0.1	19	22.8		8.3		31.2		95.3		6.9		9.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	13	22.7	22.7	8.3	8.3	31.3	31.3	96.8	97.0	7.0	7.0	10.6		10		-				-		-	
						3.7	0.0	13	22.7		8.3		31.3		97.2		7.0		10.7		19		-				-		-	
SR7	Fine	Moderate	14:05	15.2	Surface	1.0	0.4	83	22.9	22.9	8.2	8.2	33.2	33.2	93.3	93.3	6.6	6.6	2.6	2.5	5	5	-	-	823635	823745	-	-	-	-
						1.0	0.4	86	22.9		8.2		33.2		93.2		6.6		2.7		6		-				-		-	
					Middle	7.6	0.3	74	22.9	22.9	8.2	8.2	33.2	33.2	92.9	93.0	6.6		2.5		5		-				-		-	
						7.6	0.3	76	22.9		8.2		33.2		93.0		6.6		2.5		4		-				-		-	
					Bottom	14.2	0.3	54	22.9	22.9	8.2	8.2	33.2	33.2	92.7	92.8	6.6	6.6	2.4		3		-				-		-	
						14.2	0.4	58	22.9		8.2		33.2		92.8		6.6		2.4		4		-				-		-	
SR8	Fine	Moderate	12:51	4.9	Surface	1.0	-	-	23.3	23.2	8.2	8.2	32.7	32.7	99.0	99.0	7.0	7.0	3.2	3.8	6	5	-	-	820389	811639	-	-	-	-
						1.0	-	-	23.2		8.2		32.7		99.0		7.0		3.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	22.6	22.6	8.2	8.2	32.7	32.7	98.7	98.7	7.1	7.1	4.4		4		-				-		-	
						3.9	-	-	22.7		8.2		32.7		98.7		7.1		4.4		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 01 December 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	08:36	8.0	Surface	1.0	0.9	311	22.0	22.0	8.4	8.4	32.0	32.0	102.9	102.9	7.5	7.5	5.9	6.7	9	10	86	89	815610	804233	<0.2	<0.2	0.8	0.7
						1.0	0.9	315	22.0		8.4		32.0		102.9		7.5		5.9		8		86				<0.2		0.7	
					Middle	4.0	0.7	316	22.0	22.0	8.4	8.4	32.0	32.0	102.7	102.7	7.5		6.4		10		90				<0.2		0.7	
						4.0	0.7	329	22.0		8.4		32.0		102.7		7.5		6.5		9		90				<0.2		0.7	
					Bottom	7.0	0.7	315	21.9	21.9	8.3	8.3	32.0	32.0	102.8	102.9	7.5	7.5	7.7		13		91				<0.2		0.6	
						7.0	0.7	339	21.9		8.3		32.0		102.9		7.5		7.8		12		91				<0.2		0.8	
C2	Cloudy	Moderate	09:50	12.0	Surface	1.0	0.3	324	22.5	22.5	8.2	8.2	32.2	32.2	94.9	94.9	6.8	6.8	6.6	7.8	11	11	85	88	825677	806932	<0.2	<0.2	0.7	0.7
						1.0	0.4	326	22.5		8.2		32.2		94.9		6.8		6.7		10		84				<0.2		0.6	
					Middle	6.0	0.4	339	22.5	22.5	8.2	8.2	32.2	32.2	94.9	94.9	6.8		7.8		10		87				<0.2		0.8	
						6.0	0.4	312	22.5		8.2		32.2		94.9		6.8		7.9		11		88				<0.2		0.6	
					Bottom	11.0	0.3	335	22.5	22.5	8.2	8.2	32.2	32.2	97.0	97.1	7.0	7.0	8.8		12		90				<0.2		0.8	
						11.0	0.4	357	22.5		8.2		32.2		97.2		7.0		8.7		11		91				<0.2		0.7	
C3	Cloudy	Moderate	07:59	11.3	Surface	1.0	0.3	288	22.6	22.6	8.3	8.3	32.9	32.9	95.1	95.1	6.8	6.8	2.8	3.5	7	6	85	88	822091	817797	<0.2	<0.2	0.5	0.6
						1.0	0.3	290	22.6		8.3		32.9		95.0		6.8		2.9		7		85				<0.2		0.6	
					Middle	5.7	0.3	289	22.6	22.6	8.3	8.3	32.9	32.9	95.8	95.8	6.8		3.4		7		88				<0.2		0.6	
						5.7	0.3	312	22.6		8.3		32.9		95.7		6.8		3.5		6		88				<0.2		0.6	
					Bottom	10.3	0.2	292	22.7	22.7	8.3	8.3	33.0	33.0	97.6	97.7	7.0	7.0	4.3		5		91				<0.2		0.5	
						10.3	0.2	299	22.7		8.3		33.0		97.8		7.0		4.2		5		92				<0.2		0.6	
IM1	Fine	Calm	08:55	4.7	Surface	1.0	0.2	346	21.8	21.8	8.3	8.3	31.9	31.9	100.1	100.2	7.3	7.3	8.1	8.3	13	12	85	87	817966	807146	<0.2	<0.2	0.5	0.6
						1.0	0.2	346	21.8		8.3		31.9		100.2		7.3		8.1		12		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	351	21.6	21.6	8.3	8.3	31.9	31.9	101.7	101.8	7.4	7.5	8.4		11		88				<0.2		0.6	
						3.7	0.1	323	21.6		8.3		31.9		101.8		7.5		8.4		10		89				<0.2		0.6	
IM2	Fine	Moderate	09:03	6.6	Surface	1.0	1.1	305	21.9	21.9	8.4	8.4	31.9	31.9	101.4	101.4	7.4	7.4	6.7	7.6	10	15	86	89	818145	806155	<0.2	<0.2	0.7	0.7
						1.0	1.2	322	21.9		8.4		31.9		101.4		7.4		6.9		10		86				<0.2		0.7	
					Middle	3.3	1.1	306	21.9	21.9	8.3	8.3	31.9	31.9	101.4	101.4	7.4		7.8		18		89				<0.2		0.7	
						3.3	1.2	330	21.9		8.3		31.9		101.4		7.4		7.9		17		89				<0.2		0.7	
					Bottom	5.6	0.9	304	21.8	21.8	8.3	8.3	31.9	31.9	102.0	102.2	7.4	7.5	8.2		17		90				<0.2		0.8	
						5.6	0.9	304	21.8		8.3		31.9		102.4		7.5		8.3		18		91				<0.2		0.7	
IM3	Fine	Moderate	09:09	7.0	Surface	1.0	1.2	173	21.9	21.9	8.4	8.4	31.8	31.8	101.0	101.0	7.4	7.4	7.2	8.3	11	15	86	89	818775	805579	<0.2	<0.2	0.6	0.6
						1.0	1.2	178	21.9		8.4		31.8		101.0		7.4		7.4		11		87				<0.2		0.6	
					Middle	3.5	1.1	169	21.9	21.9	8.3	8.3	31.8	31.8	101.0	101.0	7.4		8.0		17		89				<0.2		0.5	
						3.5	1.2	181	21.9		8.3		31.8		101.0		7.4		8.1		17		89				<0.2		0.7	
					Bottom	6.0	1.2	169	21.8	21.8	8.3	8.3	31.8	31.8	101.2	101.3	7.4	7.4	9.5		18		90				<0.2		0.5	
						6.0	1.2	172	21.8		8.3		31.8		101.3		7.4		9.6		17		90				<0.2		0.7	
IM4	Fine	Moderate	09:20	8.2	Surface	1.0	1.5	319	21.9	21.9	8.4	8.4	31.8	31.8	101.2	101.2	7.4	7.4	8.2	8.9	12	11	85	88	819701	804592	<0.2	<0.2	0.5	0.5
						1.0	1.5	329	21.9		8.4		31.8		101.2		7.4		8.4		11		85				<0.2		0.4	
					Middle	4.1	1.7	318	21.9	21.9	8.4	8.4	31.8	31.8	101.0	101.0	7.4		9.1		11		88				<0.2		0.4	
						4.1	1.7	326	21.9		8.4		31.8		101.0		7.4		9.1		11		89				<0.2		0.4	
					Bottom	7.2	1.6	321	21.8	21.8	8.3	8.3	31.8	31.8	101.0	101.0	7.4	7.4	9.4		11		90				<0.2		0.6	
						7.2	1.7	352	21.8		8.3		31.8		101.0		7.4		9.5		10		90				<0.2		0.4	
IM5	Fine	Moderate	09:26	7.6	Surface	1.0	0.7	150	22.0	22.0	8.4	8.4	31.7	31.7	100.5	100.5	7.3	7.3	9.7	10.1	13	13	87	89	820716	804876	<0.2	<0.2	0.4	0.5
						1.0	0.7	152	22.0		8.4		31.7		100.5		7.3		9.5		12		87				<0.2		0.5	
					Middle	3.8	0.7	148	21.9	21.9	8.3	8.3	31.7	31.7	100.5	100.5	7.3		9.8		14		88				<0.2		0.5	
						3.8	0.8	162	21.9		8.3		31.7		100.5		7.3		9.9		13		89				<0.2		0.6	
					Bottom	6.6	0.6	151	21.8	21.8	8.3	8.3	31.8	31.8	100.9	101.0	7.4	7.4	10.8		14		91				<0.2		0.4	
						6.6	0.7	157	21.8		8.3		31.8		101.1		7.4		10.9		14		91				<0.2		0.4	
IM6	Fine	Moderate	09:35	7.4	Surface	1.0	0.8	341	21.9	21.9	8.4	8.4	31.8	31.8	100.8	100.8	7.3	7.3	7.1	7.0	13	13	85	88	821052	805817	<0.2	<0.2	0.5	0.5
						1.0	0.8	314	21.9		8.4		31.8		100.8		7.3		7.0		12		85				<0.2		0.4	
					Middle	3.7	0.8	348	21.9	21.9	8.3	8.3	31.8	31.8	100.8	100.8	7.3		6.8		12		89				<0.2		0.5	
						3.7	0.9	353	21.9		8.3		31.8		100.8		7.3		6.8		13		89				<0.2		0.4	
					Bottom	6.4	0.8	339	21.8	21.8	8.3	8.3	31.8	31.8	100.8	100.9	7.4	7.4	7.2		13		90				<0.2		0.4	
						6.4	0.9	351	21.8		8.3		31.8		100.9		7.4		7.0		13		90				<0.2		0.5	
IM7	Fine	Moderate	09:43	8.6	Surface	1.0	0.8	321	22.4	22.4	8.3	8.3	31.2	31.2	96.0	96.0	7.0	7.0	5.9	7.0	11	13	85	88	821349	806833	<0.2	<0.2	0.5	0.4
						1.0	0.8	337	22.4		8.3		31.2		96.0		7.0		5.9		12		85				<0.2		0.4	
					Middle	4.3	0.8	326	22.3	22.3	8.3	8.3	31.2	31.2	96.1	96.2	7.0		6.9		12		89				<0.2		0.4	
						4.3	0.8	338	22.3		8.3		31.3		96.2		7.0		6.9		13		89				<0.2		0.4	
					Bottom	7.6	0.6	329	22.2	22.2	8.3	8.3	31.3	31.3	96.6	96.7	7.0	7.0	8.2		13		90				<0.2		0.4	
						7.6	0.6	346	22.2		8.3		31.3		96.8		7.0		8.3		14		90				<0.2		0.4	
IM8	Cloudy	Moderate	09:23	7.9	Surface	1.0	0.1	74	22.3	22.3	8.3	8.3	32.7	32.7	98.3	98.3	7.1	7.1	2.9	2.8	13	11	84	87	821850	808125	<0.2	<0.2	0.5	0.6
						1.0	0.1	76	22.3		8.3		32.7		98.3		7.1		3.0		12		84				<0.2		0.6	
					Middle	4.0	0.1	85	22.2	22.2	8.3	8.3	32.8	32.8	99.0	99.0	7.1		2.7		10		87				<0.2		0.6	
						4.0	0.1	92	22.2		8.3		32.8		98.9		7.1		2.7		10		87				<0.2		0.5	
					Bottom	6.9	0.0	76	22.1	22.1	8.3	8.3	32.9	32.9	100.7	100.7	7.3	7.3	2.8		10		89				<0.2		0.5	
						6.9	0.0	78	22.1		8.3		32.9		100.7		7.3		2.8		10		90				<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 01 December 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	09:17	7.4	Surface	1.0	0.1	307	22.1	22.1	8.3	8.3	32.8	32.8	97.7	97.7	7.1	7.1	3.4	3.8	14	12	83	87	822084	808801	<0.2	<0.2	0.5	0.6
						1.0	0.1	319	22.1		8.3		32.8		97.6		7.0		3.4		13		84				<0.2		0.7	
					Middle	3.7	0.2	298	22.1	22.1	8.3	8.3	32.8	32.8	97.9	97.9	7.1		4.1		12		87				<0.2		0.6	
						3.7	0.2	311	22.1		8.3		32.8		97.9		7.1		4.2		11		86				<0.2		0.6	
					Bottom	6.4	0.2	299	22.1	22.1	8.3	8.3	32.8	32.8	100.4	100.4	7.2	7.2	3.9		11		90				<0.2		0.6	
						6.4	0.2	303	22.1		8.3		32.8		100.4		7.2		3.9		10		90				<0.2		0.5	
IM10	Cloudy	Moderate	09:10	7.3	Surface	1.0	0.6	323	22.4	22.4	8.3	8.3	32.9	32.9	96.1	96.1	6.9	7.0	4.7	5.5	13	16	83	87	822384	809801	<0.2	<0.2	0.5	0.5
						1.0	0.6	342	22.4		8.3		32.9		96.0		6.9		4.6		12		84				<0.2		0.5	
					Middle	3.7	0.6	323	22.3	22.3	8.3	8.3	32.9	32.9	96.9	97.0	7.0		5.2		13		86				<0.2		0.5	
						3.7	0.7	338	22.3		8.3		32.9		97.0		7.0		5.3		20		87				<0.2		0.5	
					Bottom	6.3	0.5	324	22.3	22.3	8.3	8.3	32.9	32.9	98.3	98.3	7.1	7.1	6.6		20		89				<0.2		0.6	
						6.3	0.6	332	22.3		8.3		32.9		98.3		7.1		6.7		20		90				<0.2		0.5	
IM11	Cloudy	Moderate	08:59	8.1	Surface	1.0	0.5	276	22.3	22.3	8.3	8.3	32.8	32.8	96.9	96.9	7.0	7.0	11.2	12.8	13	20	84	87	822051	811459	<0.2	<0.2	0.6	0.6
						1.0	0.5	300	22.3		8.3		32.8		96.9		7.0		11.2		12		84				<0.2		0.6	
					Middle	4.1	0.5	273	22.3	22.3	8.3	8.3	32.8	32.8	97.6	97.7	7.0		12.6		24		87				<0.2		0.6	
						4.1	0.5	289	22.3		8.3		32.8		97.7		7.0		12.7		24		88				<0.2		0.5	
					Bottom	7.1	0.4	276	22.3	22.3	8.3	8.3	32.8	32.8	100.9	101.1	7.3	7.3	14.5		24		91				<0.2		0.6	
						7.1	0.5	298	22.3		8.3		32.8		101.3		7.3		14.5		24		90				<0.2		0.6	
IM12	Cloudy	Moderate	08:53	8.6	Surface	1.0	0.6	265	22.3	22.3	8.3	8.3	32.9	32.9	97.2	97.2	7.0	7.0	5.5	7.2	13	13	85	88	821438	812039	<0.2	<0.2	0.5	0.6
						1.0	0.6	274	22.3		8.3		32.9		97.1		7.0		5.6		13		85				<0.2		0.6	
					Middle	4.3	0.5	267	22.3	22.3	8.3	8.3	32.9	32.9	97.3	97.3	7.0		6.6		14		88				<0.2		0.6	
						4.3	0.5	284	22.3		8.3		32.9		97.3		7.0		6.6		13		87				<0.2		0.6	
					Bottom	7.6	0.5	273	22.3	22.3	8.3	8.3	32.9	32.9	97.8	97.8	7.0	7.0	9.5		13		90				<0.2		0.6	
						7.6	0.5	278	22.3		8.3		32.9		97.7		7.0		9.6		14		91				<0.2		0.5	
SR1A	Cloudy	Moderate	08:33	4.7	Surface	1.0	-	-	22.2	22.2	8.2	8.2	32.5	32.5	97.3	97.4	7.0	7.0	4.1	3.9	10	10	-	-	819976	812654	-	-	-	-
						1.0	-	-	22.2		8.2		32.5		97.5		7.0		4.1		10		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	22.2	22.2	8.2	8.2	32.5	32.5	105.3	105.5	7.6	7.6	3.7		11		-				-		-	
						3.7	-	-	22.2		8.2		32.5		105.6		7.6		3.7		10		-				-		-	
SR2	Cloudy	Moderate	08:20	4.2	Surface	1.0	0.3	21	22.3	22.3	8.3	8.3	32.8	32.8	98.4	98.7	7.1	7.1	8.6	8.9	18	18	86	88	821447	814152	<0.2	<0.2	0.6	0.6
						1.0	0.3	21	22.3		8.3		32.8		98.9		7.1		8.6		19		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	22	22.3	22.3	8.3	8.3	32.8	32.8	102.4	102.4	7.4	7.4	9.2		17		89				<0.2		0.5	
						3.2	0.3	22	22.3		8.3		32.8		102.4		7.4		9.3		17		89				<0.2		0.6	
SR3	Cloudy	Moderate	09:28	8.8	Surface	1.0	0.1	60	22.5	22.5	8.2	8.2	32.4	32.4	95.0	95.0	6.8	6.9	4.8	4.9	9	11	-	-	822164	807572	-	-	-	-
						1.0	0.2	62	22.5		8.2		32.4		95.0		6.8		4.8		10		-				-		-	
					Middle	4.4	0.1	47	22.5	22.5	8.2	8.2	32.5	32.5	96.2	96.2	6.9		5.1		13		-				-		-	
						4.4	0.1	47	22.5		8.2		32.5		96.1		6.9		5.0		12		-				-		-	
					Bottom	7.8	0.1	332	22.2	22.2	8.3	8.3	32.8	32.8	97.5	97.5	7.0	7.0	4.8		12		-				-		-	
						7.8	0.2	344	22.2		8.3		32.8		97.4		7.0		4.7		12		-				-		-	
SR4A	Fine	Calm	08:13	7.9	Surface	1.0	0.2	87	22.0	22.0	8.3	8.3	31.4	31.4	97.0	97.0	7.1	7.1	5.0	5.6	6	10	-	-	817179	807800	-	-	-	-
						1.0	0.2	89	22.0		8.3		31.4		97.0		7.1		5.1		7		-				-		-	
					Middle	4.0	0.2	145	22.0	22.0	8.3	8.3	31.4	31.4	97.0	97.0	7.1		5.4		10		-				-		-	
						4.0	0.2	147	22.0		8.3		31.4		97.0		7.1		5.5		9		-				-		-	
					Bottom	6.9	0.2	197	21.8	21.8	8.3	8.3	31.5	31.5	98.5	98.6	7.2	7.2	6.2		12		-				-		-	
						6.9	0.2	198	21.8		8.3		31.5		98.7		7.2		6.3		13		-				-		-	
SR5A	Fine	Calm	07:56	3.7	Surface	1.0	0.1	299	22.0	22.0	8.3	8.3	31.2	31.2	93.9	94.0	6.8	6.9	4.3	4.6	6	6	-	-	816600	810690	-	-	-	-
						1.0	0.1	316	22.0		8.3		31.2		94.0		6.9		4.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	311	21.9	21.9	8.2	8.2	31.3	31.3	95.4	95.7	7.0	7.0	4.9		6		-				-		-	
						2.7	0.1	332	21.9		8.2		31.3		96.0		7.0		4.9		7		-				-		-	
SR6A	Fine	Calm	07:29	4.6	Surface	1.0	0.1	245	22.4	22.4	8.2	8.2	31.2	31.2	92.2	92.3	6.7	6.7	7.5	7.6	16	12	-	-	817948	814722	-	-	-	-
						1.0	0.1	268	22.4		8.2		31.2		92.3		6.7		7.6		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	224	22.3	22.3	8.2	8.2	31.3	31.3	93.8	94.1	6.8	6.9	7.6		8		-				-		-	
						3.6	0.1	234	22.2		8.2		31.3		94.4		6.9		7.8		7		-				-		-	
SR7	Cloudy	Moderate	07:30	15.5	Surface	1.0	0.3	53	22.9	22.9	8.2	8.2	33.1	33.1	93.4	93.5	6.6	6.7	3.5	3.7	9	9	-	-	823655	823720	-	-	-	-
						1.0	0.3	57	22.9		8.2		33.1		93.5		6.6		3.5		9		-				-		-	
					Middle	7.8	0.4	43	22.9	22.9	8.2	8.2	33.1	33.1	94.6	94.6	6.7		3.7		9		-				-		-	
						7.8	0.4	45	22.9		8.2		33.1		94.5		6.7		3.8		9		-				-		-	
					Bottom	14.5	0.3	59	22.9	22.9	8.2	8.2	33.1	33.1	96.2	96.3	6.8	6.9	3.9		9		-				-		-	
						14.5	0.3	62	22.9		8.2		33.1		96.4		6.9		3.9		10		-				-		-	
SR8	Cloudy	Moderate	08:42	4.6	Surface	1.0	-	-	22.6	22.6	8.2	8.2	32.4	32.4	101.8	101.8	7.3	7.3	3.8	4.2	13	13	-	-	820375	811607	-	-	-	-
						1.0	-	-	22.6		8.2		32.4		101.8		7.3		3.9		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.2	22.2	8.3	8.3	32.8	32.8	105.9	106.0	7.6	7.6	4.5		12		-				-		-	
						3.6	-	-	22.2		8.3		32.8		106.0		7.6		4.5		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 03 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	14:12	8.8	Surface	1.0	1.3	290	21.0	21.0	8.0	8.0	31.3	31.3	99.6	99.7	7.4	7.4	9.1	9.4	16	12	86	88	815634	804270	<0.2	<0.2	0.6	0.6
						1.0	1.3	304	21.0		8.0		31.3		99.7		7.4		9.3		16		86				<0.2		0.6	
					Middle	4.4	1.4	288	21.0	21.0	8.0	8.0	31.3	31.3	100.0	100.1	7.4		9.5		11		88				<0.2		0.6	
						4.4	1.5	291	21.0		8.0		31.3		100.1		7.4		9.5		10		88				<0.2		0.5	
					Bottom	7.8	1.5	297	21.0	21.0	8.0	8.0	31.3	31.3	100.3	100.4	7.5	7.5	9.6		10		90				<0.2		0.6	
						7.8	1.6	320	21.0		8.0		31.3		100.4		7.5		9.7		9		90				<0.2		0.6	
C2	Fine	Rough	12:59	12.0	Surface	1.0	0.2	8	21.9	21.8	8.3	8.3	32.9	32.9	98.3	98.3	7.1	7.2	7.4	9.3	15	15	85	87	825691	806954	<0.2	<0.2	0.6	0.6
						1.0	0.2	8	21.8		8.3		32.9		98.2		7.1		7.4		16		84				<0.2		0.7	
					Middle	6.0	0.3	15	21.7	21.7	8.3	8.3	32.9	32.9	99.0	99.1	7.2		9.5		15		87				<0.2		0.6	
						6.0	0.3	15	21.7		8.3		32.9		99.2		7.2		9.6		14		87				<0.2		0.6	
					Bottom	11.0	0.3	31	21.6	21.6	8.3	8.3	33.0	33.0	100.2	100.2	7.3	7.3	11.1		14		90				<0.2		0.6	
						11.0	0.3	32	21.6		8.3		33.0		100.1		7.3		11.0		14		89				<0.2		0.6	
C3	Fine	Rough	14:57	12.2	Surface	1.0	0.3	93	22.6	22.6	8.3	8.3	33.2	33.2	95.0	95.1	6.8	6.8	0.7	2.0	7	8	86	87	822119	817781	<0.2	<0.2	0.6	0.6
						1.0	0.4	98	22.6		8.3		33.2		95.1		6.8		0.7		8		85				<0.2		0.7	
					Middle	6.1	0.2	79	22.6	22.6	8.3	8.3	33.2	33.2	94.9	94.9	6.8		1.3		8		89				<0.2		0.6	
						6.1	0.3	84	22.6		8.3		33.2		94.9		6.8		1.3		9		88				<0.2		0.6	
					Bottom	11.2	0.2	62	22.6	22.6	8.2	8.2	33.2	33.2	95.3	95.4	6.8	6.8	3.8		8		87				<0.2		0.6	
						11.2	0.3	62	22.6		8.2		33.2		95.4		6.8		3.9		9		87				<0.2		0.6	
IM1	Fine	Moderate	13:40	5.1	Surface	1.0	0.6	136	20.9	20.9	8.1	8.1	31.3	31.3	99.5	99.5	7.4	7.4	10.1	11.8	14	12	84	86	817972	807123	<0.2	<0.2	0.6	0.6
						1.0	0.6	138	20.9		8.1		31.3		99.4		7.4		10.4		13		84				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.6	143	20.9	20.9	8.1	8.1	31.3	31.3	99.6	99.7	7.4	7.4	13.4		11		88				<0.2		0.6	
						4.1	0.6	151	20.9		8.1		31.3		99.8		7.4		13.4		10		88				<0.2		0.6	
IM2	Fine	Rough	13:33	6.9	Surface	1.0	0.9	153	21.0	21.0	8.1	8.1	31.3	31.3	98.9	98.9	7.3	7.3	10.5	11.0	10	12	85	87	818182	806171	<0.2	<0.2	0.6	0.6
						1.0	0.9	156	21.0		8.1		31.3		98.8		7.3		10.6		11		86				<0.2		0.5	
					Middle	3.5	0.8	153	21.0	21.0	8.1	8.1	31.3	31.3	98.6	98.6	7.3		10.3		10		87				<0.2		0.6	
						3.5	0.9	158	21.0		8.1		31.3		98.6		7.3		10.3		11		87				<0.2		0.6	
					Bottom	5.9	0.7	149	21.0	21.0	8.0	8.0	31.3	31.3	98.8	99.0	7.3	7.4	12.1		14		89				<0.2		0.6	
						5.9	0.7	157	21.0		8.0		31.3		99.1		7.4		12.2		15		89				<0.2		0.6	
IM3	Fine	Rough	13:27	7.2	Surface	1.0	0.5	222	21.0	21.0	8.1	8.1	31.3	31.3	98.9	98.9	7.3	7.3	10.5	11.1	12	13	84	87	818768	805575	<0.2	<0.2	0.5	0.6
						1.0	0.6	227	21.0		8.1		31.3		98.8		7.3		10.4		12		86				<0.2		0.6	
					Middle	3.6	0.4	225	21.0	21.0	8.1	8.1	31.3	31.3	98.6	98.6	7.3		11.0		8		87				<0.2		0.6	
						3.6	0.4	247	21.0		8.1		31.3		98.6		7.3		11.0		9		87				<0.2		0.7	
					Bottom	6.2	0.6	230	21.0	21.0	8.1	8.1	31.3	31.3	98.9	99.0	7.3	7.4	11.6		18		89				<0.2		0.7	
						6.2	0.6	247	21.0		8.1		31.3		99.1		7.4		12.0		19		89				<0.2		0.5	
IM4	Fine	Rough	13:18	8.1	Surface	1.0	0.7	153	21.0	21.0	8.1	8.1	31.1	31.1	98.2	98.1	7.3	7.3	9.0	11.3	15	12	86	87	819737	804621	<0.2	<0.2	0.6	0.5
						1.0	0.7	159	21.0		8.1		31.1		98.0		7.3		9.2		16		85				<0.2		0.5	
					Middle	4.1	0.9	155	20.9	21.0	8.1	8.1	31.2	31.2	97.4	97.4	7.2		11.4		8		87				<0.2		0.6	
						4.1	0.9	168	21.0		8.1		31.2		97.4		7.2		11.7		7		88				<0.2		0.4	
					Bottom	7.1	0.8	152	21.0	21.0	8.1	8.1	31.2	31.2	97.3	97.4	7.2	7.2	13.2		14		89				<0.2		0.5	
						7.1	0.9	165	20.9		8.1		31.2		97.4		7.2		13.2		14		89				<0.2		0.6	
IM5	Fine	Rough	13:09	7.0	Surface	1.0	0.7	353	20.9	20.9	8.1	8.1	31.2	31.2	98.4	98.4	7.3	7.3	12.9	13.5	12	13	86	88	820750	804869	<0.2	<0.2	0.5	0.5
						1.0	0.8	325	20.9		8.1		31.2		98.4		7.3		13.0		13		85				<0.2		0.5	
					Middle	3.5	0.7	4	20.9	20.9	8.1	8.1	31.2	31.2	98.3	98.3	7.3		13.3		9		87				<0.2		0.6	
						3.5	0.7	4	20.9		8.1		31.2		98.3		7.3		13.4		9		88				<0.2		0.5	
					Bottom	6.0	0.6	358	20.9	20.9	8.1	8.1	31.2	31.2	98.1	98.1	7.3	7.3	14.1		17		90				<0.2		0.5	
						6.0	0.6	329	20.9		8.1		31.2		98.1		7.3		14.2		17		89				<0.2		0.6	
IM6	Fine	Rough	13:01	7.4	Surface	1.0	0.3	325	21.0	21.0	8.1	8.1	31.3	31.3	101.8	101.8	7.6	7.6	6.8	6.6	15	11	85	87	821068	805838	<0.2	<0.2	0.5	0.6
						1.0	0.3	349	21.0		8.1		31.2		101.8		7.6		6.8		14		85				<0.2		0.6	
					Middle	3.7	0.1	36	20.9	20.9	8.1	8.1	31.3	31.3	101.6	101.6	7.6		6.5		10		87				<0.2		0.6	
						3.7	0.1	37	20.9		8.1		31.3		101.6		7.6		6.5		9		87				<0.2		0.5	
					Bottom	6.4	0.3	345	20.9	20.9	8.0	8.0	31.3	31.3	101.5	101.5	7.6	7.6	6.4		9		89				<0.2		0.5	
						6.4	0.3	358	20.9		8.0		31.3		101.5		7.6		6.4		10		89				<0.2		0.6	
IM7	Fine	Rough	12:55	8.6	Surface	1.0	0.6	140	21.0	21.0	8.1	8.1	31.3	31.3	99.3	99.3	7.4	7.4	8.7	8.8	11	10	86	88	821349	806854	<0.2	<0.2	0.5	0.5
						1.0	0.6	142	21.0		8.1		31.3		99.3		7.4		8.7		12		85				<0.2		0.5	
					Middle	4.3	0.6	143	20.9	20.9	8.1	8.1	31.3	31.3	99.2	99.2	7.4		8.7		9		89				<0.2		0.5	
						4.3	0.6	154	20.9		8.1		31.3		99.2		7.4		8.6		8		87				<0.2		0.5	
					Bottom	7.6	0.6	138	20.9	20.9	8.1	8.1	31.3	31.3	99.5	99.6	7.4	7.4	9.0		8		89				<0.2		0.5	
						7.6	0.6	150	20.9		8.1		31.3		99.7		7.4		9.1		9		89				<0.2		0.5	
IM8	Fine	Moderate	13:26	7.9	Surface	1.0	0.3	85	21.9	21.9	8.3	8.3	32.8	32.8	101.5	101.5	7.4	7.4	3.6	4.5	9	8	84	87	821849	808138	<0.2	<0.2	0.6	0.6
						1.0	0.3	86	21.9		8.3		32.8		101.5		7.4		3.6		10		84				<0.2		0.5	
					Middle	4.0	0.3	82	21.7	21.7	8.3	8.3	32.9	32.9	101.3	101.3	7.4		4.5		7		86				<0.2		0.4	
						4.0	0.3	86	21.7		8.3		32.9		101.3		7.4		4.5		8		87				<0.2		0.6	
					Bottom	6.9	0.3	77	21.5	21.5	8.3	8.3	33.2	33.2	101.6	101.7	7.4	7.4	5.5		8		89				<0.2		0.6	
						6.9	0.3	78	21.5		8.3		33.2		101.7		7.4		5.5		7		89				<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 December 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	13:32	7.4	Surface	1.0	0.3	73	22.0	22.0	8.3	8.3	32.7	32.7	98.9	98.9	7.2	7.2	3.1	3.3	7	8	84	87	822070	808801	<0.2	<0.2	0.5	0.6
						1.0	0.4	79	22.0		8.3		32.7		98.8		7.2		3.1		8		84				<0.2		0.6	
					Middle	3.7	0.3	62	21.9	21.9	8.3	8.3	32.7	32.7	99.0	99.1	7.2		3.2		8		86				<0.2		0.6	
						3.7	0.3	63	21.9		8.3		32.7		99.1		7.2		3.2		9		87				<0.2		0.6	
					Bottom	6.4	0.3	57	21.9	21.9	8.3	8.3	32.7	32.7	100.8	100.9	7.3	7.3	3.5		9		89				<0.2		0.6	
						6.4	0.3	58	21.9		8.3		32.7		100.9		7.3		3.4		8		89				<0.2		0.7	
IM10	Fine	Moderate	13:40	7.7	Surface	1.0	0.1	72	22.0	22.0	8.3	8.3	33.0	33.0	100.5	100.5	7.3	7.3	2.1	2.1	11	10	84	87	822407	809812	<0.2	<0.2	0.6	0.6
						1.0	0.2	72	22.0		8.3		33.0		100.4		7.3				10		83				<0.2		0.6	
					Middle	3.9	0.2	59	22.0	22.0	8.3	8.3	33.0	33.0	100.4	100.4	7.3		2.2		9		87				<0.2		0.5	
						3.9	0.2	62	22.0		8.3		33.0		100.4		7.3		2.2		9		87				<0.2		0.6	
					Bottom	6.7	0.2	62	21.9	21.9	8.3	8.3	33.0	33.0	101.6	101.8	7.4	7.4	2.0		9		89				<0.2		0.6	
						6.7	0.2	63	21.9		8.3		33.0		101.9		7.4		2.1		9		89				<0.2		0.5	
IM11	Fine	Moderate	13:53	8.2	Surface	1.0	0.1	90	22.2	22.2	8.3	8.3	33.0	33.0	99.1	99.1	7.1	7.1	1.9	2.4	8	8	84	87	822056	811466	<0.2	<0.2	0.6	0.6
						1.0	0.1	93	22.2		8.3		33.0		99.1		7.1		2.0		7		84				<0.2		0.6	
					Middle	4.1	0.1	79	22.3	22.3	8.3	8.3	33.0	33.0	99.1	99.1	7.1		2.9		8		86				<0.2		0.7	
						4.1	0.1	84	22.3		8.3		33.0		99.1		7.1		2.9		8		87				<0.2		0.5	
					Bottom	7.2	0.1	83	22.3	22.3	8.3	8.3	33.0	33.0	100.7	100.7	7.2	7.2	2.4		7		89				<0.2		0.7	
						7.2	0.1	90	22.3		8.3		33.0		100.7		7.2		2.4		7		89				<0.2		0.6	
IM12	Fine	Moderate	14:00	9.8	Surface	1.0	0.1	97	22.3	22.3	8.3	8.3	33.1	33.1	97.9	97.9	7.0	7.0	3.3	3.0	7	8	84	87	821456	812030	<0.2	<0.2	0.6	0.6
						1.0	0.1	106	22.3		8.3		33.1		97.9		7.0		3.3		7		84				<0.2		0.6	
					Middle	4.9	0.0	61	22.3	22.3	8.3	8.3	33.1	33.1	97.8	97.8	7.0		3.0		7		86				<0.2		0.6	
						4.9	0.0	65	22.3		8.3		33.1		97.8		7.0		3.0		8		87				<0.2		0.6	
					Bottom	8.8	0.1	56	22.3	22.3	8.3	8.3	33.1	33.1	98.6	98.6	7.1	7.1	2.7		9		89				<0.2		0.5	
						8.8	0.1	58	22.3		8.3		33.1		98.6		7.1		2.7		8		89				<0.2		0.6	
SR1A	Fine	Moderate	14:21	5.2	Surface	1.0	-	-	22.0	22.0	8.3	8.3	32.9	32.9	100.4	100.4	7.3	7.3	1.3	1.4	7	7	-	-	819975	812655	-	-	-	-
						1.0	-	-	22.0		8.3		32.9		100.4		7.3		1.3		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	22.0	22.0	8.3	8.3	32.9	32.9	101.0	101.1	7.3	7.3	1.4		5		-				-		-	
						4.2	-	-	22.0		8.3		32.9		101.2		7.3		1.4		6		-				-		-	
SR2	Fine	Rough	14:35	3.9	Surface	1.0	0.1	103	22.5	22.5	8.3	8.3	33.1	33.1	98.8	98.8	7.1	7.1	2.1	2.3	9	8	85	87	821460	814170	<0.2	<0.2	0.6	0.6
						1.0	0.1	105	22.5		8.3		33.1		98.8		7.1		2.1		8		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	117	22.5	22.5	8.3	8.3	33.1	33.1	101.4	101.4	7.3	7.3	2.5		6		87				<0.2		0.6	
						2.9	0.1	124	22.5		8.3		33.1		101.4		7.3		2.6		7		88				<0.2		0.6	
SR3	Fine	Moderate	13:20	9.1	Surface	1.0	0.3	109	21.9	21.9	8.3	8.3	32.7	32.7	100.2	100.2	7.3	7.3	4.2	6.7	9	10	-	-	822148	807591	-	-	-	-
						1.0	0.3	115	21.9		8.3		32.7		100.2		7.3		4.1		9		-				-		-	
					Middle	4.6	0.3	93	21.8	21.8	8.3	8.3	32.8	32.8	100.2	100.3	7.3		6.0		9		-				-		-	
						4.6	0.3	97	21.8		8.3		32.8		100.3		7.3		6.1		9		-				-		-	
					Bottom	8.1	0.3	74	21.6	21.6	8.3	8.3	33.0	33.0	100.7	100.7	7.3	7.3	9.8		10		-				-		-	
						8.1	0.3	75	21.6		8.3		33.0		100.6		7.3		9.7		11		-				-		-	
SR4A	Fine	Calm	14:22	9.2	Surface	1.0	0.6	102	21.1	21.1	8.1	8.1	31.3	31.3	99.8	99.8	7.4	7.4	9.0	9.2	11	9	-	-	817183	807813	-	-	-	-
						1.0	0.6	104	21.1		8.1		31.3		99.8		7.4		9.1		10		-				-		-	
					Middle	4.6	0.8	96	21.0	21.0	8.1	8.1	31.3	31.3	99.8	99.8	7.4		9.3		9		-				-		-	
						4.6	0.8	104	21.0		8.1		31.3		99.7		7.4		9.2		8		-				-		-	
					Bottom	8.2	0.7	115	21.0	21.0	8.1	8.1	31.3	31.3	99.5	99.5	7.4	7.4	9.3		9		-				-		-	
						8.2	0.7	122	21.0		8.1		31.3		99.5		7.4		9.2		8		-				-		-	
SR5A	Fine	Calm	14:37	3.4	Surface	1.0	0.1	250	21.4	21.4	8.0	8.0	31.0	31.0	102.6	102.6	7.6	7.6	7.0	7.1	9	8	-	-	816607	810704	-	-	-	-
						1.0	0.1	250	21.4		8.0		31.0		102.6		7.6		7.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	261	21.4	21.4	8.0	8.0	31.0	31.0	102.7	102.8	7.6	7.6	7.2		8		-				-		-	
						2.4	0.1	273	21.4		8.0		31.0		102.8		7.6		7.3		7		-				-		-	
SR6A	Fine	Calm	15:14	4.7	Surface	1.0	0.1	347	21.8	21.8	8.0	8.0	30.9	30.9	97.9	97.9	7.2	7.2	9.2	9.8	10	9	-	-	817981	814728	-	-	-	-
						1.0	0.1	319	21.8		8.0		30.9		97.9		7.2		9.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	48	21.6	21.6	8.0	8.0	31.0	31.0	98.8	98.9	7.3	7.3	10.4		9		-				-		-	
						3.7	0.0	52	21.6		8.0		31.0		99.0		7.3		10.4		8		-				-		-	
SR7	Fine	Rough	15:30	14.8	Surface	1.0	0.3	67	22.5	22.5	8.2	8.2	33.2	33.2	93.6	93.6	6.7	6.7	2.4	2.8	8	8	-	-	823621	823745	-	-	-	-
						1.0	0.3	73	22.5		8.2		33.2		93.6		6.7		2.4		8		-				-		-	
					Middle	7.4	0.3	54	22.5	22.5	8.2	8.2	33.2	33.2	93.0	93.0	6.7		2.7		8		-				-		-	
						7.4	0.3	56	22.5		8.2		33.2		93.0		6.7		2.7		9		-				-		-	
					Bottom	13.8	0.2	61	22.5	22.5	8.2	8.2	33.2	33.2	93.9	93.9	6.7	6.7	3.3		9		-				-		-	
						13.8	0.3	61	22.5		8.2		33.2		93.9		6.7		3.3		8		-				-		-	
SR8	Fine	Moderate	14:11	5.1	Surface	1.0	-	-	22.2	22.2	8.3	8.3	33.0	33.0	99.6	99.6	7.2	7.2	3.1	3.0	12	11	-	-	820407	811619	-	-	-	-
						1.0	-	-	22.2		8.3		33.0		99.5		7.2		3.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	22.2	22.2	8.3	8.3	33.0	33.0	101.5	101.5	7.3	7.3	2.9		10		-				-		-	
						4.1	-	-	22.2		8.3		33.0		101.4		7.3		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 03 December 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	09:59	8.0	Surface	1.0	1.3	352	21.0	21.0	8.1	8.1	31.2	31.2	96.8	96.8	7.2	7.2	6.8	7.7	8	8	87	90	815621	804267	<0.2	<0.2	0.5	0.5
						1.0	1.4	14	21.0		8.1		31.2		96.8		7.2		6.6		9		87				<0.2		0.5	
					Middle	4.0	1.5	354	21.0	21.0	8.0	8.0	31.3	31.2	96.3	96.3	7.2		7.5		9		90				<0.2		0.6	
						4.0	1.5	355	21.0		8.0		31.2		96.3		7.2		7.7		8		91				<0.2		0.5	
					Bottom	7.0	1.4	354	21.0	21.0	8.0	8.0	31.2	31.2	96.5	96.6	7.2	7.2	8.8		5		91				<0.2		0.5	
						7.0	1.5	29	21.0		8.0		31.2		96.6		7.2		8.9		6		92				<0.2		0.5	
C2	Fine	Rough	10:44	11.5	Surface	1.0	0.4	2	22.0	22.0	8.2	8.2	32.6	32.6	96.1	96.1	7.0	7.0	7.0	9.1	14	16	85	88	825695	806931	<0.2	<0.2	0.7	0.7
						1.0	0.4	2	22.0		8.2		32.6		96.1		7.0		7.0		15		86				<0.2		0.7	
					Middle	5.8	0.4	3	22.0	22.0	8.2	8.2	32.6	32.6	96.3	96.3	7.0		8.9		17		88				<0.2		0.7	
						5.8	0.4	3	22.0		8.2		32.6		96.3		7.0		9.0		17		88				<0.2		0.7	
					Bottom	10.5	0.4	5	22.0	22.0	8.2	8.2	32.6	32.6	96.1	96.2	7.0	7.0	11.4		17		91				<0.2		0.6	
						10.5	0.4	5	22.0		8.2		32.6		96.3		7.0		11.3		17		90				<0.2		0.6	
C3	Cloudy	Rough	08:40	10.8	Surface	1.0	0.4	248	22.4	22.4	8.2	8.2	33.1	33.1	94.0	94.1	6.7	6.8	2.2	3.9	8	8	85	88	822093	817796	<0.2	<0.2	0.5	0.5
						1.0	0.4	264	22.4		8.2		33.1		94.1		6.7		2.2		9		85				<0.2		0.4	
					Middle	5.4	0.3	250	22.4	22.4	8.2	8.2	33.1	33.1	95.1	95.0	6.8		3.2		7		88				<0.2		0.6	
						5.4	0.4	271	22.4		8.2		33.1		94.9		6.8		3.2		8		88				<0.2		0.4	
					Bottom	9.8	0.3	253	22.3	22.3	8.3	8.3	33.0	33.0	96.0	96.1	6.9	6.9	6.3		8		91				<0.2		0.4	
						9.8	0.3	255	22.3		8.3		33.0		96.1		6.9		6.2		7		91				<0.2		0.5	
IM1	Fine	Moderate	10:19	4.7	Surface	1.0	0.2	7	20.8	20.8	8.1	8.0	31.2	31.2	97.6	97.6	7.3	7.3	11.6	12.0	9	11	86	88	817948	807115	<0.2	<0.2	0.5	0.4
						1.0	0.2	7	20.7		8.0		31.2		97.5		7.3		11.8		10		86				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	15	20.7	20.7	8.0	8.0	31.2	31.2	98.0	98.1	7.3	7.3	12.5		11		89				<0.2		0.4	
						3.7	0.2	15	20.7		8.0		31.2		98.2		7.3		12.2		12		89				<0.2		0.4	
IM2	Fine	Moderate	10:28	6.6	Surface	1.0	1.2	154	21.0	21.0	8.1	8.1	31.1	31.1	97.2	97.2	7.2	7.2	13.5	14.4	9	10	85	87	818166	806175	<0.2	<0.2	0.4	0.5
						1.0	1.2	157	21.0		8.1		31.1		97.2		7.2		13.7		8		86				<0.2		0.5	
					Middle	3.3	1.1	155	21.0	21.0	8.1	8.1	31.1	31.1	97.1	97.1	7.2		13.5		8		87				<0.2		0.5	
						3.3	1.2	169	21.0		8.1		31.1		97.1		7.2		14.3		8		87				<0.2		0.6	
					Bottom	5.6	1.2	156	21.0	21.0	8.1	8.1	31.1	31.1	97.0	97.0	7.2	7.2	14.5		14		89				<0.2		0.5	
						5.6	1.3	168	21.0		8.1		31.1		97.0		7.2		16.6		13		89				<0.2		0.5	
IM3	Fine	Moderate	10:37	7.0	Surface	1.0	1.5	324	21.0	21.0	8.1	8.1	31.1	31.1	97.2	97.2	7.2	7.2	13.5	13.2	8	15	85	87	818785	805594	<0.2	<0.2	0.4	0.5
						1.0	1.6	338	21.0		8.1		31.1		97.2		7.2		13.6		7		86				<0.2		0.5	
					Middle	3.5	1.8	324	21.0	21.0	8.1	8.1	31.1	31.1	97.1	97.1	7.2		12.4		17		87				<0.2		0.6	
						3.5	1.9	340	21.0		8.1		31.1		97.1		7.2		12.6		18		86				<0.2		0.4	
					Bottom	6.0	1.8	324	21.0	21.0	8.1	8.1	31.1	31.1	97.0	97.0	7.2	7.2	13.5		18		90				<0.2		0.4	
						6.0	2.0	347	21.0		8.1		31.1		97.0		7.2		13.4		19		89				<0.2		0.5	
IM4	Fine	Rough	10:47	8.0	Surface	1.0	0.8	291	21.2	21.2	8.1	8.1	31.0	31.0	97.2	97.3	7.2	7.2	10.2	9.5	9	14	85	88	819746	804592	<0.2	<0.2	0.5	0.5
						1.0	0.9	293	21.2		8.1		31.0		97.3		7.2		10.2		10		86				<0.2		0.4	
					Middle	4.0	1.0	280	21.1	21.1	8.0	8.0	31.1	31.1	97.3	97.4	7.2		9.4		16		87				<0.2		0.4	
						4.0	1.1	282	21.1		8.0		31.1		97.4		7.2		9.3		17		88				<0.2		0.4	
					Bottom	7.0	0.9	280	21.1	21.1	8.0	8.0	31.1	31.1	97.5	97.6	7.2	7.3	8.9		17		90				<0.2		0.5	
						7.0	0.9	307	21.1		8.0		31.1		97.6		7.3		9.1		16		90				<0.2		0.5	
IM5	Fine	Rough	10:53	7.4	Surface	1.0	1.2	12	21.2	21.2	8.1	8.1	31.0	31.0	97.2	97.3	7.2	7.2	10.5	9.6	10	15	86	87	820754	804845	<0.2	<0.2	0.5	0.5
						1.0	1.2	12	21.2		8.1		31.0		97.3		7.2		10.5		9		85				<0.2		0.4	
					Middle	3.7	1.1	7	21.2	21.2	8.1	8.1	31.1	31.1	97.4	97.4	7.2		10.0		20		87				<0.2		0.5	
						3.7	1.2	7	21.1		8.1		31.1		97.4		7.2		9.7		19		88				<0.2		0.4	
					Bottom	6.4	1.1	16	21.1	21.1	8.1	8.1	31.1	31.1	96.9	96.9	7.2	7.2	8.2		15		89				<0.2		0.4	
						6.4	1.1	17	21.1		8.1		31.1		96.8		7.2		8.5		16		89				<0.2		0.5	
IM6	Fine	Rough	11:00	7.2	Surface	1.0	0.9	153	21.2	21.2	8.1	8.1	31.0	31.0	97.2	97.2	7.2	7.2	9.6	8.9	10	11	86	88	821068	805819	<0.2	<0.2	0.4	0.4
						1.0	0.9	166	21.2		8.1		31.0		97.2		7.2		9.6		9		85				<0.2		0.4	
					Middle	3.6	0.9	153	21.1	21.1	8.1	8.1	31.1	31.1	97.3	97.3	7.2		9.0		19		87				<0.2		0.4	
						3.6	1.0	156	21.1		8.1		31.1		97.3		7.2		8.9		10		88				<0.2		0.4	
					Bottom	6.2	0.7	146	21.1	21.1	8.1	8.1	31.1	31.1	97.2	97.2	7.2	7.2	8.3		9		90				<0.2		0.5	
						6.2	0.7	153	21.1		8.1		31.1		97.2		7.2		8.2		9		89				<0.2		0.5	
IM7	Fine	Rough	11:11	7.3	Surface	1.0	1.3	329	21.2	21.2	8.1	8.1	31.0	31.0	97.2	97.2	7.2	7.2	9.3	8.7	16	14	85	87	821336	806815	<0.2	<0.2	0.4	0.4
						1.0	1.4	334	21.2		8.1		31.0		97.2		7.2		9.0		15		85				<0.2		0.4	
					Middle	3.7	1.3	334	21.1	21.1	8.1	8.1	31.1	31.1	97.0	97.0	7.2		8.2		16		87				<0.2		0.4	
						3.7	1.4	356	21.1		8.1		31.1		97.0		7.2		8.2		15		88				<0.2		0.4	
					Bottom	6.3	1.4	333	21.1	21.2	8.1	8.1	31.1	31.0	96.9	97.0	7.2	7.2	8.5		11		90				<0.2		0.4	
						6.3	1.5	306	21.2		8.1		31.0		97.0		7.2		8.9		12		89				<0.2		0.4	
IM8	Fine	Rough	10:13	7.4	Surface	1.0	0.0	24	21.7	21.7	8.3	8.3	33.0	33.0	98.7	98.7	7.2	7.2	3.9	4.2	9	10	85	88	821824	808139	<0.2	<0.2	0.6	0.6
						1.0	0.0	24	21.7		8.3		33.0		98.7		7.2		3.9		9		85				<0.2		0.6	
					Middle	3.7	0.0	78	21.7	21.7	8.3	8.3	33.0	33.0	99.6	99.6	7.2		4.0		10		88				<0.2		0.6	
						3.7	0.0	80	21.7		8.3		33.0		99.6		7.2		4.1		11		88				<0.2		0.5	
					Bottom	6.4	0.0	0	21.7	21.7	8.3	8.3	33.0	33.0	100.3	100.4	7.3	7.3	4.5		11		90				<0.2		0.6	
						6.4	0.0	0	21.7		8.3		33.0		100.4		7.3		4.5		12		91				<0.2		0.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 December 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	Rough	10:06	6.7	Surface	1.0	0.1	318	21.6	21.6	8.3	8.3	33.0	33.0	99.2	99.2	7.2	7.2	3.4	3.7	11	10	86	88	822090	808810	<0.2	<0.2	0.6	0.6
						1.0	0.1	320	21.6		8.3		33.0		99.2		7.2		3.4		10		85				<0.2		0.5	
					Middle	3.4	0.1	307	21.6	21.6	8.3	8.3	33.0	33.0	99.3	99.4	7.2		3.5		10		88				<0.2		0.6	
						3.4	0.1	331	21.6		8.3		33.0		99.4		7.2		3.5		9		87				<0.2		0.6	
					Bottom	5.7	0.1	323	21.6	21.6	8.3	8.3	33.0	33.0	101.5	101.4	7.4	7.4	4.1		9		90				<0.2		0.6	
						5.7	0.1	327	21.6		8.3		33.0		101.3		7.4		4.1		9		91				<0.2		0.6	
IM10	Fine	Rough	09:57	7.2	Surface	1.0	0.6	319	21.9	21.9	8.3	8.3	33.0	33.0	98.7	98.8	7.1	7.2	5.5	6.0	14	13	85	88	822376	809786	<0.2	<0.2	0.6	0.5
						1.0	0.6	345	21.9		8.3		33.0		98.8		7.2		5.4		13		86				<0.2		0.5	
					Middle	3.6	0.6	318	21.9	21.9	8.3	8.3	33.0	33.0	99.0	99.0	7.2		5.9		14		88				<0.2		0.5	
						3.6	0.6	336	21.9		8.3		33.0		98.9		7.2		6.0		14		87				<0.2		0.5	
					Bottom	6.2	0.5	319	21.8	21.8	8.3	8.3	33.0	33.0	99.9	99.9	7.2	7.2	6.6		10		90				<0.2		0.6	
						6.2	0.6	332	21.8		8.3		33.0		99.9		7.2		6.7		11		90				<0.2		0.5	
IM11	Fine	Rough	09:46	7.8	Surface	1.0	0.6	311	21.9	21.9	8.3	8.3	33.0	33.0	98.2	98.2	7.1	7.1	9.8	11.3	14	13	85	88	822075	811463	<0.2	<0.2	0.5	0.5
						1.0	0.6	330	21.9		8.3		33.0		98.2		7.1		9.9		13		86				<0.2		0.5	
					Middle	3.9	0.6	312	21.9	21.9	8.3	8.3	33.0	33.0	98.3	98.3	7.1		11.2		14		87				<0.2		0.6	
						3.9	0.6	342	21.9		8.3		33.0		98.3		7.1		11.3		13		88				<0.2		0.5	
					Bottom	6.8	0.5	315	21.9	21.9	8.3	8.3	33.0	33.0	99.7	99.8	7.2	7.2	12.8		13		90				<0.2		0.6	
						6.8	0.5	323	21.9		8.3		33.0		99.9		7.2		12.8		12		90				<0.2		0.5	
IM12	Fine	Rough	09:38	9.0	Surface	1.0	0.6	260	21.9	21.9	8.3	8.3	33.0	33.0	97.9	97.9	7.1	7.1	8.1	10.0	13	14	85	88	821468	812040	<0.2	<0.2	0.4	0.4
						1.0	0.6	275	21.9		8.3		33.0		97.9		7.1		8.3		12		85				<0.2		0.4	
					Middle	4.5	0.6	268	21.9	21.9	8.3	8.3	33.0	33.0	98.7	98.6	7.1		9.5		13		88				<0.2		0.4	
						4.5	0.6	277	21.9		8.3		33.0		98.4		7.1		9.5		14		87				<0.2		0.4	
					Bottom	8.0	0.4	271	21.9	21.9	8.3	8.3	33.0	33.0	100.0	100.1	7.2	7.3	12.3		15		90				<0.2		0.5	
						8.0	0.5	282	21.9		8.3		33.0		100.2		7.3		12.1		16		90				<0.2		0.4	
SR1A	Fine	Rough	09:16	4.7	Surface	1.0	-	-	21.9	21.9	8.3	8.3	32.9	32.9	95.1	95.1	6.9	6.9	3.6	3.5	14	12	-	-	819971	812663	-	-	-	-
						1.0	-	-	21.9		8.3		32.9		95.0		6.9		3.4		13		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	21.8	21.8	8.3	8.3	32.9	32.9	98.2	98.2	7.1	7.1	3.4		10		-				-		-	
						3.7	-	-	21.8		8.3		32.9		98.1		7.1		3.4		11		-				-		-	
SR2	Cloudy	Rough	09:02	4.3	Surface	1.0	0.2	153	21.9	21.9	8.3	8.3	33.0	33.0	98.6	98.6	7.1	7.1	3.4	3.9	11	10	86	88	821470	814176	<0.2	<0.2	0.5	0.5
						1.0	0.2	162	21.9		8.3		33.0		98.6		7.1		3.2		10		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	157	21.9	21.9	8.3	8.3	33.0	33.0	99.7	99.8	7.2	7.2	4.5		9		89				<0.2		0.4	
						3.3	0.2	158	21.9		8.3		33.0		99.8		7.2		4.4		10		89				<0.2		0.6	
SR3	Fine	Rough	10:21	8.7	Surface	1.0	0.1	276	22.0	22.0	8.3	8.3	32.7	32.7	97.0	97.0	7.0	7.1	3.0	3.7	9	9	-	-	822129	807592	-	-	-	-
						1.0	0.1	295	22.0		8.3		32.7		97.0		7.0		3.1		10		-				-		-	
					Middle	4.4	0.0	259	22.0	22.0	8.2	8.2	32.7	32.7	97.9	97.9	7.1		3.3		10		-				-		-	
						4.4	0.0	277	22.0		8.2		32.7		97.9		7.1		3.4		9		-				-		-	
					Bottom	7.7	0.0	282	22.0	22.0	8.3	8.3	32.8	32.8	97.8	97.8	7.1	7.1	4.6		9		-				-		-	
						7.7	0.0	293	22.0		8.3		32.8		97.8		7.1		4.5		8		-				-		-	
SR4A	Fine	Calm	09:36	8.8	Surface	1.0	1.4	291	21.1	21.1	8.1	8.1	31.0	31.0	95.6	95.6	7.1	7.1	6.1	6.2	11	9	-	-	817204	807803	-	-	-	-
						1.0	1.5	318	21.1		8.1		31.0		95.5		7.1		6.2		10		-				-		-	
					Middle	4.4	1.3	291	21.1	21.1	8.1	8.1	31.0	31.0	95.5	95.5	7.1		6.3		9		-				-		-	
						4.4	1.4	309	21.1		8.1		31.0		95.5		7.1		6.3		8		-				-		-	
					Bottom	7.8	1.4	292	21.1	21.1	8.1	8.1	31.0	31.0	95.3	95.3	7.1	7.1	6.3		8		-				-		-	
						7.8	1.5	306	21.1		8.1		31.0		95.3		7.1		6.3		9		-				-		-	
SR5A	Fine	Calm	09:19	3.1	Surface	1.0	0.1	296	21.2	21.2	7.9	7.9	30.9	30.9	94.4	94.5	7.0	7.0	9.3	8.3	9	9	-	-	816596	810686	-	-	-	-
						1.0	0.1	320	21.2		7.9		30.9		94.5		7.0		9.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	309	21.1	21.1	7.9	7.9	30.9	30.9	95.2	95.3	7.1	7.1	7.4		9		-				-		-	
						2.1	0.1	310	21.1		7.9		30.9		95.3		7.1		7.2		9		-				-		-	
SR6A	Fine	Calm	08:52	4.4	Surface	1.0	0.1	262	21.3	21.3	8.0	8.0	30.8	30.8	90.7	90.7	6.7	6.7	8.1	7.6	7	9	-	-	817953	814754	-	-	-	-
						1.0	0.1	271	21.3		8.0		30.8		90.7		6.7		8.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	265	21.3	21.3	7.9	7.9	30.8	30.8	90.6	90.6	6.7	6.7	7.0		9		-				-		-	
						3.4	0.1	267	21.3		7.9		30.8		90.6		6.7		7.1		10		-				-		-	
SR7	Cloudy	Rough	08:08	15.9	Surface	1.0	0.3	34	22.6	22.6	8.2	8.2	33.1	33.1	92.1	92.1	6.6	6.6	5.3	6.7	10	9	-	-	823650	823757	-	-	-	-
						1.0	0.3	35	22.6		8.2		33.1		92.1		6.6		5.3		10		-				-		-	
					Middle	8.0	0.3	42	22.6	22.6	8.2	8.2	33.1	33.1	91.5	91.6	6.5	6.6	6.9		10		-				-		-	
						8.0	0.3	44	22.6		8.2		33.1		91.6		6.5		7.0		9		-				-		-	
					Bottom	14.9	0.3	37	22.6	22.6	8.2	8.2	33.1	33.1	91.9	92.0	6.6	6.6	7.7		9		-				-		-	
						14.9	0.3	37	22.6		8.2		33.1		92.0		6.6		7.8		8		-				-		-	
SR8	Fine	Rough	09:28	4.6	Surface	1.0	-	-	21.8	21.8	8.3	8.3	33.0	33.0	99.0	99.1	7.2	7.2	4.3	4.5	11	10	-	-	820386	811622	-	-	-	-
						1.0	-	-	21.8		8.3		33.0		99.2		7.2		4.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	21.8	21.7	8.3	8.3	33.0	33.0	102.0	102.0	7.4	7.4	4.7		9		-				-		-	
						3.6	-	-	21.7		8.3		33.0		101.9		7.4		4.7		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 05 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	15:45	8.5	Surface	1.0	1.4	224	20.3	20.3	8.1	8.1	31.3	31.3	99.2	99.2	7.5	7.5	8.5	9.4	7	8	86	88	815627	804256	<0.2	<0.2	0.8	0.7
						1.0	1.5	238	20.3		8.1		31.3		99.1		7.5		8.5		7		86				<0.2		0.6	
					Middle	4.3	1.4	232	20.3	20.3	8.1	8.1	31.3	31.3	98.9	98.9	7.4		9.1		8		88				<0.2		0.6	
						4.3	1.5	235	20.3		8.1		31.3		98.9		7.4		9.4		7		89				<0.2		0.7	
					Bottom	7.5	1.6	226	20.2	20.2	8.0	8.0	31.3	31.3	98.8	98.8	7.4	7.4	10.4		10		91				<0.2		0.6	
						7.5	1.6	230	20.2		8.0		31.3		98.8		7.4		10.3		9		90				<0.2		0.6	
C2	Fine	Moderate	14:41	12.1	Surface	1.0	0.2	135	21.2	21.2	8.3	8.3	32.8	32.8	100.3	100.3	7.4	7.4	3.3	5.4	4	5	84	87	825691	806963	<0.2	<0.2	0.6	0.6
						1.0	0.2	141	21.2		8.3		32.8		100.3		7.4		3.3		5		84				<0.2		0.6	
					Middle	6.1	0.5	154	21.0	21.0	8.3	8.3	32.9	32.9	100.3	100.2	7.4		5.2		5		87				<0.2		0.6	
						6.1	0.5	156	21.0		8.3		32.9		100.1		7.4		5.3		5		88				<0.2		0.6	
					Bottom	11.1	0.5	144	20.7	20.7	8.3	8.3	33.1	33.1	100.4	100.5	7.4	7.4	7.7		6		90				<0.2		0.6	
						11.1	0.5	152	20.7		8.3		33.1		100.5		7.4		7.7		5		90				<0.2		0.6	
C3	Fine	Moderate	16:33	12.4	Surface	1.0	0.4	286	21.9	21.9	8.3	8.3	33.3	33.3	98.7	98.7	7.1	7.1	0.8	1.3	3	3	85	88	822113	817817	<0.2	<0.2	0.6	0.6
						1.0	0.4	291	21.9		8.3		33.3		98.7		7.1		0.8		3		86				<0.2		0.6	
					Middle	6.2	0.2	257	21.9	21.9	8.3	8.3	33.3	33.3	98.7	98.9	7.1		1.1		3		88				<0.2		0.6	
						6.2	0.2	273	21.9		8.3		33.3		99.0		7.1		1.1		3		89				<0.2		0.7	
					Bottom	11.4	0.1	120	21.9	21.9	8.3	8.3	33.3	33.3	99.7	99.7	7.2	7.2	1.9		3		91				<0.2		0.6	
						11.4	0.1	124	21.9		8.3		33.3		99.7		7.2		1.9		3		91				<0.2		0.6	
IM1	Cloudy	Rough	15:24	5.1	Surface	1.0	1.5	3	20.0	20.0	8.1	8.1	31.2	31.2	101.0	101.0	7.7	7.7	7.1	7.9	7	7	85	87	817954	807121	<0.2	<0.2	0.6	0.6
						1.0	1.5	3	20.0		8.1		31.2		100.9		7.6		7.1		7		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	1.2	1	20.0	20.0	8.1	8.1	31.2	31.2	100.8	100.8	7.6	7.6	8.4		7		88				<0.2		0.6	
						4.1	1.2	1	20.0		8.1		31.2		100.8		7.6		8.9		6		88				<0.2		0.6	
IM2	Cloudy	Rough	15:16	7.2	Surface	1.0	1.6	170	20.2	20.2	8.1	8.1	31.2	31.2	99.0	99.0	7.5	7.5	9.4	10.2	8	9	86	87	818185	806170	<0.2	<0.2	0.6	0.6
						1.0	1.7	182	20.2		8.1		31.2		99.0		7.5		9.4		8		85				<0.2		0.6	
					Middle	3.6	1.7	171	20.2	20.2	8.1	8.1	31.2	31.2	99.0	99.1	7.5		9.8		9		86				<0.2		0.5	
						3.6	1.8	177	20.2		8.1		31.2		99.1		7.5		10.1		8		87				<0.2		0.6	
					Bottom	6.2	1.5	168	20.2	20.2	8.1	8.1	31.2	31.2	99.8	99.9	7.5	7.5	11.1		10		90				<0.2		0.6	
						6.2	1.6	183	20.2		8.1		31.2		100.0		7.5		11.5		9		89				<0.2		0.6	
IM3	Cloudy	Rough	15:10	7.3	Surface	1.0	1.2	11	20.2	20.2	8.1	8.1	31.3	31.3	98.8	98.8	7.5	7.5	8.5	9.3	9	9	85	88	818768	805591	<0.2	<0.2	0.6	0.5
						1.0	1.3	11	20.2		8.1		31.3		98.8		7.5		8.6		10		85				<0.2		0.6	
					Middle	3.7	1.0	301	20.2	20.2	8.1	8.1	31.2	31.2	98.8	98.9	7.5		9.1		10		87				<0.2		0.5	
						3.7	1.1	329	20.1		8.1		31.2		99.0		7.5		9.5		9		88				<0.2		0.5	
					Bottom	6.3	0.9	290	20.1	20.1	8.1	8.1	31.2	31.2	99.5	99.5	7.5	7.5	10.1		8		90				<0.2		0.4	
						6.3	0.9	308	20.1		8.1		31.2		99.5		7.5		10.1		8		90				<0.2		0.6	
IM4	Cloudy	Rough	15:02	8.2	Surface	1.0	2.6	134	20.2	20.2	8.1	8.1	31.3	31.3	98.5	98.5	7.4	7.4	8.6	9.1	9	9	86	88	819714	804589	<0.2	<0.2	0.7	0.6
						1.0	2.7	143	20.2		8.1		31.3		98.4		7.4		8.6		9		85				<0.2		0.6	
					Middle	4.1	2.6	135	20.2	20.2	8.1	8.1	31.2	31.2	98.3	98.4	7.4		9.1		10		87				<0.2		0.5	
						4.1	2.8	135	20.2		8.1		31.2		98.4		7.4		9.2		9		87				<0.2		0.6	
					Bottom	7.2	3.0	131	20.2	20.2	8.1	8.1	31.2	31.2	99.3	99.4	7.5	7.5	9.5		9		90				<0.2		0.6	
						7.2	3.3	133	20.2		8.1		31.2		99.4		7.5		9.5		10		90				<0.2		0.6	
IM5	Cloudy	Rough	14:52	7.8	Surface	1.0	1.3	271	20.0	20.0	8.1	8.1	31.1	31.1	98.9	98.9	7.5	7.5	10.0	12.1	10	10	86	87	820715	804866	<0.2	<0.2	0.6	0.6
						1.0	1.4	292	20.0		8.1		31.1		98.8		7.5		10.1		10		85				<0.2		0.7	
					Middle	3.9	1.3	267	20.0	20.0	8.1	8.1	31.2	31.2	98.6	98.6	7.5		11.4		10		86				<0.2		0.6	
						3.9	1.3	267	20.0		8.1		31.2		98.6		7.5		11.5		11		87				<0.2		0.6	
					Bottom	6.8	1.5	268	20.0	20.0	8.0	8.0	31.1	31.1	99.5	99.6	7.5	7.5	15.1		10		89				<0.2		0.6	
						6.8	1.6	293	20.0		8.0		31.1		99.6		7.5		14.6		11		90				<0.2		0.7	
IM6	Cloudy	Rough	14:45	7.6	Surface	1.0	1.2	86	20.3	20.3	8.1	8.1	31.0	31.0	99.8	99.8	7.5	7.5	6.9	7.1	6	6	85	87	821045	805828	<0.2	<0.2	0.7	0.6
						1.0	1.2	91	20.3		8.1		31.0		99.8		7.5		6.9		6		85				<0.2		0.6	
					Middle	3.8	1.2	98	20.1	20.1	8.1	8.1	31.0	31.0	98.8	98.8	7.5		7.3		5		87				<0.2		0.6	
						3.8	1.2	101	20.1		8.1		31.0		98.8		7.5		7.3		6		87				<0.2		0.7	
					Bottom	6.6	1.2	89	20.1	20.1	8.0	8.0	31.0	31.0	98.9	99.0	7.5	7.5	7.1		6		90				<0.2		0.6	
						6.6	1.2	93	20.1		8.0		31.0		99.1		7.5		7.2		7		90				<0.2		0.6	
IM7	Cloudy	Rough	14:39	8.3	Surface	1.0	2.0	24	20.1	20.1	8.1	8.1	31.1	31.1	99.6	99.6	7.5	7.5	7.5	7.7	4	5	86	88	821365	806840	<0.2	<0.2	0.6	0.6
						1.0	2.2	25	20.1		8.1		31.1		99.6		7.5		7.5		5		85				<0.2		0.6	
					Middle	4.2	2.2	19	20.1	20.1	8.1	8.1	31.1	31.1	99.2	99.2	7.5		7.7		5		88				<0.2		0.6	
						4.2	2.5	20	20.1		8.1		31.1		99.2		7.5		7.7		6		88				<0.2		0.6	
					Bottom	7.3	2.3	18	20.1	20.1	8.1	8.1	31.1	31.1	99.2	99.3	7.5	7.5	7.8		6		91				<0.2		0.5	
						7.3	2.3	19	20.1		8.1		31.1		99.3		7.5		7.8		5		90				<0.2		0.6	
IM8	Fine	Moderate	15:06	8.1	Surface	1.0	0.3	84	21.1	21.1	8.3	8.3	32.9	32.9	100.7	100.7	7.4	7.4	4.0	5.8	5	5	84	87	821847	808154	<0.2	<0.2	0.5	0.6
						1.0	0.3	88	21.1		8.3		32.9		100.7		7.4		4.0		5		84				<0.2		0.6	
					Middle	4.1	0.4	83	20.8	20.8	8.3	8.3	33.2	33.2	100.8	100.9	7.4		6.2		5		87				<0.2		0.6	
						4.1	0.4	87	20.8		8.3		33.2		100.9		7.4		6.2		5		87				<0.2		0.6	
					Bottom	7.1	0.3	73	20.8	20.8	8.3	8.3	33.2	33.2	102.5	102.6	7.6	7.6	7.3		5		90				<0.2		0.6	
						7.1	0.4	73	20.8		8.3		33.2		102.6		7.6		7.3		5		89				<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 05 December 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	15:12	7.3	Surface	1.0	0.4	71	21.2	21.2	8.3	8.3	32.8	32.8	100.3	100.2	7.4	7.3	3.2	3.9	4	5	84	86	822071	808795	<0.2	<0.2	0.5	0.6
						1.0	0.4	74	21.2		8.3		32.8		100.1		7.3		3.3		4		84				<0.2		0.5	
					Middle	3.7	0.4	72	21.2	21.2	8.3	8.3	32.8	32.8	100.0	100.0	7.3		3.8		5		86				<0.2		0.6	
						3.7	0.4	78	21.2		8.3		32.8		99.9		7.3		3.9		5		86				<0.2		0.7	
					Bottom	6.3	0.3	62	21.1	21.1	8.3	8.3	32.8	32.8	101.3	101.4	7.4	7.4	4.5		5		89				<0.2		0.7	
						6.3	0.3	64	21.1		8.3		32.8		101.4		7.4		4.5		5		89				<0.2		0.6	
IM10	Fine	Moderate	15:19	7.9	Surface	1.0	0.3	93	21.2	21.2	8.3	8.3	32.9	32.9	100.6	100.7	7.4	7.4	2.1	2.2	4	4	85	87	822375	809814	<0.2	<0.2	0.6	0.6
						1.0	0.3	97	21.2		8.3		32.9		100.7		7.4		2.1		5		85				<0.2		0.5	
					Middle	4.0	0.3	90	21.1	21.1	8.3	8.3	32.9	32.9	100.0	100.0	7.3		2.3		4		86				<0.2		0.5	
						4.0	0.3	96	21.1		8.3		32.9		100.0		7.3		2.3		4		87				<0.2		0.6	
					Bottom	6.9	0.3	85	21.1	21.1	8.3	8.3	33.0	33.0	100.0	100.1	7.3	7.4	2.1		4		90				<0.2		0.6	
						6.9	0.3	90	21.1		8.3		33.0		100.1		7.4		2.1		5		90				<0.2		0.6	
IM11	Fine	Moderate	15:30	8.0	Surface	1.0	0.2	94	21.6	21.6	8.3	8.3	33.2	33.2	99.5	99.5	7.2	7.3	1.7	1.6	5	4	85	87	822054	811439	<0.2	<0.2	0.6	0.6
						1.0	0.2	103	21.6		8.3		33.2		99.4		7.2		1.8		5		85				<0.2		0.5	
					Middle	4.0	0.2	84	21.6	21.6	8.3	8.3	33.2	33.2	100.2	100.3	7.3		1.5		4		87				<0.2		0.6	
						4.0	0.2	89	21.6		8.3		33.2		100.3		7.3		1.6		4		87				<0.2		0.7	
					Bottom	7.0	0.1	73	21.6	21.6	8.3	8.3	33.2	33.2	101.8	101.8	7.4	7.4	1.5		3		89				<0.2		0.6	
						7.0	0.1	78	21.6		8.3		33.2		101.8		7.4		1.4		4		90				<0.2		0.6	
IM12	Fine	Moderate	15:36	9.6	Surface	1.0	0.1	133	21.7	21.7	8.3	8.3	33.2	33.2	99.0	99.0	7.2	7.2	1.4	1.5	4	4	84	87	821452	812040	<0.2	<0.2	0.5	0.6
						1.0	0.1	140	21.7		8.3		33.2		98.9		7.2		1.4		3		84				<0.2		0.6	
					Middle	4.8	0.1	135	21.7	21.7	8.3	8.3	33.2	33.2	98.9	98.9	7.2		1.5		4		86				<0.2		0.6	
						4.8	0.1	148	21.7		8.3		33.2		98.9		7.2		1.5		4		87				<0.2		0.6	
					Bottom	8.6	0.2	127	21.6	21.6	8.3	8.3	33.2	33.2	99.5	99.5	7.2	7.2	1.6		4		89				<0.2		0.5	
						8.6	0.2	132	21.6		8.3		33.2		99.4		7.2		1.6		4		89				<0.2		0.6	
SR1A	Fine	Moderate	15:57	4.9	Surface	1.0	-	-	21.3	21.3	8.3	8.3	33.1	33.1	102.0	102.1	7.5	7.5	1.4	1.4	4	4	-	-	819979	812661	-	-	-	-
						1.0	-	-	21.3		8.3		33.1		102.1		7.5		1.4		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	21.2	21.2	8.3	8.3	33.1	33.1	104.3	104.4	7.6	7.6	1.3		5		-				-		-	
						3.9	-	-	21.2		8.3		33.1		104.4		7.6		1.3		4		-				-		-	
SR2	Fine	Moderate	16:11	4.3	Surface	1.0	0.1	22	21.7	21.7	8.3	8.3	33.2	33.2	98.6	98.7	7.2	7.2	1.5	1.9	3	4	85	86	821470	814170	<0.2	<0.2	0.6	0.6
						1.0	0.1	23	21.7		8.3		33.2		98.7		7.2		1.5		4		85				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	27	21.7	21.7	8.3	8.3	33.2	33.2	103.8	103.9	7.5	7.5	2.2		4		87				<0.2		0.7	
						3.3	0.1	29	21.7		8.3		33.2		103.9		7.5		2.2		4		88				<0.2		0.7	
SR3	Fine	Moderate	15:01	9.0	Surface	1.0	0.3	101	21.1	21.1	8.3	8.3	32.9	32.9	100.5	100.5	7.4	7.4	4.1	5.9	5	5	-	-	822131	807559	-	-	-	-
						1.0	0.3	107	21.1		8.3		32.9		100.5		7.4		4.2		5		-				-		-	
					Middle	4.5	0.3	87	21.0	21.0	8.3	8.3	33.0	33.0	100.7	100.8	7.4		6.0		5		-				-		-	
						4.5	0.4	88	21.0		8.3		33.0		100.8		7.4		6.2		6		-				-		-	
					Bottom	8.0	0.4	82	21.0	21.0	8.3	8.3	33.2	33.2	101.6	101.7	7.5	7.5	7.3		5		-				-		-	
						8.0	0.4	84	21.0		8.3		33.2		101.7		7.5		7.3		6		-				-		-	
SR4A	Cloudy	Moderate	16:07	8.2	Surface	1.0	0.1	338	20.1	20.1	8.0	8.0	31.3	31.2	99.7	99.7	7.5	7.5	7.8	7.7	9	8	-	-	817174	807826	-	-	-	-
						1.0	0.1	351	20.1		8.0		31.2		99.7		7.5		7.8		9		-				-		-	
					Middle	4.1	1.5	213	20.1	20.1	8.0	8.0	31.2	31.2	99.7	99.7	7.5		7.7		8		-				-		-	
						4.1	1.7	229	20.1		8.0		31.2		99.7		7.5		7.7		9		-				-		-	
					Bottom	7.2	0.0	233	20.1	20.1	8.0	8.0	31.2	31.2	100.0	100.2	7.6	7.6	7.7		7		-				-		-	
						7.2	0.0	255	20.1		8.0		31.2		100.3		7.6		7.7		6		-				-		-	
SR5A	Cloudy	Calm	16:24	4.2	Surface	1.0	0.1	338	20.2	20.2	8.0	8.0	31.0	31.0	100.5	100.5	7.6	7.6	7.0	9.5	8	7	-	-	816586	810693	-	-	-	-
						1.0	0.1	354	20.2		8.0		31.0		100.5		7.6		7.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	342	20.2	20.2	8.0	8.0	31.0	31.0	100.8	100.9	7.6	7.6	11.7		6		-				-		-	
						3.2	0.1	315	20.2		8.0		31.0		100.9		7.6		12.5		7		-				-		-	
SR6A	Cloudy	Calm	17:05	4.5	Surface	1.0	1.2	159	20.9	20.9	8.0	8.0	31.0	31.0	99.3	99.4	7.4	7.4	9.5	13.4	10	9	-	-	817942	814752	-	-	-	-
						1.0	1.3	165	20.9		8.0		31.0		99.4		7.4		9.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	242	20.9	20.9	8.0	8.0	31.0	31.0	100.4	100.5	7.5	7.5	17.4		8		-				-		-	
						3.5	0.1	254	20.9		8.0		31.0		100.5		7.5		17.0		7		-				-		-	
SR7	Fine	Moderate	17:05	16.2	Surface	1.0	0.6	61	21.9	21.9	8.3	8.3	33.3	33.3	97.4	97.4	7.0	7.0	2.2	2.5	5	5	-	-	823615	823744	-	-	-	-
						1.0	0.7	64	21.9		8.3		33.3		97.4		7.0		2.2		6		-				-		-	
					Middle	8.1	0.2	14	21.9	21.9	8.3	8.3	33.3	33.3	97.1	97.1	7.0		2.8		5		-				-		-	
						8.1	0.2	14	21.9		8.3		33.3		97.0		7.0		2.8		6		-				-		-	
					Bottom	15.2	0.2	55	21.9	21.9	8.3	8.3	33.3	33.3	97.1	97.1	7.0	7.0	2.5		4		-				-		-	
						15.2	0.2	56	21.9		8.3		33.3		97.1		7.0		2.6		3		-				-		-	
SR8	Fine	Moderate	15:47	4.8	Surface	1.0	-	-	21.6	21.6	8.3	8.3	33.2	33.2	101.5	101.5	7.4	7.4	2.2	2.5	3	3	-	-	820406	811613	-	-	-	-
						1.0	-	-	21.6		8.3		33.2		101.5		7.4		2.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	21.5	21.5	8.3	8.3	33.2	33.2	104.1	104.2	7.6	7.6	2.7		3		-				-		-	
						3.8	-	-	21.5		8.3		33.2		104.2		7.6		2.8		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 December 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	11:53	8.3	Surface	1.0	2.6	44	20.3	20.3	8.1	8.1	31.3	31.3	97.8	97.8	7.4	7.4	11.0	12.7	6	10	85	88	815629	804268	<0.2	<0.2	0.6	0.6
						1.0	2.8	47	20.3		8.1		31.3		97.8		7.4		11.0		7		85				<0.2		0.5	
					Middle	4.2	2.6	44	20.2	20.2	8.0	8.0	31.3	31.3	97.1	97.1	7.3		12.5		10		88				<0.2		0.6	
						4.2	2.6	45	20.2		8.0		31.3		97.1		7.3		12.3		11		88				<0.2		0.6	
					Bottom	7.3	2.7	44	20.2	20.2	8.0	8.0	31.2	31.2	97.5	97.6	7.4	7.4	14.6		13		91				<0.2		0.6	
						7.3	2.7	45	20.2		8.0		31.2		97.7		7.4		14.9		14		91				<0.2		0.6	
C2	Fine	Moderate	12:09	11.8	Surface	1.0	0.3	350	21.4	21.4	8.3	8.3	32.9	32.9	97.5	97.5	7.1	7.1	3.1	5.4	6	5	85	88	825681	806961	<0.2	<0.2	0.7	0.7
						1.0	0.3	322	21.4		8.3		32.9		97.4		7.1		3.1		6		85				<0.2		0.7	
					Middle	5.9	0.4	28	21.3	21.3	8.3	8.3	32.9	32.9	97.0	97.0	7.1		4.5		5		88				<0.2		0.8	
						5.9	0.4	29	21.3		8.3		32.9		97.0		7.1		4.7		5		89				<0.2		0.7	
					Bottom	10.8	0.4	346	21.3	21.3	8.3	8.3	33.0	33.0	98.0	98.0	7.2	7.2	8.5		5		91				<0.2		0.8	
						10.8	0.4	318	21.3		8.3		33.0		98.0		7.2		8.4		5		91				<0.2		0.6	
C3	Fine	Moderate	10:22	10.9	Surface	1.0	0.3	241	21.6	21.6	8.3	8.3	33.2	33.2	96.3	96.3	7.0	7.0	1.8	3.2	4	4	85	89	822087	817793	<0.2	<0.2	0.6	0.6
						1.0	0.3	261	21.6		8.3		33.2		96.3		7.0		1.9		5		86				<0.2		0.5	
					Middle	5.5	0.4	252	21.6	21.6	8.3	8.3	33.2	33.2	95.9	95.9	7.0		3.0		4		88				<0.2		0.5	
						5.5	0.4	266	21.6		8.3		33.2		95.9		7.0		3.0		4		89				<0.2		0.6	
					Bottom	9.9	0.4	266	21.6	21.6	8.3	8.3	33.2	33.2	95.2	95.3	6.9	6.9	4.6		4		92				<0.2		0.7	
						9.9	0.4	275	21.6		8.3		33.2		95.4		6.9		4.6		4		92				<0.2		0.8	
IM1	Cloudy	Moderate	12:14	4.9	Surface	1.0	0.1	12	19.9	19.9	8.0	8.0	31.2	31.2	98.2	98.1	7.5	7.5	7.3	11.2	12	14	87	88	817963	807148	<0.2	<0.2	0.6	0.6
						1.0	0.1	12	19.8		8.0		31.2		98.0		7.4		8.0		13		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	5	19.7	19.7	8.0	8.0	31.1	31.1	97.7	97.7	7.4	7.4	14.7		15		90				<0.2		0.6	
						3.9	0.2	5	19.7		8.0		31.1		97.7		7.4		14.9		14		89				<0.2		0.6	
IM2	Cloudy	Moderate	12:21	7.0	Surface	1.0	0.9	212	20.1	20.1	8.1	8.1	31.2	31.2	97.9	97.9	7.4	7.4	9.5	11.9	14	13	86	88	818140	806172	<0.2	<0.2	0.6	0.6
						1.0	0.9	224	20.1		8.1		31.2		97.8		7.4		9.7		13		85				<0.2		0.6	
					Middle	3.5	0.7	213	20.1	20.1	8.1	8.1	31.2	31.2	97.4	97.4	7.4		12.0		13		87				<0.2		0.7	
						3.5	0.7	226	20.1		8.1		31.2		97.4		7.4		12.3		13		86				<0.2		0.6	
					Bottom	6.0	0.9	211	20.0	20.0	8.0	8.0	31.2	31.1	97.5	97.6	7.4	7.4	14.2		11		90				<0.2		0.6	
						6.0	0.9	217	20.0		8.0		31.1		97.6		7.4		13.7		12		91				<0.2		0.6	
IM3	Cloudy	Moderate	12:28	7.2	Surface	1.0	1.0	295	20.0	20.0	8.1	8.1	31.1	31.1	97.6	97.6	7.4	7.4	9.9	11.8	12	12	85	88	818807	805610	<0.2	<0.2	0.6	0.7
						1.0	1.0	303	20.0		8.1		31.1		97.5		7.4		10.2		11		85				<0.2		0.8	
					Middle	3.6	1.0	301	20.0	20.0	8.0	8.0	31.1	31.1	97.4	97.4	7.4		11.5		11		87				<0.2		0.6	
						3.6	1.1	312	20.0		8.0		31.1		97.4		7.4		12.0		12		88				<0.2		0.7	
					Bottom	6.2	0.9	290	20.0	20.0	8.0	8.0	31.1	31.1	97.7	97.8	7.4	7.4	13.6		13		90				<0.2		0.6	
						6.2	1.0	313	20.0		8.0		31.1		97.9		7.4		13.8		14		90				<0.2		0.6	
IM4	Cloudy	Rough	12:37	7.8	Surface	1.0	0.5	220	20.0	20.0	8.1	8.1	31.1	31.1	97.4	97.4	7.4	7.4	9.6	11.1	22	16	85	88	819724	804614	<0.2	<0.2	0.6	0.7
						1.0	0.5	234	20.0		8.1		31.1		97.4		7.4		9.7		23		85				<0.2		0.7	
					Middle	3.9	0.5	230	20.0	20.0	8.0	8.0	31.1	31.1	97.5	97.6	7.4		11.1		14		88				<0.2		0.7	
						3.9	0.5	245	20.0		8.0		31.1		97.6		7.4		11.3		13		88				<0.2		0.6	
					Bottom	6.8	0.5	230	20.0	20.0	8.0	8.0	31.1	31.1	98.2	98.3	7.4	7.5	12.3		13		91				<0.2		0.6	
						6.8	0.5	243	20.0		8.0		31.1		98.4		7.5		12.3		12		91				<0.2		0.8	
IM5	Cloudy	Rough	12:44	7.6	Surface	1.0	1.7	11	20.3	20.3	8.1	8.1	31.1	31.1	97.5	97.5	7.3	7.3	9.7	10.2	16	16	85	88	820743	804884	<0.2	<0.2	0.6	0.6
						1.0	1.9	11	20.3		8.1		31.1		97.5		7.3		9.6		17		86				<0.2		0.5	
					Middle	3.8	1.6	9	20.3	20.3	8.0	8.0	31.1	31.1	97.3	97.4	7.3		10.3		17		87				<0.2		0.5	
						3.8	1.7	9	20.3		8.0		31.1		97.4		7.3		10.3		16		88				<0.2		0.6	
					Bottom	6.6	1.5	13	20.2	20.2	8.0	8.0	31.1	31.1	97.5	97.6	7.3	7.4	10.6		15		90				<0.2		0.6	
						6.6	1.5	14	20.2		8.0		31.1		97.6		7.4		10.6		14		91				<0.2		0.6	
IM6	Cloudy	Rough	12:51	7.4	Surface	1.0	1.3	44	19.9	19.9	8.1	8.1	31.1	31.1	98.7	98.7	7.5	7.5	6.8	7.1	8	8	86	88	821080	805838	<0.2	<0.2	0.7	0.7
						1.0	1.3	44	19.9		8.1		31.1		98.7		7.5		6.8		9		86				<0.2		0.7	
					Middle	3.7	1.3	53	19.9	19.9	8.1	8.1	31.1	31.1	98.7	98.8	7.5		6.9		8		87				<0.2		0.5	
						3.7	1.4	57	19.9		8.1		31.1		98.8		7.5		6.9		9		87				<0.2		0.7	
					Bottom	6.4	1.5	54	19.9	19.9	8.1	8.1	31.1	31.1	99.4	99.5	7.5	7.6	7.4		8		90				<0.2		0.7	
						6.4	1.6	54	19.9		8.1		31.1		99.5		7.6		7.5		8		90				<0.2		0.7	
IM7	Cloudy	Rough	12:59	8.0	Surface	1.0	0.9	177	20.5	20.5	8.0	8.0	30.7	30.7	97.3	97.4	7.3	7.4	6.7	7.2	7	9	85	88	821348	806855	<0.2	<0.2	0.7	0.7
						1.0	0.9	183	20.4		8.0		30.8		97.5		7.3		6.9		8		85				<0.2		0.7	
					Middle	4.0	1.0	176	20.2	20.2	8.0	8.0	30.9	30.9	97.9	97.9	7.4		7.2		9		88				<0.2		0.8	
						4.0	1.1	186	20.2		8.0		30.9		97.9		7.4		7.3		8		88				<0.2		0.7	
					Bottom	7.0	0.9	177	20.0	20.0	8.0	8.0	31.0	31.0	98.0	98.0	7.4	7.4	7.4		10		91				<0.2		0.7	
						7.0	0.9	188	20.0		8.0		31.0		98.0		7.4		7.4		9		91				<0.2		0.6	
IM8	Fine	Moderate	11:43	7.5	Surface	1.0	0.1	280	21.0	21.0	8.3	8.3	33.1	33.1	99.0	99.1	7.3	7.3	3.4	3.6	12	11	84	88	821806	808134	<0.2	<0.2	0.8	0.7
						1.0	0.1	280	21.0		8.3		33.1		99.1		7.3		3.4		12		85				<0.2		0.7	
					Middle	3.8	0.1	338	21.0	21.0	8.3	8.3	33.1	33.1	99.5	99.5	7.3		3.9		11		88				<0.2		0.7	
						3.8	0.1	311	21.0		8.3		33.1		99.4		7.3		3.9		10		88				<0.2		0.6	
					Bottom	6.5	0.1	6	20.9	20.9	8.3	8.3	33.1	33.1	101.7	101.8	7.5	7.5	3.5		10		90				<0.2		0.7	
						6.5	0.1	6	20.9		8.3		33.1		101.8		7.5		3.5		10		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 05 December 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	11:37	6.9	Surface	1.0	0.3	250	20.8	20.8	8.3	8.3	33.1	33.1	99.0	99.1	7.3	7.3	5.2	7.7	15	15	85	88	822111	808800	<0.2	<0.2	0.7	0.7
						1.0	0.3	261	20.8		8.3		33.1		99.2		7.3		5.3		15		86				<0.2		0.8	
					Middle	3.5	0.3	255	20.8	20.8	8.3	8.3	33.2	33.2	99.5	99.4	7.3		7.3		15		88				<0.2		0.7	
						3.5	0.3	275	20.8		8.3		33.2		99.3		7.3		7.5		15		88				<0.2		0.8	
					Bottom	5.9	0.3	237	20.8	20.8	8.3	8.3	33.2	33.2	100.9	101.0	7.4	7.5	10.5		14		90				<0.2		0.7	
						5.9	0.3	240	20.8		8.3		33.2		101.1		7.5		10.4		13		91				<0.2		0.7	
IM10	Fine	Moderate	11:31	6.8	Surface	1.0	0.6	311	20.9	20.9	8.3	8.3	33.2	33.2	99.3	99.4	7.3	7.4	4.7	5.8	13	12	85	88	822373	809776	<0.2	<0.2	0.6	0.7
						1.0	0.6	331	20.9		8.3		33.2		99.4		7.3		4.8		12		86				<0.2		0.6	
					Middle	3.4	0.6	309	20.9	20.9	8.3	8.3	33.2	33.2	100.9	100.9	7.4		5.6		12		88				<0.2		0.6	
						3.4	0.6	322	20.9		8.3		33.2		100.8		7.4		5.7		13		89				<0.2		0.7	
					Bottom	5.8	0.5	308	20.9	20.9	8.3	8.3	33.2	33.2	102.7	102.7	7.6	7.6	6.9		11		91				<0.2		0.8	
						5.8	0.5	321	20.9		8.3		33.2		102.6		7.6		6.9		12		91				<0.2		0.8	
IM11	Fine	Moderate	11:21	8.1	Surface	1.0	0.6	291	21.2	21.2	8.3	8.3	33.2	33.2	98.3	98.3	7.2	7.2	4.9	7.1	13	12	85	88	822069	811437	<0.2	<0.2	0.9	0.8
						1.0	0.6	317	21.2		8.3		33.2		98.3		7.2		5.0		12		86				<0.2		0.8	
					Middle	4.1	0.5	292	21.1	21.1	8.3	8.3	33.2	33.2	98.2	98.2	7.2		7.5		13		88				<0.2		0.7	
						4.1	0.6	294	21.1		8.3		33.2		98.2		7.2		7.5		12		88				<0.2		0.6	
					Bottom	7.1	0.4	296	21.1	21.1	8.3	8.3	33.2	33.2	99.7	99.7	7.3	7.3	8.9		12		91				<0.2		0.7	
						7.1	0.4	316	21.1		8.3		33.2		99.7		7.3		8.9		12		91				<0.2		0.8	
IM12	Fine	Moderate	11:14	8.3	Surface	1.0	0.6	308	21.3	21.3	8.3	8.3	33.2	33.2	96.6	96.7	7.1	7.1	7.1	8.5	9	13	84	88	821476	812037	<0.2	<0.2	0.6	0.6
						1.0	0.6	324	21.3		8.3		33.2		96.7		7.1		7.2		10		85				<0.2		0.6	
					Middle	4.2	0.5	305	21.3	21.3	8.3	8.3	33.2	33.2	97.1	97.2	7.1		8.0		11		88				<0.2		0.6	
						4.2	0.5	308	21.3		8.3		33.2		97.2		7.1		8.2		11		88				<0.2		0.6	
					Bottom	7.3	0.5	303	21.3	21.3	8.3	8.3	33.2	33.2	101.6	101.7	7.4	7.4	10.3		17		91				<0.2		0.6	
						7.3	0.5	310	21.3		8.3		33.2		101.7		7.4		10.1		17		91				<0.2		0.6	
SR1A	Fine	Moderate	10:55	5.1	Surface	1.0	-	-	21.2	21.2	8.3	8.3	33.1	33.1	98.7	98.8	7.2	7.2	2.3	2.5	10	9	-	-	819978	812657	-	-	-	-
						1.0	-	-	21.2		8.3		33.1		98.9		7.2		2.3		9		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	21.1	21.1	8.3	8.3	33.1	33.1	102.2	102.3	7.5	7.5	2.7		9		-				-		-	
						4.1	-	-	21.1		8.3		33.1		102.3		7.5		2.7		8		-				-		-	
SR2	Fine	Moderate	10:43	4.2	Surface	1.0	0.2	45	21.2	21.2	8.3	8.3	33.2	33.2	99.2	99.3	7.3	7.3	2.8	2.9	9	10	87	88	821479	814144	<0.2	<0.2	0.5	0.5
						1.0	0.2	49	21.2		8.3		33.2		99.3		7.3		2.8		9		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	51	21.2	21.2	8.3	8.3	33.2	33.2	102.7	102.9	7.5	7.6	3.0		10		89				<0.2		0.5	
						3.2	0.2	54	21.2		8.3		33.2		103.1		7.6		2.9		11		89				<0.2		0.5	
SR3	Fine	Moderate	11:48	8.6	Surface	1.0	0.1	26	21.1	21.1	8.3	8.3	32.8	32.8	97.5	97.6	7.2	7.2	3.2	3.3	14	11	-	-	822136	807555	-	-	-	-
						1.0	0.1	27	21.1		8.3		32.8		97.6		7.2		3.2		13		-				-		-	
					Middle	4.3	0.1	29	21.1	21.1	8.3	8.3	32.8	32.8	98.4	98.4	7.2		3.2		10		-				-		-	
						4.3	0.1	30	21.1		8.3		32.8		98.3		7.2		3.2		9		-				-		-	
					Bottom	7.6	0.1	335	21.0	21.0	8.3	8.3	33.0	33.0	100.8	100.8	7.4	7.4	3.4		9		-				-		-	
						7.6	0.2	308	21.0		8.3		33.0		100.8		7.4		3.4		8		-				-		-	
SR4A	Cloudy	Moderate	11:30	8.2	Surface	1.0	1.6	209	20.1	20.1	8.1	8.1	31.0	31.0	96.6	96.6	7.3	7.3	5.3	5.8	9	15	-	-	817188	807815	-	-	-	-
						1.0	1.8	223	20.1		8.1		31.0		96.5		7.3		5.3		9		-				-		-	
					Middle	4.1	1.5	213	19.9	19.9	8.0	8.0	31.0	31.0	95.4	95.4	7.2		6.1		13		-				-		-	
						4.1	1.7	230	19.9		8.0		31.0		95.4		7.2		6.0		14		-				-		-	
					Bottom	7.2	0.0	233	19.8	19.8	8.0	8.0	31.0	31.0	95.3	95.3	7.2	7.3	6.0		21		-				-		-	
						7.2	0.0	238	19.8		8.0		31.0		95.3		7.3		6.1		22		-				-		-	
SR5A	Cloudy	Calm	11:12	3.4	Surface	1.0	0.1	285	20.1	20.1	8.0	8.0	31.0	31.0	96.5	96.5	7.3	7.3	8.6	10.6	13	12	-	-	816581	810699	-	-	-	-
						1.0	0.1	304	20.1		8.0		31.0		96.5		7.3		9.2		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	286	20.1	20.1	7.9	7.9	31.0	30.9	96.7	96.7	7.3	7.3	12.6		10		-				-		-	
						2.4	0.1	299	20.1		7.9		30.9		96.7		7.3		12.1		11		-				-		-	
SR6A	Cloudy	Calm	10:45	4.9	Surface	1.0	0.1	241	20.5	20.5	8.1	8.1	31.1	31.1	96.5	96.5	7.2	7.2	7.5	8.6	14	12	-	-	817969	814758	-	-	-	-
						1.0	0.1	241	20.5		8.1		31.1		96.5		7.2		7.6		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	242	20.4	20.4	8.1	8.1	31.1	31.1	96.6	96.7	7.3	7.3	9.5		9		-				-		-	
						3.9	0.1	242	20.4		8.1		31.1		96.8		7.3		9.6		10		-				-		-	
SR7	Fine	Moderate	09:53	15.6	Surface	1.0	0.0	116	21.9	21.9	8.2	8.2	33.3	33.3	95.1	95.1	6.9	6.9	2.3	2.4	7	7	-	-	823619	823756	-	-	-	-
						1.0	0.0	123	21.9		8.2		33.3		95.0		6.9		2.3		7		-				-		-	
					Middle	7.8	0.1	184	21.9	21.9	8.2	8.2	33.3	33.3	94.5	94.5	6.8		2.4		6		-				-		-	
						7.8	0.1	191	21.9		8.2		33.3		94.5		6.8		2.4		7		-				-		-	
					Bottom	14.6	0.1	76	21.9	21.9	8.2	8.2	33.3	33.3	94.5	94.5	6.8	6.8	2.6		7		-				-		-	
						14.6	0.1	76	21.9		8.2		33.3		94.5		6.8		2.6		7		-				-		-	
SR8	Fine	Moderate	11:04	5.0	Surface	1.0	-	-	21.0	21.0	8.3	8.3	33.2	33.2	99.7	99.7	7.3	7.3	4.7	5.7	11	10	-	-	820386	811600	-	-	-	-
						1.0	-	-	21.0		8.3		33.2		99.7		7.3		4.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.9	20.9	8.3	8.3	33.1	33.1	102.6	102.7	7.6	7.6	6.7		9		-				-		-	
						4.0	-	-	20.9		8.3		33.1		102.8		7.6		6.8		10		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	06:07	7.8	Surface	1.0	0.4	211	20.2	20.2	8.4	8.4	31.6	31.6	99.3	99.3	7.5	7.5	4.8	6.4	9	8	85	87	815630	804250	<0.2	<0.2	0.4	0.4
						1.0	0.4	220	20.2		8.4		31.6		99.3		7.5		4.9		8		84				<0.2		0.4	
					Middle	3.9	0.4	216	20.2	20.2	8.4	8.4	31.6	31.6	99.0	99.0	7.4		5.9		8		88				<0.2		0.4	
						3.9	0.4	225	20.2		8.4		31.6		98.9		7.4		6.0		8		87				<0.2		0.4	
					Bottom	6.8	0.4	208	20.2	20.2	8.4	8.4	31.6	31.6	96.3	96.2	7.2	7.2	8.4		7		89				<0.2		0.4	
						6.8	0.4	213	20.2		8.4		31.6		96.1		7.2		8.6		6		89				<0.2		0.4	
C2	Cloudy	Moderate	07:12	11.2	Surface	1.0	1.5	176	20.5	20.5	8.3	8.3	32.1	32.1	97.9	98.0	7.3	7.3	3.2	5.5	11	11	85	88	825704	806943	<0.2	<0.2	0.6	0.6
						1.0	1.6	190	20.5		8.3		32.1		98.0		7.3		3.2		12		85				<0.2		0.6	
					Middle	5.6	1.6	185	20.8	20.8	8.3	8.3	33.0	33.0	98.2	98.1	7.2		6.2		11		88				<0.2		0.6	
						5.6	1.6	192	20.8		8.3		33.0		98.0		7.2		6.3		10		88				<0.2		0.6	
					Bottom	10.2	1.7	180	20.8	20.8	8.3	8.3	33.0	33.0	97.5	97.5	7.2	7.2	7.0		10		90				<0.2		0.6	
						10.2	1.8	191	20.8		8.3		33.0		97.4		7.2		6.9		9		90				<0.2		0.7	
C3	Cloudy	Moderate	05:03	11.6	Surface	1.0	0.3	90	21.6	21.6	8.3	8.3	33.3	33.3	93.8	93.9	6.8	6.8	2.1	2.2	6	6	85	88	822107	817803	<0.2	<0.2	0.4	0.4
						1.0	0.3	98	21.6		8.3		33.3		94.0		6.8		2.1		6		85				<0.2		0.4	
					Middle	5.8	0.3	87	21.6	21.6	8.3	8.3	33.3	33.3	93.6	93.7	6.8		2.2		7		88				<0.2		0.4	
						5.8	0.3	94	21.6		8.3		33.3		93.7		6.8		2.2		6		88				<0.2		0.4	
					Bottom	10.6	0.3	93	21.6	21.6	8.3	8.3	33.3	33.3	95.3	95.3	6.9	6.9	2.4		5		91				<0.2		0.4	
						10.6	0.3	97	21.6		8.3		33.3		95.3		6.9		2.4		4		91				<0.2		0.4	
IM1	Fine	Calm	06:29	4.9	Surface	1.0	0.1	190	20.2	20.2	8.4	8.4	31.7	31.7	101.0	101.0	7.6	7.6	5.3	6.2	12	11	87	88	817932	807124	<0.2	<0.2	0.4	0.4
						1.0	0.1	198	20.2		8.4		31.7		101.0		7.6		5.5		11		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	188	20.2	20.2	8.4	8.4	31.7	31.7	101.1	101.1	7.6	7.6	6.9		11		89				<0.2		0.4	
						3.9	0.1	189	20.2		8.4		31.7		101.1		7.6		6.9		10		89				<0.2		0.4	
IM2	Fine	Moderate	06:37	6.4	Surface	1.0	0.2	142	20.2	20.2	8.4	8.4	31.6	31.6	98.9	98.9	7.4	7.4	5.7	6.6	6	6	85	87	818162	806155	<0.2	<0.2	0.5	0.5
						1.0	0.2	143	20.2		8.4		31.6		98.9		7.4		5.8		5		86				<0.2		0.4	
					Middle	3.2	0.2	157	20.2	20.2	8.4	8.4	31.6	31.6	98.4	98.4	7.4		6.6		6		86				<0.2		0.4	
						3.2	0.2	160	20.2		8.4		31.6		98.3		7.4		6.6		5		88				<0.2		0.5	
					Bottom	5.4	0.2	150	20.2	20.2	8.4	8.4	31.6	31.6	96.1	96.0	7.2	7.2	7.3		6		89				<0.2		0.5	
						5.4	0.2	151	20.2		8.4		31.6		95.9		7.2		7.6		6		90				<0.2		0.5	
IM3	Fine	Moderate	06:44	6.2	Surface	1.0	0.4	111	20.2	20.2	8.4	8.4	31.7	31.7	100.4	100.4	7.6	7.5	5.0	6.4	4	6	85	87	818803	805592	<0.2	<0.2	0.4	0.4
						1.0	0.4	111	20.2		8.4		31.7		100.4		7.5		5.3		5		86				<0.2		0.4	
					Middle	3.1	0.4	121	20.2	20.2	8.4	8.4	31.7	31.7	100.3	100.3	7.5		6.7		4		87				<0.2		0.4	
						3.1	0.5	131	20.2		8.4		31.7		100.3		7.5		7.0		5		87				<0.2		0.4	
					Bottom	5.2	0.4	110	20.2	20.2	8.4	8.4	31.7	31.7	100.4	100.4	7.6	7.6	6.9		4		90				<0.2		0.6	
						5.2	0.4	115	20.2		8.4		31.7		100.4		7.6		7.3		14		89				<0.2		0.4	
IM4	Fine	Moderate	06:55	6.7	Surface	1.0	0.6	191	20.2	20.2	8.4	8.4	31.5	31.5	99.6	99.6	7.5	7.5	4.7	5.0	5	6	85	88	819735	804611	<0.2	<0.2	0.4	0.4
						1.0	0.6	193	20.2		8.4		31.5		99.6		7.5		4.8		5		86				<0.2		0.4	
					Middle	3.4	0.5	172	20.2	20.2	8.4	8.4	31.5	31.5	99.7	99.7	7.5		4.8		5		88				<0.2		0.4	
						3.4	0.5	172	20.2		8.4		31.5		99.7		7.5		4.8		5		89				<0.2		0.5	
					Bottom	5.7	0.5	188	20.1	20.1	8.4	8.4	31.6	31.6	100.1	100.1	7.5	7.6	5.4		4		90				<0.2		0.4	
						5.7	0.5	193	20.1		8.4		31.6		100.1		7.6		5.3		10		90				<0.2		0.4	
IM5	Fine	Moderate	07:05	6.8	Surface	1.0	0.6	208	20.3	20.3	8.4	8.4	31.5	31.5	99.9	99.9	7.5	7.5	3.6	4.0	4	9	85	87	820711	804852	<0.2	<0.2	0.4	0.4
						1.0	0.7	218	20.3		8.4		31.5		99.8		7.5		3.7		5		84				<0.2		0.4	
					Middle	3.4	0.6	218	20.3	20.3	8.4	8.4	31.5	31.5	99.8	99.8	7.5		3.9		12		87				<0.2		0.4	
						3.4	0.6	227	20.3		8.4		31.5		99.8		7.5		4.0		12		86				<0.2		0.4	
					Bottom	5.8	0.6	214	20.3	20.3	8.4	8.4	31.5	31.5	99.7	99.8	7.5	7.5	4.4		11		89				<0.2		0.4	
						5.8	0.7	221	20.3		8.4		31.5		99.8		7.5		4.3		12		89				<0.2		0.4	
IM6	Fine	Moderate	07:14	7.6	Surface	1.0	0.5	241	20.3	20.3	8.4	8.4	31.3	31.3	99.6	99.6	7.5	7.5	4.6	4.7	6	9	85	87	821080	805828	<0.2	<0.2	0.5	0.5
						1.0	0.5	257	20.3		8.4		31.3		99.6		7.5		4.5		6		85				<0.2		0.5	
					Middle	3.8	0.4	233	20.3	20.3	8.4	8.4	31.3	31.3	99.5	99.5	7.5		4.7		10		87				<0.2		0.4	
						3.8	0.5	255	20.3		8.4		31.3		99.5		7.5		4.7		9		88				<0.2		0.5	
					Bottom	6.6	0.4	242	20.3	20.3	8.4	8.4	31.3	31.3	99.4	99.4	7.5	7.5	4.7		11		89				<0.2		0.5	
						6.6	0.4	263	20.3		8.4		31.3		99.4		7.5		4.7		10		90				<0.2		0.5	
IM7	Fine	Moderate	07:24	7.4	Surface	1.0	0.4	245	20.4	20.4	8.4	8.4	31.3	31.3	99.9	99.9	7.5	7.5	5.7	7.0	4	11	85	88	821351	806842	<0.2	<0.2	0.4	0.4
						1.0	0.5	248	20.4		8.4		31.3		99.9		7.5		5.8		5		86				<0.2		0.4	
					Middle	3.7	0.4	267	20.3	20.3	8.4	8.4	31.3	31.3	99.8	99.8	7.5		6.5		15		87				<0.2		0.4	
						3.7	0.4	291	20.3		8.4		31.3		99.8		7.5		6.6		14		88				<0.2		0.4	
					Bottom	6.4	0.3	249	20.3	20.3	8.4	8.4	31.3	31.3	99.9	100.0	7.5	7.5	8.7		14		90				<0.2		0.5	
						6.4	0.3	260	20.3		8.4		31.3		100.0		7.5		8.7		15		90				<0.2		0.5	
IM8	Cloudy	Moderate	06:39	7.6	Surface	1.0	0.9	176	20.2	20.2	8.3	8.3	32.6	32.6	99.2	99.2	7.4	7.4	3.4	4.3	8	8	84	87	821835	808156	<0.2	<0.2	0.6	0.6
						1.0	1.0	184	20.2		8.3		32.6		99.1		7.4		3.4		7		85				<0.2		0.6	
					Middle	3.8	1.2	180	20.2	20.2	8.3	8.3	32.6	32.6	98.9	99.0	7.4		3.8		7		88				<0.2		0.7	
						3.8	1.2	192	20.2		8.3		32.6		99.0		7.4		3.9		8		87				<0.2		0.6	
					Bottom	6.6	1.1	192	20.2	20.2	8.3	8.3	32.6	32.6	99.0	99.0	7.4	7.4	5.5		9		90				<0.2		0.6	
						6.6	1.2	198	20.2		8.3		32.6		98.9		7.4		5.6		8		90				<0.2		0.6	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 December 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	06:33	6.9	Surface	1.0	0.9	174	20.2	20.2	8.3	8.3	32.6	32.6	99.2	99.2	7.4	7.4	3.7	3.5	9	9	85	87	822082	808830	<0.2	<0.2	0.6	0.6
						1.0	1.0	176	20.2		8.3		32.6		99.2		7.4		3.7		9		84				<0.2		0.5	
					Middle	3.5	1.1	192	20.2	20.2	8.3	8.3	32.7	32.7	99.2	99.2	7.4		3.5		10		88				<0.2		0.7	
						3.5	1.2	206	20.2		8.3		32.7		99.1		7.4		3.6		9		87				<0.2		0.6	
					Bottom	5.9	1.0	188	20.2	20.2	8.3	8.3	32.7	32.7	98.9	98.9	7.4	7.4	3.2		9		90				<0.2		0.6	
						5.9	1.1	194	20.2		8.3		32.7		98.9		7.4		3.2		10		90				<0.2		0.7	
IM10	Cloudy	Moderate	06:25	7.5	Surface	1.0	0.7	216	20.2	20.2	8.3	8.3	32.7	32.7	98.9	98.9	7.4	7.4	2.9	3.2	8	7	85	87	822377	809772	<0.2	<0.2	0.6	0.6
						1.0	0.8	226	20.2		8.3		32.7		98.8		7.4		2.9		7		85				<0.2		0.6	
					Middle	3.8	0.8	222	20.2	20.2	8.3	8.3	32.7	32.7	99.1	99.0	7.4		3.0		7		87				<0.2		0.6	
						3.8	0.8	225	20.2		8.3		32.7		98.9		7.4		3.0		6		87				<0.2		0.7	
					Bottom	6.5	0.6	237	20.2	20.2	8.3	8.3	32.7	32.7	99.0	99.0	7.4	7.4	3.6		7		89				<0.2		0.6	
						6.5	0.7	243	20.2		8.3		32.7		98.9		7.4		3.6		6		90				<0.2		0.6	
IM11	Cloudy	Moderate	06:12	7.8	Surface	1.0	0.9	171	20.3	20.3	8.3	8.3	32.8	32.8	99.4	99.5	7.4	7.4	2.7	3.5	10	8	84	87	822068	811456	<0.2	<0.2	0.6	0.6
						1.0	1.0	182	20.3		8.3		32.8		99.5		7.4		2.7		9		85				<0.2		0.7	
					Middle	3.9	1.2	194	20.3	20.3	8.3	8.3	32.8	32.8	98.9	99.0	7.4		3.0		8		87				<0.2		0.7	
						3.9	1.3	198	20.3		8.3		32.8		99.0		7.4		3.0		8		88				<0.2		0.7	
					Bottom	6.8	1.1	183	20.3	20.3	8.3	8.3	32.8	32.8	99.0	99.0	7.4	7.4	4.7		7		89				<0.2		0.5	
						6.8	1.2	189	20.3		8.3		32.8		98.9		7.4		4.6		6		89				<0.2		0.5	
IM12	Cloudy	Moderate	06:04	9.0	Surface	1.0	0.8	154	20.3	20.3	8.3	8.3	32.9	32.9	99.5	99.6	7.4	7.4	3.7	4.7	5	7	85	87	821452	812057	<0.2	<0.2	0.6	0.6
						1.0	0.9	169	20.3		8.3		32.9		99.6		7.4		3.7		5		84				<0.2		0.6	
					Middle	4.5	0.8	173	20.3	20.3	8.3	8.3	32.9	32.9	99.3	99.3	7.4		4.5		5		87				<0.2		0.7	
						4.5	0.8	174	20.3		8.3		32.9		99.2		7.4		4.5		6		87				<0.2		0.6	
					Bottom	8.0	0.8	168	20.3	20.3	8.3	8.3	32.9	32.9	99.0	99.1	7.4	7.4	5.9		10		90				<0.2		0.6	
						8.0	0.8	170	20.3		8.3		32.9		99.1		7.4		5.9		9		89				<0.2		0.5	
SR1A	Cloudy	Calm	05:43	4.9	Surface	1.0	-	-	21.0	21.0	8.3	8.3	33.2	33.2	97.7	97.7	7.2	7.2	1.8	1.9	6	6	-	-	819980	812654	-	-	-	-
						1.0	-	-	21.0		8.3		33.2		97.6		7.2		1.8		6		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	21.0	21.0	8.3	8.3	33.2	33.2	98.8	98.8	7.3	7.3	1.9		7		-				-		-	
						3.9	-	-	21.0		8.3		33.2		98.8		7.3		1.9		6		-				-		-	
SR2	Cloudy	Moderate	05:29	4.4	Surface	1.0	0.3	66	21.0	21.0	8.3	8.3	33.2	33.2	98.2	98.3	7.2	7.2	2.3	2.5	6	6	86	88	821469	814185	<0.2	<0.2	0.5	0.6
						1.0	0.3	69	21.0		8.3		33.2		98.3		7.2		2.4		7		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	63	21.0	21.0	8.3	8.3	33.2	33.2	99.5	99.6	7.3	7.3	2.6		6		89				<0.2		0.6	
						3.4	0.3	66	21.0		8.3		33.2		99.6		7.3		2.6		5		89				<0.2		0.6	
SR3	Cloudy	Moderate	06:45	8.8	Surface	1.0	1.2	152	20.3	20.3	8.3	8.3	32.6	32.6	99.1	99.1	7.4	7.4	5.2	6.8	8	9	-	-	822127	807554	-	-	-	-
						1.0	1.3	152	20.3		8.3		32.6		99.1		7.4		5.1		8		-				-		-	
					Middle	4.4	1.5	144	20.3	20.3	8.3	8.3	32.6	32.6	98.7	98.8	7.4		6.5		9		-				-		-	
						4.4	1.6	150	20.3		8.3		32.6		98.9		7.4		6.6		10		-				-		-	
					Bottom	7.8	1.8	132	20.3	20.3	8.3	8.3	32.6	32.6	99.0	99.1	7.4	7.4	8.6		9		-				-		-	
						7.8	1.9	138	20.3		8.3		32.6		99.1		7.4		8.5		10		-				-		-	
SR4A	Fine	Moderate	05:46	9.0	Surface	1.0	0.1	85	20.4	20.4	8.4	8.4	31.4	31.4	100.0	100.0	7.5	7.5	2.0	2.4	4	8	-	-	817194	807808	-	-	-	-
						1.0	0.1	88	20.4		8.4		31.4		99.9		7.5		2.0		4		-				-		-	
					Middle	4.5	0.1	71	20.3	20.3	8.4	8.4	31.5	31.5	99.4	99.4	7.5		2.5		4		-				-		-	
						4.5	0.1	72	20.3		8.4		31.5		99.4		7.5		2.5		13		-				-		-	
					Bottom	8.0	0.0	118	20.2	20.2	8.3	8.3	31.5	31.5	99.5	99.5	7.5	7.5	2.7		12		-				-		-	
						8.0	0.0	120	20.2		8.3		31.5		99.5		7.5		2.7		11		-				-		-	
SR5A	Fine	Calm	05:31	3.3	Surface	1.0	0.1	280	20.2	20.2	8.4	8.4	31.7	31.7	98.7	98.7	7.4	7.4	4.1	4.8	6	8	-	-	816603	810717	-	-	-	-
						1.0	0.1	282	20.2		8.4		31.7		98.6		7.4		4.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	271	20.2	20.2	8.4	8.4	31.8	31.8	98.4	98.4	7.4	7.4	5.3		8		-				-		-	
						2.3	0.0	290	20.2		8.4		31.8		98.4		7.4		5.4		9		-				-		-	
SR6A	Fine	Calm	05:01	3.6	Surface	1.0	0.1	67	20.1	20.1	8.3	8.3	31.8	31.8	99.4	99.5	7.5	7.5	3.0	4.4	5	6	-	-	817972	814749	-	-	-	-
						1.0	0.1	70	20.1		8.3		31.8		99.5		7.5		3.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.0	213	20.0	20.0	8.3	8.3	31.8	31.8	100.1	100.1	7.6	7.6	5.6		4		-				-		-	
						2.6	0.0	224	20.0		8.3		31.8		100.1		7.6		5.7		10		-				-		-	
SR7	Cloudy	Moderate	04:25	15.7	Surface	1.0	0.2	82	21.7	21.7	8.2	8.2	33.3	33.3	93.3	93.3	6.8	6.8	0.8	1.0	5	6	-	-	823636	823740	-	-	-	-
						1.0	0.2	86	21.7		8.2		33.3		93.2		6.8		0.8		5		-				-		-	
					Middle	7.9	0.2	82	21.7	21.7	8.2	8.2	33.3	33.3	93.1	93.1	6.8		1.0		6		-				-		-	
						7.9	0.2	83	21.7		8.2		33.3		93.1		6.8		1.0		7		-				-		-	
					Bottom	14.7	0.1	74	21.7	21.7	8.2	8.2	33.3	33.3	93.4	93.4	6.8	6.8	1.3		6		-				-		-	
						14.7	0.1	79	21.7		8.2		33.3		93.4		6.8		1.3		7		-				-		-	
SR8	Cloudy	Moderate	05:54	4.8	Surface	1.0	-	-	21.4	21.4	8.3	8.3	33.1	33.1	97.3	97.3	7.1	7.1	2.4	3.7	6	6	-	-	820393	811607	-	-	-	-
						1.0	-	-	21.4		8.3		33.1		97.3		7.1		2.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	21.0	21.0	8.3	8.3	33.2	33.2	97.9	97.9	7.2	7.2	5.0		5		-				-		-	
						3.8	-	-	21.0		8.3		33.2		97.9		7.2		5.1		6		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 December 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	13:42	7.6	Surface	1.0	1.1	101	20.3	20.3	8.4	8.4	31.7	31.7	100.6	100.6	7.5	7.5	4.3	9.6	4	8	87	88	815641	804248	<0.2	<0.2	0.4	0.4
						1.0	1.2	104	20.3		8.4		31.7		100.5		7.5		4.4		12		86				<0.2		0.4	
					Middle	3.8	1.2	96	20.3	20.3	8.4	8.4	31.7	31.7	99.9	99.9	7.5		5.3		7		90				<0.2		0.4	
						3.8	1.3	103	20.3		8.4		31.7		99.8		7.5		5.5		7		89				<0.2		0.4	
					Bottom	6.6	0.9	97	20.4	20.4	8.4	8.4	31.8	31.8	98.5	98.5	7.4	7.4	18.4		8		87				<0.2		0.5	
						6.6	0.9	99	20.4		8.4		31.8		98.4		7.4		19.5		9		86				<0.2		0.4	
C2	Fine	Moderate	12:35	10.7	Surface	1.0	0.1	208	20.6	20.6	8.3	8.3	32.0	32.0	98.6	98.6	7.3	7.3	4.4	3.1	12	12	84	87	825698	806939	<0.2	<0.2	0.9	0.9
						1.0	0.1	224	20.6		8.3		32.0		98.6		7.3		4.4		13		84				<0.2		1.0	
					Middle	5.4	0.1	284	20.8	20.8	8.3	8.3	32.7	32.7	97.5	97.5	7.2		2.1		12		87				<0.2		0.9	
						5.4	0.1	307	20.8		8.3		32.7		97.5		7.2		2.1		11		87				<0.2		0.9	
					Bottom	9.7	0.3	330	20.9	20.9	8.3	8.3	33.0	33.0	98.0	98.0	7.2	7.2	2.7		12		90				<0.2		0.9	
						9.7	0.3	335	20.9		8.3		33.0		98.0		7.2		2.7		11		89				<0.2		0.8	
C3	Fine	Moderate	14:37	12.0	Surface	1.0	0.5	252	21.6	21.6	8.3	8.3	33.3	33.3	94.6	94.6	6.9	6.9	3.8	5.8	10	8	85	89	822126	817811	<0.2	<0.2	0.5	0.5
						1.0	0.5	273	21.6		8.3		33.3		94.5		6.9		3.9		6		85				<0.2		0.4	
					Middle	6.0	0.4	254	21.6	21.6	8.3	8.3	33.3	33.3	94.6	94.6	6.9		7.5		8		89				<0.2		0.5	
						6.0	0.5	260	21.6		8.3		33.3		94.6		6.9		7.6		7		88				<0.2		0.6	
					Bottom	11.0	0.4	254	21.6	21.6	8.3	8.3	33.3	33.3	95.7	95.9	6.9	7.0	5.9		8		92				<0.2		0.5	
						11.0	0.4	268	21.6		8.3		33.3		96.0		7.0		5.8		8		92				<0.2		0.6	
IM1	Cloudy	Moderate	13:20	4.5	Surface	1.0	0.2	87	20.4	20.4	8.4	8.4	31.6	31.6	105.1	105.1	7.9	7.9	10.3	13.6	7	7	88	88	817945	807153	<0.2	<0.2	0.4	0.4
						1.0	0.2	87	20.4		8.4		31.6		105.1		7.9		11.0		7		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	66	20.0	20.0	8.4	8.4	31.9	32.0	104.2	104.1	7.8	7.8	16.3		7		89				<0.2		0.4	
						3.5	0.1	71	20.0		8.4		32.0		104.0		7.8		16.8		8		89				<0.2		0.3	
IM2	Cloudy	Rough	13:13	6.4	Surface	1.0	1.0	161	20.5	20.5	8.4	8.4	31.5	31.5	103.5	103.5	7.7	7.7	3.6	5.8	5	7	84	87	818145	806173	<0.2	<0.2	0.4	0.4
						1.0	1.1	173	20.5		8.4		31.5		103.5		7.7		3.5		6		86				<0.2		0.3	
					Middle	3.2	1.1	169	20.4	20.4	8.4	8.4	31.6	31.6	102.3	102.3	7.7		4.6		7		87				<0.2		0.4	
						3.2	1.2	179	20.4		8.4		31.6		102.3		7.7		4.8		8		86				<0.2		0.4	
					Bottom	5.4	1.3	162	20.4	20.4	8.4	8.4	31.6	31.6	102.8	103.1	7.7	7.7	9.0		8		89				<0.2		0.5	
						5.4	1.3	163	20.4		8.4		31.6		103.3		7.7		9.4		8		89				<0.2		0.4	
IM3	Cloudy	Rough	13:07	6.6	Surface	1.0	1.2	203	20.3	20.3	8.4	8.4	31.6	31.6	102.0	102.0	7.7	7.7	3.3	7.0	6	7	85	87	818763	805580	<0.2	<0.2	0.5	0.5
						1.0	1.3	216	20.3		8.4		31.6		102.0		7.7		3.4		7		86				<0.2		0.4	
					Middle	3.3	1.1	206	20.3	20.3	8.4	8.4	31.6	31.6	101.7	101.7	7.6		6.1		8		87				<0.2		0.4	
						3.3	1.1	224	20.3		8.4		31.6		101.6		7.6		6.6		7		88				<0.2		0.4	
					Bottom	5.6	1.5	201	20.3	20.3	8.4	8.4	31.6	31.6	102.3	102.5	7.7	7.7	11.5		8		89				<0.2		0.5	
						5.6	1.5	220	20.2		8.4		31.6		102.7		7.7		10.9		7		89				<0.2		0.5	
IM4	Cloudy	Rough	12:58	7.7	Surface	1.0	1.7	268	20.3	20.3	8.4	8.4	31.6	31.6	102.9	102.9	7.7	7.7	2.3	3.2	3	7	85	87	819744	804597	<0.2	<0.2	0.4	0.4
						1.0	1.8	293	20.3		8.4		31.6		102.9		7.7		2.3		7		85				<0.2		0.4	
					Middle	3.9	1.7	268	20.3	20.3	8.4	8.4	31.6	31.6	102.5	102.5	7.7		2.9		8		87				<0.2		0.4	
						3.9	1.7	285	20.3		8.4		31.6		102.5		7.7		3.2		7		87				<0.2		0.4	
					Bottom	6.7	1.1	275	20.3	20.3	8.4	8.4	31.7	31.7	102.4	102.4	7.7	7.7	4.1		8		89				<0.2		0.5	
						6.7	1.2	301	20.3		8.4		31.7		102.4		7.7		4.1		9		90				<0.2		0.5	
IM5	Cloudy	Rough	12:50	7.1	Surface	1.0	1.0	343	20.3	20.3	8.4	8.4	31.7	31.7	103.9	103.9	7.8	7.8	4.7	5.6	3	9	85	88	820712	804871	<0.2	<0.2	0.4	0.4
						1.0	1.1	351	20.3		8.4		31.7		103.9		7.8		4.6		11		86				<0.2		0.4	
					Middle	3.6	1.2	342	20.3	20.3	8.4	8.4	31.7	31.7	103.7	103.7	7.8		4.5		8		88				<0.2		0.4	
						3.6	1.3	315	20.3		8.4		31.7		103.7		7.8		4.7		12		87				<0.2		0.4	
					Bottom	6.1	1.0	345	20.3	20.3	8.4	8.4	31.7	31.7	103.3	103.4	7.8	7.8	7.8		10		89				<0.2		0.4	
						6.1	1.1	317	20.3		8.4		31.7		103.4		7.8		7.6		11		90				<0.2		0.5	
IM6	Cloudy	Rough	12:42	6.8	Surface	1.0	1.5	326	20.6	20.6	8.4	8.4	31.3	31.3	102.0	102.0	7.6	7.6	2.5	3.0	5	8	86	87	821048	805820	<0.2	<0.2	0.5	0.5
						1.0	1.6	355	20.6		8.4		31.3		102.0		7.6		2.5		4		85				<0.2		0.4	
					Middle	3.4	1.4	324	20.5	20.5	8.4	8.4	31.4	31.4	101.5	101.5	7.6		2.9		8		87				<0.2		0.4	
						3.4	1.4	340	20.5		8.4		31.4		101.4		7.6		3.0		9		87				<0.2		0.4	
					Bottom	5.8	1.5	325	20.4	20.4	8.4	8.4	31.4	31.4	101.4	101.5	7.6	7.6	3.5		10		89				<0.2		0.5	
						5.8	1.6	350	20.4		8.4		31.4		101.5		7.6		3.5		10		89				<0.2		0.6	
IM7	Cloudy	Rough	12:34	7.8	Surface	1.0	1.3	270	20.7	20.7	8.4	8.4	31.3	31.3	102.0	102.0	7.6	7.6	2.1	2.6	7	9	85	87	821328	806854	<0.2	<0.2	0.5	0.5
						1.0	1.4	295	20.7		8.4		31.3		102.0		7.6		2.0		6		85				<0.2		0.4	
					Middle	3.9	1.4	269	20.6	20.6	8.4	8.4	31.4	31.4	101.9	101.9	7.6		2.5		9		87				<0.2		0.5	
						3.9	1.5	270	20.6		8.4		31.4		101.9		7.6		2.5		10		88				<0.2		0.5	
					Bottom	6.8	1.7	269	20.5	20.5	8.4	8.4	31.4	31.4	102.1	102.2	7.6	7.7	3.1		11		89				<0.2		0.4	
						6.8	1.9	275	20.5		8.4		31.4		102.2		7.7		3.2		12		90				<0.2		0.4	
IM8	Fine	Moderate	12:59	7.3	Surface	1.0	0.2	265	20.4	20.4	8.3	8.3	32.8	32.8	101.2	101.2	7.5	7.5	1.9	2.2	6	7	84	87	821847	808126	<0.2	<0.2	0.7	0.7
						1.0	0.2	279	20.4		8.3		32.8		101.2		7.5		1.9		6		84				<0.2		0.7	
					Middle	3.7	0.2	279	20.4	20.4	8.3	8.3	32.8	32.8	101.0	101.0	7.5		2.3		7		87				<0.2		0.7	
						3.7	0.2	298	20.4		8.3		32.8		100.9		7.5		2.2		7		87				<0.2		0.6	
					Bottom	6.3	0.1	288	20.4	20.4	8.3	8.3	32.8	32.8	101.5	101.5	7.6	7.6	2.5		7		89				<0.2		0.6	
						6.3	0.1	291	20.4		8.3		32.8		101.5		7.6		2.5		7		90				<0.2		0.6	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 December 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	13:06	6.9	Surface	1.0	0.3	262	20.4	20.4	8.3	8.3	32.8	32.8	101.0	100.9	7.5	7.5	3.7	3.7	7	8	84	87	822089	808802	<0.2	<0.2	0.6	0.6
						1.0	0.3	268	20.4		8.3		32.8		100.8		7.5		3.6		6		84				<0.2		0.5	
					Middle	3.5	0.3	263	20.4	20.4	8.3	8.3	32.8	32.8	101.1	101.1	7.5		4.0		9		87				<0.2		0.6	
						3.5	0.3	266	20.4		8.3		32.8		101.1		7.5		4.0		8		87				<0.2		0.6	
					Bottom	5.9	0.3	269	20.4	20.4	8.3	8.3	32.8	32.8	101.1	101.2	7.5	7.5	3.3		9		89				<0.2		0.6	
						5.9	0.3	279	20.4		8.3		32.8		101.3		7.5		3.3		8		89				<0.2		0.6	
IM10	Fine	Moderate	13:14	7.1	Surface	1.0	0.5	289	20.4	20.4	8.3	8.3	32.8	32.8	101.5	101.5	7.6	7.6	3.0	3.4	6	8	84	87	822391	809793	<0.2	<0.2	0.6	0.6
						1.0	0.5	293	20.4		8.3		32.8		101.5		7.6		2.7		6		84				<0.2		0.6	
					Middle	3.6	0.5	292	20.4	20.4	8.3	8.3	32.8	32.8	102.1	102.1	7.6		3.1		7		87				<0.2		0.6	
						3.6	0.5	295	20.4		8.3		32.8		102.1		7.6		3.1		8		88				<0.2		0.5	
					Bottom	6.1	0.4	294	20.4	20.4	8.3	8.3	32.8	32.8	101.6	101.6	7.6	7.6	4.1		11		89				<0.2		0.6	
						6.1	0.5	314	20.4		8.3		32.8		101.5		7.6		4.1		12		89				<0.2		0.6	
IM11	Fine	Moderate	13:27	7.5	Surface	1.0	0.5	274	20.9	20.9	8.3	8.3	32.9	32.9	101.5	101.6	7.5	7.5	1.4	2.2	11	9	84	87	822079	811442	<0.2	<0.2	0.6	0.6
						1.0	0.5	293	20.9		8.3		32.9		101.6		7.5		1.5		10		84				<0.2		0.5	
					Middle	3.8	0.4	287	20.9	20.9	8.3	8.3	33.0	33.0	100.6	100.6	7.4		2.3		9		87				<0.2		0.6	
						3.8	0.5	295	20.9		8.3		33.0		100.5		7.4		2.2		9		88				<0.2		0.6	
					Bottom	6.5	0.4	292	20.9	20.9	8.3	8.3	33.1	33.1	100.1	100.1	7.4	7.4	3.0		7		89				<0.2		0.6	
						6.5	0.4	304	20.9		8.3		33.1		100.1		7.4		2.9		8		89				<0.2		0.5	
IM12	Fine	Moderate	13:36	8.7	Surface	1.0	0.5	268	21.2	21.2	8.3	8.3	33.2	33.2	97.6	97.7	7.1	7.1	5.2	7.3	5	8	84	87	821435	812029	<0.2	<0.2	0.5	0.5
						1.0	0.6	290	21.2		8.3		33.2		97.7		7.1		5.3		5		84				<0.2		0.4	
					Middle	4.4	0.5	265	21.3	21.3	8.3	8.3	33.2	33.2	97.4	97.4	7.1		7.9		7		87				<0.2		0.5	
						4.4	0.5	280	21.3		8.3		33.2		97.3		7.1		7.4		8		88				<0.2		0.6	
					Bottom	7.7	0.4	267	21.3	21.3	8.3	8.3	33.2	33.2	98.0	98.1	7.2	7.2	8.9		11		89				<0.2		0.5	
						7.7	0.4	268	21.3		8.3		33.2		98.1		7.2		9.0		10		90				<0.2		0.5	
SR1A	Fine	Calm	13:56	5.1	Surface	1.0	-	-	21.1	21.1	8.3	8.3	33.2	33.2	100.4	100.5	7.4	7.4	1.8	2.0	7	8	-	-	819975	812656	-	-	-	-
						1.0	-	-	21.1		8.3		33.2		100.5		7.4		1.8		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	21.0	21.0	8.3	8.3	33.2	33.2	101.4	101.6	7.4	7.5	2.1		10		-				-		-	
						4.1	-	-	21.0		8.3		33.2		101.7		7.5		2.1		9		-				-		-	
SR2	Fine	Moderate	14:13	4.3	Surface	1.0	0.1	57	21.3	21.3	8.3	8.3	33.2	33.2	100.1	100.1	7.3	7.3	2.7	3.0	6	6	85	87	821460	814144	<0.2	<0.2	0.4	0.5
						1.0	0.1	61	21.3		8.3		33.2		100.1		7.3		2.8		7		86				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	63	21.3	21.3	8.3	8.3	33.2	33.2	101.1	101.1	7.4	7.4	3.3		6		89				<0.2		0.5	
						3.3	0.1	64	21.3		8.3		33.2		101.1		7.4		3.3		6		88				<0.2		0.5	
SR3	Fine	Moderate	12:54	8.4	Surface	1.0	0.1	226	20.9	20.9	8.3	8.3	32.6	32.6	101.9	101.9	7.5	7.5	1.3	1.5	13	7	-	-	822161	807590	-	-	-	-
						1.0	0.1	237	20.9		8.3		32.6		101.9		7.5		1.3		6		-				-		-	
					Middle	4.2	0.2	273	20.8	20.8	8.3	8.3	32.7	32.7	102.0	102.1	7.5		1.4		7		-				-		-	
						4.2	0.2	277	20.8		8.3		32.7		102.1		7.5		1.4		6		-				-		-	
					Bottom	7.4	0.2	284	20.8	20.8	8.3	8.3	32.9	32.9	101.7	101.7	7.5	7.5	1.8		6		-				-		-	
						7.4	0.2	305	20.8		8.3		32.9		101.6		7.5		1.8		6		-				-		-	
SR4A	Cloudy	Calm	14:03	8.2	Surface	1.0	0.7	125	20.6	20.6	8.4	8.4	31.7	31.7	102.1	102.1	7.6	7.6	3.3	3.4	4	8	-	-	817187	807825	-	-	-	-
						1.0	0.8	131	20.6		8.4		31.7		102.0		7.6		3.3		9		-				-		-	
					Middle	4.1	0.8	121	20.6	20.6	8.4	8.4	31.7	31.7	101.6	101.6	7.6		3.4		4		-				-		-	
						4.1	0.8	128	20.6		8.4		31.7		101.5		7.6		3.4		11		-				-		-	
					Bottom	7.2	0.5	133	20.6	20.6	8.4	8.4	31.7	31.7	101.4	101.4	7.6	7.6	3.5		10		-				-		-	
						7.2	0.6	140	20.6		8.4		31.7		101.4		7.6		3.5		10		-				-		-	
SR5A	Cloudy	Calm	14:19	3.5	Surface	1.0	0.1	278	20.8	20.8	8.4	8.4	31.8	31.8	104.1	104.1	7.7	7.7	4.6	5.3	9	10	-	-	816613	810678	-	-	-	-
						1.0	0.1	283	20.8		8.4		31.8		104.0		7.7		5.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	265	20.7	20.7	8.4	8.4	31.8	31.8	103.1	103.1	7.7	7.7	5.9		8		-				-		-	
						2.5	0.1	270	20.7		8.4		31.8		103.0		7.7		5.8		15		-				-		-	
SR6A	Cloudy	Calm	14:56	4.8	Surface	1.0	0.5	28	21.2	21.2	8.4	8.4	31.9	31.9	106.2	106.2	7.8	7.8	3.8	4.5	8	8	-	-	817951	814743	-	-	-	-
						1.0	0.6	30	21.2		8.4		31.9		106.1		7.8		3.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	1.6	32	21.2	21.2	8.4	8.4	31.9	31.9	105.9	105.9	7.8	7.8	5.2		8		-				-		-	
						3.8	1.7	34	21.2		8.4		31.9		105.9		7.8		5.2		8		-				-		-	
SR7	Fine	Moderate	15:16	15.8	Surface	1.0	0.1	38	21.7	21.7	8.3	8.3	33.3	33.3	93.6	93.7	6.8	6.8	1.7	2.1	7	8	-	-	823642	823720	-	-	-	-
						1.0	0.2	41	21.7		8.3		33.3		93.7		6.8		1.6		8		-				-		-	
					Middle	7.9	0.1	9	21.7	21.7	8.3	8.3	33.3	33.3	93.4	93.4	6.8	6.8	1.9		9		-				-		-	
						7.9	0.1	9	21.7		8.3		33.3		93.3		6.8		1.9		8		-				-		-	
					Bottom	14.8	0.1	17	21.7	21.7	8.3	8.3	33.3	33.3	93.7	93.7	6.8	6.8	2.7		9		-				-		-	
						14.8	0.1	17	21.7		8.3		33.3		93.7		6.8		2.7		8		-				-		-	
SR8	Fine	Moderate	13:47	5.0	Surface	1.0	-	-	20.7	20.7	8.3	8.3	32.9	32.9	101.3	101.3	7.5	7.5	6.7	7.3	16	13	-	-	820388	811641	-	-	-	-
						1.0	-	-	20.7		8.3		32.9		101.3		7.5		6.8		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.7	20.7	8.3	8.3	32.9	32.9	101.0	101.0	7.5	7.5	7.7		11		-				-		-	
						4.0	-	-	20.7		8.3		32.9		100.9		7.5		7.8		11		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 December 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	9.0	Surface	1.0	0.2	241	20.1	20.1	8.1	8.1	31.2	31.2	95.0	95.0	7.2	7.2	5.5	5.9	4	5	85	87	815633	804231	<0.2	<0.2	0.6	0.6
						1.0	0.3	242	20.1		8.1		31.2		95.0		7.2		5.5		4		85				<0.2		0.7	
					Middle	4.5	0.2	236	20.1	20.1	8.2	8.2	31.2	31.2	94.9	94.9	7.2		6.0		5		88				<0.2		0.5	
						4.5	0.2	256	20.1		8.2		31.2		94.8		7.2		6.0		5		88				<0.2		0.5	
					Bottom	8.0	0.2	238	20.1	20.1	8.2	8.2	31.2	31.2	94.9	94.9	7.2	7.2	6.2		6		89				<0.2		0.5	
						8.0	0.2	241	20.1		8.2		31.2		94.9		7.2		6.3		6		89				<0.2		0.5	
C2	Cloudy	Moderate	09:54	11.4	Surface	1.0	3.1	327	20.4	20.4	8.4	8.4	30.6	30.6	100.7	100.7	7.6	7.5	1.2	2.6	5	4	84	87	825666	806940	<0.2	<0.2	0.8	0.8
						1.0	3.4	328	20.4		8.4		30.6		100.7		7.6		1.2		5		84				<0.2		0.7	
					Middle	5.7	3.1	328	20.5	20.5	8.4	8.4	31.4	31.4	99.0	99.0	7.4		2.7		4		87				<0.2		0.9	
						5.7	3.1	352	20.5		8.4		31.4		99.0		7.4		2.7		4		87				<0.2		0.9	
					Bottom	10.4	3.2	331	20.5	20.5	8.4	8.4	31.5	31.5	98.6	98.6	7.4	7.4	4.0		3		90				<0.2		0.8	
						10.4	3.4	342	20.5		8.4		31.5		98.6		7.4		3.9		4		90				<0.2		0.8	
C3	Cloudy	Moderate	07:41	12.9	Surface	1.0	1.6	31	21.5	21.5	8.4	8.4	32.0	32.0	91.8	91.8	6.7	6.7	0.9	1.0	4	4	86	89	822089	817815	<0.2	<0.2	1.3	0.7
						1.0	1.7	31	21.5		8.4		32.0		91.8		6.7		0.9		4		86				<0.2		1.3	
					Middle	6.5	1.6	32	21.5	21.5	8.4	8.4	32.0	32.0	91.7	91.7	6.7		0.8		4		89				<0.2		0.4	
						6.5	1.7	34	21.5		8.4		32.0		91.7		6.7		0.8		4		88				<0.2		0.4	
					Bottom	11.9	1.5	29	21.5	21.5	8.4	8.4	32.0	32.0	92.1	92.1	6.8	6.8	1.2		3		91				<0.2		0.6	
						11.9	1.6	30	21.5		8.4		32.0		92.1		6.8		1.3		2		92				<0.2		0.4	
IM1	Cloudy	Moderate	09:14	4.8	Surface	1.0	0.1	197	19.7	19.8	8.2	8.2	31.0	31.0	96.4	96.4	7.3	7.3	5.5	7.1	5	5	84	86	817950	807147	<0.2	<0.2	0.4	0.4
						1.0	0.1	212	19.8		8.2		31.0		96.3		7.3		5.6		5		84				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	204	19.8	19.8	8.2	8.2	31.0	31.0	96.1	96.1	7.3	7.3	8.6		5		89				<0.2		0.4	
						3.8	0.1	210	19.8		8.2		31.0		96.1		7.3		8.8		5		85				<0.2		0.4	
IM2	Cloudy	Moderate	09:24	6.6	Surface	1.0	0.2	193	19.7	19.7	8.1	8.1	31.0	31.0	98.0	98.0	7.5	7.5	5.5	6.8	5	5	85	88	818156	806175	<0.2	<0.2	0.5	0.5
						1.0	0.2	197	19.7		8.1		31.0		97.9		7.5		5.7		5		84				<0.2		0.5	
					Middle	3.3	0.2	184	19.7	19.7	8.1	8.1	31.0	31.0	97.6	97.6	7.4		8.7		4		89				<0.2		0.5	
						3.3	0.2	189	19.7		8.1		31.0		97.5		7.4		9.0		5		89				<0.2		0.6	
					Bottom	5.6	0.2	175	19.8	19.8	8.1	8.1	31.0	31.0	96.9	96.9	7.4	7.4	5.8		4		90				<0.2		0.5	
						5.6	0.2	190	19.8		8.1		31.0		96.9		7.4		5.8		4		90				<0.2		0.6	
IM3	Cloudy	Moderate	09:32	6.8	Surface	1.0	0.3	158	19.8	19.8	8.1	8.1	30.9	30.9	97.9	97.9	7.5	7.5	5.2	5.4	6	6	86	89	818779	805582	<0.2	<0.2	0.5	0.5
						1.0	0.3	159	19.8		8.1		30.9		97.9		7.5		5.2		6		89				<0.2		0.5	
					Middle	3.4	0.2	163	19.8	19.8	8.1	8.1	30.9	30.9	97.6	97.6	7.4		5.3		6		89				<0.2		0.6	
						3.4	0.3	164	19.8		8.1		30.9		97.6		7.4		5.3		6		90				<0.2		0.6	
					Bottom	5.8	0.2	156	19.8	19.8	8.1	8.1	30.9	30.9	97.2	97.2	7.4	7.4	5.8		5		91				<0.2		0.4	
						5.8	0.2	160	19.8		8.1		30.9		97.2		7.4		5.7		5		86				<0.2		0.5	
IM4	Cloudy	Moderate	09:46	7.8	Surface	1.0	0.6	195	19.8	19.8	8.1	8.1	30.8	30.8	97.0	97.0	7.4	7.4	5.0	6.0	6	6	87	88	819738	804611	<0.2	<0.2	0.5	0.6
						1.0	0.6	212	19.8		8.1		30.8		97.0		7.4		5.1		6		89				<0.2		0.6	
					Middle	3.9	0.5	192	19.9	19.9	8.1	8.1	30.9	30.9	96.5	96.5	7.3		6.1		6		89				<0.2		0.5	
						3.9	0.5	203	19.9		8.1		30.9		96.5		7.3		6.2		6		90				<0.2		0.6	
					Bottom	6.8	0.4	190	19.9	19.9	8.1	8.1	31.0	31.0	96.6	96.6	7.3	7.3	6.8		5		90				<0.2		0.6	
						6.8	0.4	190	19.9		8.1		31.0		96.6		7.3		6.8		5		85				<0.2		0.6	
IM5	Cloudy	Moderate	09:59	7.2	Surface	1.0	0.6	203	19.8	19.8	8.1	8.1	30.7	30.7	97.4	97.4	7.4	7.4	4.8	5.5	4	4	85	87	820749	804846	<0.2	<0.2	0.8	0.6
						1.0	0.6	211	19.8		8.1		30.7		97.4		7.4		4.8		4		85				<0.2		0.6	
					Middle	3.6	0.6	206	19.9	19.9	8.1	8.1	30.9	30.9	96.9	96.9	7.4		5.5		4		89				<0.2		0.5	
						3.6	0.6	224	19.9		8.1		30.9		96.9		7.4		5.6		4		90				<0.2		0.5	
					Bottom	6.2	0.5	199	19.9	19.9	8.1	8.1	30.9	30.9	96.7	96.8	7.4	7.4	6.0		5		90				<0.2		0.6	
						6.2	0.5	207	19.9		8.1		30.9		96.8		7.4		6.1		5		85				<0.2		0.6	
IM6	Cloudy	Moderate	10:10	6.9	Surface	1.0	0.5	231	19.8	19.8	8.1	8.1	30.8	30.8	98.7	98.7	7.5	7.5	4.2	4.4	3	3	85	88	821057	805825	<0.2	<0.2	0.5	0.6
						1.0	0.5	231	19.8		8.1		30.8		98.7		7.5		4.2		3		88				<0.2		0.6	
					Middle	3.5	0.5	236	19.8	19.8	8.1	8.1	30.8	30.8	98.1	98.1	7.5		4.4		3		88				<0.2		0.6	
						3.5	0.5	255	19.8		8.1		30.8		98.1		7.5		4.4		3		88				<0.2		0.7	
					Bottom	5.9	0.3	248	19.8	19.8	8.1	8.1	30.8	30.8	98.1	98.1	7.5	7.5	4.5		4		89				<0.2		0.6	
						5.9	0.3	249	19.8		8.1		30.8		98.1		7.5		4.5		4		90				<0.2		0.6	
IM7	Cloudy	Moderate	10:22	8.0	Surface	1.0	0.3	247	20.0	20.0	8.1	8.1	30.6	30.6	98.3	98.3	7.5	7.5	3.7	4.1	5	4	86	88	821329	806849	<0.2	<0.2	0.6	0.6
						1.0	0.3	254	20.0		8.1		30.6		98.2		7.5		3.8		5		87				<0.2		0.7	
					Middle	4.0	0.3	253	19.9	19.9	8.1	8.1	30.7	30.7	97.9	97.9	7.4		4.3		3		88				<0.2		0.5	
						4.0	0.3	276	19.9		8.1		30.7		97.9		7.4		4.3		3		89				<0.2		0.6	
					Bottom	7.0	0.2	264	19.8	19.8	8.1	8.1	30.8	30.8	97.4	97.4	7.4	7.4	4.2		3		90				<0.2		0.7	
						7.0	0.2	275	19.8		8.1		30.8		97.4		7.4		4.2		3		90				<0.2		0.6	
IM8	Cloudy	Moderate	09:22	7.6	Surface	1.0	2.3	148	20.3	20.3	8.4	8.4	31.5	31.5	100.9	100.9	7.6	7.6	1.3	2.3	3	3	85	87	821832	808159	<0.2	<0.2	0.6	0.7
						1.0	2.4	151	20.3		8.4		31.5		100.9		7.6		1.2		3		85				<0.2		0.7	
					Middle	3.8	2.3	152	20.3	20.3	8.4	8.4	31.6	31.6	99.4	99.4	7.5		2.3		3		87				<0.2		0.7	
						3.8	2.4	156	20.3		8.4		31.6		99.4		7.5		2.4		3		87				<0.2		0.7	
					Bottom	6.6	2.4	149	20.4	20.4	8.4	8.4	31.7	31.7	99.2	99.2	7.4	7.4	3.3		3		90				<0.2		0.6	
						6.6	2.4	155	20.4		8.4		31.7		99.2		7.4		3.3		3		90				<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 December 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	09:15	7.0	Surface	1.0	1.6	231	20.4	20.4	8.4	8.4	31.4	31.4	100.5	100.5	7.5	7.5	1.7	2.9	4	3	85	87	822114	808804	<0.2	<0.2	0.6	0.6
						1.0	1.8	245	20.4		8.4		31.4		100.5		7.5		1.9		4		84						0.6	
					Middle	3.5	1.8	232	20.3	20.3	8.4	8.4	31.6	31.6	99.8	99.8	7.5		3.2		3		87						0.6	
						3.5	2.0	236	20.3		8.4		31.6		99.8		7.5		3.2		3		87						0.6	
					Bottom	6.0	1.6	232	20.3	20.3	8.4	8.4	31.7	31.7	99.5	99.5	7.5	7.5	3.7		3		90						0.6	
						6.0	1.7	237	20.3		8.4		31.7		99.5		7.5		3.7		3		90						0.5	
IM10	Cloudy	Moderate	09:05	7.7	Surface	1.0	1.5	16	20.4	20.4	8.4	8.4	31.5	31.5	100.4	100.4	7.5	7.5	1.1	2.0	3	4	85	89	822363	809809	<0.2	<0.2	0.7	0.6
						1.0	1.5	16	20.4		8.4		31.5		100.4		7.5		1.1		3		89						0.6	
					Middle	3.9	1.5	14	20.4	20.4	8.4	8.4	31.5	31.5	99.6	99.6	7.5		2.0		4		88						0.7	
						3.9	1.6	14	20.4		8.4		31.5		99.6		7.5		1.9		4		88						0.6	
					Bottom	6.7	1.7	10	20.4	20.4	8.4	8.4	31.6	31.6	99.5	99.5	7.5	7.5	3.1		6		90						0.6	
						6.7	1.7	10	20.4		8.4		31.6		99.5		7.5		3.1		6		91						0.5	
IM11	Cloudy	Moderate	08:50	9.3	Surface	1.0	1.2	294	20.7	20.7	8.4	8.4	31.6	31.6	97.8	97.8	7.3	7.3	1.4	1.8	6	5	85	87	822068	811481	<0.2	<0.2	0.6	0.6
						1.0	1.3	316	20.7		8.4		31.6		97.8		7.3		1.3		6		84						0.7	
					Middle	4.7	1.2	291	20.7	20.7	8.4	8.4	31.6	31.6	97.4	97.4	7.3		1.3		5		87						0.6	
						4.7	1.3	305	20.7		8.4		31.6		97.4		7.3		1.4		5		88						0.6	
					Bottom	8.3	1.1	293	20.8	20.8	8.4	8.4	31.7	31.7	97.0	97.0	7.2	7.2	2.8		4		90						0.6	
						8.3	1.1	293	20.8		8.4		31.7		97.0		7.2		2.7		4		90						0.6	
IM12	Cloudy	Moderate	08:41	9.8	Surface	1.0	1.2	177	20.7	20.7	8.4	8.4	31.7	31.7	97.5	97.5	7.3	7.3	2.1	3.3	4	5	85	88	821471	812047	<0.2	<0.2	0.6	0.7
						1.0	1.3	180	20.7		8.4		31.7		97.5		7.3		2.1		4		85						0.7	
					Middle	4.9	1.3	177	20.7	20.7	8.4	8.4	31.7	31.7	97.4	97.4	7.3		2.9		5		88						0.7	
						4.9	1.4	177	20.7		8.4		31.7		97.3		7.2		3.0		5		88						0.6	
					Bottom	8.8	1.2	179	20.7	20.7	8.4	8.4	31.7	31.7	97.2	97.2	7.2	7.2	4.8		6		90						0.7	
						8.8	1.3	191	20.7		8.4		31.7		97.2		7.2		4.9		6		90						0.7	
SR1A	Cloudy	Calm	08:20	5.2	Surface	1.0	-	-	20.9	20.9	8.4	8.4	31.7	31.7	97.2	97.2	7.2	7.2	1.2	1.3	5	4	-	-	819972	812657	-	-	-	-
						1.0	-	-	20.9		8.4		31.7		97.1		7.2		1.2		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	20.9	20.9	8.4	8.4	31.8	31.8	96.8	96.9	7.2	7.2	1.5		3		-				-		-	
						4.2	-	-	20.9		8.4		31.8		96.9		7.2		1.5		3		-				-		-	
SR2	Cloudy	Moderate	08:06	4.6	Surface	1.0	0.3	68	21.4	21.4	8.3	8.3	31.9	31.9	92.9	92.9	6.8	6.8	1.1	1.4	4	4	87	88	821440	814156	<0.2	<0.2	1.2	1.2
						1.0	0.3	69	21.4		8.3		31.9		92.9		6.8		1.2		4		87				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	70	21.3	21.3	8.4	8.4	31.9	31.9	93.3	93.3	6.9	6.9	1.7		3		89				<0.2		1.2	
						3.6	0.3	76	21.3		8.4		31.9		93.3		6.9		1.7		3		89				<0.2		1.2	
SR3	Cloudy	Moderate	09:29	8.9	Surface	1.0	2.9	143	20.5	20.5	8.4	8.4	31.3	31.3	99.4	99.4	7.5	7.5	1.1	2.1	3	4	-	-	822140	807549	-	-	-	-
						1.0	3.2	147	20.5		8.4		31.3		99.4		7.5		1.2		3		-				-		-	
					Middle	4.5	2.8	144	20.5	20.5	8.4	8.4	31.4	31.4	99.2	99.2	7.4		1.2		4		-				-		-	
						4.5	3.0	152	20.5		8.4		31.4		99.2		7.4		1.2		4		-				-		-	
					Bottom	7.9	2.6	141	20.4	20.4	8.4	8.4	31.7	31.7	98.6	98.6	7.4	7.4	3.9		4		-				-		-	
						7.9	2.7	146	20.4		8.4		31.7		98.6		7.4		3.9		3		-				-		-	
SR4A	Cloudy	Calm	08:25	9.5	Surface	1.0	0.2	61	19.8	19.8	8.1	8.1	31.1	31.1	96.1	96.1	7.3	7.3	5.1	5.3	4	5	-	-	817180	807787	-	-	-	-
						1.0	0.2	61	19.8		8.1		31.1		96.1		7.3		5.1		4		-				-		-	
					Middle	4.8	0.1	51	19.8	19.8	8.1	8.1	31.1	31.1	96.0	96.0	7.3		5.3		5		-				-		-	
						4.8	0.1	55	19.8		8.1		31.1		96.0		7.3		5.4		5		-				-		-	
					Bottom	8.5	0.1	83	19.8	19.8	8.2	8.2	31.1	31.1	95.8	95.8	7.3	7.3	5.5		5		-				-		-	
						8.5	0.1	85	19.8		8.2		31.1		95.8		7.3		5.5		5		-				-		-	
SR5A	Cloudy	Calm	08:05	5.1	Surface	1.0	0.1	110	19.8	19.8	8.1	8.1	30.9	30.9	95.6	95.6	7.3	7.3	4.3	4.5	4	4	-	-	816601	810682	-	-	-	-
						1.0	0.1	117	19.8		8.1		30.9		95.6		7.3		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	141	19.8	19.8	8.1	8.1	30.9	30.9	95.4	95.4	7.3	7.3	4.6		4		-				-		-	
						4.1	0.0	153	19.8		8.1		30.9		95.4		7.3		4.6		4		-				-		-	
SR6A	Cloudy	Calm	07:31	4.5	Surface	1.0	0.1	48	20.6	20.6	8.1	8.1	31.2	31.2	94.9	94.9	7.1	7.1	4.8	4.7	5	5	-	-	817960	814737	-	-	-	-
						1.0	0.1	52	20.6		8.1		31.2		94.9		7.1		4.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	54	20.6	20.6	8.1	8.1	31.2	31.2	95.0	95.1	7.1	7.1	4.7		4		-				-		-	
						3.5	0.1	57	20.6		8.1		31.2		95.1		7.1		4.7		4		-				-		-	
SR7	Cloudy	Rough	07:06	15.4	Surface	1.0	1.3	23	21.6	21.6	8.3	8.3	31.9	31.9	90.8	90.8	6.6	6.6	0.6	0.7	<2	3	-	-	823630	823747	-	-	-	-
						1.0	1.3	23	21.6		8.3		31.9		90.8		6.6		0.6		<2		-				-		-	
					Middle	7.7	1.3	23	21.6	21.6	8.3	8.3	32.0	32.0	90.6	90.6	6.6		0.6		3		-				-		-	
						7.7	1.4	23	21.6		8.3		32.0		90.6		6.6		0.7		3		-				-		-	
					Bottom	14.4	1.4	28	21.5	21.5	8.3	8.3	32.0	32.0	90.7	90.8	6.6	6.6	0.8		3		-				-		-	
						14.4	1.6	28	21.5		8.3		32.0		90.8		6.6		0.8		3		-				-		-	
SR8	Cloudy	Calm	08:30	5.1	Surface	1.0	-	-	21.1	21.1	8.4	8.4	31.6	31.6	97.5	97.5	7.2	7.2	6.4	6.7	12	10	-	-	820403	811601	-	-	-	-
						1.0	-	-	21.1		8.4		31.6		97.5		7.2		6.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.8	20.8	8.4	8.4	31.7	31.7	96.9	96.9	7.2	7.2	7.1		9		-				-		-	
						4.1	-	-	20.8		8.4		31.7		96.9		7.2		6.9		8		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 December 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	15:35	8.6	Surface	1.0	0.4	41	20.1	20.1	8.1	8.1	31.0	31.0	97.3	97.3	7.4	7.3	8.2	11.1	8	8	87	90	815596	804262	<0.2	<0.2	0.7	0.6
						1.0	0.4	41	20.1		8.1		31.0		97.2		7.3		8.4		9		88				<0.2		0.6	
					Middle	4.3	0.4	40	20.1	20.1	8.1	8.1	31.1	31.1	96.7	96.7	7.3		11.5		8		91				<0.2		0.5	
						4.3	0.4	41	20.1		8.1		31.1		96.7		7.3		11.7		8		91				<0.2		0.6	
					Bottom	7.6	0.3	39	20.1	20.1	8.2	8.2	31.1	31.1	96.7	96.7	7.3	7.3	13.6		8		92				<0.2		0.7	
						7.6	0.3	42	20.1		8.2		31.1		96.7		7.3		13.4		8		92				<0.2		0.6	
C2	Cloudy	Moderate	13:52	11.1	Surface	1.0	3.0	87	20.8	20.9	8.3	8.3	30.7	30.7	97.7	97.7	7.3	7.3	1.8	2.3	4	4	84	87	825698	806937	<0.2	<0.2	1.0	1.0
						1.0	3.2	91	20.9		8.3		30.7		97.6		7.3		1.8		4		84				<0.2		1.0	
					Middle	5.6	3.2	85	20.9	20.9	8.3	8.3	31.2	31.2	96.2	96.2	7.2		1.4		4		87				<0.2		1.0	
						5.6	3.4	91	20.9		8.3		31.2		96.2		7.2		1.4		4		88				<0.2		1.0	
					Bottom	10.1	3.6	79	20.9	20.9	8.3	8.3	31.3	31.3	95.9	95.9	7.1	7.1	3.7		3		90				<0.2		1.0	
						10.1	3.6	84	20.9		8.3		31.3		95.9		7.1		3.7		4		90				<0.2		1.0	
C3	Cloudy	Moderate	15:57	12.2	Surface	1.0	2.2	30	21.6	21.6	8.3	8.3	31.9	31.9	91.6	91.6	6.7	6.7	5.0	5.9	6	5	86	89	822096	817796	<0.2	<0.2	0.5	0.5
						1.0	2.3	32	21.6		8.3		31.9		91.6		6.7		4.9		6		86				<0.2		0.5	
					Middle	6.1	2.2	30	21.6	21.6	8.3	8.3	31.9	31.9	91.5	91.5	6.7		5.6		6		89				<0.2		0.6	
						6.1	2.3	32	21.6		8.3		31.9		91.5		6.7		5.7		6		89				<0.2		0.5	
					Bottom	11.2	1.9	28	21.6	21.6	8.3	8.3	31.9	31.9	91.9	91.9	6.7	6.7	7.2		4		92				<0.2		0.5	
						11.2	2.1	29	21.6		8.3		31.9		91.9		6.7		7.4		4		92				<0.2		0.4	
IM1	Cloudy	Calm	15:11	4.6	Surface	1.0	0.1	0	20.1	20.1	8.1	8.1	31.0	31.0	98.1	98.1	7.4	7.4	6.9	8.0	6	11	86	88	817953	807112	<0.2	<0.2	0.6	0.6
						1.0	0.1	0	20.1		8.1		31.0		98.1		7.4		7.1		7		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	354	20.0	20.0	8.1	8.1	31.0	31.0	98.0	98.0	7.4	7.4	8.9		16		89				<0.2		0.6	
						3.6	0.1	326	20.0		8.1		31.0		98.0		7.4		8.9		16		90				<0.2		0.5	
IM2	Cloudy	Moderate	15:01	6.6	Surface	1.0	0.3	26	20.1	20.1	8.1	8.1	30.9	30.9	100.0	100.0	7.6	7.6	5.0	9.8	9	11	85	88	818174	806174	<0.2	<0.2	0.6	0.6
						1.0	0.3	28	20.1		8.1		30.9		100.0		7.6		5.1		9		85				<0.2		0.5	
					Middle	3.3	0.3	9	20.0	20.0	8.1	8.1	30.9	30.9	99.5	99.5	7.5		9.9		12		89				<0.2		0.6	
						3.3	0.3	9	20.0		8.1		30.9		99.5		7.5		9.7		11		90				<0.2		0.6	
					Bottom	5.6	0.2	2	20.0	20.0	8.1	8.1	31.0	31.0	98.9	98.9	7.5	7.5	14.6		14		90				<0.2		0.5	
						5.6	0.2	2	20.0		8.1		31.0		98.8		7.5		14.7		13		91				<0.2		0.6	
IM3	Cloudy	Moderate	14:51	6.8	Surface	1.0	0.3	333	20.0	20.0	8.1	8.1	30.8	30.8	99.3	99.3	7.5	7.5	5.9	8.5	7	9	88	90	818768	805586	<0.2	<0.2	0.6	0.6
						1.0	0.3	355	20.0		8.1		30.8		99.2		7.5		6.2		7		88				<0.2		0.6	
					Middle	3.4	0.3	326	20.0	20.0	8.1	8.1	30.9	30.9	98.5	98.5	7.5		8.9		9		90				<0.2		0.6	
						3.4	0.3	338	20.0		8.1		30.9		98.5		7.5		9.0		8		91				<0.2		0.6	
					Bottom	5.8	0.3	313	20.0	20.0	8.1	8.1	30.9	30.9	98.4	98.4	7.5	7.5	10.6		12		91				<0.2		0.6	
						5.8	0.3	327	20.0		8.1		30.9		98.4		7.5		10.6		13		91				<0.2		0.7	
IM4	Cloudy	Moderate	14:40	7.9	Surface	1.0	0.5	9	20.0	20.0	8.1	8.1	30.7	30.7	100.7	100.7	7.6	7.6	4.3	5.0	8	9	87	89	819745	804607	<0.2	<0.2	0.7	0.7
						1.0	0.6	9	20.0		8.1		30.7		100.7		7.6		4.3		8		87				<0.2		0.6	
					Middle	4.0	0.5	2	20.0	20.0	8.1	8.1	30.7	30.7	100.2	100.2	7.6		4.7		10		89				<0.2		0.7	
						4.0	0.5	2	20.0		8.1		30.7		100.2		7.6		4.7		9		90				<0.2		0.8	
					Bottom	6.9	0.4	357	20.0	20.0	8.1	8.1	30.9	30.9	99.7	99.7	7.6	7.6	5.9		10		91				<0.2		0.6	
						6.9	0.4	328	20.0		8.1		30.9		99.7		7.6		5.9		10		91				<0.2		0.7	
IM5	Cloudy	Moderate	14:25	7.3	Surface	1.0	0.6	354	20.0	20.0	8.1	8.1	30.9	30.9	100.1	100.1	7.6	7.6	7.9	10.3	15	14	86	89	820758	804852	<0.2	<0.2	0.6	0.7
						1.0	0.6	326	20.0		8.1		30.9		100.1		7.6		8.0		16		86				<0.2		0.7	
					Middle	3.7	0.6	357	19.9	19.9	8.1	8.1	30.9	30.9	99.8	99.8	7.6		8.9		14		90				<0.2		0.7	
						3.7	0.6	328	19.9		8.1		30.9		99.8		7.6		8.8		14		90				<0.2		0.6	
					Bottom	6.3	0.4	4	20.0	20.0	8.1	8.1	30.9	30.9	99.4	99.4	7.5	7.5	14.2		11		91				<0.2		0.8	
						6.3	0.5	4	20.0		8.1		30.9		99.3		7.5		14.0		11		91				<0.2		0.8	
IM6	Cloudy	Moderate	14:14	6.8	Surface	1.0	0.2	287	20.2	20.2	8.1	8.1	30.5	30.5	100.1	100.1	7.6	7.6	4.5	4.6	6	8	86	89	821067	805834	<0.2	<0.2	0.9	0.8
						1.0	0.2	295	20.2		8.1		30.5		100.1		7.6		4.5		6		87				<0.2		0.9	
					Middle	3.4	0.2	308	20.1	20.1	8.1	8.1	30.6	30.6	99.5	99.5	7.5		4.5		7		89				<0.2		0.9	
						3.4	0.2	318	20.1		8.1		30.6		99.5		7.5		4.5		7		89				<0.2		0.7	
					Bottom	5.8	0.1	315	20.1	20.1	8.1	8.1	30.6	30.6	99.1	99.1	7.5	7.5	4.7		10		90				<0.2		0.8	
						5.8	0.1	335	20.1		8.1		30.6		99.1		7.5		4.8		9		90				<0.2		0.8	
IM7	Cloudy	Moderate	14:02	7.9	Surface	1.0	0.2	247	20.3	20.3	8.1	8.1	30.5	30.5	99.2	99.2	7.5	7.5	4.2	4.5	10	12	86	89	821329	806834	<0.2	<0.2	0.8	0.8
						1.0	0.2	271	20.3		8.1		30.5		99.2		7.5		4.2		10		87				<0.2		0.7	
					Middle	4.0	0.2	261	20.2	20.2	8.1	8.1	30.6	30.6	98.9	98.9	7.5		4.4		11		89				<0.2		0.8	
						4.0	0.3	268	20.2		8.2		30.6		98.9		7.5		4.4		11		89				<0.2		0.7	
					Bottom	6.9	0.2	278	20.2	20.2	8.2	8.2	30.6	30.6	98.8	98.8	7.5	7.5	5.0		14		91				<0.2		0.7	
						6.9	0.2	280	20.2		8.2		30.6		98.8		7.5		5.0		14		91				<0.2		0.8	
IM8	Cloudy	Moderate	14:17	7.5	Surface	1.0	2.7	173	20.7	20.7	8.4	8.4	31.4	31.4	101.2	101.2	7.6	7.6	1.7	1.7	12	11	85	88	821829	808141	<0.2	<0.2	0.9	1.0
						1.0	2.8	185	20.7		8.4		31.4		101.2		7.6		1.7		12		84				<0.2		0.9	
					Middle	3.8	2.9	168	20.7	20.7	8.4	8.4	31.4	31.4	100.7	100.7	7.5		1.8		10		88				<0.2		1.0	
						3.8	3.2	182	20.7		8.4		31.4		100.7		7.5		1.9		11		88				<0.2		1.0	
					Bottom	6.5	2.5	166	20.7	20.7	8.4	8.4	31.4	31.4	100.5	100.5	7.5	7.5	1.8		9		90				<0.2		0.9	
						6.5	2.7	174	20.7		8.4		31.4		100.5		7.5		1.7		9		91				<0.2		1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 December 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	14:25	7.1	Surface	1.0	2.4	80	20.7	20.7	8.4	8.4	31.4	31.4	101.2	101.2	7.6	7.6	2.7	3.0	11	10	85	88	822096	808833	<0.2	<0.2	0.7	0.8
						1.0	2.6	83	20.7		8.4		31.4		101.2		7.6		2.7		11		84				<0.2		0.8	
					Middle	3.6	2.3	82	20.7	20.7	8.4	8.4	31.4	31.4	100.7	100.7	7.5		3.0		10		88				<0.2		0.8	
						3.6	2.4	88	20.7		8.4		31.4		100.7		7.5		3.1		10		88				<0.2		0.7	
					Bottom	6.1	2.3	80	20.7	20.7	8.4	8.4	31.4	31.4	100.6	100.7	7.5	7.5	3.3		9		90				<0.2		0.8	
						6.1	2.4	85	20.7		8.4		31.4		100.7		7.5		3.4		9		90				<0.2		0.7	
IM10	Cloudy	Moderate	14:34	8.2	Surface	1.0	2.1	74	20.7	20.7	8.4	8.4	31.4	31.4	101.7	101.7	7.6	7.6	1.9	2.8	8	10	84	87	822399	809773	<0.2	<0.2	0.7	0.7
						1.0	2.2	79	20.7		8.4		31.4		101.7		7.6		2.0		8		84				<0.2		0.7	
					Middle	4.1	2.3	78	20.7	20.7	8.4	8.4	31.4	31.4	101.0	101.0	7.5		2.8		10		88				<0.2		0.7	
						4.1	2.3	79	20.7		8.4		31.4		100.9		7.5		2.9		10		88				<0.2		0.7	
					Bottom	7.2	2.5	79	20.7	20.7	8.4	8.4	31.4	31.4	100.9	100.9	7.5	7.5	3.8		11		90				<0.2		0.7	
						7.2	2.6	83	20.7		8.4		31.4		100.9		7.5		3.7		11		90				<0.2		0.7	
IM11	Cloudy	Moderate	14:49	8.0	Surface	1.0	1.9	59	20.9	20.9	8.4	8.4	31.6	31.6	101.9	101.8	7.6	7.5	1.3	2.5	11	9	84	87	822056	811451	<0.2	<0.2	0.7	0.7
						1.0	2.0	61	20.9		8.4		31.6		101.7		7.6		1.3		10		84				<0.2		0.6	
					Middle	4.0	2.0	62	20.7	20.7	8.4	8.4	31.6	31.6	100.0	100.0	7.5		2.4		10		88				<0.2		0.7	
						4.0	2.1	66	20.7		8.4		31.6		99.9		7.4		2.4		9		88				<0.2		0.7	
					Bottom	7.0	2.2	61	20.7	20.7	8.4	8.4	31.6	31.6	99.6	99.6	7.4	7.4	3.7		7		90				<0.2		0.6	
						7.0	2.4	66	20.7		8.4		31.6		99.6		7.4		3.7		7		90				<0.2		0.6	
IM12	Cloudy	Moderate	14:58	8.7	Surface	1.0	2.2	71	20.9	20.9	8.4	8.4	31.7	31.7	99.2	99.2	7.4	7.4	2.2	3.6	8	8	85	88	821457	812034	<0.2	<0.2	0.7	0.6
						1.0	2.4	75	20.9		8.4		31.7		99.2		7.4		2.3		8		85				<0.2		0.6	
					Middle	4.4	2.5	71	20.9	20.9	8.4	8.4	31.6	31.6	98.8	98.8	7.3		3.6		8		88				<0.2		0.6	
						4.4	2.7	77	20.9		8.4		31.6		98.8		7.3		3.7		8		88				<0.2		0.7	
					Bottom	7.7	2.3	72	20.9	20.9	8.4	8.4	31.6	31.6	98.8	98.8	7.3	7.3	4.8		7		91				<0.2		0.5	
						7.7	2.5	74	20.9		8.4		31.6		98.8		7.3		4.7		7		91				<0.2		0.6	
SR1A	Cloudy	Moderate	15:18	4.9	Surface	1.0	-	-	21.3	21.3	8.3	8.3	31.8	31.8	97.9	97.9	7.2	7.2	2.3	2.4	8	9	-	-	819973	812665	-	-	-	-
						1.0	-	-	21.3		8.3		31.8		97.9		7.2		2.3		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	21.3	21.3	8.4	8.4	31.8	31.8	97.9	97.9	7.2	7.2	2.4		9		-				-		-	
						3.9	-	-	21.3		8.4		31.8		97.9		7.2		2.4		9		-				-		-	
SR2	Cloudy	Moderate	15:31	4.1	Surface	1.0	0.1	65	21.2	21.2	8.4	8.4	31.8	31.8	98.7	98.7	7.3	7.3	2.6	2.9	8	9	85	87	821442	814168	<0.2	<0.2	0.6	0.6
						1.0	0.1	69	21.2		8.4		31.8		98.6		7.3		2.6		8		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	60	21.2	21.2	8.4	8.4	31.8	31.8	98.3	98.3	7.3	7.3	3.3		10		89				<0.2		0.5	
						3.1	0.1	61	21.2		8.4		31.8		98.3		7.3		3.3		10		90				<0.2		0.6	
SR3	Cloudy	Moderate	14:10	8.6	Surface	1.0	2.7	175	21.0	21.0	8.3	8.3	30.8	30.8	102.1	102.1	7.6	7.6	1.1	1.5	9	9	-	-	822162	807582	-	-	-	-
						1.0	2.9	182	21.0		8.3		30.8		102.0		7.6		1.1		9		-				-		-	
					Middle	4.3	2.8	176	20.9	20.9	8.3	8.3	31.4	31.4	100.3	100.3	7.5		1.5		9		-				-		-	
						4.3	2.8	184	20.9		8.3		31.4		100.2		7.5		1.5		9		-				-		-	
					Bottom	7.6	2.8	180	20.8	20.8	8.3	8.3	31.4	31.4	99.9	99.9	7.4	7.4	1.9		10		-				-		-	
						7.6	2.8	196	20.8		8.3		31.4		99.9		7.4		1.9		10		-				-		-	
SR4A	Cloudy	Calm	15:57	9.8	Surface	1.0	0.1	67	20.2	20.2	8.1	8.1	30.9	30.9	97.5	97.5	7.4	7.4	5.7	5.6	10	9	-	-	817204	807832	-	-	-	-
						1.0	0.1	72	20.2		8.1		30.9		97.5		7.4		5.7		10		-				-		-	
					Middle	4.9	0.1	90	20.2	20.2	8.2	8.2	30.9	30.9	97.3	97.3	7.4		5.6		10		-				-		-	
						4.9	0.1	98	20.2		8.2		30.9		97.2		7.4		5.7		9		-				-		-	
					Bottom	8.8	0.1	91	20.2	20.2	8.2	8.2	30.9	30.9	97.2	97.2	7.3	7.3	5.6		7		-				-		-	
						8.8	0.1	93	20.2		8.2		30.9		97.2		7.3		5.6		7		-				-		-	
SR5A	Cloudy	Calm	16:17	5.4	Surface	1.0	0.1	338	20.3	20.3	8.2	8.2	30.9	30.9	99.1	99.1	7.5	7.5	7.4	7.4	10	10	-	-	816572	810706	-	-	-	-
						1.0	0.1	348	20.3		8.2		30.9		99.1		7.5		7.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.0	347	20.3	20.3	8.2	8.2	30.9	30.9	99.0	99.0	7.5	7.5	7.5		10		-				-		-	
						4.4	0.0	319	20.3		8.3		30.9		99.0		7.5		7.5		10		-				-		-	
SR6A	Cloudy	Calm	16:48	5.0	Surface	1.0	0.1	225	21.0	21.0	8.2	8.2	31.1	31.1	96.7	96.7	7.2	7.2	8.8	9.1	12	15	-	-	817964	814747	-	-	-	-
						1.0	0.1	230	21.0		8.2		31.1		96.7		7.2		8.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	223	21.0	21.0	8.2	8.2	31.1	31.1	96.7	96.7	7.2	7.2	9.5		17		-				-		-	
						4.0	0.0	234	21.0		8.2		31.1		96.7		7.2		9.4		18		-				-		-	
SR7	Cloudy	Moderate	16:35	15.9	Surface	1.0	2.3	105	21.6	21.6	8.3	8.3	31.9	31.9	91.3	91.3	6.7	6.7	1.7	1.8	13	11	-	-	823637	823751	-	-	-	-
						1.0	2.5	114	21.6		8.3		31.9		91.3		6.7		1.7		12		-				-		-	
					Middle	8.0	2.3	103	21.6	21.6	8.3	8.3	31.9	31.9	91.0	91.0	6.7		1.8		11		-				-		-	
						8.0	2.4	111	21.6		8.3		31.9		91.0		6.7		1.9		10		-				-		-	
					Bottom	14.9	2.4	100	21.6	21.6	8.3	8.3	31.9	31.9	91.1	91.1	6.7	6.7	1.9		10		-				-		-	
						14.9	2.5	101	21.6		8.3		31.9		91.1		6.7		2.0		10		-				-		-	
SR8	Cloudy	Moderate	15:08	4.8	Surface	1.0	-	-	21.0	21.0	8.4	8.4	31.7	31.7	100.1	100.1	7.4	7.4	3.3	4.2	11	12	-	-	820399	811638	-	-	-	-
						1.0	-	-	21.0		8.4		31.7		100.1		7.4		3.4		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	21.0	21.0	8.4	8.4	31.6	31.6	99.7	99.7	7.4	7.4	5.1		12		-				-		-	
						3.8	-	-	21.0		8.4		31.6		99.7		7.4		5.0		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 December 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	10:46	8.6	Surface	1.0	0.2	87	20.4	20.4	8.1	8.1	30.9	30.9	95.7	95.7	7.2	7.2	7.2	8.2	4	4	86	87	815621	804228	<0.2	<0.2	0.8	0.8
						1.0	0.2	91	20.4		8.1		30.9		95.6		7.2		7.4		4		85				<0.2		0.8	
					Middle	4.3	0.2	76	20.4	20.4	8.1	8.1	31.0	31.0	95.6	95.6	7.2		8.3		4		88				<0.2		0.7	
						4.3	0.2	80	20.4		8.1		31.0		95.6		7.2		8.3		4		87				<0.2		0.7	
					Bottom	7.6	0.1	88	20.2	20.2	8.1	8.1	31.1	31.2	96.4	98.0	7.3	7.4	8.9		5		88				<0.2		0.8	
						7.6	0.2	96	20.2		8.1		31.2		99.6		7.5		8.9		5		89				<0.2		0.7	
C2	Cloudy	Moderate	12:29	10.8	Surface	1.0	0.2	135	21.1	21.1	8.3	8.3	30.6	30.6	97.3	97.4	7.2	7.2	5.2	8.9	4	3	85	89	825666	806928	<0.2	<0.2	0.9	1.0
						1.0	0.2	135	21.1		8.3		30.6		97.4		7.2		5.1		3		85				<0.2		1.0	
					Middle	5.4	0.5	154	21.0	21.0	8.3	8.3	31.3	31.3	95.0	95.0	7.1		9.8		3		90				<0.2		1.0	
						5.4	0.5	167	21.0		8.3		31.3		95.0		7.1		9.8		2		89				<0.2		0.9	
					Bottom	9.8	0.5	144	21.1	21.1	8.3	8.3	31.4	31.4	94.9	94.9	7.0	7.0	11.6		2		94				<0.2		0.9	
						9.8	0.5	153	21.1		8.3		31.4		94.9		7.0		11.7		2		93				<0.2		1.0	
C3	Cloudy	Moderate	09:50	12.3	Surface	1.0	1.5	77	21.7	21.7	8.3	8.3	31.9	31.9	88.5	88.5	6.5	6.5	3.3	3.9	<2	2	85	90	822132	817784	<0.2	<0.2	0.5	0.6
						1.0	1.5	77	21.7		8.3		31.9		88.5		6.5		3.3		<2		86				<0.2		0.6	
					Middle	6.2	1.6	71	21.6	21.6	8.3	8.3	31.9	31.9	88.1	88.1	6.4		3.9		<2		90				<0.2		0.5	
						6.2	1.7	78	21.6		8.3		31.9		88.1		6.4		3.8		<2		90				<0.2		0.6	
					Bottom	11.3	1.8	63	21.6	21.6	8.3	8.3	31.9	31.9	88.2	88.2	6.5	6.5	4.7		3		94				<0.2		0.6	
						11.3	1.8	67	21.6		8.3		31.9		88.2		6.5		4.6		2		94				<0.2		0.6	
IM1	Cloudy	Moderate	11:17	4.8	Surface	1.0	1.2	198	20.4	20.4	8.1	8.1	31.0	31.0	96.6	96.6	7.3	7.3	6.6	8.5	4	4	85	86	817972	807127	<0.2	<0.2	0.6	0.6
						1.0	1.2	209	20.4		8.1		31.0		96.5		7.3		6.7		5		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	179	20.3	20.3	8.1	8.1	31.0	31.0	97.5	97.6	7.3	7.4	10.4		4		88				<0.2		0.6	
						3.8	0.1	180	20.3		8.1		31.0		97.7		7.4		10.3		4		86				<0.2		0.4	
IM2	Cloudy	Moderate	11:26	6.6	Surface	1.0	0.3	133	20.4	20.4	8.1	8.1	30.9	30.9	96.1	96.1	7.2	7.2	5.5	7.0	9	7	85	88	818165	806167	<0.2	<0.2	0.5	0.6
						1.0	0.3	136	20.4		8.1		30.9		96.0		7.2		5.6		9		86				<0.2		0.5	
					Middle	3.3	0.3	132	20.3	20.3	8.1	8.1	31.0	31.0	95.5	95.5	7.2		7.0		6		88				<0.2		0.5	
						3.3	0.3	132	20.3		8.1		31.0		95.5		7.2		7.2		5		89				<0.2		0.6	
					Bottom	5.6	0.1	141	20.3	20.3	8.1	8.1	31.0	31.0	96.4	96.5	7.3	7.3	8.4		5		90				<0.2		0.6	
						5.6	0.1	153	20.3		8.1		31.0		96.5		7.3		8.4		5		90				<0.2		0.6	
IM3	Cloudy	Moderate	11:35	6.7	Surface	1.0	0.5	181	20.3	20.3	8.1	8.1	30.7	30.7	95.9	95.9	7.2	7.2	5.7	6.2	6	5	86	88	818794	805606	<0.2	<0.2	0.6	0.6
						1.0	0.5	193	20.3		8.1		30.7		95.9		7.2		5.7		5		85				<0.2		0.6	
					Middle	3.4	0.5	182	20.3	20.3	8.1	8.1	30.8	30.8	95.6	95.6	7.2		6.2		5		89				<0.2		0.6	
						3.4	0.6	189	20.3		8.1		30.8		95.6		7.2		6.3		5		87				<0.2		0.6	
					Bottom	5.7	0.4	184	20.3	20.3	8.1	8.1	30.9	30.9	96.7	96.8	7.3	7.3	6.9		5		90				<0.2		0.7	
						5.7	0.5	195	20.3		8.1		30.9		96.9		7.3		6.4		4		89				<0.2		0.7	
IM4	Cloudy	Moderate	11:50	7.7	Surface	1.0	0.7	209	20.3	20.3	8.1	8.1	30.4	30.4	97.8	97.8	7.4	7.4	7.6	8.1	4	7	86	88	819733	804612	<0.2	<0.2	0.6	0.7
						1.0	0.7	229	20.3		8.1		30.4		97.8		7.4		7.6		4		85				<0.2		0.7	
					Middle	3.9	0.6	207	20.3	20.3	8.1	8.1	30.4	30.4	97.8	97.9	7.4		8.2		8		89				<0.2		0.7	
						3.9	0.6	217	20.3		8.1		30.4		97.9		7.4		8.2		8		90				<0.2		0.7	
					Bottom	6.7	0.5	213	20.3	20.3	8.1	8.1	30.5	30.5	98.8	98.9	7.5	7.5	8.3		9		90				<0.2		0.6	
						6.7	0.5	225	20.3		8.1		30.5		98.9		7.5		8.4		8		89				<0.2		0.6	
IM5	Cloudy	Moderate	12:03	7.0	Surface	1.0	0.5	212	20.3	20.3	8.1	8.1	30.6	30.6	96.1	96.1	7.3	7.3	7.0	7.7	7	6	85	87	820745	804877	<0.2	<0.2	0.6	0.7
						1.0	0.5	223	20.3		8.1		30.6		96.1		7.3		7.1		6		84				<0.2		0.7	
					Middle	3.5	0.5	210	20.3	20.3	8.1	8.1	30.6	30.6	96.0	96.0	7.3		7.8		7		89				<0.2		0.6	
						3.5	0.5	229	20.3		8.1		30.6		96.0		7.3		7.9		6		87				<0.2		0.8	
					Bottom	6.0	0.3	227	20.3	20.3	8.1	8.1	30.7	30.7	96.5	97.3	7.3	7.4	8.2		4		90				<0.2		0.7	
						6.0	0.3	227	20.3		8.1		30.7		98.1		7.4		8.1		5		89				<0.2		0.7	
IM6	Cloudy	Moderate	12:16	6.8	Surface	1.0	0.3	238	20.5	20.5	8.1	8.1	30.2	30.2	99.4	99.4	7.5	7.5	5.3	6.0	7	5	85	87	821068	805804	<0.2	<0.2	0.8	0.7
						1.0	0.3	248	20.5		8.1		30.2		99.4		7.5		5.3		6		85				<0.2		0.7	
					Middle	3.4	0.2	232	20.4	20.4	8.1	8.1	30.4	30.4	98.9	98.9	7.5		5.9		5		88				<0.2		0.7	
						3.4	0.2	244	20.4		8.1		30.4		98.9		7.5		6.0		4		88				<0.2		0.7	
					Bottom	5.8	0.1	227	20.3	20.3	8.1	8.1	30.6	30.6	100.2	100.2	7.6	7.6	6.7		5		89				<0.2		0.7	
						5.8	0.1	242	20.3		8.1		30.6		100.2		7.6		6.7		4		89				<0.2		0.8	
IM7	Cloudy	Moderate	12:26	8.0	Surface	1.0	0.4	219	20.4	20.4	8.1	8.1	30.3	30.3	96.2	96.2	7.3	7.3	5.9	8.9	3	4	86	88	821341	806824	<0.2	<0.2	0.8	0.9
						1.0	0.4	228	20.4		8.1		30.3		96.2		7.3		6.1		4		86				<0.2		1.0	
					Middle	4.0	0.4	229	20.3	20.3	8.1	8.1	30.7	30.7	96.3	96.3	7.3		6.8		4		88				<0.2		0.8	
						4.0	0.4	240	20.3		8.1		30.7		96.3		7.3		6.8		3		88				<0.2		0.8	
					Bottom	7.0	0.3	244	20.3	20.3	8.1	8.1	30.8	30.8	97.5	97.6	7.4	7.4	14.2		3		90				<0.2		0.8	
						7.0	0.3	265	20.3		8.1		30.8		97.6		7.4		14.0		4		90				<0.2		0.9	
IM8	Cloudy	Moderate	11:55	7.7	Surface	1.0	0.2	29	21.1	21.1	8.3	8.3	30.7	30.7	95.9	96.0	7.1	7.2	5.1	6.7	2	3	86	90	821822	808148	<0.2	<0.2	1.1	1.1
						1.0	0.2	30	21.1		8.3		30.7		96.0		7.1		5.2		2		86				<0.2		1.0	
					Middle	3.9	0.1	135	20.9	20.9	8.4	8.4	31.2	31.2	96.4	96.4	7.2		7.1		3		90				<0.2		1.1	
						3.9	0.1	137	20.9		8.4		31.2		96.4		7.2		7.1		3		90				<0.2		1.0	
					Bottom	6.7	0.1	161	20.9	20.9	8.4	8.4	31.6	31.6	96.1	96.1	7.1	7.1	8.0		3		94				<0.2		1.1	
						6.7	0.1	168	20.9		8.4		31.6		96.1		7.1		7.9		3		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 12 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:48	7.1	Surface	1.0	0.2	82	21.1	21.1	8.3	8.3	30.3	30.3	96.8	96.8	7.2	7.2	4.2	6.9	3	3	86	90	822095	808790	<0.2	<0.2	1.1	1.0
						1.0	0.2	88	21.1		8.3		30.3		96.8		7.2		4.2		2		86				<0.2		1.0	
					Middle	3.6	0.4	117	21.0	21.0	8.3	8.3	31.1	31.1	95.8	95.9	7.1		6.0		3		90				<0.2		1.1	
						3.6	0.4	124	21.0		8.3		31.1		95.9		7.1		5.9		2		91				<0.2		1.0	
					Bottom	6.1	0.3	99	20.9	20.9	8.4	8.3	31.4	31.4	96.1	96.1	7.2	7.2	10.4		4		94				<0.2		0.9	
						6.1	0.3	108	20.9		8.3		31.4		96.1		7.2		10.8		3		94				<0.2		0.8	
IM10	Cloudy	Moderate	11:38	8.3	Surface	1.0	0.7	100	21.3	21.3	8.3	8.3	30.9	30.9	97.3	97.3	7.2	7.2	5.5	8.6	4	4	85	90	822383	809785	<0.2	<0.2	0.9	0.9
						1.0	0.7	102	21.3		8.3		30.9		97.3		7.2		5.4		5		86				<0.2		0.9	
					Middle	4.2	0.7	108	21.0	21.0	8.3	8.3	31.3	31.3	95.6	95.6	7.1		8.9		4		91				<0.2		0.9	
						4.2	0.7	111	21.0		8.3		31.3		95.6		7.1		8.8		4		90				<0.2		1.0	
					Bottom	7.3	0.4	99	20.9	20.9	8.3	8.3	31.3	31.3	95.4	95.5	7.1	7.1	11.3		4		93				<0.2		1.0	
						7.3	0.4	107	20.9		8.3		31.3		95.5		7.1		11.4		3		94				<0.2		0.9	
IM11	Cloudy	Moderate	11:03	8.6	Surface	1.0	2.2	87	21.1	21.1	8.3	8.3	30.4	30.4	96.5	96.5	7.2	7.2	4.0	5.2	2	3	85	90	822059	811473	<0.2	<0.2	0.8	0.8
						1.0	2.4	93	21.1		8.3		30.4		96.5		7.2		4.0		3		86				<0.2		0.8	
					Middle	4.3	2.3	91	21.1	21.1	8.3	8.3	31.0	31.0	95.5	95.5	7.1		4.3		3		90				<0.2		0.9	
						4.3	2.3	93	21.1		8.3		31.0		95.5		7.1		4.3		3		91				<0.2		0.8	
					Bottom	7.6	2.7	92	21.1	21.1	8.3	8.3	31.3	31.3	95.1	95.1	7.1	7.1	7.4		3		94				<0.2		0.9	
						7.6	2.8	100	21.1		8.3		31.3		95.1		7.1		7.5		3		94				<0.2		0.8	
IM12	Cloudy	Moderate	10:52	9.7	Surface	1.0	2.2	27	21.2	21.2	8.3	8.3	30.3	30.3	97.0	97.0	7.2	7.2	4.8	5.8	3	3	86	91	821443	812036	<0.2	<0.2	0.8	0.8
						1.0	2.4	28	21.2		8.3		30.3		97.0		7.2		4.8		3		90				<0.2		0.7	
					Middle	4.9	2.0	28	21.1	21.1	8.3	8.3	31.3	31.3	96.1	96.1	7.1		5.2		3		90				<0.2		0.7	
						4.9	2.1	28	21.1		8.3		31.3		96.1		7.1		5.2		3		90				<0.2		0.8	
					Bottom	8.7	2.2	29	21.1	21.1	8.3	8.3	31.5	31.5	95.4	95.4	7.1	7.1	7.3		4		94				<0.2		0.8	
						8.7	2.3	31	21.1		8.3		31.5		95.4		7.1		7.2		4		94				<0.2		0.7	
SR1A	Cloudy	Moderate	10:30	5.5	Surface	1.0	-	-	21.2	21.3	8.3	8.3	31.6	31.6	94.7	94.7	7.0	7.0	5.3	5.7	4	4	-	-	819981	812665	-	-	-	-
						1.0	-	-	21.3		8.3		31.6		94.7		7.0		5.3		3		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	21.2	21.2	8.3	8.3	31.7	31.7	92.8	92.8	6.9	6.9	6.1		5		-				-		-	
						4.5	-	-	21.2		8.3		31.7		92.7		6.8		6.1		4		-				-		-	
SR2	Cloudy	Moderate	10:15	4.8	Surface	1.0	0.5	86	21.2	21.2	8.3	8.3	31.7	31.7	94.7	94.7	7.0	7.0	5.0	5.7	4	4	86	88	821476	814187	<0.2	<0.2	0.6	0.7
						1.0	0.5	87	21.2		8.3		31.7		94.7		7.0		5.0		4		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	78	21.2	21.2	8.3	8.3	31.7	31.7	94.3	94.3	7.0	7.0	6.4		3		90				<0.2		0.7	
						3.8	0.3	82	21.2		8.3		31.7		94.3		7.0		6.4		3		90				<0.2		0.8	
SR3	Cloudy	Moderate	12:01	8.4	Surface	1.0	0.0	246	21.2	21.2	8.3	8.3	30.4	30.4	97.1	97.1	7.2	7.2	4.1	5.9	2	2	-	-	822135	807558	-	-	-	-
						1.0	0.0	254	21.2		8.3		30.4		97.1		7.2		4.1		3		-				-		-	
					Middle	4.2	0.1	194	21.0	21.0	8.3	8.3	31.3	31.3	95.2	95.2	7.1		5.4		3		-				-		-	
						4.2	0.1	209	21.0		8.3		31.3		95.2		7.1		5.4		2		-				-		-	
					Bottom	7.4	0.1	258	20.9	20.9	8.3	8.3	31.4	31.4	94.8	94.8	7.0	7.0	8.3		2		-				-		-	
						7.4	0.1	274	20.9		8.3		31.4		94.8		7.0		8.2		2		-				-		-	
SR4A	Cloudy	Moderate	10:24	8.8	Surface	1.0	0.2	87	20.4	20.4	8.1	8.1	31.0	31.0	96.7	96.7	7.3	7.3	5.4	5.7	4	5	-	-	817206	807833	-	-	-	-
						1.0	0.2	92	20.4		8.1		31.0		96.7		7.3		5.4		5		-				-		-	
					Middle	4.4	0.2	250	20.3	20.3	8.1	8.1	31.0	31.0	95.9	95.9	7.2		5.8		5		-				-		-	
						4.4	0.2	261	20.3		8.1		31.0		95.9		7.2		5.9		6		-				-		-	
					Bottom	7.8	0.0	233	20.4	20.4	8.1	8.1	31.0	31.0	96.5	96.6	7.3	7.3	5.9		6		-				-		-	
						7.8	0.0	244	20.4		8.1		31.0		96.7		7.3		5.9		5		-				-		-	
SR5A	Cloudy	Moderate	10:02	4.5	Surface	1.0	0.1	82	20.5	20.5	8.1	8.1	31.1	31.1	92.6	92.6	7.0	7.0	7.9	8.5	10	9	-	-	816588	810672	-	-	-	-
						1.0	0.1	88	20.5		8.1		31.1		92.6		7.0		8.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	34	20.5	20.5	8.2	8.2	31.1	31.1	92.8	92.8	7.0	7.0	9.0		7		-				-		-	
						3.5	0.1	35	20.5		8.2		31.1		92.8		7.0		9.0		7		-				-		-	
SR6A	Cloudy	Moderate	09:28	4.8	Surface	1.0	0.0	310	20.9	20.9	8.0	8.0	31.0	31.0	89.2	89.2	6.7	6.7	12.6	13.8	22	22	-	-	817941	814749	-	-	-	-
						1.0	0.0	334	20.9		8.0		31.0		89.2		6.7		12.8		23		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	350	20.9	20.9	8.0	8.0	31.0	31.0	89.1	89.1	6.6	6.6	14.9		21		-				-		-	
						3.8	0.0	322	20.9		8.0		31.0		89.1		6.6		14.8		21		-				-		-	
SR7	Cloudy	Moderate	09:17	14.6	Surface	1.0	2.8	283	21.6	21.6	8.3	8.3	31.9	31.9	86.9	86.9	6.4	6.4	4.0	4.5	3	3	-	-	823651	823762	-	-	-	-
						1.0	2.8	284	21.6		8.3		31.9		86.9		6.4		3.9		4		-				-		-	
					Middle	7.3	2.8	286	21.6	21.6	8.3	8.3	31.9	31.9	86.8	86.8	6.4		4.5		3		-				-		-	
						7.3	2.9	311	21.6		8.3		31.9		86.8		6.4		4.6		2		-				-		-	
					Bottom	13.6	2.7	285	21.6	21.6	8.3	8.3	31.9	31.9	87.0	87.0	6.4	6.4	4.8		3		-				-		-	
						13.6	2.8	305	21.6		8.3		31.9		87.0		6.4		4.9		2		-				-		-	
SR8	Cloudy	Moderate	10:41	4.2	Surface	1.0	-	-	21.4	21.4	8.4	8.4	31.6	31.6	97.9	97.9	7.2	7.2	4.5	5.1	7	6	-	-	820389	811607	-	-	-	-
						1.0	-	-	21.4		8.4		31.6		97.9		7.2		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	21.2	21.2	8.3	8.3	31.6	31.6	96.5	96.5	7.1	7.1	5.6		6		-				-		-	
						3.2	-	-	21.2		8.3		31.6		96.5		7.1		5.6		6		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 December 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	8.4	Surface	1.0	0.5	53	20.4	20.4	8.1	8.1	30.6	30.6	96.6	96.6	7.3	7.3	10.5	11.0	9	8	87	88	815619	804230	<0.2	<0.2	0.6	0.6
						1.0	0.5	55	20.4		8.1		30.6		96.6		7.3		10.6		9		87				<0.2		0.6	
					Middle	4.2	0.5	47	20.4	20.4	8.0	8.0	30.7	30.7	96.6	96.6	7.3		10.3		8		88				<0.2		0.6	
						4.2	0.6	47	20.4		8.0		30.7		96.6		7.3		10.3		9		87				<0.2		0.5	
					Bottom	7.4	0.6	42	20.5	20.5	8.0	8.0	30.8	30.8	97.4	97.5	7.3	7.3	12.4		7		90				<0.2		0.5	
						7.4	0.6	43	20.5		8.0		30.8		97.5		7.3		11.9		6		89				<0.2		0.5	
C2	Cloudy	Moderate	15:06	10.5	Surface	1.0	0.3	350	21.4	21.4	8.3	8.3	29.2	29.2	100.2	100.2	7.5	7.3	4.2	6.0	3	4	88	92	825671	806966	<0.2	<0.2	1.1	1.1
						1.0	0.3	354	21.4		8.3		29.2		100.1		7.5		4.2		3		89				<0.2		1.0	
					Middle	5.3	0.4	28	21.2	21.2	8.3	8.3	30.4	30.4	95.4	95.5	7.1		6.1		4		91				<0.2		1.1	
						5.3	0.4	28	21.2		8.3		30.4		95.5		7.1		6.1		4		92				<0.2		1.0	
					Bottom	9.5	0.4	346	21.2	21.2	8.3	8.3	30.8	30.8	94.6	94.6	7.0	7.0	7.8		6		96				<0.2		1.1	
						9.5	0.5	318	21.2		8.3		30.8		94.6		7.0		7.8		5		96				<0.2		1.1	
C3	Cloudy	Moderate	17:15	10.8	Surface	1.0	0.3	241	21.6	21.6	8.3	8.3	31.9	31.9	88.2	88.2	6.5	6.5	6.0	11.5	7	6	88	92	822119	817822	<0.2	<0.2	0.7	0.6
						1.0	0.3	244	21.6		8.3		31.9		88.1		6.5		6.0		6		88				<0.2		0.6	
					Middle	5.4	0.4	252	21.6	21.6	8.3	8.3	31.9	31.9	87.9	87.9	6.4		13.4		6		92				<0.2		0.6	
						5.4	0.4	262	21.6		8.3		31.9		87.9		6.4		13.4		6		91				<0.2		0.5	
					Bottom	9.8	0.4	266	21.6	21.6	8.3	8.3	31.9	31.9	87.9	87.9	6.4	6.4	15.2		5		96				<0.2		0.6	
						9.8	0.4	284	21.6		8.3		31.9		87.9		6.4		15.1		6		95				<0.2		0.6	
IM1	Cloudy	Moderate	15:57	4.9	Surface	1.0	0.1	30	20.5	20.5	8.1	8.1	30.9	30.9	96.8	96.8	7.3	7.3	10.0	11.6	7	7	85	87	817952	807109	<0.2	<0.2	0.6	0.6
						1.0	0.1	32	20.5		8.1		30.9		96.8		7.3		10.1		7		85				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	40	20.5	20.5	8.1	8.1	30.9	30.9	97.4	97.5	7.3	7.3	13.2		7		89				<0.2		0.5	
						3.9	0.1	40	20.5		8.1		30.9		97.5		7.3		13.2		8		89				<0.2		0.6	
IM2	Cloudy	Moderate	15:48	6.8	Surface	1.0	0.4	7	20.4	20.4	8.1	8.1	30.5	30.5	97.1	97.1	7.3	7.3	7.3	10.5	6	9	85	88	818149	806182	<0.2	<0.2	0.7	0.7
						1.0	0.4	7	20.4		8.1		30.5		97.1		7.3		7.7		7		85				<0.2		0.7	
					Middle	3.4	0.3	344	20.4	20.4	8.1	8.1	30.6	30.6	95.7	95.7	7.2		10.4		9		89				<0.2		0.6	
						3.4	0.3	352	20.4		8.1		30.6		95.7		7.2		10.5		9		90				<0.2		0.6	
					Bottom	5.8	0.3	308	20.4	20.4	8.1	8.1	30.7	30.7	94.4	94.4	7.1	7.1	13.9		10		90				<0.2		0.7	
						5.8	0.4	321	20.4		8.1		30.7		94.3		7.1		13.0		11		90				<0.2		0.6	
IM3	Cloudy	Moderate	15:39	7.0	Surface	1.0	0.6	3	20.4	20.4	8.1	8.1	30.4	30.4	96.0	95.9	7.2	7.1	7.2	8.8	8	9	86	87	818806	805575	<0.2	<0.2	0.6	0.6
						1.0	0.6	3	20.4		8.1		30.4		95.8		7.2		7.3		7		85				<0.2		0.6	
					Middle	3.5	0.4	318	20.4	20.4	8.1	8.1	30.5	30.5	93.6	93.5	7.1		8.4		9		87				<0.2		0.7	
						3.5	0.4	329	20.4		8.1		30.5		93.3		7.0		8.5		9		87				<0.2		0.7	
					Bottom	6.0	0.4	280	20.4	20.4	8.1	8.1	30.5	30.5	91.5	91.6	6.9	6.9	11.3		9		89				<0.2		0.6	
						6.0	0.4	289	20.4		8.1		30.5		91.6		6.9		10.3		9		89				<0.2		0.6	
IM4	Cloudy	Moderate	15:28	6.7	Surface	1.0	0.4	2	20.4	20.4	8.1	8.1	30.7	30.7	96.1	96.1	7.2	7.3	7.6	9.7	10	9	86	89	819738	804616	<0.2	<0.2	0.6	0.6
						1.0	0.4	2	20.4		8.1		30.7		96.1		7.2		7.7		9		87				<0.2		0.6	
					Middle	3.4	0.3	358	20.3	20.3	8.1	8.1	30.8	30.8	96.7	96.8	7.3		10.0		8		89				<0.2		0.7	
						3.4	0.4	358	20.3		8.1		30.8		96.8		7.3		10.1		9		89				<0.2		0.6	
					Bottom	5.7	0.3	339	20.3	20.3	8.1	8.1	30.8	30.8	97.4	97.5	7.3	7.4	11.3		8		90				<0.2		0.6	
						5.7	0.3	312	20.3		8.1		30.8		97.5		7.4		11.5		8		90				<0.2		0.6	
IM5	Cloudy	Moderate	15:17	6.8	Surface	1.0	0.4	304	20.5	20.5	8.0	8.0	30.2	30.2	96.7	96.7	7.3	7.3	6.0	7.5	9	10	86	89	820756	804876	<0.2	<0.2	0.7	0.8
						1.0	0.5	327	20.5		8.0		30.2		96.7		7.3		6.3		10		86				<0.2		0.7	
					Middle	3.4	0.4	307	20.5	20.5	8.0	8.0	30.2	30.2	97.2	97.2	7.3		8.1		9		89				<0.2		0.9	
						3.4	0.4	316	20.5		8.0		30.2		97.2		7.3		8.2		10		90				<0.2		0.8	
					Bottom	5.8	0.3	308	20.5	20.5	8.0	8.0	30.2	30.2	97.6	97.7	7.4	7.4	8.0		10		90				<0.2		0.8	
						5.8	0.3	335	20.5		8.0		30.2		97.7		7.4		8.2		11		91				<0.2		0.9	
IM6	Cloudy	Moderate	15:07	6.6	Surface	1.0	0.4	314	20.5	20.5	8.1	8.1	30.4	30.4	97.0	97.0	7.3	7.4	7.5	8.8	10	7	85	88	821060	805831	<0.2	<0.2	0.9	0.9
						1.0	0.4	318	20.5		8.1		30.4		97.0		7.3		7.6		9		87				<0.2		0.9	
					Middle	3.3	0.4	308	20.5	20.5	8.0	8.0	30.4	30.4	97.6	97.6	7.4		9.0		2		89				<0.2		0.8	
						3.3	0.4	320	20.5		8.0		30.4		97.6		7.4		9.1		3		89				<0.2		0.8	
					Bottom	5.6	0.2	298	20.5	20.5	8.0	8.0	30.4	30.4	97.9	98.0	7.4	7.4	9.9		9		90				<0.2		0.9	
						5.6	0.2	306	20.5		8.0		30.4		98.0		7.4		9.9		10		90				<0.2		0.9	
IM7	Cloudy	Moderate	15:01	7.9	Surface	1.0	0.3	276	20.6	20.6	8.1	8.1	30.3	30.3	96.9	97.0	7.3	7.3	5.1	6.1	8	8	85	88	821364	806845	<0.2	<0.2	0.9	0.8
						1.0	0.3	276	20.6		8.1		30.3		97.0		7.3		5.1		9		86				<0.2		0.8	
					Middle	4.0	0.3	274	20.6	20.6	8.1	8.1	30.4	30.4	96.9	96.9	7.3		6.3		8		89				<0.2		0.8	
						4.0	0.3	292	20.6		8.1		30.4		96.9		7.3		6.3		8		89				<0.2		0.8	
					Bottom	6.9	0.2	283	20.6	20.6	8.2	8.2	30.5	30.5	97.0	97.0	7.3	7.3	6.8		8		90				<0.2		0.8	
						6.9	0.2	289	20.6		8.2		30.5		97.0		7.3		6.8		8		91				<0.2		0.8	
IM8	Cloudy	Moderate	15:34	7.9	Surface	1.0	2.6	133	21.2	21.2	8.3	8.3	30.9	30.9	98.8	98.8	7.3	7.3	4.3	5.0	5	5	89	92	821818	808121	<0.2	<0.2	1.1	1.1
						1.0	2.7	137	21.2		8.3		30.9		98.8		7.3		4.3		5		88				<0.2		1.1	
					Middle	4.0	2.2	139	21.1	21.1	8.3	8.3	31.1	31.1	98.2	98.2	7.3		4.8		5		92				<0.2		1.1	
						4.0	2.3	151	21.1		8.3		31.1		98.2		7.3		4.8		6		92				<0.2		1.1	
					Bottom	6.9	2.1	134	21.1	21.1	8.3	8.3	31.1	31.1	97.5	97.5	7.2	7.2	5.9		6		96				<0.2		1.1	
						6.9	2.1	146	21.1		8.3		31.1		97.5		7.2		5.9		5		96				<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 12 December 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	15:41	7.3	Surface	1.0	2.6	103	21.2	21.2	8.4	8.4	31.0	31.0	96.6	96.6	7.2	7.2	6.3	6.7	12	10	89	92	822097	808789	<0.2	<0.2	1.0	1.0
						1.0	2.7	111	21.2		8.4		31.0		96.6		7.2		6.4		12		88				<0.2		1.0	
					Middle	3.7	2.6	101	21.1	21.1	8.4	8.4	31.0	31.0	96.6	96.6	7.2		6.4		9		92				<0.2		1.1	
						3.7	2.6	108	21.1		8.4		31.0		96.6		7.2		6.4		10		93				<0.2		0.9	
					Bottom	6.3	2.7	101	21.1	21.1	8.3	8.3	31.0	31.0	96.5	96.5	7.2	7.2	7.5		9		96				<0.2		1.0	
						6.3	2.8	101	21.1		8.3		31.0		96.5		7.2		7.4		10		96				<0.2		1.0	
IM10	Cloudy	Moderate	15:50	7.5	Surface	1.0	2.2	258	21.1	21.1	8.3	8.3	30.9	30.9	98.2	98.2	7.3	7.3	5.0	6.2	9	9	88	92	822382	809793	<0.2	<0.2	1.0	1.0
						1.0	2.3	262	21.1		8.3		30.9		98.2		7.3		4.8		9		88				<0.2		1.0	
					Middle	3.8	2.2	257	21.1	21.1	8.3	8.3	31.0	31.0	97.3	97.3	7.2		6.0		9		92				<0.2		1.2	
						3.8	2.3	258	21.1		8.3		31.0		97.3		7.2		6.0		10		92				<0.2		1.1	
					Bottom	6.5	2.0	262	21.1	21.1	8.3	8.3	31.0	31.0	96.9	96.9	7.2	7.2	7.5		10		96				<0.2		1.0	
						6.5	2.0	267	21.1		8.3		31.0		96.9		7.2		7.6		9		96				<0.2		0.9	
IM11	Cloudy	Moderate	16:05	8.3	Surface	1.0	1.4	326	21.3	21.3	8.3	8.3	31.0	31.0	98.5	98.5	7.3	7.3	3.8	8.3	5	5	88	92	822035	811474	<0.2	<0.2	0.9	0.9
						1.0	1.4	337	21.3		8.3		31.0		98.5		7.3		3.8		5		88				<0.2		0.9	
					Middle	4.2	1.2	318	21.2	21.2	8.3	8.3	31.1	31.1	97.0	97.0	7.2		8.0		5		92				<0.2		1.0	
						4.2	1.2	345	21.2		8.3		31.1		97.0		7.2		7.5		6		92				<0.2		0.8	
					Bottom	7.3	1.3	331	21.2	21.2	8.3	8.3	31.2	31.2	96.2	96.2	7.1	7.1	13.5		6		96				<0.2		1.0	
						7.3	1.3	334	21.2		8.3		31.2		96.2		7.1		13.5		5		96				<0.2		0.8	
IM12	Cloudy	Moderate	16:15	7.8	Surface	1.0	1.6	174	21.3	21.3	8.3	8.3	31.4	31.4	95.4	95.4	7.0	7.0	7.4	10.3	13	13	88	92	821467	812038	<0.2	<0.2	0.8	0.8
						1.0	1.7	188	21.3		8.3		31.4		95.4		7.0		7.3		14		89				<0.2		0.8	
					Middle	3.9	1.0	177	21.3	21.3	8.3	8.3	31.5	31.5	95.2	95.2	7.0		9.0		14		92				<0.2		0.8	
						3.9	1.1	180	21.3		8.3		31.5		95.2		7.0		9.2		13		92				<0.2		0.8	
					Bottom	6.8	1.8	183	21.3	21.3	8.3	8.3	31.5	31.5	94.9	94.9	7.0	7.0	14.6		12		96				<0.2		0.8	
						6.8	1.9	197	21.3		8.3		31.5		94.9		7.0		14.3		11		96				<0.2		0.8	
SR1A	Cloudy	Moderate	16:36	5.6	Surface	1.0	-	-	21.3	21.3	8.3	8.3	31.2	31.2	96.9	96.9	7.2	7.2	4.3	4.5	8	9	-	-	819970	812661	-	-	-	-
						1.0	-	-	21.3		8.3		31.2		96.9		7.2		4.3		7		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	21.4	21.4	8.3	8.3	31.4	31.4	94.5	94.5	7.0	7.0	4.8		10		-				-		-	
						4.6	-	-	21.4		8.3		31.4		94.5		7.0		4.8		10		-				-		-	
SR2	Cloudy	Moderate	16:50	5.0	Surface	1.0	0.1	342	21.3	21.3	8.3	8.3	31.4	31.4	95.7	95.7	7.1	7.1	8.8	10.3	10	8	89	90	821439	814181	<0.2	<0.2	0.9	0.9
						1.0	0.1	315	21.3		8.3		31.4		95.7		7.1		8.8		9		88				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	351	21.3	21.3	8.3	8.3	31.4	31.4	95.4	95.4	7.0	7.0	11.7		6		91				<0.2		0.8	
						4.0	0.2	323	21.3		8.3		31.4		95.4		7.0		11.8		7		92				<0.2		0.9	
SR3	Cloudy	Moderate	15:26	8.8	Surface	1.0	0.3	270	21.5	21.5	8.3	8.3	30.5	30.5	100.2	100.2	7.4	7.3	3.6	4.9	8	7	-	-	822127	807571	-	-	-	-
						1.0	0.3	273	21.5		8.3		30.5		100.1		7.4		3.6		7		-				-		-	
					Middle	4.4	0.1	300	21.2	21.2	8.3	8.3	31.0	31.0	97.5	97.5	7.2		4.3		7		-				-		-	
						4.4	0.1	310	21.2		8.3		31.0		97.5		7.2		4.4		8		-				-		-	
					Bottom	7.8	0.3	59	21.1	21.1	8.3	8.3	31.1	31.1	96.7	96.7	7.2	7.2	6.8		6		-				-		-	
						7.8	0.3	64	21.1		8.3		31.1		96.7		7.2		6.7		5		-				-		-	
SR4A	Cloudy	Moderate	16:41	8.8	Surface	1.0	0.1	96	20.6	20.6	8.1	8.1	31.0	31.0	95.1	95.2	7.1	7.2	8.1	8.8	8	9	-	-	817185	807827	-	-	-	-
						1.0	0.1	102	20.6		8.1		31.0		95.2		7.1		8.3		9		-				-		-	
					Middle	4.4	0.1	121	20.6	20.6	8.1	8.1	31.0	31.0	96.9	96.9	7.3		9.8		10		-				-		-	
						4.4	0.1	121	20.6		8.1		31.0		97.0		7.3		9.9		10		-				-		-	
					Bottom	7.8	0.1	117	20.6	20.6	8.1	8.1	31.0	31.0	99.1	99.1	7.4	7.4	8.5		9		-				-		-	
						7.8	0.1	124	20.6		8.1		31.0		99.1		7.4		8.3		10		-				-		-	
SR5A	Cloudy	Moderate	17:00	3.6	Surface	1.0	0.1	296	20.7	20.7	8.1	8.1	31.0	31.0	96.2	96.2	7.2	7.2	8.6	8.7	10	12	-	-	816608	810719	-	-	-	-
						1.0	0.1	316	20.7		8.1		31.0		96.2		7.2		8.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	303	20.7	20.7	8.1	8.1	31.0	31.0	96.8	96.9	7.2	7.3	8.7		13		-				-		-	
						2.6	0.1	332	20.7		8.1		31.0		96.9		7.3		8.7		13		-				-		-	
SR6A	Cloudy	Moderate	17:31	4.2	Surface	1.0	0.0	200	20.8	20.8	8.1	8.1	30.8	30.8	95.6	95.6	7.1	7.1	7.7	8.1	11	10	-	-	817959	814726	-	-	-	-
						1.0	0.0	217	20.8		8.1		30.8		95.6		7.1		7.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	252	20.8	20.8	8.1	8.1	30.9	30.9	97.1	97.2	7.3	7.3	8.5		10		-				-		-	
						3.2	0.0	265	20.8		8.1		30.9		97.2		7.3		8.6		9		-				-		-	
SR7	Cloudy	Moderate	17:54	14.4	Surface	1.0	0.0	116	21.6	21.6	8.3	8.3	31.9	31.9	86.6	86.6	6.3	6.3	6.7	6.5	10	10	-	-	823646	823748	-	-	-	-
						1.0	0.0	121	21.6		8.3		31.9		86.6		6.3		6.5		10		-				-		-	
					Middle	7.2	0.1	184	21.6	21.6	8.3	8.3	31.9	31.9	86.5	86.5	6.3	6.3	6.4		10		-				-		-	
						7.2	0.1	200	21.6		8.3		31.9		86.4		6.3		6.2		11		-				-		-	
					Bottom	13.4	0.1	76	21.6	21.6	8.3	8.3	31.9	31.9	86.6	86.6	6.3	6.3	6.6		10		-				-		-	
						13.4	0.1	83	21.6		8.3		31.9		86.6		6.3		6.8		11		-				-		-	
SR8	Cloudy	Moderate	16:26	4.4	Surface	1.0	-	-	21.3	21.3	8.3	8.3	30.9	30.9	97.0	97.0	7.2	7.2	7.1	7.7	9	9	-	-	820396	811608	-	-	-	-
						1.0	-	-	21.3		8.3		30.9		97.0		7.2		7.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	21.2	21.2	8.3	8.3	30.9	30.9	96.7	96.7	7.2	7.2	8.4		8		-				-		-	
						3.4	-	-	21.2		8.3		30.9		96.7		7.2		8.5		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 15 December 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	13:16	8.8	Surface	1.0	0.2	201	20.0	20.0	8.1	8.1	30.9	30.9	96.6	96.7	7.3	7.4	13.4	14.3	33	29	88	91	815643	804251	<0.2	<0.2	0.8	0.9
						1.0	0.2	212	20.0		8.1		30.9		96.7		7.3		13.4		32		89				<0.2		0.9	
					Middle	4.4	0.2	207	20.0	20.0	8.1	8.1	30.9	30.9	98.4	98.5	7.5		13.7		29		92				<0.2		1.0	
						4.4	0.2	210	20.0		8.1		30.9		98.6		7.5		13.8		28		93				<0.2		0.9	
					Bottom	7.8	0.2	234	20.0	20.0	8.1	8.1	30.9	30.9	100.4	100.5	7.6	7.6	16.6		24		93				<0.2		0.9	
						7.8	0.2	251	20.0		8.1		30.9		100.5		7.6		14.8		25		93				<0.2		0.8	
C2	Cloudy	Rough	11:52	12.0	Surface	1.0	0.5	143	20.5	20.5	8.4	8.4	30.8	30.8	94.2	94.2	7.1	7.2	13.3	15.0	11	11	86	89	825688	806942	<0.2	<0.2	0.8	0.7
						1.0	0.6	153	20.5		8.4		30.8		94.2		7.1		13.3		12		86				<0.2		0.8	
					Middle	6.0	0.5	127	20.3	20.3	8.4	8.4	30.9	30.9	95.1	95.1	7.2		15.4		11		89				<0.2		0.7	
						6.0	0.5	132	20.3		8.4		30.9		95.1		7.2		15.4		10		89				<0.2		0.7	
					Bottom	11.0	0.7	131	20.3	20.3	8.4	8.4	31.1	31.1	95.2	95.3	7.2	7.2	16.4		10		91				<0.2		0.7	
						11.0	0.7	133	20.3		8.4		31.1		95.3		7.2		16.5		11		91				<0.2		0.7	
C3	Cloudy	Moderate	13:29	12.2	Surface	1.0	0.7	164	21.0	21.0	8.4	8.4	31.4	31.4	89.5	89.5	6.6	6.6	4.1	5.5	11	11	87	90	822118	817785	<0.2	<0.2	0.8	0.8
						1.0	0.7	170	21.0		8.4		31.4		89.4		6.6		4.1		12		87				<0.2		0.8	
					Middle	6.1	0.5	131	21.1	21.1	8.4	8.4	31.6	31.6	87.6	87.6	6.5		4.5		11		91				<0.2		0.8	
						6.1	0.5	134	21.1		8.4		31.6		87.5		6.5		4.3		10		91				<0.2		0.7	
					Bottom	11.2	0.7	171	21.1	21.1	8.3	8.3	31.7	31.7	87.6	87.7	6.5	6.5	8.0		11		91				<0.2		0.7	
						11.2	0.8	173	21.1		8.3		31.7		87.7		6.5		8.1		10		92				<0.2		0.8	
IM1	Cloudy	Moderate	12:55	4.8	Surface	1.0	0.2	163	19.8	19.8	8.1	8.1	30.4	30.4	93.4	93.4	7.1	7.1	11.9	15.3	11	14	87	89	817925	807148	<0.2	<0.2	0.8	0.8
						1.0	0.2	170	19.8		8.1		30.4		93.4		7.1		11.9		12		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	180	19.8	19.8	8.1	8.1	30.4	30.4	92.4	92.4	7.1	7.1	18.4		16		91				<0.2		0.8	
						3.8	0.2	184	19.8		8.1		30.4		92.4		7.1		19.0		15		91				<0.2		0.9	
IM2	Cloudy	Moderate	12:47	7.0	Surface	1.0	0.1	131	19.8	19.8	8.1	8.1	30.0	30.0	94.4	94.4	7.2	7.3	15.7	17.8	14	23	87	90	818183	806175	<0.2	<0.2	0.9	0.8
						1.0	0.1	143	19.8		8.1		30.0		94.4		7.2		15.7		15		86				<0.2		0.9	
					Middle	3.5	0.1	127	19.8	19.8	8.1	8.1	30.2	30.2	94.9	95.0	7.3		16.9		14		91				<0.2		0.8	
						3.5	0.1	130	19.8		8.1		30.2		95.0		7.3		16.9		32		91				<0.2		0.8	
					Bottom	6.0	0.1	219	19.8	19.8	8.1	8.1	30.3	30.3	97.5	97.6	7.4	7.5	20.4		33		92				<0.2		0.8	
						6.0	0.1	233	19.8		8.1		30.3		97.6		7.5		21.3		32		92				<0.2		0.8	
IM3	Cloudy	Moderate	12:39	7.2	Surface	1.0	0.1	71	19.8	19.8	8.1	8.1	30.0	30.0	93.8	93.8	7.2	7.2	18.9	18.9	8	16	89	91	818778	805594	<0.2	<0.2	0.9	0.8
						1.0	0.1	71	19.8		8.1		30.0		93.8		7.2		17.8		16		89				<0.2		0.8	
					Middle	3.6	0.1	40	19.8	19.8	8.1	8.1	30.1	30.1	92.9	92.9	7.1		17.1		14		91				<0.2		0.8	
						3.6	0.1	42	19.8		8.1		30.1		92.8		7.1		17.6		20		92				<0.2		0.9	
					Bottom	6.2	0.1	263	19.8	19.8	8.1	8.1	30.3	30.3	91.8	91.8	7.0	7.0	21.0		20		92				<0.2		0.8	
						6.2	0.1	269	19.8		8.1		30.3		91.8		7.0		20.9		19		92				<0.2		0.8	
IM4	Cloudy	Moderate	12:26	8.4	Surface	1.0	0.1	31	19.8	19.8	8.1	8.1	30.1	30.1	95.1	95.1	7.3	7.3	9.2	12.6	18	17	88	90	819727	804609	<0.2	<0.2	0.8	0.8
						1.0	0.1	32	19.8		8.1		30.1		95.1		7.3		9.3		19		88				<0.2		0.9	
					Middle	4.2	0.0	65	19.8	19.8	8.1	8.1	30.1	30.1	96.0	96.0	7.3		12.0		17		91				<0.2		0.8	
						4.2	0.0	68	19.8		8.1		30.1		96.0		7.4		12.1		17		91				<0.2		0.8	
					Bottom	7.4	0.0	72	19.7	19.7	8.1	8.1	30.1	30.1	98.8	98.9	7.6	7.6	16.5		15		92				<0.2		0.8	
						7.4	0.0	78	19.7		8.1		30.1		98.9		7.6		16.4		15		92				<0.2		0.8	
IM5	Cloudy	Moderate	12:17	7.5	Surface	1.0	0.1	6	19.8	19.8	8.1	8.1	30.1	30.1	94.6	94.6	7.2	7.3	11.7	14.5	24	24	88	90	820752	804843	<0.2	<0.2	0.9	0.9
						1.0	0.1	6	19.8		8.1		30.1		94.6		7.2		11.8		24		87				<0.2		0.9	
					Middle	3.8	0.2	5	19.8	19.8	8.1	8.1	30.2	30.2	95.0	95.0	7.3		13.9		23		91				<0.2		0.8	
						3.8	0.2	5	19.7		8.1		30.2		95.0		7.3		13.9		24		91				<0.2		0.9	
					Bottom	6.5	0.1	23	19.7	19.7	8.1	8.1	30.2	30.2	95.4	95.5	7.3	7.3	18.0		25		92				<0.2		1.0	
						6.5	0.1	24	19.7		8.1		30.2		95.5		7.3		17.6		24		93				<0.2		0.9	
IM6	Cloudy	Moderate	12:07	7.8	Surface	1.0	0.1	298	19.8	19.8	8.1	8.1	30.4	30.4	93.5	93.5	7.1	7.3	13.9	15.7	25	24	87	90	821068	805808	<0.2	<0.2	0.8	0.9
						1.0	0.1	317	19.8		8.1		30.4		93.5		7.1		14.0		24		88				<0.2		0.8	
					Middle	3.9	0.2	326	19.8	19.8	8.0	8.0	30.4	30.4	96.6	96.7	7.4		13.2		24		90				<0.2		0.8	
						3.9	0.2	356	19.8		8.0		30.4		96.8		7.4		13.3		25		91				<0.2		0.9	
					Bottom	6.8	0.0	308	19.8	19.8	8.0	8.0	30.4	30.4	98.8	98.9	7.5	7.5	19.9		24		91				<0.2		0.9	
						6.8	0.0	309	19.8		8.0		30.4		98.9		7.5		19.8		23		92				<0.2		0.9	
IM7	Cloudy	Moderate	11:52	8.6	Surface	1.0	0.3	95	19.9	19.9	8.1	8.1	30.4	30.4	93.4	93.4	7.1	7.2	12.9	15.1	14	18	87	90	821369	806822	<0.2	<0.2	0.9	0.9
						1.0	0.4	96	19.9		8.1		30.4		93.4		7.1		13.0		13		88				<0.2		0.9	
					Middle	4.3	0.4	100	19.9	19.9	8.1	8.1	30.4	30.4	93.9	93.9	7.2		13.7		19		90				<0.2		0.9	
						4.3	0.4	101	19.9		8.1		30.4		93.9		7.2		13.8		20		91				<0.2		0.9	
					Bottom	7.6	0.3	101	19.9	19.9	8.2	8.2	30.4	30.4	94.7	94.8	7.2	7.2	18.7		21		92				<0.2		0.8	
						7.6	0.3	110	19.9		8.2		30.4		94.8		7.2		18.6		22		92				<0.2		0.8	
IM8	Cloudy	Moderate	12:11	8.2	Surface	1.0	0.6	110	20.5	20.5	8.4	8.4	31.0	31.0	94.2	94.2	7.1	7.1	12.3	13.8	12	11	88	90	821816	808133	<0.2	<0.2	0.7	0.7
						1.0	0.7	116	20.5		8.4		31.0		94.2		7.1		12.2		12		88				<0.2		0.7	
					Middle	4.1	0.5	109	20.4	20.4	8.4	8.4	31.0	31.0	94.2	94.3	7.1		13.7		11		89				<0.2		0.7	
						4.1	0.5	118	20.4		8.4		31.0		94.3		7.1		14.0		10		90				<0.2		0.7	
					Bottom	7.2	0.7	84	20.3	20.3	8.4	8.4	31.1	31.1	95.9	96.2	7.2	7.3	15.3		11		91				<0.2		0.8	
						7.2	0.7	85	20.3		8.4		31.1		96.4		7.3		15.4		10		92				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 December 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	12:16	7.6	Surface	1.0	0.3	70	20.5	20.5	8.4	8.4	30.6	30.6	94.8	94.8	7.1	7.1	7.0	8.9	12	11	86	89	822100	808817	<0.2	<0.2	0.7	0.7
						1.0	0.3	70	20.5		8.4		30.6		94.8		7.1		7.0		11		86				<0.2		0.7	
					Middle	3.8	0.3	80	20.4	20.4	8.4	8.4	30.9	30.9	94.7	94.7	7.1		9.4		11		89				<0.2		0.7	
						3.8	0.3	83	20.4		8.4		30.9		94.7		7.1		9.1		10		90				<0.2		0.7	
					Bottom	6.6	0.3	48	20.4	20.4	8.4	8.4	31.1	31.1	95.2	95.3	7.2	7.2	10.3		10		90				<0.2		0.7	
						6.6	0.3	52	20.4		8.4		31.1		95.4		7.2		10.4		11		91				<0.2		0.8	
IM10	Cloudy	Moderate	12:23	7.4	Surface	1.0	0.6	105	20.6	20.6	8.4	8.4	30.6	30.6	94.4	94.4	7.1	7.1	7.2	7.4	11	10	87	90	822380	809815	<0.2	<0.2	0.7	0.8
						1.0	0.6	109	20.6		8.4		30.6		94.4		7.1		7.2		10		87				<0.2		0.7	
					Middle	3.7	0.5	104	20.5	20.5	8.4	8.4	30.9	30.9	94.9	95.0	7.1		6.9		11		90				<0.2		0.7	
						3.7	0.5	113	20.5		8.4		30.9		95.1		7.1		6.9		10		90				<0.2		0.8	
					Bottom	6.4	0.6	129	20.5	20.5	8.4	8.4	31.0	31.0	96.9	97.0	7.3	7.3	7.9		10		91				<0.2		0.8	
						6.4	0.7	132	20.5		8.4		31.0		97.1		7.3		8.2		10		92				<0.2		0.8	
IM11	Cloudy	Moderate	12:33	9.0	Surface	1.0	0.1	118	20.7	20.7	8.4	8.4	31.1	31.1	93.6	93.6	7.0	7.0	6.5	7.1	12	11	87	90	822053	811437	<0.2	<0.2	0.8	0.8
						1.0	0.2	125	20.7		8.4		31.1		93.6		7.0		6.5		11		88				<0.2		0.8	
					Middle	4.5	0.1	142	20.7	20.7	8.4	8.4	31.1	31.1	93.5	93.5	7.0		7.1		10		90				<0.2		0.8	
						4.5	0.1	152	20.7		8.4		31.1		93.5		7.0		7.2		11		90				<0.2		0.8	
					Bottom	8.0	0.3	182	20.6	20.6	8.4	8.4	31.1	31.1	93.6	93.7	7.0	7.0	7.8		10		91				<0.2		0.7	
						8.0	0.3	194	20.6		8.4		31.1		93.7		7.0		7.8		10		91				<0.2		0.8	
IM12	Cloudy	Moderate	12:40	9.4	Surface	1.0	0.1	217	20.9	20.9	8.4	8.4	31.3	31.3	91.8	91.9	6.8	6.9	8.1	8.2	8	9	86	89	821453	812068	<0.2	<0.2	0.8	0.8
						1.0	0.1	228	20.9		8.4		31.3		91.9		6.8		7.9		7		86				<0.2		0.8	
					Middle	4.7	0.0	4	20.9	20.9	8.4	8.4	31.3	31.3	92.1	92.2	6.9		8.0		9		90				<0.2		0.7	
						4.7	0.0	4	20.9		8.4		31.3		92.2		6.9		8.0		10		90				<0.2		0.7	
					Bottom	8.4	0.3	326	20.8	20.8	8.4	8.4	31.3	31.3	92.9	93.1	6.9	6.9	8.5		9		91				<0.2		0.8	
						8.4	0.3	334	20.8		8.4		31.3		93.2		6.9		8.6		10		91				<0.2		0.7	
SR1A	Cloudy	Calm	12:58	5.0	Surface	1.0	-	-	20.5	20.5	8.4	8.4	31.2	31.2	93.5	93.5	7.0	7.0	5.9	5.8	10	9	-	-	819979	812654	-	-	-	-
						1.0	-	-	20.5		8.4		31.2		93.5		7.0		6.0		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.4	20.4	8.4	8.4	31.2	31.2	93.7	93.8	7.0	7.1	5.7		8		-				-		-	
						4.0	-	-	20.4		8.4		31.2		93.9		7.1		5.7		9		-				-		-	
SR2	Cloudy	Calm	13:09	5.1	Surface	1.0	0.1	219	20.8	20.8	8.4	8.4	31.4	31.4	93.2	93.4	6.9	7.0	7.2	7.4	10	9	86	88	821460	814182	<0.2	<0.2	0.7	0.7
						1.0	0.1	240	20.8		8.4		31.4		93.5		7.0		7.2		9		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	202	20.8	20.8	8.3	8.3	31.4	31.4	95.5	95.7	7.1	7.2	7.7		7		89				<0.2		0.8	
						4.1	0.2	209	20.8		8.3		31.4		95.9		7.2		7.7		8		90				<0.2		0.7	
SR3	Cloudy	Moderate	12:07	9.2	Surface	1.0	0.9	125	20.5	20.5	8.4	8.4	30.7	30.7	94.5	94.5	7.1	7.1	13.3	15.1	11	12	-	-	822135	807580	-	-	-	-
						1.0	0.9	136	20.5		8.4		30.7		94.5		7.1		13.1		12		-				-		-	
					Middle	4.6	0.9	115	20.4	20.4	8.4	8.4	30.9	30.9	94.6	94.6	7.1		15.5		12		-				-		-	
						4.6	1.0	118	20.4		8.4		30.9		94.6		7.1		15.5		11		-				-		-	
					Bottom	8.2	0.7	113	20.4	20.4	8.4	8.4	31.0	31.0	94.8	94.9	7.1	7.1	16.8		12		-				-		-	
						8.2	0.7	117	20.3		8.4		31.0		94.9		7.1		16.5		11		-				-		-	
SR4A	Cloudy	Moderate	13:44	8.4	Surface	1.0	0.2	90	19.7	19.7	8.0	8.0	30.2	30.2	96.0	96.0	7.3	7.5	12.4	13.0	11	11	-	-	817192	807800	-	-	-	-
						1.0	0.2	91	19.7		8.0		30.2		96.0		7.4		12.5		12		-				-		-	
					Middle	4.2	0.2	83	19.7	19.7	8.0	8.0	30.3	30.3	98.7	98.8	7.6		13.6		11		-				-		-	
						4.2	0.2	87	19.7		8.0		30.3		98.8		7.6		13.7		12		-				-		-	
					Bottom	7.4	0.2	69	19.7	19.7	8.0	8.0	30.2	30.2	100.2	100.3	7.7	7.7	13.8		9		-				-		-	
						7.4	0.2	71	19.7		8.0		30.2		100.4		7.7		12.0		9		-				-		-	
SR5A	Cloudy	Moderate	14:02	3.5	Surface	1.0	0.1	10	19.9	19.9	8.1	8.1	30.5	30.5	92.6	92.7	7.0	7.1	8.9	10.9	8	9	-	-	816607	810715	-	-	-	-
						1.0	0.1	10	19.9		8.1		30.5		92.7		7.1		9.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	35	19.9	19.9	8.0	8.0	30.5	30.5	93.3	93.4	7.1	7.1	12.7		9		-				-		-	
						2.5	0.1	36	19.9		8.0		30.5		93.5		7.1		12.6		9		-				-		-	
SR6A	Cloudy	Moderate	14:43	4.2	Surface	1.0	0.1	260	19.9	19.9	8.0	8.0	30.5	30.5	94.5	94.6	7.2	7.2	10.0	10.3	12	11	-	-	817948	814722	-	-	-	-
						1.0	0.1	281	19.9		8.0		30.5		94.6		7.2		10.0		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	265	19.9	19.9	8.0	8.0	30.4	30.4	101.2	101.3	7.7	7.7	10.6		9		-				-		-	
						3.2	0.1	270	19.9		8.0		30.4		101.4		7.7		10.6		8		-				-		-	
SR7	Cloudy	Calm	13:57	18.6	Surface	1.0	1.0	38	21.2	21.2	8.4	8.4	31.7	31.7	85.9	85.9	6.3	6.3	4.5	5.3	7	10	-	-	823640	823724	-	-	-	-
						1.0	1.0	41	21.2		8.4		31.7		85.9		6.3		4.7		7		-				-		-	
					Middle	9.3	1.2	44	21.2	21.2	8.3	8.3	31.7	31.7	85.9	86.0	6.3		5.0		11		-				-		-	
						9.3	1.2	44	21.2		8.3		31.7		86.0		6.3		5.0		12		-				-		-	
					Bottom	17.6	1.1	41	21.1	21.1	8.3	8.3	31.8	31.8	87.0	87.2	6.4	6.4	6.4		12		-				-		-	
						17.6	1.1	43	21.1		8.3		31.8		87.3		6.4		6.1		11		-				-		-	
SR8	Cloudy	Calm	12:49	4.7	Surface	1.0	-	-	20.6	20.6	8.4	8.4	31.2	31.2	94.4	94.5	7.1	7.1	7.3	7.5	12	12	-	-	820408	811627	-	-	-	-
						1.0	-	-	20.6		8.4		31.2		94.6		7.1		7.4		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	20.6	20.6	8.4	8.4	31.2	31.2	95.4	95.6	7.1	7.2	7.7		10		-				-		-	
						3.7	-	-	20.6		8.4		31.2		95.7		7.2		7.7		11		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 December 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	08:44	8.6	Surface	1.0	0.6	38	19.7	19.7	8.0	8.0	29.9	29.9	94.8	94.9	7.3	7.3	12.3	16.2	11	12	86	89	815611	804261	<0.2	<0.2	0.9	0.9
						1.0	0.6	39	19.7		8.0		29.9		94.9		7.3		12.3		11		86				<0.2		0.8	
					Middle	4.3	0.5	26	19.7	19.7	8.0	8.0	30.1	30.1	95.7	95.7	7.3		13.5		11		89				<0.2		1.0	
						4.3	0.5	27	19.7		8.0		30.1		95.7		7.3		13.3		12		90				<0.2		0.9	
					Bottom	7.6	0.4	23	19.7	19.7	8.0	8.0	30.1	30.1	96.4	96.4	7.4	7.4	23.1		13		90				<0.2		0.8	
						7.6	0.4	24	19.7		8.0		30.1		96.4		7.4		23.1		12		90				<0.2		0.8	
C2	Cloudy	Moderate	09:19	11.2	Surface	1.0	0.1	113	20.6	20.6	8.4	8.4	30.2	30.2	92.7	92.7	7.0	7.0	9.7	12.4	20	13	89	90	825660	806928	<0.2	<0.2	0.6	0.8
						1.0	0.1	113	20.6		8.4		30.2		92.7		7.0		10.1		11		87				<0.2		0.8	
					Middle	5.6	0.1	108	20.7	20.7	8.4	8.4	30.2	30.2	92.5	92.5	7.0		12.6		11		90				<0.2		0.7	
						5.6	0.1	109	20.7		8.4		30.2		92.5		7.0		12.5		10		90				<0.2		0.8	
					Bottom	10.2	0.1	38	20.7	20.7	8.4	8.4	30.2	30.2	92.4	92.4	7.0	7.0	14.9		11		92				<0.2		0.8	
						10.2	0.1	40	20.7		8.4		30.2		92.4		7.0		14.7		14		92				<0.2		0.8	
C3	Cloudy	Moderate	07:29	10.6	Surface	1.0	0.4	159	20.9	20.9	8.4	8.4	31.3	31.3	91.5	91.6	6.8	6.8	11.1	12.3	8	10	86	89	822119	817788	<0.2	<0.2	0.7	0.8
						1.0	0.4	164	20.9		8.4		31.3		91.6		6.8		11.3		7		86				<0.2		0.8	
					Middle	5.3	0.4	167	20.9	20.9	8.4	8.3	31.3	31.3	91.9	92.0	6.8		12.4		7		89				<0.2		0.8	
						5.3	0.5	174	20.9		8.3		31.3		92.0		6.9		12.5		8		90				<0.2		0.8	
					Bottom	9.6	0.3	163	20.7	20.7	8.3	8.3	31.4	31.4	92.8	92.9	6.9	6.9	13.2		14		90				<0.2		0.7	
						9.6	0.3	170	20.7		8.3		31.4		92.9		6.9		13.3		13		90				<0.2		0.7	
IM1	Cloudy	Moderate	09:03	5.4	Surface	1.0	0.1	320	19.8	19.8	8.0	8.0	30.6	30.6	94.7	94.8	7.2	7.2	10.6	16.6	16	15	85	87	817941	807127	<0.2	<0.2	0.9	0.9
						1.0	0.1	329	19.8		8.0		30.6		94.8		7.2		10.6		15		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	317	19.6	19.6	8.0	8.0	30.5	30.5	96.7	96.8	7.4	7.4	22.6		15		90				<0.2		0.9	
						4.4	0.1	344	19.6		8.0		30.5		96.8		7.4		22.7		14		86				<0.2		0.9	
IM2	Cloudy	Moderate	09:11	6.5	Surface	1.0	0.3	18	19.9	19.9	8.1	8.1	30.4	30.4	92.5	92.5	7.1	7.1	14.9	17.2	12	16	87	90	818178	806152	<0.2	<0.2	0.9	0.9
						1.0	0.3	19	19.9		8.1		30.4		92.5		7.1		14.8		13		86				<0.2		0.9	
					Middle	3.3	0.3	13	19.9	19.9	8.0	8.0	30.4	30.4	91.7	91.7	7.0		14.8		17		90				<0.2		0.9	
						3.3	0.3	14	19.9		8.0		30.4		91.7		7.0		14.6		17		91				<0.2		0.9	
					Bottom	5.5	0.2	11	19.8	19.8	8.0	8.0	30.4	30.4	88.6	88.6	6.8	6.8	22.1		19		91				<0.2		0.9	
						5.5	0.2	11	19.8		8.0		30.4		88.5		6.8		22.0		18		92				<0.2		1.0	
IM3	Cloudy	Moderate	09:19	7.0	Surface	1.0	0.4	354	19.9	19.9	8.0	8.0	30.4	30.4	93.1	93.1	7.1	7.1	10.3	13.4	18	18	87	90	818790	805576	<0.2	<0.2	1.0	1.0
						1.0	0.4	326	19.9		8.0		30.4		93.1		7.1		10.3		18		90				<0.2		1.0	
					Middle	3.5	0.4	0	19.9	19.9	8.0	8.0	30.4	30.4	93.4	93.4	7.1		11.7		18		91				<0.2		0.9	
						3.5	0.5	0	19.9		8.0		30.4		93.4		7.1		11.8		18		92				<0.2		1.0	
					Bottom	6.0	0.4	355	19.8	19.8	8.0	8.0	30.3	30.3	94.0	94.1	7.2	7.2	18.3		17		92				<0.2		0.9	
						6.0	0.4	327	19.8		8.0		30.3		94.1		7.2		18.2		17		87				<0.2		0.9	
IM4	Cloudy	Moderate	09:29	8.0	Surface	1.0	0.7	8	19.7	19.7	8.1	8.1	30.2	30.2	93.5	93.5	7.2	7.2	13.3	16.0	18	18	88	90	819705	804587	<0.2	<0.2	0.9	0.9
						1.0	0.7	8	19.7		8.1		30.2		93.5		7.2		13.3		17		90				<0.2		0.9	
					Middle	4.0	0.6	5	19.8	19.8	8.1	8.1	30.2	30.2	93.5	93.5	7.2		15.4		18		91				<0.2		0.9	
						4.0	0.7	5	19.8		8.1		30.2		93.5		7.2		15.4		19		91				<0.2		0.9	
					Bottom	7.0	0.5	5	19.7	19.7	8.1	8.1	30.2	30.2	93.7	93.7	7.2	7.2	19.2		19		92				<0.2		0.9	
						7.0	0.5	5	19.7		8.1		30.2		93.7		7.2		19.5		18		86				<0.2		1.0	
IM5	Cloudy	Moderate	09:36	7.2	Surface	1.0	0.8	29	19.9	19.9	8.0	8.0	30.1	30.1	93.3	93.3	7.1	7.2	11.6	14.3	23	23	87	89	820735	804889	<0.2	<0.2	0.9	0.9
						1.0	0.9	31	19.9		8.0		30.1		93.3		7.1		11.3		23		86				<0.2		0.9	
					Middle	3.6	0.8	28	19.9	19.9	8.0	8.0	30.1	30.1	94.2	94.3	7.2		13.2		23		90				<0.2		1.0	
						3.6	0.8	28	19.9		8.0		30.1		94.3		7.2		13.3		22		91				<0.2		1.0	
					Bottom	6.2	0.7	26	19.8	19.8	8.0	8.0	30.1	30.1	95.3	95.4	7.3	7.3	18.0		22		91				<0.2		0.9	
						6.2	0.7	27	19.8		8.0		30.1		95.4		7.3		18.3		23		87				<0.2		0.8	
IM6	Cloudy	Moderate	09:45	7.4	Surface	1.0	0.2	39	19.9	19.9	8.1	8.1	30.5	30.5	93.7	93.8	7.1	7.2	9.8	10.2	19	20	86	89	821047	805830	<0.2	<0.2	0.8	0.9
						1.0	0.2	42	19.9		8.1		30.5		93.8		7.1		9.8		20		89				<0.2		0.9	
					Middle	3.7	0.2	28	19.9	19.9	8.0	8.0	30.5	30.5	94.2	94.3	7.2		9.9		19		89				<0.2		0.9	
						3.7	0.3	28	19.9		8.0		30.5		94.3		7.2		10.0		20		90				<0.2		0.9	
					Bottom	6.4	0.2	21	19.8	19.8	8.0	8.0	30.5	30.5	97.4	97.5	7.4	7.4	10.7		21		91				<0.2		1.0	
						6.4	0.3	22	19.8		8.0		30.5		97.5		7.4		10.8		21		91				<0.2		1.0	
IM7	Cloudy	Moderate	09:54	8.0	Surface	1.0	0.2	152	19.8	19.8	8.1	8.1	30.4	30.4	93.7	93.8	7.2	7.2	17.3	19.7	18	18	88	90	821362	806811	<0.2	<0.2	1.0	1.0
						1.0	0.2	166	19.8		8.1		30.4		93.8		7.2		17.6		17		88				<0.2		0.9	
					Middle	4.0	0.2	166	19.8	19.8	8.0	8.0	30.4	30.4	94.5	94.5	7.2		21.0		18		89				<0.2		0.9	
						4.0	0.2	181	19.8		8.0		30.4		94.5		7.2		21.2		17		90				<0.2		0.9	
					Bottom	7.0	0.1	176	19.8	19.8	8.0	8.0	30.4	30.4	94.7	94.8	7.2	7.2	20.6		20		92				<0.2		1.0	
						7.0	0.1	183	19.8		8.0		30.4		94.8		7.2		20.4		20		92				<0.2		1.0	
IM8	Cloudy	Moderate	08:46	7.6	Surface	1.0	0.2	62	20.6	20.6	8.3	8.3	30.2	30.2	93.1	93.1	7.0	7.0	11.3	12.2	12	14	88	90	821820	808151	<0.2	<0.2	0.8	0.8
						1.0	0.2	65	20.6		8.3		30.2		93.1		7.0		11.5		13		87				<0.2		0.8	
					Middle	3.8	0.2	104	20.6	20.6	8.3	8.3	30.3	30.3	93.5	93.6	7.0		12.2		15		90				<0.2		0.8	
						3.8	0.2	111	20.6		8.3		30.3		93.6		7.1		12.3		14		90				<0.2		0.8	
					Bottom	6.6	0.2	113	20.4	20.4	8.3	8.3	30.3	30.3	94.2	94.3	7.1	7.1	12.8		15		92				<0.2		0.9	
						6.6	0.2	114	20.4		8.3		30.3		94.3		7.1		13.4		14		92				<0.2		0.8	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 December 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	08:41	7.0	Surface	1.0	0.3	177	20.7	20.7	8.4	8.4	30.4	30.4	92.7	92.7	7.0	7.0	9.8	10.3	14	15	87	89	822083	808802	<0.2	<0.2	1.0	0.9
						1.0	0.3	187	20.7		8.4		30.4		92.7		7.0		10.0		14		88				<0.2		0.8	
					Middle	3.5	0.2	181	20.7	20.7	8.4	8.4	30.4	30.4	92.6	92.6	7.0		10.8		13		89				<0.2		0.9	
						3.5	0.3	194	20.7		8.4		30.4		92.6		7.0		10.8		14		88				<0.2		0.8	
					Bottom	6.0	0.5	159	20.7	20.7	8.4	8.4	30.4	30.4	92.7	92.8	7.0	7.0	10.3		17		92				<0.2		0.8	
						6.0	0.5	173	20.7		8.4		30.4		92.8		7.0		10.1		18		92				<0.2		0.9	
IM10	Cloudy	Moderate	08:35	7.8	Surface	1.0	0.2	309	20.7	20.7	8.4	8.4	30.4	30.4	93.4	93.4	7.0	7.1	10.1	10.9	20	17	87	90	822364	809790	<0.2	<0.2	0.8	0.8
						1.0	0.2	335	20.7		8.4		30.4		93.4		7.0		10.2		19		89				<0.2		0.7	
					Middle	3.9	0.2	25	20.6	20.6	8.4	8.4	30.6	30.6	94.2	94.4	7.1		11.0		17		90				<0.2		0.7	
						3.9	0.2	25	20.6		8.4		30.6		94.5		7.1		11.2		17		90				<0.2		0.7	
					Bottom	6.8	0.2	313	20.6	20.6	8.4	8.4	30.7	30.7	96.0	96.2	7.2	7.2	11.4		13		92				<0.2		0.9	
						6.8	0.2	331	20.6		8.4		30.7		96.3		7.2		11.5		13		91				<0.2		0.8	
IM11	Cloudy	Moderate	08:25	8.0	Surface	1.0	0.7	241	20.7	20.7	8.4	8.4	30.4	30.4	92.6	92.6	7.0	7.0	9.7	10.6	8	14	88	91	822076	811460	<0.2	<0.2	0.8	0.8
						1.0	0.7	241	20.7		8.4		30.4		92.6		7.0		9.8		9		89				<0.2		0.8	
					Middle	4.0	0.5	232	20.7	20.7	8.4	8.4	30.5	30.5	92.6	92.6	6.9		10.8		11		90				<0.2		0.7	
						4.0	0.5	253	20.7		8.4		30.5		92.6		6.9		10.8		19		91				<0.2		0.7	
					Bottom	7.0	0.4	243	20.7	20.7	8.4	8.4	30.7	30.7	92.5	92.5	6.9	6.9	11.4		20		93				<0.2		0.7	
						7.0	0.4	258	20.7		8.4		30.7		92.5		6.9		11.4		19		94				<0.2		0.8	
IM12	Cloudy	Moderate	08:19	8.8	Surface	1.0	1.0	240	20.7	20.7	8.4	8.4	30.4	30.4	93.1	93.1	7.0	7.0	9.6	10.9	13	16	88	90	821448	812049	<0.2	<0.2	0.8	0.8
						1.0	1.0	249	20.7		8.4		30.4		93.1		7.0		9.6		12		88				<0.2		0.8	
					Middle	4.4	0.8	238	20.6	20.6	8.4	8.4	30.6	30.6	93.2	93.2	7.0		10.8		12		90				<0.2		0.8	
						4.4	0.8	248	20.6		8.4		30.6		93.2		7.0		11.1		12		91				<0.2		0.8	
					Bottom	7.8	0.9	236	20.5	20.5	8.3	8.3	30.9	30.9	93.8	93.9	7.1	7.1	12.2		22		92				<0.2		0.7	
						7.8	0.9	246	20.5		8.3		30.9		94.0		7.1		12.2		23		93				<0.2		0.8	
SR1A	Cloudy	Calm	08:03	4.9	Surface	1.0	-	-	20.3	20.3	8.3	8.3	31.2	31.2	95.7	96.0	7.2	7.2	4.8	7.6	14	14	-	-	819979	812662	-	-	-	-
						1.0	-	-	20.3		8.3		31.2		96.2		7.2		4.8		13		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	20.1	20.1	8.3	8.3	31.2	31.2	99.1	99.4	7.5	7.5	10.4		15		-				-		-	
						3.9	-	-	20.1		8.3		31.2		99.7		7.5		10.5		15		-				-		-	
SR2	Cloudy	Moderate	07:50	4.3	Surface	1.0	0.6	240	20.4	20.4	8.3	8.3	31.3	31.3	94.5	94.6	7.1	7.1	15.6	16.2	19	18	85	88	821449	814145	<0.2	<0.2	0.8	0.8
						1.0	0.7	249	20.4		8.3		31.3		94.7		7.1		15.8		18		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	1.5	246	20.3	20.3	8.3	8.3	31.3	31.3	96.7	96.9	7.3	7.3	16.8		18		90				<0.2		0.8	
						3.3	1.5	261	20.2		8.3		31.4		97.0		7.3		16.7		17		90				<0.2		0.8	
SR3	Cloudy	Moderate	08:55	9.0	Surface	1.0	0.4	341	20.7	20.7	8.4	8.4	30.2	30.2	92.7	92.7	7.0	7.0	12.1	12.2	16	15	-	-	822166	807574	-	-	-	-
						1.0	0.4	314	20.7		8.4		30.2		92.7		7.0		12.4		17		-				-		-	
					Middle	4.5	0.3	345	20.7	20.7	8.4	8.4	30.2	30.2	92.6	92.6	7.0		12.9		16		-				-		-	
						4.5	0.3	317	20.7		8.4		30.2		92.6		7.0		12.7		15		-				-		-	
					Bottom	8.0	0.5	328	20.7	20.7	8.4	8.4	30.2	30.2	92.7	92.7	7.0	7.0	11.6		14		-				-		-	
						8.0	0.5	351	20.7		8.4		30.2		92.7		7.0		11.5		13		-				-		-	
SR4A	Cloudy	Moderate	08:18	8.6	Surface	1.0	0.1	97	19.9	19.9	8.0	8.0	30.6	30.6	92.2	92.3	7.0	7.1	8.9	9.5	15	13	-	-	817211	807802	-	-	-	-
						1.0	0.1	99	19.9		8.0		30.6		92.3		7.0		8.9		14		-				-		-	
					Middle	4.3	0.1	91	19.9	19.9	8.0	8.0	30.6	30.6	93.6	93.7	7.1		9.4		12		-				-		-	
						4.3	0.1	99	19.9		8.0		30.6		93.7		7.1		9.4		11		-				-		-	
					Bottom	7.6	0.1	109	19.9	19.9	8.0	8.0	30.6	30.6	94.7	94.8	7.2	7.2	9.8		12		-				-		-	
						7.6	0.1	110	19.9		8.0		30.6		94.9		7.2		10.3		11		-				-		-	
SR5A	Cloudy	Moderate	08:00	4.0	Surface	1.0	0.2	301	19.8	19.8	8.0	8.0	30.6	30.6	93.9	94.0	7.2	7.2	7.8	7.8	14	15	-	-	816582	810704	-	-	-	-
						1.0	0.2	325	19.8		8.0		30.6		94.0		7.2		7.8		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	305	19.7	19.7	8.0	8.0	30.6	30.6	96.1	96.3	7.3	7.4	7.8		16		-				-		-	
						3.0	0.2	308	19.7		8.0		30.6		96.4		7.4		7.7		15		-				-		-	
SR6A	Cloudy	Moderate	07:30	4.2	Surface	1.0	0.1	271	19.9	19.9	7.9	7.9	30.5	30.5	93.9	94.0	7.2	7.2	8.1	8.1	13	14	-	-	817975	814729	-	-	-	-
						1.0	0.1	292	19.9		7.9		30.5		94.0		7.2		8.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	266	19.9	19.9	7.9	7.9	30.5	30.5	96.1	96.4	7.3	7.4	8.1		16		-				-		-	
						3.2	0.1	286	19.9		7.9		30.5		96.6		7.4		8.1		16		-				-		-	
SR7	Cloudy	Calm	07:00	15.3	Surface	1.0	0.8	322	21.1	21.1	8.4	8.4	31.5	31.5	88.4	88.4	6.6	6.6	9.0	10.2	7	8	-	-	823638	823742	-	-	-	-
						1.0	0.9	334	21.1		8.4		31.5		88.4		6.6		9.1		6		-				-		-	
					Middle	7.7	0.7	326	21.1	21.1	8.3	8.3	31.5	31.5	88.5	88.6	6.6		9.9		7		-				-		-	
						7.7	0.8	335	21.1		8.3		31.5		88.6		6.6		10.5		8		-				-		-	
					Bottom	14.3	0.6	326	21.0	21.0	8.3	8.3	31.6	31.6	88.7	88.8	6.6	6.6	11.5		10		-				-		-	
						14.3	0.6	338	21.0		8.3		31.6		88.8		6.6		11.4		9		-				-		-	
SR8	Cloudy	Calm	08:12	4.7	Surface	1.0	-	-	20.4	20.4	8.4	8.4	31.0	31.0	94.6	94.6	7.1	7.1	9.7	11.2	8	18	-	-	820378	811621	-	-	-	-
						1.0	-	-	20.4		8.4		31.0		94.6		7.1		10.0		26		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	20.3	20.3	8.3	8.3	31.1	31.1	95.4	95.6	7.2	7.2	12.4		19		-				-		-	
						3.7	-	-	20.3		8.3		31.1		95.8		7.2		12.6		18		-				-		-	

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 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	14:35	8.2	Surface	1.0	3.3	318	19.7	19.7	8.4	8.4	31.4	31.4	96.6	96.6	7.3	7.3	9.4	13.6	9	16	85	89	815614	804260	<0.2	<0.2	0.6	0.6
						1.0	3.3	346	19.7		8.4		31.4		96.6		7.3		9.6		10		86				<0.2		0.7	
					Middle	4.1	3.6	319	19.7	19.7	8.4	8.4	31.4	31.4	96.4	96.4	7.3		14.1		19		88				<0.2		0.5	
						4.1	3.8	338	19.7		8.4		31.4		96.4		7.3		14.2		19		88				<0.2		0.5	
					Bottom	7.2	3.5	317	19.6	19.6	8.4	8.4	31.5	31.5	96.5	96.5	7.3	7.3	17.0		20		92				<0.2		0.5	
						7.2	3.7	333	19.6		8.4		31.5		96.5		7.3		17.0		19		92				<0.2		0.7	
C2	Cloudy	Moderate	13:25	12.3	Surface	1.0	0.2	346	19.1	19.1	8.1	8.1	30.4	30.4	91.8	91.9	7.1	7.2	14.9	15.3	15	18	86	90	825689	806934	<0.2	<0.2	0.8	0.8
						1.0	0.2	318	19.1		8.1		30.4		91.9		7.1		14.9		14		87				<0.2		0.8	
					Middle	6.2	0.2	5	18.9	18.9	8.1	8.1	30.5	30.5	93.7	93.8	7.3		14.9		17		90				<0.2		0.9	
						6.2	0.2	5	18.9		8.1		30.5		93.8		7.3		14.9		18		90				<0.2		0.8	
					Bottom	11.3	0.2	14	18.7	18.7	8.2	8.2	30.6	30.6	94.7	94.8	7.4	7.4	16.2		21		92				<0.2		0.8	
						11.3	0.3	14	18.7		8.2		30.6		94.8		7.4		16.1		20		92				<0.2		0.8	
C3	Cloudy	Moderate	15:05	12.5	Surface	1.0	0.4	73	19.9	19.9	8.1	8.1	30.9	30.9	87.3	87.3	6.6	6.7	6.5	7.1	8	8	87	90	822107	817782	<0.2	<0.2	0.6	0.6
						1.0	0.5	77	19.9		8.1		30.9		87.3		6.6		6.5		7		87				<0.2		0.7	
					Middle	6.3	0.4	78	19.9	19.9	8.1	8.1	30.9	30.9	87.7	87.7	6.7		6.9		7		88				<0.2		0.5	
						6.3	0.4	80	19.9		8.1		30.9		87.7		6.7		6.9		8		89				<0.2		0.6	
					Bottom	11.5	0.3	59	19.8	19.8	8.1	8.1	30.9	30.9	88.8	88.8	6.8	6.8	8.0		7		93				<0.2		0.6	
						11.5	0.3	64	19.8		8.1		30.9		88.8		6.8		8.0		8		94				<0.2		0.8	
IM1	Cloudy	Rough	14:15	4.9	Surface	1.0	3.2	171	19.3	19.3	8.4	8.4	31.2	31.2	94.3	94.4	7.2	7.2	15.5	15.7	17	19	86	88	817943	807116	<0.2	<0.2	1.0	1.0
						1.0	3.3	173	19.3		8.4		31.2		94.4		7.2		15.2		18		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	3.1	172	19.2	19.2	8.4	8.4	31.2	31.2	97.1	97.2	7.5	7.5	15.8		21		89				<0.2		0.9	
						3.9	3.4	184	19.2		8.4		31.2		97.3		7.5		16.3		20		89				<0.2		0.9	
IM2	Cloudy	Rough	14:09	6.8	Surface	1.0	2.5	112	19.4	19.4	8.4	8.4	31.1	31.1	95.7	95.7	7.3	7.3	16.1	17.9	13	14	85	88	818160	806173	<0.2	<0.2	0.9	0.9
						1.0	2.5	122	19.4		8.4		31.1		95.7		7.3		16.2		14		86				<0.2		1.0	
					Middle	3.4	2.5	114	19.4	19.4	8.4	8.4	31.2	31.2	95.5	95.5	7.3		18.7		13		88				<0.2		0.9	
						3.4	2.6	114	19.4		8.4		31.2		95.5		7.3		18.7		14		87				<0.2		1.0	
					Bottom	5.8	2.7	111	19.4	19.4	8.4	8.4	31.2	31.2	95.6	95.6	7.3	7.3	19.1		15		91				<0.2		0.9	
						5.8	2.8	119	19.4		8.4		31.2		95.6		7.3		19.0		15		91				<0.2		0.8	
IM3	Cloudy	Rough	14:01	7.3	Surface	1.0	2.0	106	19.4	19.4	8.4	8.4	31.2	31.2	96.1	96.1	7.4	7.4	15.6	18.2	23	22	86	88	818800	805613	<0.2	<0.2	1.3	1.2
						1.0	2.1	111	19.4		8.4		31.2		96.0		7.4		15.9		23		85				<0.2		1.1	
					Middle	3.7	2.0	108	19.3	19.3	8.4	8.4	31.2	31.2	95.9	95.9	7.3		17.9		23		88				<0.2		1.3	
						3.7	2.1	111	19.3		8.4		31.2		95.9		7.3		18.3		22		87				<0.2		1.1	
					Bottom	6.3	1.8	106	19.3	19.3	8.4	8.4	31.2	31.2	96.3	96.4	7.4	7.4	20.7		21		91				<0.2		1.1	
						6.3	1.9	107	19.3		8.4		31.2		96.5		7.4		20.7		22		91				<0.2		1.0	
IM4	Cloudy	Rough	13:52	8.3	Surface	1.0	1.1	268	19.4	19.4	8.4	8.4	31.1	31.1	96.1	96.1	7.4	7.4	14.9	16.8	23	23	85	88	819733	804615	<0.2	<0.2	1.0	0.9
						1.0	1.2	285	19.4		8.4		31.1		96.0		7.4		14.7		23		85				<0.2		0.9	
					Middle	4.2	1.0	268	19.4	19.4	8.4	8.4	31.1	31.2	95.8	95.8	7.3		16.8		23		87				<0.2		1.0	
						4.2	1.0	289	19.4		8.4		31.2		95.8		7.3		16.9		23		87				<0.2		0.8	
					Bottom	7.3	1.0	271	19.4	19.4	8.4	8.4	31.3	31.3	95.9	96.0	7.3	7.4	18.8		23		91				<0.2		0.9	
						7.3	1.1	274	19.4		8.4		31.3		96.0		7.4		18.7		24		91				<0.2		0.9	
IM5	Cloudy	Rough	13:44	7.6	Surface	1.0	1.6	111	19.4	19.4	8.4	8.4	31.2	31.2	96.1	96.1	7.4	7.4	13.4	15.3	13	13	85	88	820748	804843	<0.2	<0.2	1.3	1.2
						1.0	1.6	115	19.4		8.4		31.2		96.1		7.4		13.2		13		85				<0.2		1.2	
					Middle	3.8	1.7	111	19.4	19.4	8.4	8.4	31.2	31.2	96.0	96.0	7.4		15.3		13		87				<0.2		1.1	
						3.8	1.8	118	19.4		8.4		31.2		96.0		7.4		15.0		14		87				<0.2		1.2	
					Bottom	6.6	1.6	110	19.3	19.3	8.4	8.4	31.2	31.2	96.2	96.2	7.4	7.4	17.2		14		91				<0.2		1.2	
						6.6	1.7	111	19.3		8.4		31.2		96.2		7.4		17.4		13		91				<0.2		1.1	
IM6	Cloudy	Rough	13:35	7.4	Surface	1.0	0.6	50	19.4	19.4	8.4	8.4	31.2	31.2	94.9	94.9	7.3	7.3	11.5	13.5	14	13	85	87	821080	805837	<0.2	<0.2	1.1	1.0
						1.0	0.6	50	19.4		8.4		31.2		94.9		7.3		11.5		13		85				<0.2		1.1	
					Middle	3.7	0.8	37	19.4	19.4	8.4	8.4	31.2	31.2	95.0	95.0	7.3		13.4		14		87				<0.2		1.1	
						3.7	0.8	37	19.4		8.4		31.2		95.0		7.3		13.8		13		87				<0.2		1.0	
					Bottom	6.4	0.5	50	19.2	19.2	8.3	8.3	31.3	31.3	97.9	98.0	7.5	7.5	15.4		13		90				<0.2		0.9	
						6.4	0.6	51	19.2		8.3		31.3		98.1		7.5		15.5		13		90				<0.2		0.8	
IM7	Cloudy	Rough	13:26	8.5	Surface	1.0	0.1	116	19.3	19.3	8.4	8.4	31.2	31.2	95.5	95.5	7.3	7.3	10.2	12.6	18	14	85	88	821356	806811	<0.2	<0.2	1.2	1.0
						1.0	0.1	124	19.3		8.4		31.2		95.5		7.3		10.4		18		85				<0.2		1.2	
					Middle	4.3	0.3	111	19.3	19.3	8.4	8.4	31.2	31.2	95.5	95.5	7.3		12.8		12		87				<0.2		1.0	
						4.3	0.3	115	19.3		8.4		31.2		95.5		7.3		12.6		13		87				<0.2		1.0	
					Bottom	7.5	0.2	133	19.3	19.3	8.4	8.4	31.2	31.2	95.7	95.8	7.3	7.3	14.6		12		90				<0.2		0.9	
						7.5	0.2	140	19.3		8.4		31.3		95.8		7.3		14.8		13		91				<0.2		0.9	
IM8	Cloudy	Moderate	13:48	8.0	Surface	1.0	0.4	68	18.8	18.8	8.1	8.1	30.4	30.4	93.9	93.9	7.3	7.4	16.2	18.2	19	16	88	91	821815	808140	<0.2	<0.2	0.8	0.8
						1.0	0.4	70	18.8		8.1		30.4		93.9		7.3		16.2		18		88				<0.2		0.9	
					Middle	4.0	0.4	78	18.8	18.8	8.1	8.1	30.5	30.5	94.7	94.8	7.4		17.7		15		90				<0.2		0.9	
						4.0	0.5	84	18.8		8.1		30.5		94.8		7.4		17.8		15		91				<0.2		0.9	
					Bottom	7.0	0.4	75	18.7	18.7	8.1	8.1	30.5	30.5	96.4	96.5	7.5	7.5	20.7		16		93				<0.2		0.7	
						7.0	0.4	79	18.7		8.1		30.5		96.5		7.5		20.7		15		94				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 December 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	13:53	7.7	Surface	1.0	0.4	63	19.2	19.2	8.0	8.0	30.3	30.3	91.3	91.3	7.1	7.1	13.4	16.5	15	15	87	90	822092	808820	<0.2	<0.2	0.7	0.8
						1.0	0.4	68	19.2		8.0		30.3		91.3		7.1		13.3		16		88				<0.2		0.8	
					Middle	3.9	0.5	68	19.1	19.1	8.0	8.0	30.4	30.4	91.9	92.0	7.1		16.2		16		89				<0.2		0.7	
						3.9	0.5	69	19.1		8.0		30.4		92.0		7.1		16.2		15		89				<0.2		0.8	
					Bottom	6.7	0.3	65	19.1	19.1	8.0	8.0	30.4	30.4	94.2	94.3	7.3	7.3	19.9		14		93				<0.2		0.8	
						6.7	0.3	69	19.1		8.0		30.4		94.4		7.3		19.8		13		93				<0.2		0.7	
IM10	Cloudy	Moderate	14:00	8.4	Surface	1.0	0.3	72	19.2	19.2	8.0	8.0	30.3	30.3	91.8	91.8	7.1	7.2	11.4	11.7	14	14	84	89	822405	809799	<0.2	<0.2	0.8	0.8
						1.0	0.3	77	19.2		8.0		30.3		91.8		7.1		11.5		14		85				<0.2		0.8	
					Middle	4.2	0.3	72	19.1	19.1	8.0	8.0	30.4	30.4	92.8	92.9	7.2		11.8		14		89				<0.2		0.8	
						4.2	0.3	76	19.1		8.0		30.4		92.9		7.2		11.8		15		90				<0.2		0.8	
					Bottom	7.4	0.2	64	19.1	19.1	8.0	8.0	30.4	30.4	95.0	95.1	7.4	7.4	11.8		14		93				<0.2		0.8	
						7.4	0.2	70	19.1		8.0		30.4		95.1		7.4		11.8		15		94				<0.2		0.7	
IM11	Cloudy	Moderate	14:10	8.6	Surface	1.0	0.1	138	19.5	19.5	8.0	8.0	30.6	30.6	90.3	90.3	6.9	7.0	11.8	13.9	13	15	88	90	822044	811463	<0.2	<0.2	0.8	0.7
						1.0	0.1	148	19.5		8.0		30.6		90.3		6.9		11.7		14		88				<0.2		0.8	
					Middle	4.3	0.2	142	19.4	19.4	8.0	8.0	30.6	30.6	90.7	90.7	7.0		14.5		16		89				<0.2		0.7	
						4.3	0.2	154	19.4		8.0		30.6		90.7		7.0		14.6		15		90				<0.2		0.7	
					Bottom	7.6	0.2	133	19.4	19.4	8.0	8.0	30.6	30.6	91.5	91.6	7.0	7.0	15.3		16		92				<0.2		0.7	
						7.6	0.2	139	19.4		8.0		30.6		91.7		7.0		15.8		16		93				<0.2		0.6	
IM12	Cloudy	Moderate	14:16	8.8	Surface	1.0	0.3	90	19.5	19.5	8.0	8.0	30.6	30.6	89.5	89.5	6.9	6.9	11.2	12.2	15	14	87	90	821462	812034	<0.2	<0.2	0.7	0.7
						1.0	0.3	93	19.5		8.0		30.6		89.5		6.9		11.2		14		88				<0.2		0.7	
					Middle	4.4	0.2	95	19.5	19.5	8.0	8.0	30.6	30.6	89.6	89.7	6.9		12.6		14		90				<0.2		0.7	
						4.4	0.2	102	19.5		8.0		30.6		89.7		6.9		12.6		13		90				<0.2		0.6	
					Bottom	7.8	0.1	104	19.5	19.5	8.0	8.0	30.7	30.7	94.0	94.1	7.2	7.2	12.7		14		92				<0.2		0.6	
						7.8	0.1	105	19.5		8.0		30.7		94.1		7.2		12.9		13		93				<0.2		0.6	
SR1A	Cloudy	Moderate	14:34	5.0	Surface	1.0	-	-	18.8	18.8	8.0	8.0	30.5	30.5	91.5	91.6	7.1	7.1	7.2	7.3	10	9	-	-	819975	812665	-	-	-	-
						1.0	-	-	18.8		8.0		30.5		91.6		7.1		7.2		9		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	18.8	18.8	8.0	8.0	30.5	30.5	94.2	94.2	7.3	7.3	7.4		8		-				-		-	
						4.0	-	-	18.8		8.0		30.5		94.2		7.3		7.4		8		-				-		-	
SR2	Cloudy	Moderate	14:46	5.2	Surface	1.0	0.1	64	19.5	19.5	8.0	8.0	30.7	30.7	90.2	90.2	6.9	6.9	8.2	9.9	7	8	89	91	821456	814169	<0.2	<0.2	0.6	0.7
						1.0	0.1	67	19.5		8.0		30.7		90.2		6.9		8.2		8		89				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	136	19.5	19.5	8.0	8.0	30.7	30.7	93.7	93.8	7.2	7.2	11.6		9		92				<0.2		0.7	
						4.2	0.1	136	19.5		8.0		30.7		93.8		7.2		11.6		8		93				<0.2		0.8	
SR3	Cloudy	Moderate	13:43	9.7	Surface	1.0	0.3	84	18.9	18.9	8.1	8.1	30.4	30.4	92.8	92.8	7.2	7.2	18.0	18.2	18	20	-	-	822142	807564	-	-	-	-
						1.0	0.4	91	18.9		8.1		30.4		92.8		7.2		17.9		18		-				-		-	
					Middle	4.9	0.4	87	18.9	18.9	8.1	8.0	30.4	30.4	93.2	93.2	7.2		17.3		18		-				-		-	
						4.9	0.5	87	18.9		8.0		30.4		93.2		7.2		17.1		19		-				-		-	
					Bottom	8.7	0.4	67	18.8	18.8	8.0	8.0	30.4	30.4	96.1	96.3	7.5	7.5	19.5		22		-				-		-	
						8.7	0.4	71	18.8		8.0		30.4		96.5		7.5		19.3		22		-				-		-	
SR4A	Cloudy	Calm	15:04	9.2	Surface	1.0	2.3	28	19.3	19.3	8.4	8.4	31.1	31.1	95.6	95.6	7.3	7.3	8.2	11.1	13	13	-	-	817196	807801	-	-	-	-
						1.0	2.5	28	19.3		8.4		31.1		95.5		7.3		8.6		13		-				-		-	
					Middle	4.6	2.2	32	19.3	19.3	8.4	8.4	31.2	31.2	95.3	95.3	7.3		10.7		12		-				-		-	
						4.6	2.3	34	19.3		8.4		31.2		95.3		7.3		10.9		13		-				-		-	
					Bottom	8.2	2.2	27	19.3	19.3	8.4	8.4	31.2	31.2	95.1	95.1	7.3	7.3	13.8		13		-				-		-	
						8.2	2.2	29	19.3		8.4		31.2		95.1		7.3		14.3		12		-				-		-	
SR5A	Cloudy	Calm	15:21	3.6	Surface	1.0	2.2	108	19.3	19.3	8.3	8.3	31.2	31.2	93.0	93.0	7.1	7.1	7.7	7.9	11	17	-	-	816573	810695	-	-	-	-
						1.0	2.4	109	19.3		8.3		31.2		93.0		7.1		7.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	3.2	104	19.3	19.3	8.3	8.3	31.2	31.2	93.3	93.3	7.2	7.2	8.3		22		-				-		-	
						2.6	3.5	105	19.3		8.3		31.2		93.3		7.2		8.3		21		-				-		-	
SR6A	Cloudy	Calm	16:02	3.9	Surface	1.0	3.2	117	19.7	19.7	8.4	8.4	31.3	31.3	91.1	91.1	6.9	6.9	15.9	17.3	23	24	-	-	817966	814736	-	-	-	-
						1.0	3.3	120	19.7		8.4		31.3		91.1		6.9		16.2		22		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	1.6	159	19.6	19.6	8.4	8.4	31.3	31.3	91.7	91.8	7.0	7.0	18.5		25		-				-		-	
						2.9	1.8	167	19.6		8.4		31.4		91.8		7.0		18.6		25		-				-		-	
SR7	Cloudy	Moderate	15:34	15.9	Surface	1.0	0.3	60	19.8	19.8	8.1	8.1	30.9	30.9	86.8	86.8	6.6	6.6	8.2	9.6	8	9	-	-	823640	823728	-	-	-	-
						1.0	0.3	64	19.8		8.1		30.9		86.8		6.6		8.3		8		-				-		-	
					Middle	8.0	0.2	57	19.8	19.8	8.1	8.1	30.9	30.9	87.2	87.2	6.6		10.3		10		-				-		-	
						8.0	0.2	61	19.8		8.1		30.9		87.2		6.6		10.4		9		-				-		-	
					Bottom	14.9	0.2	52	19.8	19.8	8.1	8.1	30.9	30.9	89.0	89.1	6.8	6.8	10.3		10		-				-		-	
						14.9	0.2	53	19.8		8.1		30.9		89.1		6.8		10.3		11		-				-		-	
SR8	Cloudy	Moderate	14:26	5.1	Surface	1.0	-	-	19.2	19.2	8.0	8.0	30.5	30.5	93.2	93.3	7.2	7.2	9.0	9.9	13	13	-	-	820407	811645	-	-	-	-
						1.0	-	-	19.2		8.0		30.5		93.3		7.2		9.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	19.1	19.1	8.0	8.0	30.5	30.5	97.3	97.4	7.5	7.5	10.7		14		-				-		-	
						4.1	-	-	19.1		8.0		30.5		97.4		7.5		10.7		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 17 December 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	10:05	8.1	Surface	1.0	0.6	106	19.3	19.3	8.4	8.4	30.9	30.9	95.6	95.6	7.3	7.3	12.9	14.8	26	26	86	88	815631	804226	<0.2	<0.2	0.7	0.8
						1.0	0.6	111	19.3		8.4		31.0		95.5		7.3		13.1		27		86				<0.2		0.8	
					Middle	4.1	0.5	120	19.4	19.4	8.4	8.4	31.2	31.2	95.5	95.5	7.3		14.8		26		88				<0.2		0.8	
						4.1	0.5	125	19.4		8.4		31.2		95.5		7.3		14.9		27		88				<0.2		0.8	
					Bottom	7.1	0.6	115	19.4	19.4	8.4	8.4	31.2	31.2	95.5	95.5	7.3	7.3	16.5		26		91				<0.2		0.8	
						7.1	0.6	116	19.4		8.4		31.2		95.5		7.3		16.7		24		91				<0.2		0.9	
C2	Cloudy	Moderate	10:40	11.5	Surface	1.0	0.3	334	19.2	19.2	8.0	8.0	30.1	30.1	90.8	90.8	7.0	7.1	9.7	12.9	14	16	87	90	825685	806931	<0.2	<0.2	0.8	0.9
						1.0	0.4	356	19.2		8.0		30.1		90.8		7.0		9.8		15		88				<0.2		0.8	
					Middle	5.8	0.4	340	19.2	19.2	8.0	8.0	30.1	30.1	91.7	91.8	7.1		12.6		21		90				<0.2		1.0	
						5.8	0.5	313	19.2		8.0		30.1		91.8		7.1		12.6		13		90				<0.2		0.8	
					Bottom	10.5	0.4	351	19.2	19.2	8.0	8.0	30.1	30.1	93.6	93.7	7.2	7.2	16.3		17		91				<0.2		0.9	
						10.5	0.4	323	19.2		8.0		30.1		93.7		7.2		16.5		18		92				<0.2		0.9	
C3	Cloudy	Moderate	08:59	11.0	Surface	1.0	0.4	218	19.5	19.5	8.0	8.0	30.6	30.6	90.5	90.5	6.9	7.0	8.7	11.3	9	11	79	88	822088	817786	<0.2	<0.2	0.6	0.7
						1.0	0.4	238	19.5		8.0		30.6		90.5		6.9		8.8		10		84				<0.2		0.6	
					Middle	5.5	0.3	260	19.5	19.5	8.0	8.0	30.6	30.6	90.9	90.9	7.0		11.1		12		89				<0.2		0.7	
						5.5	0.3	277	19.5		8.0		30.6		90.9		7.0		11.2		11		89				<0.2		0.7	
					Bottom	10.0	0.2	259	19.5	19.5	8.0	8.0	30.6	30.6	92.5	92.5	7.1	7.1	13.9		12		93				<0.2		0.8	
						10.0	0.2	277	19.5		8.0		30.6		92.5		7.1		13.9		11		94				<0.2		0.7	
IM1	Cloudy	Rough	10:27	4.8	Surface	1.0	1.5	286	19.3	19.3	8.4	8.4	31.2	31.2	94.4	94.5	7.2	7.2	12.7	14.1	16	16	87	88	817926	807142	<0.2	<0.2	0.7	0.8
						1.0	1.6	298	19.3		8.4		31.2		94.5		7.2		13.1		16		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	310	19.3	19.3	8.4	8.4	31.2	31.2	94.5	94.5	7.3	7.3	15.3		16		89				<0.2		0.8	
						3.8	0.1	318	19.3		8.4		31.2		94.5		7.3		15.1		16		89				<0.2		0.7	
IM2	Cloudy	Rough	10:37	6.9	Surface	1.0	1.0	308	19.4	19.4	8.4	8.4	31.1	31.1	94.9	94.9	7.3	7.3	15.8	16.9	22	22	85	87	818143	806146	<0.2	<0.2	0.8	0.8
						1.0	1.0	317	19.3		8.4		31.1		94.9		7.3		16.0		21		85				<0.2		0.7	
					Middle	3.5	0.8	309	19.3	19.3	8.4	8.4	31.2	31.2	94.9	94.9	7.3		17.0		23		87				<0.2		0.8	
						3.5	0.8	310	19.3		8.4		31.2		94.9		7.3		17.0		22		87				<0.2		0.7	
					Bottom	5.9	0.8	303	19.3	19.3	8.4	8.4	31.2	31.2	95.4	95.6	7.3	7.3	17.8		22		90				<0.2		0.7	
						5.9	0.8	327	19.3		8.3		31.2		95.7		7.3		18.0		23		90				<0.2		0.8	
IM3	Cloudy	Rough	10:45	7.2	Surface	1.0	0.4	338	19.4	19.4	8.4	8.4	31.0	31.0	94.2	94.2	7.2	7.2	16.7	17.8	28	28	85	87	818768	805607	<0.2	<0.2	0.9	0.9
						1.0	0.4	354	19.4		8.4		31.0		94.1		7.2		16.9		27		85				<0.2		1.0	
					Middle	3.6	0.3	329	19.4	19.4	8.4	8.4	31.0	31.0	94.0	94.0	7.2		17.8		27		87				<0.2		0.9	
						3.6	0.3	342	19.4		8.4		31.0		94.0		7.2		17.9		28		87				<0.2		1.0	
					Bottom	6.2	0.4	324	19.4	19.4	8.4	8.4	31.0	31.0	93.9	93.9	7.2	7.2	18.8		28		90				<0.2		0.9	
						6.2	0.4	342	19.4		8.4		31.0		93.9		7.2		18.8		29		90				<0.2		0.9	
IM4	Cloudy	Rough	10:59	8.2	Surface	1.0	1.7	45	19.3	19.3	8.4	8.4	31.1	31.1	94.8	94.8	7.3	7.3	12.3	15.2	18	24	85	87	819727	804584	<0.2	<0.2	0.7	0.8
						1.0	1.7	48	19.3		8.4		31.1		94.8		7.3		12.4		18		84				<0.2		0.8	
					Middle	4.1	1.9	43	19.3	19.3	8.4	8.4	31.0	31.0	94.6	94.6	7.3		15.5		18		87				<0.2		0.7	
						4.1	2.0	47	19.3		8.4		31.0		94.6		7.3		15.7		19		87				<0.2		0.8	
					Bottom	7.2	1.7	48	19.3	19.3	8.4	8.4	31.0	31.0	94.6	94.6	7.3	7.3	17.6		35		89				<0.2		0.8	
						7.2	1.9	49	19.3		8.4		31.0		94.6		7.3		17.5		35		90				<0.2		0.8	
IM5	Cloudy	Rough	11:08	7.5	Surface	1.0	1.4	106	19.4	19.4	8.4	8.4	30.9	30.9	93.7	93.7	7.2	7.2	11.6	13.4	19	17	85	87	820737	804880	<0.2	<0.2	0.8	0.8
						1.0	1.5	108	19.4		8.4		30.9		93.7		7.2		11.6		18		85				<0.2		0.7	
					Middle	3.8	1.5	103	19.4	19.4	8.4	8.4	30.9	30.9	93.7	93.7	7.2		13.8		17		87				<0.2		0.8	
						3.8	1.6	103	19.4		8.4		30.9		93.7		7.2		13.8		16		87				<0.2		0.8	
					Bottom	6.5	1.4	103	19.3	19.3	8.3	8.3	31.0	31.0	94.3	94.4	7.2	7.2	14.9		16		90				<0.2		0.8	
						6.5	1.5	103	19.3		8.3		31.0		94.4		7.2		14.7		17		90				<0.2		0.9	
IM6	Cloudy	Rough	11:17	7.3	Surface	1.0	1.8	108	19.3	19.3	8.4	8.4	31.2	31.2	95.1	95.1	7.3	7.3	10.3	12.8	13	14	85	87	821060	805808	<0.2	<0.2	0.7	0.7
						1.0	1.9	113	19.3		8.4		31.2		95.1		7.3		10.4		14		84				<0.2		0.7	
					Middle	3.7	2.1	108	19.3	19.3	8.4	8.4	31.2	31.2	95.1	95.1	7.3		12.5		13		87				<0.2		0.8	
						3.7	2.3	111	19.3		8.4		31.2		95.1		7.3		12.6		14		87				<0.2		0.7	
					Bottom	6.3	2.0	109	19.3	19.3	8.4	8.4	31.2	31.2	95.6	95.7	7.3	7.3	15.7		14		90				<0.2		0.7	
						6.3	2.1	118	19.3		8.4		31.2		95.8		7.3		15.7		15		90				<0.2		0.8	
IM7	Cloudy	Rough	11:29	8.4	Surface	1.0	1.6	293	19.3	19.3	8.4	8.4	31.2	31.2	95.4	95.4	7.3	7.3	9.6	11.5	19	19	85	87	821326	806841	<0.2	<0.2	0.8	0.8
						1.0	1.7	320	19.3		8.4		31.2		95.4		7.3		9.9		20		84				<0.2		0.8	
					Middle	4.2	1.9	294	19.3	19.3	8.4	8.4	31.2	31.2	95.5	95.5	7.3		10.9		19		87				<0.2		0.8	
						4.2	2.0	317	19.3		8.4		31.2		95.5		7.3		11.2		19		87				<0.2		0.9	
					Bottom	7.4	2.0	290	19.2	19.2	8.3	8.3	31.3	31.3	95.7	95.8	7.3	7.4	13.9		18		90				<0.2		0.7	
						7.4	2.0	315	19.2		8.3		31.3		95.8		7.4		13.4		17		90				<0.2		0.8	
IM8	Cloudy	Moderate	10:14	7.5	Surface	1.0	0.1	354	19.2	19.2	8.0	8.0	30.2	30.2	91.6	91.7	7.1	7.1	15.7	16.2	21	20	85	89	821815	808120	<0.2	<0.2	0.7	0.8
						1.0	0.1	326	19.2		8.0		30.2		91.7		7.1		15.8		20		85				<0.2		0.8	
					Middle	3.8	0.0	349	19.2	19.2	8.0	8.0	30.2	30.2	92.1	92.1	7.1		16.3		21		89				<0.2		0.7	
						3.8	0.0	359	19.2		8.0		30.2		92.1		7.1		16.5		20		89				<0.2		0.8	
					Bottom	6.5	0.1	179	19.1	19.1	8.0	8.0	30.2	30.2	92.9	92.9	7.2	7.2	16.4		20		93				<0.2		0.7	
						6.5	0.1	187	19.1		8.0		30.2		92.9		7.2		16.8		20		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 17 December 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:10	7.2	Surface	1.0	0.3	180	19.2	19.2	8.0	8.0	30.4	30.4	91.4	91.4	7.1	7.2	15.1	16.4	23	22	85	89	822106	808811	<0.2	<0.2	0.8	0.8
						1.0	0.3	196	19.2		8.0		30.4		91.4		7.1		15.2		23		86						0.9	
					Middle	3.6	0.3	179	19.2	19.2	8.0	8.0	30.4	30.4	92.7	92.8	7.2		16.5		22		89				<0.2		0.8	
						3.6	0.3	189	19.2		8.0		30.4		92.8		7.2		16.6		21		89				<0.2		0.6	
					Bottom	6.2	0.5	161	19.1	19.1	8.0	8.0	30.4	30.4	96.6	96.7	7.5	7.5	17.4		21		92				<0.2		0.7	
						6.2	0.5	174	19.1		8.0		30.4		96.8		7.5		17.3		21		92				<0.2		0.7	
IM10	Cloudy	Moderate	10:03	7.3	Surface	1.0	0.5	289	19.0	19.0	8.1	8.1	30.3	30.3	92.2	92.2	7.2	7.2	17.1	19.3	27	28	87	90	822381	809771	<0.2	<0.2	0.8	0.7
						1.0	0.5	310	19.0		8.1		30.3		92.2		7.2		17.1		28		87				<0.2		0.8	
					Middle	3.7	0.5	289	19.0	19.0	8.0	8.0	30.3	30.3	92.8	92.8	7.2		19.5		28		88				<0.2		0.7	
						3.7	0.5	295	19.0		8.0		30.3		92.8		7.2		19.7		29		89				<0.2		0.6	
					Bottom	6.3	0.4	297	19.0	19.0	8.0	8.0	30.3	30.3	95.1	95.2	7.4	7.4	21.3		29		93				<0.2		0.7	
						6.3	0.4	315	19.0		8.0		30.3		95.3		7.4		21.3		28		93				<0.2		0.6	
IM11	Cloudy	Moderate	09:53	7.2	Surface	1.0	0.5	290	19.0	19.0	8.1	8.1	30.5	30.5	92.4	92.5	7.2	7.2	17.6	17.4	28	30	85	90	822074	811478	<0.2	<0.2	0.8	0.7
						1.0	0.5	296	19.0		8.1		30.5		92.5		7.2		17.8		27		86				<0.2		0.7	
					Middle	3.6	0.5	290	19.0	19.0	8.0	8.0	30.5	30.5	92.8	92.8	7.2		16.2		30		91				<0.2		0.7	
						3.6	0.5	297	19.0		8.0		30.5		92.8		7.2		16.2		31		91				<0.2		0.7	
					Bottom	6.2	0.5	289	19.0	19.0	8.0	8.0	30.5	30.5	93.8	93.9	7.3	7.3	18.1		32		93				<0.2		0.8	
						6.2	0.5	293	19.0		8.0		30.5		93.9		7.3		18.4		33		94				<0.2		0.7	
IM12	Cloudy	Moderate	09:47	8.0	Surface	1.0	0.5	277	19.0	19.0	8.1	8.1	30.5	30.5	92.9	92.9	7.2	7.2	17.6	19.3	22	29	86	89	821438	812065	<0.2	<0.2	0.7	0.8
						1.0	0.5	298	19.0		8.1		30.5		92.9		7.2		17.5		21		86				<0.2		0.7	
					Middle	4.0	0.5	273	19.0	19.0	8.0	8.0	30.5	30.5	93.4	93.5	7.2		19.6		30		89				<0.2		0.8	
						4.0	0.6	274	19.0		8.0		30.5		93.5		7.2		19.4		31		90				<0.2		0.9	
					Bottom	7.0	0.5	278	19.0	19.0	8.0	8.0	30.5	30.5	93.9	94.0	7.3	7.3	20.7		34		91				<0.2		0.7	
						7.0	0.5	297	19.0		8.0		30.5		94.0		7.3		20.8		33		92				<0.2		0.7	
SR1A	Cloudy	Moderate	09:29	5.1	Surface	1.0	-	-	18.9	18.9	8.0	8.0	30.5	30.5	91.3	91.4	7.1	7.1	10.7	11.6	14	14	-	-	819977	812661	-	-	-	-
						1.0	-	-	18.9		8.0		30.5		91.4		7.1		10.6		14		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	18.8	18.8	8.0	8.0	30.5	30.5	95.5	95.6	7.4	7.4	12.3		14		-				-		-	
						4.1	-	-	18.8		8.0		30.5		95.6		7.4		12.7		15		-				-		-	
SR2	Cloudy	Moderate	09:17	4.4	Surface	1.0	0.1	193	19.0	19.0	8.0	8.0	30.5	30.5	94.8	94.9	7.3	7.4	10.9	11.7	9	11	88	90	821484	814150	<0.2	<0.2	0.7	0.7
						1.0	0.1	206	19.0		8.0		30.5		94.9		7.4		10.8		9		89				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	210	18.9	18.9	8.0	8.0	30.5	30.5	95.8	95.8	7.4	7.4	12.3		14		91				<0.2		0.6	
						3.4	0.1	218	18.9		8.0		30.5		95.8		7.4		12.7		13		91				<0.2		0.8	
SR3	Cloudy	Moderate	10:21	8.8	Surface	1.0	0.0	350	19.2	19.2	8.0	8.0	30.2	30.2	90.6	90.6	7.0	7.0	16.1	15.8	21	21	-	-	822170	807578	-	-	-	-
						1.0	0.0	322	19.2		8.0		30.2		90.6		7.0		16.4		22		-				-		-	
					Middle	4.4	0.1	275	19.2	19.2	8.0	8.0	30.2	30.2	90.6	90.6	7.0		15.1		22		-				-		-	
						4.4	0.1	300	19.2		8.0		30.2		90.6		7.0		15.2		21		-				-		-	
					Bottom	7.8	0.1	151	19.2	19.2	8.0	8.0	30.2	30.2	90.6	90.7	7.0	7.0	16.0		19		-				-		-	
						7.8	0.1	159	19.2		8.0		30.2		90.7		7.0		15.9		18		-				-		-	
SR4A	Cloudy	Calm	09:38	9.2	Surface	1.0	0.5	100	19.3	19.3	8.4	8.4	31.2	31.2	91.5	91.5	7.0	7.0	10.0	11.1	13	14	-	-	817169	807795	-	-	-	-
						1.0	0.5	108	19.3		8.4		31.2		91.5		7.0		10.1		12		-				-		-	
					Middle	4.6	0.5	96	19.3	19.3	8.4	8.4	31.2	31.2	91.4	91.4	7.0		11.2		14		-				-		-	
						4.6	0.5	102	19.3		8.4		31.2		91.4		7.0		11.4		14		-				-		-	
					Bottom	8.2	0.2	82	19.3	19.3	8.4	8.4	31.2	31.2	91.8	91.9	7.0	7.1	12.0		14		-				-		-	
						8.2	0.3	83	19.3		8.4		31.2		91.9		7.1		12.1		14		-				-		-	
SR5A	Cloudy	Calm	09:18	3.3	Surface	1.0	0.2	293	19.3	19.3	8.4	8.4	31.2	31.2	88.8	88.8	6.8	6.8	11.5	12.0	15	14	-	-	816601	810690	-	-	-	-
						1.0	0.2	306	19.3		8.4		31.2		88.7		6.8		11.4		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.2	300	19.3	19.3	8.4	8.4	31.2	31.2	86.5	86.5	6.6	6.6	12.6		13		-				-		-	
						2.3	0.2	324	19.3		8.4		31.2		86.4		6.6		12.5		12		-				-		-	
SR6A	Cloudy	Calm	08:49	3.6	Surface	1.0	3.4	154	19.7	19.7	8.3	8.3	31.3	31.3	90.3	90.3	6.9	6.9	10.9	12.0	14	14	-	-	817970	814743	-	-	-	-
						1.0	3.6	167	19.7		8.3		31.3		90.3		6.9		10.8		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	3.6	153	19.6	19.6	8.3	8.3	31.3	31.3	90.4	90.4	6.9	6.9	13.2		14		-				-		-	
						2.6	3.6	157	19.6		8.3		31.3		90.4		6.9		13.0		14		-				-		-	
SR7	Cloudy	Moderate	08:29	15.3	Surface	1.0	0.8	321	19.7	19.7	8.0	8.0	30.7	30.7	87.5	87.5	6.7	6.7	10.0	10.8	12	12	-	-	823621	823763	-	-	-	-
						1.0	0.8	343	19.7		8.0		30.7		87.5		6.7		10.1		12		-				-		-	
					Middle	7.7	0.7	317	19.7	19.7	8.0	8.0	30.7	30.7	87.7	87.7	6.7		11.6		12		-				-		-	
						7.7	0.7	322	19.7		8.0		30.7		87.7		6.7		11.5		12		-				-		-	
					Bottom	14.3	0.6	316	19.7	19.7	7.9	7.9	30.7	30.7	88.3	88.4	6.7	6.7	10.8		12		-				-		-	
						14.3	0.6	332	19.7		7.9		30.7		88.4		6.7		10.9		13		-				-		-	
SR8	Cloudy	Moderate	09:39	5.2	Surface	1.0	-	-	18.9	18.9	8.1	8.1	30.4	30.4	94.1	94.2	7.3	7.3	11.2	11.8	14	14	-	-	820379	811600	-	-	-	-
						1.0	-	-	18.9		8.1		30.4		94.2		7.3		11.3		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	18.8	18.8	8.0	8.0	30.5	30.5	96.3	96.5	7.5	7.5	12.5		15		-				-		-	
						4.2	-	-	18.8		8.0		30.5		96.6		7.5		12.3		14		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	16:28	8.6	Surface	1.0	0.0	155	19.1	19.1	8.4	8.4	31.8	31.8	98.1	98.1	7.5	7.5	16.7	18.2	21	24	84	89	815615	804238	<0.2	<0.2	0.5	0.5
						1.0	0.0	161	19.1		8.4		31.8		98.1		7.5		16.6		21		85				<0.2		0.5	
					Middle	4.3	0.1	300	19.1	19.1	8.4	8.4	31.8	31.8	97.8	97.8	7.5		18.5		25		90				<0.2		0.6	
						4.3	0.1	317	19.1		8.4		31.8		97.8		7.5		18.5		24		89				<0.2		0.5	
					Bottom	7.6	0.1	4	19.1	19.1	8.4	8.4	31.8	31.8	97.8	97.9	7.5	7.5	19.2		26		93				<0.2		0.4	
						7.6	0.1	4	19.1		8.4		31.8		97.9		7.5		19.7		25		93				<0.2		0.5	
C2	Cloudy	Moderate	15:04	12.1	Surface	1.0	0.2	135	18.6	18.6	8.1	8.1	30.4	30.4	93.2	93.2	7.3	7.3	12.2	13.0	13	13	86	88	825683	806925	<0.2	<0.2	1.0	1.0
						1.0	0.2	139	18.5		8.1		30.4		93.2		7.3		12.3		13		87				<0.2		1.0	
					Middle	6.1	0.5	154	18.4	18.4	8.1	8.1	30.5	30.5	93.7	93.7	7.3		14.3		13		88				<0.2		1.0	
						6.1	0.5	157	18.4		8.1		30.5		93.7		7.3		14.3		13		89				<0.2		1.0	
					Bottom	11.1	0.5	144	18.3	18.3	8.1	8.1	30.5	30.5	94.7	94.7	7.4	7.4	12.3		14		90				<0.2		0.9	
						11.1	0.5	145	18.3		8.1		30.5		94.7		7.4		12.8		14		90				<0.2		0.9	
C3	Cloudy	Moderate	16:54	12.4	Surface	1.0	0.4	286	19.4	19.4	8.0	8.0	30.8	30.8	89.3	89.3	6.9	7.0	6.3	6.6	11	10	85	88	822126	817801	<0.2	<0.2	0.5	0.5
						1.0	0.4	303	19.4		8.0		30.8		89.3		6.9		6.3		12		85				<0.2		0.5	
					Middle	6.2	0.2	257	19.4	19.4	8.0	8.0	30.8	30.8	90.6	90.7	7.0		6.7		10		88				<0.2		0.6	
						6.2	0.2	280	19.4		8.0		30.8		90.8		7.0		6.8		9		89				<0.2		0.5	
					Bottom	11.4	0.1	120	19.4	19.4	8.0	8.0	30.8	30.8	93.8	93.9	7.2	7.2	6.9		8		89				<0.2		0.5	
						11.4	0.1	130	19.4		8.0		30.8		93.9		7.2		6.9		7		89				<0.2		0.6	
IM1	Cloudy	Rough	16:07	5.2	Surface	1.0	0.1	134	18.7	18.7	8.4	8.4	31.3	31.3	97.0	97.0	7.5	7.5	15.9	17.2	24	23	87	90	817969	807148	<0.2	<0.2	0.7	0.8
						1.0	0.1	141	18.7		8.4		31.3		97.0		7.5		16.0		23		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	311	18.7	18.7	8.4	8.4	31.3	31.3	96.7	96.7	7.5	7.5	18.3		23		92				<0.2		0.8	
						4.2	0.1	337	18.7		8.4		31.3		96.7		7.5		18.6		22		93				<0.2		0.7	
IM2	Cloudy	Rough	15:55	6.9	Surface	1.0	0.1	199	18.7	18.7	8.4	8.4	31.4	31.4	97.9	97.9	7.6	7.6	17.3	18.4	31	29	86	90	818143	806184	<0.2	<0.2	0.7	0.7
						1.0	0.1	210	18.7		8.4		31.4		97.9		7.6		17.1		30		87				<0.2		0.7	
					Middle	3.5	0.2	161	18.7	18.7	8.4	8.4	31.5	31.5	97.6	97.6	7.6		18.5		28		90				<0.2		0.7	
						3.5	0.2	174	18.7		8.4		31.5		97.6		7.6		18.2		28		90				<0.2		0.6	
					Bottom	5.9	0.2	114	18.7	18.7	8.4	8.4	31.5	31.5	98.0	98.1	7.6	7.6	19.8		27		93				<0.2		0.6	
						5.9	0.2	121	18.7		8.4		31.5		98.1		7.6		19.6		27		94				<0.2		0.6	
IM3	Cloudy	Rough	15:46	7.3	Surface	1.0	0.2	74	18.8	18.8	8.4	8.4	31.5	31.5	97.5	97.5	7.5	7.5	17.1	18.9	28	27	85	89	818776	805616	<0.2	<0.2	0.6	0.7
						1.0	0.2	77	18.8		8.4		31.5		97.5		7.5		17.0		28		86				<0.2		0.7	
					Middle	3.7	0.2	41	18.8	18.8	8.4	8.4	31.5	31.5	97.4	97.4	7.5		19.2		28		89				<0.2		0.7	
						3.7	0.2	41	18.8		8.4		31.5		97.4		7.5		19.3		27		89				<0.2		0.7	
					Bottom	6.3	0.2	105	18.8	18.8	8.4	8.4	31.5	31.5	97.4	97.4	7.5	7.5	20.2		24		94				<0.2		0.7	
						6.3	0.2	109	18.8		8.4		31.5		97.4		7.5		20.7		25		93				<0.2		0.6	
IM4	Cloudy	Rough	15:36	7.6	Surface	1.0	0.9	195	18.8	18.8	8.4	8.4	31.5	31.5	97.6	97.6	7.6	7.6	16.6	18.4	23	24	84	89	819745	804629	<0.2	<0.2	0.8	0.7
						1.0	0.9	201	18.8		8.4		31.5		97.6		7.6		16.4		24		85				<0.2		0.6	
					Middle	3.8	0.7	188	18.8	18.8	8.4	8.4	31.5	31.5	97.5	97.5	7.5		18.0		24		89				<0.2		0.6	
						3.8	0.7	204	18.8		8.4		31.5		97.5		7.5		17.9		24		89				<0.2		0.6	
					Bottom	6.6	0.4	170	18.8	18.8	8.4	8.4	31.5	31.5	97.5	97.5	7.5	7.5	20.7		25		94				<0.2		0.8	
						6.6	0.4	184	18.8		8.4		31.5		97.5		7.5		20.8		25		93				<0.2		0.7	
IM5	Cloudy	Rough	15:25	7.4	Surface	1.0	0.7	216	18.7	18.7	8.4	8.4	31.4	31.4	97.9	98.0	7.6	7.6	16.4	18.5	25	24	86	89	820738	804847	<0.2	<0.2	0.7	0.7
						1.0	0.7	221	18.7		8.4		31.4		98.0		7.6		16.4		25		87				<0.2		0.7	
					Middle	3.7	0.7	201	18.7	18.7	8.4	8.4	31.4	31.4	97.9	97.9	7.6		18.7		23		90				<0.2		0.8	
						3.7	0.7	217	18.7		8.4		31.4		97.9		7.6		18.5		23		90				<0.2		0.8	
					Bottom	6.4	0.4	183	18.6	18.6	8.4	8.4	31.5	31.5	99.6	99.9	7.7	7.8	20.7		23		91				<0.2		0.6	
						6.4	0.4	184	18.6		8.4		31.5		100.1		7.8		20.5		22		91				<0.2		0.6	
IM6	Cloudy	Rough	15:15	7.8	Surface	1.0	0.5	243	18.7	18.7	8.4	8.4	31.3	31.3	96.9	96.9	7.5	7.5	17.4	18.2	28	28	84	89	821044	805826	<0.2	<0.2	0.8	0.7
						1.0	0.5	244	18.7		8.4		31.3		96.9		7.5		17.3		28		85				<0.2		0.7	
					Middle	3.9	0.5	231	18.7	18.7	8.4	8.4	31.3	31.3	96.7	96.8	7.5		18.4		28		90				<0.2		0.8	
						3.9	0.5	243	18.7		8.4		31.3		96.8		7.5		18.3		28		92				<0.2		0.7	
					Bottom	6.8	0.3	199	18.7	18.7	8.4	8.4	31.3	31.3	97.4	97.4	7.5	7.6	18.8		27		92				<0.2		0.7	
						6.8	0.3	207	18.7		8.4		31.3		97.4		7.6		18.9		27		93				<0.2		0.7	
IM7	Cloudy	Rough	15:07	8.4	Surface	1.0	0.2	275	18.7	18.7	8.4	8.4	31.3	31.3	96.9	96.9	7.5	7.5	18.7	19.6	26	26	85	90	821345	806817	<0.2	<0.2	0.7	0.8
						1.0	0.2	281	18.7		8.4		31.3		96.9		7.5		18.4		27		86				<0.2		0.7	
					Middle	4.2	0.2	216	18.7	18.7	8.4	8.4	31.3	31.3	96.7	96.8	7.5		19.2		26		89				<0.2		0.8	
						4.2	0.2	237	18.7		8.4		31.3		96.8		7.5		19.4		25		90				<0.2		0.7	
					Bottom	7.4	0.3	163	18.7	18.7	8.3	8.3	31.3	31.3	96.8	96.9	7.5	7.5	20.9		25		94				<0.2		0.8	
						7.4	0.3	178	18.7		8.3		31.3		96.9		7.5		21.1		25		93				<0.2		0.9	
IM8	Cloudy	Moderate	15:28	7.6	Surface	1.0	0.1	59	18.3	18.3	8.0	8.0	30.5	30.5	95.8	95.8	7.5	7.6	18.5	20.8	20	17	82	87	821824	808127	<0.2	<0.2	1.0	0.9
						1.0	0.1	63	18.3		8.0		30.5		95.8		7.5		18.5		20		83				<0.2		0.9	
					Middle	3.8	0.2	68	18.2	18.2	8.0	8.0	30.5	30.5	96.7	96.7	7.6		21.0		17		88				<0.2		0.9	
						3.8	0.2	69	18.2		8.0		30.5		96.7		7.6		21.0		17		89				<0.2		0.8	
					Bottom	6.6	0.2	63	18.2	18.2	8.0	8.0	30.5	30.5	97.8	97.9	7.7	7.7	22.7		15		89				<0.2		0.8	
						6.6	0.2	67	18.2		8.0		30.5		98.0		7.7		23.0		14		89				<0.2		0.9	

DA: Depth-Averaged

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

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

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Water Quality Monitoring
Water Quality Monitoring Results on 19 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	15:34	7.2	Surface	1.0	0.2	67	18.6	18.6	8.0	8.0	30.4	30.4	93.8	93.8	7.3	7.4	10.6	11.7	14	14	84	87	822107	808797	<0.2	<0.2	0.9	0.9
						1.0	0.2	73	18.6		8.0		30.4		93.8		7.3		10.6		15		84				<0.2		1.0	
					Middle	3.6	0.2	66	18.6	18.6	8.0	8.0	30.4	30.4	95.0	95.1	7.4		11.6		14		88				<0.2		0.9	
						3.6	0.2	66	18.6		8.0		30.4		95.1		7.4		11.6		13		88				<0.2		0.9	
					Bottom	6.2	0.2	45	18.7	18.7	8.0	8.0	30.5	30.5	97.0	97.1	7.6	7.6	13.0		12		90				<0.2		0.8	
						6.2	0.2	47	18.7		8.0		30.5		97.1		7.6		13.1		13		90				<0.2		0.9	
IM10	Cloudy	Moderate	15:41	7.9	Surface	1.0	0.2	355	18.7	18.7	8.0	8.0	30.6	30.6	93.0	93.0	7.2	7.3	11.9	12.8	16	15	84	88	822389	809784	<0.2	<0.2	1.1	1.0
						1.0	0.2	359	18.7		8.0		30.6		93.0		7.2		11.9		16		84				<0.2		1.1	
					Middle	4.0	0.2	342	18.7	18.7	8.0	8.0	30.6	30.6	94.6	94.6	7.4		13.0		14		87				<0.2		0.9	
						4.0	0.2	345	18.7		8.0		30.6		94.6		7.4		13.0		14		88				<0.2		0.9	
					Bottom	6.9	0.2	339	18.6	18.6	8.0	8.0	30.6	30.6	95.6	95.7	7.5	7.5	13.4		14		93				<0.2		0.9	
						6.9	0.2	312	18.6		8.0		30.6		95.7		7.5		13.5		14		90				<0.2		0.9	
IM11	Cloudy	Moderate	15:52	7.6	Surface	1.0	0.1	279	18.9	18.9	8.0	8.0	30.7	30.7	93.1	93.2	7.2	7.3	9.6	10.2	10	11	82	87	822073	811440	<0.2	<0.2	0.9	0.9
						1.0	0.1	303	18.9		8.0		30.7		93.2		7.2		9.6		11		82				<0.2		0.9	
					Middle	3.8	0.1	278	18.9	18.9	8.0	8.0	30.7	30.7	95.1	95.2	7.4		10.3		10		89				<0.2		0.9	
						3.8	0.1	295	18.9		8.0		30.7		95.3		7.4		10.4		11		89				<0.2		0.9	
					Bottom	6.6	0.1	288	18.9	18.9	8.0	8.0	30.7	30.7	96.4	96.5	7.5	7.5	10.7		10		90				<0.2		0.8	
						6.6	0.1	316	18.9		8.0		30.7		96.6		7.5		10.9		11		90				<0.2		0.7	
IM12	Cloudy	Moderate	15:59	9.4	Surface	1.0	0.2	259	19.1	19.1	8.0	8.0	30.7	30.7	90.1	90.1	7.0	7.0	13.1	14.1	11	12	84	87	821441	812024	<0.2	<0.2	0.8	0.9
						1.0	0.2	259	19.1		8.0		30.7		90.1		7.0		13.0		11		84				<0.2		0.8	
					Middle	4.7	0.2	243	19.1	19.1	8.0	8.0	30.7	30.7	90.6	90.6	7.0		12.3		12		85				<0.2		0.8	
						4.7	0.2	243	19.1		8.0		30.7		90.6		7.0		12.2		11		88				<0.2		0.9	
					Bottom	8.4	0.1	271	19.1	19.1	8.0	8.0	30.7	30.7	93.6	93.7	7.2	7.2	16.9		12		89				<0.2		0.9	
						8.4	0.1	273	19.1		8.0		30.7		93.7		7.2		17.0		12		90				<0.2		0.9	
SR1A	Cloudy	Moderate	16:18	4.8	Surface	1.0	-	-	18.5	18.5	8.0	8.0	30.6	30.6	93.7	93.8	7.3	7.3	9.3	9.4	9	10	-	-	819974	812664	-	-	-	-
						1.0	-	-	18.5		8.0		30.6		93.9		7.3		9.3		10		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	18.5	18.5	8.0	8.0	30.6	30.6	95.7	95.8	7.5	7.5	9.6		10		-				-		-	
						3.8	-	-	18.5		8.0		30.6		95.8		7.5		9.6		10		-				-		-	
SR2	Cloudy	Moderate	16:31	4.9	Surface	1.0	0.2	326	19.3	19.3	8.0	8.0	30.8	30.8	90.0	90.0	6.9	6.9	7.6	8.2	9	9	88	89	821463	814148	<0.2	<0.2	0.9	0.9
						1.0	0.2	349	19.3		8.0		30.8		90.0		6.9		7.6		10		88				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	331	19.3	19.3	8.0	8.0	30.8	30.8	93.8	93.9	7.2	7.2	8.8		9		89				<0.2		0.8	
						3.9	0.2	337	19.3		8.0		30.8		93.9		7.2		8.9		9		89				<0.2		0.9	
SR3	Cloudy	Moderate	15:23	8.6	Surface	1.0	0.3	78	18.1	18.1	8.1	8.0	30.5	30.5	96.4	96.5	7.6	7.7	16.4	17.9	18	17	-	-	822150	807593	-	-	-	-
						1.0	0.3	78	18.1		8.0		30.5		96.5		7.6		16.5		17		-				-		-	
					Middle	4.3	0.3	65	18.1	18.1	8.0	8.0	30.5	30.5	97.9	97.9	7.7		18.2		17		-				-		-	
						4.3	0.3	70	18.1		8.0		30.5		97.9		7.7		18.4		17		-				-		-	
					Bottom	7.6	0.3	51	18.1	18.1	8.0	8.0	30.5	30.5	99.0	99.1	7.8	7.8	19.1		17		-				-		-	
						7.6	0.3	54	18.1		8.0		30.5		99.1		7.8		19.0		17		-				-		-	
SR4A	Cloudy	Moderate	16:52	8.6	Surface	1.0	0.5	254	18.6	18.6	8.4	8.4	31.4	31.4	97.5	97.5	7.6	7.6	16.0	18.1	21	21	-	-	817208	807788	-	-	-	-
						1.0	0.5	275	18.6		8.4		31.4		97.5		7.6		16.1		22		-				-		-	
					Middle	4.3	0.2	250	18.6	18.6	8.4	8.4	31.4	31.4	97.5	97.5	7.6		18.0		21		-				-		-	
						4.3	0.2	252	18.6		8.4		31.4		97.5		7.6		18.3		21		-				-		-	
					Bottom	7.6	0.0	233	18.6	18.6	8.4	8.4	31.3	31.3	97.4	97.4	7.6	7.6	20.2		20		-				-		-	
						7.6	0.0	235	18.6		8.4		31.3		97.4		7.6		20.2		20		-				-		-	
SR5A	Cloudy	Calm	17:07	4.1	Surface	1.0	0.1	342	18.8	18.8	8.3	8.3	31.3	31.3	94.8	94.8	7.3	7.3	9.0	9.3	14	14	-	-	816585	810695	-	-	-	-
						1.0	0.1	349	18.8		8.3		31.3		94.8		7.3		9.1		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	331	18.8	18.8	8.3	8.3	31.3	31.3	95.4	95.5	7.4	7.4	9.6		13		-				-		-	
						3.1	0.1	344	18.8		8.3		31.3		95.5		7.4		9.6		13		-				-		-	
SR6A	Cloudy	Calm	17:36	4.4	Surface	1.0	0.0	91	19.2	19.2	8.3	8.3	31.4	31.4	95.4	95.4	7.3	7.3	6.1	6.6	11	10	-	-	817977	814756	-	-	-	-
						1.0	0.0	98	19.2		8.3		31.4		95.4		7.3		6.1		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	83	19.2	19.2	8.3	8.3	31.4	31.4	95.7	95.7	7.3	7.3	7.0		9		-				-		-	
						3.4	0.0	87	19.2		8.3		31.4		95.7		7.3		7.0		9		-				-		-	
SR7	Cloudy	Moderate	17:27	16.4	Surface	1.0	0.6	61	19.4	19.4	8.0	8.0	30.9	30.9	88.5	88.5	6.8	6.8	5.3	5.6	7	6	-	-	823626	823756	-	-	-	-
						1.0	0.7	65	19.4		8.0		30.9		88.5		6.8		5.4		7		-				-		-	
					Middle	8.2	0.2	14	19.4	19.4	8.0	8.0	30.9	30.9	89.0	89.0	6.8		5.6		7		-				-		-	
						8.2	0.2	14	19.4		8.0		30.9		89.0		6.8		5.6		6		-				-		-	
					Bottom	15.4	0.2	55	19.4	19.4	8.0	8.0	30.9	30.9	92.5	92.6	7.1	7.1	5.7		5		-				-		-	
						15.4	0.2	56	19.4		8.0		30.9		92.6		7.1		5.8		5		-				-		-	
SR8	Cloudy	Moderate	16:09	4.1	Surface	1.0	-	-	18.6	18.6	8.0	8.0	30.6	30.6	95.3	95.4	7.4	7.4	12.1	13.0	10	10	-	-	820382	811645	-	-	-	-
						1.0	-	-	18.6		8.0		30.6		95.4		7.4		12.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	18.6	18.6	8.0	8.0	30.6	30.6	96.1	96.2	7.5	7.5	13.9		10		-				-		-	
						3.1	-	-	18.6		8.0		30.6		96.2		7.5		13.8		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 19 December 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	11:50	8.8	Surface	1.0	0.6	50	18.9	18.9	8.4	8.4	31.5	31.5	97.5	97.5	7.5	7.5	16.0	17.6	24	24	86	90	815640	804229	<0.2	<0.2	0.8	0.7
						1.0	0.7	50	18.9		8.4		31.5		97.5		7.5		15.8		24		87				<0.2		0.7	
					Middle	4.4	0.5	64	18.9	18.9	8.4	8.4	31.6	31.6	97.1	97.1	7.5		17.3		24		90				<0.2		0.7	
						4.4	0.5	68	18.9		8.4		31.6		97.1		7.5		17.4		24		90				<0.2		0.6	
					Bottom	7.8	0.6	46	18.9	18.9	8.4	8.4	31.6	31.6	96.9	96.9	7.5	7.5	19.5		25		93				<0.2		0.7	
						7.8	0.6	46	18.9		8.4		31.6		96.9		7.5		19.8		25		93				<0.2		0.9	
C2	Cloudy	Rough	12:28	12.0	Surface	1.0	0.3	350	18.7	18.7	8.0	8.0	30.3	30.3	92.0	92.0	7.2	7.2	9.3	12.9	11	11	85	89	825678	806965	0.3	0.2	1.0	1.0
						1.0	0.3	322	18.7		8.0		30.3		92.0		7.2		9.4		11		86				0.3		0.9	
					Middle	6.0	0.4	28	18.7	18.7	8.0	8.0	30.3	30.3	92.4	92.4	7.2		14.1		11		89				<0.2		0.9	
						6.0	0.4	29	18.7		8.0		30.3		92.4		7.2		14.2		10		89				<0.2		0.9	
					Bottom	11.0	0.4	346	18.6	18.6	8.0	8.0	30.3	30.3	93.8	93.8	7.3	7.3	15.2		10		92				<0.2		1.0	
						11.0	0.4	357	18.6		8.0		30.3		93.8		7.3		15.2		10		92				<0.2		1.0	
C3	Cloudy	Moderate	10:28	11.1	Surface	1.0	0.3	241	19.2	19.2	8.0	8.0	30.8	30.8	88.9	88.9	6.8	6.9	7.5	9.8	7	7	86	89	822092	817826	<0.2	<0.2	0.8	0.7
						1.0	0.3	255	19.2		8.0		30.8		88.9		6.8		7.6		7		86				<0.2		0.7	
					Middle	5.6	0.4	252	19.1	19.1	8.0	8.0	30.8	30.8	89.3	89.3	6.9		8.5		7		90				<0.2		0.8	
						5.6	0.4	264	19.1		8.0		30.8		89.3		6.9		8.7		6		90				<0.2		0.6	
					Bottom	10.1	0.4	266	19.0	19.0	8.0	8.0	30.8	30.8	89.6	89.6	6.9	6.9	13.2		6		91				<0.2		0.8	
						10.1	0.4	267	19.0		8.0		30.8		89.6		6.9		13.0		6		92				<0.2		0.7	
IM1	Cloudy	Rough	12:14	5.3	Surface	1.0	0.1	278	18.7	18.7	8.3	8.3	31.3	31.3	96.3	96.3	7.5	7.5	14.3	15.9	29	28	88	91	817968	807123	<0.2	<0.2	0.7	0.8
						1.0	0.1	284	18.7		8.3		31.3		96.3		7.5		14.2		30		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	302	18.7	18.7	8.3	8.3	31.3	31.3	96.6	96.7	7.5	7.5	17.5		27		94				<0.2		0.8	
						4.3	0.1	317	18.7		8.3		31.3		96.8		7.5		17.6		26		94				<0.2		0.8	
IM2	Cloudy	Rough	12:24	7.6	Surface	1.0	0.4	7	18.8	18.8	8.4	8.4	31.4	31.4	97.4	97.4	7.5	7.5	16.6	17.8	33	33	88	91	818171	806185	<0.2	<0.2	0.8	0.7
						1.0	0.4	7	18.8		8.4		31.4		97.4		7.5		16.6		34		88				<0.2		0.8	
					Middle	3.8	0.3	344	18.8	18.8	8.4	8.4	31.4	31.4	97.2	97.2	7.5		17.4		33		92				<0.2		0.7	
						3.8	0.3	316	18.8		8.4		31.4		97.2		7.5		17.4		32		92				<0.2		0.7	
					Bottom	6.6	0.3	308	18.7	18.7	8.3	8.3	31.4	31.4	97.2	97.3	7.5	7.5	19.3		32		94				<0.2		0.7	
						6.6	0.4	315	18.7		8.3		31.4		97.4		7.5		19.4		31		93				<0.2		0.6	
IM3	Cloudy	Rough	12:35	7.8	Surface	1.0	0.1	321	18.7	18.7	8.4	8.4	31.3	31.3	97.5	97.5	7.6	7.6	15.4	17.2	29	33	89	91	818796	805587	<0.2	<0.2	0.7	0.7
						1.0	0.1	346	18.7		8.4		31.3		97.5		7.6		15.4		30		88				<0.2		0.7	
					Middle	3.9	0.4	318	18.7	18.7	8.4	8.4	31.3	31.3	97.2	97.2	7.5		17.5		34		91				<0.2		0.6	
						3.9	0.4	320	18.7		8.4		31.3		97.2		7.5		17.6		34		91				<0.2		0.8	
					Bottom	6.8	0.4	280	18.7	18.7	8.4	8.3	31.3	31.3	97.1	97.1	7.5	7.5	18.5		35		94				<0.2		0.6	
						6.8	0.4	288	18.7		8.3		31.3		97.1		7.5		18.9		34		94				<0.2		0.8	
IM4	Cloudy	Rough	12:48	8.2	Surface	1.0	0.3	0	18.6	18.6	8.4	8.4	31.2	31.2	97.4	97.4	7.6	7.6	15.0	16.6	31	29	88	91	819706	804626	<0.2	<0.2	0.8	0.8
						1.0	0.3	0	18.6		8.4		31.2		97.4		7.6		14.9		31		88				<0.2		0.7	
					Middle	4.1	0.3	354	18.6	18.6	8.4	8.4	31.2	31.2	97.2	97.2	7.6		16.6		29		92				<0.2		0.6	
						4.1	0.3	326	18.6		8.4		31.2		97.2		7.6		16.5		29		91				<0.2		0.8	
					Bottom	7.2	0.3	11	18.6	18.6	8.4	8.4	31.2	31.2	97.1	97.1	7.5	7.5	18.1		27		94				<0.2		0.8	
						7.2	0.3	11	18.6		8.4		31.2		97.1		7.5		18.3		27		94				<0.2		0.9	
IM5	Cloudy	Rough	12:57	7.3	Surface	1.0	0.2	125	18.7	18.7	8.4	8.4	31.2	31.2	97.5	97.5	7.6	7.6	16.2	17.9	27	35	88	92	820716	804869	<0.2	<0.2	0.8	0.8
						1.0	0.2	130	18.7		8.4		31.2		97.4		7.6		16.3		26		89				<0.2		0.8	
					Middle	3.7	0.2	149	18.7	18.7	8.4	8.4	31.3	31.3	97.3	97.3	7.5		18.0		37		93				<0.2		0.9	
						3.7	0.2	150	18.7		8.4		31.3		97.3		7.5		18.1		38		93				<0.2		0.7	
					Bottom	6.3	0.1	130	18.7	18.7	8.3	8.3	31.3	31.3	97.3	97.3	7.5	7.5	19.4		41		94				<0.2		0.8	
						6.3	0.1	131	18.7		8.3		31.3		97.3		7.5		19.4		41		95				<0.2		0.9	
IM6	Cloudy	Rough	13:06	7.4	Surface	1.0	0.3	111	18.7	18.7	8.4	8.4	31.3	31.3	96.7	96.7	7.5	7.5	16.1	18.1	39	**43**	89	92	821067	805805	<0.2	<0.2	0.9	0.8
						1.0	0.3	113	18.7		8.4		31.3		96.7		7.5		16.0		40		88				<0.2		0.8	
					Middle	3.7	0.2	168	18.7	18.7	8.4	8.4	31.3	31.3	96.7	96.7	7.5		18.3		39		92				<0.2		0.8	
						3.7	0.2	171	18.7		8.4		31.3		96.7		7.5		18.4		40		93				<0.2		0.8	
					Bottom	6.4	0.2	119	18.7	18.7	8.4	8.4	31.3	31.3	96.8	96.8	7.5	7.5	19.9		48		94				<0.2		0.9	
						6.4	0.2	126	18.7		8.4		31.3		96.8		7.5		19.8		49		94				<0.2		0.8	
IM7	Cloudy	Rough	13:15	8.8	Surface	1.0	0.4	48	18.7	18.7	8.4	8.4	31.3	31.3	96.8	96.8	7.5	7.5	16.0	18.1	29	25	88	92	821362	806849	<0.2	<0.2	0.9	0.8
						1.0	0.4	50	18.7		8.4		31.3		96.8		7.5		16.0		29		88				<0.2		0.8	
					Middle	4.4	0.4	29	18.7	18.7	8.4	8.4	31.3	31.3	96.6	96.6	7.5		18.0		26		92				<0.2		0.8	
						4.4	0.4	29	18.7		8.4		31.3		96.6		7.5		17.8		25		93				<0.2		0.8	
					Bottom	7.8	0.5	38	18.7	18.7	8.3	8.3	31.3	31.3	96.6	96.6	7.5	7.5	20.5		20		94				<0.2		0.8	
						7.8	0.6	40	18.7		8.3		31.3		96.6		7.5		20.5		21		94				<0.2		0.8	
IM8	Cloudy	Moderate	11:58	7.4	Surface	1.0	0.1	54	18.4	18.4	8.0	8.0	30.5	30.5	93.3	93.3	7.3	7.3	13.7	14.2	21	20	86	89	821826	808145	<0.2	<0.2	1.0	1.0
						1.0	0.1	56	18.4		8.0		30.5		93.3		7.3		13.7		21		86				<0.2		1.0	
					Middle	3.7	0.0	76	18.4	18.4	8.0	8.0	30.5	30.5	93.7	93.7	7.3		13.7		20		91				<0.2		1.0	
						3.7	0.0	82	18.4		8.0		30.5		93.7		7.3		13.7		20		90				<0.2		1.0	
					Bottom	6.4	0.1	43	18.3	18.3	8.0	8.0	30.5	30.5	94.5	94.5	7.4	7.4	15.0		19		91				<0.2		1.1	
						6.4	0.1	43	18.3		8.0		30.5		94.5		7.4		15.4		18		92				<0.2		1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 December 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	11:51	6.7	Surface	1.0	0.1	245	18.3	18.3	8.0	8.0	30.5	30.5	93.7	93.7	7.3	7.4	16.2	16.6	22	25	86	89	822110	808824	<0.2	<0.2	1.1	1.0
						1.0	0.1	253	18.3		8.0		30.5		93.7		7.3		16.6		22		86				<0.2		1.0	
					Middle	3.4	0.1	229	18.3	18.3	8.0	8.0	30.5	30.5	94.5	94.6	7.4		16.5		24		89				<0.2		1.0	
						3.4	0.1	240	18.3		8.0		30.5		94.6		7.4		16.5		24		90				<0.2		1.0	
					Bottom	5.7	0.1	246	18.3	18.3	8.0	8.0	30.5	30.5	95.3	95.4	7.5	7.5	17.0		27		92				<0.2		1.1	
						5.7	0.1	262	18.3		8.0		30.5		95.4		7.5		17.0		28		92				<0.2		1.0	
IM10	Cloudy	Moderate	11:43	7.5	Surface	1.0	0.6	305	18.3	18.3	8.0	8.0	30.5	30.5	94.0	94.0	7.4	7.4	16.3	16.8	25	24	86	89	822393	809817	<0.2	<0.2	0.9	0.9
						1.0	0.6	334	18.3		8.0		30.5		94.0		7.4		16.3		25		87				<0.2		0.9	
					Middle	3.8	0.6	305	18.3	18.3	8.0	8.0	30.5	30.5	94.8	94.8	7.4		15.6		24		89				<0.2		0.9	
						3.8	0.6	330	18.3		8.0		30.5		94.8		7.4		15.7		24		89				<0.2		0.9	
					Bottom	6.5	0.5	303	18.3	18.3	8.0	8.0	30.5	30.5	96.7	96.8	7.6	7.6	18.5		22		91				<0.2		0.9	
						6.5	0.5	318	18.3		8.0		30.5		96.8		7.6		18.5		23		92				<0.2		1.0	
IM11	Cloudy	Moderate	11:31	7.8	Surface	1.0	0.5	298	18.6	18.6	8.0	8.0	30.6	30.6	91.8	91.8	7.2	7.2	16.1	17.3	23	25	87	89	822047	811467	<0.2	<0.2	0.8	0.9
						1.0	0.5	313	18.6		8.0		30.6		91.8		7.2		16.1		23		87				<0.2		0.8	
					Middle	3.9	0.4	309	18.6	18.6	8.0	8.0	30.6	30.6	91.8	91.8	7.2		18.6		25		90				<0.2		0.8	
						3.9	0.5	327	18.6		8.0		30.6		91.8		7.2		17.9		24		90				<0.2		0.8	
					Bottom	6.8	0.3	306	18.6	18.6	8.0	8.0	30.6	30.6	92.7	92.8	7.2	7.2	17.3		29		91				<0.2		1.0	
						6.8	0.4	323	18.6		8.0		30.6		92.8		7.2		17.6		28		90				<0.2		0.9	
IM12	Cloudy	Moderate	11:25	8.6	Surface	1.0	0.5	285	18.8	18.8	8.0	8.0	30.7	30.7	91.3	91.3	7.1	7.1	18.2	19.8	26	33	86	89	821462	812025	<0.2	<0.2	0.8	0.7
						1.0	0.6	308	18.8		8.0		30.7		91.3		7.1		18.8		26		86				<0.2		0.7	
					Middle	4.3	0.5	283	18.7	18.7	8.0	8.0	30.6	30.6	91.3	91.3	7.1		18.9		27		89				<0.2		0.6	
						4.3	0.5	304	18.7		8.0		30.6		91.3		7.1		18.2		27		91				<0.2		0.8	
					Bottom	7.6	0.4	284	18.7	18.7	8.0	8.0	30.6	30.6	91.2	91.2	7.1	7.1	22.3		45		91				<0.2		0.7	
						7.6	0.5	311	18.7		8.0		30.6		91.2		7.1		22.5		44		91				<0.2		0.8	
SR1A	Cloudy	Moderate	11:04	4.6	Surface	1.0	-	-	18.7	18.7	8.0	8.0	30.6	30.6	91.1	91.2	7.1	7.1	8.7	9.1	14	15	-	-	819972	812657	-	-	-	-
						1.0	-	-	18.7		8.0		30.6		91.2		7.1		8.7		14		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	18.6	18.6	8.0	8.0	30.6	30.6	92.6	92.6	7.2	7.2	9.4		17		-				-		-	
						3.6	-	-	18.6		8.0		30.6		92.6		7.2		9.5		16		-				-		-	
SR2	Cloudy	Moderate	10:51	4.0	Surface	1.0	0.2	158	18.7	18.7	8.0	8.0	30.6	30.6	92.2	92.5	7.2	7.2	14.1	16.3	22	19	89	90	821467	814155	<0.2	<0.2	0.9	0.8
						1.0	0.2	166	18.6		8.0		30.6		92.7		7.2		15.4		21		90				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.2	157	18.6	18.6	8.0	8.0	30.6	30.6	94.4	94.6	7.4	7.4	18.4		16		91				<0.2		0.7	
						3.0	0.2	166	18.6		8.0		30.6		94.7		7.4		17.1		15		91				<0.2		0.7	
SR3	Cloudy	Moderate	12:05	8.7	Surface	1.0	0.1	25	18.7	18.7	8.0	8.0	30.3	30.3	91.9	91.9	7.2	7.2	11.5	15.8	18	16	-	-	822148	807590	-	-	-	-
						1.0	0.1	26	18.7		8.0		30.3		91.9		7.2		11.5		17		-				-		-	
					Middle	4.4	0.1	12	18.7	18.7	8.0	8.0	30.3	30.3	92.3	92.4	7.2		16.7		16		-				-		-	
						4.4	0.1	12	18.7		8.0		30.3		92.4		7.2		17.0		17		-				-		-	
					Bottom	7.7	0.1	1	18.7	18.7	8.0	8.0	30.3	30.3	93.7	93.7	7.3	7.3	18.9		15		-				-		-	
						7.7	0.2	1	18.7		8.0		30.3		93.7		7.3		18.9		14		-				-		-	
SR4A	Cloudy	Moderate	11:21	8.1	Surface	1.0	0.2	81	18.7	18.7	8.3	8.3	31.2	31.2	93.8	93.8	7.3	7.3	10.7	11.4	19	20	-	-	817167	807793	-	-	-	-
						1.0	0.2	82	18.7		8.3		31.2		93.8		7.3		10.9		19		-				-		-	
					Middle	4.1	0.2	79	18.7	18.7	8.3	8.3	31.2	31.2	93.8	93.8	7.3		11.4		20		-				-		-	
						4.1	0.2	83	18.7		8.3		31.2		93.8		7.3		11.4		19		-				-		-	
					Bottom	7.1	0.1	97	18.6	18.6	8.3	8.3	31.2	31.2	93.8	93.9	7.3	7.3	11.9		21		-				-		-	
						7.1	0.1	103	18.6		8.3		31.3		93.9		7.3		12.1		20		-				-		-	
SR5A	Cloudy	Calm	10:59	4.0	Surface	1.0	0.1	289	18.8	18.8	8.3	8.3	31.2	31.2	93.8	93.8	7.3	7.3	14.1	15.7	21	21	-	-	816608	810700	-	-	-	-
						1.0	0.1	293	18.8		8.3		31.2		93.8		7.3		13.9		22		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	271	18.8	18.8	8.3	8.3	31.2	31.2	93.7	93.7	7.3	7.3	17.5		20		-				-		-	
						3.0	0.1	297	18.8		8.3		31.2		93.7		7.3		17.4		21		-				-		-	
SR6A	Cloudy	Calm	10:26	4.1	Surface	1.0	0.1	260	19.0	19.0	8.4	8.4	31.3	31.3	93.8	93.8	7.2	7.2	7.9	8.8	14	14	-	-	817979	814734	-	-	-	-
						1.0	0.1	280	19.0		8.4		31.3		93.8		7.2		8.0		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	280	19.0	19.0	8.3	8.3	31.3	31.3	93.6	93.6	7.2	7.2	9.4		14		-				-		-	
						3.1	0.0	294	19.0		8.3		31.3		93.6		7.2		9.9		14		-				-		-	
SR7	Cloudy	Moderate	09:56	16.2	Surface	1.0	0.0	116	19.4	19.4	8.0	8.0	31.1	31.1	87.4	87.4	6.7	6.7	9.2	11.2	10	9	-	-	823628	823746	-	-	-	-
						1.0	0.0	127	19.4		8.0		31.1		87.4		6.7		9.3		9		-				-		-	
					Middle	8.1	0.1	184	19.4	19.4	8.1	8.1	31.1	31.1	87.8	87.8	6.7		12.4		9		-				-		-	
						8.1	0.1	189	19.4		8.1		31.1		87.8		6.7		12.5		9		-				-		-	
					Bottom	15.2	0.1	76	19.4	19.4	8.1	8.1	31.1	31.1	90.9	91.1	7.0	7.0	11.9		9		-				-		-	
						15.2	0.1	76	19.4		8.1		31.1		91.2		7.0		11.7		9		-				-		-	
SR8	Cloudy	Moderate	11:14	3.6	Surface	1.0	-	-	18.5	18.5	8.0	8.0	30.5	30.5	92.4	92.4	7.2	7.2	14.8	15.6	20	19	-	-	820385	811621	-	-	-	-
						1.0	-	-	18.5		8.0		30.5		92.4		7.2		14.6		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	18.5	18.5	8.0	8.0	30.5	30.5	92.9	92.9	7.3	7.3	16.5		19		-				-		-	
						2.6	-	-	18.5		8.0		30.5		92.9		7.3		16.7		18		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 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	Calm	06:07	7.2	Surface	1.0	0.3	51	18.2	18.2	8.5	8.5	31.6	31.6	99.2	99.2	7.8	7.8	4.4	4.5	5	6	85	87	815633	804251	<0.2	<0.2	0.4	0.4
						1.0	0.3	53	18.2		8.5		31.6		99.2		7.8		4.4		5		86				<0.2		0.5	
					Middle	3.6	0.3	34	18.2	18.2	8.4	8.4	31.6	31.6	99.1	99.1	7.7		4.5		6		87				<0.2		0.4	
						3.6	0.3	36	18.2		8.4		31.6		99.1		7.7		4.5		6		87				<0.2		0.4	
					Bottom	6.2	0.3	35	18.2	18.2	8.4	8.4	31.6	31.6	99.2	99.2	7.8	7.8	4.8		7		89				<0.2		0.4	
						6.2	0.3	35	18.2		8.4		31.6		99.2		7.8		4.8		7		90				<0.2		0.4	
C2	Cloudy	Moderate	07:43	11.6	Surface	1.0	0.1	344	18.5	18.5	8.2	8.2	32.3	32.3	94.7	94.7	7.3	7.3	2.4	4.5	5	5	86	88	825699	806959	<0.2	<0.2	0.6	0.6
						1.0	0.1	348	18.5		8.2		32.3		94.7		7.3		2.5		5		86				<0.2		0.6	
					Middle	5.8	0.2	333	18.7	18.7	8.2	8.2	32.5	32.5	95.1	95.2	7.3		4.3		4		88				<0.2		0.5	
						5.8	0.2	306	18.7		8.2		32.5		95.2		7.3		4.3		5		88				<0.2		0.6	
					Bottom	10.6	0.2	338	18.8	18.8	8.2	8.2	32.7	32.7	95.5	95.5	7.3	7.3	6.6		4		89				<0.2		0.6	
						10.6	0.2	352	18.8		8.2		32.7		95.5		7.3		6.6		4		90				<0.2		0.5	
C3	Cloudy	Moderate	05:45	11.2	Surface	1.0	0.4	90	19.2	19.2	8.2	8.2	32.8	32.8	93.7	93.7	7.1	7.1	5.2	5.3	8	8	86	88	822112	817794	<0.2	<0.2	0.5	0.5
						1.0	0.5	95	19.2		8.2		32.8		93.7		7.1		5.2		8		85				<0.2		0.5	
					Middle	5.6	0.4	97	19.2	19.2	8.2	8.2	32.8	32.8	93.3	93.3	7.1		5.2		8		87				<0.2		0.5	
						5.6	0.4	97	19.2		8.2		32.8		93.3		7.1		5.2		8		87				<0.2		0.6	
					Bottom	10.2	0.4	105	19.3	19.3	8.2	8.2	32.7	32.7	93.7	93.7	7.1	7.1	5.4		9		92				<0.2		0.4	
						10.2	0.4	112	19.3		8.2		32.7		93.7		7.1		5.4		9		92				<0.2		0.4	
IM1	Cloudy	Calm	06:30	3.8	Surface	1.0	0.1	32	17.9	17.9	8.4	8.4	31.6	31.6	99.6	99.6	7.8	7.8	5.6	6.6	3	5	86	88	817966	807142	<0.2	<0.2	0.4	0.5
						1.0	0.1	32	17.8		8.4		31.6		99.6		7.8		5.6		4		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	63	17.8	17.8	8.4	8.4	31.7	31.7	104.0	104.0	8.2	8.2	7.6		6		88				<0.2		0.5	
						2.8	0.0	67	17.8		8.4		31.7		104.0		8.2		7.6		6		89				<0.2		0.6	
IM2	Cloudy	Calm	06:38	6.2	Surface	1.0	0.2	332	18.1	18.1	8.4	8.4	31.6	31.6	98.8	98.8	7.7	7.7	10.7	11.9	9	10	85	87	818145	806186	<0.2	<0.2	0.4	0.5
						1.0	0.3	305	18.1		8.4		31.6		98.7		7.7		10.8		9		85				<0.2		0.5	
					Middle	3.1	0.2	329	18.1	18.1	8.4	8.4	31.6	31.6	98.8	98.8	7.7		13.4		10		87				<0.2		0.5	
						3.1	0.2	359	18.1		8.4		31.6		98.8		7.7		13.6		10		87				<0.2		0.5	
					Bottom	5.2	0.2	319	18.1	18.1	8.4	8.4	31.6	31.6	98.7	98.7	7.7	7.7	11.6		11		89				<0.2		0.5	
						5.2	0.2	339	18.1		8.4		31.6		98.7		7.7		11.5		11		90				<0.2		0.5	
IM3	Cloudy	Calm	06:46	7.1	Surface	1.0	0.3	1	18.0	18.0	8.4	8.4	31.6	31.6	98.7	98.7	7.7	7.7	5.2	6.4	10	8	85	88	818762	805584	<0.2	<0.2	0.5	0.5
						1.0	0.3	1	18.0		8.4		31.6		98.7		7.7		5.2		9		85				<0.2		0.5	
					Middle	3.6	0.2	354	18.0	18.0	8.4	8.4	31.6	31.6	98.6	98.7	7.7		6.1		8		87				<0.2		0.4	
						3.6	0.3	326	18.0		8.4		31.6		98.7		7.7		6.6		8		88				<0.2		0.4	
					Bottom	6.1	0.2	356	18.0	18.0	8.4	8.4	31.6	31.6	98.5	98.5	7.7	7.7	7.7		7		91				<0.2		0.5	
						6.1	0.2	358	18.0		8.4		31.6		98.5		7.7		7.8		7		92				<0.2		0.4	
IM4	Sunny	Calm	06:57	7.8	Surface	1.0	0.2	16	18.1	18.1	8.4	8.4	31.6	31.6	98.8	98.8	7.7	7.7	5.4	5.4	7	8	84	87	819739	804619	<0.2	<0.2	0.4	0.4
						1.0	0.2	16	18.1		8.4		31.6		98.8		7.7		5.2		7		85				<0.2		0.4	
					Middle	3.9	0.3	2	18.0	18.0	8.4	8.4	31.6	31.6	98.6	98.6	7.7		5.3		8		86				<0.2		0.4	
						3.9	0.3	2	18.0		8.4		31.6		98.6		7.7		5.3		8		87				<0.2		0.4	
					Bottom	6.8	0.2	20	18.0	18.0	8.4	8.4	31.6	31.6	98.8	98.8	7.7	7.7	5.4		8		90				<0.2		0.4	
						6.8	0.2	20	18.0		8.4		31.6		98.8		7.7		5.5		9		91				<0.2		0.4	
IM5	Sunny	Calm	07:08	7.4	Surface	1.0	0.5	351	18.1	18.1	8.4	8.4	31.6	31.6	98.2	98.2	7.7	7.7	5.1	5.4	7	8	85	87	820716	804854	<0.2	<0.2	0.4	0.5
						1.0	0.5	323	18.1		8.4		31.6		98.2		7.7		5.1		7		85				<0.2		0.4	
					Middle	3.7	0.4	357	18.1	18.1	8.4	8.4	31.6	31.6	98.1	98.1	7.7		5.4		7		87				<0.2		0.5	
						3.7	0.5	357	18.1		8.4		31.6		98.1		7.7		5.4		7		87				<0.2		0.4	
					Bottom	6.4	0.4	358	18.1	18.1	8.4	8.4	31.6	31.6	98.1	98.1	7.7	7.7	5.8		9		90				<0.2		0.5	
						6.4	0.4	329	18.1		8.4		31.6		98.1		7.7		5.7		9		90				<0.2		0.5	
IM6	Sunny	Calm	07:18	7.1	Surface	1.0	0.0	21	18.5	18.5	8.4	8.4	31.5	31.5	96.6	96.6	7.5	7.5	5.2	5.9	6	7	85	88	821070	805833	0.3	0.3	0.5	0.5
						1.0	0.0	21	18.5		8.4		31.5		96.6		7.5		5.3		7		85				0.4		0.5	
					Middle	3.6	0.1	357	18.5	18.5	8.4	8.4	31.5	31.5	96.4	96.4	7.5		5.7		7		87				<0.2		0.4	
						3.6	0.1	328	18.5		8.4		31.5		96.4		7.5		5.7		7		87				<0.2		0.5	
					Bottom	6.1	0.1	342	18.5	18.5	8.4	8.4	31.5	31.5	96.6	96.6	7.5	7.5	6.8		7		90				<0.2		0.5	
						6.1	0.1	315	18.5		8.4		31.5		96.6		7.5		6.8		7		91				<0.2		0.4	
IM7	Sunny	Calm	07:28	7.9	Surface	1.0	0.1	274	18.6	18.6	8.4	8.4	31.5	31.5	96.0	96.0	7.4	7.5	3.2	5.6	5	7	85	88	821333	806814	<0.2	<0.2	0.5	0.5
						1.0	0.1	295	18.6		8.4		31.5		96.0		7.4		3.2		5		86				<0.2		0.4	
					Middle	4.0	0.1	325	18.6	18.6	8.4	8.4	31.5	31.5	96.2	96.2	7.5		4.8		6		87				<0.2		0.5	
						4.0	0.1	343	18.5		8.4		31.5		96.2		7.5		4.9		6		88				<0.2		0.5	
					Bottom	6.9	0.1	41	18.4	18.4	8.4	8.4	31.5	31.5	96.5	96.5	7.5	7.5	8.7		8		89				<0.2		0.5	
						6.9	0.1	44	18.4		8.4		31.5		96.5		7.5		8.8		9		90				<0.2		0.5	
IM8	Cloudy	Moderate	07:15	7.6	Surface	1.0	0.1	254	18.3	18.3	8.3	8.3	33.0	33.0	96.8	96.8	7.5	7.5	9.3	5.9	4	5	85	88	821815	808130	<0.2	<0.2	0.5	0.5
						1.0	0.1	255	18.3		8.3		33.0		96.8		7.5		9.3		4		85				<0.2		0.5	
					Middle	3.8	0.1	256	18.3	18.3	8.3	8.3	33.0	33.0	96.7	96.7	7.5		4.3		6		87				<0.2		0.4	
						3.8	0.1	276	18.3		8.3		33.0		96.7		7.5		4.3		6		88				<0.2		0.5	
					Bottom	6.6	0.1	235	18.3	18.3	8.3	8.3	33.0	33.0	96.5	96.5	7.5	7.5	4.1		6		91				<0.2		0.5	
						6.6	0.1	248	18.3		8.3		33.0		96.5		7.5		4.1		6		92				<0.2		0.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 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	07:10	7.2	Surface	1.0	0.2	242	18.3	18.3	8.3	8.3	33.0	33.0	97.2	97.2	7.5	7.5	3.2	3.2	8	6	86	88	822090	808801	<0.2	<0.2	0.4	0.5
						1.0	0.2	261	18.3		8.3		33.0		97.2		7.5		3.2		7		85				<0.2		0.4	
					Middle	3.6	0.2	242	18.3	18.3	8.3	8.3	33.0	33.0	97.0	97.0	7.5		3.2		5		87				<0.2		0.5	
						3.6	0.2	259	18.3		8.3		33.0		97.0		7.5		3.2		5		87				<0.2		0.5	
					Bottom	6.2	0.2	244	18.3	18.3	8.3	8.3	33.0	33.0	96.7	96.7	7.5	7.5	3.2		5		90				<0.2		0.4	
						6.2	0.2	250	18.3		8.3		33.0		96.7		7.5		3.2		5		90				<0.2		0.5	
IM10	Cloudy	Moderate	07:02	7.8	Surface	1.0	0.3	287	18.7	18.7	8.2	8.2	32.9	32.9	95.9	95.9	7.4	7.4	1.8	2.8	4	5	85	88	822367	809777	<0.2	<0.2	0.4	0.5
						1.0	0.3	306	18.7		8.2		32.9		95.9		7.4		1.8		5		85				<0.2		0.5	
					Middle	3.9	0.3	286	18.4	18.4	8.3	8.3	33.0	33.0	96.0	96.0	7.4		3.4		5		87				<0.2		0.5	
						3.9	0.3	308	18.4		8.3		33.0		96.0		7.4		3.4		5		87				<0.2		0.5	
					Bottom	6.8	0.2	290	18.4	18.4	8.3	8.3	33.0	33.0	96.2	96.2	7.4	7.4	3.3		4		91				<0.2		0.4	
						6.8	0.3	317	18.4		8.3		33.0		96.2		7.4		3.3		4		91				<0.2		0.4	
IM11	Cloudy	Moderate	06:50	8.0	Surface	1.0	0.3	305	18.1	18.1	8.3	8.3	33.1	33.1	97.2	97.2	7.5	7.5	4.4	4.6	4	4	85	88	822063	811444	<0.2	<0.2	0.4	0.4
						1.0	0.3	311	18.1		8.3		33.1		97.2		7.5		4.4		5		85				<0.2		0.4	
					Middle	4.0	0.3	309	18.1	18.1	8.3	8.3	33.1	33.1	96.8	96.8	7.5		4.8		4		87				<0.2		0.4	
						4.0	0.4	317	18.1		8.3		33.1		96.8		7.5		4.8		4		88				<0.2		0.4	
					Bottom	7.0	0.2	313	18.1	18.1	8.3	8.3	33.1	33.1	96.7	96.7	7.5	7.5	4.7		3		91				<0.2		0.4	
						7.0	0.2	337	18.1		8.3		33.1		96.7		7.5		4.7		3		92				<0.2		0.4	
IM12	Cloudy	Moderate	06:43	9.0	Surface	1.0	0.4	276	18.4	18.4	8.2	8.2	33.0	33.0	96.0	96.0	7.4	7.4	2.1	3.3	4	5	86	88	821479	812066	<0.2	<0.2	0.4	0.4
						1.0	0.4	280	18.4		8.2		33.0		96.0		7.4		2.1		3		85				<0.2		0.4	
					Middle	4.5	0.3	272	18.3	18.3	8.2	8.2	33.0	33.0	96.3	96.3	7.4		3.6		5		87				<0.2		0.4	
						4.5	0.3	275	18.4		8.2		33.0		96.3		7.4		3.8		6		88				<0.2		0.4	
					Bottom	8.0	0.2	274	18.3	18.3	8.2	8.2	33.0	33.0	95.6	95.6	7.4	7.4	4.2		5		89				<0.2		0.5	
						8.0	0.2	291	18.3		8.2		33.0		95.6		7.4		4.2		6		90				<0.2		0.4	
SR1A	Cloudy	Moderate	06:24	4.4	Surface	1.0	-	-	19.2	19.2	8.2	8.2	32.8	32.8	94.1	94.2	7.2	7.2	5.6	5.6	7	7	-	-	819977	812666	-	-	-	-
						1.0	-	-	19.2		8.2		32.8		94.2		7.2		5.7		7		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	19.2	19.2	8.2	8.2	32.8	32.8	94.4	94.4	7.2	7.2	5.6		6		-				-		-	
						3.4	-	-	19.2		8.2		32.8		94.4		7.2		5.6		6		-				-		-	
SR2	Cloudy	Moderate	06:11	4.3	Surface	1.0	0.2	87	19.2	19.2	8.2	8.2	32.8	32.8	95.5	95.5	7.3	7.3	6.0	6.1	7	8	87	88	821468	814160	<0.2	<0.2	0.5	0.5
						1.0	0.2	88	19.2		8.2		32.8		95.5		7.3		6.0		8		87				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	94	19.1	19.1	8.2	8.2	32.9	32.9	95.8	95.8	7.3	7.3	6.2		8		89				<0.2		0.5	
						3.3	0.2	98	19.1		8.2		32.9		95.8		7.3		6.3		9		89				<0.2		0.5	
SR3	Cloudy	Moderate	07:20	8.7	Surface	1.0	0.0	230	18.7	18.7	8.2	8.2	32.9	32.9	95.0	95.0	7.3	7.3	1.4	2.5	3	4	-	-	822154	807589	-	-	-	-
						1.0	0.0	237	18.7		8.2		32.9		95.0		7.3		1.4		3		-				-		-	
					Middle	4.4	0.1	302	18.6	18.6	8.2	8.2	33.0	33.0	95.6	95.6	7.3		2.5		4		-				-		-	
						4.4	0.1	330	18.6		8.2		33.0		95.6		7.3		2.5		4		-				-		-	
					Bottom	7.7	0.1	298	18.5	18.5	8.3	8.3	33.0	33.0	95.4	95.4	7.4	7.4	3.6		5		-				-		-	
						7.7	0.1	323	18.5		8.3		33.0		95.4		7.4		3.6		5		-				-		-	
SR4A	Cloudy	Calm	05:46	8.2	Surface	1.0	0.4	221	18.4	18.4	8.4	8.4	31.6	31.6	95.8	95.8	7.5	7.6	4.1	4.2	6	5	-	-	817201	807796	-	-	-	-
						1.0	0.4	234	18.4		8.4		31.6		95.7		7.4		4.1		6		-				-		-	
					Middle	4.1	0.3	234	18.1	18.1	8.4	8.4	31.6	31.6	98.2	98.2	7.7		3.6		6		-				-		-	
						4.1	0.3	241	18.1		8.4		31.6		98.2		7.7		3.7		6		-				-		-	
					Bottom	7.2	0.2	210	18.1	18.1	8.4	8.4	31.6	31.6	98.2	98.3	7.7	7.7	4.9		4		-				-		-	
						7.2	0.2	225	18.1		8.4		31.6		98.3		7.7		4.8		4		-				-		-	
SR5A	Cloudy	Calm	05:30	3.4	Surface	1.0	0.0	342	17.8	17.8	8.4	8.4	31.5	31.5	96.4	96.4	7.6	7.6	3.8	5.3	6	6	-	-	816583	810672	-	-	-	-
						1.0	0.0	348	17.8		8.4		31.5		96.3		7.6		3.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.0	354	18.0	18.0	8.4	8.4	31.6	31.6	97.2	97.2	7.6	7.6	6.8		6		-				-		-	
						2.4	0.0	359	18.0		8.4		31.6		97.2		7.6		6.9		6		-				-		-	
SR6A	Cloudy	Calm	04:56	4.2	Surface	1.0	0.1	22	18.7	18.7	8.4	8.4	31.2	31.2	93.7	93.7	7.3	7.3	4.9	4.6	8	8	-	-	817943	814750	-	-	-	-
						1.0	0.1	23	18.7		8.4		31.2		93.7		7.3		4.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	12	19.0	19.0	8.4	8.4	31.5	31.5	93.5	93.5	7.2	7.2	4.4		8		-				-		-	
						3.2	0.0	12	19.0		8.4		31.5		93.5		7.2		4.5		8		-				-		-	
SR7	Cloudy	Moderate	05:08	16.4	Surface	1.0	0.4	89	19.3	19.3	8.2	8.2	32.6	32.6	93.8	93.8	7.1	7.1	4.9	4.9	8	7	-	-	823651	823747	-	-	-	-
						1.0	0.4	96	19.3		8.2		32.6		93.8		7.1		4.9		8		-				-		-	
					Middle	8.2	0.3	81	19.3	19.3	8.2	8.2	32.6	32.6	93.6	93.6	7.1		4.8		7		-				-		-	
						8.2	0.3	88	19.3		8.2		32.6		93.6		7.1		4.8		7		-				-		-	
					Bottom	15.4	0.4	56	19.3	19.3	8.2	8.2	32.6	32.6	93.6	93.6	7.1	7.1	4.9		6		-				-		-	
						15.4	0.4	57	19.3		8.2		32.6		93.6		7.1		4.9		6		-				-		-	
SR8	Cloudy	Moderate	06:33	4.8	Surface	1.0	-	-	18.4	18.4	8.2	8.2	33.0	33.0	96.1	96.1	7.4	7.4	6.8	6.9	6	5	-	-	820390	811614	-	-	-	-
						1.0	-	-	18.4		8.2		33.0		96.1		7.4		6.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	18.4	18.4	8.2	8.2	33.0	33.0	96.9	96.9	7.5	7.5	6.9		5		-				-		-	
						3.8	-	-	18.4		8.2		33.0		96.9		7.5		6.9		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 December 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Calm	13:51	7.4	Surface	1.0	0.9	312	18.3	18.3	8.4	8.4	31.6	31.6	99.3	99.3	7.7	7.7	3.7	4.5	4	5	85	87	815602	804249	<0.2	<0.2	0.4	0.4
						1.0	0.9	329	18.3		8.4		31.6		99.3		7.7		3.7		4		84				<0.2		0.4	
					Middle	3.7	0.6	321	18.2	18.2	8.4	8.4	31.6	31.6	99.0	99.0	7.7		4.1		4		87				<0.2		0.5	
						3.7	0.7	352	18.2		8.4		31.6		99.0		7.7		4.2		5		86				<0.2		0.4	
					Bottom	6.4	0.7	318	18.2	18.2	8.4	8.4	31.6	31.6	98.9	98.9	7.7	7.7	5.5		5		90				<0.2		0.4	
						6.4	0.8	331	18.2		8.4		31.6		98.9		7.7		5.6		5		91				<0.2		0.4	
C2	Cloudy	Moderate	12:34	12.0	Surface	1.0	0.3	335	18.9	18.9	8.2	8.2	32.6	32.6	95.4	95.4	7.3	7.3	1.3	2.0	3	4	86	88	825674	806966	<0.2	<0.2	0.3	0.4
						1.0	0.4	347	18.9		8.2		32.6		95.4		7.3		1.3		4		85				<0.2		0.4	
					Middle	6.0	0.4	321	18.9	18.9	8.2	8.2	32.7	32.7	94.9	94.9	7.3		2.2		4		88				<0.2		0.4	
						6.0	0.4	325	18.9		8.2		32.7		94.9		7.3		2.2		4		88				<0.2		0.3	
					Bottom	11.0	0.4	349	18.9	18.9	8.2	8.2	32.7	32.7	95.6	95.6	7.3	7.3	2.4		4		90				<0.2		0.3	
						11.0	0.4	321	18.9		8.2		32.7		95.6		7.3		2.4		4		91				<0.2		0.4	
C3	Cloudy	Moderate	14:39	12.1	Surface	1.0	0.1	90	19.1	19.1	8.2	8.2	32.9	32.9	94.9	94.9	7.2	7.2	4.5	6.7	4	3	85	88	822089	817792	<0.2	<0.2	0.4	0.5
						1.0	0.1	91	19.1		8.2		32.9		94.9		7.2		4.5		4		85				<0.2		0.3	
					Middle	6.1	0.1	89	19.1	19.1	8.2	8.2	32.9	32.9	94.2	94.2	7.2		7.0		3		87				<0.2		0.4	
						6.1	0.1	97	19.1		8.2		32.9		94.2		7.2		7.0		3		87				<0.2		0.4	
					Bottom	11.1	0.2	86	19.1	19.1	8.2	8.2	32.9	32.9	94.0	94.0	7.2	7.2	8.5		3		91				<0.2		0.7	
						11.1	0.2	93	19.1		8.2		32.9		94.0		7.2		8.5		2		92				<0.2		0.6	
IM1	Sunny	Calm	13:29	4.1	Surface	1.0	0.2	352	18.2	18.2	8.4	8.4	31.6	31.6	98.7	98.7	7.7	7.7	4.5	4.4	5	5	87	88	817946	807136	<0.2	<0.2	0.4	0.4
						1.0	0.2	324	18.2		8.4		31.6		98.7		7.7		4.5		5		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	346	18.1	18.1	8.4	8.4	31.6	31.6	99.4	99.5	7.8	7.8	4.4		5		89				<0.2		0.4	
						3.1	0.1	318	18.1		8.4		31.6		99.5		7.8		4.4		5		90				<0.2		0.4	
IM2	Sunny	Calm	13:21	6.8	Surface	1.0	1.1	300	18.2	18.2	8.4	8.4	31.6	31.6	99.4	99.4	7.8	7.8	4.9	6.2	10	11	85	87	818160	806149	<0.2	<0.2	0.4	0.4
						1.0	1.2	327	18.2		8.4		31.6		99.4		7.8		5.0		10		85				<0.2		0.3	
					Middle	3.4	1.1	317	18.1	18.1	8.4	8.4	31.6	31.6	98.9	98.9	7.7		6.3		12		87				<0.2		0.3	
						3.4	1.1	324	18.1		8.4		31.6		98.9		7.7		6.3		12		87				<0.2		0.4	
					Bottom	5.8	0.9	295	18.1	18.1	8.4	8.4	31.6	31.6	99.0	99.2	7.7	7.8	7.6		12		89				<0.2		0.4	
						5.8	1.0	309	18.1		8.4		31.6		99.3		7.8		7.1		11		90				<0.2		0.3	
IM3	Sunny	Calm	13:13	7.1	Surface	1.0	1.2	169	18.3	18.3	8.4	8.4	31.6	31.6	100.7	100.7	7.8	7.8	2.9	3.9	8	8	85	88	818764	805614	<0.2	<0.2	0.5	0.5
						1.0	1.3	171	18.3		8.4		31.6		100.7		7.8		2.9		8		86				<0.2		0.6	
					Middle	3.6	1.1	171	18.2	18.2	8.4	8.4	31.6	31.6	100.4	100.4	7.8		3.5		8		87				<0.2		0.5	
						3.6	1.2	180	18.2		8.4		31.6		100.4		7.8		3.5		8		87				<0.2		0.5	
					Bottom	6.1	1.2	162	18.2	18.2	8.4	8.4	31.6	31.6	99.9	99.9	7.8	7.8	5.2		7		90				<0.2		0.6	
						6.1	1.2	173	18.2		8.4		31.6		99.9		7.8		5.4		7		91				<0.2		0.4	
IM4	Sunny	Calm	13:02	7.9	Surface	1.0	1.5	327	18.2	18.2	8.4	8.4	31.6	31.6	100.0	100.0	7.8	7.8	3.0	3.5	6	8	85	87	819710	804598	<0.2	<0.2	0.5	0.4
						1.0	1.6	333	18.2		8.4		31.6		100.0		7.8		3.1		6		84				<0.2		0.4	
					Middle	4.0	1.7	312	18.1	18.1	8.4	8.4	31.6	31.6	99.6	99.6	7.8		3.4		7		86				<0.2		0.4	
						4.0	1.7	315	18.1		8.4		31.6		99.6		7.8		3.5		7		86				<0.2		0.4	
					Bottom	6.9	1.6	336	18.1	18.1	8.4	8.4	31.6	31.6	99.4	99.5	7.8	7.8	4.0		9		91				<0.2		0.5	
						6.9	1.7	357	18.1		8.4		31.6		99.5		7.8		4.0		10		89				<0.2		0.4	
IM5	Cloudy	Calm	12:52	7.5	Surface	1.0	0.7	143	18.1	18.1	8.4	8.4	31.6	31.6	99.4	99.4	7.8	7.9	4.9	5.1	10	11	85	88	820725	804858	<0.2	<0.2	0.4	0.4
						1.0	0.7	145	18.1		8.4		31.6		99.4		8.0		4.9		10		87				<0.2		0.4	
					Middle	3.8	0.7	152	18.1	18.1	8.4	8.4	31.6	31.6	99.4	99.4	7.8		5.2		10		88				<0.2		0.5	
						3.8	0.8	158	18.1		8.4		31.6		99.4		7.8		5.2		10		88				<0.2		0.5	
					Bottom	6.5	0.6	149	18.1	18.1	8.4	8.4	31.6	31.6	100.0	100.0	7.8	7.8	5.2		12		90				<0.2		0.4	
						6.5	0.7	152	18.1		8.4		31.6		100.0		7.8		5.2		11		90				<0.2		0.4	
IM6	Cloudy	Calm	12:40	7.2	Surface	1.0	0.8	336	18.6	18.6	8.4	8.4	31.5	31.5	98.3	98.3	7.6	7.6	4.1	4.3	6	7	85	88	821062	805840	<0.2	<0.2	0.4	0.4
						1.0	0.8	347	18.6		8.4		31.5		98.3		7.6		4.1		6		86				<0.2		0.4	
					Middle	3.6	0.8	340	18.4	18.4	8.4	8.4	31.6	31.6	98.2	98.2	7.6		4.3		7		88				<0.2		0.5	
						3.6	0.9	351	18.4		8.4		31.6		98.2		7.6		4.4		7		88				<0.2		0.4	
					Bottom	6.2	0.8	324	18.5	18.5	8.4	8.4	31.6	31.6	99.0	99.1	7.7	7.7	4.4		8		90				<0.2		0.5	
						6.2	0.9	336	18.5		8.4		31.6		99.1		7.7		4.5		8		91				<0.2		0.4	
IM7	Cloudy	Calm	12:34	7.8	Surface	1.0	0.7	313	18.7	18.7	8.4	8.4	31.5	31.5	97.3	97.4	7.5	7.5	4.0	6.7	4	6	85	87	821355	806825	<0.2	<0.2	0.4	0.4
						1.0	0.8	313	18.7		8.4		31.5		97.4		7.5		4.0		4		86				<0.2		0.4	
					Middle	3.9	0.8	320	18.7	18.7	8.4	8.4	31.5	31.5	97.4	97.4	7.5		4.1		7		86				<0.2		0.5	
						3.9	0.8	348	18.7		8.4		31.5		97.4		7.5		4.1		7		88				<0.2		0.4	
					Bottom	6.8	0.6	314	18.5	18.5	8.4	8.4	31.5	31.5	97.5	97.5	7.6	7.6	12.0		7		89				<0.2		0.4	
						6.8	0.7	327	18.5		8.4		31.5		97.5		7.6		11.9		7		90				<0.2		0.5	
IM8	Cloudy	Moderate	12:59	7.4	Surface	1.0	0.1	82	18.5	18.5	8.3	8.3	32.9	32.9	97.7	97.7	7.5	7.5	2.9	3.0	9	8	86	89	821819	808151	<0.2	0.2	0.3	0.5
						1.0	0.1	89	18.5		8.3		32.9		97.7		7.5		2.9		9		86				<0.2		0.4	
					Middle	3.7	0.1	89	18.4	18.4	8.3	8.3	32.9	32.9	97.4	97.4	7.5		2.8		8		88				0.3		0.5	
						3.7	0.1	93	18.4		8.3		32.9		97.4		7.5		2.8		8		89				0.3		0.5	
					Bottom	6.4	0.0	77	18.3	18.3	8.3	8.3	33.0	33.0	97.4	97.4	7.5	7.5	3.2		7		91				<0.2		0.5	
						6.4	0.0	81	18.3		8.3		33.0		97.4		7.5		3.2		6		92				<0.2		0.5	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 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	13:05	7.0	Surface	1.0	0.1	301	18.5	18.5	8.3	8.3	32.9	32.9	98.4	98.4	7.6	7.6	6.0	3.6	10	8	85	88	822091	808800	<0.2	<0.2	0.4	0.5
						1.0	0.2	307	18.5		8.3		32.9		98.4		7.6		6.0		10		86				<0.2		0.5	
					Middle	3.5	0.2	285	18.4	18.4	8.3	8.3	32.9	32.9	97.5	97.5	7.5		2.2		8		87				<0.2		0.4	
						3.5	0.2	289	18.4		8.3		32.9		97.5		7.5		2.2		8		87				<0.2		0.6	
					Bottom	6.0	0.2	281	18.4	18.4	8.3	8.3	32.9	32.9	98.3	98.3	7.6	7.6	2.5		6		91				<0.2		0.5	
						6.0	0.2	290	18.4		8.3		32.9		98.3		7.6		2.5		6		91				<0.2		0.5	
IM10	Cloudy	Moderate	13:14	7.6	Surface	1.0	0.6	328	18.7	18.7	8.3	8.3	32.9	32.9	98.2	98.2	7.5	7.5	6.0	6.3	9	8	86	87	822369	809788	<0.2	0.2	0.4	0.5
						1.0	0.6	335	18.7		8.3		32.9		98.2		7.5		6.0		9		85				<0.2		0.5	
					Middle	3.8	0.6	311	18.6	18.6	8.3	8.3	32.9	32.9	97.8	97.8	7.5		6.5		9		87				<0.2		0.5	
						3.8	0.6	329	18.6		8.3		32.9		97.8		7.5		6.5		9		86				<0.2		0.5	
					Bottom	6.6	0.6	340	18.6	18.6	8.3	8.3	32.9	32.9	97.8	97.8	7.5	7.5	6.4		7		91				0.2		0.6	
						6.6	0.6	345	18.6		8.3		32.9		97.8		7.5		6.4		7		89				0.2		0.5	
IM11	Cloudy	Moderate	13:26	6.8	Surface	1.0	0.5	271	19.2	19.2	8.2	8.2	32.8	32.8	95.5	95.5	7.3	7.3	4.8	5.6	7	10	86	88	822035	811444	<0.2	<0.2	0.6	0.5
						1.0	0.5	272	19.2		8.2		32.8		95.5		7.3		4.8		7		86				<0.2		0.6	
					Middle	3.4	0.5	287	19.1	19.1	8.2	8.2	32.8	32.8	95.9	95.9	7.3		5.8		10		87				<0.2		0.5	
						3.4	0.5	296	19.1		8.2		32.8		95.9		7.3		5.8		11		88				<0.2		0.6	
					Bottom	5.8	0.4	277	19.0	19.0	8.2	8.2	32.8	32.8	96.9	96.9	7.4	7.4	6.1		11		90				<0.2		0.4	
						5.8	0.5	303	19.0		8.2		32.8		96.9		7.4		6.1		11		91				<0.2		0.4	
IM12	Cloudy	Moderate	13:33	9.3	Surface	1.0	0.6	268	19.2	19.2	8.2	8.2	32.8	32.8	95.0	95.0	7.2	7.3	2.7	3.3	6	7	86	88	821467	812037	0.3	0.2	0.5	0.5
						1.0	0.6	282	19.2		8.2		32.8		95.0		7.2		2.7		6		86				0.2		0.5	
					Middle	4.7	0.5	254	19.1	19.1	8.2	8.2	32.8	32.8	95.5	95.5	7.3		3.6		7		88				<0.2		0.5	
						4.7	0.5	273	19.1		8.2		32.8		95.5		7.3		3.6		7		88				<0.2		0.4	
					Bottom	8.3	0.5	271	19.1	19.1	8.2	8.2	32.8	32.8	96.7	96.7	7.4	7.4	3.7		8		90				<0.2		0.4	
						8.3	0.5	279	19.1		8.2		32.8		96.7		7.4		3.7		8		91				<0.2		0.4	
SR1A	Cloudy	Moderate	13:53	4.7	Surface	1.0	-	-	19.0	19.0	8.2	8.2	32.9	32.9	95.9	95.9	7.3	7.3	2.9	3.3	7	7	-	-	819980	812662	-	-	-	-
						1.0	-	-	19.0		8.2		32.9		95.9		7.3		2.9		7		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	19.0	19.0	8.2	8.2	32.9	32.9	98.6	98.6	7.5	7.5	3.6		7		-				-		-	
						3.7	-	-	19.0		8.2		32.9		98.6		7.5		3.6		7		-				-		-	
SR2	Cloudy	Moderate	14:14	4.8	Surface	1.0	0.3	79	19.1	19.1	8.2	8.2	32.9	32.9	97.0	97.0	7.4	7.4	3.8	4.4	6	6	87	89	821462	814166	<0.2	<0.2	0.5	0.5
						1.0	0.3	82	19.1		8.2		32.9		97.0		7.4		3.8		6		87				<0.2		0.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	77	19.1	19.1	8.2	8.2	32.8	32.8	99.5	99.6	7.6	7.6	4.9		5		90				<0.2		0.5	
						3.8	0.3	83	19.1		8.2		32.8		99.7		7.6		4.9		5		91				<0.2		0.4	
SR3	Cloudy	Moderate	12:53	8.6	Surface	1.0	0.1	66	18.9	18.9	8.2	8.2	32.9	32.9	97.1	97.1	7.4	7.5	1.8	2.3	5	7	-	-	822133	807559	-	-	-	-
						1.0	0.1	69	18.9		8.2		32.9		97.1		7.4		1.9		5		-				-		-	
					Middle	4.3	0.2	42	18.8	18.8	8.2	8.2	32.9	32.9	97.5	97.5	7.5		2.6		7		-				-		-	
						4.3	0.2	42	18.8		8.2		32.9		97.5		7.5		2.6		7		-				-		-	
					Bottom	7.6	0.1	325	18.7	18.7	8.2	8.2	32.8	32.8	98.2	98.2	7.5	7.5	2.3		8		-				-		-	
						7.6	0.1	349	18.7		8.2		32.8		98.2		7.5		2.3		8		-				-		-	
SR4A	Sunny	Calm	15:31	8.1	Surface	1.0	0.2	89	19.4	19.4	8.4	8.4	31.3	31.3	95.5	95.5	7.3	7.3	1.2	2.3	7	8	-	-	817171	807812	-	-	-	-
						1.0	0.2	90	19.4		8.4		31.3		95.5		7.3		1.2		7		-				-		-	
					Middle	4.1	0.2	149	19.3	19.3	8.4	8.4	31.3	31.3	94.6	94.6	7.2		2.2		8		-				-		-	
						4.1	0.2	161	19.3		8.4		31.3		94.6		7.2		2.1		8		-				-		-	
					Bottom	7.1	0.2	205	19.3	19.3	8.4	8.4	31.3	31.3	94.6	94.7	7.2	7.3	3.7		10		-				-		-	
						7.1	0.2	219	19.3		8.4		31.3		94.8		7.3		3.7		9		-				-		-	
SR5A	Sunny	Calm	15:39	3.5	Surface	1.0	0.1	294	19.4	19.4	8.4	8.4	31.3	31.3	95.6	95.6	7.3	7.3	1.4	1.7	8	9	-	-	816608	810711	-	-	-	-
						1.0	0.1	312	19.4		8.4		31.3		95.6		7.3		1.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	315	19.4	19.4	8.4	8.4	31.3	31.3	95.0	95.0	7.3	7.3	2.1		10		-				-		-	
						2.5	0.1	318	19.4		8.4		31.3		95.0		7.3		2.1		10		-				-		-	
SR6A	Sunny	Calm	15:45	4.3	Surface	1.0	0.1	235	19.4	19.4	8.4	8.4	31.3	31.3	95.8	95.8	7.3	7.3	1.3	1.7	10	11	-	-	817975	814762	-	-	-	-
						1.0	0.1	248	19.4		8.4		31.3		95.8		7.3		1.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	222	19.4	19.4	8.4	8.4	31.3	31.3	95.0	95.0	7.3	7.3	2.1		12		-				-		-	
						3.3	0.1	231	19.4		8.4		31.3		95.0		7.3		2.1		12		-				-		-	
SR7	Cloudy	Moderate	15:11	16.4	Surface	1.0	0.3	98	19.1	19.1	8.2	8.2	32.9	32.9	94.3	94.3	5.3	5.0	4.3	6.5	4	6	-	-	823630	823721	-	-	-	-
						1.0	0.3	99	19.1		8.2		32.9		94.3		5.3		4.3		4		-				-		-	
					Middle	8.2	0.3	93	19.1	19.1	8.2	8.2	32.9	32.9	94.1	94.1	4.6		6.4		6		-				-		-	
						8.2	0.3	99	19.1		8.2		32.9		94.1		4.6		6.4		6		-				-		-	
					Bottom	15.4	0.2	95	19.1	19.1	8.2	8.2	32.8	32.8	93.6	93.6	4.3	4.3	8.8		7		-				-		-	
						15.4	0.2	98	19.1		8.2		32.8		93.6		4.4		8.8		8		-				-		-	
SR8	Cloudy	Moderate	13:43	4.8	Surface	1.0	-	-	19.0	19.0	8.2	8.2	32.9	32.9	98.8	98.8	7.5	7.5	2.7	2.9	8	7	-	-	820388	811600	-	-	-	-
						1.0	-	-	19.0		8.2		32.9		98.8		7.5		2.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	19.0	19.0	8.2	8.2	32.9	32.9	100.4	100.4	7.7	7.7	3.0		6		-				-		-	
						3.8	-	-	19.0		8.2		32.9		100.4		7.7		3.0		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 24 December 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	Calm	08:15	8.3	Surface	1.0	0.2	232	18.5	18.5	8.4	8.4	31.3	31.3	99.1	99.1	7.7	7.7	2.6	2.7	4	5	84	87	815632	804254	<0.2	<0.2	0.5	0.6
						1.0	0.2	238	18.5		8.4		31.3		99.1		7.7		2.6		4		85				<0.2		0.6	
					Middle	4.2	0.1	227	18.6	18.6	8.4	8.4	31.3	31.3	98.9	98.9	7.7		2.5		4		88				<0.2		0.6	
						4.2	0.2	233	18.6		8.4		31.3		98.9		7.7		2.5		4		88				<0.2		0.5	
					Bottom	7.3	0.1	217	18.6	18.6	8.4	8.4	31.3	31.3	97.9	97.9	7.6	7.6	3.0		5		88				<0.2		0.6	
						7.3	0.1	237	18.6		8.4		31.3		97.8		7.6		3.1		6		88				<0.2		0.5	
C2	Fine	Moderate	09:28	11.1	Surface	1.0	0.3	167	17.9	17.9	8.0	8.0	28.7	28.8	95.7	95.6	7.7	7.5	4.2	5.4	3	3	87	90	825702	806924	<0.2	<0.2	0.5	0.6
						1.0	0.4	170	17.9		8.0		28.8		95.4		7.6		4.2		3		86				<0.2		0.7	
					Middle	5.6	0.2	166	18.2	18.2	8.0	8.0	30.7	30.7	94.0	94.0	7.4		4.7		3		90				<0.2		0.6	
						5.6	0.2	181	18.2		8.0		30.7		93.9		7.4		4.9		2		90				<0.2		0.6	
					Bottom	10.1	0.1	149	18.2	18.2	8.0	8.0	30.7	30.7	94.1	94.2	7.4	7.4	7.2		3		92				<0.2		0.6	
						10.1	0.1	161	18.2		8.0		30.7		94.2		7.4		7.2		2		93				<0.2		0.6	
C3	Fine	Moderate	07:16	11.6	Surface	1.0	0.0	53	18.7	18.7	8.0	8.0	30.9	30.9	91.7	91.7	7.1	7.1	3.1	3.7	3	3	83	88	822125	817822	<0.2	<0.2	0.5	0.5
						1.0	0.0	57	18.7		8.0		30.9		91.7		7.1		3.1		4		84				<0.2		0.6	
					Middle	5.8	0.1	79	18.7	18.7	8.0	8.0	30.9	30.9	91.6	91.6	7.1		3.1		2		88				<0.2		0.4	
						5.8	0.1	80	18.7		8.0		30.9		91.6		7.1		3.1		3		88				<0.2		0.6	
					Bottom	10.6	0.1	75	18.7	18.7	8.0	8.0	30.9	30.9	92.5	92.6	7.2	7.2	4.9		3		91				<0.2		0.6	
						10.6	0.1	77	18.6		8.0		30.9		92.7		7.2		4.9		2		92				<0.2		0.5	
IM1	Cloudy	Calm	08:37	4.6	Surface	1.0	0.1	195	18.4	18.4	8.4	8.4	31.3	31.3	100.7	100.7	7.9	7.9	2.8	3.0	3	3	84	86	817948	807150	<0.2	<0.2	0.6	0.6
						1.0	0.1	206	18.4		8.4		31.3		100.7		7.9		2.9		3		84				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	219	18.4	18.4	8.4	8.4	31.3	31.3	100.0	100.0	7.8	7.8	3.0		3		88				<0.2		0.6	
						3.6	0.1	229	18.4		8.4		31.3		99.9		7.8		3.2		3		88				<0.2		0.6	
IM2	Cloudy	Calm	08:45	6.7	Surface	1.0	0.1	216	18.3	18.3	8.4	8.4	31.2	31.2	100.2	100.2	7.8	7.8	3.6	3.5	2	3	84	87	818150	806143	<0.2	<0.2	0.5	0.5
						1.0	0.1	222	18.3		8.4		31.2		100.2		7.8		3.6		3		85				<0.2		0.5	
					Middle	3.4	0.2	155	18.3	18.3	8.4	8.4	31.3	31.3	99.4	99.4	7.8		2.2		3		88				<0.2		0.6	
						3.4	0.2	159	18.3		8.4		31.3		99.4		7.8		2.3		3		88				<0.2		0.6	
					Bottom	5.7	0.1	179	18.4	18.4	8.4	8.4	31.4	31.4	98.2	98.2	7.6	7.7	4.5		3		89				<0.2		0.5	
						5.7	0.1	180	18.4		8.4		31.4		98.2		7.7		4.6		4		89				<0.2		0.5	
IM3	Cloudy	Calm	09:07	6.6	Surface	1.0	1.2	319	18.4	18.4	8.4	8.4	31.2	31.2	100.0	100.0	7.8	7.8	5.4	5.7	3	3	86	89	818795	805593	<0.2	<0.2	0.6	0.5
						1.0	1.3	334	18.4		8.4		31.2		100.0		7.8		5.6		4		87				<0.2		0.5	
					Middle	3.3	1.0	322	18.4	18.4	8.4	8.4	31.2	31.2	99.6	99.6	7.8		7.0		4		90				<0.2		0.5	
						3.3	1.0	325	18.4		8.4		31.2		99.6		7.8		7.4		3		90				<0.2		0.4	
					Bottom	5.6	1.1	316	18.4	18.4	8.4	8.4	31.4	31.4	98.5	98.5	7.7	7.7	4.3		3		91				<0.2		0.6	
						5.6	1.1	325	18.4		8.4		31.4		98.4		7.7		4.3		3		92				<0.2		0.5	
IM4	Sunny	Calm	09:19	7.9	Surface	1.0	0.5	193	18.3	18.3	8.4	8.4	30.2	30.2	100.7	100.7	7.9	7.9	1.5	3.0	4	3	87	89	819728	804599	<0.2	<0.2	0.5	0.5
						1.0	0.5	200	18.3		8.4		30.2		100.7		7.9		1.5		3		87				<0.2		0.6	
					Middle	4.0	0.3	177	18.3	18.3	8.4	8.4	30.9	30.9	99.8	99.8	7.8		2.2		3		90				<0.2		0.4	
						4.0	0.3	184	18.3		8.4		30.9		99.8		7.8		2.4		2		90				<0.2		0.5	
					Bottom	6.9	0.2	166	18.3	18.3	8.4	8.4	31.1	31.1	99.6	99.6	7.8	7.8	5.1		2		91				<0.2		0.6	
						6.9	0.2	169	18.3		8.4		31.1		99.6		7.8		5.4		3		91				<0.2		0.6	
IM5	Sunny	Calm	09:29	7.4	Surface	1.0	0.4	200	18.3	18.3	8.4	8.4	29.9	29.9	100.5	100.5	7.9	7.9	1.4	1.8	<2	2	86	89	820753	804854	<0.2	<0.2	0.5	0.5
						1.0	0.4	215	18.3		8.4		29.9		100.5		7.9		1.4		<2		86				<0.2		0.5	
					Middle	3.7	0.3	208	18.3	18.3	8.4	8.4	31.2	31.2	99.7	99.7	7.8		2.1		2		89				<0.2		0.5	
						3.7	0.3	221	18.3		8.4		31.2		99.7		7.8		2.1		2		90				<0.2		0.5	
					Bottom	6.4	0.2	204	18.3	18.3	8.4	8.4	31.2	31.2	100.7	100.8	7.9	7.9	2.0		3		90				<0.2		0.5	
						6.4	0.2	218	18.3		8.4		31.2		100.8		7.9		1.9		2		91				<0.2		0.6	
IM6	Sunny	Calm	09:39	6.9	Surface	1.0	0.8	33	18.4	18.4	8.4	8.4	30.5	30.5	100.9	100.9	7.9	7.9	1.5	2.0	2	2	86	89	821036	805832	<0.2	<0.2	0.6	0.5
						1.0	0.9	33	18.4		8.4		30.5		100.8		7.9		1.5		3		86				<0.2		0.6	
					Middle	3.5	1.0	21	18.4	18.4	8.4	8.4	30.7	30.7	100.7	100.7	7.9		1.7		3		89				<0.2		0.4	
						3.5	1.1	21	18.4		8.4		30.7		100.7		7.9		1.7		2		89				<0.2		0.5	
					Bottom	5.9	0.9	29	18.3	18.3	8.4	8.4	30.9	30.9	100.6	100.6	7.9	7.9	2.8		2		91				<0.2		0.5	
						5.9	0.9	30	18.3		8.4		30.9		100.6		7.9		2.8		2		91				<0.2		0.5	
IM7	Sunny	Calm	09:49	7.8	Surface	1.0	2.4	280	18.5	18.5	8.4	8.4	30.7	30.8	100.2	100.2	7.8	7.8	2.1	2.5	2	3	87	90	821359	806833	<0.2	<0.2	0.4	0.5
						1.0	2.6	307	18.4		8.4		30.8		100.2		7.8		2.1		2		88				<0.2		0.5	
					Middle	3.9	2.1	277	18.4	18.4	8.4	8.4	31.0	31.0	100.1	100.1	7.8		2.2		2		89				<0.2		0.5	
						3.9	2.1	286	18.4		8.4		31.0		100.1		7.8		2.2		3		90				<0.2		0.5	
					Bottom	6.8	2.3	278	18.4	18.4	8.4	8.4	31.2	31.2	99.3	99.3	7.7	7.7	3.1		3		91				<0.2		0.5	
						6.8	2.3	281	18.4		8.4		31.2		99.3		7.7		3.1		3		92				<0.2		0.5	
IM8	Fine	Moderate	08:59	7.4	Surface	1.0	0.1	134	17.8	17.8	8.1	8.1	30.2	30.2	97.2	97.2	7.7	7.7	4.3	4.6	4	3	85	88	821818	808135	<0.2	<0.2	0.6	0.7
						1.0	0.1	138	17.8		8.1		30.3		97.2		7.7		4.3		3		86				<0.2		0.6	
					Middle	3.7	0.1	124	17.8	17.8	8.1	8.1	30.5	30.5	97.0	97.0	7.7		4.6		4		88				<0.2		0.7	
						3.7	0.1	133	17.8		8.1		30.5		97.0		7.7		4.7		3		89				<0.2		0.7	
					Bottom	6.4	0.0	68	17.8	17.8	8.1	8.1	30.6	30.6	97.1	97.2	7.7	7.7	4.9		2		90				<0.2		0.6	
						6.4	0.0	74	17.8		8.1		30.6		97.2		7.7		4.9		2		90				<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 24 December 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	08:54	6.8	Surface	1.0	0.2	156	17.9	17.9	8.0	8.0	30.2	30.2	96.9	96.9	7.7	7.7	4.3	4.7	2	3	86	90	822071	808822	<0.2	<0.2	0.5	0.6
						1.0	0.2	168	17.9		8.0		30.2		96.9		7.7		4.3		3		87				<0.2		0.5	
					Middle	3.4	0.1	121	17.9	17.9	8.0	8.0	30.3	30.3	96.8	96.8	7.7		4.6		3		92				<0.2		0.7	
						3.4	0.1	129	17.9		8.0		30.3		96.8		7.7		4.7		3		91				<0.2		0.6	
					Bottom	5.8	0.2	88	17.8	17.8	8.0	8.0	30.5	30.5	96.9	96.9	7.7	7.7	5.2		4		93				<0.2		0.7	
						5.8	0.2	92	17.8		8.0		30.5		96.9		7.7		5.2		3		93				<0.2		0.7	
IM10	Fine	Moderate	08:47	7.0	Surface	1.0	0.3	144	18.0	18.0	8.0	8.0	30.5	30.5	96.2	96.2	7.6	7.6	4.2	5.1	4	4	86	90	822378	809813	<0.2	<0.2	0.6	0.6
						1.0	0.3	152	18.0		8.0		30.5		96.2		7.6		4.2		4		87				<0.2		0.6	
					Middle	3.5	0.3	129	17.9	17.9	8.0	8.0	30.5	30.5	96.1	96.1	7.6		4.9		4		91				<0.2		0.6	
						3.5	0.3	138	17.9		8.0		30.5		96.0		7.6		5.1		3		90				<0.2		0.7	
					Bottom	6.0	0.2	122	17.9	17.9	8.0	8.0	30.5	30.5	96.1	96.1	7.6	7.6	6.2		4		92				<0.2		0.6	
						6.0	0.3	130	17.9		8.0		30.5		96.1		7.6		6.2		3		93				<0.2		0.7	
IM11	Fine	Moderate	08:36	7.4	Surface	1.0	0.2	96	17.9	17.9	8.1	8.1	30.6	30.6	96.1	96.1	7.6	7.6	4.5	4.8	3	3	82	88	822037	811458	<0.2	<0.2	0.7	0.7
						1.0	0.2	98	17.9		8.1		30.6		96.1		7.6		4.6		3		84				<0.2		0.7	
					Middle	3.7	0.1	102	17.9	17.9	8.0	8.0	30.6	30.6	96.0	96.0	7.6		4.7		3		89				<0.2		0.8	
						3.7	0.1	106	17.9		8.0		30.6		96.0		7.6		4.7		4		90				<0.2		0.7	
					Bottom	6.4	0.2	73	17.9	17.9	8.0	8.0	30.6	30.6	96.4	96.5	7.6	7.6	5.0		3		91				<0.2		0.7	
						6.4	0.2	75	17.9		8.0		30.6		96.5		7.6		5.1		3		92				<0.2		0.6	
IM12	Fine	Moderate	08:29	8.8	Surface	1.0	0.2	111	17.9	17.9	8.1	8.1	30.7	30.7	95.9	95.9	7.6	7.6	4.7	5.0	4	4	84	88	821450	812060	<0.2	<0.2	0.7	0.7
						1.0	0.2	111	17.9		8.1		30.7		95.8		7.6		4.7		3		84				<0.2		0.6	
					Middle	4.4	0.1	107	17.9	17.9	8.1	8.1	30.7	30.7	95.6	95.6	7.5		4.9		3		88				<0.2		0.7	
						4.4	0.1	108	17.9		8.1		30.7		95.6		7.5		5.0		4		88				<0.2		0.8	
					Bottom	7.8	0.1	107	17.9	17.9	8.1	8.1	30.7	30.7	96.1	96.2	7.6	7.6	5.3		5		92				<0.2		0.7	
						7.8	0.1	109	17.9		8.1		30.7		96.3		7.6		5.3		6		91				<0.2		0.7	
SR1A	Fine	Calm	07:55	5.1	Surface	1.0	-	-	18.3	18.3	8.0	8.0	30.8	30.8	92.7	92.7	7.3	7.3	4.6	5.1	2	3	-	-	819976	812664	-	-	-	-
						1.0	-	-	18.3		8.0		30.8		92.7		7.3		4.8		2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	18.4	18.4	8.0	8.0	30.9	30.9	93.1	93.3	7.3	7.3	5.5		3		-				-		-	
						4.1	-	-	18.4		8.0		30.9		93.4		7.3		5.6		4		-				-		-	
SR2	Fine	Calm	07:40	4.6	Surface	1.0	0.1	32	18.4	18.4	8.0	8.0	30.9	30.9	93.3	93.3	7.3	7.3	5.7	6.2	4	3	85	88	821462	814156	<0.2	<0.2	0.6	0.7
						1.0	0.1	35	18.4		8.0		30.9		93.3		7.3		5.8		3		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	74	18.4	18.4	8.0	8.0	30.9	30.9	94.0	94.2	7.3	7.4	6.6		2		91				<0.2		0.8	
						3.6	0.0	80	18.4		8.0		30.9		94.3		7.4		7.0		3		91				<0.2		0.6	
SR3	Fine	Moderate	09:05	8.9	Surface	1.0	0.2	190	17.8	17.8	8.0	8.0	29.5	29.5	97.2	97.2	7.7	7.7	4.0	4.3	2	3	-	-	822170	807560	-	-	-	-
						1.0	0.2	201	17.8		8.1		29.6		97.2		7.7		4.0		3		-				-		-	
					Middle	4.5	0.1	146	17.8	17.8	8.1	8.1	30.3	30.3	97.0	97.0	7.7		4.1		3		-				-		-	
						4.5	0.1	156	17.8		8.1		30.3		97.0		7.7		4.2		2		-				-		-	
					Bottom	7.9	0.1	46	17.8	17.8	8.1	8.1	30.6	30.6	96.9	96.9	7.7	7.7	4.8		3		-				-		-	
						7.9	0.1	47	17.8		8.1		30.6		96.9		7.7		4.8		3		-				-		-	
SR4A	Cloudy	Calm	07:53	8.2	Surface	1.0	0.2	80	18.4	18.4	8.4	8.4	31.3	31.3	99.9	99.9	7.8	7.8	2.2	2.5	3	3	-	-	817187	807799	-	-	-	-
						1.0	0.2	84	18.4		8.4		31.3		99.8		7.8		2.2		3		-				-		-	
					Middle	4.1	0.1	58	18.4	18.4	8.4	8.4	31.3	31.3	99.6	99.6	7.8		2.9		3		-				-		-	
						4.1	0.1	61	18.4		8.4		31.3		99.6		7.8		2.8		3		-				-		-	
					Bottom	7.2	0.1	83	18.4	18.4	8.4	8.4	31.4	31.4	99.3	99.3	7.7	7.7	2.3		3		-				-		-	
						7.2	0.1	89	18.4		8.4		31.4		99.3		7.7		2.3		2		-				-		-	
SR5A	Cloudy	Calm	07:34	3.1	Surface	1.0	0.0	168	18.5	18.5	8.4	8.4	31.4	31.4	98.1	98.1	7.6	7.6	2.2	2.8	2	3	-	-	816584	810713	-	-	-	-
						1.0	0.0	183	18.5		8.4		31.4		98.1		7.6		2.2		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.0	80	18.5	18.5	8.4	8.4	31.4	31.4	98.2	98.3	7.6	7.6	3.3		4		-				-		-	
						2.1	0.0	82	18.5		8.4		31.4		98.3		7.6		3.6		3		-				-		-	
SR6A	Cloudy	Calm	07:06	3.2	Surface	1.0	0.0	243	19.3	19.3	8.4	8.4	31.4	31.4	92.9	92.9	7.1	7.1	4.4	4.6	5	5	-	-	817945	814745	-	-	-	-
						1.0	0.0	254	19.3		8.4		31.4		92.9		7.1		4.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.0	259	19.3	19.3	8.4	8.4	31.4	31.4	93.0	93.0	7.1	7.1	4.8		5		-				-		-	
						2.2	0.0	284	19.3		8.4		31.4		93.0		7.1		4.9		4		-				-		-	
SR7	Fine	Calm	06:43	18.0	Surface	1.0	0.1	98	18.7	18.7	8.1	8.1	30.9	30.9	90.8	90.8	7.0	7.0	3.2	3.4	4	4	-	-	823632	823751	-	-	-	-
						1.0	0.1	100	18.7		8.1		30.9		90.8		7.0		3.2		4		-				-		-	
					Middle	9.0	0.1	67	18.8	18.8	8.1	8.1	30.9	30.9	90.7	90.7	7.0		3.4		3		-				-		-	
						9.0	0.1	71	18.7		8.1		31.0		90.7		7.0		3.5		4		-				-		-	
					Bottom	17.0	0.1	72	18.7	18.7	8.1	8.1	31.0	31.0	90.7	90.7	7.0	7.0	3.5		4		-				-		-	
						17.0	0.1	78	18.7		8.1		31.0		90.7		7.0		3.5		3		-				-		-	
SR8	Fine	Calm	08:20	4.3	Surface	1.0	-	-	18.2	18.2	8.0	8.0	30.7	30.7	94.9	94.9	7.4	7.4	6.4	7.1	3	4	-	-	820396	811607	-	-	-	-
						1.0	-	-	18.2		8.0		30.7		94.9		7.4		6.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	18.1	18.1	8.0	8.0	30.8	30.8	95.0	95.1	7.5	7.5	7.7		4		-				-		-	
						3.3	-	-	18.1		8.0		30.8		95.1		7.5		7.9		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 December 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	14:56	8.4	Surface	1.0	0.1	342	18.6	18.6	8.4	8.4	31.2	31.2	101.4	101.4	7.9	7.9	1.3	1.7	3	3	87	90	815610	804262	<0.2	<0.2	0.6	0.6
						1.0	0.1	342	18.6		8.4		31.2		101.4		7.9		1.3		3		87				<0.2		0.6	
					Middle	4.2	0.1	21	18.5	18.5	8.4	8.4	31.3	31.3	100.7	100.7	7.8		1.8		3		91				<0.2		0.6	
						4.2	0.1	21	18.5		8.4		31.3		100.7		7.8		1.8		2		92				<0.2		0.6	
					Bottom	7.4	0.1	17	18.5	18.5	8.4	8.4	31.3	31.3	100.4	100.4	7.8	7.8	1.9		2		92				<0.2		0.6	
						7.4	0.1	18	18.5		8.4		31.3		100.4		7.8		1.9		2		92				<0.2		0.5	
C2	Fine	Calm	13:42	11.4	Surface	1.0	0.0	143	17.8	17.8	8.1	8.1	28.4	28.4	96.8	96.7	7.8	7.6	4.3	4.9	2	3	83	87	825705	806960	<0.2	<0.2	0.7	0.6
						1.0	0.0	150	17.8		8.1		28.4		96.5		7.7		4.3		3		83				<0.2		0.7	
					Middle	5.7	0.2	300	18.2	18.2	8.1	8.1	30.7	30.7	93.7	93.7	7.4		4.2		3		86				<0.2		0.6	
						5.7	0.2	303	18.2		8.1		30.7		93.7		7.4		4.2		3		87				<0.2		0.6	
					Bottom	10.4	0.3	321	18.2	18.2	8.1	8.1	30.7	30.7	93.7	93.7	7.4	7.4	6.3		3		90				<0.2		0.6	
						10.4	0.3	323	18.2		8.1		30.7		93.7		7.4		6.3		3		90				<0.2		0.6	
C3	Fine	Moderate	15:38	11.4	Surface	1.0	0.4	280	18.9	18.9	8.1	8.1	30.7	30.7	93.8	93.7	7.3	7.3	4.0	5.0	5	4	86	89	822107	817783	<0.2	<0.2	0.6	0.6
						1.0	0.4	282	18.8		8.1		30.7		93.6		7.3		4.1		6		86				<0.2		0.6	
					Middle	5.7	0.5	259	18.6	18.6	8.1	8.1	30.8	30.8	92.8	92.8	7.2		5.2		5		89				<0.2		0.7	
						5.7	0.5	260	18.6		8.1		30.8		92.8		7.2		5.2		4		89				<0.2		0.6	
					Bottom	10.4	0.2	212	18.5	18.5	8.1	8.1	30.8	30.8	93.3	93.4	7.3	7.3	5.6		3		93				<0.2		0.6	
						10.4	0.2	216	18.5		8.1		30.8		93.4		7.3		5.6		2		92				<0.2		0.6	
IM1	Sunny	Moderate	14:36	4.7	Surface	1.0	2.2	336	18.5	18.5	8.4	8.4	31.3	31.3	101.9	101.9	7.9	7.9	0.9	2.4	5	5	87	88	817959	807137	<0.2	<0.2	0.5	0.6
						1.0	2.4	309	18.5		8.4		31.3		101.8		7.9		1.0		4		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	2.2	358	18.5	18.5	8.4	8.4	31.3	31.3	101.6	101.6	7.9	7.9	3.9		6		89				<0.2		0.6	
						3.7	2.2	329	18.5		8.4		31.3		101.6		7.9		3.9		6		90				<0.2		0.6	
IM2	Sunny	Moderate	14:27	6.6	Surface	1.0	2.6	342	18.5	18.5	8.4	8.4	31.2	31.2	101.5	101.5	7.9	7.9	1.4	3.4	3	5	91	91	818146	806180	<0.2	<0.2	0.5	0.6
						1.0	2.9	315	18.5		8.4		31.2		101.5		7.9		1.4		3		91				<0.2		0.6	
					Middle	3.3	2.3	350	18.4	18.4	8.4	8.4	31.3	31.3	99.6	99.6	7.8		1.7		5		91				<0.2		0.7	
						3.3	2.4	322	18.4		8.4		31.3		99.5		7.8		1.8		6		91				<0.2		0.6	
					Bottom	5.6	2.2	321	18.4	18.4	8.4	8.4	31.4	31.4	95.7	95.6	7.5	7.5	7.0		6		92				<0.2		0.6	
						5.6	2.3	342	18.4		8.4		31.4		95.5		7.4		6.9		7		92				<0.2		0.6	
IM3	Sunny	Moderate	14:20	6.7	Surface	1.0	2.1	287	18.4	18.4	8.4	8.4	31.1	31.1	100.8	100.8	7.9	7.9	1.8	2.3	6	6	89	91	818807	805601	<0.2	<0.2	0.6	0.6
						1.0	2.2	305	18.4		8.4		31.1		100.8		7.9		1.8		7		89				<0.2		0.6	
					Middle	3.4	2.1	291	18.4	18.4	8.4	8.4	31.1	31.1	100.2	100.2	7.8		2.2		6		92				<0.2		0.6	
						3.4	2.2	314	18.4		8.4		31.1		100.2		7.8		2.2		6		92				<0.2		0.5	
					Bottom	5.7	2.1	288	18.4	18.4	8.4	8.4	31.3	31.3	99.6	99.7	7.8	7.8	3.0		6		93				<0.2		0.6	
						5.7	2.1	308	18.4		8.4		31.3		99.7		7.8		3.0		5		93				<0.2		0.6	
IM4	Sunny	Moderate	14:10	8.1	Surface	1.0	2.7	286	18.4	18.4	8.4	8.4	30.3	30.3	101.0	101.0	7.9	7.9	1.0	4.1	4	5	88	90	819704	804624	<0.2	<0.2	0.6	0.6
						1.0	2.9	291	18.4		8.4		30.3		100.9		7.9		1.0		4		88				<0.2		0.6	
					Middle	4.1	2.6	264	18.3	18.3	8.4	8.4	30.8	30.8	100.0	100.1	7.8		4.2		5		91				<0.2		0.7	
						4.1	2.7	282	18.3		8.4		30.8		100.1		7.8		4.2		6		91				<0.2		0.5	
					Bottom	7.1	2.8	270	18.3	18.3	8.4	8.4	30.9	30.9	99.6	99.6	7.8	7.8	7.2		6		92				<0.2		0.6	
						7.1	3.0	285	18.3		8.4		30.9		99.6		7.8		7.2		7		92				<0.2		0.6	
IM5	Sunny	Calm	14:01	7.5	Surface	1.0	2.4	304	18.4	18.4	8.4	8.4	30.2	30.2	100.9	100.9	7.9	7.9	1.7	1.9	3	4	87	90	820722	804871	<0.2	<0.2	0.6	0.6
						1.0	2.5	307	18.4		8.4		30.2		100.9		7.9		1.7		3		87				<0.2		0.6	
					Middle	3.8	2.4	294	18.4	18.4	8.4	8.4	30.5	30.5	100.4	100.4	7.9		1.9		4		90				<0.2		0.6	
						3.8	2.5	318	18.4		8.4		30.5		100.4		7.9		1.8		5		91				<0.2		0.6	
					Bottom	6.5	2.4	306	18.4	18.4	8.4	8.4	30.9	30.9	100.0	100.1	7.8	7.8	2.1		6		91				<0.2		0.6	
						6.5	2.6	325	18.4		8.4		30.9		100.1		7.8		2.1		5		92				<0.2		0.6	
IM6	Sunny	Calm	13:49	7.1	Surface	1.0	1.8	3	18.4	18.4	8.4	8.4	30.7	30.8	100.8	100.7	7.9	7.9	2.0	2.4	5	5	87	90	821073	805826	<0.2	<0.2	0.5	0.6
						1.0	1.8	3	18.4		8.4		30.9		100.6		7.9		2.3		5		88				<0.2		0.5	
					Middle	3.6	1.8	6	18.4	18.4	8.4	8.4	31.0	31.0	100.5	100.5	7.8		2.4		5		90				<0.2		0.6	
						3.6	1.8	6	18.4		8.4		31.0		100.4		7.8		2.4		6		90				<0.2		0.6	
					Bottom	6.1	2.2	10	18.4	18.4	8.4	8.4	31.1	31.1	100.3	100.4	7.8	7.8	2.8		5		91				<0.2		0.6	
						6.1	2.4	10	18.4		8.4		31.1		100.4		7.8		2.8		6		91				<0.2		0.6	
IM7	Sunny	Calm	13:41	7.9	Surface	1.0	1.9	287	18.5	18.5	8.4	8.4	30.3	30.4	100.4	100.4	7.9	7.9	1.6	1.9	5	4	87	90	821341	806851	<0.2	<0.2	0.6	0.6
						1.0	1.9	290	18.5		8.4		30.4		100.4		7.9		1.7		4		87				<0.2		0.6	
					Middle	4.0	1.8	290	18.4	18.4	8.4	8.4	31.1	31.1	100.1	100.1	7.8		1.7		4		90				<0.2		0.6	
						4.0	1.9	296	18.4		8.4		31.1		100.1		7.8		1.6		4		90				<0.2		0.6	
					Bottom	6.9	1.7	283	18.4	18.4	8.4	8.4	31.2	31.2	99.7	99.8	7.8	7.8	2.4		4		91				<0.2		0.6	
						6.9	1.8	297	18.4		8.4		31.1		99.9		7.8		2.3		4		92				<0.2		0.6	
IM8	Fine	Moderate	14:03	7.2	Surface	1.0	0.1	237	18.0	18.0	8.1	8.1	29.3	29.3	98.2	98.2	7.8	7.8	4.1	5.3	3	4	85	88	821846	808148	<0.2	<0.2	0.6	0.6
						1.0	0.1	256	18.0		8.1		29.3		98.2		7.8		4.1		2		85				<0.2		0.5	
					Middle	3.6	0.2	242	17.9	17.9	8.1	8.1	29.9	29.9	97.7	97.7	7.8		5.5		4		88				<0.2		0.6	
						3.6	0.2	251	17.9		8.1		29.9		97.6		7.7		5.7		5		88				<0.2		0.6	
					Bottom	6.2	0.1	230	17.9	17.9	8.1	8.1	30.0	30.0	97.3	97.3	7.7	7.7	6.3		4		91				<0.2		0.6	
						6.2	0.1	231	17.9		8.1		30.0		97.2		7.7		6.3		5		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**

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Water Quality Monitoring
Water Quality Monitoring Results on 24 December 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	14:08	6.7	Surface	1.0	0.2	260	18.0	18.0	8.0	8.0	29.8	29.8	98.0	98.0	7.8	7.8	4.2	4.5	5	5	85	88	822098	808827	<0.2	<0.2	0.5	0.6
						1.0	0.2	284	18.0		8.0		29.8		97.9		7.8		4.2		6		85				<0.2		0.7	
					Middle	3.4	0.2	225	18.0	18.0	8.0	8.0	29.8	29.8	97.9	97.9	7.8		4.2		4		88				<0.2		0.6	
						3.4	0.2	237	18.0		8.0		29.8		97.9		7.8		4.2		5		88				<0.2		0.6	
					Bottom	5.7	0.2	243	18.0	18.0	8.1	8.1	30.0	30.0	97.3	97.3	7.7	7.7	5.1		4		91				<0.2		0.7	
						5.7	0.3	257	18.0		8.1		30.0		97.2		7.7		5.0		4		92				<0.2		0.6	
IM10	Fine	Moderate	14:14	6.8	Surface	1.0	0.3	292	18.0	18.0	8.1	8.1	30.1	30.1	97.4	97.4	7.7	7.7	4.1	4.2	5	5	83	87	822408	809807	<0.2	<0.2	0.6	0.6
						1.0	0.3	297	18.0		8.1		30.1		97.4		7.7		4.1		6		83				<0.2		0.7	
					Middle	3.4	0.3	269	18.0	18.0	8.1	8.1	30.1	30.1	97.4	97.4	7.7		4.2		5		87				<0.2		0.7	
						3.4	0.3	269	18.0		8.1		30.1		97.4		7.7		4.2		4		87				<0.2		0.6	
					Bottom	5.8	0.3	280	18.0	18.0	8.1	8.1	30.1	30.1	97.2	97.2	7.7	7.7	4.2		4		90				<0.2		0.6	
						5.8	0.3	305	18.0		8.1		30.1		97.2		7.7		4.1		3		90				<0.2		0.6	
IM11	Fine	Moderate	14:24	7.1	Surface	1.0	0.4	290	18.1	18.1	8.1	8.1	30.5	30.5	97.1	97.1	7.6	7.6	4.2	4.4	3	4	85	88	822046	811477	<0.2	<0.2	0.6	0.6
						1.0	0.4	313	18.1		8.1		30.5		97.1		7.6		4.2		4		85				<0.2		0.6	
					Middle	3.6	0.3	300	18.1	18.1	8.1	8.1	30.5	30.5	96.8	96.8	7.6		4.3		4		88				<0.2		0.6	
						3.6	0.4	313	18.1		8.1		30.5		96.8		7.6		4.3		4		89				<0.2		0.6	
					Bottom	6.1	0.3	274	18.0	18.0	8.1	8.1	30.5	30.5	96.8	96.8	7.6	7.6	4.6		4		91				<0.2		0.6	
						6.1	0.3	282	18.0		8.1		30.5		96.8		7.6		4.6		5		92				<0.2		0.7	
IM12	Fine	Moderate	14:29	8.6	Surface	1.0	0.2	296	18.0	18.0	8.1	8.1	30.5	30.5	97.1	97.1	7.7	7.7	4.3	4.7	4	3	85	88	821460	812066	<0.2	<0.2	0.7	0.6
						1.0	0.2	318	18.0		8.1		30.5		97.0		7.7		4.4		3		85				<0.2		0.6	
					Middle	4.3	0.3	312	18.0	18.0	8.1	8.1	30.5	30.5	96.7	96.7	7.6		4.7		3		88				<0.2		0.6	
						4.3	0.3	342	18.0		8.1		30.5		96.7		7.6		4.7		4		88				<0.2		0.6	
					Bottom	7.6	0.2	317	18.0	18.0	8.1	8.1	30.6	30.6	97.1	97.1	7.7	7.7	5.0		3		91				<0.2		0.6	
						7.6	0.3	335	18.0		8.1		30.6		97.1		7.7		5.0		3		91				<0.2		0.7	
SR1A	Fine	Calm	15:02	5.0	Surface	1.0	-	-	18.3	18.3	8.0	8.0	30.6	30.6	95.4	95.4	7.5	7.5	5.2	5.7	5	5	-	-	819980	812658	-	-	-	-
						1.0	-	-	18.3		8.0		30.6		95.4		7.5		5.2		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	18.3	18.3	8.1	8.1	30.7	30.7	94.6	94.6	7.4	7.4	6.2		6		-				-		-	
						4.0	-	-	18.3		8.1		30.7		94.6		7.4		6.3		5		-				-		-	
SR2	Fine	Calm	15:17	4.8	Surface	1.0	0.1	317	18.1	18.1	8.1	8.1	30.6	30.6	98.3	98.3	7.7	7.7	5.4	6.6	6	6	84	87	821460	814150	<0.2	<0.2	0.6	0.6
						1.0	0.1	326	18.1		8.1		30.6		98.3		7.7		6.0		5		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	324	18.1	18.1	8.1	8.1	30.6	30.6	98.2	98.2	7.7	7.7	7.4		5		89				<0.2		0.7	
						3.8	0.1	355	18.1		8.1		30.6		98.2		7.7		7.5		6		89				<0.2		0.6	
SR3	Fine	Moderate	13:59	8.6	Surface	1.0	0.2	204	17.9	17.9	8.1	8.1	29.5	29.6	98.0	98.0	7.8	7.8	4.1	5.1	4	4	-	-	822168	807555	-	-	-	-
						1.0	0.3	207	17.9		8.1		29.6		97.9		7.8		4.1		5		-				-		-	
					Middle	4.3	0.2	258	17.8	17.8	8.1	8.1	30.3	30.4	97.2	97.2	7.7		4.8		5		-				-		-	
						4.3	0.2	273	17.8		8.1		30.4		97.1		7.7		5.0		4		-				-		-	
					Bottom	7.6	0.1	271	17.8	17.8	8.1	8.1	30.6	30.6	96.9	96.9	7.7	7.7	6.3		3		-				-		-	
						7.6	0.1	285	17.8		8.1		30.6		96.9		7.7		6.4		2		-				-		-	
SR4A	Sunny	Calm	15:18	8.3	Surface	1.0	1.5	190	18.6	18.6	8.4	8.4	31.3	31.3	100.1	100.1	7.8	7.8	2.1	2.2	4	4	-	-	817170	807789	-	-	-	-
						1.0	1.6	207	18.6		8.4		31.3		100.0		7.8		2.1		4		-				-		-	
					Middle	4.2	1.9	181	18.5	18.5	8.4	8.4	31.3	31.3	99.4	99.4	7.7		2.0		4		-				-		-	
						4.2	1.9	198	18.5		8.4		31.3		99.4		7.7		2.0		4		-				-		-	
					Bottom	7.3	1.7	192	18.5	18.5	8.4	8.4	31.3	31.3	98.6	98.6	7.7	7.7	2.5		5		-				-		-	
						7.3	1.7	197	18.5		8.4		31.3		98.6		7.7		2.5		5		-				-		-	
SR5A	Sunny	Calm	15:37	3.2	Surface	1.0	0.1	284	18.9	18.9	8.4	8.4	31.3	31.3	101.7	101.7	7.9	7.9	5.7	5.5	5	5	-	-	816594	810684	-	-	-	-
						1.0	0.1	294	18.9		8.4		31.3		101.7		7.9		5.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.0	136	18.9	18.9	8.4	8.4	31.3	31.3	101.6	101.6	7.8	7.8	5.4		5		-				-		-	
						2.2	0.0	147	18.9		8.4		31.3		101.6		7.8		5.3		5		-				-		-	
SR6A	Sunny	Calm	16:16	3.5	Surface	1.0	0.0	45	19.7	19.7	8.5	8.5	31.2	31.2	93.9	93.9	7.2	7.2	9.4	9.7	4	4	-	-	817972	814730	-	-	-	-
						1.0	0.0	48	19.7		8.5		31.2		93.9		7.2		9.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.0	318	19.6	19.6	8.5	8.5	31.3	31.3	93.5	93.5	7.1	7.1	10.0		4		-				-		-	
						2.5	0.0	321	19.6		8.5		31.3		93.5		7.1		10.0		3		-				-		-	
SR7	Fine	Calm	16:12	14.0	Surface	1.0	0.0	283	18.9	18.9	8.1	8.1	30.6	30.6	93.1	93.1	7.2	7.2	3.8	4.3	6	5	-	-	823650	823746	-	-	-	-
						1.0	0.0	307	18.9		8.1		30.6		93.0		7.2		3.8		5		-				-		-	
					Middle	7.0	0.1	88	18.8	18.8	8.1	8.1	30.6	30.6	92.5	92.5	7.2	7.2	4.4		5		-				-		-	
						7.0	0.1	94	18.8		8.1		30.6		92.5		7.2		4.4		4		-				-		-	
					Bottom	13.0	0.1	90	18.8	18.8	8.1	8.1	30.6	30.6	93.3	93.5	7.3	7.3	4.8		5		-				-		-	
						13.0	0.1	98	18.8		8.1		30.6		93.6		7.3		4.8		4		-				-		-	
SR8	Fine	Calm	14:45	4.2	Surface	1.0	-	-	18.4	18.4	8.1	8.1	30.6	30.6	96.4	96.3	7.5	7.5	5.5	5.8	4	5	-	-	820402	811642	-	-	-	-
						1.0	-	-	18.3		8.1		30.6		96.2		7.5		5.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	18.2	18.2	8.1	8.1	30.6	30.6	95.7	95.7	7.5	7.5	5.9		5		-				-		-	
						3.2	-	-	18.2		8.1		30.6		95.6		7.5		6.0		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 December 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	09:55	8.0	Surface	1.0	0.0	268	19.0	19.0	8.1	8.1	31.2	31.2	98.8	98.8	7.6	7.6	3.7	8.0	3	4	85	87	815621	804228	<0.2	<0.2	0.4	0.4
						1.0	0.0	287	19.0		8.1		31.2		98.8		7.6		3.8		4		84				<0.2		0.5	
					Middle	4.0	0.0	226	18.9	18.9	8.1	8.1	31.2	31.2	98.2	98.2	7.6		9.9		3		88				<0.2		0.4	
						4.0	0.0	238	18.9		8.1		31.2		98.2		7.6		10.7		4		87				<0.2		0.4	
					Bottom	7.0	0.0	131	18.9	18.9	8.1	8.1	31.2	31.2	98.3	98.4	7.6	7.6	9.7		5		90				<0.2		0.4	
						7.0	0.0	136	18.9		8.1		31.2		98.4		7.6		10.3		4		89				<0.2		0.5	
C2	Sunny	Moderate	11:23	10.8	Surface	1.0	0.2	135	18.5	18.5	8.1	8.1	30.1	30.1	96.7	96.7	7.6	7.5	4.4	4.8	4	4	85	89	825664	806925	<0.2	<0.2	0.8	0.9
						1.0	0.2	147	18.5		8.1		30.1		96.7		7.6		4.4		3		85				<0.2		0.8	
					Middle	5.4	0.5	154	18.4	18.4	8.1	8.1	30.2	30.2	94.8	94.8	7.4		4.6		4		90				<0.2		0.9	
						5.4	0.5	162	18.4		8.1		30.2		94.8		7.4		4.6		3		89				<0.2		0.9	
					Bottom	9.8	0.5	144	18.5	18.5	8.1	8.1	30.4	30.4	93.4	93.4	7.3	7.3	5.4		5		94				<0.2		1.0	
						9.8	0.5	144	18.5		8.1		30.4		93.4		7.3		5.4		5		93				<0.2		0.9	
C3	Sunny	Moderate	09:14	12.3	Surface	1.0	0.4	286	18.8	18.8	8.1	8.1	30.7	30.7	90.5	90.5	7.0	7.0	3.8	3.9	3	3	86	90	822128	817825	<0.2	<0.2	0.6	0.5
						1.0	0.4	309	18.8		8.1		30.7		90.5		7.0		3.8		3		86				<0.2		0.6	
					Middle	6.2	0.2	257	18.8	18.8	8.1	8.1	30.7	30.7	90.2	90.2	7.0		4.0		3		90				<0.2		0.6	
						6.2	0.2	280	18.8		8.1		30.7		90.2		7.0		4.0		3		90				<0.2		0.4	
					Bottom	11.3	0.1	120	18.8	18.8	8.1	8.1	30.7	30.7	90.6	90.7	7.0	7.0	3.8		2		94				<0.2		0.5	
						11.3	0.1	125	18.8		8.1		30.7		90.7		7.0		3.8		3		94				<0.2		0.4	
IM1	Cloudy	Moderate	10:17	4.9	Surface	1.0	0.1	190	18.8	18.8	8.1	8.1	30.9	30.9	99.0	99.0	7.7	7.7	7.8	7.4	4	3	87	88	817940	807125	<0.2	<0.2	0.5	0.6
						1.0	0.1	207	18.8		8.1		30.9		99.0		7.7		7.9		3		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	200	18.8	18.8	8.1	8.1	30.9	30.9	98.3	98.3	7.6	7.6	6.9		3		89				<0.2		0.5	
						3.9	0.1	206	18.8		8.1		30.9		98.2		7.6		7.0		3		89				<0.2		0.7	
IM2	Cloudy	Moderate	10:24	7.0	Surface	1.0	0.1	194	18.9	18.9	8.1	8.1	31.0	31.0	100.1	100.1	7.7	7.7	2.2	4.7	4	4	85	87	818170	806171	<0.2	<0.2	0.6	0.6
						1.0	0.1	201	18.9		8.1		31.0		100.1		7.7		2.2		3		86				<0.2		0.5	
					Middle	3.5	0.1	173	18.8	18.8	8.1	8.1	31.0	31.0	98.7	98.7	7.7		5.3		4		86				<0.2		0.6	
						3.5	0.1	177	18.8		8.1		31.0		98.6		7.6		5.9		3		88				<0.2		0.6	
					Bottom	6.0	0.1	167	18.8	18.8	8.1	8.1	31.0	31.0	98.6	98.6	7.6	7.6	6.3		4		89				<0.2		0.6	
						6.0	0.1	177	18.8		8.1		31.0		98.6		7.6		6.2		3		90				<0.2		0.6	
IM3	Cloudy	Moderate	10:32	7.3	Surface	1.0	0.1	183	18.8	18.8	8.1	8.1	31.0	31.0	99.6	99.5	7.7	7.7	2.7	4.9	4	4	85	87	818761	805598	<0.2	<0.2	0.5	0.5
						1.0	0.1	190	18.8		8.1		31.0		99.4		7.7		2.7		3		86				<0.2		0.5	
					Middle	3.7	0.0	166	18.8	18.8	8.1	8.1	31.0	31.0	98.9	98.9	7.7		3.3		3		87				<0.2		0.5	
						3.7	0.0	172	18.8		8.1		31.0		98.9		7.7		3.7		4		87				<0.2		0.5	
					Bottom	6.3	0.0	186	18.8	18.8	8.1	8.1	31.1	31.1	98.7	98.7	7.6	7.6	8.3		3		90				<0.2		0.4	
						6.3	0.0	202	18.8		8.1		31.1		98.7		7.6		8.6		4		89				<0.2		0.6	
IM4	Cloudy	Moderate	10:41	7.8	Surface	1.0	0.1	184	18.8	18.8	8.1	8.1	31.0	31.0	99.1	99.1	7.7	7.7	5.1	5.3	6	5	85	88	819725	804590	<0.2	<0.2	0.5	0.5
						1.0	0.1	190	18.8		8.1		31.0		99.0		7.7		5.2		7		86				<0.2		0.5	
					Middle	3.9	0.1	169	18.8	18.8	8.1	8.1	31.0	31.0	98.7	98.7	7.6		5.2		5		88				<0.2		0.5	
						3.9	0.1	179	18.8		8.1		31.0		98.6		7.6		5.3		5		87				<0.2		0.6	
					Bottom	6.8	0.2	172	18.8	18.8	8.1	8.1	31.0	31.0	98.3	98.3	7.6	7.6	5.4		3		90				<0.2		0.5	
						6.8	0.2	178	18.8		8.1		31.0		98.2		7.6		5.5		3		90				<0.2		0.5	
IM5	Cloudy	Moderate	10:51	7.7	Surface	1.0	0.2	189	18.8	18.8	8.1	8.1	31.0	31.0	99.8	99.8	7.7	7.7	2.7	4.2	3	4	85	87	820736	804883	<0.2	<0.2	0.6	0.5
						1.0	0.2	191	18.8		8.1		31.0		99.7		7.7		2.9		3		85				<0.2		0.5	
					Middle	3.9	0.2	186	18.8	18.8	8.1	8.1	31.0	31.0	99.1	99.1	7.7		4.3		4		87				<0.2		0.5	
						3.9	0.2	195	18.8		8.1		31.0		99.1		7.7		4.6		3		87				<0.2		0.5	
					Bottom	6.7	0.1	180	18.8	18.8	8.1	8.1	31.0	31.0	99.0	99.0	7.7	7.7	5.2		6		89				<0.2		0.5	
						6.7	0.2	191	18.8		8.1		31.0		99.0		7.7		5.4		6		90				<0.2		0.5	
IM6	Cloudy	Moderate	10:59	7.4	Surface	1.0	0.2	163	18.7	18.7	8.1	8.1	30.8	30.8	100.5	100.5	7.8	7.8	5.4	6.5	7	7	85	88	821071	805843	<0.2	<0.2	0.6	0.6
						1.0	0.2	166	18.7		8.1		30.8		100.5		7.8		5.6		6		86				<0.2		0.5	
					Middle	3.7	0.1	131	18.7	18.7	8.1	8.1	30.8	30.8	100.2	100.2	7.8		6.4		6		88				<0.2		0.6	
						3.7	0.1	136	18.7		8.1		30.8		100.2		7.8		6.6		7		89				<0.2		0.7	
					Bottom	6.4	0.1	202	18.7	18.7	8.1	8.1	30.8	30.8	99.3	99.2	7.7	7.7	7.6		7		90				<0.2		0.6	
						6.4	0.1	219	18.7		8.1		30.8		99.1		7.7		7.6		8		90				<0.2		0.6	
IM7	Cloudy	Moderate	11:07	8.2	Surface	1.0	0.1	238	19.0	19.0	8.1	8.1	30.8	30.8	99.7	99.7	7.7	7.7	2.3	2.4	5	5	85	87	821346	806828	<0.2	<0.2	0.7	0.7
						1.0	0.1	244	19.0		8.1		30.8		99.6		7.7		2.4		6		84				<0.2		0.7	
					Middle	4.1	0.1	197	18.9	18.9	8.1	8.1	30.8	30.8	99.1	99.1	7.7		2.4		5		87				<0.2		0.6	
						4.1	0.1	198	18.9		8.1		30.8		99.0		7.7		2.5		5		86				<0.2		0.7	
					Bottom	7.2	0.1	178	19.0	19.0	8.1	8.1	30.8	30.8	98.3	98.3	7.6	7.6	2.3		4		89				<0.2		0.6	
						7.2	0.1	179	19.0		8.1		30.7		98.2		7.6		2.3		5		89				<0.2		0.6	
IM8	Sunny	Moderate	10:52	7.7	Surface	1.0	0.1	107	18.2	18.2	8.1	8.1	30.1	30.1	98.4	98.4	7.8	7.8	4.6	4.7	3	3	86	90	821835	808154	<0.2	<0.2	1.0	1.1
						1.0	0.1	116	18.2		8.1		30.1		98.4		7.8		4.6		3		86				<0.2		1.0	
					Middle	3.9	0.0	107	18.2	18.2	8.1	8.1	30.1	30.1	98.0	98.0	7.7		4.6		3		91				<0.2		1.0	
						3.9	0.0	116	18.2		8.1		30.1		98.0		7.7		4.6		3		90				<0.2		1.0	
					Bottom	6.7	0.1	82	18.2	18.2	8.1	8.1	30.2	30.2	97.4	97.4	7.7	7.7	5.1		3		94				<0.2		1.2	
						6.7	0.1	88	18.2		8.1		30.2		97.4		7.7		5.0		3		94				<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 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	10:45	7.1	Surface	1.0	0.0	62	18.2	18.2	8.1	8.1	30.2	30.2	98.2	98.2	7.7	7.7	5.0	5.0	4	4	86	90	822098	808821	<0.2	<0.2	0.9	0.9
						1.0	0.0	67	18.2		8.1		30.2		98.2		7.7		5.0		4		86				<0.2		1.0	
					Middle	3.6	0.1	69	18.2	18.2	8.1	8.1	30.2	30.2	98.0	98.0	7.7		5.0		3		90				<0.2		0.8	
						3.6	0.1	75	18.2		8.1		30.2		98.0		7.7		5.0		4		91				<0.2		1.0	
					Bottom	6.1	0.1	84	18.1	18.1	8.1	8.1	30.2	30.2	97.7	97.7	7.7	7.7	5.0		3		94				<0.2		0.8	
						6.1	0.1	92	18.1		8.1		30.2		97.7		7.7		5.0		4		94				<0.2		0.9	
IM10	Sunny	Moderate	10:37	8.3	Surface	1.0	0.1	137	18.2	18.2	8.1	8.1	30.2	30.2	97.8	97.8	7.7	7.7	4.6	4.7	3	4	86	90	822393	809797	<0.2	<0.2	0.9	0.8
						1.0	0.1	137	18.2		8.1		30.2		97.8		7.7		4.6		3		86				<0.2		0.8	
					Middle	4.2	0.2	136	18.2	18.2	8.1	8.1	30.2	30.2	97.7	97.7	7.7		4.7		4		91				<0.2		0.8	
						4.2	0.2	143	18.2		8.1		30.2		97.7		7.7		4.7		5		90				<0.2		0.9	
					Bottom	7.3	0.2	121	18.2	18.2	8.1	8.1	30.2	30.2	97.2	97.2	7.7	7.7	4.8		4		93				<0.2		0.7	
						7.3	0.2	131	18.2		8.1		30.2		97.2		7.7		4.8		5		94				<0.2		0.7	
IM11	Sunny	Moderate	10:24	7.6	Surface	1.0	0.2	136	18.5	18.5	8.1	8.1	30.5	30.5	95.8	95.8	7.5	7.5	5.0	5.7	4	4	85	90	822034	811469	<0.2	<0.2	0.8	0.8
						1.0	0.2	147	18.5		8.1		30.5		95.8		7.5		5.1		4		86				<0.2		0.8	
					Middle	3.8	0.2	122	18.5	18.5	8.1	8.1	30.5	30.5	95.5	95.5	7.5		5.2		4		90				<0.2		0.6	
						3.8	0.2	123	18.5		8.1		30.5		95.5		7.5		5.3		4		91				<0.2		0.8	
					Bottom	6.6	0.1	113	18.5	18.5	8.1	8.1	30.5	30.5	95.4	95.5	7.5	7.5	6.8		4		94				<0.2		0.9	
						6.6	0.2	123	18.5		8.1		30.5		95.5		7.5		6.8		4		94				<0.2		0.7	
IM12	Sunny	Moderate	10:16	9.7	Surface	1.0	0.1	141	18.6	18.6	8.1	8.1	30.6	30.6	94.2	94.2	7.3	7.3	4.9	5.0	5	4	86	91	821435	812031	<0.2	<0.2	0.7	0.6
						1.0	0.1	143	18.6		8.1		30.6		94.1		7.3		4.9		4		90				<0.2		0.7	
					Middle	4.9	0.1	109	18.6	18.6	8.1	8.1	30.6	30.6	93.9	93.9	7.3		5.0		5		90				<0.2		0.5	
						4.9	0.1	118	18.6		8.1		30.6		93.9		7.3		5.0		4		90				<0.2		0.6	
					Bottom	8.7	0.0	41	18.6	18.6	8.0	8.0	30.6	30.6	93.9	94.0	7.3	7.3	5.1		4		94				<0.2		0.6	
						8.7	0.0	45	18.6		8.0		30.6		94.0		7.3		5.1		4		94				<0.2		0.5	
SR1A	Sunny	Moderate	09:53	5.5	Surface	1.0	-	-	18.5	18.5	8.1	8.1	30.6	30.6	95.0	95.0	7.4	7.4	4.3	4.3	4	3	-	-	819975	812659	-	-	-	-
						1.0	-	-	18.5		8.1		30.6		95.0		7.4		4.2		3		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	18.6	18.6	8.1	8.1	30.7	30.7	93.5	93.5	7.3	7.3	4.3		2		-				-		-	
						4.5	-	-	18.6		8.1		30.7		93.5		7.3		4.3		3		-				-		-	
SR2	Sunny	Moderate	09:38	4.8	Surface	1.0	0.1	26	18.7	18.7	8.1	8.1	30.7	30.7	92.9	92.9	7.2	7.2	4.6	5.0	4	4	86	88	821457	814169	<0.2	<0.2	0.5	0.5
						1.0	0.1	26	18.7		8.1		30.7		92.9		7.2		4.6		4		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	34	18.7	18.7	8.1	8.1	30.7	30.7	92.9	92.9	7.2	7.2	5.4		4		90				<0.2		0.5	
						3.8	0.1	34	18.7		8.1		30.7		92.9		7.2		5.4		4		90				<0.2		0.5	
SR3	Sunny	Moderate	10:59	8.4	Surface	1.0	0.1	196	18.3	18.3	8.1	8.1	30.2	30.2	97.3	97.3	7.6	7.6	4.7	5.3	3	3	-	-	822161	807560	-	-	-	-
						1.0	0.1	196	18.3		8.1		30.2		97.3		7.6		4.7		3		-				-		-	
					Middle	4.2	0.1	177	18.3	18.3	8.1	8.1	30.2	30.2	96.7	96.7	7.6		4.8		3		-				-		-	
						4.2	0.1	183	18.3		8.1		30.2		96.7		7.6		4.8		3		-				-		-	
					Bottom	7.4	0.1	138	18.3	18.3	8.0	8.0	30.2	30.2	95.6	95.6	7.5	7.5	6.5		3		-				-		-	
						7.4	0.1	147	18.3		8.0		30.2		95.6		7.5		6.6		3		-				-		-	
SR4A	Cloudy	Moderate	09:33	8.1	Surface	1.0	0.3	78	18.8	18.8	8.1	8.1	30.9	30.9	99.5	99.5	7.7	7.7	2.8	2.7	6	5	-	-	817184	807815	-	-	-	-
						1.0	0.3	80	18.8		8.1		30.9		99.5		7.7		2.9		5		-				-		-	
					Middle	4.1	0.2	71	18.8	18.8	8.1	8.1	30.9	30.9	99.3	99.3	7.7		2.7		5		-				-		-	
						4.1	0.2	74	18.8		8.1		30.9		99.3		7.7		2.7		4		-				-		-	
					Bottom	7.1	0.2	68	18.8	18.8	8.1	8.1	30.9	30.9	99.1	99.1	7.7	7.7	2.6		5		-				-		-	
						7.1	0.2	72	18.8		8.1		30.9		99.1		7.7		2.7		4		-				-		-	
SR5A	Cloudy	Moderate	09:14	3.0	Surface	1.0	0.1	284	18.9	18.9	8.1	8.1	31.1	31.1	98.2	98.2	7.6	7.6	4.3	6.8	3	3	-	-	816576	810679	-	-	-	-
						1.0	0.1	301	18.9		8.1		31.1		98.1		7.6		4.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.0	0.1	286	18.9	18.9	8.1	8.1	31.1	31.1	98.0	98.0	7.6	7.6	8.8		3		-				-		-	
						2.0	0.1	287	18.9		8.1		31.1		98.0		7.6		9.2		4		-				-		-	
SR6A	Cloudy	Moderate	08:44	4.3	Surface	1.0	0.0	73	19.1	19.1	8.1	8.1	31.2	31.2	96.3	96.3	7.4	7.4	2.5	2.5	4	4	-	-	817961	814715	-	-	-	-
						1.0	0.0	77	19.1		8.1		31.2		96.3		7.4		2.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	188	19.1	19.1	8.1	8.1	31.2	31.2	96.6	96.6	7.4	7.4	2.6		4		-				-		-	
						3.3	0.0	190	19.1		8.1		31.2		96.6		7.4		2.5		4		-				-		-	
SR7	Sunny	Moderate	08:40	14.6	Surface	1.0	0.6	61	18.8	18.8	8.0	8.0	30.7	30.7	88.2	88.2	6.8	6.8	4.0	3.8	3	3	-	-	823623	823749	-	-	-	-
						1.0	0.7	61	18.8		8.0		30.7		88.2		6.8		4.1		2		-				-		-	
					Middle	7.3	0.2	14	18.8	18.8	8.0	8.0	30.7	30.7	88.0	88.0	6.8		3.7		3		-				-		-	
						7.3	0.2	14	18.8		8.0		30.7		88.0		6.8		3.7		2		-				-		-	
					Bottom	13.6	0.2	55	18.8	18.8	8.0	8.0	30.7	30.7	88.1	88.1	6.8	6.8	3.6		3		-				-		-	
						13.6	0.2	60	18.8		8.0		30.7		88.1		6.8		3.9		2		-				-		-	
SR8	Sunny	Moderate	10:05	5.2	Surface	1.0	-	-	18.6	18.6	8.1	8.1	30.4	30.4	97.0	97.0	7.6	7.6	5.6	5.5	8	8	-	-	820392	811610	-	-	-	-
						1.0	-	-	18.6		8.1		30.4		97.0		7.6		5.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	18.5	18.5	8.1	8.1	30.5	30.5	95.8	95.8	7.5	7.5	5.5		8		-				-		-	
						4.2	-	-	18.5		8.1		30.5		95.8		7.5		5.5		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 December 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	15:44	8.2	Surface	1.0	0.2	39	19.3	19.3	8.1	8.1	31.2	31.2	101.5	101.5	7.8	7.8	1.9	5.3	4	3	87	88	815612	804247	<0.2	<0.2	0.6	0.6
						1.0	0.2	39	19.3		8.1		31.2		101.4		7.8		2.0		4		86				<0.2		0.5	
					Middle	4.1	0.3	27	19.2	19.2	8.1	8.1	31.2	31.2	100.4	100.3	7.7		6.0		4		88				<0.2		0.6	
						4.1	0.3	29	19.2		8.1		31.2		100.2		7.7		6.9		3		87				<0.2		0.6	
					Bottom	7.2	0.3	32	19.1	19.1	8.1	8.1	31.2	31.1	98.4	98.4	7.6	7.6	7.4		2		89				<0.2		0.6	
						7.2	0.3	32	19.1		8.1		31.1		98.4		7.6		7.7		3		89				<0.2		0.6	
C2	Sunny	Moderate	14:32	11.0	Surface	1.0	0.3	350	18.5	18.5	8.1	8.1	29.1	29.1	101.8	101.8	8.0	7.8	3.9	4.7	2	2	88	92	825670	806949	<0.2	<0.2	1.2	1.2
						1.0	0.3	322	18.5		8.1		29.1		101.8		8.0		3.9		3		88				<0.2		1.4	
					Middle	5.5	0.4	28	18.4	18.4	8.1	8.1	29.7	29.7	97.4	97.4	7.7		4.7		2		91				<0.2		1.1	
						5.5	0.4	29	18.4		8.1		29.7		97.3		7.6		4.7		2		92				<0.2		1.0	
					Bottom	10.0	0.4	346	18.6	18.6	8.1	8.1	30.4	30.4	93.8	93.8	7.3	7.3	5.3		2		96				<0.2		1.2	
						10.0	0.4	318	18.6		8.1		30.4		93.8		7.3		5.3		2		96				<0.2		1.1	
C3	Sunny	Moderate	16:41	11.2	Surface	1.0	0.3	241	18.9	18.9	8.0	8.0	30.5	30.5	92.1	92.1	7.1	7.1	3.4	4.0	3	3	88	92	822125	817820	<0.2	<0.2	0.6	0.5
						1.0	0.3	258	18.9		8.0		30.5		92.1		7.1		3.4		3		88				<0.2		0.6	
					Middle	5.6	0.4	252	18.8	18.8	8.0	8.0	30.5	30.5	92.0	92.0	7.1		4.0		3		92				<0.2		0.4	
						5.6	0.4	264	18.8		8.0		30.5		92.0		7.1		4.0		3		91				<0.2		0.4	
					Bottom	10.2	0.4	266	18.7	18.7	8.0	8.0	30.5	30.5	92.1	92.1	7.2	7.2	4.5		2		96				<0.2		0.6	
						10.2	0.4	280	18.7		8.0		30.5		92.1		7.2		4.5		3		95				<0.2		0.5	
IM1	Cloudy	Moderate	15:17	5.0	Surface	1.0	0.2	4	19.0	19.0	8.1	8.1	31.0	31.0	101.4	101.3	7.8	7.8	3.7	4.8	13	9	87	88	817945	807124	<0.2	<0.2	0.6	0.6
						1.0	0.2	4	19.0		8.1		31.0		101.1		7.8		4.0		12		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	345	19.0	19.0	8.1	8.1	30.9	30.9	99.9	99.9	7.7	7.7	5.6		6		89				<0.2		0.5	
						4.0	0.1	356	19.0		8.1		30.9		99.9		7.7		5.7		5		89				<0.2		0.7	
IM2	Cloudy	Moderate	15:10	7.0	Surface	1.0	0.1	40	19.3	19.3	8.1	8.1	31.0	31.0	104.7	104.7	8.0	7.9	7.2	9.4	3	4	85	88	818146	806176	<0.2	<0.2	0.6	0.6
						1.0	0.1	41	19.3		8.1		31.0		104.7		8.0		7.4		3		86				<0.2		0.6	
					Middle	3.5	0.1	1	18.9	18.9	8.1	8.1	31.0	31.0	100.5	100.4	7.8		9.1		3		87				<0.2		0.6	
						3.5	0.1	1	18.9		8.1		31.0		100.3		7.8		9.6		4		88				<0.2		0.6	
					Bottom	6.0	0.1	333	18.9	18.9	8.1	8.1	31.0	31.0	99.9	99.9	7.7	7.7	12.3		4		90				<0.2		0.6	
						6.0	0.1	357	18.9		8.1		31.0		99.8		7.7		10.7		4		90				<0.2		0.6	
IM3	Cloudy	Moderate	15:03	7.3	Surface	1.0	0.2	354	19.1	19.1	8.1	8.1	30.9	30.9	102.6	102.4	7.9	7.9	1.9	3.2	7	7	85	87	818783	805592	<0.2	<0.2	0.7	0.6
						1.0	0.2	326	19.0		8.1		30.9		102.2		7.9		2.0		6		85				<0.2		0.6	
					Middle	3.7	0.2	347	18.9	18.9	8.1	8.1	31.0	31.0	100.6	100.6	7.8		2.4		6		87				<0.2		0.6	
						3.7	0.2	319	18.9		8.1		31.0		100.5		7.8		2.5		7		88				<0.2		0.6	
					Bottom	6.3	0.1	343	19.0	19.0	8.1	8.1	31.0	31.0	99.6	99.6	7.7	7.7	5.1		6		89				<0.2		0.6	
						6.3	0.1	358	19.0		8.1		31.0		99.6		7.7		5.2		7		90				<0.2		0.6	
IM4	Cloudy	Moderate	14:54	7.4	Surface	1.0	0.2	346	19.5	19.5	8.1	8.1	30.9	30.9	104.2	104.2	8.0	7.9	2.3	3.6	3	5	86	87	819710	804618	<0.2	<0.2	0.6	0.6
						1.0	0.2	349	19.5		8.1		30.9		104.1		8.0		2.3		4		85				<0.2		0.6	
					Middle	3.7	0.2	5	19.1	19.1	8.1	8.1	30.9	30.9	100.8	100.6	7.8		3.2		5		87				<0.2		0.6	
						3.7	0.2	5	19.1		8.1		30.9		100.3		7.7		3.2		6		87				<0.2		0.6	
					Bottom	6.4	0.2	5	19.0	19.0	8.1	8.1	30.9	30.9	99.4	99.4	7.7	7.7	5.3		6		89				<0.2		0.7	
						6.4	0.2	5	19.0		8.1		30.9		99.4		7.7		5.4		6		89				<0.2		0.6	
IM5	Cloudy	Moderate	14:45	7.4	Surface	1.0	0.3	0	19.1	19.1	8.1	8.1	30.8	30.8	102.8	102.8	7.9	7.9	2.0	3.1	6	6	85	87	820712	804853	<0.2	<0.2	0.7	0.6
						1.0	0.3	0	19.1		8.1		30.8		102.7		7.9		2.0		6		85				<0.2		0.6	
					Middle	3.7	0.2	340	18.9	18.9	8.1	8.1	30.8	30.8	101.7	101.7	7.9		2.2		6		87				<0.2		0.6	
						3.7	0.2	357	18.9		8.1		30.8		101.6		7.9		2.2		6		88				<0.2		0.6	
					Bottom	6.4	0.2	330	19.0	19.0	8.1	8.1	30.9	30.9	100.2	100.2	7.7	7.7	4.9		4		89				<0.2		0.6	
						6.4	0.3	330	19.0		8.1		30.9		100.1		7.7		5.1		5		90				<0.2		0.7	
IM6	Cloudy	Moderate	14:37	7.2	Surface	1.0	0.1	292	19.2	19.2	8.1	8.1	30.8	30.8	102.3	102.3	7.9	7.9	1.6	1.8	4	7	84	87	821037	805833	<0.2	<0.2	0.6	0.7
						1.0	0.1	307	19.2		8.1		30.8		102.2		7.9		1.6		5		86				<0.2		0.7	
					Middle	3.6	0.1	302	19.1	19.1	8.1	8.1	30.8	30.8	100.9	100.9	7.8		1.8		7		87				<0.2		0.7	
						3.6	0.1	311	19.1		8.1		30.8		100.9		7.8		1.8		7		86				<0.2		0.7	
					Bottom	6.2	0.1	346	19.1	19.1	8.1	8.1	30.8	30.8	100.5	100.5	7.8	7.8	1.9		9		89				<0.2		0.6	
						6.2	0.1	348	19.1		8.1		30.8		100.4		7.8		2.0		9		89				<0.2		0.6	
IM7	Cloudy	Moderate	14:32	7.8	Surface	1.0	0.1	270	19.1	19.1	8.1	8.1	30.7	30.7	101.1	101.1	7.8	7.8	2.0	2.2	7	6	85	88	821350	806847	<0.2	<0.2	0.7	0.7
						1.0	0.2	271	19.1		8.1		30.7		101.0		7.8		2.0		6		86				<0.2		0.7	
					Middle	3.9	0.1	251	19.1	19.1	8.1	8.1	30.7	30.7	100.2	100.2	7.7		2.2		6		87				<0.2		0.7	
						3.9	0.1	251	19.1		8.1		30.7		100.1		7.7		2.2		5		88				<0.2		0.7	
					Bottom	6.8	0.1	225	19.1	19.1	8.1	8.1	30.7	30.7	99.8	99.8	7.7	7.7	2.3		4		90				<0.2		0.8	
						6.8	0.1	227	19.1		8.1		30.7		99.8		7.7		2.3		5		89				<0.2		0.7	
IM8	Sunny	Moderate	14:58	7.9	Surface	1.0	0.2	255	18.4	18.4	8.1	8.1	30.1	30.1	100.4	100.5	7.9	7.9	4.7	5.0	6	7	89	92	821829	808160	<0.2	<0.2	1.1	1.2
						1.0	0.2	275	18.4		8.1		30.1		100.5		7.9		4.7		5		88				<0.2		1.1	
					Middle	4.0	0.2	247	18.4	18.4	8.1	8.1	30.1	30.1	100.1	100.1	7.9		4.8		7		92				<0.2		1.3	
						4.0	0.2	265	18.4		8.1		30.1		100.1		7.9		4.8		8		92				<0.2		1.5	
					Bottom	6.9	0.2	232	18.4	18.4	8.1	8.1	30.1	30.1	99.9	99.9	7.8	7.8	5.6		8		96				<0.2		1.1	
						6.9	0.2	240	18.4		8.1		30.1		99.9		7.8		5.7		7		96				<0.2		1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 December 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:06	7.3	Surface	1.0	0.3	262	18.4	18.4	8.1	8.1	30.1	30.1	98.8	98.8	7.8	7.8	6.5	7.0	9	9	88	92	822087	808798	<0.2	<0.2	1.2	1.2
						1.0	0.3	274	18.4		8.1		30.1		98.8		7.8		6.6		9		88				<0.2		1.4	
					Middle	3.7	0.3	255	18.4	18.4	8.1	8.1	30.1	30.1	98.7	98.7	7.7		7.0		10		92				<0.2		1.1	
						3.7	0.3	266	18.4		8.1		30.1		98.7		7.7		7.0		9		92				<0.2		1.1	
					Bottom	6.3	0.3	252	18.4	18.4	8.1	8.1	30.1	30.1	98.7	98.7	7.7	7.7	7.3		9		96				<0.2		1.1	
						6.3	0.3	268	18.4		8.1		30.1		98.7		7.7		7.3		10		96				<0.2		1.1	
IM10	Sunny	Moderate	15:15	7.5	Surface	1.0	0.4	301	18.5	18.5	8.1	8.1	30.2	30.2	100.3	100.3	7.9	7.9	4.4	5.0	6	5	88	92	822391	809797	<0.2	<0.2	1.5	1.4
						1.0	0.4	310	18.5		8.1		30.2		100.3		7.9		4.4		6		88				<0.2		1.6	
					Middle	3.8	0.4	292	18.5	18.5	8.1	8.1	30.2	30.2	100.0	100.0	7.8		4.8		4		92				<0.2		1.4	
						3.8	0.4	316	18.5		8.1		30.2		100.0		7.8		4.8		5		92				<0.2		1.4	
					Bottom	6.5	0.3	296	18.5	18.5	8.1	8.1	30.2	30.2	99.7	99.7	7.8	7.8	5.6		5		96				<0.2		1.3	
						6.5	0.3	311	18.5		8.1		30.2		99.7		7.8		5.7		4		96				<0.2		1.3	
IM11	Sunny	Moderate	15:29	8.3	Surface	1.0	0.5	273	18.7	18.7	8.1	8.1	30.4	30.4	99.5	99.5	7.8	7.8	4.3	4.7	4	5	88	92	822035	811476	<0.2	<0.2	1.0	0.9
						1.0	0.5	279	18.7		8.1		30.4		99.5		7.8		4.3		4		88				<0.2		1.1	
					Middle	4.2	0.4	275	18.7	18.7	8.1	8.1	30.4	30.4	99.0	99.0	7.7		4.5		5		92				<0.2		0.9	
						4.2	0.4	278	18.7		8.1		30.4		99.0		7.7		4.5		4		92				<0.2		0.8	
					Bottom	7.3	0.3	272	18.7	18.7	8.1	8.1	30.4	30.4	98.7	98.7	7.7	7.7	5.4		5		96				<0.2		0.9	
						7.3	0.4	293	18.7		8.1		30.4		98.7		7.7		5.4		6		96				<0.2		0.9	
IM12	Sunny	Moderate	15:37	8.8	Surface	1.0	0.4	296	18.8	18.8	8.1	8.1	30.5	30.5	98.3	98.3	7.6	7.6	4.1	4.6	4	4	88	92	821454	812036	<0.2	<0.2	1.0	0.9
						1.0	0.5	296	18.8		8.1		30.5		98.3		7.6		4.1		3		88				<0.2		0.9	
					Middle	4.4	0.4	290	18.7	18.7	8.1	8.1	30.5	30.5	97.1	97.1	7.6		4.5		3		92				<0.2		0.9	
						4.4	0.4	292	18.7		8.1		30.5		97.1		7.6		4.5		4		92				<0.2		0.8	
					Bottom	7.8	0.3	293	18.7	18.7	8.1	8.1	30.5	30.5	96.9	96.9	7.6	7.6	5.3		4		96				<0.2		0.8	
						7.8	0.3	312	18.7		8.1		30.5		96.9		7.6		5.4		5		96				<0.2		0.9	
SR1A	Sunny	Moderate	16:01	5.6	Surface	1.0	-	-	19.0	19.0	8.1	8.1	30.6	30.6	98.1	98.1	7.6	7.6	4.5	4.5	6	6	-	-	819979	812654	-	-	-	-
						1.0	-	-	19.0		8.1		30.6		98.1		7.6		4.6		5		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	19.0	19.0	8.1	8.1	30.6	30.6	97.8	97.8	7.6	7.6	4.4		6		-				-		-	
						4.6	-	-	19.0		8.1		30.6		97.8		7.6		4.4		5		-				-		-	
SR2	Sunny	Moderate	16:16	5.0	Surface	1.0	0.2	122	18.9	18.9	8.1	8.1	30.5	30.5	96.7	96.7	7.5	7.5	5.9	6.2	5	6	88	90	821480	814165	<0.2	<0.2	1.0	1.0
						1.0	0.2	127	18.9		8.1		30.5		96.7		7.5		5.8		5		88				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	125	18.9	18.9	8.1	8.1	30.5	30.5	96.5	96.5	7.5	7.5	6.5		6		91				<0.2		1.0	
						4.0	0.3	129	18.9		8.1		30.5		96.5		7.5		6.5		6		92				<0.2		1.0	
SR3	Sunny	Moderate	14:51	8.8	Surface	1.0	0.2	258	18.4	18.4	8.1	8.1	30.1	30.1	99.0	99.0	7.8	7.8	6.4	5.8	10	10	-	-	822149	807583	-	-	-	-
						1.0	0.2	259	18.4		8.1		30.1		99.0		7.8		6.4		10		-				-		-	
					Middle	4.4	0.2	258	18.4	18.4	8.1	8.1	30.1	30.1	98.3	98.3	7.7		5.2		10		-				-		-	
						4.4	0.2	277	18.4		8.1		30.1		98.3		7.7		5.2		9		-				-		-	
					Bottom	7.8	0.1	238	18.4	18.4	8.1	8.1	30.2	30.2	96.9	96.9	7.6	7.6	5.7		10		-				-		-	
						7.8	0.1	258	18.4		8.1		30.2		96.9		7.6		5.8		9		-				-		-	
SR4A	Cloudy	Moderate	16:04	8.4	Surface	1.0	0.1	47	19.3	19.3	8.1	8.1	31.0	31.0	103.4	103.4	7.9	7.8	2.1	3.4	5	5	-	-	817197	807805	-	-	-	-
						1.0	0.1	48	19.3		8.1		31.0		103.4		7.9		2.1		4		-				-		-	
					Middle	4.2	0.0	35	19.0	19.0	8.1	8.1	30.9	30.9	99.9	99.9	7.7		2.6		5		-				-		-	
						4.2	0.0	36	19.0		8.1		30.9		99.8		7.7		2.7		5		-				-		-	
					Bottom	7.4	0.0	64	19.0	19.0	8.1	8.1	30.9	30.9	98.9	98.9	7.6	7.6	5.4		6		-				-		-	
						7.4	0.0	65	19.0		8.1		30.9		98.9		7.6		5.6		7		-				-		-	
SR5A	Cloudy	Moderate	16:20	3.6	Surface	1.0	0.2	307	19.4	19.4	8.1	8.1	31.0	31.0	102.9	102.8	7.9	7.9	2.8	5.8	4	5	-	-	816582	810715	-	-	-	-
						1.0	0.2	309	19.4		8.1		31.0		102.7		7.9		2.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	293	19.4	19.4	8.1	8.1	30.9	30.9	101.1	101.0	7.7	7.7	8.6		5		-				-		-	
						2.6	0.2	298	19.4		8.1		30.9		100.9		7.7		8.8		5		-				-		-	
SR6A	Cloudy	Moderate	17:09	4.7	Surface	1.0	0.1	212	19.4	19.4	8.1	8.1	31.2	31.2	99.1	99.1	7.6	7.6	3.7	3.8	7	5	-	-	817944	814762	-	-	-	-
						1.0	0.1	212	19.4		8.1		31.2		99.0		7.6		3.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	204	19.4	19.4	8.1	8.1	31.2	31.2	98.9	98.9	7.6	7.6	3.8		4		-				-		-	
						3.7	0.0	223	19.4		8.1		31.2		98.9		7.6		4.0		4		-				-		-	
SR7	Sunny	Moderate	17:22	14.4	Surface	1.0	0.0	116	18.9	18.9	8.0	8.0	30.5	30.5	87.9	88.0	6.8	6.8	4.0	4.1	4	5	-	-	823613	823742	-	-	-	-
						1.0	0.0	124	18.9		8.0		30.5		88.0		6.8		4.0		5		-				-		-	
					Middle	7.2	0.1	184	18.9	18.9	8.0	8.0	30.5	30.5	87.8	87.8	6.8		4.2		6		-				-		-	
						7.2	0.1	187	18.9		8.0		30.5		87.8		6.8		4.2		5		-				-		-	
					Bottom	13.4	0.1	76	18.9	18.9	8.1	8.1	30.5	30.5	88.3	88.4	6.9	6.9	4.0		6		-				-		-	
						13.4	0.1	77	18.9		8.1		30.5		88.4		6.9		4.0		5		-				-		-	
SR8	Sunny	Moderate	15:50	4.4	Surface	1.0	-	-	18.6	18.6	8.1	8.1	30.3	30.3	98.1	98.1	7.7	7.7	6.6	7.1	10	11	-	-	820375	811615	-	-	-	-
						1.0	-	-	18.6		8.1		30.3		98.1		7.7		6.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	18.6	18.6	8.1	8.1	30.4	30.4	97.4	97.5	7.6	7.6	7.6		12		-				-		-	
						3.4	-	-	18.6		8.1		30.4		97.5		7.6		7.5		11		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 December 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	11:53	8.0	Surface	1.0	0.0	200	19.5	19.5	8.2	8.2	30.5	30.5	100.3	100.3	7.7	7.7	6.0	8.2	6	7	86	89	815643	804228	<0.2	<0.2	0.8	0.7
						1.0	0.0	204	19.5		8.2		30.5		100.2		7.7		6.0		6		86							
					Middle	4.0	0.0	234	19.4	19.4	8.2	8.2	30.5	30.5	99.7	99.7	7.7		7.0		7		89							
						4.0	0.0	250	19.4		8.2		30.5		99.7		7.7		7.3		7		90							
					Bottom	7.0	0.0	231	19.4	19.4	8.2	8.2	30.5	30.5	99.6	99.7	7.7	7.7	11.2		8		90							
						7.0	0.0	244	19.4		8.2		30.5		99.7		7.7		11.6		8		90							
C2	Sunny	Moderate	10:49	12.2	Surface	1.0	0.1	22	19.5	19.5	8.2	8.2	30.3	30.3	98.0	98.1	7.5	7.5	1.5	2.7	6	6	85	88	825702	806964	<0.2	<0.2	0.9	0.8
						1.0	0.1	22	19.5		8.2		30.3		98.1		7.5		1.7		6		85							
					Middle	6.1	0.2	46	19.4	19.4	8.2	8.2	30.6	30.6	97.4	97.4	7.5		2.6		6		88							
						6.1	0.2	48	19.4		8.2		30.6		97.3		7.5		2.8		6		89							
					Bottom	11.2	0.1	81	19.4	19.4	8.2	8.2	31.0	31.0	97.0	97.1	7.4	7.4	3.7		7		91							
						11.2	0.1	87	19.4		8.2		31.0		97.1		7.4		3.7		7		92							
C3	Sunny	Moderate	12:50	11.8	Surface	1.0	0.4	86	19.9	19.9	8.2	8.2	32.0	32.0	98.2	98.2	7.4	7.3	0.3	0.5	6	7	82	87	822107	817790	<0.2	<0.2	0.8	1.1
						1.0	0.4	89	19.9		8.2		32.0		98.2		7.4		0.3		6		82							
					Middle	5.9	0.3	87	19.7	19.7	8.2	8.2	32.1	32.1	95.2	95.0	7.2		0.3		6		87							
						5.9	0.4	87	19.7		8.2		32.1		94.7		7.2		0.3		6		87							
					Bottom	10.8	0.2	89	19.6	19.6	8.2	8.2	32.3	32.3	93.8	94.0	7.1	7.1	0.9		8		91							
						10.8	0.2	95	19.6		8.2		32.3		94.2		7.1		1.0		7		91							
IM1	Fine	Moderate	11:32	5.1	Surface	1.0	0.0	341	19.9	19.9	8.2	8.2	30.2	30.2	103.4	103.4	7.9	7.9	2.8	3.2	10	9	86	87	817972	807139	<0.2	<0.2	0.8	0.7
						1.0	0.0	314	19.8		8.2		30.2		103.3		7.9		2.9		10		85							
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	296	19.7	19.7	8.2	8.2	30.2	30.2	102.6	102.7	7.9	7.9	3.6		8		88				<0.2		0.6	
						4.1	0.1	324	19.7		8.2		30.2		102.7		7.9		3.6		8		88				<0.2		0.6	
IM2	Fine	Moderate	11:25	7.0	Surface	1.0	0.2	89	19.6	19.6	8.2	8.2	30.1	30.1	102.0	102.0	7.8	7.8	4.2	4.4	10	9	85	88	818175	806167	<0.2	<0.2	1.2	0.9
						1.0	0.2	89	19.6		8.2		30.1		101.9		7.8		4.2		10		86				<0.2		1.0	
					Middle	3.5	0.1	106	19.4	19.4	8.2	8.2	30.1	30.1	101.2	101.2	7.8		4.4		9		88				<0.2		0.8	
						3.5	0.1	107	19.4		8.2		30.1		101.2		7.8		4.4		9		89				<0.2		0.9	
					Bottom	6.0	0.0	49	19.5	19.5	8.2	8.2	30.1	30.1	101.3	101.3	7.8	7.8	4.5		7		89				<0.2		0.8	
						6.0	0.0	51	19.5		8.2		30.1		101.3		7.8		4.5		8		90				<0.2		0.7	
IM3	Fine	Moderate	11:19	7.3	Surface	1.0	0.1	79	19.7	19.7	8.2	8.2	30.1	30.1	102.8	102.7	7.9	7.9	4.5	5.4	7	8	85	88	818780	805601	<0.2	<0.2	0.8	0.8
						1.0	0.1	81	19.6		8.2		30.1		102.6		7.9		4.5		6		86				<0.2		0.7	
					Middle	3.7	0.1	74	19.4	19.4	8.2	8.2	30.1	30.1	101.3	101.3	7.8		4.9		7		87				<0.2		0.7	
						3.7	0.1	75	19.4		8.2		30.1		101.3		7.8		4.9		7		89				<0.2		0.8	
					Bottom	6.3	0.1	353	19.5	19.5	8.2	8.2	30.1	30.1	101.4	101.4	7.8	7.8	6.8		9		90				<0.2		0.8	
						6.3	0.1	325	19.5		8.2		30.1		101.4		7.8		6.8		9		90				<0.2		0.7	
IM4	Fine	Moderate	11:10	8.0	Surface	1.0	0.1	333	19.6	19.6	8.2	8.2	30.0	30.0	102.8	102.8	7.9	7.9	4.1	5.4	9	8	86	88	819709	804627	<0.2	<0.2	0.8	0.8
						1.0	0.1	306	19.6		8.2		30.0		102.8		7.9		4.1		9		86				<0.2		0.8	
					Middle	4.0	0.1	343	19.5	19.5	8.2	8.2	30.0	30.0	102.1	102.1	7.9		4.7		8		88				<0.2		0.9	
						4.0	0.1	351	19.5		8.2		30.0		102.1		7.9		4.9		8		88				<0.2		0.8	
					Bottom	7.0	0.1	2	19.5	19.5	8.2	8.2	30.0	30.0	101.8	101.8	7.8	7.8	7.0		6		89				<0.2		0.8	
						7.0	0.1	2	19.5		8.2		30.0		101.7		7.8		7.4		6		90				<0.2		0.8	
IM5	Fine	Moderate	11:02	7.7	Surface	1.0	0.2	21	19.6	19.6	8.2	8.2	30.0	30.0	102.4	102.4	7.9	7.9	5.4	7.5	11	10	85	88	820752	804843	<0.2	<0.2	0.9	1.0
						1.0	0.2	22	19.5		8.2		30.0		102.4		7.9		5.4		11		85				<0.2		1.0	
					Middle	3.9	0.2	13	19.5	19.5	8.2	8.2	30.0	30.0	102.0	102.0	7.8		6.3		10		88				<0.2		1.0	
						3.9	0.2	14	19.5		8.2		30.0		101.9		7.8		6.3		10		89				<0.2		1.1	
					Bottom	6.7	0.2	26	19.5	19.5	8.2	8.2	30.0	30.0	101.7	101.7	7.8	7.8	10.6		7		90				<0.2		1.0	
						6.7	0.2	26	19.5		8.2		30.0		101.7		7.8		11.0		8		90				<0.2		1.1	
IM6	Fine	Moderate	10:54	7.4	Surface	1.0	0.0	262	19.6	19.6	8.2	8.2	29.7	29.7	101.4	101.4	7.8	7.8	3.6	4.1	10	8	85	87	821070	805841	<0.2	<0.2	0.9	0.9
						1.0	0.0	264	19.6		8.2		29.7		101.4		7.8		3.6		9		86				<0.2		0.8	
					Middle	3.7	0.0	247	19.5	19.5	8.2	8.2	29.8	29.8	101.2	101.2	7.8		3.9		8		87				<0.2		0.9	
						3.7	0.0	256	19.5		8.2		29.8		101.1		7.8		3.8		8		88				<0.2		0.9	
					Bottom	6.4	0.1	31	19.5	19.5	8.2	8.2	29.9	29.9	101.2	101.2	7.8	7.8	4.8		6		89				<0.2		0.8	
						6.4	0.1	32	19.5		8.2		29.9		101.2		7.8		4.9		6		89				<0.2		0.8	
IM7	Fine	Moderate	10:49	7.8	Surface	1.0	0.1	163	19.5	19.5	8.2	8.2	29.7	29.7	101.1	101.1	7.8	7.8	4.2	6.5	7	6	85	88	821336	806814	<0.2	<0.2	1.0	1.0
						1.0	0.1	179	19.5		8.2		29.7		101.0		7.8		4.3		7		85				<0.2		1.0	
					Middle	3.9	0.2	153	19.4	19.4	8.2	8.2	30.0	30.0	100.6	100.6	7.8		7.0		6		88				<0.2		0.8	
						3.9	0.2	164	19.4		8.2		30.0		100.6		7.8		7.2		6		88				<0.2		1.0	
					Bottom	6.8	0.2	171	19.5	19.5	8.2	8.2	30.0	30.0	100.5	100.5	7.7	7.7	8.2		4		89				<0.2		1.2	
						6.8	0.2	185	19.5		8.2		30.0		100.5		7.7		8.3		4		90				<0.2		1.1	
IM8	Sunny	Moderate	11:15	7.7	Surface	1.0	0.1	94	19.5	19.5	8.2	8.2	30.5	30.5	99.7	99.6	7.6	7.6	1.4	2.0	5	7	85	88	821809	808144	<0.2	<0.2	1.1	1.0
						1.0	0.1	95	19.5		8.2		30.5		99.5		7.6		1.4		5		85				<0.2		1.2	
					Middle	3.9	0.3	69	19.5	19.5	8.2	8.2	30.8	30.8	99.8	99.8	7.6		1.6		7		88				<0.2		1.2	
						3.9	0.3	69	19.5		8.2		30.8		99.8		7.6		1.7		7		88				<0.2		1.1	
					Bottom	6.7	0.2	86	19.5	19.5	8.3	8.3	31.3	31.2	99.0	99.0	7.6	7.6	2.8		9		91				<0.2		0.6	
						6.7	0.2	87	19.5		8.3		31.2		99.0		7.6		2.8		9		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 29 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	11:21	7.4	Surface	1.0	0.3	58	19.7	19.7	8.2	8.2	30.4	30.4	98.3	98.3	7.5	7.5	1.9	2.7	9	8	86	90	822072	808795	<0.2	<0.2	0.8	0.8
						1.0	0.3	63	19.6		8.2		30.5		98.3		7.5		2.1		9		87				<0.2		0.8	
					Middle	3.7	0.3	70	19.5	19.5	8.2	8.2	30.9	30.9	98.0	97.9	7.5		3.0		9		90				<0.2		0.9	
						3.7	0.3	73	19.5		8.2		30.9		97.8		7.5		3.0		8		90				<0.2		0.8	
					Bottom	6.4	0.3	68	19.5	19.5	8.2	8.2	31.2	31.1	97.5	97.7	7.5	7.5	3.2		8		92				<0.2		0.7	
						6.4	0.3	72	19.5		8.2		31.1		97.9		7.5		3.2		6		92				<0.2		0.7	
IM10	Sunny	Moderate	11:27	8.2	Surface	1.0	0.3	95	19.6	19.6	8.2	8.2	30.6	30.6	99.2	99.2	7.6	7.6	1.0	1.2	5	6	87	90	822384	809771	<0.2	<0.2	0.7	0.7
						1.0	0.3	100	19.6		8.2		30.6		99.2		7.6		1.0		5		86				<0.2		0.8	
					Middle	4.1	0.3	101	19.5	19.5	8.2	8.2	31.0	31.0	98.5	98.6	7.5		1.1		6		90				<0.2		0.8	
						4.1	0.4	110	19.5		8.2		31.0		98.6		7.5		1.1		6		90				<0.2		0.7	
					Bottom	7.2	0.2	90	19.5	19.5	8.2	8.2	31.7	31.7	98.4	98.4	7.5	7.5	1.4		8		92				<0.2		0.8	
						7.2	0.2	97	19.5		8.2		31.7		98.3		7.5		1.3		8		93				<0.2		0.6	
IM11	Sunny	Moderate	11:38	7.8	Surface	1.0	0.1	116	19.7	19.7	8.2	8.2	31.7	31.7	99.9	99.9	7.6	7.6	0.1	0.1	6	7	83	88	822034	811479	<0.2	<0.2	0.6	0.7
						1.0	0.1	118	19.7		8.2		31.7		99.9		7.6		0.1		6		84				<0.2		0.8	
					Middle	3.9	0.1	114	19.6	19.6	8.2	8.2	31.7	31.7	99.5	99.5	7.6		0.1		6		88				<0.2		0.6	
						3.9	0.1	119	19.6		8.2		31.7		99.4		7.6		0.1		6		88				<0.2		0.6	
					Bottom	6.8	0.1	116	19.6	19.6	8.2	8.2	31.7	31.7	98.6	98.7	7.5	7.5	0.2		8		91				<0.2		0.7	
						6.8	0.1	126	19.6		8.2		31.7		98.8		7.5		0.2		8		92				<0.2		0.8	
IM12	Sunny	Moderate	11:44	9.5	Surface	1.0	0.1	86	19.7	19.7	8.2	8.2	31.7	31.7	100.2	100.2	7.6	7.6	0.1	0.3	8	7	85	88	821472	812054	<0.2	<0.2	0.7	0.7
						1.0	0.1	90	19.7		8.2		31.7		100.1		7.6		0.1		8		86				<0.2		0.7	
					Middle	4.8	0.2	90	19.7	19.7	8.2	8.2	31.7	31.7	99.3	99.2	7.5		0.3		6		88				<0.2		0.6	
						4.8	0.2	95	19.7		8.2		31.7		99.1		7.5		0.3		6		89				<0.2		0.6	
					Bottom	8.5	0.1	81	19.5	19.5	8.2	8.2	31.7	31.7	98.4	98.5	7.5	7.5	0.4		6		89				<0.2		0.8	
						8.5	0.1	88	19.5		8.2		31.7		98.6		7.5		0.4		6		90				<0.2		0.9	
SR1A	Sunny	Calm	12:14	4.4	Surface	1.0	-	-	19.6	19.6	8.2	8.2	31.8	31.8	99.0	99.1	7.5	7.5	1.8	1.9	8	7	-	-	819977	812660	-	-	-	-
						1.0	-	-	19.6		8.2		31.8		99.1		7.5		1.7		8		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	19.6	19.6	8.2	8.2	31.8	31.8	98.7	98.7	7.5	7.5	1.9		6		-				-		-	
						3.4	-	-	19.6		8.2		31.8		98.7		7.5		2.0		6		-				-		-	
SR2	Sunny	Calm	12:28	4.5	Surface	1.0	0.1	68	19.8	19.8	8.2	8.2	31.8	31.8	99.7	99.7	7.6	7.6	0.1	0.1	6	4	83	85	821469	814172	<0.2	<0.2	0.5	0.6
						1.0	0.1	73	19.7		8.2		31.8		99.6		7.5		0.1		5		82				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	64	19.6	19.6	8.2	8.2	31.8	31.8	98.2	98.2	7.5	7.5	0.1		3		87				<0.2		0.7	
						3.5	0.1	65	19.6		8.2		31.8		98.1		7.5		0.1		3		87				<0.2		0.7	
SR3	Sunny	Moderate	11:10	9.8	Surface	1.0	0.2	37	19.7	19.6	8.2	8.2	30.5	30.5	100.2	100.2	7.7	7.7	2.5	4.6	6	6	-	-	822126	807556	-	-	-	-
						1.0	0.2	38	19.6		8.2		30.6		100.2		7.7		2.6		6		-				-		-	
					Middle	4.9	0.3	65	19.5	19.5	8.2	8.2	30.9	30.9	99.5	99.5	7.6		4.0		6		-				-		-	
						4.9	0.3	71	19.5		8.2		30.9		99.4		7.6		4.4		6		-				-		-	
					Bottom	8.8	0.4	63	19.5	19.5	8.2	8.2	31.4	31.4	98.9	98.9	7.5	7.5	7.2		7		-				-		-	
						8.8	0.4	67	19.5		8.2		31.4		98.9		7.5		6.8		7		-				-		-	
SR4A	Fine	Moderate	12:15	8.7	Surface	1.0	0.3	69	19.7	19.7	8.2	8.2	30.1	30.1	103.9	103.9	8.0	8.0	2.6	3.2	9	8	-	-	817167	807805	-	-	-	-
						1.0	0.4	71	19.7		8.2		30.1		103.8		8.0		2.7		9		-				-		-	
					Middle	4.4	0.3	68	19.5	19.6	8.2	8.2	30.1	30.1	102.6	102.6	7.9		3.3		8		-				-		-	
						4.4	0.3	71	19.6		8.2		30.1		102.6		7.9		3.3		8		-				-		-	
					Bottom	7.7	0.3	62	19.6	19.6	8.2	8.2	30.1	30.1	102.8	102.9	7.9	7.9	3.5		7		-				-		-	
						7.7	0.3	63	19.6		8.2		30.1		102.9		7.9		3.5		7		-				-		-	
SR5A	Fine	Moderate	12:30	4.0	Surface	1.0	0.1	31	20.1	20.1	8.2	8.2	30.4	30.4	106.1	106.2	8.1	8.1	4.9	6.5	7	6	-	-	816586	810675	-	-	-	-
						1.0	0.1	33	20.1		8.2		30.4		106.2		8.1		5.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	40	20.0	20.0	8.2	8.2	30.4	30.4	106.2	106.2	8.1	8.1	7.6		5		-				-		-	
						3.0	0.1	41	20.0		8.2		30.4		106.2		8.1		8.1		5		-				-		-	
SR6A	Fine	Moderate	13:06	4.4	Surface	1.0	0.0	129	19.8	19.8	8.2	8.2	30.5	30.5	103.0	103.0	7.9	7.9	4.9	5.9	6	6	-	-	817977	814732	-	-	-	-
						1.0	0.0	133	19.8		8.2		30.6		102.9		7.8		5.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	94	19.8	19.8	8.2	8.2	30.6	30.6	102.5	102.6	7.8	7.8	6.9		6		-				-		-	
						3.4	0.1	96	19.8		8.2		30.6		102.6		7.8		6.9		6		-				-		-	
SR7	Sunny	Calm	13:20	18.1	Surface	1.0	0.4	74	19.8	19.8	8.2	8.2	32.3	32.3	92.2	92.2	7.0	7.0	0.4	1.2	3	5	-	-	823644	823743	-	-	-	-
						1.0	0.4	75	19.8		8.2		32.3		92.1		7.0		0.4		3		-				-		-	
					Middle	9.1	0.3	59	19.6	19.6	8.2	8.2	32.3	32.3	90.5	90.7	6.9		1.0		5		-				-		-	
						9.1	0.3	64	19.6		8.2		32.3		90.8		6.9		1.0		4		-				-		-	
					Bottom	17.1	0.3	35	19.6	19.6	8.2	8.2	32.3	32.3	91.0	91.1	6.9	6.9	2.2		7		-				-		-	
						17.1	0.3	37	19.6		8.2		32.3		91.2		6.9		2.0		7		-				-		-	
SR8	Sunny	Calm	12:00	5.9	Surface	1.0	-	-	19.9	19.9	8.3	8.3	31.6	31.6	101.1	101.0	7.6	7.6	0.6	0.5	7	6	-	-	820389	811619	-	-	-	-
						1.0	-	-	19.9		8.3		31.6		100.9		7.6		0.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	-	-	19.6	19.6	8.2	8.2	31.7	31.7	99.5	99.5	7.6	7.6	0.3		4		-				-		-	
						4.9	-	-	19.6		8.2		31.7		99.5		7.6		0.3		5		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 December 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	08:11	8.2	Surface	1.0	0.5	39	19.4	19.4	8.2	8.2	30.1	30.1	101.0	101.0	7.8	7.8	8.6	9.3	6	7	86	88	815626	804265	<0.2	<0.2	0.6	0.7
						1.0	0.5	40	19.4		8.2		30.1		101.0		7.8		8.6		6		85				<0.2		0.7	
					Middle	4.1	0.3	37	19.3	19.3	8.2	8.2	30.2	30.2	100.0	100.0	7.7		9.0		7		88				<0.2		0.7	
						4.1	0.3	38	19.3		8.2		30.2		99.9		7.7		8.6		7		88				<0.2		0.8	
					Bottom	7.2	0.3	23	19.3	19.3	8.2	8.2	30.3	30.3	99.3	99.3	7.7	7.7	10.6		9		89				<0.2		0.7	
						7.2	0.3	24	19.3		8.2		30.3		99.3		7.7		10.7		9		89				<0.2		0.7	
C2	Fine	Moderate	09:00	12.0	Surface	1.0	0.3	353	19.6	19.6	8.2	8.2	30.4	30.4	96.8	96.9	7.4	7.4	1.7	2.2	6	6	85	88	825686	806968	<0.2	<0.2	0.6	0.8
						1.0	0.3	325	19.6		8.2		30.4		96.9		7.4		1.7		6		86				<0.2		0.6	
					Middle	6.0	0.3	353	19.5	19.5	8.2	8.2	30.5	30.5	96.4	96.5	7.4		2.4		5		88				<0.2		0.7	
						6.0	0.3	325	19.5		8.2		30.5		96.5		7.4		2.4		6		89				<0.2		0.8	
					Bottom	11.0	0.2	9	19.5	19.5	8.2	8.2	30.7	30.7	96.6	96.6	7.4	7.4	2.5		6		89				<0.2		1.1	
						11.0	0.3	9	19.5		8.2		30.7		96.6		7.4		2.4		5		90				<0.2		1.2	
C3	Fine	Moderate	06:56	11.2	Surface	1.0	0.4	260	19.5	19.5	8.2	8.2	31.7	31.7	97.8	97.7	7.5	7.4	1.1	2.8	7	5	83	88	822102	817789	<0.2	<0.2	1.2	1.2
						1.0	0.4	280	19.5		8.2		31.7		97.5		7.4		1.2		5		84				<0.2		1.1	
					Middle	5.6	0.4	256	19.5	19.5	8.2	8.2	31.9	31.9	97.2	97.2	7.4		2.7		5		88				<0.2		1.2	
						5.6	0.4	275	19.5		8.2		31.9		97.1		7.4		2.8		5		88				<0.2		1.1	
					Bottom	10.2	0.3	265	19.5	19.5	8.2	8.2	31.9	31.9	96.9	96.8	7.4	7.4	4.7		5		91				<0.2		1.2	
						10.2	0.4	283	19.5		8.2		31.9		96.7		7.4		4.5		5		92				<0.2		1.4	
IM1	Cloudy	Moderate	08:31	4.9	Surface	1.0	0.1	289	19.6	19.6	8.2	8.2	30.2	30.2	100.4	100.4	7.7	7.7	4.1	4.3	4	6	85	87	817926	807127	<0.2	<0.2	0.7	0.7
						1.0	0.1	304	19.6		8.2		30.2		100.4		7.7		4.2		4		85				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	292	19.6	19.6	8.2	8.2	30.2	30.2	100.6	100.8	7.7	7.7	4.5		8		88				<0.2		0.7	
						3.9	0.1	302	19.6		8.2		30.2		100.9		7.7		4.5		8		88				<0.2		0.7	
IM2	Cloudy	Moderate	08:39	6.8	Surface	1.0	0.2	2	19.4	19.4	8.2	8.2	30.0	30.0	100.9	100.9	7.8	7.8	7.0	7.9	6	8	85	87	818152	806188	<0.2	<0.2	0.8	0.8
						1.0	0.2	2	19.4		8.2		30.0		100.8		7.8		7.1		6		85				<0.2		0.8	
					Middle	3.4	0.2	10	19.4	19.4	8.2	8.2	30.0	30.0	100.3	100.3	7.7		8.0		9		87				<0.2		0.8	
						3.4	0.2	10	19.4		8.2		30.0		100.3		7.7		8.2		9		88				<0.2		0.8	
					Bottom	5.8	0.2	346	19.4	19.4	8.2	8.2	30.0	30.0	100.1	100.1	7.7	7.7	8.7		10		89				<0.2		0.9	
						5.8	0.2	318	19.4		8.2		30.0		100.0		7.7		8.7		10		90				<0.2		0.9	
IM3	Cloudy	Moderate	08:46	7.0	Surface	1.0	0.3	346	19.4	19.4	8.2	8.2	30.0	30.0	101.5	101.5	7.8	7.8	5.9	6.3	8	9	85	88	818769	805595	<0.2	<0.2	0.9	0.9
						1.0	0.3	318	19.4		8.2		30.0		101.5		7.8		6.0		8		85				<0.2		0.8	
					Middle	3.5	0.3	344	19.4	19.4	8.2	8.2	30.0	30.0	101.3	101.3	7.8		6.3		9		88				<0.2		0.8	
						3.5	0.3	316	19.4		8.2		30.0		101.3		7.8		6.3		9		87				<0.2		0.9	
					Bottom	6.0	0.2	340	19.4	19.4	8.2	8.2	30.0	30.0	100.8	100.8	7.8	7.8	6.5		10		90				<0.2		0.9	
						6.0	0.3	313	19.4		8.2		30.0		100.8		7.8		6.8		10		90				<0.2		0.9	
IM4	Cloudy	Moderate	08:54	8.1	Surface	1.0	0.4	353	19.4	19.4	8.2	8.2	30.0	30.0	100.2	100.2	7.7	7.7	5.8	6.5	9	9	85	87	819717	804612	<0.2	<0.2	0.8	0.9
						1.0	0.4	357	19.4		8.2		30.0		100.2		7.7		5.8		10		86				<0.2		0.9	
					Middle	4.1	0.4	353	19.4	19.4	8.2	8.2	30.0	30.0	99.9	99.9	7.7		6.0		9		87				<0.2		0.9	
						4.1	0.4	359	19.4		8.2		30.0		99.9		7.7		6.1		9		87				<0.2		0.9	
					Bottom	7.1	0.3	344	19.4	19.4	8.2	8.2	30.0	30.0	99.3	99.3	7.7	7.7	7.6		8		89				<0.2		0.8	
						7.1	0.3	350	19.4		8.2		30.0		99.3		7.7		7.8		8		90				<0.2		0.9	
IM5	Cloudy	Moderate	09:01	7.7	Surface	1.0	0.6	10	19.4	19.4	8.2	8.2	30.1	30.1	100.3	100.3	7.7	7.7	5.4	6.8	8	9	84	87	820742	804876	<0.2	<0.2	0.9	0.9
						1.0	0.7	10	19.4		8.2		30.1		100.2		7.7		5.5		8		85				<0.2		0.9	
					Middle	3.9	0.6	9	19.4	19.4	8.2	8.2	30.1	30.1	99.8	99.8	7.7		6.3		8		86				<0.2		0.9	
						3.9	0.6	9	19.4		8.2		30.1		99.8		7.7		6.4		9		88				<0.2		1.0	
					Bottom	6.7	0.5	16	19.4	19.4	8.2	8.2	30.1	30.1	99.5	99.5	7.7	7.7	8.6		9		89				<0.2		0.9	
						6.7	0.5	17	19.4		8.2		30.1		99.5		7.7		8.4		9		90				<0.2		0.8	
IM6	Cloudy	Moderate	09:09	7.4	Surface	1.0	0.1	10	19.4	19.4	8.2	8.2	29.6	29.7	100.4	100.5	7.8	7.8	3.8	5.5	10	8	85	87	821083	805844	<0.2	<0.2	1.2	1.2
						1.0	0.1	10	19.4		8.2		29.7		100.5		7.8		4.0		11		85				<0.2		1.2	
					Middle	3.7	0.2	48	19.4	19.4	8.2	8.2	29.8	29.8	100.5	100.6	7.8		5.2		8		88				<0.2		1.1	
						3.7	0.2	48	19.4		8.2		29.9		100.6		7.8		5.5		9		88				<0.2		1.1	
					Bottom	6.4	0.2	68	19.4	19.4	8.2	8.2	30.0	30.0	100.4	100.4	7.7	7.7	7.2		6		89				<0.2		1.2	
						6.4	0.2	72	19.4		8.2		30.0		100.3		7.7		7.1		6		89				<0.2		1.3	
IM7	Cloudy	Moderate	09:14	8.5	Surface	1.0	0.1	196	19.5	19.5	8.2	8.2	29.2	29.2	99.4	99.5	7.7	7.7	3.1	4.6	5	5	86	88	821364	806856	<0.2	<0.2	1.1	1.2
						1.0	0.1	206	19.5		8.2		29.2		99.5		7.7		3.2		5		85				<0.2		1.1	
					Middle	4.3	0.2	144	19.5	19.5	8.2	8.2	29.5	29.5	99.9	100.0	7.7		4.5		5		88				<0.2		1.2	
						4.3	0.2	151	19.5		8.2		29.6		100.0		7.7		4.7		5		88				<0.2		1.2	
					Bottom	7.5	0.3	121	19.5	19.5	8.2	8.2	30.0	30.0	99.7	99.6	7.7	7.7	6.1		4		90				<0.2		1.3	
						7.5	0.3	125	19.5		8.2		30.0		99.5		7.7		5.9		4		90				<0.2		1.2	
IM8	Fine	Moderate	08:34	8.0	Surface	1.0	0.1	187	19.5	19.5	8.2	8.2	30.3	30.3	97.6	97.5	7.5	7.5	2.0	4.0	7	6	82	88	821841	808140	<0.2	<0.2	1.2	1.1
						1.0	0.1	192	19.5		8.2		30.3		97.4		7.5		2.1		6		84				<0.2		1.1	
					Middle	4.0	0.1	170	19.5	19.5	8.2	8.2	30.4	30.4	97.5	97.5	7.5		3.2		5		89				<0.2		1.1	
						4.0	0.1	182	19.5		8.2		30.4		97.4		7.5		3.3		5		90				<0.2		1.1	
					Bottom	7.0	0.1	46	19.5	19.5	8.2	8.2	30.6	30.6	97.1	97.1	7.5	7.5	6.6		5		91				<0.2		1.1	
						7.0	0.1	49	19.5		8.2		30.6		97.1		7.5		6.8		5		92				<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 29 December 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	08:28	7.2	Surface	1.0	0.2	199	19.4	19.4	8.3	8.3	31.3	31.3	98.4	98.4	7.5	7.5	3.1	4.4	9	8	82	87	822089	808798	<0.2	<0.2	1.1	1.1
						1.0	0.2	213	19.4		8.3		31.3		98.4		7.5		3.1		9		82				<0.2		1.0	
					Middle	3.6	0.2	200	19.5	19.5	8.3	8.3	31.4	31.4	98.2	98.3	7.5		4.3		9		86				<0.2		1.2	
						3.6	0.2	205	19.5		8.3		31.4		98.4		7.5		4.3		8		87				<0.2		1.2	
					Bottom	6.2	0.1	202	19.5	19.5	8.3	8.3	31.4	31.4	98.1	98.2	7.5	7.5	5.6		6		91				<0.2		1.1	
						6.2	0.2	221	19.5		8.3		31.4		98.3		7.5		5.9		6		91				<0.2		1.0	
IM10	Fine	Moderate	08:21	7.4	Surface	1.0	0.5	276	19.4	19.4	8.2	8.2	31.4	31.4	99.3	99.3	7.6	7.6	3.2	3.1	5	7	82	87	822384	809794	<0.2	<0.2	1.1	1.1
						1.0	0.5	280	19.4		8.2		31.4		99.2		7.6		3.3		5		82				<0.2		1.1	
					Middle	3.7	0.4	281	19.4	19.4	8.2	8.2	31.4	31.4	98.8	98.8	7.5		3.1		8		87				<0.2		1.2	
						3.7	0.4	302	19.4		8.2		31.4		98.8		7.5		3.1		8		88				<0.2		1.2	
					Bottom	6.4	0.4	280	19.4	19.4	8.2	8.2	31.4	31.4	98.8	99.0	7.5	7.6	3.0		9		91				<0.2		1.1	
						6.4	0.4	290	19.4		8.2		31.4		99.1		7.6		2.9		9		92				<0.2		1.1	
IM11	Fine	Moderate	08:11	7.8	Surface	1.0	0.5	269	19.5	19.5	8.2	8.2	31.7	31.7	98.7	98.7	7.5	7.5	1.8	2.3	9	8	86	90	822038	811450	<0.2	<0.2	1.3	1.2
						1.0	0.5	285	19.5		8.2		31.7		98.7		7.5		2.0		7		87				<0.2		1.1	
					Middle	3.9	0.5	279	19.5	19.5	8.2	8.2	31.8	31.8	99.0	99.0	7.5		2.4		8		90				<0.2		1.1	
						3.9	0.5	291	19.5		8.2		31.8		99.0		7.5		2.4		8		91				<0.2		1.2	
					Bottom	6.8	0.4	279	19.5	19.5	8.2	8.2	31.9	31.9	97.9	98.1	7.5	7.5	2.7		7		92				<0.2		1.1	
						6.8	0.4	290	19.5		8.2		31.9		98.2		7.5		2.7		7		93				<0.2		1.3	
IM12	Fine	Moderate	08:05	8.4	Surface	1.0	0.5	305	19.4	19.4	8.2	8.2	31.7	31.7	97.7	97.9	7.5	7.5	5.2	5.8	9	7	87	90	821451	812054	<0.2	<0.2	0.8	0.9
						1.0	0.5	305	19.4		8.2		31.7		98.0		7.5		5.5		8		86				<0.2		0.8	
					Middle	4.2	0.4	308	19.4	19.4	8.2	8.2	31.8	31.8	98.0	98.0	7.5		6.1		7		90				<0.2		0.7	
						4.2	0.4	320	19.4		8.2		31.8		97.9		7.5		6.0		7		91				<0.2		0.8	
					Bottom	7.4	0.4	306	19.4	19.4	8.2	8.2	31.8	31.8	97.4	97.4	7.4	7.4	5.9		5		92				<0.2		1.1	
						7.4	0.4	332	19.4		8.2		31.8		97.4		7.4		5.9		5		93				<0.2		1.2	
SR1A	Fine	Calm	07:32	4.5	Surface	1.0	-	-	19.4	19.4	8.2	8.2	31.7	31.7	97.7	97.6	7.5	7.5	0.2	0.3	10	7	-	-	819979	812665	-	-	-	-
						1.0	-	-	19.4		8.2		31.7		97.5		7.4		0.2		10		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	19.5	19.5	8.2	8.2	31.9	31.9	97.2	97.4	7.4	7.4	0.4		4		-				-		-	
						3.5	-	-	19.6		8.2		31.9		97.5		7.4		0.4		4		-				-		-	
SR2	Fine	Calm	07:18	4.2	Surface	1.0	0.4	174	19.4	19.4	8.2	8.2	31.7	31.7	98.4	98.4	7.5	7.5	6.4	5.0	4	7	85	87	821447	814153	<0.2	<0.2	0.8	0.8
						1.0	0.4	179	19.4		8.2		31.7		98.4		7.5		6.1		4		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	177	19.4	19.4	8.2	8.2	31.7	31.7	97.9	97.9	7.5	7.5	3.7		10		89				<0.2		0.7	
						3.2	0.3	192	19.4		8.2		31.7		97.8		7.5		3.8		10		89				<0.2		0.8	
SR3	Fine	Moderate	08:39	8.8	Surface	1.0	0.1	60	19.5	19.5	8.2	8.2	30.3	30.3	97.3	97.2	7.5	7.5	2.3	2.8	5	5	-	-	822154	807553	-	-	-	-
						1.0	0.1	60	19.5		8.2		30.3		97.0		7.5		2.3		5		-				-		-	
					Middle	4.4	0.2	74	19.5	19.5	8.2	8.2	30.4	30.4	96.7	96.7	7.4		2.8		5		-				-		-	
						4.4	0.2	77	19.5		8.2		30.5		96.7		7.4		2.8		5		-				-		-	
					Bottom	7.8	0.2	64	19.4	19.4	8.2	8.2	30.7	30.7	96.7	96.8	7.4	7.4	3.4		6		-				-		-	
						7.8	0.2	67	19.4		8.2		30.7		96.8		7.4		3.4		6		-				-		-	
SR4A	Cloudy	Moderate	07:47	8.8	Surface	1.0	0.2	70	19.6	19.6	8.2	8.2	30.3	30.3	100.0	100.0	7.7	7.7	3.3	3.6	4	5	-	-	817179	807798	-	-	-	-
						1.0	0.2	73	19.6		8.2		30.3		100.0		7.7		3.4		4		-				-		-	
					Middle	4.4	0.1	72	19.6	19.6	8.2	8.2	30.3	30.3	100.0	100.0	7.7		3.6		5		-				-		-	
						4.4	0.1	75	19.6		8.2		30.3		100.0		7.7		3.5		5		-				-		-	
					Bottom	7.8	0.1	42	19.6	19.6	8.2	8.2	30.4	30.4	100.1	100.2	7.7	7.7	4.0		5		-				-		-	
						7.8	0.1	43	19.6		8.2		30.4		100.2		7.7		4.0		5		-				-		-	
SR5A	Cloudy	Moderate	07:28	3.4	Surface	1.0	0.1	303	19.6	19.6	8.2	8.2	30.7	30.7	99.5	99.5	7.6	7.6	3.6	3.8	5	5	-	-	816606	810710	-	-	-	-
						1.0	0.1	324	19.6		8.2		30.7		99.5		7.6		3.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	0.1	300	19.5	19.5	8.2	8.2	30.7	30.7	100.3	100.4	7.7	7.7	4.0		5		-				-		-	
						2.4	0.1	328	19.5		8.2		30.7		100.4		7.7		4.0		5		-				-		-	
SR6A	Cloudy	Moderate	06:58	4.6	Surface	1.0	0.1	277	19.4	19.4	8.2	8.2	30.7	30.7	98.6	98.6	7.6	7.6	3.5	4.3	5	5	-	-	817939	814724	-	-	-	-
						1.0	0.1	301	19.4		8.2		30.7		98.5		7.6		3.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	221	19.4	19.4	8.2	8.2	30.7	30.7	98.1	98.1	7.5	7.5	5.2		4		-				-		-	
						3.6	0.0	231	19.4		8.2		30.7		98.1		7.5		5.3		4		-				-		-	
SR7	Fine	Calm	06:26	19.0	Surface	1.0	0.3	355	19.5	19.5	8.1	8.1	32.2	32.2	93.8	93.8	7.1	7.1	1.8	2.4	7	8	-	-	823652	823726	-	-	-	-
						1.0	0.4	327	19.5		8.1		32.2		93.8		7.1		2.0		7		-				-		-	
					Middle	9.5	0.3	8	19.5	19.5	8.1	8.1	32.2	32.2	93.6	93.7	7.1		2.7		7		-				-		-	
						9.5	0.3	8	19.5		8.1		32.2		93.8		7.1		2.7		7		-				-		-	
					Bottom	18.0	0.3	342	19.5	19.5	8.1	8.1	32.2	32.2	93.1	93.1	7.1	7.1	2.5		9		-				-		-	
						18.0	0.3	315	19.5		8.1		32.2		93.1		7.1		2.7		9		-				-		-	
SR8	Fine	Calm	07:55	5.2	Surface	1.0	-	-	19.6	19.6	8.2	8.2	31.4	31.4	99.5	99.5	7.6	7.6	5.5	5.8	5	5	-	-	820369	811604	-	-	-	-
						1.0	-	-	19.6		8.2		31.4		99.4		7.6		5.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	19.4	19.4	8.3	8.3	31.4	31.4	99.3	99.3	7.6	7.6	6.2		5		-				-		-	
						4.2	-	-	19.4		8.3		31.4		99.2		7.6		6.1		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 31 December 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	13:30	8.4	Surface	1.0	0.1	126	18.3	18.3	8.5	8.5	30.9	30.9	101.8	101.8	8.0	8.0	7.9	8.4	14	10	85	89	815623	804242	<0.2	<0.2	0.9	0.9
						1.0	0.1	126	18.3		8.5		30.9		101.8		8.0		7.9		13		86				<0.2		1.0	
					Middle	4.2	0.1	205	18.3	18.3	8.5	8.5	31.0	31.0	101.2	101.2	7.9		9.4		8		88				<0.2		0.9	
						4.2	0.1	209	18.3		8.5		31.0		101.2		7.9		9.3		9		88				<0.2		1.0	
					Bottom	7.4	0.1	160	18.3	18.3	8.5	8.5	31.0	31.0	101.7	101.7	8.0	8.0	7.8		8		93				<0.2		1.0	
						7.4	0.1	175	18.3		8.5		31.0		101.7		8.0		7.9		9		93				<0.2		0.8	
C2	Sunny	Moderate	12:05	11.8	Surface	1.0	0.3	1	17.7	17.7	8.1	8.1	29.4	29.4	96.6	96.6	7.7	7.7	9.2	9.0	13	14	85	88	825697	806950	<0.2	<0.2	0.8	0.9
						1.0	0.3	1	17.7		8.1		29.4		96.5		7.7		9.2		13		85				<0.2		0.8	
					Middle	5.9	0.3	11	17.7	17.7	8.1	8.1	29.5	29.5	96.4	96.4	7.7		8.9		13		88				<0.2		0.9	
						5.9	0.4	11	17.7		8.1		29.5		96.4		7.7		8.9		13		88				<0.2		0.8	
					Bottom	10.8	0.2	47	17.8	17.8	8.1	8.1	29.5	29.5	97.0	97.0	7.7	7.7	8.8		17		91				<0.2		0.9	
						10.8	0.2	50	17.8		8.1		29.5		97.0		7.7		8.9		16		91				<0.2		0.9	
C3	Sunny	Moderate	14:01	12.1	Surface	1.0	0.3	86	18.6	18.6	8.1	8.1	30.6	30.6	94.4	94.4	7.4	7.4	4.1	4.6	6	6	85	89	822104	817788	<0.2	<0.2	0.5	0.5
						1.0	0.3	87	18.6		8.1		30.6		94.4		7.4		4.1		6		86				<0.2		0.5	
					Middle	6.1	0.3	84	18.5	18.5	8.0	8.0	30.6	30.6	94.7	94.8	7.4		4.5		6		89				<0.2		0.4	
						6.1	0.3	87	18.5		8.0		30.6		94.8		7.4		4.6		6		89				<0.2		0.5	
					Bottom	11.1	0.2	70	18.5	18.5	8.0	8.0	30.5	30.5	96.3	96.6	7.5	7.6	5.1		7		91				<0.2		0.5	
						11.1	0.2	71	18.5		8.0		30.5		96.9		7.6		5.1		7		91				<0.2		0.5	
IM1	Sunny	Moderate	13:09	5.3	Surface	1.0	0.1	182	18.0	18.0	8.5	8.5	29.8	29.8	100.2	100.2	7.9	7.9	6.6	8.2	13	13	85	89	817926	807149	<0.2	<0.2	0.9	0.9
						1.0	0.1	192	18.0		8.5		29.8		100.1		7.9		6.7		13		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.0	334	17.9	17.9	8.5	8.5	29.8	29.8	98.6	98.6	7.8	7.8	9.8		14		92				<0.2		1.0	
						4.3	0.0	356	17.9		8.5		29.8		98.6		7.8		9.6		13		92				<0.2		0.9	
IM2	Sunny	Moderate	13:00	7.1	Surface	1.0	0.1	314	18.0	18.0	8.5	8.5	29.7	29.7	100.6	100.6	8.0	8.0	8.0	9.2	14	15	86	87	818145	806160	<0.2	<0.2	0.9	0.8
						1.0	0.1	343	18.0		8.5		29.7		100.6		8.0		9.0		13		86				<0.2		0.8	
					Middle	3.6	0.1	54	18.1	18.1	8.5	8.5	30.5	30.5	100.6	100.7	7.9		9.2		15		86				<0.2		0.7	
						3.6	0.1	58	18.1		8.5		30.5		100.7		7.9		9.2		15		87				<0.2		0.8	
					Bottom	6.1	0.1	42	18.2	18.2	8.5	8.5	30.6	30.6	100.7	100.7	7.9	7.9	9.4		15		89				<0.2		0.9	
						6.1	0.2	43	18.2		8.5		30.6		100.7		7.9		10.1		16		90				<0.2		0.9	
IM3	Sunny	Moderate	12:53	7.2	Surface	1.0	0.1	342	18.2	18.2	8.5	8.5	30.5	30.5	101.5	101.5	8.0	8.0	8.6	9.4	14	16	85	89	818805	805603	<0.2	<0.2	0.8	0.8
						1.0	0.1	315	18.2		8.5		30.5		101.5		8.0		8.6		15		85				<0.2		0.9	
					Middle	3.6	0.1	331	18.2	18.2	8.5	8.5	30.6	30.6	101.4	101.4	8.0		9.1		17		89				<0.2		0.7	
						3.6	0.1	348	18.2		8.5		30.6		101.4		8.0		9.1		16		89				<0.2		0.8	
					Bottom	6.2	0.1	1	18.2	18.2	8.5	8.5	30.7	30.7	101.4	101.4	8.0	8.0	10.5		17		92				<0.2		0.9	
						6.2	0.1	1	18.2		8.5		30.7		101.4		8.0		10.5		16		92				<0.2		0.8	
IM4	Sunny	Moderate	12:34	8.1	Surface	1.0	0.3	344	18.1	18.1	8.5	8.5	30.6	30.6	101.4	101.4	8.0	8.0	8.7	9.5	14	14	86	88	819724	804605	<0.2	<0.2	0.9	0.8
						1.0	0.3	316	18.1		8.5		30.6		101.4		8.0		8.8		14		84				<0.2		0.8	
					Middle	4.1	0.2	340	18.1	18.1	8.5	8.5	30.6	30.6	101.3	101.3	8.0		9.3		14		87				<0.2		0.8	
						4.1	0.3	351	18.1		8.5		30.6		101.3		8.0		9.3		14		87				<0.2		0.8	
					Bottom	7.1	0.2	341	18.0	18.0	8.5	8.5	30.6	30.6	101.6	101.7	8.0	8.0	10.2		13		93				<0.2		0.8	
						7.1	0.3	351	18.0		8.5		30.6		101.7		8.0		11.0		13		93				<0.2		0.7	
IM5	Sunny	Moderate	12:23	7.9	Surface	1.0	0.3	354	17.9	17.9	8.5	8.5	30.0	30.0	100.3	100.3	8.0	8.0	8.8	9.6	14	15	86	89	820713	804859	<0.2	<0.2	0.8	0.8
						1.0	0.4	354	17.9		8.5		30.0		100.3		8.0		8.9		15		85				<0.2		0.8	
					Middle	4.0	0.3	3	17.9	17.9	8.5	8.5	30.0	30.0	100.1	100.1	7.9		9.0		16		87				<0.2		0.8	
						4.0	0.4	3	17.9		8.5		30.0		100.1		7.9		9.1		15		87				<0.2		0.8	
					Bottom	6.9	0.3	22	17.8	17.8	8.5	8.5	30.1	30.1	100.3	100.3	8.0	8.0	10.5		16		93				<0.2		0.7	
						6.9	0.4	22	17.8		8.5		30.1		100.3		8.0		11.5		15		93				<0.2		0.8	
IM6	Sunny	Calm	12:13	7.6	Surface	1.0	0.1	336	17.9	17.9	8.5	8.5	29.8	29.8	99.6	99.6	7.9	7.9	8.1	8.2	15	14	84	88	821036	805831	<0.2	<0.2	0.9	0.9
						1.0	0.1	359	17.9		8.5		29.8		99.6		7.9		8.1		15		83				<0.2		0.8	
					Middle	3.8	0.1	352	17.9	17.9	8.5	8.5	29.8	29.8	99.5	99.5	7.9		8.7		14		88				<0.2		0.8	
						3.8	0.1	324	17.9		8.5		29.8		99.5		7.9		8.7		13		88				<0.2		0.8	
					Bottom	6.6	0.1	351	17.9	17.9	8.5	8.5	29.8	29.8	99.5	99.5	7.9	7.9	8.0		14		91				<0.2		0.9	
						6.6	0.1	323	17.9		8.5		29.8		99.5		7.9		7.9		14		91				<0.2		0.9	
IM7	Sunny	Calm	12:05	8.4	Surface	1.0	0.2	192	17.9	17.9	8.5	8.5	29.8	29.8	100.0	100.0	7.9	7.9	8.5	9.8	14	15	86	96	821335	806846	<0.2	<0.2	1.0	1.0
						1.0	0.2	208	17.9		8.5		29.8		100.0		7.9		8.5		13		84				<0.2		1.0	
					Middle	4.2	0.1	169	17.9	17.9	8.5	8.5	29.8	29.8	100.0	100.0	7.9		9.8		15		89				<0.2		0.9	
						4.2	0.1	175	17.9		8.5		29.8		100.0		7.9		9.7		16		89				<0.2		1.0	
					Bottom	7.4	0.2	193	17.8	17.8	8.5	8.5	29.9	29.9	100.8	100.9	8.0	8.0	11.2		15		114				<0.2		1.0	
						7.4	0.2	201	17.8		8.5		29.9		100.9		8.0		11.1		16		116				<0.2		0.9	
IM8	Sunny	Moderate	12:33	7.8	Surface	1.0	0.3	82	17.4	17.4	8.1	8.1	29.4	29.4	97.9	97.9	7.9	7.9	10.7	9.1	11	10	86	89	821826	808156	<0.2	<0.2	0.8	0.8
						1.0	0.3	84	17.4		8.1		29.4		97.9		7.9		10.4		11		86				<0.2		0.8	
					Middle	3.9	0.2	85	17.5	17.5	8.1	8.1	29.5	29.5	97.9	97.9	7.8		8.4		11		89				<0.2		0.7	
						3.9	0.2	87	17.5		8.1		29.5		97.9		7.8		8.4		10		89				<0.2		0.7	
					Bottom	6.8	0.2	68	17.5	17.5	8.1	8.1	29.5	29.5	98.6	98.7	7.9	7.9	8.4		9		91				<0.2		0.8	
						6.8	0.3	70	17.5		8.1		29.5		98.7		7.9		8.4		8		92				<0.2		0.8	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	12:38	7.8	Surface	1.0	0.2	69	17.8	17.8	8.1	8.1	29.5	29.5	97.6	97.6	7.8	7.8	6.9	7.3	9	9	86	88	822115	808828	<0.2	<0.2	0.8	0.8
						1.0	0.3	72	17.8		8.1		29.5		97.6		7.8		6.9		10		85				<0.2		0.8	
					Middle	3.9	0.2	55	17.7	17.7	8.1	8.0	29.5	29.5	97.6	97.6	7.8		7.3		9		89				<0.2		0.7	
						3.9	0.3	58	17.7		8.0		29.5		97.6		7.8		7.3		10		89				<0.2		0.8	
					Bottom	6.8	0.3	38	17.7	17.7	8.0	8.0	29.5	29.5	98.3	98.4	7.8	7.9	7.6		8		90				<0.2		0.8	
						6.8	0.3	41	17.7		8.0		29.5		98.4		7.9		7.7		9		90				<0.2		0.8	
IM10	Sunny	Moderate	12:44	8.1	Surface	1.0	0.2	19	17.9	17.9	8.1	8.1	29.7	29.7	96.5	96.5	7.7	7.7	6.8	7.7	9	10	86	89	822371	809776	<0.2	<0.2	1.0	0.8
						1.0	0.2	19	17.9		8.1		29.7		96.5		7.7		6.9		9		87				<0.2		0.8	
					Middle	4.1	0.1	16	17.9	17.9	8.1	8.1	29.7	29.7	96.5	96.6	7.7		7.7		10		89				<0.2		0.9	
						4.1	0.2	16	17.9		8.1		29.7		96.6		7.7		7.7		9		89				<0.2		0.7	
					Bottom	7.1	0.1	356	17.9	17.9	8.0	8.0	29.7	29.7	97.6	97.7	7.8	7.8	8.5		10		90				<0.2		0.7	
						7.1	0.1	328	17.9		8.0		29.7		97.8		7.8		8.5		10		90				<0.2		0.8	
IM11	Sunny	Moderate	12:55	7.4	Surface	1.0	0.1	182	18.2	18.2	8.1	8.1	30.1	30.1	95.7	95.7	7.5	7.6	5.1	5.3	9	8	85	88	822059	811461	<0.2	<0.2	0.7	0.8
						1.0	0.1	185	18.2		8.1		30.1		95.7		7.5		5.1		9		86				<0.2		0.8	
					Middle	3.7	0.1	186	18.2	18.2	8.1	8.1	30.1	30.1	96.1	96.2	7.6		5.3		8		87				<0.2		0.8	
						3.7	0.1	190	18.2		8.1		30.1		96.2		7.6		5.3		7		87				<0.2		0.8	
					Bottom	6.4	0.1	181	18.1	18.2	8.0	8.0	30.1	30.1	98.1	98.2	7.7	7.8	5.4		6		92				<0.2		0.7	
						6.4	0.1	182	18.2		8.0		30.1		98.3		7.8		5.4		7		92				<0.2		0.8	
IM12	Sunny	Moderate	13:00	9.5	Surface	1.0	0.2	213	18.0	18.0	8.1	8.1	29.9	29.9	96.4	96.4	7.6	7.7	5.7	7.9	8	8	86	90	821466	812024	<0.2	<0.2	0.7	0.7
						1.0	0.2	224	18.0		8.1		29.9		96.4		7.6		5.8		8		87				<0.2		0.7	
					Middle	4.8	0.2	211	18.1	18.1	8.0	8.0	30.1	30.1	97.0	97.1	7.7		6.2		8		91				<0.2		0.6	
						4.8	0.2	229	18.1		8.0		30.1		97.2		7.7		6.2		8		91				<0.2		0.7	
					Bottom	8.5	0.2	197	18.1	18.1	8.1	8.1	30.1	30.1	98.8	99.0	7.8	7.8	11.8		7		93				<0.2		0.7	
						8.5	0.2	205	18.1		8.1		30.1		99.1		7.8		11.8		8		93				<0.2		0.6	
SR1A	Sunny	Calm	13:29	4.6	Surface	1.0	-	-	17.7	17.7	8.1	8.1	29.7	29.7	101.1	101.4	8.1	8.1	6.4	6.4	5	6	-	-	819973	812662	-	-	-	-
						1.0	-	-	17.7		8.1		29.7		101.6		8.1		6.4		6		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	17.6	17.6	8.1	8.1	29.7	29.7	103.7	103.9	8.3	8.3	6.4		6		-				-		-	
						3.6	-	-	17.6		8.1		29.7		104.1		8.3		6.3		7		-				-		-	
SR2	Sunny	Calm	13:42	4.2	Surface	1.0	0.3	31	18.0	18.0	8.1	8.0	30.0	30.0	97.2	97.3	7.7	7.7	5.3	6.7	6	6	86	87	821457	814176	<0.2	<0.2	0.5	0.5
						1.0	0.3	33	18.0		8.0		30.0		97.3		7.7		5.3		5		85				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	37	18.1	18.1	8.0	8.0	30.1	30.1	98.0	98.1	7.7	7.8	7.9		6		88				<0.2		0.6	
						3.2	0.3	38	18.1		8.0		30.1		98.2		7.8		8.1		7		88				<0.2		0.5	
SR3	Sunny	Moderate	12:26	8.8	Surface	1.0	0.5	64	17.4	17.4	8.1	8.1	29.4	29.4	97.4	97.4	7.8	7.8	9.0	9.6	17	16	-	-	822145	807554	-	-	-	-
						1.0	0.5	70	17.4		8.1		29.4		97.4		7.8		9.0		16		-				-		-	
					Middle	4.4	0.5	60	17.4	17.4	8.1	8.1	29.4	29.4	97.7	97.7	7.8		9.7		17		-				-		-	
						4.4	0.5	61	17.4		8.1		29.4		97.7		7.9		9.8		16		-				-		-	
					Bottom	7.8	0.4	67	17.4	17.4	8.1	8.1	29.4	29.4	98.3	98.4	7.9	7.9	10.0		15		-				-		-	
						7.8	0.4	67	17.4		8.1		29.4		98.4		7.9		10.1		16		-				-		-	
SR4A	Sunny	Calm	13:53	8.2	Surface	1.0	0.2	66	17.9	17.9	8.5	8.5	30.0	30.0	100.8	100.7	8.0	8.0	8.9	9.8	8	11	-	-	817207	807831	-	-	-	-
						1.0	0.2	70	17.9		8.5		30.0		100.6		8.0		9.4		9		-				-		-	
					Middle	4.1	0.2	68	17.9	17.9	8.5	8.5	30.0	30.0	100.5	100.5	8.0		9.7		12		-				-		-	
						4.1	0.2	69	17.9		8.5		30.0		100.5		8.0		9.7		13		-				-		-	
					Bottom	7.2	0.2	62	17.7	17.7	8.4	8.4	30.1	30.1	102.1	102.2	8.1	8.1	10.8		12		-				-		-	
						7.2	0.2	66	17.7		8.4		30.1		102.2		8.1		10.7		13		-				-		-	
SR5A	Sunny	Calm	14:10	3.2	Surface	1.0	0.0	277	17.9	17.9	8.4	8.4	30.0	30.0	102.6	102.6	8.1	8.1	6.6	6.2	12	12	-	-	816616	810684	-	-	-	-
						1.0	0.0	290	17.9		8.4		30.0		102.6		8.1		6.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	323	17.9	17.9	8.4	8.4	30.1	30.1	105.6	105.7	8.4	8.4	5.8		12		-				-		-	
						2.2	0.1	347	17.9		8.4		30.1		105.7		8.4		5.8		11		-				-		-	
SR6A	Sunny	Calm	14:50	4.3	Surface	1.0	0.1	102	18.2	18.2	8.5	8.5	30.1	30.1	101.5	101.5	8.0	8.0	8.9	7.9	10	12	-	-	817951	814761	-	-	-	-
						1.0	0.1	108	18.2		8.5		30.1		101.5		8.0		8.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	107	18.1	18.1	8.4	8.4	30.1	30.1	102.5	102.6	8.1	8.1	7.0		14		-				-		-	
						3.3	0.1	111	18.1		8.4		30.1		102.6		8.1		7.0		15		-				-		-	
SR7	Sunny	Calm	14:33	19.0	Surface	1.0	0.4	53	18.4	18.4	8.1	8.1	30.5	30.5	93.3	93.3	7.3	7.3	5.6	5.9	8	8	-	-	823617	823736	-	-	-	-
						1.0	0.5	54	18.4		8.1		30.5		93.3		7.3		5.7		9		-				-		-	
					Middle	9.5	0.5	47	18.4	18.4	8.1	8.1	30.5	30.5	93.3	93.4	7.3		6.2		8		-				-		-	
						9.5	0.5	47	18.4		8.1		30.5		93.4		7.3		6.2		8		-				-		-	
					Bottom	18.0	0.3	39	18.4	18.4	8.1	8.1	30.5	30.5	94.0	94.1	7.4	7.4	5.9		7		-				-		-	
						18.0	0.4	41	18.4		8.1		30.5		94.1		7.4		6.0		6		-				-		-	
SR8	Sunny	Calm	13:10	4.5	Surface	1.0	-	-	17.9	17.9	8.1	8.1	29.7	29.7	98.8	98.8	7.8	7.9	6.7	6.8	9	8	-	-	820375	811611	-	-	-	-
						1.0	-	-	17.9		8.1		29.7		98.8		7.9		6.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	17.8	17.8	8.1	8.1	29.7	29.7	103.6	103.8	8.2	8.3	7.0		7		-				-		-	
						3.5	-	-	17.8		8.1		29.7		104.0		8.3		6.9		8		-				-		-	

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

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Water Quality Monitoring
Water Quality Monitoring Results on 31 December 20 during Mid-Flood Tide

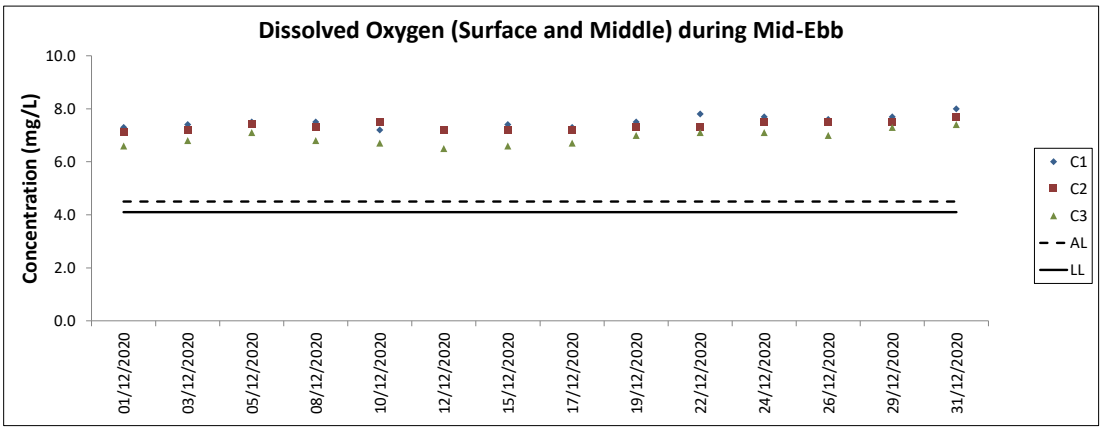
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Calm	08:54	8.3	Surface	1.0	0.4	54	17.8	17.8	8.5	8.5	29.9	29.9	99.9	99.9	7.9	7.9	9.2	10.0	10	13	85	87	815597	804228	<0.2	<0.2	0.6	0.7
						1.0	0.4	59	17.8		8.5		29.9		99.9		7.9		9.2		9		85				<0.2		0.6	
					Middle	4.2	0.4	46	17.9	17.9	8.5	8.5	30.1	30.1	99.6	99.6	7.9		9.9		15		88				<0.2		0.6	
						4.2	0.4	48	17.9		8.5		30.1		99.6		7.9		9.8		14		88				<0.2		0.8	
					Bottom	7.3	0.4	49	17.9	17.9	8.5	8.5	30.3	30.3	99.6	99.7	7.9	7.9	10.8		14		89				<0.2		0.8	
						7.3	0.4	49	17.9		8.5		30.3		99.7		7.9		11.2		15		89				<0.2		0.8	
C2	Fine	Rough	09:52	11.4	Surface	1.0	0.5	352	17.9	17.9	8.0	8.0	29.7	29.7	95.4	95.4	7.6	7.6	7.9	8.4	14	14	86	89	825679	806934	<0.2	<0.2	0.7	0.8
						1.0	0.5	324	17.9		8.0		29.7		95.4		7.6		7.9		15		86				<0.2		0.7	
					Middle	5.7	0.5	357	17.9	17.9	8.0	8.0	29.7	29.7	95.7	95.8	7.6		8.7		14		89				<0.2		0.9	
						5.7	0.5	328	17.9		8.0		29.7		95.8		7.6		8.8		13		89				<0.2		0.8	
					Bottom	10.4	0.5	5	17.9	17.9	8.0	8.0	29.7	29.7	96.8	96.9	7.7	7.7	8.6		13		90				<0.2		0.9	
						10.4	0.5	5	17.9		8.0		29.7		96.9		7.7		8.7		13		91				<0.2		0.8	
C3	Fine	Moderate	07:39	10.4	Surface	1.0	0.4	275	18.3	18.3	8.1	8.1	30.2	30.2	92.8	92.8	7.3	7.3	6.0	6.8	6	9	86	89	822085	817801	<0.2	<0.2	0.7	0.8
						1.0	0.4	276	18.3		8.1		30.2		92.8		7.3		6.0		7		86				<0.2		0.7	
					Middle	5.2	0.4	274	18.3	18.3	8.1	8.1	30.2	30.2	92.8	92.9	7.3		6.2		10		90				<0.2		0.8	
						5.2	0.4	285	18.3		8.1		30.2		92.9		7.3		6.2		10		90				<0.2		0.9	
					Bottom	9.4	0.4	269	18.3	18.3	8.0	8.0	30.2	30.2	93.4	93.5	7.3	7.3	8.3		11		91				<0.2		0.9	
						9.4	0.4	279	18.3		8.0		30.2		93.5		7.3		8.3		10		91				<0.2		0.9	
IM1	Sunny	Calm	09:16	4.6	Surface	1.0	0.2	18	17.7	17.7	8.5	8.5	29.8	29.8	98.4	98.4	7.8	7.8	10.7	11.2	14	15	85	87	817939	807144	<0.2	<0.2	0.8	0.9
						1.0	0.2	18	17.7		8.5		29.9		98.4		7.8		10.7		13		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	16	17.7	17.7	8.4	8.4	29.9	29.9	98.4	98.4	7.8	7.8	11.6		15		88				<0.2		0.9	
						3.6	0.2	16	17.7		8.4		29.9		98.4		7.8		11.9		16		88				<0.2		0.9	
IM2	Sunny	Calm	09:23	6.7	Surface	1.0	0.3	353	17.9	17.9	8.4	8.4	29.5	29.5	99.3	99.3	7.9	7.9	9.9	10.6	16	15	85	89	818156	806153	<0.2	<0.2	0.8	0.9
						1.0	0.3	325	17.9		8.4		29.5		99.3		7.9		9.9		15		85				<0.2		0.8	
					Middle	3.4	0.3	345	17.9	17.9	8.4	8.4	29.5	29.5	99.1	99.1	7.9		10.4		15		87				<0.2		1.0	
						3.4	0.3	317	17.9		8.4		29.5		99.1		7.9		10.4		14		96				<0.2		0.8	
					Bottom	5.7	0.3	353	17.8	17.8	8.4	8.4	29.6	29.6	99.6	99.6	7.9	7.9	11.7		15		89				<0.2		0.8	
						5.7	0.3	359	17.8		8.4		29.6		99.6		7.9		11.4		14		93				<0.2		0.9	
IM3	Sunny	Calm	09:31	6.9	Surface	1.0	0.3	323	18.0	18.0	8.4	8.4	29.9	29.9	97.9	97.9	7.7	7.7	9.4	10.4	16	15	86	86	818795	805572	<0.2	<0.2	0.8	0.9
						1.0	0.3	328	18.0		8.4		29.9		97.8		7.7		9.2		16		87				<0.2		0.9	
					Middle	3.5	0.3	323	18.0	18.0	8.4	8.4	29.9	29.9	97.8	97.8	7.7		10.0		15		83				<0.2		1.0	
						3.5	0.4	332	18.0		8.4		29.9		97.8		7.7		10.2		15		83				<0.2		0.9	
					Bottom	5.9	0.2	344	18.0	18.0	8.4	8.4	29.9	29.9	98.0	98.0	7.8	7.8	11.7		15		89				<0.2		0.8	
						5.9	0.3	348	18.0		8.4		29.9		98.0		7.8		11.8		14		88				<0.2		0.8	
IM4	Sunny	Calm	09:41	8.0	Surface	1.0	0.3	358	18.2	18.2	8.4	8.4	29.9	29.9	97.5	97.6	7.7	7.7	9.9	10.5	16	16	85	87	819734	804623	<0.2	<0.2	0.8	0.8
						1.0	0.3	329	18.2		8.4		29.9		97.6		7.7		9.4		17		83				<0.2		0.8	
					Middle	4.0	0.5	359	18.1	18.1	8.4	8.4	30.0	30.0	97.6	97.7	7.7		10.5		16		84				<0.2		0.9	
						4.0	0.5	330	18.1		8.4		30.0		97.7		7.7		10.9		15		83				<0.2		0.8	
					Bottom	7.0	0.2	356	18.1	18.1	8.4	8.4	30.0	30.0	98.0	98.1	7.7	7.8	11.4		15		93				<0.2		0.9	
						7.0	0.2	328	18.1		8.4		30.0		98.1		7.8		11.2		15		92				<0.2		0.8	
IM5	Sunny	Calm	09:58	7.2	Surface	1.0	0.8	4	18.0	18.0	8.5	8.5	29.9	29.9	99.3	99.3	7.9	7.9	8.2	9.7	15	16	85	89	820730	804880	<0.2	<0.2	0.8	0.8
						1.0	0.8	4	18.0		8.5		29.9		99.3		7.9		8.2		15		85				<0.2		0.9	
					Middle	3.6	0.6	16	18.0	18.0	8.5	8.5	29.9	29.9	99.3	99.3	7.9		9.7		15		89				<0.2		0.8	
						3.6	0.7	17	18.0		8.5		29.9		99.3		7.9		9.2		15		90				<0.2		0.9	
					Bottom	6.2	0.6	12	17.9	17.9	8.4	8.4	29.9	29.9	99.2	99.2	7.9	7.9	11.4		17		93				<0.2		0.8	
						6.2	0.6	12	17.9		8.4		29.9		99.2		7.9		11.3		16		90				<0.2		0.8	
IM6	Sunny	Calm	10:00	7.1	Surface	1.0	0.3	65	18.0	18.0	8.5	8.5	29.9	29.9	99.3	99.3	7.9	7.9	7.4	10.3	15	16	84	87	821074	805832	<0.2	<0.2	0.9	0.8
						1.0	0.3	68	18.0		8.5		29.9		99.3		7.9		7.4		14		85				<0.2		0.9	
					Middle	3.6	0.3	69	18.0	18.0	8.5	8.5	29.9	29.9	99.1	99.1	7.9		9.8		16		88				<0.2		0.9	
						3.6	0.3	74	18.0		8.5		29.9		99.1		7.9		9.9		15		89				<0.2		0.9	
					Bottom	6.1	0.2	73	18.0	18.0	8.5	8.5	29.8	29.8	98.9	98.9	7.8	7.8	13.6		18		89				<0.2		0.6	
						6.1	0.2	76	18.0		8.5		29.8		98.9		7.8		13.6		18		89				<0.2		0.8	
IM7	Sunny	Calm	10:09	8.2	Surface	1.0	0.2	124	18.1	18.1	8.4	8.4	29.9	29.9	98.1	98.1	7.7	7.7	9.0	9.5	16	17	85	88	821348	806840	<0.2	<0.2	0.9	0.9
						1.0	0.2	129	18.1		8.4		29.9		98.1		7.7		9.1		16		85				<0.2		0.8	
					Middle	4.1	0.1	109	18.1	18.1	8.4	8.4	30.0	30.0	98.0	98.0	7.7		9.4		16		87				<0.2		0.8	
						4.1	0.1	114	18.1		8.4		30.0		98.0		7.7		9.5		17		87				<0.2		0.9	
					Bottom	7.2	0.1	69	17.9	17.9	8.4	8.4	30.1	30.1	99.8	99.9	7.9	7.9	9.9		17		93				<0.2		0.8	
						7.2	0.1	74	17.9		8.4		30.1		99.9		7.9		10.0		18		91				<0.2		0.9	
IM8	Fine	Rough	09:27	7.4	Surface	1.0	0.1	151	17.7	17.7	8.1	8.1	29.4	29.4	96.5	96.5	7.7	7.8	10.7	10.7	18	18	85	88	821827	808140	<0.2	<0.2	0.9	0.9
						1.0	0.1	165	17.7		8.1		29.4		96.5		7.7		10.7		19		85				<0.2		0.8	
					Middle	3.7	0.1	111	17.7	17.7	8.0	8.0	29.5	29.5	97.2	97.3	7.8		10.7		17		89				<0.2		0.9	
						3.7	0.1	119	17.7		8.0		29.5		97.3		7.8		10.7		18		89				<0.2		0.9	
					Bottom	6.4	0.1	86	17.6	17.6	8.0	8.0	29.4	29.4	97.6	97.8	7.8	7.8	10.5		18		90				<0.2		1.0	
						6.4	0.1	89	17.6		8.0		29.4		98.0		7.8		10.7		17		90				<0.2		0.9	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 December 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	Rough	09:21	6.9	Surface	1.0	0.2	35	17.5	17.5	8.1	8.1	29.2	29.2	97.3	97.4	7.8	7.9	11.4	12.9	20	20	87	89	822095	808800	<0.2	<0.2	0.9	0.9
						1.0	0.2	35	17.5		8.1		29.2		97.4		7.8		11.5		19		87				<0.2		0.8	
					Middle	3.5	0.2	46	17.5	17.5	8.1	8.1	29.2	29.2	98.3	98.5	7.9		13.1		19		89				<0.2		0.7	
						3.5	0.2	46	17.5		8.1		29.2		98.7		7.9		13.3		20		89				<0.2		0.9	
					Bottom	5.9	0.2	20	17.4	17.4	8.1	8.1	29.2	29.2	101.1	101.3	8.1	8.2	14.0		22		89				<0.2		1.0	
						5.9	0.2	21	17.4		8.1		29.2		101.5		8.2		14.0		22		90				<0.2		0.9	
IM10	Fine	Rough	09:14	7.0	Surface	1.0	0.7	294	17.7	17.7	8.1	8.1	29.7	29.7	97.1	97.2	7.7	7.8	13.3	13.5	18	20	85	88	822398	809797	<0.2	<0.2	1.0	0.9
						1.0	0.7	310	17.7		8.1		29.7		97.2		7.7		13.1		19		86				<0.2		0.9	
					Middle	3.5	0.6	297	17.7	17.7	8.1	8.1	29.7	29.7	97.9	98.0	7.8		13.9		21		88				<0.2		0.9	
						3.5	0.7	318	17.7		8.1		29.7		98.0		7.8		14.0		20		89				<0.2		0.9	
					Bottom	6.0	0.6	302	17.6	17.6	8.1	8.1	29.7	29.7	100.2	100.4	8.0	8.0	13.2		20		90				<0.2		0.9	
						6.0	0.6	316	17.6		8.1		29.7		100.6		8.0		13.4		21		90				<0.2		0.8	
IM11	Fine	Moderate	09:04	8.2	Surface	1.0	0.6	275	17.9	17.9	8.1	8.1	29.8	29.8	95.4	95.5	7.6	7.6	11.1	11.8	15	17	86	89	822049	811475	<0.2	<0.2	1.0	1.0
						1.0	0.6	284	17.9		8.1		29.8		95.5		7.6		11.1		16		86				<0.2		0.9	
					Middle	4.1	0.6	279	17.9	17.9	8.0	8.0	29.8	29.8	96.1	96.2	7.6		12.0		18		89				<0.2		1.0	
						4.1	0.6	293	17.9		8.0		29.8		96.3		7.6		12.0		18		90				<0.2		1.0	
					Bottom	7.2	0.5	281	17.8	17.8	8.0	8.0	29.8	29.8	97.0	97.0	7.7	7.7	12.2		19		91				<0.2		0.9	
						7.2	0.5	284	17.8		8.0		29.8		97.0		7.7		12.3		18		92				<0.2		0.9	
IM12	Fine	Moderate	08:58	8.4	Surface	1.0	0.6	304	18.0	18.0	8.1	8.1	29.8	29.8	95.1	95.1	7.5	7.6	11.3	13.5	14	15	86	88	821465	812027	<0.2	<0.2	1.0	0.9
						1.0	0.7	329	18.0		8.1		29.8		95.1		7.5		11.6		14		86				<0.2		0.9	
					Middle	4.2	0.6	305	18.0	18.0	8.1	8.1	29.8	29.8	95.4	95.5	7.6		13.3		15		87				<0.2		0.9	
						4.2	0.6	325	18.0		8.1		29.8		95.5		7.6		13.5		16		87				<0.2		0.9	
					Bottom	7.4	0.6	310	17.9	17.9	8.0	8.0	29.8	29.8	98.5	98.7	7.8	7.8	15.8		16		90				<0.2		0.9	
						7.4	0.6	337	17.9		8.0		29.8		98.9		7.8		15.5		17		91				<0.2		0.8	
SR1A	Fine	Calm	08:18	4.3	Surface	1.0	-	-	17.5	17.5	8.1	8.0	29.8	29.8	95.7	95.8	7.7	7.7	6.5	6.7	10	10	-	-	819973	812663	-	-	-	-
						1.0	-	-	17.5		8.0		29.8		95.8		7.7		6.5		10		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	17.4	17.4	8.0	8.0	29.8	29.8	96.9	97.1	7.8	7.8	6.8		9		-				-		-	
						3.3	-	-	17.4		8.0		29.8		97.3		7.8		6.9		10		-				-		-	
SR2	Fine	Calm	08:02	4.0	Surface	1.0	0.2	159	17.8	17.8	8.1	8.0	29.9	29.9	95.2	95.2	7.6	7.6	13.4	13.8	9	10	87	88	821470	814183	<0.2	<0.2	0.6	0.7
						1.0	0.2	160	17.8		8.0		29.9		95.2		7.6		13.5		9		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	160	17.7	17.7	8.0	8.0	29.8	29.8	97.7	97.9	7.8	7.8	14.4		10		89				<0.2		0.8	
						3.0	0.2	160	17.7		8.0		29.8		98.0		7.8		14.1		11		89				<0.2		0.6	
SR3	Fine	Rough	09:32	8.6	Surface	1.0	0.1	130	17.7	17.7	8.0	8.0	29.5	29.5	96.6	96.7	7.7	7.8	9.0	9.2	23	21	-	-	822141	807590	-	-	-	-
						1.0	0.1	141	17.7		8.0		29.5		96.7		7.7		9.0		22		-				-		-	
					Middle	4.3	0.1	77	17.7	17.7	8.0	8.0	29.5	29.5	97.3	97.4	7.8		9.1		22		-				-		-	
						4.3	0.1	78	17.7		8.0		29.5		97.5		7.8		9.1		23		-				-		-	
					Bottom	7.6	0.1	74	17.6	17.6	8.0	8.0	29.5	29.5	100.3	100.5	8.0	8.1	9.6		19		-				-		-	
						7.6	0.1	77	17.6		8.0		29.5		100.7		8.1		9.7		18		-				-		-	
SR4A	Sunny	Calm	08:31	8.1	Surface	1.0	0.1	224	17.9	17.9	8.5	8.5	30.2	30.2	99.0	99.0	7.9	7.9	6.1	6.6	9	10	-	-	817202	807793	-	-	-	-
						1.0	0.1	238	17.9		8.5		30.2		99.0		7.9		6.0		10		-				-		-	
					Middle	4.1	0.1	241	17.8	17.8	8.4	8.4	30.2	30.2	99.5	99.5	7.9		6.4		9		-				-		-	
						4.1	0.2	246	17.8		8.4		30.2		99.5		7.9		6.5		10		-				-		-	
					Bottom	7.1	0.1	224	17.7	17.7	8.4	8.4	30.3	30.3	101.0	101.1	8.0	8.0	7.2		11		-				-		-	
						7.1	0.1	245	17.7		8.4		30.3		101.1		8.0		7.2		12		-				-		-	
SR5A	Sunny	Calm	08:13	3.1	Surface	1.0	0.1	304	18.0	18.0	8.5	8.5	30.2	30.2	98.0	98.0	7.8	7.8	5.4	7.6	7	8	-	-	816614	810689	-	-	-	-
						1.0	0.1	323	18.0		8.5		30.2		98.0		7.8		5.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.1	0.1	303	17.9	17.9	8.4	8.4	30.2	30.2	98.3	98.3	7.8	7.8	9.7		9		-				-		-	
						2.1	0.1	330	17.9		8.4		30.2		98.3		7.8		9.9		8		-				-		-	
SR6A	Sunny	Calm	07:41	4.1	Surface	1.0	0.0	247	17.8	17.8	8.5	8.4	30.0	30.0	98.6	98.7	7.8	7.8	9.2	9.5	17	16	-	-	817986	814736	-	-	-	-
						1.0	0.0	271	17.8		8.4		30.0		98.7		7.8		9.2		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	219	17.5	17.5	8.4	8.4	30.2	30.2	99.1	99.2	7.9	7.9	9.7		16		-				-		-	
						3.1	0.0	222	17.5		8.4		30.2		99.2		7.9		9.8		15		-				-		-	
SR7	Fine	Moderate	07:09	18.0	Surface	1.0	0.3	49	18.4	18.4	8.1	8.1	30.6	30.6	92.4	92.4	7.2	7.2	4.8	4.9	7	8	-	-	823626	823752	-	-	-	-
						1.0	0.4	52	18.4		8.1		30.6		92.4		7.2		4.9		8		-				-		-	
					Middle	9.0	0.3	48	18.4	18.4	8.1	8.1	30.6	30.6	92.2	92.2	7.2	7.2	4.7		8		-				-		-	
						9.0	0.4	48	18.4		8.1		30.6		92.2		7.2		4.7		9		-				-		-	
					Bottom	17.0	0.3	44	18.4	18.4	8.0	8.0	30.6	30.6	92.2	92.2	7.2	7.2	5.0		8		-				-		-	
						17.0	0.3	45	18.4		8.0		30.6		92.2		7.2		5.1		9		-				-		-	
SR8	Fine	Moderate	08:36	4.6	Surface	1.0	-	-	17.4	17.4	8.1	8.1	29.3	29.3	97.2	97.3	7.8	7.8	9.7	10.3	19	19	-	-	820366	811639	-	-	-	-
						1.0	-	-	17.4		8.1		29.3		97.3		7.8		9.8		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	17.4	17.4	8.0	8.0	29.3	29.3	99.4	99.7	8.0	8.0	10.9		19		-				-		-	
						3.6	-	-	17.4		8.0		29.3		99.9		8.0		11.0		18		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
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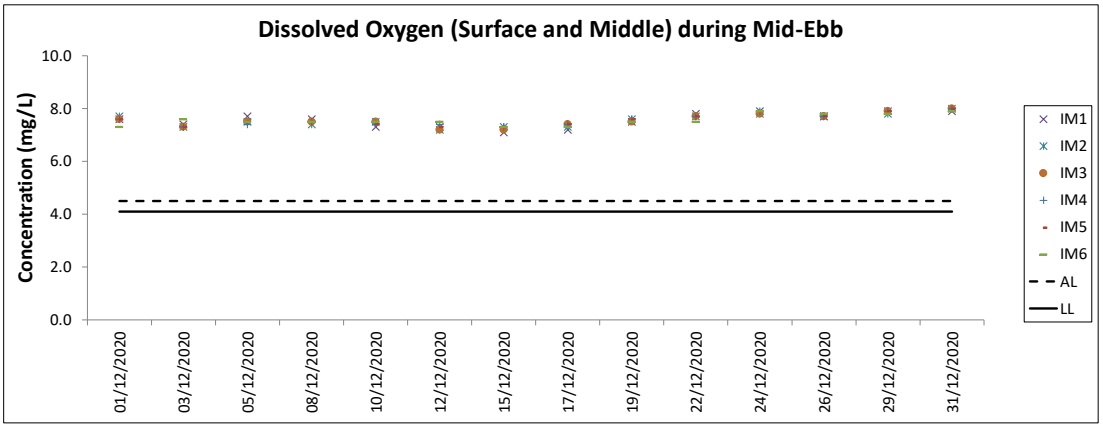
26/12/2020
29/12/2020
31/12/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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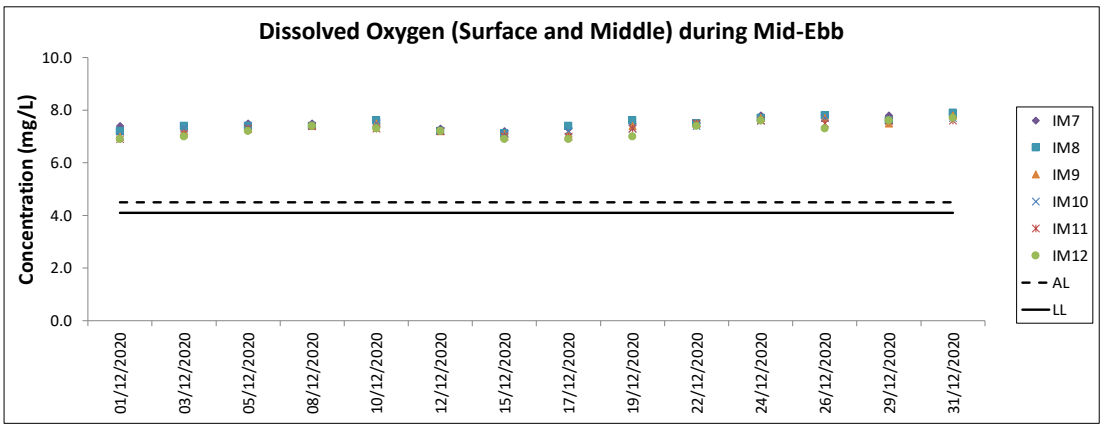
29/12/2020
31/12/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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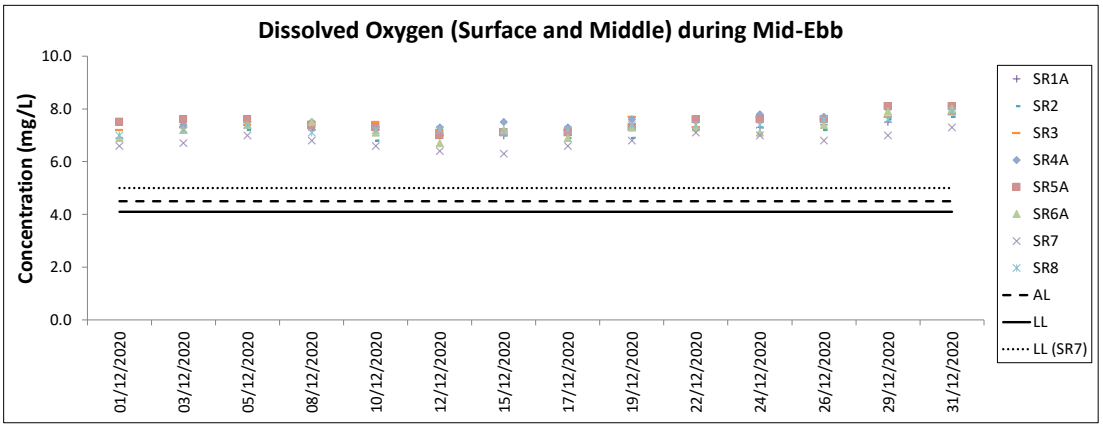
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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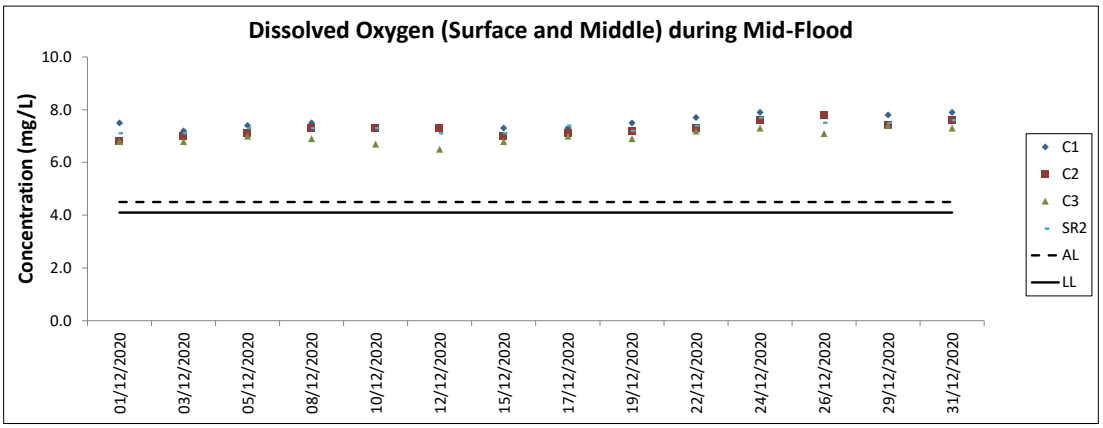
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
24/12/2020
26/12/2020
29/12/2020
31/12/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
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26/12/2020
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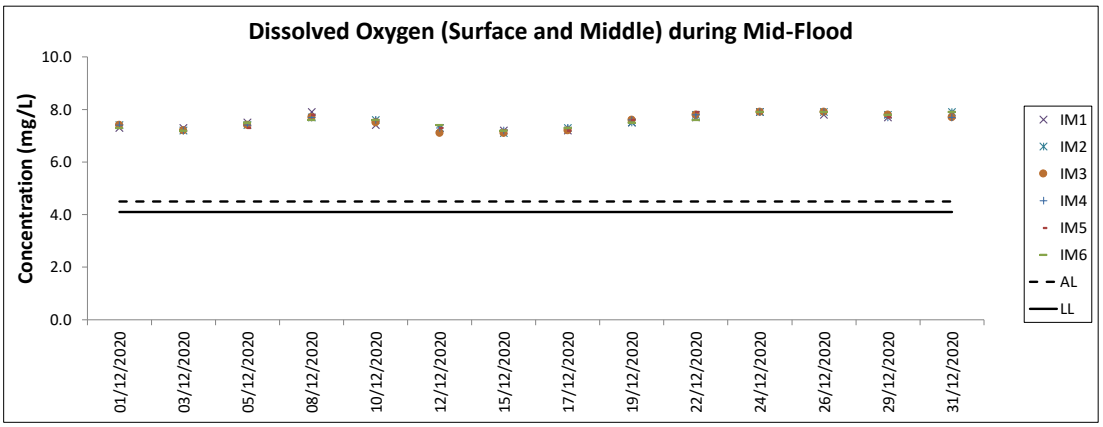
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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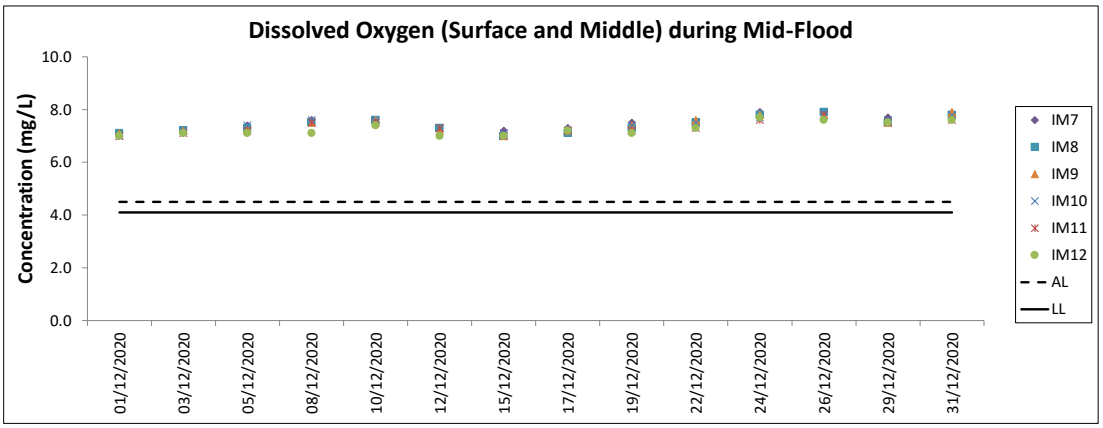
26/12/2020
29/12/2020
31/12/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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29/12/2020
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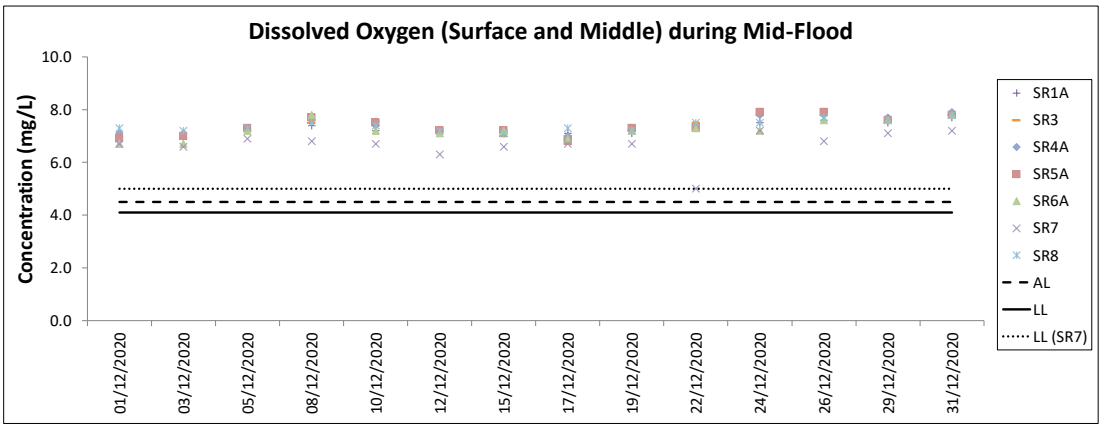
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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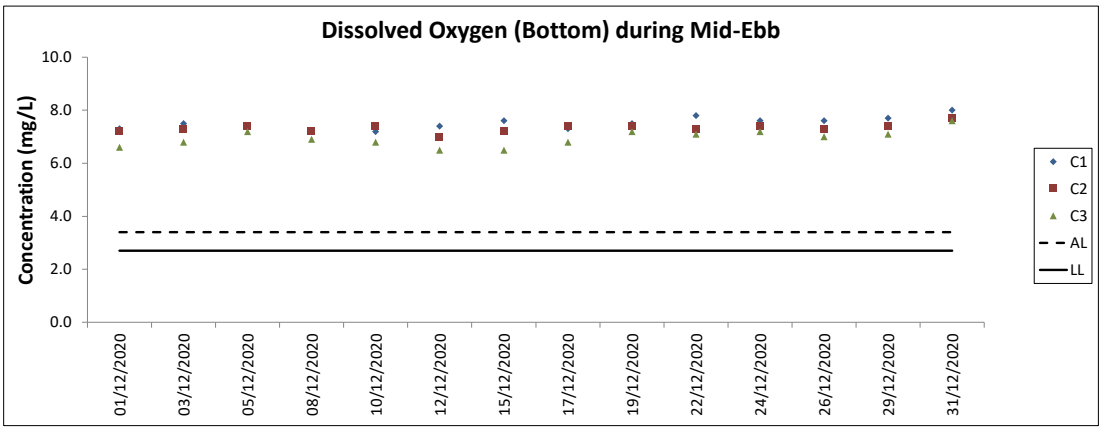
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
24/12/2020
26/12/2020
29/12/2020
31/12/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
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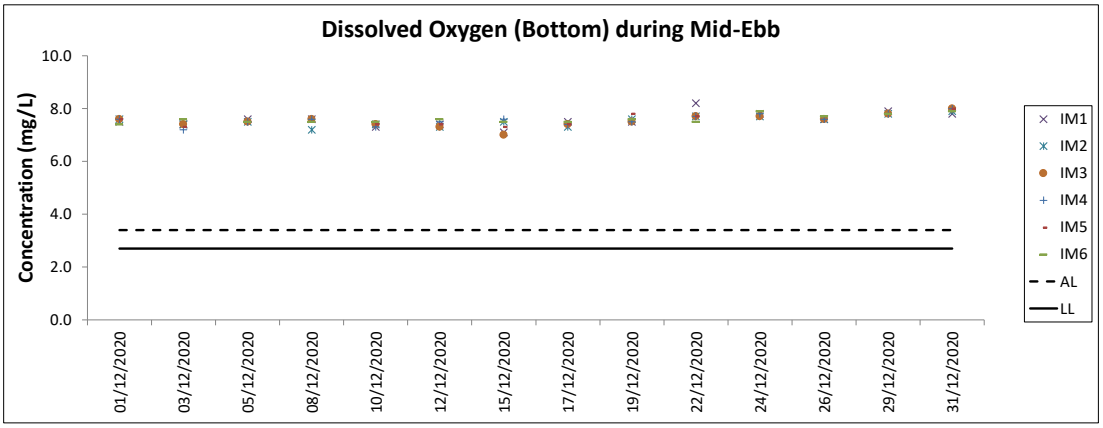
29/12/2020
31/12/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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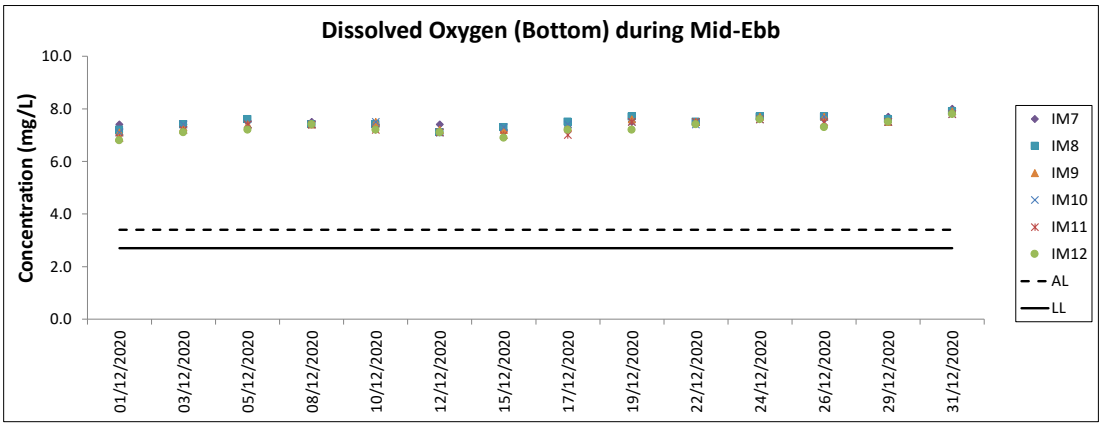
29/12/2020
31/12/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
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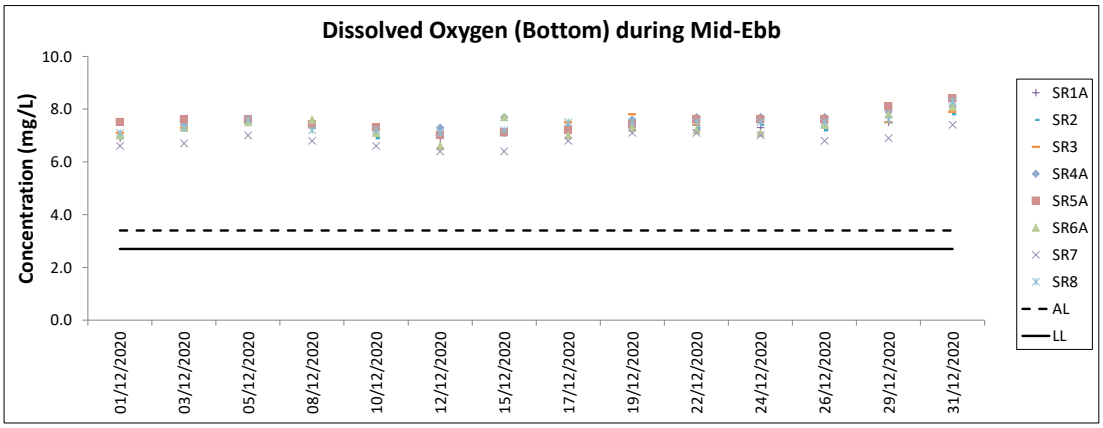
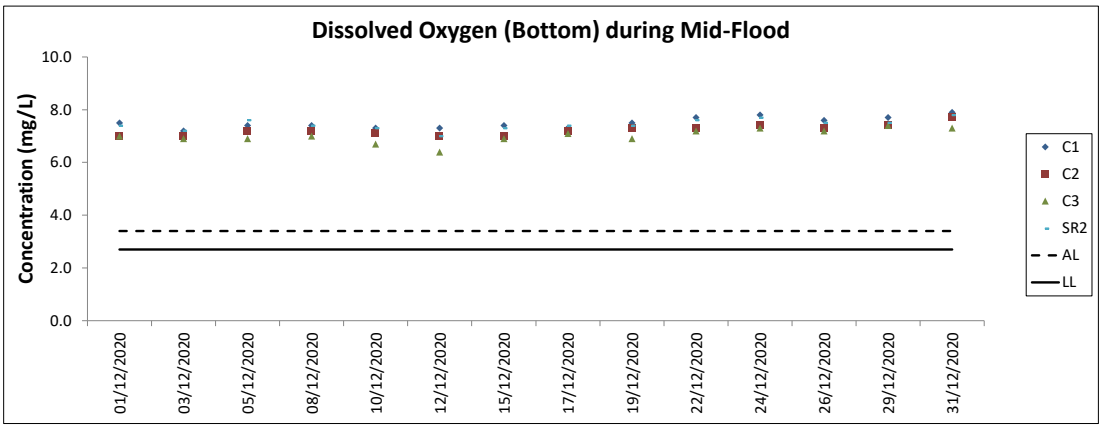
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
24/12/2020
26/12/2020
29/12/2020
31/12/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
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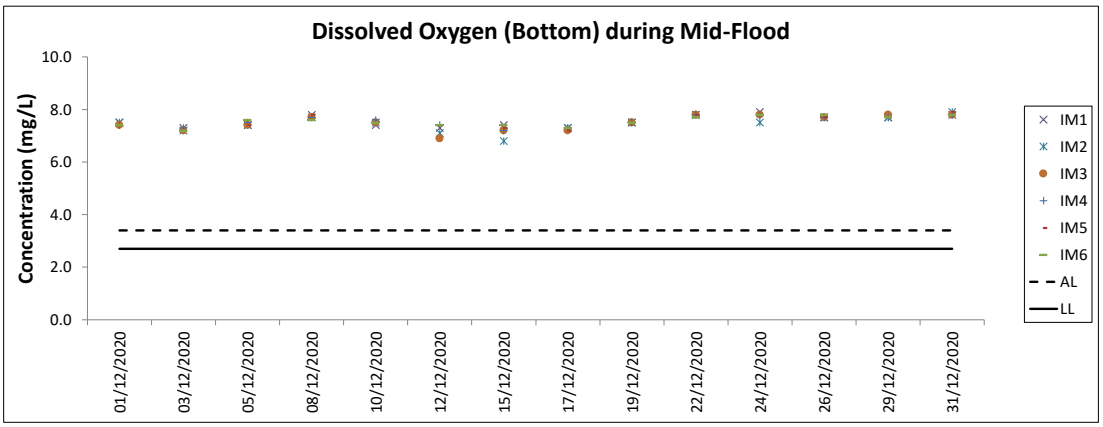
26/12/2020
29/12/2020
31/12/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
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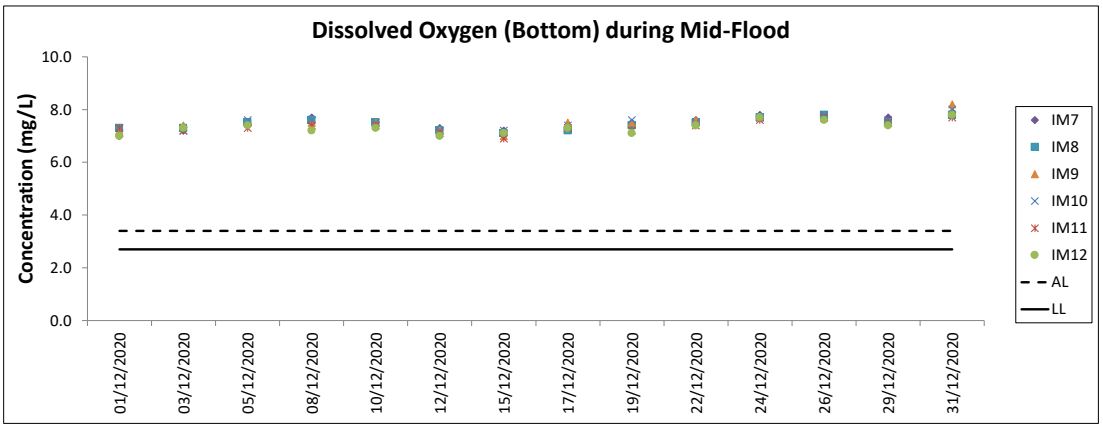
29/12/2020
31/12/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
10/12/2020
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15/12/2020
17/12/2020
19/12/2020
22/12/2020
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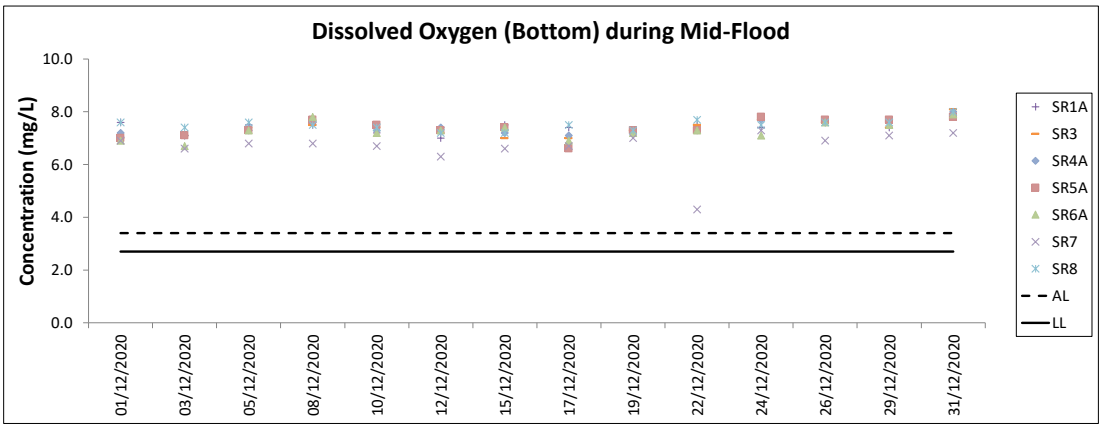
31/12/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/12/2020
03/12/2020
05/12/2020
08/12/2020
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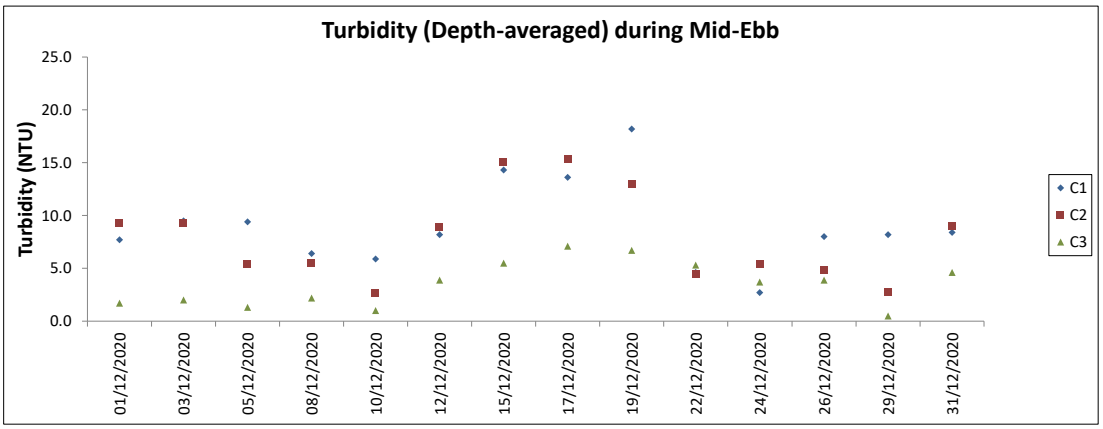
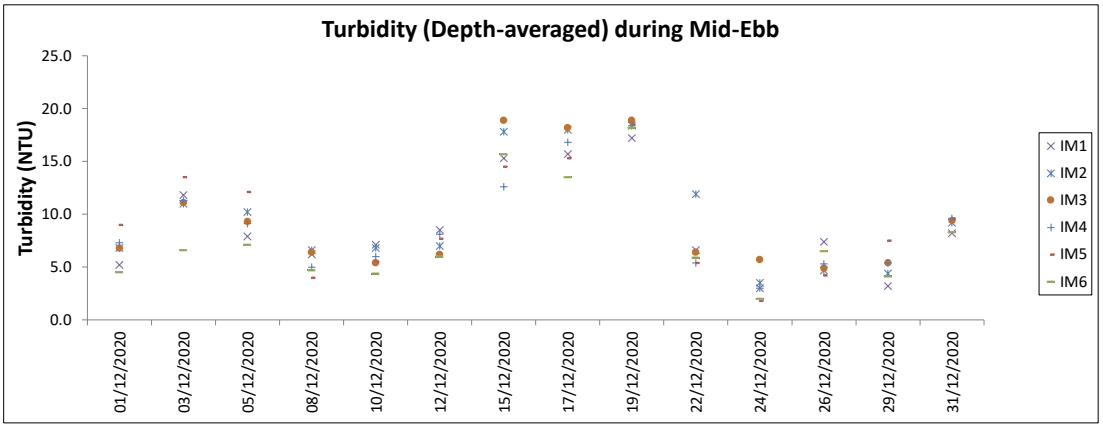
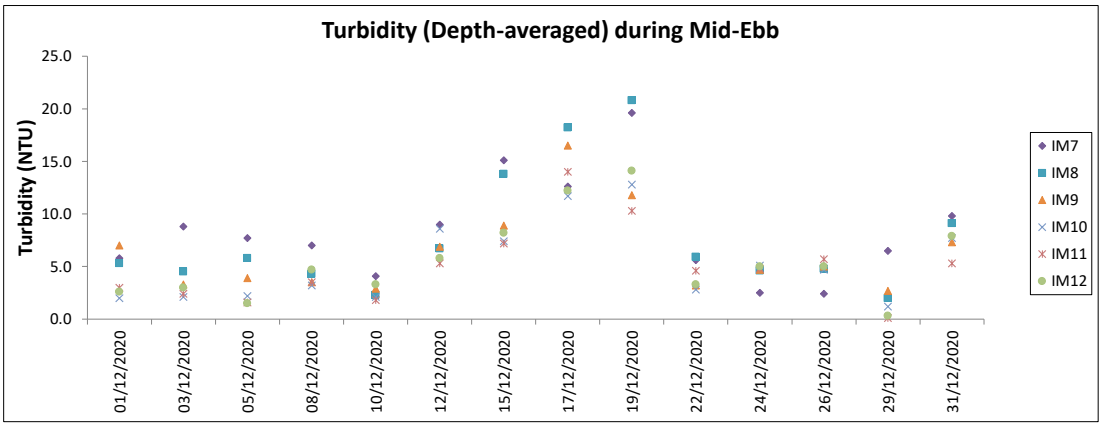
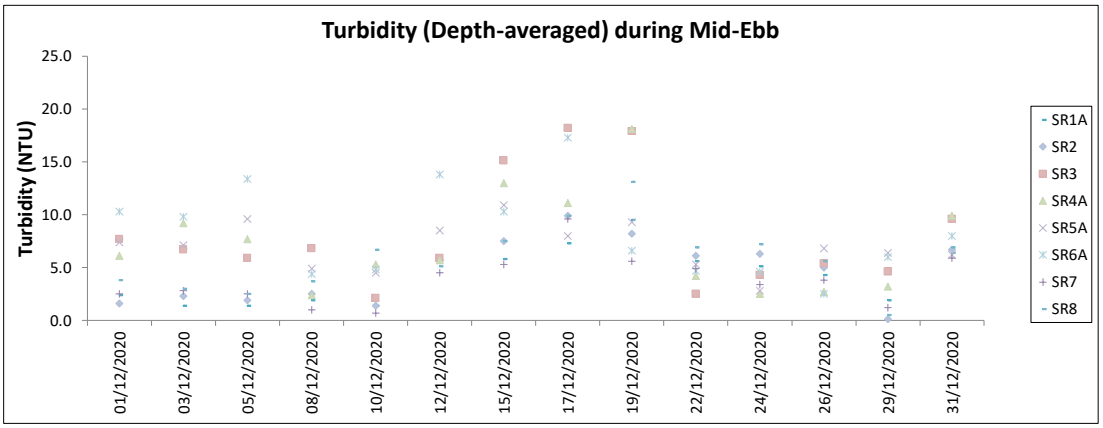
12/12/2020
15/12/2020
17/12/2020
19/12/2020
22/12/2020
24/12/2020
26/12/2020
29/12/2020
31/12/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

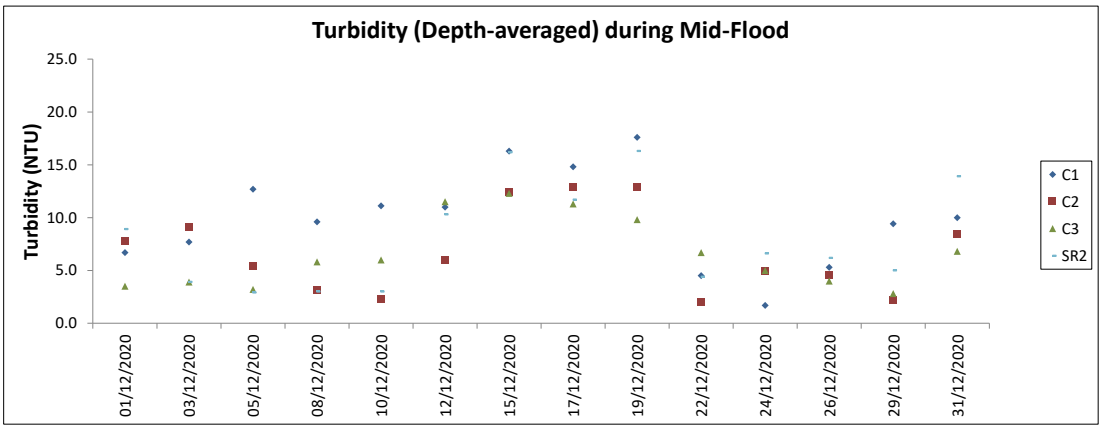


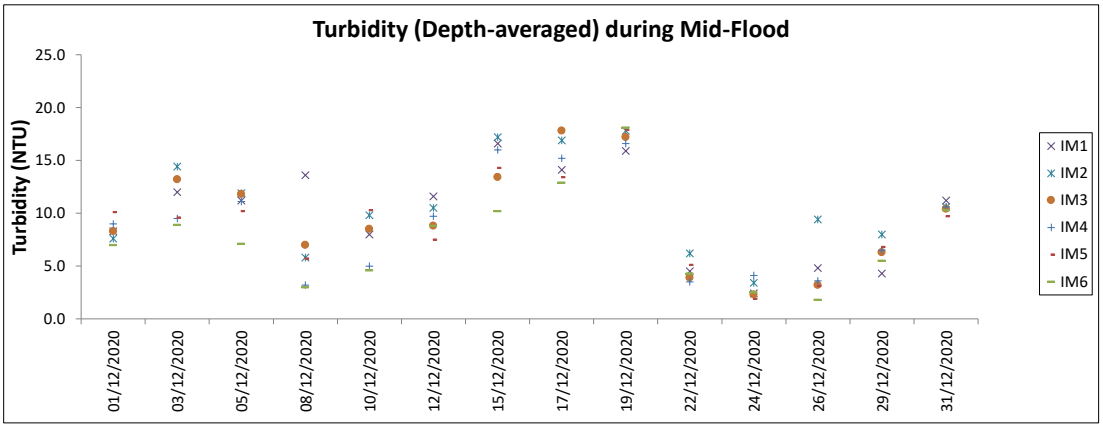


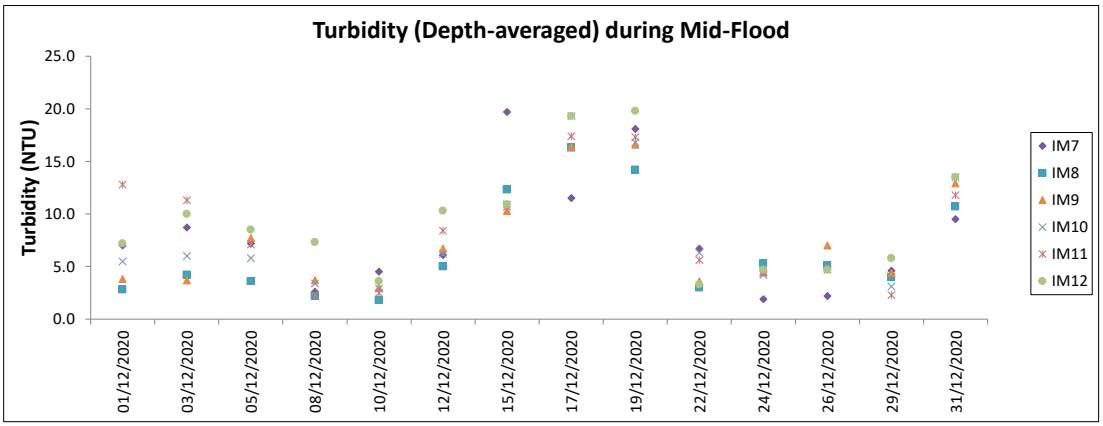


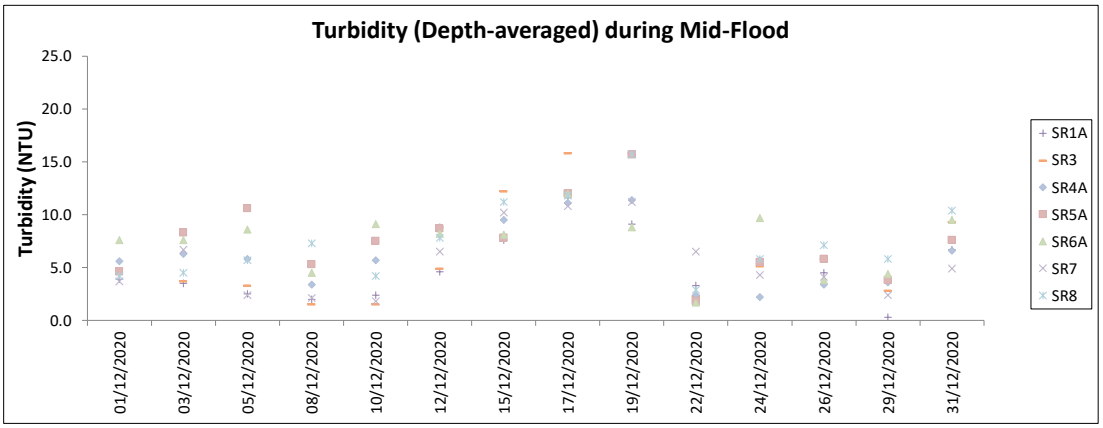


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

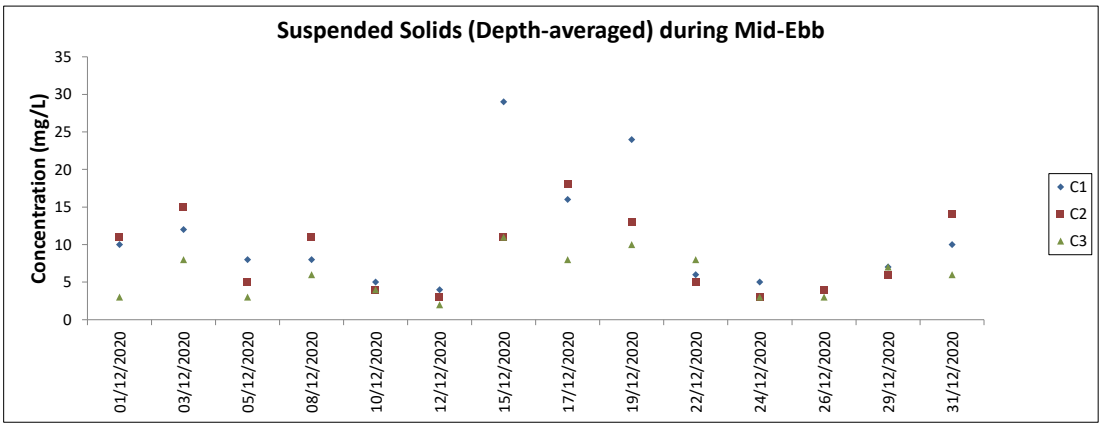


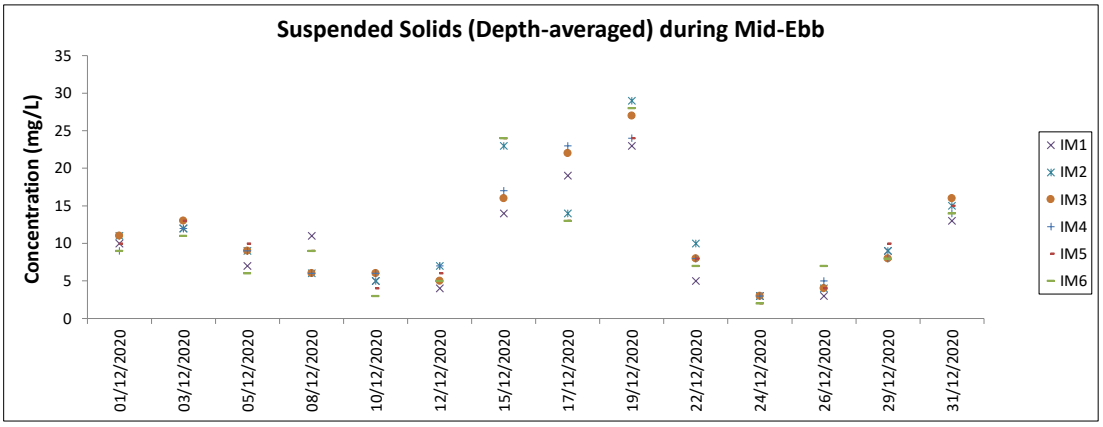


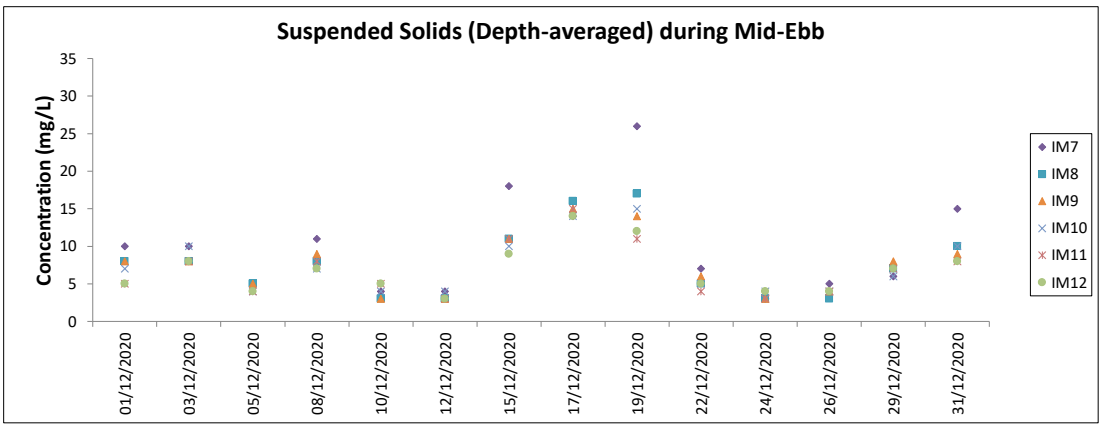


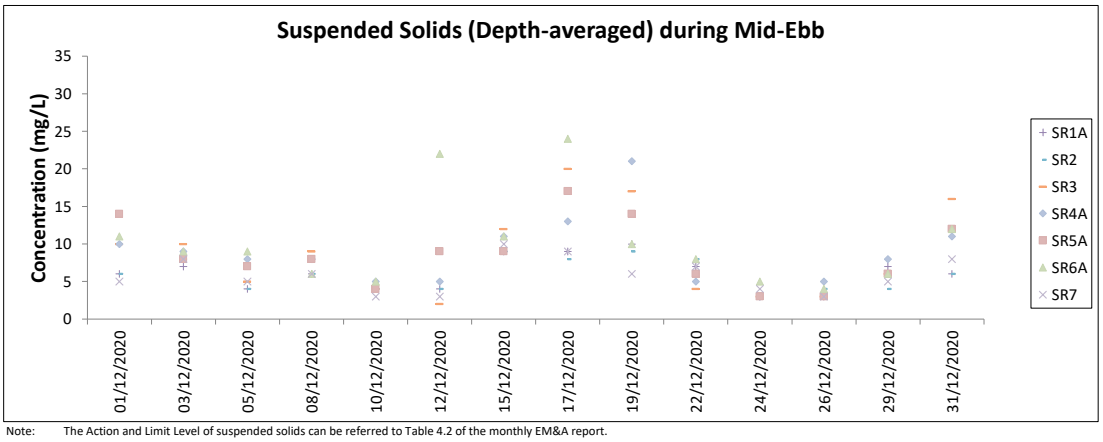


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

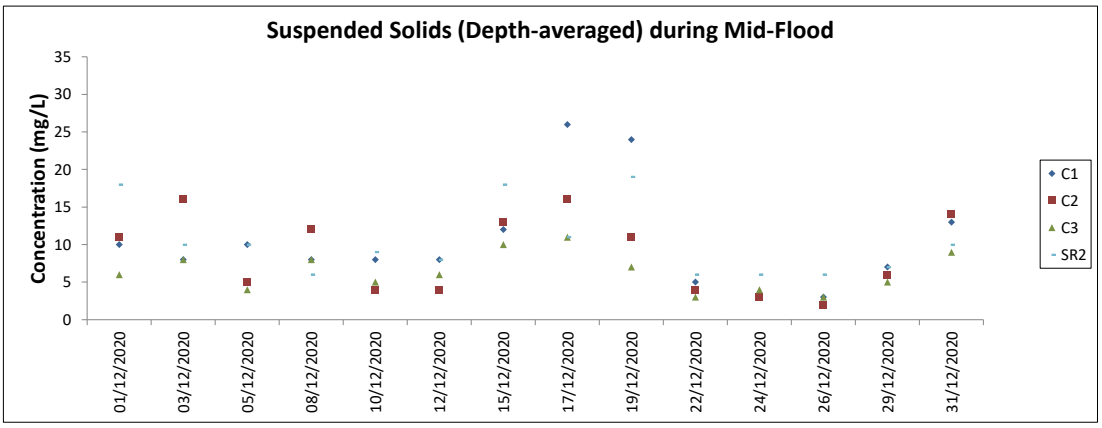


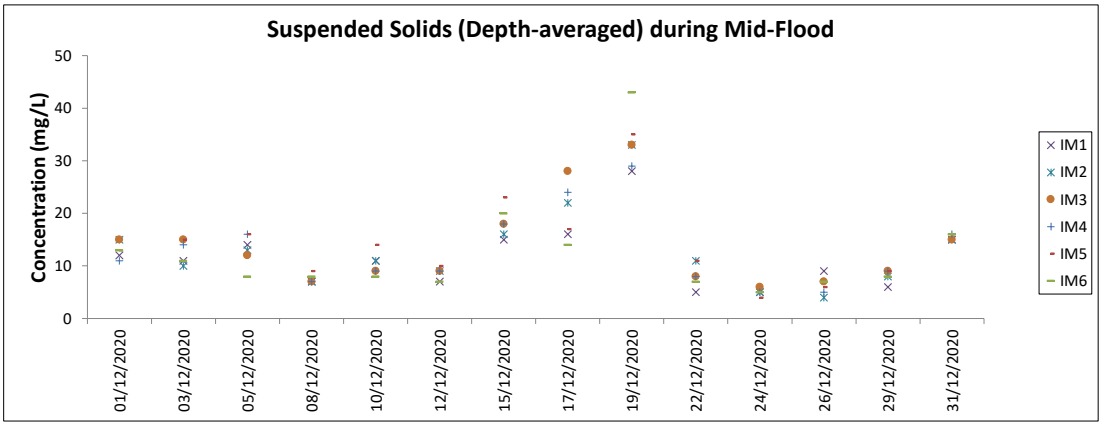


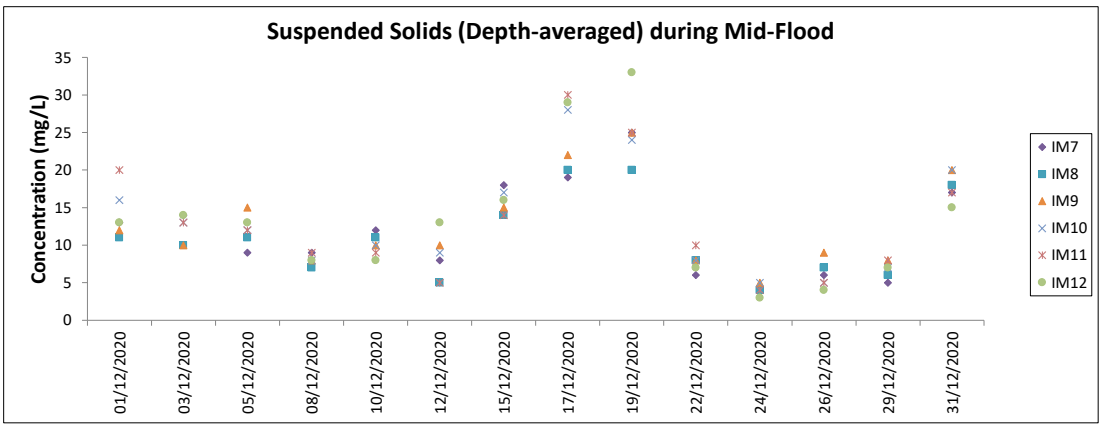


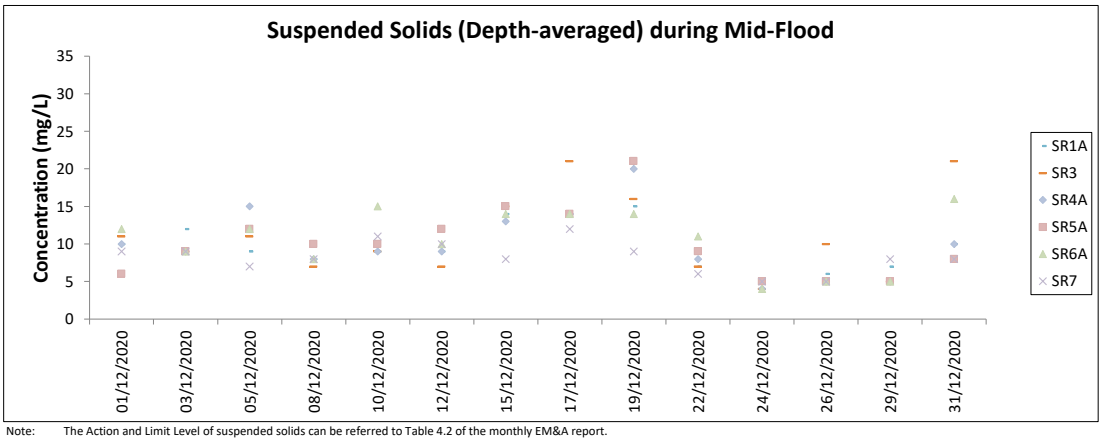


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

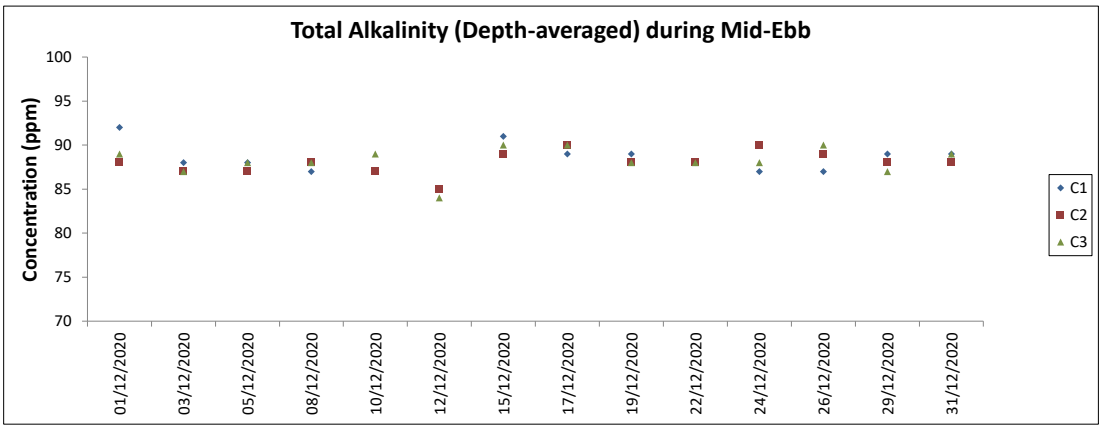


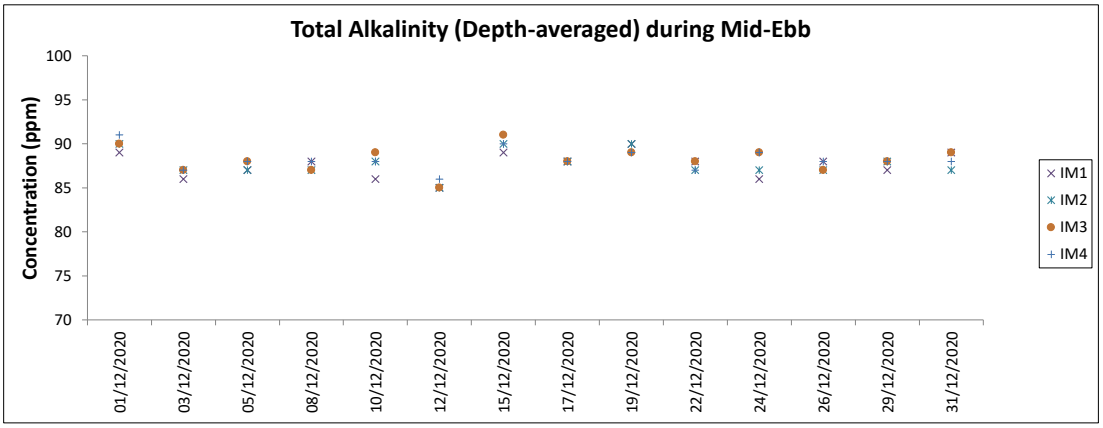


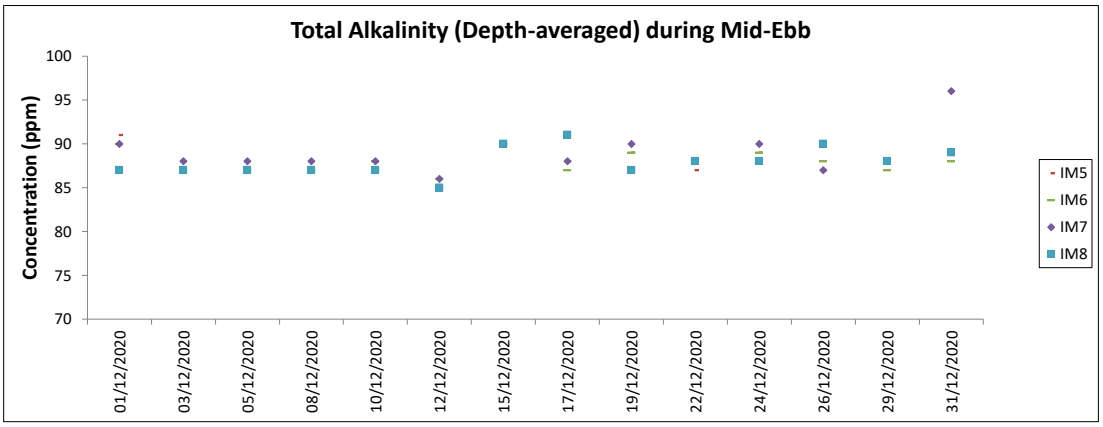


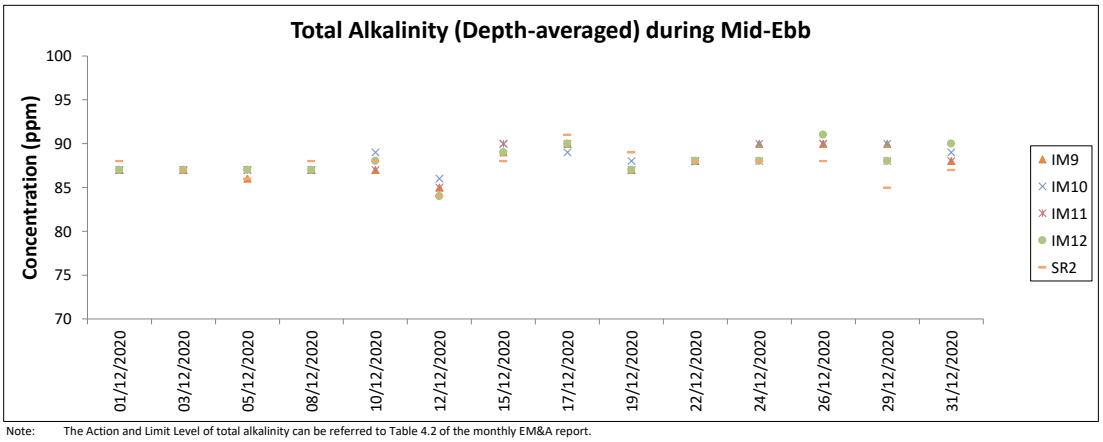


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

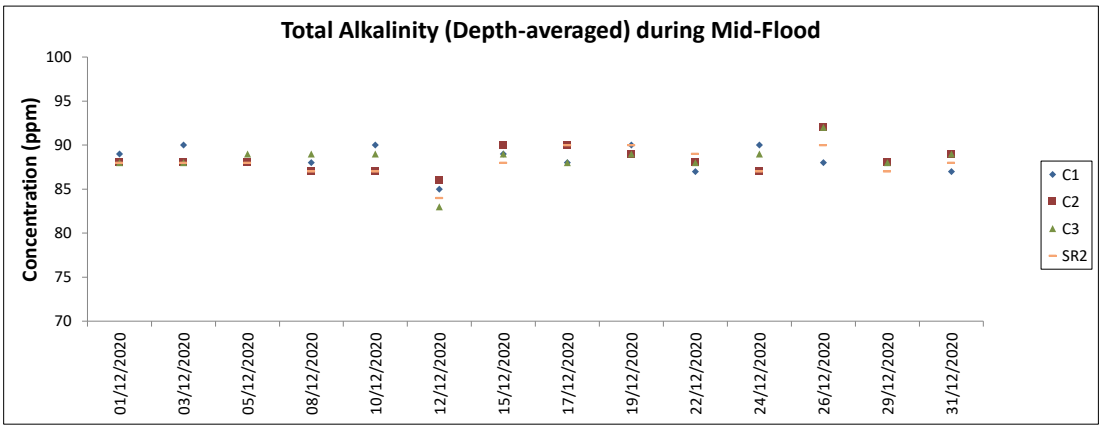


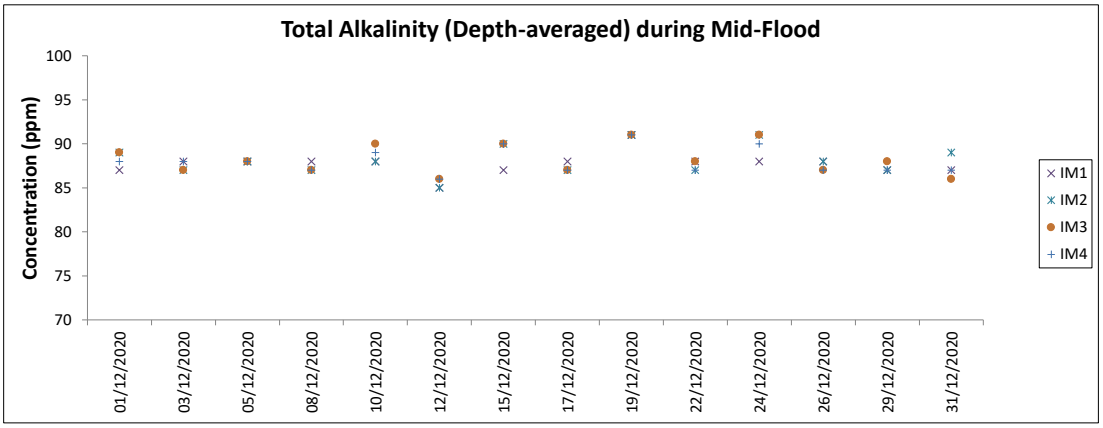


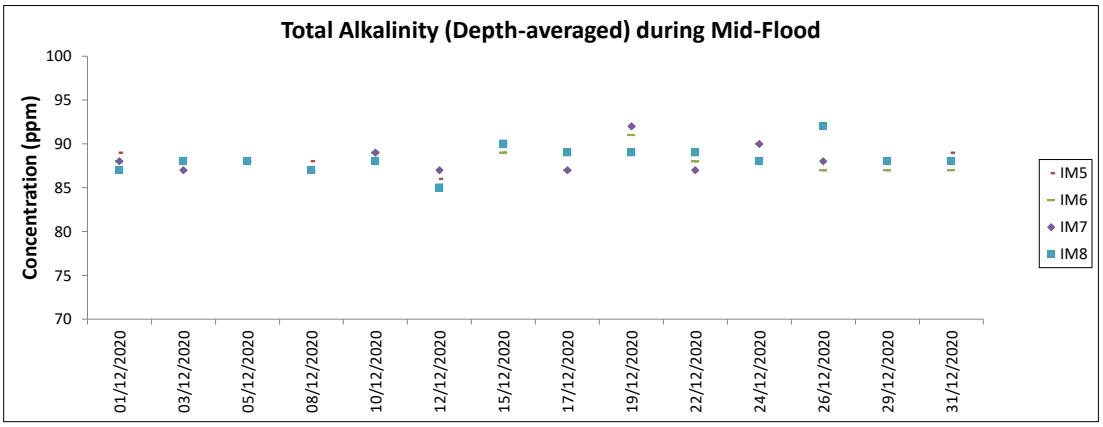


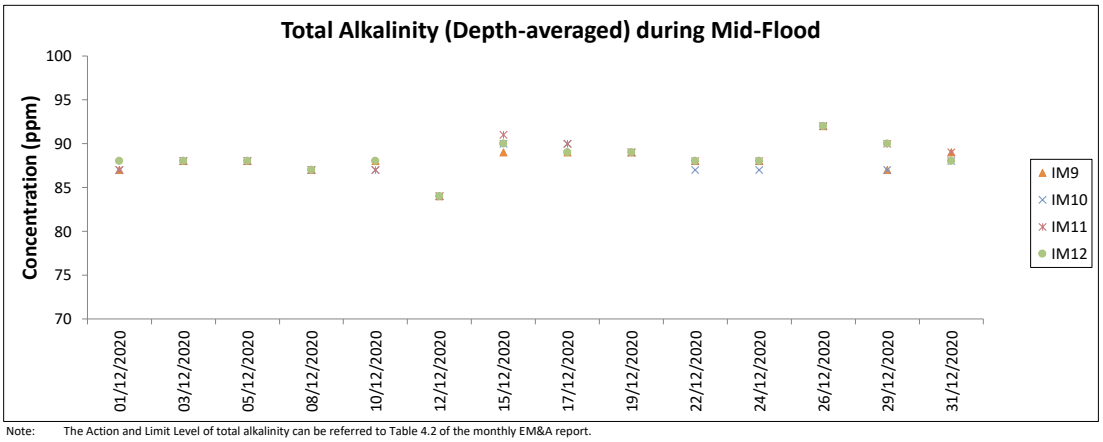


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

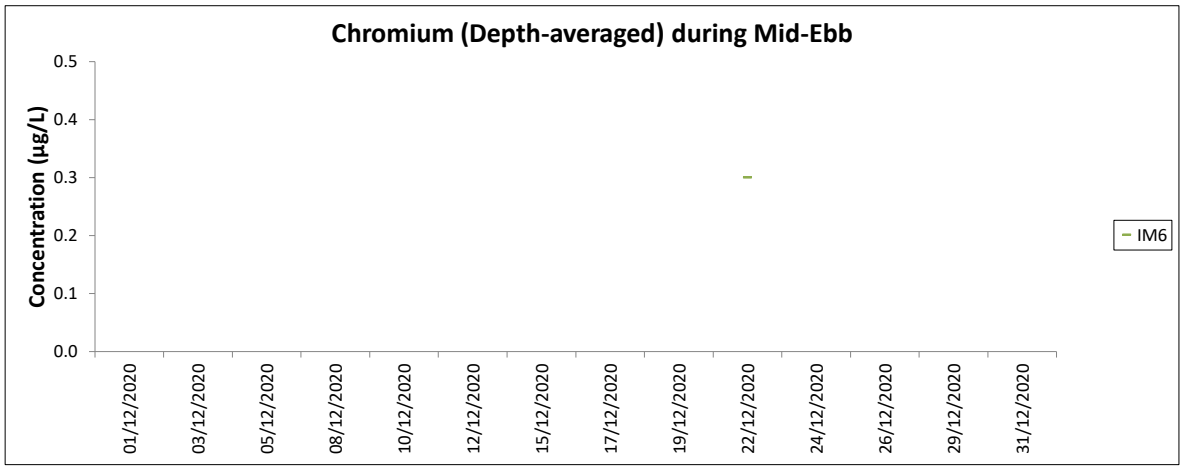


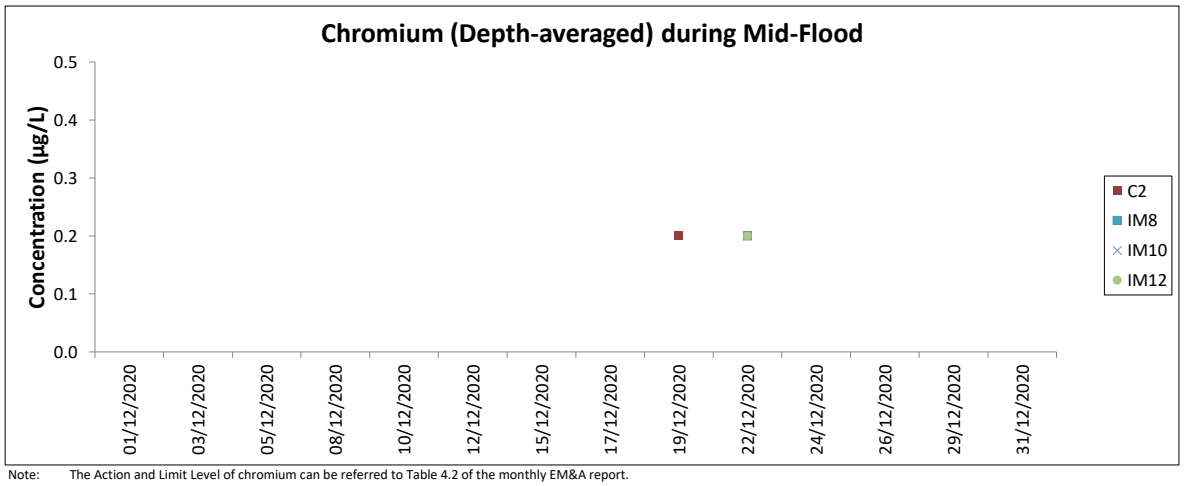




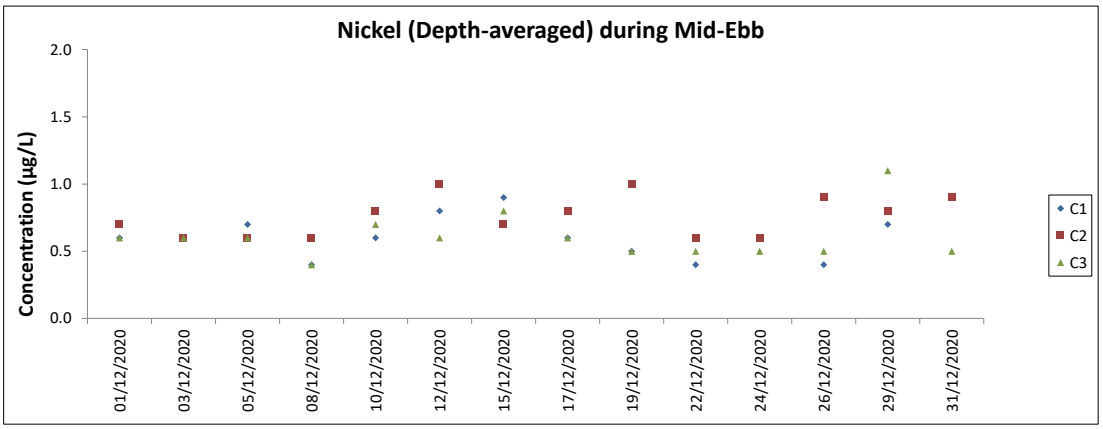


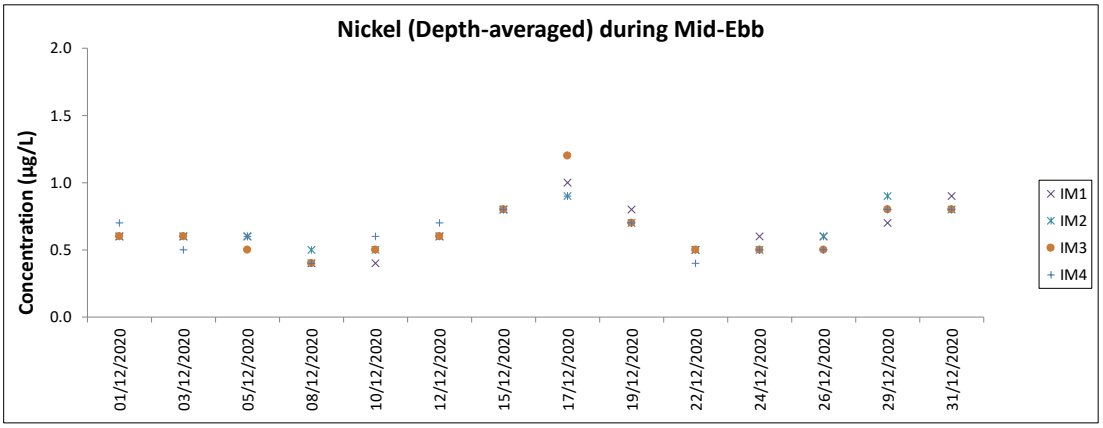
Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

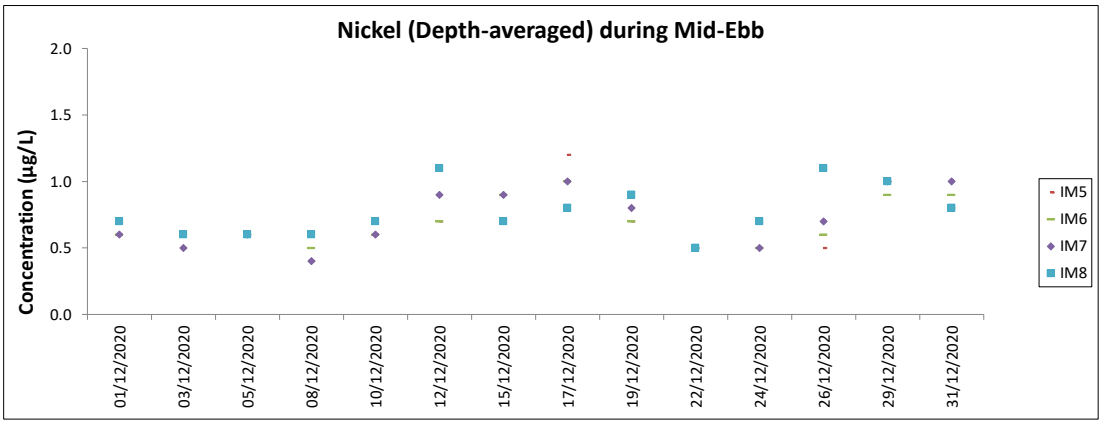


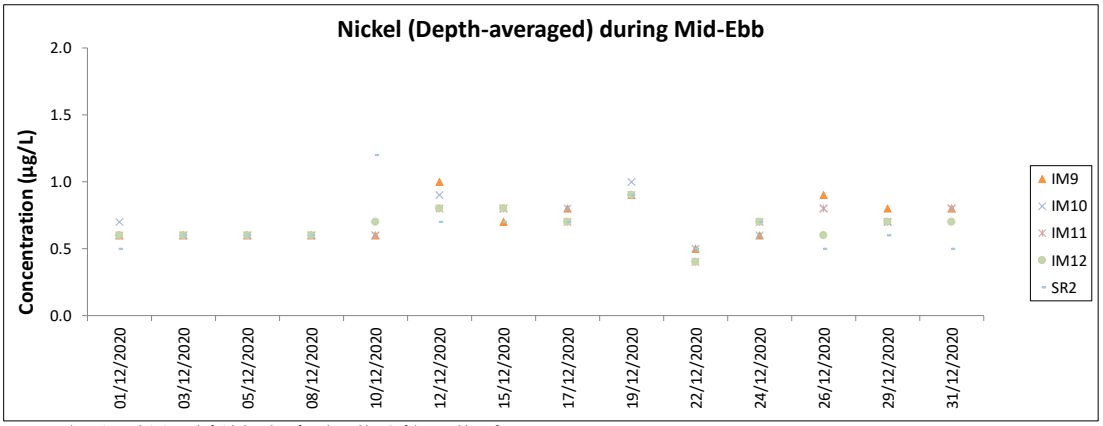


Note: The Action and Limit Level of chromium can be referred to Table 4.2 of the monthly EM&A report.
All other chromium in the reporting period was below the reporting limit 0.2 µg/L.

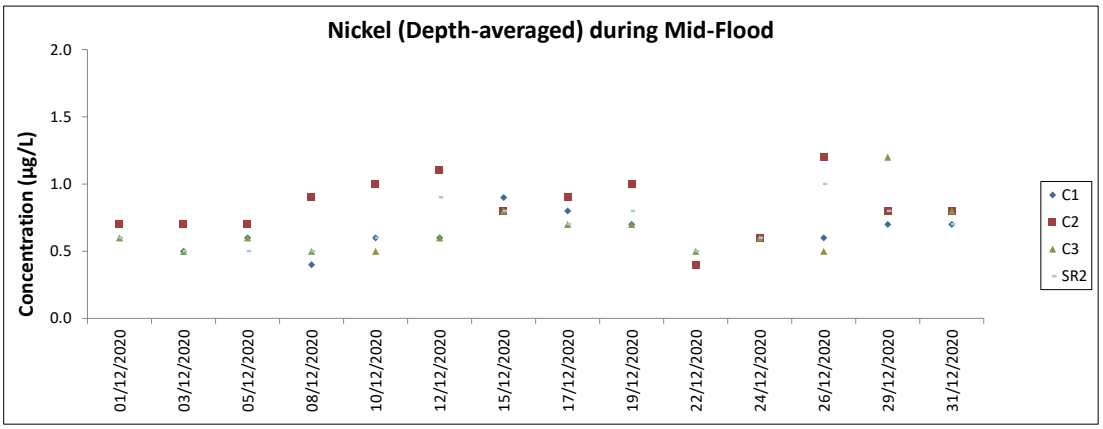


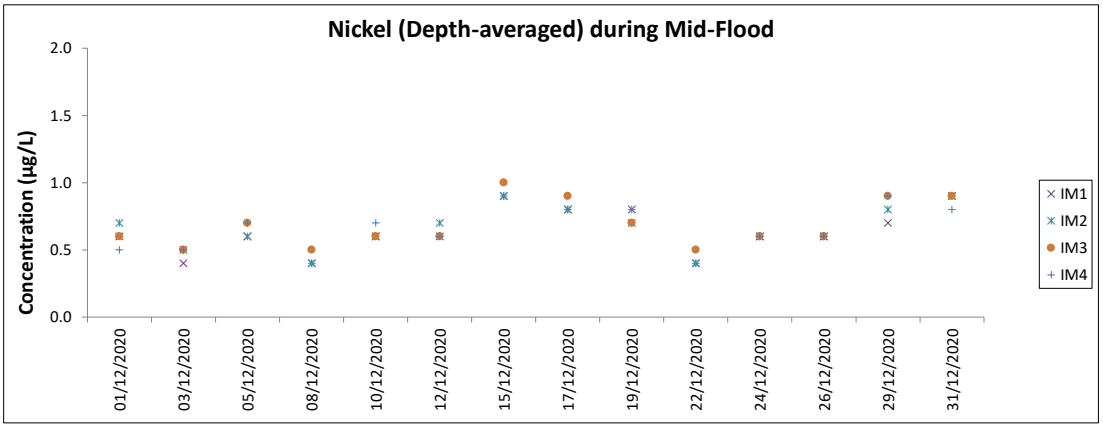


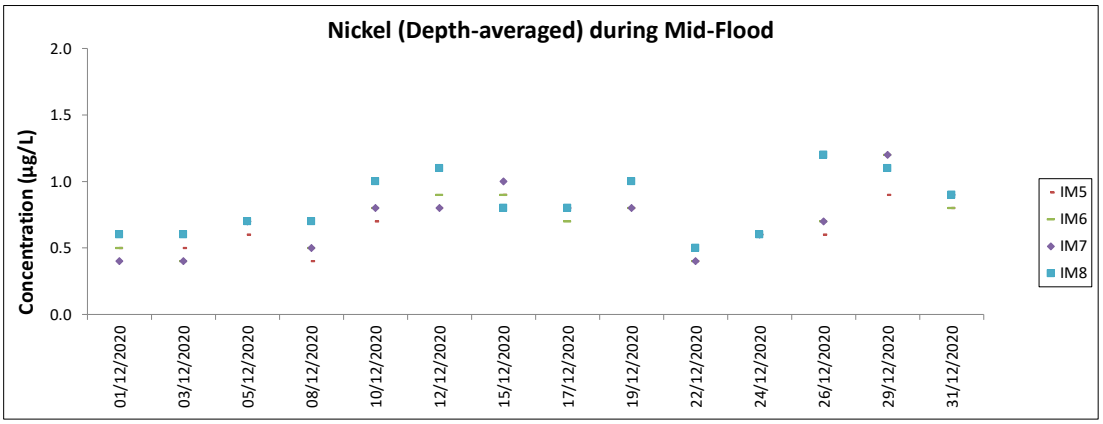


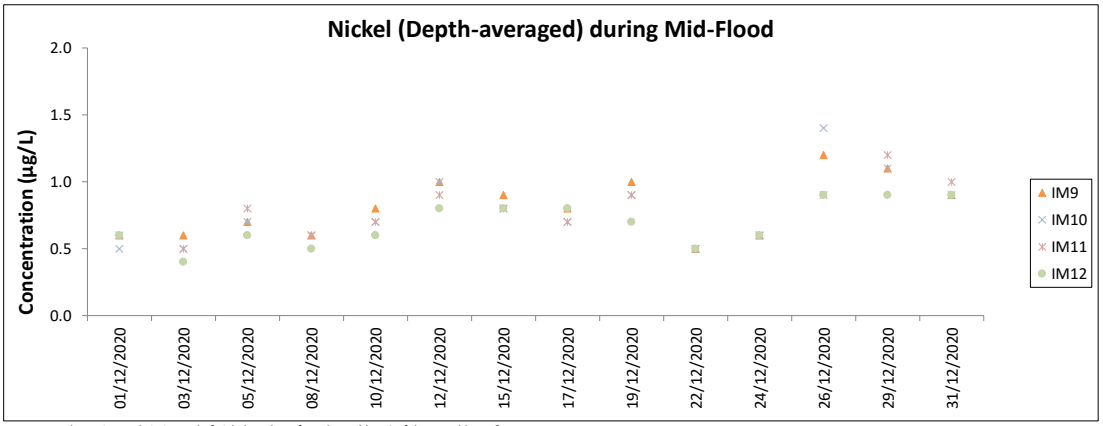


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.









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.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-Oct-20	NEL	2	25.180	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	3	11.540	AUTUMN	32166	3RS ET	P
12-Oct-20	NEL	2	7.680	AUTUMN	32166	3RS ET	S
12-Oct-20	NEL	3	3.000	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	2	1.400	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	8.600	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	4	20.650	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	5	6.550	AUTUMN	32166	3RS ET	P
14-Oct-20	NEL	3	4.100	AUTUMN	32166	3RS ET	S
14-Oct-20	NEL	4	6.000	AUTUMN	32166	3RS ET	S
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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/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
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
4-Dec-20	NEL	2	1.000	WINTER	32166	3RS ET	P
4-Dec-20	NEL	3	30.450	WINTER	32166	3RS ET	P
4-Dec-20	NEL	4	6.100	WINTER	32166	3RS ET	P
4-Dec-20	NEL	2	1.000	WINTER	32166	3RS ET	S
4-Dec-20	NEL	3	8.450	WINTER	32166	3RS ET	S
9-Dec-20	SWL	2	22.072	WINTER	32166	3RS ET	P
9-Dec-20	SWL	3	32.643	WINTER	32166	3RS ET	P
9-Dec-20	SWL	2	8.280	WINTER	32166	3RS ET	S
9-Dec-20	SWL	3	6.717	WINTER	32166	3RS ET	S
10-Dec-20	SWL	2	40.788	WINTER	32166	3RS ET	P
10-Dec-20	SWL	3	11.922	WINTER	32166	3RS ET	P
10-Dec-20	SWL	2	13.112	WINTER	32166	3RS ET	S
10-Dec-20	SWL	3	2.693	WINTER	32166	3RS ET	S
11-Dec-20	AW	1	4.850	WINTER	32166	3RS ET	P
11-Dec-20	WL	1	4.680	WINTER	32166	3RS ET	P
11-Dec-20	WL	2	10.655	WINTER	32166	3RS ET	P
11-Dec-20	WL	3	4.566	WINTER	32166	3RS ET	P
11-Dec-20	WL	1	1.310	WINTER	32166	3RS ET	S
11-Dec-20	WL	2	6.879	WINTER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
11-Dec-20	WL	3	2.210	WINTER	32166	3RS ET	S
15-Dec-20	NEL	2	8.700	WINTER	32166	3RS ET	P
15-Dec-20	NEL	3	28.460	WINTER	32166	3RS ET	P
15-Dec-20	NEL	2	3.900	WINTER	32166	3RS ET	S
15-Dec-20	NEL	3	5.940	WINTER	32166	3RS ET	S
16-Dec-20	AW	3	4.550	WINTER	32166	3RS ET	P
16-Dec-20	WL	3	13.920	WINTER	32166	3RS ET	P
16-Dec-20	WL	4	2.060	WINTER	32166	3RS ET	P
16-Dec-20	WL	5	0.400	WINTER	32166	3RS ET	P
16-Dec-20	WL	3	11.710	WINTER	32166	3RS ET	S
16-Dec-20	WL	4	1.180	WINTER	32166	3RS ET	S
18-Dec-20	NWL	2	3.100	WINTER	32166	3RS ET	P
18-Dec-20	NWL	3	39.720	WINTER	32166	3RS ET	P
18-Dec-20	NWL	4	19.680	WINTER	32166	3RS ET	P
18-Dec-20	NWL	2	0.200	WINTER	32166	3RS ET	S
18-Dec-20	NWL	3	10.900	WINTER	32166	3RS ET	S
18-Dec-20	NWL	4	1.600	WINTER	32166	3RS ET	S
21-Dec-20	NWL	3	23.100	WINTER	32166	3RS ET	P
21-Dec-20	NWL	4	40.400	WINTER	32166	3RS ET	P
21-Dec-20	NWL	2	1.000	WINTER	32166	3RS ET	S
21-Dec-20	NWL	3	6.200	WINTER	32166	3RS ET	S
21-Dec-20	NWL	4	4.300	WINTER	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
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
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

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
19-Nov-20	2	1514	CWD	4	SWL	2	71	ON	3RS ET	22.1883	113.8491	AUTUMN	NONE	P
9-Dec-20	1	1117	CWD	1	SWL	2	111	ON	3RS ET	22.1828	113.9277	WINTER	NONE	P
9-Dec-20	2	1159	CWD	1	SWL	2	59	ON	3RS ET	22.1730	113.9191	WINTER	NONE	P
9-Dec-20	3	1211	CWD	1	SWL	2	21	ON	3RS ET	22.1702	113.9188	WINTER	NONE	P
9-Dec-20	4	1224	FP	2	SWL	3	22	ON	3RS ET	22.1562	113.9183	WINTER	NONE	P
9-Dec-20	5	1247	CWD	2	SWL	2	148	ON	3RS ET	22.1623	113.8987	WINTER	NONE	S
9-Dec-20	6	1351	CWD	1	SWL	3	7	ON	3RS ET	22.1487	113.8958	WINTER	NONE	S
9-Dec-20	7	1516	CWD	3	SWL	3	389	ON	3RS ET	22.2007	113.8678	WINTER	NONE	P
10-Dec-20	1	1107	FP	1	SWL	2	3	ON	3RS ET	22.1645	113.9276	WINTER	NONE	P
10-Dec-20	2	1156	FP	1	SWL	2	54	ON	3RS ET	22.1473	113.9180	WINTER	NONE	P
10-Dec-20	3	1307	FP	1	SWL	2	51	ON	3RS ET	22.1548	113.8975	WINTER	NONE	P
10-Dec-20	4	1430	CWD	2	SWL	3	53	ON	3RS ET	22.1921	113.8679	WINTER	NONE	P
10-Dec-20	5	1448	CWD	1	SWL	3	122	ON	3RS ET	22.1991	113.8600	WINTER	NONE	S
10-Dec-20	6	1459	CWD	1	SWL	3	449	ON	3RS ET	22.1951	113.8589	WINTER	NONE	P
10-Dec-20	7	1535	CWD	4	SWL	3	805	ON	3RS ET	22.1905	113.8490	WINTER	NONE	P
11-Dec-20	1	1129	CWD	1	WL	2	109	ON	3RS ET	22.2229	113.8213	WINTER	NONE	P
11-Dec-20	2	1146	CWD	2	WL	2	133	ON	3RS ET	22.2149	113.8312	WINTER	NONE	P
16-Dec-20	1	0940	CWD	2	AW	3	19	ON	3RS ET	22.2937	113.8775	WINTER	NONE	P
16-Dec-20	2	1039	CWD	4	WL	3	493	ON	3RS ET	22.2687	113.8538	WINTER	NONE	P
16-Dec-20	3	1139	CWD	1	WL	3	8	ON	3RS ET	22.2323	113.8307	WINTER	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 375.677 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 15 on-effort sightings and total number of 27 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in December 2020 are shown as below:

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

$$STG = \frac{15}{375.677}\ x\ 100 = 3.99$$

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

$$ANI = \frac{27}{375.677}\ x\ 100 = 7.19$$

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

A total of 1159.435 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 43 on-effort sightings and total number of 135 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

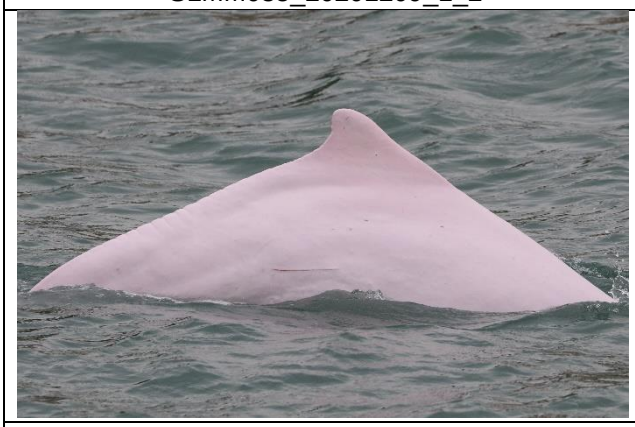
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{43}{1159.435}\ x\ 100 = 3.71$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{135}{1159.435}\ x\ 100 = 11.64$$

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

	
SLMM035_20201209_1_2	SLMM035_20201209_5_1
	
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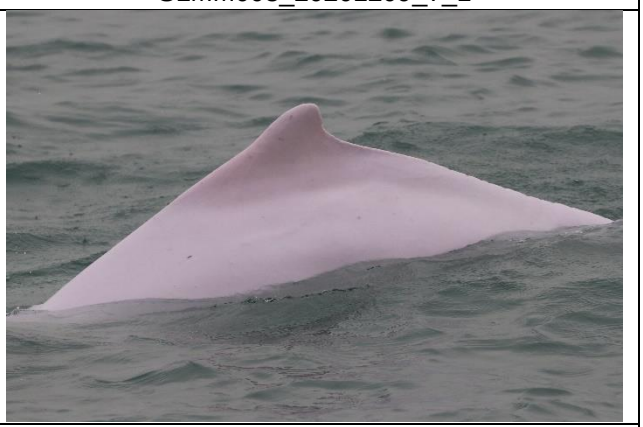
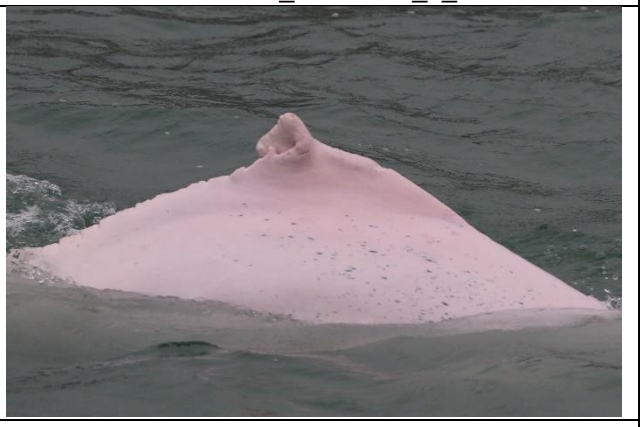
	
SLMM037_20201209_7_4	SLMM003_20201210_4_6
	
SLMM010_20201210_4_3	SLMM014_20201210_5_6

	
WLMM028_20201210_7_1	WLMM029_20201210_7_1
	
WLMM063_20201216_1_5	WLMM064_20201216_2_1

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
10/Dec/20	Sha Chau	10:52	16:52	6:00	2	3	0	-
28/Dec/20	Lung Kwu Chau	8:59	14:59	6:00	2-3	2	3	2-4

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

Appendix D. Calibration Certificates

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ120104
Date of Issue : 31 December 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Dec 02, 2020
Date of Calibration	:	Dec 02, 2020
Date of Next Calibration[a]	:	Mar 01, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.05	0.05	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	9.92	-0.09	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
20	20.0	0.0	Satisfactory
40	40.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

This report supersedes the previous report number # AJ120009 dated 02 Dec 2020

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ120104
Date of Issue : 31 December 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.06	0.40	0.34	Satisfactory
1.80	1.36	-0.44	Satisfactory
5.14	4.70	-0.44	Satisfactory
8.44	8.60	0.16	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	157.0	6.88	Satisfactory
0.01	1412	1376	-2.55	Satisfactory
0.1	12890	12854	-0.28	Satisfactory
0.5	58670	57630	-1.77	Satisfactory
1.0	111900	111802	-0.09	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.08	0.80	Satisfactory
20	20.10	0.50	Satisfactory
30	30.52	1.73	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.08	--	Satisfactory
10	9.89	-1.1	Satisfactory
20	19.96	-0.2	Satisfactory
100	107.74	7.7	Satisfactory
800	798.46	-0.2	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

Report No. : AJ120103
Date of Issue : 31 December 2020

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	18A104824
Date of Received	:	Dec 02, 2020
Date of Calibration	:	Dec 02, 2020
Date of Next Calibration[a]	:	Mar 01, 2021

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.03	0.03	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	9.91	-0.10	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10	10.0	0.0	Satisfactory
20	20.1	0.1	Satisfactory
40	40.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

This report supersedes the previous report number # AJ120010 dated 02 Dec 2020

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ120103
Date of Issue : 31 December 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.06	0.46	0.40	Satisfactory
1.80	1.42	-0.38	Satisfactory
5.14	4.80	-0.34	Satisfactory
8.44	8.70	0.26	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	159.0	8.24	Satisfactory
0.01	1412	1384	-1.98	Satisfactory
0.1	12890	12846	-0.34	Satisfactory
0.5	58670	57821	-1.45	Satisfactory
1.0	111900	111884	-0.01	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.89	-1.10	Satisfactory
20	19.88	-0.60	Satisfactory
30	29.74	-0.87	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.11	--	Satisfactory
10	10.13	1.3	Satisfactory
20	20.20	1.0	Satisfactory
100	108.72	8.7	Satisfactory
800	796.13	-0.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
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Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

CALIBRATION REPORT

Test Report No. : AJ110143
Date of Issue : 30 November 2020

PART A – CUSTOMER INFORMATION

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

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette® bottle-top burette, 50mL
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N64701
Date of Received	:	Nov 30, 2020
Date of Calibration	:	Nov 30, 2020
Date of Next Calibration[a]	:	Feb 28, 2021

PART C – CALIBRATION REQUESTED

Parameter[b]	Reference Method
Accuracy Test	In-house Method (Gravimetric Method)

~ Continued On Next Page ~

Remark(s): -

[a] *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.*

[b] *All chemical and microbiological tests were performed at unit 10-5/F and unit 10-14/F respectively of the company address stated above.*

LEE Chun-ning Desmond
Senior Chemist

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

CALIBRATION REPORT

Test Report No. : AJ110143
Date of Issue : 30 November 2020

PART D – RESULT[c],[d]

Water temperature: 23.2°C
Environmental conditions of the calibration:
Relative humidity: 51%
Z-Factor: 1.0036
Nominal volume: 3.0ml

Trial	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9803	2.9793	2.9824	2.9964	2.9886
2	3.0005	2.9977	3.0017	2.9678	2.9851
3	2.9716	2.9881	2.9777	2.9805	2.9777
4	2.9855	3.0005	2.9895	2.9707	2.9848
5	2.9890	2.9924	2.9811	2.9796	2.9902
6	2.9968	2.9876	2.9788	2.9767	2.9809
7	2.9929	2.9889	2.9917	3.0002	2.9785
8	2.9926	2.9788	2.9846	2.9873	2.9758
9	2.9888	2.9875	2.9999	2.9803	2.9801
10	2.9761	2.9919	2.9948	2.9734	2.9877
Average (g)	2.9874	2.9893	2.9882	2.9813	2.9829
Standard deviation	0.0091	0.0069	0.0086	0.0106	0.0050
Converted volume (mL)	2.9982	3.0000	2.9990	2.9920	2.9937
Error (%)	-0.0612	0.0010	-0.0341	-0.2659	-0.2107
RSD (%)	0.3051	0.2305	0.2882	0.3530	0.1674

Acceptance Criteria [e]

Accuracy (%Error)	< ±1%	< ±1%	< ±1%	< ±1%	< ±1%
Precision (%RSD)	< 1%	< 1%	< 1%	< 1%	< 1%

~ END OF REPORT ~

Remark(s): -
[c] *The results relate only to the tested sample as received*
[d] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[e] *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted from relevant international standards.*

Appendix E. 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-RS0851-20	Superseded by GW-RS0919-20
			GW-RS0919-20	Valid from 5 Dec 2020 to 3 Jun 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-RS0849-20	Superseded by GW-RS0971-20
			GW-RS0971-20	Valid from 23 Dec 2020 to 20 Jun 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
		Works area of 3303	WT00036734-2020	Valid from 1 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0825-20	Valid from 16 Nov 2020 to 15 May 2021
		Works area of 3303 (Reclamation area)	GW-RS0563-20	Superseded by GW-RS0915-20
			GW-RS0915-20	Valid from 5 Dec 2020 to 3 Jun 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3307	WT00036926-2020	Valid from 31 Dec 2020 to 31 Dec 2025
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
	Construction Noise Permit (General Works)	Works area of 3307	GW-RS0532-20	Valid from 9 Aug 2020 to 6 Feb 2021
3402	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	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-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
			GW-RS0989-20	Valid from 28 Dec 2020 to 5 May 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
			WT00036551-2020	Valid from 17 Sep 2020 to 30 Sep 2025
			WT00036697-2020	Valid from 2 Nov 2020 to 30 Nov 2025
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0789-20	Valid from 24 Oct 2020 to 15 Apr 2021
		Stockpiling area of 3503	GW-RS0870-20	Valid from 25 Nov 2020 to 30 Apr 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3503 (Special Case)	GW-RS0442-20	Valid from 2 Jul 2020 to 31 Dec 2020
			GW-RS0869-20	Valid from 25 Nov 2020 to 31 Jan 2021
			GW-RS0871-20	Valid from 1 Dec 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-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
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
			GW-RS0840-20	Superseded by GW-RS0916-20

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0916-20	Valid from 5 Dec 2020 to 3 Jun 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-RS0677-20	Valid from 18 Sep 2020 to 14 Mar 2021
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works area of 3801	GW-RS0826-20	Valid from 31 Oct 2020 to 27 Apr 2021
	Construction Noise Permit (Special case)	Works area of 3801	GW-RS0633-20	Valid from 10 Sep 2020 to 3 Mar 2021

Contract No.	Description	Location	Permit/ Reference No.	Status
3802	Notification of Construction Work under APCO	Works area of 3802	458122	Receipt acknowledged by EPD on 14 Jul 2020
	Registration as Chemical Waste Producer	Works area of 3802	WPN 5218-951-G2895-01	Completion of Registration on 28 Aug 2020
	Bill Account for disposal	Works area of 3802	A/C 7037575	Approval granted from EPD on 15 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3802	GW-RS0860-20	Superseded by GW-RS0972-20
			GW-RS0972-20	Valid from 23 Dec 2020 to 22 Jun 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-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	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 F. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

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

		Total no. recorded in the reporting period	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
Waste	Action	0	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	0	0	0
From 28 December 2015 to end of the reporting period	27	1	1