MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.36 (For December 2018)

January 2019

Airport Authority Hong Kong

3/F Mapletree Bay Point
348 Kwun Tong Road
Kwun Tong
Kowloon
Hong Kong

T +852 2828 5757
F +852 2827 1823
mottmac.hk

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This Monthly EM&A Report No. 36 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 2019

AECOM
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, Hong Kong
香港新界沙田鄉事會路 138 號新城
市中央廣場第 2 座 8 樓
www.aecom.com

+852 3922 9000 tel
+852 2317 7609 fax

Our Ref : 60440482/C/JCHL190114

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

14 January 2019

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 36 (December 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 36 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 January 2019.

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
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Marine 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
PVD	Prefabricated Vertical Drain
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 36th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 December 2018.

Key Activities in the Reporting Period

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

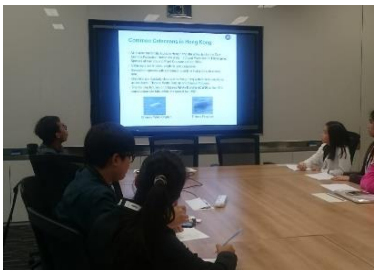
EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5
Terrestrial ecology monitoring	1

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 Marine 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

		
Dolphin Observer Training Conducted by ET	Dust Suppression Measure Adopted by Contractor	Enhanced Design of Wheel Washing Facility Adopted by Contractor

Results of Impact Monitoring

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, terrestrial ecology, 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 dissolved oxygen (DO), turbidity, and total alkalinity 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 suspended solids (SS), chromium, and nickel, 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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Site reinstatement; and
- Shoreline reinstatement next to the new pipe.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction;
- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works;
- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Third Runway Concourse and Integrated Airport Centers Works:

Contract 3402 New Integrated Airport Centers Enabling Works

- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Boring works; and
- Pipe installation.

Contract 3502 Terminal 2 Automated People Mover (APM) Depot Modification Works

- Site clearance;
- Plant mobilization
- Cable duct installation; and
- Brick wall construction.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Utilities and road work; and
- Piling and structure works.

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- Site office construction; and
- Drilling dowel bars.

Baggage Handling System (BHS) Works:

Contract 3603 3RS Baggage Handling System

- Site office establishment; and
- BHS modification work at Terminal 1.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Cofferdam and support installation for box culvert;
- Rising main installation;
- Piling and foundation works; and

- Site clearance.

Summary Table

The following table summarizes 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	Nil
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A	Nil

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

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 36th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 December 2018.

1.3 Project Organisation

The Project's organization 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, Environment	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 9348

Advanced Works:

Party	Position	Name	Telephone
Contract P560(R) Aviation Fuel Pipeline Diversion Works (Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.)	Project Manager	Wei Shih	2117 0566
	Environmental Officer	Lyn Liu	5172 6543

Deep Cement Mixing (DCM) Works:

Party	Position	Name	Telephone
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Hiu Yeung Tang	6329 3513
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	David Man	6421 3238
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226

Deep Cement Mixing (DCM) Works:

Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Margaret Chung	9130 3696

Reclamation Works:

Party	Position	Name	Telephone
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3763 1509
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Project Manager	Kin Hang Chung	9412 1386
	Environmental Officer	Nelson Tam	9721 3942

Third Runway Concourse and Integrated Airport Centers Works:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centers Enabling Works (Wing Hing Construction Co., Ltd.)	Construction Manager	Micheal Kan	9206 0550

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Raymond Au	6985 8860
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	David Ng	9010 7871
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Stephen Tsang	5508 6361

Terminal 2 (T2) Expansion Works:

Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.)	Project Manager	Wylar Chan	9107 5920
	Environmental Officer	Kelvin Lam	9379 2446

Automated People Mover (APM) Works:

Party	Position	Name	Telephone
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Arthur Wong	9170 3394

Baggage Handling System (BHS) Works:

Party	Position	Name	Telephone
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	Andy Ng	9102 2739
	Environmental Officer	Eric Ha	9215 3432

Airport Support Infrastructure and Logistic Works:

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	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, and seawall construction. Land-side works involved mainly foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (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 the works area are presented in **Figure 1.1** to **Figure 1.2**.

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.

Parameters	Status
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
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.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	On-going
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.
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

Parameters	Status
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, terrestrial ecology, 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 summarized as below:

- One dolphin observer training provided by ET: 5 December 2018
- One skipper training provided by ET: 27 December 2018
- Seven environmental management meetings for EM&A review with works contracts: 6, 14, 18, 19 and 20 December 2018

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-1 (Serial No. 597337)	2 Oct 2018	Monthly EM&A Report No. 35, Appendix D
	SIBATA LD-3B-2 (Serial No. 296098)	16 Oct 2018	

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 1.2 m above the ground.

b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.
c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.
d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix D of the Construction Phase Monthly EM&A Report No.35, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are still valid.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	18 – 87	306	500
AR2	43 – 179	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 from Project activities was observed during impact air quality monitoring. Major sources of dust observed at the monitoring stations during the monitoring sessions were local air pollution and nearby traffic emissions. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

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 five 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 Sep 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	75 dB(A)(1)

Note:

(1) Reduced to 70dB(A) for school and 65dB(A) during school examination periods for NM4.

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	NTi XL2-M2211 (Microphone Serial No.7681; Capsule Serial No.72079)	28 Aug 2018	**Appendix E**
	Rion NL-31 (Serial No. 01262786)	7 Aug 2018	Monthly EM&A Report No. 35, Appendix D
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	7 Aug 2018	
	Casella CEL-120/1 (Serial No. 2383737)	17 Oct 2018	

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 1.2 m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3 dB(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 1 dB(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 still valid.

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	67 – 73	75
NM4(1)	64 – 65	70(2)
NM5(1)	53 – 62	75
NM6(1)	68 – 73	75

Notes:

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

(2) Reduced to 65 dB(A) during school examination periods at NM4. No school examination took place in 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 and aircraft noise near NM1A, school activities at NM4, and aircraft and helicopter noise near NM5 and 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 3.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations and Parameters of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A(1)	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

Monitoring Station	Description	Coordinates		Parameters
SR5A	San Tau Beach SSSI	810696	816593	
SR6	Tai Ho Bay, Near Tai Ho Stream SSSI	814663	817899	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8[5]	Seawater Intake for cooling at Hong Kong International Airport (East)	811418	820246	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 Oct 2018.

(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) 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 abovementioned 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 4.5 mg/L		Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only	
		Bottom 3.4 mg/L		Bottom 2.7 mg/L	
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/L	0.2		0.2	
	Representative Heavy Metals for regular DCM	3.2		3.6	

Parameters	Action Level (AL)	Limit Level (LL)
monitoring (Nickel) in µg/L		
Action and Limit Levels SR1A		
SS (mg/l)	33	42
Action and Limit Levels SR8		
SS (mg/l)	52	60

Notes:

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

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

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

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

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

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
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 Sep 2016 onwards.

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 16H104234)	26 Oct 2018	Monthly EM&A Report No. 34, Appendix D
	YSI ProDSS (Serial No. 17H105557)	26 Oct 2018	
	YSI ProDSS (Serial No. 17E100747)	3 Oct 2018	Monthly EM&A Report No. 35, Appendix D
	YSI ProDSS (Serial No. 16H104233)	3 Oct 2018	
	YSI 6920 V2 (Serial No. 00019CB2)	19 Nov 2018	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N60623)	28 Nov 2018	**Appendix E**

Note:

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

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 4 ºC 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 were 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 listed in **Table 4.4** are still valid.

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	2 mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2 µg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2 µg/L

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**.

The water quality monitoring results for DO, total alkalinity and turbidity obtained during the reporting period were within their corresponding Action and Limit Levels.

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

Table 4.7 presents a summary of the SS compliance status at IM and SR stations during mid-ebb 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	SR6	SR7	SR8
1/12/2018			D																	
4/12/2018																				
6/12/2018																				
8/12/2018																				
11/12/2018																				
13/12/2018																				
15/12/2018																				
18/12/2018																				
20/12/2018																				
22/12/2018																				
25/12/2018																				
27/12/2018																				
29/12/2018																				
No. of result triggering Action or Limit Level	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix D**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	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
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Action Level was triggered on 1 December 2018. Details of the Project's marine construction activities on the concerned monitoring day was collected and findings are summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of SS Monitoring Results (Mid-Ebb Tide)

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
1/12/2018	Marine filling, seabed regulation works and DCM works	Around 1 km	Localised and enhanced silt curtain deployed	No	No	No

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

SS result recorded at IM3 on 1 December 2018 was considered an isolated case with no spatial trend to indicate any effect due to Project. As mitigation measures were implemented properly and no silt plume was observed, this case was considered not related to Project.

Table 4.9 presents a summary of the nickel compliance status at IM stations during mid-flood tide for the reporting period.

Table 4.9: Summary of Nickel Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
1/12/2018												
4/12/2018							D	D				
6/12/2018												
8/12/2018												
11/12/2018												
13/12/2018												
15/12/2018												
18/12/2018												
20/12/2018												
22/12/2018												
25/12/2018												
27/12/2018												
29/12/2018												
No. of result triggering Action or Limit Level	0	0	0	0	0	0	1	1	0	0	0	0

Note: Detailed results are presented in **Appendix D**.	
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
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring result triggered the corresponding Action Levels at IM7 and IM8 on 4 December 2018. Details of the Project's marine construction activities was collected and findings are summarized in **Table 4.10**.

Table 4.10: Summary of Findings from Investigation of Nickel Monitoring Results (Mid-Flood Tide)

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
4/12/2018	Marine filling, seabed regulation works and DCM works	More than 2 km	Localised and enhanced silt curtain deployed	No	No	No

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

On 4 December 2018, the nearest operating DCM barge was more than 2 km away when monitoring was conducted at IM7 and IM8. These measurements were therefore likely not related to Project activities. Besides, as nickel is a representative heavy metal that indicates the potential for release of contaminants from contaminated mud pits due to the disturbance of marine sediment within the pits by DCM activities, elevated nickel concentration due to these activities should be associated with similar elevated SS levels. SS results at both impact monitoring locations were within their Action and Limit Levels, which implies that active DCM works had limited influence on water quality in that period. With mitigation measures properly implemented and no observable silt plumes, the two cases were considered due to external factors and not due to the Project.

Table 4.11 presents a summary of the chromium compliance status at IM stations during mid-ebb tide for the reporting period.

Table 4.11: Summary of Chromium Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
1/12/2018												
4/12/2018												
6/12/2018												
8/12/2018												
11/12/2018												
13/12/2018												
15/12/2018												
18/12/2018												
20/12/2018												
22/12/2018											D	D
25/12/2018												
27/12/2018												
29/12/2018												
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	1	0	1	1

Note: Detailed results are presented in **Appendix D**.	
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 22 and 27 December 2018. The incident at IM9 on 27 December 2018 was unlikely be affected the Project, as it was located upstream of the Project during ebb tide.

Investigation focusing on the cases that occurred at monitoring stations located downstream of the Project was carried out. Details of the Project's marine construction activities on the concerned monitoring day was collected and findings are summarized in **Table 4.12**.

Table 4.12: Summary of Findings from Investigation of Chromium Monitoring Results (Mid-Ebb Tide)

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
22/12/2018	Marine filling and DCM works	Around 1000m	Localised and enhanced silt curtain deployed.	No	No	No

According to the investigation findings, it was confirmed that DCM and marine filling works were operating normally with localised and enhanced silt curtains deployed. The localised and enhanced silt curtains were maintained properly and checked by ET regularly.

Chromium is a representative heavy metal that indicates the potential for release of contaminants from contaminated mud pits due to the disturbance of marine sediment within the pits by DCM activities, and elevated chromium concentration due to these activities should be associated with similar elevated SS levels. Since SS results at IM11 and IM12 on 22 December 2018 were within their Action and Limit Levels, this implies that active DCM works had limited influence on water quality in that period. The nearest active DCM works were at least 1000m from the monitoring location with mitigation measures properly implemented and no silt plume observed. Therefore, these cases were considered due to external factors and not related 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 their corresponding Action or Limit Levels, and investigations were conducted accordingly.

Based on the investigation findings, all results that triggered the corresponding Action and 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, the non-project related triggers have been attended to and have initiated corresponding actions and measures. As part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling, and seawall construction as recommended in the Manual.

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors had taken actions to implement the recommended measures.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarized in **Table 5.2**.

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.

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)
Oct 2018[(2)(3)]	3,876	5,400	-	-	-	-	-
Nov 2018[(2)(3)]	-	3,532	-	8,851	-	9,440	515
Dec 2018[(3)]	5,909	3,825	-	4,282	2,700	12,000	345

Notes:

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

(2) Only updated figures are presented.

(3) Metals and paper were recycled in the reporting period.

6 Chinese White Dolphin Monitoring

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

The small vessel line-transect survey as proposed in the Manual 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 during the construction phase. In addition to the land-based theodolite tracking survey required for impact monitoring as stipulated in the Manual, supplemental theodolite tracking surveys have also been conducted during the implementation for the SkyPier HSF diversion and speed control in order to assist in monitoring the effectiveness of these measures, i.e. in total twice per month at the Sha Chau station and three times per month at the Lung Kwu Chau station.

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 summarized 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 STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for December 2018, data from 1 October 2018 to 31 December 2018 was used to calculate the running quarterly encounter rates STG & ANI;

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month November 2018 (calculated by data from September 2018 to November 2018) and the running quarterly encounter rates of this month (calculated by data from October 2018 to December 2018).

(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 follow the waypoints set for construction phase monitoring as proposed in the Manual and 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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL covering the AW, WL and SWL areas as proposed in the Manual and 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 15-20 m vessel with a flying bridge observation platform about 4 to 5 m 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 minimize 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 photo 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 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 (>1-3 km, 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 2-3 km 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 3, 4, 6, 7 17, 18, 20 and 21 December 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

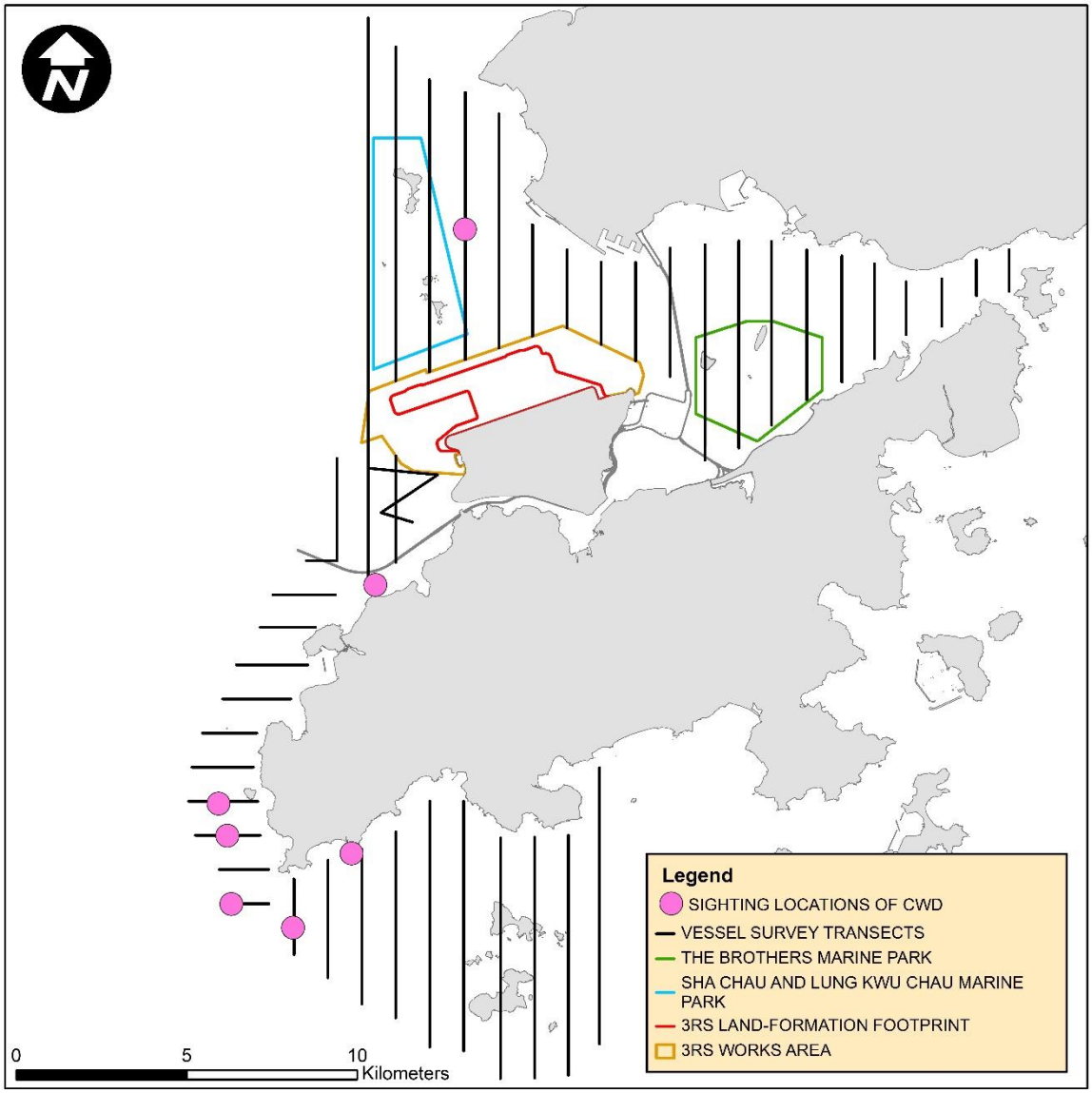
A total of around 452.57 km of survey effort was collected from these surveys, with around 92.8% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In December 2018, 7 sightings with 34 dolphins were sighted. Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in December 2018 is illustrated in **Figure 6.3**. In NWL, one CWD sighting was recorded east to Sha Chau and Lung Kwu Chau Marine Park while another sighting was recorded at the southwestern corner of the survey area. In WL, all three CWD sightings were recorded from Peaked Hill to Fan Lau. In SWL, the two CWD sightings were all located in the western end of the survey area around Fan Lau and Fan Lau Tung Wan. No sightings of CWD were recorded in NEL survey area or in close vicinity to 3RS Works Area in this month.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from December 2018. 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 2018, a total of around 419.77 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 7 on-effort sightings with 34 dolphins were sighted under such condition. Calculation of the encounter rates in December 2018 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from October to December 2018), a total of around 1235.68 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 39 on-effort sightings and a total number of 128 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of December 2018 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 did not trigger Action Level.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
December 2018	1.67	8.10
Running Quarter from October 2018 to December 2018(1)	3.16	10.36
Action Level	Running quarterly(1) < 1.86	Running quarterly(1) < 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 to December 2018, 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 2018, 7 groups with 34 dolphins were sighted, and the average group size of CWDs was 4.86 dolphins per group. Numbers of sightings with small group size (i.e. 1-2 dolphins) were dominant. Two sightings with large group size (i.e. 10 or more dolphins) were recorded, one in WL and another in SWL.

Activities and Association with Fishing Boats

None of the sightings of CWDs were recorded engaging in feeding activities, whilst three sightings were recorded engaging in socializing activities in December 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In December 2018, one sighting of CWD was recorded with the presence of mother-and-unspotted calf pairs. This sighting was recorded in SWL survey area.

6.4.2 Photo Identification

In December 2018, a total number of 17 different CWD individuals were identified for totally 25 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
SLMM010	4-Dec-18	1	SWL
SLMM012	4-Dec-18	1	SWL
SLMM014	4-Dec-18	1	SWL
	21-Dec-18	2	WL
SLMM019	4-Dec-18	1	SWL
SLMM022	4-Dec-18	1	SWL
SLMM028	3-Dec-18	1	NWL
SLMM030	21-Dec-18	1	WL
SLMM053	21-Dec-18	1	WL
		2	WL
SLMM067	4-Dec-18	1	SWL
WLMM001	4-Dec-18	1	SWL
	20-Dec-18	1	WL
	21-Dec-18	1	WL
		2	WL
WLMM028	21-Dec-18	1	WL
		2	WL
WLMM029	21-Dec-18	1	WL
		2	WL
WLMM069	4-Dec-18	1	SWL
WLMM073	21-Dec-18	1	WL
WLMM078	21-Dec-18	1	WL
		2	WL
WLMM080	21-Dec-18	1	WL
WLMM114	4-Dec-18	2	SWL

6.4.3 Land-based Theodolite Tracking Survey

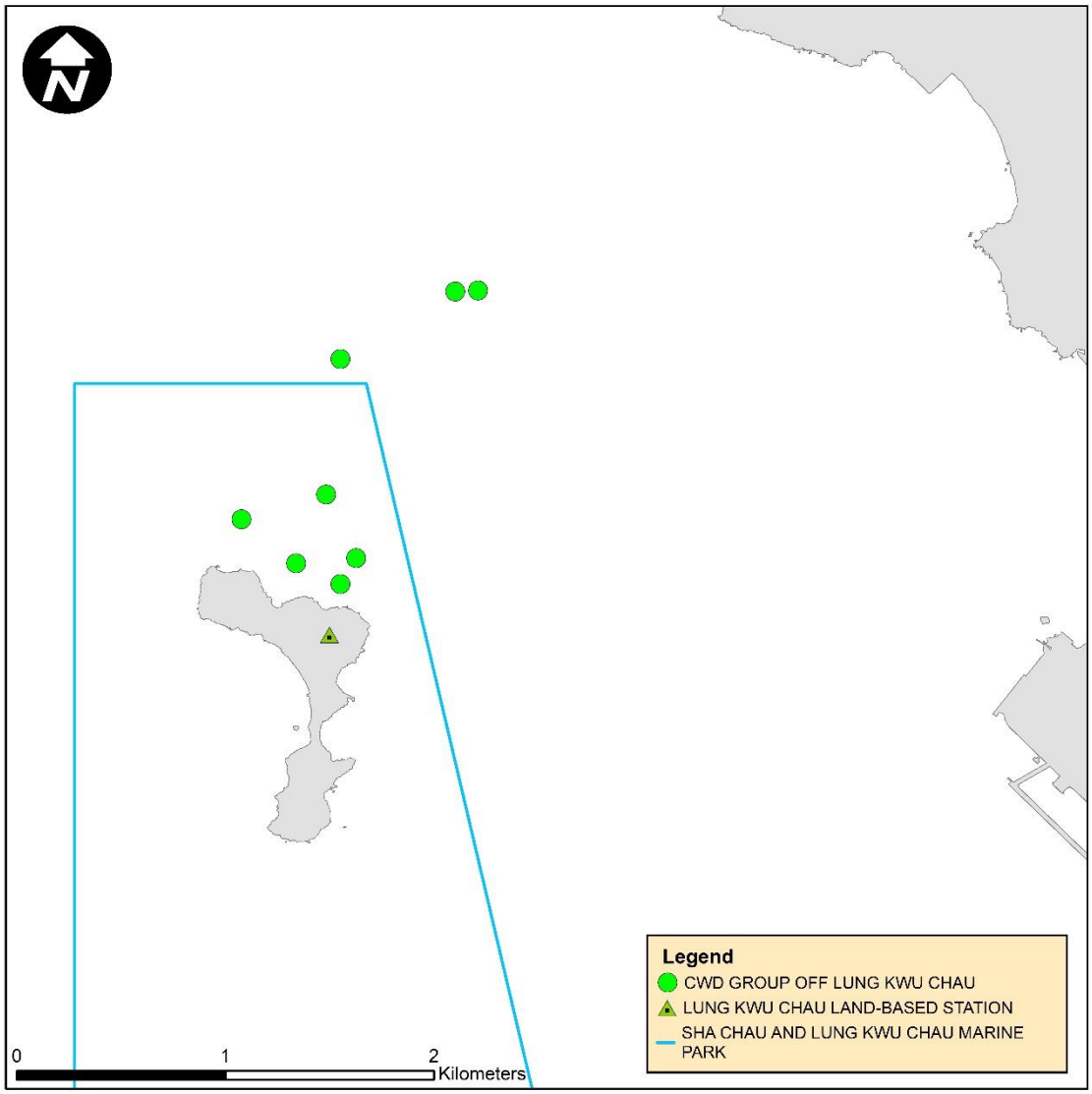
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 10, 18 and 19 December 2018 and at SC on 11 and 14 December 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 8 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in December 2018 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	3	18:00	8	0.44
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**8**	**0.27**

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized

team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling, in which dolphin observers were deployed by contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 14 to 16 dolphin observation stations by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction 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 677 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 five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the appropriate 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 organized for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

During the reporting period, implementation of recommended landscape and visual mitigation measures (CM1 – CM10) where applicable was monitored weekly in accordance with the Manual and no non-conformity was recorded. In case of non-conformity, specific recommendations will be made, and actions will be proposed according to the Event and Action Plan. The monitoring status is summarized in **Appendix B**.

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

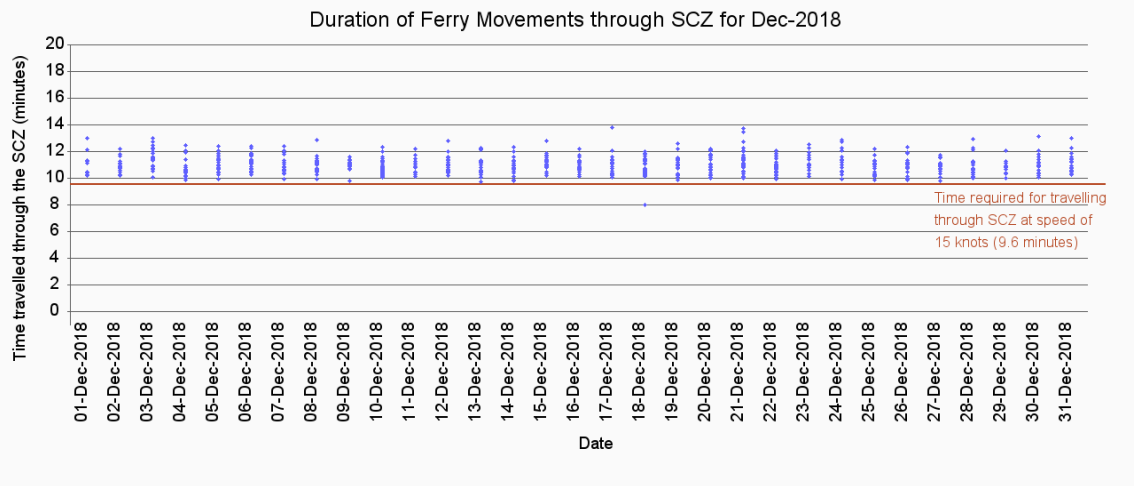
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 90 to 92 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 899 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in December 2018 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in December 2018 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ, except one HSF on 18 December 2018.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for December 2018



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

One ferry was recorded with average speed over 15 knots on 18 December 2018. A notice was sent to the ferry operator and the case is under investigation by ET. The investigation results will be presented in the next monthly EM&A report. Two ferries were recorded with minor route deviation on 3 December 2018, and 17 December 2018. Notices were sent to the ferry operator and the cases are under investigation by ET.

As reported in the Construction Phase Monthly EM&A Report No. 35, one ferry was recorded with average speed over 15 knots on 6 November 2018. ET's investigation found that the deviation was due to captain's fault according to the responses provided by ferry operator. Ferry operator's internal meeting and internal training have been conducted for the captain.

Table 7.1: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 December to 31 December 2018
Total number of ferry movements recorded and audited	899
Use diverted route and enter / leave SCZ through Gate Access Points	2 deviations
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 9.0 to 17.0 knots. Except the case on 18 December 2018, all HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	90 to 92 daily movements (within the maximum daily cap - 125 daily movements).

7.3 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 November 2016 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:

- One skipper training session was 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.
- Four skipper training sessions were held by contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, three skippers were trained by ET and six skippers were trained by contractors' Environmental Officers. In total, 1082 skippers were trained from August 2016 to December 2018.
- The Marine Surveillance System (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.

7.4 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 relevant records by the contractors and conducted competence checking to audit the implementation of DEZ.

7.5 Terrestrial Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island during the HDD construction works period from August to March to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found. During the reporting period, it was observed from the monthly ecological monitoring at the HDD daylighting location on Sheung Sha Chau that shoreline landscape reinstatement works were carried out under the Contract P560(R), and there was no encroachment of any works upon the egretry area nor any significant disturbance to the ardeids foraging at Sheung Sha Chau by the works. No signs of breeding or nursery activities were observed. At the HDD daylighting location, neither nest nor breeding activity of ardeids were found during the monthly ecological monitoring and weekly site inspections in the reporting period. The location map and site photos regarding the monthly ecological monitoring for the HDD works and egretry area are provided in **Appendix D** for reference.

7.6 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.2**.

Table 7.2: 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	

7.7 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory

requirements was recorded. The environmental licenses and permits which are valid in the reporting period are presented in **Appendix F**.

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

7.8.1 Complaints

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

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Site reinstatement; and
- Shoreline reinstatement next to the new pipe.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Seawall construction;
- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works;
- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Third Runway Concourse and Integrated Airport Centers Works:

Contract 3402 New Integrated Airport Centers Enabling Works

- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Boring works; and
- Pipe installation.

Contract 3502 Terminal 2 Automated People Mover (APM) Depot Modification Works

- Site clearance;

- Plant mobilization
- Cable duct installation; and
- Brick wall construction.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Utilities and road work; and
- Piling and structure works.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- Site office construction; and
- Drilling dowel bars.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site office establishment; and
- BHS modification work at Terminal 1.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Cofferdam and support installation for box culvert;
- Rising main installation;
- Piling and foundation works; and
- Site clearance.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works) and seawall construction;
- Implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Terrestrial ecological monitoring on Sheung Sha Chau;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- 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 C**.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, marine filling, and seawall construction. Land-side works involved mainly 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, terrestrial ecology, 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 DO, turbidity, and total alkalinity 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, nickel and chromium some of the testing results triggered the relevant Action and 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 during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

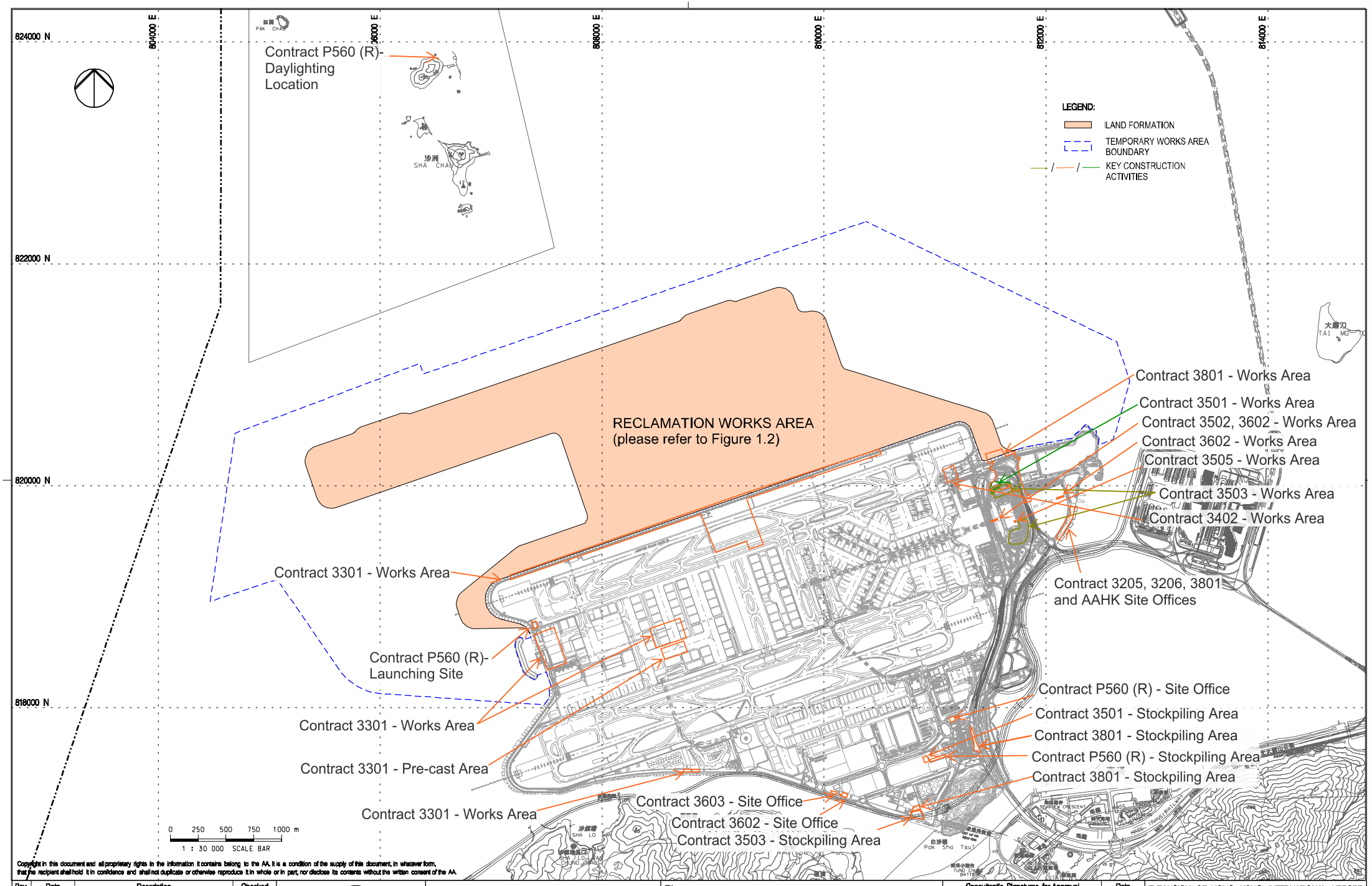
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in December 2018 were in the range of 90 to 92 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 899 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 9.0 to 17.0 knots. Except the case on 18 December 2018, all HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. Two deviations from the diverted route in December 2018 were recorded in the HSF monitoring. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone, 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. 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



Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

HONG KONG INTERNATIONAL AIRPORT

Mott MacDonald

Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Consultant's Signatures for Approval		Date
Design	DC	31AUG15
Checkers	DC	31AUG15
Design Supervisor	EC	31AUG15
Authorised Representative	JFP	31AUG15

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. A

Filename: J:\355482\REPORT\ENV\CWSLP\FIG 1.dgn

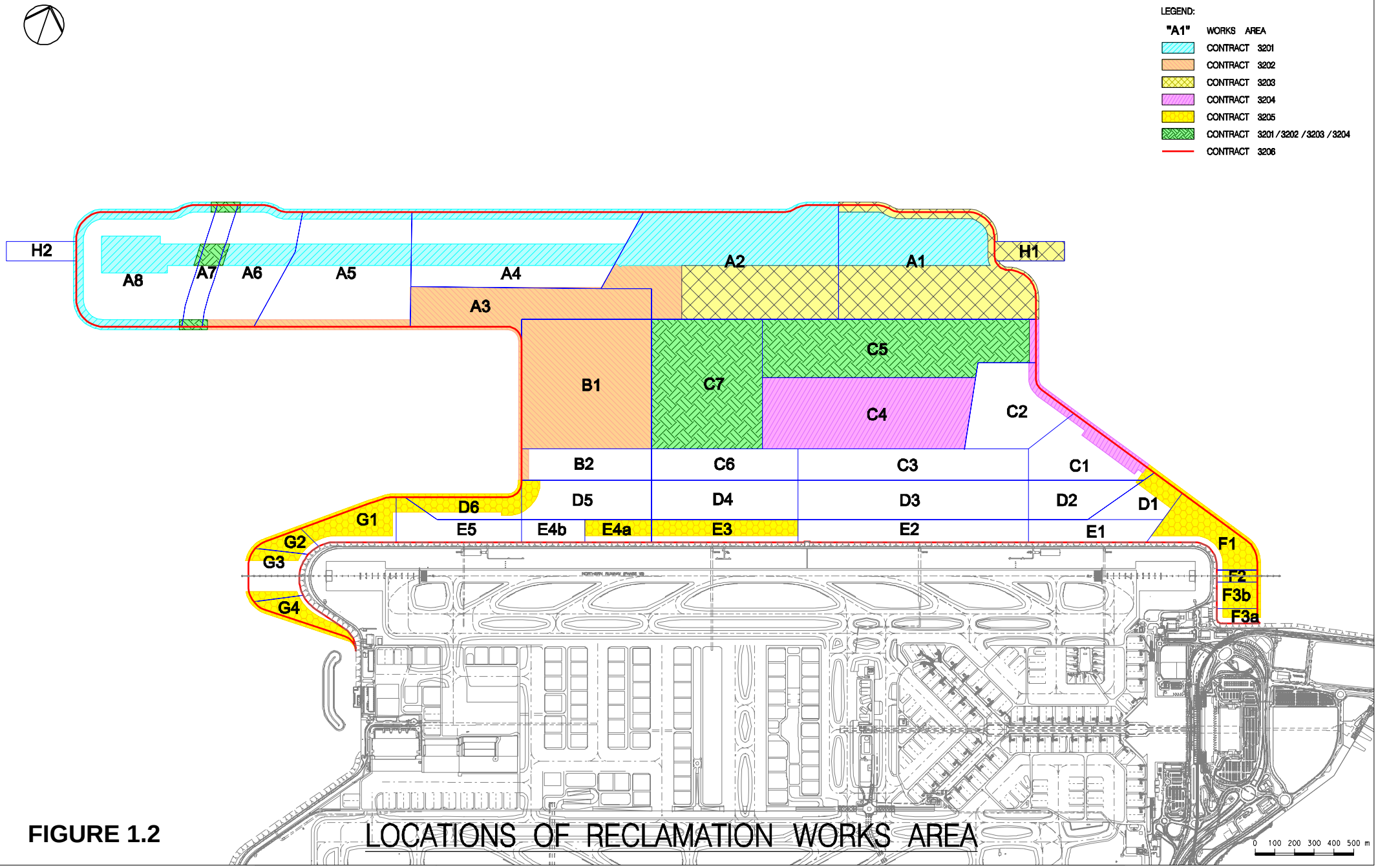
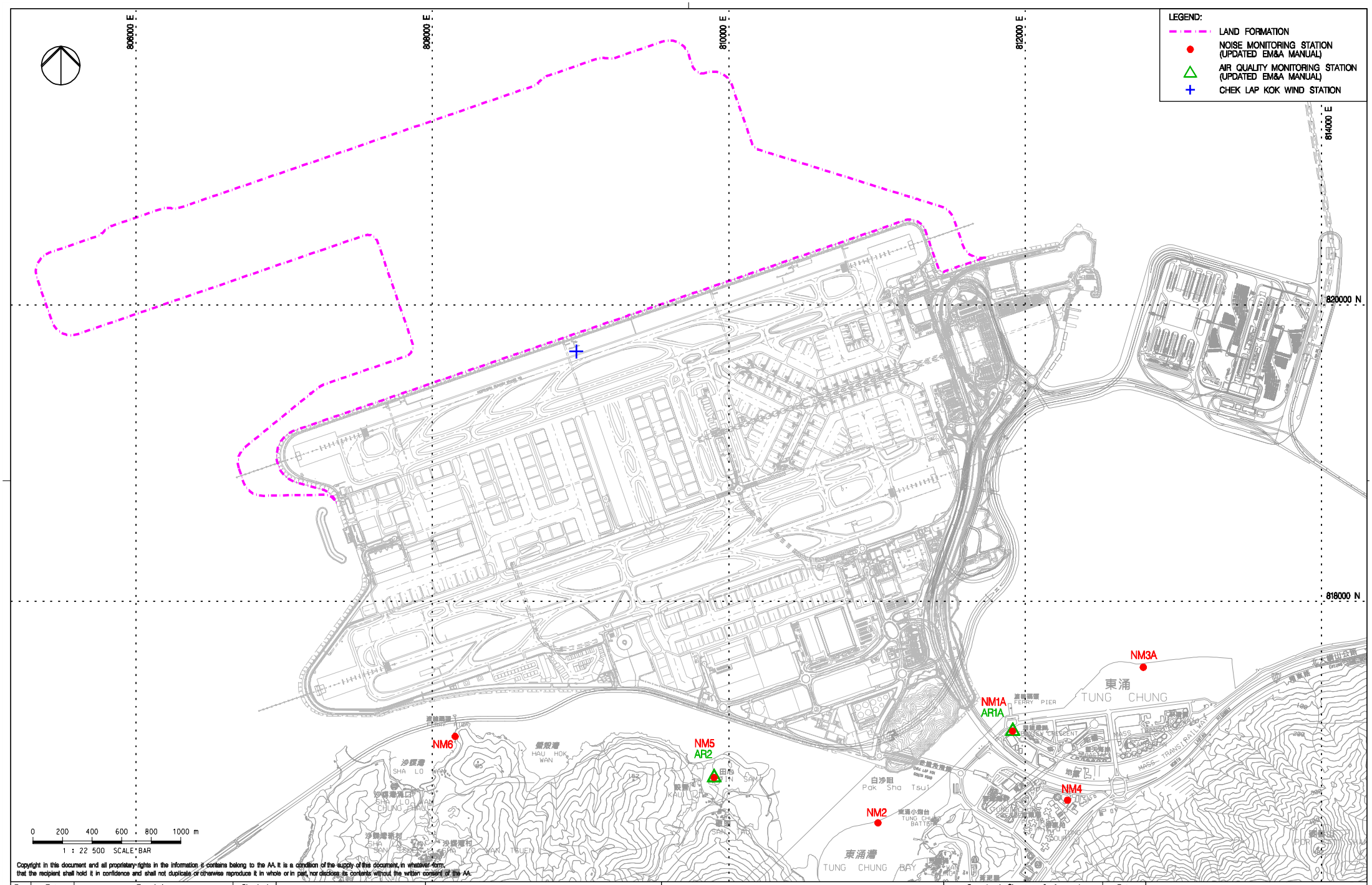


FIGURE 1.2

LOCATIONS OF RECLAMATION WORKS AREA



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

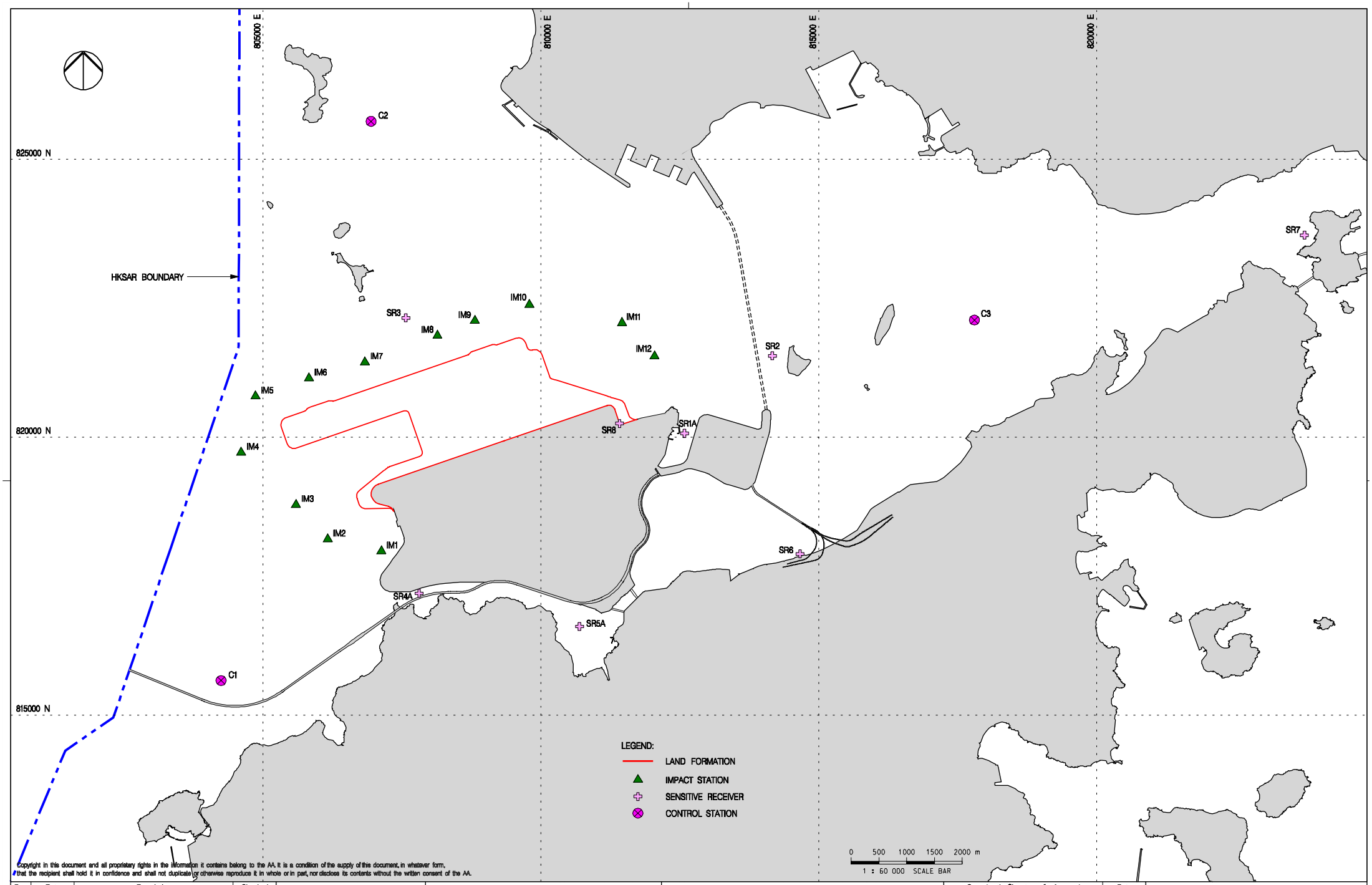
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



Rev.	Date	Description	Checked
A	25MAY17	FIRST ISSUE	HY
B	07AUG17	GENERAL REVISION	JL
C	25MAY18	GENERAL REVISION	SH
D	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

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

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

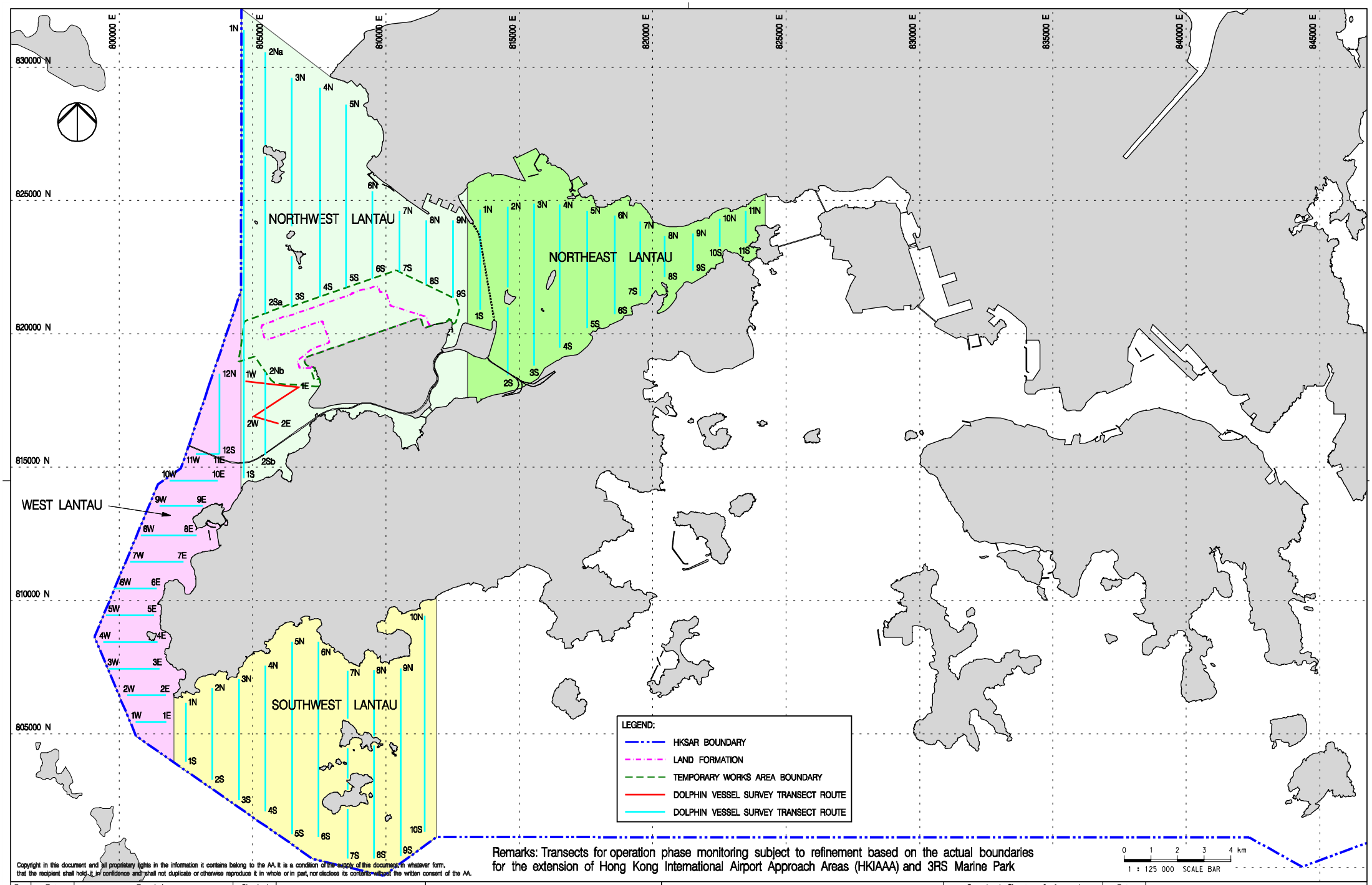
Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.2.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
A	02DEC15	FIRST ISSUE	JC
B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT
E	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

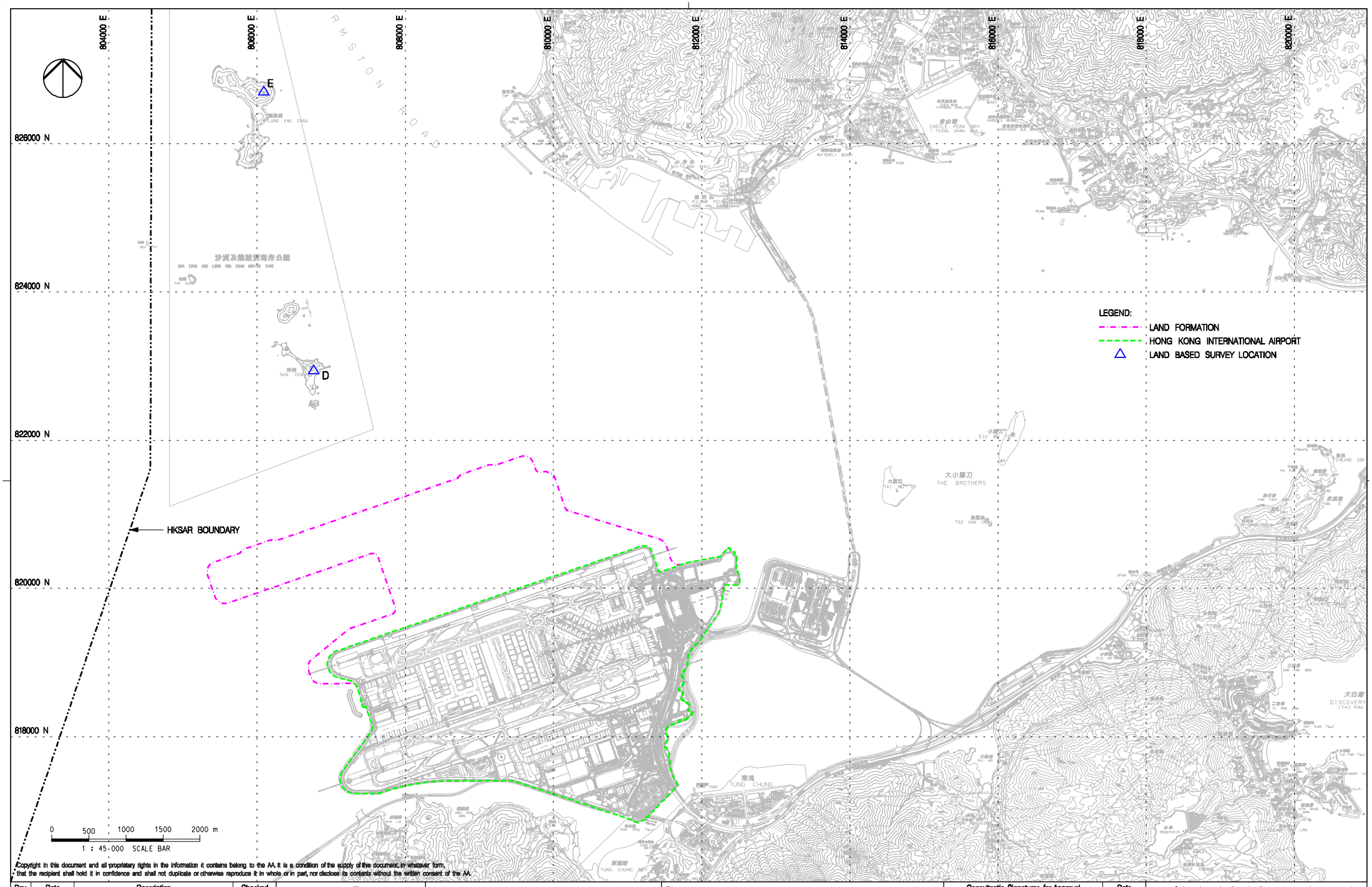
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. E

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.4.dgn



Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
B	06FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

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

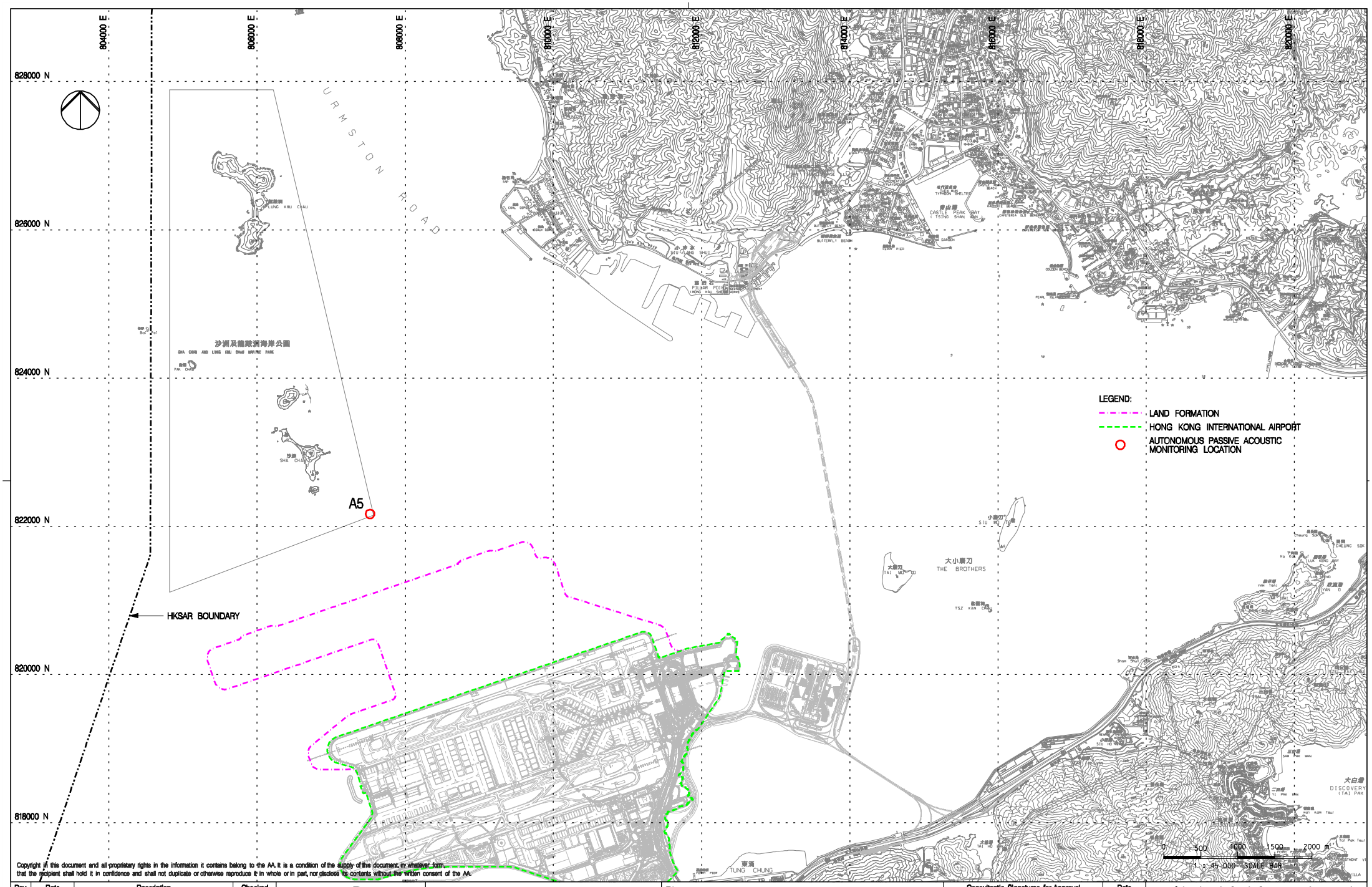
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
P560 (R)	Aviation Fuel Pipeline Diversion Works	Langfang Huayuan Mechanical and Electrical Engineering Co., Ltd.	Diversion of the existing submarine aviation fuel pipelines will use a horizontal directional drilling (HDD) method forming two rock drill holes by drilling through bedrock from a launching site located at the west of the airport island to a daylighting point adjacent to the offshore receiving platform at Sha Chau. Two new pipelines will be installed through the drilled tunnels. The total length is approximately 5 km. Drilling works will proceed from the HDD launching site at the airport island.
3201	Deep Cement Mixing (Package 1)	Penta-Ocean-China State-Dong-Ah Joint Venture	The works covered by the Contract 3201, 3202, 3203, 3204 and 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3202	Deep Cement Mixing (Package 2)	Samsung-BuildKing Joint Venture	
3203	Deep Cement Mixing (Package 3)	Sambo E&C Co.,Ltd	
3204	Deep Cement Mixing (Package 4)	CRBC-SAMBO Joint Venture	
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	
3206	Reclamation Contract	ZHEC-CCCC-CDC Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Site clearance and demolition; • Geotechnical and ground improvement works;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition; • Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3502	Terminal 2 APM Depot Modification Works	Build King Construction Limited	The works covered by the Contract 3502 comprise the modification of the existing Automatic People Mover (APM) Depot in the basement of T2, for the APM line running between T1 East Hall, West Hall and Midfield Concourse. The major construction activities include without limitation the following: • Removal of the existing steel guide rails;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Removal of the existing mass concrete fill and re-construction of the reinforced concrete fill; • Construction of separation walls and walkways; • Removal of re-provision of existing building services and airport systems; and • All associated testing and commissioning works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3505	Terminal 2 Spectrum Lighting Mock-ups	Union Contractors Ltd.	The works covered by the Contract 3505 comprise the design, supply, manufacture, delivery, and installation of the Spectrum Lighting Mock-ups to demonstrate the lighting effects on various interior elements of the new Terminal 2.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3801	APM and BHS Tunnels on	China State Construction Engineering (HK) Ltd.	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following:

Contract No.	Contract Title	Contractor	Key Construction Activities
	Existing Airport Island		• Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

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

Appendix B Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and ▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units).		
			Material transportation ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and ▪ Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Control of emissions from bitumen decanting ▪ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; ▪ Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; ▪ Proper chimney for the discharge of bitumen fumes shall be provided at high level; ▪ The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Liquid fuel ▪ The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Housekeeping ▪ A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Crushers ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure.		
			Vibratory screens and grizzlies ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Belt conveyors ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.	Within Concrete Batching Plant / Duration of the construction phase	N/A

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.		
7.5.6	4.3	-	**Adoption of QPME** ▪ QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Movable Noise Barriers** ▪ Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Noise Enclosure/ Acoustic Shed** ▪ Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Within the Project site / During construction phase / Prior to commencement of operation	I
			Water Quality Impact – Construction Phase		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** <u>General Measures to be Applied to All Works Areas</u> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I
			▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities;		I
			▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The Silt Curtain Deployment Plan shall be implemented.		I

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion ▪ Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	**Modification of the Existing Seawall** ▪ Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** ▪ During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment. 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.	Within construction site / Duration of the construction phase	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: ▪ 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	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?^
			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		N/A

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.		N/A
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	N/A
			▪ 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		N/A
			▪ 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	N/A
			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)
			▪ 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 HDD drilling works at HKIA	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
12.7.2.3 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
			▪ 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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		N/A
			▪ 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		N/A
			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
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	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				to completion of construction	
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.		N/A
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan** ▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.	Construction phase	I

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases	
Table 15.6	12.3	-	**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; Upon handover and completion of works.	N/A
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Dec-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 General WQ & Regular DCM mid-ebb: 21:17 mid-flood: 15:06
2	**3** CWD Survey (Vessel)	**4** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 General WQ & Regular DCM mid-ebb: 10:55 mid-flood: 5:04	**5** Site Inspection	**6** Site Inspection CWD Survey (Vessel) General WQ & Regular DCM mid-ebb: 12:32 mid-flood: 6:57	**7** Site Inspection CWD Survey (Vessel)	**8** General WQ & Regular DCM mid-ebb: 13:49 mid-flood: 8:27
9	**10** CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6	**11** Site Inspection CWD Survey (Land-based) General WQ & Regular DCM mid-ebb: 15:36 mid-flood: 10:29	**12** Site Inspection	**13** Site Inspection General WQ & Regular DCM mid-ebb: 4:11 mid-flood: 12:05	**14** Site Inspection CWD Survey (Land-based)	**15** AR1A, AR2 General WQ & Regular DCM mid-ebb: 20:03 mid-flood: 14:00
16	**17** CWD Survey (Vessel)	**18** Site Inspection CWD Survey (Vessel, Land-based) General WQ & Regular DCM mid-ebb: 8:51 mid-flood: 15:38	**19** Site Inspection CWD Survey (Land-based)	**20** Site Inspection CWD Survey (Vessel) Terrestrial Ecological Monitoring General WQ & Regular DCM mid-ebb: 10:53 mid-flood: 16:42	**21** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	**22** General WQ & Regular DCM mid-ebb: 12:36 mid-flood: 17:56
23	**24** Site Inspection	**25** General WQ & Regular DCM mid-ebb: 15:01 mid-flood: 9:44	**26**	**27** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 General WQ & Regular DCM mid-ebb: 16:45 mid-flood: 11:25	**28** Site Inspection	**29** General WQ & Regular DCM mid-ebb: 19:17 mid-flood: 13:16
30	**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				

Tentative Monitoring Schedule of Next Reporting Period

Jan-19

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 WQ General & Regular DCM mid-ebb: 9:36 mid-flood: 15:40	**2** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**3** Site Inspection WQ General & Regular DCM mid-ebb: 11:38 mid-flood: 16:51	**4** Site Inspection	**5** WQ General & Regular DCM mid-ebb: 12:56 mid-flood: 17:58
6	**7** CWD Survey (Vessel)	**8** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 14:39 mid-flood: 9:28	**9** Site Inspection CWD Survey (Vessel)	**10** Site Inspection Terrestrial Ecological Monitoring WQ General & Regular DCM mid-ebb: 15:48 mid-flood: 10:29	**11** Site Inspection	**12** WQ General & Regular DCM mid-ebb: 17:13 mid-flood: 11:34
13	**14** CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6	**15** Site Inspection CWD Survey (Vesse) WQ General & Regular DCM mid-ebb: 20:36 mid-flood: 13:41	**16** Site Inspection CWD Survey (Vessel)	**17** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 9:21 mid-flood: 15:11	**18** Site Inspection	**19** AR1A, AR2 WQ General & Regular DCM mid-ebb: 11:34 mid-flood: 16:49
20	**21** CWD Survey (Vessel)	**22** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 14:02 mid-flood: 8:42	**23** Site Inspection CWD Survey (Land-based)	**24** Site Inspection WQ General & Regular DCM mid-ebb: 15:35 mid-flood: 10:08	**25** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**26** WQ General & Regular DCM mid-ebb: 17:20 mid-flood: 11:33
27	**28**	**29** Site Inspection WQ General & Regular DCM mid-ebb: 7:46 mid-flood: 13:57	**30** Site Inspection	**31** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 10:37 mid-flood: 15:37		

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

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

WQ - Water Quality
DCM - Deep Cemenet Mixing

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

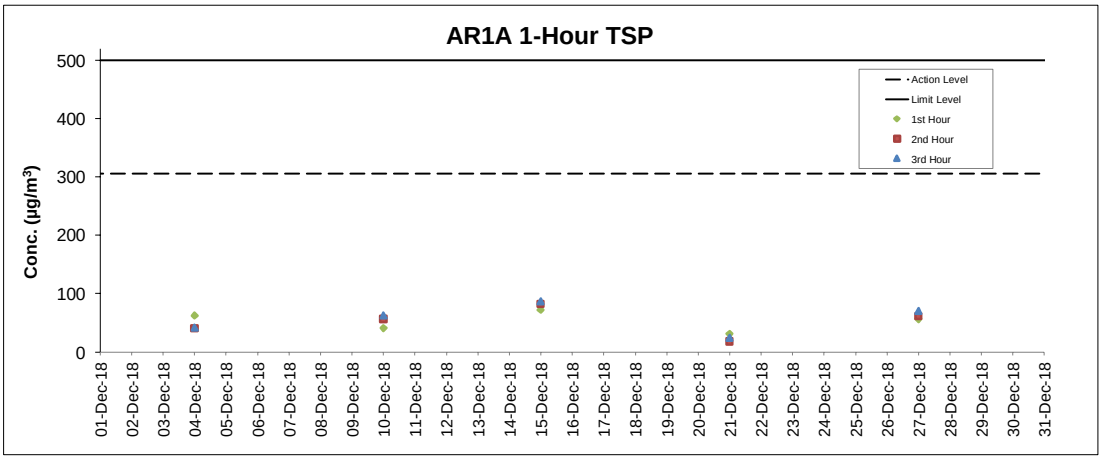
Station: AR1A- Man Tung Road Park

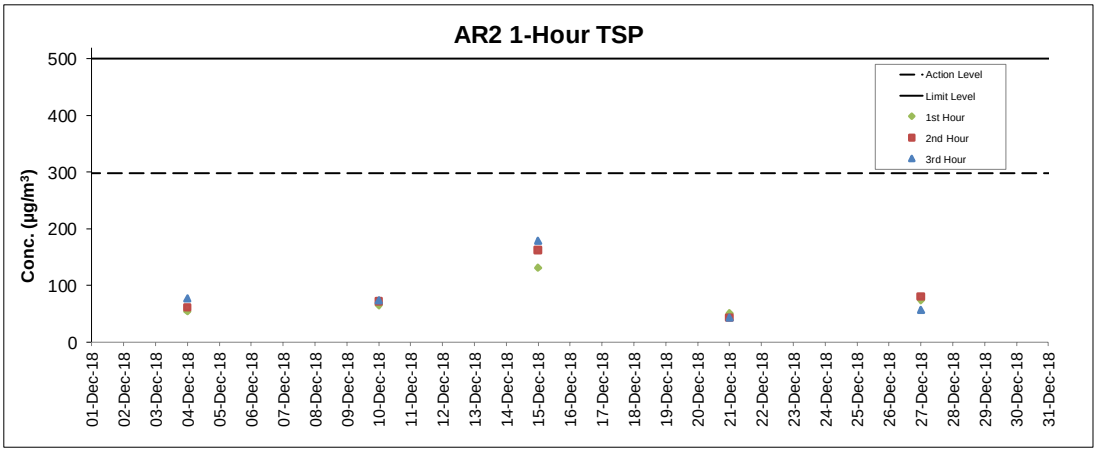
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
04-Dec-18	12:55	Sunny	3.1	267	62	306	500
04-Dec-18	13:55	Sunny	3.6	266	40	306	500
04-Dec-18	14:55	Sunny	4.5	259	42	306	500
10-Dec-18	13:00	Cloudy	3.6	358	41	306	500
10-Dec-18	14:00	Cloudy	7.5	341	56	306	500
10-Dec-18	15:00	Cloudy	6.8	347	63	306	500
15-Dec-18	9:42	Sunny	2.2	12	72	306	500
15-Dec-18	10:42	Sunny	2.4	5	82	306	500
15-Dec-18	11:42	Sunny	3.1	343	87	306	500
21-Dec-18	13:00	Sunny	1.7	52	31	306	500
21-Dec-18	14:00	Sunny	6.2	97	18	306	500
21-Dec-18	15:00	Sunny	7.8	94	24	306	500
27-Dec-18	13:15	Cloudy	3.2	354	56	306	500
27-Dec-18	14:15	Cloudy	1.7	305	61	306	500
27-Dec-18	15:15	Cloudy	4.4	309	70	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
04-Dec-18	9:18	Sunny	1.8	18	54	298	500
04-Dec-18	10:18	Sunny	3.6	335	61	298	500
04-Dec-18	11:18	Sunny	2.8	293	77	298	500
10-Dec-18	14:38	Cloudy	2.7	353	65	298	500
10-Dec-18	15:38	Cloudy	3.7	336	72	298	500
10-Dec-18	16:38	Cloudy	4.3	327	74	298	500
15-Dec-18	13:49	Sunny	5.2	329	131	298	500
15-Dec-18	14:49	Sunny	3.6	317	162	298	500
15-Dec-18	15:49	Sunny	3.2	296	179	298	500
21-Dec-18	9:47	Sunny	4.7	59	51	298	500
21-Dec-18	10:47	Sunny	5.2	77	43	298	500
21-Dec-18	11:47	Sunny	2.5	268	43	298	500
27-Dec-18	9:08	Cloudy	6.2	49	74	298	500
27-Dec-18	10:08	Cloudy	5.5	49	80	298	500
27-Dec-18	11:08	Cloudy	5.4	50	57	298	500





Noise Monitoring Results

Noise Measurement Results
Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
04-Dec-18	Sunny	13:06	73.0	55.6	73
04-Dec-18	Sunny	13:11	71.8	55.9	
04-Dec-18	Sunny	13:16	73.2	56.1	
04-Dec-18	Sunny	13:21	73.9	56.0	
04-Dec-18	Sunny	13:26	73.8	56.3	
04-Dec-18	Sunny	13:31	74.9	57.1	
10-Dec-18	Cloudy	13:43	75.3	57.7	67
10-Dec-18	Cloudy	13:48	74.4	55.2	
10-Dec-18	Cloudy	13:53	72.8	54.3	
10-Dec-18	Cloudy	13:58	75.0	57.6	
10-Dec-18	Cloudy	14:03	76.1	58.6	
10-Dec-18	Cloudy	14:08	74.8	56.8	
21-Dec-18	Sunny	13:31	76.2	57.3	73
21-Dec-18	Sunny	13:36	73.6	55.1	
21-Dec-18	Sunny	13:41	73.5	55.5	
21-Dec-18	Sunny	13:46	73.5	54.7	
21-Dec-18	Sunny	13:51	73.6	54.8	
21-Dec-18	Sunny	13:56	72.4	53.6	
27-Dec-18	Cloudy	13:34	72.3	53.8	72
27-Dec-18	Cloudy	13:39	73.6	56.5	
27-Dec-18	Cloudy	13:44	74.7	56.0	
27-Dec-18	Cloudy	13:49	70.9	54.9	
27-Dec-18	Cloudy	13:54	72.8	53.6	
27-Dec-18	Cloudy	13:59	73.8	55.7	

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

Noise Measurement Results
Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
04-Dec-18	Sunny	11:03	64.2	59.7	65
04-Dec-18	Sunny	11:08	64.5	60.4	
04-Dec-18	Sunny	11:13	64.9	60.8	
04-Dec-18	Sunny	11:18	63.6	60.3	
04-Dec-18	Sunny	11:23	64.4	59.6	
04-Dec-18	Sunny	11:28	63.4	60.2	
10-Dec-18	Cloudy	11:02	65.3	59.7	65
10-Dec-18	Cloudy	11:07	64.6	59.0	
10-Dec-18	Cloudy	11:12	63.3	58.9	
10-Dec-18	Cloudy	11:17	65.1	60.0	
10-Dec-18	Cloudy	11:22	64.3	58.9	
10-Dec-18	Cloudy	11:27	63.8	58.9	
21-Dec-18	Sunny	11:07	64.0	59.4	65
21-Dec-18	Sunny	11:12	63.7	58.9	
21-Dec-18	Sunny	11:17	63.6	59.2	
21-Dec-18	Sunny	11:22	64.0	59.4	
21-Dec-18	Sunny	11:27	63.7	59.1	
21-Dec-18	Sunny	11:32	63.5	59.1	
27-Dec-18	Cloudy	11:28	62.4	57.6	64
27-Dec-18	Cloudy	11:33	64.2	58.3	
27-Dec-18	Cloudy	11:38	64.2	58.4	
27-Dec-18	Cloudy	11:43	64.0	58.0	
27-Dec-18	Cloudy	11:48	61.8	57.7	
27-Dec-18	Cloudy	11:53	64.5	58.3	

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)
04-Dec-18	Sunny	09:25	59.6	48.0	53
04-Dec-18	Sunny	09:30	56.3	49.6	
04-Dec-18	Sunny	09:35	58.3	51.0	
04-Dec-18	Sunny	09:40	57.5	49.3	
04-Dec-18	Sunny	09:45	53.0	46.1	
04-Dec-18	Sunny	09:50	64.8	47.3	
10-Dec-18	Cloudy	14:55	61.4	46.9	62
10-Dec-18	Cloudy	15:00	67.0	59.4	
10-Dec-18	Cloudy	15:05	66.2	50.3	
10-Dec-18	Cloudy	15:10	58.7	50.2	
10-Dec-18	Cloudy	15:15	60.2	50.7	
10-Dec-18	Cloudy	15:20	65.6	49.5	
21-Dec-18	Sunny	10:34	55.8	47.9	56
21-Dec-18	Sunny	10:39	54.9	47.3	
21-Dec-18	Sunny	10:44	55.3	46.5	
21-Dec-18	Sunny	10:49	58.0	46.8	
21-Dec-18	Sunny	10:54	56.1	46.4	
21-Dec-18	Sunny	10:59	56.2	47.9	
27-Dec-18	Cloudy	09:17	55.7	48.6	61
27-Dec-18	Cloudy	09:22	58.4	49.1	
27-Dec-18	Cloudy	09:27	55.7	48.6	
27-Dec-18	Cloudy	09:32	61.1	50.3	
27-Dec-18	Cloudy	09:37	65.2	50.7	
27-Dec-18	Cloudy	09:42	60.9	50.4	

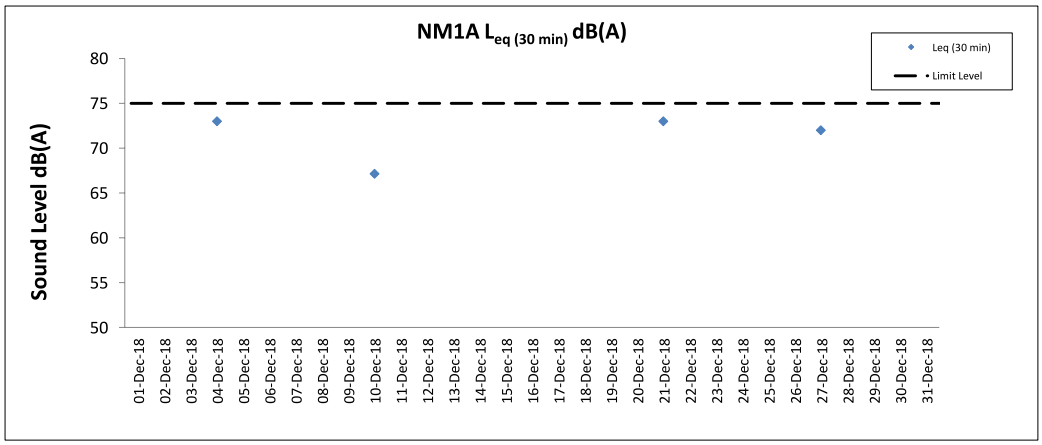
Remarks:
+3dB (A) correction was applied to free-field measurement.

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)
04-Dec-18	Sunny	09:44	72.6	62.7	68
04-Dec-18	Sunny	09:49	73.0	61.8	
04-Dec-18	Sunny	09:54	69.3	61.5	
04-Dec-18	Sunny	09:59	69.7	61.3	
04-Dec-18	Sunny	10:04	70.3	54.5	
04-Dec-18	Sunny	10:09	68.5	55.3	
10-Dec-18	Cloudy	09:42	72.3	58.8	73
10-Dec-18	Cloudy	09:47	75.1	58.2	
10-Dec-18	Cloudy	09:52	77.4	58.1	
10-Dec-18	Cloudy	09:57	70.7	56.3	
10-Dec-18	Cloudy	10:02	77.9	55.8	
10-Dec-18	Cloudy	10:07	76.7	58.5	
21-Dec-18	Sunny	09:46	68.2	54.5	68
21-Dec-18	Sunny	09:51	65.1	51.8	
21-Dec-18	Sunny	09:56	69.8	56.6	
21-Dec-18	Sunny	10:01	71.4	53.8	
21-Dec-18	Sunny	10:06	70.0	52.4	
21-Dec-18	Sunny	10:11	62.4	49.4	
27-Dec-18	Cloudy	09:46	69.2	52.4	68
27-Dec-18	Cloudy	09:51	71.5	52.5	
27-Dec-18	Cloudy	09:56	69.0	48.9	
27-Dec-18	Cloudy	10:01	66.6	50.9	
27-Dec-18	Cloudy	10:06	68.0	49.2	
27-Dec-18	Cloudy	10:11	67.4	50.9	

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


NM1A $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Dec-18
02-Dec-18
03-Dec-18
04-Dec-18
05-Dec-18
06-Dec-18
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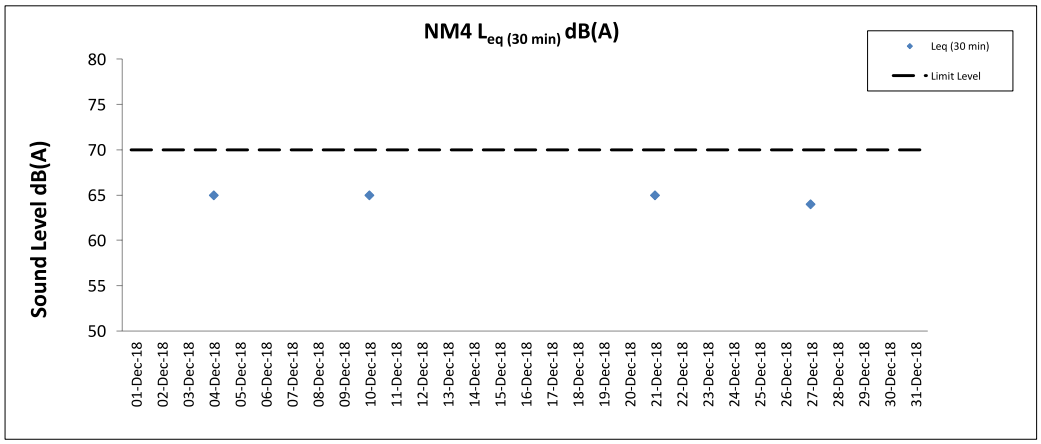
NM4 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Dec-18
02-Dec-18
03-Dec-18
04-Dec-18
05-Dec-18
06-Dec-18
07-Dec-18
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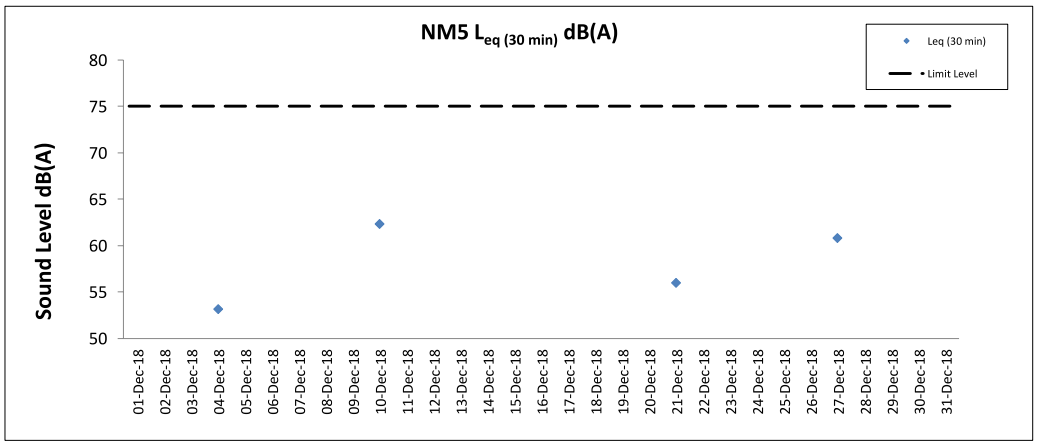
NM5 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Dec-18
02-Dec-18
03-Dec-18
04-Dec-18
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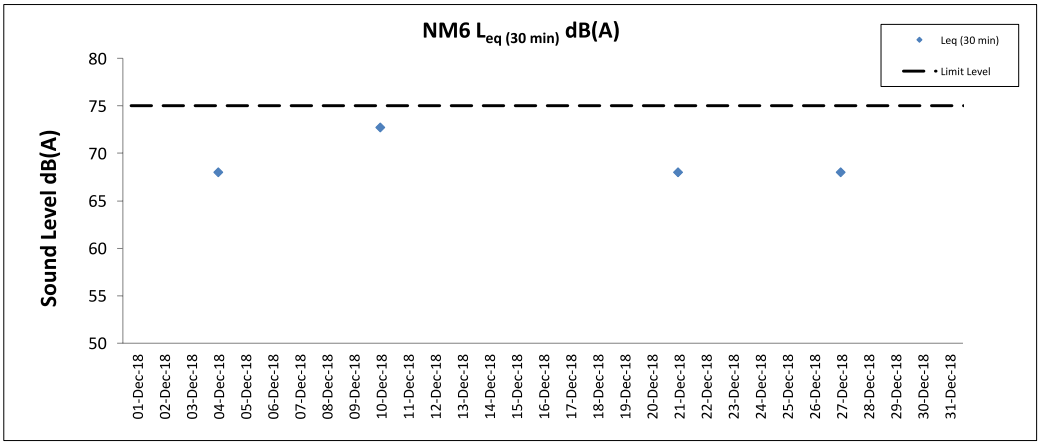
NM6 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Dec-18
02-Dec-18
03-Dec-18
04-Dec-18
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31-Dec-18

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 18 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	20:34	7.7	Surface	1.0	0.3	216	22.8	22.8	8.0	8.0	30.1	30.1	94.2	94.2	6.8	6.8	16.4	16.9	20	19	84	89	815643	804235	<0.2	<0.2	2.8	2.8
						1.0	0.3	235	22.8		8.0		30.1		94.2		6.8		16.5		20		85				<0.2		2.7	
					Middle	3.9	0.2	231	22.7	22.7	8.0	8.0	30.0	30.0	94.2	94.2	6.8		16.9		20		89				<0.2		2.9	
						3.9	0.2	246	22.7		8.0		30.0		94.2		6.8		16.9		18		89				<0.2		2.7	
					Bottom	6.7	0.1	264	22.7	22.7	8.0	8.0	30.0	30.0	94.4	94.5	6.8	6.9	17.3		18		94				<0.2		2.9	
						6.7	0.1	285	22.7		8.0		30.0		94.5		6.9		17.4		18		94				<0.2		2.9	
C2	Fine	Moderate	22:11	12.4	Surface	1.0	0.5	205	23.0	23.0	8.0	8.0	24.4	24.5	84.5	84.4	6.3	6.2	9.1	18.8	6	8	89	91	825687	806933	<0.2	<0.2	3.4	3.4
						1.0	0.5	217	22.9		8.0		24.5		84.3		6.3		9.3		6		88				<0.2		3.5	
					Middle	6.2	0.5	191	22.8	22.8	8.0	8.0	28.5	28.5	83.9	83.9	6.1		16.9		6		92				<0.2		3.5	
						6.2	0.5	202	22.8		8.0		28.5		83.9		6.1		16.9		7		90				<0.2		3.4	
					Bottom	11.4	0.3	234	22.7	22.7	8.0	8.0	29.1	29.1	84.6	84.6	6.2	6.2	30.2		10		92				<0.2		3.4	
						11.4	0.3	250	22.7		8.0		29.1		84.6		6.2		30.7		10		93				<0.2		3.3	
C3	Fine	Moderate	20:12	11.7	Surface	1.0	0.1	132	22.7	22.7	8.1	8.1	30.0	30.0	90.2	90.2	6.5	6.5	7.2	8.3	13	14	91	92	822102	817786	<0.2	<0.2	3.6	3.4
						1.0	0.1	144	22.7		8.1		30.0		90.1		6.5		7.2		12		89				<0.2		3.3	
					Middle	5.9	0.1	115	22.7	22.7	8.1	8.1	30.1	30.1	89.0	89.0	6.5		8.4		13		92				<0.2		3.3	
						5.9	0.1	119	22.7		8.1		30.1		89.0		6.5		8.4		15		92				<0.2		3.3	
					Bottom	10.7	0.1	334	22.6	22.6	8.1	8.1	30.5	30.5	83.0	82.9	6.0	6.0	9.2		15		93				<0.2		3.4	
						10.7	0.1	334	22.6		8.1		30.4		82.8		6.0		9.2		14		95				<0.2		3.5	
IM1	Fine	Moderate	20:54	4.8	Surface	1.0	0.2	6	23.1	23.1	8.1	8.1	30.4	30.4	94.4	94.4	6.8	6.8	10.2	11.8	15	14	85	90	817933	807120	<0.2	<0.2	2.6	2.7
						1.0	0.3	6	23.0		8.1		30.4		94.4		6.8		10.4		15		86				<0.2		2.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	13	22.9	22.9	8.2	8.2	30.4	30.4	95.9	96.0	6.9	7.0	13.3		14		94				<0.2		2.8	
						3.8	0.2	13	22.8		8.2		30.4		96.1		7.0		13.3		13		94				<0.2		2.6	
IM2	Fine	Moderate	21:00	6.4	Surface	1.0	0.3	177	22.9	22.9	8.2	8.2	29.6	29.6	94.4	94.4	6.8	6.8	15.1	17.1	14	16	85	89	818149	806183	<0.2	<0.2	2.4	2.5
						1.0	0.3	188	22.9		8.2		29.6		94.3		6.8		15.3		15		85				<0.2		2.5	
					Middle	3.2	0.2	176	22.8	22.8	8.2	8.2	29.8	29.8	94.0	94.0	6.8		17.6		15		90				<0.2		2.5	
						3.2	0.2	190	22.8		8.2		29.8		94.0		6.8		17.6		16		90				<0.2		2.5	
					Bottom	5.4	0.2	0	22.8	22.8	8.2	8.2	29.9	29.9	93.9	93.9	6.8	6.8	18.2		17		93				<0.2		2.4	
						5.4	0.2	0	22.8		8.2		29.9		93.9		6.8		18.8		17		93				<0.2		2.6	
IM3	Fine	Moderate	21:06	6.8	Surface	1.0	0.2	242	22.8	22.8	8.0	8.0	29.1	29.1	93.7	93.7	6.8	6.8	18.9	20.1	21	25	85	89	818770	805580	<0.2	<0.2	2.4	2.5
						1.0	0.2	245	22.8		8.0		29.1		93.7		6.8		18.9		22		85				<0.2		2.5	
					Middle	3.4	0.2	255	22.8	22.8	8.0	8.0	29.1	29.1	93.8	93.9	6.8		20.3		27		89				<0.2		2.4	
						3.4	0.2	272	22.8		8.0		29.1		93.9		6.8		20.1		27		89				<0.2		2.5	
					Bottom	5.8	0.2	247	22.8	22.8	8.0	8.0	29.1	29.1	94.2	94.4	6.9	6.9	21.3		26		93				<0.2		2.4	
						5.8	0.2	252	22.8		8.0		29.1		94.6		6.9		21.3		27		93				<0.2		2.5	
IM4	Fine	Moderate	21:13	6.7	Surface	1.0	0.2	326	22.9	22.9	8.0	8.0	29.3	29.3	94.0	94.0	6.8	6.8	13.1	14.4	18	18	85	89	819737	804599	<0.2	<0.2	2.6	2.6
						1.0	0.3	328	22.9		8.0		29.3		94.0		6.8		13.1		18		85				<0.2		2.5	
					Middle	3.4	0.2	339	22.8	22.8	8.0	8.0	29.6	29.6	94.2	94.3	6.8		13.8		19		89				<0.2		2.5	
						3.4	0.2	353	22.8		8.0		29.6		94.3		6.8		13.8		19		89				<0.2		2.4	
					Bottom	5.7	0.1	294	22.8	22.8	8.0	8.0	29.6	29.6	95.6	95.9	6.9	7.0	16.3		18		93				<0.2		2.8	
						5.7	0.1	304	22.8		8.0		29.6		96.2		7.0		16.3		17		93				<0.2		2.8	
IM5	Fine	Moderate	21:20	6.3	Surface	1.0	0.5	254	23.1	23.1	7.9	7.9	27.7	27.7	88.5	88.5	6.5	6.5	13.5	14.9	15	17	85	90	820735	804847	<0.2	<0.2	2.6	2.6
						1.0	0.5	254	23.1		7.9		27.7		88.5		6.5		13.4		16		85				<0.2		2.6	
					Middle	3.2	0.4	252	23.1	23.1	7.9	7.9	27.8	27.8	88.2	88.2	6.4		14.6		18		90				<0.2		2.6	
						3.2	0.4	262	23.1		7.9		27.8		88.1		6.4		14.8		17		90				<0.2		2.5	
					Bottom	5.3	0.2	258	23.1	23.1	7.9	7.9	27.8	27.8	87.9	87.9	6.4	6.4	16.6		16		94				<0.2		2.5	
						5.3	0.3	271	23.1		7.9		27.8		87.9		6.4		16.7		17		94				<0.2		2.5	
IM6	Fine	Moderate	21:27	6.1	Surface	1.0	0.6	266	23.1	23.1	7.9	7.9	27.6	27.6	88.6	88.6	6.5	6.5	13.6	14.6	12	13	85	89	821036	805806	<0.2	<0.2	2.4	2.4
						1.0	0.6	288	23.1		7.9		27.6		88.6		6.5		13.9		13		85				<0.2		2.5	
					Middle	3.1	0.5	273	23.1	23.1	7.9	7.9	27.7	27.7	88.7	88.7	6.5		14.8		12		89				<0.2		2.4	
						3.1	0.6	284	23.1		7.9		27.8		88.7		6.5		14.9		13		89				<0.2		2.5	
					Bottom	5.1	0.5	269	23.0	23.0	7.9	7.9	27.8	27.8	89.0	89.1	6.5	6.5	15.1		13		94				<0.2		2.4	
						5.1	0.5	283	23.0		7.9		27.8		89.1		6.5		15.2		12		94				<0.2		2.3	
IM7	Fine	Moderate	21:35	6.5	Surface	1.0	0.5	224	23.2	23.2	7.9	7.9	27.2	27.3	89.3	89.3	6.5	6.6	11.3	12.6	9	8	85	89	821357	806841	<0.2	<0.2	2.4	2.5
						1.0	0.6	233	23.2		7.9		27.3		89.3		6.5		11.5		9		84				<0.2		2.4	
					Middle	3.3	0.5	229	23.1	23.1	7.9	7.9	27.7	27.7	89.8	89.9	6.6		12.9		8		89				<0.2		2.4	
						3.3	0.5	240	23.0		7.9		27.7		90.0		6.6		12.8		8		90				<0.2		2.5	
					Bottom	5.5	0.4	231	23.0	23.0	7.9	7.9	27.8	27.8	90.8	90.9	6.6	6.6	13.6		7		93				<0.2		2.6	
						5.5	0.4	253	23.0		7.9		27.8		90.9		6.6		13.6		7		93				<0.2		2.5	
IM8	Fine	Moderate	21:42	6.8	Surface	1.0	0.5	211	22.8	22.8	8.0	8.0	27.3	27.4	87.5	87.5	6.4	6.5	6.7	9.0	5	6	87	90	821840	808155	<0.2	<0.2	3.2	3.4
						1.0	0.5	221	22.8		8.0		27.4		87.5		6.4		6.8		6		87				<0.2		3.4	
					Middle	3.4	0.4	224	22.6	22.6	8.0	8.0	28.1	28.2	88.4	88.5	6.5		9.2		6		89				<0.2		3.5	
						3.4	0.5	244	22.6		8.0		28.2		88.6		6.5		9.5		5		91				<0.2		3.3	
					Bottom	5.8	0.4	235	22.7	22.7	8.0	8.0	28.3	28.3	89.1	89.1	6.5	6.5	10.9		6		93				<0.2		3.4	
						5.8	0.4	256	22.7		8.0		28.3		89.1		6.5		11.1		6		95				<0.2		3.4	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	21:37	6.5	Surface	1.0	0.5	203	22.7	22.7	8.0	8.0	27.3	27.3	88.2	88.2	6.5	6.5	6.5	8.1	6	7	88	90	822106	808806	<0.2	<0.2	3.4	3.4
						1.0	0.5	208	22.7		8.0		27.3		88.2		6.5		6.5		7		87				<0.2		3.5	
					Middle	3.3	0.2	212	22.6	22.6	8.0	8.0	28.0	28.0	87.6	87.7	6.4		8.0		5		90				<0.2		3.5	
						3.3	0.2	227	22.6		8.0		28.0		87.7		6.4		8.0		6		89				<0.2		3.2	
					Bottom	5.5	0.2	266	22.6	22.6	8.0	8.0	28.4	28.4	88.4	88.4	6.5	6.5	9.7		7		93				<0.2		3.5	
						5.5	0.2	286	22.6		8.0		28.4		88.4		6.5		9.8		8		94				<0.2		3.4	
IM10	Fine	Moderate	21:29	7.0	Surface	1.0	0.3	169	22.7	22.7	8.0	8.0	27.3	27.3	87.8	87.8	6.5	6.5	5.5	12.7	6	7	89	91	822376	809811	<0.2	<0.2	3.5	3.5
						1.0	0.3	179	22.7		8.0		27.3		87.8		6.5		5.5		7		88				<0.2		3.4	
					Middle	3.5	0.1	166	22.6	22.6	8.1	8.1	28.5	28.5	88.7	88.8	6.5		8.5		7		91				<0.2		3.6	
						3.5	0.1	169	22.6		8.1		28.5		88.8		6.5		8.7		6		91				<0.2		3.3	
					Bottom	6.0	0.0	176	22.6	22.6	8.1	8.1	29.0	29.0	90.0	90.1	6.6	6.6	23.2		7		93				<0.2		3.5	
						6.0	0.0	191	22.6		8.1		29.0		90.1		6.6		24.7		7		92				<0.2		3.4	
IM11	Fine	Moderate	21:17	7.4	Surface	1.0	0.2	111	22.8	22.8	8.1	8.1	28.7	28.7	90.2	90.2	6.6	6.6	6.8	8.1	6	6	89	92	822070	811437	<0.2	<0.2	3.2	3.3
						1.0	0.2	117	22.8		8.1		28.8		90.2		6.6		6.9		6		91				<0.2		3.2	
					Middle	3.7	0.1	102	22.8	22.8	8.1	8.1	28.8	28.8	90.9	91.0	6.6		8.2		6		91				<0.2		3.4	
						3.7	0.2	112	22.7		8.1		28.8		91.0		6.6		8.3		6		92				<0.2		3.3	
					Bottom	6.4	0.1	129	22.7	22.7	8.1	8.1	28.9	28.9	93.7	93.8	6.8	6.9	9.4		6		93				<0.2		3.3	
						6.4	0.1	139	22.7		8.1		28.9		93.9		6.9		9.3		6		95				<0.2		3.5	
IM12	Fine	Moderate	21:10	8.1	Surface	1.0	0.1	147	22.6	22.6	8.1	8.1	29.0	29.0	91.6	91.6	6.7	6.7	8.5	9.5	6	7	90	91	821473	812055	<0.2	<0.2	3.4	3.4
						1.0	0.1	152	22.6		8.1		29.0		91.6		6.7		8.4		6		91				<0.2		3.3	
					Middle	4.1	0.1	129	22.4	22.4	8.1	8.1	29.3	29.3	91.8	91.8	6.7		9.9		7		92				<0.2		3.3	
						4.1	0.1	141	22.4		8.1		29.3		91.8		6.7		9.9		6		91				<0.2		3.5	
					Bottom	7.1	0.1	19	22.4	22.4	8.1	8.1	29.5	29.5	92.4	92.5	6.8	6.8	10.2		8		89				<0.2		3.6	
						7.1	0.1	20	22.4		8.1		29.5		92.5		6.8		10.2		8		90				<0.2		3.5	
SR1A	Fine	Moderate	20:50	4.6	Surface	1.0	-	-	22.5	22.5	8.1	8.1	29.7	29.7	91.4	91.4	6.7	6.7	8.0	9.1	11	11	-	-	820075	812590	-	-	-	-
						1.0	-	-	22.5		8.1		29.7		91.3		6.7		8.0		11		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.5	22.5	8.1	8.1	30.0	30.0	89.7	89.7	6.5	6.5	10.1		11		-				-		-	
						3.6	-	-	22.5		8.1		30.0		89.6		6.5		10.2		10		-				-		-	
SR2	Fine	Moderate	20:38	4.4	Surface	1.0	0.3	91	22.5	22.5	8.1	8.1	29.6	29.7	92.7	92.7	6.8	6.8	9.0	9.7	12	12	91	92	821483	814176	<0.2	<0.2	3.3	2.8
						1.0	0.3	99	22.5		8.1		29.7		92.7		6.8		9.1		12		90				<0.2		3.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	75	22.4	22.4	8.1	8.1	29.9	29.9	93.3	93.3	6.8	6.8	10.3		13		93				<0.2		2.5	
						3.4	0.1	80	22.4		8.1		29.9		93.3		6.8		10.4		12		94				<0.2		2.3	
SR3	Fine	Moderate	21:48	8.4	Surface	1.0	0.5	198	22.9	22.9	8.0	8.0	27.1	27.1	87.1	87.1	6.4	6.4	8.5	12.2	6	7	-	-	822147	807563	-	-	-	-
						1.0	0.6	216	22.8		8.0		27.2		87.0		6.4		8.9		6		-				-		-	
					Middle	4.2	0.4	228	22.6	22.6	8.0	8.0	28.3	28.3	86.4	86.4	6.3		13.1		6		-				-		-	
						4.2	0.4	229	22.6		8.0		28.3		86.4		6.3		13.1		6		-				-		-	
					Bottom	7.4	0.3	255	22.6	22.6	8.0	8.0	28.5	28.5	85.5	85.5	6.3	6.3	14.8		8		-				-		-	
						7.4	0.4	277	22.6		8.0		28.5		85.4		6.3		15.0		9		-				-		-	
SR4A	Fine	Moderate	20:15	7.4	Surface	1.0	0.3	223	23.0	23.0	8.0	8.0	29.9	29.9	93.1	93.1	6.7	6.7	17.5	19.4	19	20	-	-	817171	807826	-	-	-	-
						1.0	0.3	242	23.0		8.0		29.9		93.1		6.7		17.5		20		-				-		-	
					Middle	3.7	0.1	207	23.0	23.0	8.0	8.0	29.9	29.9	93.1	93.1	-		19.9		20		-				-		-	
						3.7	0.1	209	23.0		8.0		29.9		93.1		-		19.6		19		-				-		-	
					Bottom	6.4	0.1	234	23.0	23.0	8.0	8.0	29.9	29.9	93.2	93.3	6.7	6.7	20.8		20		-				-		-	
						6.4	0.1	235	23.0		8.0		29.9		93.3		6.7		21.0		21		-				-		-	
SR5A	Fine	Moderate	20:02	4.2	Surface	1.0	0.4	280	23.1	23.1	7.9	7.9	29.9	29.9	93.0	93.0	6.7	6.7	10.4	11.5	8	8	-	-	816616	810703	-	-	-	-
						1.0	0.4	303	23.1		7.9		29.9		93.0		6.7		10.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	282	23.1	23.1	7.9	7.9	30.0	30.0	94.4	94.5	6.8	6.8	12.7		8		-				-		-	
						3.2	0.3	283	23.1		7.9		30.0		94.6		6.8		12.6		7		-				-		-	
SR6	Fine	Moderate	19:40	3.7	Surface	1.0	0.1	314	22.9	22.9	7.9	7.9	30.1	29.9	95.5	93.4	6.9	6.8	10.3	11.5	8	9	-	-	817915	814685	-	-	-	-
						1.0	0.1	329	22.9		7.9		29.7		91.3		6.6		10.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	312	22.9	22.9	7.9	7.9	29.8	29.8	91.2	91.2	6.6	6.6	12.5		10		-				-		-	
						2.7	0.1	327	22.9		7.9		29.8		91.2		6.6		12.5		10		-				-		-	
SR7	Fine	Moderate	19:33	15.8	Surface	1.0	0.2	68	22.5	22.5	8.1	8.1	30.5	30.5	88.3	88.3	6.4	6.4	4.5	5.3	7	7	-	-	823616	823754	-	-	-	-
						1.0	0.3	73	22.5		8.1		30.5		88.2		6.4		4.5		6		-				-		-	
					Middle	7.9	0.0	15	22.6	22.6	8.1	8.1	30.7	30.7	86.8	86.8	-		5.1		8		-				-		-	
						7.9	0.0	15	22.6		8.1		30.7		86.8		-		5.2		7		-				-		-	
					Bottom	14.8	0.2	279	22.7	22.7	8.0	8.0	31.0	31.0	87.1	87.2	6.3	6.3	6.1		8		-				-		-	
						14.8	0.2	286	22.7		8.0		31.0		87.2		6.3		6.1		7		-				-		-	
SR8	Fine	Moderate	21:00	4.8	Surface	1.0	-	-	22.6	22.6	8.1	8.1	29.3	29.3	93.4	93.4	6.8	6.8	8.3	9.5	12	13	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.6		8.1		29.3		93.4		6.8		8.4		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	22.6	22.6	8.1	8.1	29.5	29.5	93.3	93.3	6.8	6.8	10.7		12		-				-		-	
						3.8	-	-	22.6		8.1		29.5		93.2		6.8		10.8		12		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 December 18 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	14:28	8.3	Surface	1.0	0.3	44	22.8	22.9	8.1	8.1	30.3	30.3	93.0	93.0	6.7	6.7	18.0	19.5	13	13	84	89	815605	804228	<0.2	<0.2	2.3	2.7
						1.0	0.3	48	22.9		8.1		30.3		93.0		6.7		18.3		12		85				<0.2		2.5	
					Middle	4.2	0.4	41	22.9	22.9	8.1	8.1	30.5	30.5	93.0	93.0	6.7		19.6		13		90				<0.2		2.8	
						4.2	0.5	43	22.9		8.1		30.5		93.0		6.7		19.9		13		90				<0.2		2.5	
					Bottom	7.3	0.4	42	22.9	22.9	8.1	8.1	30.5	30.5	93.1	93.2	6.7	6.7	20.6		14		93				<0.2		2.8	
						7.3	0.4	43	22.9		8.1		30.5		93.2		6.7		20.8		14		93				<0.2		3.2	
C2	Fine	Moderate	13:40	12.1	Surface	1.0	0.3	237	22.9	22.9	8.0	8.0	24.7	24.7	83.6	83.6	6.2	6.2	13.7	16.3	7	8	87	90	825690	806954	<0.2	<0.2	3.5	3.6
						1.0	0.3	249	22.9		8.0		24.7		83.5		6.2		14.3		6		88				<0.2		3.3	
					Middle	6.1	0.2	249	22.8	22.8	8.0	8.0	28.4	28.4	83.4	83.4	6.1		15.8		8		89				<0.2		3.6	
						6.1	0.3	249	22.8		8.0		28.4		83.4		6.1		15.8		7		91				<0.2		3.7	
					Bottom	11.1	0.2	289	22.8	22.8	8.0	8.0	28.5	28.5	83.5	83.5	6.1	6.1	19.0		10		92				<0.2		3.8	
						11.1	0.2	299	22.8		8.0		28.5		83.5		6.1		19.0		11		91				<0.2		3.7	
C3	Fine	Moderate	15:50	12.6	Surface	1.0	0.4	269	22.9	22.9	8.1	8.1	30.2	30.2	91.9	91.7	6.6	6.5	4.4	9.1	8	7	89	92	822104	817805	<0.2	<0.2	3.6	3.6
						1.0	0.4	295	22.9		8.1		30.2		91.5		6.6		4.4		8		91				<0.2		3.6	
					Middle	6.3	0.5	256	22.7	22.7	8.1	8.1	30.9	30.9	87.9	88.0	6.4		9.0		7		93				<0.2		3.5	
						6.3	0.5	277	22.7		8.1		30.9		88.0		6.4		9.4		7		92				<0.2		3.5	
					Bottom	11.6	0.3	268	22.7	22.7	8.1	8.1	30.9	30.9	88.6	88.6	6.4	6.4	14.1		5		94				<0.2		3.5	
						11.6	0.3	274	22.7		8.1		30.9		88.6		6.4		13.3		6		93				<0.2		3.8	
IM1	Fine	Moderate	14:07	4.6	Surface	1.0	0.2	30	23.2	23.2	8.1	8.1	30.3	30.3	93.3	93.3	6.7	6.7	19.0	20.4	21	20	85	90	817958	807144	<0.2	<0.2	2.9	2.7
						1.0	0.3	31	23.2		8.1		30.3		93.3		6.7		19.2		19		86				<0.2		2.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	31	23.2	23.2	8.1	8.1	30.4	30.4	93.7	93.8	6.7	6.7	21.6		20		94				<0.2		2.5	
						3.6	0.2	31	23.2		8.1		30.4		93.8		6.7		21.6		19		95				<0.2		2.6	
IM2	Fine	Moderate	14:01	7.2	Surface	1.0	0.2	358	23.0	23.0	8.1	8.1	29.5	29.5	95.1	95.1	6.9	6.9	10.6	12.8	12	12	84	89	818177	806173	<0.2	<0.2	2.5	2.7
						1.0	0.2	329	23.0		8.1		29.5		95.1		6.9		10.6		12		85				<0.2		2.7	
					Middle	3.6	0.2	2	22.9	22.9	8.1	8.1	29.6	29.6	95.3	95.3	6.9		13.6		11		89				<0.2		2.7	
						3.6	0.2	2	22.9		8.1		29.6		95.3		6.9		13.7		12		90				<0.2		2.6	
					Bottom	6.2	0.1	344	22.9	23.0	8.1	8.1	29.6	29.6	95.5	95.6	6.9	6.9	14.0		13		93				<0.2		2.8	
						6.2	0.1	316	23.0		8.1		29.6		95.6		6.9		14.0		12		95				<0.2		2.6	
IM3	Fine	Moderate	13:55	7.0	Surface	1.0	0.2	353	23.0	23.0	8.0	8.0	29.3	29.3	94.6	94.6	6.9	6.9	13.2	14.6	15	16	85	90	818764	805584	<0.2	<0.2	3.0	2.9
						1.0	0.2	355	22.9		8.0		29.3		94.5		6.9		13.3		16		86				<0.2		2.8	
					Middle	3.5	0.2	21	22.9	22.9	8.0	8.0	29.3	29.3	94.2	94.2	6.8		13.6		15		89				<0.2		2.9	
						3.5	0.2	22	22.8		8.0		29.3		94.2		6.8		13.7		16		90				<0.2		3.0	
					Bottom	6.0	0.3	38	22.8	22.8	8.0	8.0	29.3	29.3	94.4	94.4	6.9	6.9	16.6		16		94				<0.2		2.8	
						6.0	0.3	40	22.8		8.0		29.3		94.4		6.9		17.0		16		95				<0.2		3.0	
IM4	Fine	Moderate	13:45	6.9	Surface	1.0	0.4	355	22.9	22.9	8.0	8.0	29.0	29.0	93.4	93.4	6.8	6.8	17.9	19.3	23	23	85	90	819746	804603	<0.2	<0.2	2.7	2.9
						1.0	0.4	327	22.9		8.0		29.0		93.4		6.8		18.0		23		87				<0.2		2.8	
					Middle	3.5	0.3	353	22.9	22.9	8.0	8.0	29.0	29.0	93.3	93.3	6.8		18.5		22		89				<0.2		3.0	
						3.5	0.3	325	22.9		8.0		29.0		93.3		6.8		18.9		23		91				<0.2		3.0	
					Bottom	5.9	0.3	4	22.9	22.9	8.0	8.0	29.0	29.0	93.5	93.6	6.8	6.8	21.0		23		93				<0.2		2.8	
						5.9	0.3	4	22.9		8.0		29.0		93.6		6.8		21.3		22		94				<0.2		2.8	
IM5	Fine	Moderate	13:38	6.5	Surface	1.0	0.3	286	23.0	23.0	8.0	8.0	28.3	28.4	92.9	93.0	6.8	6.8	12.2	13.3	8	8	85	90	820716	804857	<0.2	<0.2	2.8	2.8
						1.0	0.4	309	23.0		8.0		28.4		93.0		6.8		12.3		8		87				<0.2		2.7	
					Middle	3.3	0.3	313	23.0	23.0	8.0	8.0	28.8	28.9	93.4	93.5	6.8		13.1		7		89				<0.2		2.8	
						3.3	0.3	333	23.0		8.0		28.9		93.5		6.8		13.2		8		91				<0.2		2.9	
					Bottom	5.5	0.3	354	23.0	23.0	7.9	7.9	29.1	29.1	94.0	94.0	6.8	6.8	14.5		9		94				<0.2		2.8	
						5.5	0.3	326	23.0		7.9		29.1		94.0		6.8		14.6		10		94				<0.2		3.0	
IM6	Fine	Moderate	13:31	6.4	Surface	1.0	0.4	284	23.2	23.2	7.9	7.9	27.3	27.3	88.9	88.9	6.5	6.5	11.1	12.1	8	9	86	90	821081	805808	<0.2	<0.2	2.7	2.7
						1.0	0.4	289	23.2		7.9		27.3		88.9		6.5		11.2		8		88				<0.2		2.7	
					Middle	3.2	0.3	293	23.2	23.2	8.0	8.0	27.4	27.4	89.1	89.2	6.5		12.0		8		90				<0.2		2.6	
						3.2	0.4	314	23.2		8.0		27.4		89.2		6.5		12.1		10		91				<0.2		2.7	
					Bottom	5.4	0.3	275	23.1	23.1	8.0	8.0	27.4	27.4	89.7	89.9	6.6	6.6	13.2		9		92				<0.2		2.8	
						5.4	0.3	277	23.1		8.0		27.4		90.1		6.6		13.2		9		94				<0.2		2.7	
IM7	Fine	Moderate	13:21	6.8	Surface	1.0	0.5	244	23.2	23.2	7.9	7.9	27.3	27.3	88.1	88.1	6.4	6.4	11.1	11.8	7	7	85	90	821362	806837	<0.2	<0.2	2.7	2.6
						1.0	0.5	255	23.2		7.9		27.3		88.1		6.4		11.1		7		87				<0.2		2.6	
					Middle	3.4	0.5	242	23.1	23.1	7.9	7.9	27.4	27.4	87.9	87.9	6.4		11.8		6		90				<0.2		2.5	
						3.4	0.5	250	23.1		7.9		27.4		87.9		6.4		11.8		7		91				<0.2		2.6	
					Bottom	5.8	0.4	252	23.1	23.1	7.9	7.9	27.4	27.4	87.8	87.8	6.4	6.4	12.4		8		93				<0.2		2.7	
						5.8	0.4	275	23.1		7.9		27.4		87.8		6.4		12.5		8		95				<0.2		2.5	
IM8	Fine	Moderate	14:02	7.8	Surface	1.0	0.2	260	23.0	23.0	8.0	8.0	27.5	27.5	89.2	89.2	6.5	6.5	6.5	7.0	6	5	87	90	821823	808162	<0.2	<0.2	3.6	3.6
						1.0	0.2	261	22.9		8.0		27.5		89.2		6.5		6.5		5		88				<0.2		3.4	
					Middle	3.9	0.2	264	22.9	22.9	8.0	8.0	27.7	27.7	89.1	89.1	6.5		6.9		5		89				<0.2		3.5	
						3.9	0.2	271	22.9		8.0		27.7		89.1		6.5		7.0		5		91				<0.2		3.6	
					Bottom	6.8	0.2	291	22.8	22.8	8.0	8.0	27.9	27.9	90.3	90.8	6.6	6.7	7.6		5		92				<0.2		3.6	
						6.8	0.2	296	22.8		8.0		27.9		91.3		6.7		7.4		5		92				<0.2		3.6	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 December 18 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	14:09	7.5	Surface	1.0	0.2	295	22.8	22.8	8.0	8.0	27.9	27.9	89.0	89.1	6.5	6.6	6.6	8.0	5	6	88	90	822090	808821	<0.2	<0.2	3.6	3.6
						1.0	0.2	305	22.8		8.0		27.9		89.1		6.5		6.9		6		87				<0.2		3.6	
					Middle	3.8	0.2	294	22.8	22.8	8.0	8.0	28.1	28.1	89.6	89.7	6.6		8.3		6		89				<0.2		3.6	
						3.8	0.3	300	22.8		8.0		28.1		89.7		6.6		8.6		6		90				<0.2		3.6	
					Bottom	6.5	0.2	294	22.8	22.8	8.0	8.0	28.2	28.2	91.3	91.4	6.7	6.7	8.9		7		93				<0.2		3.5	
						6.5	0.2	303	22.8		8.0		28.1		91.5		6.7		8.6		6		92				<0.2		3.7	
IM10	Fine	Moderate	14:19	7.4	Surface	1.0	0.5	302	22.9	22.9	8.0	8.0	28.6	28.6	91.2	91.2	6.6	6.6	8.0	11.6	6	6	89	90	822379	809797	<0.2	<0.2	3.6	3.7
						1.0	0.5	309	22.9		8.0		28.6		91.1		6.6		8.3		5		89				<0.2		3.8	
					Middle	3.7	0.4	304	22.7	22.7	8.1	8.1	29.0	29.0	90.9	91.0	6.6		12.6		5		90				<0.2		3.5	
						3.7	0.5	333	22.7		8.1		29.0		91.0		6.6		12.8		6		91				<0.2		3.6	
					Bottom	6.4	0.3	313	22.7	22.7	8.1	8.1	29.0	29.0	91.7	91.8	6.7	6.7	13.9		6		92				<0.2		3.7	
						6.4	0.3	340	22.7		8.1		29.0		91.9		6.7		13.9		6		89				<0.2		3.7	
IM11	Fine	Moderate	14:32	7.8	Surface	1.0	0.6	290	22.9	22.9	8.1	8.1	29.3	29.3	93.1	93.1	6.8	6.8	6.9	11.7	6	6	89	90	822058	811448	<0.2	<0.2	3.5	3.6
						1.0	0.6	307	22.9		8.1		29.3		93.0		6.8		7.1		5		88				<0.2		3.7	
					Middle	3.9	0.5	301	22.5	22.5	8.1	8.1	29.6	29.6	92.4	92.5	6.8		12.5		6		90				<0.2		3.6	
						3.9	0.6	329	22.5		8.1		29.6		92.5		6.8		12.7		5		91				<0.2		3.8	
					Bottom	6.8	0.4	306	22.5	22.5	8.1	8.1	29.6	29.6	93.0	93.0	6.8	6.8	15.5		6		92				<0.2		3.5	
						6.8	0.4	317	22.5		8.1		29.6		93.0		6.8		15.5		5		92				<0.2		3.7	
IM12	Fine	Moderate	14:42	8.4	Surface	1.0	0.5	279	22.5	22.5	8.1	8.1	30.0	30.0	92.7	92.7	6.7	6.7	9.3	11.2	5	6	89	91	821450	812039	<0.2	<0.2	3.5	3.7
						1.0	0.5	294	22.5		8.1		30.1		92.7		6.7		9.4		6		89				<0.2		3.8	
					Middle	4.2	0.5	285	22.5	22.5	8.1	8.1	30.2	30.2	92.8	92.8	-		12.0		6		91				<0.2		3.6	
						4.2	0.5	290	22.5		8.1		30.2		92.8		-		12.1		6		92				<0.2		3.7	
					Bottom	7.4	0.3	276	22.5	22.5	8.1	8.1	30.3	30.2	93.5	93.6	6.8	6.8	12.4		7		94				<0.2		3.8	
						7.4	0.3	286	22.5		8.1		30.2		93.6		6.8		12.0		7		93				<0.2		3.6	
SR1A	Fine	Moderate	15:00	4.5	Surface	1.0	-	-	22.9	22.9	8.1	8.1	30.1	30.1	95.2	95.3	6.9	6.9	8.3	8.4	7	7	-	-	820064	812580	-	-	-	-
						1.0	-	-	22.9		8.1		30.1		95.3		6.9		8.4		7		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	22.9	22.9	8.1	8.1	30.1	30.1	96.3	96.4	7.0	7.0	8.4		7		-				-		-	
						3.5	-	-	22.9		8.1		30.1		96.4		7.0		8.6		8		-				-		-	
SR2	Fine	Moderate	15:11	4.9	Surface	1.0	0.8	285	22.7	22.7	8.1	8.1	30.0	30.0	91.7	91.7	6.7	6.7	10.1	11.1	8	8	89	91	821456	814159	<0.2	<0.2	3.6	3.6
						1.0	0.8	288	22.6		8.1		30.0		91.7		6.7		10.4		7		89				<0.2		3.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.5	277	22.6	22.6	8.1	8.1	30.1	30.1	93.0	93.1	6.8	6.8	12.3		8		92				<0.2		3.6	
						3.9	0.6	295	22.6		8.1		30.1		93.2		6.8		11.8		8		93				<0.2		3.6	
SR3	Fine	Moderate	13:57	8.2	Surface	1.0	0.3	225	23.0	23.0	8.0	8.0	26.9	27.0	87.1	87.1	6.4	6.4	7.1	8.6	6	7	-	-	822147	807574	-	-	-	-
						1.0	0.3	225	22.9		8.0		27.0		87.1		6.4		7.3		6		-				-		-	
					Middle	4.1	0.2	258	22.7	22.7	8.0	8.0	28.0	28.0	87.2	87.2	-		9.1		8		-				-		-	
						4.1	0.2	266	22.7		8.0		28.0		87.2		-		9.2		7		-				-		-	
					Bottom	7.2	0.2	281	22.7	22.7	8.0	8.0	28.1	28.1	88.0	88.1	6.5	6.5	9.4		8		-				-		-	
						7.2	0.2	285	22.7		8.0		28.1		88.1		6.5		9.3		8		-				-		-	
SR4A	Fine	Moderate	14:45	9.4	Surface	1.0	0.2	228	23.3	23.3	8.0	8.0	29.9	29.9	94.3	94.3	6.8	6.8	12.5	12.7	15	13	-	-	817193	807795	-	-	-	-
						1.0	0.2	242	23.3		8.0		29.9		94.2		6.8		12.5		14		-				-		-	
					Middle	4.7	0.3	210	23.3	23.3	8.0	8.0	29.9	29.9	94.4	94.4	-		12.8		13		-				-		-	
						4.7	0.3	228	23.3		8.0		29.9		94.4		-		12.8		11		-				-		-	
					Bottom	8.4	0.2	209	23.3	23.3	8.0	8.0	29.9	29.9	94.8	94.9	6.8	6.8	12.8		12		-				-		-	
						8.4	0.2	216	23.3		8.0		29.9		95.0		6.8		13.0		12		-				-		-	
SR5A	Fine	Moderate	15:01	5.6	Surface	1.0	0.0	250	23.3	23.3	8.1	8.1	30.0	30.0	95.6	95.6	6.9	6.9	12.1	12.2	10	12	-	-	816598	810687	-	-	-	-
						1.0	0.0	254	23.3		8.1		30.0		95.6		6.9		12.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	291	23.3	23.3	8.1	8.1	30.0	30.0	95.7	95.8	6.9	6.9	12.3		13		-				-		-	
						4.6	0.1	298	23.3		8.1		30.0		95.8		6.9		12.3		14		-				-		-	
SR6	Fine	Moderate	15:25	5.3	Surface	1.0	0.1	143	23.2	23.2	8.1	8.1	29.9	29.9	96.0	96.1	6.9	6.9	11.8	12.3	12	14	-	-	817878	814683	-	-	-	-
						1.0	0.1	156	23.2		8.1		29.9		96.1		6.9		12.0		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	142	23.1	23.1	8.1	8.1	29.9	29.9	96.8	96.9	7.0	7.0	12.6		14		-				-		-	
						4.3	0.1	145	23.1		8.1		29.9		96.9		7.0		12.8		15		-				-		-	
SR7	Fine	Moderate	16:21	16.5	Surface	1.0	0.6	320	22.8	22.8	8.1	8.1	31.6	31.6	86.5	86.5	6.2	6.2	7.4	8.1	6	7	-	-	823613	823742	-	-	-	-
						1.0	0.6	350	22.8		8.1		31.6		86.5		6.2		7.4		6		-				-		-	
					Middle	8.3	0.2	255	22.8	22.8	8.1	8.1	31.7	31.7	86.5	86.6	6.2		8.4		7		-				-		-	
						8.3	0.2	276	22.8		8.1		31.7		86.6		6.2		8.4		6		-				-		-	
					Bottom	15.5	0.4	213	22.8	22.8	8.1	8.1	31.7	31.7	86.8	86.8	6.2	6.2	8.5		8		-				-		-	
						15.5	0.4	217	22.8		8.1		31.7		86.8		6.2		8.5		8		-				-		-	
SR8	Fine	Moderate	14:50	5.0	Surface	1.0	-	-	23.2	23.2	8.1	8.1	29.5	29.5	95.3	95.3	6.9	6.9	10.6	11.0	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	23.1		8.1		29.5		95.2		6.9		10.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	22.6	22.7	8.1	8.1	29.8	29.8	94.9	95.0	6.9	6.9	11.2		8		-				-		-	
						4.0	-	-	22.7		8.1		29.7		95.0		6.9		11.3		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 04 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Sunny	Moderate	10:21	8.7	Surface	1.0	0.0	175	23.2	23.2	8.1	8.1	28.8	28.7	96.4	96.3	7.0	7.0	8.6	12.5	2	4	84	90	815606	804261	<0.2	<0.2	1.9	2.0
						1.0	0.0	184	23.2		8.1		28.7		96.2		7.0		8.6		2		87				<0.2		1.9	
					Middle	4.4	0.1	185	23.1	23.1	8.1	8.1	30.7	30.7	95.7	95.7	6.9		13.4		4		89				<0.2		2.2	
						4.4	0.2	197	23.1		8.1		30.7		95.7		6.9		13.4		3		90				<0.2		1.9	
					Bottom	7.7	0.2	220	23.1	23.1	8.1	8.1	30.8	30.8	96.2	96.3	6.9	6.9	15.7		5		94				<0.2		1.9	
						7.7	0.2	237	23.1		8.1		30.8		96.4		6.9		15.7		5		94				<0.2		1.9	
C2	Fine	Moderate	09:11	11.3	Surface	1.0	0.2	121	23.5	23.5	7.9	7.9	26.4	26.4	88.2	88.2	6.4	6.4	5.7	10.4	7	6	84	87	825688	806941	<0.2	<0.2	2.4	2.5
						1.0	0.2	124	23.5		7.9		26.4		88.2		6.4		5.7		6		83				<0.2		2.5	
					Middle	5.7	0.1	137	23.5	23.5	7.9	7.9	28.2	28.2	88.2	88.2	6.4		12.0		6		87				<0.2		2.5	
						5.7	0.2	143	23.5		7.9		28.2		88.2		6.4		12.1		6		87				<0.2		2.5	
					Bottom	10.3	0.1	149	23.4	23.4	7.9	7.9	29.6	29.6	88.3	88.4	6.3	6.3	13.5		5		92				<0.2		2.5	
						10.3	0.1	152	23.4		7.9		29.6		88.4		6.3		13.6		6		91				<0.2		2.6	
C3	Fine	Moderate	10:56	11.3	Surface	1.0	0.4	74	23.5	23.5	8.0	8.0	29.6	29.6	92.3	92.3	6.6	6.5	2.6	2.8	3	3	84	88	822121	817810	<0.2	<0.2	2.0	1.9
						1.0	0.4	78	23.5		8.0		29.6		92.3		6.5		2.6		2		85				<0.2		1.8	
					Middle	5.7	0.4	68	23.4	23.4	7.9	7.9	30.3	30.3	89.6	89.6	6.4		2.8		2		88				<0.2		1.9	
						5.7	0.4	69	23.4		7.9		30.3		89.6		6.4		2.7		3		88				<0.2		1.9	
					Bottom	10.3	0.2	91	23.4	23.4	7.9	7.9	30.6	30.6	90.4	90.4	6.5	6.5	2.9		3		92				<0.2		1.8	
						10.3	0.2	93	23.4		7.9		30.6		90.4		6.5		2.9		3		92				<0.2		2.0	
IM1	Sunny	Moderate	09:57	5.2	Surface	1.0	0.1	176	23.3	23.3	8.2	8.2	29.5	29.6	96.2	96.2	6.9	6.9	10.2	11.7	4	4	86	90	817971	807114	<0.2	<0.2	2.0	1.8
						1.0	0.1	184	23.3		8.2		29.6		96.1		6.9		10.2		4		86				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	148	23.2	23.2	8.2	8.2	29.9	29.9	95.5	95.6	6.9	6.9	13.3		5		94				<0.2		1.5	
						4.2	0.2	153	23.2		8.2		29.9		95.6		6.9		13.3		4		94				<0.2		1.5	
IM2	Sunny	Moderate	09:49	7.3	Surface	1.0	0.1	40	23.2	23.2	8.0	8.0	29.3	29.3	95.2	95.2	6.9	6.9	10.6	11.5	3	3	86	90	818146	806172	<0.2	<0.2	1.4	1.4
						1.0	0.1	42	23.2		8.0		29.4		95.1		6.9		10.5		3		86				<0.2		1.4	
					Middle	3.7	0.0	214	23.2	23.2	8.0	8.0	29.5	29.5	95.0	95.0	6.9		11.6		3		90				<0.2		1.4	
						3.7	0.0	215	23.2		8.0		29.5		95.0		6.9		11.6		3		90				<0.2		1.5	
					Bottom	6.3	0.1	157	23.2	23.2	8.0	8.0	29.5	29.5	95.1	95.1	6.9	6.9	12.2		4		95				<0.2		1.4	
						6.3	0.1	169	23.2		8.0		29.5		95.1		6.9		12.3		4		95				<0.2		1.5	
IM3	Sunny	Moderate	09:40	8.6	Surface	1.0	0.1	149	23.2	23.2	7.9	7.9	29.1	29.1	95.7	95.7	6.9	6.9	6.6	10.0	7	6	86	90	818803	805590	<0.2	<0.2	1.4	1.5
						1.0	0.1	162	23.2		8.0		29.2		95.6		6.9		6.9		7		87				<0.2		1.4	
					Middle	4.3	0.1	109	23.2	23.2	8.0	8.0	29.5	29.5	95.5	95.6	6.9		9.6		6		90				<0.2		1.5	
						4.3	0.1	113	23.2		8.0		29.5		95.6		6.9		9.7		5		90				<0.2		1.7	
					Bottom	7.6	0.1	92	23.2	23.2	8.0	8.0	29.3	29.2	96.0	96.1	6.9	7.0	13.6		4		94				<0.2		1.6	
						7.6	0.1	97	23.2		8.0		29.2		96.2		7.0		13.6		4		94				<0.2		1.5	
IM4	Sunny	Moderate	09:35	7.8	Surface	1.0	0.1	197	23.2	23.2	8.1	8.1	29.2	29.3	96.0	96.0	6.9	6.9	6.7	7.8	8	8	85	89	819701	804612	<0.2	<0.2	1.9	1.6
						1.0	0.1	203	23.2		8.1		29.3		96.0		6.9		6.7		7		85				<0.2		1.4	
					Middle	3.9	0.1	131	23.2	23.2	8.1	8.1	29.5	29.5	96.1	96.2	6.9		8.1		8		89				<0.2		1.5	
						3.9	0.1	142	23.2		8.1		29.5		96.2		6.9		8.1		8		89				<0.2		1.6	
					Bottom	6.8	0.0	240	23.2	23.2	8.1	8.1	29.5	29.5	96.3	96.4	7.0	7.0	8.6		10		94				<0.2		1.5	
						6.8	0.0	242	23.2		8.1		29.5		96.4		7.0		8.7		9		94				<0.2		1.4	
IM5	Sunny	Moderate	09:23	7.3	Surface	1.0	0.1	222	23.5	23.5	8.1	8.1	26.2	26.2	92.3	92.4	6.8	6.9	5.8	7.5	3	3	84	89	820721	804843	0.2	0.2	2.7	2.7
						1.0	0.1	238	23.5		8.1		26.2		92.4		6.8		5.8		4		85				<0.2		2.8	
					Middle	3.7	0.0	131	23.2	23.2	8.1	8.1	28.8	28.8	95.8	95.9	6.9		6.3		3		89				<0.2		2.8	
						3.7	0.0	133	23.2		8.1		28.9		95.9		6.9		6.5		3		89				<0.2		2.7	
					Bottom	6.3	0.1	189	23.3	23.3	8.1	8.1	29.0	29.0	96.0	96.1	6.9	6.9	10.3		3		93				<0.2		2.6	
						6.3	0.1	202	23.3		8.1		29.0		96.1		6.9		10.3		2		93				<0.2		2.8	
IM6	Sunny	Moderate	09:17	8.2	Surface	1.0	0.1	218	23.3	23.3	8.1	8.1	26.6	26.6	94.1	94.1	6.9	6.9	7.2	10.3	4	3	84	89	821037	805812	<0.2	<0.2	2.7	2.7
						1.0	0.1	225	23.3		8.1		26.6		94.1		6.9		7.3		3		85				<0.2		2.6	
					Middle	4.1	0.0	152	23.2	23.2	8.1	8.1	28.9	28.9	93.6	93.6	6.8		13.5		4		89				<0.2		2.6	
						4.1	0.0	156	23.2		8.1		29.0		93.5		6.8		13.4		3		90				<0.2		2.6	
					Bottom	7.2	0.0	45	23.3	23.3	8.1	8.1	29.0	29.0	92.6	92.5	6.7	6.7	10.2		3		93				<0.2		2.7	
						7.2	0.0	45	23.3		8.1		29.0		92.4		6.7		10.6		3		92				<0.2		2.8	
IM7	Sunny	Moderate	09:11	8.5	Surface	1.0	0.1	243	23.3	23.3	8.2	8.2	26.3	26.3	94.6	94.7	7.0	7.0	5.6	10.4	3	4	84	89	821329	806849	<0.2	<0.2	2.8	2.9
						1.0	0.1	261	23.3		8.2		26.3		94.7		7.0		5.7		4		84				<0.2		2.8	
					Middle	4.3	0.1	106	23.2	23.2	8.2	8.2	29.0	29.0	94.9	94.9	6.9		10.2		4		89				<0.2		2.9	
						4.3	0.1	113	23.2		8.2		29.0		94.9		6.9		10.2		3		89				<0.2		2.8	
					Bottom	7.5	0.2	125	23.2	23.2	8.2	8.2	29.0	29.0	95.0	95.0	6.9	6.9	15.4		4		94				<0.2		2.8	
						7.5	0.2	133	23.2		8.2		29.1		95.0		6.9		15.4		4		94				<0.2		3.1	
IM8	Fine	Moderate	09:36	7.6	Surface	1.0	0.3	129	23.7	23.7	7.9	7.9	26.6	26.6	89.9	89.9	6.5	6.6	4.0	8.0	4	4	85	88	821827	808116	<0.2	0.2	3.2	3.2
						1.0	0.3	133	23.7		7.9		26.6		89.9		6.5		4.0		3		84				<0.2		3.2	
					Middle	3.8	0.3	112	23.5	23.5	8.0	8.0	27.9	27.9	92.2	92.3	6.7		8.4		3		88				0.2		3.1	
						3.8	0.3	118	23.5		8.0		27.9		92.3		6.7		8.4		4		89				<0.2		3.2	
					Bottom	6.6	0.2	89	23.4	23.4	8.0	8.0	29.6	29.6	93.2	93.2	6.7	6.7	11.5		5		92				<0.2		2.9	
						6.6	0.2	94	23.4		8.0		29.6		93.2		6.7		11.4		4		92				<0.2		3.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 December 18 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	09:42	7.3	Surface	1.0	0.2	99	23.6	23.6	7.9	7.9	26.6	26.7	90.2	90.2	6.6	6.6	4.0	8.2	2	3	84	88	822106	808806	<0.2	<0.2	3.2	3.1
						1.0	0.3	103	23.6		7.9		26.7		90.2		6.6		4.0		3		84				<0.2		3.0	
					Middle	3.7	0.3	82	23.5	23.5	7.9	7.9	27.6	27.6	91.2	91.3	6.6		6.0		4		88				<0.2		3.1	
						3.7	0.3	82	23.5		7.9		27.6		91.3		6.6		6.1		4		88				<0.2		3.2	
					Bottom	6.3	0.3	76	23.4	23.4	8.0	8.0	29.5	29.5	93.4	93.4	6.7	6.7	14.6		3		92				<0.2		2.9	
						6.3	0.4	78	23.4		8.0		29.5		93.4		6.7		14.6		4		92				<0.2		3.0	
IM10	Fine	Moderate	09:49	6.8	Surface	1.0	0.5	113	23.6	23.6	7.9	7.9	27.4	27.4	91.7	91.7	6.7	6.7	5.0	7.7	6	5	84	88	822362	809781	<0.2	<0.2	3.0	2.9
						1.0	0.5	115	23.6		7.9		27.4		91.7		6.7		5.0		6		83				<0.2		2.8	
					Middle	3.4	0.4	108	23.4	23.4	8.0	8.0	28.9	28.9	92.7	92.7	6.7		8.6		4		88				<0.2		3.0	
						3.4	0.4	110	23.4		8.0		28.9		92.7		6.7		8.6		5		89				<0.2		2.8	
					Bottom	5.8	0.2	105	23.4	23.4	8.0	8.0	29.4	29.4	93.4	93.4	6.7	6.7	9.6		4		92				<0.2		2.9	
						5.8	0.3	111	23.4		8.0		29.4		93.4		6.7		9.6		3		92				<0.2		2.9	
IM11	Fine	Moderate	09:59	8.3	Surface	1.0	0.5	110	23.6	23.6	7.9	7.9	27.5	27.5	91.7	91.7	6.6	6.6	4.8	5.6	5	4	85	88	822048	811453	<0.2	<0.2	2.6	2.5
						1.0	0.5	115	23.6		7.9		27.5		91.7		6.6		4.8		4		84				<0.2		2.5	
					Middle	4.2	0.3	101	23.5	23.5	8.0	8.0	28.5	28.5	91.7	91.7	6.6		5.5		4		88				<0.2		2.5	
						4.2	0.3	108	23.5		8.0		28.5		91.7		6.6		5.5		4		89				<0.2		2.4	
					Bottom	7.3	0.2	115	23.4	23.4	8.0	8.0	29.3	29.3	92.3	92.4	6.6	6.7	6.4		4		92				<0.2		2.3	
						7.3	0.2	123	23.4		8.0		29.3		92.4		6.7		6.5		4		92				<0.2		2.5	
IM12	Fine	Moderate	10:05	9.8	Surface	1.0	0.6	114	23.6	23.6	8.0	8.0	27.7	27.7	92.0	92.0	6.7	6.7	5.0	5.4	7	7	84	88	821460	812052	<0.2	<0.2	2.6	2.5
						1.0	0.6	118	23.6		8.0		27.7		92.0		6.7		5.0		8		84				<0.2		2.5	
					Middle	4.9	0.3	92	23.4	23.4	8.0	8.0	28.6	28.6	92.0	92.0	6.6		5.3		7		87				<0.2		2.3	
						4.9	0.3	94	23.4		8.0		28.7		92.0		6.6		5.3		7		88				<0.2		2.3	
					Bottom	8.8	0.2	96	23.4	23.4	8.0	8.0	29.5	29.5	92.2	92.2	6.6	6.6	5.9		6		91				<0.2		2.8	
						8.8	0.2	104	23.4		8.0		29.5		92.2		6.6		5.9		7		92				<0.2		2.7	
SR1A	Fine	Moderate	10:24	5.8	Surface	1.0	-	-	23.5	23.5	8.0	8.0	29.3	29.3	92.6	92.6	6.6	6.6	5.4	7.5	5	6	-	-	820072	812586	-	-	-	-
						1.0	-	-	23.5		8.0		29.3		92.6		6.6		5.4		6		-				-		-	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	-	-	23.5	23.5	8.0	8.0	29.7	29.7	93.4	93.4	6.7	6.7	9.4		7		-				-		-	
						4.8	-	-	23.5		8.0		29.7		93.4		6.7		9.6		7		-				-		-	
SR2	Fine	Moderate	10:37	5.0	Surface	1.0	0.4	124	23.5	23.5	8.0	8.0	29.7	29.7	92.1	92.1	6.6	6.6	4.0	5.1	4	5	84	86	821460	814151	<0.2	<0.2	1.8	1.9
						1.0	0.4	129	23.5		8.0		29.7		92.1		6.6		4.1		5		84				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	137	23.4	23.4	8.0	8.0	30.0	30.0	92.2	92.3	6.6	6.6	6.2		5		88				<0.2		2.0	
						4.0	0.3	149	23.4		8.0		30.0		92.3		6.6		6.2		6		88				<0.2		2.0	
SR3	Fine	Moderate	09:31	8.6	Surface	1.0	0.1	130	23.7	23.7	7.9	7.9	26.7	26.7	89.4	89.4	6.5	6.6	4.0	6.6	4	4	-	-	822130	807581	-	-	-	-
						1.0	0.2	134	23.7		7.9		26.7		89.4		6.5		4.0		4		-				-		-	
					Middle	4.3	0.2	145	23.5	23.5	7.9	7.9	27.8	27.8	90.9	90.9	6.6		6.1		3		-				-		-	
						4.3	0.2	148	23.5		7.9		27.8		90.9		6.6		6.2		4		-				-		-	
					Bottom	7.6	0.3	62	23.4	23.4	8.0	8.0	29.7	29.7	93.4	93.4	6.7	6.7	9.7		3		-				-		-	
						7.6	0.3	63	23.4		8.0		29.7		93.4		6.7		9.8		4		-				-		-	
SR4A	Sunny	Moderate	10:42	9.7	Surface	1.0	0.1	87	23.1	23.1	8.1	8.1	30.3	30.3	96.0	96.0	6.9	6.9	6.6	7.6	4	4	-	-	817170	807805	-	-	-	-
						1.0	0.1	94	23.1		8.1		30.4		96.0		6.9		6.8		5		-				-		-	
					Middle	4.9	0.1	99	23.1	23.1	8.1	8.1	30.7	30.7	96.1	96.1	6.9		7.8		4		-				-		-	
						4.9	0.1	106	23.1		8.1		30.7		96.1		6.9		7.8		4		-				-		-	
					Bottom	8.7	0.2	108	23.1	23.1	8.1	8.1	30.6	30.6	96.7	96.9	6.9	7.0	8.1		5		-				-		-	
						8.7	0.2	117	23.1		8.1		30.5		97.0		7.0		8.3		4		-				-		-	
SR5A	Sunny	Moderate	10:54	5.3	Surface	1.0	0.1	119	23.6	23.6	8.1	8.1	29.2	29.2	95.1	95.1	6.8	6.8	6.4	9.3	4	6	-	-	816586	810694	-	-	-	-
						1.0	0.1	129	23.6		8.1		29.2		95.1		6.8		6.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	105	23.5	23.5	8.1	8.1	29.3	29.3	95.4	95.5	6.9	6.9	12.2		8		-				-		-	
						4.3	0.2	112	23.5		8.1		29.3		95.6		6.9		12.2		9		-				-		-	
SR6	Sunny	Moderate	11:05	4.2	Surface	1.0	0.1	73	23.5	23.5	8.1	8.1	29.4	29.4	95.0	95.0	6.8	6.8	7.1	11.7	5	6	-	-	817886	814667	-	-	-	-
						1.0	0.1	75	23.5		8.1		29.4		95.0		6.8		7.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	119	23.4	23.5	8.1	8.1	29.4	29.4	94.7	94.7	6.8	6.8	16.1		5		-				-		-	
						3.2	0.2	125	23.5		8.1		29.4		94.7		6.8		16.3		6		-				-		-	
SR7	Fine	Moderate	11:22	14.5	Surface	1.0	0.4	82	23.6	23.6	8.0	8.0	30.5	30.5	91.7	91.7	6.5	6.5	1.9	2.2	4	3	-	-	823633	823765	-	-	-	-
						1.0	0.5	84	23.6		8.0		30.5		91.7		6.5		2.0		4		-				-		-	
					Middle	7.3	0.3	77	23.4	23.4	7.9	7.9	30.9	30.9	89.9	90.0	6.4		2.2		4		-				-		-	
						7.3	0.3	83	23.4		7.9		30.9		90.0		6.4		2.1		3		-				-		-	
					Bottom	13.5	0.1	86	23.3	23.3	7.9	7.9	31.1	31.1	89.2	89.2	6.4	6.4	2.6		2		-				-		-	
						13.5	0.1	86	23.3		7.9		31.1		89.2		6.4		2.6		2		-				-		-	
SR8	Fine	Moderate	10:15	4.6	Surface	1.0	-	-	23.6	23.6	8.0	8.0	28.4	28.4	93.7	93.7	6.8	6.8	7.1	9.6	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	23.6		8.0		28.4		93.7		6.8		7.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	23.4	23.4	8.0	8.0	29.3	29.3	93.9	93.9	6.8	6.8	12.1		7		-				-		-	
						3.6	-	-	23.4		8.0		29.3		93.9		6.8		12.1		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 04 December 18 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	04:32	8.9	Surface	1.0	0.2	40	23.1	23.1	7.9	7.9	30.1	30.2	96.3	96.3	6.9	6.9	15.1	17.5	5	6	85	89	815636	804263	<0.2	<0.2	2.6	2.7
						1.0	0.2	41	23.1		7.9		30.3		96.2		6.9		15.1		5		85				<0.2		2.7	
					Middle	4.5	0.1	11	23.1	23.1	7.9	7.9	30.9	30.9	96.4	96.5	6.9		17.4		6		89				<0.2		2.6	
						4.5	0.1	12	23.1		7.9		30.9		96.5		6.9		17.5		6		90				<0.2		2.6	
					Bottom	7.9	0.1	36	23.1	23.1	7.9	7.9	30.8	30.8	96.7	96.8	6.9	6.9	19.9		6		92				<0.2		2.8	
						7.9	0.1	37	23.1		7.9		30.8		96.8		6.9		19.9		6		92				<0.2		2.7	
C2	Fine	Moderate	05:48	11.3	Surface	1.0	0.2	22	23.5	23.5	7.9	7.9	27.2	27.2	88.3	88.3	6.4	6.4	7.2	9.1	5	5	88	92	825670	806943	<0.2	<0.2	2.7	2.8
						1.0	0.2	21	23.5		7.9		27.2		88.3		6.4		7.2		6		87				<0.2		2.8	
					Middle	5.7	0.1	39	23.5	23.5	7.9	7.9	28.5	28.5	88.4	88.4	6.4		10.3		5		91				<0.2		2.8	
						5.7	0.1	43	23.5		7.9		28.5		88.4		6.4		10.4		4		92				<0.2		2.8	
					Bottom	10.3	0.0	19	23.5	23.5	7.9	7.9	29.2	29.2	89.6	89.6	6.4	6.5	9.8		4		96				<0.2		2.7	
						10.3	0.0	20	23.5		7.9		29.2		89.6		6.5		9.8		3		95				<0.2		2.7	
C3	Fine	Moderate	03:54	12.0	Surface	1.0	0.1	244	23.4	23.4	8.0	8.0	29.8	29.8	89.9	89.9	6.5	6.4	3.2	4.6	2	2	86	90	822095	817785	<0.2	<0.2	1.6	1.7
						1.0	0.1	259	23.4		8.0		29.8		89.9		6.5		3.2		3		86				<0.2		1.6	
					Middle	6.0	0.1	268	23.3	23.3	7.9	7.9	31.1	31.1	88.1	88.1	6.3		4.5		2		90				<0.2		1.6	
						6.0	0.1	284	23.3		7.9		31.1		88.1		6.3		4.6		<2		90				<0.2		1.7	
					Bottom	11.0	0.1	240	23.3	23.3	7.9	7.9	31.1	31.1	89.1	89.1	6.4	6.4	6.2		2		94				<0.2		2.1	
						11.0	0.1	258	23.3		7.9		31.1		89.1		6.4		6.1		3		94				<0.2		1.8	
IM1	Sunny	Moderate	04:45	4.5	Surface	1.0	0.1	323	23.2	23.2	7.9	7.9	29.2	29.3	96.2	96.2	7.0	7.0	17.3	18.0	6	6	85	89	817963	807127	<0.2	<0.2	1.5	1.6
						1.0	0.1	336	23.2		7.9		29.3		96.2		7.0		17.4		6		85				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	313	23.2	23.2	7.9	7.9	29.4	29.4	96.3	96.3	7.0	7.0	18.7		5		93				<0.2		1.7	
						3.5	0.1	316	23.2		7.9		29.4		96.3		7.0		18.7		6		93				<0.2		1.6	
IM2	Sunny	Moderate	04:58	7.6	Surface	1.0	0.0	-	23.2	23.2	8.0	8.0	29.6	29.6	95.4	95.5	6.9	6.9	16.9	18.8	6	6	85	89	818153	806157	<0.2	<0.2	1.7	1.7
						1.0	0.0	-	23.2		8.0		29.6		95.6		6.9		16.8		5		86				<0.2		1.7	
					Middle	3.8	0.1	22	23.2	23.2	8.0	8.0	29.6	29.6	95.6	95.6	6.9		18.9		6		89				<0.2		1.6	
						3.8	0.1	23	23.2		8.0		29.6		95.6		6.9		19.3		5		89				<0.2		1.7	
					Bottom	6.6	0.1	12	23.2	23.2	8.0	8.0	29.6	29.6	95.8	95.9	6.9	6.9	20.6		6		92				<0.2		1.7	
						6.6	0.1	14	23.2		8.0		29.6		95.9		6.9		20.5		5		92				<0.2		1.6	
IM3	Sunny	Moderate	05:06	8.2	Surface	1.0	0.1	18	23.2	23.2	7.9	7.9	29.5	29.6	95.5	95.5	6.9	6.9	10.6	14.6	5	6	86	90	818766	805614	<0.2	<0.2	1.6	1.8
						1.0	0.1	14	23.2		7.9		29.6		95.4		6.9		10.8		5		86				<0.2		1.8	
					Middle	4.1	0.1	2	23.2	23.2	7.9	7.9	29.6	29.6	95.3	95.3	6.9		13.9		6		90				<0.2		1.8	
						4.1	0.1	2	23.2		7.9		29.6		95.3		6.9		13.7		7		89				<0.2		1.8	
					Bottom	7.2	0.1	22	23.2	23.2	7.9	7.9	29.6	29.6	95.3	95.4	6.9	6.9	19.1		6		93				<0.2		1.8	
						7.2	0.1	25	23.2		7.9		29.6		95.4		6.9		19.2		7		93				<0.2		1.8	
IM4	Sunny	Moderate	05:15	8.5	Surface	1.0	0.1	58	23.2	23.2	7.9	7.9	29.6	29.6	95.2	95.2	6.9	6.9	11.0	15.3	7	7	86	89	819714	804622	<0.2	<0.2	1.8	1.8
						1.0	0.1	59	23.2		7.9		29.6		95.2		6.9		11.0		7		86				<0.2		1.7	
					Middle	4.3	0.1	39	23.2	23.2	7.9	7.9	29.6	29.6	95.1	95.1	6.9		14.7		7		89				<0.2		1.8	
						4.3	0.1	41	23.2		7.9		29.6		95.1		6.9		14.7		6		89				<0.2		1.8	
					Bottom	7.5	0.0	11	23.2	23.2	7.9	7.9	29.6	29.6	95.3	95.3	6.9	6.9	20.3		7		93				<0.2		1.8	
						7.5	0.0	12	23.2		7.9		29.6		95.3		6.9		20.3		6		93				<0.2		1.8	
IM5	Sunny	Moderate	05:23	7.3	Surface	1.0	0.3	20	23.2	23.2	7.9	7.9	29.6	29.6	95.3	95.3	6.9	6.9	13.2	17.5	6	6	89	87	820720	804874	<0.2	<0.2	2.9	2.4
						1.0	0.4	22	23.2		7.9		29.6		95.3		6.9		13.4		6		89				<0.2		2.9	
					Middle	3.7	0.3	30	23.2	23.2	7.9	7.9	29.6	29.6	95.2	95.2	6.9		17.9		6		84				<0.2		2.2	
						3.7	0.3	31	23.2		7.9		29.6		95.2		6.9		18.1		5		84				<0.2		2.2	
					Bottom	6.3	0.3	34	23.2	23.2	7.9	7.9	29.6	29.6	95.2	95.2	6.9	6.9	21.2		5		89				<0.2		2.0	
						6.3	0.3	37	23.2		7.9		29.6		95.2		6.9		21.2		6		89				<0.2		2.1	
IM6	Sunny	Moderate	05:33	7.5	Surface	1.0	0.2	34	23.2	23.2	7.9	7.9	29.6	29.6	95.2	95.2	6.9	6.9	12.5	16.5	4	4	84	89	821076	805841	<0.2	<0.2	3.0	3.0
						1.0	0.2	34	23.2		7.9		29.6		95.2		6.9		12.4		4		85				<0.2		2.9	
					Middle	3.8	0.1	62	23.2	23.2	7.9	7.9	29.6	29.6	95.1	95.1	6.9		16.2		4		90				<0.2		3.0	
						3.8	0.1	65	23.2		7.9		29.6		95.1		6.9		16.3		4		90				<0.2		3.2	
					Bottom	6.5	0.2	38	23.2	23.2	7.9	7.9	29.6	29.6	95.1	95.1	6.9	6.9	20.8		5		93				<0.2		3.0	
						6.5	0.2	41	23.2		7.9		29.6		95.1		6.9		20.7		5		93				<0.2		3.1	
IM7	Sunny	Moderate	05:43	8.3	Surface	1.0	0.1	31	23.2	23.2	7.8	7.8	29.6	29.6	95.3	95.3	6.9	6.9	11.3	15.5	4	5	86	89	821357	806832	<0.2	<0.2	3.1	3.3
						1.0	0.1	32	23.2		7.8		29.6		95.2		6.9		11.6		5		86				<0.2		3.1	
					Middle	4.2	0.2	51	23.2	23.2	7.9	7.9	29.6	29.6	95.1	95.1	6.9		15.1		6		89				<0.2		3.2	
						4.2	0.2	53	23.2		7.9		29.6		95.1		6.9		15.3		4		89				<0.2		3.2	
					Bottom	7.3	0.2	49	23.2	23.2	7.9	7.9	29.6	29.6	95.2	95.3	6.9	6.9	19.7		6		92				<0.2		3.3	
						7.3	0.2	49	23.2		7.9		29.6		95.3		6.9		19.9		5		92				<0.2		3.6	
IM8	Fine	Moderate	05:22	7.8	Surface	1.0	0.1	307	23.5	23.5	7.9	7.9	26.2	26.2	89.4	89.4	6.5	6.6	3.9	6.0	4	5	86	91	821852	808124	<0.2	<0.2	3.4	3.4
						1.0	0.2	315	23.5		7.9		26.2		89.4		6.5		3.9		5		87				<0.2		3.4	
					Middle	3.9	0.3	285	23.5	23.5	7.9	7.9	27.7	27.7	91.7	91.7	6.7		6.2		5		92				<0.2		3.5	
						3.9	0.3	287	23.5		7.9		27.7		91.7		6.7		6.2		4		91				<0.2		3.5	
					Bottom	6.8	0.2	271	23.5	23.5	8.0	8.0	29.6	29.6	93.3	93.3	6.7	6.7	7.9		6		95				<0.2		3.5	
						6.8	0.2	274	23.5		8.0		29.6		93.3		6.7		7.9		6		96				<0.2		3.1	

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 04 December 18 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	05:15	7.6	Surface	1.0	0.2	296	23.5	23.5	7.9	7.9	26.6	26.6	90.4	90.4	6.6	6.6	4.2	7.9	5	6	88	91	822083	808807	<0.2	<0.2	3.0	3.2
						1.0	0.2	304	23.5		7.9		26.6		90.4		6.6		4.2		5		87				<0.2		3.4	
					Middle	3.8	0.3	289	23.5	23.5	7.9	7.9	27.5	27.5	91.3	91.3	6.6		6.6		6		91				<0.2		3.4	
						3.8	0.3	289	23.5		7.9		27.5		91.3		6.6		6.6		6		90				<0.2		3.3	
					Bottom	6.6	0.3	296	23.4	23.4	8.0	8.0	29.5	29.5	93.2	93.2	6.7	6.7	12.9		6		95				<0.2		3.1	
						6.6	0.3	296	23.4		8.0		29.5		93.2		6.7		12.9		5		95				<0.2		3.1	
IM10	Fine	Moderate	05:07	8.1	Surface	1.0	0.3	289	23.5	23.5	7.9	7.9	26.6	26.6	90.9	90.9	6.6	6.6	4.4	5.8	5	5	87	91	822377	809801	<0.2	<0.2	3.0	3.1
						1.0	0.3	291	23.5		7.9		26.6		90.9		6.6		4.5		6		88				<0.2		3.0	
					Middle	4.1	0.2	272	23.5	23.5	8.0	8.0	28.0	28.0	91.3	91.4	6.6		6.6		5		91				<0.2		3.3	
						4.1	0.2	276	23.5		8.0		28.0		91.4		6.6		6.7		5		91				<0.2		3.0	
					Bottom	7.1	0.1	323	23.5	23.5	8.0	8.0	29.3	29.3	92.2	92.3	6.6	6.6	6.1		5		95				<0.2		3.2	
						7.1	0.1	333	23.5		8.0		29.3		92.3		6.6		6.2		5		95				<0.2		3.3	
IM11	Fine	Moderate	04:55	7.8	Surface	1.0	0.1	339	23.4	23.4	8.0	8.0	29.5	29.5	92.1	92.1	6.6	6.6	7.3	7.4	8	9	87	91	822078	811440	<0.2	<0.2	2.5	2.5
						1.0	0.1	312	23.4		8.0		29.5		92.1		6.6		7.3		8		88				<0.2		2.3	
					Middle	3.9	0.1	356	23.4	23.4	8.0	8.0	29.5	29.5	92.1	92.1	6.6		7.0		9		91				<0.2		2.5	
						3.9	0.1	328	23.4		8.0		29.5		92.1		6.6		7.0		10		91				<0.2		2.8	
					Bottom	6.8	0.1	26	23.4	23.4	8.0	8.0	29.5	29.5	92.7	92.8	6.7	6.7	7.9		10		95				<0.2		2.4	
						6.8	0.1	27	23.4		8.0		29.5		92.8		6.7		7.9		9		94				<0.2		2.7	
IM12	Fine	Moderate	04:49	8.9	Surface	1.0	0.2	253	23.4	23.4	8.0	8.0	29.5	29.5	91.9	91.9	6.6	6.6	5.5	6.8	6	7	87	91	821455	812033	<0.2	<0.2	2.4	2.4
						1.0	0.2	277	23.4		8.0		29.5		91.9		6.6		5.6		7		87				<0.2		2.5	
					Middle	4.5	0.2	249	23.4	23.4	8.0	8.0	29.6	29.6	91.9	91.9	6.6		7.2		7		92				<0.2		2.2	
						4.5	0.2	257	23.4		8.0		29.6		91.9		6.6		7.3		7		91				<0.2		2.3	
					Bottom	7.9	0.1	227	23.4	23.4	8.0	8.0	29.6	29.6	92.8	92.9	6.7	6.7	7.7		6		96				<0.2		2.5	
						7.9	0.2	237	23.4		8.0		29.6		92.9		6.7		7.7		6		95				<0.2		2.2	
SR1A	Fine	Moderate	04:30	5.6	Surface	1.0	-	-	23.5	23.5	8.0	8.0	29.4	29.4	92.1	92.1	6.6	6.6	3.3	3.9	4	4	-	-	820069	812586	-	-	-	-
						1.0	-	-	23.5		8.0		29.4		92.1		6.6		3.3		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	23.5	23.5	8.0	8.0	29.7	29.7	92.5	92.5	6.6	6.6	4.5		4		-				-		-	
						4.6	-	-	23.5		8.0		29.7		92.5		6.6		4.4		4		-				-		-	
SR2	Fine	Moderate	04:17	4.8	Surface	1.0	0.3	338	23.4	23.4	8.0	8.0	29.5	29.5	92.3	92.3	6.6	6.6	4.1	5.0	7	7	87	89	821457	814156	<0.2	<0.2	2.4	2.2
						1.0	0.3	348	23.4		8.0		29.5		92.3		6.6		4.1		6		87				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	335	23.4	23.4	8.0	8.0	29.7	29.7	92.7	92.7	6.7	6.7	5.8		7		91				<0.2		2.0	
						3.8	0.3	352	23.4		8.0		29.7		92.7		6.7		5.8		6		91				<0.2		2.1	
SR3	Fine	Moderate	05:27	8.2	Surface	1.0	0.2	15	23.6	23.6	7.9	7.9	26.5	26.5	89.1	89.1	6.5	6.6	4.6	6.1	6	6	-	-	822166	807591	-	-	-	-
						1.0	0.2	16	23.6		7.9		26.5		89.1		6.5		4.6		7		-				-		-	
					Middle	4.1	0.3	45	23.5	23.5	7.9	7.9	28.0	28.0	90.9	90.9	6.6		6.4		6		-				-		-	
						4.1	0.3	45	23.5		7.9		28.0		90.9		6.6		6.4		6		-				-		-	
					Bottom	7.2	0.3	57	23.4	23.4	8.0	8.0	29.6	29.6	92.9	92.9	6.7	6.7	7.3		6		-				-		-	
						7.2	0.3	58	23.4		8.0		29.6		92.9		6.7		7.3		6		-				-		-	
SR4A	Sunny	Moderate	04:20	9.6	Surface	1.0	0.1	261	23.3	23.3	7.9	7.9	29.5	29.5	95.5	95.5	6.9	6.9	12.7	14.7	8	9	-	-	817212	807814	-	-	-	-
						1.0	0.1	244	23.3		7.9		29.5		95.5		6.9		12.7		7		-				-		-	
					Middle	4.8	0.1	204	23.3	23.3	7.9	7.9	29.5	29.5	95.3	95.3	6.9		15.2		10		-				-		-	
						4.8	0.1	209	23.3		7.9		29.5		95.3		6.9		15.2		9		-				-		-	
					Bottom	8.6	0.1	203	23.3	23.3	7.9	7.9	29.5	29.5	95.4	95.4	6.9	6.9	16.1		10		-				-		-	
						8.6	0.1	211	23.3		7.9		29.5		95.4		6.9		16.1		11		-				-		-	
SR5A	Sunny	Moderate	04:12	5.3	Surface	1.0	0.3	299	23.3	23.3	7.9	7.9	29.5	29.5	95.6	95.7	6.9	6.9	13.5	13.9	6	7	-	-	816609	810686	-	-	-	-
						1.0	0.3	305	23.3		7.9		29.5		95.7		6.9		13.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	309	23.3	23.3	7.8	7.8	29.5	29.5	95.8	95.9	6.9	6.9	14.2		8		-				-		-	
						4.3	0.2	310	23.3		7.8		29.5		96.0		6.9		14.2		7		-				-		-	
SR6	Sunny	Moderate	03:21	4.6	Surface	1.0	0.1	246	23.4	23.4	7.8	7.8	28.9	28.9	93.3	93.4	6.7	6.7	18.1	18.0	8	9	-	-	817894	814643	-	-	-	-
						1.0	0.1	246	23.4		7.8		28.9		93.4		6.7		18.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	250	23.4	23.4	7.8	7.8	28.9	28.9	93.7	93.9	6.8	6.8	17.9		10		-				-		-	
						3.6	0.1	262	23.4		7.8		28.9		94.0		6.8		18.0		9		-				-		-	
SR7	Fine	Moderate	03:25	14.8	Surface	1.0	0.1	293	23.3	23.3	8.0	8.0	30.8	30.8	88.4	88.4	6.3	6.3	3.1	4.4	7	7	-	-	823655	823756	-	-	-	-
						1.0	0.1	293	23.3		8.0		30.8		88.4		6.3		3.2		6		-				-		-	
					Middle	7.4	0.1	287	23.3	23.3	8.0	8.0	31.1	31.1	87.7	87.7	6.3		4.4		7		-				-		-	
						7.4	0.1	267	23.3		8.0		31.1		87.7		6.3		4.4		7		-				-		-	
					Bottom	13.8	0.2	263	23.3	23.3	8.0	8.0	31.5	31.5	87.3	87.3	6.2	6.2	5.6		7		-				-		-	
						13.8	0.2	285	23.3		8.0		31.5		87.3		6.2		5.6		6		-				-		-	
SR8	Fine	Moderate	04:39	4.4	Surface	1.0	-	-	23.4	23.4	8.0	8.0	29.3	29.3	92.4	92.4	6.6	6.6	5.7	5.8	9	10	-	-	820506	811670	-	-	-	-
						1.0	-	-	23.4		8.0		29.3		92.4		6.6		5.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	23.4	23.4	8.0	8.0	29.6	29.6	93.0	93.1	6.7	6.7	5.9		10		-				-		-	
						3.4	-	-	23.4		8.0		29.6		93.1		6.7		5.8		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**
Note: Due to safety concern, the monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 December 18 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	Average	DA	Value	DA
C1	Cloudy	Moderate	11:48	8.8	Surface	1.0	0.2	221	23.5	23.5	7.9	7.9	31.3	31.3	100.2	100.3	7.1	7.1	12.1	14.6	6	8	89	93	815628	804238	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.2	233	23.5		7.9		31.3		100.3		7.1		12.2		7		90				<0.2			1.0	
					Middle	4.4	0.1	231	23.3	23.3	7.9	7.9	32.7	32.7	98.7	98.7	7.0		15.5		7		93				<0.2	<0.2		1.1	
						4.4	0.1	241	23.3		7.9		32.7		98.7		7.0		15.5		7		93				<0.2			1.0	
					Bottom	7.8	0.2	226	23.3	23.3	7.9	7.9	32.9	32.9	98.5	98.5	7.0	7.0	16.1		9		95				<0.2	<0.2		1.1	
						7.8	0.2	244	23.3		7.9		32.9		98.4		7.0		16.1		9		96				<0.2			1.0	
C2	Cloudy	Moderate	10:51	11.6	Surface	1.0	0.2	1	23.7	23.7	8.0	8.0	27.3	27.3	90.0	90.0	6.5	6.5	9.0	13.0	6	6	84	87	825678	806959	<0.2	<0.2	<0.2	1.9	1.9
						1.0	0.2	1	23.7		8.0		27.3		90.0		6.5		8.9		7		83				<0.2			1.9	
					Middle	5.8	0.2	26	23.5	23.5	8.0	8.0	27.5	27.5	90.0	90.1	6.5		10.3		6		88				<0.2	<0.2		1.9	
						5.8	0.2	26	23.5		8.0		27.5		90.1		6.5		10.3		6		87				<0.2			1.9	
					Bottom	10.6	0.1	25	23.5	23.5	8.1	8.1	28.2	28.2	91.1	91.1	6.6	6.6	20.8		6		91				<0.2	<0.2		1.9	
						10.6	0.1	27	23.5		8.1		28.2		91.1		6.6		18.8		6		91				<0.2			2.0	
C3	Cloudy	Moderate	12:35	11.5	Surface	1.0	0.5	90	23.8	23.8	8.1	8.1	29.5	29.5	95.0	95.0	6.8	6.7	6.2	6.8	3	3	88	91	822089	817823	<0.2	<0.2	<0.2	1.5	1.6
						1.0	0.5	90	23.8		8.1		29.5		94.9		6.8		6.2		2		87				<0.2			1.6	
					Middle	5.8	0.3	109	23.6	23.6	8.1	8.1	30.0	30.0	91.1	91.1	6.5		6.8		3		91				<0.2	<0.2		1.5	
						5.8	0.3	117	23.6		8.1		30.0		91.0		6.5		6.8		3		92				<0.2			1.6	
					Bottom	10.5	0.2	111	23.3	23.3	8.1	8.1	31.0	31.0	89.4	89.5	6.4	6.4	7.5		4		95				<0.2	<0.2		1.6	
						10.5	0.2	112	23.3		8.1		31.0		89.6		6.4		7.5		4		95				<0.2			1.5	
IM1	Cloudy	Moderate	11:30	5.4	Surface	1.0	0.2	207	23.4	23.4	7.9	7.9	31.3	31.3	97.3	97.3	6.9	6.9	11.4	12.8	6	7	88	90	817962	807122	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.2	216	23.4		7.9		31.3		97.3		6.9		11.4		6		88				<0.2			0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.4	0.2	227	23.3	23.3	7.9	7.9	31.6	31.6	96.8	96.8	6.9	6.9	14.0		7		92				<0.2	<0.2		1.1	
						4.4	0.2	243	23.3		7.9		31.6		96.8		6.9		14.2		7		93				<0.2			1.0	
IM2	Cloudy	Moderate	11:24	7.7	Surface	1.0	0.1	249	23.4	23.4	7.9	7.9	31.4	31.4	98.6	98.6	7.0	7.0	11.1	13.9	7	8	89	92	818160	806185	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.1	249	23.4		7.9		31.4		98.6		7.0		11.2		7		89				<0.2			1.0	
					Middle	3.9	0.0	35	23.4	23.4	7.9	7.9	31.6	31.6	97.9	98.0	7.0		12.6		7		92				<0.2	<0.2		1.1	
						3.9	0.0	38	23.4		7.9		31.6		98.0		7.0		12.6		7		93				<0.2			1.0	
					Bottom	6.7	0.1	133	23.3	23.3	7.9	7.9	32.1	32.1	97.7	97.8	6.9	6.9	17.7		9		95				<0.2	<0.2		1.0	
						6.7	0.1	144	23.3		7.9		32.1		97.8		6.9		17.9		8		95				<0.2			1.0	
IM3	Cloudy	Moderate	11:18	7.8	Surface	1.0	0.1	64	23.4	23.4	7.9	7.9	31.6	31.6	99.1	99.0	7.0	7.0	11.5	13.7	7	7	88	92	818788	805616	<0.2	<0.2	<0.2	1.6	1.5
						1.0	0.1	65	23.4		7.9		31.6		98.9		7.0		11.6		7		89				<0.2			1.5	
					Middle	3.9	0.0	161	23.3	23.3	7.9	7.9	32.0	32.0	97.5	97.5	6.9		13.9		6		92				<0.2	<0.2		1.5	
						3.9	0.0	175	23.3		7.9		32.0		97.5		6.9		13.9		6		92				<0.2			1.5	
					Bottom	6.8	0.1	154	23.3	23.3	7.9	7.9	32.2	32.2	97.3	97.4	6.9	6.9	15.5		7		94				<0.2	<0.2		1.4	
						6.8	0.1	160	23.3		7.9		32.2		97.5		6.9		15.6		7		94				<0.2			1.4	
IM4	Cloudy	Moderate	11:09	8.0	Surface	1.0	0.1	47	23.4	23.4	7.9	7.9	30.9	30.9	98.9	98.9	7.1	7.0	12.7	15.5	5	6	89	91	819709	804617	<0.2	<0.2	<0.2	1.4	1.3
						1.0	0.2	48	23.4		7.9		30.9		98.8		7.0		13.0		5		88				<0.2			1.5	
					Middle	4.0	0.1	139	23.3	23.3	7.9	7.9	31.7	31.7	97.3	97.3	6.9		16.4		6		91				<0.2	<0.2		1.4	
						4.0	0.1	143	23.3		7.9		31.7		97.3		6.9		16.6		6		91				<0.2			1.1	
					Bottom	7.0	0.1	238	23.3	23.3	7.9	7.9	31.9	31.9	97.4	97.4	6.9	6.9	17.0		8		94				<0.2	<0.2		1.2	
						7.0	0.1	261	23.3		7.9		31.9		97.3		6.9		17.2		8		94				<0.2			1.2	
IM5	Cloudy	Moderate	11:00	7.4	Surface	1.0	0.2	26	23.4	23.4	7.9	7.9	31.6	31.6	98.3	98.3	7.0	7.0	15.4	17.9	7	8	91	93	820755	804873	<0.2	<0.2	<0.2	1.5	1.4
						1.0	0.2	26	23.4		7.9		31.6		98.2		7.0		15.6		8		91				<0.2			1.4	
					Middle	3.7	0.1	30	23.3	23.3	7.9	7.9	31.7	31.7	97.4	97.4	6.9		18.6		7		93				<0.2	<0.2		1.4	
						3.7	0.1	32	23.3		7.9		31.7		97.4		6.9		18.6		8		93				<0.2			1.4	
					Bottom	6.4	0.1	39	23.3	23.3	7.9	7.9	31.7	31.7	97.6	97.6	6.9	6.9	19.5		7		95				<0.2	<0.2		1.4	
						6.4	0.1	42	23.3		7.9		31.7		97.6		6.9		19.4		8		95				<0.2			1.4	
IM6	Cloudy	Moderate	10:54	7.2	Surface	1.0	0.1	27	23.5	23.5	7.8	7.8	30.1	30.1	96.9	96.9	6.9	6.9	13.4	16.6	9	9	88	92	821036	805812	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.1	29	23.5		7.8		30.1		96.9		6.9		13.4		10		88				<0.2			1.7	
					Middle	3.6	0.1	162	23.3	23.3	7.9	7.9	31.2	31.2	96.6	96.6	6.9		16.5		8		92				<0.2	<0.2		1.9	
						3.6	0.2	165	23.3		7.9		31.2		96.5		6.9		16.7		8		93				<0.2			1.8	
					Bottom	6.2	0.1	114	23.3	23.3	7.9	7.9	31.2	31.2	97.1	97.1	6.9	6.9	19.7		8		95				<0.2	<0.2		1.8	
						6.2	0.1	124	23.3		7.9		31.2		97.0		6.9		19.7		8		95				<0.2			1.7	
IM7	Cloudy	Moderate	10:48	7.4	Surface	1.0	0.0	329	23.6	23.6	7.8	7.8	28.9	28.9	94.3	94.5	6.8	6.9	13.4	15.8	6	8	88	91	821353	806850	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.0	337	23.6		7.8		28.9		94.6		6.8		13.8		6		88				<0.2			1.7	
					Middle	3.7	0.2	59	23.5	23.5	7.8	7.8	30.2	30.2	96.1	96.1	6.9		17.2		8		92				<0.2	<0.2		1.8	
						3.7	0.2	59	23.5		7.8		30.2		96.1		6.9		17.2		8		92				<0.2			1.7	
					Bottom	6.4	0.2	75	23.4	23.4	7.9	7.9	30.8	30.8	96.3	96.3	6.9	6.9	16.5		9		94				<0.2	<0.2		1.7	
						6.4	0.2	78	23.4		7.9		30.8		96.2		6.9		16.5		9		94				<0.2			1.8	
IM8	Cloudy	Moderate	11:16	7.9	Surface	1.0	0.1	93	23.7	23.7	8.1	8.1	28.0	28.0	94.0	94.0	6.8	6.8	8.4	10.5	6	6	88	92	821845	808130	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.1	97	23.7		8.1		28.0		94.0		6.8		8.5		6		88				<0.2			1.8	
					Middle	4.0	0.3	87	23.4	23.4	8.2	8.2	29.3	29.3	95.0	95.0	6.8		9.8		6		92				<0.2	<0.2		1.8	
						4.0	0.3	89	23.4		8.2		29.4		95.0		6.8		9.9		6		92				<0.2			1.8	
					Bottom	6.9	0.3	92	23.3	23.3	8.2	8.2	29.9	29.9	95.0	95.0	6.8	6.8	13.3		5		96				<0.2	<0.2		1.9	
						6.9	0.4	92	23.3		8.2		29.9		95.0		6.8		13.0		5		95				<0.2			1.9	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 December 18 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	Average	DA	Value	DA
IM9	Cloudy	Moderate	11:22	7.4	Surface	1.0	0.2	72	23.5	23.5	8.1	8.1	28.2	28.2	93.5	93.5	6.8	6.8	9.4	10.8	7	7	89	92	822109	808800	<0.2	<0.2	<0.2	1.7	1.8
						1.0	0.3	74	23.5		8.1		28.2		93.5		6.8		9.4		7		88				<0.2			1.8	
					Middle	3.7	0.3	85	23.4	23.4	8.1	8.1	28.7	28.7	93.6	93.6	6.8		9.8		7		92				<0.2	<0.2		1.8	
						3.7	0.3	87	23.4		8.1		28.7		93.6		6.8		9.8		7		92				<0.2			1.7	
					Bottom	6.4	0.3	81	23.3	23.3	8.2	8.2	29.8	29.8	94.6	94.6	6.8	6.8	13.4		6		96				<0.2	<0.2		1.8	
						6.4	0.3	87	23.3		8.2		29.8		94.6		6.8		13.3		7		96				<0.2			1.7	
IM10	Cloudy	Moderate	11:29	8.0	Surface	1.0	0.3	104	23.5	23.5	8.1	8.1	28.8	28.8	92.7	92.7	6.7	6.7	9.6	9.4	6	7	88	92	822401	809772	<0.2	<0.2	<0.2	1.7	1.7
						1.0	0.3	110	23.5		8.1		28.8		92.7		6.7		9.6		7		88				<0.2			1.6	
					Middle	4.0	0.2	97	23.5	23.5	8.1	8.1	28.9	28.9	92.6	92.6	6.7		9.7		7		91				<0.2	<0.2		1.7	
						4.0	0.2	100	23.5		8.1		28.9		92.6		6.7		9.7		8		92				<0.2			1.7	
					Bottom	7.0	0.2	113	23.5	23.5	8.1	8.1	29.2	29.2	92.9	93.0	6.7	6.7	8.9		7		95				<0.2	<0.2		1.7	
						7.0	0.2	118	23.5		8.1		29.2		93.0		6.7		9.1		6		96				<0.2			1.7	
IM11	Cloudy	Moderate	11:39	8.0	Surface	1.0	0.1	86	23.5	23.5	8.1	8.1	29.4	29.4	93.9	93.9	6.7	6.7	7.9	8.5	4	5	88	92	822034	811456	<0.2	<0.2	<0.2	1.6	1.7
						1.0	0.1	88	23.5		8.1		29.4		93.9		6.7		7.9		4		88				<0.2			1.8	
					Middle	4.0	0.1	103	23.5	23.5	8.1	8.1	29.4	29.4	93.2	93.2	6.7		8.6		5		92				<0.2	<0.2		1.7	
						4.0	0.1	109	23.5		8.1		29.4		93.2		6.7		8.5		5		92				<0.2			1.8	
					Bottom	7.0	0.1	101	23.5	23.5	8.1	8.1	29.4	29.4	93.4	93.5	6.7	6.7	9.1		5		96				<0.2	<0.2		1.7	
						7.0	0.1	106	23.5		8.1		29.4		93.5		6.7		9.1		6		96				<0.2			1.8	
IM12	Cloudy	Moderate	11:46	8.8	Surface	1.0	0.2	97	23.5	23.5	8.1	8.1	29.4	29.4	92.5	92.5	6.6	6.6	8.0	7.9	4	5	88	92	821473	812053	<0.2	<0.2	<0.2	1.7	1.6
						1.0	0.2	100	23.5		8.1		29.4		92.5		6.6		8.0		4		88				<0.2			1.6	
					Middle	4.4	0.1	112	23.5	23.5	8.1	8.1	29.4	29.4	92.5	92.5	6.6		7.9		4		92				<0.2	<0.2		1.6	
						4.4	0.2	117	23.5		8.1		29.4		92.5		6.6		7.9		5		92				<0.2			1.6	
					Bottom	7.8	0.2	102	23.5	23.5	8.1	8.1	29.4	29.4	92.9	93.0	6.7	6.7	7.9		6		96				<0.2	<0.2		1.6	
						7.8	0.2	106	23.5		8.1		29.4		93.0		6.7		7.9		5		96				<0.2			1.7	
SR1A	Cloudy	Moderate	12:05	5.7	Surface	1.0	-	-	23.6	23.6	8.1	8.1	29.1	29.1	93.7	93.7	6.7	6.7	7.8	9.4	4	5	-	-	820071	812591	-	-	-	-	-
						1.0	-	-	23.6		8.1		29.1		93.7		6.7		7.9		5		-				-			-	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-				-		-				-	-		-	
						2.9	-	-	-		-		-		-		-				-		-				-			-	
					Bottom	4.7	-	-	23.5	23.5	8.1	8.1	29.4	29.4	90.9	91.0	6.5	6.5	10.8		5		-				-	-		-	
						4.7	-	-	23.5		8.1		29.4		91.1		6.5		11.0		4		-				-			-	
SR2	Cloudy	Moderate	12:16	4.4	Surface	1.0	0.3	91	23.5	23.5	8.1	8.1	29.4	29.4	92.9	92.8	6.7	6.7	7.3	7.8	3	3	88	90	821459	814164	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	99	23.5		8.1		29.4		92.7		6.7		7.4		3		88				<0.2			1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.4	0.3	83	23.5	23.5	8.1	8.1	29.5	29.5	91.6	91.6	6.6	6.6	8.3		4		92				<0.2	<0.2		1.8	
						3.4	0.3	89	23.5		8.1		29.5		91.6		6.6		8.3		3		92				<0.2			1.9	
SR3	Cloudy	Moderate	11:11	8.8	Surface	1.0	0.4	90	23.5	23.5	8.1	8.1	28.0	28.0	92.0	92.1	6.7	6.8	10.4	12.3	8	8	-	-	822143	807551	-	-	-	-	-
						1.0	0.4	92	23.5		8.1		28.0		92.1		6.7		10.5		7		-				-			-	
					Middle	4.4	0.4	58	23.4	23.4	8.1	8.1	29.3	29.3	94.7	94.7	6.8		10.4		9		-				-	-		-	
						4.4	0.4	62	23.4		8.2		29.3		94.7		6.8		10.5		9		-				-			-	
					Bottom	7.8	0.3	50	23.3	23.3	8.2	8.2	29.6	29.6	95.0	95.0	6.8	6.8	15.9		8		-				-	-		-	
						7.8	0.4	54	23.3		8.2		29.6		95.0		6.8		16.2		8		-				-			-	
SR4A	Cloudy	Calm	12:08	8.6	Surface	1.0	0.3	98	23.3	23.3	7.9	7.9	31.3	31.3	97.1	97.1	6.9	6.9	12.1	13.3	7	7	-	-	817170	807832	-	-	-	-	-
						1.0	0.3	99	23.3		7.9		31.3		97.0		6.9		12.1		7		-				-			-	
					Middle	4.3	0.2	99	23.3	23.3	7.9	7.9	31.4	31.4	96.4	96.4	6.9		13.1		7		-				-	-		-	
						4.3	0.3	107	23.3		7.9		31.4		96.3		6.9		13.2		7		-				-			-	
					Bottom	7.6	0.2	71	23.3	23.3	7.9	7.9	31.5	31.5	96.5	96.5	6.9	6.9	14.6		7		-				-	-		-	
						7.6	0.2	73	23.3		7.9		31.5		96.4		6.9		14.4		8		-				-			-	
SR5A	Cloudy	Calm	12:22	5.1	Surface	1.0	0.1	332	23.8	23.8	7.8	7.8	29.9	29.9	95.6	95.6	6.8	6.8	9.8	10.3	4	6	-	-	816601	810679	-	-	-	-	-
						1.0	0.1	354	23.8		7.8		29.9		95.6		6.8		9.7		5		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.1	0.1	105	23.6	23.6	7.9	7.9	30.3	30.3	96.5	96.5	6.9	6.9	10.9		6		-				-	-		-	
						4.1	0.1	109	23.6		7.9		30.3		96.5		6.9		10.9		7		-				-			-	
SR6	Cloudy	Calm	12:50	4.5	Surface	1.0	0.1	44	23.7	23.7	7.8	7.8	29.8	29.8	94.4	94.4	6.7	6.7	10.2	10.5	7	7	-	-	817887	814668	-	-	-	-	-
						1.0	0.1	44	23.7		7.8		29.8		94.4		6.7		10.2		7		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.5	0.1	65	23.6	23.6	7.9	7.9	29.9	29.9	96.3	96.3	6.9	6.9	10.7		6		-				-	-		-	
						3.5	0.1	66	23.6		7.9		29.9		96.3		6.9		10.7		6		-				-			-	
SR7	Cloudy	Moderate	13:01	14.7	Surface	1.0	0.5	88	23.4	23.4	8.1	8.1	30.7	30.7	89.5	89.5	6.4	6.4	6.2	6.8	2	3	-	-	823638	823733	-	-	-	-	-
						1.0	0.5	90	23.4		8.1		30.7		89.4		6.4		6.3		3		-				-			-	
					Middle	7.4	0.3	70	23.3	23.3	8.1	8.1	31.1	31.1	88.5	88.5	6.3		7.2		3		-				-	-		-	
						7.4	0.3	75	23.3		8.1		31.1		88.5		6.3		7.2		4		-				-			-	
					Bottom	13.7	0.1	84	23.3	23.3	8.1	8.1	31.1	31.1	88.7	88.7	6.3	6.3	7.1		4		-				-	-		-	
						13.7	0.1	89	23.3		8.1		31.1		88.7		6.3		7.1		4		-				-			-	
SR8	Cloudy	Moderate	11:56	4.5	Surface	1.0	-	-	23.6	23.6	8.2	8.2	28.9	28.9	94.4	94.4	6.8	6.8	12.4	13.9	12	12	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	23.6		8.2		28.9		94.3		6.8		12.4		13		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.5	-	-	23.5	23.5	8.2	8.2	29.2	29.2	93.6	93.6	6.7	6.7	15.4		12		-				-	-		-	
						3.5	-	-	23.5		8.2		29.2		93.6		6.7		15.3		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 06 December 18 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	Average	DA	Value	DA
C1	Cloudy	Moderate	06:29	8.2	Surface	1.0	0.4	32	23.3	23.3	7.9	7.9	31.2	31.2	98.1	98.2	7.0	7.0	13.2	18.0	7	8	88	92	815612	804270	<0.2	<0.2	<0.2	1.2	1.2
						1.0	0.4	34	23.3		7.9		31.2		98.3		7.0		13.2		8		89				<0.2			1.2	
					Middle	4.1	0.5	26	23.3	23.3	7.9	7.9	32.5	32.5	97.9	97.9	6.9		17.6		8		93				<0.2	<0.2		1.2	
						4.1	0.5	26	23.3		7.9		32.5		97.9		6.9		17.6		7		94				<0.2			1.3	
					Bottom	7.2	0.4	28	23.3	23.3	7.9	7.9	32.7	32.7	97.6	97.6	6.9	6.9	23.1		9		95				<0.2	<0.2		1.2	
						7.2	0.4	28	23.3		7.9		32.7		97.5		6.9		23.3		9		95				<0.2			1.2	
C2	Cloudy	Moderate	07:27	11.6	Surface	1.0	0.2	0	23.7	23.7	8.0	8.0	27.2	27.2	89.7	89.7	6.5	6.5	8.8	12.8	7	8	89	93	825693	806947	<0.2	<0.2	<0.2	1.9	1.9
						1.0	0.2	0	23.7		8.0		27.2		89.7		6.5		8.8		7		89				<0.2			2.0	
					Middle	5.8	0.2	21	23.5	23.5	8.0	8.0	27.5	27.5	90.2	90.3	6.5		10.3		7		92				<0.2	<0.2		2.0	
						5.8	0.2	21	23.5		8.0		27.5		90.3		6.5		10.4		8		93				<0.2			1.9	
					Bottom	10.6	0.1	5	23.5	23.5	8.0	8.0	28.6	28.6	89.7	89.8	6.5	6.5	19.5		8		96				<0.2	<0.2		1.9	
						10.6	0.1	5	23.5		8.0		28.6		89.9		6.5		19.2		9		96				<0.2			1.9	
C3	Cloudy	Moderate	05:39	11.4	Surface	1.0	0.2	246	23.6	23.6	8.0	8.0	29.7	29.7	90.6	90.6	6.5	6.4	6.9	8.1	4	5	85	89	822089	817815	<0.2	<0.2	<0.2	1.8	1.6
						1.0	0.2	267	23.6		8.0		29.7		90.6		6.5		6.9		5		85				<0.2			1.8	
					Middle	5.7	0.3	254	23.4	23.4	8.0	8.0	30.7	30.7	88.6	88.6	6.3		8.2		5		89				<0.2	<0.2		1.5	
						5.7	0.3	256	23.4		8.0		30.7		88.6		6.3		8.1		4		89				<0.2			1.5	
					Bottom	10.4	0.4	250	23.4	23.4	8.0	8.0	30.8	30.8	89.5	89.6	6.4	6.4	9.3		5		92				<0.2	<0.2		1.6	
						10.4	0.4	250	23.4		8.0		30.8		89.7		6.4		9.3		5		92				<0.2			1.4	
IM1	Cloudy	Moderate	06:46	5.8	Surface	1.0	0.1	41	23.3	23.3	7.9	7.9	31.3	31.3	96.6	96.6	6.9	6.9	11.7	12.6	9	10	88	90	817960	807122	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.1	43	23.4		7.9		31.3		96.6		6.9		11.8		10		88				<0.2			1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.8	0.1	348	23.2	23.2	7.9	7.9	31.5	31.5	96.3	96.3	6.9	6.9	13.7		10		92				<0.2	<0.2		1.1	
						4.8	0.1	320	23.2		7.9		31.5		96.3		6.9		13.0		11		92				<0.2			1.0	
IM2	Cloudy	Moderate	06:53	7.3	Surface	1.0	0.2	337	23.3	23.3	7.9	7.9	31.6	31.6	97.3	97.3	6.9	6.9	14.3	19.0	12	12	89	92	818174	806168	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.2	354	23.3		7.9		31.6		97.2		6.9		14.4		11		89				<0.2			1.1	
					Middle	3.7	0.3	22	23.3	23.3	7.9	7.9	31.9	31.9	96.9	96.9	6.9		17.3		13		91				<0.2	<0.2		1.1	
						3.7	0.3	23	23.3		7.9		31.9		96.8		6.9		17.4		13		91				<0.2			1.1	
					Bottom	6.3	0.2	19	23.3	23.3	7.9	7.9	32.0	32.0	96.7	96.7	6.9	6.9	25.3		13		96				<0.2	<0.2		1.2	
						6.3	0.2	19	23.3		7.9		32.0		96.7		6.9		25.3		12		96				<0.2			1.2	
IM3	Cloudy	Moderate	06:59	7.8	Surface	1.0	0.2	26	23.3	23.3	7.9	7.9	31.7	31.7	97.7	97.7	6.9	6.9	15.5	18.9	8	9	89	92	818772	805580	<0.2	<0.2	<0.2	1.2	1.1
						1.0	0.2	26	23.3		7.9		31.7		97.7		6.9		15.7		9		88				<0.2			1.2	
					Middle	3.9	0.2	19	23.3	23.3	7.9	7.9	32.0	32.0	96.9	96.9	6.9		20.0		8		91				<0.2	<0.2		1.3	
						3.9	0.3	19	23.3		7.9		32.0		96.9		6.9		19.9		9		91				<0.2			1.0	
					Bottom	6.8	0.2	35	23.3	23.3	7.9	7.9	32.0	32.0	96.8	96.8	6.9	6.9	21.3		9		95				<0.2	<0.2		1.1	
						6.8	0.2	37	23.3		7.9		32.0		96.8		6.9		21.2		9		95				<0.2			1.0	
IM4	Cloudy	Moderate	07:07	8.1	Surface	1.0	0.2	0	23.3	23.3	7.9	7.9	31.6	31.6	97.9	98.0	7.0	7.0	14.9	20.4	7	8	89	92	819736	804629	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.2	0	23.3		7.9		31.6		98.0		7.0		15.0		8		89				<0.2			1.0	
					Middle	4.1	0.2	351	23.3	23.3	7.9	7.9	31.9	31.9	96.8	96.9	6.9		22.1		8		92				<0.2	<0.2		1.0	
						4.1	0.2	323	23.3		7.9		31.9		96.9		6.9		22.1		9		92				<0.2			1.0	
					Bottom	7.1	0.3	350	23.3	23.3	7.9	7.9	31.9	31.9	97.1	97.1	6.9	6.9	24.1		8		95				<0.2	<0.2		1.1	
						7.1	0.3	322	23.3		7.9		31.9		97.1		6.9		24.0		8		95				<0.2			1.0	
IM5	Cloudy	Moderate	07:13	7.5	Surface	1.0	0.4	10	23.3	23.3	7.9	7.9	31.7	31.7	97.4	97.4	6.9	6.9	13.9	21.6	14	22	89	92	820758	804851	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.4	10	23.3		7.9		31.7		97.4		6.9		13.9		13		89				<0.2			1.0	
					Middle	3.8	0.4	11	23.3	23.3	7.9	7.9	31.7	31.7	97.2	97.2	6.9		23.9		20		91				<0.2	<0.2		0.9	
						3.8	0.5	11	23.3		7.9		31.7		97.2		6.9		23.9		20		92				<0.2			1.0	
					Bottom	6.5	0.3	15	23.3	23.3	7.9	7.9	31.7	31.7	96.6	96.6	6.9	6.9	27.0		32		96				<0.2	<0.2		1.1	
						6.5	0.3	16	23.3		7.9		31.7		96.6		6.9		27.1		35		96				<0.2			1.1	
IM6	Cloudy	Moderate	07:21	7.3	Surface	1.0	0.4	72	23.4	23.4	7.9	7.9	30.5	30.5	96.3	96.3	6.9	6.9	13.4	15.1	12	13	88	92	821038	805816	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.4	72	23.4		7.9		30.5		96.2		6.9		13.5		13		89				<0.2			1.1	
					Middle	3.7	0.2	73	23.4	23.4	7.9	7.9	30.6	30.6	96.3	96.3	6.9		16.0		13		92				<0.2	<0.2		1.1	
						3.7	0.2	76	23.4		7.9		30.6		96.3		6.9		16.1		12		92				<0.2			1.0	
					Bottom	6.3	0.2	80	23.4	23.4	7.9	7.9	30.7	30.7	96.1	96.2	6.9	6.9	15.7		14		95				<0.2	<0.2		1.1	
						6.3	0.2	81	23.4		7.9		30.7		96.2		6.9		15.7		13		95				<0.2			1.3	
IM7	Cloudy	Moderate	07:28	8.7	Surface	1.0	0.1	124	23.7	23.7	7.8	7.8	28.6	28.6	94.2	94.3	6.8	6.8	13.5	16.2	8	9	88	92	821326	806818	<0.2	<0.2	<0.2	1.5	1.4
						1.0	0.1	125	23.7		7.8		28.7		94.3		6.8		13.5		9		90				<0.2			1.5	
					Middle	4.4	0.2	90	23.5	23.5	7.9	7.9	30.2	30.2	95.2	95.3	6.8		17.5		8		92				<0.2	<0.2		1.4	
						4.4	0.2	92	23.5		7.9		30.2		95.3		6.8		17.5		9		93				<0.2			1.4	
					Bottom	7.7	0.1	65	23.4	23.4	8.0	8.0	30.7	30.7	94.9	94.9	6.8	6.8	17.5		10		95				<0.2	<0.2		1.4	
						7.7	0.1	70	23.4		8.0		30.7		94.9		6.8		17.6		10		96				<0.2			1.1	
IM8	Cloudy	Moderate	07:02	8.0	Surface	1.0	0.1	101	23.5	23.5	8.1	8.1	28.1	28.1	93.0	93.0	6.7	6.8	9.4	11.4	10	9	89	93	821835	808118	<0.2	<0.2	<0.2	2.1	2.1
						1.0	0.1	104	23.5		8.1		28.1		93.0		6.7		9.4		9		89				<0.2			2.0	
					Middle	4.0	0.2	71	23.4	23.4	8.1	8.1	28.6	28.6	93.5	93.6	6.8		10.8		9		93				<0.2	<0.2		2.1	
						4.0	0.2	77	23.4		8.1		28.6		93.6		6.8		10.7		10		94				<0.2			2.0	
					Bottom	7.0	0.3	65	23.3	23.3	8.2	8.2	29.8	29.8	94.9	95.0	6.8	6.8	13.9		9		97				<0.2	<0.2		2.1	
						7.0	0.3	68	23.3		8.2		29.8		95.0		6.8		14.0		9		97				<0.2			2.1	

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 06 December 18 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	Average	DA	Value	DA
IM9	Cloudy	Moderate	06:55	7.8	Surface	1.0	0.1	344	23.5	23.5	8.1	8.1	28.0	28.0	92.2	92.2	6.7	6.7	9.8	11.6	7	9	89	93	822093	808827	<0.2	<0.2	<0.2	2.2	2.0
						1.0	0.1	350	23.5		8.1		28.0		92.2		6.7		9.9		7		89							1.9	
					Middle	3.9	0.1	28	23.5	23.5	8.1	8.1	28.4	28.4	92.7	92.8	6.7		11.9		9		94				<0.2	<0.2		2.2	
						3.9	0.1	28	23.5		8.1		28.4		92.8		6.7		11.8		9		93				<0.2			1.8	
					Bottom	6.8	0.2	60	23.4	23.4	8.1	8.1	29.0	29.0	93.5	93.6	6.7	6.7	13.3		10		97				<0.2	<0.2		1.8	
						6.8	0.2	64	23.4		8.1		29.0		93.6		6.7		13.2		9		97				<0.2			1.9	
IM10	Cloudy	Moderate	06:48	8.2	Surface	1.0	0.2	337	23.5	23.5	8.1	8.1	28.5	28.5	93.9	93.9	6.8	6.8	9.1	9.5	6	7	89	93	822375	809796	<0.2	<0.2	<0.2	2.0	1.9
						1.0	0.3	310	23.5		8.1		28.5		93.9		6.8		9.0		7		89				<0.2			2.0	
					Middle	4.1	0.3	325	23.5	23.5	8.1	8.1	29.1	29.1	92.7	92.7	6.7		8.9		6		94				<0.2	<0.2		2.0	
						4.1	0.3	334	23.5		8.1		29.1		92.7		6.7		8.9		7		93				<0.2			1.8	
					Bottom	7.2	0.2	305	23.5	23.5	8.1	8.1	29.3	29.3	92.6	92.7	6.7	6.7	10.5		8		97				<0.2	<0.2		1.7	
						7.2	0.2	327	23.5		8.1		29.3		92.7		6.7		10.6		9		97				<0.2			1.7	
IM11	Cloudy	Moderate	06:36	7.9	Surface	1.0	0.3	278	23.5	23.5	8.1	8.1	29.5	29.5	92.5	92.5	6.6	6.6	9.4	10.5	9	8	90	93	822048	811471	<0.2	<0.2	<0.2	1.5	1.6
						1.0	0.3	302	23.5		8.1		29.5		92.5		6.6		9.4		8		89				<0.2			1.5	
					Middle	4.0	0.3	290	23.5	23.5	8.1	8.1	29.5	29.5	92.4	92.4	6.6		10.6		7		93				<0.2	<0.2		1.5	
						4.0	0.3	305	23.5		8.1		29.5		92.4		6.6		10.6		8		93				<0.2			1.5	
					Bottom	6.9	0.2	290	23.5	23.5	8.1	8.1	29.5	29.5	92.9	93.0	6.7	6.7	11.5		8		98				<0.2	<0.2		1.7	
						6.9	0.2	309	23.5		8.1		29.5		93.0		6.7		11.6		7		97				<0.2			1.8	
IM12	Cloudy	Moderate	06:30	8.7	Surface	1.0	0.3	277	23.5	23.5	8.1	8.1	29.3	29.3	92.7	92.7	6.7	6.7	8.8	11.1	7	8	89	93	821462	812038	<0.2	<0.2	<0.2	1.6	1.5
						1.0	0.3	287	23.5		8.1		29.3		92.7		6.7		8.8		6		89				<0.2			1.5	
					Middle	4.4	0.3	256	23.5	23.5	8.1	8.1	29.4	29.4	92.6	92.6	6.7		11.2		7		94				<0.2	<0.2		1.5	
						4.4	0.3	272	23.5		8.1		29.4		92.6		6.7		11.2		7		93				<0.2			1.5	
					Bottom	7.7	0.2	250	23.5	23.5	8.1	8.1	29.4	29.4	92.9	93.0	6.7	6.7	13.3		9		97				<0.2	<0.2		1.5	
						7.7	0.2	256	23.5		8.1		29.4		93.0		6.7		13.2		9		97				<0.2			1.5	
SR1A	Cloudy	Moderate	06:12	5.6	Surface	1.0	-	-	23.6	23.6	8.1	8.1	29.0	29.0	92.3	92.3	6.6	6.6	8.5	8.8	8	7	-	-	820074	812590	-	-	-	-	-
						1.0	-	-	23.6		8.1		29.0		92.3		6.6		8.4		7		-				-			-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-				-		-				-	-		-	
						2.8	-	-	-		-		-		-		-				-		-				-			-	
					Bottom	4.6	-	-	23.6	23.6	8.1	8.1	29.0	29.0	93.0	93.1	6.7	6.7	9.0		6		-				-	-		-	
						4.6	-	-	23.6		8.1		29.0		93.1		6.7		9.2		6		-				-			-	
SR2	Cloudy	Moderate	06:00	4.0	Surface	1.0	0.1	303	23.4	23.4	8.1	8.1	29.2	29.2	92.4	92.4	6.6	6.7	10.3	11.3	8	8	89	92	821462	814142	<0.2	<0.2	<0.2	2.7	2.2
						1.0	0.1	332	23.4		8.1		29.2		92.4		6.7		10.2		8		90				<0.2			2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.0	0.1	293	23.4	23.4	8.1	8.1	29.2	29.2	92.8	92.9	6.7	6.7	12.4		9		94				<0.2	<0.2		1.9	
						3.0	0.1	317	23.4		8.1		29.2		92.9		6.7		12.5		8		93				<0.2			1.7	
SR3	Cloudy	Moderate	07:08	9.1	Surface	1.0	0.4	80	23.5	23.5	8.1	8.1	28.2	28.2	93.3	93.4	6.7	6.8	10.1	13.0	9	10	-	-	822141	807563	-	-	-	-	-
						1.0	0.4	84	23.5		8.1		28.2		93.4		6.8		10.1		9		-				-			-	
					Middle	4.6	0.4	63	23.3	23.3	8.1	8.1	29.5	29.5	94.6	94.7	6.8		11.7		10		-				-	-		-	
						4.6	0.4	63	23.3		8.1		29.5		94.7		6.8		11.7		10		-				-			-	
					Bottom	8.1	0.2	37	23.3	23.3	8.2	8.2	29.8	29.8	94.9	95.0	6.8	6.8	17.0		9		-				-	-		-	
						8.1	0.3	40	23.3		8.2		29.8		95.0		6.8		17.5		10		-				-			-	
SR4A	Cloudy	Calm	06:06	8.7	Surface	1.0	0.2	110	23.6	23.6	7.8	7.8	30.4	30.4	95.6	95.7	6.8	6.8	10.4	13.4	7	7	-	-	817170	807822	-	-	-	-	-
						1.0	0.2	116	23.6		7.8		30.4		95.7		6.8		10.4		6		-				-			-	
					Middle	4.4	0.3	96	23.3	23.3	7.9	7.9	31.2	31.2	95.3	95.3	6.8		13.9		6		-				-	-		-	
						4.4	0.3	102	23.3		7.9		31.2		95.3		6.8		13.9		7		-				-			-	
					Bottom	7.7	0.2	92	23.3	23.3	7.9	7.9	31.5	31.5	95.3	95.3	6.8	6.8	15.8		7		-				-	-		-	
						7.7	0.2	100	23.3		7.9		31.5		95.3		6.8		15.8		7		-				-			-	
SR5A	Cloudy	Calm	05:50	4.4	Surface	1.0	0.1	87	23.7	23.7	7.8	7.8	29.9	29.9	94.2	94.2	6.7	6.7	9.6	9.5	6	8	-	-	816582	810712	-	-	-	-	-
						1.0	0.1	91	23.7		7.8		29.9		94.1		6.7		9.7		6		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.4	0.0	85	23.7	23.7	7.8	7.8	29.9	29.9	95.2	95.2	6.8	6.8	9.4		10		-				-	-		-	
						3.4	0.0	91	23.7		7.8		29.9		95.2		6.8		9.4		10		-				-			-	
SR6	Cloudy	Calm	05:27	4.7	Surface	1.0	0.1	146	23.6	23.6	7.7	7.7	29.8	29.8	90.9	91.0	6.5	6.5	10.6	11.4	6	6	-	-	817909	814653	-	-	-	-	-
						1.0	0.1	152	23.6		7.7		29.8		91.0		6.5		10.7		7		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.7	0.1	91	23.6	23.6	7.7	7.7	30.1	30.1	90.4	90.4	6.5	6.5	12.1		6		-				-	-		-	
						3.7	0.1	94	23.6		7.7		30.1		90.4		6.5		12.2		6		-				-			-	
SR7	Cloudy	Moderate	05:12	15.2	Surface	1.0	0.1	9	23.4	23.4	8.0	8.0	30.8	30.8	88.8	88.8	6.3	6.3	7.8	8.5	6	5	-	-	823625	823740	-	-	-	-	-
						1.0	0.1	9	23.4		8.0		30.8		88.8		6.3		7.8		5		-				-			-	
					Middle	7.6	0.0	151	23.3	23.3	7.9	7.9	31.0	31.0	88.5	88.5	6.3		8.8		5		-				-	-		-	
						7.6	0.0	162	23.3		7.9		31.0		88.5		6.3		8.8		4		-				-			-	
					Bottom	14.2	0.4	228	23.3	23.3	7.9	7.9	31.0	31.0	88.9	89.0	6.3	6.4	8.8		6		-				-	-		-	
						14.2	0.4	244	23.3		7.9		31.0		89.0		6.4		8.8		6		-				-			-	
SR8	Cloudy	Moderate	06:21	4.3	Surface	1.0	-	-	23.6	23.6	8.1	8.1	28.7	28.7	93.9	93.9	6.8	6.8	8.3	9.0	8	7	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	23.6		8.1		28.7		93.9		6.8		8.3		7		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	-	-	23.4	23.4	8.1	8.1	29.5	29.5	92.8	92.9	6.7	6.7	9.6		6		-				-	-		-	
						3.3	-	-	23.4		8.1		29.5		92.9		6.7		9.6		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 08 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Rough	13:25	7.4	Surface	1.0	0.4	144	22.2	22.2	8.3	8.3	30.4	30.4	98.8	98.8	7.2	7.2	9.2	11.9	9	9	85	89	815631	804233	<0.2	<0.2	1.5	1.4
						1.0	0.4	147	22.2		8.3		30.4		98.8		7.2		9.3		8		85				<0.2		1.5	
					Middle	3.7	0.2	145	22.4	22.4	8.3	8.3	31.4	31.4	99.1	99.1	7.2		10.5		9		89				<0.2		1.6	
						3.7	0.2	145	22.4		8.3		31.4		99.1		7.2		10.5		9		89				<0.2		1.2	
					Bottom	6.4	0.0	71	22.5	22.5	8.2	8.2	32.5	32.5	101.6	101.8	7.3	7.3	16.1		10		94				<0.2		1.3	
						6.4	0.0	77	22.5		8.2		32.5		101.9		7.3		16.1		10		94				<0.2		1.3	
C2	Cloudy	Moderate	12:04	12.0	Surface	1.0	0.1	78	22.8	22.8	8.1	8.1	28.0	28.0	92.5	92.5	6.8	6.8	11.3	17.9	12	14	82	85	825689	806955	<0.2	<0.2	1.9	1.9
						1.0	0.1	84	22.8		8.1		28.0		92.5		6.8		11.3		12		81				<0.2		1.9	
					Middle	6.0	0.2	34	22.7	22.7	8.2	8.2	28.3	28.3	92.5	92.5	6.8		18.8		12		85				<0.2		1.9	
						6.0	0.2	34	22.7		8.2		28.3		92.5		6.8		18.9		12		85				<0.2		2.0	
					Bottom	11.0	0.2	333	22.8	22.9	8.2	8.2	28.5	28.5	92.2	92.3	6.7	6.7	23.4		18		90				<0.2		2.0	
						11.0	0.2	345	22.9		8.2		28.5		92.3		6.7		23.9		18		89				<0.2		1.8	
C3	Cloudy	Moderate	13:45	10.6	Surface	1.0	0.4	91	23.0	23.0	8.2	8.2	30.4	30.4	92.8	92.8	6.7	6.7	3.9	5.7	7	6	82	86	822121	817792	<0.2	<0.2	1.4	1.4
						1.0	0.4	95	23.0		8.2		30.4		92.8		6.7		3.9		6		83				<0.2		1.4	
					Middle	5.3	0.4	83	23.0	23.0	8.2	8.2	30.4	30.4	92.1	92.1	6.6		3.9		6		86				<0.2		1.4	
						5.3	0.4	89	23.0		8.2		30.4		92.1		6.6		3.9		6		86				<0.2		1.4	
					Bottom	9.6	0.3	73	23.0	23.0	8.2	8.2	30.6	30.6	91.7	91.8	6.6	6.6	9.4		4		90				<0.2		1.4	
						9.6	0.4	73	23.0		8.2		30.6		91.9		6.6		9.4		5		90				<0.2		1.4	
IM1	Cloudy	Moderate	13:08	5.5	Surface	1.0	0.1	327	22.3	22.3	8.2	8.2	30.1	30.1	96.2	96.3	7.0	7.0	8.7	9.6	10	10	83	85	817939	807115	<0.2	<0.2	1.5	1.4
						1.0	0.1	357	22.3		8.2		30.1		96.3		7.0		8.9		10		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.0	76	22.2	22.2	8.2	8.2	30.2	30.2	99.2	99.3	7.2	7.3	10.4		9		86				<0.2		1.3	
						4.5	0.0	83	22.2		8.2		30.2		99.4		7.3		10.4		9		86				<0.2		1.4	
IM2	Cloudy	Moderate	13:01	7.6	Surface	1.0	0.2	35	22.3	22.3	8.2	8.2	30.7	30.7	98.1	98.1	7.1	7.1	10.0	12.1	9	10	84	88	818182	806180	<0.2	<0.2	1.5	1.4
						1.0	0.2	37	22.3		8.2		30.7		98.0		7.1		10.1		8		84				<0.2		1.5	
					Middle	3.8	0.1	14	22.3	22.3	8.2	8.2	30.7	30.7	97.6	97.6	7.1		11.1		11		87				<0.2		1.4	
						3.8	0.1	15	22.3		8.2		30.7		97.5		7.1		11.4		10		88				<0.2		1.3	
					Bottom	6.6	0.2	353	22.3	22.3	8.2	8.2	30.9	30.9	97.5	97.5	7.1	7.1	14.7		12		92				<0.2		1.4	
						6.6	0.2	325	22.3		8.2		30.9		97.5		7.1		15.2		12		92				<0.2		1.2	
IM3	Cloudy	Moderate	12:54	8.0	Surface	1.0	0.2	66	22.3	22.3	8.2	8.2	30.4	30.4	97.2	97.2	7.1	7.1	11.0	14.7	8	10	84	88	818761	805595	<0.2	<0.2	1.6	1.4
						1.0	0.2	69	22.3		8.2		30.5		97.1		7.1		11.4		9		84				<0.2		1.7	
					Middle	4.0	0.2	18	22.4	22.4	8.2	8.2	31.1	31.1	96.7	96.7	7.0		14.7		9		88				<0.2		1.5	
						4.0	0.2	18	22.4		8.2		31.1		96.7		7.0		14.7		10		88				<0.2		1.3	
					Bottom	7.0	0.2	22	22.4	22.4	8.2	8.2	31.2	31.2	96.7	96.7	7.0	7.0	18.3		11		93				<0.2		1.3	
						7.0	0.2	22	22.4		8.2		31.2		96.7		7.0		18.3		12		92				<0.2		1.2	
IM4	Fine	Moderate	12:45	8.3	Surface	1.0	0.2	42	22.2	22.2	8.2	8.2	30.5	30.5	97.9	97.9	7.1	7.1	10.3	13.5	12	12	84	88	819708	804586	<0.2	<0.2	1.3	1.3
						1.0	0.2	43	22.2		8.2		30.5		97.8		7.1		10.3		11		83				<0.2		1.2	
					Middle	4.2	0.1	359	22.5	22.5	8.2	8.2	31.2	31.2	96.9	96.9	7.0		12.3		11		88				<0.2		1.3	
						4.2	0.1	330	22.5		8.2		31.2		96.9		7.0		12.4		11		88				<0.2		1.3	
					Bottom	7.3	0.2	336	22.4	22.4	8.2	8.2	31.3	31.3	98.4	98.5	7.1	7.1	17.7		13		91				<0.2		1.2	
						7.3	0.3	341	22.4		8.2		31.3		98.6		7.1		18.3		14		91				<0.2		1.3	
IM5	Fine	Moderate	12:34	7.2	Surface	1.0	0.1	34	22.2	22.2	8.2	8.2	30.3	30.4	97.7	97.7	7.1	7.1	11.9	15.6	14	16	84	87	820742	804854	<0.2	<0.2	1.6	1.4
						1.0	0.2	35	22.2		8.2		30.4		97.7		7.1		12.1		14		83				<0.2		1.4	
					Middle	3.6	0.2	44	22.3	22.3	8.2	8.2	30.8	30.8	97.3	97.3	7.1		15.2		15		87				<0.2		1.4	
						3.6	0.2	44	22.3		8.2		30.8		97.3		7.1		15.5		15		87				<0.2		1.3	
					Bottom	6.2	0.4	4	22.4	22.4	8.2	8.2	30.9	30.9	98.2	98.3	7.1	7.1	19.4		18		91				<0.2		1.2	
						6.2	0.4	4	22.3		8.2		30.9		98.3		7.1		19.7		17		92				<0.2		1.2	
IM6	Fine	Moderate	12:22	7.5	Surface	1.0	0.2	88	22.4	22.4	8.2	8.2	29.8	29.8	95.0	95.0	6.9	7.0	17.6	19.5	21	20	83	87	821062	805849	<0.2	<0.2	1.5	1.5
						1.0	0.2	92	22.4		8.2		29.9		95.0		6.9		17.9		21		83				<0.2		1.6	
					Middle	3.8	0.2	49	22.4	22.4	8.2	8.2	30.1	30.1	95.5	95.6	7.0		19.5		21		87				<0.2		1.5	
						3.8	0.2	51	22.4		8.2		30.1		95.6		7.0		19.6		20		87				<0.2		1.4	
					Bottom	6.5	0.1	9	22.4	22.4	8.2	8.2	30.2	30.2	96.2	96.3	7.0	7.0	21.2		18		91				<0.2		1.4	
						6.5	0.1	9	22.4		8.2		30.2		96.3		7.0		21.2		18		91				<0.2		1.6	
IM7	Fine	Moderate	12:14	9.0	Surface	1.0	0.3	146	22.4	22.4	8.2	8.2	29.2	29.2	93.0	93.0	6.8	6.8	17.2	19.6	22	20	83	87	821353	806845	<0.2	<0.2	2.0	1.8
						1.0	0.3	155	22.4		8.2		29.2		93.0		6.8		17.2		21		83				<0.2		1.8	
					Middle	4.5	0.1	113	22.4	22.4	8.2	8.2	29.6	29.6	93.3	93.3	6.8		19.4		19		86				<0.2		1.7	
						4.5	0.1	116	22.4		8.2		29.6		93.3		6.8		19.6		19		86				<0.2		1.8	
					Bottom	8.0	0.0	358	22.4	22.4	8.2	8.2	29.9	29.9	94.7	94.8	6.9	6.9	22.0		19		90				<0.2		1.9	
						8.0	0.0	329	22.4		8.2		29.9		94.9		6.9		22.2		19		91				<0.2		1.8	
IM8	Cloudy	Moderate	12:28	8.3	Surface	1.0	0.3	92	22.7	22.7	8.2	8.2	28.6	28.6	94.5	94.5	6.9	6.9	10.8	15.1	18	12	83	86	821842	808151	<0.2	<0.2	2.0	1.9
						1.0	0.3	95	22.7		8.2		28.6		94.5		6.9		10.9		18		82				<0.2		1.7	
					Middle	4.2	0.3	81	22.7	22.7	8.2	8.2	28.7	28.7	94.7	94.8	6.9		14.0		8		86				<0.2		2.0	
						4.2	0.3	86	22.7		8.2		28.7		94.8		6.9		14.4		9		87				<0.2		2.0	
					Bottom	7.3	0.3	83	22.7	22.7	8.2	8.2	29.1	29.1	95.8	95.8	7.0	7.0	20.3		9		90				<0.2		1.9	
						7.3	0.3	88	22.7		8.2		29.1		95.8		7.0		20.6		10		90				<0.2		2.0	

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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 08 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	12:33	7.3	Surface	1.0	0.3	98	22.7	22.7	8.2	8.2	28.5	28.5	95.1	95.1	7.0	7.0	8.5	11.1	11	11	82	86	822085	808809	<0.2	<0.2	2.0	2.1
						1.0	0.3	104	22.7		8.2		28.5		95.1		7.0		8.5		10		82				<0.2		2.0	
					Middle	3.7	0.2	99	22.7	22.7	8.2	8.2	29.0	29.0	94.8	94.8	6.9		12.2		12		85				<0.2		2.0	
						3.7	0.3	104	22.7		8.2		29.0		94.8		6.9		12.0		11		86				<0.2		2.0	
					Bottom	6.3	0.2	107	22.7	22.7	8.2	8.2	29.0	29.0	96.9	97.1	7.1	7.1	12.9		11		90				<0.2		2.4	
						6.3	0.2	116	22.7		8.2		29.0		97.3		7.1		12.8		12		90				<0.2		2.0	
IM10	Cloudy	Moderate	12:40	7.1	Surface	1.0	0.3	107	22.8	22.8	8.2	8.2	28.6	28.6	93.1	93.1	6.8	6.8	8.9	10.7	7	10	82	86	822377	809785	<0.2	<0.2	2.0	1.9
						1.0	0.3	111	22.8		8.2		28.6		93.1		6.8		9.0		7		81				<0.2		2.1	
					Middle	3.6	0.3	98	22.8	22.8	8.2	8.2	28.8	28.8	92.7	92.7	6.8		11.9		11		86				<0.2		1.9	
						3.6	0.3	102	22.8		8.2		28.8		92.7		6.8		11.9		11		87				<0.2		1.8	
					Bottom	6.1	0.2	88	22.8	22.8	8.2	8.2	28.9	28.9	93.7	93.8	6.8	6.8	11.3		12		90				<0.2		1.9	
						6.1	0.2	90	22.8		8.2		28.9		93.9		6.8		11.3		14		90				<0.2		1.8	
IM11	Cloudy	Moderate	12:50	7.7	Surface	1.0	0.2	117	22.9	22.9	8.2	8.2	29.2	29.2	92.8	92.8	6.7	6.7	6.5	6.7	12	10	83	86	822042	811480	<0.2	<0.2	1.8	1.8
						1.0	0.2	125	22.9		8.2		29.2		92.8		6.7		6.5		11		82				<0.2		1.7	
					Middle	3.9	0.2	103	22.9	22.9	8.2	8.2	29.2	29.2	92.8	92.8	6.7		6.7		9		86				<0.2		1.7	
						3.9	0.2	110	22.9		8.2		29.2		92.8		6.7		6.7		8		87				<0.2		1.8	
					Bottom	6.7	0.1	103	22.9	22.9	8.2	8.2	29.3	29.3	93.3	93.4	6.8	6.8	6.9		9		90				<0.2		1.8	
						6.7	0.2	111	22.9		8.2		29.3		93.5		6.8		6.9		10		90				<0.2		1.8	
IM12	Cloudy	Moderate	12:56	9.8	Surface	1.0	0.3	105	22.9	22.9	8.2	8.2	29.2	29.2	92.2	92.2	6.7	6.7	5.7	6.3	8	9	82	86	821453	812038	<0.2	<0.2	1.8	1.8
						1.0	0.4	105	22.9		8.2		29.2		92.2		6.7		5.7		8		82				<0.2		1.8	
					Middle	4.9	0.3	117	22.9	22.9	8.2	8.2	29.3	29.3	91.8	91.8	6.7		6.7		10		85				<0.2		1.8	
						4.9	0.3	122	22.9		8.2		29.3		91.8		6.7		6.7		10		86				<0.2		1.8	
					Bottom	8.8	0.2	118	22.9	22.9	8.2	8.2	29.4	29.4	92.2	92.3	6.7	6.7	6.4		9		89				<0.2		1.8	
						8.8	0.2	123	22.9		8.2		29.4		92.3		6.7		6.5		8		90				<0.2		1.9	
SR1A	Cloudy	Moderate	13:15	5.0	Surface	1.0	-	-	22.7	22.7	8.2	8.2	28.7	28.7	91.8	91.8	6.7	6.7	6.0	6.3	21	23	-	-	820070	812592	-	-	-	-
						1.0	-	-	22.7		8.2		28.7		91.8		6.7		6.0		20		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-				-		-				-		-	
						2.5	-	-	-		-		-		-		-				-		-				-		-	
					Bottom	4.0	-	-	22.7	22.7	8.2	8.2	28.8	28.8	92.7	92.8	6.8	6.8	6.7		26		-				-		-	
						4.0	-	-	22.7		8.2		28.8		92.8		6.8		6.7		25		-				-		-	
SR2	Cloudy	Moderate	13:27	5.5	Surface	1.0	0.4	84	22.9	22.9	8.2	8.2	29.1	29.1	92.4	92.4	6.7	6.7	6.7	6.5	8	8	82	84	821486	814150	<0.2	<0.2	1.5	1.5
						1.0	0.4	89	22.9		8.2		29.1		92.3		6.7		6.7		8		83				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	98	22.9	22.9	8.2	8.2	29.3	29.3	93.4	93.5	6.8	6.8	6.3		8		85				<0.2		1.5	
						4.5	0.2	101	22.9		8.2		29.3		93.6		6.8		6.4		8		86				<0.2		1.5	
SR3	Cloudy	Moderate	12:24	8.6	Surface	1.0	0.4	103	22.8	22.8	8.2	8.2	28.1	28.1	93.4	93.4	6.8	6.9	9.1	12.5	15	13	-	-	822157	807581	-	-	-	-
						1.0	0.4	107	22.8		8.2		28.1		93.4		6.8		9.0		14		-				-		-	
					Middle	4.3	0.5	96	22.7	22.7	8.2	8.2	28.4	28.4	94.2	94.2	6.9		12.4		13		-				-		-	
						4.3	0.5	103	22.7		8.2		28.4		94.2		6.9		12.2		13		-				-		-	
					Bottom	7.6	0.4	78	22.7	22.7	8.2	8.2	29.0	29.0	96.1	96.1	7.0	7.0	17.2		11		-				-		-	
						7.6	0.4	84	22.7		8.2		29.0		96.1		7.0		15.1		11		-				-		-	
SR4A	Cloudy	Calm	13:44	9.9	Surface	1.0	0.3	74	22.3	22.3	8.2	8.2	30.3	30.3	95.7	95.7	7.0	7.0	14.2	15.0	15	13	-	-	817189	807823	-	-	-	-
						1.0	0.3	78	22.3		8.2		30.3		95.7		7.0		14.3		15		-				-		-	
					Middle	5.0	0.3	71	22.2	22.2	8.2	8.2	30.4	30.4	96.0	96.0	7.0		14.5		12		-				-		-	
						5.0	0.3	75	22.2		8.2		30.4		96.0		7.0		14.6		12		-				-		-	
					Bottom	8.9	0.2	43	22.2	22.2	8.2	8.2	30.4	30.4	96.8	96.9	7.1	7.1	16.2		12		-				-		-	
						8.9	0.2	43	22.2		8.2		30.4		96.9		7.1		16.1		12		-				-		-	
SR5A	Cloudy	Calm	14:01	3.8	Surface	1.0	0.2	332	22.4	22.4	8.2	8.2	29.5	29.5	91.3	91.3	6.7	6.7	8.0	8.2	8	8	-	-	816581	810700	-	-	-	-
						1.0	0.2	354	22.4		8.2		29.5		91.3		6.7		8.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	334	22.4	22.4	8.2	8.2	29.5	29.5	92.4	92.5	6.8	6.8	8.4		8		-				-		-	
						2.8	0.2	335	22.4		8.2		29.5		92.6		6.8		8.3		8		-				-		-	
SR6	Cloudy	Calm	14:35	3.5	Surface	1.0	0.1	327	22.3	22.3	8.1	8.1	29.3	29.3	91.3	91.4	6.7	6.7	7.3	7.7	6	5	-	-	817900	814659	-	-	-	-
						1.0	0.1	357	22.3		8.1		29.3		91.4		6.7		7.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	320	22.3	22.3	8.1	8.1	29.4	29.4	92.5	92.6	6.8	6.8	8.1		5		-				-		-	
						2.5	0.1	344	22.3		8.1		29.4		92.6		6.8		8.1		4		-				-		-	
SR7	Cloudy	Moderate	14:11	14.6	Surface	1.0	0.5	91	23.1	23.1	8.2	8.2	30.8	30.8	91.2	91.2	6.5	6.5	4.4	4.5	6	5	-	-	823620	823724	-	-	-	-
						1.0	0.5	96	23.1		8.2		30.8		91.2		6.5		4.4		6		-				-		-	
					Middle	7.3	0.4	103	23.1	23.1	8.2	8.2	30.8	30.8	91.1	91.1	6.5		4.1		5		-				-		-	
						7.3	0.4	105	23.1		8.2		30.8		91.1		6.5		4.2		5		-				-		-	
					Bottom	13.6	0.2	37	23.0	23.0	8.2	8.2	30.9	30.9	91.5	91.5	6.6	6.6	5.2		5		-				-		-	
						13.6	0.2	37	23.0		8.2		30.9		91.5		6.6		5.1		5		-				-		-	
SR8	Cloudy	Moderate	13:07	4.6	Surface	1.0	-	-	22.7	22.7	8.3	8.3	29.0	29.0	94.7	94.7	6.9	6.9	13.0	15.7	10	9	-	-	820515	811655	-	-	-	-
						1.0	-	-	22.7		8.3		29.0		94.7		6.9		12.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.7	22.7	8.3	8.3	29.0	29.0	94.7	94.7	6.9	6.9	18.6		7		-				-		-	
						3.6	-	-	22.7		8.3		29.0		94.7		6.9		18.2		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Rough	08:18	8.6	Surface	1.0	0.6	52	22.2	22.2	8.3	8.3	30.1	30.1	97.0	97.0	7.1	7.1	11.9	14.7	15	17	86	89	815630	804251	<0.2	<0.2	1.4	1.4
						1.0	0.6	55	22.2		8.3		30.1		97.0		7.1		12.6		15		86				<0.2		1.4	
					Middle	4.3	0.4	43	22.4	22.4	8.3	8.3	31.2	31.2	97.6	97.6	7.1		14.9		17		89				<0.2		1.3	
						4.3	0.4	45	22.4		8.3		31.2		97.6		7.1		14.8		17		89				<0.2		1.4	
					Bottom	7.6	0.5	26	22.4	22.4	8.3	8.3	31.4	31.4	98.3	98.4	7.1	7.1	17.3		18		93				<0.2		1.3	
						7.6	0.5	28	22.4		8.3		31.4		98.5		7.1		16.9		17		92				<0.2		1.4	
C2	Cloudy	Moderate	09:15	11.4	Surface	1.0	0.2	11	22.9	22.9	8.1	8.1	27.8	27.8	91.9	91.9	6.7	6.8	10.2	14.0	12	12	85	89	825697	806940	<0.2	<0.2	1.3	1.3
						1.0	0.2	11	22.9		8.1		27.8		91.9		6.7		10.3		13		85				<0.2		1.2	
					Middle	5.7	0.2	25	22.8	22.8	8.2	8.2	28.1	28.1	92.5	92.5	6.8		11.4		12		89				<0.2		1.4	
						5.7	0.2	25	22.8		8.2		28.1		92.5		6.8		11.4		12		89				<0.2		1.4	
					Bottom	10.4	0.1	10	22.7	22.7	8.2	8.2	29.0	29.0	93.4	93.4	6.8	6.8	20.1		11		93				<0.2		1.4	
						10.4	0.1	10	22.7		8.2		29.0		93.4		6.8		20.7		11		93				<0.2		1.3	
C3	Cloudy	Moderate	07:12	11.1	Surface	1.0	0.4	255	23.1	23.1	8.2	8.2	29.4	29.4	91.0	91.0	6.6	6.6	5.3	9.5	5	5	84	88	822110	817822	<0.2	<0.2	1.5	1.5
						1.0	0.4	260	23.1		8.2		29.4		91.0		6.6		5.3		6		84				<0.2		1.5	
					Middle	5.6	0.6	262	23.1	23.1	8.2	8.2	30.0	30.0	89.9	89.9	6.5		7.4		5		88				<0.2		1.6	
						5.6	0.6	269	23.1		8.2		30.0		89.9		6.5		7.4		5		88				<0.2		1.5	
					Bottom	10.1	0.4	260	23.2	23.2	8.2	8.2	30.2	30.2	90.0	90.0	6.5	6.5	15.9		5		92				<0.2		1.5	
						10.1	0.4	263	23.2		8.2		30.2		90.0		6.5		15.5		5		91				<0.2		1.6	
IM1	Cloudy	Moderate	08:36	5.1	Surface	1.0	0.2	7	22.2	22.2	8.2	8.2	29.9	29.9	95.1	95.1	7.0	7.0	9.3	13.0	12	13	84	87	817964	807131	<0.2	<0.2	1.4	1.8
						1.0	0.2	7	22.2		8.2		29.9		95.1		7.0		9.3		13		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	335	22.2	22.2	8.2	8.2	30.1	30.1	95.9	96.0	7.0	7.0	16.8		13		89				<0.2		2.1	
						4.1	0.1	308	22.2		8.2		30.1		96.0		7.0		16.7		12		89				<0.2		2.3	
IM2	Cloudy	Moderate	08:44	7.7	Surface	1.0	0.3	1	22.4	22.4	8.2	8.2	30.4	30.4	96.1	96.2	7.0	7.0	15.8	17.4	20	19	85	88	818140	806174	<0.2	<0.2	1.6	1.7
						1.0	0.3	1	22.4		8.2		30.4		96.2		7.0		15.8		21		85				<0.2		1.7	
					Middle	3.9	0.3	0	22.4	22.4	8.2	8.2	30.4	30.4	96.6	96.7	7.0		16.9		19		88				<0.2		1.5	
						3.9	0.3	0	22.4		8.2		30.4		96.7		7.0		17.1		19		88				<0.2		1.9	
					Bottom	6.7	0.4	29	22.3	22.3	8.2	8.2	30.4	30.4	99.8	100.0	7.3	7.3	19.5		18		91				<0.2		1.7	
						6.7	0.5	30	22.3		8.2		30.4		100.1		7.3		19.4		18		92				<0.2		1.7	
IM3	Cloudy	Moderate	08:51	7.9	Surface	1.0	0.5	21	22.4	22.4	8.2	8.2	30.7	30.7	96.4	96.4	7.0	7.0	15.8	18.6	20	17	85	88	818796	805609	<0.2	<0.2	1.4	1.4
						1.0	0.5	22	22.4		8.2		30.7		96.4		7.0		15.8		19		85				<0.2		1.3	
					Middle	4.0	0.3	7	22.5	22.5	8.2	8.2	30.8	30.8	96.4	96.4	7.0		18.9		17		88				<0.2		1.3	
						4.0	0.3	7	22.5		8.2		30.8		96.4		7.0		18.8		16		88				<0.2		1.4	
					Bottom	6.9	0.4	17	22.4	22.4	8.2	8.2	30.8	30.8	97.0	97.1	7.0	7.0	21.0		16		91				<0.2		1.5	
						6.9	0.4	18	22.4		8.2		30.8		97.1		7.0		21.1		16		91				<0.2		1.6	
IM4	Cloudy	Moderate	09:01	8.2	Surface	1.0	0.6	355	22.3	22.3	8.2	8.2	30.8	30.8	97.0	97.0	7.1	7.1	18.0	20.3	28	23	85	88	819726	804611	<0.2	<0.2	1.5	1.4
						1.0	0.6	327	22.3		8.2		30.8		97.0		7.1		18.0		29		85				<0.2		1.4	
					Middle	4.1	0.3	349	22.4	22.4	8.2	8.2	30.9	30.9	96.7	96.7	7.0		20.3		20		88				<0.2		1.6	
						4.1	0.4	357	22.4		8.2		30.9		96.7		7.0		20.4		18		89				<0.2		1.3	
					Bottom	7.2	0.5	359	22.4	22.4	8.2	8.2	30.9	30.9	97.1	97.2	7.1	7.1	22.5		20		91				<0.2		1.3	
						7.2	0.5	330	22.4		8.2		30.9		97.2		7.1		22.4		20		92				<0.2		1.4	
IM5	Cloudy	Moderate	09:09	6.8	Surface	1.0	0.5	7	22.2	22.2	8.2	8.2	30.4	30.4	97.0	97.0	7.1	7.1	14.8	18.0	20	19	85	88	820718	804846	<0.2	<0.2	1.6	1.6
						1.0	0.5	7	22.2		8.2		30.4		97.0		7.1		15.2		21		85				<0.2		1.5	
					Middle	3.4	0.5	24	22.3	22.3	8.2	8.2	30.6	30.6	96.7	96.7	7.0		17.7		19		88				<0.2		1.5	
						3.4	0.5	24	22.3		8.2		30.6		96.7		7.0		17.5		19		88				<0.2		1.6	
					Bottom	5.8	0.4	351	22.3	22.3	8.2	8.2	30.6	30.6	97.1	97.1	7.1	7.1	21.5		17		91				<0.2		1.7	
						5.8	0.5	323	22.3		8.2		30.6		97.1		7.1		21.5		17		91				<0.2		1.7	
IM6	Cloudy	Moderate	09:18	7.3	Surface	1.0	0.2	78	22.3	22.3	8.2	8.2	29.7	29.7	94.0	94.0	6.9	6.9	15.1	17.5	18	18	83	87	821060	805816	<0.2	<0.2	1.7	1.7
						1.0	0.2	83	22.3		8.2		29.7		94.0		6.9		15.3		18		83				<0.2		1.6	
					Middle	3.7	0.2	40	22.3	22.3	8.2	8.2	29.7	29.7	94.1	94.2	6.9		16.4		18		86				<0.2		1.7	
						3.7	0.2	43	22.3		8.2		29.7		94.2		6.9		16.8		19		87				<0.2		1.8	
					Bottom	6.3	0.1	96	22.3	22.3	8.2	8.2	29.8	29.8	95.1	95.2	7.0	7.0	21.0		18		90				<0.2		1.7	
						6.3	0.1	100	22.3		8.2		29.8		95.3		7.0		20.6		18		90				<0.2		1.7	
IM7	Cloudy	Moderate	09:30	9.3	Surface	1.0	0.2	136	22.4	22.4	8.2	8.2	29.3	29.3	92.7	92.8	6.8	6.8	17.0	20.2	21	21	83	86	821325	806828	<0.2	<0.2	1.6	1.7
						1.0	0.2	144	22.4		8.2		29.3		92.8		6.8		16.9		20		82				<0.2		1.6	
					Middle	4.7	0.1	128	22.4	22.4	8.2	8.2	29.4	29.4	93.0	93.0	6.8		20.6		19		86				<0.2		1.6	
						4.7	0.1	138	22.4		8.2		29.4		93.0		6.8		20.4		20		87				<0.2		1.8	
					Bottom	8.3	0.1	301	22.4	22.4	8.2	8.2	29.9	29.9	94.3	94.4	6.9	6.9	23.2		21		90				<0.2		1.7	
						8.3	0.1	320	22.4		8.2		29.9		94.4		6.9		23.3		22		90				<0.2		1.7	
IM8	Cloudy	Moderate	08:40	7.6	Surface	1.0	0.2	94	22.9	22.9	8.1	8.1	27.8	27.8	91.4	91.5	6.7	6.8	9.6	12.7	22	17	84	89	821810	808159	<0.2	<0.2	1.7	1.7
						1.0	0.2	97	22.9		8.1		27.8		91.5		6.7		9.6		22		85				<0.2		1.8	
					Middle	3.8	0.3	58	22.8	22.8	8.2	8.2	28.3	28.3	92.6	92.7	6.8		13.2		14		89				<0.2		1.7	
						3.8	0.3	59	22.8		8.2		28.3		92.7		6.8		13.3		15		89				<0.2		1.6	
					Bottom	6.6	0.3	51	22.7	22.7	8.2	8.2	28.8	28.8	93.9	93.9	6.9	6.9	15.1		13		93				<0.2		1.6	
						6.6	0.3	55	22.7		8.2		28.8		93.9		6.9		15.2		14		93				<0.2		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 18 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	08:35	7.3	Surface	1.0	0.2	1	22.8	22.8	8.1	8.1	28.0	28.0	91.9	91.9	6.7	6.8	18.6	21.2	23	23	85	89	822102	808803	<0.2	<0.2	1.9	1.9
						1.0	0.2	1	22.8		8.1		28.0		91.9		6.7		18.5		23		85				<0.2		1.8	
					Middle	3.7	0.3	21	22.8	22.8	8.1	8.1	28.1	28.1	92.3	92.4	6.8	6.8	20.9		23		89				<0.2		1.8	
						3.7	0.4	21	22.8		8.1		28.1		92.4		6.8		20.3		23		88				<0.2		1.9	
					Bottom	6.3	0.3	355	22.7	22.7	8.1	8.1	28.3	28.3	93.2	93.3	6.8	6.8	24.3		23		93				<0.2		2.0	
						6.3	0.3	327	22.7		8.1		28.3		93.3		6.8		24.9		24		93				<0.2		1.9	
IM10	Cloudy	Moderate	08:26	7.8	Surface	1.0	0.4	317	22.9	22.9	8.2	8.2	28.9	28.9	91.7	91.7	6.7	6.7	11.3	12.1	15	16	85	89	822389	809778	<0.2	<0.2	1.9	1.9
						1.0	0.5	336	22.9		8.2		28.9		91.7		6.7		11.3		14		85				<0.2		2.0	
					Middle	3.9	0.4	319	22.9	22.9	8.2	8.2	28.9	28.9	92.0	92.0	6.7		12.3		15		89				<0.2		2.0	
						3.9	0.5	346	22.9		8.2		28.9		92.0		6.7		12.3		16		88				<0.2		1.9	
					Bottom	6.8	0.3	309	22.8	22.8	8.2	8.2	28.9	28.9	93.0	93.1	6.8	6.8	12.9		16		92				<0.2		1.9	
						6.8	0.3	332	22.8		8.2		28.9		93.2		6.8		12.7		17		93				<0.2		1.9	
IM11	Cloudy	Moderate	08:15	7.8	Surface	1.0	0.5	292	22.8	22.8	8.2	8.2	28.9	28.9	93.1	93.1	6.8	6.8	12.3	17.8	17	19	85	89	822037	811440	<0.2	<0.2	1.6	1.6
						1.0	0.5	316	22.8		8.2		28.9		93.1		6.8		12.2		17		85				<0.2		1.5	
					Middle	3.9	0.5	292	22.8	22.8	8.2	8.2	28.9	28.9	93.2	93.2	6.8		18.9		19		88				<0.2		1.6	
						3.9	0.5	320	22.8		8.2		28.9		93.2		6.8		18.0		19		89				<0.2		1.7	
					Bottom	6.8	0.3	302	22.8	22.8	8.2	8.2	28.9	28.9	94.5	94.6	6.9	6.9	22.6		21		92				<0.2		1.7	
						6.8	0.4	304	22.8		8.2		28.9		94.7		6.9		22.7		21		92				<0.2		1.7	
IM12	Cloudy	Moderate	08:08	9.7	Surface	1.0	0.4	280	22.8	22.8	8.2	8.2	28.9	28.9	92.7	92.7	6.8	6.8	11.8	15.2	18	19	85	89	821438	812044	<0.2	<0.2	1.6	1.6
						1.0	0.4	292	22.8		8.2		28.9		92.7		6.8		11.7		19		84				<0.2		1.7	
					Middle	4.9	0.4	277	22.8	22.8	8.2	8.2	28.9	28.9	92.8	92.8	6.8		15.6		16		89				<0.2		1.6	
						4.9	0.4	290	22.8		8.2		28.9		92.8		6.8		16.2		17		89				<0.2		1.6	
					Bottom	8.7	0.5	283	22.8	22.8	8.2	8.2	28.9	28.9	93.5	93.6	6.8	6.8	17.7		21		94				<0.2		1.6	
						8.7	0.5	306	22.8		8.2		28.9		93.7		6.8		18.0		21		93				<0.2		1.6	
SR1A	Cloudy	Moderate	07:48	5.3	Surface	1.0	-	-	22.8	22.8	8.2	8.2	28.7	28.7	90.6	90.6	6.6	6.6	8.3	7.9	11	10	-	-	820064	812590	-	-	-	-
						1.0	-	-	22.8		8.2		28.7		90.6		6.6		8.4		10		-				-		-	
					Middle	2.7	-	-	-	-		-	-	-	-	-	-					-		-				-		-	
						2.7	-	-	-				-		-		-				-		-				-		-	
					Bottom	4.3	-	-	22.8	22.8	8.2	8.2	28.7	28.7	92.1	92.3	6.7	6.8	7.5		10		-				-		-	
						4.3	-	-	22.7		8.2		28.7		92.5		6.8		7.5		10		-				-		-	
SR2	Cloudy	Moderate	07:36	4.4	Surface	1.0	0.1	346	22.7	22.7	8.2	8.2	28.9	28.9	93.1	93.1	6.8	6.8	15.6	15.4	6	12	84	87	821486	814179	<0.2	<0.2	1.6	1.6
						1.0	0.1	318	22.7		8.2		28.9		93.1		6.8		15.3		6		85				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	339	22.7	22.7	8.2	8.2	28.9	28.9	93.3	93.4	6.8	6.8	15.3		17		89				<0.2		1.6	
						3.4	0.1	312	22.7		8.2		28.9		93.4		6.8		15.4		17		89				<0.2		1.6	
SR3	Cloudy	Moderate	08:47	8.7	Surface	1.0	0.1	56	22.9	22.9	8.1	8.1	27.8	27.8	91.9	91.9	6.7	6.8	10.0	15.7	11	11	-	-	822163	807559	-	-	-	-
						1.0	0.1	56	22.9		8.1		27.8		91.9		6.7		10.0		11		-				-		-	
					Middle	4.4	0.3	62	22.7	22.7	8.2	8.2	28.1	28.1	93.3	93.4	6.8		11.5		11		-				-		-	
						4.4	0.3	67	22.7		8.2		28.2		93.4		6.8		11.5		11		-				-		-	
					Bottom	7.7	0.4	51	22.7	22.7	8.2	8.2	29.1	29.0	94.1	94.2	6.9	6.9	25.8		11		-				-		-	
						7.7	0.4	55	22.7		8.2		29.0		94.2		6.9		25.6		12		-				-		-	
SR4A	Cloudy	Calm	07:56	9.1	Surface	1.0	0.1	187	22.4	22.4	8.2	8.2	29.5	29.5	90.9	91.0	6.7	6.8	8.2	10.7	7	7	-	-	817192	807810	-	-	-	-
						1.0	0.2	196	22.4		8.2		29.5		91.0		6.7		8.3		7		-				-		-	
					Middle	4.6	0.0	181	22.4	22.4	8.2	8.2	29.6	29.6	92.3	92.5	6.8		10.2		7		-				-		-	
						4.6	0.0	185	22.4		8.2		29.7		92.7		6.8		11.2		7		-				-		-	
					Bottom	8.1	0.2	61	22.3	22.3	8.2	8.2	30.4	30.4	94.7	94.8	6.9	6.9	13.0		7		-				-		-	
						8.1	0.2	65	22.3		8.2		30.4		94.9		6.9		13.1		7		-				-		-	
SR5A	Cloudy	Calm	07:40	3.5	Surface	1.0	0.1	270	22.4	22.4	8.2	8.2	29.5	29.5	92.4	92.5	6.8	6.8	9.2	9.5	7	9	-	-	816607	810691	-	-	-	-
						1.0	0.1	295	22.4		8.2		29.5		92.6		6.8		9.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	272	22.3	22.3	8.2	8.2	29.5	29.5	93.1	93.2	6.8	6.8	9.8		10		-				-		-	
						2.5	0.1	299	22.3		8.2		29.5		93.2		6.8		10.0		9		-				-		-	
SR6	Cloudy	Calm	07:06	3.8	Surface	1.0	0.2	248	22.4	22.4	8.1	8.1	29.6	29.6	90.4	90.5	6.6	6.6	9.9	11.3	6	8	-	-	817888	814659	-	-	-	-
						1.0	0.2	256	22.4		8.1		29.6		90.5		6.6		10.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	262	22.4	22.4	8.1	8.1	29.7	29.7	91.0	91.1	6.7	6.7	12.5		9		-				-		-	
						2.8	0.2	266	22.4		8.1		29.7		91.1		6.7		12.7		10		-				-		-	
SR7	Cloudy	Moderate	06:44	14.3	Surface	1.0	0.1	68	22.9	22.9	8.2	8.2	29.8	29.8	90.5	90.5	6.6	6.6	4.8	6.4	5	7	-	-	823618	823721	-	-	-	-
						1.0	0.1	69	22.9		8.2		29.8		90.5		6.6		4.8		6		-				-		-	
					Middle	7.2	0.3	26	23.1	23.1	8.1	8.1	30.3	30.3	90.2	90.2	6.5		6.7		8		-				-		-	
						7.2	0.3	26	23.1		8.1		30.3		90.2		6.5		6.7		8		-				-		-	
					Bottom	13.3	0.2	359	23.0	23.0	8.0	8.0	30.4	30.4	91.1	91.1	6.6	6.6	7.7		6		-				-		-	
						13.3	0.3	330	23.0		8.0		30.4		91.1		6.6		7.8		8		-				-		-	
SR8	Cloudy	Moderate	08:00	4.6	Surface	1.0	-	-	22.7	22.7	8.2	8.2	28.7	28.7	93.2	93.2	6.8	6.8	8.7	9.4	16	15	-	-	820484	811646	-	-	-	-
						1.0	-	-	22.7		8.2		28.7		93.2		6.8		8.6		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	22.8	22.8	8.2	8.2	28.9	28.9	93.7	93.8	6.8	6.8	10.1		14		-				-		-	
						3.6	-	-	22.8		8.2		28.9		93.9		6.8		10.2		14		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 December 18 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	14:49	9.1	Surface	1.0	0.1	230	21.3	21.3	8.3	8.3	30.8	30.8	97.2	97.2	7.2	7.2	6.9	11.9	13	11	90	94	815600	804246	<0.2	<0.2	0.8	0.7
						1.0	0.1	232	21.3		8.3		30.8		97.1		7.2		7.0		12		90				<0.2		0.7	
					Middle	4.6	0.3	266	21.3	21.3	8.3	8.3	30.8	30.8	97.0	97.0	7.2		7.6		8		93				<0.2		0.7	
						4.6	0.3	272	21.3		8.3		30.8		96.9		7.2		7.7		10		95				<0.2		0.6	
					Bottom	8.1	0.3	270	21.3	21.3	8.2	8.2	30.8	30.8	96.7	96.7	7.2	7.2	21.1		10		96				<0.2		0.6	
						8.1	0.3	274	21.3		8.2		30.8		96.7		7.2		21.2		10		97				<0.2		0.8	
C2	Fine	Moderate	13:54	11.8	Surface	1.0	0.3	21	21.5	21.5	8.2	8.2	29.7	29.7	94.9	94.9	7.1	7.1	5.8	14.2	7	8	88	93	825687	806933	<0.2	<0.2	1.3	1.4
						1.0	0.3	21	21.5		8.2		29.7		94.9		7.1		5.8		7		89				<0.2		1.4	
					Middle	5.9	0.4	337	21.4	21.4	8.2	8.2	30.1	30.1	94.2	94.2	7.0		20.8		9		92				<0.2		1.4	
						5.9	0.4	359	21.4		8.2		30.1		94.2		7.0		20.7		8		93				<0.2		1.3	
					Bottom	10.8	0.4	315	21.3	21.3	8.2	8.2	30.8	30.8	96.4	96.5	7.1	7.1	16.0		8		96				<0.2		1.3	
						10.8	0.4	318	21.3		8.2		30.8		96.5		7.1		16.1		8		97				<0.2		1.5	
C3	Fine	Moderate	15:53	7.8	Surface	1.0	0.1	163	22.2	22.2	8.2	8.2	31.8	31.8	93.7	93.7	6.8	6.8	4.0	4.4	8	9	88	92	822112	817804	<0.2	<0.2	0.8	0.8
						1.0	0.1	167	22.2		8.2		31.8		93.7		6.8		4.0		7		89				<0.2		0.8	
					Middle	3.9	0.0	326	22.2	22.2	8.2	8.2	31.9	31.9	93.5	93.5	6.8		4.3		8		92				<0.2		0.7	
						3.9	0.0	328	22.2		8.2		31.9		93.5		6.8		4.3		8		92				<0.2		0.9	
					Bottom	6.8	0.0	359	22.2	22.2	8.2	8.2	31.9	31.9	93.4	93.5	6.8	6.8	4.8		10		96				<0.2		1.0	
						6.8	0.0	330	22.2		8.2		31.9		93.5		6.8		4.8		10		95				<0.2		0.8	
IM1	Fine	Moderate	14:31	5.4	Surface	1.0	0.1	175	21.3	21.3	8.2	8.2	30.8	30.8	95.8	95.8	7.1	7.1	6.9	7.4	9	9	86	90	817967	807131	<0.2	<0.2	0.8	0.7
						1.0	0.1	177	21.3		8.2		30.8		95.8		7.1		6.8		8		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	169	21.4	21.4	8.2	8.2	30.8	30.8	95.2	95.2	7.0	7.0	7.9		9		94				<0.2		0.7	
						4.4	0.1	173	21.4		8.2		30.8		95.2		7.0		7.9		9		94				<0.2		0.7	
IM2	Fine	Moderate	14:26	7.8	Surface	1.0	0.2	160	21.3	21.3	8.2	8.2	30.8	30.8	96.4	96.4	7.1	7.1	6.2	6.5	8	9	86	91	818172	806186	<0.2	<0.2	0.6	0.7
						1.0	0.2	164	21.3		8.2		30.8		96.4		7.1		6.2		8		88				<0.2		0.7	
					Middle	3.9	0.2	287	21.3	21.3	8.2	8.2	30.8	30.8	96.1	96.1	7.1		6.4		8		90				<0.2		0.7	
						3.9	0.2	302	21.3		8.2		30.8		96.1		7.1		6.4		9		90				<0.2		0.7	
					Bottom	6.8	0.1	280	21.3	21.3	8.2	8.2	30.8	30.8	95.9	96.0	7.1	7.1	6.8		9		94				<0.2		0.7	
						6.8	0.2	292	21.3		8.2		30.8		96.0		7.1		6.9		9		95				<0.2		0.7	
IM3	Fine	Moderate	14:20	8.1	Surface	1.0	0.2	180	21.3	21.3	8.2	8.2	30.8	30.8	95.8	95.8	7.1	7.1	7.5	7.8	10	10	87	91	818793	805571	<0.2	<0.2	0.8	0.8
						1.0	0.2	195	21.3		8.2		30.8		95.8		7.1		7.5		9		88				<0.2		0.8	
					Middle	4.1	0.1	133	21.3	21.3	8.2	8.2	30.8	30.8	95.6	95.6	7.1		7.5		10		90				<0.2		0.8	
						4.1	0.1	143	21.3		8.2		30.8		95.6		7.1		7.4		10		91				<0.2		0.7	
					Bottom	7.1	0.1	110	21.3	21.3	8.2	8.2	30.8	30.8	95.3	95.4	7.1	7.1	8.4		9		94				<0.2		0.8	
						7.1	0.1	111	21.3		8.2		30.8		95.4		7.1		8.4		9		94				<0.2		0.7	
IM4	Fine	Moderate	14:13	8.4	Surface	1.0	0.4	310	21.3	21.3	8.2	8.2	30.3	30.3	96.7	96.8	7.2	7.2	7.8	9.0	9	10	87	90	819702	804599	<0.2	<0.2	0.7	0.7
						1.0	0.4	319	21.3		8.2		30.3		96.8		7.2		7.9		9		87				<0.2		0.7	
					Middle	4.2	0.2	328	21.3	21.3	8.2	8.2	30.5	30.5	97.1	97.2	7.2		8.9		11		90				<0.2		0.7	
						4.2	0.2	330	21.3		8.2		30.5		97.2		7.2		9.0		10		91				<0.2		0.7	
					Bottom	7.4	0.2	354	21.3	21.3	8.2	8.2	30.7	30.7	97.3	97.3	7.2	7.2	10.2		10		93				<0.2		0.8	
						7.4	0.3	326	21.3		8.2		30.7		97.3		7.2		10.2		11		94				<0.2		0.7	
IM5	Fine	Moderate	14:03	7.6	Surface	1.0	0.4	243	21.4	21.4	8.2	8.2	30.3	30.3	97.4	97.4	7.2	7.2	8.0	9.9	10	11	86	91	820731	804844	<0.2	<0.2	0.8	0.8
						1.0	0.4	249	21.4		8.2		30.3		97.3		7.2		8.0		11		87				<0.2		0.6	
					Middle	3.8	0.4	221	21.3	21.3	8.3	8.3	30.6	30.6	96.7	96.7	7.2		10.0		10		89				<0.2		0.7	
						3.8	0.4	228	21.3		8.3		30.6		96.7		7.2		10.0		10		91				<0.2		0.8	
					Bottom	6.6	0.1	199	21.2	21.2	8.3	8.3	30.9	30.9	96.3	96.3	7.2	7.2	11.6		12		95				<0.2		0.8	
						6.6	0.1	215	21.2		8.3		30.9		96.3		7.2		11.7		12		96				<0.2		0.8	
IM6	Fine	Moderate	13:55	8.0	Surface	1.0	0.5	214	21.4	21.4	8.2	8.2	30.3	30.3	97.4	97.4	7.2	7.2	7.8	9.6	9	10	86	90	821054	805824	<0.2	<0.2	0.8	0.7
						1.0	0.5	221	21.4		8.2		30.3		97.4		7.2		7.9		9		87				<0.2		0.7	
					Middle	4.0	0.3	237	21.3	21.3	8.3	8.3	30.6	30.6	96.9	96.9	7.2		9.5		11		90				<0.2		0.7	
						4.0	0.3	237	21.3		8.3		30.6		96.8		7.2		9.6		10		91				<0.2		0.7	
					Bottom	7.0	0.3	216	21.2	21.2	8.3	8.3	30.9	30.9	96.5	96.5	7.2	7.2	11.4		11		93				<0.2		0.7	
						7.0	0.3	235	21.2		8.3		30.9		96.5		7.2		11.3		10		94				<0.2		0.7	
IM7	Fine	Moderate	13:53	9.4	Surface	1.0	0.4	216	21.4	21.4	8.2	8.2	30.3	30.3	97.0	97.0	7.2	7.2	8.0	10.1	11	11	87	90	821354	806833	<0.2	<0.2	0.8	0.8
						1.0	0.5	220	21.4		8.2		30.3		97.0		7.2		8.0		12		88				<0.2		0.8	
					Middle	4.7	0.5	239	21.2	21.2	8.3	8.3	30.9	30.9	96.1	96.1	7.1		9.9		11		90				<0.2		0.7	
						4.7	0.5	250	21.2		8.3		30.9		96.1		7.1		10.0		11		91				<0.2		0.8	
					Bottom	8.4	0.4	249	21.2	21.2	8.3	8.3	31.1	31.1	96.3	96.3	7.1	7.1	12.3		11		93				<0.2		0.7	
						8.4	0.4	255	21.2		8.3		31.1		96.3		7.1		12.2		12		93				<0.2		0.8	
IM8	Fine	Moderate	14:23	8.9	Surface	1.0	0.2	125	21.4	21.4	8.2	8.2	30.3	30.3	97.6	97.6	7.2	7.2	8.2	9.8	8	10	89	93	821835	808129	<0.2	<0.2	1.2	1.1
						1.0	0.2	130	21.4		8.2		30.3		97.6		7.2		8.3		8		89				<0.2		1.1	
					Middle	4.5	0.2	118	21.3	21.3	8.2	8.2	30.5	30.5	97.4	97.4	7.2		8.6		11		92				<0.2		1.1	
						4.5	0.2	120	21.3		8.2		30.5		97.4		7.2		8.6		11		93				<0.2		1.1	
					Bottom	7.9	0.2	102	21.2	21.2	8.3	8.3	30.9	30.9	97.2	97.3	7.2	7.2	12.6		11		96				<0.2		1.2	
						7.9	0.2	104	21.2		8.3		30.9		97.3		7.2		12.7		12		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 11 December 18 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	14:30	8.3	Surface	1.0	0.2	73	21.3	21.3	8.2	8.2	30.3	30.3	97.0	97.1	7.2	7.2	7.7	9.2	10	11	89	93	822108	808805	<0.2	<0.2	1.1	1.2
						1.0	0.2	74	21.3		8.2		30.3		97.1		7.2		7.8		10		89				<0.2		1.3	
					Middle	4.2	0.2	86	21.2	21.2	8.2	8.2	30.6	30.6	97.6	97.7	7.2		9.4		10		92				<0.2		1.0	
						4.2	0.2	86	21.2		8.2		30.6		97.7		7.3		9.5		10		93				<0.2		1.2	
					Bottom	7.3	0.1	88	21.3	21.3	8.2	8.2	30.8	30.8	99.2	99.4	7.4	7.4	10.5		12		96				<0.2		1.3	
						7.3	0.1	91	21.3		8.2		30.8		99.5		7.4		10.5		11		96				<0.2		1.1	
IM10	Fine	Moderate	14:37	8.4	Surface	1.0	0.1	331	21.3	21.3	8.2	8.2	30.8	30.8	96.0	96.0	7.1	7.1	7.3	7.8	10	10	88	93	822386	809800	<0.2	<0.2	1.0	1.0
						1.0	0.1	352	21.3		8.2		30.8		96.0		7.1		7.3		9		89				<0.2		1.1	
					Middle	4.2	0.2	62	21.3	21.3	8.2	8.2	30.8	30.8	95.8	95.9	7.1		8.0		10		93				<0.2		1.0	
						4.2	0.2	63	21.3		8.2		30.8		95.9		7.1		7.9		9		92				<0.2		1.0	
					Bottom	7.4	0.1	66	21.3	21.3	8.2	8.2	30.8	30.8	96.9	97.1	7.2	7.2	8.2		10		96				<0.2		1.0	
						7.4	0.1	73	21.3		8.2		30.8		97.2		7.2		8.2		10		97				<0.2		1.0	
IM11	Fine	Moderate	14:49	9.1	Surface	1.0	0.1	89	21.3	21.3	8.2	8.2	30.8	30.8	96.7	96.7	7.2	7.2	6.2	6.7	10	9	88	93	822056	811464	<0.2	<0.2	1.0	0.9
						1.0	0.1	98	21.3		8.2		30.8		96.7		7.2		6.2		10		89				<0.2		1.0	
					Middle	4.6	0.0	79	21.3	21.3	8.2	8.2	30.8	30.8	96.4	96.4	7.1		6.7		9		93				<0.2		1.0	
						4.6	0.0	64	21.3		8.2		30.8		96.4		7.1		6.7		8		93				<0.2		0.8	
					Bottom	8.1	0.1	23	21.2	21.2	8.2	8.2	30.8	30.8	97.3	97.4	7.2	7.2	7.3		9		96				<0.2		0.9	
						8.1	0.1	26	21.2		8.2		30.8		97.4		7.2		7.3		8		97				<0.2		0.9	
IM12	Fine	Moderate	14:57	8.4	Surface	1.0	0.1	54	21.3	21.3	8.2	8.2	30.8	30.8	95.9	95.9	7.1	7.1	6.6	7.7	10	10	89	93	821468	812059	<0.2	<0.2	0.9	1.0
						1.0	0.1	61	21.3		8.2		30.8		95.9		7.1		6.7		9		89				<0.2		1.0	
					Middle	4.2	0.2	54	21.3	21.3	8.2	8.2	30.8	30.8	95.7	95.7	7.1		7.1		10		93				<0.2		1.0	
						4.2	0.2	59	21.3		8.2		30.8		95.7		7.1		7.2		10		93				<0.2		1.0	
					Bottom	7.4	0.2	46	21.4	21.4	8.2	8.2	30.8	30.8	97.2	97.4	7.2	7.2	9.3		9		96				<0.2		1.0	
						7.4	0.2	51	21.4		8.2		30.8		97.5		7.2		9.4		9		97				<0.2		1.0	
SR1A	Fine	Moderate	15:17	5.6	Surface	1.0	-	-	21.3	21.3	8.2	8.2	30.2	30.2	94.2	94.2	7.0	7.0	6.4	7.2	8	9	-	-	820070	812592	-	-	-	-
						1.0	-	-	21.3		8.2		30.2		94.2		7.0		6.4		9		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	21.3	21.3	8.2	8.2	30.3	30.3	95.6	95.8	7.1	7.1	8.0		9		-				-		-	
						4.6	-	-	21.3		8.2		30.3		95.9		7.1		8.0		8		-				-		-	
SR2	Fine	Moderate	15:29	4.8	Surface	1.0	0.1	80	21.5	21.5	8.2	8.2	31.0	31.0	95.9	95.9	7.1	7.1	6.2	6.6	8	10	89	90	821466	814187	<0.2	<0.2	1.0	1.0
						1.0	0.1	82	21.5		8.2		31.0		95.9		7.1		6.3		9		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	49	21.6	21.6	8.2	8.2	31.0	31.0	96.6	96.7	7.1	7.1	6.9		11		92				<0.2		1.0	
						3.8	0.2	43	21.6		8.2		31.0		96.8		7.1		7.1		10		92				<0.2		0.8	
SR3	Fine	Moderate	14:18	10.0	Surface	1.0	0.3	177	21.4	21.4	8.2	8.2	30.3	30.3	97.2	97.2	7.2	7.2	8.1	10.4	10	12	-	-	822137	807576	-	-	-	-
						1.0	0.3	177	21.4		8.2		30.3		97.2		7.2		8.1		10		-				-		-	
					Middle	5.0	0.2	165	21.2	21.2	8.3	8.3	31.0	31.0	96.7	96.7	7.2		10.8		11		-				-		-	
						5.0	0.2	167	21.2		8.3		31.0		96.7		7.2		10.8		11		-				-		-	
					Bottom	9.0	0.2	175	21.1	21.1	8.3	8.3	31.1	31.1	97.3	97.3	7.2	7.2	12.4		14		-				-		-	
						9.0	0.2	182	21.1		8.3		31.1		97.3		7.2		12.1		14		-				-		-	
SR4A	Fine	Calm	15:12	8.6	Surface	1.0	0.3	66	21.5	21.5	8.2	8.2	30.9	30.9	95.6	95.6	7.1	7.0	6.1	7.1	7	8	-	-	817199	807790	-	-	-	-
						1.0	0.3	71	21.5		8.2		30.9		95.5		7.1		6.1		8		-				-		-	
					Middle	4.3	0.3	59	21.6	21.6	8.2	8.2	31.0	31.0	93.5	93.5	6.9		6.4		8		-				-		-	
						4.3	0.3	59	21.6		8.2		31.0		93.4		6.9		6.6		8		-				-		-	
					Bottom	7.6	0.2	100	21.8	21.8	8.2	8.2	31.1	31.1	93.6	93.7	6.9	6.9	8.6		9		-				-		-	
						7.6	0.2	106	21.8		8.2		31.1		93.7		6.9		8.6		9		-				-		-	
SR5A	Fine	Calm	15:28	5.0	Surface	1.0	0.1	140	22.2	22.2	8.2	8.2	31.8	31.8	93.7	93.7	6.8	6.8	4.0	4.1	4	7	-	-	816572	810713	-	-	-	-
						1.0	0.1	140	22.2		8.2		31.8		93.7		6.8		4.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	81	22.2	22.2	8.2	8.2	31.8	31.8	93.7	93.7	6.8	6.8	4.2		10		-				-		-	
						4.0	0.1	88	22.2		8.2		31.8		93.7		6.8		4.2		9		-				-		-	
SR6	Fine	Calm	15:51	4.3	Surface	1.0	0.1	250	22.2	22.2	8.2	8.2	31.8	31.8	93.7	93.7	6.8	6.8	4.1	4.1	7	7	-	-	817885	814651	-	-	-	-
						1.0	0.1	264	22.2		8.2		31.8		93.7		6.8		4.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	271	22.2	22.2	8.2	8.2	31.8	31.8	93.6	93.6	6.8	6.8	4.2		8		-				-		-	
						3.3	0.1	285	22.2		8.2		31.8		93.6		6.8		4.2		8		-				-		-	
SR7	Fine	Moderate	16:22	14.7	Surface	1.0	0.3	70	22.1	22.1	8.2	8.2	31.8	31.8	94.3	94.3	6.8	6.8	3.9	4.2	9	14	-	-	823650	823748	-	-	-	-
						1.0	0.3	71	22.1		8.2		31.8		94.3		6.8		3.9		10		-				-		-	
					Middle	7.4	0.2	44	22.1	22.1	8.2	8.2	31.8	31.8	94.0	94.0	6.8		4.2		10		-				-		-	
						7.4	0.2	47	22.1		8.2		31.8		94.0		6.8		4.2		10		-				-		-	
					Bottom	13.7	0.1	17	22.2	22.2	8.2	8.2	31.9	31.9	94.1	94.1	6.8	6.8	4.6		22		-				-		-	
						13.7	0.1	18	22.2		8.2		31.9		94.1		6.8		4.6		22		-				-		-	
SR8	Fine	Moderate	15:07	4.3	Surface	1.0	-	-	21.3	21.3	8.3	8.3	30.8	30.8	97.5	97.5	7.2	7.2	6.7	7.0	11	11	-	-	820525	811658	-	-	-	-
						1.0	-	-	21.3		8.3		30.8		97.5		7.2		6.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	21.3	21.3	8.2	8.2	30.8	30.8	99.2	99.3	7.3	7.4	7.3		11		-				-		-	
						3.3	-	-	21.3		8.2		30.8		99.4		7.4		7.3		10		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 December 18 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	09:52	8.8	Surface	1.0	0.0	80	21.3	21.3	8.2	8.2	30.8	30.8	94.9	94.9	7.0	7.0	7.6	9.8	10	9	84	89	815609	804266	<0.2	<0.2	0.9	0.9
						1.0	0.0	84	21.3		8.2		30.8		94.9		7.0		7.7		11		85				<0.2		0.9	
					Middle	4.4	0.1	87	21.3	21.3	8.2	8.2	30.8	30.8	94.8	94.8	7.0		8.1		9		88				<0.2		1.0	
						4.4	0.1	90	21.3		8.2		30.8		94.7		7.0		8.4		9		89				<0.2		1.0	
					Bottom	7.8	0.1	79	21.3	21.3	8.2	8.2	30.8	30.8	94.6	94.7	7.0	7.0	13.3		6		93				<0.2		0.8	
						7.8	0.2	83	21.3		8.2		30.8		94.7		7.0		13.5		6		93				<0.2		0.9	
C2	Fine	Moderate	11:46	12.0	Surface	1.0	0.3	340	21.4	21.4	8.2	8.2	29.7	29.7	93.9	93.9	7.0	7.0	5.6	12.3	9	9	84	88	825693	806934	<0.2	<0.2	1.3	1.4
						1.0	0.3	342	21.4		8.2		29.7		93.9		7.0		5.6		9		84				<0.2		1.4	
					Middle	6.0	0.3	1	21.5	21.5	8.2	8.2	29.9	29.9	92.7	92.7	6.9		9.3		8		89				<0.2		1.4	
						6.0	0.3	1	21.5		8.2		29.9		92.7		6.9		9.4		9		88				<0.2		1.3	
					Bottom	11.0	0.2	324	21.8	21.8	8.2	8.2	30.6	30.5	92.8	92.9	6.8	6.8	22.0		9		92				<0.2		1.5	
						11.0	0.2	337	21.8		8.2		30.5		92.9		6.8		22.1		9		92				<0.2		1.4	
C3	Cloudy	Moderate	09:45	10.9	Surface	1.0	0.5	274	21.7	21.7	8.2	8.2	31.1	31.1	93.4	93.4	6.9	6.9	6.0	12.6	8	8	84	89	822100	817818	<0.2	<0.2	0.9	1.0
						1.0	0.5	298	21.7		8.2		31.1		93.4		6.9		6.0		8		85				<0.2		0.8	
					Middle	5.5	0.4	274	21.8	21.8	8.2	8.2	31.1	31.1	92.7	92.7	6.8		8.7		8		89				<0.2		0.8	
						5.5	0.4	293	21.8		8.2		31.1		92.7		6.8		8.8		8		89				<0.2		1.1	
					Bottom	9.9	0.3	277	21.8	21.8	8.2	8.2	31.1	31.1	92.8	92.8	6.8	6.8	22.5		6		93				<0.2		1.0	
						9.9	0.3	303	21.8		8.2		31.1		92.8		6.8		23.7		7		92				<0.2		1.1	
IM1	Fine	Moderate	10:08	5.5	Surface	1.0	0.1	97	21.2	21.2	8.2	8.2	30.7	30.7	95.0	95.0	7.1	7.1	8.8	9.3	10	9	85	89	817943	807131	<0.2	<0.2	0.9	0.9
						1.0	0.1	103	21.2		8.2		30.7		95.0		7.1		8.9		9		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	130	21.2	21.2	8.2	8.2	30.8	30.8	94.9	94.9	7.0	7.0	9.7		9		92				<0.2		0.9	
						4.5	0.1	134	21.2		8.2		30.8		94.9		7.0		9.8		8		93				<0.2		0.9	
IM2	Fine	Moderate	10:15	8.0	Surface	1.0	0.2	92	21.4	21.4	8.2	8.2	30.9	30.9	95.0	95.0	7.0	7.0	11.2	13.2	9	9	87	89	818167	806188	<0.2	<0.2	0.9	1.0
						1.0	0.2	94	21.4		8.2		30.9		95.0		7.0		11.2		10		87				<0.2		1.0	
					Middle	4.0	0.1	100	21.3	21.3	8.2	8.2	30.9	30.9	94.7	94.7	7.0		13.3		10		89				<0.2		1.0	
						4.0	0.1	108	21.3		8.2		30.9		94.7		7.0		13.5		9		89				<0.2		0.9	
					Bottom	7.0	0.2	90	21.3	21.3	8.2	8.2	30.9	30.9	94.6	94.6	7.0	7.0	15.0		9		92				<0.2		1.0	
						7.0	0.2	97	21.3		8.2		30.9		94.6		7.0		15.0		9		92				<0.2		1.0	
IM3	Fine	Moderate	10:22	8.1	Surface	1.0	0.1	88	21.3	21.3	8.2	8.2	30.8	30.8	95.3	95.3	7.1	7.1	11.4	11.5	10	11	87	92	818794	805581	<0.2	<0.2	0.9	1.0
						1.0	0.1	95	21.3		8.2		30.8		95.3		7.1		11.2		11		88				<0.2		1.0	
					Middle	4.1	0.1	90	21.3	21.3	8.2	8.2	30.8	30.8	95.2	95.2	7.1		11.5		11		92				<0.2		1.0	
						4.1	0.1	97	21.3		8.2		30.8		95.2		7.1		11.4		11		93				<0.2		1.0	
					Bottom	7.1	0.2	64	21.3	21.3	8.2	8.2	30.8	30.8	95.2	95.2	7.1	7.1	11.7		11		95				<0.2		1.0	
						7.1	0.2	64	21.3		8.2		30.8		95.2		7.1		11.6		12		95				<0.2		0.9	
IM4	Fine	Moderate	10:29	8.2	Surface	1.0	0.2	74	21.3	21.3	8.2	8.2	29.8	29.8	94.4	94.4	7.0	7.0	8.0	9.8	14	16	87	90	819733	804619	<0.2	<0.2	1.0	1.0
						1.0	0.2	80	21.3		8.2		29.8		94.4		7.0		8.0		14		87				<0.2		1.0	
					Middle	4.1	0.1	333	21.3	21.3	8.2	8.2	30.0	30.0	94.5	94.5	7.0		10.1		15		90				<0.2		1.1	
						4.1	0.1	359	21.3		8.2		30.0		94.5		7.0		10.1		16		90				<0.2		1.0	
					Bottom	7.2	0.2	337	21.3	21.3	8.2	8.2	30.2	30.2	94.8	94.8	7.1	7.1	11.3		20		92				<0.2		1.0	
						7.2	0.2	337	21.3		8.2		30.2		94.8		7.1		11.2		19		93				<0.2		1.0	
IM5	Fine	Moderate	10:36	7.4	Surface	1.0	0.1	327	21.3	21.3	8.2	8.2	29.9	29.9	94.5	94.5	7.0	7.0	8.7	9.9	10	10	88	93	820716	804859	<0.2	<0.2	1.1	0.9
						1.0	0.1	346	21.3		8.2		29.9		94.5		7.0		8.7		10		89				<0.2		0.8	
					Middle	3.7	0.2	22	21.3	21.3	8.2	8.2	29.9	29.9	94.5	94.5	7.0		9.4		9		93				<0.2		0.7	
						3.7	0.2	22	21.3		8.2		29.9		94.5		7.0		9.4		10		94				<0.2		1.0	
					Bottom	6.4	0.1	49	21.3	21.3	8.2	8.2	30.3	30.3	94.5	94.5	7.0	7.0	11.7		10		96				<0.2		0.8	
						6.4	0.2	50	21.3		8.2		30.3		94.5		7.0		11.6		10		96				<0.2		1.1	
IM6	Fine	Moderate	10:42	7.6	Surface	1.0	0.0	129	21.3	21.3	8.2	8.2	29.9	29.9	94.6	94.6	7.0	7.0	9.4	10.1	12	12	88	93	821057	805826	<0.2	<0.2	0.9	1.0
						1.0	0.0	140	21.3		8.2		29.9		94.6		7.0		9.4		11		89				<0.2		1.1	
					Middle	3.8	0.1	57	21.3	21.3	8.2	8.2	30.0	29.9	94.5	94.5	7.0		9.7		12		92				<0.2		1.1	
						3.8	0.1	58	21.3		8.2		29.9		94.5		7.0		9.7		11		94				<0.2		0.8	
					Bottom	6.6	0.1	43	21.3	21.3	8.2	8.2	30.3	30.3	94.4	94.4	7.0	7.0	11.4		12		96				<0.2		0.8	
						6.6	0.1	44	21.3		8.2		30.2		94.4		7.0		11.1		14		97				<0.2		1.1	
IM7	Fine	Moderate	10:50	9.0	Surface	1.0	0.1	257	21.4	21.4	8.2	8.2	29.6	29.6	93.8	93.8	7.0	7.0	8.2	13.5	10	10	88	92	821328	806847	<0.2	<0.2	1.1	0.9
						1.0	0.1	270	21.4		8.2		29.6		93.8		7.0		8.2		10		89				<0.2		1.0	
					Middle	4.5	0.1	78	21.4	21.4	8.2	8.2	29.8	29.8	93.7	93.7	7.0		10.2		9		92				<0.2		1.0	
						4.5	0.1	79	21.4		8.2		29.8		93.7		7.0		10.4		9		93				<0.2		0.8	
					Bottom	8.0	0.1	80	21.2	21.2	8.2	8.2	30.6	30.6	94.3	94.3	7.0	7.0	22.0		10		95				<0.2		0.9	
						8.0	0.1	82	21.2		8.2		30.6		94.2		7.0		22.0		9		96				<0.2		0.8	
IM8	Cloudy	Moderate	11:13	7.3	Surface	1.0	0.1	103	21.3	21.3	8.2	8.2	29.9	29.9	94.7	94.7	7.1	7.1	8.7	10.3	12	12	85	89	821810	808138	<0.2	<0.2	1.3	1.3
						1.0	0.1	105	21.3		8.2		29.9		94.7		7.1		8.7		11		84				<0.2		1.4	
					Middle	3.7	0.1	80	21.3	21.3	8.2	8.2	30.0	30.0	94.9	95.0	7.1		9.9		12		89				<0.2		1.3	
						3.7	0.1	81	21.3		8.2		30.0		95.0		7.1		9.9		13		89				<0.2		1.2	
					Bottom	6.3	0.1	72	21.3	21.3	8.2	8.2	30.3	30.3	96.1	96.2	7.1	7.2	12.3		13		93				<0.2		1.1	
						6.3	0.1	72	21.3		8.2		30.3		96.2		7.2		12.4		13		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 11 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:05	6.7	Surface	1.0	0.3	31	21.3	21.3	8.2	8.2	29.8	29.8	94.8	94.9	7.1	7.1	8.2	10.0	10	10	84	89	822101	808814	<0.2	<0.2	1.3	1.3
						1.0	0.3	31	21.3		8.2		29.8		94.9		7.1		8.4		11		85				<0.2		1.2	
					Middle	3.4	0.3	13	21.2	21.2	8.2	8.2	30.0	30.0	95.4	95.5	7.1		10.4		10		88				<0.2		1.3	
						3.4	0.3	13	21.2		8.2		30.0		95.5		7.1		10.4		10		89				<0.2		1.3	
					Bottom	5.7	0.4	349	21.2	21.2	8.2	8.2	30.2	30.2	97.8	98.0	7.3	7.3	11.2		10		93				<0.2		1.3	
						5.7	0.4	321	21.2		8.2		30.2		98.2		7.3		11.3		11		92				<0.2		1.3	
IM10	Cloudy	Moderate	10:55	6.5	Surface	1.0	0.4	326	21.3	21.3	8.2	8.2	30.8	30.8	95.5	95.5	7.1	7.1	10.9	11.5	15	16	84	89	822389	809785	<0.2	<0.2	0.8	0.9
						1.0	0.4	329	21.3		8.2		30.8		95.5		7.1		10.9		15		85				<0.2		1.0	
					Middle	3.3	0.4	320	21.3	21.3	8.2	8.2	30.8	30.8	95.6	95.7	7.1		11.3		15		89				<0.2		0.8	
						3.3	0.4	339	21.3		8.2		30.8		95.7		7.1		11.2		16		89				<0.2		0.9	
					Bottom	5.5	0.3	321	21.3	21.3	8.2	8.2	30.8	30.8	97.0	97.1	7.2	7.2	12.3		16		92				<0.2		0.9	
						5.5	0.3	350	21.3		8.2		30.8		97.2		7.2		12.3		16		93				<0.2		1.0	
IM11	Cloudy	Moderate	10:45	7.4	Surface	1.0	0.4	287	21.4	21.4	8.2	8.2	30.8	30.8	95.3	95.4	7.1	7.1	10.9	14.3	10	11	84	89	822062	811473	<0.2	<0.2	0.9	0.9
						1.0	0.4	313	21.4		8.2		30.8		95.4		7.1		10.9		11		85				<0.2		0.9	
					Middle	3.7	0.4	288	21.4	21.4	8.2	8.2	30.8	30.8	95.4	95.4	7.1		10.9		11		89				<0.2		0.9	
						3.7	0.4	292	21.4		8.2		30.8		95.4		7.1		11.1		11		89				<0.2		1.0	
					Bottom	6.4	0.3	298	21.2	21.2	8.2	8.2	30.9	30.9	96.1	96.2	7.1	7.1	21.1		11		93				<0.2		0.8	
						6.4	0.3	312	21.2		8.2		30.9		96.2		7.1		20.9		11		93				<0.2		0.9	
IM12	Cloudy	Moderate	10:38	9.4	Surface	1.0	0.4	296	21.2	21.2	8.2	8.2	30.7	30.7	95.2	95.2	7.1	7.1	8.9	9.9	10	10	84	90	821467	812033	<0.2	<0.2	1.0	0.9
						1.0	0.4	311	21.2		8.2		30.7		95.2		7.1		8.8		10		89				<0.2		0.9	
					Middle	4.7	0.3	283	21.2	21.2	8.2	8.2	30.7	30.7	95.2	95.2	7.1		9.1		11		89				<0.2		0.8	
						4.7	0.4	304	21.2		8.2		30.7		95.2		7.1		9.2		11		89				<0.2		0.9	
					Bottom	8.4	0.3	277	21.2	21.2	8.2	8.2	30.8	30.8	96.1	96.2	7.1	7.1	12.0		10		93				<0.2		0.9	
						8.4	0.4	302	21.2		8.2		30.8		96.2		7.1		11.6		10		93				<0.2		0.8	
SR1A	Cloudy	Moderate	10:19	5.6	Surface	1.0	-	-	21.2	21.2	8.2	8.2	30.2	30.2	92.0	92.0	6.9	6.9	8.5	8.6	12	12	-	-	820067	812585	-	-	-	-
						1.0	-	-	21.2		8.2		30.2		92.0		6.9		8.5		12		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	21.2	21.2	8.2	8.2	30.3	30.3	94.3	94.6	7.0	7.1	8.7		12		-				-		-	
						4.6	-	-	21.2		8.2		30.3		94.8		7.1		8.5		13		-				-		-	
SR2	Cloudy	Moderate	10:07	4.6	Surface	1.0	0.4	301	21.1	21.1	8.2	8.2	30.7	30.7	95.7	95.7	7.1	7.1	8.1	11.2	11	10	84	86	821465	814150	<0.2	<0.2	1.2	1.0
						1.0	0.5	325	21.1		8.2		30.7		95.7		7.1		8.2		10		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	303	21.1	21.1	8.2	8.2	30.7	30.7	96.0	96.0	7.1	7.1	14.6		10		89				<0.2		0.9	
						3.6	0.4	331	21.1		8.2		30.7		96.0		7.1		13.6		10		88				<0.2		0.9	
SR3	Cloudy	Moderate	11:23	8.2	Surface	1.0	0.1	127	21.4	21.4	8.2	8.2	29.6	29.6	94.3	94.3	7.0	7.0	7.9	12.4	10	10	-	-	822136	807574	-	-	-	-
						1.0	0.1	133	21.4		8.2		29.6		94.3		7.0		7.9		10		-				-		-	
					Middle	4.1	0.2	40	21.4	21.4	8.2	8.2	29.8	29.8	94.3	94.4	7.0		10.0		9		-				-		-	
						4.1	0.2	40	21.3		8.2		29.8		94.4		7.0		10.1		10		-				-		-	
					Bottom	7.2	0.3	14	21.2	21.2	8.2	8.2	30.6	30.6	95.7	95.7	7.1	7.1	19.2		9		-				-		-	
						7.2	0.3	14	21.2		8.2		30.6		95.7		7.1		19.3		10		-				-		-	
SR4A	Fine	Calm	09:29	8.5	Surface	1.0	0.1	254	21.1	21.1	8.2	8.2	30.7	30.7	95.4	95.4	7.1	7.1	7.2	9.5	7	7	-	-	817180	807820	-	-	-	-
						1.0	0.1	268	21.1		8.2		30.7		95.4		7.1		7.3		7		-				-		-	
					Middle	4.3	0.1	260	21.1	21.1	8.2	8.2	30.7	30.7	95.3	95.3	7.1		8.9		7		-				-		-	
						4.3	0.1	268	21.1		8.2		30.7		95.3		7.1		9.3		6		-				-		-	
					Bottom	7.5	0.0	266	21.1	21.1	8.2	8.2	30.8	30.8	95.2	95.2	7.1	7.1	12.2		6		-				-		-	
						7.5	0.0	274	21.1		8.2		30.8		95.2		7.1		12.2		6		-				-		-	
SR5A	Fine	Calm	09:19	5.2	Surface	1.0	0.1	309	21.8	21.8	8.2	8.2	31.1	31.1	93.3	93.3	6.8	6.8	6.1	5.9	7	6	-	-	816604	810708	-	-	-	-
						1.0	0.1	310	21.8		8.2		31.1		93.3		6.8		6.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	301	21.7	21.7	8.2	8.2	31.1	31.1	93.4	93.4	6.9	6.9	5.9		6		-				-		-	
						4.2	0.0	318	21.7		8.2		31.1		93.4		6.9		5.7		5		-				-		-	
SR6	Fine	Calm	08:48	4.5	Surface	1.0	0.0	216	22.1	22.1	8.2	8.2	31.6	31.6	92.3	92.3	6.7	6.7	6.5	6.7	8	10	-	-	817890	814644	-	-	-	-
						1.0	0.0	216	22.1		8.2		31.6		92.3		6.7		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	226	22.1	22.1	8.2	8.2	31.6	31.6	92.3	92.3	6.7	6.7	6.8		11		-				-		-	
						3.5	0.0	228	22.1		8.2		31.6		92.3		6.7		6.9		11		-				-		-	
SR7	Cloudy	Moderate	09:16	14.4	Surface	1.0	0.1	222	22.1	22.1	8.2	8.2	31.6	31.6	92.5	92.5	6.7	6.7	6.1	6.8	9	8	-	-	823658	823725	-	-	-	-
						1.0	0.1	213	22.1		8.2		31.6		92.4		6.7		6.1		8		-				-		-	
					Middle	7.2	0.3	240	22.1	22.1	8.2	8.2	31.6	31.6	92.5	92.5	6.7		7.1		8		-				-		-	
						7.2	0.3	241	22.1		8.2		31.6		92.5		6.7		7.2		8		-				-		-	
					Bottom	13.4	0.3	240	22.1	22.1	8.2	8.2	31.6	31.6	92.7	92.8	6.7	6.7	7.2		9		-				-		-	
						13.4	0.3	231	22.1		8.2		31.6		92.8		6.7		7.2		8		-				-		-	
SR8	Cloudy	Moderate	10:28	4.7	Surface	1.0	-	-	21.3	21.3	8.2	8.2	30.8	30.8	95.4	95.4	7.1	7.1	8.3	9.9	7	9	-	-	820507	811646	-	-	-	-
						1.0	-	-	21.3		8.2		30.8		95.4		7.1		8.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	21.3	21.3	8.2	8.2	30.8	30.8	96.9	97.1	7.2	7.2	11.6		11		-				-		-	
						3.7	-	-	21.2		8.2		30.8		97.2		7.2		11.5		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 December 18 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	03:35	8.2	Surface	1.0	0.1	232	20.6	20.6	8.2	8.2	32.4	32.4	94.8	94.8	7.0	7.0	8.1	10.8	10	9	83	87	815613	804230	<0.2	<0.2	0.7	0.8
						1.0	0.1	232	20.6		8.2		32.4		94.8		7.0		8.1		10		84				<0.2		0.8	
					Middle	4.1	0.2	263	20.6	20.6	8.2	8.2	32.5	32.5	94.7	94.7	7.0		7.6		9		87				<0.2		0.8	
						4.1	0.3	267	20.6		8.2		32.5		94.6		7.0		7.6		9		87				<0.2		0.8	
					Bottom	7.2	0.0	278	20.6	20.6	8.1	8.1	32.5	32.5	94.6	94.6	7.0	7.0	16.4		8		91				<0.2		0.8	
						7.2	0.0	282	20.6		8.1		32.5		94.6		7.0		16.7		9		92				<0.2		0.8	
C2	Cloudy	Rough	04:44	9.5	Surface	1.0	0.2	38	20.8	20.9	8.1	8.1	32.1	32.1	96.1	96.1	7.1	7.1	6.2	8.9	8	9	91	94	825686	806921	<0.2	<0.2	0.7	0.8
						1.0	0.2	43	20.9		8.1		32.1		96.1		7.1		6.5		9		91				<0.2		0.8	
					Middle	4.8	0.1	79	20.9	20.9	8.1	8.1	32.4	32.4	96.2	96.3	7.1		9.7		8		95				<0.2		0.8	
						4.8	0.1	86	20.9		8.1		32.4		96.3		7.1		9.9		8		95				<0.2		0.9	
					Bottom	8.5	0.1	108	20.8	20.8	8.1	8.1	32.4	32.4	96.7	96.7	7.2	7.2	10.5		10		95				<0.2		0.8	
						8.5	0.1	120	20.8		8.1		32.4		96.7		7.2		10.5		11		97				<0.2		0.9	
C3	Cloudy	Moderate	03:02	9.2	Surface	1.0	0.2	97	20.9	20.9	8.1	8.1	32.8	32.8	96.5	96.5	7.1	7.1	7.5	7.8	9	11	90	94	822106	817809	<0.2	<0.2	0.9	0.8
						1.0	0.2	109	20.9		8.1		32.8		96.5		7.1		7.6		11		90				<0.2		0.8	
					Middle	4.6	0.2	111	20.9	20.9	8.1	8.1	32.8	32.8	96.5	96.6	7.1		8.1		11		94				<0.2		0.9	
						4.6	0.2	117	20.9		8.1		32.8		96.6		7.1		8.1		11		94				<0.2		0.8	
					Bottom	8.2	0.1	138	20.9	20.9	8.1	8.1	32.8	32.8	96.8	96.9	7.1	7.1	7.8		12		97				<0.2		0.8	
						8.2	0.1	152	20.9		8.1		32.8		96.9		7.1		7.9		10		97				<0.2		0.8	
IM1	Cloudy	Moderate	03:51	5.1	Surface	1.0	0.1	187	20.3	20.3	8.2	8.2	32.6	32.6	98.6	98.6	7.4	7.4	7.9	8.1	6	8	83	87	817936	807119	<0.2	<0.2	0.8	0.8
						1.0	0.1	193	20.3		8.2		32.6		98.6		7.4		8.0		7		84				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	178	20.3	20.3	8.1	8.1	32.6	32.6	98.7	98.7	7.4	7.4	8.2		9		90				<0.2		0.8	
						4.1	0.2	181	20.3		8.1		32.6		98.7		7.4		8.2		8		91				<0.2		0.9	
IM2	Cloudy	Moderate	03:58	7.4	Surface	1.0	0.2	175	20.2	20.2	8.3	8.3	32.6	32.6	98.4	98.4	7.4	7.4	8.4	9.1	11	9	85	88	818160	806158	<0.2	<0.2	0.9	0.9
						1.0	0.2	180	20.2		8.3		32.6		98.4		7.4		8.4		10		85				<0.2		0.9	
					Middle	3.7	0.1	280	20.1	20.1	8.1	8.1	32.6	32.6	98.2	98.2	7.4		9.3		8		87				<0.2		0.8	
						3.7	0.1	305	20.1		8.1		32.6		98.2		7.4		9.4		9		88				<0.2		0.9	
					Bottom	6.4	0.2	272	20.1	20.1	8.1	8.1	32.6	32.6	98.2	98.2	7.4	7.4	9.5		9		90				<0.2		0.9	
						6.4	0.2	273	20.1		8.1		32.6		98.2		7.4		9.4		8		91				<0.2		0.9	
IM3	Cloudy	Moderate	04:04	7.6	Surface	1.0	0.2	175	20.4	20.4	8.1	8.1	32.6	32.6	98.3	98.3	7.3	7.3	8.7	9.5	6	8	85	90	818774	805600	<0.2	<0.2	0.9	1.0
						1.0	0.2	175	20.4		8.1		32.6		98.3		7.3		8.7		8		86				<0.2		0.9	
					Middle	3.8	0.1	133	20.3	20.3	8.1	8.1	32.6	32.6	98.1	98.1	7.3		9.6		8		91				<0.2		1.0	
						3.8	0.1	142	20.3		8.1		32.6		98.1		7.3		9.7		7		91				<0.2		1.0	
					Bottom	6.6	0.1	110	20.3	20.3	8.1	8.1	32.6	32.6	98.0	98.0	7.3	7.3	10.2		8		93				<0.2		0.9	
						6.6	0.1	112	20.3		8.1		32.6		98.0		7.3		10.1		8		94				<0.2		1.0	
IM4	Cloudy	Moderate	04:13	7.7	Surface	1.0	0.3	210	20.9	20.9	8.1	8.1	32.5	32.5	96.0	96.0	7.1	7.1	9.9	12.4	9	9	85	88	819710	804603	<0.2	<0.2	0.8	1.0
						1.0	0.3	229	20.9		8.1		32.5		95.9		7.1		10.2		8		86				<0.2		0.9	
					Middle	3.9	0.2	227	20.9	20.9	8.1	8.1	32.5	32.5	95.8	95.9	7.1		11.6		9		88				<0.2		0.9	
						3.9	0.2	250	20.9		8.1		32.5		95.9		7.1		11.9		9		88				<0.2		1.1	
					Bottom	6.7	0.2	253	20.9	20.9	8.1	8.1	32.5	32.5	96.1	96.1	7.1	7.1	15.1		9		91				<0.2		1.1	
						6.7	0.2	224	20.9		8.1		32.5		96.1		7.1		15.6		9		91				<0.2		1.2	
IM5	Cloudy	Moderate	04:22	7.5	Surface	1.0	0.3	249	20.8	20.8	8.1	8.1	32.4	32.4	97.3	97.3	7.2	7.2	7.1	9.7	8	9	86	91	820715	804868	<0.2	<0.2	1.1	1.3
						1.0	0.4	259	20.8		8.1		32.4		97.3		7.2		7.1		8		87				<0.2		1.2	
					Middle	3.8	0.4	221	20.8	20.8	8.1	8.1	32.4	32.4	97.2	97.2	7.2		11.4		9		92				<0.2		1.3	
						3.8	0.4	228	20.8		8.1		32.4		97.2		7.2		11.5		10		92				<0.2		1.3	
					Bottom	6.5	0.1	187	20.8	20.8	8.0	8.0	32.4	32.4	97.4	97.5	7.2	7.2	10.4		10		94				<0.2		1.3	
						6.5	0.1	198	20.8		8.0		32.4		97.5		7.2		10.7		11		95				<0.2		1.6	
IM6	Cloudy	Moderate	04:31	7.8	Surface	1.0	0.5	215	20.9	20.9	8.1	8.1	32.5	32.5	96.9	96.9	7.2	7.2	8.4	8.0	8	9	87	92	821067	805843	<0.2	<0.2	1.2	1.2
						1.0	0.5	215	20.9		8.1		32.5		96.9		7.2		8.4		9		88				<0.2		1.3	
					Middle	3.9	0.3	248	20.9	20.9	8.1	8.1	32.5	32.5	96.8	96.8	7.2		8.2		8		91				<0.2		1.2	
						3.9	0.3	272	20.9		8.1		32.5		96.8		7.2		8.1		10		92				<0.2		1.2	
					Bottom	6.8	0.3	214	20.9	20.9	8.0	8.0	32.5	32.5	97.0	97.0	7.2	7.2	7.5		11		95				<0.2		1.2	
						6.8	0.3	226	20.9		8.0		32.5		97.0		7.2		7.6		9		96				<0.2		1.3	
IM7	Cloudy	Moderate	04:43	7.7	Surface	1.0	0.4	223	20.9	20.9	8.0	8.0	32.4	32.4	96.4	96.4	7.1	7.1	7.7	9.1	10	10	87	91	821325	806847	<0.2	<0.2	1.2	1.4
						1.0	0.5	229	20.9		8.0		32.4		96.4		7.1		7.7		10		87				<0.2		1.5	
					Middle	3.9	0.5	247	20.9	20.9	8.0	8.0	32.4	32.4	96.3	96.3	7.1		8.1		10		91				<0.2		1.3	
						3.9	0.5	251	20.9		8.0		32.4		96.3		7.1		8.2		9		91				<0.2		1.6	
					Bottom	6.7	0.4	251	20.9	20.9	8.0	8.0	32.4	32.4	96.4	96.5	7.1	7.1	11.4		11		94				<0.2		1.5	
						6.7	0.4	251	20.9		8.0		32.4		96.5		7.1		11.4		9		95				<0.2		1.5	
IM8	Cloudy	Moderate	04:16	7.0	Surface	1.0	0.2	63	20.9	20.9	8.1	8.1	32.5	32.5	97.2	97.2	7.2	7.2	7.9	9.0	9	9	90	95	821835	808153	<0.2	<0.2	1.6	1.7
						1.0	0.2	83	20.9		8.1		32.5		97.2		7.2		7.9		7		91				<0.2		1.6	
					Middle	3.5	0.2	59	20.9	20.9	8.1	8.1	32.5	32.5	97.2	97.3	7.2	7.2	8.7		7		95				<0.2		1.8	
						3.5	0.2	61	20.9		8.1		32.5		97.3		7.2		8.8		9		94				<0.2		1.7	
					Bottom	6.0	0.2	27	20.9	20.9	8.0	8.0	32.5	32.5	97.6	97.7	7.2	7.2	10.0		11		99				<0.2		1.6	
						6.0	0.2	26	20.9		8.0		32.5		97.7		7.2		10.4		9		99				<0.2		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 13 December 18 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	04:10	6.8	Surface	1.0	0.4	48	20.8	20.8	8.2	8.2	32.4	32.4	97.7	97.8	7.2	7.3	7.2	8.1	10	95	91		822089	808821	<0.2	<0.2	1.6	1.7
						1.0	0.4	56	20.8		8.2		32.4		97.8		7.2		7.2		9		90				<0.2		1.6	
					Middle	3.4	0.3	54	20.8	20.8	8.2	8.2	32.4	32.4	98.0	98.0	7.3		7.8		95		95				<0.2		1.7	
						3.4	0.3	58	20.8		8.2		32.4		98.0		7.3		7.9		9		94				<0.2		1.6	
					Bottom	5.8	0.2	89	20.7	20.7	8.2	8.2	32.4	32.4	100.0	100.3	7.4	7.5	9.1		11		99				<0.2		1.8	
						5.8	0.2	101	20.7		8.2		32.4		100.5		7.5		9.1		10		99				<0.2		1.8	
IM10	Cloudy	Moderate	04:03	7.4	Surface	1.0	0.2	90	20.9	20.9	8.2	8.2	32.5	32.5	96.3	96.3	7.1	7.1	6.7	11.1	5	95	91		822405	809775	<0.2	<0.2	1.8	1.7
						1.0	0.2	106	20.9		8.2		32.5		96.2		7.1		6.8		5		91				<0.2		1.9	
					Middle	3.7	0.2	109	20.9	20.9	8.2	8.2	32.5	32.5	96.1	96.1	7.1		14.0		6	6	95				<0.2		1.6	
						3.7	0.2	114	20.9		8.2		32.5		96.1		7.1		14.4		5		94				<0.2		1.6	
					Bottom	6.4	0.2	197	20.9	20.9	8.1	8.1	32.5	32.5	96.1	96.1	7.1	7.1	12.1		7		98				<0.2		1.6	
						6.4	0.2	202	20.9		8.1		32.5		96.1		7.1		12.6		8		99				<0.2		1.7	
IM11	Cloudy	Moderate	03:52	8.7	Surface	1.0	0.3	74	20.4	20.4	8.1	8.1	32.6	32.6	98.7	98.7	7.4	7.4	9.0	10.4	8	94	90		822067	811452	<0.2	<0.2	1.6	1.4
						1.0	0.3	81	20.3		8.1		32.6		98.7		7.4		9.3		7		91				<0.2		1.7	
					Middle	4.4	0.3	83	20.3	20.3	8.1	8.1	32.6	32.6	98.8	98.8	7.4		11.0		12	9	94				<0.2		1.7	
						4.4	0.3	100	20.3		8.1		32.6		98.8		7.4		11.1		10		95				<0.2		1.7	
					Bottom	7.7	0.2	86	20.3	20.3	8.0	8.0	32.6	32.6	100.1	100.3	7.5	7.5	11.2		9		98				<0.2		0.7	
						7.7	0.2	90	20.3		8.0		32.6		100.4		7.5		11.0		8		98				<0.2		0.8	
IM12	Cloudy	Moderate	03:46	9.2	Surface	1.0	0.3	63	20.1	20.1	8.1	8.1	32.6	32.6	98.6	98.6	7.4	7.4	8.7	9.6	9	95	91		821441	812064	<0.2	<0.2	0.9	0.8
						1.0	0.3	71	20.1		8.1		32.6		98.6		7.4		8.9		7		90				<0.2		0.9	
					Middle	4.6	0.3	81	20.1	20.1	8.1	8.1	32.7	32.7	98.4	98.4	7.4		9.9		10	9	95				<0.2		0.7	
						4.6	0.3	98	20.1		8.1		32.7		98.4		7.4		9.9		9		94				<0.2		0.8	
					Bottom	8.2	0.2	89	20.1	20.1	8.0	8.0	32.7	32.7	98.5	98.5	7.4	7.4	10.1		10		99				<0.2		0.8	
						8.2	0.2	91	20.1		8.0		32.6		98.5		7.4		10.0		8		99				<0.2		0.9	
SR1A	Cloudy	Moderate	03:34	5.1	Surface	1.0	-	-	20.6	20.6	8.0	8.0	32.5	32.5	95.3	95.3	7.1	7.1	9.5	11.2	8	-	-		820063	812582	-	-	-	-
						1.0	-	-	20.6		8.0		32.5		95.3		7.1		10.5		7		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-	9	-	-			-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.6	20.6	8.1	8.1	32.6	32.6	95.7	95.8	7.1	7.1	12.8		10		-				-		-	
						4.1	-	-	20.6		8.1		32.6		95.8		7.1		12.1		10		-				-		-	
SR2	Cloudy	Moderate	03:23	5.0	Surface	1.0	0.2	110	20.0	20.0	8.0	8.0	32.7	32.7	98.1	98.1	7.4	7.4	8.9	9.8	7	93	90		821457	814150	<0.2	<0.2	0.7	0.8
						1.0	0.2	110	20.0		8.0		32.7		98.1		7.4		8.9		6		90				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-	9	-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	105	20.0	20.0	8.0	8.0	32.7	32.7	98.1	98.1	7.4	7.4	10.6		12		95				<0.2		1.0	
						4.0	0.2	107	20.0		8.0		32.7		98.1		7.4		10.7		11		95				<0.2		1.0	
SR3	Cloudy	Rough	04:22	8.6	Surface	1.0	0.2	219	20.8	20.8	8.1	8.1	32.4	32.4	96.8	96.8	7.2	7.2	10.7	11.5	10	-	-		822156	807576	-	-	-	-
						1.0	0.2	220	20.8		8.1		32.4		96.8		7.2		10.6		9		-				-		-	
					Middle	4.3	0.2	241	20.8	20.8	8.1	8.1	32.4	32.4	96.9	97.0	7.2		11.3		12		-				-		-	
						4.3	0.2	263	20.8		8.1		32.4		97.1		7.2		11.8		10		-				-		-	
					Bottom	7.6	0.1	252	20.8	20.8	8.1	8.1	32.4	32.4	98.0	98.2	7.3	7.3	12.2		10		-				-		-	
						7.6	0.1	270	20.8		8.1		32.4		98.3		7.3		12.1		11		-				-		-	
SR4A	Cloudy	Calm	03:11	7.9	Surface	1.0	0.3	52	20.0	20.0	8.1	8.1	32.7	32.7	98.2	98.2	7.4	7.4	8.5	10.1	11	-	-		817187	807805	-	-	-	-
						1.0	0.3	63	20.0		8.1		32.7		98.2		7.4		8.3		10		-				-		-	
					Middle	4.0	0.3	42	20.0	20.0	8.1	8.1	32.7	32.7	98.0	98.0	7.3		8.8		10	10	-				-		-	
						4.0	0.3	46	20.0		8.1		32.7		98.0		7.3		8.8		10		-				-		-	
					Bottom	6.9	0.2	44	20.0	20.0	8.1	8.1	32.7	32.7	98.2	98.3	7.4	7.4	13.3		10		-				-		-	
						6.9	0.2	43	20.0		8.1		32.7		98.3		7.4		13.1		8		-				-		-	
SR5A	Cloudy	Calm	02:55	4.3	Surface	1.0	0.1	93	20.9	20.9	8.2	8.2	32.8	32.8	96.5	96.5	7.1	7.1	7.4	7.4	8	-	-		816571	810711	-	-	-	-
						1.0	0.1	110	20.9		8.2		32.8		96.5		7.1		7.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-	10	-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	99	20.9	20.9	8.2	8.2	32.8	32.8	96.6	96.6	7.1	7.1	7.4		12		-				-		-	
						3.3	0.1	103	20.9		8.2		32.8		96.6		7.1		7.4		12		-				-		-	
SR6	Cloudy	Calm	02:30	4.5	Surface	1.0	0.1	43	21.5	21.5	8.2	8.2	33.2	33.2	96.1	96.2	7.0	7.0	4.6	4.7	13	-	-		817911	814663	-	-	-	-
						1.0	0.1	51	21.5		8.2		33.2		96.2		7.0		4.6		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-	13	-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	50	21.6	21.6	8.1	8.1	33.2	33.2	96.6	96.6	7.0	7.0	4.7		13		-				-		-	
						3.5	0.1	60	21.6		8.1		33.2		96.6		7.0		4.7		13		-				-		-	
SR7	Cloudy	Moderate	02:32	15.0	Surface	1.0	0.2	65	21.1	21.1	8.0	8.0	33.3	33.3	95.0	95.0	7.0	7.0	5.5	5.6	10	-	-		823651	823753	-	-	-	-
						1.0	0.3	70	21.1		8.0		33.3		95.0		7.0		5.5		9		-				-		-	
					Middle	7.5	0.1	84	21.2	21.2	8.1	8.1	33.4	33.4	95.7	95.7	7.0	7.0	5.6		8	9	-				-		-	
						7.5	0.2	92	21.2		8.1		33.4		95.7		7.0		5.6		9		-				-		-	
					Bottom	14.0	0.1	110	21.2	21.2	8.1	8.1	33.4	33.4	96.4	96.5	7.1	7.1	5.8		9		-				-		-	
						14.0	0.1	114	21.1		8.1		33.4		96.5		7.1		5.7		8		-				-		-	
SR8	Cloudy	Moderate	03:41	5.3	Surface	1.0	-	-	20.2	20.2	8.1	8.1	32.6	32.6	99.5	99.6	7.4	7.4	8.0	8.2	8	-	-		820525	811672	-	-	-	-
						1.0	-	-	20.2		8.1		32.6		99.6		7.4		8.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-	8	-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.2	20.2	8.0	8.0	32.6	32.6	101.5	101.7	7.6	7.6	8.3		8		-				-		-	
						4.3	-	-	20.2		8.0		32.6		101.8		7.6		8.4		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 December 18 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	11:32	8.8	Surface	1.0	0.0	90	20.4	20.4	8.1	8.1	32.0	32.0	94.6	94.6	7.1	7.1	7.0	8.3	10	10	88	92	815619	804230	<0.2	<0.2	1.1	1.0
						1.0	0.0	96	20.4		8.1		32.0		94.6		7.1		7.0		10		88				<0.2		1.1	
					Middle	4.4	0.1	88	20.4	20.4	8.1	8.1	32.0	32.0	94.7	94.8	7.1		7.8		10		91				<0.2		1.0	
						4.4	0.1	92	20.4		8.1		32.0		94.8		7.1		8.1		8		92				<0.2		0.8	
					Bottom	7.8	0.1	70	20.5	20.5	8.1	8.2	32.1	32.1	95.3	95.4	7.1	7.1	9.9		10		95				<0.2		0.9	
						7.8	0.1	75	20.4		8.2		32.1		95.4		7.1		9.8		10		95				<0.2		0.8	
C2	Cloudy	Rough	10:24	9.6	Surface	1.0	0.2	240	20.4	20.4	8.1	8.1	32.3	32.3	94.5	94.5	7.1	7.0	7.0	9.4	8	9	87	90	825669	806967	<0.2	<0.2	0.8	0.8
						1.0	0.2	256	20.4		8.1		32.3		94.5		7.0		7.3		8		86				<0.2		0.9	
					Middle	4.8	0.1	272	20.5	20.5	8.1	8.1	32.5	32.5	94.4	94.4	7.0		10.2		10		90				<0.2		0.8	
						4.8	0.2	278	20.5		8.1		32.5		94.4		7.0		10.2		12		90				<0.2		0.7	
					Bottom	8.6	0.1	285	20.4	20.4	8.1	8.1	32.5	32.5	94.4	94.4	7.0	7.0	10.7		10		95				<0.2		0.8	
						8.6	0.2	293	20.4		8.1		32.5		94.4		7.0		10.7		8		94				<0.2		0.8	
C3	Cloudy	Moderate	12:20	9.4	Surface	1.0	0.4	261	21.2	21.2	8.2	8.2	33.4	33.4	96.2	96.2	7.0	7.0	7.8	11.3	11	11	87	91	822117	817783	<0.2	<0.2	1.0	0.9
						1.0	0.4	262	21.2		8.2		33.4		96.2		7.0		8.1		10		87				<0.2		0.9	
					Middle	4.7	0.4	264	21.2	21.2	8.2	8.2	33.4	33.4	96.2	96.2	7.0		11.3		12		91				<0.2		0.8	
						4.7	0.4	289	21.2		8.2		33.4		96.2		7.0		11.5		12		91				<0.2		0.7	
					Bottom	8.4	0.3	268	21.2	21.2	8.2	8.2	33.4	33.4	96.2	96.2	7.0	7.0	14.4		12		95				<0.2		0.9	
						8.4	0.4	274	21.2		8.2		33.4		96.2		7.0		14.7		10		95				<0.2		0.8	
IM1	Cloudy	Moderate	11:16	5.3	Surface	1.0	0.1	103	20.4	20.4	8.2	8.2	32.6	32.6	98.0	98.0	7.3	7.3	8.2	9.3	9	9	88	90	817936	807115	<0.2	<0.2	0.5	0.7
						1.0	0.1	109	20.4		8.2		32.6		98.0		7.3		8.3		9		89				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	140	20.3	20.3	8.2	8.2	32.6	32.6	98.0	98.0	7.3	7.3	10.1		9		91				<0.2		0.9	
						4.3	0.1	144	20.3		8.2		32.6		98.0		7.3		10.4		7		92				<0.2		0.8	
IM2	Cloudy	Moderate	11:08	7.5	Surface	1.0	0.2	98	20.6	20.6	8.2	8.2	32.5	32.6	96.0	96.0	7.1	7.1	10.0	11.1	9	9	87	89	818159	806161	<0.2	<0.2	0.7	0.7
						1.0	0.2	106	20.6		8.2		32.6		96.0		7.1		10.1		8		88				<0.2		0.8	
					Middle	3.8	0.1	102	20.6	20.6	8.2	8.2	32.6	32.6	96.0	96.0	7.1		11.5		8		87				<0.2		0.7	
						3.8	0.1	107	20.6		8.2		32.6		96.0		7.1		11.4		8		87				<0.2		0.7	
					Bottom	6.5	0.2	85	20.4	20.4	8.2	8.2	32.6	32.6	97.1	97.2	7.2	7.2	11.8		9		92				<0.2		0.7	
						6.5	0.2	88	20.4		8.2		32.6		97.2		7.2		11.9		9		93				<0.2		0.7	
IM3	Cloudy	Rough	11:00	8.0	Surface	1.0	0.1	92	20.2	20.2	8.2	8.2	32.4	32.5	98.3	98.3	7.4	7.4	8.8	10.6	10	10	88	89	818791	805583	<0.2	<0.2	0.6	0.7
						1.0	0.1	98	20.2		8.2		32.5		98.3		7.4		8.8		9		89				<0.2		0.6	
					Middle	4.0	0.1	99	20.1	20.1	8.1	8.1	32.6	32.6	98.2	98.2	7.4		10.9		10		88				<0.2		0.7	
						4.0	0.1	101	20.1		8.1		32.6		98.2		7.4		11.0		9		88				<0.2		0.7	
					Bottom	7.0	0.1	72	20.1	20.1	8.1	8.1	32.6	32.6	98.5	98.5	7.4	7.4	12.0		10		91				<0.2		0.9	
						7.0	0.1	74	20.1		8.1		32.6		98.5		7.4		12.2		10		92				<0.2		0.8	
IM4	Cloudy	Rough	10:51	8.1	Surface	1.0	0.2	71	20.3	20.3	8.0	8.0	32.5	32.5	98.0	98.0	7.3	7.3	8.9	8.9	8	8	85	88	819718	804597	<0.2	<0.2	0.8	0.8
						1.0	0.2	74	20.3		8.0		32.5		98.0		7.3		9.0		8		84				<0.2		0.8	
					Middle	4.1	0.1	332	20.3	20.3	8.1	8.1	32.6	32.6	97.7	97.7	7.3		8.8		8		87				<0.2		0.7	
						4.1	0.1	344	20.3		8.1		32.6		97.6		7.3		8.8		8		88				<0.2		0.8	
					Bottom	7.1	0.2	338	20.3	20.3	8.0	8.0	32.6	32.6	97.2	97.2	7.3	7.3	8.9		6		91				<0.2		0.8	
						7.1	0.2	311	20.3		8.0		32.6		97.1		7.3		9.0		7		92				<0.2		0.8	
IM5	Cloudy	Rough	10:43	7.4	Surface	1.0	0.1	326	20.8	20.8	8.0	8.0	32.6	32.6	79.7	79.7	5.9	5.9	7.4	10.8	7	8	83	88	820729	804857	<0.2	<0.2	0.8	0.7
						1.0	0.1	336	20.8		8.0		32.6		79.7		5.9		7.6		7		85				<0.2		0.8	
					Middle	3.7	0.2	22	20.8	20.8	8.0	8.0	32.6	32.6	79.1	79.1	5.9		10.4		8		87				<0.2		0.7	
						3.7	0.2	23	20.8		8.0		32.6		79.1		5.9		10.6		9		88				<0.2		0.8	
					Bottom	6.4	0.2	30	20.8	20.8	8.0	8.0	32.5	32.5	79.0	79.0	5.8	5.9	14.3		7		93				<0.2		0.5	
						6.4	0.2	31	20.8		8.0		32.5		79.0		5.9		14.4		8		93				<0.2		0.5	
IM6	Cloudy	Rough	10:33	7.8	Surface	1.0	0.0	126	20.8	20.8	8.0	8.0	32.4	32.4	97.6	97.6	7.2	7.2	6.7	7.1	8	7	88	89	821071	805848	<0.2	<0.2	0.6	0.6
						1.0	0.0	127	20.8		8.0		32.4		97.6		7.2		6.7		8		89				<0.2		0.6	
					Middle	3.9	0.1	52	20.8	20.8	8.0	8.0	32.4	32.4	97.3	97.3	7.2		6.9		7		87				<0.2		0.7	
						3.9	0.2	54	20.8		8.0		32.4		97.3		7.2		7.0		8		88				<0.2		0.6	
					Bottom	6.8	0.1	44	20.8	20.8	8.0	8.0	32.5	32.5	97.2	97.2	7.2	7.2	7.6		7		91				<0.2		0.5	
						6.8	0.1	48	20.8		8.0		32.5		97.2		7.2		7.6		5		92				<0.2		0.6	
IM7	Cloudy	Rough	10:24	8.4	Surface	1.0	0.1	241	21.0	21.0	8.0	8.0	32.5	32.5	96.5	96.5	7.1	7.1	8.6	8.6	7	7	88	91	821335	806823	<0.2	<0.2	0.6	0.7
						1.0	0.1	259	21.0		8.0		32.5		96.5		7.1		8.5		7		89				<0.2		0.7	
					Middle	4.2	0.1	73	21.0	21.0	8.1	8.1	32.5	32.5	96.3	96.3	7.1		8.6		6		88				<0.2		0.6	
						4.2	0.1	77	21.0		8.1		32.5		96.3		7.1		8.5		8		89				<0.2		0.7	
					Bottom	7.4	0.1	89	21.0	21.0	8.1	8.1	32.5	32.5	96.3	96.4	7.1	7.1	8.6		7		96				<0.2		0.8	
						7.4	0.1	97	21.0		8.1		32.5		96.5		7.1		8.8		8		96				<0.2		0.7	
IM8	Cloudy	Moderate	10:49	7.5	Surface	1.0	0.1	263	20.3	20.3	8.1	8.1	32.6	32.6	96.4	96.4	7.2	7.2	7.3	7.8	8	7	88	91	821845	808144	<0.2	<0.2	0.7	0.6
						1.0	0.1	283	20.3		8.1		32.6		96.4		7.2		7.4		7		87				<0.2		0.7	
					Middle	3.8	0.1	239	20.4	20.4	8.1	8.1	32.6	32.6	95.9	95.9	7.1		7.9		7		91				<0.2		0.5	
						3.8	0.1	261	20.4		8.1		32.6		95.9		7.1		8.0		7		91				<0.2		0.6	
					Bottom	6.5	0.0	227	20.4	20.4	8.1	8.1	32.6	32.6	96.3	96.3	7.2	7.2	7.9		8		91				<0.2		0.6	
						6.5	0.0	236	20.4		8.1		32.6		96.3		7.2		8.2		7		95				<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 13 December 18 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	10:54	7.0	Surface	1.0	0.2	277	20.4	20.4	8.1	8.1	32.7	32.7	96.0	96.0	7.1	7.2	8.1	11.3	11	12	87	91	822084	808825	<0.2	<0.2	0.7	0.6
						1.0	0.2	285	20.4		8.1		32.7		95.9		7.1		8.1		13		87				<0.2		0.6	
					Middle	3.5	0.2	286	20.4	20.4	8.1	8.1	32.7	32.7	96.1	96.1	7.2	7.2	8.9		11		90				<0.2		0.7	
						3.5	0.2	290	20.4		8.1		32.7		96.1		7.2		8.9		11		91				<0.2		0.6	
					Bottom	6.0	0.2	299	20.3	20.3	8.1	8.1	32.7	32.7	96.7	96.7	7.2	7.2	16.6		13		94				<0.2		0.4	
						6.0	0.2	304	20.3		8.1		32.7		96.7		7.2		17.1		11		95				<0.2		0.4	
IM10	Cloudy	Moderate	11:02	8.1	Surface	1.0	0.3	303	19.9	19.9	8.2	8.2	32.7	32.7	97.1	97.1	7.3	7.3	9.3	9.7	7	7	87	91	822404	809771	<0.2	<0.2	0.5	0.7
						1.0	0.4	327	19.9		8.2		32.7		97.1		7.3		9.3		7		86				<0.2		0.6	
					Middle	4.1	0.3	314	19.9	19.9	8.1	8.1	32.7	32.7	97.4	97.4	7.3		9.8		5		91				<0.2		0.8	
						4.1	0.3	341	19.9		8.1		32.7		97.4		7.3		9.8		6		92				<0.2		0.8	
					Bottom	7.1	0.3	291	19.9	19.9	8.1	8.1	32.7	32.7	98.6	98.7	7.4	7.4	9.9		8		95				<0.2		0.8	
						7.1	0.3	307	19.9		8.1		32.7		98.7		7.4		10.0		10		96				<0.2		0.8	
IM11	Cloudy	Moderate	11:14	8.2	Surface	1.0	0.4	289	19.8	19.8	8.2	8.2	32.6	32.6	97.2	97.2	7.3	7.3	9.3	13.2	7	7	87	91	822039	811451	<0.2	<0.2	0.7	0.7
						1.0	0.4	309	19.8		8.2		32.6		97.2		7.3		9.7		6		87				<0.2		0.8	
					Middle	4.1	0.4	293	19.7	19.7	8.1	8.1	32.7	32.7	97.3	97.3	7.3		11.1		6		91				<0.2		0.7	
						4.1	0.4	305	19.7		8.1		32.7		97.3		7.3		11.3		7		91				<0.2		0.8	
					Bottom	7.2	0.3	296	19.7	19.7	8.1	8.1	32.8	32.8	98.9	99.1	7.5	7.5	19.6		8		95				<0.2		0.7	
						7.2	0.3	325	19.7		8.1		32.8		99.2		7.5		18.3		7		95				<0.2		0.7	
IM12	Cloudy	Moderate	11:22	9.4	Surface	1.0	0.4	279	20.2	20.2	8.1	8.1	32.7	32.7	94.8	94.8	7.1	7.2	10.4	11.4	11	8	86	91	821471	812055	<0.2	<0.2	0.7	0.7
						1.0	0.4	287	20.2		8.1		32.7		94.8		7.1		10.5		11		87				<0.2		0.7	
					Middle	4.7	0.4	272	20.1	20.1	8.1	8.1	32.8	32.8	95.7	95.8	7.2		12.4		7		90				<0.2		0.7	
						4.7	0.4	290	20.1		8.1		32.8		95.8		7.2		12.3		7		91				<0.2		0.6	
					Bottom	8.4	0.2	284	19.9	19.9	8.1	8.1	32.8	32.8	98.1	98.3	7.4	7.4	11.2		6		94				<0.2		0.8	
						8.4	0.2	295	19.9		8.1		32.8		98.5		7.4		11.4		8		95				<0.2		0.8	
SR1A	Cloudy	Moderate	11:41	5.3	Surface	1.0	-	-	20.0	20.0	8.1	8.1	32.1	32.1	93.7	93.7	7.1	7.1	7.8	8.9	10	10	-	-	820066	812591	-	-	-	-
						1.0	-	-	20.0		8.1		32.1		93.7		7.1		7.7		12		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-			
					Bottom	4.3	-	-	20.0	20.0	8.1	8.1	32.2	32.2	95.4	95.5	7.2	7.2	10.1		10		-				-		-	
						4.3	-	-	20.0		8.1		32.2		95.6		7.2		9.8		9		-				-		-	
SR2	Cloudy	Moderate	11:55	5.1	Surface	1.0	0.5	337	20.6	20.6	8.1	8.1	33.0	33.0	95.6	95.6	7.1	7.1	9.3	9.9	8	10	87	89	821475	814178	<0.2	<0.2	0.7	0.7
						1.0	0.5	347	20.6		8.1		33.0		95.6		7.1		9.4		10		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-			
					Bottom	4.1	0.4	337	20.6	20.6	8.1	8.1	33.0	33.0	97.6	97.7	7.2	7.2	10.4		11		90				<0.2		0.7	
						4.1	0.4	338	20.6		8.1		33.0		97.8		7.2		10.5		11		91				<0.2		0.7	
SR3	Cloudy	Rough	10:44	8.0	Surface	1.0	0.1	28	20.5	20.5	8.1	8.1	32.6	32.6	95.3	95.3	7.1	7.1	9.0	9.2	10	9	-	-	822126	807580	-	-	-	-
						1.0	0.1	30	20.5		8.1		32.6		95.3		7.1		9.0		9		-				-		-	
					Middle	4.0	0.1	40	20.5	20.5	8.1	8.1	32.6	32.6	95.2	95.2	7.1		9.1		10		-				-		-	
						4.0	0.1	43	20.5		8.1		32.6		95.2		7.1		9.2		9		-				-		-	
					Bottom	7.0	0.1	56	20.5	20.5	8.1	8.1	32.6	32.6	95.2	95.3	7.1	7.1	9.4		8		-				-		-	
						7.0	0.1	60	20.5		8.1		32.6		95.4		7.1		9.4		7		-				-		-	
SR4A	Cloudy	Calm	11:54	8.7	Surface	1.0	0.2	252	21.0	21.0	8.2	8.2	32.9	32.9	96.6	96.6	7.1	7.1	8.9	10.2	10	11	-	-	817177	807832	-	-	-	-
						1.0	0.2	273	21.0		8.2		32.9		96.6		7.1		9.1		9		-				-		-	
					Middle	4.4	0.1	242	21.1	21.1	8.2	8.2	32.9	32.9	96.7	96.8	7.1		11.3		12		-				-		-	
						4.4	0.1	246	21.1		8.1		32.9		96.8		7.1		11.5		10		-				-		-	
					Bottom	7.7	0.0	244	21.0	21.0	8.1	8.1	32.9	32.9	97.3	97.4	7.2	7.2	10.5		10		-				-		-	
						7.7	0.0	253	21.0		8.1		32.9		97.4		7.2		9.6		12		-				-		-	
SR5A	Cloudy	Calm	12:19	4.8	Surface	1.0	0.1	293	21.7	21.7	8.2	8.2	33.3	33.3	97.3	97.3	7.1	7.1	5.4	5.6	10	11	-	-	816582	810705	-	-	-	-
						1.0	0.1	310	21.7		8.2		33.3		97.3		7.1		5.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-			
					Bottom	3.8	0.0	299	21.7	21.7	8.2	8.2	33.3	33.3	97.3	97.3	7.1	7.1	5.8		12		-				-		-	
						3.8	0.0	303	21.7		8.2		33.3		97.3		7.1		5.7		13		-				-		-	
SR6	Cloudy	Calm	12:45	4.3	Surface	1.0	0.0	243	21.6	21.6	8.2	8.2	33.3	33.3	97.3	97.3	7.1	7.1	4.4	5.0	12	12	-	-	817876	814646	-	-	-	-
						1.0	0.0	251	21.6		8.2		33.3		97.3		7.1		4.7		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-			
					Bottom	3.3	0.0	250	21.7	21.7	8.1	8.1	33.3	33.3	97.3	97.3	7.1	7.1	5.5		11		-				-		-	
						3.3	0.0	273	21.7		8.1		33.3		97.3		7.1		5.3		13		-				-		-	
SR7	Cloudy	Moderate	12:52	16.6	Surface	1.0	0.1	219	21.2	21.2	8.1	8.1	33.4	33.4	96.3	96.3	7.0	7.1	5.3	5.4	6	9	-	-	823650	823718	-	-	-	-
						1.0	0.1	210	21.2		8.1		33.4		96.3		7.0		5.3		7		-				-		-	
					Middle	8.3	0.2	221	21.1	21.1	8.2	8.2	33.4	33.4	96.6	96.7	7.1		5.5		10		-				-		-	
						8.3	0.2	229	21.1		8.2		33.4		96.7		7.1		5.5		9		-				-		-	
					Bottom	15.6	0.2	306	21.1	21.1	8.2	8.2	33.4	33.4	97.0	97.1	7.1	7.1	5.4		9		-				-		-	
						15.6	0.2	306	21.1		8.2		33.4		97.1		7.1		5.3		10		-				-		-	
SR8	Cloudy	Moderate	11:32	4.9	Surface	1.0	-	-	20.0	20.0	8.2	8.2	32.8	32.8	96.9	96.9	7.3	7.3	8.6	8.7	11	12	-	-	820506	811641	-	-	-	-
						1.0	-	-	20.0		8.2		32.8		96.9		7.3		8.8		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-			
					Bottom	3.9	-	-	19.9	19.9	8.1	8.1	32.8	32.8	100.2	100.5	7.5	7.6	8.7		13		-				-		-	
						3.9	-	-	19.9		8.1		32.8		100.8		7.6		8.7		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	18:33	8.0	Surface	1.0	0.2	182	19.9	19.9	8.2	8.2	32.9	32.9	98.7	98.7	7.4	7.4	8.3	9.0	5	5	85	90	815604	804255	<0.2	<0.2	1.3	1.2
						1.0	0.2	190	19.9		8.2		32.9		98.7		7.4		8.4		4		86				<0.2		1.1	
					Middle	4.0	0.3	214	19.9	19.9	8.2	8.2	32.9	32.9	99.0	99.0	7.4		8.6		6		90				<0.2		1.0	
						4.0	0.4	219	19.9		8.2		32.9		99.0		7.4		8.6		5		90				<0.2		1.0	
					Bottom	7.0	0.4	210	19.7	19.7	8.2	8.2	33.0	33.0	98.9	98.9	7.4	7.4	10.1		4		94				<0.2		1.4	
						7.0	0.4	221	19.7		8.2		33.0		98.8		7.4		10.3		4		95				<0.2		1.4	
C2	Fine	Moderate	20:45	11.3	Surface	1.0	0.1	175	20.2	20.2	8.1	8.1	32.6	32.6	96.5	96.5	7.2	7.2	5.3	6.7	4	5	86	91	825682	806938	<0.2	<0.2	0.7	0.7
						1.0	0.1	189	20.2		8.1		32.6		96.5		7.2		5.1		4		87				<0.2		0.8	
					Middle	5.7	0.2	302	20.2	20.2	8.1	8.1	33.0	33.0	96.1	96.1	7.2		6.3		5		90				<0.2		0.6	
						5.7	0.2	329	20.2		8.1		33.0		96.1		7.2		6.3		5		90				<0.2		0.8	
					Bottom	10.3	0.3	331	20.3	20.3	8.1	8.1	33.0	33.0	96.3	96.4	7.2	7.2	8.6		5		96				<0.2		0.8	
						10.3	0.3	347	20.3		8.1		33.0		96.4		7.2		8.5		5		96				<0.2		0.7	
C3	Fine	Moderate	18:53	11.3	Surface	1.0	0.3	283	20.6	20.6	8.2	8.2	33.4	33.4	93.9	93.9	6.9	6.9	4.9	5.2	5	6	84	90	822085	817808	<0.2	<0.2	0.5	0.6
						1.0	0.3	283	20.6		8.2		33.4		93.8		6.9		4.9		6		87				<0.2		0.6	
					Middle	5.7	0.3	268	20.7	20.7	8.2	8.2	33.5	33.5	93.3	93.3	6.9		5.2		6		89				<0.2		0.5	
						5.7	0.3	290	20.7		8.2		33.5		93.3		6.9		5.3		6		90				<0.2		0.6	
					Bottom	10.3	0.3	258	20.7	20.7	8.2	8.2	33.5	33.5	93.9	93.9	6.9	6.9	5.3		5		94				<0.2		0.6	
						10.3	0.3	267	20.7		8.2		33.5		93.9		6.9		5.4		6		94				<0.2		0.6	
IM1	Fine	Moderate	18:42	5.4	Surface	1.0	0.2	12	20.3	20.3	8.1	8.1	33.0	33.0	98.9	99.0	7.4	7.4	7.3	7.5	4	5	90	92	817933	807152	<0.2	<0.2	0.7	0.7
						1.0	0.2	12	20.3		8.1		33.0		99.0		7.4		7.4		3		91				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	11	20.1	20.1	8.1	8.1	33.0	33.0	99.0	99.1	7.4	7.4	7.7		6		93				<0.2		0.7	
						4.4	0.4	11	20.1		8.1		33.0		99.2		7.4		7.6		6		94				<0.2		0.8	
IM2	Fine	Moderate	18:51	6.8	Surface	1.0	0.1	254	20.4	20.4	8.1	8.1	33.0	33.0	97.7	97.7	7.3	7.3	7.7	8.7	6	7	89	90	818144	806185	<0.2	<0.2	0.6	0.7
						1.0	0.1	266	20.4		8.1		33.0		97.7		7.3		7.7		6		88				<0.2		0.7	
					Middle	3.4	0.2	344	20.3	20.3	8.1	8.1	33.0	33.0	98.0	98.0	7.3		8.3		8		89				<0.2		0.7	
						3.4	0.2	316	20.3		8.1		33.0		98.0		7.3		8.5		7		90				<0.2		0.6	
					Bottom	5.8	0.3	358	20.2	20.2	8.1	8.1	33.0	33.0	98.2	98.3	7.3	7.3	10.0		8		93				<0.2		0.7	
						5.8	0.3	329	20.2		8.1		33.0		98.4		7.3		10.0		8		93				<0.2		0.6	
IM3	Fine	Moderate	18:58	7.0	Surface	1.0	0.2	240	20.6	20.6	8.1	8.1	32.9	32.9	99.0	99.0	7.3	7.3	7.4	7.6	4	5	89	94	818766	805582	<0.2	<0.2	0.6	0.6
						1.0	0.2	260	20.6		8.1		32.9		99.0		7.3		7.4		4		90				<0.2		0.6	
					Middle	3.5	0.1	336	20.4	20.4	8.1	8.1	32.9	32.9	98.5	98.5	7.3		7.6		4		93				<0.2		0.6	
						3.5	0.1	309	20.4		8.1		32.9		98.5		7.3		7.6		5		94				<0.2		0.5	
					Bottom	6.0	0.1	30	20.3	20.3	8.1	8.1	32.9	32.9	98.1	98.1	7.3	7.3	7.9		4		98				<0.2		0.5	
						6.0	0.1	31	20.3		8.1		32.9		98.1		7.3		7.9		6		99				<0.2		0.6	
IM4	Fine	Moderate	19:05	7.1	Surface	1.0	0.1	335	20.1	20.1	8.1	8.1	32.8	32.8	99.3	99.3	7.4	7.4	8.5	8.9	5	6	87	92	819748	804627	<0.2	<0.2	1.1	1.1
						1.0	0.1	335	20.1		8.1		32.8		99.3		7.4		8.5		5		88				<0.2		1.0	
					Middle	3.6	0.2	339	20.0	20.0	8.1	8.1	32.8	32.8	98.9	98.9	7.4		9.0		6		91				<0.2		1.1	
						3.6	0.2	343	20.0		8.1		32.8		98.9		7.4		8.9		5		92				<0.2		1.1	
					Bottom	6.1	0.3	36	20.0	20.0	8.1	8.1	32.8	32.8	99.0	99.0	7.4	7.4	9.3		6		97				<0.2		1.1	
						6.1	0.3	37	20.0		8.1		32.8		99.0		7.4		9.4		6		97				<0.2		1.2	
IM5	Fine	Moderate	19:26	6.4	Surface	1.0	0.4	270	20.0	20.0	8.1	8.1	32.8	32.8	98.7	98.7	7.4	7.4	12.8	15.0	9	8	87	91	820752	804856	<0.2	<0.2	0.8	1.0
						1.0	0.4	293	20.0		8.1		32.8		98.7		7.4		12.8		8		87				<0.2		0.9	
					Middle	3.2	0.2	287	20.0	20.0	8.1	8.1	32.8	32.8	98.6	98.6	7.4		14.9		7		90				<0.2		1.1	
						3.2	0.2	293	20.0		8.1		32.8		98.6		7.4		14.9		8		91				<0.2		1.0	
					Bottom	5.4	0.2	337	20.0	20.0	8.1	8.1	32.8	32.8	99.0	99.1	7.4	7.4	18.6		7		94				<0.2		1.0	
						5.4	0.2	353	20.0		8.1		32.8		99.1		7.4		16.2		6		95				<0.2		1.0	
IM6	Fine	Moderate	19:45	6.1	Surface	1.0	0.4	265	20.4	20.4	8.1	8.1	32.9	32.9	98.8	98.8	7.3	7.3	8.1	9.3	6	6	88	91	821068	805820	<0.2	<0.2	0.7	0.9
						1.0	0.4	279	20.4		8.1		32.9		98.8		7.3		8.1		6		87				<0.2		0.6	
					Middle	3.1	0.4	280	20.1	20.1	8.1	8.1	32.8	32.8	98.2	98.2	7.3		9.6		6		91				<0.2		0.7	
						3.1	0.4	302	20.1		8.1		32.8		98.2		7.3		9.5		6		92				<0.2		1.1	
					Bottom	5.1	0.3	244	20.1	20.1	8.1	8.1	32.8	32.8	98.3	98.4	7.4	7.4	10.2		6		94				<0.2		1.1	
						5.1	0.3	251	20.1		8.1		32.8		98.4		7.4		10.2		7		95				<0.2		1.2	
IM7	Fine	Moderate	20:03	7.2	Surface	1.0	0.5	254	20.2	20.3	8.1	8.1	32.9	32.9	98.3	98.3	7.3	7.3	9.2	9.6	5	6	86	91	821343	806815	<0.2	<0.2	1.0	1.1
						1.0	0.5	265	20.3		8.1		32.9		98.3		7.3		9.1		6		87				<0.2		1.1	
					Middle	3.6	0.4	277	20.2	20.2	8.1	8.1	32.8	32.8	98.1	98.1	7.3		9.4		6		90				<0.2		1.3	
						3.6	0.5	287	20.2		8.1		32.8		98.1		7.3		9.3		6		91				<0.2		1.1	
					Bottom	6.2	0.3	260	20.1	20.1	8.1	8.1	32.8	32.8	97.8	97.8	7.3	7.3	10.3		6		95				<0.2		1.0	
						6.2	0.3	278	20.1		8.1		32.8		97.8		7.3		10.3		6		95				<0.2		1.1	
IM8	Fine	Moderate	20:13	7.0	Surface	1.0	0.1	127	19.6	19.6	8.1	8.1	33.1	33.1	98.0	98.0	7.4	7.4	11.5	14.7	8	8	86	89	821820	808143	<0.2	<0.2	0.7	0.7
						1.0	0.1	139	19.6		8.1		33.1		98.0		7.4		11.5		8		87				<0.2		0.6	
					Middle	3.5	0.0	112	19.6	19.6	8.1	8.1	33.1	33.1	97.9	97.9	7.4		14.8		8		94				<0.2		0.7	
						3.5	0.0	114	19.6		8.1		33.1		97.9		7.4		15.2		8		94				<0.2		0.6	
					Bottom	6.0	0.1	143	19.6	19.6	8.1	8.1	33.1	33.1	98.4	98.5	7.4	7.4	17.6		8		85				<0.2		0.8	
						6.0	0.1	149	19.6		8.1		33.1		98.6		7.4		17.9		8		86				<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 15 December 18 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	20:08	6.8	Surface	1.0	0.2	58	19.8	19.8	8.1	8.1	33.1	33.1	98.7	98.7	7.4	7.4	6.5	7.0	6	6	90	90	822072	808807	<0.2	<0.2	0.6	0.6
						1.0	0.2	61	19.8		8.1		33.1		98.7		7.4		6.5		4		89				<0.2		0.6	
					Middle	3.4	0.1	61	19.6	19.6	8.1	8.1	33.1	33.1	98.1	98.1	7.4		6.9		6		94				<0.2		0.6	
						3.4	0.1	63	19.6		8.1		33.1		98.1		7.4		6.9		6		95				<0.2		0.6	
					Bottom	5.8	0.1	74	19.6	19.6	8.1	8.1	33.1	33.1	98.4	98.5	7.4	7.4	7.5		7		85				<0.2		0.5	
						5.8	0.1	81	19.6		8.1		33.1		98.5		7.4		7.6		7		86				<0.2		0.7	
IM10	Fine	Moderate	20:01	7.1	Surface	1.0	0.3	307	20.3	20.3	8.1	8.1	33.3	33.3	98.4	98.4	7.3	7.3	5.1	5.3	6	6	89	90	822367	809805	<0.2	<0.2	0.5	0.6
						1.0	0.3	323	20.3		8.1		33.3		98.4		7.3		5.1		6		90				<0.2		0.5	
					Middle	3.6	0.3	308	20.1	20.1	8.1	8.1	33.3	33.3	97.9	97.9	7.3		5.3		6		93				<0.2		0.6	
						3.6	0.3	314	20.1		8.1		33.3		97.8		7.3		5.3		6		93				<0.2		0.6	
					Bottom	6.1	0.3	289	19.9	19.9	8.1	8.1	33.2	33.2	97.5	97.5	7.3	7.3	5.6		5		87				<0.2		0.6	
						6.1	0.4	298	19.9		8.1		33.2		97.5		7.3		5.6		5		88				<0.2		0.6	
IM11	Fine	Moderate	19:50	8.0	Surface	1.0	0.3	286	20.1	20.1	8.1	8.1	33.4	33.3	97.0	97.0	7.2	7.3	5.5	6.7	8	9	90	91	822047	811450	<0.2	<0.2	0.6	0.6
						1.0	0.3	295	20.1		8.1		33.3		97.0		7.2		5.5		6		91				<0.2		0.6	
					Middle	4.0	0.3	282	20.0	20.0	8.1	8.1	33.3	33.3	97.2	97.3	7.3		6.2		8		95				<0.2		0.6	
						4.0	0.3	292	20.0		8.1		33.3		97.3		7.3		6.5		9		96				<0.2		0.6	
					Bottom	7.0	0.3	273	19.8	19.8	8.1	8.1	33.3	33.3	97.7	97.8	7.3	7.3	8.0		10		85				<0.2		0.5	
						7.0	0.3	290	19.8		8.1		33.3		97.9		7.3		8.3		10		86				<0.2		0.6	
IM12	Fine	Moderate	19:44	7.9	Surface	1.0	0.4	300	19.9	19.9	8.1	8.1	33.3	33.3	98.2	98.3	7.3	7.4	5.0	5.8	11	8	91	91	821450	812045	<0.2	<0.2	0.6	0.6
						1.0	0.4	312	19.9		8.1		33.3		98.3		7.4		5.0		10		92				<0.2		0.6	
					Middle	4.0	0.4	301	19.7	19.8	8.1	8.1	33.4	33.4	98.3	98.4	7.4		5.5		6		94				<0.2		0.6	
						4.0	0.4	323	19.8		8.1		33.4		98.5		7.4		5.6		6		96				<0.2		0.6	
					Bottom	6.9	0.3	298	19.5	19.5	8.1	8.1	33.4	33.4	98.5	98.6	7.4	7.4	6.9		7		86				<0.2		0.6	
						6.9	0.4	304	19.5		8.1		33.4		98.6		7.4		6.9		7		86				<0.2		0.6	
SR1A	Fine	Moderate	19:26	5.3	Surface	1.0	-	-	20.1	20.1	8.1	8.1	33.1	33.1	95.2	95.2	7.1	7.1	5.4	5.8	7	7	-	-	820066	812586	-	-	-	-
						1.0	-	-	20.1		8.1		33.1		95.2		7.1		5.4		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.0	20.0	8.1	8.1	33.1	33.1	96.1	96.2	7.2	7.2	6.1		6		-				-		-	
						4.3	-	-	20.0		8.1		33.1		96.3		7.2		6.3		6		-				-		-	
SR2	Fine	Moderate	19:13	3.9	Surface	1.0	0.1	126	20.1	20.1	8.2	8.2	33.3	33.3	95.4	95.4	7.1	7.1	5.2	6.1	6	8	92	93	821470	814153	<0.2	<0.2	0.6	0.6
						1.0	0.1	126	20.1		8.2		33.3		95.4		7.1		5.1		7		92				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	191	20.1	20.1	8.2	8.2	33.3	33.3	96.9	97.2	7.2	7.3	6.9		10		93				<0.2		0.6	
						2.9	0.1	210	20.1		8.2		33.3		97.4		7.3		7.0		9		93				<0.2		0.6	
SR3	Fine	Moderate	20:18	8.7	Surface	1.0	0.0	200	20.1	20.1	8.1	8.1	33.2	33.2	98.1	98.1	7.3	7.3	5.9	7.4	7	6	-	-	822162	807555	-	-	-	-
						1.0	0.0	217	20.1		8.1		33.2		98.1		7.3		6.0		6		-				-		-	
					Middle	4.4	0.1	301	19.8	19.8	8.1	8.1	33.2	33.2	97.5	97.5	7.3		7.7		6		-				-		-	
						4.4	0.1	309	19.8		8.1		33.2		97.5		7.3		7.7		6		-				-		-	
					Bottom	7.7	0.1	308	19.7	19.7	8.1	8.1	33.2	33.2	97.7	97.8	7.3	7.3	8.6		6		-				-		-	
						7.7	0.1	311	19.7		8.1		33.2		97.8		7.3		8.4		6		-				-		-	
SR4A	Fine	Calm	18:26	9.6	Surface	1.0	0.2	260	20.5	20.5	8.1	8.1	33.0	33.0	96.1	96.1	7.1	7.1	7.5	8.0	6	6	-	-	817189	807817	-	-	-	-
						1.0	0.2	273	20.5		8.1		33.0		96.1		7.1		7.5		6		-				-		-	
					Middle	4.8	0.1	262	20.5	20.5	8.1	8.1	33.0	33.0	96.3	96.3	7.1		7.5		6		-				-		-	
						4.8	0.1	286	20.5		8.1		33.0		96.3		7.2		7.5		6		-				-		-	
					Bottom	8.6	0.0	84	20.4	20.4	8.1	8.1	33.0	33.0	97.2	97.4	7.2	7.3	9.1		5		-				-		-	
						8.6	0.0	92	20.4		8.1		33.0		97.6		7.3		9.0		6		-				-		-	
SR5A	Fine	Calm	18:19	4.7	Surface	1.0	0.2	302	21.0	21.0	8.1	8.1	33.1	33.1	94.5	94.5	6.9	6.9	7.1	7.2	6	6	-	-	816573	810703	-	-	-	-
						1.0	0.2	314	21.0		8.1		33.1		94.5		6.9		7.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	310	21.1	21.1	8.1	8.1	33.1	33.1	93.9	93.9	6.9	6.9	7.3		6		-				-		-	
						3.7	0.2	328	21.1		8.1		33.1		93.9		6.9		7.3		7		-				-		-	
SR6	Fine	Calm	18:19	4.5	Surface	1.0	0.1	240	21.3	21.3	8.1	8.1	33.1	33.1	94.2	94.2	6.9	6.9	7.1	7.0	6	6	-	-	817875	814648	-	-	-	-
						1.0	0.1	249	21.3		8.1		33.1		94.2		6.9		7.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	222	21.3	21.3	8.1	8.1	33.1	33.1	94.2	94.2	6.9	6.9	6.8		6		-				-		-	
						3.5	0.0	238	21.3		8.1		33.1		94.2		6.9		6.9		6		-				-		-	
SR7	Fine	Moderate	18:24	14.6	Surface	1.0	0.1	81	20.9	20.9	8.2	8.2	33.5	33.5	93.5	93.5	6.9	6.9	4.5	4.6	5	5	-	-	823640	823748	-	-	-	-
						1.0	0.1	82	20.9		8.2		33.5		93.5		6.9		4.5		6		-				-		-	
					Middle	7.3	0.2	34	20.9	20.9	8.2	8.2	33.5	33.5	93.5	93.5	6.9		4.8		4		-				-		-	
						7.3	0.2	35	20.9		8.2		33.5		93.5		6.9		4.9		4		-				-		-	
					Bottom	13.6	0.1	35	20.9	20.9	8.1	8.1	33.5	33.5	93.7	93.7	6.9	6.9	4.6		6		-				-		-	
						13.6	0.1	37	20.9		8.1		33.5		93.7		6.9		4.6		6		-				-		-	
SR8	Fine	Moderate	19:34	3.8	Surface	1.0	-	-	19.6	19.6	8.2	8.2	33.3	33.3	98.0	98.0	7.4	7.4	6.3	7.6	5	6	-	-	820517	811644	-	-	-	-
						1.0	-	-	19.6		8.2		33.3		98.0		7.4		6.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	19.3	19.3	8.2	8.2	33.4	33.4	98.1	98.1	7.4	7.4	8.7		6		-				-		-	
						2.8	-	-	19.3		8.2		33.4		98.1		7.4		8.9		6		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	13:30	8.6	Surface	1.0	0.6	58	20.4	20.4	8.1	8.1	32.9	32.9	97.8	97.9	7.3	7.4	8.4	9.1	6	7	84	90	815637	804249	<0.2	<0.2	0.9	0.9
						1.0	0.6	59	20.4		8.2		32.9		97.9		7.3		8.3		6		85				<0.2		1.0	
					Middle	4.3	0.3	49	20.2	20.2	8.2	8.2	32.9	32.9	98.8	98.9	7.4		9.2		7		90				<0.2		0.8	
						4.3	0.3	49	20.2		8.2		32.9		98.9		7.4		9.2		6		91				<0.2		1.0	
					Bottom	7.6	0.2	40	20.1	20.2	8.2	8.1	32.9	32.9	99.3	99.4	7.4	7.4	9.8		7		93				<0.2		0.9	
						7.6	0.2	40	20.2		8.1		32.9		99.4		7.4		9.8		7		94				<0.2		1.0	
C2	Fine	Moderate	12:19	10.4	Surface	1.0	0.2	141	20.2	20.2	8.1	8.1	32.4	32.4	97.5	97.5	7.3	7.3	5.0	6.8	6	7	86	91	825686	806933	<0.2	<0.2	0.8	0.8
						1.0	0.3	154	20.2		8.1		32.4		97.4		7.3		5.0		6		86				<0.2		0.8	
					Middle	5.2	0.1	255	20.3	20.3	8.1	8.1	33.0	33.0	96.8	96.8	7.2		5.6		6		90				<0.2		0.8	
						5.2	0.1	270	20.3		8.1		33.0		96.8		7.2		5.5		5		91				<0.2		0.8	
					Bottom	9.4	0.1	282	20.2	20.2	8.1	8.1	33.2	33.2	96.4	96.5	7.2	7.2	10.0		8		96				<0.2		0.8	
						9.4	0.1	294	20.2		8.1		33.2		96.5		7.2		10.0		8		96				<0.2		0.6	
C3	Fine	Moderate	13:58	12.0	Surface	1.0	0.1	281	21.0	21.0	8.1	8.1	33.5	33.5	94.2	94.2	6.9	6.9	4.5	6.2	4	5	86	91	822091	817814	<0.2	<0.2	0.6	0.7
						1.0	0.1	288	21.0		8.1		33.5		94.1		6.9		4.6		4		88				<0.2		0.9	
					Middle	6.0	0.1	278	21.0	21.0	8.1	8.1	33.5	33.5	93.7	93.7	6.9		5.9		5		91				<0.2		0.6	
						6.0	0.1	295	21.0		8.1		33.5		93.7		6.9		6.1		5		92				<0.2		0.6	
					Bottom	11.0	0.1	266	20.9	20.9	8.1	8.1	33.5	33.5	93.7	93.7	6.9	6.9	8.0		6		94				<0.2		0.6	
						11.0	0.1	280	20.9		8.1		33.5		93.7		6.9		8.0		6		94				<0.2		0.6	
IM1	Fine	Moderate	13:11	5.1	Surface	1.0	0.1	200	20.9	20.9	8.1	8.1	33.0	33.0	95.5	95.5	7.0	7.0	10.5	13.8	7	7	87	88	817927	807132	<0.2	<0.2	1.0	1.0
						1.0	0.1	211	20.9		8.1		33.0		95.5		7.0		10.6		7		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	187	20.9	20.9	8.1	8.1	33.0	33.0	95.8	95.8	7.1	7.1	17.2		7		88				<0.2		1.0	
						4.1	0.1	192	20.9		8.1		33.0		95.8		7.1		16.8		7		89				<0.2		1.0	
IM2	Fine	Moderate	13:03	7.3	Surface	1.0	0.4	220	20.7	20.7	8.1	8.1	32.8	32.8	96.4	96.3	7.1	7.1	8.4	8.7	7	6	86	90	818159	806174	<0.2	<0.2	0.9	0.9
						1.0	0.4	231	20.7		8.1		32.8		96.2		7.1		8.6		7		87				<0.2		0.9	
					Middle	3.7	0.2	0	20.9	20.9	8.1	8.1	33.0	33.0	95.7	95.7	7.0		8.3		6		90				<0.2		0.9	
						3.7	0.2	0	20.9		8.1		33.0		95.7		7.0		8.5		6		91				<0.2		0.9	
					Bottom	6.3	0.1	276	21.0	21.0	8.1	8.1	33.1	33.1	95.6	95.6	7.0	7.0	9.1		6		91				<0.2		0.9	
						6.3	0.1	277	21.0		8.1		33.1		95.6		7.0		9.2		6		92				<0.2		0.9	
IM3	Fine	Moderate	12:57	7.5	Surface	1.0	0.4	209	20.4	20.4	8.2	8.2	33.0	33.0	100.4	100.4	7.5	7.5	7.4	8.0	8	7	84	89	818768	805592	<0.2	<0.2	0.9	0.9
						1.0	0.4	218	20.4		8.2		33.0		100.4		7.5		7.4		8		85				<0.2		0.9	
					Middle	3.8	0.4	211	20.1	20.1	8.2	8.2	33.0	33.0	100.0	100.0	7.5		8.0		7		89				<0.2		0.9	
						3.8	0.4	215	20.1		8.2		33.0		100.0		7.5		8.0		7		89				<0.2		0.9	
					Bottom	6.5	0.3	199	20.1	20.1	8.2	8.2	33.0	33.0	100.3	100.4	7.5	7.5	8.7		7		94				<0.2		0.9	
						6.5	0.3	216	20.1		8.2		33.0		100.5		7.5		8.7		6		94				<0.2		0.8	
IM4	Fine	Moderate	12:48	7.6	Surface	1.0	0.6	166	19.9	19.9	8.2	8.2	32.8	32.8	101.7	101.7	7.6	7.6	10.4	11.5	10	9	85	90	819707	804613	<0.2	<0.2	0.9	0.9
						1.0	0.6	171	19.9		8.2		32.8		101.7		7.6		10.3		10		86				<0.2		1.0	
					Middle	3.8	0.2	169	19.8	19.8	8.2	8.2	32.8	32.8	101.2	101.2	7.6		11.3		10		89				<0.2		1.0	
						3.8	0.3	178	19.8		8.2		32.8		101.2		7.6		11.4		9		90				<0.2		0.9	
					Bottom	6.6	0.0	71	19.8	19.8	8.2	8.2	32.9	32.9	101.5	101.6	7.6	7.6	12.8		8		94				<0.2		0.9	
						6.6	0.0	77	19.8		8.2		32.9		101.6		7.6		12.9		9		95				<0.2		0.9	
IM5	Fine	Moderate	12:40	6.9	Surface	1.0	0.5	180	20.0	20.0	8.2	8.2	32.8	32.8	102.7	102.7	7.7	7.7	11.3	12.4	11	13	86	90	820748	804857	<0.2	<0.2	1.1	1.0
						1.0	0.5	195	20.0		8.2		32.8		102.7		7.7		11.4		11		87				<0.2		1.1	
					Middle	3.5	0.4	209	19.9	19.9	8.2	8.2	32.8	32.8	102.3	102.3	7.7		12.4		12		90				<0.2		1.1	
						3.5	0.5	217	19.9		8.2		32.8		102.3		7.7		12.5		13		91				<0.2		0.9	
					Bottom	5.9	0.4	226	20.0	20.0	8.2	8.2	32.9	32.9	102.4	102.4	7.7	7.7	13.3		14		94				<0.2		1.0	
						5.9	0.4	231	20.0		8.2		32.9		102.4		7.7		13.4		14		94				<0.2		1.0	
IM6	Fine	Moderate	12:32	7.0	Surface	1.0	0.2	276	20.4	20.4	8.1	8.1	32.8	32.8	101.2	101.2	7.5	7.5	9.8	11.3	10	7	84	90	821051	805840	<0.2	<0.2	0.9	0.9
						1.0	0.2	276	20.3		8.1		32.8		101.1		7.5		10.0		10		85				<0.2		1.0	
					Middle	3.5	0.2	266	20.1	20.1	8.1	8.1	32.8	32.8	100.2	100.2	7.5		12.0		6		90				<0.2		1.0	
						3.5	0.2	287	20.1		8.1		32.8		100.1		7.5		12.0		7		92				<0.2		0.9	
					Bottom	6.0	0.2	270	20.1	20.1	8.1	8.1	32.8	32.8	100.0	100.1	7.5	7.5	12.0		5		92				<0.2		0.9	
						6.0	0.2	292	20.1		8.1		32.8		100.1		7.5		12.0		6		94				<0.2		0.9	
IM7	Fine	Moderate	12:22	8.5	Surface	1.0	0.4	215	20.3	20.4	8.1	8.1	32.8	32.8	101.3	101.4	7.5	7.5	9.7	11.0	7	8	89	94	821366	806829	<0.2	<0.2	1.0	1.0
						1.0	0.4	231	20.4		8.1		32.8		101.4		7.5		9.5		7		91				<0.2		1.0	
					Middle	4.3	0.5	227	20.1	20.1	8.1	8.1	32.8	32.8	99.7	99.7	7.5		12.1		8		95				<0.2		1.0	
						4.3	0.5	248	20.1		8.1		32.8		99.6		7.5		12.0		8		95				<0.2		1.0	
					Bottom	7.5	0.2	219	20.1	20.1	8.1	8.1	32.8	32.8	99.7	99.7	7.5	7.5	11.3		8		97				<0.2		1.1	
						7.5	0.3	238	20.1		8.1		32.8		99.7		7.5		11.4		8		98				<0.2		0.9	
IM8	Fine	Moderate	12:36	7.3	Surface	1.0	0.2	217	19.6	19.6	8.2	8.2	33.1	33.1	101.9	101.9	7.7	7.7	9.5	10.8	11	12	95	92	821828	808133	<0.2	<0.2	0.8	0.8
						1.0	0.2	225	19.6		8.2		33.1		101.9		7.7		9.6		11		96				<0.2		0.7	
					Middle	3.7	0.2	256	19.6	19.6	8.2	8.2	33.1	33.1	101.6	101.6	7.7		10.8		12		86				<0.2		0.8	
						3.7	0.2	261	19.6		8.2		33.1		101.5		7.7		11.0		13		87				<0.2		0.7	
					Bottom	6.3	0.3	223	19.6	19.6	8.2	8.2	33.2	33.2	101.6	101.7	7.7	7.7	11.9		12		94				<0.2		0.7	
						6.3	0.3	225	19.6		8.2		33.2		101.7		7.7		11.7		12		95				<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 18 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	12:42	7.1	Surface	1.0	0.3	256	19.6	19.6	8.2	8.2	33.2	33.2	100.9	100.9	7.6	7.6	8.7	10.2	10	11	95	91	822079	808797	<0.2	<0.2	0.8	0.7
						1.0	0.3	268	19.6		8.2		33.2		100.9		7.6		8.7		10		95				<0.2		0.7	
					Middle	3.6	0.2	265	19.5	19.5	8.2	8.2	33.2	33.2	100.5	100.5	7.6		9.8		10		86				<0.2		0.7	
						3.6	0.2	278	19.5		8.2		33.2		100.5		7.6		9.7		11		86				<0.2		0.8	
					Bottom	6.1	0.2	266	19.5	19.5	8.2	8.2	33.2	33.2	100.8	100.9	7.6	7.6	12.1		11		90				<0.2		0.7	
						6.1	0.2	280	19.5		8.2		33.2		100.9		7.6		12.1		11		91				<0.2		0.7	
IM10	Fine	Moderate	12:49	8.1	Surface	1.0	0.2	261	20.1	20.1	8.1	8.1	33.3	33.3	99.7	99.7	7.4	7.4	5.0	5.9	4	4	93	90	822407	809813	<0.2	<0.2	0.7	0.7
						1.0	0.2	269	20.1		8.1		33.3		99.7		7.4		5.0		4		93				<0.2		0.6	
					Middle	4.1	0.2	274	19.8	19.8	8.1	8.1	33.4	33.4	99.2	99.3	7.4		6.0		4		86				<0.2		0.7	
						4.1	0.3	281	19.8		8.1		33.4		99.3		7.4		5.9		4		87				<0.2		0.7	
					Bottom	7.1	0.2	266	19.7	19.7	8.1	8.1	33.4	33.4	99.8	99.9	7.5	7.5	6.7		5		90				<0.2		0.7	
						7.1	0.2	282	19.7		8.1		33.4		100.0		7.5		6.8		4		90				<0.2		0.6	
IM11	Fine	Moderate	13:01	7.7	Surface	1.0	0.3	259	20.4	20.4	8.1	8.1	33.1	33.1	95.7	95.6	7.1	7.1	6.4	7.5	6	7	93	90	822055	811465	<0.2	<0.2	0.6	0.6
						1.0	0.3	265	20.4		8.1		33.1		95.5		7.1		6.6		7		95				<0.2		0.6	
					Middle	3.9	0.3	260	20.6	20.6	8.1	8.1	33.4	33.4	95.1	95.1	7.0		6.3		8		84				<0.2		0.6	
						3.9	0.3	271	20.6		8.1		33.4		95.0		7.0		6.4		8		86				<0.2		0.6	
					Bottom	6.7	0.3	259	20.6	20.6	8.1	8.1	33.4	33.4	95.0	95.0	7.0	7.0	9.4		7		92				<0.2		0.6	
						6.7	0.3	261	20.6		8.1		33.4		95.0		7.0		9.9		7		92				<0.2		0.7	
IM12	Fine	Moderate	13:08	8.2	Surface	1.0	0.2	281	20.6	20.6	8.1	8.1	33.3	33.3	95.0	95.0	7.0	7.0	8.7	11.1	7	8	96	91	821456	812046	<0.2	<0.2	0.5	0.6
						1.0	0.2	287	20.6		8.1		33.3		95.0		7.0		8.6		7		96				<0.2		0.6	
					Middle	4.1	0.2	270	20.6	20.6	8.1	8.1	33.3	33.3	94.8	94.8	7.0		10.5		7		86				<0.2		0.5	
						4.1	0.2	292	20.6		8.1		33.3		94.8		7.0		10.5		7		87				<0.2		0.5	
					Bottom	7.2	0.1	340	20.6	20.6	8.1	8.1	33.3	33.3	95.2	95.3	7.0	7.1	14.2		10		90				<0.2		0.6	
						7.2	0.1	313	20.6		8.1		33.3		95.3		7.1		14.2		9		91				<0.2		0.6	
SR1A	Fine	Moderate	13:24	5.5	Surface	1.0	-	-	20.0	20.0	8.1	8.1	32.8	32.8	96.3	96.3	7.2	7.2	6.9	7.0	7	8	-	-	820072	812584	-	-	-	-
						1.0	-	-	20.0		8.1		32.8		96.3		7.2		6.9		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	20.0	20.0	8.1	8.1	32.8	32.8	97.0	97.1	7.3	7.3	7.1		9		-				-		-	
						4.5	-	-	20.0		8.1		32.8		97.1		7.3		7.1		9		-				-		-	
SR2	Fine	Moderate	13:36	4.5	Surface	1.0	0.1	307	20.5	20.5	8.1	8.1	33.3	33.3	96.3	96.3	7.1	7.1	6.0	7.2	4	5	86	89	821480	814174	<0.2	<0.2	0.5	0.6
						1.0	0.2	311	20.5		8.1		33.3		96.2		7.1		6.1		5		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	315	20.5	20.5	8.1	8.1	33.3	33.3	98.1	98.2	7.3	7.3	8.2		6		90				<0.2		0.7	
						3.5	0.1	319	20.5		8.1		33.3		98.3		7.3		8.4		6		91				<0.2		0.7	
SR3	Fine	Moderate	12:29	8.5	Surface	1.0	0.2	263	20.0	20.0	8.1	8.1	33.1	33.1	100.5	100.6	7.5	7.5	7.7	9.2	6	6	-	-	822149	807556	-	-	-	-
						1.0	0.2	278	20.0		8.1		33.1		100.6		7.5		7.4		7		-				-		-	
					Middle	4.3	0.2	271	19.7	19.7	8.1	8.1	33.1	33.1	99.0	99.0	7.4		10.0		6		-				-		-	
						4.3	0.2	286	19.7		8.1		33.1		99.0		7.4		10.0		5		-				-		-	
					Bottom	7.5	0.1	278	19.7	19.7	8.1	8.1	33.1	33.1	99.1	99.2	7.5	7.5	9.9		7		-				-		-	
						7.5	0.1	297	19.7		8.1		33.1		99.2		7.5		10.0		7		-				-		-	
SR4A	Fine	Calm	13:50	8.2	Surface	1.0	0.1	264	20.9	20.9	8.1	8.1	33.0	33.0	97.0	97.0	7.1	7.1	8.1	10.0	12	10	-	-	817184	807791	-	-	-	-
						1.0	0.1	264	20.9		8.1		33.0		96.9		7.1		8.1		12		-				-		-	
					Middle	4.1	0.2	277	20.8	20.8	8.1	8.1	33.0	33.0	96.6	96.7	7.1		8.6		9		-				-		-	
						4.1	0.2	281	20.8		8.1		33.0		96.7		7.1		8.7		10		-				-		-	
					Bottom	7.2	0.2	261	20.8	20.8	8.1	8.1	33.0	33.0	98.8	98.9	7.3	7.3	12.9		8		-				-		-	
						7.2	0.2	266	20.8		8.1		33.0		99.0		7.3		13.6		9		-				-		-	
SR5A	Fine	Calm	14:06	3.8	Surface	1.0	0.0	200	21.4	21.4	8.1	8.1	33.1	33.1	94.7	94.7	6.9	6.9	7.1	7.1	5	6	-	-	816577	810715	-	-	-	-
						1.0	0.0	209	21.4		8.1		33.1		94.6		6.9		7.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	168	21.3	21.3	8.1	8.1	33.1	33.1	94.2	94.2	6.9	6.9	7.0		5		-				-		-	
						2.8	0.0	179	21.3		8.1		33.1		94.2		6.9		7.3		6		-				-		-	
SR6	Fine	Calm	14:31	4.6	Surface	1.0	0.0	180	21.3	21.3	8.1	8.1	33.1	33.1	94.2	94.2	6.9	6.9	7.2	7.2	6	8	-	-	817908	814667	-	-	-	-
						1.0	0.0	181	21.3		8.1		33.1		94.2		6.9		7.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	104	21.3	21.3	8.1	8.1	33.1	33.1	94.1	94.1	6.9	6.9	7.2		9		-				-		-	
						3.6	0.0	104	21.3		8.1		33.1		94.0		6.9		7.2		9		-				-		-	
SR7	Fine	Moderate	14:31	14.3	Surface	1.0	0.1	82	21.0	21.0	8.1	8.1	33.5	33.5	93.6	93.6	6.9	6.9	4.7	4.9	5	6	-	-	823653	823760	-	-	-	-
						1.0	0.1	82	21.0		8.1		33.5		93.6		6.9		4.8		5		-				-		-	
					Middle	7.2	0.1	56	21.0	21.0	8.1	8.1	33.5	33.5	93.4	93.4	6.9		5.3		6		-				-		-	
						7.2	0.1	57	21.0		8.1		33.5		93.4		6.9		5.4		5		-				-		-	
					Bottom	13.3	0.0	1	21.0	21.0	8.1	8.1	33.5	33.5	93.5	93.6	6.9	6.9	4.7		6		-				-		-	
						13.3	0.0	1	21.0		8.1		33.5		93.6		6.9		4.7		6		-				-		-	
SR8	Fine	Moderate	13:16	4.5	Surface	1.0	-	-	20.1	20.1	8.1	8.1	33.2	33.2	97.2	97.3	7.3	7.3	6.1	6.6	7	7	-	-	820522	811658	-	-	-	-
						1.0	-	-	20.1		8.1		33.2		97.4		7.3		6.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	19.8	19.8	8.1	8.1	33.3	33.3	98.2	98.3	7.4	7.4	7.1		7		-				-		-	
						3.5	-	-	19.8		8.1		33.3		98.3		7.4		7.2		6		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	08:08	9.7	Surface	1.0	0.4	221	20.1	20.1	8.1	8.1	32.6	32.6	97.0	97.1	7.3	7.3	7.5	9.2	11	12	84	89	815623	804238	<0.2	<0.2	0.6	0.6
						1.0	0.4	223	20.1		8.1		32.6		97.1		7.3		7.5		11		84				<0.2		0.6	
					Middle	4.9	0.2	176	20.1	20.2	8.1	8.1	32.7	32.7	97.2	97.3	7.3		9.1		11		89				<0.2		0.6	
						4.9	0.3	192	20.2		8.1		32.7		97.3		7.3		9.0		11		89				<0.2		0.8	
					Bottom	8.7	0.3	170	20.2	20.2	8.1	8.1	32.8	32.8	97.5	97.6	7.3	7.3	11.2		13		93				<0.2		0.6	
						8.7	0.3	172	20.2		8.1		32.8		97.6		7.3		11.2		13		93				<0.2		0.5	
C2	Fine	Moderate	09:38	11.0	Surface	1.0	0.4	163	20.2	20.3	8.1	8.1	33.1	33.1	95.5	95.5	7.1	7.1	6.0	6.5	7	8	84	89	825687	806939	<0.2	<0.2	0.5	0.5
						1.0	0.4	168	20.3		8.1		33.1		95.4		7.1		6.1		8		84				<0.2		0.4	
					Middle	5.5	0.3	166	20.4	20.4	8.1	8.1	33.2	33.2	95.4	95.4	7.1		6.6		8		89				<0.2		0.5	
						5.5	0.3	178	20.4		8.1		33.2		95.4		7.1		6.7		8		90				<0.2		0.5	
					Bottom	10.0	0.2	162	20.4	20.4	8.1	8.1	33.2	33.2	95.5	95.5	7.1	7.1	7.0		7		93				<0.2		0.5	
						10.0	0.2	173	20.4		8.1		33.2		95.5		7.1		6.9		7		93				<0.2		0.5	
C3	Fine	Moderate	07:44	11.1	Surface	1.0	0.1	104	20.6	20.6	8.1	8.1	33.5	33.5	93.1	93.1	6.9	6.9	4.5	5.0	8	7	84	89	822123	817825	<0.2	<0.2	0.6	0.6
						1.0	0.1	107	20.6		8.1		33.5		93.1		6.9		4.6		10		84				<0.2		0.6	
					Middle	5.6	0.1	106	20.6	20.6	8.1	8.1	33.5	33.5	93.3	93.3	6.9		5.0		7		88				<0.2		0.7	
						5.6	0.1	115	20.6		8.1		33.5		93.3		6.9		4.9		7		89				<0.2		0.6	
					Bottom	10.1	0.1	76	20.6	20.6	8.1	8.1	33.5	33.5	93.8	94.0	6.9	6.9	5.4		6		93				<0.2		0.6	
						10.1	0.1	79	20.6		8.1		33.5		94.1		6.9		5.5		6		93				<0.2		0.6	
IM1	Fine	Moderate	08:15	4.2	Surface	1.0	0.2	160	19.8	19.8	8.2	8.2	32.4	32.4	99.2	99.2	7.5	7.5	6.6	7.2	8	10	85	90	817955	807119	<0.2	<0.2	0.4	0.5
						1.0	0.2	161	19.8		8.2		32.4		99.1		7.5		6.5		9		85				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	<0.2	-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	180	20.1	20.1	8.2	8.2	32.6	32.6	98.7	98.7	7.4	7.4	7.9		10		94				<0.2		0.5	
						3.2	0.1	190	20.1		8.2		32.6		98.7		7.4		7.9		11		95				<0.2		0.5	
IM2	Fine	Moderate	08:32	7.8	Surface	1.0	0.4	212	19.9	20.0	8.2	8.2	32.6	32.6	98.9	98.8	7.4	7.4	6.3	6.8	12	12	84	88	818176	806176	<0.2	<0.2	0.6	0.6
						1.0	0.5	217	20.0		8.2		32.6		98.6		7.4		6.3		13		84				<0.2		0.6	
					Middle	3.9	0.3	218	20.3	20.3	8.1	8.1	32.8	32.8	97.6	97.6	7.3		6.6		12		88				<0.2		0.5	
						3.9	0.4	233	20.3		8.1		32.8		97.6		7.3		6.6		12		88				<0.2		0.5	
					Bottom	6.8	0.2	200	20.3	20.3	8.1	8.1	32.8	32.8	97.9	98.0	7.3	7.3	7.5		12		93				<0.2		0.6	
						6.8	0.2	207	20.3		8.1		32.8		98.0		7.3		7.5		12		93				<0.2		0.5	
IM3	Fine	Moderate	08:45	7.3	Surface	1.0	0.4	216	20.0	20.0	8.2	8.2	32.6	32.6	99.7	99.7	7.5	7.5	8.6	10.4	10	11	85	90	818804	805610	<0.2	<0.2	0.4	0.5
						1.0	0.5	226	20.0		8.2		32.6		99.7		7.5		8.7		11		85				<0.2		0.4	
					Middle	3.7	0.2	190	20.0	20.0	8.2	8.2	32.6	32.6	99.5	99.5	7.5		10.8		10		91				<0.2		0.6	
						3.7	0.2	200	20.0		8.2		32.6		99.5		7.5		10.8		11		91				<0.2		0.6	
					Bottom	6.3	0.3	166	20.0	20.0	8.2	8.2	32.6	32.6	99.6	99.7	7.5	7.5	11.9		11		93				<0.2		0.6	
						6.3	0.3	180	20.0		8.2		32.6		99.7		7.5		11.9		11		93				<0.2		0.5	
IM4	Fine	Moderate	08:58	7.6	Surface	1.0	0.6	187	19.5	19.5	8.2	8.2	32.2	32.2	103.1	103.0	7.8	7.8	8.7	9.5	10	11	85	89	819738	804609	<0.2	<0.2	0.5	0.5
						1.0	0.6	202	19.5		8.2		32.2		102.9		7.8		8.8		10		85				<0.2		0.5	
					Middle	3.8	0.5	177	19.5	19.5	8.2	8.2	32.2	32.2	102.6	102.4	7.8		9.1		10		90				<0.2		0.5	
						3.8	0.5	185	19.5		8.2		32.2		102.2		7.8		9.0		11		90				<0.2		0.5	
					Bottom	6.6	0.3	152	19.5	19.5	8.2	8.2	32.2	32.2	102.1	102.2	7.8	7.8	10.8		12		93				<0.2		0.5	
						6.6	0.3	152	19.5		8.2		32.2		102.2		7.8		10.8		11		93				<0.2		0.5	
IM5	Fine	Moderate	09:05	8.3	Surface	1.0	0.7	198	19.7	19.7	8.2	8.2	32.3	32.3	102.7	102.7	7.8	7.8	8.8	9.4	7	7	85	89	820744	804885	<0.2	<0.2	0.6	0.5
						1.0	0.7	207	19.7		8.2		32.3		102.6		7.8		8.8		6		85				<0.2		0.4	
					Middle	4.2	0.6	194	19.6	19.6	8.2	8.2	32.3	32.3	101.8	101.8	7.7		9.4		7		89				<0.2		0.4	
						4.2	0.6	213	19.6		8.2		32.3		101.8		7.7		9.4		7		89				<0.2		0.4	
					Bottom	7.3	0.4	182	19.6	19.6	8.1	8.1	32.3	32.3	102.0	102.1	7.7	7.7	10.0		7		93				<0.2		0.5	
						7.3	0.4	192	19.6		8.1		32.3		102.1		7.7		10.1		7		93				<0.2		0.4	
IM6	Fine	Moderate	09:11	8.6	Surface	1.0	0.5	250	19.5	19.5	8.2	8.2	32.2	32.2	103.4	103.2	7.8	7.8	10.1	10.2	7	7	85	89	821070	805804	<0.2	<0.2	0.5	0.5
						1.0	0.5	253	19.5		8.2		32.2		103.0		7.8		10.2		7		85				<0.2		0.6	
					Middle	4.3	0.5	231	19.5	19.5	8.2	8.2	32.3	32.3	101.7	101.7	7.7		10.2		7		89				<0.2		0.5	
						4.3	0.5	243	19.5		8.2		32.3		101.6		7.7		10.2		6		89				<0.2		0.5	
					Bottom	7.6	0.3	227	19.5	19.5	8.1	8.1	32.4	32.4	101.4	101.5	7.7	7.7	10.4		7		93				<0.2		0.5	
						7.6	0.4	241	19.5		8.1		32.4		101.5		7.7		10.3		7		94				<0.2		0.5	
IM7	Fine	Moderate	09:25	7.9	Surface	1.0	0.5	213	19.6	19.6	8.2	8.1	32.2	32.2	102.5	102.5	7.8	7.8	6.3	7.6	7	7	84	89	821339	806832	<0.2	<0.2	0.6	0.5
						1.0	0.6	219	19.6		8.1		32.2		102.4		7.8		6.3		8		85				<0.2		0.4	
					Middle	4.0	0.4	235	19.6	19.6	8.1	8.1	32.3	32.3	102.0	102.1	7.7		7.5		6		89				<0.2		0.4	
						4.0	0.4	243	19.6		8.1		32.3		102.1		7.7		7.6		6		90				<0.2		0.5	
					Bottom	6.9	0.2	193	19.6	19.6	8.1	8.1	32.2	32.2	102.6	102.7	7.8	7.8	8.9		6		93				<0.2		0.6	
						6.9	0.2	205	19.6		8.1		32.2		102.8		7.8		8.9		6		94				<0.2		0.5	
IM8	Fine	Moderate	09:11	7.5	Surface	1.0	0.2	135	19.2	19.2	8.1	8.1	32.6	32.6	102.6	102.4	7.8	7.8	8.8	8.9	7	7	86	90	821844	808122	<0.2	<0.2	0.7	0.6
						1.0	0.2	139	19.2		8.1		32.6		102.2		7.8		8.8		6		86				<0.2		0.5	
					Middle	3.8	0.2	114	19.1	19.1	8.1	8.1	32.6	32.7	101.2	101.2	7.7		8.9		7		89				<0.2		0.5	
						3.8	0.2	117	19.1		8.1		32.7		101.1		7.7		9.0		7		90				<0.2		0.6	
					Bottom	6.5	0.1	104	19.1	19.1	8.1	8.1	32.7	32.7	101.0	101.1	7.7	7.7	9.0		8		93				<0.2		0.6	
						6.5	0.1	110	19.1		8.1		32.7		101.1		7.7		9.0		9		93				<0.2		0.7	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 December 18 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	09:05	6.8	Surface	1.0	0.2	101	19.3	19.3	8.1	8.1	32.6	32.6	102.0	102.0	7.8	7.8	7.7	8.8	5	7	84	90	822102	808833	<0.2	<0.2	0.6	0.6
						1.0	0.2	107	19.3		8.1		32.6		101.9		7.8		7.7		5		85				<0.2		0.7	
					Middle	3.4	0.2	108	19.3	19.3	8.1	8.1	32.6	32.6	101.1	101.1	7.7		8.6		6		90				<0.2		0.5	
						3.4	0.2	112	19.3		8.1		32.6		101.1		7.7		8.6		6		93				<0.2		0.7	
					Bottom	5.8	0.2	118	19.3	19.3	8.1	8.1	32.6	32.6	101.3	101.4	7.7	7.7	10.0		9		93				<0.2		0.6	
						5.8	0.2	127	19.3		8.1		32.6		101.4		7.7		10.2		8		94				<0.2		0.6	
IM10	Fine	Moderate	08:58	6.9	Surface	1.0	0.4	103	19.2	19.2	8.2	8.2	32.6	32.6	102.4	102.3	7.8	7.8	7.7	9.4	6	7	86	90	822366	809809	<0.2	<0.2	0.6	0.7
						1.0	0.4	109	19.2		8.2		32.6		102.2		7.8		7.7		7		87				<0.2		0.8	
					Middle	3.5	0.3	125	19.1	19.1	8.2	8.2	32.6	32.6	101.7	101.7	7.8		8.3		8		90				<0.2		0.5	
						3.5	0.3	126	19.1		8.2		32.6		101.6		7.7		8.2		8		90				<0.2		0.6	
					Bottom	5.9	0.3	103	19.1	19.1	8.2	8.2	32.6	32.6	101.5	101.5	7.7	7.7	12.4		7		93				<0.2		0.7	
						5.9	0.3	107	19.1		8.2		32.6		101.5		7.7		12.4		8		93				<0.2		0.7	
IM11	Fine	Moderate	08:45	7.5	Surface	1.0	0.4	130	19.6	19.6	8.1	8.1	32.9	32.9	99.1	99.1	7.5	7.5	6.5	6.9	7	7	84	89	822060	811467	<0.2	<0.2	0.7	0.7
						1.0	0.4	130	19.6		8.1		32.9		99.1		7.5		6.5		7		85				<0.2		0.7	
					Middle	3.8	0.4	114	19.7	19.7	8.1	8.1	32.9	32.9	99.0	99.0	7.5		6.6		8		89				<0.2		0.7	
						3.8	0.4	117	19.7		8.1		32.9		99.0		7.5		6.5		7		89				<0.2		0.7	
					Bottom	6.5	0.3	100	19.7	19.7	8.1	8.1	32.9	32.9	99.1	99.2	7.5	7.5	7.7		8		93				<0.2		0.6	
						6.5	0.3	106	19.7		8.1		32.9		99.2		7.5		7.7		7		93				<0.2		0.6	
IM12	Fine	Moderate	08:38	9.5	Surface	1.0	0.3	97	19.6	19.6	8.1	8.1	33.0	33.0	98.2	98.1	7.4	7.4	5.5	5.7	8	9	84	90	821452	812051	<0.2	<0.2	0.7	0.7
						1.0	0.3	97	19.6		8.1		33.0		97.9		7.4		5.5		9		85				<0.2		0.6	
					Middle	4.8	0.3	108	20.0	20.0	8.1	8.1	33.2	33.2	97.3	97.5	7.3		5.6		10		89				<0.2		0.6	
						4.8	0.3	109	20.0		8.1		33.2		97.6		7.3		5.7		9		94				<0.2		0.7	
					Bottom	8.5	0.2	122	20.0	20.0	8.1	8.1	33.2	33.2	98.7	98.9	7.4	7.4	5.9		10		93				<0.2		0.7	
						8.5	0.2	129	20.0		8.1		33.2		99.1		7.4		5.9		9		93				<0.2		0.7	
SR1A	Fine	Moderate	08:18	5.1	Surface	1.0	-	-	19.7	19.7	8.1	8.1	33.0	33.0	96.5	96.5	7.3	7.3	5.5	7.6	10	11	-	-	820072	812584	-	-	-	-
						1.0	-	-	19.7		8.1		33.0		96.5		7.3		5.5		12		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	19.9	19.9	8.1	8.1	33.1	33.1	97.0	97.5	7.3	7.4	9.7		11		-				-		-	
						4.1	-	-	19.9		8.1		33.1		98.0		7.4		9.6		10		-				-		-	
SR2	Fine	Moderate	08:06	4.9	Surface	1.0	0.3	111	20.2	20.2	8.1	8.1	33.3	33.3	93.2	93.2	6.9	6.9	4.3	5.4	11	10	84	89	821470	814184	<0.2	<0.2	0.7	0.7
						1.0	0.3	118	20.2		8.1		33.3		93.2		6.9		4.2		10		84				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	124	20.2	20.2	8.1	8.1	33.3	33.3	92.9	93.0	6.9	6.9	6.5		10		93				<0.2		0.6	
						3.9	0.2	133	20.2		8.1		33.3		93.0		6.9		6.7		9		93				<0.2		0.7	
SR3	Fine	Moderate	09:16	8.5	Surface	1.0	0.2	202	19.3	19.3	8.1	8.1	32.5	32.5	101.8	101.8	7.8	7.7	7.1	7.4	8	9	-	-	822166	807554	-	-	-	-
						1.0	0.3	218	19.3		8.1		32.6		101.7		7.7		7.2		9		-				-		-	
					Middle	4.3	0.1	221	19.2	19.2	8.1	8.1	32.6	32.6	101.4	101.4	7.7		7.5		9		-				-		-	
						4.3	0.1	239	19.2		8.1		32.6		101.4		7.7		7.5		10		-				-		-	
					Bottom	7.5	0.1	289	19.2	19.2	8.1	8.1	32.6	32.6	101.9	102.0	7.8	7.8	7.5		9		-				-		-	
						7.5	0.1	307	19.2		8.1		32.6		102.1		7.8		7.5		9		-				-		-	
SR4A	Fine	Moderate	07:35	9.5	Surface	1.0	0.2	77	20.6	20.6	8.1	8.1	33.0	33.0	93.8	93.8	6.9	6.9	6.6	7.7	10	10	-	-	817210	807821	-	-	-	-
						1.0	0.2	77	20.6		8.1		33.0		93.7		6.9		6.6		10		-				-		-	
					Middle	4.8	0.2	70	20.6	20.6	8.1	8.1	33.0	33.0	93.2	93.2	6.9		8.0		11		-				-		-	
						4.8	0.3	70	20.6		8.1		33.0		93.2		6.9		8.0		10		-				-		-	
					Bottom	8.5	0.2	71	20.6	20.6	8.1	8.1	33.0	33.0	93.3	93.4	6.9	6.9	8.6		10		-				-		-	
						8.5	0.2	77	20.6		8.1		33.0		93.4		6.9		8.6		10		-				-		-	
SR5A	Fine	Moderate	07:25	3.8	Surface	1.0	0.1	12	21.0	21.0	8.1	8.1	33.1	33.1	93.8	93.8	6.9	6.9	6.9	7.0	9	8	-	-	816569	810681	-	-	-	-
						1.0	0.1	12	21.0		8.1		33.1		93.8		6.9		6.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	108	21.0	21.0	8.1	8.1	33.1	33.1	94.2	94.2	6.9	6.9	7.1		7		-				-		-	
						2.8	0.1	108	21.0		8.1		33.1		94.2		6.9		7.2		7		-				-		-	
SR6	Fine	Moderate	07:12	4.2	Surface	1.0	0.1	285	21.1	21.1	8.0	8.0	33.1	33.1	92.1	92.1	6.8	6.8	6.2	6.3	10	9	-	-	817886	814648	-	-	-	-
						1.0	0.1	311	21.1		8.0		33.1		92.0		6.7		6.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	112	21.1	21.1	8.0	8.0	33.1	33.1	91.9	92.0	6.7	6.7	6.3		9		-				-		-	
						3.2	0.1	122	21.1		8.0		33.1		92.0		6.7		6.4		9		-				-		-	
SR7	Fine	Moderate	07:15	16.5	Surface	1.0	0.1	74	20.7	20.7	8.1	8.1	33.5	33.4	91.6	91.5	6.8	6.7	4.0	4.0	5	5	-	-	823641	823751	-	-	-	-
						1.0	0.1	78	20.7		8.1		33.4		91.4		6.7		4.0		5		-				-		-	
					Middle	8.3	0.1	80	20.7	20.7	8.1	8.1	33.4	33.4	91.4	91.4	6.7		4.0		5		-				-		-	
						8.3	0.2	86	20.7		8.1		33.4		91.4		6.7		4.0		4		-				-		-	
					Bottom	15.5	0.1	73	20.7	20.7	8.1	8.1	33.4	33.4	91.4	91.4	6.7	6.7	3.9		5		-				-		-	
						15.5	0.2	73	20.7		8.1		33.4		91.4		6.7		3.9		5		-				-		-	
SR8	Fine	Moderate	08:28	4.0	Surface	1.0	-	-	19.4	19.4	8.2	8.2	32.7	32.7	98.7	98.6	7.5	7.5	8.2	9.1	7	8	-	-	820486	811669	-	-	-	-
						1.0	-	-	19.4		8.2		32.7		98.5		7.5		8.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	19.7	19.7	8.2	8.2	32.9	32.9	98.3	98.3	7.4	7.4	10.0		9		-				-		-	
						3.0	-	-	19.7		8.2		32.9		98.3		7.4		10.0		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	14:55	8.5	Surface	1.0	0.2	40	19.9	19.9	8.3	8.3	32.2	32.2	106.4	106.3	8.0	8.0	9.2	10.1	7	8	84	89	815599	804239	<0.2	<0.2	0.4	0.5
						1.0	0.2	43	19.9		8.3		32.2		106.2		8.0		9.2		6		84				<0.2		0.6	
					Middle	4.3	0.1	89	19.6	19.6	8.3	8.3	32.2	32.2	104.3	103.9	7.9		10.1		8		89				<0.2		0.6	
						4.3	0.1	91	19.5		8.3		32.2		103.5		7.9		10.1		9		90				<0.2		0.5	
					Bottom	7.5	0.0	22	19.4	19.4	8.3	8.3	32.2	32.2	102.9	103.0	7.8	7.8	11.0		10		93				<0.2		0.6	
						7.5	0.0	42	19.4		8.3		32.2		103.0		7.8		11.0		9		93				<0.2		0.5	
C2	Fine	Moderate	13:54	10.4	Surface	1.0	0.4	70	20.1	20.1	8.1	8.1	33.0	33.0	96.3	96.2	7.2	7.2	5.4	6.7	4	4	85	90	825679	806924	<0.2	<0.2	0.5	0.5
						1.0	0.4	76	20.1		8.1		33.0		96.0		7.2		5.4		4		86				<0.2		0.5	
					Middle	5.2	0.3	59	20.4	20.4	8.1	8.1	33.2	33.2	95.5	95.5	7.1		7.2		4		90				<0.2		0.6	
						5.2	0.3	66	20.4		8.1		33.2		95.5		7.1		7.3		4		90				<0.2		0.6	
					Bottom	9.4	0.2	96	20.4	20.4	8.1	8.1	33.2	33.2	95.9	96.0	7.1	7.1	7.4		4		94				<0.2		0.5	
						9.4	0.3	112	20.4		8.1		33.2		96.0		7.1		7.4		4		94				<0.2		0.5	
C3	Fine	Moderate	15:33	10.5	Surface	1.0	0.3	65	21.0	21.0	8.1	8.1	33.5	33.5	95.6	95.6	7.0	7.0	4.0	4.5	4	4	85	89	822121	817794	<0.2	<0.2	0.6	0.6
						1.0	0.3	72	21.0		8.1		33.5		95.5		7.0		4.0		4		86				<0.2		0.6	
					Middle	5.3	0.2	52	20.7	20.7	8.1	8.1	33.5	33.5	94.7	94.7	7.0		4.3		3		90				<0.2		0.4	
						5.3	0.2	60	20.7		8.1		33.5		94.6		7.0		4.3		4		90				<0.2		0.5	
					Bottom	9.5	0.3	60	20.6	20.6	8.1	8.1	33.5	33.5	95.0	95.2	7.0	7.0	5.3		3		92				<0.2		0.7	
						9.5	0.3	70	20.6		8.1		33.5		95.3		7.0		5.3		3		93				<0.2		0.6	
IM1	Fine	Moderate	14:41	3.6	Surface	1.0	-	332	19.6	19.6	8.2	8.2	32.3	32.3	104.4	104.3	7.9	7.9	9.1	9.6	9	8	85	87	817936	807125	<0.2	<0.2	0.6	0.6
						1.0	-	357	19.6		8.2		32.3		104.1		7.9		9.1		8		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	65	19.5	19.5	8.2	8.2	32.3	32.3	103.0	103.0	7.8	7.8	10.2		8		89				<0.2		0.6	
						2.6	0.1	65	19.5		8.2		32.3		102.9		7.8		10.2		8		89				<0.2		0.6	
IM2	Fine	Moderate	14:34	8.1	Surface	1.0	0.3	70	20.3	20.3	8.2	8.2	32.5	32.5	104.3	104.0	7.8	7.6	7.9	7.9	8	8	85	89	818166	806148	<0.2	<0.2	0.6	0.7
						1.0	0.3	81	20.3		8.2		32.5		103.7		7.8		7.9		7		85				<0.2		0.7	
					Middle	4.1	0.2	80	20.4	20.4	8.1	8.1	32.6	32.6	98.6	98.5	7.3		7.9		8		89				<0.2		0.6	
						4.1	0.2	84	20.4		8.1		32.6		98.3		7.3		8.0		8		89				<0.2		0.7	
					Bottom	7.1	0.1	99	20.5	20.5	8.1	8.1	32.7	32.7	98.1	98.4	7.3	7.3	8.0		8		93				<0.2		0.6	
						7.1	0.1	105	20.5		8.1		32.7		98.6		7.3		8.0		8		93				<0.2		0.8	
IM3	Fine	Moderate	14:23	8.2	Surface	1.0	0.3	67	20.2	20.2	8.2	8.2	32.2	32.2	107.4	107.2	8.1	7.8	7.2	8.1	7	8	84	89	818795	805576	<0.2	<0.2	0.7	0.6
						1.0	0.3	69	20.1		8.2		32.2		107.0		8.0		7.2		8		84				<0.2		0.7	
					Middle	4.1	0.3	55	20.2	20.2	8.2	8.1	32.4	32.5	104.0	101.8	7.8		7.9		6		89				<0.2		0.5	
						4.1	0.3	65	20.2		8.1		32.5		99.5		7.4		8.0		8		89				<0.2		0.5	
					Bottom	7.2	0.2	51	20.3	20.3	8.1	8.1	32.6	32.6	99.7	99.7	7.4	7.4	9.1		8		93				<0.2		0.4	
						7.2	0.2	54	20.3		8.2		32.6		99.7		7.4		9.1		9		93				<0.2		0.5	
IM4	Fine	Moderate	14:17	7.3	Surface	1.0	0.6	31	19.9	19.9	8.2	8.2	32.2	32.2	108.2	108.2	8.2	8.0	7.9	8.6	6	5	85	89	819744	804591	<0.2	<0.2	0.6	0.7
						1.0	0.6	33	19.9		8.2		32.2		108.2		8.2		7.9		4		85				<0.2		0.6	
					Middle	3.7	0.5	46	19.8	19.8	8.2	8.2	32.3	32.3	103.8	103.6	7.8		8.8		5		89				<0.2		0.7	
						3.7	0.5	44	19.8		8.2		32.3		103.4		7.8		8.9		5		89				<0.2		0.6	
					Bottom	6.3	0.5	29	19.8	19.8	8.2	8.2	32.3	32.3	103.3	103.4	7.8	7.8	9.2		4		93				<0.2		0.7	
						6.3	0.5	31	19.8		8.2		32.3		103.4		7.8		9.1		4		93				<0.2		0.8	
IM5	Fine	Moderate	14:11	8.2	Surface	1.0	0.7	20	19.8	19.8	8.2	8.2	32.2	32.2	105.9	105.8	8.0	8.0	8.2	9.8	6	5	85	89	820726	804852	<0.2	<0.2	0.6	0.6
						1.0	0.7	24	19.8		8.2		32.2		105.6		8.0		8.2		7		85				<0.2		0.7	
					Middle	4.1	0.6	66	19.8	19.8	8.2	8.2	32.3	32.3	105.3	105.2	7.9		10.9		5		89				<0.2		0.7	
						4.1	0.6	63	19.8		8.2		32.3		105.1		7.9		10.9		5		89				<0.2		0.5	
					Bottom	7.2	0.5	95	19.8	19.8	8.2	8.2	32.3	32.3	104.5	104.5	7.9	7.9	10.3		4		93				<0.2		0.5	
						7.2	0.5	103	19.8		8.2		32.3		104.5		7.9		10.4		4		93				<0.2		0.5	
IM6	Fine	Moderate	14:08	7.9	Surface	1.0	0.6	75	19.7	19.7	8.2	8.2	32.2	32.2	105.0	104.7	7.9	7.9	8.2	8.6	4	5	84	89	821069	805809	<0.2	<0.2	0.5	0.5
						1.0	0.6	89	19.7		8.2		32.2		104.4		7.9		8.3		5		84				<0.2		0.5	
					Middle	4.0	0.4	61	19.7	19.7	8.2	8.2	32.2	32.3	103.9	103.3	7.9		8.4		4		89				<0.2		0.5	
						4.0	0.4	65	19.7		8.2		32.3		102.6		7.8		8.5		5		89				<0.2		0.6	
					Bottom	6.9	0.4	44	19.7	19.7	8.2	8.2	32.3	32.3	102.5	102.5	7.7	7.7	9.2		6		94				<0.2		0.5	
						6.9	0.4	41	19.7		8.2		32.3		102.4		7.7		9.3		5		94				<0.2		0.6	
IM7	Fine	Moderate	13:54	7.5	Surface	1.0	0.6	53	20.3	20.4	8.2	8.1	32.6	32.6	97.0	97.0	7.1	7.2	7.1	7.5	5	5	85	89	821326	806849	<0.2	<0.2	0.6	0.6
						1.0	0.6	55	20.4		8.1		32.6		97.0		7.2		7.2		5		85				<0.2		0.5	
					Middle	3.8	0.5	61	20.4	20.6	8.1	8.1	32.7	32.8	96.7	96.4	7.2		7.2		5		89				<0.2		0.6	
						3.8	0.6	65	20.7		8.1		32.9		96.0		7.1		7.2		4		89				<0.2		0.6	
					Bottom	6.5	0.3	79	20.7	20.7	8.1	8.1	32.9	32.9	96.1	96.3	7.1	7.1	8.1		6		94				<0.2		0.6	
						6.5	0.3	86	20.7		8.1		32.9		96.5		7.1		8.0		7		94				<0.2		0.5	
IM8	Fine	Moderate	14:11	7.3	Surface	1.0	0.1	239	19.4	19.4	8.2	8.2	32.6	32.6	105.2	105.1	8.0	8.0	8.1	8.8	7	6	85	90	821836	808128	<0.2	<0.2	0.8	0.8
						1.0	0.1	243	19.4		8.2		32.6		105.0		8.0		8.1		8		85				<0.2		0.8	
					Middle	3.7	0.1	252	19.4	19.4	8.2	8.2	32.6	32.6	104.6	104.5	7.9		8.5		6		89				<0.2		0.7	
						3.7	0.1	267	19.4		8.2		32.6		104.4		7.9		8.6		5		90				<0.2		0.8	
					Bottom	6.3	0.1	243	19.4	19.4	8.2	8.2	32.6	32.6	104.0	104.0	7.9	7.9	9.6		6		94				<0.2		0.8	
						6.3	0.1	259	19.4		8.2		32.6		103.9		7.9		9.6		6		94				<0.2		0.7	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 December 18 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	14:16	6.8	Surface	1.0	0.1	224	19.5	19.5	8.2	8.2	32.6	32.6	107.4	107.4	8.1	8.0	6.2	7.4	6	7	85	89	822079	808822	<0.2	<0.2	0.8	0.9
						1.0	0.1	240	19.5		8.2		32.6		107.3		8.1		6.2		5		84				<0.2		0.8	
					Middle	3.4	0.0	279	19.4	19.4	8.2	8.2	32.6	32.6	102.9	102.8	7.8		7.2		6		89				<0.2		1.0	
						3.4	0.0	282	19.4		8.2		32.6		102.6		7.8		7.3		7		89				<0.2		1.0	
					Bottom	5.8	0.1	297	19.4	19.4	8.2	8.2	32.7	32.7	102.6	102.7	7.8	7.8	8.8		7		93				<0.2		0.9	
						5.8	0.1	320	19.4		8.2		32.7		102.7		7.8		8.8		8		93				<0.2		0.7	
IM10	Fine	Moderate	14:23	7.7	Surface	1.0	0.1	65	19.8	19.8	8.2	8.2	32.5	32.5	106.4	106.2	8.0	7.8	4.1	7.2	4	5	85	89	822408	809776	<0.2	<0.2	0.7	0.8
						1.0	0.1	66	19.8		8.2		32.5		106.0		8.0		4.1		6		85				<0.2		0.7	
					Middle	3.9	0.1	320	19.8	19.9	8.1	8.1	32.8	32.8	102.8	100.9	7.7		6.2		5		89				<0.2		0.9	
						3.9	0.1	320	19.9		8.1		32.9		98.9		7.4		6.2		4		90				<0.2		0.9	
					Bottom	6.7	0.0	304	20.0	20.0	8.1	8.1	33.0	33.0	99.0	99.1	7.4	7.4	11.3		6		93				<0.2		0.8	
						6.7	0.0	319	19.9		8.1		33.0		99.2		7.4		11.3		7		93				<0.2		0.8	
IM11	Fine	Moderate	14:34	7.1	Surface	1.0	-	28	19.9	19.9	8.1	8.1	32.8	32.8	103.3	101.3	7.8	7.5	6.0	6.9	4	5	85	89	822064	811445	<0.2	<0.2	0.7	0.7
						1.0	-	29	19.9		8.1		32.8		99.3		7.5		6.0		4		85				<0.2		0.6	
					Middle	3.6	0.1	327	20.0	20.0	8.1	8.1	32.9	32.9	97.8	97.7	7.3		6.3		5		89				<0.2		0.7	
						3.6	0.1	330	20.0		8.1		33.0		97.5		7.3		6.2		4		90				<0.2		0.8	
					Bottom	6.1	0.1	269	20.1	20.1	8.1	8.1	33.0	33.0	97.6	97.7	7.3	7.3	8.6		5		93				<0.2		0.9	
						6.1	0.1	271	20.1		8.1		33.0		97.7		7.3		8.6		6		93				<0.2		0.7	
IM12	Fine	Moderate	14:40	9.2	Surface	1.0	0.1	263	19.2	19.2	8.2	8.2	32.6	32.6	103.6	103.5	7.9	7.9	7.6	8.7	6	6	85	89	821456	812023	<0.2	<0.2	0.8	0.7
						1.0	0.1	272	19.2		8.2		32.6		103.3		7.9		7.6		6		85				<0.2		0.6	
					Middle	4.6	0.2	265	19.1	19.1	8.2	8.2	32.6	32.6	102.3	102.3	7.8		8.9		6		90				<0.2		0.8	
						4.6	0.2	278	19.1		8.2		32.6		102.2		7.8		9.0		6		90				<0.2		0.7	
					Bottom	8.2	0.2	277	19.1	19.1	8.2	8.2	32.6	32.6	102.1	102.1	7.8	7.8	9.4		5		93				<0.2		0.8	
						8.2	0.2	300	19.1		8.2		32.6		102.1		7.8		9.4		4		93				<0.2		0.7	
SR1A	Fine	Moderate	14:58	5.4	Surface	1.0	-	-	19.8	19.8	8.1	8.1	33.0	33.0	100.2	100.2	7.5	7.5	6.2	7.6	3	4	-	-	820065	812586	-	-	-	-
						1.0	-	-	19.8		8.1		33.0		100.1		7.5		6.3		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	19.8	19.8	8.1	8.1	33.0	33.0	99.9	100.0	7.5	7.5	9.0		4		-				-		-	
						4.4	-	-	19.8		8.1		33.0		100.1		7.5		8.8		3		-				-		-	
SR2	Fine	Moderate	15:10	5.1	Surface	1.0	0.2	295	20.2	20.2	8.1	8.1	33.1	33.1	100.6	100.4	7.5	7.5	4.4	4.4	5	5	85	88	821453	814188	<0.2	<0.2	0.6	0.6
						1.0	0.2	318	20.2		8.1		33.1		100.1		7.5		4.4		5		86				<0.2		0.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	279	20.1	20.1	8.1	8.1	33.2	33.2	98.1	98.2	7.3	7.3	4.5		4		90				<0.2		0.6	
						4.1	0.2	285	20.1		8.1		33.2		98.3		7.3		4.4		4		91				<0.2		0.7	
SR3	Fine	Moderate	14:08	7.2	Surface	1.0	0.2	68	19.4	19.4	8.2	8.2	32.6	32.6	103.7	103.5	7.9	7.8	6.7	7.4	4	4	-	-	822163	807577	-	-	-	-
						1.0	0.3	69	19.4		8.2		32.6		103.2		7.8		6.8		4		-				-		-	
					Middle	3.6	0.3	88	19.4	19.4	8.2	8.2	32.6	32.6	102.1	102.0	7.8		7.7		5		-				-		-	
						3.6	0.3	90	19.4		8.2		32.7		101.9		7.7		7.6		4		-				-		-	
					Bottom	6.2	0.2	78	19.4	19.4	8.2	8.2	32.7	32.7	101.9	102.0	7.7	7.7	7.9		5		-				-		-	
						6.2	0.2	79	19.4		8.2		32.7		102.0		7.7		8.0		4		-				-		-	
SR4A	Fine	Moderate	15:10	9.5	Surface	1.0	0.6	236	20.2	20.2	8.1	8.1	32.6	32.6	101.1	101.0	7.6	7.6	7.7	9.1	12	13	-	-	817172	807797	-	-	-	-
						1.0	0.6	249	20.2		8.1		32.6		100.9		7.6		7.8		11		-				-		-	
					Middle	4.8	0.5	241	20.2	20.2	8.1	8.1	32.7	32.7	100.3	100.3	7.5		9.4		12		-				-		-	
						4.8	0.5	245	20.2		8.1		32.7		100.3		7.5		9.5		13		-				-		-	
					Bottom	8.5	0.3	256	20.2	20.2	8.1	8.1	32.7	32.7	100.5	100.6	7.5	7.5	10.2		14		-				-		-	
						8.5	0.4	259	20.2		8.1		32.7		100.7		7.5		10.2		13		-				-		-	
SR5A	Fine	Moderate	15:22	3.2	Surface	1.0	0.4	285	20.6	20.6	8.2	8.2	32.7	32.7	101.4	101.2	7.5	7.5	3.4	5.1	9	10	-	-	816584	810699	-	-	-	-
						1.0	0.4	310	20.5		8.2		32.7		100.9		7.5		3.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.2	272	20.4	20.4	8.1	8.1	32.9	32.9	98.5	98.6	7.3	7.3	6.9		11		-				-		-	
						2.2	0.2	279	20.4		8.2		32.9		98.6		7.3		6.9		11		-				-		-	
SR6	Fine	Moderate	15:34	4.3	Surface	1.0	0.3	224	21.4	21.4	8.1	8.1	33.1	33.1	96.2	96.2	7.0	7.0	5.7	5.9	8	9	-	-	817899	814639	-	-	-	-
						1.0	0.3	227	21.3		8.1		33.1		96.2		7.0		5.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	229	21.1	21.1	8.1	8.1	33.1	33.1	95.2	95.2	7.0	7.0	6.0		10		-				-		-	
						3.3	0.3	250	21.0		8.1		33.1		95.1		7.0		6.0		9		-				-		-	
SR7	Fine	Moderate	16:06	15.6	Surface	1.0	0.2	287	20.8	20.8	8.1	8.1	33.4	33.4	92.2	92.2	6.8	6.8	4.4	4.5	7	6	-	-	823618	823743	-	-	-	-
						1.0	0.2	291	20.8		8.1		33.4		92.2		6.8		4.5		8		-				-		-	
					Middle	7.8	0.3	310	20.8	20.8	8.1	8.1	33.4	33.4	92.2	92.3	6.8		4.6		5		-				-		-	
						7.8	0.3	315	20.8		8.1		33.4		92.3		6.8		4.6		6		-				-		-	
					Bottom	14.6	0.2	311	20.8	20.8	8.1	8.1	33.4	33.4	93.1	93.2	6.9	6.9	4.6		5		-				-		-	
						14.6	0.2	312	20.8		8.1		33.4		93.3		6.9		4.5		5		-				-		-	
SR8	Fine	Moderate	14:50	5.2	Surface	1.0	-	-	19.5	19.5	8.2	8.2	32.5	32.5	105.5	105.4	8.0	8.0	7.9	8.8	4	4	-	-	820496	811640	-	-	-	-
						1.0	-	-	19.5		8.2		32.5		105.3		8.0		8.0		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	19.0	19.0	8.2	8.2	32.5	32.5	102.2	102.3	7.8	7.8	9.6		6		-				-		-	
						4.2	-	-	19.0		8.2		32.5		102.3		7.8		9.6		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Rough	10:26	8.8	Surface	1.0	0.2	79	20.9	20.9	8.1	8.1	32.5	32.5	106.1	106.1	7.8	7.8	9.4	11.9	6	6	86	89	815610	804244	<0.2	<0.2	1.6	1.7
						1.0	0.2	77	20.9		8.1		32.5		106.0		7.8		9.8		7		86				<0.2		1.7	
					Middle	4.4	0.2	67	20.9	20.9	8.1	8.1	32.5	32.5	105.7	105.7	7.8		14.1		6		89				<0.2		1.6	
						4.4	0.2	60	20.9		8.1		32.6		105.7		7.8		14.4		6		89				<0.2		1.8	
					Bottom	7.8	0.1	75	20.9	20.9	8.1	8.1	32.5	32.5	105.5	105.5	7.8	7.8	11.9		6		93				<0.2		1.9	
						7.8	0.1	88	20.9		8.1		32.5		105.5		7.8		11.5		6		93				<0.2		1.6	
C2	Fine	Moderate	09:15	11.1	Surface	1.0	0.3	65	21.0	21.0	8.2	8.2	30.9	30.9	104.5	104.5	7.8	7.6	7.5	9.5	6	6	82	85	825672	806930	<0.2	<0.2	0.9	0.8
						1.0	0.3	68	21.0		8.2		31.0		104.5		7.8		7.6		6		81				<0.2		0.8	
					Middle	5.6	0.2	67	20.7	20.7	8.2	8.2	32.1	32.1	99.1	99.0	7.4		8.5		6		84				<0.2		0.8	
						5.6	0.2	69	20.7		8.2		32.1		98.9		7.4		8.5		5		85				<0.2		0.9	
					Bottom	10.1	0.1	87	20.7	20.7	8.2	8.2	32.7	32.7	97.4	97.5	7.2	7.2	12.5		7		88				<0.2		0.8	
						10.1	0.1	90	20.7		8.2		32.7		97.5		7.2		12.4		7		88				<0.2		0.8	
C3	Fine	Moderate	11:13	8.4	Surface	1.0	0.5	258	20.8	20.8	8.2	8.2	32.9	32.9	99.5	99.4	7.4	7.3	7.4	9.2	8	8	85	88	822118	817813	<0.2	<0.2	0.7	0.7
						1.0	0.5	275	20.8		8.2		32.9		99.3		7.3		7.5		7		85				<0.2		0.7	
					Middle	4.2	0.4	263	20.7	20.7	8.2	8.2	32.9	32.9	97.6	97.6	7.2		8.6		9		88				<0.2		0.8	
						4.2	0.4	278	20.7		8.2		32.9		97.6		7.2		8.6		8		88				<0.2		0.7	
					Bottom	7.4	0.4	258	20.8	20.8	8.2	8.2	32.9	32.9	97.3	97.4	7.2	7.2	11.2		9		91				<0.2		0.8	
						7.4	0.4	270	20.8		8.2		32.9		97.4		7.2		11.7		8		91				<0.2		0.7	
IM1	Fine	Moderate	10:13	5.0	Surface	1.0	0.1	87	20.9	20.9	8.1	8.1	32.4	32.4	105.2	105.2	7.8	7.8	8.1	8.6	7	6	85	88	817925	807125	<0.2	<0.2	1.6	1.7
						1.0	0.1	88	20.9		8.1		32.4		105.2		7.8		8.1		6		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	60	20.5	20.6	8.1	8.1	32.6	32.6	102.9	103.1	7.6	7.7	9.2		6		90				<0.2		1.8	
						4.0	0.0	58	20.6		8.1		32.6		103.2		7.7		9.1		6		89				<0.2		2.0	
IM2	Fine	Moderate	10:05	7.2	Surface	1.0	0.2	70	20.8	20.8	8.1	8.1	32.4	32.5	103.8	103.7	7.7	7.7	8.7	10.4	7	8	86	89	818176	806182	<0.2	<0.2	1.6	1.6
						1.0	0.2	78	20.8		8.1		32.5		103.5		7.7		9.0		7		85				<0.2		1.6	
					Middle	3.6	0.2	76	20.6	20.6	8.1	8.1	32.6	32.6	102.2	102.2	7.6		10.7		7		88				<0.2		1.8	
						3.6	0.2	83	20.5		8.1		32.6		102.1		7.6		10.9		8		88				<0.2		1.5	
					Bottom	6.2	0.1	55	20.5	20.5	8.1	8.1	32.7	32.7	102.0	102.1	7.6	7.6	11.6		8		92				<0.2		1.6	
						6.2	0.1	60	20.5		8.1		32.7		102.1		7.6		11.6		9		92				<0.2		1.6	
IM3	Fine	Moderate	09:55	7.4	Surface	1.0	0.6	22	21.3	21.3	8.1	8.1	32.3	32.3	106.2	106.2	7.8	7.7	7.8	8.9	7	6	85	88	818805	805580	<0.2	<0.2	1.6	1.6
						1.0	0.6	23	21.3		8.1		32.3		106.1		7.8		7.9		6		85				<0.2		1.5	
					Middle	3.7	0.5	20	20.8	20.8	8.1	8.1	32.4	32.4	103.0	102.9	7.6		8.7		6		88				<0.2		1.4	
						3.7	0.5	20	20.8		8.1		32.4		102.8		7.6		8.9		6		88				<0.2		1.6	
					Bottom	6.4	0.3	27	20.6	20.6	8.1	8.1	32.4	32.4	102.2	102.2	7.6	7.6	10.0		7		91				<0.2		1.7	
						6.4	0.3	27	20.6		8.1		32.4		102.2		7.6		10.0		6		92				<0.2		1.6	
IM4	Fine	Moderate	09:32	7.5	Surface	1.0	0.6	29	20.9	20.9	8.1	8.1	32.2	32.2	105.1	105.1	7.8	7.8	8.9	9.1	6	6	85	88	819733	804597	<0.2	<0.2	2.0	1.6
						1.0	0.7	30	20.9		8.1		32.2		105.0		7.8		8.9		6		85				<0.2		1.6	
					Middle	3.8	0.4	16	20.8	20.8	8.1	8.1	32.3	32.3	104.5	104.5	7.7		9.0		6		88				<0.2		1.6	
						3.8	0.4	17	20.8		8.1		32.3		104.4		7.7		9.0		5		88				<0.2		1.5	
					Bottom	6.5	0.3	340	20.8	20.8	8.1	8.1	32.3	32.3	104.1	104.2	7.7	7.7	9.4		6		91				<0.2		1.5	
						6.5	0.3	355	20.8		8.1		32.3		104.3		7.7		9.3		6		91				<0.2		1.5	
IM5	Fine	Moderate	09:32	6.4	Surface	1.0	0.6	355	21.1	21.1	8.1	8.1	32.1	32.1	105.6	105.5	7.8	7.8	9.4	10.5	4	5	85	88	820742	804876	<0.2	<0.2	1.6	1.6
						1.0	0.7	327	21.0		8.1		32.1		105.4		7.8		9.5		4		85				<0.2		1.6	
					Middle	3.2	0.5	342	20.8	20.8	8.1	8.1	32.3	32.3	103.9	103.9	7.7		10.9		5		88				<0.2		1.6	
						3.2	0.6	315	20.7		8.1		32.3		103.9		7.7		10.9		5		89				<0.2		1.7	
					Bottom	5.4	0.4	350	20.7	20.8	8.1	8.1	32.3	32.3	103.9	104.0	7.7	7.7	11.2		4		91				<0.2		1.6	
						5.4	0.4	322	20.8		8.1		32.3		104.1		7.7		11.0		5		92				<0.2		1.6	
IM6	Fine	Moderate	09:21	6.7	Surface	1.0	0.3	77	20.8	20.8	8.1	8.1	32.2	32.2	104.9	104.8	7.8	7.8	8.3	9.8	6	7	84	88	821058	805815	<0.2	<0.2	1.5	1.6
						1.0	0.4	83	20.7		8.1		32.2		104.7		7.8		8.4		7		84				<0.2		1.6	
					Middle	3.4	0.6	65	20.7	20.7	8.1	8.1	32.3	32.3	103.8	103.8	7.7		9.1		8		87				<0.2		1.6	
						3.4	0.6	67	20.6		8.1		32.3		103.7		7.7		9.4		7		88				<0.2		1.6	
					Bottom	5.7	0.3	89	20.6	20.6	8.1	8.1	32.4	32.4	103.4	103.4	7.7	7.7	11.8		8		91				<0.2		1.6	
						5.7	0.3	95	20.6		8.1		32.4		103.4		7.7		11.9		8		91				<0.2		1.8	
IM7	Fine	Moderate	09:10	8.0	Surface	1.0	0.3	92	20.9	20.9	8.1	8.1	31.1	31.1	102.7	102.6	7.7	7.6	7.4	8.2	6	7	84	87	821363	806852	<0.2	<0.2	1.6	1.6
						1.0	0.3	101	20.8		8.1		31.1		102.5		7.6		7.5		5		83				<0.2		1.5	
					Middle	4.0	0.4	91	20.7	20.7	8.1	8.1	31.7	31.7	100.2	100.1	7.5		8.2		7		87				<0.2		1.3	
						4.0	0.4	93	20.7		8.1		31.8		99.9		7.4		8.3		7		87				<0.2		1.6	
					Bottom	7.0	0.3	96	20.7	20.7	8.1	8.1	32.4	32.4	99.0	99.1	7.3	7.4	8.9		9		90				<0.2		1.8	
						7.0	0.3	96	20.7		8.1		32.4		99.2		7.4		8.9		10		90				<0.2		1.8	
IM8	Fine	Moderate	09:40	7.3	Surface	1.0	0.2	255	21.0	21.0	8.2	8.2	32.2	32.2	105.1	105.0	7.8	7.8	10.0	10.9	3	5	83	86	821827	808148	<0.2	<0.2	0.8	0.8
						1.0	0.2	272	21.0		8.2		32.2		104.9		7.8		10.1		4		83				<0.2		0.9	
					Middle	3.7	0.2	265	20.7	20.7	8.2	8.2	32.3	32.3	103.4	103.4	7.7		11.4		5		86				<0.2		0.8	
						3.7	0.3	270	20.7		8.2		32.3		103.3		7.7		11.4		5		86				<0.2		0.8	
					Bottom	6.3	0.2	254	20.7	20.7	8.2	8.2	32.4	32.4	102.6	102.6	7.6	7.6	11.3		6		89				<0.2		0.8	
						6.3	0.2	256	20.7		8.2		32.4		102.5		7.6		11.2		5		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 December 18 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	09:46	6.8	Surface	1.0	0.2	276	21.0	21.0	8.2	8.2	32.2	32.2	105.3	105.3	7.8	7.8	9.1	9.3	6	6	83	86	822083	808810	<0.2	<0.2	0.8	0.9
						1.0	0.2	287	21.0		8.2		32.2		105.3		7.8		9.1		5		83				<0.2		1.0	
					Middle	3.4	0.3	272	20.8	20.8	8.2	8.2	32.3	32.3	103.4	103.4	7.7		9.4		6		86				<0.2		0.8	
						3.4	0.3	281	20.8		8.2		32.3		103.3		7.7		9.4		6		87				<0.2		0.8	
					Bottom	5.8	0.2	275	20.8	20.8	8.2	8.2	32.3	32.3	102.1	102.1	7.6	7.6	9.5		6		90				<0.2		0.9	
						5.8	0.3	286	20.8		8.2		32.3		102.0		7.6		9.5		6		89				<0.2		0.8	
IM10	Fine	Moderate	09:56	8.2	Surface	1.0	0.3	286	21.3	21.3	8.2	8.2	32.3	32.3	105.6	105.6	7.8	7.7	7.9	9.7	8	7	84	87	822407	809800	<0.2	<0.2	0.8	0.8
						1.0	0.3	287	21.3		8.2		32.3		105.6		7.8		7.9		7		84				<0.2		0.9	
					Middle	4.1	0.3	294	20.6	20.6	8.2	8.2	32.4	32.4	101.0	101.0	7.5		10.7		7		87				<0.2		0.9	
						4.1	0.3	302	20.6		8.2		32.4		100.9		7.5		10.8		8		87				<0.2		0.8	
					Bottom	7.2	0.2	305	20.6	20.6	8.2	8.2	32.4	32.4	100.3	100.3	7.5	7.5	10.5		6		90				<0.2		0.7	
						7.2	0.3	329	20.6		8.2		32.4		100.3		7.5		10.6		5		90				<0.2		0.8	
IM11	Fine	Moderate	10:08	8.0	Surface	1.0	0.3	283	20.9	20.9	8.2	8.2	32.4	32.4	104.4	104.3	7.7	7.7	8.3	10.5	5	5	84	87	822073	811452	<0.2	<0.2	0.8	0.9
						1.0	0.3	307	20.9		8.2		32.4		104.2		7.7		8.4		6		84				<0.2		0.9	
					Middle	4.0	0.3	286	20.6	20.6	8.3	8.3	32.6	32.6	101.8	101.8	7.6		11.0		5		87				<0.2		0.9	
						4.0	0.3	288	20.5		8.3		32.6		101.8		7.6		11.2		4		87				<0.2		0.8	
					Bottom	7.0	0.2	281	20.5	20.5	8.3	8.3	32.7	32.7	101.1	101.1	7.5	7.5	12.0		6		90				<0.2		0.9	
						7.0	0.3	297	20.5		8.3		32.7		101.0		7.5		11.8		6		90				<0.2		0.8	
IM12	Fine	Moderate	10:16	8.1	Surface	1.0	0.4	280	20.8	20.8	8.3	8.3	32.5	32.5	103.6	103.5	7.7	7.7	8.7	11.7	7	7	84	87	821455	812046	<0.2	<0.2	0.9	0.9
						1.0	0.4	302	20.7		8.3		32.6		103.3		7.7		8.9		7		84				<0.2		0.8	
					Middle	4.1	0.5	287	20.4	20.4	8.3	8.3	32.8	32.8	101.6	101.6	7.6		10.3		7		87				<0.2		0.9	
						4.1	0.5	295	20.4		8.3		32.8		101.5		7.6		10.3		7		87				<0.2		0.9	
					Bottom	7.1	0.4	291	20.4	20.4	8.3	8.3	32.8	32.8	101.1	101.1	7.5	7.5	15.7		8		90				<0.2		0.9	
						7.1	0.4	314	20.4		8.3		32.8		101.1		7.5		16.4		7		91				<0.2		0.8	
SR1A	Fine	Moderate	10:38	5.4	Surface	1.0	-	-	20.6	20.6	8.3	8.3	32.7	32.7	104.6	104.6	7.8	7.8	8.9	9.3	6	6	-	-	820064	812588	-	-	-	-
						1.0	-	-	20.6		8.3		32.7		104.5		7.8		8.9		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	20.5	20.5	8.3	8.3	32.7	32.7	103.0	102.9	7.7	7.7	9.6		6		-				-		-	
						4.4	-	-	20.5		8.3		32.7		102.8		7.6		9.6		6		-				-		-	
SR2	Fine	Moderate	10:51	4.4	Surface	1.0	0.0	328	20.6	20.6	8.3	8.3	32.8	32.8	102.8	102.8	7.6	7.6	10.6	11.2	6	7	83	86	821467	814145	<0.2	<0.2	0.7	0.7
						1.0	0.0	330	20.6		8.3		32.8		102.7		7.6		10.7		5		83				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	294	20.6	20.6	8.3	8.3	32.8	32.8	101.7	101.7	7.5	7.5	11.6		9		90				<0.2		0.7	
						3.4	0.0	294	20.6		8.3		32.8		101.6		7.5		11.7		9		89				<0.2		0.7	
SR3	Fine	Moderate	09:33	8.1	Surface	1.0	0.2	25	21.0	21.0	8.2	8.2	32.0	32.0	106.3	106.3	7.9	7.8	8.0	10.1	6	5	-	-	822167	807562	-	-	-	-
						1.0	0.2	34	20.9		8.2		32.0		106.2		7.9		8.0		4		-				-		-	
					Middle	4.1	0.2	60	20.6	20.6	8.2	8.2	32.4	32.4	102.8	102.8	7.6		9.2		6		-				-		-	
						4.1	0.2	63	20.6		8.2		32.4		102.8		7.6		9.4		5		-				-		-	
					Bottom	7.1	0.2	63	20.5	20.5	8.2	8.2	32.5	32.5	102.1	102.1	7.6	7.6	13.0		5		-				-		-	
						7.1	0.2	70	20.5		8.2		32.5		102.1		7.6		12.8		6		-				-		-	
SR4A	Fine	Calm	10:50	9.3	Surface	1.0	0.3	245	20.6	20.6	8.1	8.1	32.8	32.8	103.3	103.3	7.7	7.7	10.6	10.9	8	7	-	-	817204	807818	-	-	-	-
						1.0	0.3	261	20.6		8.1		32.8		103.3		7.7		10.7		8		-				-		-	
					Middle	4.7	0.3	244	20.6	20.6	8.1	8.1	32.8	32.8	103.0	103.0	7.6		10.9		8		-				-		-	
						4.7	0.3	258	20.6		8.1		32.8		103.0		7.6		11.0		8		-				-		-	
					Bottom	8.3	0.2	250	20.6	20.6	8.1	8.1	32.8	32.8	102.9	102.9	7.6	7.6	11.1		6		-				-		-	
						8.3	0.2	264	20.6		8.1		32.8		102.9		7.6		11.1		6		-				-		-	
SR5A	Fine	Calm	11:06	3.8	Surface	1.0	0.2	276	20.8	20.8	8.1	8.1	32.9	32.9	99.4	99.3	7.3	7.3	7.4	7.9	8	9	-	-	816598	810708	-	-	-	-
						1.0	0.2	302	20.8		8.1		32.9		99.1		7.3		7.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	301	20.8	20.8	8.1	8.1	32.9	32.9	99.3	99.4	7.3	7.4	8.4		9		-				-		-	
						2.8	0.2	326	20.8		8.1		32.9		99.5		7.4		8.1		9		-				-		-	
SR6	Fine	Calm	11:33	4.4	Surface	1.0	0.2	260	21.2	21.2	8.0	8.0	33.1	33.1	91.6	91.6	6.7	6.7	9.0	8.6	5	7	-	-	817917	814678	-	-	-	-
						1.0	0.2	271	21.2		8.0		33.1		91.6		6.7		9.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	266	21.2	21.2	8.0	8.0	33.1	33.1	91.4	91.4	6.7	6.7	8.0		8		-				-		-	
						3.4	0.2	288	21.2		8.0		33.1		91.4		6.7		8.0		8		-				-		-	
SR7	Fine	Moderate	11:47	15.3	Surface	1.0	0.2	246	21.2	21.2	8.2	8.2	33.1	33.1	91.6	91.6	6.7	6.7	8.0	8.1	7	7	-	-	823625	823757	-	-	-	-
						1.0	0.2	249	21.2		8.2		33.1		91.6		6.7		8.0		6		-				-		-	
					Middle	7.7	0.2	239	21.2	21.2	8.2	8.2	33.1	33.1	91.9	92.0	6.7		8.4		6		-				-		-	
						7.7	0.2	240	21.2		8.2		33.1		92.0		6.7		8.4		6		-				-		-	
					Bottom	14.3	0.2	241	21.2	21.2	8.2	8.2	33.1	33.1	92.8	92.9	6.8	6.8	7.9		7		-				-		-	
						14.3	0.2	243	21.2		8.2		33.1		93.0		6.8		7.9		7		-				-		-	
SR8	Fine	Moderate	10:28	5.2	Surface	1.0	-	-	20.9	20.9	8.3	8.3	32.5	32.5	105.8	105.8	7.8	7.8	9.3	10.6	8	8	-	-	820519	811668	-	-	-	-
						1.0	-	-	20.9		8.3		32.5		105.8		7.8		9.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	20.9	20.9	8.3	8.3	32.5	32.5	103.7	103.7	7.7	7.7	11.9		9		-				-		-	
						4.2	-	-	20.9		8.3		32.5		103.7		7.7		11.7		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 December 18 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	16:15	8.2	Surface	1.0	0.3	220	21.0	21.0	8.1	8.1	32.7	32.7	103.9	103.8	7.6	7.6	11.3	12.3	5	6	85	89	815603	804261	<0.2	<0.2	0.8	0.8
						1.0	0.3	239	21.0		8.1		32.7		103.7		7.6		11.3		6		85				<0.2		0.9	
					Middle	4.1	0.3	211	20.5	20.5	8.2	8.2	32.8	32.8	102.1	101.9	7.6		11.4		5		89				<0.2		0.7	
						4.1	0.3	216	20.5		8.2		32.8		101.7		7.6		11.3		6		88				<0.2		0.9	
					Bottom	7.2	0.3	214	20.6	20.6	8.2	8.2	32.8	32.7	95.7	95.5	7.1	7.1	14.4		5		93				<0.2		0.8	
						7.2	0.3	219	20.6		8.2		32.7		95.3		7.1		14.3		6		93				<0.2		0.8	
C2	Fine	Moderate	17:52	10.9	Surface	1.0	0.3	177	21.0	21.0	8.2	8.2	30.9	30.9	102.8	102.6	7.7	7.5	7.5	9.0	8	7	82	85	825701	806942	<0.2	<0.2	1.4	1.6
						1.0	0.4	193	20.9		8.2		30.9		102.4		7.6		7.5		7		82				<0.2		1.6	
					Middle	5.5	0.2	186	20.7	20.7	8.2	8.2	32.2	32.2	98.2	98.2	7.3		8.7		7		85				<0.2		1.6	
						5.5	0.2	195	20.7		8.2		32.2		98.1		7.3		8.8		7		85				<0.2		1.6	
					Bottom	9.9	0.1	303	20.7	20.7	8.2	8.2	32.6	32.6	97.2	97.3	7.2	7.2	10.7		6		89				<0.2		1.7	
						9.9	0.1	311	20.7		8.2		32.6		97.3		7.2		10.6		6		88				<0.2		1.4	
C3	Fine	Moderate	15:41	9.4	Surface	1.0	0.1	71	20.6	20.6	8.2	8.2	32.9	32.8	101.2	101.1	7.5	7.5	7.9	8.6	5	5	85	88	822105	817812	<0.2	<0.2	1.0	1.1
						1.0	0.2	76	20.6		8.2		32.8		101.0		7.5		8.1		5		85				<0.2		1.1	
					Middle	4.7	0.2	94	20.5	20.5	8.2	8.2	32.8	32.8	99.9	99.9	7.4		8.9		5		88				<0.2		1.1	
						4.7	0.2	96	20.5		8.2		32.8		99.8		7.4		8.9		5		87				<0.2		1.1	
					Bottom	8.4	0.2	107	20.5	20.5	8.2	8.2	32.8	32.8	99.7	99.7	7.4	7.4	8.9		6		91				<0.2		1.0	
						8.4	0.2	112	20.5		8.2		32.8		99.7		7.4		9.0		5		91				<0.2		1.0	
IM1	Fine	Moderate	16:33	4.4	Surface	1.0	0.2	180	20.7	20.7	8.1	8.1	32.5	32.5	104.4	104.4	7.7	7.7	8.8	9.6	11	11	84	86	817942	807137	<0.2	<0.2	0.6	0.6
						1.0	0.2	180	20.7		8.1		32.5		104.3		7.7		8.9		11		85				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	191	20.6	20.6	8.1	8.1	32.6	32.6	103.4	103.4	7.7	7.7	10.3		10		87				<0.2		0.7	
						3.4	0.2	191	20.6		8.1		32.6		103.4		7.7		10.5		10		87				<0.2		0.6	
IM2	Fine	Moderate	16:46	6.6	Surface	1.0	0.3	190	20.7	20.7	8.1	8.1	32.3	32.3	104.2	104.1	7.7	7.7	8.4	9.2	7	7	84	89	818163	806176	<0.2	<0.2	0.7	0.7
						1.0	0.4	197	20.7		8.1		32.3		103.9		7.7		8.5		8		85				<0.2		0.7	
					Middle	3.3	0.3	200	20.5	20.5	8.1	8.1	32.5	32.5	102.9	102.9	7.7		9.5		8		89				<0.2		0.7	
						3.3	0.3	207	20.5		8.1		32.5		102.8		7.7		9.7		6		88				<0.2		0.6	
					Bottom	5.6	0.2	188	20.6	20.6	8.1	8.1	32.5	32.4	103.4	103.5	7.7	7.7	9.7		6		93				<0.2		0.7	
						5.6	0.2	204	20.6		8.1		32.4		103.6		7.7		9.5		6		93				<0.2		0.6	
IM3	Fine	Moderate	16:55	6.8	Surface	1.0	0.2	182	20.6	20.6	8.1	8.1	32.3	32.3	102.0	102.0	7.6	7.6	9.9	11.0	8	7	84	88	818781	805599	<0.2	<0.2	0.6	0.7
						1.0	0.2	189	20.6		8.1		32.4		101.9		7.6		10.1		7		84				<0.2		0.6	
					Middle	3.4	0.2	193	20.5	20.5	8.1	8.1	32.5	32.5	100.8	100.7	7.5		11.5		8		89				<0.2		0.7	
						3.4	0.2	208	20.5		8.1		32.5		100.6		7.5		11.5		7		89				<0.2		0.6	
					Bottom	5.8	0.2	191	20.4	20.5	8.1	8.1	32.5	32.5	100.6	100.7	7.5	7.5	11.5		7		92				<0.2		0.7	
						5.8	0.2	204	20.5		8.1		32.5		100.7		7.5		11.5		6		92				<0.2		0.7	
IM4	Fine	Moderate	17:06	7.1	Surface	1.0	0.5	184	20.8	20.8	8.1	8.1	32.3	32.3	103.6	103.6	7.7	7.7	8.8	12.5	4	5	84	88	819728	804604	<0.2	<0.2	0.9	0.9
						1.0	0.5	189	20.8		8.1		32.3		103.5		7.7		9.0		5		84				<0.2		0.9	
					Middle	3.6	0.4	187	20.5	20.5	8.1	8.1	32.4	32.4	102.3	102.3	7.6		11.7		4		87				<0.2		0.8	
						3.6	0.4	196	20.5		8.1		32.4		102.2		7.6		11.9		5		88				<0.2		0.8	
					Bottom	6.1	0.3	199	20.5	20.5	8.1	8.1	32.5	32.4	102.2	102.3	7.6	7.6	16.2		4		92				<0.2		0.9	
						6.1	0.4	210	20.5		8.1		32.4		102.3		7.6		17.2		5		92				<0.2		0.9	
IM5	Fine	Moderate	17:18	6.5	Surface	1.0	0.5	195	20.9	20.9	8.1	8.1	32.3	32.3	104.5	104.5	7.7	7.7	8.5	9.2	5	6	83	88	820737	804884	<0.2	<0.2	0.8	0.8
						1.0	0.6	203	20.9		8.1		32.3		104.5		7.7		8.6		5		84				<0.2		0.7	
					Middle	3.3	0.4	182	20.8	20.8	8.1	8.1	32.3	32.3	103.9	103.9	7.7		9.1		5		88				<0.2		0.8	
						3.3	0.4	185	20.7		8.1		32.3		103.8		7.7		9.2		6		88				<0.2		0.8	
					Bottom	5.5	0.3	192	20.6	20.6	8.1	8.1	32.4	32.4	103.2	103.3	7.7	7.7	9.8		6		91				<0.2		0.8	
						5.5	0.3	192	20.6		8.1		32.4		103.3		7.7		9.7		6		92				<0.2		0.8	
IM6	Fine	Moderate	17:30	6.3	Surface	1.0	0.3	210	20.8	20.8	8.1	8.1	32.4	32.4	104.2	104.1	7.7	7.7	8.7	9.1	5	5	83	87	821045	805817	<0.2	<0.2	0.8	0.8
						1.0	0.4	214	20.7		8.1		32.4		104.0		7.7		8.8		5		83				<0.2		0.7	
					Middle	3.2	0.3	225	20.5	20.5	8.1	8.1	32.5	32.5	103.0	103.0	-		9.2		5		87				<0.2		0.7	
						3.2	0.3	226	20.5		8.1		32.5		103.0		-		9.3		6		88				<0.2		0.9	
					Bottom	5.3	0.2	241	20.5	20.5	8.1	8.1	32.5	32.5	103.0	103.0	7.7	7.7	9.4		5		91				<0.2		0.8	
						5.3	0.2	246	20.5		8.1		32.5		103.0		7.7		9.4		4		91				<0.2		0.8	
IM7	Fine	Moderate	17:39	7.8	Surface	1.0	0.4	219	21.0	21.0	8.1	8.1	30.8	30.8	103.8	103.8	7.7	7.6	7.4	8.2	6	7	82	86	821325	806829	<0.2	<0.2	1.0	0.8
						1.0	0.4	222	21.0		8.1		30.8		103.8		7.7		7.5		5		83				<0.2		0.7	
					Middle	3.9	0.3	237	20.7	20.7	8.1	8.1	31.6	31.6	99.8	99.7	7.4		8.3		7		85				<0.2		0.8	
						3.9	0.4	246	20.7		8.1		31.7		99.6		7.4		8.3		7		86				<0.2		0.8	
					Bottom	6.8	0.2	233	20.7	20.7	8.1	8.1	32.4	32.4	98.6	98.7	7.3	7.3	8.8		7		90				<0.2		0.8	
						6.8	0.2	236	20.7		8.1		32.4		98.7		7.3		8.9		7		90				<0.2		0.7	
IM8	Fine	Moderate	17:19	7.0	Surface	1.0	0.2	207	20.8	20.8	8.2	8.2	32.3	32.3	103.9	103.9	7.7	7.7	9.1	11.5	6	6	82	86	821814	808143	<0.2	<0.2	1.5	1.5
						1.0	0.3	223	20.8		8.2		32.3		103.8		7.7		9.2		5		83				<0.2		1.4	
					Middle	3.5	0.2	225	20.6	20.6	8.2	8.2	32.4	32.4	102.8	102.8	7.6		10.5		6		86				<0.2		1.5	
						3.5	0.2	227	20.6		8.2		32.4		102.7		7.6		10.8		7		86				<0.2		1.6	
					Bottom	6.0	0.2	233	20.6	20.6	8.2	8.2	32.4	32.4	101.5	101.4	7.5	7.5	13.8		5		90				<0.2		1.5	
						6.0	0.2	236	20.6		8.2		32.4		101.3		7.5		15.3		4		89				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 December 18 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	17:10	6.5	Surface	1.0	0.2	176	20.9	20.9	8.2	8.2	32.2	32.2	104.0	104.0	7.7	7.7	8.4	10.8	5	7	83	86	822076	808824	<0.2	<0.2	1.6	1.5
						1.0	0.2	177	20.9		8.2		32.2		104.0		7.7		8.5		5		83				<0.2		1.5	
					Middle	3.3	0.1	189	20.6	20.6	8.2	8.2	32.4	32.4	102.4	102.4	7.6		10.1		8		86				<0.2		1.5	
						3.3	0.1	207	20.6		8.2		32.4		102.3		7.6		10.4		9		86				<0.2		1.4	
					Bottom	5.5	0.1	198	20.8	20.9	8.2	8.2	32.2	32.2	100.1	100.2	7.4	7.4	13.6		6		89				<0.2		1.4	
						5.5	0.1	212	21.0		8.2		32.1		100.2		7.4		13.5		7		89				<0.2		1.5	
IM10	Fine	Moderate	17:01	6.7	Surface	1.0	0.2	149	20.7	20.7	8.2	8.2	32.3	32.3	102.7	102.7	7.6	7.6	8.5	10.4	6	7	83	86	822404	809817	<0.2	<0.2	1.0	1.3
						1.0	0.2	152	20.7		8.2		32.3		102.7		7.6		8.5		6		83				<0.2		1.0	
					Middle	3.4	0.1	120	20.5	20.5	8.2	8.2	32.4	32.4	101.3	101.2	7.5		11.1		7		86				<0.2		1.0	
						3.4	0.1	124	20.5		8.2		32.4		101.1		7.5		11.2		7		86				<0.2		1.6	
					Bottom	5.7	0.1	76	20.5	20.5	8.2	8.2	32.5	32.5	100.3	100.3	7.5	7.5	11.6		7		89				<0.2		1.6	
						5.7	0.1	80	20.5		8.2		32.5		100.3		7.5		11.5		7		89				<0.2		1.6	
IM11	Fine	Moderate	16:49	7.4	Surface	1.0	0.2	124	20.7	20.7	8.2	8.2	32.3	32.3	104.2	104.1	7.7	7.7	8.5	9.1	6	6	83	87	822035	811468	<0.2	<0.2	1.0	1.0
						1.0	0.2	136	20.7		8.2		32.3		104.0		7.7		8.5		5		84				<0.2		1.0	
					Middle	3.7	0.2	112	20.5	20.5	8.2	8.2	32.4	32.4	102.9	102.9	7.7		9.3		6		87				<0.2		1.1	
						3.7	0.2	116	20.5		8.2		32.4		102.8		7.7		9.4		6		87				<0.2		1.1	
					Bottom	6.4	0.1	94	20.6	20.6	8.2	8.2	32.5	32.4	102.9	102.9	7.7	7.7	9.4		7		90				<0.2		1.0	
						6.4	0.2	101	20.6		8.2		32.4		102.9		7.7		9.4		8		90				<0.2		0.9	
IM12	Fine	Moderate	16:40	8.2	Surface	1.0	0.3	113	20.9	20.9	8.2	8.2	32.4	32.4	105.1	105.0	7.8	7.7	8.6	9.7	7	6	84	87	821465	812034	<0.2	<0.2	1.1	1.1
						1.0	0.3	116	20.8		8.2		32.4		104.9		7.8		8.7		7		84				<0.2		1.1	
					Middle	4.1	0.2	99	20.6	20.6	8.2	8.2	32.6	32.6	103.0	103.0	7.7		9.9		6		87				<0.2		1.0	
						4.1	0.2	105	20.6		8.2		32.6		103.0		7.6		9.9		5		87				<0.2		1.2	
					Bottom	7.2	0.2	100	20.6	20.6	8.2	8.2	32.6	32.6	101.3	101.2	7.5	7.5	10.6		6		90				<0.2		1.0	
						7.2	0.2	105	20.6		8.2		32.6		101.1		7.5		10.5		6		90				<0.2		1.1	
SR1A	Fine	Moderate	16:16	5.3	Surface	1.0	-	-	20.3	20.3	8.3	8.3	32.7	32.7	100.9	100.9	7.5	7.5	8.4	10.9	5	5	-	-	820070	812584	-	-	-	-
						1.0	-	-	20.3		8.3		32.7		100.8		7.5		9.1		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.3	20.3	8.3	8.3	32.8	32.8	100.6	100.6	7.5	7.5	13.0		5		-				-		-	
						4.3	-	-	20.3		8.3		32.8		100.6		7.5		13.1		6		-				-		-	
SR2	Fine	Moderate	16:03	4.1	Surface	1.0	0.2	84	20.5	20.5	8.3	8.3	32.7	32.7	102.7	102.7	7.6	7.6	9.1	9.3	6	7	84	87	821484	814176	<0.2	<0.2	1.1	1.1
						1.0	0.2	90	20.5		8.3		32.7		102.6		7.6		9.1		7		83				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	91	20.5	20.5	8.2	8.2	32.7	32.7	101.3	101.3	7.5	7.5	9.4		6		90				<0.2		1.0	
						3.1	0.1	94	20.5		8.2		32.7		101.2		7.5		9.4		7		90				<0.2		1.0	
SR3	Fine	Moderate	17:26	8.3	Surface	1.0	0.3	205	21.0	21.0	8.2	8.2	32.2	32.2	105.0	105.0	7.8	7.7	8.3	9.1	5	7	-	-	822146	807590	-	-	-	-
						1.0	0.3	209	21.0		8.2		32.2		104.9		7.8		8.3		5		-				-		-	
					Middle	4.2	0.2	218	20.5	20.5	8.2	8.2	32.5	32.5	102.7	102.7	7.6		9.2		6		-				-		-	
						4.2	0.3	234	20.5		8.2		32.5		102.6		7.6		9.2		6		-				-		-	
					Bottom	7.3	0.3	230	20.5	20.6	8.2	8.2	32.5	32.5	101.8	101.8	7.6	7.6	9.9		9		-				-		-	
						7.3	0.3	240	20.6		8.2		32.5		101.8		7.6		9.8		8		-				-		-	
SR4A	Fine	Calm	15:48	7.8	Surface	1.0	0.2	55	20.5	20.5	8.1	8.1	32.7	32.7	102.7	102.7	7.6	7.6	9.1	9.2	6	7	-	-	817191	807817	-	-	-	-
						1.0	0.2	59	20.5		8.1		32.7		102.7		7.6		9.2		7		-				-		-	
					Middle	3.9	0.2	62	20.5	20.5	8.1	8.1	32.7	32.7	102.5	102.5	7.6		9.2		7		-				-		-	
						3.9	0.2	67	20.5		8.1		32.7		102.5		7.6		9.3		7		-				-		-	
					Bottom	6.8	0.2	54	20.5	20.5	8.1	8.1	32.7	32.7	102.6	102.7	7.6	7.6	9.2		7		-				-		-	
						6.8	0.2	58	20.5		8.1		32.7		102.7		7.6		9.2		7		-				-		-	
SR5A	Fine	Calm	15:25	3.6	Surface	1.0	0.1	91	20.6	20.6	8.1	8.1	32.8	32.8	102.1	102.1	7.6	7.6	7.8	7.9	4	4	-	-	816600	810689	-	-	-	-
						1.0	0.1	93	20.6		8.1		32.8		102.1		7.6		7.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	115	20.6	20.6	8.1	8.1	32.8	32.8	101.7	101.8	7.5	7.5	8.0		4		-				-		-	
						2.6	0.2	122	20.6		8.1		32.8		101.8		7.5		7.9		4		-				-		-	
SR6	Fine	Calm	15:01	4.2	Surface	1.0	0.2	34	21.2	21.2	7.9	7.9	33.1	33.1	92.6	92.6	6.8	6.8	6.3	6.7	4	5	-	-	817889	814647	-	-	-	-
						1.0	0.2	34	21.2		7.9		33.1		92.5		6.8		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	45	21.1	21.1	7.9	7.9	33.1	33.1	92.0	92.0	6.8	6.8	7.0		5		-				-		-	
						3.2	0.2	48	21.1		7.9		33.1		92.0		6.8		7.1		5		-				-		-	
SR7	Fine	Moderate	15:08	15.2	Surface	1.0	0.5	65	21.2	21.2	8.0	8.0	33.1	33.1	92.9	92.9	6.8	6.8	6.3	6.9	4	5	-	-	823646	823736	-	-	-	-
						1.0	0.5	70	21.2		8.0		33.1		92.8		6.8		6.5		6		-				-		-	
					Middle	7.6	0.3	51	21.0	21.0	8.0	8.0	33.1	33.1	92.3	92.3	6.8		7.3		4		-				-		-	
						7.6	0.3	55	21.0		8.0		33.1		92.3		6.8		7.3		5		-				-		-	
					Bottom	14.2	0.3	26	21.0	21.1	8.0	8.0	33.1	33.1	93.3	93.5	6.9	6.9	7.1		4		-				-		-	
						14.2	0.4	28	21.1		8.0		33.1		93.6		6.9		7.0		6		-				-		-	
SR8	Fine	Moderate	16:28	5.0	Surface	1.0	-	-	21.0	21.0	8.3	8.3	32.7	32.7	104.1	104.1	7.7	7.7	11.2	12.6	11	11	-	-	820498	811644	-	-	-	-
						1.0	-	-	20.9		8.3		32.7		104.1		7.7		11.4		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	20.4	20.4	8.3	8.3	32.8	32.7	99.5	99.6	7.4	7.4	13.6		11		-				-		-	
						4.0	-	-	20.4		8.3		32.7		99.6		7.4		14.1		10		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	12:09	7.9	Surface	1.0	0.3	213	21.0	21.1	8.2	8.2	32.1	32.1	103.0	103.0	7.6	7.6	9.4	12.9	7	7	82	87	815596	804233	<0.2	<0.2	1.1	1.0
						1.0	0.3	214	21.1		8.2		32.1		103.0		7.6		9.4		7		83				<0.2		1.0	
					Middle	4.0	0.3	200	20.9	21.0	8.2	8.2	32.1	32.1	102.1	102.2	-		10.2		7		87				<0.2		0.9	
						4.0	0.3	201	21.0		8.2		32.1		102.2		-		10.1		6		87				<0.2		1.0	
					Bottom	6.9	0.3	205	20.9	20.9	8.2	8.2	32.2	32.2	101.2	101.2	7.5	7.5	18.9		8		91				<0.2		0.9	
						6.9	0.3	214	20.9		8.2		32.2		101.2		7.5		19.5		8		91				<0.2		0.9	
C2	Cloudy	Moderate	13:37	10.9	Surface	1.0	0.5	153	21.4	21.4	8.3	8.3	30.3	30.3	102.3	102.3	7.6	7.6	7.3	7.4	10	10	84	88	825679	806921	<0.2	<0.2	1.3	1.3
						1.0	0.5	162	21.4		8.3		30.3		102.2		7.6		7.2		11		84				<0.2		1.2	
					Middle	5.5	0.4	154	21.0	21.0	8.3	8.3	31.5	31.5	98.9	98.9	-		6.2		10		89				<0.2		1.3	
						5.5	0.4	168	21.0		8.3		31.5		98.9		-		6.2		9		88				<0.2		1.4	
					Bottom	9.9	0.3	145	21.1	21.1	8.3	8.3	31.5	31.5	98.7	98.7	7.3	7.3	8.9		10		92				<0.2		1.3	
						9.9	0.3	149	21.1		8.3		31.5		98.7		7.3		8.7		10		92				<0.2		1.3	
C3	Cloudy	Moderate	11:41	12.2	Surface	1.0	0.3	84	21.4	21.4	8.3	8.3	32.2	32.2	97.9	97.9	7.2	7.1	3.3	4.2	3	4	84	89	822098	817826	<0.2	<0.2	0.9	1.0
						1.0	0.3	91	21.4		8.3		32.2		97.9		7.2		3.4		4		85				<0.2		1.0	
					Middle	6.1	0.3	81	21.1	21.1	8.2	8.2	32.3	32.3	93.6	93.6	6.9		3.9		4		88				<0.2		0.8	
						6.1	0.3	82	21.1		8.2		32.3		93.6		6.9		3.9		4		89				<0.2		2.0	
					Bottom	11.2	0.3	80	21.1	21.1	8.2	8.2	32.3	32.3	94.1	94.2	6.9	6.9	5.2		4		93				<0.2		0.8	
						11.2	0.3	80	21.1		8.2		32.3		94.2		6.9		5.3		4		92				<0.2		0.7	
IM1	Cloudy	Moderate	12:34	4.8	Surface	1.0	0.2	178	20.8	20.8	8.2	8.2	31.6	31.6	101.4	101.4	7.5	7.5	8.3	8.9	8	9	83	87	817947	807124	<0.2	<0.2	1.4	1.2
						1.0	0.2	183	20.8		8.2		31.6		101.4		7.5		8.3		9		83				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	180	20.8	20.8	8.2	8.2	31.8	31.8	100.9	100.9	7.5	7.5	9.4		9		90				<0.2		1.2	
						3.8	0.2	182	20.8		8.2		31.8		100.9		7.5		9.5		9		91				<0.2		1.1	
IM2	Cloudy	Moderate	12:42	6.3	Surface	1.0	0.5	199	21.1	21.1	8.1	8.1	31.6	31.6	102.8	102.8	7.6	7.6	8.1	9.7	9	9	85	88	818161	806167	<0.2	<0.2	1.3	1.4
						1.0	0.5	212	21.1		8.1		31.6		102.7		7.6		8.1		8		85				<0.2		1.1	
					Middle	3.2	0.3	194	21.0	21.0	8.1	8.1	31.7	31.7	101.7	101.7	7.5		8.5		9		87				<0.2		1.3	
						3.2	0.3	207	21.0		8.1		31.7		101.6		7.5		8.4		9		87				<0.2		1.5	
					Bottom	5.3	0.2	176	20.8	20.8	8.1	8.1	32.0	32.0	99.8	99.8	7.4	7.4	12.3		10		90				<0.2		1.6	
						5.3	0.2	191	20.8		8.1		32.0		99.8		7.4		12.6		9		91				<0.2		1.6	
IM3	Cloudy	Moderate	12:50	6.6	Surface	1.0	0.2	187	20.9	20.9	8.1	8.1	31.6	31.6	101.0	101.0	7.5	7.5	11.2	15.7	16	14	85	90	818795	805588	<0.2	<0.2	1.0	0.9
						1.0	0.2	189	20.9		8.1		31.6		101.0		7.5		11.2		17		86				<0.2		0.9	
					Middle	3.3	0.2	209	20.8	20.8	8.1	8.1	31.7	31.7	100.2	100.2	7.5		13.8		14		90				<0.2		0.9	
						3.3	0.2	226	20.8		8.1		31.7		100.2		7.5		13.8		14		91				<0.2		0.9	
					Bottom	5.6	0.2	190	20.8	20.8	8.1	8.1	31.7	31.7	99.9	99.9	7.4	7.4	21.7		12		93				<0.2		0.8	
						5.6	0.2	192	20.8		8.1		31.7		99.9		7.4		22.4		12		93				<0.2		1.0	
IM4	Cloudy	Moderate	13:00	6.8	Surface	1.0	0.5	199	20.9	20.9	8.1	8.1	31.7	31.7	101.8	101.8	7.6	7.5	11.6	13.1	12	12	85	88	819711	804590	<0.2	<0.2	1.1	1.1
						1.0	0.5	217	20.9		8.1		31.7		101.7		7.5		11.6		12		85				<0.2		0.9	
					Middle	3.4	0.4	185	20.8	20.8	8.1	8.1	31.8	31.8	101.0	101.0	7.5		12.9		12		88				<0.2		1.0	
						3.4	0.4	194	20.8		8.1		31.8		101.0		7.5		13.0		12		88				<0.2		1.1	
					Bottom	5.8	0.3	188	20.8	20.8	8.1	8.1	31.8	31.8	100.4	100.4	7.5	7.5	14.7		12		90				<0.2		1.2	
						5.8	0.3	196	20.8		8.1		31.8		100.3		7.5		15.1		12		91				<0.2		1.1	
IM5	Cloudy	Moderate	13:13	6.1	Surface	1.0	0.5	191	21.1	21.1	8.1	8.1	31.5	31.5	102.1	102.1	7.6	7.6	8.0	9.2	6	8	86	91	820736	804850	<0.2	<0.2	0.8	1.0
						1.0	0.6	208	21.1		8.1		31.5		102.0		7.6		8.0		7		87				<0.2		0.9	
					Middle	3.1	0.4	192	20.8	20.8	8.1	8.1	31.5	31.5	100.5	100.5	7.5		9.0		9		91				<0.2		1.1	
						3.1	0.4	201	20.8		8.1		31.5		100.5		7.5		9.2		8		92				<0.2		1.2	
					Bottom	5.1	0.3	199	20.9	20.9	8.1	8.1	31.9	31.9	102.8	102.8	7.6	7.6	10.5		9		94				<0.2		0.9	
						5.1	0.3	211	20.9		8.1		31.9		102.7		7.6		10.5		8		94				<0.2		1.1	
IM6	Cloudy	Moderate	13:25	6.5	Surface	1.0	0.3	224	20.9	20.9	8.1	8.1	31.5	31.5	101.6	101.6	7.5	7.5	8.3	9.2	10	10	87	91	821073	805804	<0.2	<0.2	1.2	1.0
						1.0	0.4	242	20.9		8.1		31.5		101.5		7.5		8.4		11		87				<0.2		1.2	
					Middle	3.3	0.3	216	20.8	20.8	8.1	8.1	31.6	31.6	100.7	100.7	7.5		9.0		10		91				<0.2		1.1	
						3.3	0.3	218	20.8		8.1		31.6		100.7		7.5		9.1		11		92				<0.2		0.9	
					Bottom	5.5	0.2	238	20.9	20.9	8.1	8.1	31.8	31.8	102.0	101.9	7.6	7.6	10.3		8		94				<0.2		0.8	
						5.5	0.2	243	20.9		8.1		31.8		101.8		7.6		10.2		9		95				<0.2		0.8	
IM7	Cloudy	Moderate	13:33	7.1	Surface	1.0	0.4	221	20.8	20.8	8.1	8.1	31.7	31.7	100.8	100.8	7.5	7.5	10.3	10.3	11	10	86	91	821350	806833	<0.2	<0.2	1.2	1.2
						1.0	0.4	236	20.8		8.1		31.7		100.7		7.5		10.3		10		87				<0.2		1.2	
					Middle	3.6	0.3	247	20.8	20.8	8.1	8.1	31.7	31.7	100.1	100.1	7.4		10.5		10		90				<0.2		1.4	
						3.6	0.4	248	20.8		8.1		31.7		100.1		7.4		10.3		11		91				<0.2		1.2	
					Bottom	6.1	0.2	249	20.8	20.8	8.1	8.1	31.8	31.8	100.1	100.1	7.4	7.4	10.3		8		94				<0.2		1.1	
						6.1	0.2	250	20.8		8.1		31.8		100.1		7.4		10.2		10		95				<0.2		0.9	
IM8	Cloudy	Moderate	13:11	7.7	Surface	1.0	0.1	175	21.4	21.4	8.3	8.3	30.6	30.6	103.4	103.4	7.7	7.7	6.6	8.0	8	9	85	89	821829	808150	<0.2	<0.2	1.3	1.2
						1.0	0.1	180	21.3		8.3		30.6		103.3		7.7		6.7		8		84				<0.2		1.2	
					Middle	3.9	0.1	156	21.1	21.1	8.3	8.3	30.7	30.7	101.6	101.7	7.6		7.9		8		89				<0.2		1.2	
						3.9	0.1	156	21.1		8.3		30.7		101.7		7.6		7.9		8		89				<0.2		1.2	
					Bottom	6.7	0.1	87	21.2	21.2	8.3	8.3	31.1	31.1	104.0	104.0	7.7	7.7	9.3		9		93				<0.2		1.2	
						6.7	0.1	89	21.2		8.3		31.1		103.9		7.7		9.4		10		92				<0.2		1.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	13:05	7.1	Surface	1.0	0.4	124	21.2	21.2	8.3	8.3	30.9	30.9	102.9	102.9	7.6	7.6	10.2	11.6	11	12	84	89	822096	808804	<0.2	<0.2	1.1	1.3
						1.0	0.4	133	21.2		8.3		30.9		102.8		7.6		10.3		11		85				<0.2		1.3	
					Middle	3.6	0.3	115	21.1	21.1	8.3	8.3	30.9	30.9	102.1	102.1	7.6		11.8		12		88				<0.2		1.3	
						3.6	0.3	123	21.1		8.3		30.9		102.0		7.6		11.7		12		89				<0.2		1.2	
					Bottom	6.1	0.3	119	21.1	21.1	8.3	8.3	30.9	30.9	101.4	101.4	7.5	7.5	12.6		12		93				<0.2		1.4	
						6.1	0.3	124	21.1		8.3		30.9		101.4		7.5		12.8		13		92				<0.2		1.3	
IM10	Cloudy	Moderate	12:57	8.3	Surface	1.0	0.5	116	21.2	21.2	8.3	8.3	30.8	30.8	101.9	101.9	7.6	7.6	9.8	12.5	13	13	84	89	822369	809809	<0.2	<0.2	1.2	1.2
						1.0	0.6	117	21.2		8.3		30.8		101.9		7.6		9.7		13		85				<0.2		1.3	
					Middle	4.2	0.5	109	21.0	21.0	8.3	8.3	30.9	30.9	101.1	101.1	7.5		12.7		13		89				<0.2		1.1	
						4.2	0.5	116	21.0		8.3		30.9		101.0		7.5		12.2		13		89				<0.2		1.2	
					Bottom	7.3	0.5	101	21.0	21.0	8.3	8.3	30.9	30.9	100.7	100.7	7.5	7.5	15.3		11		92				<0.2		1.3	
						7.3	0.5	108	21.0		8.3		30.9		100.7		7.5		15.5		12		93				<0.2		1.3	
IM11	Cloudy	Moderate	12:44	7.7	Surface	1.0	0.5	97	21.4	21.4	8.3	8.3	30.8	30.8	104.0	104.0	7.7	7.7	7.2	8.3	8	9	84	89	822058	811477	0.4	**0.4**	1.1	1.3
						1.0	0.5	97	21.4		8.3		30.8		104.0		7.7		7.2		8		84				0.4		1.3	
					Middle	3.9	0.4	94	21.3	21.3	8.3	8.3	30.8	30.8	102.9	102.9	7.6		7.0		8		89				0.4		1.4	
						3.9	0.4	96	21.2		8.3		30.9		102.8		7.6		6.9		8		89				0.4		1.4	
					Bottom	6.7	0.4	92	21.1	21.1	8.3	8.3	31.2	31.2	100.9	100.9	7.5	7.5	10.7		9		93				0.4		1.3	
						6.7	0.4	93	21.1		8.3		31.2		100.9		7.5		10.7		10		93				0.4		1.4	
IM12	Cloudy	Moderate	12:35	9.9	Surface	1.0	0.5	110	21.1	21.1	8.4	8.4	30.7	30.7	102.5	102.5	7.6	7.6	7.1	7.6	9	9	84	89	821451	812042	0.2	**0.3**	1.2	1.1
						1.0	0.5	114	21.1		8.4		30.7		102.5		7.6		7.1		9		88				0.3		1.1	
					Middle	5.0	0.4	94	21.1	21.1	8.4	8.4	30.9	30.9	102.1	102.1	7.6		8.1		9		89				0.3		1.0	
						5.0	0.4	98	21.1		8.4		30.9		102.1		7.6		8.2		9		88				0.3		1.0	
					Bottom	8.9	0.3	99	21.1	21.1	8.3	8.3	31.3	31.3	100.8	100.8	7.5	7.5	7.4		9		93				0.2		1.1	
						8.9	0.3	99	21.1		8.3		31.3		100.8		7.5		7.5		9		92				0.2		1.1	
SR1A	Cloudy	Moderate	12:16	5.4	Surface	1.0	-	-	21.3	21.3	8.3	8.3	31.5	31.5	103.0	103.0	7.6	7.6	6.0	6.8	7	8	-	-	820071	812590	-	-	-	-
						1.0	-	-	21.3		8.3		31.5		102.9		7.6		6.1		6		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	21.2	21.2	8.3	8.3	31.8	31.8	101.0	101.1	7.5	7.5	7.4		8		-				-		-	
						4.4	-	-	21.2		8.3		31.8		101.1		7.5		7.6		9		-				-		-	
SR2	Cloudy	Moderate	12:05	4.8	Surface	1.0	0.2	82	21.1	21.1	8.3	8.3	31.5	31.5	103.9	103.9	7.7	7.7	5.2	5.1	7	7	84	86	821456	814163	<0.2	<0.2	1.0	1.0
						1.0	0.3	90	21.1		8.3		31.5		103.8		7.7		5.2		6		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	86	21.1	21.1	8.3	8.3	31.6	31.6	101.7	101.7	7.5	7.5	5.0		6		89				<0.2		1.1	
						3.8	0.2	89	21.1		8.3		31.6		101.6		7.5		5.0		7		88				<0.2		1.0	
SR3	Cloudy	Moderate	13:18	8.4	Surface	1.0	0.1	216	21.1	21.1	8.3	8.3	30.9	30.9	101.9	101.9	7.6	7.6	8.6	8.7	10	10	-	-	822163	807560	-	-	-	-
						1.0	0.1	231	21.1		8.3		30.9		101.9		7.6		8.6		10		-				-		-	
					Middle	4.2	0.1	206	21.0	21.0	8.3	8.3	30.9	30.9	101.2	101.2	7.5		8.8		10		-				-		-	
						4.2	0.1	222	21.0		8.3		30.9		101.2		7.5		8.7		9		-				-		-	
					Bottom	7.4	0.1	204	21.1	21.1	8.3	8.3	30.9	30.9	101.2	101.2	7.5	7.5	8.6		9		-				-		-	
						7.4	0.1	221	21.1		8.3		30.9		101.2		7.5		8.6		9		-				-		-	
SR4A	Cloudy	Calm	11:46	7.7	Surface	1.0	0.2	50	20.8	20.9	8.1	8.1	32.4	32.4	102.7	102.7	7.6	7.5	6.6	6.1	6	6	-	-	817192	807828	-	-	-	-
						1.0	0.2	53	20.9		8.1		32.4		102.7		7.6		6.6		6		-				-		-	
					Middle	3.9	0.2	66	20.8	20.8	8.1	8.1	32.4	32.4	100.6	100.6	7.4		6.1		6		-				-		-	
						3.9	0.2	66	20.8		8.1		32.4		100.6		7.4		6.1		6		-				-		-	
					Bottom	6.7	0.2	54	20.8	20.8	8.1	8.1	32.4	32.4	100.3	100.3	7.4	7.4	5.6		6		-				-		-	
						6.7	0.2	54	20.8		8.1		32.4		100.3		7.4		5.7		7		-				-		-	
SR5A	Cloudy	Calm	11:27	5.1	Surface	1.0	0.1	90	21.1	21.1	8.1	8.1	33.1	33.1	96.9	96.9	7.1	7.1	4.3	4.7	4	4	-	-	816613	810719	-	-	-	-
						1.0	0.1	94	21.1		8.1		33.1		96.8		7.1		4.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	110	20.9	20.9	8.1	8.1	33.1	33.1	93.0	93.0	6.8	6.8	5.0		5		-				-		-	
						4.1	0.2	114	20.9		8.1		33.1		92.9		6.8		5.0		4		-				-		-	
SR6	Cloudy	Calm	11:00	3.8	Surface	1.0	0.2	37	20.9	20.9	8.0	8.0	33.2	33.2	90.6	90.6	6.7	6.7	5.6	6.7	7	7	-	-	817888	814662	-	-	-	-
						1.0	0.2	38	20.9		8.0		33.2		90.6		6.7		5.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	50	20.9	20.9	8.0	8.0	33.2	33.2	90.0	90.1	6.6	6.6	7.8		7		-				-		-	
						2.8	0.2	54	20.9		8.0		33.2		90.1		6.6		7.8		7		-				-		-	
SR7	Cloudy	Moderate	11:10	14.6	Surface	1.0	0.3	74	21.2	21.2	8.2	8.2	32.3	32.3	91.5	91.5	6.7	6.7	4.5	5.3	6	7	-	-	823614	823732	-	-	-	-
						1.0	0.3	74	21.2		8.2		32.3		91.5		6.7		4.4		6		-				-		-	
					Middle	7.3	0.2	79	21.2	21.2	8.2	8.2	32.3	32.3	90.5	90.5	6.7		5.4		7		-				-		-	
						7.3	0.2	81	21.2		8.2		32.3		90.5		6.7		5.7		7		-				-		-	
					Bottom	13.6	0.2	53	21.2	21.2	8.1	8.1	32.3	32.3	90.8	90.8	6.7	6.7	5.9		6		-				-		-	
						13.6	0.2	57	21.2		8.1		32.3		90.8		6.7		6.0		7		-				-		-	
SR8	Cloudy	Moderate	12:26	4.1	Surface	1.0	-	-	21.3	21.3	8.3	8.3	31.2	31.2	104.0	104.0	7.7	7.7	7.9	8.4	8	8	-	-	820507	811655	-	-	-	-
						1.0	-	-	21.3		8.3		31.2		104.0		7.7		8.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	21.3	21.3	8.3	8.3	31.3	31.2	103.2	103.3	7.6	7.6	8.9		7		-				-		-	
						3.1	-	-	21.3		8.3		31.2		103.3		7.6		8.8		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	17:26	7.7	Surface	1.0	0.2	67	21.4	21.4	8.2	8.2	31.9	31.9	106.1	106.1	7.8	7.8	7.8	8.4	8	7	88	92	815621	804246	<0.2	<0.2	1.0	1.2
						1.0	0.2	74	21.4		8.2		31.9		106.1		7.8		7.7		7		89				<0.2		1.2	
					Middle	3.9	0.2	67	21.2	21.2	8.2	8.2	32.1	32.1	105.1	105.1	-	7.8	7.7		6	7	92				<0.2		1.1	
						3.9	0.2	72	21.2		8.2		32.1		105.1		-		7.7		7		93				<0.2		1.2	
					Bottom	6.7	0.1	24	21.2	21.2	8.2	8.2	32.1	32.1	104.1	104.1	7.7	7.7	9.6		7		94				<0.2		1.2	
						6.7	0.1	23	21.2		8.2		32.1		104.0		7.7		9.7		7		95				<0.2		1.2	
C2	Sunny	Moderate	16:11	11.4	Surface	1.0	0.4	63	21.4	21.4	8.3	8.3	30.3	30.3	101.9	101.9	7.6	7.5	7.2	7.1	10	9	87	91	825674	806935	<0.2	<0.2	1.5	1.4
						1.0	0.5	66	21.4		8.3		30.3		101.9		7.6		7.2		10		88				<0.2		1.4	
					Middle	5.7	0.3	66	21.0	21.0	8.3	8.3	31.4	31.4	99.0	99.0	7.3		5.9		9		90				<0.2		1.4	
						5.7	0.3	70	21.0		8.3		31.4		99.0		7.3		6.0		9		91				<0.2		1.3	
					Bottom	10.4	0.2	58	21.1	21.1	8.3	8.3	31.5	31.5	98.7	98.7	7.3	7.3	8.0		7		95				<0.2		1.4	
						10.4	0.2	62	21.1		8.3		31.5		98.7		7.3		8.1		8		95				<0.2		1.5	
C3	Sunny	Moderate	17:55	9.7	Surface	1.0	0.0	13	21.4	21.4	8.3	8.3	31.6	31.6	104.3	104.2	7.7	7.7	4.2	4.7	5	4	87	91	822130	817796	<0.2	<0.2	1.2	1.2
						1.0	0.0	13	21.4		8.3		31.6		104.1		7.7		4.2		5		87				<0.2		1.3	
					Middle	4.9	0.1	318	21.1	21.1	8.3	8.3	31.9	31.9	98.9	98.9	-		4.1		4		91				<0.2		1.2	
						4.9	0.1	326	21.1		8.3		31.9		98.8		-		4.1		5		90				<0.2		1.2	
					Bottom	8.7	0.1	262	21.1	21.1	8.3	8.3	32.0	32.0	97.0	97.1	7.2	7.2	5.7		3		95				<0.2		1.2	
						8.7	0.1	274	21.1		8.3		32.0		97.1		7.2		5.8		4		94				<0.2		1.3	
IM1	Fine	Moderate	17:06	4.6	Surface	1.0	0.1	84	20.9	20.9	8.1	8.1	31.7	31.7	100.9	100.9	7.5	7.5	12.3	14.1	13	13	85	89	817967	807144	<0.2	<0.2	1.2	1.1
						1.0	0.1	89	20.9		8.1		31.7		100.9		7.5		12.4		13		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	100	20.9	20.9	8.1	8.1	31.7	31.7	100.2	100.2	7.4	7.4	15.7		13		92				<0.2		1.1	
						3.6	0.0	101	20.9		8.1		31.7		100.2		7.4		16.0		13		92				<0.2		1.0	
IM2	Fine	Moderate	16:59	6.7	Surface	1.0	0.2	77	20.9	20.9	8.1	8.1	31.7	31.7	101.9	101.9	7.6	7.6	9.7	14.9	6	8	84	89	818146	806163	<0.2	<0.2	1.0	1.1
						1.0	0.3	76	20.9		8.1		31.7		101.9		7.6		9.7		6		86				<0.2		1.1	
					Middle	3.4	0.1	71	20.9	20.9	8.1	8.1	31.8	31.8	101.0	101.0	7.5		16.3		8		88				<0.2		1.0	
						3.4	0.2	73	20.9		8.1		31.8		101.0		7.5		16.0		8		88				<0.2		1.2	
					Bottom	5.7	0.1	44	20.9	20.9	8.1	8.1	31.8	31.8	100.9	100.9	7.5	7.5	19.2		10		92				<0.2		1.2	
						5.7	0.1	46	20.9		8.1		31.8		100.9		7.5		18.7		10		93				<0.2		1.3	
IM3	Fine	Moderate	16:52	6.8	Surface	1.0	0.5	25	20.8	20.8	8.1	8.1	31.7	31.7	102.6	102.6	7.6	7.6	12.9	19.0	7	8	85	89	818789	805606	<0.2	<0.2	1.2	1.2
						1.0	0.5	25	20.8		8.1		31.7		102.5		7.6		12.8		7		86				<0.2		1.2	
					Middle	3.4	0.4	20	20.8	20.8	8.1	8.1	31.7	31.7	102.2	102.2	7.6		19.3		8		89				<0.2		1.2	
						3.4	0.5	21	20.8		8.1		31.7		102.1		7.6		19.4		8		89				<0.2		1.0	
					Bottom	5.8	0.3	11	20.8	20.8	8.1	8.1	31.8	31.8	101.6	101.6	7.6	7.6	24.9		8		92				<0.2		1.2	
						5.8	0.4	11	20.8		8.1		31.8		101.6		7.6		24.8		9		92				<0.2		1.1	
IM4	Fine	Moderate	16:42	7.0	Surface	1.0	0.6	33	21.1	21.1	8.1	8.1	31.2	31.3	103.0	103.0	7.6	7.7	8.4	11.9	6	5	85	89	819713	804619	<0.2	<0.2	1.3	1.2
						1.0	0.6	33	21.1		8.1		31.3		103.0		7.6		8.6		5		85				<0.2		1.2	
					Middle	3.5	0.4	12	20.9	20.9	8.1	8.1	31.5	31.4	103.0	103.0	7.7		12.5		5		88				<0.2		1.2	
						3.5	0.4	13	20.9		8.1		31.4		103.0		7.7		12.3		5		89				<0.2		1.2	
					Bottom	6.0	0.3	339	20.9	20.9	8.1	8.1	31.6	31.6	102.5	102.5	7.6	7.6	14.8		5		91				<0.2		1.0	
						6.0	0.3	352	20.9		8.1		31.6		102.4		7.6		15.1		5		93				<0.2		1.1	
IM5	Fine	Moderate	16:35	6.5	Surface	1.0	0.6	342	21.1	21.1	8.1	8.1	31.5	31.5	104.5	104.5	7.7	7.7	8.2	8.9	7	7	84	89	820746	804859	<0.2	<0.2	1.2	1.2
						1.0	0.7	358	21.1		8.1		31.5		104.4		7.7		8.2		7		85				<0.2		1.4	
					Middle	3.3	0.5	337	20.9	20.9	8.1	8.1	31.8	31.8	102.6	102.6	7.6		9.0		6		88				<0.2		1.2	
						3.3	0.6	340	20.9		8.1		31.8		102.6		7.6		9.0		6		89				<0.2		1.2	
					Bottom	5.5	0.4	347	20.9	20.9	8.1	8.1	31.8	31.8	102.5	102.5	7.6	7.6	9.5		6		93				<0.2		1.1	
						5.5	0.4	351	20.9		8.1		31.8		102.5		7.6		9.6		7		94				<0.2		1.3	
IM6	Fine	Moderate	16:22	6.2	Surface	1.0	0.4	88	21.1	21.1	8.1	8.1	31.5	31.5	103.5	103.5	7.7	7.7	8.1	9.2	6	6	84	88	821041	805818	<0.2	<0.2	1.0	1.1
						1.0	0.4	90	21.1		8.1		31.5		103.5		7.7		8.2		6		85				<0.2		1.2	
					Middle	3.1	0.6	83	20.9	20.9	8.1	8.1	31.8	31.8	102.1	102.1	7.6		9.2		6		88				<0.2		1.1	
						3.1	0.6	85	20.9		8.1		31.8		102.1		7.6		9.4		5		89				<0.2		1.1	
					Bottom	5.2	0.3	81	20.9	20.9	8.1	8.1	31.9	31.9	102.1	102.1	7.6	7.6	9.9		6		92				<0.2		1.0	
						5.2	0.3	88	20.9		8.1		31.9		102.0		7.6		10.3		6		92				<0.2		1.1	
IM7	Fine	Moderate	16:11	7.5	Surface	1.0	0.3	90	21.2	21.2	8.1	8.1	31.5	31.5	103.7	103.7	7.7	7.6	8.0	10.0	7	6	86	89	821351	806837	<0.2	<0.2	1.2	1.2
						1.0	0.3	94	21.2		8.1		31.5		103.6		7.7		7.9		6		86				<0.2		1.3	
					Middle	3.8	0.3	92	20.8	20.8	8.1	8.1	31.8	31.8	101.3	101.4	7.5		9.5		6		88				<0.2		1.2	
						3.8	0.4	98	20.8		8.1		31.8		101.4		7.5		9.5		6		89				<0.2		1.2	
					Bottom	6.5	0.3	98	20.8	20.8	8.1	8.1	31.9	31.9	101.2	101.2	7.5	7.5	12.6		6		91				<0.2		1.1	
						6.5	0.3	98	20.8		8.1		31.9		101.2		7.5		12.5		6		91				<0.2		1.1	
IM8	Sunny	Moderate	16:37	7.5	Surface	1.0	0.1	228	21.4	21.4	8.3	8.3	30.7	30.7	104.7	104.7	7.7	7.7	6.7	8.0	6	9	88	91	821824	808149	<0.2	<0.2	1.4	1.4
						1.0	0.2	230	21.4		8.3		30.7		104.7		7.7		6.8		6		87				<0.2		1.4	
					Middle	3.8	0.1	260	21.2	21.2	8.3	8.3	30.9	30.9	103.2	103.2	7.7		7.7		9		91				<0.2		1.4	
						3.8	0.1	272	21.2		8.3		30.9		103.2		7.7		7.7		10		91				<0.2		1.2	
					Bottom	6.5	0.1	294	21.2	21.2	8.3	8.3	31.0	31.0	103.2	103.2	7.7	7.7	9.4		11		95				<0.2		1.4	
						6.5	0.1	317	21.2		8.3		31.0		103.1		7.7		9.6		10		95				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 December 18 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	16:44	7.2	Surface	1.0	0.4	131	21.5	21.5	8.3	8.3	30.4	30.4	104.1	104.1	7.7	7.7	7.0	9.9	5	4	88	91	822106	808819	<0.2	<0.2	1.5	1.4
						1.0	0.4	131	21.4		8.3		30.4		104.0		7.7		7.1		4		87				<0.2		1.4	
					Middle	3.6	0.3	125	21.2	21.2	8.3	8.3	30.6	30.6	104.0	104.0	7.7		10.5		4		91				<0.2		1.3	
						3.6	0.4	136	21.2		8.3		30.6		104.0		7.7		10.1		5		91				<0.2		1.4	
					Bottom	6.2	0.3	118	21.2	21.2	8.3	8.3	30.7	30.7	103.5	103.5	7.7	7.7	12.4		4		95				<0.2		1.5	
						6.2	0.3	129	21.2		8.3		30.7		103.4		7.7		12.5		4		95				<0.2		1.5	
IM10	Sunny	Moderate	16:50	6.3	Surface	1.0	0.4	111	21.1	21.1	8.3	8.3	30.8	30.8	103.7	103.7	7.7	7.7	11.4	15.1	6	6	87	91	822369	809790	<0.2	<0.2	1.3	1.3
						1.0	0.4	112	21.1		8.3		30.8		103.7		7.7		11.2		5		87				<0.2		1.3	
					Middle	3.2	0.4	103	21.1	21.1	8.3	8.3	30.9	30.9	103.3	103.3	7.7		15.3		5		91				<0.2		1.3	
						3.2	0.4	108	21.1		8.3		30.9		103.3		7.7		15.3		5		91				<0.2		1.3	
					Bottom	5.3	0.2	98	21.1	21.1	8.3	8.3	30.9	30.9	102.8	102.8	7.6	7.6	18.5		8		95				<0.2		1.1	
						5.3	0.2	98	21.1		8.3		30.9		102.7		7.6		18.8		9		95				<0.2		1.3	
IM11	Sunny	Moderate	17:00	7.4	Surface	1.0	0.3	122	21.2	21.2	8.3	8.3	30.9	30.9	103.0	103.0	7.6	7.6	7.4	12.8	13	9	87	91	822051	811477	<0.2	<0.2	1.3	1.3
						1.0	0.4	129	21.2		8.3		30.9		103.0		7.6		7.5		12		87				<0.2		1.3	
					Middle	3.7	0.4	117	21.2	21.2	8.3	8.3	30.9	30.9	102.1	102.1	7.6		12.3		8		91				<0.2		1.2	
						3.7	0.4	124	21.2		8.3		30.9		102.0		7.6		12.1		8		91				<0.2		1.2	
					Bottom	6.4	0.3	114	21.2	21.2	8.3	8.3	30.9	30.9	101.9	102.0	7.6	7.6	17.6		6		95				<0.2		1.2	
						6.4	0.3	121	21.2		8.3		30.9		102.0		7.6		19.7		5		95				<0.2		1.3	
IM12	Sunny	Moderate	17:06	8.4	Surface	1.0	0.3	95	21.2	21.2	8.3	8.3	30.8	30.8	102.0	102.0	7.6	7.6	10.3	10.3	12	11	87	91	821458	812026	<0.2	<0.2	1.4	1.6
						1.0	0.3	101	21.2		8.3		30.8		102.0		7.6		10.6		11		88				<0.2		1.5	
					Middle	4.2	0.3	111	21.2	21.2	8.3	8.3	30.8	30.8	102.0	102.0	7.6		9.4		10		91				<0.2		1.7	
						4.2	0.3	118	21.2		8.3		30.8		102.0		7.6		9.3		10		91				<0.2		1.5	
					Bottom	7.4	0.2	90	21.2	21.2	8.3	8.3	30.8	30.8	101.3	101.3	7.5	7.5	11.2		10		95				<0.2		1.6	
						7.4	0.2	91	21.2		8.3		30.8		101.3		7.5		10.8		10		95				<0.2		1.6	
SR1A	Sunny	Moderate	17:25	5.3	Surface	1.0	-	-	21.6	21.6	8.3	8.3	31.1	31.1	105.6	105.6	7.8	7.8	6.4	6.4	5	6	-	-	820071	812581	-	-	-	-
						1.0	-	-	21.6		8.3		31.1		105.6		7.8		6.4		6		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	21.3	21.3	8.3	8.3	31.5	31.5	102.9	102.9	7.6	7.6	6.5		6		-				-		-	
						4.3	-	-	21.3		8.3		31.5		102.9		7.6		6.3		6		-				-		-	
SR2	Sunny	Moderate	17:37	4.7	Surface	1.0	0.3	90	21.3	21.3	8.3	8.3	30.7	30.7	101.7	101.7	7.5	7.5	7.1	6.5	6	7	88	89	821477	814143	<0.2	<0.2	1.3	1.2
						1.0	0.3	96	21.3		8.3		30.7		101.6		7.5		7.2		7		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	78	21.1	21.1	8.3	8.3	31.2	31.2	100.2	100.2	7.4	7.4	5.8		8		90				<0.2		1.2	
						3.7	0.1	79	21.1		8.3		31.2		100.1		7.4		5.8		8		91				<0.2		1.1	
SR3	Sunny	Moderate	16:32	8.6	Surface	1.0	0.1	241	21.5	21.5	8.3	8.3	30.7	30.7	104.9	104.9	7.7	7.7	6.6	8.5	9	8	-	-	822141	807585	-	-	-	-
						1.0	0.1	261	21.5		8.3		30.7		104.8		7.7		6.5		8		-				-		-	
					Middle	4.3	0.1	267	21.1	21.1	8.3	8.3	30.9	30.9	102.5	102.5	7.6		8.4		9		-				-		-	
						4.3	0.1	282	21.1		8.3		30.9		102.5		7.6		8.3		8		-				-		-	
					Bottom	7.6	0.1	262	21.1	21.1	8.3	8.3	31.0	31.0	102.3	102.3	7.6	7.6	10.6		6		-				-		-	
						7.6	0.1	283	21.1		8.3		31.0		102.3		7.6		10.5		6		-				-		-	
SR4A	Fine	Calm	17:48	8.0	Surface	1.0	0.3	243	21.0	21.0	8.1	8.1	31.5	31.5	100.5	100.5	7.5	7.5	8.8	8.4	9	8	-	-	817185	807790	-	-	-	-
						1.0	0.3	259	21.0		8.1		31.5		100.5		7.5		8.7		8		-				-		-	
					Middle	4.0	0.3	249	20.8	20.8	8.1	8.1	32.1	32.1	99.1	99.1	-		7.2		8		-				-		-	
						4.0	0.4	254	20.8		8.1		32.1		99.1		-		7.1		8		-				-		-	
					Bottom	7.0	0.2	240	20.8	20.8	8.1	8.1	32.1	32.1	98.8	98.8	7.3	7.3	9.5		8		-				-		-	
						7.0	0.3	258	20.8		8.1		32.1		98.8		7.3		9.4		8		-				-		-	
SR5A	Fine	Calm	18:10	4.8	Surface	1.0	0.2	287	21.1	21.1	8.1	8.1	32.5	32.5	103.2	103.1	7.6	7.6	5.2	6.1	3	4	-	-	816616	810705	-	-	-	-
						1.0	0.2	315	21.1		8.1		32.5		103.0		7.6		5.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	293	20.8	20.8	8.1	8.1	32.9	32.9	96.0	96.0	7.1	7.1	6.9		5		-				-		-	
						3.8	0.2	296	20.8		8.1		32.9		96.0		7.1		6.9		6		-				-		-	
SR6	Fine	Calm	18:37	3.9	Surface	1.0	0.2	254	21.0	21.0	8.1	8.1	32.9	32.9	97.6	97.6	7.2	7.2	4.8	4.8	7	6	-	-	817902	814678	-	-	-	-
						1.0	0.2	261	21.0		8.1		32.9		97.6		7.2		4.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	250	21.0	21.0	8.1	8.1	33.0	33.0	96.6	96.6	7.1	7.1	4.8		4		-				-		-	
						2.9	0.2	274	21.0		8.1		33.0		96.6		7.1		4.9		4		-				-		-	
SR7	Sunny	Moderate	18:22	14.7	Surface	1.0	0.1	206	21.4	21.4	8.3	8.3	32.0	32.0	99.8	99.8	7.3	7.3	3.6	3.8	3	3	-	-	823637	823754	-	-	-	-
						1.0	0.1	208	21.4		8.3		32.0		99.8		7.3		3.5		3		-				-		-	
					Middle	7.4	0.0	261	21.3	21.3	8.3	8.3	32.0	32.0	98.5	98.5	-		3.7		4		-				-		-	
						7.4	0.0	268	21.3		8.3		32.0		98.5		-		3.7		3		-				-		-	
					Bottom	13.7	0.1	215	21.3	21.3	8.3	8.3	32.1	32.1	97.4	97.4	7.2	7.2	4.0		3		-				-		-	
						13.7	0.1	217	21.3		8.3		32.1		97.4		7.2		4.0		3		-				-		-	
SR8	Sunny	Moderate	17:17	4.5	Surface	1.0	-	-	21.7	21.7	8.3	8.3	31.0	31.0	107.3	107.3	7.9	7.9	6.2	6.2	10	9	-	-	820482	811647	-	-	-	-
						1.0	-	-	21.7		8.3		31.1		107.3		7.9		6.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	21.5	21.5	8.4	8.4	31.2	31.2	106.2	106.2	7.8	7.8	6.3		8		-				-		-	
						3.5	-	-	21.5		8.4		31.2		106.2		7.8		6.3		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	14:25	9.7	Surface	1.0	0.4	215	20.5	20.5	8.1	8.1	32.0	32.0	94.2	94.3	7.0	7.1	7.5	8.5	21	19	83	87	815642	804238	<0.2	<0.2	1.4	1.2
						1.0	0.5	223	20.5		8.1		32.0		94.3		7.0		7.4		20		83				<0.2		1.2	
					Middle	4.9	0.3	170	20.5	20.5	8.1	8.1	32.0	32.0	94.8	95.0	7.1		8.5		17		87				<0.2		1.1	
						4.9	0.3	178	20.5		8.1		32.0		95.1		7.1		8.6		17		87				<0.2		1.1	
					Bottom	8.7	0.3	177	20.5	20.5	8.1	8.1	32.0	32.0	96.0	96.3	7.2	7.2	9.5		19		92				<0.2		1.2	
						8.7	0.3	182	20.5		8.1		32.0		96.5		7.2		9.6		18		92				<0.2		1.0	
C2	Fine	Moderate	13:18	8.9	Surface	1.0	0.3	324	20.9	20.9	8.1	8.1	30.7	30.7	89.0	89.0	6.6	6.6	11.6	14.3	8	9	84	87	825693	806966	<0.2	<0.2	0.9	0.9
						1.0	0.4	329	20.9		8.1		30.7		89.0		6.6		11.8		7		84				<0.2		1.0	
					Middle	4.5	0.4	234	21.0	21.0	8.1	8.1	30.9	30.9	89.1	89.2	-		12.1		9		88				<0.2		1.0	
						4.5	0.4	227	21.0		8.1		30.9		89.2		-		12.1		9		87				<0.2		0.9	
					Bottom	7.9	0.3	225	21.0	21.0	8.1	8.1	31.0	31.0	89.1	89.1	6.6	6.6	19.2		11		87				<0.2		1.0	
						7.9	0.3	225	21.0		8.1		31.0		89.0		6.6		19.2		10		91				<0.2		0.8	
C3	Fine	Moderate	14:58	12.4	Surface	1.0	0.2	39	21.1	21.1	8.1	8.1	32.4	32.4	87.8	87.9	6.5	6.5	11.5	12.1	8	9	83	87	822130	817802	<0.2	<0.2	0.9	0.9
						1.0	0.2	40	21.1		8.1		32.4		87.9		6.5		11.5		8		83				<0.2		0.9	
					Middle	6.2	0.2	40	21.1	21.1	8.1	8.1	32.4	32.4	88.3	88.4	6.5		12.3		9		88				<0.2		0.9	
						6.2	0.2	49	21.1		8.1		32.4		88.5		6.5		12.3		8		88				<0.2		0.9	
					Bottom	11.4	0.1	55	21.1	21.1	8.1	8.1	32.4	32.4	89.0	89.1	6.6	6.6	12.6		9		91				<0.2		0.9	
						11.4	0.1	59	21.1		8.1		32.4		89.2		6.6		12.5		10		91				<0.2		1.0	
IM1	Fine	Moderate	14:02	4.8	Surface	1.0	0.2	166	20.5	20.5	8.1	8.1	32.1	32.1	95.7	95.7	7.1	7.1	9.5	10.4	19	20	84	88	817949	807115	<0.2	<0.2	1.2	1.2
						1.0	0.2	174	20.5		8.1		32.1		95.7		7.1		9.6		19		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	189	20.5	20.5	8.1	8.1	32.1	32.1	96.8	97.1	7.2	7.3	11.2		20		90				<0.2		1.1	
						3.8	0.2	199	20.5		8.1		32.1		97.3		7.3		11.2		20		91				<0.2		1.2	
IM2	Fine	Moderate	13:57	7.5	Surface	1.0	0.4	210	20.5	20.5	8.1	8.1	32.1	32.1	95.0	95.0	7.1	7.1	13.1	15.0	14	16	83	87	818182	806167	<0.2	<0.2	1.1	1.2
						1.0	0.4	212	20.5		8.1		32.1		95.0		7.1		13.1		16		84				<0.2		1.3	
					Middle	3.8	0.3	215	20.5	20.5	8.1	8.1	32.1	32.1	95.2	95.3	7.1		14.9		17		87				<0.2		1.2	
						3.8	0.3	221	20.5		8.1		32.1		95.4		7.1		15.1		17		87				<0.2		1.1	
					Bottom	6.5	0.2	209	20.5	20.5	8.1	8.1	32.1	32.1	96.0	96.2	7.2	7.2	16.9		17		89				<0.2		1.2	
						6.5	0.2	225	20.5		8.1		32.1		96.3		7.2		16.9		16		91				<0.2		1.1	
IM3	Fine	Moderate	13:51	7.1	Surface	1.0	0.5	214	20.6	20.6	8.1	8.1	32.1	32.1	94.2	94.2	7.0	7.0	16.7	18.9	23	21	83	88	818797	805587	<0.2	<0.2	1.4	1.3
						1.0	0.6	231	20.6		8.1		32.1		94.2		7.0		16.7		22		84				<0.2		1.2	
					Middle	3.6	0.2	198	20.6	20.6	8.1	8.1	32.1	32.1	94.2	94.2	7.0		19.7		21		87				<0.2		1.4	
						3.6	0.3	216	20.6		8.1		32.1		94.2		7.0		19.7		22		88				<0.2		1.2	
					Bottom	6.1	0.5	172	20.6	20.6	8.1	8.1	32.1	32.1	94.3	94.3	7.0	7.0	20.3		19		92				<0.2		1.1	
						6.1	0.5	180	20.6		8.1		32.1		94.3		7.0		20.3		18		92				<0.2		1.2	
IM4	Fine	Moderate	13:39	8.2	Surface	1.0	0.6	194	20.5	20.5	8.1	8.1	32.1	32.1	94.5	94.5	7.0	7.1	18.2	19.4	13	16	83	88	819727	804601	<0.2	<0.2	1.1	1.1
						1.0	0.6	206	20.5		8.1		32.1		94.5		7.0		18.2		13		83				<0.2		1.1	
					Middle	4.1	0.5	188	20.5	20.5	8.1	8.1	32.1	32.1	94.7	94.8	7.1		19.3		16		88				<0.2		1.1	
						4.1	0.5	193	20.5		8.1		32.1		94.8		7.1		19.3		17		88				<0.2		1.1	
					Bottom	7.2	0.3	153	20.5	20.5	8.1	8.1	32.1	32.1	95.1	95.3	7.1	7.1	20.7		18		92				<0.2		1.2	
						7.2	0.3	160	20.5		8.1		32.1		95.4		7.1		20.8		17		92				<0.2		1.1	
IM5	Fine	Moderate	13:31	7.6	Surface	1.0	0.7	187	20.6	20.6	8.1	8.1	31.5	31.5	94.1	94.2	7.0	7.1	19.4	19.2	13	13	84	88	820719	804882	<0.2	<0.2	1.3	1.2
						1.0	0.7	193	20.6		8.1		31.5		94.2		7.0		19.4		12		84				<0.2		1.1	
					Middle	3.8	0.6	190	20.5	20.5	8.1	8.1	31.7	31.7	94.7	94.8	7.1		18.6		12		88				<0.2		1.2	
						3.8	0.6	199	20.5		8.1		31.7		94.9		7.1		18.5		12		88				<0.2		1.2	
					Bottom	6.6	0.4	172	20.5	20.5	8.1	8.1	31.8	31.8	95.8	96.6	7.2	7.3	19.7		14		91				<0.2		1.2	
						6.6	0.4	174	20.5		8.1		31.8		97.3		7.3		19.7		15		92				<0.2		1.3	
IM6	Fine	Moderate	13:26	7.4	Surface	1.0	0.5	254	20.6	20.6	8.1	8.1	31.6	31.6	94.6	94.6	7.1	7.1	17.6	19.1	13	14	83	87	821041	805832	<0.2	<0.2	1.3	1.2
						1.0	0.5	258	20.6		8.1		31.6		94.6		7.1		17.6		14		83				<0.2		1.1	
					Middle	3.7	0.4	233	20.5	20.5	8.1	8.1	31.8	31.9	95.0	95.1	7.1		19.1		15		87				<0.2		1.3	
						3.7	0.5	254	20.5		8.1		31.9		95.1		7.1		19.0		14		87				<0.2		1.3	
					Bottom	6.4	0.4	218	20.5	20.5	8.1	8.1	31.9	31.9	95.7	95.9	7.1	7.2	20.7		14		91				<0.2		1.1	
						6.4	0.4	222	20.5		8.1		31.9		96.1		7.2		20.8		14		92				<0.2		1.2	
IM7	Fine	Moderate	13:22	8.2	Surface	1.0	0.5	211	20.6	20.6	8.1	8.1	31.1	31.1	93.6	93.6	7.0	7.0	12.8	16.7	16	14	84	88	821355	806855	<0.2	<0.2	1.2	1.2
						1.0	0.6	218	20.6		8.1		31.2		93.6		7.0		12.8		15		84				<0.2		1.4	
					Middle	4.1	0.3	237	20.6	20.6	8.1	8.1	31.5	31.5	94.3	94.4	7.0		18.0		14		87				<0.2		1.1	
						4.1	0.4	251	20.6		8.1		31.5		94.4		7.1		18.1		14		88				<0.2		1.2	
					Bottom	7.2	0.2	193	20.6	20.6	8.1	8.1	31.5	31.5	95.2	95.4	7.1	7.1	19.1		10		91				<0.2		1.3	
						7.2	0.2	196	20.6		8.1		31.5		95.5		7.1		19.2		12		91				<0.2		1.1	
IM8	Fine	Moderate	13:44	7.9	Surface	1.0	0.3	47	20.9	20.9	8.1	8.1	31.3	31.3	90.9	91.0	6.8	6.8	11.5	13.7	9	10	83	87	821850	808160	<0.2	<0.2	1.0	1.1
						1.0	0.3	47	20.9		8.1		31.3		91.0		6.8		11.5		8		84				<0.2		1.1	
					Middle	4.0	0.3	62	20.9	20.9	8.1	8.1	31.6	31.6	91.3	91.4	6.8		13.9		11		85				<0.2		1.1	
						4.0	0.3	63	20.8		8.1		31.6		91.4		6.8		13.8		11		85				<0.2		1.0	
					Bottom	6.9	0.3	19	20.8	20.9	8.1	8.1	31.6	31.6	92.1	92.3	6.8	6.9	15.8		10		91				<0.2		1.0	
						6.9	0.3	19	20.9		8.1		31.6		92.4		6.9		15.9		12		91				<0.2		1.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 December 18 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	13:49	7.5	Surface	1.0	0.3	345	20.9	20.9	8.1	8.1	31.2	31.2	90.5	90.6	6.7	6.8	11.3	15.4	7	7	84	88	822090	808808	<0.2	<0.2	1.0	1.0
						1.0	0.3	317	20.9		8.1		31.3		90.6		6.7		11.3		7		84				<0.2		1.0	
					Middle	3.8	0.3	348	20.9	20.9	8.1	8.1	31.4	31.4	91.1	91.2	6.8		15.7		7		87				<0.2		1.1	
						3.8	0.4	351	20.9		8.1		31.4		91.2		6.8		15.6		7		88				<0.2		1.1	
					Bottom	6.5	0.2	19	20.8	20.8	8.1	8.1	31.5	31.5	92.1	92.6	6.9	6.9	19.1		7		91				<0.2		1.0	
						6.5	0.3	19	20.8		8.1		31.5		93.1		6.9		19.1		8		91				<0.2		1.0	
IM10	Fine	Moderate	13:57	8.3	Surface	1.0	0.3	24	20.8	20.8	8.1	8.1	31.8	31.8	90.9	90.9	6.8	6.8	15.4	16.9	11	10	83	88	822408	809791	<0.2	<0.2	1.2	1.0
						1.0	0.3	24	20.8		8.1		31.8		90.9		6.8		15.5		11		84				<0.2		1.1	
					Middle	4.2	0.3	33	20.8	20.8	8.1	8.1	31.8	31.8	91.0	91.1	6.8		18.8		11		88				<0.2		0.9	
						4.2	0.3	34	20.8		8.1		31.8		91.1		6.8		18.8		10		89				<0.2		0.9	
					Bottom	7.3	0.3	100	20.8	20.8	8.1	8.1	31.8	31.8	91.5	91.6	6.8	6.8	16.5		8		91				<0.2		0.9	
						7.3	0.3	103	20.8		8.1		31.8		91.7		6.8		16.6		7		91				<0.2		1.0	
IM11	Fine	Moderate	14:08	9.2	Surface	1.0	0.3	284	20.9	20.9	8.1	8.1	31.8	31.8	90.5	90.5	6.7	6.7	17.3	19.3	7	8	83	88	822044	811442	<0.2	<0.2	0.9	0.9
						1.0	0.3	290	20.9		8.1		31.8		90.5		6.7		17.2		8		83				<0.2		0.8	
					Middle	4.6	0.3	82	20.9	20.9	8.1	8.1	31.8	31.8	90.5	90.6	6.7		19.8		8		89				<0.2		0.8	
						4.6	0.3	83	20.9		8.1		31.8		90.6		6.7		19.9		8		89				<0.2		0.8	
					Bottom	8.2	0.2	80	20.9	20.9	8.1	8.1	31.8	31.8	90.7	90.7	6.7	6.7	20.8		9		91				<0.2		0.9	
						8.2	0.2	86	20.9		8.1		31.8		90.7		6.7		20.9		10		91				<0.2		0.9	
IM12	Fine	Moderate	14:15	9.4	Surface	1.0	0.3	264	20.8	20.8	8.1	8.1	31.8	31.8	91.4	91.4	6.8	6.8	14.2	15.3	7	7	84	88	821450	812036	<0.2	<0.2	1.1	1.0
						1.0	0.3	289	20.8		8.1		31.8		91.4		6.8		14.2		7		84				<0.2		0.9	
					Middle	4.7	0.4	64	20.8	20.8	8.1	8.1	31.8	31.8	91.5	91.6	6.8		15.5		8		88				<0.2		1.0	
						4.7	0.4	66	20.8		8.1		31.8		91.6		6.8		15.5		7		88				<0.2		1.1	
					Bottom	8.4	0.3	66	20.8	20.8	8.1	8.1	31.8	31.8	92.2	92.4	6.8	6.9	16.2		6		92				<0.2		0.8	
						8.4	0.3	65	20.8		8.1		31.8		92.5		6.9		16.2		6		92				<0.2		0.9	
SR1A	Fine	Moderate	14:25	4.2	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.6	31.6	90.4	90.5	6.7	6.7	10.0	10.2	7	7	-	-	820073	812585	-	-	-	-
						1.0	-	-	20.8		8.1		31.6		90.5		6.7		10.1		7		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	20.8	20.8	8.1	8.1	31.6	31.6	91.0	91.2	6.8	6.8	10.2		8		-				-		-	
						3.2	-	-	20.8		8.1		31.6		91.3		6.8		10.2		7		-				-		-	
SR2	Fine	Moderate	14:36	5.9	Surface	1.0	0.4	308	21.0	21.0	8.1	8.1	31.8	31.8	90.5	90.6	6.7	6.7	12.3	13.9	8	9	83	84	821470	814151	<0.2	<0.2	0.9	0.9
						1.0	0.5	317	21.0		8.1		31.8		90.6		6.7		12.3		8		83				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.3	96	21.0	21.0	8.1	8.1	31.8	31.8	91.2	91.4	6.8	6.8	15.5		11		85				<0.2		1.0	
						4.9	0.3	114	21.0		8.1		31.8		91.6		6.8		15.5		10		85				<0.2		0.9	
SR3	Fine	Moderate	13:39	7.5	Surface	1.0	0.1	245	20.9	20.9	8.1	8.1	30.8	30.9	90.0	90.0	6.7	6.7	13.2	16.3	9	9	-	-	822150	807554	-	-	-	-
						1.0	0.1	248	20.9		8.1		30.9		90.0		6.7		13.3		10		-				-		-	
					Middle	3.8	0.2	134	20.9	20.9	8.1	8.1	31.2	31.2	90.6	90.7	-		16.9		8		-				-		-	
						3.8	0.2	134	20.9		8.1		31.2		90.7		-		16.8		8		-				-		-	
					Bottom	6.5	0.2	207	20.9	20.9	8.1	8.1	31.2	31.2	91.4	91.6	6.8	6.8	18.9		8		-				-		-	
						6.5	0.2	207	20.9		8.1		31.2		91.8		6.8		18.9		8		-				-		-	
SR4A	Fine	Moderate	14:35	8.6	Surface	1.0	0.3	87	20.7	20.7	8.1	8.1	32.1	32.1	94.3	94.4	7.0	7.1	14.6	16.0	18	17	-	-	817188	807826	-	-	-	-
						1.0	0.3	94	20.7		8.1		32.1		94.4		7.0		14.7		18		-				-		-	
					Middle	4.3	0.2	80	20.7	20.7	8.1	8.1	32.1	32.1	95.1	95.3	7.1		16.1		18		-				-		-	
						4.3	0.2	85	20.7		8.1		32.1		95.4		7.1		15.2		16		-				-		-	
					Bottom	7.6	0.2	89	20.7	20.7	8.1	8.1	32.1	32.1	96.4	96.9	7.2	7.2	17.6		16		-				-		-	
						7.6	0.2	91	20.7		8.1		32.1		97.3		7.2		17.6		16		-				-		-	
SR5A	Fine	Moderate	14:48	4.7	Surface	1.0	0.1	22	20.7	20.7	8.1	8.1	32.7	32.7	91.4	91.5	6.8	6.8	9.9	10.6	17	17	-	-	816583	810719	-	-	-	-
						1.0	0.1	23	20.7		8.1		32.7		91.5		6.8		9.8		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	113	20.7	20.7	8.1	8.1	32.7	32.7	92.0	92.1	6.8	6.8	11.4		17		-				-		-	
						3.7	0.1	122	20.7		8.1		32.7		92.2		6.8		11.4		17		-				-		-	
SR6	Fine	Moderate	14:52	3.6	Surface	1.0	0.1	280	20.8	20.8	8.1	8.1	32.9	32.9	89.9	89.9	6.6	6.6	9.3	10.0	18	18	-	-	817888	814640	-	-	-	-
						1.0	0.1	305	20.8		8.1		32.9		89.9		6.6		9.2		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	96	20.8	20.8	8.1	8.1	32.9	32.9	89.9	90.0	6.6	6.6	10.8		18		-				-		-	
						2.6	0.1	98	20.8		8.1		32.9		90.0		6.6		10.8		17		-				-		-	
SR7	Fine	Moderate	15:26	16.3	Surface	1.0	0.2	4	21.1	21.1	8.1	8.1	32.6	32.6	86.4	86.4	6.4	6.4	9.1	10.2	13	12	-	-	823655	823749	-	-	-	-
						1.0	0.2	4	21.1		8.1		32.6		86.4		6.4		9.0		12		-				-		-	
					Middle	8.2	0.1	78	21.1	21.1	8.1	8.1	32.6	32.6	86.5	86.5	-		10.7		12		-				-		-	
						8.2	0.1	82	21.1		8.1		32.6		86.5		-		10.7		12		-				-		-	
					Bottom	15.3	0.2	70	21.1	21.1	8.1	8.1	32.6	32.6	86.6	86.9	6.4	6.4	10.7		11		-				-		-	
						15.3	0.2	75	21.1		8.1		32.6		87.2		6.4		10.8		12		-				-		-	
SR8	Fine	Moderate	14:20	4.6	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.8	31.8	91.9	91.9	6.8	6.8	10.8	11.7	7	8	-	-	820515	811643	-	-	-	-
						1.0	-	-	20.8		8.1		31.8		91.9		6.8		10.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	20.8	20.8	8.1	8.1	31.8	31.8	92.8	93.0	6.9	6.9	12.6		9		-				-		-	
						3.6	-	-	20.8		8.1		31.8		93.2		6.9		12.6		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	09:45	9.2	Surface	1.0	0.2	11	20.5	20.5	8.1	8.1	32.0	32.0	94.3	94.3	7.0	7.0	7.9	8.6	11	10	83	87	815604	804242	<0.2	<0.2	1.2	1.3
						1.0	0.2	11	20.5		8.1		32.0		94.3		7.0		7.9		10		83				<0.2		1.3	
					Middle	4.6	0.1	98	20.5	20.5	8.1	8.1	32.0	32.0	94.5	94.6	-		8.3		9		88				<0.2		1.4	
						4.6	0.1	105	20.5		8.1		32.0		94.6		-		8.3		9		88				<0.2		1.3	
					Bottom	8.2	0.0	61	20.5	20.5	8.1	8.1	32.0	32.0	95.1	95.3	7.1	7.1	9.6		9		91				<0.2		1.3	
						8.2	0.0	63	20.5		8.1		32.0		95.4		7.1		9.6		9		91				<0.2		1.2	
C2	Fine	Moderate	10:01	8.4	Surface	1.0	0.3	333	21.0	21.0	8.1	8.1	30.8	30.8	89.1	89.1	6.6	6.7	13.1	14.2	11	10	83	88	825691	806955	<0.2	<0.2	1.0	1.0
						1.0	0.3	353	21.0		8.1		30.8		89.1		6.6		13.3		12		84				<0.2		1.1	
					Middle	4.2	0.3	347	21.0	21.0	8.1	8.1	30.9	31.0	89.3	89.4	6.7		13.8		9		88				<0.2		1.0	
						4.2	0.3	355	21.0		8.1		31.0		89.4		6.7		13.8		9		89				<0.2		0.9	
					Bottom	7.4	0.4	2	21.0	21.0	8.1	8.1	31.1	31.1	89.5	89.5	6.7	6.7	15.5		10		92				<0.2		0.9	
						7.4	0.4	2	21.0		8.1		31.1		89.5		6.7		15.5		10		92				<0.2		1.0	
C3	Fine	Moderate	08:30	11.6	Surface	1.0	0.3	272	21.0	21.0	8.1	8.1	31.8	31.8	89.6	89.6	6.6	6.6	10.0	15.2	10	10	83	88	822103	817780	<0.2	<0.2	0.8	1.0
						1.0	0.3	288	21.0		8.1		31.8		89.6		6.6		10.4		10		83				<0.2		1.0	
					Middle	5.8	0.3	270	21.0	21.0	8.1	8.1	31.8	31.8	89.7	89.7	6.6		16.6		11		87				<0.2		1.0	
						5.8	0.3	296	21.0		8.1		31.8		89.7		6.6		16.6		11		88				<0.2		0.9	
					Bottom	10.6	0.3	283	21.0	21.0	8.1	8.1	31.8	31.8	89.8	89.8	6.6	6.6	18.8		10		92				<0.2		0.9	
						10.6	0.4	295	21.0		8.1		31.8		89.8		6.6		18.9		9		92				<0.2		1.1	
IM1	Fine	Moderate	09:54	5.2	Surface	1.0	0.0	325	20.5	20.5	8.1	8.1	32.0	32.0	94.8	94.8	7.1	7.1	15.2	17.6	12	13	83	86	817942	807118	<0.2	<0.2	1.2	1.2
						1.0	0.0	347	20.5		8.1		32.0		94.8		7.1		15.3		14		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	77	20.5	20.5	8.1	8.1	32.0	32.0	95.0	95.1	7.1	7.1	20.0		13		87				<0.2		1.2	
						4.2	0.1	78	20.5		8.1		32.0		95.1		7.1		20.0		14		88				<0.2		1.2	
IM2	Fine	Moderate	09:59	6.8	Surface	1.0	0.3	62	20.5	20.5	8.1	8.1	32.2	32.2	95.1	95.1	7.1	7.1	15.2	17.7	13	12	83	88	818153	806181	<0.2	<0.2	1.2	1.3
						1.0	0.3	61	20.5		8.1		32.2		95.1		7.1		15.3		13		84				<0.2		1.3	
					Middle	3.4	0.2	68	20.5	20.5	8.1	8.1	32.2	32.2	95.0	95.0	7.1		18.6		13		88				<0.2		1.2	
						3.4	0.2	71	20.5		8.1		32.2		95.0		7.1		18.5		12		88				<0.2		1.2	
					Bottom	5.8	0.1	102	20.5	20.5	8.1	8.1	32.2	32.2	95.0	95.0	7.1	7.1	19.2		12		92				<0.2		1.3	
						5.8	0.1	109	20.5		8.1		32.2		95.0		7.1		19.3		11		92				<0.2		1.3	
IM3	Fine	Moderate	10:08	7.3	Surface	1.0	0.3	60	20.5	20.5	8.1	8.1	32.1	32.1	94.2	94.2	7.0	7.0	15.6	17.1	11	12	84	88	818769	805570	<0.2	<0.2	1.2	1.2
						1.0	0.3	62	20.5		8.1		32.1		94.2		7.0		15.5		12		84				<0.2		1.4	
					Middle	3.7	0.3	61	20.5	20.5	8.1	8.1	32.1	32.1	94.4	94.5	7.0		17.7		12		88				<0.2		1.1	
						3.7	0.3	61	20.5		8.1		32.1		94.5		7.0		17.7		12		88				<0.2		1.2	
					Bottom	6.3	0.2	44	20.5	20.5	8.1	8.1	32.1	32.1	95.3	95.5	7.1	7.1	18.1		12		91				<0.2		1.2	
						6.3	0.2	50	20.5		8.1		32.1		95.7		7.1		18.1		12		92				<0.2		1.3	
IM4	Fine	Moderate	10:17	7.5	Surface	1.0	0.6	39	20.5	20.5	8.1	8.1	31.9	31.9	94.4	94.4	7.0	7.0	16.2	18.0	18	18	83	88	819733	804597	<0.2	<0.2	1.5	1.3
						1.0	0.7	38	20.5		8.1		31.9		94.4		7.0		16.2		19		84				<0.2		1.3	
					Middle	3.8	0.5	67	20.5	20.5	8.1	8.1	31.9	31.9	94.4	94.4	7.0		18.4		18		87				<0.2		1.3	
						3.8	0.5	69	20.5		8.1		31.9		94.4		7.0		18.3		18		88				<0.2		1.2	
					Bottom	6.5	0.4	120	20.5	20.5	8.1	8.1	31.9	31.9	94.7	94.8	7.1	7.1	19.3		16		91				<0.2		1.2	
						6.5	0.5	135	20.5		8.1		31.9		94.9		7.1		19.4		16		92				<0.2		1.2	
IM5	Fine	Moderate	10:23	8.4	Surface	1.0	0.7	32	20.6	20.6	8.1	8.1	31.7	31.7	94.0	94.0	7.0	7.0	17.7	19.2	13	13	83	87	820740	804855	<0.2	<0.2	1.3	1.3
						1.0	0.7	33	20.6		8.1		31.7		94.0		7.0		17.6		12		83				<0.2		1.3	
					Middle	4.2	0.6	71	20.6	20.6	8.1	8.1	31.7	31.7	94.1	94.1	7.0		19.6		14		87				<0.2		1.3	
						4.2	0.6	74	20.6		8.1		31.7		94.1		7.0		19.7		14		87				<0.2		1.4	
					Bottom	7.4	0.4	90	20.6	20.6	8.1	8.1	31.7	31.7	94.5	94.7	7.1	7.1	20.2		12		91				<0.2		1.3	
						7.4	0.5	100	20.6		8.1		31.7		94.8		7.1		20.3		13		92				<0.2		1.2	
IM6	Fine	Moderate	10:28	8.6	Surface	1.0	0.6	70	20.6	20.6	8.1	8.1	31.3	31.3	93.7	93.7	7.0	7.0	15.3	17.6	13	13	83	88	821073	805834	<0.2	<0.2	1.2	1.2
						1.0	0.6	76	20.6		8.1		31.3		93.7		7.0		15.3		12		83				<0.2		1.2	
					Middle	4.3	0.4	66	20.6	20.6	8.1	8.1	31.4	31.4	93.7	93.7	7.0		17.7		13		88				<0.2		1.3	
						4.3	0.4	65	20.6		8.1		31.4		93.7		7.0		17.7		13		88				<0.2		1.3	
					Bottom	7.6	0.4	95	20.6	20.6	8.1	8.1	31.4	31.4	93.8	93.8	7.0	7.0	19.8		14		91				<0.2		1.1	
						7.6	0.4	93	20.6		8.1		31.4		93.8		7.0		19.9		14		92				<0.2		1.0	
IM7	Fine	Moderate	10:43	7.9	Surface	1.0	0.6	54	20.6	20.6	8.1	8.1	31.1	31.1	93.3	93.3	7.0	7.0	12.5	15.3	15	16	83	87	821361	806849	<0.2	<0.2	1.2	1.2
						1.0	0.6	58	20.6		8.1		31.1		93.3		7.0		12.6		16		83				<0.2		1.1	
					Middle	4.0	0.5	62	20.6	20.6	8.1	8.1	31.2	31.2	93.8	93.9	7.0		14.9		15		87				<0.2		1.0	
						4.0	0.6	66	20.6		8.1		31.2		93.9		7.0		14.9		15		87				<0.2		1.1	
					Bottom	6.9	0.4	102	20.6	20.6	8.1	8.1	31.3	31.3	94.3	94.4	7.1	7.1	18.6		18		91				<0.2		1.3	
						6.9	0.4	102	20.6		8.1		31.3		94.4		7.1		18.7		18		92				<0.2		1.2	
IM8	Fine	Moderate	09:43	7.4	Surface	1.0	0.2	285	20.9	20.9	8.1	8.1	31.0	31.1	90.1	90.1	6.7	6.7	15.4	17.6	11	10	83	87	821827	808122	<0.2	<0.2	0.9	1.0
						1.0	0.2	299	20.9		8.1		31.1		90.1		6.7		15.4		12		83				<0.2		1.1	
					Middle	3.7	0.2	306	20.9	20.9	8.1	8.1	31.2	31.2	90.2	90.3	6.7		17.9		11		88				<0.2		1.0	
						3.7	0.3	315	20.9		8.1		31.2		90.3		6.7		17.8		10		88				<0.2		1.1	
					Bottom	6.4	0.3	301	20.9	20.9	8.1	8.1	31.2	31.2	90.4	90.4	6.7	6.7	19.5		7		91				<0.2		0.9	
						6.4	0.3	307	20.9		8.1		31.2		90.4		6.7		19.4		8		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 25 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	09:38	7.5	Surface	1.0	0.4	298	20.9	20.9	8.1	8.1	31.4	31.4	90.3	90.3	6.7	6.7	16.4	18.0	9	8	83	88	822075	808812	<0.2	<0.2	0.8	0.9
						1.0	0.4	299	20.9		8.1		31.4		90.3		6.7		16.3		9		83				<0.2		1.0	
					Middle	3.8	0.5	300	20.9	20.9	8.1	8.1	31.4	31.4	90.4	90.5	6.7		18.0		8		88				<0.2		0.9	
						3.8	0.5	321	20.9		8.1		31.4		90.5		6.7		18.0		7		88				<0.2		0.9	
					Bottom	6.5	0.4	319	20.9	20.9	8.1	8.1	31.4	31.4	90.8	91.0	6.8	6.8	19.7		7		91				<0.2		1.0	
						6.5	0.5	326	20.9		8.1		31.4		91.1		6.8		19.7		8		92				<0.2		0.8	
IM10	Fine	Moderate	09:32	8.5	Surface	1.0	0.5	306	20.9	20.9	8.1	8.1	31.6	31.6	90.7	90.7	6.7	6.7	13.4	17.6	13	9	84	88	822399	809776	<0.2	<0.2	0.9	0.9
						1.0	0.5	306	20.9		8.1		31.6		90.7		6.7		13.4		12		84				<0.2		0.8	
					Middle	4.3	0.5	305	20.9	20.9	8.1	8.1	31.6	31.6	90.7	90.7	6.7		19.1		8		88				<0.2		1.0	
						4.3	0.5	309	20.9		8.1		31.6		90.7		6.7		19.1		7		88				<0.2		0.9	
					Bottom	7.5	0.4	307	20.9	20.9	8.1	8.1	31.6	31.6	91.0	91.1	6.8	6.8	20.2		8		91				<0.2		1.0	
						7.5	0.4	320	20.9		8.1		31.6		91.1		6.8		20.3		8		92				<0.2		1.0	
IM11	Fine	Moderate	09:23	7.9	Surface	1.0	0.5	268	20.8	20.9	8.1	8.1	31.8	31.8	90.7	90.7	6.7	6.7	16.0	17.7	10	10	83	88	822042	811457	<0.2	<0.2	0.9	0.9
						1.0	0.5	291	20.9		8.1		31.8		90.7		6.7		15.9		9		83				<0.2		1.0	
					Middle	4.0	0.3	299	20.9	20.9	8.1	8.1	31.8	31.8	90.8	90.9	6.7		18.4		10		88				<0.2		1.0	
						4.0	0.3	304	20.9		8.1		31.8		90.9		6.7		18.3		11		88				<0.2		1.0	
					Bottom	6.9	0.3	286	20.8	20.8	8.1	8.1	31.8	31.8	91.7	91.9	6.8	6.8	18.7		11		92				<0.2		0.8	
						6.9	0.3	306	20.8		8.1		31.8		92.0		6.8		18.7		11		92				<0.2		0.9	
IM12	Fine	Moderate	09:17	8.2	Surface	1.0	0.4	264	20.8	20.8	8.1	8.1	31.9	31.9	91.4	91.4	6.8	6.8	18.6	20.0	10	10	84	88	821468	812048	<0.2	<0.2	1.0	1.0
						1.0	0.4	265	20.8		8.1		31.9		91.4		6.8		18.6		10		84				<0.2		1.0	
					Middle	4.1	0.4	271	20.8	20.8	8.1	8.1	31.9	31.9	91.2	91.2	6.8		20.4		10		88				<0.2		0.9	
						4.1	0.4	278	20.8		8.1		31.9		91.2		6.8		20.3		10		88				<0.2		1.0	
					Bottom	7.2	0.4	278	20.8	20.8	8.1	8.1	31.9	31.9	91.0	91.0	6.8	6.8	20.9		9		91				<0.2			
						7.2	0.4	287	20.8		8.1		31.9		91.0		6.8		21.0		9		92				<0.2		1.0	
SR1A	Fine	Moderate	09:00	5.1	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.7	31.7	90.6	90.7	6.7	6.7	9.8	10.1	7	9	-	-	820067	812581	-	-	0.9	-
						1.0	-	-	20.8		8.1		31.7		90.7		6.7		9.8		7		-				-		1.0	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	20.8	20.8	8.1	8.1	31.7	31.7	90.9	91.0	6.8	6.8	10.4		11		-				-		-	
						4.1	-	-	20.8		8.1		31.7		91.0		6.8		10.5		11		-				-		-	
SR2	Fine	Moderate	08:50	5.2	Surface	1.0	0.7	291	20.8	20.8	8.1	8.1	31.8	31.8	91.6	91.6	6.8	6.8	15.7	18.1	7	8	83	84	821443	814175	<0.2	<0.2	1.0	1.0
						1.0	0.7	300	20.8		8.1		31.8		91.6		6.8		15.8		6		83				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.6	294	20.8	20.8	8.1	8.1	31.9	31.9	91.7	91.7	6.8	6.8	20.4		10		84				<0.2		0.9	
						4.2	0.6	294	20.8		8.1		31.9		91.7		6.8		20.4		10		85				<0.2		1.0	
SR3	Fine	Moderate	09:47	8.1	Surface	1.0	0.2	353	20.9	20.9	8.1	8.1	30.8	30.8	89.7	89.8	6.7	6.7	13.7	15.5	8	7	-	-	822137	807578	-	-	-	-
						1.0	0.2	325	20.9		8.1		30.8		89.8		6.7		13.7		8		-				-		-	
					Middle	4.1	0.2	350	20.9	20.9	8.1	8.1	30.9	30.9	90.1	90.2	6.7		15.6		8		-				-		-	
						4.1	0.2	356	20.9		8.1		30.9		90.2		6.7		15.5		8		-				-		-	
					Bottom	7.1	0.2	342	20.9	20.9	8.1	8.1	31.1	31.1	91.4	91.7	6.8	6.8	17.4		6		-				-		-	
						7.1	0.2	345	20.9		8.1		31.1		91.9		6.8		17.5		6		-				-		-	
SR4A	Fine	Moderate	09:23	8.5	Surface	1.0	0.6	247	20.5	20.5	8.1	8.1	32.2	32.2	95.2	95.2	7.1	7.1	15.0	18.4	9	8	-	-	817199	807795	-	-	-	-
						1.0	0.6	259	20.5		8.1		32.2		95.2		7.1		15.0		9		-				-		-	
					Middle	4.3	0.5	250	20.5	20.5	8.1	8.1	32.2	32.2	95.3	95.3	7.1		19.6		8		-				-		-	
						4.3	0.5	260	20.5		8.1		32.2		95.3		7.1		19.7		8		-				-		-	
					Bottom	7.5	0.3	267	20.5	20.5	8.1	8.1	32.2	32.2	95.3	95.3	7.1	7.1	20.6		7		-				-		-	
						7.5	0.4	278	20.5		8.1		32.2		95.3		7.1		20.5		7		-				-		-	
SR5A	Fine	Moderate	09:15	4.2	Surface	1.0	0.4	290	20.7	20.7	8.1	8.1	32.1	32.1	93.2	93.2	6.9	6.9	8.4	12.7	9	8	-	-	816582	810681	-	-	-	-
						1.0	0.4	310	20.7		8.1		32.1		93.2		6.9		8.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	276	20.7	20.7	8.1	8.1	32.1	32.1	93.2	93.2	6.9	6.9	17.0		8		-				-		-	
						3.2	0.2	297	20.7		8.1		32.1		93.2		6.9		17.0		8		-				-		-	
SR6	Fine	Moderate	09:11	3.8	Surface	1.0	0.3	222	20.7	20.7	8.1	8.1	32.4	32.4	91.6	91.6	6.8	6.8	10.8	12.9	8	9	-	-	817890	814646	-	-	-	-
						1.0	0.3	238	20.7		8.1		32.4		91.6		6.8		10.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	231	20.7	20.7	8.1	8.1	32.4	32.4	91.3	91.3	6.8	6.8	14.9		9		-				-		-	
						2.8	0.2	239	20.7		8.1		32.5		91.3		6.8		15.0		9		-				-		-	
SR7	Fine	Moderate	08:02	15.6	Surface	1.0	0.3	30	21.0	21.0	8.0	8.0	32.1	32.1	88.1	88.1	6.5	6.5	11.9	13.7	11	9	-	-	823647	823718	-	-	-	-
						1.0	0.3	30	21.0		8.0		32.1		88.1		6.5		11.9		12		-				-		-	
					Middle	7.8	0.2	276	21.0	21.0	8.0	8.0	32.1	32.1	87.8	87.8	6.5		13.1		9		-				-		-	
						7.8	0.2	288	21.0		8.0		32.1		87.8		6.5		13.0		8		-				-		-	
					Bottom	14.6	0.2	220	21.0	21.0	8.0	8.0	32.1	32.1	87.8	87.8	6.5	6.5	16.2		8		-				-		-	
						14.6	0.2	221	21.0		8.0		32.1		87.8		6.5		16.3		8		-				-		-	
SR8	Fine	Moderate	09:08	4.3	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.7	31.7	91.2	91.2	6.8	6.8	12.3	15.0	8	9	-	-	820487	811639	-	-	-	-
						1.0	-	-	20.8		8.1		31.7		91.2		6.8		12.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	20.8	20.8	8.1	8.1	31.7	31.7	91.2	91.2	6.8	6.8	17.6		9		-				-		-	
						3.3	-	-	20.8		8.1		31.7		91.2		6.8		17.5		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 December 18 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	16:30	8.6	Surface	1.0	0.4	155	20.8	20.8	8.1	8.1	31.7	31.7	92.7	92.7	6.9	6.9	10.3	11.4	7	7	95	98	815623	804230	<0.2	<0.2	1.2	1.1
						1.0	0.5	155	20.8		8.1		31.7		92.7		6.9		10.3		8		95				<0.2		1.0	
					Middle	4.3	0.5	143	20.8	20.8	8.1	8.1	31.7	31.7	92.6	92.6	6.9		11.1		8		99				<0.2		1.1	
						4.3	0.5	144	20.8		8.1		31.7		92.6		6.9		11.2		7		100				<0.2		1.1	
					Bottom	7.6	0.3	148	20.8	20.8	8.1	8.1	31.7	31.7	92.5	92.5	6.9	6.9	12.9		7		101				<0.2		1.1	
						7.6	0.3	120	20.8		8.1		31.7		92.5		6.9		12.9		6		100				<0.2		1.2	
C2	Cloudy	Moderate	15:01	10.5	Surface	1.0	0.3	55	20.8	20.8	8.0	8.0	30.2	30.2	91.5	91.5	6.9	6.9	9.1	13.7	8	8	95	99	825699	806945	<0.2	<0.2	2.1	2.2
						1.0	0.3	56	20.8		8.0		30.2		91.5		6.9		9.3		7		96				<0.2		2.1	
					Middle	5.3	0.3	112	20.7	20.7	8.1	8.1	30.3	30.3	91.5	91.5	6.9		11.8		8		99				<0.2		2.1	
						5.3	0.3	112	20.7		8.1		30.3		91.5		6.9		11.4		8		99				<0.2		2.3	
					Bottom	9.5	0.3	132	20.7	20.7	8.1	8.1	30.6	30.6	91.4	91.4	6.9	6.9	20.3		7		103				<0.2		2.3	
						9.5	0.3	134	20.7		8.1		30.5		91.4		6.9		20.3		7		103				<0.2		2.2	
C3	Cloudy	Moderate	16:52	10.5	Surface	1.0	0.1	35	20.8	20.8	8.1	8.1	32.4	32.4	90.2	90.2	6.7	6.7	6.4	10.2	4	5	95	99	822110	817797	<0.2	<0.2	2.0	1.3
						1.0	0.1	36	20.8		8.1		32.4		90.2		6.7		6.5		4		95				<0.2		1.2	
					Middle	5.3	0.2	38	20.8	20.8	8.1	8.1	32.4	32.4	89.9	89.9	6.7		9.5		5		99				<0.2		1.1	
						5.3	0.2	41	20.8		8.1		32.4		89.9		6.7		9.9		6		98				<0.2		1.2	
					Bottom	9.5	0.2	32	20.8	20.8	8.1	8.1	32.5	32.5	91.2	91.3	6.8	6.8	14.7		5		103				<0.2		1.2	
						9.5	0.2	34	20.8		8.1		32.5		91.3		6.8		14.6		5		102				<0.2		1.1	
IM1	Cloudy	Moderate	16:04	5.1	Surface	1.0	0.2	139	20.7	20.7	8.1	8.1	31.6	31.6	93.1	93.1	6.9	6.9	12.4	13.3	9	11	93	95	817949	807117	<0.2	<0.2	1.2	1.2
						1.0	0.2	133	20.7		8.1		31.6		93.1		6.9		12.5		10		94				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	146	20.7	20.7	8.1	8.1	31.6	31.6	93.0	93.0	6.9	6.9	14.1		12		95				<0.2		1.2	
						4.1	0.2	160	20.7		8.1		31.6		93.0		6.9		14.0		11		96				<0.2		1.1	
IM2	Cloudy	Moderate	15:55	7.3	Surface	1.0	0.5	147	20.8	20.8	8.1	8.1	30.4	30.4	92.1	92.1	6.9	6.9	9.4	12.1	12	12	93	97	818167	806142	<0.2	<0.2	1.1	1.1
						1.0	0.5	151	20.8		8.1		30.4		92.1		6.9		9.4		12		93				<0.2		1.1	
					Middle	3.7	0.3	166	20.7	20.7	8.1	8.1	30.6	30.6	91.8	91.8	6.9		13.5		12		96				<0.2		1.1	
						3.7	0.4	148	20.7		8.1		30.6		91.8		6.9		13.7		12		97				<0.2		1.1	
					Bottom	6.3	0.2	236	20.7	20.7	8.1	8.1	30.6	30.6	91.8	91.8	6.9	6.9	13.8		11		100				<0.2		1.0	
						6.3	0.2	253	20.7		8.1		30.6		91.8		6.9		13.1		10		101				<0.2		1.1	
IM3	Cloudy	Moderate	15:48	7.5	Surface	1.0	0.4	133	20.8	20.8	8.1	8.1	31.5	31.5	92.9	92.9	6.9	6.9	12.7	13.4	14	14	93	97	818769	805609	<0.2	<0.2	1.1	1.1
						1.0	0.4	136	20.8		8.1		31.5		92.9		6.9		13.0		14		93				<0.2		1.0	
					Middle	3.8	0.4	121	20.8	20.8	8.1	8.1	31.5	31.5	92.8	92.8	6.9		13.8		13		96				<0.2		1.1	
						3.8	0.4	140	20.8		8.1		31.5		92.8		6.9		13.9		14		97				<0.2		1.2	
					Bottom	6.5	0.4	219	20.8	20.8	8.1	8.1	31.5	31.5	92.9	92.9	6.9	6.9	13.7		15		100				<0.2		1.2	
						6.5	0.4	219	20.8		8.1		31.5		92.9		6.9		13.5		14		100				<0.2		1.2	
IM4	Cloudy	Moderate	15:36	7.6	Surface	1.0	0.5	164	20.7	20.7	8.1	8.1	31.1	31.1	93.6	93.6	7.0	7.0	12.3	12.2	18	18	97	102	819717	804605	<0.2	<0.2	1.1	1.2
						1.0	0.5	157	20.7		8.1		31.1		93.6		7.0		12.1		18		98				<0.2		1.2	
					Middle	3.8	0.4	257	20.7	20.7	8.1	8.1	31.3	31.3	93.5	93.5	7.0		11.8		14		102				<0.2		1.2	
						3.8	0.4	228	20.7		8.1		31.3		93.5		7.0		11.8		13		103				<0.2		1.2	
					Bottom	6.6	0.4	236	20.7	20.7	8.1	8.1	31.5	31.5	93.5	93.5	7.0	7.0	12.5		21		104				<0.2		1.1	
						6.6	0.4	233	20.7		8.1		31.5		93.5		7.0		12.5		21		105				<0.2		1.1	
IM5	Cloudy	Moderate	15:24	6.4	Surface	1.0	0.5	159	20.8	20.8	8.1	8.1	30.7	30.7	92.9	92.9	7.0	7.0	10.6	11.8	16	18	97	100	820721	804880	<0.2	<0.2	1.2	1.2
						1.0	0.5	162	20.7		8.1		30.8		92.9		7.0		11.0		16		98				<0.2		1.2	
					Middle	3.2	0.4	218	20.7	20.7	8.1	8.1	30.9	30.9	92.8	92.8	6.9		11.4		19		100				<0.2		1.0	
						3.2	0.5	219	20.7		8.1		30.9		92.8		7.0		11.3		18		101				<0.2		1.2	
					Bottom	5.4	0.1	231	20.6	20.6	8.1	8.1	31.2	31.1	92.7	92.7	6.9	6.9	13.4		20		101				<0.2		1.2	
						5.4	0.1	250	20.6		8.1		31.1		92.7		6.9		13.4		20		102				<0.2		1.2	
IM6	Cloudy	Moderate	15:13	7.3	Surface	1.0	0.1	134	20.8	20.8	8.1	8.1	30.7	30.7	93.2	93.2	7.0	7.0	11.6	13.7	11	11	94	99	821062	805806	<0.2	<0.2	1.2	1.2
						1.0	0.1	154	20.8		8.1		30.7		93.2		7.0		11.8		11		95				<0.2		1.2	
					Middle	3.7	0.1	217	20.7	20.7	8.1	8.1	30.9	30.9	93.5	93.5	7.0		12.1		11		99				<0.2		1.2	
						3.7	0.2	225	20.7		8.1		30.9		93.5		7.0		12.2		11		99				<0.2		1.1	
					Bottom	6.3	0.1	242	20.7	20.7	8.1	8.1	31.1	31.1	94.7	94.9	7.1	7.1	17.1		12		103				<0.2		1.2	
						6.3	0.1	216	20.7		8.1		31.1		95.0		7.1		17.1		12		104				<0.2		1.2	
IM7	Cloudy	Moderate	15:03	7.9	Surface	1.0	0.0	243	20.7	20.7	8.1	8.1	30.2	30.2	91.5	91.5	6.9	6.9	9.3	11.3	9	8	91	95	821349	806826	<0.2	<0.2	1.1	1.2
						1.0	0.0	235	20.7		8.1		30.2		91.5		6.9		9.3		8		91				<0.2		1.2	
					Middle	4.0	0.1	216	20.7	20.7	8.1	8.1	30.3	30.3	91.5	91.5	6.9		11.1		8		94				<0.2		1.2	
						4.0	0.2	227	20.7		8.1		30.4		91.5		6.9		11.3		7		95				<0.2		1.2	
					Bottom	6.9	0.1	236	20.7	20.7	8.1	8.1	30.5	30.5	91.4	91.4	6.9	6.9	13.6		8		98				<0.2		1.2	
						6.9	0.1	209	20.7		8.1		30.5		91.4		6.9		13.6		8		99				<0.2		1.1	
IM8	Cloudy	Moderate	15:30	8.0	Surface	1.0	0.2	76	20.7	20.7	8.1	8.1	31.0	31.0	93.5	93.5	7.0	7.0	17.2	19.6	15	20	96	99	821820	808161	<0.2	<0.2	1.6	1.6
						1.0	0.2	82	20.7		8.1		31.0		93.5		7.0		17.3		16		95				<0.2		1.6	
					Middle	4.0	0.2	51	20.7	20.7	8.1	8.1	31.2	31.2	93.6	93.6	7.0		20.0		18		98				<0.2		1.6	
						4.0	0.3	54	20.7		8.1		31.2		93.6		7.0		20.2		19		98				<0.2		1.6	
					Bottom	7.0	0.3	49	20.7	20.7	8.1	8.1	31.3	31.3	93.9	94.0	7.0	7.0	21.3		24		102				<0.2		1.7	
						7.0	0.3	52	20.7		8.1		31.3		94.0		7.0		21.5		25		102				<0.2		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 27 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	15:36	7.5	Surface	1.0	0.0	66	20.8	20.8	8.2	8.2	30.7	30.7	93.7	93.7	7.0	7.0	16.0	19.4	16	16	94	98	822099	808789	0.3	0.3	1.7	1.8
						1.0	0.0	72	20.8		8.2		30.7		93.7		7.0		16.0		17		94				0.3		1.8	
					Middle	3.8	0.0	63	20.7	20.7	8.3	8.3	30.8	30.8	93.5	93.6	7.0		20.7		16		98				0.4		1.7	
						3.8	0.0	67	20.7		8.3		30.8		93.6		7.0		20.7		16		98				0.3		1.8	
					Bottom	6.5	0.0	1	20.7	20.7	8.3	8.3	30.8	30.8	94.0	94.1	7.0	7.0	21.4		16		102				0.3		1.9	
						6.5	0.0	1	20.7		8.3		30.8		94.1		7.0		21.6		16		102				0.3		1.8	
IM10	Cloudy	Moderate	15:44	8.1	Surface	1.0	0.4	130	20.7	20.7	8.1	8.1	31.1	31.1	93.6	93.6	7.0	7.0	12.1	13.7	14	14	94	98	822378	809775	<0.2	<0.2	1.6	1.6
						1.0	0.4	149	20.7		8.1		31.1		93.6		7.0		12.2		14		94				<0.2		1.4	
					Middle	4.1	0.3	118	20.7	20.7	8.1	8.1	31.4	31.4	93.6	93.6	7.0		13.7		14		98				<0.2		1.6	
						4.1	0.4	125	20.7		8.1		31.4		93.6		7.0		13.9		15		98				<0.2		1.7	
					Bottom	7.1	0.4	198	20.7	20.7	8.1	8.1	31.6	31.6	93.9	93.9	7.0	7.0	15.2		14		101				<0.2		1.5	
						7.1	0.4	212	20.7		8.1		31.6		93.9		7.0		14.9		13		102				<0.2		1.7	
IM11	Cloudy	Moderate	15:58	8.7	Surface	1.0	0.4	184	20.8	20.8	8.1	8.1	31.5	31.5	93.2	93.2	6.9	6.9	12.7	13.4	11	11	95	99	822079	811444	<0.2	<0.2	1.3	1.4
						1.0	0.4	209	20.8		8.1		31.5		93.2		6.9		12.8		10		95				<0.2		1.3	
					Middle	4.4	0.4	184	20.8	20.8	8.1	8.1	31.5	31.5	93.3	93.3	6.9		13.6		12		99				<0.2		1.4	
						4.4	0.5	200	20.8		8.1		31.5		93.3		7.0		13.5		11		100				<0.2		1.4	
					Bottom	7.7	0.3	189	20.8	20.8	8.1	8.1	31.5	31.5	94.2	94.3	7.0	7.0	13.8		11		103				<0.2		1.4	
						7.7	0.3	207	20.8		8.1		31.5		94.4		7.0		13.8		10		103				<0.2		1.4	
IM12	Cloudy	Moderate	16:03	8.2	Surface	1.0	0.5	172	20.7	20.7	8.1	8.1	31.6	31.6	93.2	93.2	6.9	7.0	12.7	14.2	13	13	94	99	821447	812050	<0.2	<0.2	1.3	1.3
						1.0	0.5	181	20.7		8.1		31.6		93.2		6.9		12.9		12		95				<0.2		1.3	
					Middle	4.1	0.5	171	20.7	20.7	8.1	8.1	31.6	31.6	93.3	93.3	7.0		14.4		12		98				<0.2		1.3	
						4.1	0.5	173	20.7		8.1		31.6		93.3		7.0		14.4		13		99				<0.2		1.3	
					Bottom	7.2	0.4	177	20.7	20.7	8.1	8.1	31.6	31.6	94.1	94.2	7.0	7.0	15.3		14		102				<0.2		1.3	
						7.2	0.4	182	20.7		8.1		31.6		94.2		7.0		15.4		13		103				<0.2		1.4	
SR1A	Cloudy	Calm	16:19	5.4	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.8	31.8	95.1	95.2	7.1	7.1	9.7	9.6	8	7	-	-	820065	812583	-	-	-	-
						1.0	-	-	20.8		8.1		31.8		95.2		7.1		9.7		7		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	20.8	20.8	8.2	8.2	31.8	31.8	96.3	96.4	7.2	7.2	9.6		7		-				-		-	
						4.4	-	-	20.8		8.2		31.8		96.5		7.2		9.5		7		-				-		-	
SR2	Cloudy	Moderate	16:29	5.8	Surface	1.0	0.4	91	20.8	20.8	8.1	8.1	31.7	31.7	93.3	93.3	6.9	6.9	8.4	9.9	8	8	95	96	821453	814166	<0.2	<0.2	1.4	1.4
						1.0	0.4	97	20.8		8.1		31.7		93.3		6.9		8.5		9		94				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.4	89	20.8	20.8	8.1	8.1	31.7	31.7	94.2	94.4	7.0	7.0	11.9		8		98				<0.2		1.3	
						4.8	0.4	98	20.8		8.1		31.7		94.5		7.0		11.0		8		98				<0.2		1.4	
SR3	Cloudy	Moderate	15:25	8.6	Surface	1.0	0.2	83	20.8	20.8	8.1	8.1	30.7	30.7	93.0	93.1	7.0	7.0	11.5	16.1	12	12	-	-	822156	807592	-	-	-	-
						1.0	0.2	83	20.8		8.1		30.7		93.1		7.0		11.5		12		-				-		-	
					Middle	4.3	0.3	107	20.6	20.6	8.1	8.1	31.1	31.1	92.7	92.7	6.9		16.1		11		-				-		-	
						4.3	0.3	108	20.6		8.1		31.1		92.7		6.9		15.8		12		-				-		-	
					Bottom	7.6	0.3	142	20.6	20.6	8.1	8.1	31.2	31.2	92.6	92.6	6.9	6.9	20.7		10		-				-		-	
						7.6	0.3	146	20.6		8.1		31.2		92.6		6.9		20.8		11		-				-		-	
SR4A	Cloudy	Calm	16:51	8.2	Surface	1.0	0.3	90	30.4	30.4	8.1	8.1	11.2	11.2	99.1	99.0	7.0	7.0	9.6	12.1	11	10	-	-	817211	807789	-	-	-	-
						1.0	0.4	98	30.4		8.1		11.2		98.8		7.0		9.6		11		-				-		-	
					Middle	4.1	0.3	99	29.2	29.2	8.1	8.1	20.0	20.0	84.9	84.8	-		10.6		10		-				-		-	
						4.1	0.3	104	29.2		8.1		20.0		84.7		-		10.7		9		-				-		-	
					Bottom	7.2	0.3	85	28.1	28.1	8.0	8.0	26.8	26.8	74.4	74.7	5.0	5.1	16.0		9		-				-		-	
						7.2	0.4	89	28.1		8.0		26.8		75.0		5.1		16.2		10		-				-		-	
SR5A	Cloudy	Calm	17:10	3.7	Surface	1.0	0.1	101	20.8	20.8	8.1	8.1	32.4	32.4	90.1	90.1	6.7	6.7	6.8	6.7	7	8	-	-	816604	810676	-	-	-	-
						1.0	0.1	111	20.8		8.1		32.4		90.0		6.7		6.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	119	20.8	20.8	8.1	8.1	32.4	32.4	90.0	90.0	6.7	6.7	6.6		8		-				-		-	
						2.7	0.1	120	20.8		8.1		32.4		90.0		6.7		6.6		9		-				-		-	
SR6	Cloudy	Calm	17:35	4.3	Surface	1.0	0.2	102	20.8	20.8	8.1	8.1	32.4	32.4	90.0	90.0	6.7	6.7	6.8	6.7	5	6	-	-	817897	814655	-	-	-	-
						1.0	0.2	104	20.8		8.1		32.4		90.0		6.7		6.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	92	20.8	20.8	8.1	8.1	32.4	32.4	90.0	90.0	6.7	6.7	6.7		6		-				-		-	
						3.3	0.2	98	20.8		8.1		32.4		90.0		6.7		6.7		6		-				-		-	
SR7	Cloudy	Moderate	17:21	17.2	Surface	1.0	0.1	91	20.8	20.8	8.1	8.1	32.7	32.7	88.5	88.5	6.5	6.5	7.5	8.1	6	6	-	-	823623	823752	-	-	-	-
						1.0	0.1	94	20.8		8.1		32.7		88.5		6.5		7.6		6		-				-		-	
					Middle	8.6	0.1	83	20.8	20.8	8.1	8.1	32.7	32.7	88.6	88.6	-		8.2		7		-				-		-	
						8.6	0.1	85	20.8		8.1		32.7		88.6		-		8.2		6		-				-		-	
					Bottom	16.2	0.1	46	20.8	20.8	8.1	8.1	32.7	32.7	89.4	89.5	6.6	6.6	8.3		6		-				-		-	
						16.2	0.1	49	20.8		8.1		32.7		89.6		6.6		8.5		6		-				-		-	
SR8	Cloudy	Moderate	16:12	5.3	Surface	1.0	-	-	20.8	20.8	8.1	8.1	31.4	31.4	94.3	94.3	7.0	7.0	7.7	9.6	5	5	-	-	820491	811647	-	-	-	-
						1.0	-	-	20.8		8.1		31.4		94.3		7.0		7.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	20.7	20.7	8.1	8.1	31.6	31.6	94.6	94.8	7.1	7.1	11.6		4		-				-		-	
						4.3	-	-	20.7		8.1		31.6		94.9		7.1		11.4		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 December 18 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	10:51	8.1	Surface	1.0	0.2	33	20.6	20.6	8.1	8.1	31.5	31.5	92.7	92.7	6.9	6.9	15.7	17.9	6	8	95	99	815621	804267	<0.2	<0.2	1.4	1.5
						1.0	0.2	33	20.6		8.1		31.5		92.7		6.9		15.6		7		96				<0.2		1.5	
					Middle	4.1	0.2	40	20.6	20.6	8.1	8.1	31.5	31.5	92.7	92.7	6.9		17.8		8		99				<0.2		1.6	
						4.1	0.2	41	20.6		8.1		31.5		92.7		6.9		17.6		9		99				<0.2		1.5	
					Bottom	7.1	0.3	39	20.6	20.6	8.1	8.1	31.5	31.5	92.7	92.8	6.9	6.9	20.4		8		102				<0.2		1.5	
						7.1	0.3	39	20.6		8.1		31.5		92.8		6.9		20.3		9		102				<0.2		1.5	
C2	Cloudy	Moderate	12:06	10.4	Surface	1.0	0.3	-	20.8	20.8	8.0	8.0	30.2	30.2	91.8	91.8	6.9	6.9	8.7	11.7	9	8	90	94	825697	806966	<0.2	<0.2	2.1	2.0
						1.0	0.3	-	20.8		8.0		30.2		91.8		6.9		8.8		8		90				<0.2		2.0	
					Middle	5.2	0.3	14	20.7	20.7	8.1	8.1	30.5	30.5	92.0	92.0	6.9		10.3		8		95				<0.2		2.1	
						5.2	0.3	15	20.7		8.1		30.5		92.0		6.9		10.0		8		94				<0.2		1.9	
					Bottom	9.4	0.3	35	20.7	20.7	8.1	8.1	30.6	30.6	92.5	92.6	6.9	6.9	16.3		8		99				<0.2		2.1	
						9.4	0.3	35	20.7		8.1		30.6		92.6		6.9		16.2		8		98				<0.2		2.0	
C3	Cloudy	Moderate	10:21	10.3	Surface	1.0	0.5	258	20.8	20.8	8.1	8.1	31.4	31.4	93.1	93.1	6.9	6.9	6.8	11.3	5	6	90	95	822108	817819	<0.2	<0.2	1.5	1.4
						1.0	0.5	263	20.8		8.1		31.4		93.0		6.9		6.8		5		91				<0.2		1.3	
					Middle	5.2	0.5	262	20.7	20.7	8.1	8.1	31.7	31.7	92.8	92.9	6.9		12.5		5		94				<0.2		1.4	
						5.2	0.5	269	20.7		8.1		31.7		92.9		6.9		12.4		6		95				<0.2		1.5	
					Bottom	9.3	0.4	274	20.7	20.7	8.1	8.1	31.8	31.8	93.5	93.6	7.0	7.0	14.8		6		99				<0.2		1.3	
						9.3	0.4	296	20.7		8.1		31.8		93.6		7.0		14.8		6		98				<0.2		1.4	
IM1	Cloudy	Moderate	11:14	5.5	Surface	1.0	0.3	341	20.7	20.7	8.1	8.1	31.8	31.8	93.1	93.1	6.9	6.9	9.4	9.6	13	13	94	95	817972	807115	<0.2	<0.2	1.6	1.5
						1.0	0.3	314	20.7		8.1		31.8		93.1		6.9		9.5		14		95				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	11	20.7	20.7	8.1	8.1	31.8	31.8	93.8	93.9	7.0	7.0	9.8		11		96				<0.2		1.5	
						4.5	0.3	11	20.7		8.1		31.8		94.0		7.0		9.8		12		96				<0.2		1.3	
IM2	Cloudy	Moderate	11:22	6.6	Surface	1.0	0.4	10	20.7	20.7	8.1	8.1	31.7	31.7	92.5	92.5	6.9	6.9	15.6	16.8	12	12	92	97	818144	806157	<0.2	<0.2	1.4	1.4
						1.0	0.5	10	20.7		8.1		31.7		92.5		6.9		15.9		12		93				<0.2		1.5	
					Middle	3.3	0.4	5	20.7	20.7	8.1	8.1	31.8	31.8	92.4	92.4	6.9		17.1		13		98				<0.2		1.5	
						3.3	0.4	5	20.7		8.1		31.8		92.4		6.9		17.5		13		98				<0.2		1.5	
					Bottom	5.6	0.3	9	20.7	20.7	8.1	8.1	31.8	31.7	92.5	92.5	6.9	6.9	17.4		12		99				<0.2		1.4	
						5.6	0.3	9	20.7		8.1		31.7		92.5		6.9		17.1		12		100				<0.2		1.3	
IM3	Cloudy	Moderate	11:30	7.0	Surface	1.0	0.5	29	20.7	20.7	8.1	8.1	31.3	31.3	92.2	92.2	6.9	6.9	11.4	16.1	16	18	94	96	818783	805611	<0.2	<0.2	1.4	1.5
						1.0	0.5	29	20.7		8.1		31.4		92.2		6.9		11.8		16		94				<0.2		1.5	
					Middle	3.5	0.4	11	20.7	20.7	8.1	8.1	31.8	31.8	91.9	91.9	6.9		17.1		18		95				<0.2		1.6	
						3.5	0.4	11	20.7		8.1		31.8		91.9		6.8		17.6		18		95				<0.2		1.5	
					Bottom	6.0	0.3	10	20.7	20.7	8.1	8.1	31.8	31.8	91.9	91.9	6.8	6.8	19.3		19		97				<0.2		1.5	
						6.0	0.3	10	20.7		8.1		31.8		91.9		6.8		19.6		20		98				<0.2		1.6	
IM4	Cloudy	Moderate	11:39	7.1	Surface	1.0	0.5	342	20.7	20.7	8.1	8.1	31.1	31.1	93.3	93.3	7.0	7.0	16.2	18.9	10	14	94	96	819737	804593	<0.2	<0.2	1.6	1.6
						1.0	0.5	315	20.7		8.1		31.1		93.3		7.0		16.5		11		93				<0.2		1.6	
					Middle	3.6	0.4	349	20.7	20.7	8.1	8.1	31.1	31.1	93.0	93.0	7.0		20.8		16		95				<0.2		1.7	
						3.6	0.4	321	20.7		8.1		31.1		93.0		7.0		20.7		15		96				<0.2		1.6	
					Bottom	6.1	0.4	9	20.7	20.7	8.1	8.1	31.1	31.1	93.0	93.0	7.0	7.0	19.4		16		100				<0.2		1.6	
						6.1	0.4	9	20.7		8.1		31.1		93.0		7.0		19.6		18		99				<0.2		1.6	
IM5	Cloudy	Moderate	11:50	6.4	Surface	1.0	0.6	6	20.7	20.7	8.1	8.1	30.6	30.6	92.9	92.9	7.0	7.0	15.2	17.3	10	11	93	96	820711	804850	<0.2	<0.2	1.4	1.5
						1.0	0.6	6	20.7		8.1		30.6		92.9		7.0		15.2		10		94				<0.2		1.4	
					Middle	3.2	0.5	8	20.7	20.7	8.1	8.1	30.6	30.6	92.6	92.6	6.9		16.8		10		96				<0.2		1.5	
						3.2	0.6	8	20.7		8.1		30.6		92.6		6.9		16.7		11		96				<0.2		1.4	
					Bottom	5.4	0.5	355	20.7	20.7	8.1	8.1	30.7	30.7	92.6	92.6	6.9	6.9	20.1		13		99				<0.2		1.5	
						5.4	0.6	355	20.7		8.1		30.7		92.6		6.9		20.1		12		100				<0.2		1.6	
IM6	Cloudy	Moderate	12:02	6.1	Surface	1.0	0.2	342	20.7	20.7	8.1	8.1	30.7	30.7	92.6	92.6	6.9	6.9	16.7	19.2	6	7	93	97	821079	805832	<0.2	<0.2	1.6	1.6
						1.0	0.2	356	20.7		8.1		30.7		92.6		6.9		16.7		6		94				<0.2		1.5	
					Middle	3.1	0.1	344	20.7	20.7	8.1	8.1	30.8	30.8	92.5	92.5	6.9		17.2		7		96				<0.2		1.5	
						3.1	0.1	352	20.7		8.1		30.8		92.5		6.9		17.6		8		96				<0.2		1.8	
					Bottom	5.1	0.1	349	20.7	20.7	8.1	8.1	30.8	30.8	92.2	92.2	6.9	6.9	23.9		6		100				<0.2		1.6	
						5.1	0.1	321	20.7		8.1		30.8		92.2		6.9		23.3		7		101				<0.2		1.6	
IM7	Cloudy	Moderate	12:12	7.2	Surface	1.0	0.1	301	20.8	20.8	8.1	8.1	30.5	30.5	92.0	92.0	6.9	6.9	10.0	12.8	7	8	91	96	821367	806817	<0.2	<0.2	1.6	1.6
						1.0	0.1	302	20.8		8.1		30.5		92.0		6.9		10.1		8		92				<0.2		1.6	
					Middle	3.6	0.2	351	20.7	20.7	8.1	8.1	30.6	30.6	91.8	91.9	6.9		13.8		6		95				<0.2		1.7	
						3.6	0.2	323	20.7		8.1		30.6		91.9		6.9		14.0		6		96				<0.2		1.5	
					Bottom	6.2	0.2	353	20.7	20.7	8.1	8.1	30.7	30.6	91.8	91.8	6.9	6.9	14.5		9		100				<0.2		1.5	
						6.2	0.2	357	20.7		8.1		30.6		91.8		6.9		14.5		9		100				<0.2		1.6	
IM8	Cloudy	Moderate	11:41	7.4	Surface	1.0	0.2	100	20.8	20.8	8.1	8.1	30.7	30.7	92.5	92.5	6.9	6.9	18.6	20.7	10	13	91	95	821821	808153	<0.2	<0.2	1.9	1.8
						1.0	0.2	109	20.8		8.1		30.7		92.5		6.9		18.6		10		91				<0.2		1.7	
					Middle	3.7	0.2	97	20.7	20.7	8.1	8.1	30.8	30.8	92.7	92.7	6.9		20.2		14		96				<0.2		1.6	
						3.7	0.2	103	20.7		8.1		30.8		92.7		6.9		20.6		14		95				<0.2		1.8	
					Bottom	6.4	0.2	87	20.7	20.7	8.1	8.1	30.9	30.9	93.1	93.1	7.0	7.0	23.1		15		99				<0.2		1.7	
						6.4	0.2	89	20.7		8.1		30.9		93.1		7.0		23.1		15		99				<0.2		1.9	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 December 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:34	7.1	Surface	1.0	0.3	44	20.7	20.7	8.1	8.1	30.6	30.6	92.8	92.8	7.0	7.0	18.2	20.8	8	18	91	95	822081	808827	<0.2	<0.2	1.7	1.7
						1.0	0.3	46	20.7		8.1		30.6		92.8		7.0		18.2		9		91				<0.2		1.7	
					Middle	3.6	0.2	46	20.7	20.7	8.1	8.1	30.7	30.7	92.8	92.8	7.0		20.7		17		95				<0.2		1.7	
						3.6	0.2	49	20.7		8.1		30.7		92.8		7.0		20.7		18		96				<0.2		1.7	
					Bottom	6.1	0.2	64	20.7	20.7	8.1	8.1	30.7	30.7	93.0	93.0	7.0	7.0	23.7		27		99				<0.2		1.7	
						6.1	0.2	68	20.7		8.1		30.7		93.0		7.0		23.6		29		99				<0.2		1.6	
IM10	Cloudy	Moderate	11:26	7.8	Surface	1.0	0.5	310	20.7	20.7	8.1	8.1	31.1	31.1	93.4	93.4	7.0	7.0	17.5	18.1	14	15	90	95	822404	809801	<0.2	<0.2	1.4	1.4
						1.0	0.5	333	20.7		8.1		31.1		93.4		7.0		17.6		14		90				<0.2		1.4	
					Middle	3.9	0.4	316	20.7	20.7	8.1	8.1	31.1	31.1	93.4	93.4	7.0		16.4		15		95				<0.2		1.4	
						3.9	0.5	329	20.7		8.1		31.1		93.4		7.0		16.5		14		95				<0.2		1.5	
					Bottom	6.8	0.3	318	20.7	20.7	8.1	8.1	31.1	31.1	94.5	94.6	7.1	7.1	20.2		15		98				<0.2		1.4	
						6.8	0.3	341	20.7		8.1		31.1		94.7		7.1		20.2		15		99				<0.2		1.3	
IM11	Cloudy	Moderate	11:15	8.0	Surface	1.0	0.6	288	20.7	20.7	8.1	8.1	31.3	31.3	92.5	92.5	6.9	6.9	10.8	16.0	13	12	90	95	822076	811470	<0.2	<0.2	1.4	1.4
						1.0	0.6	303	20.7		8.1		31.3		92.5		6.9		10.8		12		91				<0.2		1.4	
					Middle	4.0	0.4	290	20.7	20.7	8.1	8.1	31.7	31.7	93.1	93.1	6.9		16.6		12		95				<0.2		1.4	
						4.0	0.4	310	20.7		8.1		31.7		93.1		6.9		16.5		10		96				<0.2		1.3	
					Bottom	7.0	0.4	304	20.7	20.7	8.1	8.1	31.8	31.8	93.4	93.5	7.0	7.0	20.5		11		99				<0.2		1.4	
						7.0	0.4	326	20.7		8.1		31.8		93.5		7.0		20.7		11		99				<0.2		1.5	
IM12	Cloudy	Moderate	11:09	8.2	Surface	1.0	0.5	283	20.7	20.7	8.1	8.1	31.7	31.6	92.7	92.7	6.9	6.9	13.9	17.4	13	13	91	96	821437	812068	<0.2	<0.2	1.4	1.3
						1.0	0.5	286	20.7		8.1		31.6		92.7		6.9		13.8		12		95				<0.2		1.4	
					Middle	4.1	0.5	286	20.7	20.7	8.1	8.1	31.7	31.7	92.5	92.5	-		16.1		14		95				<0.2		1.2	
						4.1	0.5	295	20.7		8.1		31.7		92.5		-		16.0		14		95				<0.2		1.3	
					Bottom	7.2	0.4	287	20.7	20.7	8.1	8.1	31.8	31.8	92.9	93.0	6.9	6.9	22.5		13		99				<0.2		1.2	
						7.2	0.4	298	20.7		8.1		31.8		93.0		6.9		22.3		14		99				<0.2		1.1	
SR1A	Cloudy	Calm	10:50	5.6	Surface	1.0	-	-	20.7	20.7	8.1	8.1	31.8	31.8	93.4	93.5	6.9	7.0	10.2	13.6	10	10	-	-	820071	812585	-	-	-	-
						1.0	-	-	20.7		8.1		31.8		93.5		7.0		10.2		10		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	20.6	20.6	8.1	8.1	31.9	31.9	94.9	95.0	7.1	7.1	17.2		10		-				-		-	
						4.6	-	-	20.6		8.1		31.9		95.0		7.1		16.9		9		-				-		-	
SR2	Cloudy	Moderate	10:40	5.7	Surface	1.0	0.5	308	20.6	20.6	8.1	8.1	31.5	31.5	92.9	92.9	6.9	6.9	19.4	19.8	10	10	91	93	821450	814183	<0.2	<0.2	1.6	1.5
						1.0	0.5	313	20.6		8.1		31.5		92.9		6.9		19.4		9		90				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.5	325	20.6	20.6	8.1	8.1	31.5	31.5	94.1	94.2	7.0	7.0	20.2		10		95				<0.2		1.4	
						4.7	0.5	356	20.6		8.1		31.5		94.3		7.0		20.3		10		95				<0.2		1.6	
SR3	Cloudy	Moderate	11:48	8.6	Surface	1.0	0.1	52	20.8	20.8	8.1	8.1	30.5	30.5	92.2	92.2	6.9	6.9	9.5	12.9	8	9	-	-	822143	807559	-	-	-	-
						1.0	0.1	54	20.8		8.1		30.5		92.2		6.9		9.5		7		-				-		-	
					Middle	4.3	0.2	42	20.7	20.7	8.1	8.1	30.6	30.6	91.9	92.0	-		13.1		8		-				-		-	
						4.3	0.2	42	20.7		8.1		30.6		92.0		-		13.0		8		-				-		-	
					Bottom	7.6	0.2	14	20.7	20.7	8.1	8.1	30.7	30.7	92.2	92.2	6.9	6.9	16.2		12		-				-		-	
						7.6	0.2	14	20.7		8.1		30.7		92.2		6.9		16.3		13		-				-		-	
SR4A	Cloudy	Calm	10:32	9.5	Surface	1.0	0.1	111	20.8	20.8	8.1	8.1	31.6	31.6	92.6	92.6	6.9	6.9	7.6	9.9	9	10	-	-	817166	807804	-	-	-	-
						1.0	0.1	115	20.8		8.1		31.6		92.6		6.9		7.8		10		-				-		-	
					Middle	4.8	0.1	105	20.7	20.7	8.1	8.1	31.7	31.7	92.5	92.5	-		10.8		10		-				-		-	
						4.8	0.1	109	20.7		8.1		31.7		92.5		-		11.1		10		-				-		-	
					Bottom	8.5	0.1	72	20.7	20.8	8.1	8.1	31.7	31.7	92.4	92.5	6.9	6.9	11.2		10		-				-		-	
						8.5	0.1	75	20.8		8.1		31.7		92.5		6.9		10.7		10		-				-		-	
SR5A	Cloudy	Calm	10:15	4.6	Surface	1.0	0.1	280	20.8	20.8	8.1	8.1	31.6	31.6	92.5	92.5	6.9	6.9	7.0	7.2	11	11	-	-	816587	810680	-	-	-	-
						1.0	0.1	290	20.8		8.1		31.6		92.5		6.9		7.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	276	20.8	20.8	8.1	8.1	31.7	31.7	92.5	92.5	6.9	6.9	7.4		11		-				-		-	
						3.6	0.1	277	20.8		8.1		31.7		92.5		6.9		7.3		11		-				-		-	
SR6	Cloudy	Calm	09:43	4.4	Surface	1.0	0.2	243	20.8	20.8	8.0	8.0	32.2	32.2	90.7	90.7	6.7	6.7	10.3	10.2	11	11	-	-	817909	814650	-	-	-	-
						1.0	0.2	263	20.8		8.0		32.2		90.6		6.7		10.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	237	20.8	20.8	8.0	8.0	32.2	32.2	90.6	90.6	6.7	6.7	10.1		11		-				-		-	
						3.4	0.2	237	20.8		8.0		32.2		90.6		6.7		10.1		12		-				-		-	
SR7	Cloudy	Moderate	09:51	15.9	Surface	1.0	0.2	222	20.8	20.8	8.0	8.0	32.2	32.2	90.8	90.8	6.7	6.7	10.5	11.3	8	8	-	-	823643	823722	-	-	-	-
						1.0	0.2	229	20.8		8.0		32.2		90.8		6.7		10.5		8		-				-		-	
					Middle	8.0	0.3	226	20.8	20.8	8.0	8.0	32.2	32.2	90.9	90.9	6.7		11.3		8		-				-		-	
						8.0	0.3	242	20.8		8.0		32.2		90.9		6.7		11.4		8		-				-		-	
					Bottom	14.9	0.3	221	20.8	20.8	8.0	8.0	32.2	32.2	91.6	91.7	6.8	6.8	12.1		7		-				-		-	
						14.9	0.3	244	20.8		8.0		32.2		91.7		6.8		12.0		8		-				-		-	
SR8	Cloudy	Calm	10:59	4.9	Surface	1.0	-	-	20.7	20.7	8.1	8.1	31.2	31.2	93.5	93.6	7.0	7.0	9.9	10.8	9	9	-	-	820488	811675	-	-	-	-
						1.0	-	-	20.7		8.1		31.2		93.6		7.0		9.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	20.6	20.6	8.1	8.1	31.3	31.3	94.9	95.0	7.1	7.1	11.9		9		-				-		-	
						3.9	-	-	20.5		8.1		31.3		95.0		7.1		11.5		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**
Note: Access to SR8 was blocked by barge and its wires. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Misty	Rough	18:47	8.2	Surface	1.0	0.5	126	19.9	19.9	8.1	8.1	31.8	31.8	95.5	95.5	7.2	7.2	9.1	9.4	16	15	83	87	815614	804263	<0.2	<0.2	1.4	1.5
						1.0	0.5	128	19.9		8.1		31.8		95.5		7.2		9.1		14		83				<0.2		1.4	
					Middle	4.1	0.3	124	19.9	19.9	8.1	8.1	31.8	31.8	95.8	95.9	7.2	7.2	9.3		15		87				<0.2		1.6	
						4.1	0.3	128	19.9		8.1		31.8		95.9		7.2		9.3		13		88				<0.2		1.5	
					Bottom	7.2	0.2	122	19.9	19.9	8.1	8.1	31.8	31.8	96.6	96.7	7.3	7.3	9.8		14		91				<0.2		1.4	
						7.2	0.2	123	19.9		8.1		31.8		96.8		7.3		9.8		15		91				<0.2		1.4	
C2	Misty	Rough	17:35	11.8	Surface	1.0	0.4	212	20.6	20.6	8.3	8.3	30.6	30.6	90.4	90.5	6.8	6.8	7.5	8.0	13	12	83	88	825696	806962	<0.2	<0.2	1.1	1.0
						1.0	0.4	212	20.6		8.3		30.6		90.5		6.8		7.5		13		83				<0.2		1.0	
					Middle	5.9	0.4	250	20.6	20.6	8.3	8.3	30.6	30.6	90.8	90.9	-		7.6		12		88				<0.2		1.0	
						5.9	0.4	222	20.6		8.3		30.6		90.9		-		7.6		12		88				<0.2		1.0	
					Bottom	10.8	0.5	221	20.6	20.6	8.3	8.3	30.6	30.6	91.2	91.3	6.9	6.9	8.8		11		92				<0.2		0.8	
						10.8	0.5	242	20.6		8.3		30.6		91.3		6.9		8.9		11		92				<0.2		1.0	
C3	Misty	Rough	19:15	9.8	Surface	1.0	0.2	120	20.7	20.7	8.3	8.3	31.7	31.7	87.3	87.3	6.5	6.5	4.8	6.0	11	14	83	87	822086	817818	<0.2	<0.2	1.1	1.1
						1.0	0.3	122	20.7		8.3		31.7		87.3		6.5		4.9		11		83				<0.2		1.0	
					Middle	4.9	0.1	152	20.7	20.7	8.3	8.3	31.8	31.8	87.6	87.7	6.5	6.5	6.4		15		87				<0.2		1.2	
						4.9	0.1	164	20.7		8.3		31.8		87.7		6.5		6.5		13		87				<0.2		1.0	
					Bottom	8.8	0.1	137	20.7	20.7	8.3	8.3	31.8	31.8	87.8	87.9	6.5	6.6	6.6		17		91				<0.2		1.0	
						8.8	0.1	139	20.7		8.3		31.8		88.0		6.6		6.7		15		92				<0.2		1.0	
IM1	Misty	Rough	18:27	4.4	Surface	1.0	0.1	258	19.9	19.9	8.2	8.2	31.8	31.8	94.8	94.9	7.2	7.2	14.2	16.4	12	12	83	87	817929	807112	<0.2	<0.2	1.3	1.4
						1.0	0.1	259	19.9		8.2		31.8		94.9		7.2		14.2		10		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	286	19.9	19.9	8.2	8.2	31.8	31.8	95.7	95.9	7.2	7.3	18.7		13		91				<0.2		1.4	
						3.4	0.0	291	19.9		8.2		31.8		96.0		7.3		18.7		12		88				<0.2		1.5	
IM2	Misty	Rough	18:22	6.4	Surface	1.0	0.3	163	19.9	19.9	8.2	8.2	31.8	31.8	95.9	95.9	7.2	7.3	8.7	10.5	11	12	83	87	818155	806151	<0.2	<0.2	1.5	1.4
						1.0	0.3	165	19.9		8.2		31.8		95.9		7.2		8.7		13		83				<0.2		1.4	
					Middle	3.2	0.2	232	19.9	19.9	8.2	8.2	31.9	31.9	96.2	96.2	7.3	7.3	11.1		12		87				<0.2		1.4	
						3.2	0.2	232	19.9		8.2		31.9		96.2		7.3		11.1		12		87				<0.2		1.4	
					Bottom	5.4	0.2	209	19.9	19.9	8.2	8.2	31.9	31.9	96.5	96.6	7.3	7.3	11.6		13		91				<0.2		1.4	
						5.4	0.2	209	19.9		8.2		31.9		96.6		7.3		11.6		11		92				<0.2		1.4	
IM3	Misty	Rough	18:10	6.8	Surface	1.0	0.3	206	19.9	19.9	8.1	8.1	31.8	31.8	96.5	96.6	7.3	7.3	11.9	14.5	14	14	83	87	818794	805582	<0.2	<0.2	1.4	1.4
						1.0	0.4	206	19.9		8.1		31.8		96.6		7.3		11.9		12		83				<0.2		1.5	
					Middle	3.4	0.3	214	19.9	19.9	8.1	8.1	31.8	31.8	97.0	97.1	7.3	7.3	13.7		12		88				<0.2		1.4	
						3.4	0.3	211	19.9		8.1		31.8		97.2		7.3		13.7		12		88				<0.2		1.3	
					Bottom	5.8	0.3	218	19.9	19.9	8.1	8.1	31.8	31.8	97.7	97.8	7.4	7.4	17.9		16		91				<0.2		1.5	
						5.8	0.3	209	19.9		8.1		31.8		97.9		7.4		17.9		15		91				<0.2		1.4	
IM4	Misty	Rough	18:01	7.3	Surface	1.0	0.4	249	20.2	20.2	8.1	8.1	31.9	31.9	93.7	93.7	7.0	7.0	6.4	6.9	11	12	83	87	819742	804605	<0.2	<0.2	1.5	1.5
						1.0	0.4	250	20.2		8.1		31.9		93.6		7.0		6.4		10		83				<0.2		1.4	
					Middle	3.7	0.4	222	20.2	20.2	8.1	8.1	31.9	31.9	93.5	93.5	7.0	7.0	7.0		11		88				<0.2		1.5	
						3.7	0.4	222	20.2		8.1		31.9		93.5		7.0		7.0		11		88				<0.2		1.4	
					Bottom	6.3	0.3	217	20.2	20.2	8.1	8.1	32.0	32.0	93.7	93.8	7.0	7.0	7.2		12		91				<0.2		1.5	
						6.3	0.4	208	20.2		8.1		32.0		93.9		7.0		7.3		14		91				<0.2		1.4	
IM5	Misty	Rough	18:00	6.7	Surface	1.0	0.5	230	20.2	20.2	8.1	8.1	31.9	31.9	94.4	94.4	7.1	7.1	6.1	6.4	12	12	83	88	820731	804874	<0.2	<0.2	1.3	1.4
						1.0	0.5	231	20.2		8.1		31.9		94.4		7.1		6.1		11		83				<0.2		1.3	
					Middle	3.4	0.5	232	20.2	20.2	8.1	8.1	31.9	31.9	94.5	94.6	7.1	7.1	6.5		12		88				<0.2		1.4	
						3.4	0.5	234	20.2		8.1		31.9		94.6		7.1		6.5		12		88				<0.2		1.4	
					Bottom	5.7	0.4	243	20.2	20.2	8.1	8.1	31.9	31.9	94.9	95.0	7.1	7.1	6.6		11		91				<0.2		1.5	
						5.7	0.4	245	20.2		8.1		31.9		95.0		7.1		6.6		12		92				<0.2		1.3	
IM6	Misty	Rough	17:56	6.5	Surface	1.0	0.2	203	20.2	20.2	8.1	8.1	31.6	31.6	93.9	93.9	7.1	7.1	11.0	10.7	13	14	83	87	821056	805842	<0.2	<0.2	1.5	1.4
						1.0	0.2	203	20.2		8.1		31.7		93.9		7.1		11.0		14		83				<0.2		1.4	
					Middle	3.3	0.2	237	20.2	20.2	8.1	8.1	31.7	31.7	93.9	94.0	7.1	7.1	10.7		15		87				<0.2		1.4	
						3.3	0.2	237	20.2		8.1		31.7		94.0		7.1		10.6		15		88				<0.2		1.4	
					Bottom	5.5	0.1	224	20.2	20.2	8.1	8.1	31.7	31.7	94.2	94.3	7.1	7.1	10.6		12		91				<0.2		1.4	
						5.5	0.1	241	20.2		8.1		31.7		94.3		7.1		10.6		13		92				<0.2		1.4	
IM7	Misty	Rough	17:38	7.8	Surface	1.0	0.0	107	20.2	20.2	8.1	8.1	31.5	31.5	94.1	94.1	7.1	7.1	9.4	9.6	17	14	83	87	821336	806832	<0.2	<0.2	1.4	1.4
						1.0	0.0	111	20.2		8.1		31.5		94.1		7.1		9.4		14		83				<0.2		1.4	
					Middle	3.9	0.2	158	20.2	20.2	8.1	8.1	31.5	31.5	94.4	94.5	7.1	7.1	9.6		14		88				<0.2		1.3	
						3.9	0.3	159	20.2		8.1		31.5		94.5		7.1		9.5		15		88				<0.2		1.3	
					Bottom	6.8	0.3	107	20.2	20.2	8.1	8.1	31.5	31.5	94.8	94.9	7.1	7.1	9.9		13		91				<0.2		1.5	
						6.8	0.3	108	20.2		8.1		31.5		94.9		7.1		9.9		12		91				<0.2		1.3	
IM8	Misty	Rough	17:58	7.9	Surface	1.0	0.1	129	20.5	20.5	8.3	8.3	31.0	31.0	90.5	90.5	6.8	6.8	4.9	5.0	10	13	83	87	821819	808142	<0.2	<0.2	1.0	1.0
						1.0	0.1	141	20.5		8.3		31.0		90.5		6.8		4.9		12		83				<0.2		1.0	
					Middle	4.0	0.2	105	20.5	20.5	8.3	8.3	31.0	31.0	90.6	90.7	6.8	6.8	5.0		15		88				<0.2		1.1	
						4.0	0.2	110	20.5		8.3		31.0		90.7		6.8		5.1		14		88				<0.2		0.9	
					Bottom	6.9	0.2	92	20.5	20.5	8.3	8.3	31.0	31.0	91.3	91.5	6.9	6.9	5.1		15		91				<0.2		1.1	
						6.9	0.2	97	20.5		8.3		31.0		91.7		6.9		5.1		13		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 29 December 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Misty	Rough	17:58	7.5	Surface	1.0	0.1	326	20.5	20.5	8.3	8.3	31.0	31.0	89.9	89.9	6.7	6.7	8.8	10.2	15	14	83	88	822096	808792	<0.2	<0.2	0.8	0.9
						1.0	0.1	326	20.5		8.3		31.0		89.8		6.7		8.9		17		84				<0.2		1.0	
					Middle	3.8	0.1	10	20.5	20.5	8.3	8.3	31.0	31.0	89.7	89.7	6.7		10.3		15		88				<0.2		0.9	
						3.8	0.1	10	20.5		8.3		31.0		89.7		6.7		10.4		16		88				<0.2		1.0	
					Bottom	6.5	0.0	22	20.5	20.5	8.3	8.3	31.0	31.0	90.0	90.1	6.8	6.8	11.4		11		92				<0.2		0.9	
						6.5	0.0	23	20.5		8.3		31.0		90.1		6.8		11.3		12		92				<0.2		1.0	
IM10	Misty	Rough	18:08	8.7	Surface	1.0	0.5	329	20.3	20.3	8.3	8.3	30.9	30.9	92.8	92.8	7.0	7.0	10.1	12.1	12	12	83	87	822383	809794	<0.2	<0.2	1.0	1.0
						1.0	0.6	353	20.3		8.3		30.9		92.8		7.0		10.0		12		84				<0.2		1.0	
					Middle	4.4	0.3	120	20.3	20.3	8.3	8.3	30.9	30.9	93.3	93.4	7.0		10.3		12		87				<0.2		1.1	
						4.4	0.3	132	20.2		8.3		30.9		93.5		7.1		10.3		12		87				<0.2		1.1	
					Bottom	7.7	0.2	208	20.2	20.2	8.3	8.3	30.8	30.8	95.8	96.1	7.2	7.3	15.8		14		91				<0.2		1.0	
						7.7	0.2	225	20.2		8.3		30.8		96.4		7.3		15.9		12		92				<0.2		1.0	
IM11	Misty	Rough	18:19	8.5	Surface	1.0	0.1	288	20.2	20.2	8.3	8.3	30.9	30.9	92.1	92.1	7.0	7.0	7.0	9.1	18	14	83	88	822066	811468	<0.2	<0.2	1.2	1.1
						1.0	0.1	310	20.2		8.3		30.9		92.1		7.0		7.1		18		83				<0.2		1.2	
					Middle	4.3	0.2	162	20.2	20.2	8.3	8.3	30.9	30.9	92.4	92.4	-		9.1		11		88				<0.2		1.1	
						4.3	0.2	163	20.2		8.3		30.9		92.4		-		9.2		13		88				<0.2		1.0	
					Bottom	7.5	0.3	136	20.2	20.2	8.3	8.3	30.9	30.9	92.8	92.9	7.0	7.0	11.0		12		92				<0.2		1.0	
						7.5	0.3	144	20.2		8.3		30.9		93.0		7.0		11.1		11		92				<0.2		1.0	
IM12	Misty	Rough	18:24	9.2	Surface	1.0	0.2	231	20.3	20.3	8.3	8.3	30.9	30.9	91.1	91.1	6.9	6.9	12.4	12.9	19	18	83	88	821477	812063	<0.2	<0.2	1.1	1.1
						1.0	0.2	231	20.3		8.3		30.9		91.1		6.9		12.5		18		83				<0.2		1.0	
					Middle	4.6	0.2	169	20.3	20.3	8.3	8.3	30.9	30.9	91.3	91.4	6.9		12.5		17		88				<0.2		1.2	
						4.6	0.2	162	20.3		8.3		30.9		91.4		6.9		12.7		19		88				<0.2		1.0	
					Bottom	8.2	0.1	138	20.3	20.3	8.3	8.3	30.9	30.9	91.8	92.0	6.9	7.0	13.6		19		92				<0.2		1.1	
						8.2	0.1	141	20.3		8.3		30.9		92.1		7.0		13.6		17		92				<0.2		1.0	
SR1A	Misty	Rough	18:41	5.5	Surface	1.0	-	-	20.2	20.2	8.3	8.3	30.9	30.9	90.4	90.4	6.8	6.8	6.9	7.1	17	15	-	-	820070	812580	-	-	-	-
						1.0	-	-	20.2		8.3		30.9		90.4		6.8		6.9		15		-				-		-	
					Middle	2.8	-	-		-		-		-		-	-		-		-		-				-		-	
						2.8	-	-									-		-		-		-				-		-	
					Bottom	4.5	-	-	20.2	20.2	8.3	8.3	30.9	30.9	90.6	90.7	6.9	6.9	7.2		15		-				-		-	
						4.5	-	-	20.2		8.3		30.9		90.8		6.9		7.3		14		-				-		-	
SR2	Misty	Rough	18:51	5.6	Surface	1.0	0.1	101	20.5	20.5	8.3	8.3	31.2	31.2	90.5	90.6	6.8	6.8	9.5	10.5	16	14	88	90	821458	814158	<0.2	<0.2	1.1	1.0
						1.0	0.1	103	20.5		8.3		31.2		90.7		6.8		9.6		18		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	126	20.5	20.5	8.3	8.3	31.2	31.2	91.3	91.4	6.9	6.9	11.3		11		91				<0.2		1.0	
						4.6	0.1	137	20.5		8.3		31.2		91.4		6.9		11.4		10		92				<0.2		1.0	
SR3	Misty	Rough	17:53	9.3	Surface	1.0	0.3	152	20.5	20.5	8.3	8.3	30.7	30.7	90.2	90.2	6.8	6.8	9.3	9.6	12	14	-	-	822138	807547	-	-	-	-
						1.0	0.3	154	20.5		8.3		30.8		90.2		6.8		9.4		14		-				-		-	
					Middle	4.7	0.3	177	20.5	20.5	8.3	8.3	30.8	30.8	90.3	90.3	-		9.5		12		-				-		-	
						4.7	0.3	182	20.5		8.3		30.8		90.3		-		9.5		14		-				-		-	
					Bottom	8.3	0.4	168	20.5	20.5	8.3	8.3	30.8	30.8	90.5	90.6	6.8	6.8	9.8		14		-				-		-	
						8.3	0.4	171	20.5		8.3		30.8		90.7		6.8		9.8		17		-				-		-	
SR4A	Misty	Rough	19:07	7.9	Surface	1.0	0.3	40	19.8	19.8	8.1	8.1	31.8	31.8	94.1	94.1	7.1	7.1	8.4	8.6	14	15	-	-	817195	807802	-	-	-	-
						1.0	0.3	40	19.8		8.1		31.8		94.1		7.1		8.4		16		-				-		-	
					Middle	4.0	0.2	39	19.8	19.8	8.1	8.1	31.8	31.8	94.1	94.2	7.1		8.6		16		-				-		-	
						4.0	0.3	40	19.8		8.1		31.8		94.2		7.1		8.6		15		-				-		-	
					Bottom	6.9	0.3	75	19.8	19.8	8.1	8.1	31.8	31.8	94.4	94.5	7.1	7.2	8.8		13		-				-		-	
						6.9	0.3	80	19.8		8.1		31.8		94.6		7.2		8.8		13		-				-		-	
SR5A	Misty	Rough	19:18	5.1	Surface	1.0	0.1	45	20.1	20.1	8.1	8.1	32.1	32.1	94.3	94.4	7.1	7.1	11.5	12.6	13	13	-	-	816584	810707	-	-	-	-
						1.0	0.1	43	20.1		8.1		32.1		94.5		7.1		11.4		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	69	20.1	20.1	8.1	8.1	32.1	32.1	95.2	95.3	7.1	7.2	13.7		13		-				-		-	
						4.1	0.2	69	20.1		8.1		32.1		95.3		7.2		13.7		13		-				-		-	
SR6	Misty	Rough	19:32	4.2	Surface	1.0	0.0	11	20.4	20.4	8.1	8.1	32.6	32.6	91.1	91.0	6.8	6.8	4.9	6.6	17	15	-	-	817920	814642	-	-	-	-
						1.0	0.0	11	20.4		8.1		32.6		90.9		6.8		4.9		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	22	20.4	20.4	8.1	8.1	32.7	32.7	90.9	91.0	6.8	6.8	8.3		14		-				-		-	
						3.2	0.1	22	20.4		8.1		32.7		91.0		6.8		8.3		13		-				-		-	
SR7	Misty	Rough	19:45	16.0	Surface	1.0	0.0	213	20.8	20.8	8.3	8.3	31.9	31.9	86.6	86.7	6.4	6.5	4.5	5.6	13	10	-	-	823614	823747	-	-	-	-
						1.0	0.0	224	20.8		8.3		31.9		86.7		6.4		4.6		11		-				-		-	
					Middle	8.0	0.0	96	20.8	20.8	8.3	8.3	31.9	31.9	87.2	87.3	6.5		5.9		10		-				-		-	
						8.0	0.0	103	20.8		8.3		31.9		87.3		6.5		6.0		9		-				-		-	
					Bottom	15.0	0.0	104	20.8	20.8	8.3	8.3	31.9	31.9	87.9	88.1	6.5	6.6	6.2		9		-				-		-	
						15.0	0.0	108	20.8		8.3		31.9		88.2		6.6		6.3		9		-				-		-	
SR8	Misty	Rough	18:32	4.8	Surface	1.0	-	-	20.2	20.2	8.3	8.3	30.9	30.9	92.0	92.1	6.9	7.0	8.0	8.1	15	14	-	-	820510	811673	-	-	-	-
						1.0	-	-	20.2		8.3		30.9		92.1		7.0		8.1		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	20.2	20.2	8.3	8.3	30.9	30.9	92.7	92.8	7.0	7.0	8.2		13		-				-		-	
						3.8	-	-	20.2		8.3		30.9		92.9		7.0		8.2		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**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 December 18 during Mid-Flood Tide

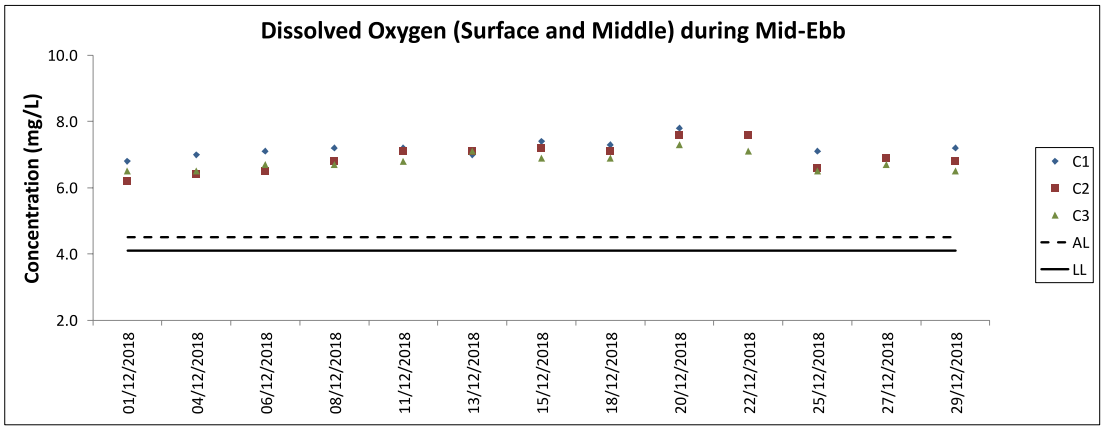
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Misty	Rough	12:50	9.0	Surface	1.0	0.5	32	20.2	20.2	8.1	8.1	30.8	30.8	91.5	91.6	6.9	7.0	7.4	8.7	10	10	84	88	815627	804266	<0.2	<0.2	1.6	1.5
						1.0	0.5	32	20.2		8.1		30.8		91.6		6.9		7.4		10		84				<0.2		1.5	
					Middle	4.5	0.4	21	20.2	20.2	8.1	8.1	30.9	30.9	92.4	92.6	7.0		9.1		9		88				<0.2		1.6	
						4.5	0.5	21	20.2		8.1		30.9		92.7		7.0		9.1		10		88				<0.2		1.4	
					Bottom	8.0	0.4	19	20.2	20.2	8.1	8.1	30.9	30.9	93.2	93.3	7.0	7.1	9.6		10		92				<0.2		1.6	
						8.0	0.4	20	20.2		8.1		30.9		93.3		7.1		9.6		10		92				<0.2		1.5	
C2	Misty	Rough	14:15	11.5	Surface	1.0	0.4	21	20.2	20.2	8.1	8.1	31.8	31.8	92.4	92.4	6.9	6.9	11.1	11.6	11	12	88	89	825658	806957	<0.2	<0.2	1.2	1.2
						1.0	0.4	22	20.2		8.1		31.8		92.4		6.9		11.2		12		88				<0.2		1.0	
					Middle	5.8	0.4	340	20.3	20.3	8.1	8.1	31.8	31.8	92.3	92.3	6.9		11.4		11		89				<0.2		1.4	
						5.8	0.4	313	20.3		8.1		31.9		92.3		6.9		11.4		12		89				<0.2		1.2	
					Bottom	10.5	0.3	355	20.3	20.3	8.1	8.1	31.9	31.9	92.4	92.5	6.9	6.9	12.2		14		91				<0.2		1.2	
						10.5	0.4	327	20.3		8.1		31.9		92.5		6.9		12.1		12		91				<0.2		1.4	
C3	Misty	Rough	12:14	11.6	Surface	1.0	0.3	231	20.2	20.2	8.1	8.1	32.2	32.2	91.8	91.8	6.9	6.9	8.7	8.8	10	13	83	87	822109	817808	<0.2	<0.2	1.2	1.2
						1.0	0.3	233	20.2		8.1		32.2		91.7		6.9		8.7		10		83				<0.2		1.3	
					Middle	5.8	0.4	276	20.2	20.2	8.1	8.1	32.2	32.2	91.6	91.6	6.9		8.8		15		87				<0.2		1.2	
						5.8	0.4	303	20.2		8.1		32.2		91.6		6.9		8.8		14		87				<0.2		1.3	
					Bottom	10.6	0.5	282	20.2	20.2	8.1	8.1	32.3	32.3	91.7	91.8	6.9	6.9	8.9		13		92				<0.2		1.3	
						10.6	0.5	299	20.2		8.1		32.3		91.8		6.9		9.0		13		92				<0.2		1.1	
IM1	Misty	Rough	12:59	4.8	Surface	1.0	0.2	25	20.1	20.1	8.1	8.1	31.0	31.0	93.1	93.2	7.0	7.1	7.8	8.4	10	9	83	88	817941	807131	<0.2	<0.2	1.3	1.5
						1.0	0.2	25	20.1		8.1		31.0		93.2		7.1		7.9		9		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	32	20.1	20.1	8.1	8.1	31.0	31.0	95.6	96.0	7.2	7.3	9.0		9		91				<0.2		1.7	
						3.8	0.2	33	20.1		8.1		31.0		96.3		7.3		9.0		8		92				<0.2		1.6	
IM2	Misty	Rough	13:09	7.2	Surface	1.0	0.4	26	20.4	20.4	8.2	8.2	30.7	30.7	91.4	91.4	6.9	6.9	10.0	11.6	10	11	83	87	818168	806145	<0.2	<0.2	1.6	1.7
						1.0	0.4	26	20.4		8.2		30.7		91.4		6.9		11.1		12		83				<0.2		1.7	
					Middle	3.6	0.3	12	20.4	20.4	8.2	8.2	30.7	30.7	91.3	91.3	6.9		11.6		11		88				<0.2		1.7	
						3.6	0.3	12	20.3		8.2		30.7		91.2		6.9		11.5		11		88				<0.2		1.7	
					Bottom	6.2	0.3	354	20.3	20.3	8.2	8.2	30.7	30.7	90.8	90.7	6.9	6.9	12.7		12		91				<0.2		1.7	
						6.2	0.3	326	20.3		8.2		30.7		90.6		6.8		12.7		10		91				<0.2		1.7	
IM3	Misty	Rough	13:13	7.3	Surface	1.0	0.3	43	20.5	20.5	8.2	8.2	30.9	30.9	91.1	91.2	6.8	6.9	8.4	8.6	9	10	83	88	818786	805602	<0.2	<0.2	1.5	1.6
						1.0	0.4	44	20.5		8.2		30.9		91.2		6.9		8.3		8		84				<0.2		1.6	
					Middle	3.7	0.2	40	20.5	20.5	8.2	8.2	30.9	30.9	91.8	92.0	6.9		8.7		9		87				<0.2		1.7	
						3.7	0.2	41	20.5		8.2		30.9		92.1		6.9		8.7		11		87				<0.2		1.5	
					Bottom	6.3	0.3	44	20.4	20.4	8.2	8.1	30.9	30.9	92.7	92.8	7.0	7.0	8.7		11		92				<0.2		1.5	
						6.3	0.3	47	20.4		8.1		30.9		92.9		7.0		8.6		10		92				<0.2		1.6	
IM4	Misty	Rough	13:26	7.6	Surface	1.0	0.4	351	20.6	20.6	8.2	8.2	30.9	30.9	89.6	89.6	6.7	6.7	6.8	7.1	10	9	83	88	819725	804595	<0.2	<0.2	1.5	1.6
						1.0	0.5	323	20.6		8.2		30.9		89.6		6.7		6.8		8		83				<0.2		1.5	
					Middle	3.8	0.4	342	20.6	20.6	8.2	8.2	30.9	30.9	89.9	90.0	6.7		7.1		9		88				<0.2		1.5	
						3.8	0.4	315	20.6		8.2		30.9		90.0		6.8		7.2		9		88				<0.2		1.7	
					Bottom	6.6	0.4	338	20.6	20.6	8.2	8.2	30.9	30.9	90.6	90.8	6.8	6.8	7.4		10		91				<0.2		1.7	
						6.6	0.4	344	20.6		8.2		30.9		90.9		6.8		7.4		10		92				<0.2		1.6	
IM5	Misty	Rough	13:33	6.4	Surface	1.0	0.6	5	20.5	20.6	8.2	8.2	30.9	30.9	89.1	89.1	6.7	6.7	9.7	9.3	11	11	83	88	820724	804856	<0.2	<0.2	1.7	1.7
						1.0	0.6	5	20.6		8.2		30.9		89.0		6.7		9.7		12		84				<0.2		1.7	
					Middle	3.2	0.6	357	20.6	20.6	8.2	8.2	30.9	30.9	89.0	89.0	6.7		8.6		12		88				<0.2		1.5	
						3.2	0.7	328	20.6		8.2		30.9		89.0		6.7		8.6		11		88				<0.2		1.7	
					Bottom	5.4	0.4	339	20.6	20.6	8.2	8.2	31.0	31.0	89.1	89.2	6.7	6.7	9.5		11		91				<0.2		1.8	
						5.4	0.4	356	20.6		8.2		31.0		89.2		6.7		9.5		10		92				<0.2		1.7	
IM6	Misty	Rough	13:46	6.1	Surface	1.0	0.3	43	20.5	20.6	8.2	8.2	30.9	30.9	88.9	88.9	6.7	6.7	9.3	10.0	12	11	83	88	821048	805838	<0.2	<0.2	1.8	1.8
						1.0	0.3	43	20.6		8.2		30.9		88.9		6.7		9.4		11		83				<0.2		1.9	
					Middle	3.1	0.2	65	20.6	20.6	8.2	8.2	30.9	30.9	88.8	88.9	6.7		9.8		11		88				<0.2		1.7	
						3.1	0.2	65	20.6		8.2		30.9		88.9		6.7		9.8		11		88				<0.2		1.8	
					Bottom	5.1	0.1	30	20.6	20.6	8.2	8.2	31.0	31.0	89.0	89.0	6.7	6.7	10.9		11		92				<0.2		1.8	
						5.1	0.2	30	20.6		8.2		31.0		89.0		6.7		10.8		11		92				<0.2		1.8	
IM7	Misty	Rough	14:01	7.5	Surface	1.0	0.1	324	20.5	20.5	8.2	8.2	30.8	30.8	88.9	88.9	6.7	6.7	9.3	10.1	8	9	83	87	821372	806833	<0.2	<0.2	1.7	1.8
						1.0	0.1	347	20.5		8.2		30.8		88.9		6.7		9.3		7		83				<0.2		1.9	
					Middle	3.8	0.2	43	20.6	20.6	8.2	8.2	30.9	30.9	88.7	88.7	6.7		10.2		8		88				<0.2		1.6	
						3.8	0.2	44	20.6		8.2		30.9		88.7		6.7		10.3		10		88				<0.2		1.8	
					Bottom	6.5	0.2	48	20.6	20.6	8.2	8.2	31.0	31.0	88.8	88.9	6.7	6.7	10.6		10		91				<0.2		1.7	
						6.5	0.2	51	20.6		8.2		31.0		88.9		6.7		10.6		9		91				<0.2		1.8	
IM8	Misty	Rough	13:38	7.8	Surface	1.0	0.0	112	20.2	20.2	8.1	8.1	31.8	31.8	92.7	92.7	7.0	7.0	9.3	10.6	12	12	83	87	821844	808117	<0.2	<0.2	1.3	1.3
						1.0	0.0	118	20.2		8.1		31.8		92.6		7.0		9.4		14		83				<0.2		1.2	
					Middle	3.9	0.2	109	20.3	20.3	8.1	8.1	31.8	31.8	92.6	92.6	6.9		10.4		12		88				<0.2		1.4	
						3.9	0.2	116	20.3		8.1		31.8		92.6		6.9		10.6		13		88				<0.2		1.3	
					Bottom	6.8	0.1	58	20.3	20.3	8.1	8.1	31.9	31.8	92.7	92.8	7.0	7.0	11.9		11		91				<0.2		1.4	
						6.8	0.1	59	20.3		8.1		31.8		92.8		7.0		11.9		11		91				<0.2		1.3	

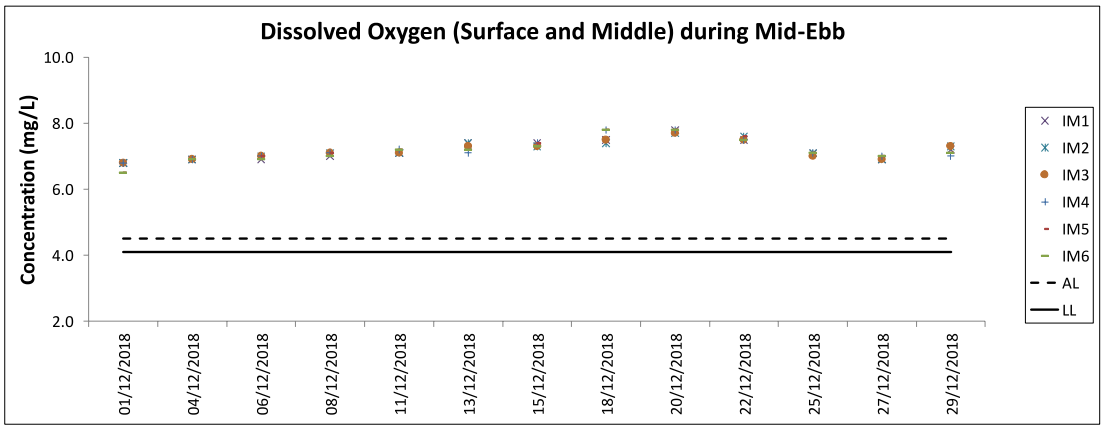
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

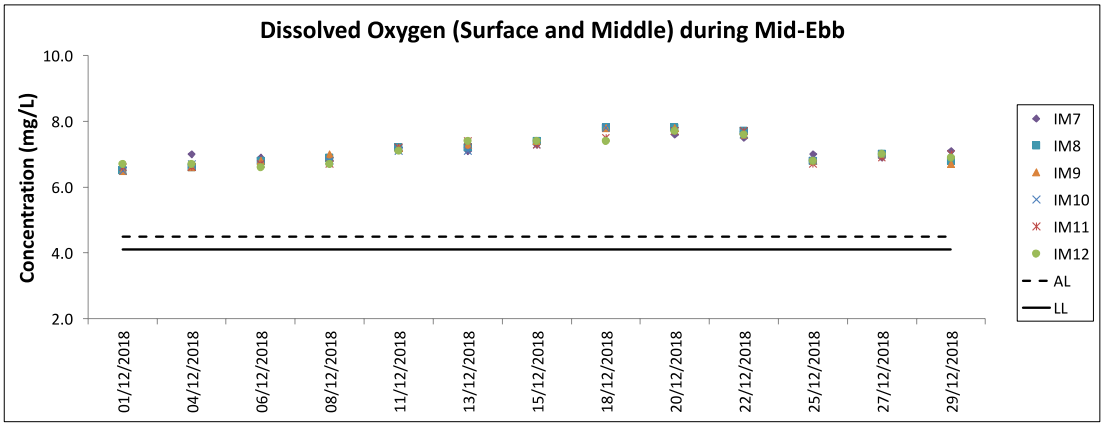
Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 December 18 during Mid-Flood Tide

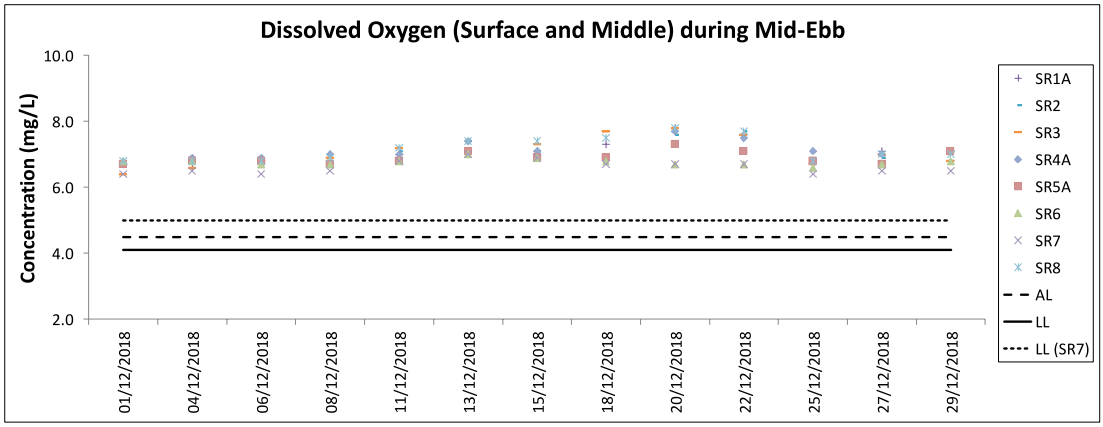
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) 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	Misty	Rough	13:32	6.9	Surface	1.0	0.2	140	20.2	20.2	8.1	8.1	31.8	31.8	92.8	92.8	7.0	7.0	9.8	10.4	11	13	84	88	822085	808792	<0.2	<0.2	1.2	1.3
						1.0	0.3	146	20.2		8.1		31.8		92.8		7.0		9.8		10		84				<0.2		1.1	
					Middle	3.5	0.3	115	20.3	20.3	8.1	8.1	31.8	31.8	92.8	92.8	7.0		10.2		12		88				<0.2		1.2	
						3.5	0.3	125	20.3		8.1		31.8		92.8		7.0		10.1		12		88				<0.2		1.3	
					Bottom	5.9	0.2	126	20.3	20.3	8.1	8.1	31.9	31.9	92.9	93.0	7.0	7.0	11.3		16		91				<0.2		1.4	
						5.9	0.2	130	20.3		8.1		31.9		93.0		7.0		11.4		17		92				<0.2		1.4	
IM10	Misty	Rough	13:24	7.2	Surface	1.0	0.3	90	20.3	20.3	8.1	8.1	31.8	31.8	93.3	93.4	7.0	7.0	8.5	8.8	11	16	83	87	822373	809780	<0.2	<0.2	1.2	1.3
						1.0	0.3	90	20.3		8.1		31.8		93.4		7.0		8.5		13		83				<0.2		1.3	
					Middle	3.6	0.3	72	20.3	20.3	8.1	8.1	31.8	31.8	93.7	93.8	-		8.6		18		87				<0.2		1.4	
						3.6	0.3	74	20.3		8.1		31.8		93.8		-		8.6		17		88				<0.2		1.2	
					Bottom	6.2	0.2	87	20.3	20.3	8.1	8.1	31.8	31.8	94.4	94.6	7.1	7.1	9.1		20		91				<0.2		1.2	
						6.2	0.3	92	20.3		8.1		31.8		94.7		7.1		9.2		17		91				<0.2		1.2	
IM11	Misty	Rough	13:11	7.9	Surface	1.0	0.7	289	20.1	20.1	8.1	8.1	31.8	31.8	95.0	95.1	7.1	7.2	10.6	10.8	13	10	84	88	822066	811461	<0.2	<0.2	1.2	1.3
						1.0	0.8	312	20.1		8.1		31.8		95.2		7.2		10.6		11		84				<0.2		1.3	
					Middle	4.0	0.6	290	20.1	20.1	8.1	8.1	31.8	31.8	95.9	96.0	7.2		10.8		9		88				<0.2		1.2	
						4.0	0.6	317	20.1		8.1		31.8		96.1		7.2		10.8		10		88				<0.2		1.3	
					Bottom	6.9	0.5	306	20.1	20.1	8.1	8.0	31.8	31.8	96.6	96.7	7.3	7.3	10.9		8		91				<0.2		1.3	
						6.9	0.5	331	20.1		8.0		31.8		96.8		7.3		10.9		9		92				<0.2		1.2	
IM12	Misty	Rough	13:07	8.4	Surface	1.0	0.3	270	20.0	20.0	8.1	8.1	31.6	31.6	95.5	95.6	7.2	7.2	13.9	14.2	10	8	83	88	821449	812052	<0.2	<0.2	1.1	1.3
						1.0	0.3	286	20.0		8.1		31.6		95.6		7.2		13.9		9		84				<0.2		1.2	
					Middle	4.2	0.4	265	20.0	20.0	8.1	8.1	31.6	31.6	95.8	95.9	7.2		14.1		8		88				<0.2		1.4	
						4.2	0.4	269	20.0		8.1		31.6		95.9		7.2		14.2		7		88				<0.2		1.3	
					Bottom	7.4	0.3	261	20.0	20.0	8.1	8.1	31.6	31.6	96.3	96.4	7.3	7.3	14.6		8		91				<0.2		1.3	
						7.4	0.3	261	20.0		8.1		31.6		96.4		7.3		14.6		7		92				<0.2		1.2	
SR1A	Misty	Rough	12:48	5.1	Surface	1.0	-	-	19.9	19.9	8.2	8.2	31.7	31.7	95.3	95.4	7.2	7.2	9.5	10.5	4	4	-	-	820062	812589	-	-	-	-
						1.0	-	-	19.9		8.2		31.7		95.4		7.2		9.6		4		-				-		-	
					Middle	2.6	-	-		-		-		-		-	-		-		-		-				-		-	
						2.6	-	-									-		-		-		-				-		-	
					Bottom	4.1	-	-	19.8	19.8	8.2	8.2	31.8	31.8	96.3	96.4	7.3	7.3	11.4		4		-				-		-	
						4.1	-	-	19.8		8.2		31.8		96.5		7.3		11.6		3		-				-		-	
SR2	Misty	Rough	12:35	5.2	Surface	1.0	0.2	139	19.9	19.9	8.2	8.2	31.8	31.8	95.8	95.9	7.2	7.3	13.3	15.0	4	4	83	86	821440	814185	<0.2	<0.2	1.2	1.3
						1.0	0.2	146	19.9		8.2		31.8		96.0		7.3		13.4		4		83				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	133	19.8	19.8	8.1	8.1	31.9	31.9	98.8	99.0	7.5	7.5	16.6		5		88				<0.2		1.4	
						4.2	0.2	142	19.8		8.1		31.9		99.1		7.5		16.7		4		88				<0.2		1.5	
SR3	Misty	Rough	13:49	8.6	Surface	1.0	0.0	276	20.2	20.2	8.1	8.1	31.7	31.7	92.7	92.7	7.0	7.0	10.5	11.3	12	11	-	-	822136	807573	-	-	-	-
						1.0	0.0	277	20.2		8.1		31.7		92.7		7.0		10.6		10		-				-		-	
					Middle	4.3	0.2	24	20.3	20.3	8.1	8.1	31.8	31.8	92.5	92.5	6.9		11.0		11		-				-		-	
						4.3	0.2	24	20.3		8.1		31.9		92.5		6.9		11.1		13		-				-		-	
					Bottom	7.6	0.2	54	20.3	20.3	8.1	8.1	31.9	31.9	92.6	92.7	7.0	7.0	12.2		10		-				-		-	
						7.6	0.3	57	20.3		8.1		31.9		92.7		7.0		12.3		11		-				-		-	
SR4A	Misty	Rough	12:37	8.7	Surface	1.0	0.1	77	20.2	20.2	8.1	8.1	30.9	30.9	92.2	92.3	7.0	7.0	10.9	12.0	7	8	-	-	817171	807832	-	-	-	-
						1.0	0.1	81	20.2		8.1		30.9		92.4		7.0		11.0		8		-				-		-	
					Middle	4.4	0.1	62	20.2	20.2	8.2	8.2	31.0	31.0	93.5	93.8	-		12.1		8		-				-		-	
						4.4	0.1	68	20.2		8.2		31.0		94.0		-		12.1		8		-				-		-	
					Bottom	7.7	0.2	84	20.2	20.2	8.2	8.2	31.0	31.0	95.2	95.4	7.2	7.2	13.0		8		-				-		-	
						7.7	0.2	91	20.1		8.2		31.0		95.6		7.2		12.9		9		-				-		-	
SR5A	Misty	Rough	12:28	4.2	Surface	1.0	0.1	310	20.5	20.5	8.2	8.2	31.3	31.3	88.0	88.0	6.6	6.6	6.7	6.9	9	9	-	-	816591	810678	-	-	-	-
						1.0	0.1	325	20.5		8.2		31.3		88.0		6.6		6.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	326	20.5	20.5	8.2	8.2	31.3	31.3	87.8	87.8	6.6	6.6	7.1		8		-				-		-	
						3.2	0.1	327	20.5		8.2		31.3		87.8		6.6		7.1		9		-				-		-	
SR6	Misty	Rough	12:23	4.8	Surface	1.0	0.1	221	20.8	20.8	8.1	8.1	31.9	31.9	85.8	85.8	6.4	6.4	6.0	6.2	9	8	-	-	817922	814669	-	-	-	-
						1.0	0.1	234	20.8		8.1		31.9		85.7		6.4		6.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	210	20.8	20.8	8.1	8.1	31.9	31.9	85.7	85.7	6.4	6.4	6.4		8		-				-		-	
						3.8	0.1	213	20.8		8.1		31.9		85.7		6.4		6.4		7		-				-		-	
SR7	Misty	Rough	11:39	16.7	Surface	1.0	0.3	273	20.5	20.5	8.1	8.1	32.8	32.8	89.6	89.6	6.7	6.7	9.3	10.9	11	12	-	-	823658	823751	-	-	-	-
						1.0	0.3	291	20.5		8.1		32.8		89.6		6.7		9.5		10		-				-		-	
					Middle	8.4	0.3	236	20.5	20.5	8.1	8.1	32.8	32.8	89.6	89.6	6.7		10.9		11		-				-		-	
						8.4	0.4	253	20.5		8.1		32.8		89.5		6.7		10.9		11		-				-		-	
					Bottom	15.7	0.6	221	20.5	20.5	8.1	8.1	32.8	32.8	89.5	89.6	6.7	6.7	12.5		12		-				-		-	
						15.7	0.7	227	20.5		8.1		32.8		89.6		6.7		12.5		14		-				-		-	
SR8	Misty	Rough	12:57	4.3	Surface	1.0	-	-	19.8	19.8	8.2	8.2	31.9	31.9	95.8	95.8	7.3	7.3	10.8	12.2	11	7	-	-	820511	811667	-	-	-	-
						1.0	-	-	19.8		8.2		31.9		95.8		7.3		10.9		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	19.8	19.8	8.2	8.2	31.9	31.9	96.5	96.8	7.3	7.3	13.5		4		-				-		-	
						3.3	-	-	19.8		8.2		31.9		97.0		7.3		13.5		4		-				-		-	

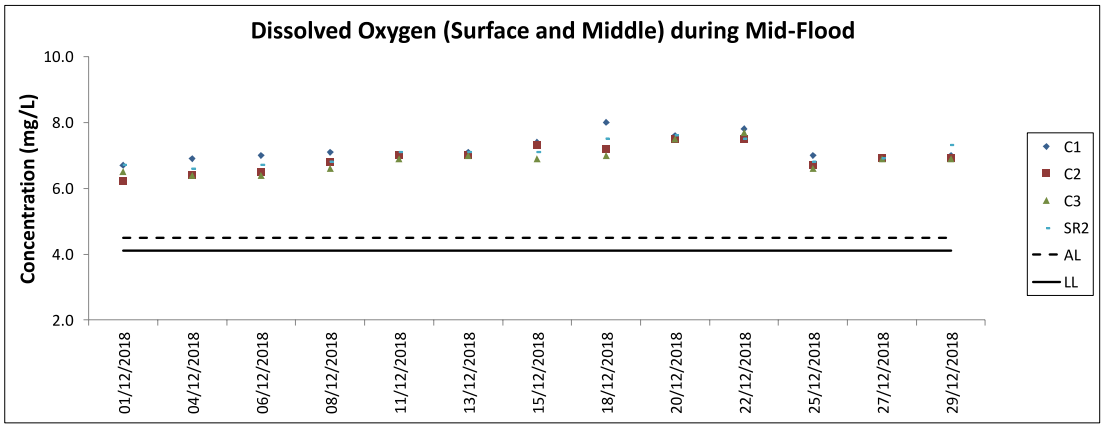
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR8 was blocked by barge and its wire. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.

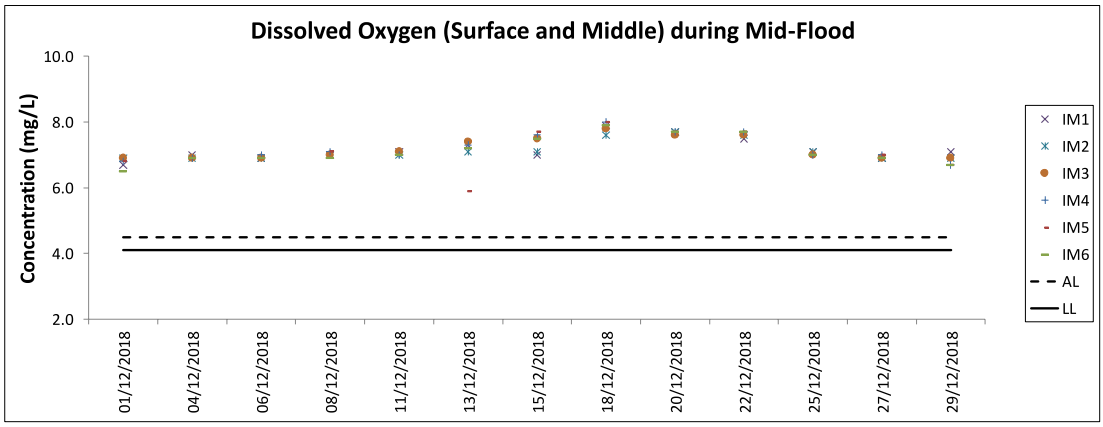

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
C1
C2
C3
AL
LL

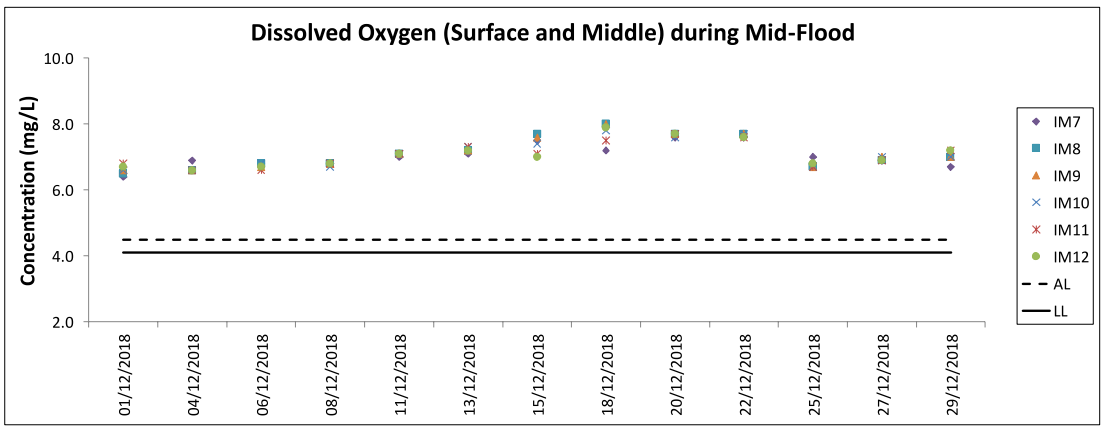

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

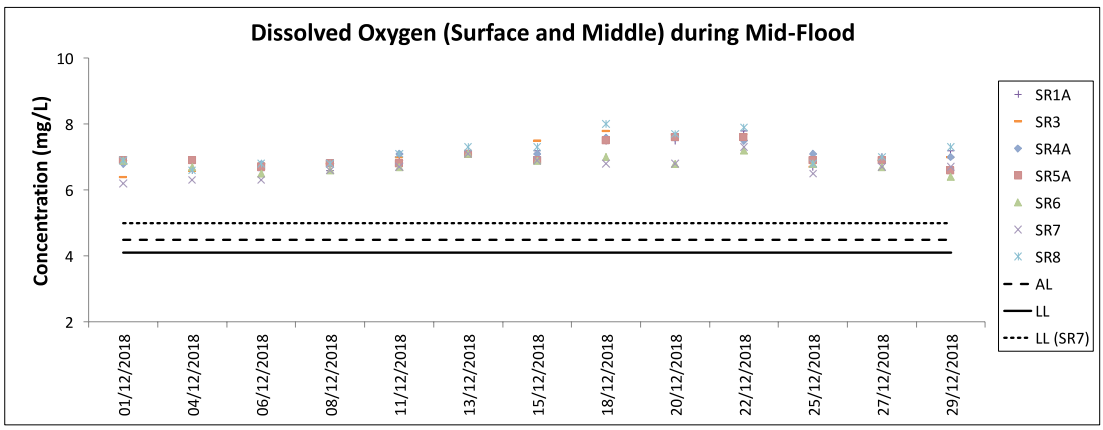

Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10
8
6
4
2
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
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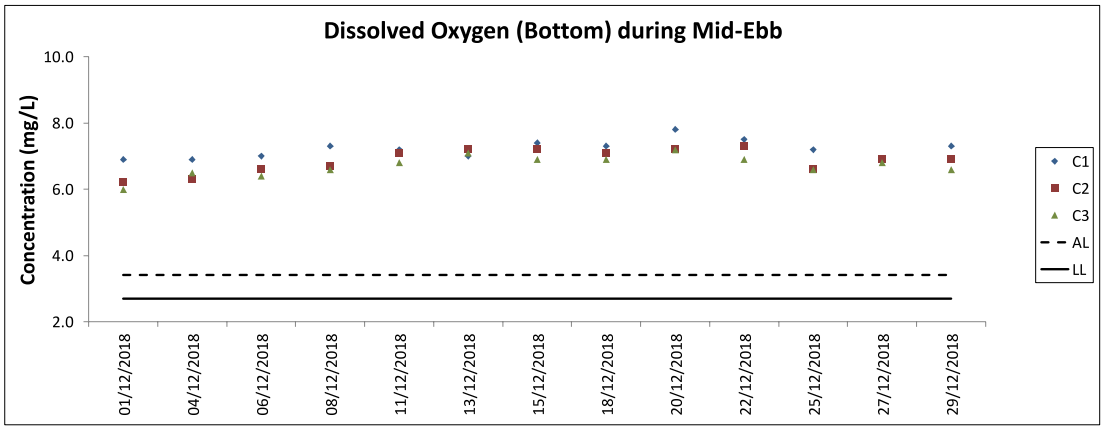
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
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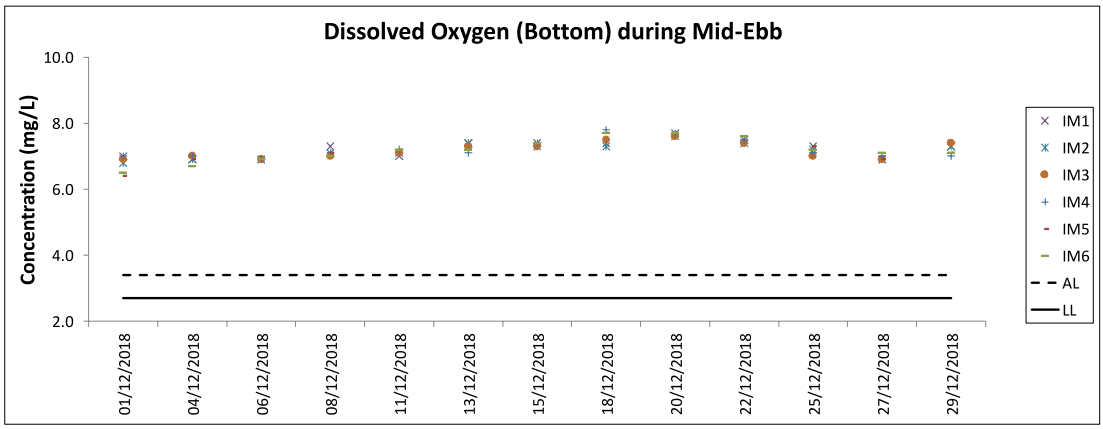
22/12/2018
25/12/2018
27/12/2018
29/12/2018
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
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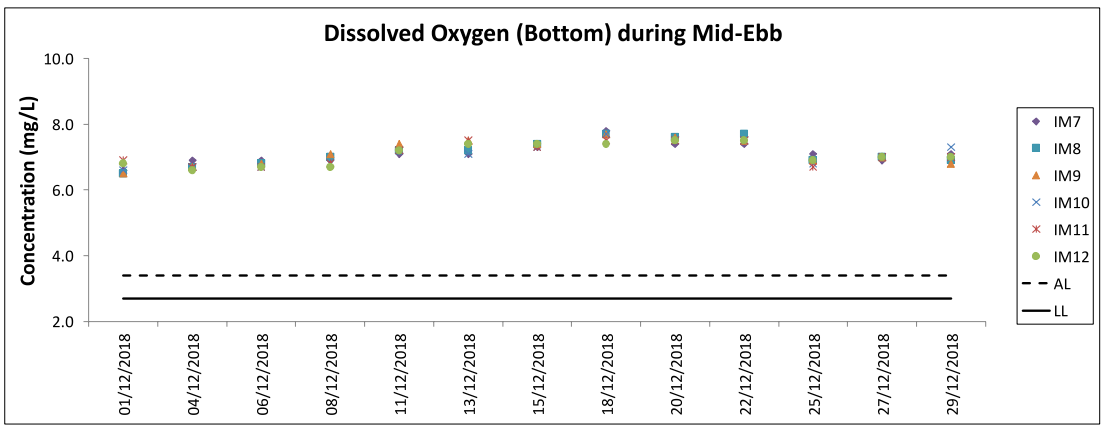
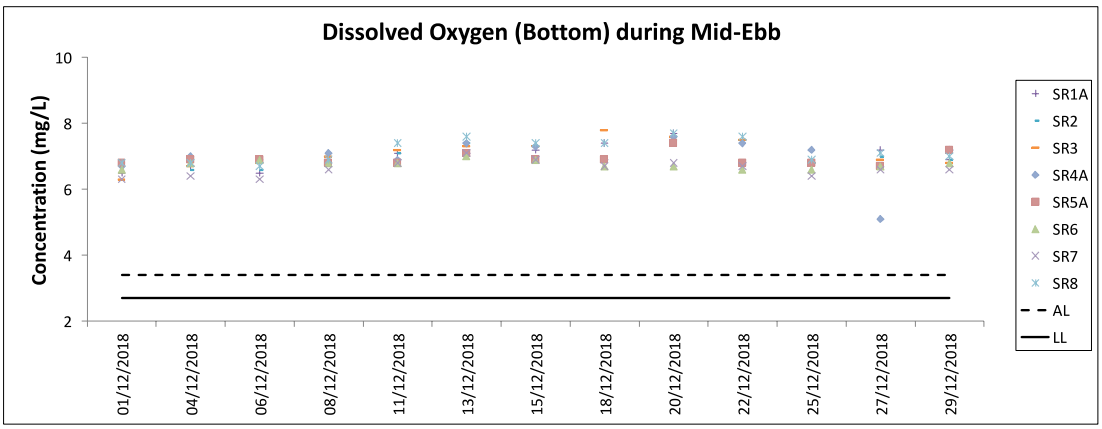
27/12/2018
29/12/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10
8
6
4
2
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
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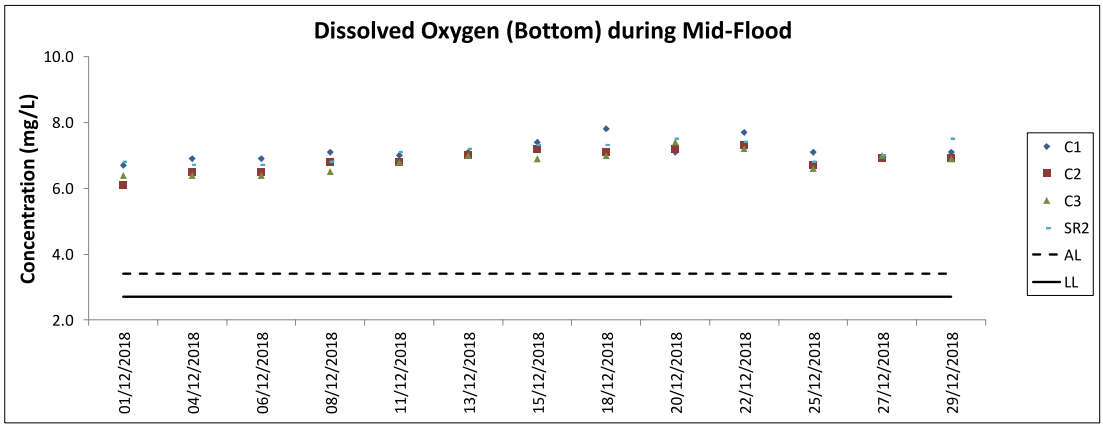
29/12/2018
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
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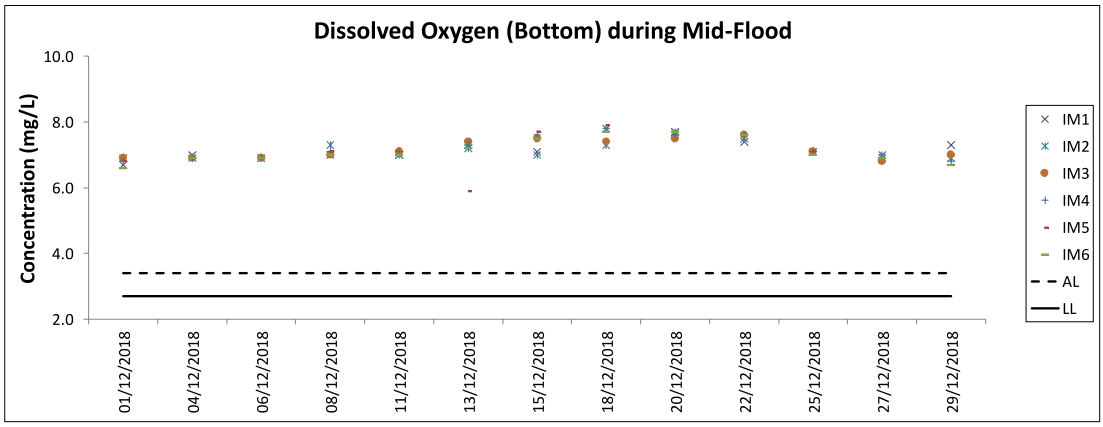
25/12/2018
27/12/2018
29/12/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
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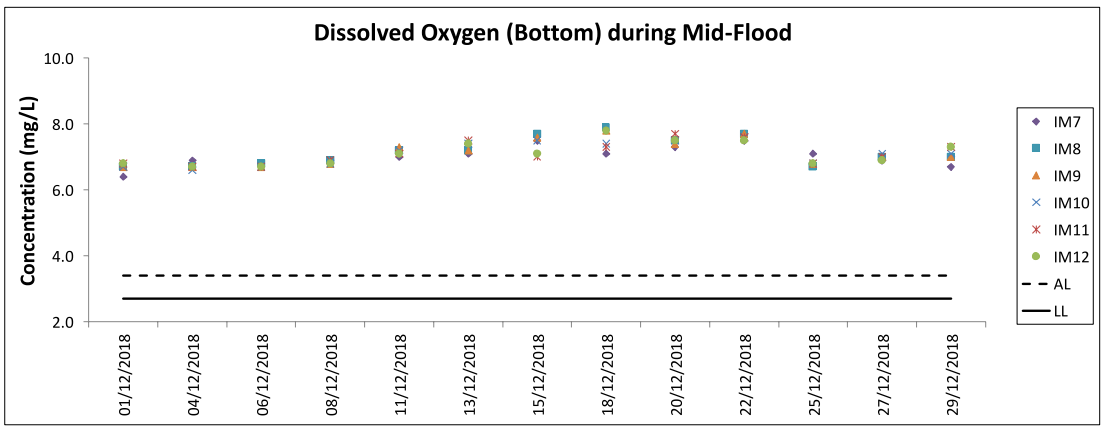
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
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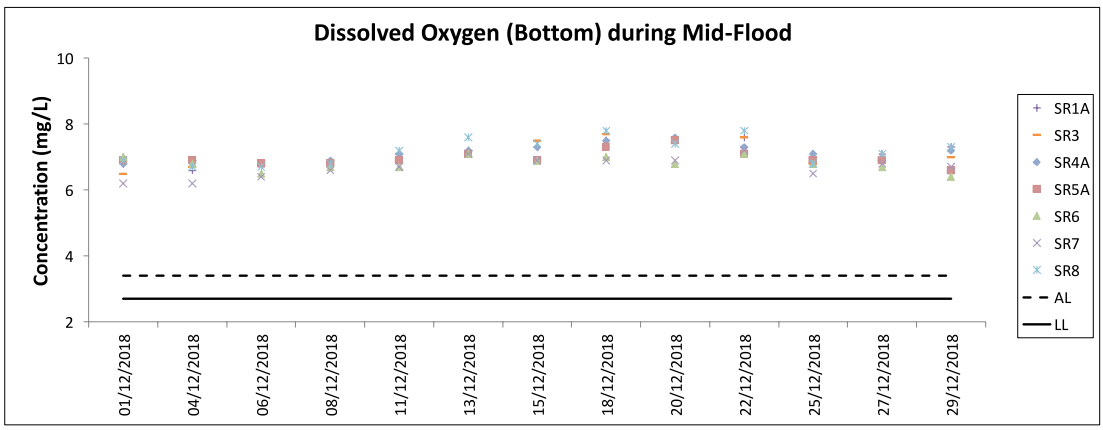
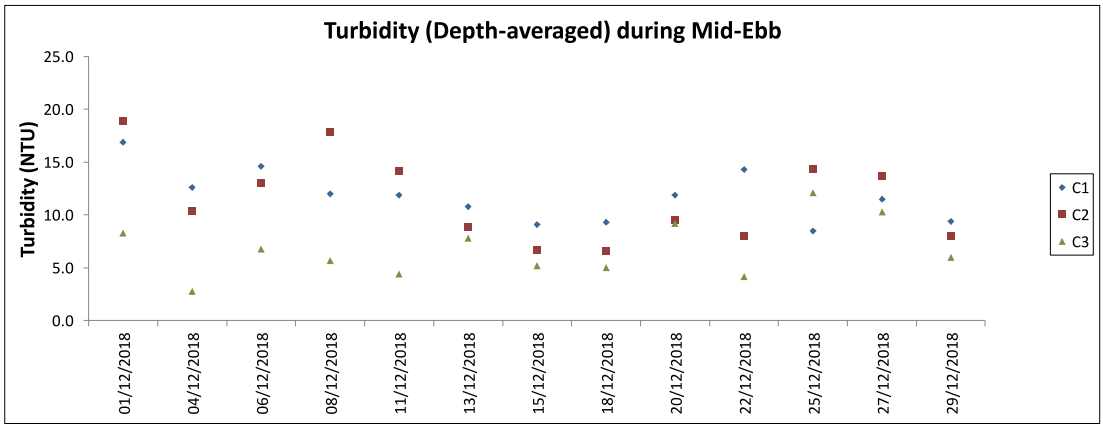
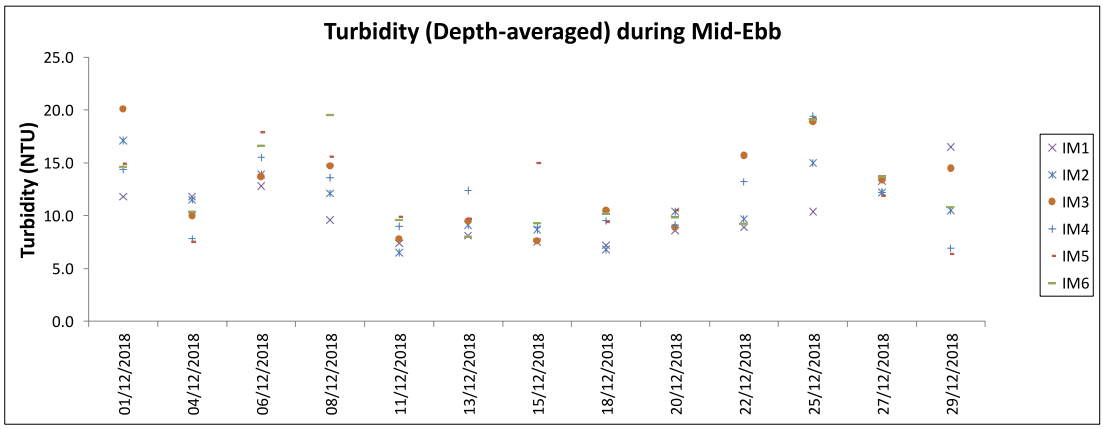
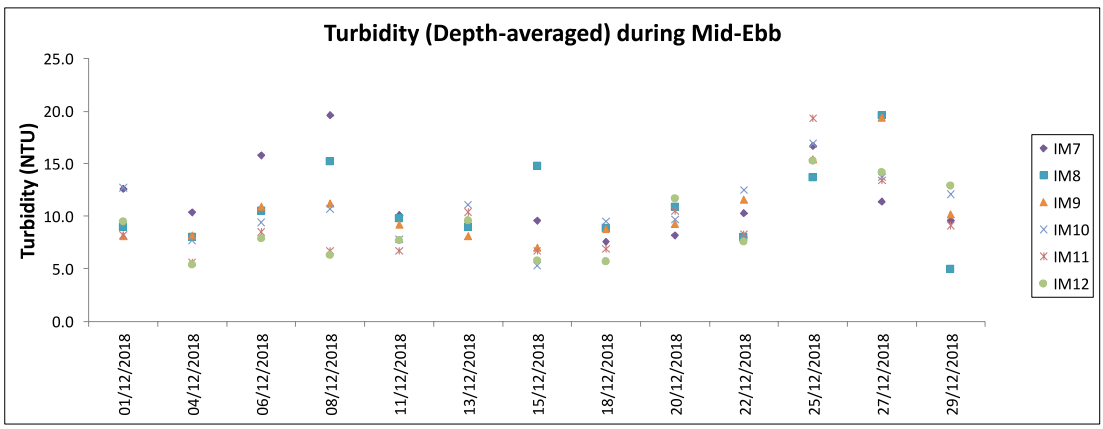
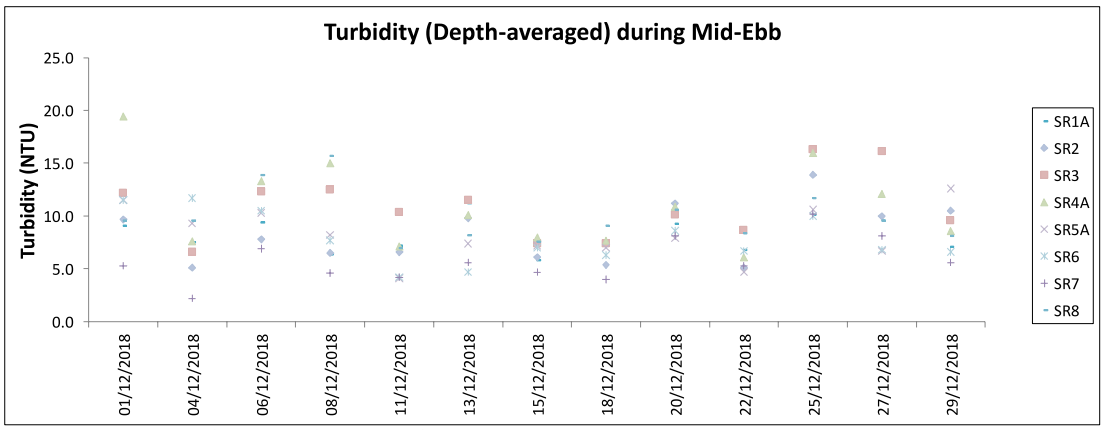
27/12/2018
29/12/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10
8
6
4
2
01/12/2018
04/12/2018
06/12/2018
08/12/2018
11/12/2018
13/12/2018
15/12/2018
18/12/2018
20/12/2018
22/12/2018
25/12/2018
27/12/2018
29/12/2018
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

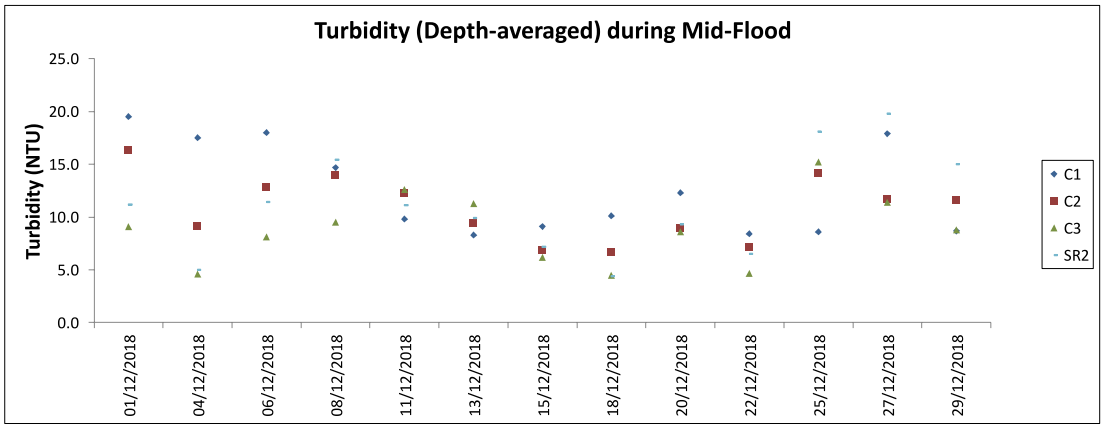


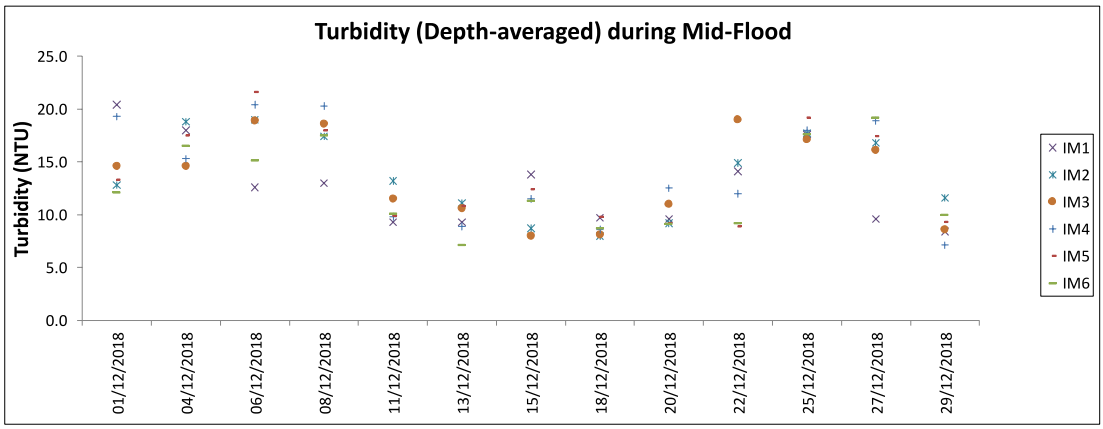


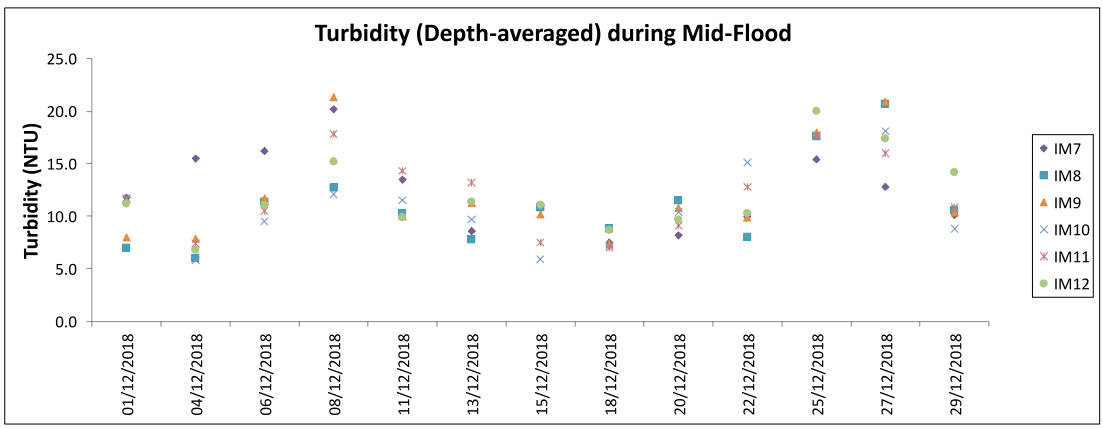


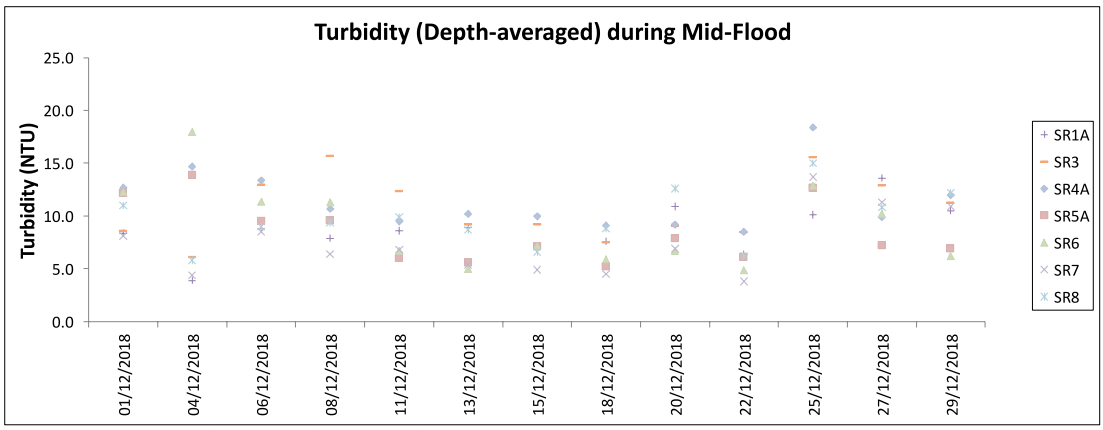


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

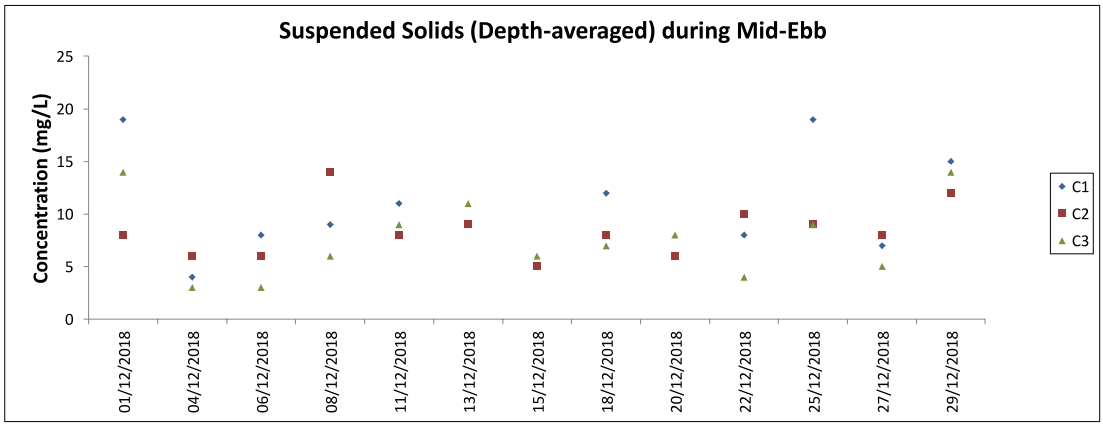


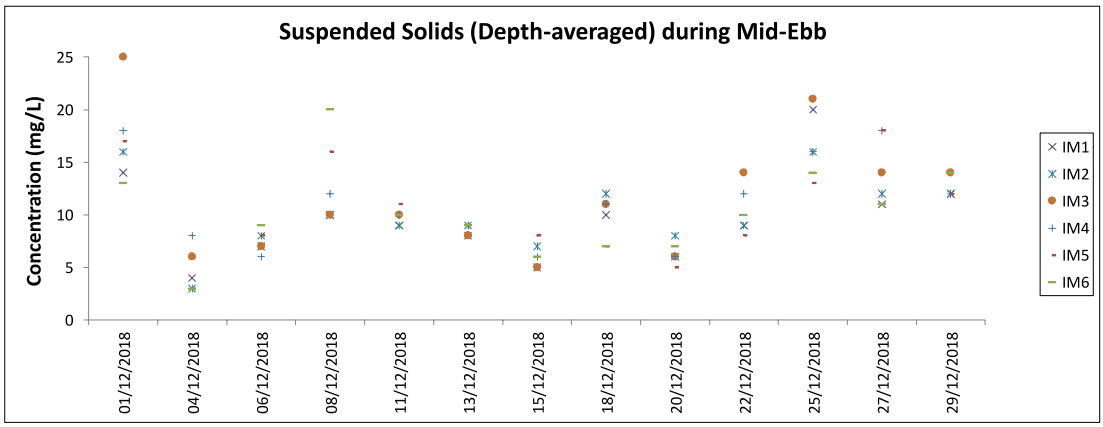


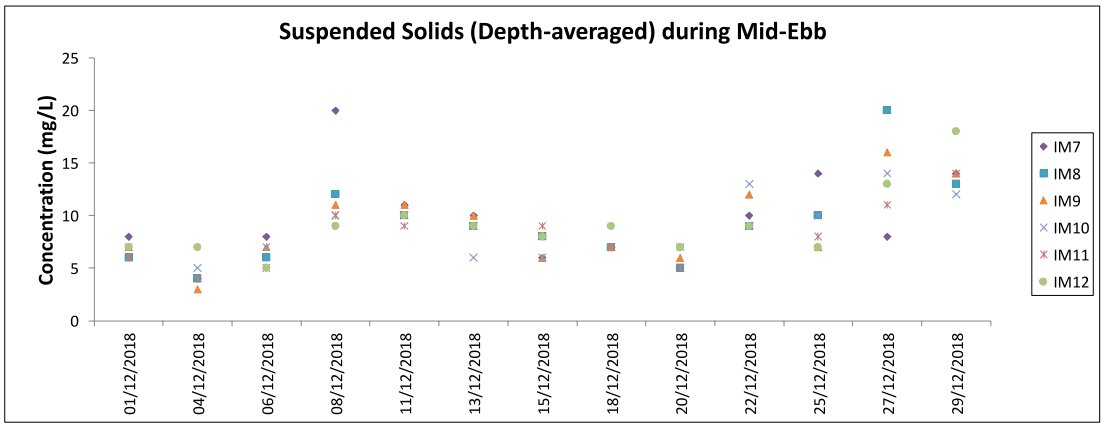


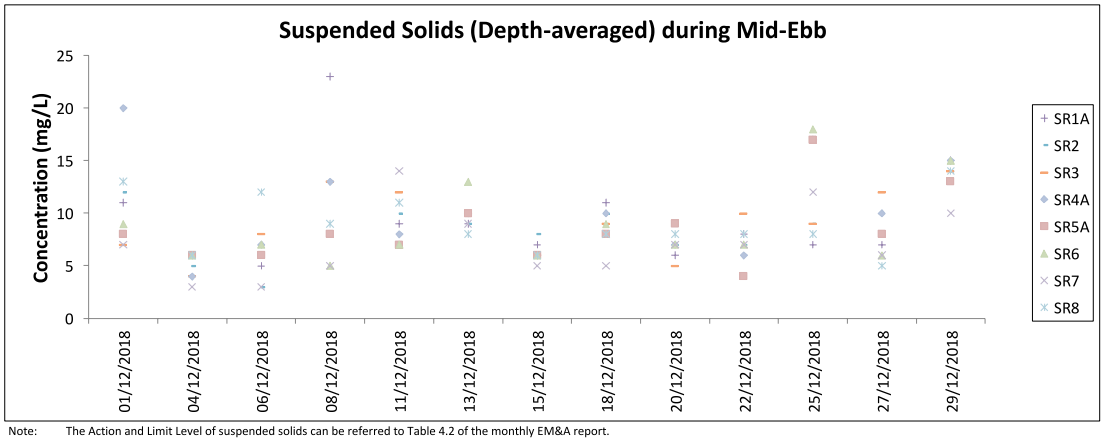


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

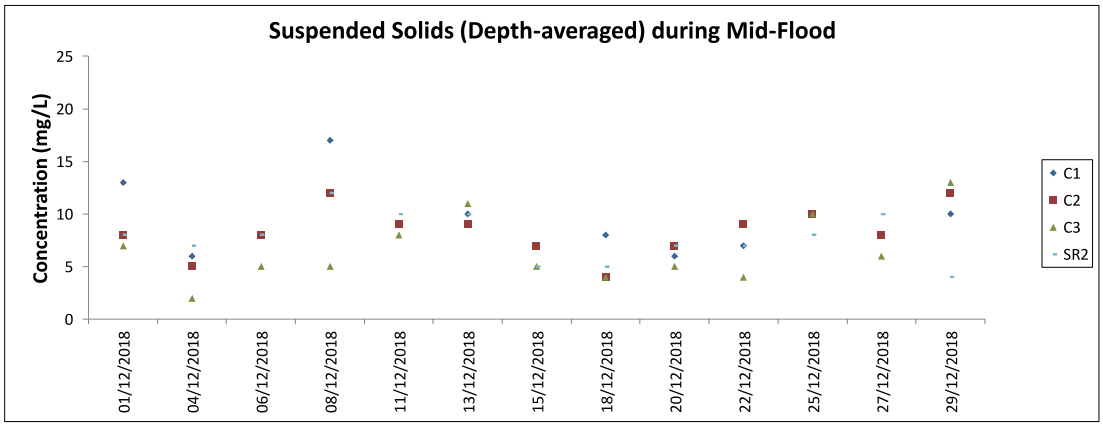


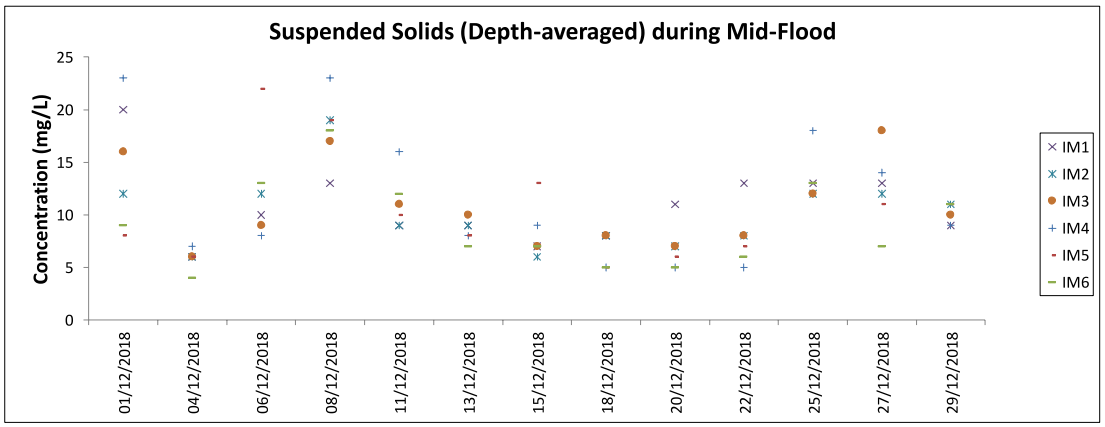


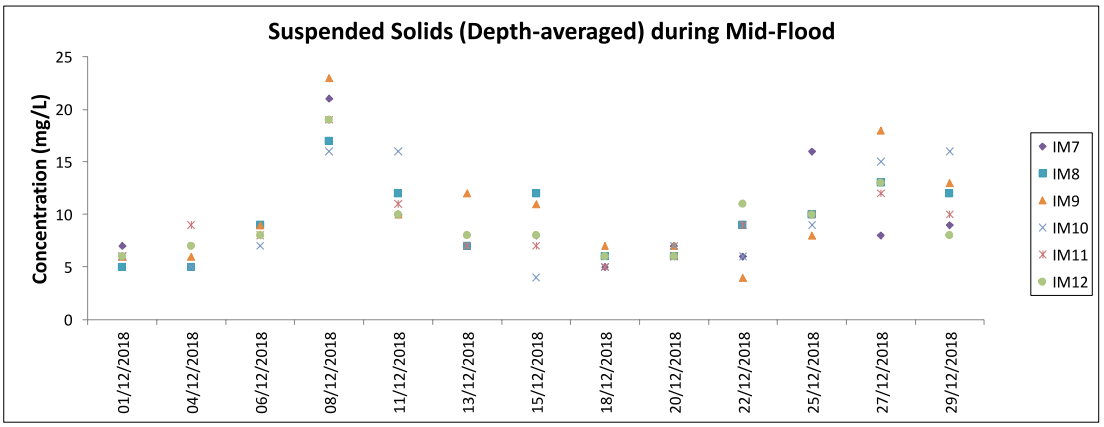


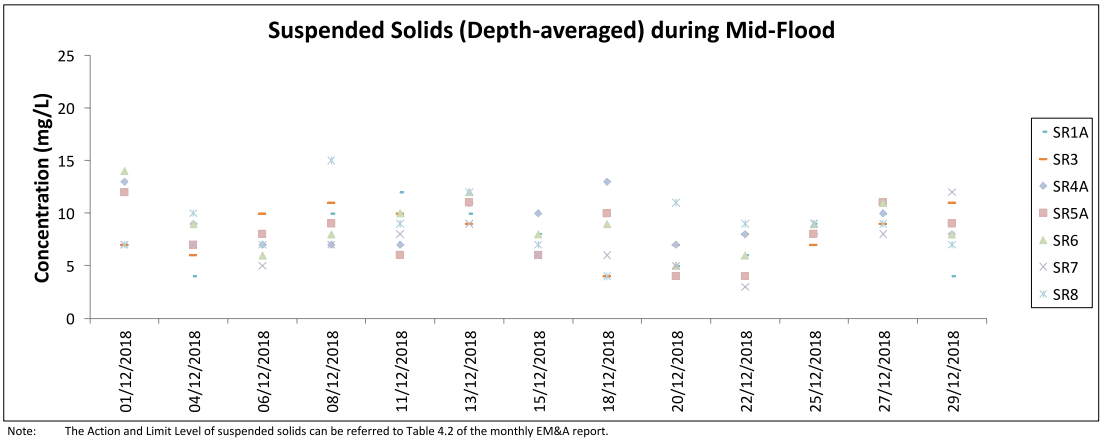


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

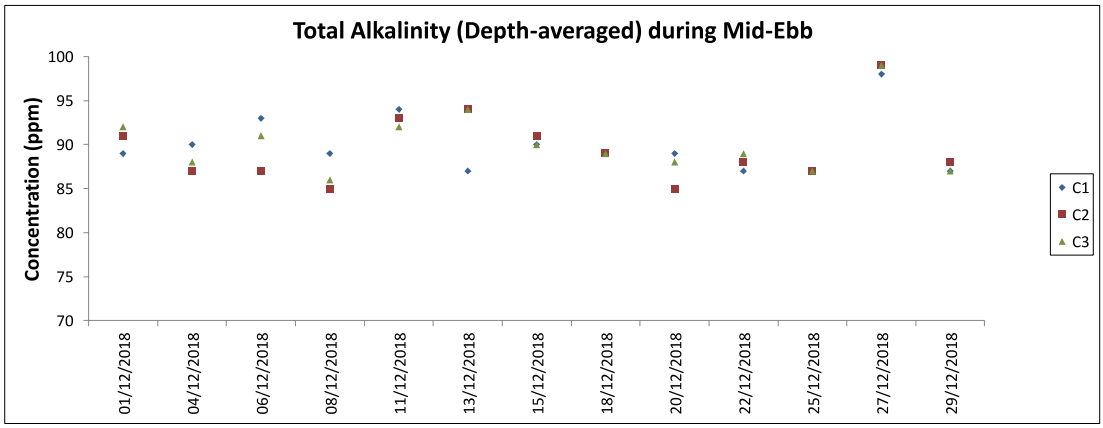


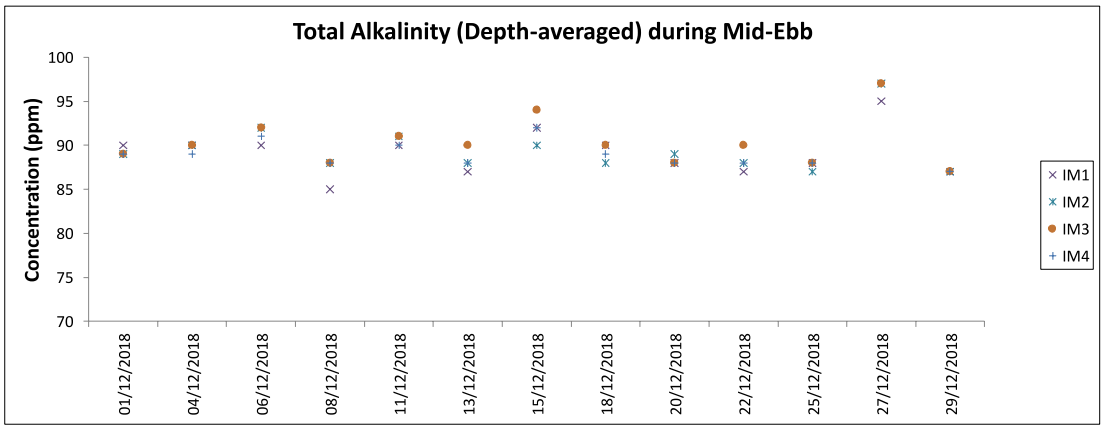


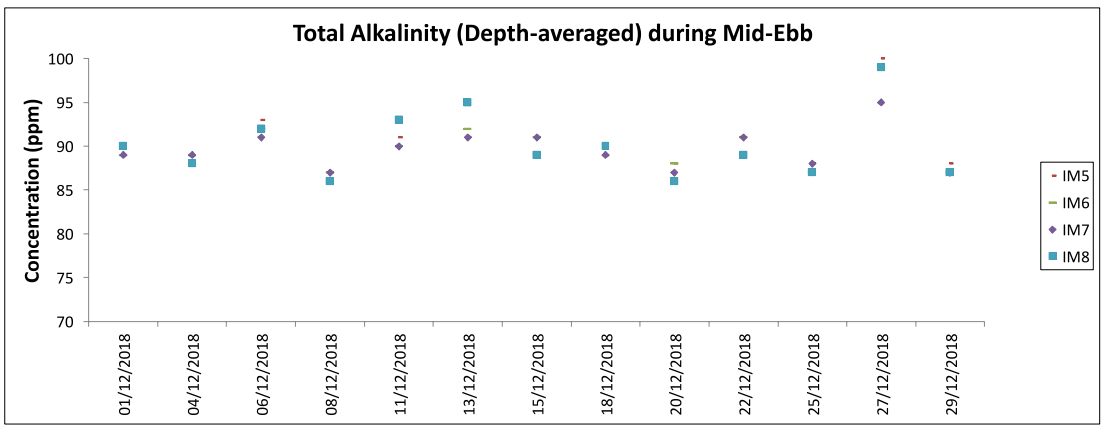


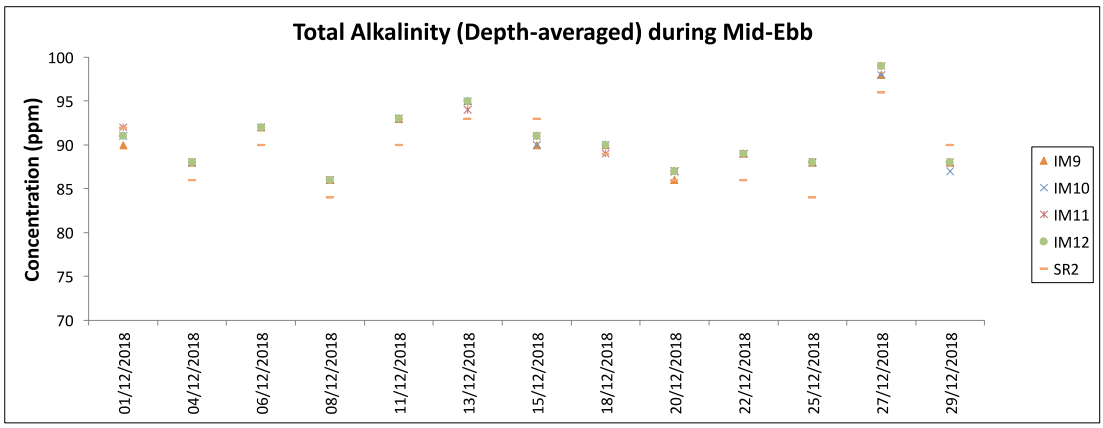


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

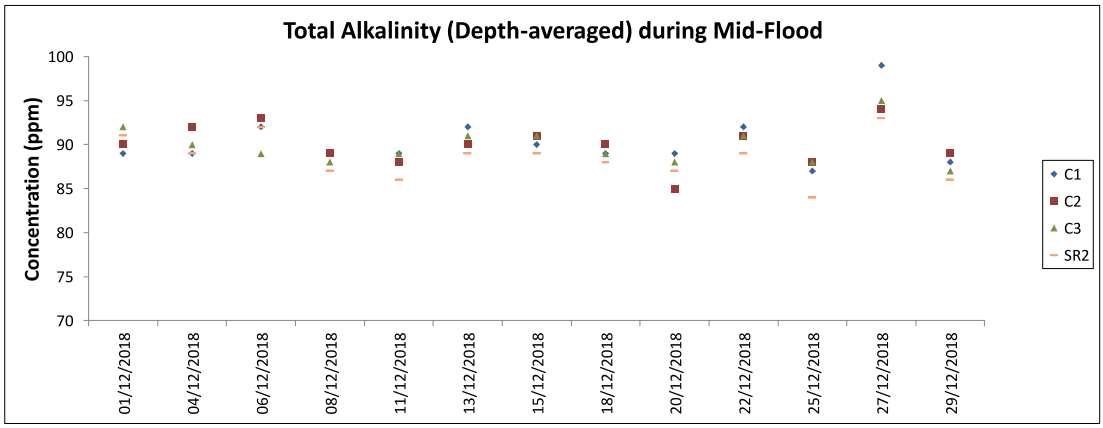


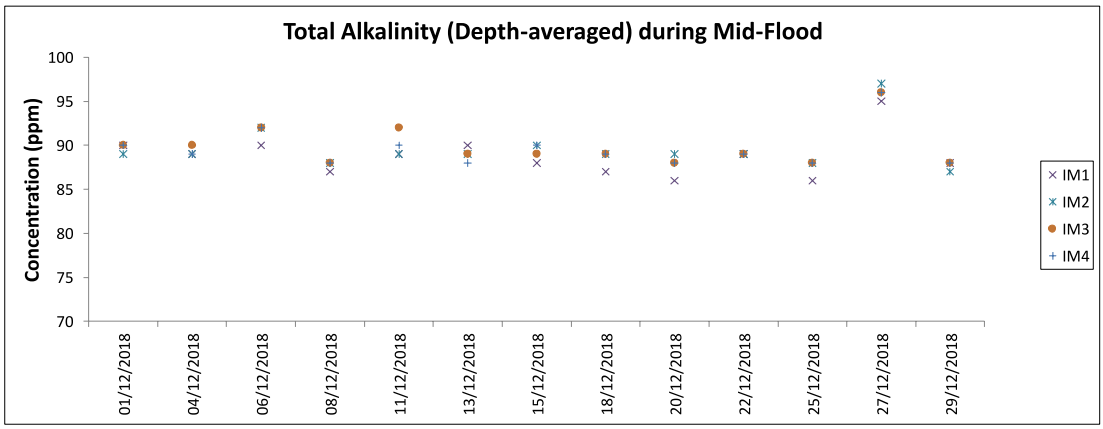


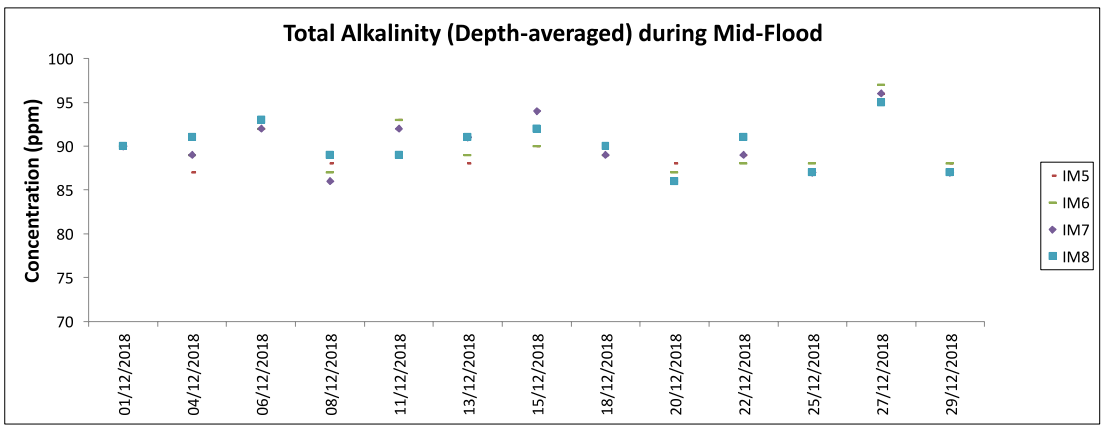


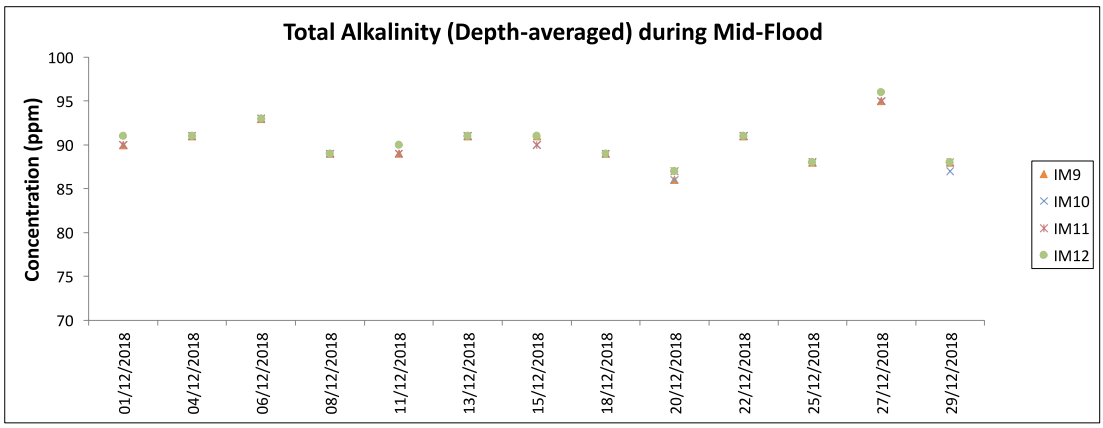


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

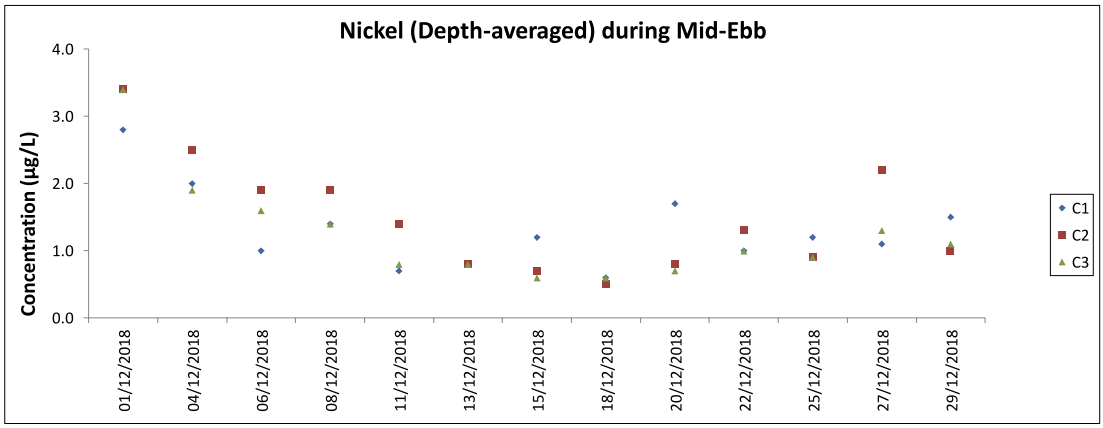


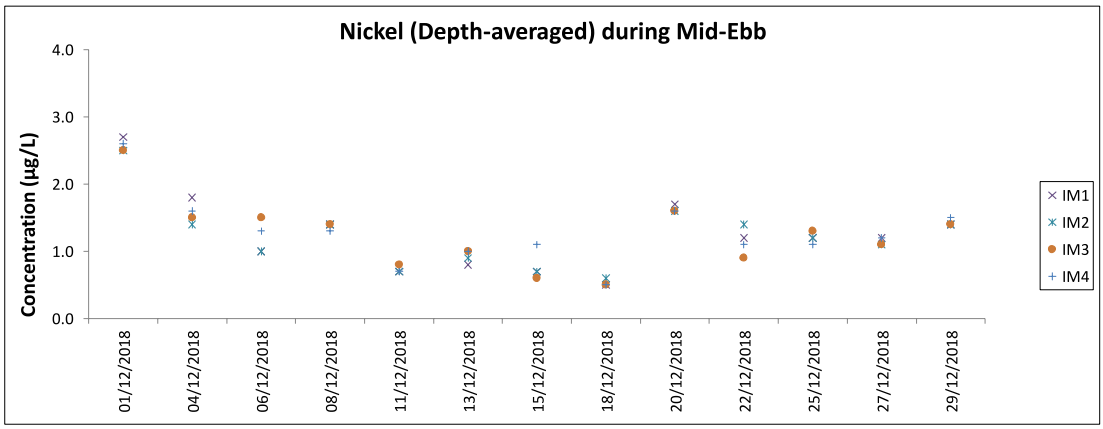


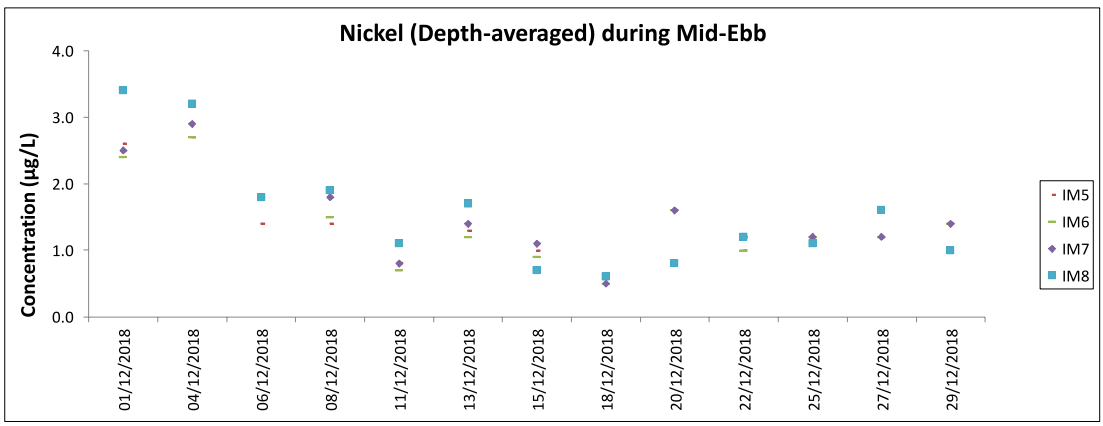


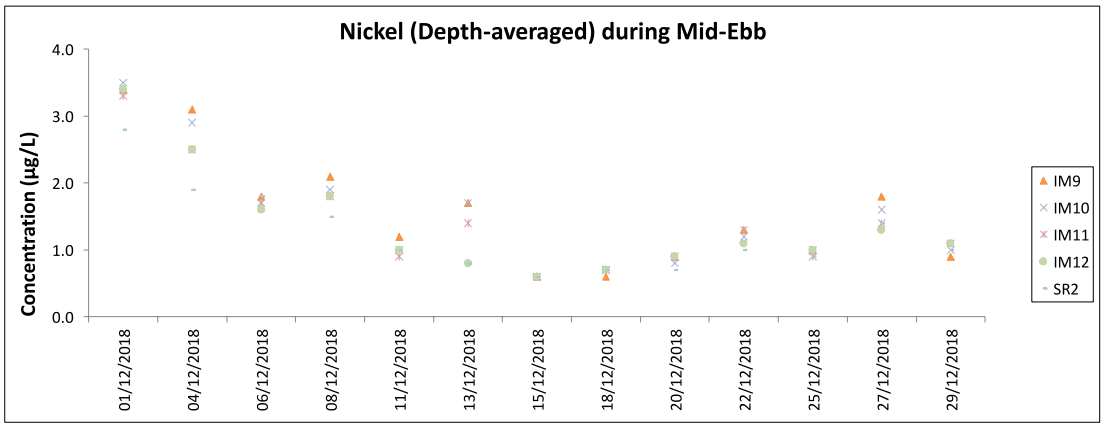


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

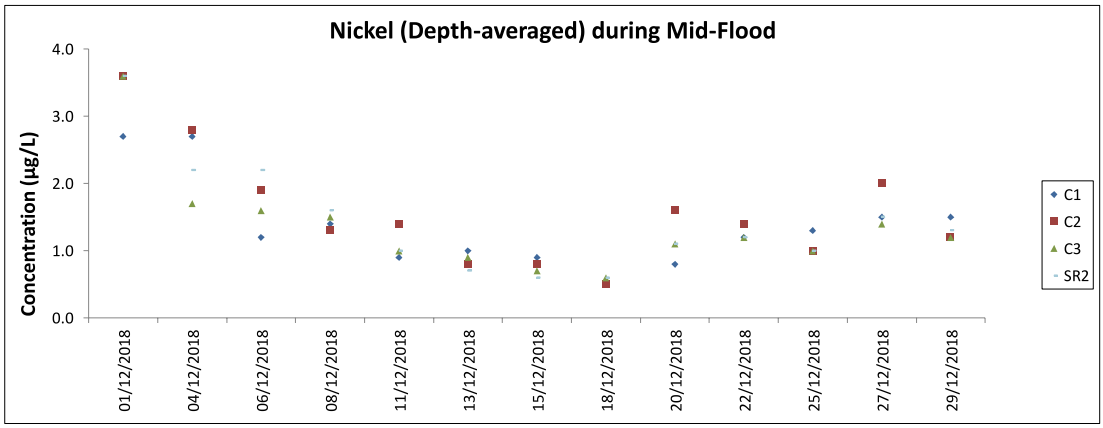


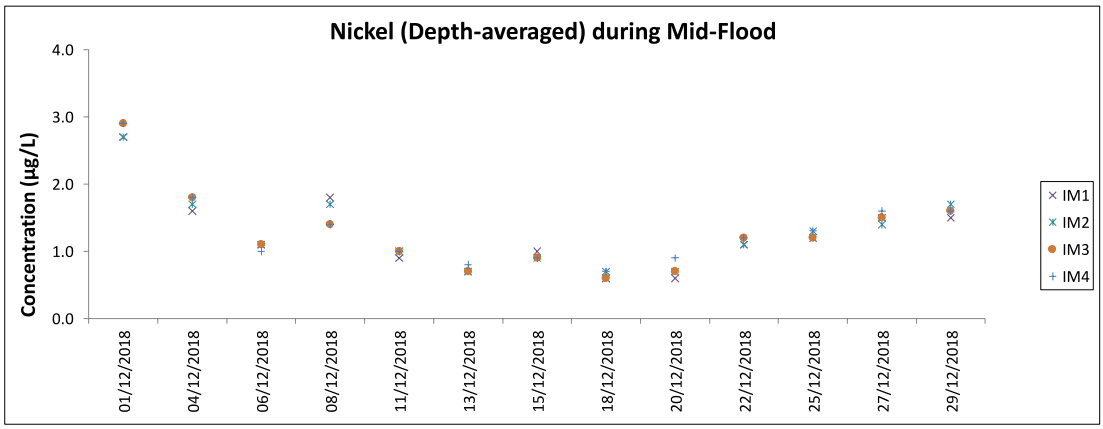


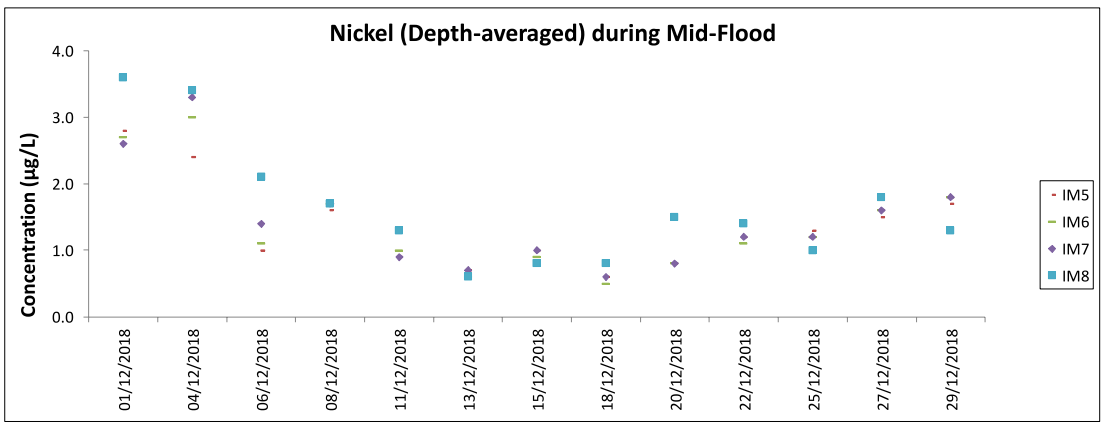


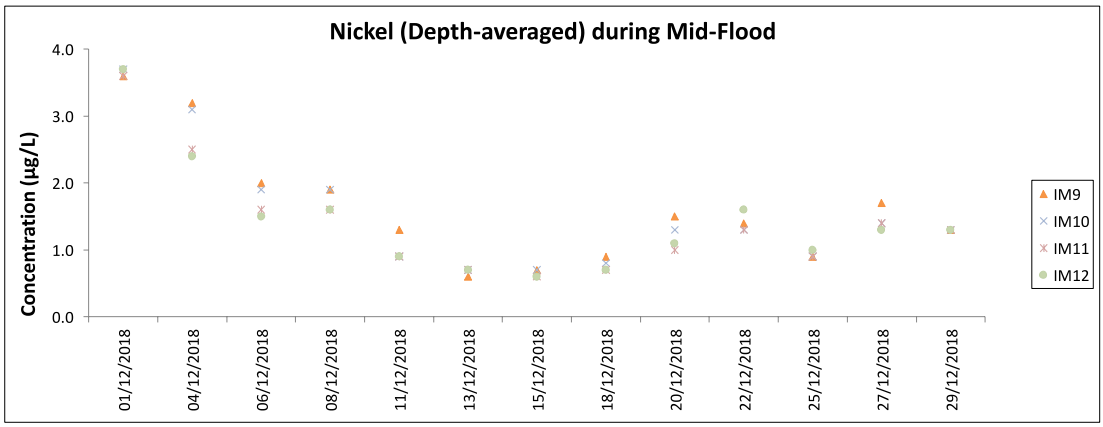


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.

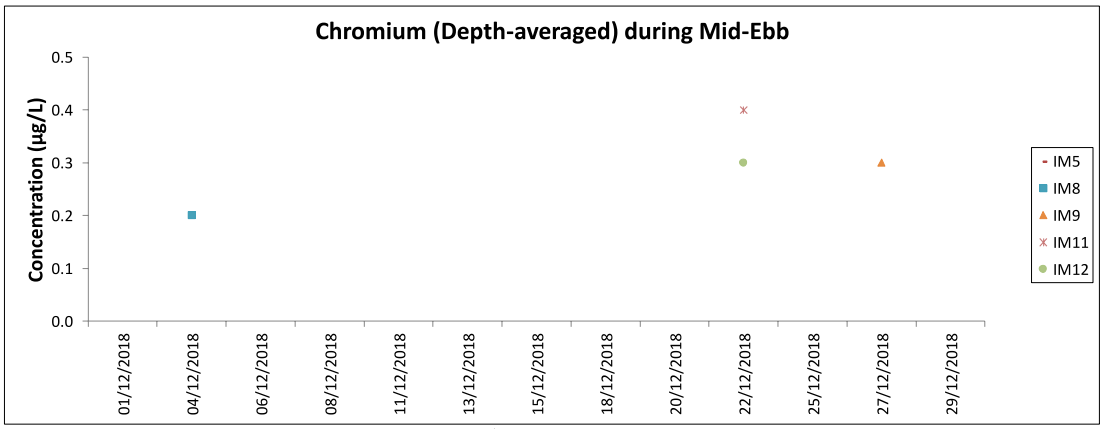








Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.



Note: All other chromium results in the reporting period was below the reporting limit 0.2 µg/L.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
4-Oct-18	AW	2	1.010	AUTUMN	32166	3RS ET	P
4-Oct-18	AW	3	3.830	AUTUMN	32166	3RS ET	P
4-Oct-18	WL	3	16.560	AUTUMN	32166	3RS ET	P
4-Oct-18	WL	4	3.020	AUTUMN	32166	3RS ET	P
4-Oct-18	WL	2	0.740	AUTUMN	32166	3RS ET	S
4-Oct-18	WL	3	8.310	AUTUMN	32166	3RS ET	S
4-Oct-18	WL	4	1.110	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	2	9.800	AUTUMN	32166	3RS ET	P
5-Oct-18	NWL	3	37.010	AUTUMN	32166	3RS ET	P
5-Oct-18	NWL	4	15.400	AUTUMN	32166	3RS ET	P
5-Oct-18	NWL	2	1.100	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	3	8.290	AUTUMN	32166	3RS ET	S
5-Oct-18	NWL	4	1.400	AUTUMN	32166	3RS ET	S
8-Oct-18	NWL	2	45.386	AUTUMN	32166	3RS ET	P
8-Oct-18	NWL	3	14.046	AUTUMN	32166	3RS ET	P
8-Oct-18	NWL	2	10.674	AUTUMN	32166	3RS ET	S
8-Oct-18	NWL	3	1.390	AUTUMN	32166	3RS ET	S
11-Oct-18	NEL	2	15.780	AUTUMN	32166	3RS ET	P
11-Oct-18	NEL	3	19.940	AUTUMN	32166	3RS ET	P
11-Oct-18	NEL	4	1.900	AUTUMN	32166	3RS ET	P
11-Oct-18	NEL	2	3.580	AUTUMN	32166	3RS ET	S
11-Oct-18	NEL	3	5.900	AUTUMN	32166	3RS ET	S
12-Oct-18	NEL	2	29.540	AUTUMN	32166	3RS ET	P
12-Oct-18	NEL	3	6.500	AUTUMN	32166	3RS ET	P
12-Oct-18	NEL	2	7.440	AUTUMN	32166	3RS ET	S
12-Oct-18	NEL	3	2.900	AUTUMN	32166	3RS ET	S
23-Oct-18	SWL	2	24.730	AUTUMN	32166	3RS ET	P
23-Oct-18	SWL	3	31.390	AUTUMN	32166	3RS ET	P
23-Oct-18	SWL	2	9.780	AUTUMN	32166	3RS ET	S
23-Oct-18	SWL	3	5.100	AUTUMN	32166	3RS ET	S
24-Oct-18	AW	2	4.710	AUTUMN	32166	3RS ET	P
24-Oct-18	WL	2	13.470	AUTUMN	32166	3RS ET	P
24-Oct-18	WL	3	4.494	AUTUMN	32166	3RS ET	P
24-Oct-18	WL	4	1.000	AUTUMN	32166	3RS ET	P
24-Oct-18	WL	2	6.760	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	3	2.240	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	4	0.300	AUTUMN	32166	3RS ET	S
24-Oct-18	WL	5	0.500	AUTUMN	32166	3RS ET	S
26-Oct-18	SWL	2	25.709	AUTUMN	32166	3RS ET	P
26-Oct-18	SWL	3	30.667	AUTUMN	32166	3RS ET	P
26-Oct-18	SWL	2	9.234	AUTUMN	32166	3RS ET	S
26-Oct-18	SWL	3	5.860	AUTUMN	32166	3RS ET	S
6-Nov-18	NWL	2	7.350	AUTUMN	32166	3RS ET	P
6-Nov-18	NWL	3	40.500	AUTUMN	32166	3RS ET	P
6-Nov-18	NWL	4	12.930	AUTUMN	32166	3RS ET	P
6-Nov-18	NWL	2	2.000	AUTUMN	32166	3RS ET	S
6-Nov-18	NWL	3	7.820	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
6-Nov-18	NWL	4	1.800	AUTUMN	32166	3RS ET	S
7-Nov-18	NEL	2	2.200	AUTUMN	32166	3RS ET	P
7-Nov-18	NEL	3	30.480	AUTUMN	32166	3RS ET	P
7-Nov-18	NEL	4	4.540	AUTUMN	32166	3RS ET	P
7-Nov-18	NEL	2	0.700	AUTUMN	32166	3RS ET	S
7-Nov-18	NEL	3	9.180	AUTUMN	32166	3RS ET	S
12-Nov-18	NWL	2	60.880	AUTUMN	32166	3RS ET	P
12-Nov-18	NWL	3	2.180	AUTUMN	32166	3RS ET	P
12-Nov-18	NWL	2	12.440	AUTUMN	32166	3RS ET	S
13-Nov-18	NEL	1	10.400	AUTUMN	32166	3RS ET	P
13-Nov-18	NEL	2	13.700	AUTUMN	32166	3RS ET	P
13-Nov-18	NEL	3	13.500	AUTUMN	32166	3RS ET	P
13-Nov-18	NEL	1	1.800	AUTUMN	32166	3RS ET	S
13-Nov-18	NEL	2	2.100	AUTUMN	32166	3RS ET	S
13-Nov-18	NEL	3	5.600	AUTUMN	32166	3RS ET	S
16-Nov-18	AW	2	2.900	AUTUMN	32166	3RS ET	P
16-Nov-18	AW	3	1.910	AUTUMN	32166	3RS ET	P
16-Nov-18	WL	2	2.752	AUTUMN	32166	3RS ET	P
16-Nov-18	WL	3	10.665	AUTUMN	32166	3RS ET	P
16-Nov-18	WL	4	2.306	AUTUMN	32166	3RS ET	P
16-Nov-18	WL	2	1.680	AUTUMN	32166	3RS ET	S
16-Nov-18	WL	3	5.483	AUTUMN	32166	3RS ET	S
16-Nov-18	WL	4	0.355	AUTUMN	32166	3RS ET	S
20-Nov-18	AW	3	2.570	AUTUMN	32166	3RS ET	P
20-Nov-18	AW	4	1.950	AUTUMN	32166	3RS ET	P
20-Nov-18	WL	2	6.864	AUTUMN	32166	3RS ET	P
20-Nov-18	WL	3	6.279	AUTUMN	32166	3RS ET	P
20-Nov-18	WL	4	5.049	AUTUMN	32166	3RS ET	P
20-Nov-18	WL	5	1.710	AUTUMN	32166	3RS ET	P
20-Nov-18	WL	2	6.792	AUTUMN	32166	3RS ET	S
20-Nov-18	WL	3	1.259	AUTUMN	32166	3RS ET	S
20-Nov-18	WL	4	1.812	AUTUMN	32166	3RS ET	S
20-Nov-18	WL	5	0.370	AUTUMN	32166	3RS ET	S
21-Nov-18	SWL	2	10.974	AUTUMN	32166	3RS ET	P
21-Nov-18	SWL	3	29.690	AUTUMN	32166	3RS ET	P
21-Nov-18	SWL	4	10.110	AUTUMN	32166	3RS ET	P
21-Nov-18	SWL	5	1.200	AUTUMN	32166	3RS ET	P
21-Nov-18	SWL	2	3.840	AUTUMN	32166	3RS ET	S
21-Nov-18	SWL	3	9.400	AUTUMN	32166	3RS ET	S
21-Nov-18	SWL	4	2.860	AUTUMN	32166	3RS ET	S
23-Nov-18	SWL	2	17.802	AUTUMN	32166	3RS ET	P
23-Nov-18	SWL	3	33.670	AUTUMN	32166	3RS ET	P
23-Nov-18	SWL	4	4.260	AUTUMN	32166	3RS ET	P
23-Nov-18	SWL	2	8.268	AUTUMN	32166	3RS ET	S
23-Nov-18	SWL	3	6.410	AUTUMN	32166	3RS ET	S
23-Nov-18	SWL	4	1.090	AUTUMN	32166	3RS ET	S
3-Dec-18	NWL	2	40.660	WINTER	32166	3RS ET	P
3-Dec-18	NWL	3	21.070	WINTER	32166	3RS ET	P
3-Dec-18	NWL	2	9.970	WINTER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
3-Dec-18	NWL	3	1.200	WINTER	32166	3RS ET	S
4-Dec-18	SWL	1	1.500	WINTER	32166	3RS ET	P
4-Dec-18	SWL	2	53.480	WINTER	32166	3RS ET	P
4-Dec-18	SWL	2	13.410	WINTER	32166	3RS ET	S
6-Dec-18	NEL	2	31.662	WINTER	32166	3RS ET	P
6-Dec-18	NEL	3	5.158	WINTER	32166	3RS ET	P
6-Dec-18	NEL	2	9.300	WINTER	32166	3RS ET	S
6-Dec-18	NEL	3	1.080	WINTER	32166	3RS ET	S
7-Dec-18	NEL	2	25.400	WINTER	32166	3RS ET	P
7-Dec-18	NEL	3	11.810	WINTER	32166	3RS ET	P
7-Dec-18	NEL	2	5.200	WINTER	32166	3RS ET	S
7-Dec-18	NEL	3	4.890	WINTER	32166	3RS ET	S
17-Dec-18	NWL	2	9.700	WINTER	32166	3RS ET	P
17-Dec-18	NWL	3	50.000	WINTER	32166	3RS ET	P
17-Dec-18	NWL	4	3.700	WINTER	32166	3RS ET	P
17-Dec-18	NWL	2	3.400	WINTER	32166	3RS ET	S
17-Dec-18	NWL	3	9.000	WINTER	32166	3RS ET	S
18-Dec-18	SWL	2	13.300	WINTER	32166	3RS ET	P
18-Dec-18	SWL	3	19.310	WINTER	32166	3RS ET	P
18-Dec-18	SWL	4	6.734	WINTER	32166	3RS ET	P
18-Dec-18	SWL	5	15.820	WINTER	32166	3RS ET	P
18-Dec-18	SWL	2	1.300	WINTER	32166	3RS ET	S
18-Dec-18	SWL	3	9.990	WINTER	32166	3RS ET	S
18-Dec-18	SWL	4	2.406	WINTER	32166	3RS ET	S
18-Dec-18	SWL	5	2.140	WINTER	32166	3RS ET	S
20-Dec-18	AW	2	4.680	WINTER	32166	3RS ET	P
20-Dec-18	WL	1	1.360	WINTER	32166	3RS ET	P
20-Dec-18	WL	2	18.841	WINTER	32166	3RS ET	P
20-Dec-18	WL	2	10.999	WINTER	32166	3RS ET	S
21-Dec-18	AW	1	4.800	WINTER	32166	3RS ET	P
21-Dec-18	WL	1	1.990	WINTER	32166	3RS ET	P
21-Dec-18	WL	2	12.080	WINTER	32166	3RS ET	P
21-Dec-18	WL	3	4.200	WINTER	32166	3RS ET	P
21-Dec-18	WL	4	0.800	WINTER	32166	3RS ET	P
21-Dec-18	WL	1	1.370	WINTER	32166	3RS ET	S
21-Dec-18	WL	2	5.760	WINTER	32166	3RS ET	S
21-Dec-18	WL	3	1.900	WINTER	32166	3RS ET	S
21-Dec-18	WL	4	1.200	WINTER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months (i.e. October and November 2018) are presented for reference only.

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
4-Oct-18	1	1104	CWD	3	WL	3	461	ON	3RS ET	22.2411	113.8415	AUTUMN	NONE	P
4-Oct-18	2	1148	CWD	1	WL	3	2	ON	3RS ET	22.2319	113.8356	AUTUMN	NONE	P
4-Oct-18	3	1210	CWD	3	WL	3	325	ON	3RS ET	22.2232	113.8283	AUTUMN	NONE	P
4-Oct-18	4	1253	CWD	2	WL	3	49	ON	3RS ET	22.2029	113.8235	AUTUMN	NONE	S
4-Oct-18	5	1314	CWD	7	WL	4	214	ON	3RS ET	22.1965	113.8380	AUTUMN	NONE	P
5-Oct-18	1	1038	CWD	3	NWL	3	182	ON	3RS ET	22.2805	113.8703	AUTUMN	NONE	P
8-Oct-18	1	0948	CWD	6	NWL	3	860	ON	3RS ET	22.3855	113.8703	AUTUMN	NONE	P
8-Oct-18	2	1201	CWD	1	NWL	2	59	ON	3RS ET	22.3717	113.8774	AUTUMN	NONE	P
8-Oct-18	3	1223	CWD	4	NWL	2	196	ON	3RS ET	22.3923	113.8781	AUTUMN	NONE	P
8-Oct-18	4	1410	CWD	1	NWL	2	116	ON	3RS ET	22.3887	113.8980	AUTUMN	NONE	P
8-Oct-18	5	1423	CWD	2	NWL	2	15	ON	3RS ET	22.3897	113.8979	AUTUMN	NONE	P
12-Oct-18	1	1210	CWD	1	NEL	2	18	ON	3RS ET	22.3219	113.9658	AUTUMN	NONE	P
24-Oct-18	1	1033	CWD	5	WL	3	264	ON	3RS ET	22.2690	113.8447	AUTUMN	NONE	S
24-Oct-18	2	1054	CWD	6	WL	3	300	ON	3RS ET	22.2690	113.8459	AUTUMN	NONE	P
26-Oct-18	1	1236	FP	1	SWL	2	55	ON	3RS ET	22.1571	113.8774	AUTUMN	NONE	S
6-Nov-18	1	0941	CWD	4	NWL	3	997	ON	3RS ET	22.3858	113.8695	AUTUMN	NONE	P
6-Nov-18	2	1202	CWD	7	NWL	2	259	ON	3RS ET	22.3897	113.8781	AUTUMN	NONE	P
12-Nov-18	1	1036	CWD	2	NWL	2	635	ON	3RS ET	22.2857	113.8701	AUTUMN	NONE	P
12-Nov-18	2	1145	CWD	2	NWL	3	4	ON	3RS ET	22.3678	113.8780	AUTUMN	NONE	P
16-Nov-18	1	1038	CWD	4	WL	3	60	ON	3RS ET	22.2604	113.8462	AUTUMN	NONE	P
16-Nov-18	2	1059	CWD	3	WL	2	131	ON	3RS ET	22.2502	113.8359	AUTUMN	NONE	P
16-Nov-18	3	1144	CWD	3	WL	3	783	ON	3RS ET	22.2300	113.8381	AUTUMN	NONE	S
16-Nov-18	4	1219	CWD	1	WL	2	20	ON	3RS ET	22.2233	113.8273	AUTUMN	NONE	P
16-Nov-18	5	1223	CWD	3	WL	2	244	ON	3RS ET	22.2237	113.8249	AUTUMN	NONE	P
16-Nov-18	6	1237	CWD	1	WL	3	170	ON	3RS ET	22.2144	113.8230	AUTUMN	NONE	P
16-Nov-18	7	1243	CWD	2	WL	3	413	ON	3RS ET	22.2146	113.8296	AUTUMN	NONE	P
16-Nov-18	8	1300	CWD	8	WL	3	103	ON	3RS ET	22.2054	113.8384	AUTUMN	NONE	P
16-Nov-18	9	1322	CWD	3	WL	3	171	ON	3RS ET	22.2000	113.8254	AUTUMN	NONE	S
16-Nov-18	10	1345	CWD	2	WL	3	77	ON	3RS ET	22.1963	113.8401	AUTUMN	NONE	P
20-Nov-18	1	1058	CWD	3	WL	2	127	ON	3RS ET	22.2413	113.8401	AUTUMN	NONE	P
20-Nov-18	2	1210	CWD	4	WL	2	N/A	OFF	3RS ET	22.2234	113.8330	AUTUMN	NONE	P
20-Nov-18	3	1226	CWD	4	WL	3	7	ON	3RS ET	22.2230	113.8315	AUTUMN	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
20-Nov-18	4	1244	CWD	2	WL	3	495	ON	3RS ET	22.2227	113.8233	AUTUMN	NONE	P
21-Nov-18	1	1450	CWD	1	SWL	3	354	ON	3RS ET	22.1994	113.8604	AUTUMN	NONE	S
21-Nov-18	2	1516	CWD	1	SWL	2	339	ON	3RS ET	22.1757	113.8489	AUTUMN	NONE	P
21-Nov-18	3	1532	CWD	1	SWL	2	N/A	OFF	3RS ET	22.1869	113.8490	AUTUMN	NONE	P
23-Nov-18	1	1320	FP	2	SWL	2	52	ON	3RS ET	22.1551	113.9041	AUTUMN	NONE	S
3-Dec-18	1	1039	CWD	2	NWL	2	178	ON	3RS ET	22.2718	113.8723	WINTER	NONE	S
3-Dec-18	2	1302	CWD	1	NWL	3	21	ON	3RS ET	22.3659	113.8976	WINTER	NONE	P
4-Dec-18	1	1442	CWD	10	SWL	2	210	ON	3RS ET	22.2007	113.8657	WINTER	NONE	S
4-Dec-18	2	1533	CWD	2	SWL	2	541	ON	3RS ET	22.1810	113.8491	WINTER	NONE	P
18-Dec-18	1	1315	FP	2	SWL	3	4	ON	3RS ET	22.1552	113.9043	WINTER	NONE	S
18-Dec-18	2	1419	FP	3	SWL	5	112	ON	3RS ET	22.1667	113.9268	WINTER	NONE	P
20-Dec-18	1	1136	CWD	1	WL	2	34	ON	3RS ET	22.2138	113.8278	WINTER	NONE	P
21-Dec-18	1	1143	CWD	11	WL	3	170	ON	3RS ET	22.2053	113.8303	WINTER	NONE	P
21-Dec-18	2	1218	CWD	7	WL	3	244	ON	3RS ET	22.1872	113.8315	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 (i.e. October and November 2018) are presented for reference only. No relevant figure or text will be mentioned in the 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 December 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 419.770 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 7 on-effort sightings and total number of 34 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in December 2018 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in December 2018

$$STG = \frac{7}{419.770}\ x\ 100 = 1.67$$

Encounter Rate by Number of Dolphins (ANI) in December 2018

$$ANI = \frac{34}{419.770}\ x\ 100 = 8.10$$

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

A total of 1235.678 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 39 on-effort sightings and total number of 128 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)

$$STG = \frac{39}{1235.678}\ x\ 100 = 3.16$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{128}{1235.678}\ x\ 100 = 10.36$$

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

	
SLMM028_20181203_1_14	SLMM010_20181204_1_1
	
SLMM012_20181204_1_2	SLMM014_20181204_1_3
	
SLMM019_20181204_1_2	SLMM022_20181204_1_1
	
SLMM067_20181204_1_1	WLMM001_20181204_1_9

	
WLMM069_20181204_1_1	WLMM114_20181204_2_3
	
WLMM001_20181220_1_2	SLMM030_20181221_1_2
	
SLMM053_20181221_1_3	WLMM001_20181221_1_3
	
WLMM028_20181221_1_1	WLMM029_20181221_1_6

	
WLMM073_20181221_1_1	WLMM078_20181221_1_15
	
WLMM080_20181221_1_11	SLMM014_20181221_2_5
	
SLMM053_20181221_2_11	WLMM001_20181221_2_3
	
WLMM028_20181221_2_9	WLMM029_20181221_2_1

WLMM078_20181221_2_5

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
10/Dec/18	Lung Kwu Chau	8:46	14:46	6:00	2	2	4	1-3
11/Dec/18	Sha Chau	8:41	14:41	6:00	2-3	2	0	N/A
14/Dec/18	Sha Chau	8:43	14:43	6:00	2	2	0	N/A
18/Dec/18	Lung Kwu Chau	8:40	14:40	6:00	2-3	1	2	3-4
19/Dec/18	Lung Kwu Chau	8:43	14:43	6:00	2-3	1-2	2	3-5

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

Terrestrial Ecological Monitoring

Terrestrial Ecological Monitoring – location map and site photos regarding the monthly ecological monitoring for the egretry area on Sheung Sha Chau and the HDD daylighting location

Photo record of View 1

Photo record of View 2

Appendix E. Calibration Certificates

Manufacturer Calibration Certificate

The following instrument has been tested and calibrated to the manufacturer specifications.
The calibration is traceable in accordance with ISO/IEC 17025 covering all instrument functions.

- Device Type: XL2 Audio and Acoustic Analyzer
- Serial Number: A2A-14829-E0

- Certificate Issued: 28 August 2018
- Certificate Number: 43340-A2A-14829-E0

- Results: PASSED
  (for detailed report see next page)

Tested by: M. Frick

Signature:

Stamp:

NTi Audio AG
Im alten Riet 102
LI - 9494 Schaan
www.nti-audio.com

Calibration of: XL2 Audio and Acoustic Analyzer
Serial Number: A2A-14829-E0
Date: 28 August 2018

- Detailed Calibration Test Results:

		reference	actual	unit	actual error	XL2 tolerance	calibration uncertainty[2]
RMS Level @ 1kHz, XLR Input		0.1	0.100	V	≤0.1%	±0.5%	±0.10%
		1	1.000	V	≤0.1%	±0.5%	±0.09%
		10	9.988	V	-0.1%	±0.5%	±0.09%
Flatness, XLR Input[1]	20 Hz	1	0.996	V	-0.4%	±1.1%	±0.09%
	20 kHz	1	1.005	V	0.5%	±1.1%	±0.09%
Frequency		1000	999.99	Hz		±0.003%	±0.01%
Residual Noise	XLR		< 2 uV			<2 uV	±0.50%
THD+N @ 0 dBu, 1 kHz, XLR Input			-98.5	dB		typ. -100 dB	±0.50%

- Test Conditions: Temperature: 25.7 °C
  Relative Humidity: 55.2 %

- Calibration Equipment Used:

- Agilent Multimeter, Typ 34401A, Serial No. MY 5300 4607
  Last calibration: 15.08.2018, Next calibration: 15.08.2019
  Calibrated by ELCAL to the national standards maintained
  at Swiss Federal Office of Metrology. SCS 0002

- FX100 Audio Analyzer, Serial No. 10408
  Last Calibration: 27.04.2018, Next Calibration: 27.04.2019
  Manufacturer calibration based on Agilent 34410, Serial No. MY47014254,
  Last Calibration: 11.05.2018, Next Calibration: 11.05.2019
  which is calibrated by ELCAL to national standards maintained
  at Swiss Federal Office of Metrology. SCS 002

[1] The specified tolerance +/-0.1 dB @ 1V = +/- 1.1%

[2] The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with the regulations of the GUM.

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. : AH110159
Date of Issue : 04 December 2018

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	:	6761161
Serial Number	:	10N60623
Date of Received	:	Nov 28, 2018
Date of Calibration	:	Nov 28, 2018
Date of Next Calibration[a]	:	Feb 28, 2019

PART C – CALIBRATION REQUESTED

Parameter	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.*

APPROVED SIGNATORY: _____
LAM Ho-yee, Emma
Assistant Laboratory Manager

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. : AH110159
Date of Issue : 04 December 2018

PART D – RESULT[b],[c]

Water temperature: 25.2 °C
Relative humidity: 63%
z-Factor: 1.0039

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9754	2.9751	2.9755	2.9754	2.9749
2	2.9788	2.9770	2.9666	2.9750	2.9786
3	2.9781	2.9772	2.9775	2.9771	2.9735
4	2.9740	2.9734	2.9751	2.9826	2.9737
5	2.9750	2.9764	2.9757	2.9777	2.9784
6	2.9756	2.9781	2.9818	2.9789	2.9718
7	2.9781	2.9774	2.9772	2.9761	2.9781
8	2.9756	2.9775	2.9791	2.9779	2.9795
9	2.9719	2.9810	2.9845	2.9831	2.9790
10	2.9797	2.9794	2.9835	2.9806	2.9801
Average (g)	2.9762	2.9773	2.9777	2.9784	2.9768
Standard deviation	0.0024	0.0021	0.0051	0.0028	0.0030
Calculated volume (mL)	2.9878	2.9889	2.9893	2.9901	2.9884
Error (%)	-0.4058	-0.3713	-0.3579	-0.3315	-0.3877
RSD (%)	0.0807	0.0703	0.1719	0.0953	0.0995

Acceptance Criteria [d]

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

~ END OF REPORT ~

Remark(s): -
[b] *The results relate only to the tested sample 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] *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted from relevant international standards.*

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS0965-18	Valid until 22 Apr 2019
		Stockpiling Area	GW-RS0683-18	Valid until 3 Feb 2019
	Discharge License under WPCO	Launching Site	WT00024249-2016	Valid from to 25 Apr 2016 to 30 Apr 2021
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Registration was updated on 29 Sep 2017
		Sheung Sha Chau	WPN 5111-434-L2902-03	Registration was updated on 6 Oct 2017
		Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
	Construction Noise Permit (General Works)	Works area of 3201	GW-RS0761-18	Valid until 28 Feb 2019
	Discharge License under WPCO	Works area of 3201	WT00032628-2018	Valid from to 19 Dec 2018 to 31 Dec 2023
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	439729	Receipt acknowledged by EPD on 23 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0949-18	Valid until 19 Apr 2019
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License under WPCO	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS1110-18	Valid until 2 Jun 2019
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License under WPCO	Works area of 3204	WT00028245-2017	Valid from 5 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	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-RS0950-18	Superseded by GW-RS1111-18 on 3 Dec 2018
			GW-RS1111-18	Valid until 2 Jun 2019
	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
	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
			GW-RS0596-18	Valid until 10 Jan 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS1044-18	Superseded by GW-RS1112-18 on 3 Dec 2018
			GW-RS1112-18	Valid until 30 May 2019
	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
	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 (Cable ducting works)	GW-RS0923-18	Valid until 11 Apr 2019
		Works area of 3301	GW-RS0937-18	Valid until 11 Apr 2019
		Works area of 3301 (Tie in works)	GW-RS1061-18	Valid until 16 Feb 2019
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400-2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0945-18	Valid until 30 Apr 2019
3502	Notification of Construction Work under APCO	Works area of 3502	437766	Receipt acknowledged by EPD on 26 Sep 2018
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0845-18	Valid until 10 Mar 2019
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	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

Contract No.	Description	Location	Permit/ Reference No.	Status
		Stockpiling area of 3503	WT00031826-2018	Valid from 18 Sep 2018 to 30 Sep 2023
	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-RS0940-18	Superseded by GW-RS1203-18 on 21 Dec 2018
			GW-RS1203-18	Valid until 18 Jun 2019
		Stockpiling area of 3503	GW-RS1031-18	Valid until 13 May 2019
3505	Bill Account for disposal	Works area of 3505	A/C 7030321	Approval granted from EPD on 16 Mar 2018
	Construction Noise Permit (General Works)	Works area of 3505	GW-RS1050-18	Valid until 15 May 2019
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951-S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS1098-18	Valid until 26 Apr 2019
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
	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 and stockpiling area of 3801	GW-RS0783-18	Valid until 28 Feb 2019
		Works area of 3801	GW-RS1218-18	Valid until 26 Mar 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
		(Drill and grouting works)		
		Works area of 3801 (Demolition and road works)	GW-RS1226-18	Valid until 30 Jan 2019

Appendix G. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecution

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 Prosecution

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	16	1	1

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 December 2018)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 December 2018)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Dec	08:17	3A061	YFT	Arrival	13.4	-	-
01-Dec	08:18	8S210	XZM	Arrival	12.1	-	-
01-Dec	10:01	3A062	YFT	Arrival	11.2	-	-
01-Dec	10:17	3A163	YFT	Departure	12.1	-	-
01-Dec	10:49	8S212	XZM	Arrival	12.2	-	-
01-Dec	10:49	3A081	ZUI	Arrival	13.3	-	-
01-Dec	10:53	8S121	XZM	Departure	13	-	-
01-Dec	11:15	3A063	YFT	Arrival	11.3	-	-
01-Dec	12:25	3A181	ZUI	Departure	12.5	-	-
01-Dec	12:27	3A168	YFT	Departure	12.1	-	-
01-Dec	12:44	8S215	XZM	Arrival	12	-	-
01-Dec	13:00	3A064	YFT	Arrival	11	-	-
01-Dec	13:29	8S123	XZM	Departure	12.2	-	-
01-Dec	13:49	3A082	ZUI	Arrival	11.8	-	-
01-Dec	14:15	3A182	ZUI	Departure	12.2	-	-
01-Dec	14:18	3A164	YFT	Departure	12	-	-
01-Dec	14:56	3A065	YFT	Arrival	11.5	-	-
01-Dec	16:10	3A167	YFT	Departure	12.3	-	-
01-Dec	16:45	3A083	ZUI	Arrival	12.4	-	-
01-Dec	16:46	8S218	XZM	Arrival	11.5	-	-
01-Dec	17:01	3A067	YFT	Arrival	10.4	-	-
01-Dec	17:02	3A183	ZUI	Departure	13.3	-	-
01-Dec	17:14	8S126	XZM	Departure	12.8	-	-
01-Dec	19:12	3A166	YFT	Departure	11	-	-
01-Dec	19:50	3A084	ZUI	Arrival	13.7	-	-
01-Dec	20:03	3A185	ZUI	Departure	13.2	-	-
01-Dec	20:46	8S2113	XZM	Arrival	12.2	-	-
01-Dec	21:04	3A169	YFT	Departure	10.9	-	-
01-Dec	21:41	8S522	XZM	Departure	13	-	-
02-Dec	08:12	3A061	YFT	Arrival	12.3	-	-
02-Dec	08:25	8S210	XZM	Arrival	11.5	-	-
02-Dec	10:11	3A062	YFT	Arrival	12.5	-	-
02-Dec	10:24	3A163	YFT	Departure	13.3	-	-
02-Dec	10:46	8S212	XZM	Arrival	11.6	-	-
02-Dec	10:51	3A081	ZUI	Arrival	12.9	-	-
02-Dec	11:11	8S121	XZM	Departure	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Dec	11:20	3A063	YFT	Arrival	12.6	-	-
02-Dec	12:19	3A168	YFT	Departure	13	-	-
02-Dec	12:20	3A181	ZUI	Departure	12.5	-	-
02-Dec	12:49	8S215	XZM	Arrival	12.1	-	-
02-Dec	13:00	3A064	YFT	Arrival	12.2	-	-
02-Dec	13:35	8S123	XZM	Departure	12.3	<= 5	< 1min
02-Dec	13:49	3A082	ZUI	Arrival	12.1	-	-
02-Dec	14:12	3A182	ZUI	Departure	13.3	-	-
02-Dec	14:17	3A164	YFT	Departure	12.7	-	-
02-Dec	14:59	3A065	YFT	Arrival	11.1	-	-
02-Dec	16:36	3A167	YFT	Departure	12.5	-	-
02-Dec	16:41	8S218	XZM	Arrival	12	-	-
02-Dec	16:52	3A083	ZUI	Arrival	11.9	-	-
02-Dec	17:23	3A183	ZUI	Departure	13.3	-	-
02-Dec	17:26	3A067	YFT	Arrival	12	-	-
02-Dec	17:27	8S126	XZM	Departure	12.5	-	-
02-Dec	19:18	3A166	YFT	Departure	12.4	-	-
02-Dec	20:06	3A084	ZUI	Arrival	12.8	-	-
02-Dec	20:16	3A185	ZUI	Departure	13	-	-
02-Dec	20:49	8S2113	XZM	Arrival	12.2	-	-
02-Dec	21:05	3A169	YFT	Departure	10.5	-	-
02-Dec	21:52	8S522	XZM	Departure	12.7	-	-
03-Dec	08:14	8S210	XZM	Arrival	12.5	-	-
03-Dec	08:21	3A061	YFT	Arrival	11.7	-	-
03-Dec	09:54	3A062	YFT	Arrival	11.7	-	-
03-Dec	10:15	3A163	YFT	Departure	11.1	-	-
03-Dec	10:40	8S212	XZM	Arrival	11.9	-	-
03-Dec	10:49	3A081	ZUI	Arrival	12.4	-	-
03-Dec	11:12	8S121	XZM	Departure	10.4	-	-
03-Dec	11:18	3A063	YFT	Arrival	12.5	-	-
03-Dec	12:20	3A181	ZUI	Departure	12.1	-	-
03-Dec	12:20	3A168	YFT	Departure	11.3	-	-
03-Dec	12:48	8S215	XZM	Arrival	10.9	-	-
03-Dec	12:57	3A064	YFT	Arrival	11.9	-	-
03-Dec	13:22	8S123	XZM	Departure	11.1	-	-
03-Dec	13:48	3A082	ZUI	Arrival	11.4	-	-
03-Dec	14:17	3A164	YFT	Departure	12	-	-
03-Dec	14:18	3A182	ZUI	Departure	13.5	-	-
03-Dec	15:15	3A065	YFT	Arrival	11.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Dec	16:18	3A167	YFT	Departure	12.8	-	-
03-Dec	16:48	3A083	ZUI	Arrival	10.7	-	-
03-Dec	16:48	8S218	XZM	Arrival	10.4	-	-
03-Dec	16:58	3A067	YFT	Arrival	11.8	-	-
03-Dec	17:05	3A183	ZUI	Departure	13.2	-	-
03-Dec	17:07	8S126	XZM	Departure	12.5	-	-
03-Dec	19:08	3A166	YFT	Departure	11.7	-	-
03-Dec	19:58	3A084	ZUI	Arrival	12.9	-	-
03-Dec	20:10	3A185	ZUI	Departure	13.4	-	-
03-Dec	20:59	8S2113	XZM	Arrival	12.2	-	-
03-Dec	21:03	3A169	YFT	Departure	10.9	-	-
03-Dec	21:55	8S522	XZM	Departure	12.6	-	-
04-Dec	08:17	3A061	YFT	Arrival	10.9	-	-
04-Dec	08:23	8S210	XZM	Arrival	12.2	-	-
04-Dec	09:56	3A062	YFT	Arrival	13.6	-	-
04-Dec	10:18	3A163	YFT	Departure	13.6	-	-
04-Dec	10:35	8S212	XZM	Arrival	12.8	-	-
04-Dec	10:39	3A081	ZUI	Arrival	12.8	-	-
04-Dec	11:03	8S121	XZM	Departure	12.6	-	-
04-Dec	11:15	3A063	YFT	Arrival	12.8	-	-
04-Dec	12:18	3A168	YFT	Departure	12.9	-	-
04-Dec	12:21	3A181	ZUI	Departure	11.4	-	-
04-Dec	12:43	8S215	XZM	Arrival	12.7	-	-
04-Dec	12:52	3A064	YFT	Arrival	13.5	-	-
04-Dec	13:21	8S123	XZM	Departure	13.1	-	-
04-Dec	13:40	3A082	ZUI	Arrival	12.6	-	-
04-Dec	14:13	3A182	ZUI	Departure	12.4	-	-
04-Dec	14:15	3A164	YFT	Departure	13.8	-	-
04-Dec	15:04	3A065	YFT	Arrival	12	-	-
04-Dec	16:25	3A167	YFT	Departure	13	-	-
04-Dec	16:48	8S218	XZM	Arrival	11.9	-	-
04-Dec	16:50	3A067	YFT	Arrival	12.9	-	-
04-Dec	16:51	3A083	ZUI	Arrival	12.2	-	-
04-Dec	17:11	8S126	XZM	Departure	12.9	-	-
04-Dec	17:12	3A183	ZUI	Departure	13.6	-	-
04-Dec	19:10	3A166	YFT	Departure	12	-	-
04-Dec	19:56	3A084	ZUI	Arrival	13	-	-
04-Dec	20:17	3A185	ZUI	Departure	12.8	-	-
04-Dec	20:53	8S2113	XZM	Arrival	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Dec	21:03	3A169	YFT	Departure	11.3	-	-
04-Dec	22:00	8S522	XZM	Departure	13.3	-	-
05-Dec	08:16	3A061	YFT	Arrival	12.1	-	-
05-Dec	08:20	8S210	XZM	Arrival	11.8	-	-
05-Dec	09:56	3A062	YFT	Arrival	11.3	-	-
05-Dec	10:19	3A163	YFT	Departure	11.9	-	-
05-Dec	10:37	8S212	XZM	Arrival	12.1	-	-
05-Dec	10:48	3A081	ZUI	Arrival	12.7	-	-
05-Dec	11:04	8S121	XZM	Departure	12.3	-	-
05-Dec	11:14	3A063	YFT	Arrival	12	-	-
05-Dec	12:10	3A181	ZUI	Departure	12.4	-	-
05-Dec	12:17	3A168	YFT	Departure	11.5	-	-
05-Dec	12:52	8S215	XZM	Arrival	11.8	-	-
05-Dec	13:01	3A064	YFT	Arrival	11.6	-	-
05-Dec	13:18	8S123	XZM	Departure	12.6	-	-
05-Dec	13:47	3A082	ZUI	Arrival	11.9	-	-
05-Dec	14:18	3A182	ZUI	Departure	13.1	-	-
05-Dec	14:20	3A164	YFT	Departure	11	-	-
05-Dec	14:58	3A065	YFT	Arrival	11.7	-	-
05-Dec	16:13	3A167	YFT	Departure	12.7	-	-
05-Dec	16:40	8S218	XZM	Arrival	11.9	-	-
05-Dec	16:47	3A083	ZUI	Arrival	12.4	-	-
05-Dec	16:57	3A067	YFT	Arrival	11.5	-	-
05-Dec	16:58	3A183	ZUI	Departure	13.7	-	-
05-Dec	17:16	8S126	XZM	Departure	12.1	-	-
05-Dec	19:12	3A166	YFT	Departure	12.8	-	-
05-Dec	19:53	3A084	ZUI	Arrival	13	-	-
05-Dec	20:13	3A185	ZUI	Departure	13.1	-	-
05-Dec	20:47	8S2113	XZM	Arrival	12.1	-	-
05-Dec	21:03	3A169	YFT	Departure	11.9	-	-
05-Dec	21:54	8S522	XZM	Departure	13.3	-	-
06-Dec	08:17	3A061	YFT	Arrival	12.1	-	-
06-Dec	08:21	8S210	XZM	Arrival	11.6	-	-
06-Dec	10:01	3A062	YFT	Arrival	11.6	-	-
06-Dec	10:15	3A163	YFT	Departure	12	-	-
06-Dec	10:30	8S212	XZM	Arrival	13.1	-	-
06-Dec	10:35	3A081	ZUI	Arrival	12.7	-	-
06-Dec	11:04	8S121	XZM	Departure	13.2	-	-
06-Dec	11:12	3A063	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Dec	12:14	3A181	ZUI	Departure	12.6	-	-
06-Dec	12:17	3A168	YFT	Departure	11	-	-
06-Dec	12:42	8S215	XZM	Arrival	12.9	-	-
06-Dec	13:09	3A064	YFT	Arrival	11.4	-	-
06-Dec	13:14	8S123	XZM	Departure	12.6	-	-
06-Dec	13:47	3A082	ZUI	Arrival	13	-	-
06-Dec	14:19	3A182	ZUI	Departure	13	-	-
06-Dec	14:22	3A164	YFT	Departure	11.5	-	-
06-Dec	14:53	3A065	YFT	Arrival	12.2	-	-
06-Dec	16:24	3A167	YFT	Departure	12.9	-	-
06-Dec	16:52	8S218	XZM	Arrival	11.6	-	-
06-Dec	16:55	3A083	ZUI	Arrival	11.9	-	-
06-Dec	17:10	3A067	YFT	Arrival	11.1	-	-
06-Dec	17:12	8S126	XZM	Departure	12.8	-	-
06-Dec	17:14	3A183	ZUI	Departure	12.1	-	-
06-Dec	19:05	3A166	YFT	Departure	12.5	-	-
06-Dec	19:39	3A084	ZUI	Arrival	11.8	-	-
06-Dec	20:12	3A185	ZUI	Departure	13	-	-
06-Dec	20:56	8S2113	XZM	Arrival	11.5	-	-
06-Dec	20:59	3A169	YFT	Departure	12.1	-	-
06-Dec	21:57	8S522	XZM	Departure	12	-	-
07-Dec	08:13	3A061	YFT	Arrival	12.7	-	-
07-Dec	08:15	8S210	XZM	Arrival	11.6	-	-
07-Dec	10:04	3A062	YFT	Arrival	11.4	-	-
07-Dec	10:23	3A163	YFT	Departure	12	-	-
07-Dec	10:36	8S212	XZM	Arrival	13.1	-	-
07-Dec	10:38	3A081	ZUI	Arrival	11.9	-	-
07-Dec	11:16	8S121	XZM	Departure	12.8	-	-
07-Dec	11:20	3A063	YFT	Arrival	12.1	-	-
07-Dec	12:14	3A181	ZUI	Departure	12	-	-
07-Dec	12:19	3A168	YFT	Departure	12.5	-	-
07-Dec	12:45	8S215	XZM	Arrival	13.1	-	-
07-Dec	12:56	3A064	YFT	Arrival	12.3	-	-
07-Dec	13:24	8S123	XZM	Departure	10.9	-	-
07-Dec	13:47	3A082	ZUI	Arrival	12.1	-	-
07-Dec	14:13	3A182	ZUI	Departure	13.1	-	-
07-Dec	14:16	3A164	YFT	Departure	11.5	-	-
07-Dec	15:02	3A065	YFT	Arrival	12.5	-	-
07-Dec	16:17	3A167	YFT	Departure	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Dec	16:39	8S218	XZM	Arrival	12.6	-	-
07-Dec	16:40	3A083	ZUI	Arrival	11.3	-	-
07-Dec	16:57	3A067	YFT	Arrival	12.6	-	-
07-Dec	17:18	8S126	XZM	Departure	13.7	-	-
07-Dec	17:31	3A183	ZUI	Departure	12.9	-	-
07-Dec	19:12	3A166	YFT	Departure	13.1	-	-
07-Dec	19:43	3A084	ZUI	Arrival	12.7	-	-
07-Dec	20:14	3A185	ZUI	Departure	13.2	-	-
07-Dec	21:04	3A169	YFT	Departure	12.5	-	-
07-Dec	21:04	8S2113	XZM	Arrival	12.7	-	-
07-Dec	22:03	8S522	XZM	Departure	12.6	<= 5	< 1min
08-Dec	08:21	3A061	YFT	Arrival	10.6	-	-
08-Dec	08:26	8S210	XZM	Arrival	11	-	-
08-Dec	10:02	3A062	YFT	Arrival	11.9	-	-
08-Dec	10:20	3A163	YFT	Departure	13	-	-
08-Dec	10:36	8S212	XZM	Arrival	12.2	-	-
08-Dec	10:39	3A081	ZUI	Arrival	12.7	-	-
08-Dec	11:02	8S121	XZM	Departure	12	-	-
08-Dec	11:25	3A063	YFT	Arrival	12.5	-	-
08-Dec	12:13	3A181	ZUI	Departure	12.3	-	-
08-Dec	12:18	3A168	YFT	Departure	12.4	-	-
08-Dec	12:45	8S215	XZM	Arrival	12.5	-	-
08-Dec	13:00	3A064	YFT	Arrival	12.1	-	-
08-Dec	13:15	8S123	XZM	Departure	12.9	-	-
08-Dec	13:46	3A082	ZUI	Arrival	12.5	-	-
08-Dec	14:15	3A182	ZUI	Departure	13	-	-
08-Dec	14:20	3A164	YFT	Departure	12.7	-	-
08-Dec	15:03	3A065	YFT	Arrival	12.7	-	-
08-Dec	16:20	3A167	YFT	Departure	12.2	-	-
08-Dec	16:35	3A083	ZUI	Arrival	12.1	-	-
08-Dec	16:37	8S218	XZM	Arrival	12.2	-	-
08-Dec	17:03	8S126	XZM	Departure	12.3	-	-
08-Dec	17:04	3A067	YFT	Arrival	11.7	-	-
08-Dec	17:06	3A183	ZUI	Departure	13.2	-	-
08-Dec	19:08	3A166	YFT	Departure	13.7	-	-
08-Dec	19:44	3A084	ZUI	Arrival	12	-	-
08-Dec	20:15	3A185	ZUI	Departure	13	-	-
08-Dec	20:49	8S2113	XZM	Arrival	12.1	-	-
08-Dec	20:56	3A169	YFT	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
08-Dec	21:56	8S522	XZM	Departure	12.9	-	-
09-Dec	08:19	3A061	YFT	Arrival	12.1	-	-
09-Dec	08:19	8S210	XZM	Arrival	12.2	-	-
09-Dec	10:00	3A062	YFT	Arrival	11.7	-	-
09-Dec	10:16	3A163	YFT	Departure	12.3	-	-
09-Dec	10:38	3A081	ZUI	Arrival	11.5	-	-
09-Dec	10:40	8S212	XZM	Arrival	12.5	-	-
09-Dec	11:05	8S121	XZM	Departure	13.4	-	-
09-Dec	11:16	3A063	YFT	Arrival	11.3	-	-
09-Dec	12:09	3A168	YFT	Departure	11.7	-	-
09-Dec	12:09	3A181	ZUI	Departure	12.6	-	-
09-Dec	12:49	8S215	XZM	Arrival	10.9	-	-
09-Dec	13:05	3A064	YFT	Arrival	12	-	-
09-Dec	13:13	8S123	XZM	Departure	12.4	-	-
09-Dec	13:44	3A082	ZUI	Arrival	12.3	-	-
09-Dec	14:15	3A164	YFT	Departure	12.2	-	-
09-Dec	14:17	3A182	ZUI	Departure	12.7	-	-
09-Dec	14:54	3A065	YFT	Arrival	11.9	-	-
09-Dec	16:17	3A167	YFT	Departure	12.5	-	-
09-Dec	16:45	8S218	XZM	Arrival	10.7	-	-
09-Dec	16:49	3A083	ZUI	Arrival	11.2	-	-
09-Dec	17:00	3A183	ZUI	Departure	12.7	-	-
09-Dec	17:06	3A067	YFT	Arrival	12.1	-	-
09-Dec	17:06	8S126	XZM	Departure	12.5	-	-
09-Dec	19:00	3A166	YFT	Departure	12.2	-	-
09-Dec	19:44	3A084	ZUI	Arrival	12.4	-	-
09-Dec	20:22	3A185	ZUI	Departure	11.9	-	-
09-Dec	21:01	8S2113	XZM	Arrival	11.9	-	-
09-Dec	21:28	3A169	YFT	Departure	13.9	-	-
09-Dec	21:54	8S522	XZM	Departure	12.4	-	-
10-Dec	08:21	3A061	YFT	Arrival	12.4	-	-
10-Dec	08:26	8S210	XZM	Arrival	12.1	-	-
10-Dec	10:07	3A062	YFT	Arrival	11.1	-	-
10-Dec	10:24	3A163	YFT	Departure	13.5	-	-
10-Dec	10:36	8S212	XZM	Arrival	12.3	-	-
10-Dec	10:45	3A081	ZUI	Arrival	11.1	-	-
10-Dec	11:11	8S121	XZM	Departure	12.7	-	-
10-Dec	11:19	3A063	YFT	Arrival	12.2	-	-
10-Dec	12:11	3A168	YFT	Departure	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Dec	12:12	3A181	ZUI	Departure	11.9	-	-
10-Dec	12:46	8S215	XZM	Arrival	12.8	-	-
10-Dec	12:58	3A064	YFT	Arrival	12.8	-	-
10-Dec	13:24	8S123	XZM	Departure	13.3	-	-
10-Dec	13:41	3A082	ZUI	Arrival	13.2	-	-
10-Dec	14:20	3A164	YFT	Departure	12.9	-	-
10-Dec	14:24	3A182	ZUI	Departure	13.3	-	-
10-Dec	15:01	3A065	YFT	Arrival	11.4	-	-
10-Dec	16:26	3A167	YFT	Departure	12.5	-	-
10-Dec	16:45	8S218	XZM	Arrival	12.4	-	-
10-Dec	16:53	3A083	ZUI	Arrival	11.7	-	-
10-Dec	17:00	3A067	YFT	Arrival	13.1	-	-
10-Dec	17:05	3A183	ZUI	Departure	12.7	-	-
10-Dec	17:15	8S126	XZM	Departure	13.5	-	-
10-Dec	19:08	3A166	YFT	Departure	12.8	-	-
10-Dec	19:50	3A084	ZUI	Arrival	12.8	-	-
10-Dec	20:19	3A185	ZUI	Departure	12.6	-	-
10-Dec	20:55	8S2113	XZM	Arrival	12.5	-	-
10-Dec	21:01	3A169	YFT	Departure	13	-	-
10-Dec	22:02	8S522	XZM	Departure	13.2	-	-
11-Dec	08:15	3A061	YFT	Arrival	11.1	-	-
11-Dec	08:18	8S210	XZM	Arrival	12.6	-	-
11-Dec	10:03	3A062	YFT	Arrival	11.9	-	-
11-Dec	10:16	3A163	YFT	Departure	11.9	-	-
11-Dec	10:37	8S212	XZM	Arrival	12.1	-	-
11-Dec	10:39	3A081	ZUI	Arrival	12.1	-	-
11-Dec	11:09	8S121	XZM	Departure	13.1	-	-
11-Dec	11:18	3A063	YFT	Arrival	12.3	-	-
11-Dec	12:15	3A181	ZUI	Departure	12.2	-	-
11-Dec	12:22	3A168	YFT	Departure	13.1	-	-
11-Dec	12:48	8S215	XZM	Arrival	12.1	-	-
11-Dec	12:57	3A064	YFT	Arrival	11.9	-	-
11-Dec	13:20	8S123	XZM	Departure	11.6	-	-
11-Dec	13:42	3A082	ZUI	Arrival	13	-	-
11-Dec	14:17	3A164	YFT	Departure	12.6	-	-
11-Dec	14:19	3A182	ZUI	Departure	13.4	-	-
11-Dec	14:59	3A065	YFT	Arrival	12.5	-	-
11-Dec	16:19	3A167	YFT	Departure	13.2	-	-
11-Dec	16:47	3A083	ZUI	Arrival	10.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Dec	16:49	8S218	XZM	Arrival	11.7	-	-
11-Dec	16:59	3A183	ZUI	Departure	13	-	-
11-Dec	16:59	3A067	YFT	Arrival	12.6	-	-
11-Dec	17:05	8S126	XZM	Departure	11.6	-	-
11-Dec	19:10	3A166	YFT	Departure	12.1	-	-
11-Dec	19:46	3A084	ZUI	Arrival	12	-	-
11-Dec	20:06	3A185	ZUI	Departure	12.3	-	-
11-Dec	20:56	8S2113	XZM	Arrival	11.6	-	-
11-Dec	20:58	3A169	YFT	Departure	12.2	-	-
11-Dec	21:57	8S522	XZM	Departure	11.8	-	-
12-Dec	08:18	3A061	YFT	Arrival	12	-	-
12-Dec	08:21	8S210	XZM	Arrival	11.9	-	-
12-Dec	10:01	3A062	YFT	Arrival	12.4	-	-
12-Dec	10:19	3A163	YFT	Departure	12.8	-	-
12-Dec	10:38	8S212	XZM	Arrival	11.3	-	-
12-Dec	10:42	3A081	ZUI	Arrival	11.6	-	-
12-Dec	11:02	8S121	XZM	Departure	11.2	-	-
12-Dec	11:16	3A063	YFT	Arrival	13.1	-	-
12-Dec	12:14	3A181	ZUI	Departure	11.9	-	-
12-Dec	12:16	3A168	YFT	Departure	13.6	-	-
12-Dec	12:53	8S215	XZM	Arrival	10.6	-	-
12-Dec	12:59	3A064	YFT	Arrival	12.3	-	-
12-Dec	13:19	8S123	XZM	Departure	11.3	-	-
12-Dec	13:44	3A082	ZUI	Arrival	12.6	-	-
12-Dec	14:12	3A182	ZUI	Departure	12.9	-	-
12-Dec	14:18	3A164	YFT	Departure	13	-	-
12-Dec	14:51	3A065	YFT	Arrival	13	-	-
12-Dec	16:18	3A167	YFT	Departure	13.4	-	-
12-Dec	16:40	8S218	XZM	Arrival	10.6	-	-
12-Dec	16:45	3A083	ZUI	Arrival	11	-	-
12-Dec	17:03	3A067	YFT	Arrival	12.8	-	-
12-Dec	17:03	3A183	ZUI	Departure	12.4	-	-
12-Dec	17:11	8S126	XZM	Departure	12.2	-	-
12-Dec	19:06	3A166	YFT	Departure	11.8	-	-
12-Dec	19:47	3A084	ZUI	Arrival	12.3	-	-
12-Dec	20:08	3A185	ZUI	Departure	12.4	-	-
12-Dec	20:57	8S2113	XZM	Arrival	12.1	-	-
12-Dec	20:59	3A169	YFT	Departure	11.8	-	-
12-Dec	22:07	8S522	XZM	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Dec	08:15	3A061	YFT	Arrival	12.2	-	-
13-Dec	08:20	8S210	XZM	Arrival	12.2	-	-
13-Dec	10:11	3A062	YFT	Arrival	11.2	-	-
13-Dec	10:34	8S212	XZM	Arrival	12.2	-	-
13-Dec	10:34	3A163	YFT	Departure	12	-	-
13-Dec	10:47	3A081	ZUI	Arrival	11.2	-	-
13-Dec	10:59	8S121	XZM	Departure	13.1	-	-
13-Dec	11:17	3A063	YFT	Arrival	11.1	-	-
13-Dec	12:10	3A181	ZUI	Departure	12.1	-	-
13-Dec	12:11	3A168	YFT	Departure	13.5	-	-
13-Dec	12:39	8S215	XZM	Arrival	12.9	-	-
13-Dec	12:59	3A064	YFT	Arrival	11.8	-	-
13-Dec	13:13	8S123	XZM	Departure	13.2	-	-
13-Dec	13:43	3A082	ZUI	Arrival	12.1	-	-
13-Dec	14:13	3A164	YFT	Departure	12.2	-	-
13-Dec	14:15	3A182	ZUI	Departure	12.4	-	-
13-Dec	14:54	3A065	YFT	Arrival	11.2	-	-
13-Dec	16:20	3A167	YFT	Departure	12.6	-	-
13-Dec	16:37	8S218	XZM	Arrival	12.9	-	-
13-Dec	16:46	3A083	ZUI	Arrival	13.1	-	-
13-Dec	17:03	3A183	ZUI	Departure	12	-	-
13-Dec	17:03	3A067	YFT	Arrival	11.8	-	-
13-Dec	17:07	8S126	XZM	Departure	13.5	-	-
13-Dec	19:05	3A166	YFT	Departure	13.9	-	-
13-Dec	19:50	3A084	ZUI	Arrival	12.9	-	-
13-Dec	20:06	3A185	ZUI	Departure	12.2	-	-
13-Dec	20:54	8S2113	XZM	Arrival	12.2	-	-
13-Dec	21:01	3A169	YFT	Departure	12.3	-	-
13-Dec	22:00	8S522	XZM	Departure	13	-	-
14-Dec	08:19	3A061	YFT	Arrival	12.1	-	-
14-Dec	08:20	8S210	XZM	Arrival	11	-	-
14-Dec	10:09	3A062	YFT	Arrival	11.3	-	-
14-Dec	10:25	3A163	YFT	Departure	12	-	-
14-Dec	10:37	8S212	XZM	Arrival	12.5	-	-
14-Dec	10:40	3A081	ZUI	Arrival	11	-	-
14-Dec	11:06	8S121	XZM	Departure	13.9	-	-
14-Dec	11:16	3A063	YFT	Arrival	12.5	-	-
14-Dec	12:15	3A181	ZUI	Departure	12	-	-
14-Dec	12:22	3A168	YFT	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Dec	12:42	8S215	XZM	Arrival	12.4	-	-
14-Dec	13:01	3A064	YFT	Arrival	11.7	-	-
14-Dec	13:17	8S123	XZM	Departure	12.4	-	-
14-Dec	13:41	3A082	ZUI	Arrival	13.1	-	-
14-Dec	14:19	3A164	YFT	Departure	12.6	-	-
14-Dec	14:21	3A182	ZUI	Departure	12.5	-	-
14-Dec	14:58	3A065	YFT	Arrival	12.6	-	-
14-Dec	16:15	3A167	YFT	Departure	12.9	-	-
14-Dec	16:36	8S218	XZM	Arrival	12.6	-	-
14-Dec	16:43	3A083	ZUI	Arrival	13.4	-	-
14-Dec	16:57	3A067	YFT	Arrival	12.2	-	-
14-Dec	17:03	8S126	XZM	Departure	12.3	-	-
14-Dec	17:08	3A183	ZUI	Departure	13.4	-	-
14-Dec	19:03	3A166	YFT	Departure	12.3	-	-
14-Dec	19:49	3A084	ZUI	Arrival	13.8	-	-
14-Dec	20:09	3A185	ZUI	Departure	13.5	-	-
14-Dec	21:01	3A169	YFT	Departure	13.9	-	-
14-Dec	21:17	8S2113	XZM	Arrival	12.6	-	-
14-Dec	22:15	8S522	XZM	Departure	12.6	-	-
15-Dec	08:17	8S210	XZM	Arrival	12.5	-	-
15-Dec	08:17	3A061	YFT	Arrival	12	-	-
15-Dec	10:03	3A062	YFT	Arrival	11.8	-	-
15-Dec	10:18	3A163	YFT	Departure	12.4	-	-
15-Dec	10:34	3A081	ZUI	Arrival	12.8	-	-
15-Dec	10:42	8S212	XZM	Arrival	12.6	-	-
15-Dec	11:08	8S121	XZM	Departure	13.2	-	-
15-Dec	11:18	3A063	YFT	Arrival	12.1	-	-
15-Dec	12:27	3A168	YFT	Departure	13	-	-
15-Dec	12:31	3A181	ZUI	Departure	12.5	-	-
15-Dec	12:49	8S215	XZM	Arrival	11.5	-	-
15-Dec	12:55	3A064	YFT	Arrival	12.5	-	-
15-Dec	13:16	8S123	XZM	Departure	12	-	-
15-Dec	13:46	3A082	ZUI	Arrival	11.7	-	-
15-Dec	14:16	3A164	YFT	Departure	12.3	-	-
15-Dec	14:17	3A182	ZUI	Departure	12.1	-	-
15-Dec	14:57	3A065	YFT	Arrival	12.6	-	-
15-Dec	16:21	3A167	YFT	Departure	13.3	-	-
15-Dec	16:44	8S218	XZM	Arrival	10.6	-	-
15-Dec	16:49	3A083	ZUI	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Dec	16:59	3A067	YFT	Arrival	12.4	-	-
15-Dec	17:00	3A183	ZUI	Departure	13.3	-	-
15-Dec	17:04	8S126	XZM	Departure	11.8	-	-
15-Dec	19:04	3A166	YFT	Departure	11.7	-	-
15-Dec	19:49	3A084	ZUI	Arrival	11.6	-	-
15-Dec	20:09	3A185	ZUI	Departure	12.4	-	-
15-Dec	21:00	8S2113	XZM	Arrival	12.1	-	-
15-Dec	21:05	3A169	YFT	Departure	12.2	-	-
15-Dec	21:57	8S522	XZM	Departure	12.4	-	-
16-Dec	08:10	3A061	YFT	Arrival	12.4	-	-
16-Dec	08:21	8S210	XZM	Arrival	12.4	-	-
16-Dec	10:01	3A062	YFT	Arrival	12	-	-
16-Dec	10:14	3A163	YFT	Departure	12.6	-	-
16-Dec	10:33	8S212	XZM	Arrival	12.4	-	-
16-Dec	10:39	3A081	ZUI	Arrival	12	-	-
16-Dec	11:01	8S121	XZM	Departure	13.5	-	-
16-Dec	11:19	3A063	YFT	Arrival	11.2	-	-
16-Dec	12:17	3A168	YFT	Departure	11.6	-	-
16-Dec	12:18	3A181	ZUI	Departure	12	-	-
16-Dec	12:41	8S215	XZM	Arrival	12.9	-	-
16-Dec	12:57	3A064	YFT	Arrival	12	-	-
16-Dec	13:20	8S123	XZM	Departure	12.8	-	-
16-Dec	13:42	3A082	ZUI	Arrival	12.3	-	-
16-Dec	14:16	3A182	ZUI	Departure	12.2	-	-
16-Dec	14:18	3A164	YFT	Departure	12.7	-	-
16-Dec	14:59	3A065	YFT	Arrival	11.7	-	-
16-Dec	16:19	3A167	YFT	Departure	12.1	-	-
16-Dec	16:34	8S218	XZM	Arrival	12.4	-	-
16-Dec	16:55	3A083	ZUI	Arrival	9	-	-
16-Dec	16:59	3A067	YFT	Arrival	12.7	-	-
16-Dec	17:23	8S126	XZM	Departure	13	-	-
16-Dec	17:24	3A183	ZUI	Departure	13.2	-	-
16-Dec	19:08	3A166	YFT	Departure	12.3	-	-
16-Dec	19:45	3A084	ZUI	Arrival	12	-	-
16-Dec	20:03	3A185	ZUI	Departure	12.4	-	-
16-Dec	20:50	8S2113	XZM	Arrival	12.8	-	-
16-Dec	20:57	3A169	YFT	Departure	12.5	-	-
16-Dec	21:58	8S522	XZM	Departure	12.7	-	-
17-Dec	08:20	3A061	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Dec	08:22	8S210	XZM	Arrival	12.1	-	-
17-Dec	10:19	3A062	YFT	Arrival	11.7	-	-
17-Dec	10:48	3A163	YFT	Departure	12	-	-
17-Dec	10:50	3A081	ZUI	Arrival	12.5	-	-
17-Dec	10:56	8S212	XZM	Arrival	11.5	-	-
17-Dec	11:13	8S121	XZM	Departure	11.3	-	-
17-Dec	11:21	3A063	YFT	Arrival	11.9	-	-
17-Dec	12:19	3A181	ZUI	Departure	13.3	-	-
17-Dec	12:22	3A168	YFT	Departure	12.2	-	-
17-Dec	12:53	8S215	XZM	Arrival	11.2	-	-
17-Dec	13:11	3A064	YFT	Arrival	11.5	-	-
17-Dec	13:24	8S123	XZM	Departure	13	-	-
17-Dec	13:53	3A082	ZUI	Arrival	11.4	-	-
17-Dec	14:17	3A182	ZUI	Departure	12	-	-
17-Dec	14:19	3A164	YFT	Departure	11.7	-	-
17-Dec	14:56	3A065	YFT	Arrival	11.9	-	-
17-Dec	16:28	3A167	YFT	Departure	13.1	-	-
17-Dec	16:46	8S218	XZM	Arrival	9.9	-	-
17-Dec	16:48	3A083	ZUI	Arrival	12.5	-	-
17-Dec	17:11	3A067	YFT	Arrival	12.3	-	-
17-Dec	17:12	3A183	ZUI	Departure	13.3	-	-
17-Dec	17:13	8S126	XZM	Departure	12.9	-	-
17-Dec	19:10	3A166	YFT	Departure	13.1	-	-
17-Dec	19:53	3A084	ZUI	Arrival	13.1	-	-
17-Dec	20:11	3A185	ZUI	Departure	13.1	-	-
17-Dec	20:57	8S2113	XZM	Arrival	12.7	-	-
17-Dec	21:02	3A169	YFT	Departure	12.2	-	-
17-Dec	21:57	8S522	XZM	Departure	13.5	-	-
18-Dec	08:19	3A061	YFT	Arrival	11.3	-	-
18-Dec	08:21	8S210	XZM	Arrival	12.1	-	-
18-Dec	09:53	3A062	YFT	Arrival	12	-	-
18-Dec	10:13	3A163	YFT	Departure	11.6	-	-
18-Dec	10:36	8S212	XZM	Arrival	13.3	-	-
18-Dec	10:47	3A081	ZUI	Arrival	12.9	-	-
18-Dec	10:56	8S121	XZM	Departure	13	-	-
18-Dec	11:17	3A063	YFT	Arrival	12.9	-	-
18-Dec	12:15	3A181	ZUI	Departure	13.2	-	-
18-Dec	12:22	3A168	YFT	Departure	12.8	-	-
18-Dec	12:51	8S215	XZM	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Dec	13:04	3A064	YFT	Arrival	11.4	-	-
18-Dec	13:18	8S123	XZM	Departure	11.9	-	-
18-Dec	13:50	3A082	ZUI	Arrival	13.8	-	-
18-Dec	14:14	3A164	YFT	Departure	13	-	-
18-Dec	14:18	3A182	ZUI	Departure	13	-	-
18-Dec	14:58	3A065	YFT	Arrival	12.3	-	-
18-Dec	16:18	3A167	YFT	Departure	13.3	-	-
18-Dec	16:35	8S218	XZM	Arrival	12.1	-	-
18-Dec	16:43	3A083	ZUI	Arrival	12.2	-	-
18-Dec	16:56	3A067	YFT	Arrival	11.3	-	-
18-Dec	17:02	3A183	ZUI	Departure	13.2	-	-
18-Dec	17:03	8S126	XZM	Departure	17	> 15	< 4min
18-Dec	19:18	3A166	YFT	Departure	11.5	-	-
18-Dec	19:51	3A084	ZUI	Arrival	13	-	-
18-Dec	20:07	3A185	ZUI	Departure	13.4	-	-
18-Dec	20:58	3A169	YFT	Departure	12.7	-	-
18-Dec	21:10	8S2113	XZM	Arrival	11.9	-	-
18-Dec	21:56	8S522	XZM	Departure	12.7	-	-
19-Dec	08:19	3A061	YFT	Arrival	11.8	-	-
19-Dec	08:23	8S210	XZM	Arrival	11.6	-	-
19-Dec	09:58	3A062	YFT	Arrival	11.9	-	-
19-Dec	10:25	3A163	YFT	Departure	12.3	-	-
19-Dec	10:40	8S212	XZM	Arrival	12.6	-	-
19-Dec	10:48	3A081	ZUI	Arrival	13.3	-	-
19-Dec	11:13	8S121	XZM	Departure	13.3	-	-
19-Dec	11:20	3A063	YFT	Arrival	12.5	-	-
19-Dec	12:18	3A168	YFT	Departure	12.1	-	-
19-Dec	12:22	3A181	ZUI	Departure	12.9	-	-
19-Dec	12:52	8S215	XZM	Arrival	12	-	-
19-Dec	12:54	3A064	YFT	Arrival	11.9	-	-
19-Dec	13:21	8S123	XZM	Departure	13.1	-	-
19-Dec	13:49	3A082	ZUI	Arrival	12.1	-	-
19-Dec	14:13	3A164	YFT	Departure	12.4	-	-
19-Dec	14:18	3A182	ZUI	Departure	12.5	-	-
19-Dec	15:03	3A065	YFT	Arrival	12.3	-	-
19-Dec	16:17	3A167	YFT	Departure	13.8	-	-
19-Dec	16:39	8S218	XZM	Arrival	12.5	-	-
19-Dec	16:44	3A083	ZUI	Arrival	12.1	-	-
19-Dec	17:03	3A067	YFT	Arrival	10.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Dec	17:12	3A183	ZUI	Departure	13.5	-	-
19-Dec	17:17	8S126	XZM	Departure	12.6	-	-
19-Dec	19:03	3A166	YFT	Departure	12.6	-	-
19-Dec	19:54	3A084	ZUI	Arrival	13.3	-	-
19-Dec	20:08	3A185	ZUI	Departure	13.2	-	-
19-Dec	20:58	3A169	YFT	Departure	11.2	-	-
19-Dec	21:02	8S2113	XZM	Arrival	12.7	-	-
19-Dec	21:59	8S522	XZM	Departure	12.6	-	-
20-Dec	08:19	8S210	XZM	Arrival	13.2	-	-
20-Dec	08:24	3A061	YFT	Arrival	11.9	-	-
20-Dec	10:02	3A062	YFT	Arrival	11.5	-	-
20-Dec	10:37	3A163	YFT	Departure	11.1	-	-
20-Dec	10:43	8S212	XZM	Arrival	13.1	-	-
20-Dec	10:46	3A081	ZUI	Arrival	13.5	-	-
20-Dec	11:22	8S121	XZM	Departure	12.6	-	-
20-Dec	11:30	3A063	YFT	Arrival	11.8	-	-
20-Dec	12:24	3A181	ZUI	Departure	12.9	-	-
20-Dec	12:27	3A168	YFT	Departure	11.2	-	-
20-Dec	12:51	8S215	XZM	Arrival	12.6	-	-
20-Dec	13:16	3A064	YFT	Arrival	11.6	-	-
20-Dec	13:31	8S123	XZM	Departure	11.9	-	-
20-Dec	13:47	3A082	ZUI	Arrival	12.8	-	-
20-Dec	14:29	3A164	YFT	Departure	11.2	-	-
20-Dec	14:32	3A182	ZUI	Departure	11.9	-	-
20-Dec	15:05	3A065	YFT	Arrival	11.6	-	-
20-Dec	16:24	3A167	YFT	Departure	12.6	-	-
20-Dec	16:38	8S218	XZM	Arrival	11.2	-	-
20-Dec	16:46	3A083	ZUI	Arrival	12.3	-	-
20-Dec	17:02	3A183	ZUI	Departure	13.4	-	-
20-Dec	17:03	3A067	YFT	Arrival	11.2	-	-
20-Dec	17:04	8S126	XZM	Departure	11.7	<= 5	< 1min
20-Dec	18:58	3A166	YFT	Departure	12.8	-	-
20-Dec	19:48	3A084	ZUI	Arrival	13.1	-	-
20-Dec	20:06	3A185	ZUI	Departure	13.6	-	-
20-Dec	20:55	8S2113	XZM	Arrival	12.4	-	-
20-Dec	21:08	3A169	YFT	Departure	12.5	-	-
20-Dec	21:58	8S522	XZM	Departure	12.6	-	-
21-Dec	08:15	3A061	YFT	Arrival	11.8	-	-
21-Dec	08:22	8S210	XZM	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Dec	10:02	3A062	YFT	Arrival	11.9	-	-
21-Dec	10:26	3A163	YFT	Departure	11.3	-	-
21-Dec	10:40	8S212	XZM	Arrival	11.7	-	-
21-Dec	10:46	3A081	ZUI	Arrival	13.2	-	-
21-Dec	11:10	8S121	XZM	Departure	11.9	-	-
21-Dec	11:14	3A063	YFT	Arrival	12.5	-	-
21-Dec	12:09	3A181	ZUI	Departure	12.9	-	-
21-Dec	12:20	3A168	YFT	Departure	11.6	-	-
21-Dec	12:45	8S215	XZM	Arrival	11.7	-	-
21-Dec	13:02	3A064	YFT	Arrival	11.3	-	-
21-Dec	13:10	8S123	XZM	Departure	12	-	-
21-Dec	13:42	3A082	ZUI	Arrival	13	-	-
21-Dec	14:12	3A164	YFT	Departure	10.7	-	-
21-Dec	14:16	3A182	ZUI	Departure	12.3	-	-
21-Dec	14:51	3A065	YFT	Arrival	12.2	-	-
21-Dec	16:17	3A167	YFT	Departure	13.4	-	-
21-Dec	16:44	3A083	ZUI	Arrival	12.3	-	-
21-Dec	16:45	8S218	XZM	Arrival	9.9	-	-
21-Dec	17:01	3A067	YFT	Arrival	10.1	-	-
21-Dec	17:02	8S126	XZM	Departure	12.6	-	-
21-Dec	17:03	3A183	ZUI	Departure	13.6	-	-
21-Dec	18:58	3A166	YFT	Departure	12.3	-	-
21-Dec	19:52	3A084	ZUI	Arrival	12.6	-	-
21-Dec	20:04	3A185	ZUI	Departure	13.5	-	-
21-Dec	20:58	3A169	YFT	Departure	12.5	-	-
21-Dec	21:05	8S2113	XZM	Arrival	11.1	-	-
21-Dec	21:57	8S522	XZM	Departure	11.9	-	-
22-Dec	08:12	3A061	YFT	Arrival	12.7	-	-
22-Dec	08:21	8S210	XZM	Arrival	13	-	-
22-Dec	10:05	3A062	YFT	Arrival	11.3	-	-
22-Dec	10:31	3A163	YFT	Departure	12.2	-	-
22-Dec	10:42	8S212	XZM	Arrival	12.3	-	-
22-Dec	10:46	3A081	ZUI	Arrival	12.9	-	-
22-Dec	11:09	8S121	XZM	Departure	13	-	-
22-Dec	11:18	3A063	YFT	Arrival	12.4	-	-
22-Dec	12:23	3A168	YFT	Departure	11.9	-	-
22-Dec	12:24	3A181	ZUI	Departure	12.7	-	-
22-Dec	12:46	8S215	XZM	Arrival	13.3	-	-
22-Dec	12:54	3A064	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
22-Dec	13:26	8S123	XZM	Departure	13	-	-
22-Dec	13:46	3A082	ZUI	Arrival	12.4	-	-
22-Dec	14:20	3A182	ZUI	Departure	12.3	-	-
22-Dec	14:23	3A164	YFT	Departure	11.4	-	-
22-Dec	15:02	3A065	YFT	Arrival	11.7	-	-
22-Dec	16:18	3A167	YFT	Departure	12.6	-	-
22-Dec	16:47	8S218	XZM	Arrival	13.1	-	-
22-Dec	16:49	3A083	ZUI	Arrival	12.8	-	-
22-Dec	16:54	3A067	YFT	Arrival	11.6	-	-
22-Dec	16:59	3A183	ZUI	Departure	13.7	-	-
22-Dec	17:09	8S126	XZM	Departure	13.2	-	-
22-Dec	19:09	3A166	YFT	Departure	11.5	-	-
22-Dec	19:51	3A084	ZUI	Arrival	12.5	-	-
22-Dec	20:19	3A185	ZUI	Departure	13.5	-	-
22-Dec	20:46	8S2113	XZM	Arrival	13	-	-
22-Dec	21:06	3A169	YFT	Departure	12.3	-	-
22-Dec	21:52	8S522	XZM	Departure	12.5	-	-
23-Dec	08:14	3A061	YFT	Arrival	11.6	-	-
23-Dec	08:24	8S210	XZM	Arrival	12.9	-	-
23-Dec	10:01	3A062	YFT	Arrival	11.9	-	-
23-Dec	10:23	3A163	YFT	Departure	12.6	-	-
23-Dec	10:42	8S212	XZM	Arrival	12.2	-	-
23-Dec	10:46	3A081	ZUI	Arrival	12.8	-	-
23-Dec	11:10	8S121	XZM	Departure	12.4	-	-
23-Dec	11:19	3A063	YFT	Arrival	11.8	-	-
23-Dec	12:24	3A181	ZUI	Departure	13.2	-	-
23-Dec	12:25	3A168	YFT	Departure	10.8	-	-
23-Dec	12:47	8S215	XZM	Arrival	12.3	-	-
23-Dec	12:57	3A064	YFT	Arrival	12.3	-	-
23-Dec	13:18	8S123	XZM	Departure	0.0 **	-	-
23-Dec	13:41	3A082	ZUI	Arrival	13.1	-	-
23-Dec	14:16	3A182	ZUI	Departure	13.4	-	-
23-Dec	14:17	3A164	YFT	Departure	11.4	-	-
23-Dec	15:15	3A065	YFT	Arrival	11.5	-	-
23-Dec	16:18	3A167	YFT	Departure	10.3	-	-
23-Dec	16:46	8S218	XZM	Arrival	11.6	-	-
23-Dec	16:47	3A083	ZUI	Arrival	12.8	-	-
23-Dec	16:58	3A067	YFT	Arrival	12.5	-	-
23-Dec	17:02	3A183	ZUI	Departure	13.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Dec	17:05	8S126	XZM	Departure	11.9	-	-
23-Dec	19:03	3A166	YFT	Departure	12.5	-	-
23-Dec	19:52	3A084	ZUI	Arrival	12.3	-	-
23-Dec	20:11	3A185	ZUI	Departure	13.6	-	-
23-Dec	20:50	8S2113	XZM	Arrival	10.9	-	-
23-Dec	20:59	3A169	YFT	Departure	10.1	-	-
23-Dec	21:52	8S522	XZM	Departure	11.1	-	-
24-Dec	08:17	3A061	YFT	Arrival	11.7	-	-
24-Dec	08:20	8S210	XZM	Arrival	11.4	-	-
24-Dec	09:56	3A062	YFT	Arrival	11.3	-	-
24-Dec	10:14	3A163	YFT	Departure	10.7	-	-
24-Dec	10:36	8S212	XZM	Arrival	12.9	-	-
24-Dec	10:45	3A081	ZUI	Arrival	12.4	-	-
24-Dec	10:59	8S121	XZM	Departure	12.6	-	-
24-Dec	11:15	3A063	YFT	Arrival	11.3	-	-
24-Dec	12:13	3A181	ZUI	Departure	13.7	-	-
24-Dec	12:14	3A168	YFT	Departure	12.9	-	-
24-Dec	12:40	8S215	XZM	Arrival	10.8	-	-
24-Dec	12:59	3A064	YFT	Arrival	11.6	-	-
24-Dec	13:11	8S123	XZM	Departure	12.9	-	-
24-Dec	13:45	3A082	ZUI	Arrival	12.8	-	-
24-Dec	14:24	3A182	ZUI	Departure	11.1	-	-
24-Dec	14:24	3A164	YFT	Departure	10.5	-	-
24-Dec	14:56	3A065	YFT	Arrival	12.2	-	-
24-Dec	16:28	3A167	YFT	Departure	12.3	-	-
24-Dec	16:42	3A083	ZUI	Arrival	13.2	-	-
24-Dec	16:42	8S218	XZM	Arrival	11.2	-	-
24-Dec	17:00	3A067	YFT	Arrival	11.9	-	-
24-Dec	17:08	8S126	XZM	Departure	12	-	-
24-Dec	17:10	3A183	ZUI	Departure	13.7	-	-
24-Dec	19:03	3A166	YFT	Departure	11.7	-	-
24-Dec	19:51	3A084	ZUI	Arrival	12.5	-	-
24-Dec	20:13	3A185	ZUI	Departure	13.7	-	-
24-Dec	20:49	8S2113	XZM	Arrival	12	-	-
24-Dec	21:07	3A169	YFT	Departure	13	-	-
24-Dec	22:11	8S522	XZM	Departure	12.7	-	-
25-Dec	08:16	3A061	YFT	Arrival	12	-	-
25-Dec	08:23	8S210	XZM	Arrival	12	-	-
25-Dec	10:11	3A062	YFT	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Dec	10:31	3A163	YFT	Departure	13.2	-	-
25-Dec	10:36	8S212	XZM	Arrival	13.1	-	-
25-Dec	10:46	3A081	ZUI	Arrival	12.5	-	-
25-Dec	11:11	8S121	XZM	Departure	13.5	-	-
25-Dec	11:19	3A063	YFT	Arrival	11.7	-	-
25-Dec	12:29	3A181	ZUI	Departure	13.8	-	-
25-Dec	12:30	3A168	YFT	Departure	11.1	-	-
25-Dec	12:47	8S215	XZM	Arrival	12.6	-	-
25-Dec	13:00	3A064	YFT	Arrival	13	-	-
25-Dec	13:19	8S123	XZM	Departure	12.2	-	-
25-Dec	13:40	3A082	ZUI	Arrival	13.3	-	-
25-Dec	14:23	3A164	YFT	Departure	13.2	-	-
25-Dec	14:28	3A182	ZUI	Departure	13.4	-	-
25-Dec	15:02	3A065	YFT	Arrival	12.3	-	-
25-Dec	16:22	3A167	YFT	Departure	12.3	-	-
25-Dec	16:41	3A083	ZUI	Arrival	13.4	-	-
25-Dec	16:41	8S218	XZM	Arrival	12.2	-	-
25-Dec	16:59	3A067	YFT	Arrival	13.3	-	-
25-Dec	17:13	3A183	ZUI	Departure	13.4	-	-
25-Dec	17:17	8S126	XZM	Departure	13.4	-	-
25-Dec	19:13	3A166	YFT	Departure	12.2	-	-
25-Dec	19:54	3A084	ZUI	Arrival	12.7	-	-
25-Dec	20:08	3A185	ZUI	Departure	13.6	-	-
25-Dec	20:48	8S2113	XZM	Arrival	12.3	-	-
25-Dec	21:04	3A169	YFT	Departure	11.6	-	-
25-Dec	22:11	8S522	XZM	Departure	13.8	-	-
26-Dec	08:18	8S210	XZM	Arrival	12.6	-	-
26-Dec	08:19	3A061	YFT	Arrival	12	-	-
26-Dec	10:03	3A062	YFT	Arrival	11	-	-
26-Dec	10:33	3A163	YFT	Departure	12.1	-	-
26-Dec	10:47	3A081	ZUI	Arrival	12.6	-	-
26-Dec	10:53	8S212	XZM	Arrival	12.3	-	-
26-Dec	11:14	8S121	XZM	Departure	13.4	-	-
26-Dec	11:22	3A063	YFT	Arrival	11.4	-	-
26-Dec	12:26	3A181	ZUI	Departure	13.4	-	-
26-Dec	12:26	3A168	YFT	Departure	12.1	-	-
26-Dec	12:41	8S215	XZM	Arrival	12	-	-
26-Dec	13:08	3A064	YFT	Arrival	13.6	<= 5	< 2min
26-Dec	13:21	8S123	XZM	Departure	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Dec	13:43	3A082	ZUI	Arrival	12.2	-	-
26-Dec	14:15	3A164	YFT	Departure	12.1	-	-
26-Dec	14:16	3A182	ZUI	Departure	11.4	-	-
26-Dec	15:09	3A065	YFT	Arrival	12.3	-	-
26-Dec	16:20	3A167	YFT	Departure	12.3	-	-
26-Dec	16:35	8S218	XZM	Arrival	12.3	-	-
26-Dec	16:48	3A083	ZUI	Arrival	13.8	-	-
26-Dec	17:02	8S126	XZM	Departure	12.6	-	-
26-Dec	17:04	3A183	ZUI	Departure	12.5	-	-
26-Dec	17:08	3A067	YFT	Arrival	12.5	<= 5	< 1min
26-Dec	19:05	3A166	YFT	Departure	12.3	-	-
26-Dec	19:52	3A084	ZUI	Arrival	13	-	-
26-Dec	20:06	3A185	ZUI	Departure	13.7	-	-
26-Dec	20:49	8S2113	XZM	Arrival	12.4	-	-
26-Dec	21:06	3A169	YFT	Departure	12	-	-
26-Dec	22:02	8S522	XZM	Departure	12.6	-	-
27-Dec	08:21	3A061	YFT	Arrival	12.4	-	-
27-Dec	08:23	8S210	XZM	Arrival	11.8	-	-
27-Dec	09:53	3A062	YFT	Arrival	11.8	-	-
27-Dec	10:23	3A163	YFT	Departure	12.7	-	-
27-Dec	10:35	8S212	XZM	Arrival	12.2	-	-
27-Dec	10:49	3A081	ZUI	Arrival	11.7	-	-
27-Dec	10:53	8S121	XZM	Departure	12.5	-	-
27-Dec	11:09	3A063	YFT	Arrival	12.4	-	-
27-Dec	12:18	3A168	YFT	Departure	12.8	-	-
27-Dec	12:21	3A181	ZUI	Departure	14	-	-
27-Dec	12:35	8S215	XZM	Arrival	10.8	-	-
27-Dec	13:01	3A064	YFT	Arrival	12.2	-	-
27-Dec	13:16	8S123	XZM	Departure	12.4	-	-
27-Dec	13:51	3A082	ZUI	Arrival	12.4	-	-
27-Dec	14:19	3A182	ZUI	Departure	12.9	-	-
27-Dec	14:22	3A164	YFT	Departure	12.3	-	-
27-Dec	14:54	3A065	YFT	Arrival	13.2	-	-
27-Dec	16:23	3A167	YFT	Departure	13.8	-	-
27-Dec	16:41	8S218	XZM	Arrival	11.6	-	-
27-Dec	16:42	3A083	ZUI	Arrival	13.5	-	-
27-Dec	16:55	3A067	YFT	Arrival	12.5	<= 5	< 1min
27-Dec	16:56	3A183	ZUI	Departure	12.8	-	-
27-Dec	17:05	8S126	XZM	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
27-Dec	19:01	3A166	YFT	Departure	12.5	-	-
27-Dec	19:58	3A084	ZUI	Arrival	13.1	-	-
27-Dec	20:07	3A185	ZUI	Departure	13.6	-	-
27-Dec	20:49	8S2113	XZM	Arrival	12.3	-	-
27-Dec	21:00	3A169	YFT	Departure	12.9	-	-
27-Dec	21:53	8S522	XZM	Departure	12.5	-	-
28-Dec	08:11	3A061	YFT	Arrival	12.6	-	-
28-Dec	08:24	8S210	XZM	Arrival	11.6	-	-
28-Dec	09:55	3A062	YFT	Arrival	12.3	-	-
28-Dec	10:18	3A163	YFT	Departure	12.8	-	-
28-Dec	10:34	8S212	XZM	Arrival	12.4	-	-
28-Dec	10:44	3A081	ZUI	Arrival	13.2	-	-
28-Dec	11:09	8S121	XZM	Departure	12.5	-	-
28-Dec	11:23	3A063	YFT	Arrival	11.2	-	-
28-Dec	12:10	3A181	ZUI	Departure	13.6	-	-
28-Dec	12:27	3A168	YFT	Departure	11.1	-	-
28-Dec	12:50	8S215	XZM	Arrival	12.8	-	-
28-Dec	13:03	3A064	YFT	Arrival	12.2	-	-
28-Dec	13:19	8S123	XZM	Departure	12.7	-	-
28-Dec	13:46	3A082	ZUI	Arrival	12.3	-	-
28-Dec	14:26	3A164	YFT	Departure	13.4	-	-
28-Dec	14:27	3A182	ZUI	Departure	12.1	-	-
28-Dec	15:06	3A065	YFT	Arrival	10.5	-	-
28-Dec	16:14	3A167	YFT	Departure	12.8	-	-
28-Dec	16:38	8S218	XZM	Arrival	13	-	-
28-Dec	16:45	3A083	ZUI	Arrival	13.6	-	-
28-Dec	17:02	3A067	YFT	Arrival	13.1	-	-
28-Dec	17:12	3A183	ZUI	Departure	13.1	-	-
28-Dec	17:15	8S126	XZM	Departure	12.8	-	-
28-Dec	19:08	3A166	YFT	Departure	13.3	-	-
28-Dec	19:57	3A084	ZUI	Arrival	12.8	-	-
28-Dec	20:07	3A185	ZUI	Departure	13.5	-	-
28-Dec	20:52	8S2113	XZM	Arrival	12.7	-	-
28-Dec	20:56	3A169	YFT	Departure	12.4	-	-
28-Dec	21:58	8S522	XZM	Departure	13.4	-	-
29-Dec	08:20	3A061	YFT	Arrival	12.7	-	-
29-Dec	08:22	8S210	XZM	Arrival	13.2	<= 10	< 1min
29-Dec	10:02	3A062	YFT	Arrival	11.6	-	-
29-Dec	10:21	3A163	YFT	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Dec	10:35	8S212	XZM	Arrival	12.2	-	-
29-Dec	10:51	3A081	ZUI	Arrival	12.5	-	-
29-Dec	11:09	8S121	XZM	Departure	12.5	-	-
29-Dec	11:15	3A063	YFT	Arrival	12.3	-	-
29-Dec	12:14	3A181	ZUI	Departure	13.7	-	-
29-Dec	12:23	3A168	YFT	Departure	13	-	-
29-Dec	12:51	8S215	XZM	Arrival	12.5	-	-
29-Dec	13:00	3A064	YFT	Arrival	11.2	-	-
29-Dec	13:20	8S123	XZM	Departure	12.1	-	-
29-Dec	13:47	3A082	ZUI	Arrival	12.5	-	-
29-Dec	14:10	3A182	ZUI	Departure	12.5	-	-
29-Dec	14:17	3A164	YFT	Departure	12.5	-	-
29-Dec	15:03	3A065	YFT	Arrival	12.6	-	-
29-Dec	16:17	3A167	YFT	Departure	12.5	-	-
29-Dec	16:36	8S218	XZM	Arrival	12.2	-	-
29-Dec	16:49	3A083	ZUI	Arrival	12.6	-	-
29-Dec	16:56	3A067	YFT	Arrival	12.1	-	-
29-Dec	17:06	3A183	ZUI	Departure	13.6	-	-
29-Dec	17:09	8S126	XZM	Departure	12.4	-	-
29-Dec	19:18	3A166	YFT	Departure	13.6	-	-
29-Dec	19:55	3A084	ZUI	Arrival	13.1	-	-
29-Dec	20:06	3A185	ZUI	Departure	13.1	-	-
29-Dec	20:57	8S2113	XZM	Arrival	11.6	-	-
29-Dec	21:10	3A169	YFT	Departure	12.5	-	-
29-Dec	21:52	8S522	XZM	Departure	12.2	-	-
30-Dec	08:16	3A061	YFT	Arrival	11.5	-	-
30-Dec	08:19	8S210	XZM	Arrival	12.1	-	-
30-Dec	10:00	3A062	YFT	Arrival	12.5	-	-
30-Dec	10:20	3A163	YFT	Departure	12.5	-	-
30-Dec	10:35	8S212	XZM	Arrival	12.8	-	-
30-Dec	10:47	3A081	ZUI	Arrival	13.2	-	-
30-Dec	11:06	8S121	XZM	Departure	12.8	-	-
30-Dec	11:19	3A063	YFT	Arrival	12.2	-	-
30-Dec	12:13	3A181	ZUI	Departure	13.3	-	-
30-Dec	12:15	3A168	YFT	Departure	12.5	-	-
30-Dec	12:51	8S215	XZM	Arrival	11.3	-	-
30-Dec	13:04	3A064	YFT	Arrival	11.7	-	-
30-Dec	13:19	8S123	XZM	Departure	12.4	-	-
30-Dec	13:48	3A082	ZUI	Arrival	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Dec	14:22	3A182	ZUI	Departure	12.3	-	-
30-Dec	14:23	3A164	YFT	Departure	12.4	-	-
30-Dec	15:03	3A065	YFT	Arrival	12.4	-	-
30-Dec	16:19	3A167	YFT	Departure	12.9	-	-
30-Dec	16:40	8S218	XZM	Arrival	10.3	-	-
30-Dec	16:46	3A083	ZUI	Arrival	12.4	-	-
30-Dec	16:59	3A067	YFT	Arrival	12.5	-	-
30-Dec	17:29	3A183	ZUI	Departure	13.5	-	-
30-Dec	17:40	8S126	XZM	Departure	11.3	-	-
30-Dec	19:08	3A166	YFT	Departure	11.9	-	-
30-Dec	20:13	3A084	ZUI	Arrival	12.9	-	-
30-Dec	20:23	3A185	ZUI	Departure	13	-	-
30-Dec	20:54	8S2113	XZM	Arrival	13.1	-	-
30-Dec	20:59	3A169	YFT	Departure	13.3	-	-
30-Dec	21:58	8S522	XZM	Departure	13.5	-	-
31-Dec	08:16	3A061	YFT	Arrival	11.9	-	-
31-Dec	08:21	8S210	XZM	Arrival	11.7	-	-
31-Dec	09:52	3A062	YFT	Arrival	12.5	-	-
31-Dec	10:15	3A163	YFT	Departure	11.3	-	-
31-Dec	10:36	8S212	XZM	Arrival	12.8	-	-
31-Dec	10:49	3A081	ZUI	Arrival	13.2	-	-
31-Dec	11:07	8S121	XZM	Departure	10.5	-	-
31-Dec	11:16	3A063	YFT	Arrival	11.5	-	-
31-Dec	12:13	3A181	ZUI	Departure	13.2	-	-
31-Dec	12:21	3A168	YFT	Departure	12.2	-	-
31-Dec	12:44	8S215	XZM	Arrival	12.6	-	-
31-Dec	12:57	3A064	YFT	Arrival	12	-	-
31-Dec	13:20	8S123	XZM	Departure	13	-	-
31-Dec	13:54	3A082	ZUI	Arrival	12.2	-	-
31-Dec	14:15	3A182	ZUI	Departure	11.8	-	-
31-Dec	14:18	3A164	YFT	Departure	12.2	-	-
31-Dec	14:59	3A065	YFT	Arrival	11.1	-	-
31-Dec	16:24	3A167	YFT	Departure	12.2	-	-
31-Dec	16:37	8S218	XZM	Arrival	12.7	-	-
31-Dec	16:47	3A083	ZUI	Arrival	12.2	-	-
31-Dec	17:01	3A067	YFT	Arrival	12.7	-	-
31-Dec	17:11	3A183	ZUI	Departure	13.2	-	-
31-Dec	17:19	8S126	XZM	Departure	12.9	-	-
31-Dec	18:58	3A166	YFT	Departure	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
31-Dec	19:59	3A084	ZUI	Arrival	12.8	-	-
31-Dec	20:10	3A185	ZUI	Departure	13.3	-	-
31-Dec	20:49	8S2113	XZM	Arrival	12.2	-	-
31-Dec	20:59	3A169	YFT	Departure	10.4	-	-
31-Dec	21:55	8S522	XZM	Departure	12.6	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in December 2018, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 7 HSF movements of which the durations of all instantaneous speeding cases were less than two minutes. The AIS data and ferry operators' responses showed the cases were due to local strong water currents and giving way to vessels. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

1 HSF with no transmission of AIS data was received in December 2018.