MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.35 (For November 2018)

December 2018

Airport Authority Hong Kong

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This Monthly EM&A Report No. 35 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 14 December 2018

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By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
Hong Kong International Airport
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Principal Manager

14 December 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 35 (November 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 35 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 December 2018.

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 35th 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 30 November 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, seawall construction, and prefabricated vertical drain (PVD) installation. 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

		
Noise Monitoring Conducted by ET	Checking of Chemical Waste Storage during Site Inspection	Environmental Management Meeting for EM&A Review with Works Contracts

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), total alkalinity, and chromium obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For turbidity, suspended solids (SS), 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

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation 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;
- Drainage, utility, and road work;
- Piling and structure works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Re-fixing of ceiling panels.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- Site office construction
- Drilling dowel bars; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site 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;
- Piling and foundation works; and
- Demolition of footbridge.

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	√		A complaint regarding dust nuisance from sand barges in Tuen Mun was received on 6 Nov 2018.	ET found that there was one contractor deployed sand delivery vessels for the Project in recent months. Photo records provided by the contractor confirmed that dust mitigation measures were implemented during stopover/anchored at Tuen Mun Anchorage Area. ET will keep reminding contractors to continue the implementation of dust mitigation measures and conduct regular training for all frontline staff.
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A	Nil

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

1 Introduction

1.1 Background

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

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

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

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

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 32.

1.2 Scope of this Report

This is the 35th 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 30 November 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

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	Kivin Cheng	9380 3635
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Construction Manager	Stephen O'Donoghue	9732 6787
	Environmental Officer	Stephen Tsang	5508 6361
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, seawall construction, and prefabricated vertical drain (PVD) installation. 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.
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	

Parameters	Status
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	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, 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: 9 November 2018
- Two skipper trainings provided by ET: 14 and 28 November 2018
- Seven environmental management meetings for EM&A review with works contracts: 1, 14, 19, 21 and 28 November 2018
- EPD sharing on key issues of waste management and construction dust control: 21 November 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 A**.

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-1 (Serial No. 597337)	2 Oct 2018	**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 and portable direct reading dust meters are provided in **Appendix D**.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	18 – 215	306	500
AR2	29 – 197	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 D**
	Rion NL-31 (Serial No. 01262786)	7 Aug 2018	
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 B**.

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	67 – 73	75
NM4(1)	65 – 68	70(2)
NM5(1)	57 – 61	75
NM6(1)	66 – 74	75

Notes:

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

(2) Reduced to 65 dB(A) during school examination periods at NM4. School examination took place from 9 to 15 November 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	**Appendix D**
	YSI ProDSS (Serial No. 16H104233)	3 Oct 2018	
	YSI 6920 V2 (Serial No. 00019CB2)	19 Nov 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	20 Aug 2018(1)	Monthly EM&A Report No. 32, Appendix E
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N64701)	18 Sep 2018	Monthly EM&A Report No. 33, Appendix D

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 B**. Flood tide monitoring session on 1 November 2018 was cancelled due to typhoon. It should be noted that Super Typhoon Yutu affected Hong Kong from 1 to 2 November 2018 and water quality monitoring results might be affected by this weather event.

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

For turbidity, SS and nickel, 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 turbidity compliance status at IM and SR stations during mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7
3/11/2018																	
6/11/2018																	
8/11/2018																	
10/11/2018																	
13/11/2018																	
15/11/2018																	
17/11/2018																	
20/11/2018																	
22/11/2018																	
24/11/2018																	
27/11/2018					D	D											
29/11/2018																	
No. of results triggering Action or Limit Level	0	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0

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

Action Level was triggered on 27 November 2018. Cases at IM3, IM4, IM11 and IM12 were recorded upstream of the Project during flood tide and would unlikely be affected by the Project.

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 4.8**.

Table 4.8: Summary of Findings from Investigation of Turbidity 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
27/11/2018	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. Contractor had followed up and carried out silt curtain maintenance when defects were identified by ET or Contractor.

Turbidity results recorded at IM5 and IM6 on 27 November 2018 were within the baseline range and Action Level was also triggered at IM3 and IM4, which were located upstream of IM5 and IM6 during flood tide. Repeat measurement was carried out on 28 November 2018, where no Action or Limit Level was triggered at all monitored stations. Consider above observations and the fact that mitigation measures were properly implemented, these two cases were not due to Project.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6	SR7	SR8
3/11/2018																			
6/11/2018																			
8/11/2018														D					
10/11/2018					D					D									
13/11/2018																			
15/11/2018																			
17/11/2018																			
20/11/2018																			
22/11/2018																			
24/11/2018																			
27/11/2018					D														
29/11/2018									D										
No. of result triggereing Action or Limit Level	0	0	0	1	2	0	0	0	1	1	1	1	0	1	0	0	0	0	0

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

D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring result triggered the corresponding Action Levels on 8, 10, 27, and 29 November 2018. Some cases on 10 and 27 November 2018 were recorded at locations upstream of the Project during flood tide and would unlikely be affected by the Project. For the case at SR3 on 8 November 2018, all results at impact monitoring stations were within their Action and Limit Levels and therefore it was considered not related to the Project.

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 days were collected and findings are summarized in **Table 4.10**.

Table 4.10: Summary of Findings from Investigation of SS 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
10/11/2018	Marine filling and DCM works	Around 1 km	Localised and enhanced silt curtain deployed	No	No	No
27/11/2018	Marine filling, seabed regulation works and DCM works	Around 1 km	Localised and enhanced silt curtain deployed	No	No	No
29/11/2018	Marine filling, seabed regulation works and DCM works	Around 500 m	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. Contractor had followed up and carried out silt curtain maintenance when defects were identified by ET or Contractor..

For SS results recorded at IM5 and IM10 on 10 November 2018, it is observed that the corresponding Action Level was also triggered at IM4 and IM12, which were located upstream of IM5 and IM10 respectively during flood tide. With no observable silt plume during marine works and mitigation measures implemented properly, cases at both stations were considered not caused by Project.

SS result recorded at IM5 on 27 November 2018 and that at IM9 on 29 November 2018 were considered an isolated case with no spatial trend to indicate any effect due to Project. The former was also found to be within the baseline range at that location during mid-flood tide. As mitigation measures were implemented properly and no silt plume was observed, cases on both days were considered not related to Project.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
1/11/2018												
3/11/2018												
6/11/2018												
8/11/2018												
10/11/2018												
13/11/2018												
15/11/2018												
17/11/2018	D	D		D								
20/11/2018												
22/11/2018												
24/11/2018												
27/11/2018												
29/11/2018												
No. of result triggering Action or Limit Level	1	1	0	1	0	0	1	1	0	1	0	0

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

Monitoring results triggered the corresponding Action Levels on 17 November 2018. Cases occurred at IM7, IM8 and IM10 were located upstream of the Project during ebb tide and would unlikely be affected by the Project.

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 Nickel 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
17/11/2018	Marine filling, seabed regulation works and DCM works	Around 500m	Localised and enhanced silt curtain deployed.	No	No	No

According to the investigation findings, it was confirmed that DCM, seabed regulation 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. Contractor had followed up and carried out silt curtain maintenance when defects were identified by ET or Contractor.

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, and elevated nickel concentration due to these activities should be associated with similar elevated SS levels. Since SS results at IM1, IM2 and IM4 on 17 November 2018 were within their Action and Limit Levels, this implies that active DCM works had limited influence on water quality in that period. With mitigation measures properly implemented and no observable silt plumes, 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 Levels, and investigations were conducted accordingly.

Based on the investigation findings, all results that triggered the corresponding Action 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, seawall construction, and sand blanket laying works 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 Transferred to Temporary Stockpiling Area (m^3)[2]	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)
Sep 2018[3][4]	-	3,330	-	5,688	-	-	-
Nov 2018[4]	3,005	3,333	1,035	8,841	180	8,240	500

Notes:

(1) C&D refers to Construction and Demolition.
(2) The stockpiled material will be reused in the Project.
(3) Only updated figures are presented.
(4) 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 November 2018, data from 1 September 2018 to 30 November 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 October 2018 (calculated by data from August 2018 to October 2018) and the running quarterly encounter rates of this month (calculated by data from September 2018 to November 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 6, 7, 12, 13, 16, 20, 21 and 23 November 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

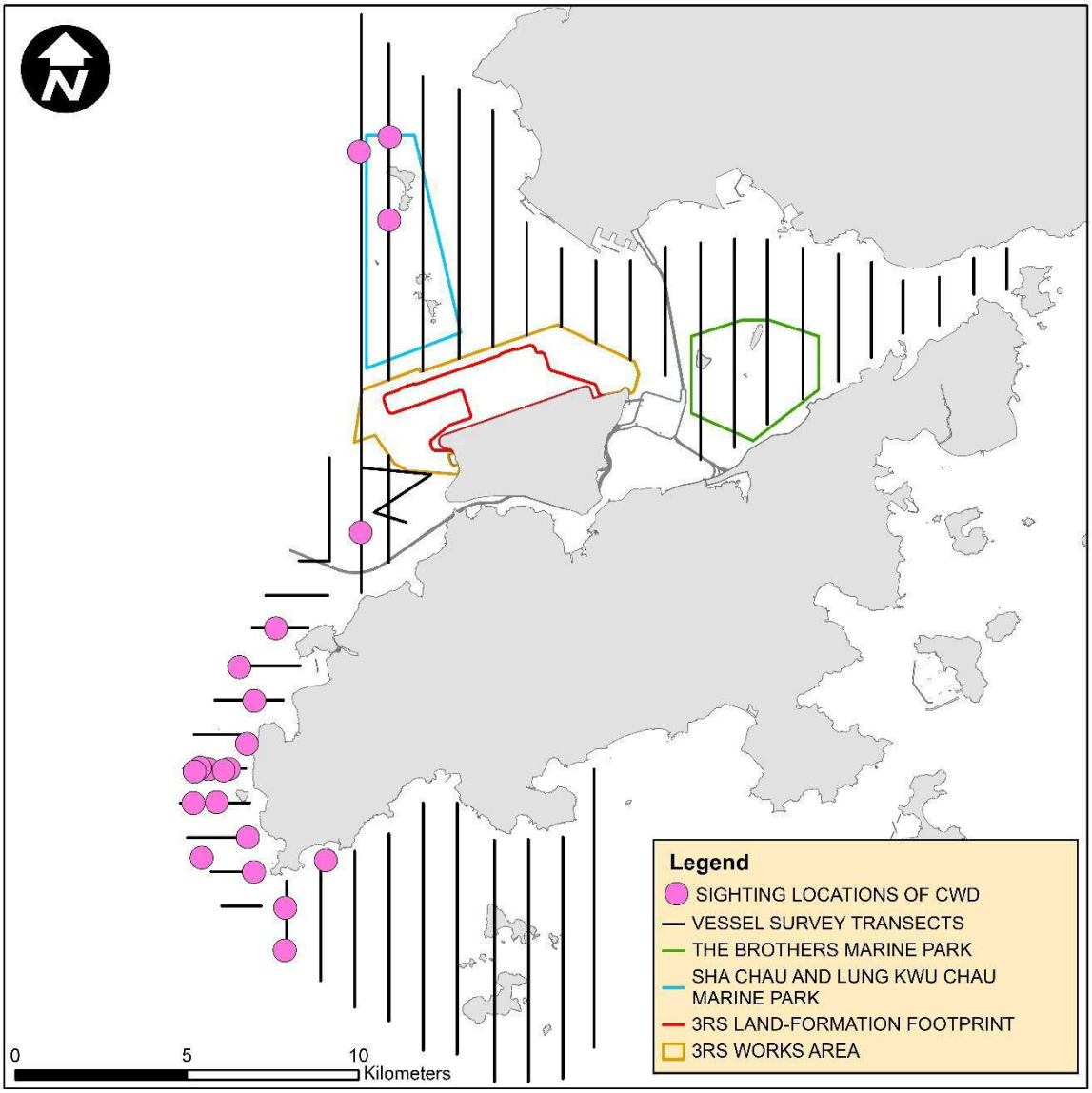
A total of around 444.38 km of survey effort was collected from these surveys, with around 88.2% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In November 2018, 21 sightings with 61 dolphins were sighted. Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in November 2018 is illustrated in **Figure 6.3**. In NWL, the majority of CWD sightings were recorded around Lung Kwu Chau while one sighting was recorded at the southwestern part of the survey area. In WL, CWD sightings were distributed from Tai O to Fan Lau, particularly in waters off Peaked Hill. In SWL, 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 in this month.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 21 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from November 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 November 2018, a total of around 392.04 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 19 on-effort sightings with 56 dolphins were sighted under such condition. Calculation of the encounter rates in November 2018 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from September to November 2018), a total of around 1258.60 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 54 on-effort sightings and a total number of 166 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of November 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)
November 2018	4.85	14.28
Running Quarter from September 2018 to November 2018(1)	4.29	13.19
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 September to November 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 November 2018, 21 groups with 61 dolphins were sighted, and the average group size of CWDs was 2.90 dolphins per group. Numbers of sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. No sighting with large group size (i.e. 10 or more dolphins) was recorded.

Activities and Association with Fishing Boats

Five out of 21 sightings of CWDs were recorded engaging in feeding activities in November 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In November 2018, three sightings were recorded with the presence of mother-and-unspotted calf, mother-and-unspotted juvenile or mother-and-spotted juvenile pairs. Two of these sightings were sighted in NWL while the remaining one was encountered in WL.

6.4.2 Photo Identification

In November 2018, a total number of 30 different CWD individuals were identified for totally 34 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM004	6-Nov-18	2	NWL	SLMM034	21-Nov-18	2	SWL
NLMM006	6-Nov-18	2	NWL	SLMM037	20-Nov-18	2	WL
NLMM012	6-Nov-18	1	NWL	SLMM052	16-Nov-18	1	WL
NLMM013	6-Nov-18	2	NWL	SLMM059	20-Nov-18	3	WL
NLMM018	20-Nov-18	2	WL	WLMM001	16-Nov-18	8	WL
		3	WL	WLMM007	16-Nov-18	8	WL
NLMM023	12-Nov-18	2	NWL	WLMM018	20-Nov-18	4	WL
NLMM037	6-Nov-18	2	NWL	WLMM056	20-Nov-18	3	WL
NLMM039	6-Nov-18	1	NWL	WLMM060	12-Nov-18	1	NWL
NLMM052	12-Nov-18	2	NWL	WLMM063	16-Nov-18	3	WL
NLMM068	6-Nov-18	2	NWL	WLMM071	12-Nov-18	1	NWL
SLMM003	16-Nov-18	1	WL	WLMM079	16-Nov-18	1	WL
	20-Nov-18	2	WL			8	WL
SLMM007	16-Nov-18	1	WL	WLMM109	16-Nov-18	8	WL
SLMM014	21-Nov-18	1	SWL	WLMM125	20-Nov-18	3	WL
		3	SWL	WLMM127	6-Nov-18	2	NWL
SLMM028	20-Nov-18	1	WL	WLMM131	20-Nov-18	2	WL

6.4.3 Land-based Theodolite Tracking Survey

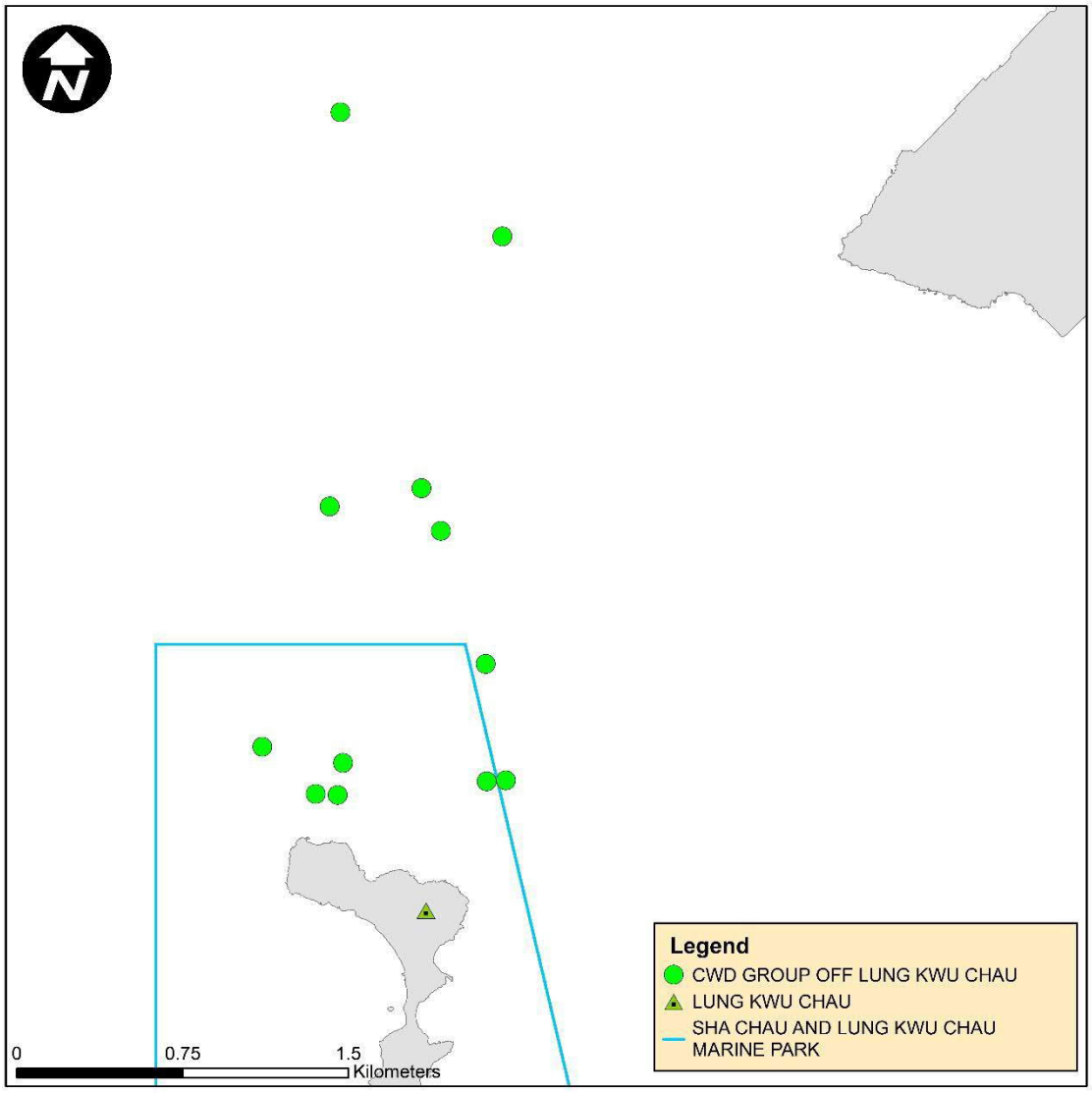
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 5, 13 and 21 November 2018 and at SC on 14 and 27 November 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 12 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 C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in November 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	12	0.67
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**12**	**0.40**

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 retrieved on 28 November 2018 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise

information simultaneously. Analysis (by a 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 contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 12 to 16 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) 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 668 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 B**. Bi-weekly site inspections were also conducted by the IEC. Besides, *ad-hoc* site inspections were conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed both within the site area as well as outside the project sites which was likely to be affected, directly or indirectly, by the site activities. 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 A**.

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

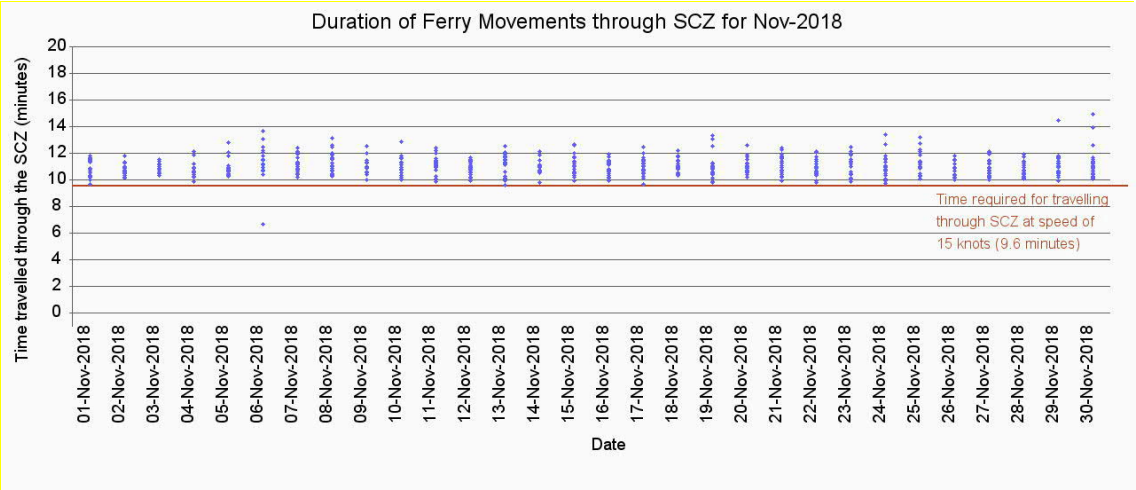
7.2 Audit of SkyPier High Speed Ferries

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., 86 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, 870 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in November 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in November 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 06 November 2018.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for November 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 06 November 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.

As reported in the Construction Phase Monthly EM&A Report No. 34, one ferry was recorded with minor deviation from the diverted route on 18 October 2018. ET's investigation found that the deviation was due to a failure in water jet pump. Due to emergency, the captain decided to deviate from planned track for safety reasons.

One meeting was held with the ferry operators on 12 November 2018 to review and discuss the deviation cases happened in the past few months as well as to share experience and recommendations to further strengthen the implementation of SkyPier Plan.

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

Requirements in the SkyPier Plan	1 November to 30 November 2018
Total number of ferry movements recorded and audited	870
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots, which complied with the SkyPier Plan, except one HSF on 06 November 2018 (9.1 knots to 20.3 knots), which complied 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)	86 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:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Three skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, three skippers were trained by ET and five skippers were trained by contractors' Environmental Officers. In total, 1073 skippers were trained from August 2016 to November 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 ground improvement works (DCM works and PVD installation) 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 ad-hoc inspection 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 preparation works for shoreline landscape reinstatement 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 on the island 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 C** 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	
2.19	Waste Management Plan	
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 E**.

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

7.8.1 Complaints

A complaint was received on 6 Nov 2018 regarding dust nuisance from sand barges at Tuen Mun. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. The anonymous complainant did not provide any specific information (e.g. date, time, name of vessels) on the case. In recent months, only one contractor has deployed sand delivery vessels for 3RS Project, and photo records of implementation of dust mitigation measure, such as water spraying, were provided by the contractor. Considering that Tuen Mun Anchorage Area is one of the designated anchorage areas for all vessels in Hong Kong waters, including construction vessels of various construction projects. Based on the information provided by the complainant, there were no evidences suggesting that the Project's sand delivery vessels caused dust nuisance to nearby residence at Tuen Mun. Nevertheless, ET will continue reminding all contractors to continue the implementation of dust mitigation measures and to conduct regular training for all frontline staff to avoid dust nuisance to the public. ET will also continue to monitor the implementation of dust mitigation measures. Hence, the complaint case was considered closed.

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 F**.

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Trench backfilling;
- Shoreline reinstatement next to the new pipe; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201, 3203, and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation 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;
- Drainage, utility, and road work;
- Piling and structure works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Re-fixing of ceiling panels.

Automated People Mover (APM) works:

Contract 3602 Existing APM System Modification Works

- Site establishment;
- Site office construction
- Drilling dowel bars; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site 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;
- Piling and foundation works; and
- Demolition of footbridge.

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 PVD installation) 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 B**.

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 deep cement mixing (DCM) works, marine filling, seawall construction and prefabricated vertical drain (PVD) installation. 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.

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, total alkalinity, and chromium obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For SS, turbidity and nickel, 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 November 2018 were in the range of 86 to 92 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 870 HSF movements under the SkyPier Plan were recorded in the reporting period. Except the case on 06 November 2018, all HSFs had travelled through the SCZ with average speeds under 15 knots (9.1 to 20.3 knots), which were in compliance with the SkyPier Plan. Zero deviation from the diverted route in November 2018 was 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

824000 N
822000 N
820000 N
818000 N
804000 E
806000 E
808000 E
810000 E
812000 E
814000 E

Contract P560 (R)-
Daylighting
Location

LEGEND:
- LAND FORMATION
- TEMPORARY WORKS AREA BOUNDARY
- KEY CONSTRUCTION ACTIVITIES

RECLAMATION WORKS AREA
(please refer to Figure 1.2)

Contract 3801 - Works Area
Contract 3501 - Works Area
Contract 3502, 3602 - Works Area
Contract 3602 - Works Area
Contract 3505 - Works Area
Contract 3503 - Works Area

Contract 3205, 3206, 3801
and AAHK Site Offices

Contract 3301 - Works Area

Contract P560 (R)-
Launching Site

Contract 3301 - Works Area

Contract 3301 - Pre-cast Area

Contract 3301 - Works Area

Contract P560 (R) - Site Office
Contract 3501 - Stockpiling Area
Contract 3801 - Stockpiling Area
Contract P560 (R) - Stockpiling Area
Contract 3801 - Stockpiling Area

Contract 3603 - Site Office
Contract 3602 - Site Office
Contract 3503 - Stockpiling Area

0 250 500 750 1000 m
1 : 30 000 SCALE BAR

Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

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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\EN\V\CWSLP\FIG 1.dgn

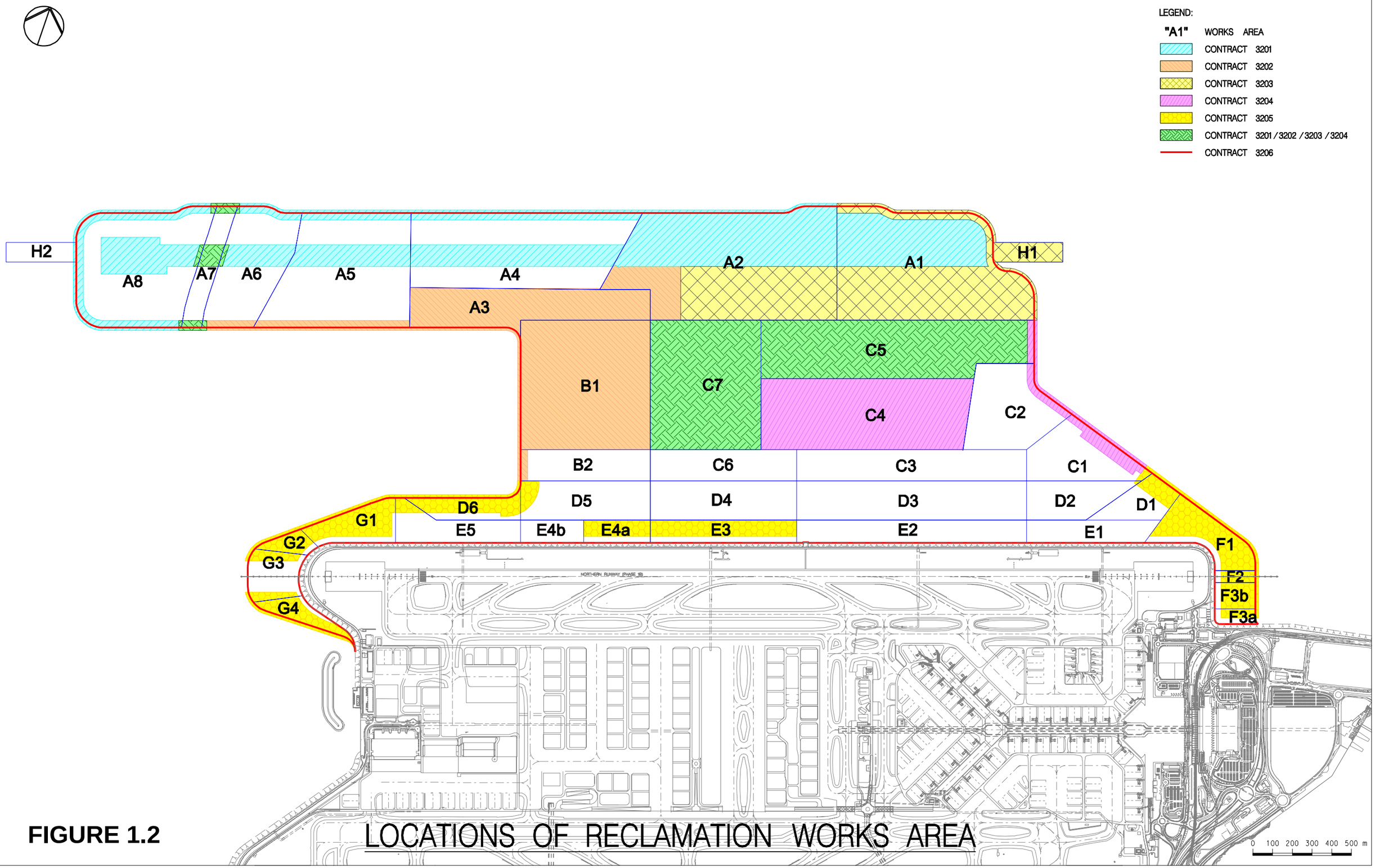

FIGURE 1.2

LOCATIONS OF RECLAMATION WORKS AREA

LEGEND:

- LAND FORMATION
- NOISE MONITORING STATION (UPDATED EM&A MANUAL)
- AIR QUALITY MONITORING STATION (UPDATED EM&A MANUAL)
- CHEK LAP KOK WIND STATION

806000 E
808000 E
810000 E
812000 E
814000 E
820000 N
818000 N

NM1A
AR1A
NM2
NM3A
NM4
NM5
AR2
NM6

0 200 400 600 800 1000 m
1 : 22 500 SCALE BAR

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

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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

805000 E
810000 E
815000 E
820000 E
825000 N
820000 N
815000 N
HKSAR BOUNDARY
C2
C3
C1
IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8

LEGEND:
- LAND FORMATION
- IMPACT STATION
- SENSITIVE RECEIVER
- CONTROL STATION

0 500 1000 1500 2000 m
1 : 60 000 SCALE BAR

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Title

WATER QUALITY MONITORING STATIONS

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

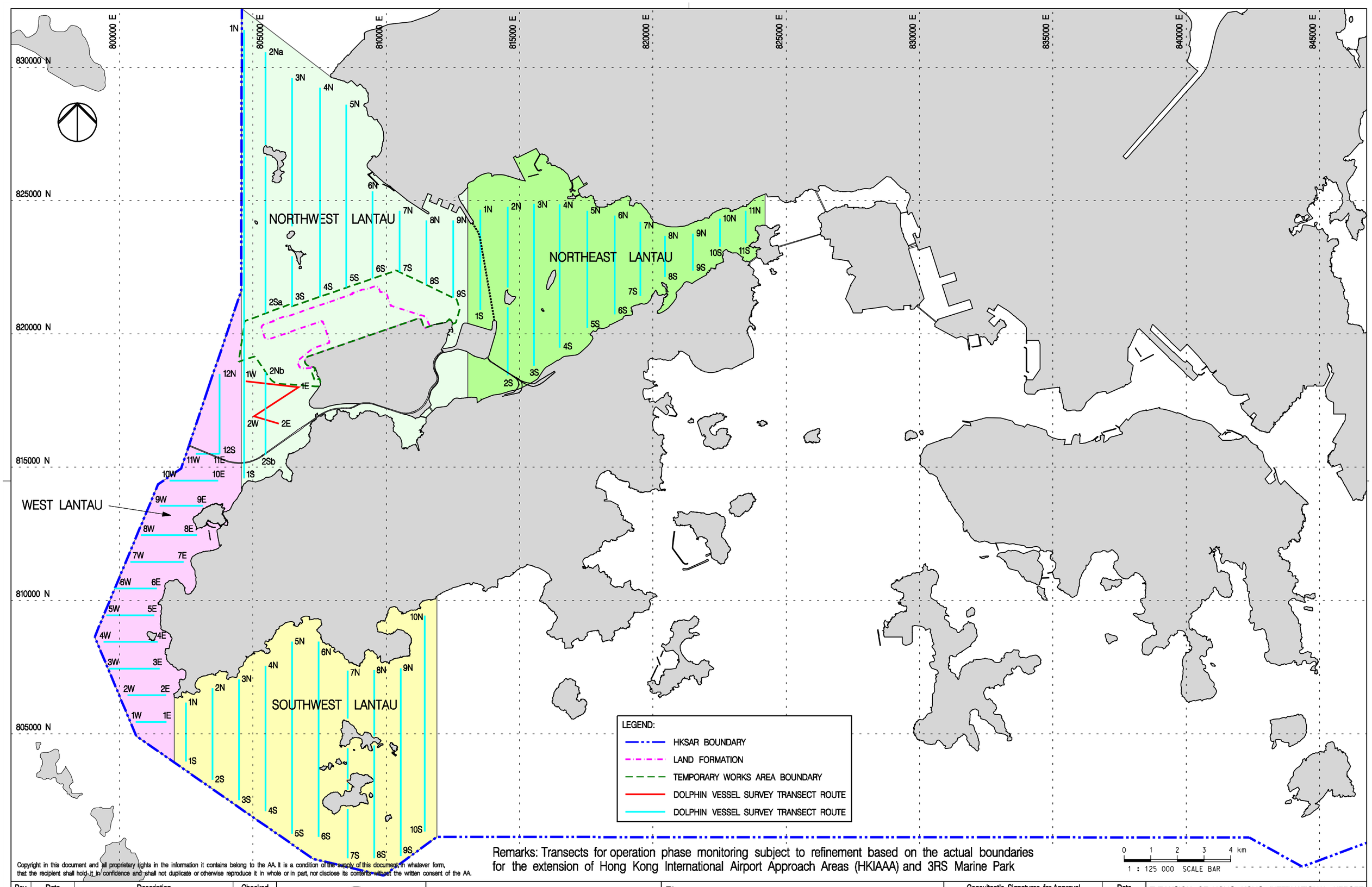
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

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

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A	02DEC15	FIRST ISSUE	JC
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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

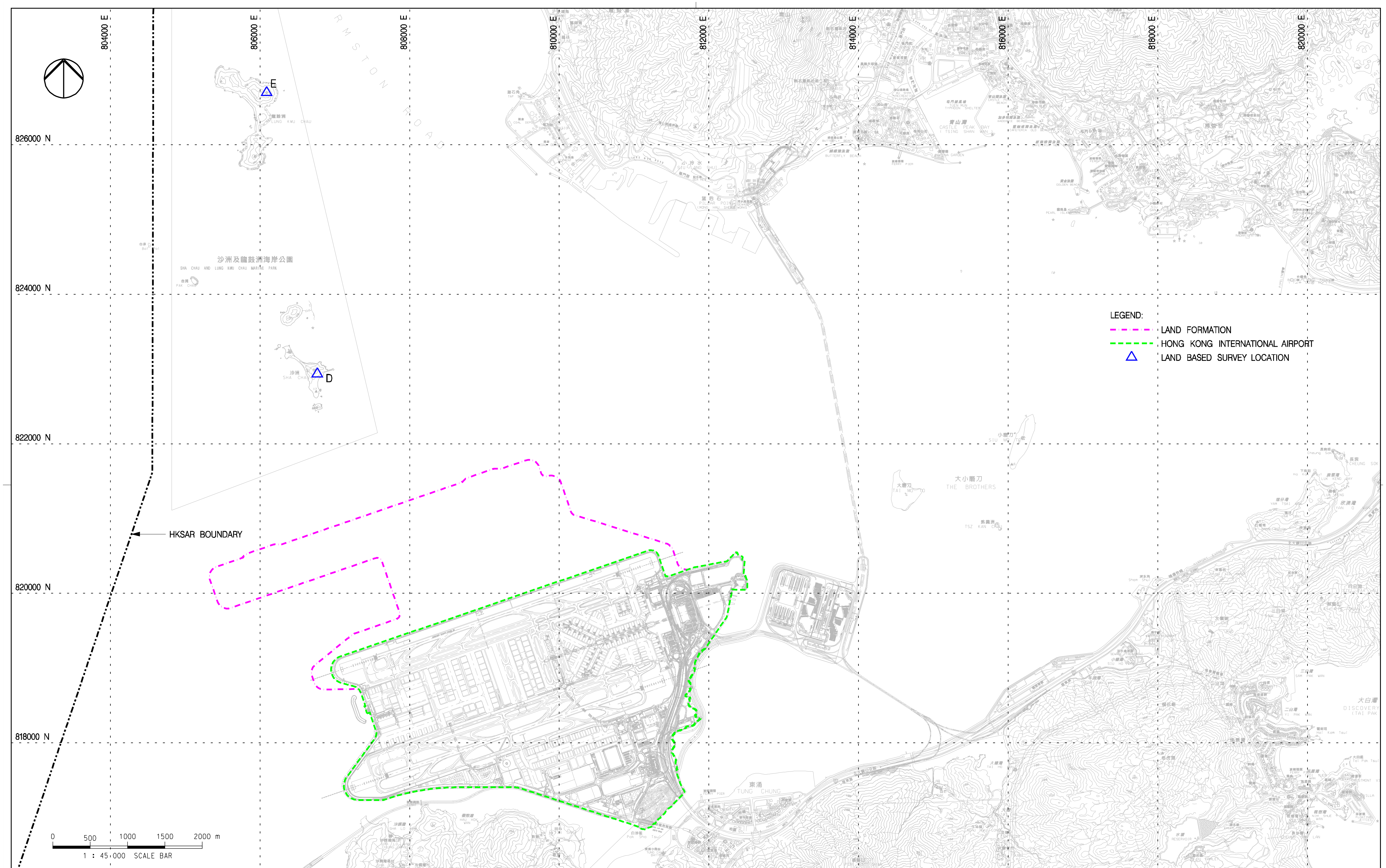
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. E

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



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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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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

804000 E
806000 E
808000 E
810000 E
812000 N
814000 E
816000 E
818000 E
820000 E
828000 N
826000 N
824000 N
822000 N
820000 N
818000 N

URMSTON ROAD

龍鼓洲
LUNG KWU CHAU

沙洲及龍鼓洲海岸公園
SHA CHAU AND LUNG KWU CHAU MARINE PARK

沙洲
SHA CHAU

A5

HKSAR BOUNDARY

CASTLE PEAK BAY
青山灣
TSING SHAN WAN

TUNG CHUNG
東涌

大小廳刀
THE BROTHERS

LEGEND:

LAND FORMATION

HONG KONG INTERNATIONAL AIRPORT

AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

0 500 1000 1500 2000 m

1 : 45 000 SCALE BAR

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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. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Appendix A 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; ▪ 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; ▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; ▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; ▪ Treated and untreated sediment should be clearly separated and stored separately; and ▪ 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.	Project Site Area / Construction Phase	N/A
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 B. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Nov-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Site Inspection General WQ & Regular DCM mid-ebb: 6:20 mid-flood: 14:54*	**2** Site Inspection	**3** General WQ & Regular DCM mid-ebb: 9:20 mid-flood: 16:30
4	**5** CWD Survey (Land-based)	**6** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5 General WQ & Regular DCM mid-ebb: 12:01 mid-flood: 18:03	**7** CWD Survey (Vessel)	**8** Site Inspection NM6 Terrestrial Ecological Monitoring General WQ & Regular DCM mid-ebb: 13:27 mid-flood: 19:00	**9** Site Inspection	**10** General WQ & Regular DCM mid-ebb: 14:45 mid-flood: 9:13
11	**12** CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5	**13** Site Inspection CWD Survey (Vessel, Land-based) General WQ & Regular DCM mid-ebb: 4:00 mid-flood: 11:45	**14** Site Inspection CWD Survey (Land-based) NM6	**15** Site Inspection General WQ & Regular DCM mid-ebb: 5:29 mid-flood: 17:57	**16** Site Inspection CWD Survey (Vessel) AR1A, AR2	**17** General WQ & Regular DCM mid-ebb: 22:11 mid-flood: 15:50
18	**19** Site Inspection	**20** Site Inspection CWD Survey (Vessel) NM6 General WQ & Regular DCM mid-ebb: 10:42 mid-flood: 17:06	**21** Site Inspection CWD Survey (Vessel, Land-based)	**22** Site Inspection AR1A, AR2 NM1A, NM4, NM5 General WQ & Regular DCM mid-ebb: 12:08 mid-flood: 17:57	**23** Site Inspection CWD Survey (Vessel)	**24** General WQ & Regular DCM mid-ebb: 13:36 mid-flood: 8:03
25	**26** Site Inspection NM6	**27** Site Inspection CWD Survey (Land-based) General WQ & Regular DCM mid-ebb: 16:01 mid-flood: 10:47	**28** Site Inspection AR1A, AR2 NM1A, NM4, NM5	**29** Site Inspection General WQ & Regular DCM mid-ebb: 18:15 mid-flood: 12:59	**30** Site Inspection	
		Notes: CWD - Chinese White Dolphin Air Quality and Noise Monitoring Station NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan WQ - Water Quality DCM - Deep Cement Mixing *Flood tide WQ montoring session on 1 November was cancelled due to typhoon.				

Tentative Monitoring Schedule of Next 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) Terrestrial Ecological Monitoring 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 CWD Survey (Land-based)	**13** Site Inspection General WQ & Regular DCM mid-ebb: 4:11 mid-flood: 12:05	**14** Site Inspection	**15** AR1A, AR2 General WQ & Regular DCM mid-ebb: 5:33 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 (Vessel, Land-based)	**20** Site Inspection CWD Survey (Vessel) General WQ & Regular DCM mid-ebb: 10:53 mid-flood: 16:42	**21** Site Inspection 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: 5:46 mid-flood: 13:16
30	**31**	**Notes:** Site Inspection CWD - Chinese White Dolphin Air Quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix C. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

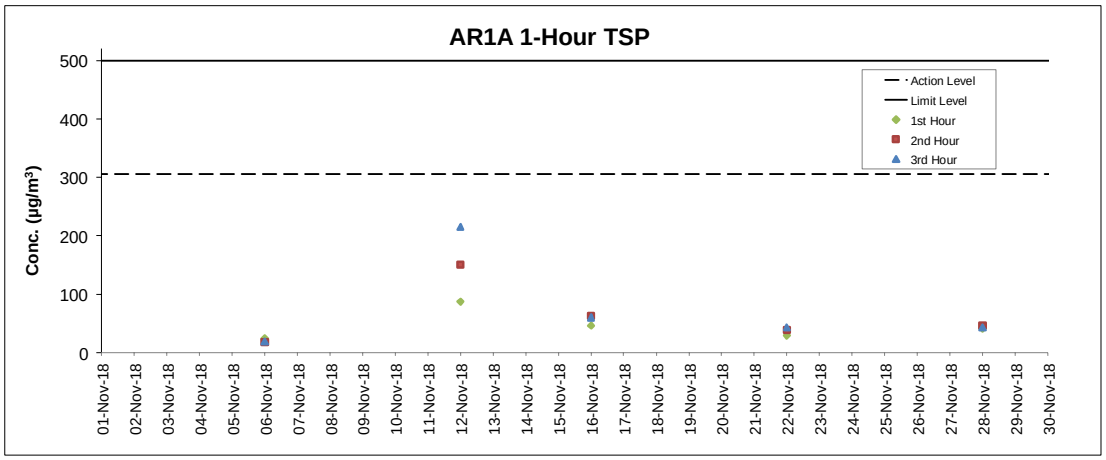
Station: AR1A- Man Tung Road Park

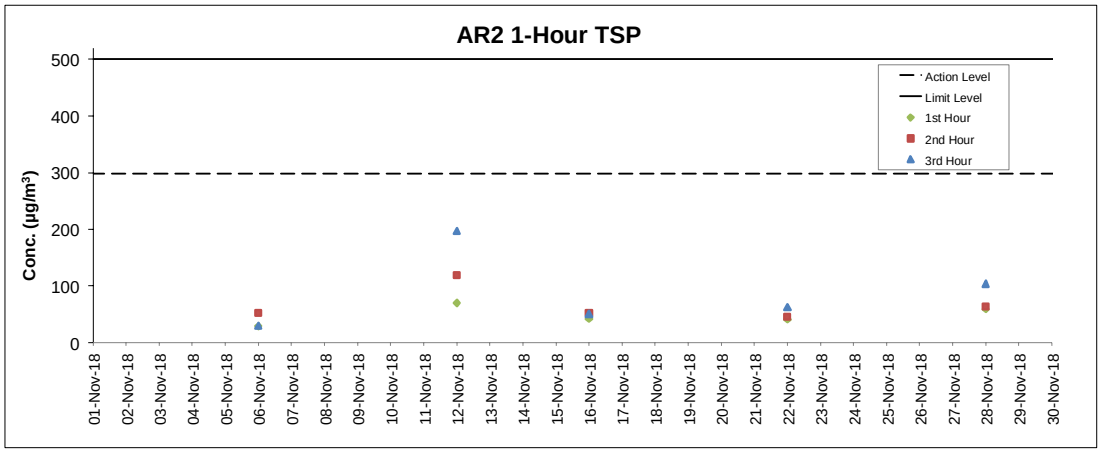
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
06-Nov-18	8:40	Sunny	4.6	87	24	306	500
06-Nov-18	9:40	Sunny	5.1	92	18	306	500
06-Nov-18	10:40	Sunny	4.6	94	19	306	500
12-Nov-18	9:33	Cloudy	2.7	288	87	306	500
12-Nov-18	10:33	Cloudy	1.4	Variable	150	306	500
12-Nov-18	11:33	Cloudy	2.3	271	215	306	500
16-Nov-18	9:09	Sunny	9.1	80	46	306	500
16-Nov-18	10:09	Sunny	8.0	79	63	306	500
16-Nov-18	11:09	Sunny	7.6	80	60	306	500
22-Nov-18	08:56	Sunny	6.5	356	29	306	500
22-Nov-18	9:56	Sunny	6.5	6	39	306	500
22-Nov-18	10:56	Sunny	6.6	358	43	306	500
28-Nov-18	9:09	Cloudy	3.6	60	41	306	500
28-Nov-18	10:09	Cloudy	3.4	54	46	306	500
28-Nov-18	11:09	Cloudy	3.7	60	43	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
06-Nov-18	9:17	Sunny	5.7	85	29	298	500
06-Nov-18	10:17	Sunny	5.4	85	53	298	500
06-Nov-18	11:17	Sunny	5.4	106	30	298	500
12-Nov-18	9:09	Fine	2.2	286	70	298	500
12-Nov-18	10:09	Fine	1.7	285	119	298	500
12-Nov-18	11:09	Fine	2.3	268	197	298	500
16-Nov-18	9:17	Fine	5.7	85	42	298	500
16-Nov-18	10:17	Fine	5.4	85	53	298	500
16-Nov-18	11:17	Fine	5.4	106	51	298	500
22-Nov-18	10:12	Sunny	5.8	20	41	298	500
22-Nov-18	11:12	Sunny	6.8	355	46	298	500
22-Nov-18	12:12	Sunny	6.8	348	63	298	500
28-Nov-18	14:14	Rainy	2.6	96	59	298	500
28-Nov-18	15:14	Cloudy	3.3	79	64	298	500
28-Nov-18	16:14	Cloudy	4.5	108	104	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)
6-Nov-18	Sunny	9:02	74.3	57.5	72
6-Nov-18	Sunny	9:07	72.9	57.0	
6-Nov-18	Sunny	9:12	73.5	57.2	
6-Nov-18	Sunny	9:17	73.6	55.9	
6-Nov-18	Sunny	9:22	73.4	54.5	
6-Nov-18	Sunny	9:27	70.7	55.4	
12-Nov-18	Cloudy	9:47	75.3	53.8	67
12-Nov-18	Cloudy	9:52	74.7	53.3	
12-Nov-18	Cloudy	9:57	74.6	53.3	
12-Nov-18	Cloudy	10:02	74.0	54.1	
12-Nov-18	Cloudy	10:07	74.2	53.7	
12-Nov-18	Cloudy	10:12	77.0	55.2	
22-Nov-18	Sunny	9:05	73.1	57.3	72
22-Nov-18	Sunny	9:10	73.6	58.2	
22-Nov-18	Sunny	9:15	73.7	56.6	
22-Nov-18	Sunny	9:20	73.0	56.5	
22-Nov-18	Sunny	9:25	72.3	57.8	
22-Nov-18	Sunny	9:30	73.0	58.9	
28-Nov-18	Cloudy	9:20	73.9	57.0	73
28-Nov-18	Cloudy	9:25	73.5	55.1	
28-Nov-18	Cloudy	9:30	73.6	54.1	
28-Nov-18	Cloudy	9:35	73.8	54.6	
28-Nov-18	Cloudy	9:40	75.2	57.3	
28-Nov-18	Cloudy	9:45	72.3	55.3	

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)
6-Nov-18	Sunny	13:00	63.5	59.0	66
6-Nov-18	Sunny	13:05	64.8	59.8	
6-Nov-18	Sunny	13:10	63.0	59.7	
6-Nov-18	Sunny	13:15	65.3	60.2	
6-Nov-18	Sunny	13:20	69.9	62.2	
6-Nov-18	Sunny	13:25	72.5	68.3	
12-Nov-18	Fine	13:47	64.3	58.5	65
12-Nov-18	Fine	13:52	64.2	58.6	
12-Nov-18	Fine	13:57	62.8	58.5	
12-Nov-18	Fine	14:02	61.8	57.7	
12-Nov-18	Fine	14:07	63.8	58.8	
12-Nov-18	Fine	14:12	63.6	58.2	
22-Nov-18	Fine	13:05	70.9	63.3	68
22-Nov-18	Fine	13:10	72.1	67.7	
22-Nov-18	Fine	13:15	72.6	66.4	
22-Nov-18	Fine	13:20	64.1	59.1	
22-Nov-18	Fine	13:25	63.3	58.5	
22-Nov-18	Fine	13:30	63.8	58.8	
28-Nov-18	Cloudy	13:21	64.7	60.4	66
28-Nov-18	Cloudy	13:26	68.8	60.9	
28-Nov-18	Cloudy	13:31	65.3	60.6	
28-Nov-18	Cloudy	13:36	65.2	60.0	
28-Nov-18	Cloudy	13:41	63.6	59.7	
28-Nov-18	Cloudy	13:46	65.5	60.0	

Remarks:

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

Limit Level at NM4 was reduced to 65 dB(A) during school examination period from 9 to 15 Nov 2018.

Noise Measurement Results
Station: NM5- Village House, Tin Sum

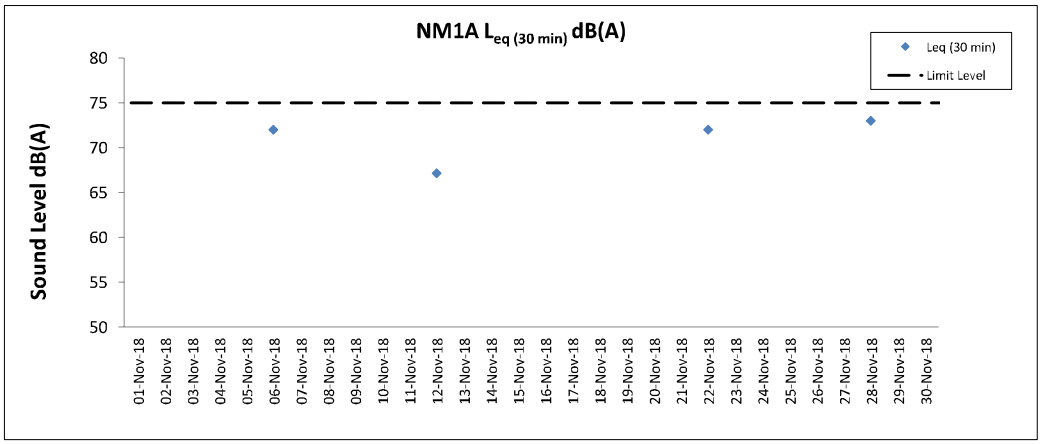
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
6-Nov-18	Sunny	9:18	61.3	48.9	61
6-Nov-18	Sunny	9:23	63.3	49.3	
6-Nov-18	Sunny	9:28	63.7	50.7	
6-Nov-18	Sunny	9:33	63.0	51.2	
6-Nov-18	Sunny	9:38	62.8	51.8	
6-Nov-18	Sunny	9:43	62.7	50.0	
12-Nov-18	Fine	9:19	57.1	44.2	57
12-Nov-18	Fine	9:24	62.6	46.8	
12-Nov-18	Fine	9:29	53.9	48.4	
12-Nov-18	Fine	9:34	61.2	45.5	
12-Nov-18	Fine	9:39	50.4	44.6	
12-Nov-18	Fine	9:44	51.7	44.4	
22-Nov-18	Sunny	10:16	63.8	51.8	57
22-Nov-18	Sunny	10:21	58.3	50.6	
22-Nov-18	Sunny	10:26	58.3	49.9	
22-Nov-18	Sunny	10:31	59.1	50.2	
22-Nov-18	Sunny	10:36	60.3	52.1	
22-Nov-18	Sunny	10:41	60.2	52.3	
28-Nov-18	Cloudy	15:19	57.4	49.7	59
28-Nov-18	Cloudy	15:24	65.0	52.4	
28-Nov-18	Cloudy	15:29	66.6	48.2	
28-Nov-18	Cloudy	15:34	54.4	47.1	
28-Nov-18	Cloudy	15:39	58.0	46.6	
28-Nov-18	Cloudy	15:44	54.1	46.9	

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)
8-Nov-18	Cloudy	9:45	72.4	58.9	74
8-Nov-18	Cloudy	9:50	77.5	57.6	
8-Nov-18	Cloudy	9:55	73.9	58.1	
8-Nov-18	Cloudy	10:00	79.3	61.7	
8-Nov-18	Cloudy	10:05	75.6	57.1	
8-Nov-18	Cloudy	10:10	69.2	57.5	
14-Nov-18	Cloudy	9:45	67.3	53.1	66
14-Nov-18	Cloudy	9:50	62.3	52.3	
14-Nov-18	Cloudy	9:55	71.5	58.7	
14-Nov-18	Cloudy	10:00	71.0	58.7	
14-Nov-18	Cloudy	10:05	74.7	62.5	
14-Nov-18	Cloudy	10:10	67.5	57.2	
20-Nov-18	Sunny	9:48	66.3	56.0	66
20-Nov-18	Sunny	9:53	67.9	56.6	
20-Nov-18	Sunny	9:58	72.2	57.8	
20-Nov-18	Sunny	10:03	71.1	54.5	
20-Nov-18	Sunny	10:08	70.0	65.5	
20-Nov-18	Sunny	10:13	70.6	64.1	
26-Nov-18	Cloudy	10:28	73.8	61.7	74
26-Nov-18	Cloudy	10:33	76.1	60.9	
26-Nov-18	Cloudy	10:38	75.1	60.2	
26-Nov-18	Cloudy	10:43	77.7	59.7	
26-Nov-18	Cloudy	10:48	77.1	59.6	
26-Nov-18	Cloudy	10:53	77.4	56.5	

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-Nov-18
02-Nov-18
03-Nov-18
04-Nov-18
05-Nov-18
06-Nov-18
07-Nov-18
08-Nov-18
09-Nov-18
10-Nov-18
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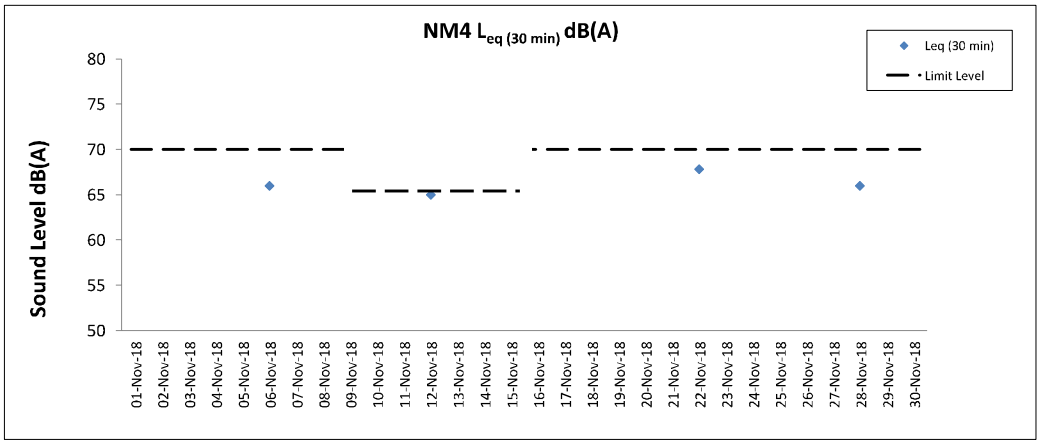
29-Nov-18
30-Nov-18


NM4 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Nov-18
02-Nov-18
03-Nov-18
04-Nov-18
05-Nov-18
06-Nov-18
07-Nov-18
08-Nov-18
09-Nov-18
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16-Nov-18
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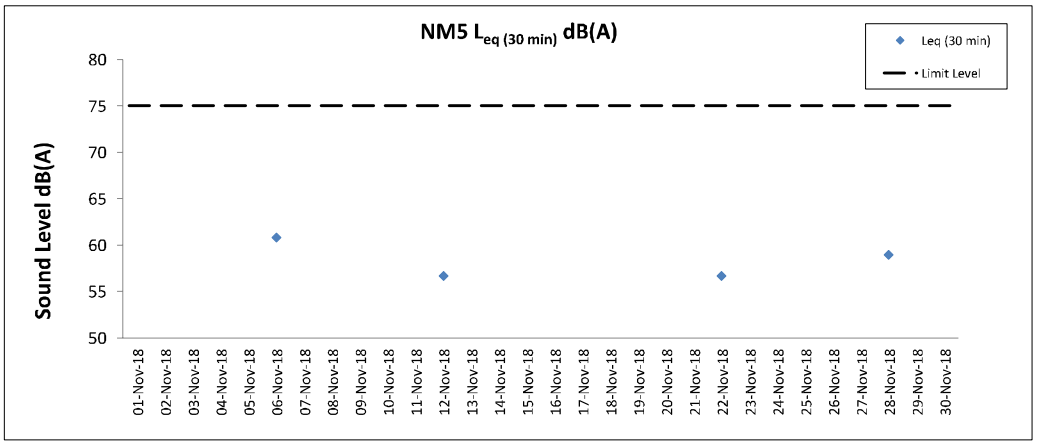
28-Nov-18
29-Nov-18
30-Nov-18


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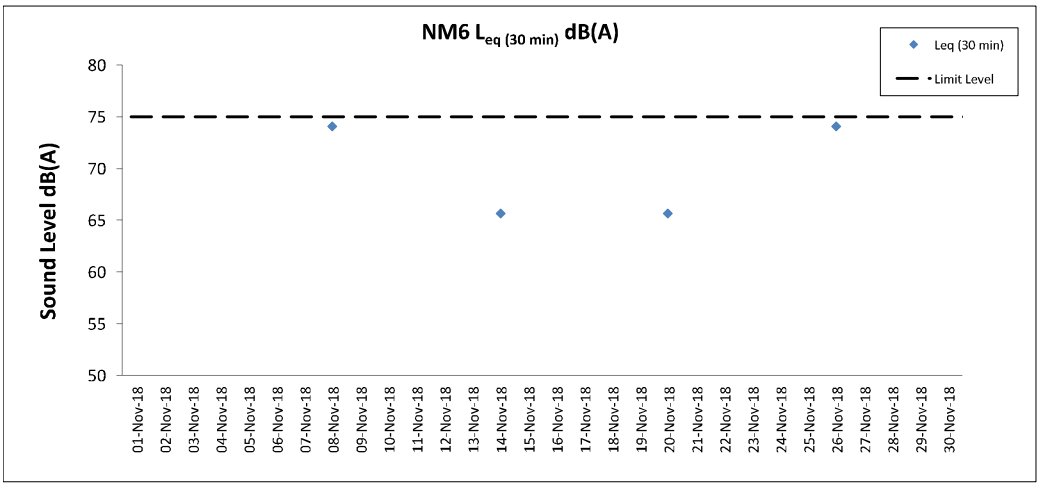
NM6 $L_{eq\ (30\ min)}$ dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Nov-18
02-Nov-18
03-Nov-18
04-Nov-18
05-Nov-18
06-Nov-18
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29-Nov-18
30-Nov-18

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 November 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	05:56	8.0	Surface	1.0	0.4	175	24.3	24.3	8.2	8.2	30.8	30.8	94.6	94.6	6.7	6.7	4.5	5.5	8	9	83	88	815635	804257	<0.2	<0.2	0.7	0.8
						1.0	0.4	176	24.3		8.2		30.8		94.6		6.7		4.6		8		84				<0.2		0.8	
					Middle	4.0	0.4	188	24.3	24.3	8.2	8.2	30.8	30.8	94.2	94.2	6.6		4.9		8		88				<0.2		0.8	
						4.0	0.4	201	24.3		8.2		30.8		94.2		6.6		4.9		9		88				<0.2		1.0	
					Bottom	7.0	0.3	179	24.3	24.3	8.2	8.2	30.8	30.8	93.7	93.7	6.6	6.6	6.9		10		92				<0.2		0.8	
						7.0	0.3	185	24.3		8.2		30.8		93.7		6.6		7.2		11		92				<0.2		0.8	
C2	Cloudy	Rough	06:55	11.2	Surface	1.0	0.3	29	24.9	24.9	8.2	8.2	29.5	29.6	97.3	97.3	6.8	6.7	6.1	6.7	10	12	84	87	825674	806957	<0.2	<0.2	1.6	1.5
						1.0	0.3	31	24.9		8.2		29.6		97.3		6.8		6.1		10		85				<0.2		1.4	
					Middle	5.6	0.3	33	24.9	24.9	8.2	8.2	30.2	30.2	94.7	94.7	6.6		6.8		12		87				<0.2		1.5	
						5.6	0.3	34	24.9		8.2		30.2		94.6		6.6		6.8		13		88				<0.2		1.4	
					Bottom	10.2	0.3	26	25.0	25.0	8.2	8.2	30.4	30.4	94.8	94.9	6.6	6.6	7.0		12		90				<0.2		1.6	
						10.2	0.3	26	25.0		8.2		30.4		94.9		6.6		7.0		12		90				<0.2		1.5	
C3	Cloudy	Moderate	05:45	11.6	Surface	1.0	0.1	152	25.1	25.1	8.1	8.1	31.2	31.2	92.2	92.2	6.4	6.4	6.2	6.5	4	5	84	87	822120	817780	<0.2	<0.2	1.2	1.4
						1.0	0.1	155	25.1		8.1		31.2		92.1		6.4		6.1		6		83				<0.2		1.3	
					Middle	5.8	0.1	72	25.2	25.2	8.1	8.1	31.3	31.3	91.9	91.9	6.3		6.4		5		86				<0.2		1.5	
						5.8	0.1	77	25.2		8.1		31.3		91.9		6.3		6.4		4		87				<0.2		1.5	
					Bottom	10.6	0.1	76	25.1	25.2	8.1	8.1	31.4	31.4	91.5	91.5	6.3	6.3	7.0		4		89				<0.2		1.3	
						10.6	0.1	81	25.2		8.1		31.4		91.5		6.3		7.1		4		90				<0.2		1.5	
IM1	Fine	Moderate	06:17	5.4	Surface	1.0	0.2	3	24.5	24.5	8.2	8.2	30.9	30.9	94.4	94.3	6.6	6.6	4.3	4.6	7	7	88	90	817927	807144	<0.2	<0.2	0.8	0.8
						1.0	0.2	3	24.5		8.2		30.9		94.2		6.6		4.3		7		88				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	353	24.6	24.6	8.2	8.2	31.0	31.0	92.9	92.9	6.5	6.5	4.9		7		91				<0.2		0.7	
						4.4	0.2	356	24.6		8.2		31.0		92.9		6.5		5.0		6		92				<0.2		0.7	
IM2	Fine	Moderate	06:23	6.8	Surface	1.0	0.4	176	24.2	24.2	8.2	8.2	30.2	30.2	94.5	94.5	6.7	6.7	6.3	9.3	8	9	84	89	818155	806155	<0.2	<0.2	0.9	0.9
						1.0	0.5	176	24.2		8.2		30.3		94.4		6.7		6.4		7		85				<0.2		0.9	
					Middle	3.4	0.4	180	24.2	24.2	8.2	8.2	30.4	30.4	93.5	93.5	6.6		8.1		9		88				<0.2		1.0	
						3.4	0.5	186	24.2		8.2		30.4		93.5		6.6		7.9		9		89				<0.2		0.9	
					Bottom	5.8	0.3	0	24.2	24.2	8.2	8.2	30.4	30.4	92.9	92.9	6.6	6.6	13.4		9		92				<0.2		0.9	
						5.8	0.3	0	24.2		8.2		30.4		92.9		6.6		13.8		10		93				<0.2		0.8	
IM3	Fine	Moderate	06:31	7.0	Surface	1.0	0.4	240	24.3	24.3	8.2	8.2	29.9	29.9	94.9	94.9	6.7	6.7	4.3	4.6	7	9	85	90	818784	805585	<0.2	<0.2	1.1	1.1
						1.0	0.4	253	24.3		8.2		29.9		94.9		6.7		4.4		7		86				<0.2		1.2	
					Middle	3.5	0.4	249	24.3	24.3	8.2	8.2	29.9	29.9	94.6	94.6	6.7		4.8		8		89				<0.2		1.0	
						3.5	0.4	273	24.3		8.2		29.9		94.6		6.7		4.8		9		90				<0.2		1.1	
					Bottom	6.0	0.3	241	24.3	24.3	8.2	8.2	29.9	29.9	94.3	94.3	6.7	6.7	4.7		10		94				<0.2		1.0	
						6.0	0.3	242	24.3		8.2		29.9		94.3		6.7		4.7		10		95				<0.2		1.0	
IM4	Fine	Moderate	06:40	7.1	Surface	1.0	0.3	202	24.3	24.3	8.2	8.2	30.5	30.5	95.8	95.8	6.7	6.7	4.3	4.3	5	6	87	92	819702	804602	<0.2	<0.2	0.7	0.8
						1.0	0.4	209	24.3		8.2		30.5		95.8		6.7		4.3		5		87				<0.2		0.7	
					Middle	3.6	0.3	180	24.3	24.3	8.2	8.2	30.5	30.5	95.7	95.7	6.7		3.9		6		91				<0.2		0.8	
						3.6	0.3	196	24.3		8.2		30.5		95.7		6.7		3.9		7		91				<0.2		0.9	
					Bottom	6.1	0.3	172	24.3	24.3	8.2	8.2	30.6	30.6	95.4	95.4	6.7	6.7	4.7		8		96				<0.2		0.9	
						6.1	0.3	181	24.3		8.2		30.6		95.3		6.7		4.7		7		97				<0.2		0.9	
IM5	Fine	Rough	06:49	6.4	Surface	1.0	0.3	216	24.5	24.5	8.2	8.2	29.5	29.5	93.3	93.3	6.6	6.6	3.9	7.8	10	13	86	88	820729	804858	<0.2	<0.2	1.0	1.1
						1.0	0.4	222	24.5		8.2		29.5		93.3		6.6		4.0		11		86				<0.2		1.2	
					Middle	3.2	0.4	236	24.5	24.5	8.2	8.2	29.5	29.5	93.0	93.0	6.6		8.1		13		87				<0.2		1.0	
						3.2	0.4	258	24.5		8.2		29.5		93.0		6.6		8.0		13		87				<0.2		1.1	
					Bottom	5.4	0.6	229	24.5	24.5	8.2	8.2	29.5	29.5	92.7	92.7	6.5	6.5	11.4		14		91				<0.2		1.1	
						5.4	0.6	233	24.5		8.2		29.5		92.7		6.5		11.3		14		91				<0.2		1.1	
IM6	Fine	Rough	06:57	6.1	Surface	1.0	0.6	250	24.6	24.6	8.1	8.1	29.2	29.2	92.7	92.7	6.5	6.5	2.9	5.9	6	8	86	89	821058	805849	<0.2	<0.2	1.1	1.2
						1.0	0.6	265	24.6		8.1		29.2		92.7		6.5		3.1		6		85				<0.2		1.2	
					Middle	3.1	0.4	234	24.6	24.6	8.1	8.1	29.3	29.3	92.5	92.5	6.5		3.8		8		89				<0.2		1.3	
						3.1	0.4	245	24.6		8.1		29.3		92.5		6.5		4.0		8		89				<0.2		1.1	
					Bottom	5.1	0.3	244	24.6	24.6	8.1	8.1	29.3	29.3	92.2	92.2	6.5	6.5	10.6		10		92				<0.2		1.2	
						5.1	0.3	258	24.6		8.1		29.3		92.2		6.5		11.3		10		93				<0.2		1.1	
IM7	Fine	Rough	07:06	7.2	Surface	1.0	0.4	252	24.7	24.7	8.1	8.1	29.3	29.3	92.6	92.6	6.5	6.5	9.6	12.2	6	8	83	89	821334	806835	<0.2	<0.2	1.1	1.1
						1.0	0.4	265	24.7		8.1		29.3		92.6		6.5		9.6		6		85				<0.2		1.1	
					Middle	3.6	0.4	258	24.7	24.7	8.1	8.1	29.3	29.3	92.4	92.4	6.5		11.1		7		88				<0.2		1.2	
						3.6	0.5	261	24.7		8.1		29.3		92.4		6.5		10.9		8		89				<0.2		1.1	
					Bottom	6.2	0.5	260	24.7	24.7	8.1	8.1	29.3	29.3	92.3	92.3	6.5	6.5	16.0		9		93				<0.2		1.1	
						6.2	0.5	284	24.7		8.1		29.3		92.3		6.5		16.2		10		93				<0.2		1.1	
IM8	Cloudy	Moderate	06:25	7.7	Surface	1.0	0.6	204	24.7	24.7	8.2	8.2	30.0	30.0	100.7	100.7	7.1	7.1	6.0	6.3	5	5	85	88	821840	808160	<0.2	<0.2	1.4	1.3
						1.0	0.6	208	24.7		8.2		30.0		100.7		7.1		6.0		5		85				<0.2		1.4	
					Middle	3.9	0.4	227	24.7	24.7	8.2	8.2	30.2	30.2	100.2	100.2	7.0		6.3		5		88				<0.2		1.2	
						3.9	0.5	227	24.7		8.2		30.2		100.1		7.0		6.4		5		87				<0.2		1.2	
					Bottom	6.7	0.4	250	24.7	24.7	8.2	8.2	30.3	30.3	98.6	98.5	6.9	6.9	6.6		6		91				<0.2		1.2	
						6.7	0.4	255	24.7		8.2		30.3		98.4		6.9		6.7		5		90				<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**
Note: The flood tide monitoring session on 1 November 2018 was cancelled due to Strong Wind Signal No. 3.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 November 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	06:19	7.2	Surface	1.0	0.7	221	24.7	24.7	8.2	8.2	30.4	30.4	100.7	100.7	7.0	7.0	6.4	6.8	5	5	84	87	822082	808804	<0.2	<0.2	1.2	1.2
						1.0	0.7	226	24.7		8.2		30.4		100.7		7.0		6.4		4		85				<0.2		1.1	
					Middle	3.6	0.6	218	24.7	24.7	8.2	8.2	30.4	30.4	100.7	100.7	7.0		6.4		5		87				<0.2		1.3	
						3.6	0.6	220	24.7		8.2		30.4		100.7		7.0		6.4		5		85				<0.2		1.2	
					Bottom	6.2	0.5	227	24.6	24.6	8.2	8.2	30.4	30.4	101.1	101.1	7.1	7.1	7.5		5		89				<0.2		1.3	
						6.2	0.6	233	24.6		8.2		30.4		101.1		7.1		7.5		5		91				<0.2		1.2	
IM10	Cloudy	Moderate	06:09	7.0	Surface	1.0	0.3	214	24.8	24.8	8.2	8.2	30.3	30.3	100.5	100.5	7.0	7.0	6.1	6.3	4	5	87	88	822366	809806	<0.2	<0.2	1.2	1.3
						1.0	0.3	234	24.8		8.2		30.3		100.5		7.0		6.1		4		85				<0.2		1.2	
					Middle	3.5	0.3	223	24.6	24.6	8.2	8.2	30.4	30.4	100.2	100.2	7.0		6.3		6		89				<0.2		1.5	
						3.5	0.4	224	24.6		8.2		30.4		100.2		7.0		6.3		6		88				<0.2		1.1	
					Bottom	6.0	0.3	233	24.6	24.6	8.2	8.2	30.5	30.5	100.1	100.1	7.0	7.0	6.4		6		89				<0.2		1.2	
						6.0	0.3	242	24.6		8.2		30.5		100.1		7.0		6.4		6		89				<0.2		1.7	
IM11	Cloudy	Moderate	05:05	7.6	Surface	1.0	0.2	193	24.5	24.5	8.2	8.2	30.3	30.3	101.9	101.9	7.2	7.2	10.3	9.4	6	5	84	87	822044	811439	<0.2	<0.2	1.1	1.2
						1.0	0.2	201	24.5		8.2		30.3		101.8		7.2		10.3		7		85				<0.2		1.2	
					Middle	3.8	0.2	206	24.5	24.5	8.2	8.2	30.2	30.2	101.1	101.1	7.1		9.4		5		87				<0.2		1.2	
						3.8	0.2	224	24.5		8.2		30.2		101.1		7.1		9.4		5		86				<0.2		1.2	
					Bottom	6.6	0.1	207	24.5	24.5	8.2	8.2	30.3	30.3	101.5	101.5	7.1	7.1	8.5		5		89				<0.2		1.2	
						6.6	0.1	225	24.5		8.2		30.3		101.5		7.1		8.3		4		89				<0.2		1.1	
IM12	Cloudy	Moderate	05:48	7.8	Surface	1.0	0.1	135	24.5	24.5	8.2	8.2	30.3	30.3	101.3	101.3	7.1	7.1	6.2	9.2	3	4	84	87	821462	812041	<0.2	<0.2	1.3	1.3
						1.0	0.1	135	24.5		8.2		30.3		101.2		7.1		6.2		4		84				<0.2		1.2	
					Middle	3.9	0.1	100	24.5	24.5	8.2	8.2	30.3	30.3	100.4	100.4	7.1		9.9		3		87				<0.2		1.4	
						3.9	0.1	107	24.5		8.2		30.3		100.3		7.1		10.2		4		86				<0.2		1.3	
					Bottom	6.8	0.1	151	24.4	24.4	8.2	8.2	30.2	30.2	100.6	100.7	7.1	7.1	11.4		4		89				<0.2		1.1	
						6.8	0.1	160	24.4		8.2		30.3		100.8		7.1		11.2		3		91				<0.2		1.2	
SR1A	Cloudy	Moderate	05:27	6.8	Surface	1.0	-	-	24.6	24.6	8.2	8.2	30.2	30.2	96.6	96.6	6.8	6.8	6.1	6.8	4	3	-	-	820075	812584	-	-	-	-
						1.0	-	-	24.6		8.2		30.2		96.5		6.8		6.2		4		-				-		-	
					Middle	3.4	-	-	24.6	24.7	8.2	8.2	30.3	30.3	95.3	95.2	-		6.6		3		-				-		-	
						3.4	-	-	24.7		8.2		30.3		95.1		-		6.6		3		-				-		-	
					Bottom	5.8	-	-	24.9	24.9	8.2	8.2	30.5	30.5	94.0	94.0	6.6	6.6	7.4		2		-				-		-	
						5.8	-	-	24.9		8.2		30.5		94.0		6.5		7.5		3		-				-		-	
SR2	Cloudy	Moderate	05:15	4.3	Surface	1.0	0.1	290	24.9	24.9	8.2	8.2	30.7	30.7	93.9	93.9	6.5	6.5	6.4	6.7	5	5	85	88	821475	814184	<0.2	<0.2	1.3	1.2
						1.0	0.1	294	24.9		8.2		30.7		93.9		6.5		6.4		5		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	288	24.9	24.9	8.2	8.1	30.7	30.7	94.7	94.8	6.6	6.6	7.1		4		89				<0.2		1.2	
						3.3	0.1	306	24.9		8.1		30.7		94.8		6.6		7.1		5		90				<0.2		1.0	
SR3	Cloudy	Rough	06:31	8.2	Surface	1.0	0.4	184	24.7	24.7	8.2	8.2	29.7	29.7	99.3	99.3	7.0	7.0	6.2	6.4	3	3	-	-	822145	807564	-	-	-	-
						1.0	0.4	197	24.7		8.2		29.7		99.3		7.0		6.3		3		-				-		-	
					Middle	4.1	0.3	177	24.7	24.7	8.2	8.2	30.0	30.0	99.5	99.5	7.0		6.4		3		-				-		-	
						4.1	0.3	182	24.7		8.2		30.0		99.5		7.0		6.5		3		-				-		-	
					Bottom	7.2	0.1	218	24.7	24.7	8.2	8.2	30.1	30.1	99.5	99.6	7.0	7.0	6.6		2		-				-		-	
						7.2	0.1	223	24.7		8.2		30.0		99.6		7.0		6.5		3		-				-		-	
SR4A	Fine	Moderate	05:39	9.6	Surface	1.0	0.5	241	24.0	24.1	8.2	8.2	29.7	29.7	90.2	90.3	6.4	6.4	2.3	6.6	5	4	-	-	817173	807800	-	-	-	-
						1.0	0.6	263	24.1		8.2		29.7		90.3		6.4		2.2		5		-				-		-	
					Middle	4.8	0.5	235	24.2	24.2	8.2	8.2	30.3	30.3	89.9	89.9	-		4.5		3		-				-		-	
						4.8	0.5	242	24.2		8.2		30.3		89.8		-		4.5		3		-				-		-	
					Bottom	8.6	0.3	245	24.7	24.7	8.2	8.2	31.0	31.0	89.1	89.2	6.2	6.2	13.0		4		-				-		-	
						8.6	0.4	249	24.7		8.2		31.0		89.2		6.2		13.0		4		-				-		-	
SR5A	Fine	Moderate	05:25	4.7	Surface	1.0	0.2	277	24.1	24.1	8.2	8.2	29.3	29.3	93.5	93.5	6.6	6.6	1.7	1.7	4	5	-	-	816586	810703	-	-	-	-
						1.0	0.2	288	24.1		8.2		29.3		93.5		6.6		1.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	286	24.1	24.1	8.2	8.2	29.3	29.3	93.4	93.5	6.6	6.6	1.7		6		-				-		-	
						3.7	0.2	293	24.1		8.2		29.3		93.5		6.6		1.7		6		-				-		-	
SR6	Fine	Moderate	05:00	4.5	Surface	1.0	0.1	291	24.5	24.5	8.1	8.1	28.7	28.7	88.8	88.9	6.3	6.3	3.3	5.2	5	4	-	-	817875	814675	-	-	-	-
						1.0	0.1	298	24.5		8.1		28.7		89.0		6.3		3.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	294	24.5	24.5	8.1	8.1	28.9	28.9	89.2	89.1	6.3	6.3	7.0		4		-				-		-	
						3.5	0.1	317	24.5		8.1		28.9		89.0		6.3		7.2		4		-				-		-	
SR7	Cloudy	Moderate	05:03	16.8	Surface	1.0	0.4	120	25.2	25.2	8.0	8.0	31.8	31.8	93.8	93.8	6.4	6.4	5.8	5.8	3	3	-	-	823637	823736	-	-	-	-
						1.0	0.4	131	25.2		8.0		31.8		93.8		6.4		5.8		2		-				-		-	
					Middle	8.4	0.4	144	25.2	25.2	7.9	7.9	31.9	31.9	93.7	93.7	-		5.8		3		-				-		-	
						8.4	0.4	150	25.2		7.9		31.9		93.7		-		5.8		3		-				-		-	
					Bottom	15.8	0.2	164	25.2	25.2	7.9	7.9	31.9	31.9	93.7	93.7	6.4	6.4	5.7		4		-				-		-	
						15.8	0.2	171	25.2		7.9		31.9		93.7		6.4		5.8		3		-				-		-	
SR8	Cloudy	Moderate	05:37	5.3	Surface	1.0	-	-	24.4	24.4	8.3	8.3	30.5	30.5	101.3	101.3	7.1	7.1	7.0	8.7	2	3	-	-	820495	811670	-	-	-	-
						1.0	-	-	24.4		8.3		30.5		101.2		7.1		7.0		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	24.3	24.3	8.3	8.3	30.6	30.6	100.9	101.0	7.1	7.1	10.4		3		-				-		-	
						4.3	-	-	24.3		8.3		30.6		101.0		7.1		10.4		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**
Note: SR8 cannot be accessed due to windy weather. The monitoring at SR8 was slightly shifted to the closest safe and accessible location temporarily.
Note: The flood tide monitoring session on 1 November 2018 was cancelled due to Strong Wind Signal No. 3.

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 November 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	08:57	9.0	Surface	1.0	0.6	201	24.2	24.2	8.3	8.3	31.5	31.5	100.7	100.6	7.1	7.1	12.0	16.3	3	3	85	90	815609	804263	<0.2	<0.2	1.0	0.9
						1.0	0.7	207	24.2		8.3		31.5		100.5		7.0		11.9		3		86				<0.2		0.8	
					Middle	4.5	0.5	208	24.2	24.2	8.3	8.3	31.5	31.5	100.9	101.0	7.1		17.5		2		90				<0.2		0.8	
						4.5	0.5	211	24.2		8.3		31.5		101.0		7.1		17.6		3		91				<0.2		0.8	
					Bottom	8.0	0.4	184	24.2	24.2	8.3	8.3	31.5	31.5	103.0	103.4	7.2	7.3	19.2		<2		94				<0.2		0.9	
						8.0	0.4	200	24.2		8.3		31.5		103.8		7.3		19.3		<2		95				<0.2		0.9	
C2	Fine	Moderate	10:14	11.4	Surface	1.0	1.0	187	24.1	24.1	8.4	8.4	32.0	32.0	106.8	106.6	7.5	7.5	4.2	6.0	5	4	85	90	825692	806931	<0.2	<0.2	0.8	0.9
						1.0	1.1	190	24.1		8.4		32.0		106.4		7.5		4.5		6		87				<0.2		0.9	
					Middle	5.7	0.8	180	24.1	24.1	8.4	8.4	32.0	32.0	105.9	105.7	7.4		5.7		4		90				<0.2		0.9	
						5.7	0.8	192	24.0		8.4		32.0		105.5		7.4		5.8		4		91				<0.2		0.9	
					Bottom	10.4	0.4	188	24.0	24.0	8.4	8.3	32.1	32.1	105.4	105.6	7.4	7.4	7.6		3		93				<0.2		0.8	
						10.4	0.4	192	24.0		8.3		32.1		105.8		7.4		7.9		3		95				<0.2		0.8	
C3	Fine	Moderate	08:24	11.4	Surface	1.0	0.3	110	23.6	23.7	8.3	8.3	30.9	31.0	97.3	97.2	6.9	6.9	3.9	5.3	5	7	85	89	822086	817811	<0.2	<0.2	0.7	0.8
						1.0	0.3	119	23.8		8.3		31.1		97.0		6.9		3.8		5		86				<0.2		0.9	
					Middle	5.7	0.2	105	23.8	23.8	8.3	8.3	31.2	31.2	97.0	97.0	6.9		5.2		6		89				<0.2		0.8	
						5.7	0.2	105	23.8		8.3		31.1		96.9		6.9		5.3		6		90				<0.2		0.7	
					Bottom	10.4	0.2	52	24.0	24.0	8.3	8.3	32.2	32.2	97.4	97.4	6.8	6.8	6.9		10		93				<0.2		1.0	
						10.4	0.3	55	24.0		8.3		32.2		97.4		6.8		6.8		9		93				<0.2		0.7	
IM1	Fine	Moderate	09:19	4.8	Surface	1.0	0.1	106	24.0	24.0	8.3	8.3	31.3	31.3	101.9	102.0	7.2	7.2	9.1	10.3	5	5	84	90	817960	807116	<0.2	<0.2	0.7	0.8
						1.0	0.1	113	24.0		8.3		31.3		102.1		7.2		9.2		5		85				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	215	24.0	24.0	8.3	8.3	31.3	31.3	103.4	103.8	7.3	7.3	11.4		6		94				<0.2		0.8	
						3.8	0.1	233	24.0		8.3		31.3		104.2		7.3		11.6		5		95				<0.2		0.8	
IM2	Fine	Moderate	09:27	7.1	Surface	1.0	0.4	188	24.0	24.0	8.3	8.3	31.2	31.2	102.2	102.2	7.2	7.2	3.1	4.6	10	11	84	89	818180	806188	<0.2	<0.2	0.8	0.8
						1.0	0.4	197	24.0		8.3		31.3		102.2		7.2		3.4		10		85				<0.2		0.7	
					Middle	3.6	0.4	178	24.0	24.0	8.3	8.3	31.3	31.3	102.1	102.0	7.2		4.3		10		89				<0.2		0.7	
						3.6	0.4	183	24.0		8.3		31.3		101.9		7.2		4.5		10		89				<0.2		0.9	
					Bottom	6.1	0.4	178	24.0	24.0	8.3	8.3	31.2	31.2	102.3	102.6	7.2	7.2	6.1		11		93				<0.2		0.8	
						6.1	0.4	190	24.0		8.3		31.2		102.8		7.2		6.3		13		94				<0.2		0.8	
IM3	Fine	Moderate	09:34	7.2	Surface	1.0	0.2	201	23.9	23.9	8.3	8.3	31.0	31.0	103.9	103.9	7.3	7.4	7.1	7.8	11	10	86	89	818765	805576	<0.2	<0.2	0.8	0.8
						1.0	0.2	206	23.9		8.3		31.0		103.8		7.3		7.2		10		86				<0.2		0.8	
					Middle	3.6	0.2	222	23.9	23.9	8.3	8.3	31.1	31.1	104.2	104.2	7.4		7.5		10		89				<0.2		0.7	
						3.6	0.2	241	24.0		8.3		31.1		104.2		7.4		7.9		10		86				<0.2		0.8	
					Bottom	6.2	0.2	236	23.9	23.9	8.3	8.3	31.1	31.1	105.1	105.1	7.4	7.4	8.5		8		93				<0.2		0.7	
						6.2	0.2	256	23.9		8.3		31.1		105.1		7.4		8.5		8		93				<0.2		0.8	
IM4	Fine	Moderate	09:43	7.5	Surface	1.0	0.7	201	24.0	24.0	8.4	8.4	31.1	31.1	105.8	105.8	7.5	7.5	3.6	5.6	9	12	87	91	819734	804597	<0.2	<0.2	0.8	0.7
						1.0	0.8	201	24.0		8.4		31.1		105.7		7.5		3.8		10		88				<0.2		0.7	
					Middle	3.8	0.6	197	24.0	24.0	8.4	8.4	31.1	31.1	105.2	105.4	7.4		4.7		11		90				<0.2		0.7	
						3.8	0.7	210	24.0		8.4		31.1		105.6		7.4		5.0		10		90				<0.2		0.6	
					Bottom	6.5	0.6	196	24.0	24.0	8.4	8.4	31.1	31.1	105.9	105.9	7.5	7.5	8.2		17		95				<0.2		0.6	
						6.5	0.6	214	24.0		8.4		31.1		105.9		7.5		8.1		17		95				<0.2		0.6	
IM5	Fine	Moderate	09:53	6.5	Surface	1.0	0.7	197	24.0	24.0	8.3	8.3	31.0	31.0	107.0	107.0	7.5	7.5	8.2	9.0	3	4	84	89	820714	804884	<0.2	<0.2	0.6	0.6
						1.0	0.8	197	24.0		8.3		31.0		107.0		7.5		8.1		2		85				<0.2		0.7	
					Middle	3.3	0.7	196	24.0	24.0	8.3	8.3	31.0	31.0	106.8	106.9	7.5		8.4		3		88				<0.2		0.6	
						3.3	0.7	204	24.0		8.3		31.0		106.9		7.5		8.6		3		90				<0.2		0.6	
					Bottom	5.5	0.6	197	24.0	24.0	8.3	8.4	31.0	31.0	106.8	106.8	7.5	7.5	10.1		5		94				<0.2		0.6	
						5.5	0.6	210	24.0		8.4		31.0		106.8		7.5		10.5		5		95				<0.2		0.6	
IM6	Fine	Moderate	10:01	6.2	Surface	1.0	0.7	198	24.0	24.0	8.3	8.3	30.9	30.9	105.8	105.8	7.5	7.5	7.3	10.4	5	6	85	89	821043	805816	<0.2	<0.2	0.6	0.6
						1.0	0.7	204	24.0		8.3		31.0		105.8		7.5		7.9		4		85				<0.2		0.6	
					Middle	3.1	0.7	201	24.0	24.0	8.3	8.3	31.1	31.1	105.8	106.0	7.5		9.7		6		89				<0.2		0.7	
						3.1	0.7	205	24.0		8.3		31.1		106.2		7.5		9.9		6		91				<0.2		0.6	
					Bottom	5.2	0.6	199	24.0	24.0	8.3	8.3	31.1	31.1	106.1	106.4	7.5	7.5	13.5		8		93				<0.2		0.6	
						5.2	0.6	204	24.0		8.4		31.1		106.6		7.5		13.8		8		93				<0.2		0.6	
IM7	Fine	Moderate	10:11	7.7	Surface	1.0	0.6	231	24.1	24.1	8.4	8.4	30.7	30.7	107.4	107.3	7.6	7.6	6.3	7.9	6	8	86	90	821357	806839	<0.2	<0.2	0.6	0.7
						1.0	0.6	238	24.1		8.4		30.7		107.1		7.6		6.0		7		86				<0.2		0.6	
					Middle	3.9	0.5	232	24.1	24.1	8.4	8.3	30.7	30.7	106.2	106.3	7.5		6.7		7		89				<0.2		0.6	
						3.9	0.5	248	24.1		8.3		30.8		106.4		7.5		6.9		7		89				<0.2		0.7	
					Bottom	6.7	0.4	231	24.0	24.0	8.3	8.3	30.8	30.8	105.9	106.0	7.5	7.5	10.4		10		94				<0.2		0.7	
						6.7	0.4	231	24.0		8.3		30.8		106.1		7.5		10.9		10		95				<0.2		0.8	
IM8	Fine	Moderate	09:56	7.7	Surface	1.0	0.6	177	24.0	24.0	8.4	8.4	32.3	32.3	106.6	106.6	7.5	7.5	2.4	3.6	3	3	86	90	821817	808129	<0.2	<0.2	0.6	0.7
						1.0	0.7	184	24.0		8.4		32.3		106.5		7.5		2.7		2		88				<0.2		0.7	
					Middle	3.9	0.4	170	24.0	24.0	8.4	8.4	32.3	32.3	106.2	106.3	7.4	7.5	3.6		4		90				<0.2		0.6	
						3.9	0.4	177	24.0		8.4		32.3		106.4		7.5		3.9		4		91				<0.2		0.6	
					Bottom	6.7	0.3	208	24.0	24.0	8.4	8.4	32.3	32.3	106.4	106.4	7.5	7.5	4.6		4		92				<0.2		0.7	
						6.7	0.3	219	24.0		8.4		32.3		106.4		7.5		4.4		3		94				<0.2		0.7	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 November 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	6.9	Surface	1.0	0.4	152	24.0	24.0	8.4	8.4	32.3	32.3	105.0	105.0	7.3	7.3	10.0	14.9	4	4	85	90	822091	808796	<0.2	<0.2	0.8	0.7
						1.0	0.5	153	24.0		8.4		32.3		105.0		7.4		10.6		4		87				<0.2		0.6	
					Middle	3.5	0.3	137	24.0	24.0	8.4	8.4	32.3	32.3	104.7	104.7	7.3		16.0		4		89				<0.2		0.5	
						3.5	0.3	141	24.0		8.4		32.3		104.7		7.3		16.4		4		91				<0.2		0.7	
					Bottom	5.9	0.1	109	24.0	24.0	8.4	8.4	32.3	32.3	104.7	105.0	7.3	7.4	17.5		3		94				<0.2		0.8	
						5.9	0.1	118	24.0		8.4		32.3		105.2		7.4		18.9		3		94				<0.2		0.7	
IM10	Fine	Moderate	09:37	7.2	Surface	1.0	0.6	141	23.9	23.9	8.4	8.4	32.3	32.3	103.4	103.4	7.2	7.3	7.1	8.7	4	5	85	90	822400	809811	<0.2	<0.2	0.7	0.7
						1.0	0.6	148	23.9		8.4		32.3		103.4		7.2		7.2		5		87				<0.2		0.7	
					Middle	3.6	0.6	148	23.9	23.9	8.4	8.4	32.3	32.3	103.5	103.6	7.3		8.3		4		89				<0.2		0.7	
						3.6	0.6	153	23.9		8.4		32.3		103.6		7.3		8.1		4		91				<0.2		0.7	
					Bottom	6.2	0.4	124	23.9	23.9	8.4	8.4	32.4	32.4	104.3	104.3	7.3	7.3	10.7		5		93				<0.2		0.8	
						6.2	0.5	136	23.9		8.4		32.4		104.3		7.3		10.6		5		94				<0.2		0.8	
IM11	Fine	Moderate	09:30	7.9	Surface	1.0	0.6	111	24.0	24.0	8.4	8.4	32.5	32.5	101.8	101.8	7.1	7.1	6.5	9.8	5	4	85	90	822051	811436	<0.2	<0.2	0.7	0.7
						1.0	0.7	113	24.0		8.4		32.5		101.8		7.1		6.7		4		86				<0.2		0.7	
					Middle	4.0	0.5	109	24.0	24.0	8.4	8.4	32.5	32.5	101.7	101.7	7.1		10.5		4		89				<0.2		0.7	
						4.0	0.6	114	24.0		8.4		32.5		101.6		7.1		10.1		3		90				<0.2		0.8	
					Bottom	6.9	0.4	102	24.0	24.0	8.4	8.4	32.5	32.5	101.7	102.1	7.1	7.2	12.4		3		94				<0.2		0.6	
						6.9	0.4	108	24.0		8.4		32.5		102.4		7.2		12.6		3		95				<0.2		0.7	
IM12	Fine	Moderate	09:23	8.2	Surface	1.0	0.5	117	24.0	24.0	8.4	8.4	32.6	32.6	100.9	101.0	7.1	7.1	2.9	5.5	3	5	84	89	821435	812062	<0.2	<0.2	0.7	0.7
						1.0	0.5	118	24.0		8.4		32.6		101.0		7.1		3.2		4		85				<0.2		0.6	
					Middle	4.1	0.4	100	24.0	24.0	8.4	8.4	32.6	32.6	100.8	100.8	-		6.2		5		89				<0.2		0.6	
						4.1	0.5	105	24.0		8.4		32.6		100.8		-		6.1		5		90				<0.2		0.7	
					Bottom	7.2	0.3	98	24.0	24.0	8.4	8.4	32.6	32.6	101.1	101.3	7.1	7.1	7.3		5		93				<0.2		0.6	
						7.2	0.4	100	24.0		8.4		32.6		101.4		7.1		7.1		5		95				<0.2		0.7	
SR1A	Fine	Moderate	09:01	7.1	Surface	1.0	-	-	24.2	24.2	8.4	8.4	32.7	32.7	100.2	100.2	7.0	7.0	3.7	6.0	4	6	-	-	820074	812586	-	-	-	-
						1.0	-	-	24.2		8.4		32.7		100.1		7.0		3.8		4		-				-		-	
					Middle	3.6	-	-	24.2	24.2	8.4	8.4	32.8	32.8	100.1	100.2	7.0		6.8		6		-				-		-	
						3.6	-	-	24.2		8.4		32.8		100.2		7.0		6.6		6		-				-		-	
					Bottom	6.1	-	-	24.2	24.2	8.4	8.4	32.8	32.8	101.1	101.4	7.0	7.1	7.5		7		-				-		-	
						6.1	-	-	24.2		8.4		32.8		101.6		7.1		7.8		6		-				-		-	
SR2	Fine	Moderate	08:41	4.5	Surface	1.0	0.6	102	23.9	23.9	8.4	8.4	32.5	32.5	99.1	99.1	6.9	6.9	2.7	3.3	6	6	84	89	821461	814181	<0.2	<0.2	0.7	0.8
						1.0	0.6	110	23.9		8.4		32.5		99.1		6.9		2.6		6		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	105	23.9	23.9	8.4	8.4	32.7	32.7	99.0	99.0	6.9	6.9	3.8		5		93				<0.2		0.7	
						3.5	0.3	107	23.9		8.4		32.7		99.0		6.9		4.0		5		94				<0.2		0.8	
SR3	Fine	Moderate	10:04	8.5	Surface	1.0	0.7	188	23.9	23.9	8.3	8.3	32.2	32.2	105.7	105.6	7.4	7.4	3.2	6.0	2	3	-	-	822123	807572	-	-	-	-
						1.0	0.8	199	23.9		8.3		32.2		105.5		7.4		3.1		2		-				-		-	
					Middle	4.3	0.4	195	24.0	24.0	8.3	8.3	32.3	32.3	105.3	105.4	-		6.2		<2		-				-		-	
						4.3	0.4	213	24.0		8.3		32.3		105.4		-		6.3		2		-				-		-	
					Bottom	7.5	0.3	220	24.0	24.0	8.3	8.3	32.3	32.3	105.4	105.7	7.4	7.4	8.5		3		-				-		-	
						7.5	0.3	241	24.0		8.3		32.3		106.0		7.4		8.7		4		-				-		-	
SR4A	Fine	Moderate	08:38	8.7	Surface	1.0	0.1	53	23.9	23.9	8.3	8.3	31.1	31.2	99.5	99.6	7.0	7.0	6.8	7.9	5	4	-	-	817199	807820	-	-	-	-
						1.0	0.1	55	23.9		8.3		31.2		99.7		7.0		7.2		5		-				-		-	
					Middle	4.4	0.1	50	23.9	23.9	8.3	8.3	31.4	31.4	99.5	99.6	-		7.4		4		-				-		-	
						4.4	0.1	53	23.9		8.3		31.4		99.6		-		7.6		4		-				-		-	
					Bottom	7.7	0.1	41	23.9	23.9	8.2	8.2	31.4	31.4	99.7	99.8	7.0	7.0	9.2		2		-				-		-	
						7.7	0.1	41	23.9		8.2		31.4		99.9		7.0		9.3		2		-				-		-	
SR5A	Fine	Moderate	08:20	4.2	Surface	1.0	0.1	37	23.7	23.7	8.2	8.2	29.8	29.8	98.0	98.0	7.0	7.0	5.5	5.9	6	5	-	-	816584	810711	-	-	-	-
						1.0	0.1	37	23.7		8.2		29.8		98.0		7.0		5.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	135	24.0	24.0	8.2	8.2	31.0	31.0	99.7	99.7	7.0	7.0	6.2		4		-				-		-	
						3.2	0.1	140	24.0		8.2		31.0		99.7		7.0		6.2		4		-				-		-	
SR6	Fine	Moderate	07:41	4.8	Surface	1.0	0.1	83	24.3	24.3	8.2	8.2	29.8	29.8	107.4	107.5	7.6	7.6	5.5	5.7	3	4	-	-	817885	814644	-	-	-	-
						1.0	0.1	86	24.3		8.2		29.8		107.5		7.6		5.6		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	81	24.4	24.3	8.2	8.2	30.0	30.0	107.5	107.3	7.6	7.6	6.0		4		-				-		-	
						3.8	0.1	81	24.2		8.2		29.9		107.1		7.6		5.7		4		-				-		-	
SR7	Fine	Moderate	07:45	16.3	Surface	1.0	0.7	82	24.2	24.2	8.3	8.3	30.8	30.8	107.0	107.0	7.5	7.5	4.3	6.4	3	3	-	-	823614	823757	-	-	-	-
						1.0	0.8	88	24.2		8.3		30.8		107.0		7.5		4.4		3		-				-		-	
					Middle	8.2	0.3	90	24.2	24.2	8.3	8.3	30.9	30.9	106.8	106.8	7.5		6.5		3		-				-		-	
						8.2	0.4	92	24.2		8.3		30.9		106.8		7.5		6.7		3		-				-		-	
					Bottom	15.3	0.2	22	24.3	24.3	8.2	8.1	31.0	31.0	107.2	107.1	7.5	7.5	8.4		2		-				-		-	
						15.3	0.2	22	24.2		8.1		30.9		106.9		7.5		8.3		3		-				-		-	
SR8	Fine	Moderate	09:01	4.2	Surface	1.0	-	-	24.2	24.2	8.4	8.4	32.7	32.7	100.4	100.4	7.0	7.0	4.7	5.5	3	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.2		8.4		32.7		100.3		7.0		4.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	24.2	24.2	8.4	8.4	32.7	32.7	100.2	100.2	7.0	7.0	6.1		4		-				-		-	
						3.2	-	-	24.2		8.4		32.7		100.2		7.0		6.2		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 03 November 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	15:46	7.8	Surface	1.0	0.5	93	24.0	24.0	8.3	8.3	31.3	31.3	104.5	104.4	7.4	7.3	11.0	13.8	10	10	84	90	815601	804234	<0.2	<0.2	0.6	0.7
						1.0	0.5	98	24.0		8.3		31.3		104.3		7.3		11.8		9		87				<0.2		0.7	
					Middle	3.9	0.4	86	24.0	24.0	8.2	8.2	31.3	31.4	104.2	104.2	7.3		14.2		10		89				<0.2		0.6	
						3.9	0.4	96	24.0		8.2		31.4		104.1		7.3		14.6		10		90				<0.2		0.6	
					Bottom	6.8	0.3	105	24.0	24.0	8.3	8.3	31.4	31.4	105.1	105.1	7.4	7.4	15.7		11		94				<0.2		0.7	
						6.8	0.3	118	24.0		8.3		31.4		105.1		7.4		15.3		11		94				<0.2		0.7	
C2	Fine	Moderate	14:46	11.7	Surface	1.0	0.8	76	24.1	24.1	8.4	8.4	31.9	31.9	106.8	106.8	7.5	7.4	6.7	7.6	4	5	85	90	825699	806934	<0.2	<0.2	0.8	0.7
						1.0	0.8	79	24.1		8.4		31.9		106.8		7.5		6.8		4		86				<0.2		0.7	
					Middle	5.9	0.3	90	24.0	24.0	8.4	8.4	32.0	32.0	104.7	104.7	7.3		7.3		4		90				<0.2		0.7	
						5.9	0.3	102	24.0		8.4		32.1		104.7		7.3		7.4		4		91				<0.2		0.8	
					Bottom	10.7	0.1	120	24.0	24.0	8.4	8.4	32.2	32.2	104.6	104.8	7.3	7.3	8.4		7		92				<0.2		0.7	
						10.7	0.1	134	24.0		8.4		32.2		104.9		7.3		8.7		8		93				<0.2		0.7	
C3	Fine	Moderate	16:44	9.8	Surface	1.0	0.5	254	24.1	24.1	8.4	8.4	31.4	31.4	103.3	103.3	7.3	7.3	3.3	4.6	5	5	85	90	822110	817805	<0.2	<0.2	0.6	0.7
						1.0	0.5	268	24.1		8.4		31.4		103.3		7.3		3.5		5		87				<0.2		0.7	
					Middle	4.9	0.5	250	24.1	24.1	8.4	8.4	31.4	31.4	103.3	103.4	7.3		3.9		4		89				<0.2		0.7	
						4.9	0.5	270	24.1		8.4		31.4		103.4		7.3		4.1		5		91				<0.2		0.7	
					Bottom	8.8	0.4	256	24.1	24.1	8.4	8.4	31.5	31.5	104.6	104.7	7.4	7.4	6.4		4		93				<0.2		0.7	
						8.8	0.4	281	24.1		8.4		31.5		104.7		7.4		6.6		4		94				<0.2		0.7	
IM1	Fine	Moderate	15:28	4.3	Surface	1.0	0.1	2	24.0	24.0	8.3	8.3	31.3	31.3	103.0	103.1	7.3	7.3	6.2	7.4	8	8	86	90	817940	807142	<0.2	<0.2	0.8	0.7
						1.0	0.1	2	24.0		8.3		31.3		103.1		7.3		6.7		7		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	349	24.0	24.0	8.3	8.3	31.3	31.3	102.2	101.9	7.2	7.2	8.2		9		94				<0.2		0.6	
						3.3	0.1	321	24.0		8.3		31.3		101.5		7.1		8.5		9		94				<0.2		0.7	
IM2	Fine	Moderate	15:21	6.5	Surface	1.0	0.5	75	24.0	24.0	8.3	8.3	31.2	31.2	104.2	104.2	7.3	7.3	6.2	8.6	8	11	86	90	818162	806143	<0.2	<0.2	0.7	0.7
						1.0	0.5	80	24.0		8.3		31.2		104.2		7.3		6.3		9		86				<0.2		0.7	
					Middle	3.3	0.3	70	24.0	24.0	8.3	8.3	31.2	31.2	104.0	103.9	7.3		8.6		10		90				<0.2		0.7	
						3.3	0.4	82	24.0		8.3		31.2		103.8		7.3		9.0		10		90				<0.2		0.8	
					Bottom	5.5	0.4	76	24.0	24.0	8.3	8.3	31.2	31.2	104.6	104.6	7.4	7.4	10.4		12		95				<0.2		0.6	
						5.5	0.4	91	24.0		8.3		31.2		104.6		7.4		11.3		14		95				<0.2		0.7	
IM3	Fine	Moderate	15:15	6.7	Surface	1.0	0.6	84	24.0	24.0	8.3	8.3	31.0	31.0	108.5	108.4	7.7	7.7	14.4	19.0	7	7	86	90	818761	805613	<0.2	<0.2	0.7	0.8
						1.0	0.6	85	24.0		8.3		31.0		108.3		7.6		15.3		7		87				<0.2		0.8	
					Middle	3.4	0.6	84	24.0	24.0	8.3	8.3	31.0	31.0	108.3	108.8	7.6		20.3		7		90				<0.2		0.8	
						3.4	0.7	92	24.0		8.3		31.0		109.3		7.7		20.8		7		90				<0.2		0.8	
					Bottom	5.7	0.6	86	24.0	24.0	8.3	8.3	31.0	31.0	109.2	109.2	7.7	7.7	21.5		6		94				<0.2		0.7	
						5.7	0.6	93	24.0		8.3		31.0		109.2		7.7		21.8		7		94				<0.2		0.8	
IM4	Fine	Moderate	15:06	7.1	Surface	1.0	0.8	33	24.0	24.0	8.3	8.3	31.0	31.0	108.4	108.4	7.7	7.7	10.1	11.4	6	7	84	90	819724	804592	<0.2	<0.2	0.7	0.7
						1.0	0.8	40	24.0		8.3		31.0		108.4		7.7		10.2		6		86				<0.2		0.6	
					Middle	3.6	0.7	31	24.0	24.0	8.4	8.4	31.0	31.0	107.5	107.7	7.6		11.3		6		91				<0.2		0.7	
						3.6	0.7	31	24.0		8.4		31.0		107.8		7.6		11.8		7		92				<0.2		0.8	
					Bottom	6.1	0.6	31	24.0	24.0	8.4	8.4	31.0	31.0	107.4	107.3	7.6	7.6	12.4		8		93				<0.2		0.7	
						6.1	0.6	37	24.0		8.4		31.0		107.1		7.6		12.6		8		93				<0.2		0.6	
IM5	Fine	Moderate	14:59	6.5	Surface	1.0	0.6	68	24.0	24.0	8.4	8.4	30.9	30.9	109.3	109.2	7.7	7.7	8.8	10.2	5	5	86	90	820746	804879	<0.2	<0.2	0.6	0.7
						1.0	0.6	69	24.0		8.4		30.9		109.0		7.7		9.0		6		86				<0.2		0.6	
					Middle	3.3	0.6	69	24.0	24.0	8.4	8.4	31.0	31.0	108.4	108.3	7.6		10.3		4		89				<0.2		0.7	
						3.3	0.6	68	24.0		8.4		31.0		108.2		7.6		10.0		5		91				<0.2		0.8	
					Bottom	5.5	0.4	69	24.0	24.0	8.4	8.4	30.9	31.0	108.1	107.9	7.6	7.6	11.5		4		93				<0.2		0.8	
						5.5	0.5	67	24.0		8.4		31.0		107.6		7.6		11.7		3		94				<0.2		0.9	
IM6	Fine	Moderate	14:53	6.4	Surface	1.0	0.6	63	24.0	24.0	8.3	8.3	31.0	31.0	106.4	106.1	7.5	7.5	5.4	6.4	6	5	86	91	821083	805812	<0.2	<0.2	0.8	0.7
						1.0	0.6	65	24.0		8.3		31.0		105.7		7.5		5.8		6		87				<0.2		0.7	
					Middle	3.2	0.6	68	24.0	24.0	8.3	8.3	31.0	31.0	105.3	105.3	7.4		6.3		4		89				<0.2		0.7	
						3.2	0.6	63	24.0		8.3		31.0		105.2		7.4		6.1		4		91				<0.2		0.7	
					Bottom	5.4	0.5	61	24.0	24.0	8.3	8.3	31.0	31.0	105.7	105.9	7.5	7.5	7.3		4		95				<0.2		0.6	
						5.4	0.5	67	24.0		8.4		31.0		106.1		7.5		7.2		4		96				<0.2		0.7	
IM7	Fine	Moderate	14:46	7.6	Surface	1.0	0.6	65	24.1	24.1	8.4	8.4	30.7	30.7	107.9	107.9	7.6	7.6	5.8	6.6	4	4	86	90	821333	806845	<0.2	<0.2	0.7	0.7
						1.0	0.6	61	24.1		8.4		30.7		107.8		7.6		5.9		4		87				<0.2		0.6	
					Middle	3.8	0.5	66	24.1	24.0	8.4	8.3	30.8	30.8	105.9	105.8	7.5		6.3		3		90				<0.2		0.8	
						3.8	0.6	65	24.0		8.3		30.8		105.7		7.5		6.7		4		90				<0.2		0.7	
					Bottom	6.6	0.4	69	24.0	24.0	8.3	8.3	30.9	30.9	105.4	105.4	7.4	7.4	7.5		3		94				<0.2		0.7	
						6.6	0.4	63	24.0		8.4		30.9		105.3		7.4		7.6		4		95				<0.2		0.7	
IM8	Fine	Moderate	14:59	7.8	Surface	1.0	0.4	229	24.0	24.0	8.4	8.4	32.2	32.2	108.6	108.5	7.6	7.6	2.3	4.4	3	4	85	90	821814	808121	<0.2	<0.2	0.6	0.7
						1.0	0.5	225	24.0		8.4		32.2		108.4		7.6		2.2		4		85				<0.2		0.8	
					Middle	3.9	0.3	235	24.0	24.0	8.4	8.4	32.2	32.2	107.8	107.7	7.6		3.6		5		90				<0.2		0.6	
						3.9	0.3	234	24.0		8.4		32.2		107.6		7.5		3.7		4		91				<0.2		0.7	
					Bottom	6.8	0.2	237	24.0	24.0	8.4	8.4	32.2	32.2	107.4	107.3	7.5	7.5	7.1		4		93				<0.2		0.6	
						6.8	0.2	248	24.0		8.4		32.2		107.1		7.5		7.2		4		93				<0.2		0.6	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 November 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	15:06	7.3	Surface	1.0	0.3	200	24.0	24.0	8.4	8.4	32.3	32.3	107.6	107.6	7.5	7.5	2.4	4.3	4	4	85	90	822098	808790	<0.2	<0.2	0.7	0.8
						1.0	0.3	208	24.0		8.4		32.3		107.5		7.5		2.3		3		86				<0.2		0.7	
					Middle	3.7	0.1	241	24.0	24.0	8.4	8.4	32.3	32.3	107.1	107.1	7.5		4.7		4		89				<0.2		0.7	
						3.7	0.2	247	24.0		8.4		32.3		107.1		7.5		4.9		4		91				<0.2		0.8	
					Bottom	6.3	0.2	277	24.0	24.0	8.4	8.4	32.3	32.3	106.8	106.8	7.5	7.5	5.6		4		94				<0.2		0.8	
						6.3	0.2	300	24.0		8.4		32.3		106.8		7.5		5.7		4		95				<0.2		0.8	
IM10	Fine	Moderate	15:15	8.5	Surface	1.0	0.1	177	24.0	24.0	8.4	8.4	32.2	32.2	105.4	105.4	7.4	7.4	5.5	8.3	3	4	87	90	822365	809794	<0.2	<0.2	0.7	0.7
						1.0	0.1	177	24.0		8.4		32.2		105.4		7.4		5.8		4		87				<0.2		0.7	
					Middle	4.3	0.1	321	24.0	24.0	8.4	8.4	32.2	32.2	105.1	105.1	7.4		9.1		4		90				<0.2		0.8	
						4.3	0.1	343	24.0		8.4		32.2		105.1		7.4		9.3		4		91				<0.2		0.8	
					Bottom	7.5	0.1	309	24.0	24.0	8.4	8.4	32.2	32.2	105.1	105.1	7.4	7.4	9.8		4		93				<0.2		0.7	
						7.5	0.1	329	24.0		8.4		32.2		105.0		7.4		10.1		3		92				<0.2		0.6	
IM11	Fine	Moderate	15:21	8.3	Surface	1.0	0.1	222	24.0	24.0	8.4	8.4	32.4	32.4	103.8	103.8	7.3	7.3	4.6	5.6	<2	3	86	90	822047	811479	<0.2	<0.2	0.6	0.7
						1.0	0.1	223	24.0		8.4		32.4		103.7		7.3		4.7		2		87				<0.2		0.6	
					Middle	4.2	0.1	300	24.0	24.0	8.4	8.4	32.5	32.5	103.5	103.5	7.2		5.3		3		90				<0.2		0.8	
						4.2	0.1	318	24.0		8.4		32.5		103.4		7.2		5.6		3		90				<0.2		0.8	
					Bottom	7.3	0.2	319	24.0	24.0	8.4	8.4	32.5	32.5	104.0	104.0	7.3	7.3	6.5		3		93				<0.2		0.8	
						7.3	0.2	336	24.0		8.4		32.5		104.0		7.3		6.8		2		94				<0.2		0.7	
IM12	Fine	Moderate	15:28	9.0	Surface	1.0	0.1	252	24.0	24.0	8.4	8.4	32.5	32.5	99.2	99.0	6.9	6.8	7.4	9.4	3	4	87	90	821468	812062	<0.2	<0.2	0.6	0.7
						1.0	0.1	265	24.0		8.4		32.5		98.8		6.9		7.5		2		86				<0.2		0.7	
					Middle	4.5	0.2	279	24.0	24.0	8.4	8.4	32.6	32.6	97.5	97.0	6.8		9.5		4		89				<0.2		0.7	
						4.5	0.2	299	24.0		8.4		32.6		96.4		6.7		9.5		4		90				<0.2		0.7	
					Bottom	8.0	0.3	282	24.0	24.0	8.4	8.4	30.1	30.1	89.4	86.6	6.3	6.1	11.2		4		93				<0.2		0.8	
						8.0	0.3	306	24.0		8.4		30.2		83.8		5.9		11.5		5		94				<0.2		0.7	
SR1A	Fine	Moderate	15:46	7.6	Surface	1.0	-	-	24.0	24.0	8.4	8.4	32.5	32.5	104.0	104.0	7.3	7.3	2.2	5.5	3	3	-	-	820075	812584	-	-	-	-
						1.0	-	-	24.0		8.4		32.5		104.0		7.3		2.3		4		-				-		-	
					Middle	3.8	-	-	24.0	24.0	8.3	8.3	32.5	32.5	103.7	103.7	7.3		6.6		3		-				-		-	
						3.8	-	-	24.0		8.3		32.5		103.7		7.3		6.7		3		-				-		-	
					Bottom	6.6	-	-	24.0	24.0	8.3	8.3	32.5	32.5	104.0	104.3	7.3	7.3	7.6		4		-				-		-	
						6.6	-	-	24.0		8.3		32.5		104.5		7.3		7.7		3		-				-		-	
SR2	Fine	Moderate	16:25	5.7	Surface	1.0	0.1	33	23.9	23.9	8.3	8.3	31.4	31.4	101.9	101.9	7.2	7.2	3.9	4.8	3	5	85	90	821468	814143	<0.2	<0.2	0.7	0.8
						1.0	0.1	33	23.9		8.3		31.4		101.8		7.2		4.0		3		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	15	23.9	23.9	8.3	8.3	31.6	31.6	104.0	104.1	7.3	7.3	5.5		6		94				<0.2		0.8	
						4.7	0.1	16	23.9		8.3		31.6		104.1		7.3		5.6		7		95				<0.2		0.7	
SR3	Fine	Moderate	14:53	9.1	Surface	1.0	0.6	30	24.0	24.0	8.4	8.4	32.2	32.2	104.6	104.6	7.3	7.3	3.2	3.7	4	5	-	-	822142	807568	-	-	-	-
						1.0	0.6	33	24.0		8.4		32.2		104.5		7.3		3.4		4		-				-		-	
					Middle	4.6	0.3	25	24.0	24.0	8.4	8.4	32.2	32.2	104.2	104.2	7.3		3.4		5		-				-		-	
						4.6	0.3	26	24.0		8.4		32.2		104.2		7.3		3.5		5		-				-		-	
					Bottom	8.1	0.4	39	23.9	23.9	8.4	8.3	32.2	32.2	104.6	105.0	7.3	7.4	4.1		5		-				-		-	
						8.1	0.4	40	23.9		8.3		32.2		105.3		7.4		4.5		5		-				-		-	
SR4A	Fine	Moderate	16:25	7.9	Surface	1.0	0.7	245	24.0	24.0	8.2	8.2	30.3	30.3	101.7	101.7	7.2	7.2	10.3	11.7	11	11	-	-	817173	807795	-	-	-	-
						1.0	0.7	251	24.0		8.2		30.4		101.7		7.2		10.5		14		-				-		-	
					Middle	4.0	0.6	242	23.9	23.9	8.2	8.2	30.5	30.5	101.8	101.9	7.2		11.1		10		-				-		-	
						4.0	0.6	250	23.9		8.2		30.5		101.9		7.2		11.3		11		-				-		-	
					Bottom	6.9	0.5	245	23.9	23.9	8.2	8.2	30.5	30.5	103.7	103.7	7.3	7.3	13.2		11		-				-		-	
						6.9	0.5	263	23.9		8.2		30.5		103.7		7.3		13.9		10		-				-		-	
SR5A	Fine	Moderate	16:44	5.1	Surface	1.0	0.4	297	24.1	24.1	8.3	8.3	30.2	30.2	103.8	103.8	7.3	7.3	5.4	5.9	13	10	-	-	816590	810694	-	-	-	-
						1.0	0.4	319	24.1		8.3		30.2		103.8		7.3		5.5		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.3	305	24.1	24.1	8.3	8.3	30.3	30.3	105.3	105.4	7.5	7.5	6.3		8		-				-		-	
						4.1	0.3	320	24.1		8.3		30.3		105.4		7.5		6.5		7		-				-		-	
SR6	Fine	Moderate	17:23	3.2	Surface	1.0	0.2	252	24.6	24.6	8.1	8.1	31.4	31.4	103.5	103.4	7.2	7.2	6.2	7.3	10	10	-	-	817906	814671	-	-	-	-
						1.0	0.2	259	24.6		8.1		31.4		103.3		7.2		6.5		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.2	251	24.8	24.8	8.0	8.0	32.2	32.2	103.0	103.2	7.1	7.1	8.1		10		-				-		-	
						2.2	0.2	256	24.8		8.0		32.2		103.3		7.1		8.2		9		-				-		-	
SR7	Fine	Moderate	17:23	16.0	Surface	1.0	0.1	275	24.6	24.7	8.4	8.4	31.8	31.9	105.4	105.0	7.3	7.3	4.6	6.5	5	4	-	-	823651	823745	-	-	-	-
						1.0	0.1	284	24.8		8.4		32.0		104.6		7.2		4.8		6		-				-		-	
					Middle	8.0	0.1	287	24.8	24.8	8.4	8.4	32.2	32.2	105.2	105.4	7.3		6.1		4		-				-		-	
						8.0	0.1	292	24.8		8.4		32.2		105.5		7.3		6.3		3		-				-		-	
					Bottom	15.0	0.1	290	24.8	24.8	8.4	8.4	32.1	32.1	106.2	106.4	7.3	7.4	8.5		3		-				-		-	
						15.0	0.1	290	24.8		8.4		32.1		106.6		7.4		8.6		3		-				-		-	
SR8	Fine	Moderate	15:46	4.6	Surface	1.0	-	-	24.1	24.1	8.4	8.4	32.5	32.5	104.1	103.6	7.2	7.1	2.6	3.2	3	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.1		8.4		32.5		103.1		7.0		2.9		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	24.1	24.1	8.4	8.4	32.5	32.5	103.2	103.7	7.2	7.3	3.5		4		-				-		-	
						3.6	-	-	24.1		8.4		32.5		104.2		7.3		3.6		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 November 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	Sunny	Moderate	12:10	8.8	Surface	1.0	0.5	187	25.1	25.1	8.3	8.3	32.4	32.4	103.5	103.4	7.1	7.0	4.3	9.2	8	6	89	92	815632	804257	<0.2	<0.2	<0.2	1.1	0.9
						1.0	0.5	199	25.1		8.3		32.4		103.3		7.1		4.3		7		91				<0.2			1.1	
					Middle	4.4	0.5	196	24.8	24.8	8.3	8.3	32.7	32.7	100.4	100.4	6.9		7.2		5		92				<0.2	<0.2		0.9	
						4.4	0.5	204	24.8		8.3		32.7		100.4		6.9		7.4		5		93				<0.2			0.8	
					Bottom	7.8	0.3	210	24.7	24.7	8.3	8.3	32.8	32.8	101.9	102.0	7.0	7.0	15.8		5		94				<0.2	<0.2		0.6	
						7.8	0.4	213	24.7		8.3		32.8		102.1		7.0		15.9		5		95				<0.2			0.9	
C2	Sunny	Moderate	13:14	11.3	Surface	1.0	0.2	59	24.9	24.9	8.2	8.2	29.8	29.8	112.3	112.3	7.8	7.7	8.3	11.7	5	5	83	87	825690	806929	<0.2	<0.2	<0.2	0.9	1.0
						1.0	0.2	60	24.9		8.2		29.8		112.3		7.8		8.4		6		83				<0.2			1.0	
					Middle	5.7	0.3	90	24.7	24.7	8.2	8.2	30.3	30.3	107.6	107.6	7.5		10.5		4		87				<0.2	<0.2		1.1	
						5.7	0.3	92	24.7		8.2		30.3		107.5		7.5		10.6		4		87				<0.2			1.1	
					Bottom	10.3	0.4	63	24.7	24.7	8.2	8.2	31.1	31.1	105.6	105.7	7.4	7.4	16.2		4		90				<0.2	<0.2		1.0	
						10.3	0.5	67	24.7		8.2		31.1		105.7		7.4		16.3		5		91				<0.2			1.1	
C3	Sunny	Moderate	11:00	12.1	Surface	1.0	0.4	84	24.9	24.9	8.1	8.1	31.0	31.0	105.9	105.8	7.4	7.2	6.6	8.0	4	6	84	89	822124	817801	<0.2	<0.2	<0.2	0.8	0.7
						1.0	0.5	87	24.9		8.1		31.0		105.7		7.3		6.6		4		84				<0.2			0.6	
					Middle	6.1	0.4	89	24.9	24.9	8.1	8.1	31.1	31.1	100.3	100.3	7.0		7.6		4		90				<0.2	<0.2		0.6	
						6.1	0.5	94	24.9		8.1		31.1		100.3		7.0		7.6		5		89				<0.2			0.7	
					Bottom	11.1	0.4	97	24.8	24.8	8.1	8.1	31.2	31.2	98.6	98.6	6.8	6.8	9.9		8		94				<0.2	<0.2		0.7	
						11.1	0.4	100	24.8		8.1		31.2		98.5		6.8		9.9		9		93				<0.2			0.8	
IM1	Sunny	Moderate	12:34	4.8	Surface	1.0	0.3	220	24.8	24.8	8.3	8.3	32.6	32.6	101.3	101.3	7.0	7.0	6.8	10.4	7	8	90	91	817928	807120	<0.2	<0.2	<0.2	1.5	1.5
						1.0	0.4	239	24.8		8.3		32.6		101.3		7.0		7.0		8		90				<0.2			1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.3	211	24.7	24.7	8.2	8.2	32.7	32.7	101.5	101.5	7.0	7.0	13.4		8		91				<0.2	<0.2		1.4	
						3.8	0.3	223	24.7		8.2		32.7		101.5		7.0		14.2		8		92				<0.2			1.6	
IM2	Sunny	Moderate	12:41	7.1	Surface	1.0	0.5	191	25.0	25.0	8.3	8.3	32.1	32.1	106.2	106.2	7.3	7.2	4.9	9.5	6	13	87	90	818171	806164	<0.2	<0.2	<0.2	0.9	0.9
						1.0	0.5	196	25.0		8.3		32.1		106.1		7.3		5.0		7		86				<0.2			0.9	
					Middle	3.6	0.4	181	24.8	24.8	8.3	8.3	32.4	32.4	103.2	103.2	7.1		8.6		12		90				<0.2	<0.2		1.0	
						3.6	0.4	196	24.8		8.3		32.4		103.1		7.1		8.7		11		91				<0.2			0.8	
					Bottom	6.1	0.4	185	24.8	24.8	8.3	8.3	32.5	32.5	102.1	102.1	7.0	7.0	14.7		21		93				<0.2	<0.2		0.8	
						6.1	0.4	188	24.8		8.3		32.5		102.1		7.0		15.0		20		93				<0.2			0.8	
IM3	Sunny	Moderate	12:48	7.4	Surface	1.0	0.2	200	24.8	24.8	8.3	8.3	32.4	32.4	104.2	104.2	7.2	7.2	4.7	6.7	8	9	87	90	818805	805584	<0.2	<0.2	<0.2	1.2	1.1
						1.0	0.2	214	24.9		8.3		32.4		104.1		7.2		4.7		8		87				<0.2			1.0	
					Middle	3.7	0.3	201	24.8	24.8	8.3	8.3	32.4	32.4	102.8	102.8	7.1		6.6		10		89				<0.2	<0.2		1.2	
						3.7	0.3	214	24.8		8.3		32.4		102.8		7.1		6.7		9		90				<0.2			1.0	
					Bottom	6.4	0.2	191	24.8	24.8	8.3	8.3	32.6	32.6	103.2	103.2	7.1	7.1	8.7		9		93				<0.2	<0.2		1.1	
						6.4	0.2	206	24.8		8.3		32.6		103.2		7.1		8.8		10		94				<0.2			1.0	
IM4	Sunny	Moderate	12:57	7.5	Surface	1.0	0.8	204	24.9	24.9	8.3	8.3	32.2	32.2	107.2	107.2	7.4	7.4	9.7	14.1	4	8	86	90	819705	804584	<0.2	<0.2	<0.2	1.8	1.5
						1.0	0.8	205	24.9		8.3		32.2		107.2		7.4		9.7		4		87				<0.2			1.5	
					Middle	3.8	0.7	202	24.8	24.8	8.3	8.3	32.3	32.3	106.5	106.5	7.4		13.7		9		90				<0.2	<0.2		1.5	
						3.8	0.8	220	24.8		8.3		32.3		106.5		7.4		14.1		9		90				<0.2			1.4	
					Bottom	6.5	0.6	198	24.8	24.8	8.3	8.3	32.3	32.3	105.9	105.9	7.3	7.3	18.6		10		93				<0.2	<0.2		1.4	
						6.5	0.7	215	24.8		8.3		32.3		105.9		7.3		18.5		9		93				<0.2			1.5	
IM5	Sunny	Moderate	13:05	6.8	Surface	1.0	0.7	201	24.7	24.7	8.2	8.2	32.1	32.1	108.6	108.6	7.5	7.4	7.8	12.3	6	6	87	90	820720	804864	<0.2	<0.2	<0.2	1.6	1.6
						1.0	0.8	218	24.8		8.2		32.1		108.6		7.5		7.9		5		88				<0.2			1.6	
					Middle	3.4	0.6	209	24.6	24.6	8.3	8.3	32.2	32.2	105.9	105.9	7.3		12.9		7		89				<0.2	<0.2		1.7	
						3.4	0.7	224	24.6		8.3		32.2		105.8		7.3		13.0		6		90				<0.2			1.5	
					Bottom	5.8	0.5	200	24.6	24.6	8.3	8.3	32.2	32.2	105.2	105.2	7.3	7.3	16.2		7		93				<0.2	<0.2		1.5	
						5.8	0.6	204	24.6		8.3		32.2		105.2		7.3		16.2		7		93				<0.2			1.4	
IM6	Sunny	Moderate	13:13	6.6	Surface	1.0	0.6	195	25.3	25.3	8.2	8.2	31.5	31.6	113.0	112.8	7.8	7.7	3.1	9.4	7	6	86	90	821041	805806	<0.2	<0.2	<0.2	0.8	0.9
						1.0	0.6	204	25.2		8.2		31.6		112.5		7.7		3.2		8		87				<0.2			0.9	
					Middle	3.3	0.5	204	24.7	24.7	8.2	8.2	32.1	32.1	109.2	109.2	7.6		6.3		6		89				<0.2	<0.2		1.1	
						3.3	0.5	208	24.7		8.2		32.1		109.1		7.6		6.4		6		90				<0.2			0.8	
					Bottom	5.6	0.4	204	24.7	24.7	8.2	8.2	32.1	32.1	107.5	107.5	7.4	7.4	18.7		5		92				<0.2	<0.2		0.8	
						5.6	0.4	216	24.7		8.2		32.1		107.5		7.4		18.7		5		93				<0.2			0.8	
IM7	Sunny	Moderate	13:21	7.9	Surface	1.0	0.5	257	25.0	25.0	8.2	8.2	31.4	31.3	111.6	111.6	7.7	7.7	6.1	9.0	6	7	87	90	821367	806849	<0.2	<0.2	<0.2	1.0	0.8
						1.0	0.5	260	25.0		8.2		31.3		111.5		7.7		6.2		6		88				<0.2			1.0	
					Middle	4.0	0.4	258	25.0	25.0	8.2	8.2	31.4	31.4	109.5	109.5	7.6		8.2		7		90				<0.2	<0.2		0.5	
						4.0	0.4	264	25.0		8.2		31.4		109.4		7.6		8.2		6		91				<0.2			0.5	
					Bottom	6.9	0.2	257	24.7	24.7	8.2	8.2	32.1	32.1	105.4	105.4	7.3	7.3	12.6		8		93				<0.2	<0.2		0.7	
						6.9	0.3	262	24.7		8.2		32.1		105.4		7.3		12.9		9		93				<0.2			0.9	
IM8	Sunny	Moderate	12:44	7.3	Surface	1.0	0.3	110	25.0	25.0	8.2	8.2	29.7	29.7	112.2	112.3	7.8	7.7	7.3	9.7	4	5	84	89	821837	808152	<0.2	<0.2	<0.2	0.8	0.8
						1.0	0.4	119	25.0		8.2		29.7		112.3		7.8		7.3		4		85				<0.2			0.7	
					Middle	3.7	0.3	89	24.7	24.7	8.2	8.2	30.3	30.3	107.4	107.4	7.5		9.7		5		90				<0.2	<0.2		0.8	
						3.7	0.3	95	24.7		8.2		30.3		107.3		7.5		9.7		4		89				<0.2			0.9	
					Bottom	6.3	0.4	94	24.7	24.7	8.2	8.2	30.7	30.7	103.9	103.9	7.3	7.3	12.1		6		92				<0.2	<0.2		0.9	
						6.3	0.4	95	24.7		8.2		30.7		103.9		7.3		12.1		6		93				<0.2			0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 November 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	Sunny	Moderate	12:38	7.4	Surface	1.0	0.6	115	25.0	25.0	8.2	8.2	29.7	29.7	112.1	112.2	7.8	7.7	7.9	10.8	6	8	84	89	822087	808799	<0.2	<0.2		1.0	
						1.0	0.6	124	25.0		8.2		29.7		112.2		7.8		7.9		6		85				<0.2			0.4	
					Middle	3.7	0.5	93	24.7	24.7	8.2	8.2	30.5	30.5	107.6	107.6	7.5		11.4		8		89				<0.2	<0.2	<0.2	0.5	0.6
						3.7	0.5	99	24.7		8.2		30.5		107.6		7.5		11.5		8		89				<0.2			0.5	
					Bottom	6.4	0.4	77	24.6	24.6	8.2	8.2	30.5	30.5	107.0	107.1	7.5	7.5	13.0		9		93				<0.2	<0.2		0.5	
						6.4	0.5	77	24.6		8.2		30.5		107.1		7.5		13.1		9		93				<0.2			0.6	
IM10	Sunny	Moderate	12:30	9.0	Surface	1.0	0.5	116	25.0	25.0	8.2	8.2	29.6	29.6	113.1	113.1	7.9	7.8	7.2	10.9	8	8	84	89	822399	809784	<0.2	<0.2		0.5	
						1.0	0.6	125	25.0		8.2		29.6		113.0		7.9		7.2		7		84				<0.2			0.7	
					Middle	4.5	0.5	97	24.7	24.7	8.2	8.2	30.3	30.3	107.9	107.9	7.6		11.3		5		89				<0.2	<0.2	<0.2	0.6	0.7
						4.5	0.6	99	24.7		8.2		30.3		107.9		7.6		11.0		5		88				<0.2			0.6	
					Bottom	8.0	0.4	75	24.6	24.6	8.2	8.2	30.6	30.6	107.7	107.7	7.5	7.5	14.5		10		93				<0.2	<0.2		0.7	
						8.0	0.4	80	24.6		8.2		30.6		107.7		7.5		14.4		10		93				<0.2			0.9	
IM11	Sunny	Moderate	12:17	9.3	Surface	1.0	0.6	115	24.9	24.9	8.2	8.2	29.7	29.7	113.4	113.4	7.9	7.8	8.0	10.4	5	4	84	89	822077	811478	<0.2	<0.2		0.8	
						1.0	0.6	116	24.9		8.2		29.7		113.3		7.9		8.1		4		84				<0.2			0.9	
					Middle	4.7	0.5	103	24.7	24.7	8.2	8.2	30.1	30.1	109.2	109.1	7.6		10.3		4		90				<0.2	<0.2	<0.2	0.6	0.8
						4.7	0.6	106	24.7		8.2		30.1		109.0		7.6		10.3		5		89				<0.2			0.6	
					Bottom	8.3	0.4	77	24.6	24.6	8.2	8.2	30.6	30.6	107.8	107.8	7.5	7.5	12.8		4		93				<0.2	<0.2		0.8	
						8.3	0.4	81	24.6		8.2		30.6		107.8		7.5		12.9		4		93				<0.2			0.9	
IM12	Sunny	Moderate	12:06	9.9	Surface	1.0	0.6	116	24.9	24.9	8.1	8.1	29.8	29.8	111.3	111.3	7.8	7.7	7.7	11.6	9	8	85	89	821476	812027	<0.2	<0.2		0.9	
						1.0	0.6	121	24.9		8.1		29.8		111.2		7.8		7.8		10		84				<0.2			0.9	
					Middle	5.0	0.6	105	24.6	24.6	8.2	8.2	30.4	30.4	106.6	106.6	7.5		11.3		8		88				<0.2	<0.2	<0.2	0.9	0.9
						5.0	0.6	111	24.6		8.2		30.4		106.5		7.5		11.4		9		90				<0.2			0.8	
					Bottom	8.9	0.4	99	24.6	24.6	8.2	8.2	30.6	30.6	105.0	105.0	7.3	7.3	15.7		6		93				<0.2	<0.2		0.8	
						8.9	0.4	101	24.6		8.2		30.6		104.9		7.3		15.8		5		91				<0.2			1.1	
SR1A	Sunny	Moderate	11:43	7.5	Surface	1.0	-	-	24.6	24.6	8.1	8.1	30.7	30.7	108.6	108.5	7.6	7.6	8.5	9.4	7	8	-	-	820063	812583	-	-	-	-	-
						1.0	-	-	24.6		8.1		30.7		108.4		7.6		8.3		7		-				-			-	
					Middle	3.8	-	-	24.6	24.6	8.1	8.1	30.7	30.7	106.9	106.9	7.5		9.2		7		-	-			-	-		-	-
						3.8	-	-	24.6		8.1		30.7		106.8		7.5		9.2		7		-				-			-	
					Bottom	6.5	-	-	24.6	24.6	8.1	8.1	30.7	30.7	104.4	104.4	7.3	7.3	10.5		11		-	-			-	-		-	-
						6.5	-	-	24.6		8.1		30.7		104.3		7.3		10.4		10		-				-			-	
SR2	Sunny	Moderate	11:27	4.8	Surface	1.0	0.4	80	24.7	24.7	8.1	8.1	30.8	30.8	107.9	107.9	7.5	7.5	7.0	7.6	6	7	84	86	821474	814185	<0.2	<0.2		1.2	
						1.0	0.4	80	24.7		8.1		30.8		107.8		7.5		7.1		8		84				<0.2			1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	<0.2	-	1.1
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.3	78	24.6	24.6	8.1	8.1	30.8	30.8	104.4	104.4	7.3	7.3	8.2		7		88				<0.2	<0.2		1.0	
						3.8	0.3	78	24.6		8.1		30.8		104.3		7.3		8.2		8		89				<0.2			1.0	
SR3	Sunny	Moderate	12:51	9.1	Surface	1.0	0.3	140	25.0	25.0	8.2	8.2	29.7	29.7	113.4	113.4	7.9	7.8	7.3	8.8	7	6	-	-	822127	807588	-	-	-	-	-
						1.0	0.3	143	25.0		8.2		29.7		113.4		7.9		7.3		7		-				-			-	
					Middle	4.6	0.3	104	24.8	24.8	8.2	8.2	30.1	30.1	110.5	110.5	7.7		8.4		6		-	-			-	-		-	-
						4.6	0.3	106	24.8		8.2		30.1		110.4		7.7		8.4		5		-				-			-	
					Bottom	8.1	0.4	87	24.7	24.7	8.2	8.2	30.6	30.6	109.2	109.2	7.6	7.6	10.6		5		-	-			-	-		-	-
						8.1	0.4	87	24.7		8.2		30.6		109.2		7.6		10.6		5		-				-			-	
SR4A	Sunny	Calm	11:51	9.5	Surface	1.0	0.3	68	24.7	24.7	8.3	8.3	32.6	32.6	99.7	99.7	6.9	6.9	4.2	6.9	6	9	-	-	817184	807808	-	-	-	-	-
						1.0	0.3	71	24.7		8.3		32.6		99.7		6.9		4.3		7		-				-			-	
					Middle	4.8	0.2	60	24.6	24.6	8.3	8.3	32.6	32.6	99.6	99.6	6.9		6.7		10		-	-			-	-		-	-
						4.8	0.3	61	24.6		8.3		32.6		99.6		6.9		6.7		10		-				-			-	
					Bottom	8.5	0.2	56	24.6	24.6	8.3	8.3	32.6	32.6	100.9	101.0	7.0	7.0	9.7		10		-	-			-	-		-	-
						8.5	0.2	60	24.6		8.3		32.6		101.0		7.0		9.7		10		-				-			-	
SR5A	Sunny	Calm	11:34	4.6	Surface	1.0	0.1	73	24.7	24.7	8.3	8.3	32.2	32.2	106.0	106.0	7.3	7.3	7.2	6.2	5	5	-	-	816570	810707	-	-	-	-	-
						1.0	0.1	77	24.7		8.3		32.2		106.0		7.3		7.2		5		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.6	0.2	97	24.6	24.6	8.3	8.3	32.3	32.3	105.9	106.0	7.3	7.3	5.2		4		-	-			-	-		-	-
						3.6	0.2	105	24.6		8.3		32.3		106.0		7.3		5.3		5		-				-			-	
SR6	Sunny	Calm	11:06	4.5	Surface	1.0	0.1	353	24.5	24.5	8.3	8.3	32.1	32.1	112.6	112.3	7.8	7.8	6.1	5.5	8	9	-	-	817896	814681	-	-	-	-	-
						1.0	0.1	353	24.5		8.3		32.2		112.0		7.8		6.2		8		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.5	0.1	351	24.4	24.4	8.2	8.2	32.2	32.2	108.8	108.8	7.6	7.6	4.9		9		-	-			-	-		-	-
						3.5	0.1	351	24.4		8.2		32.2		108.8		7.6		4.9		10		-				-			-	
SR7	Sunny	Moderate	10:23	15.6	Surface	1.0	0.3	69	24.9	24.9	8.5	8.5	31.6	31.6	95.8	95.8	6.6	6.6	7.3	7.6	6	8	-	-	823641	823764	-	-	-	-	-
						1.0	0.3	71	24.9		8.5		31.6		95.7		6.6		7.3		6		-				-			-	
					Middle	7.8	0.3	68	24.9	24.9	8.5	8.5	31.5	31.5	95.3	95.3	6.6		7.5		7		-	-			-	-		-	-
						7.8	0.4	71	24.9		8.5		31.5		95.2		6.6		7.4		6		-				-			-	
					Bottom	14.6	0.2	23	24.9	24.9	8.6	8.6	31.6	31.6	94.3	94.3	6.5	6.5	7.9		12		-	-			-	-		-	-
						14.6	0.2	23	24.9		8.6		31.7		94.2		6.5		7.9		12		-				-			-	
SR8	Sunny	Moderate	11:53	4.7	Surface	1.0	-	-	24.9	24.9	8.2	8.2	30.9	30.9	108.6	108.7	7.5	7.6	9.5	9.5	11	11	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	24.9		8.2		30.9		108.7		7.6		9.5		10		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.7	-	-	24.7	24.7	8.2	8.2	30.8	30.8	106.1	106.0	7.4	7.4	9.5		10		-	-			-	-		-	-
						3.7	-	-	24.8		8.2		30.8		105.9		7.4		9.5		11		-				-			-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 November 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) Average	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Sunny	Moderate	17:19	7.8	Surface	1.0	0.5	192	25.1	25.1	8.4	8.4	32.5	32.5	104.5	104.5	7.2	7.2	7.1	11.5	7	7	87	90	815599	804233	<0.2	<0.2	<0.2	0.9	1.1
						1.0	0.6	208	25.1		8.4		32.5		104.4		7.2		7.2		6		87				<0.2			1.2	
					Middle	3.9	0.5	202	24.9	24.9	8.4	8.4	32.5	32.5	103.2	103.2	7.1		10.8		6		89				<0.2	<0.2		1.2	
						3.9	0.5	213	24.9		8.4		32.6		103.1		7.1		11.9		7		90				<0.2			1.2	
					Bottom	6.8	0.3	208	24.8	24.8	8.4	8.4	32.6	32.6	102.7	102.7	7.1	7.1	15.9		9		94				<0.2	<0.2		1.2	
						6.8	0.4	214	24.8		8.4		32.6		102.7		7.1		16.0		8		95				<0.2			1.1	
C2	Sunny	Moderate	16:18	11.4	Surface	1.0	0.2	320	25.0	24.9	8.2	8.2	29.8	29.8	111.5	111.4	7.8	7.7	8.1	14.5	5	7	85	90	825704	806935	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.2	335	24.9		8.2		29.8		111.3		7.8		8.2		5		85				<0.2			1.0	
					Middle	5.7	0.2	15	24.7	24.7	8.2	8.2	30.7	30.7	106.8	106.8	7.5		12.4		6		90				<0.2	<0.2		0.8	
						5.7	0.3	15	24.7		8.2		30.7		106.8		7.5		12.4		7		90				<0.2			0.9	
					Bottom	10.4	0.4	44	24.8	24.8	8.2	8.2	31.1	31.1	105.0	105.1	7.3	7.3	22.7		9		95				<0.2	<0.2		0.9	
						10.4	0.4	45	24.8		8.2		31.1		105.1		7.3		23.2		11		94				<0.2			1.0	
C3	Fine	Moderate	18:20	11.7	Surface	1.0	0.3	236	24.9	24.9	8.2	8.2	30.6	30.6	112.2	112.2	7.8	7.8	8.5	9.3	10	10	84	88	822101	817815	<0.2	<0.2	<0.2	0.9	1.0
						1.0	0.3	243	24.9		8.2		30.6		112.1		7.8		8.5		11		84				<0.2			1.1	
					Middle	5.9	0.3	230	24.8	24.8	8.1	8.1	30.7	30.7	110.3	110.3	7.7		10.1		11		88				<0.2	<0.2		1.1	
						5.9	0.3	248	24.8		8.1		30.7		110.3		7.7		10.2		9		88				<0.2			1.1	
					Bottom	10.7	0.2	233	24.8	24.8	8.1	8.1	30.8	30.8	108.5	108.5	7.6	7.6	9.3		10		93				<0.2	<0.2		1.1	
						10.7	0.2	255	24.8		8.1		30.8		108.5		7.6		9.2		9		92				<0.2			0.8	
IM1	Sunny	Calm	17:00	4.6	Surface	1.0	0.1	43	24.9	24.9	8.4	8.4	32.5	32.5	103.3	103.3	7.1	7.1	3.3	4.0	10	9	88	91	817946	807113	<0.2	<0.2	<0.2	0.6	0.6
						1.0	0.1	43	24.9		8.4		32.5		103.3		7.1		3.3		9		89				<0.2			0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.6	0.0	34	24.8	24.8	8.4	8.4	32.5	32.5	103.1	103.1	7.1	7.1	4.6		8		93				<0.2	<0.2		0.6	
						3.6	0.0	35	24.8		8.4		32.5		103.1		7.1		4.8		8		93				<0.2			0.6	
IM2	Sunny	Moderate	16:54	6.6	Surface	1.0	0.2	40	24.9	24.9	8.4	8.4	32.2	32.2	105.8	105.8	7.3	7.3	5.0	10.1	10	10	86	90	818156	806167	<0.2	<0.2	<0.2	0.8	0.9
						1.0	0.2	40	24.9		8.4		32.2		105.8		7.3		5.2		10		87				<0.2			1.0	
					Middle	3.3	0.4	66	24.8	24.8	8.4	8.4	32.4	32.4	104.8	104.8	7.2		8.7		9		89				<0.2	<0.2		1.0	
						3.3	0.4	69	24.8		8.4		32.4		104.8		7.2		9.5		10		90				<0.2			0.9	
					Bottom	5.6	0.4	58	24.8	24.8	8.4	8.4	32.4	32.4	104.4	104.4	7.2	7.2	16.3		9		94				<0.2	<0.2		0.9	
						5.6	0.5	63	24.8		8.4		32.4		104.4		7.2		15.9		9		94				<0.2			0.9	
IM3	Sunny	Moderate	16:48	6.8	Surface	1.0	0.3	88	24.9	24.9	8.4	8.4	32.1	32.1	109.4	109.4	7.5	7.5	8.6	9.2	10	14	87	90	818783	805579	<0.2	<0.2	<0.2	0.8	0.9
						1.0	0.3	94	24.9		8.4		32.1		109.3		7.5		8.4		11		87				<0.2			0.9	
					Middle	3.4	0.2	80	24.9	24.9	8.4	8.4	32.1	32.1	108.8	108.8	7.5		7.4		11		90				<0.2	<0.2		0.8	
						3.4	0.2	81	24.9		8.4		32.1		108.8		7.5		7.6		11		90				<0.2			1.0	
					Bottom	5.8	0.2	62	24.9	24.9	8.4	8.4	32.1	32.1	108.6	108.6	7.5	7.5	11.5		19		94				<0.2	<0.2		0.8	
						5.8	0.2	67	24.9		8.4		32.1		108.5		7.5		11.4		20		94				<0.2			0.8	
IM4	Sunny	Moderate	16:40	7.0	Surface	1.0	0.2	76	24.9	24.9	8.4	8.4	32.0	32.0	109.2	109.2	7.5	7.5	7.1	10.7	12	11	87	90	819731	804597	<0.2	<0.2	<0.2	0.8	0.9
						1.0	0.3	76	24.9		8.4		32.0		109.1		7.5		7.2		14		87				<0.2			0.8	
					Middle	3.5	0.2	12	24.8	24.8	8.4	8.4	32.1	32.1	107.6	107.6	7.4		11.1		10		89				<0.2	<0.2		0.9	
						3.5	0.2	12	24.8		8.4		32.1		107.6		7.4		11.1		11		90				<0.2			0.9	
					Bottom	6.0	0.2	320	24.7	24.7	8.4	8.4	32.1	32.1	106.6	106.6	7.4	7.4	13.9		9		93				<0.2	<0.2		0.9	
						6.0	0.3	323	24.7		8.4		32.1		106.5		7.4		14.0		10		95				<0.2			1.0	
IM5	Sunny	Moderate	16:34	6.6	Surface	1.0	0.9	26	24.8	24.8	8.4	8.4	32.0	32.0	108.6	108.6	7.5	7.5	7.3	10.4	10	9	86	90	820747	804888	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.9	26	24.8		8.4		32.0		108.5		7.5		7.4		10		87				<0.2			1.1	
					Middle	3.3	0.7	23	24.7	24.7	8.4	8.4	32.1	32.1	106.9	106.9	7.4		11.0		8		90				<0.2	<0.2		1.1	
						3.3	0.7	25	24.7		8.4		32.1		106.8		7.4		11.1		9		90				<0.2			1.2	
					Bottom	5.6	0.6	26	24.7	24.7	8.4	8.4	32.1	32.1	105.7	105.7	7.3	7.3	12.7		8		94				<0.2	<0.2		1.1	
						5.6	0.6	29	24.7		8.4		32.1		105.7		7.3		12.6		8		94				<0.2			0.9	
IM6	Sunny	Moderate	16:29	6.5	Surface	1.0	0.6	32	25.3	25.3	8.4	8.4	31.2	31.2	117.0	116.9	8.1	8.0	10.1	12.1	7	8	87	90	821079	805837	<0.2	<0.2	<0.2	1.0	1.0
						1.0	0.7	38	25.3		8.4		31.2		116.7		8.0		10.3		7		88				<0.2			1.1	
					Middle	3.3	0.6	26	25.1	25.1	8.4	8.4	31.5	31.5	114.1	114.1	7.9		11.3		7		89				<0.2	<0.2		1.0	
						3.3	0.7	23	25.1		8.4		31.5		114.0		7.9		11.3		8		90				<0.2			1.0	
					Bottom	5.5	0.5	14	24.9	24.9	8.4	8.4	31.8	31.8	111.5	111.5	7.7	7.7	14.8		8		93				<0.2	<0.2		1.0	
						5.5	0.5	16	24.9		8.4		31.8		111.4		7.7		14.8		9		95				<0.2			1.0	
IM7	Sunny	Moderate	16:18	7.7	Surface	1.0	0.5	64	24.9	24.9	8.4	8.4	31.4	31.4	110.1	110.1	7.6	7.5	7.1	9.7	9	10	90	93	821353	806844	<0.2	<0.2	<0.2	1.2	1.1
						1.0	0.5	69	24.9		8.4		31.4		110.0		7.6		7.1		9		90				<0.2			1.0	
					Middle	3.9	0.5	60	24.7	24.7	8.4	8.4	31.6	31.6	107.0	107.0	7.4		10.3		8		92				<0.2	<0.2		1.0	
						3.9	0.5	65	24.7		8.4		31.6		106.9		7.4		10.4		9		93				<0.2			1.2	
					Bottom	6.7	0.3	53	24.6	24.6	8.4	8.4	31.9	31.9	106.8	106.8	7.4	7.4	11.8		12		95				<0.2	<0.2		1.1	
						6.7	0.3	54	24.6		8.4		31.9		106.8		7.4		11.7		11		95				<0.2			1.2	
IM8	Fine	Moderate	16:44	7.5	Surface	1.0	0.2	243	25.0	25.0	8.2	8.2	29.7	29.7	114.1	114.1	8.0	7.9	7.2	8.7	11	9	86	90	821814	808156	<0.2	<0.2	<0.2	1.1	1.0
						1.0	0.2	252	25.0		8.2		29.7		114.1		8.0		7.2		11		86				<0.2			1.0	
					Middle	3.8	0.4	237	24.8	24.8	8.2	8.2	30.0	30.0	111.7	111.8	7.8		8.5		7		90				<0.2	<0.2		1.0	
						3.8	0.4	244	24.8		8.2		30.0		111.8		7.8		8.6		7		90				<0.2			1.0	
					Bottom	6.5	0.4	242	24.7	24.7	8.2	8.2	30.8	30.8	108.0	108.1	7.5	7.5	10.2		8		94				<0.2	<0.2		1.0	
						6.5	0.5	254	24.7		8.2		30.8		108.1		7.5		10.2		8		95				<0.2			1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 November 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) Average	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	16:51	7.2	Surface	1.0	0.3	232	25.0	25.0	8.2	8.2	29.8	29.8	113.1	113.1	7.9	7.8	7.6	8.6	10	11	86	90	822099	808829	<0.2	<0.2		1.0	1.0
						1.0	0.3	252	25.0		8.2		29.8		113.0		7.9		7.7		10		87				<0.2			0.9	
					Middle	3.6	0.2	226	24.8	24.8	8.2	8.2	30.1	30.1	110.1	110.1	7.7		8.9		10		90				<0.2	<0.2	<0.2	1.0	
						3.6	0.2	243	24.8		8.2		30.1		110.1		7.7		9.0		11		90				<0.2			1.1	
					Bottom	6.2	0.2	214	24.7	24.7	8.2	8.2	30.8	30.8	108.8	108.8	7.6	7.6	9.1		14		95				<0.2	<0.2		1.1	
						6.2	0.2	226	24.7		8.2		30.8		108.8		7.6		9.1		13		94				<0.2			1.0	
IM10	Fine	Moderate	16:59	6.3	Surface	1.0	0.2	264	25.0	25.0	8.2	8.2	29.8	29.8	113.3	113.3	7.9	7.8	7.3	8.4	9	8	86	90	822404	809807	<0.2	<0.2	<0.2	1.1	1.1
						1.0	0.3	289	25.0		8.2		29.8		113.3		7.9		7.4		9		86				<0.2			1.1	
					Middle	3.2	0.2	260	24.7	24.7	8.2	8.2	30.2	30.2	109.9	109.9	7.7		8.9		8		90				<0.2	<0.2		1.1	
						3.2	0.2	275	24.7		8.2		30.2		109.9		7.7		8.9		8		90				<0.2			1.0	
					Bottom	5.3	0.2	253	24.8	24.8	8.2	8.2	30.7	30.7	109.7	109.7	7.6	7.6	8.9		7		94				<0.2	<0.2		1.1	
						5.3	0.3	254	24.8		8.2		30.8		109.7		7.6		8.9		6		94				<0.2			1.2	
IM11	Fine	Moderate	17:12	7.4	Surface	1.0	0.3	235	24.9	24.9	8.2	8.2	30.0	30.0	113.1	113.1	7.9	7.8	7.4	8.5	6	8	85	90	822072	811477	<0.2	<0.2	<0.2	1.2	1.2
						1.0	0.3	253	24.9		8.2		30.0		113.1		7.9		7.4		7		86				<0.2			1.2	
					Middle	3.7	0.3	230	24.7	24.7	8.2	8.2	30.3	30.3	110.1	110.1	7.7		8.8		7		90				<0.2	<0.2		1.3	
						3.7	0.3	245	24.7		8.2		30.3		110.0		7.7		8.8		7		90				<0.2			1.2	
					Bottom	6.4	0.2	226	24.7	24.7	8.2	8.2	30.7	30.7	109.4	109.4	7.6	7.6	9.4		11		94				<0.2	<0.2		1.1	
						6.4	0.2	230	24.7		8.2		30.7		109.3		7.6		9.4		10		94				<0.2			1.3	
IM12	Fine	Moderate	17:20	8.4	Surface	1.0	0.2	312	24.9	24.9	8.2	8.2	30.0	30.0	112.7	112.7	7.9	7.8	7.1	7.9	8	7	86	90	821447	812060	<0.2	<0.2		0.8	0.9
						1.0	0.2	341	24.9		8.2		30.0		112.7		7.9		7.0		9		86				<0.2			0.8	
					Middle	4.2	0.3	317	24.7	24.7	8.2	8.2	30.4	30.4	109.7	109.8	7.7		8.1		6		89				<0.2	<0.2	<0.2	0.9	
						4.2	0.3	339	24.7		8.2		30.4		109.8		7.7		8.2		6		90				<0.2			0.9	
					Bottom	7.4	0.2	319	24.8	24.8	8.2	8.2	30.8	30.8	109.4	109.4	7.6	7.6	8.4		7		93				<0.2	<0.2		0.9	
						7.4	0.3	342	24.8		8.2		30.8		109.4		7.6		8.3		7		94				<0.2			1.3	
SR1A	Fine	Moderate	17:45	7.2	Surface	1.0	-	-	24.9	24.9	8.2	8.2	30.6	30.6	114.9	114.9	8.0	7.9	7.5	7.8	8	9	-	-	820064	812579	-	-	-	-	-
						1.0	-	-	24.9		8.2		30.6		114.8		8.0		7.5		8		-				-			-	
					Middle	3.6	-	-	24.8	24.8	8.2	8.2	30.7	30.7	112.4	112.4	7.8		6.9		9		-				-	-		-	
						3.6	-	-	24.8		8.2		30.7		112.3		7.8		6.9		8		-				-			-	
					Bottom	6.2	-	-	24.6	24.6	8.1	8.1	30.8	30.8	109.0	109.0	7.6	7.6	8.9		10		-				-	-		-	
						6.2	-	-	24.6		8.1		30.8		108.9		7.6		8.9		10		-				-			-	
SR2	Fine	Moderate	18:00	4.7	Surface	1.0	0.3	342	24.7	24.7	8.2	8.2	30.4	30.4	106.7	106.8	7.5	7.5	12.6	13.7	13	16	85	89	821453	814183	<0.2	<0.2		0.8	0.9
						1.0	0.3	315	24.7		8.2		30.4		106.8		7.5		12.6		15		86				<0.2			1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	<0.2	-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.7	0.3	349	24.6	24.6	8.2	8.2	30.5	30.5	104.9	104.9	7.3	7.3	14.8		16		91				<0.2	<0.2		0.8	
						3.7	0.3	321	24.6		8.2		30.5		104.9		7.3		14.8		18		92				<0.2			0.9	
SR3	Fine	Moderate	16:38	8.6	Surface	1.0	0.5	78	25.0	25.0	8.2	8.2	29.8	29.8	112.2	112.2	7.8	7.7	7.5	9.2	10	8	-	-	822156	807585	-	-	-	-	-
						1.0	0.6	85	25.0		8.2		29.8		112.2		7.8		7.6		10		-				-			-	
					Middle	4.3	0.5	80	24.7	24.7	8.2	8.2	30.3	30.3	108.1	108.1	7.6		9.5		10		-				-	-		-	
						4.3	0.6	87	24.7		8.2		30.3		108.0		7.6		9.5		8		-				-			-	
					Bottom	7.6	0.5	89	24.7	24.7	8.2	8.2	31.0	31.0	108.0	108.1	7.5	7.5	10.4		5		-				-	-		-	
						7.6	0.6	89	24.7		8.2		31.0		108.2		7.5		10.4		6		-				-			-	
SR4A	Sunny	Moderate	17:40	8.0	Surface	1.0	0.5	240	25.1	25.1	8.4	8.4	32.4	32.4	102.9	102.9	7.1	7.1	3.2	5.2	8	7	-	-	817208	807821	-	-	-	-	-
						1.0	0.6	256	25.1		8.4		32.4		102.9		7.1		3.2		8		-				-			-	
					Middle	4.0	0.6	246	24.9	24.9	8.4	8.4	32.5	32.5	102.0	102.0	7.0		5.3		7		-				-	-		-	
						4.0	0.6	249	24.9		8.4		32.5		102.0		7.0		5.5		7		-				-			-	
					Bottom	7.0	0.5	244	24.9	24.9	8.4	8.4	32.5	32.5	102.0	102.0	7.0	7.0	7.2		5		-				-	-		-	
						7.0	0.5	257	24.9		8.4		32.5		102.0		7.0		7.0		5		-				-			-	
SR5A	Sunny	Calm	17:59	4.8	Surface	1.0	0.3	284	25.1	25.1	8.4	8.4	32.3	32.3	106.6	106.4	7.3	7.3	2.9	4.2	4	5	-	-	816601	810672	-	-	-	-	-
						1.0	0.3	311	25.1		8.4		32.3		106.1		7.3		3.1		4		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.3	296	25.0	25.0	8.4	8.4	32.4	32.4	104.4	104.4	7.2	7.2	5.2		5		-				-	-		-	
						3.8	0.3	323	25.0		8.4		32.4		104.3		7.2		5.4		5		-				-			-	
SR6	Sunny	Calm	19:05	4.1	Surface	1.0	0.2	250	24.8	24.8	8.5	8.5	32.1	32.1	126.6	126.6	8.8	8.8	4.5	5.7	7	9	-	-	817877	814651	-	-	-	-	-
						1.0	0.2	271	24.8		8.5		32.1		126.5		8.7		4.6		8		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.1	0.2	243	24.7	24.7	8.5	8.5	32.1	32.1	122.4	122.4	8.5	8.5	6.9		10		-				-	-		-	
						3.1	0.2	260	24.7		8.5		32.1		122.3		8.5		6.9		10		-				-			-	
SR7	Fine	Moderate	18:48	14.7	Surface	1.0	0.1	258	24.9	24.9	8.1	8.1	31.2	31.2	106.7	106.7	7.4	7.3	6.8	7.2	5	7	-	-	823613	823752	-	-	-	-	-
						1.0	0.1	262	24.9		8.1		31.2		106.7		7.4		6.8		6		-				-			-	
					Middle	7.4	0.3	263	24.9	24.9	8.1	8.1	31.2	31.2	103.7	103.7	7.2		7.0		6		-				-	-		-	
						7.4	0.3	263	24.9		8.1		31.2		103.6		7.2		7.0		5		-				-			-	
					Bottom	13.7	0.2	292	24.9	24.9	8.1	8.1	31.3	31.3	100.0	100.0	6.9	6.9	7.6		12		-				-	-		-	
						13.7	0.2	294	24.9		8.1		31.3		99.9		6.9		7.7		10		-				-			-	
SR8	Fine	Moderate	17:35	4.5	Surface	1.0	-	-	25.5	25.5	8.1	8.1	31.0	31.0	108.6	108.6	7.5	7.5	8.6	8.4	8	8	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	25.5		8.2		31.0		108.5		7.5		8.6		8		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.5	-	-	24.8	24.8	8.1	8.1	31.2	31.2	106.2	106.2	7.4	7.4	8.1		8		-				-	-		-	
						3.5	-	-	24.8		8.1		31.2		106.1		7.4		8.1		8		-				-			-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 November 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	Rough	13:26	8.0	Surface	1.0	0.3	195	25.0	25.0	8.1	8.1	30.6	30.6	106.7	106.7	7.4	7.4	11.0	13.8	11	12	84	89	815626	804260	<0.2	<0.2	0.9	1.1
						1.0	0.3	200	25.0		8.1		30.6		106.7		7.4		11.0		11		85				<0.2		1.3	
					Middle	4.0	0.2	225	25.0	25.0	8.1	8.1	30.6	30.6	104.7	104.7	7.3		12.6		11		89				<0.2		1.2	
						4.0	0.2	225	25.0		8.1		30.6		104.7		7.3		12.7		12		90				<0.2		1.0	
					Bottom	7.0	0.2	235	24.9	24.9	8.0	8.0	31.2	31.2	102.3	102.3	7.1	7.1	17.5		13		93				<0.2		1.0	
						7.0	0.2	236	24.9		8.0		31.2		102.3		7.1		17.7		12		94				<0.2		0.9	
C2	Fine	Rough	14:19	11.4	Surface	1.0	0.2	62	25.1	25.1	8.2	8.2	28.8	28.8	111.8	111.8	7.8	7.8	10.5	11.3	10	12	85	90	825694	806921	<0.2	<0.2	1.0	1.1
						1.0	0.2	64	25.1		8.2		28.8		111.8		7.8		10.6		10		86				<0.2		1.1	
					Middle	5.7	0.3	88	25.1	25.1	8.2	8.2	28.9	28.9	110.4	110.4	7.7		11.4		11		89				<0.2		1.1	
						5.7	0.3	89	25.1		8.2		28.9		110.4		7.7		11.4		11		89				<0.2		1.3	
					Bottom	10.4	0.4	70	25.0	25.0	8.2	8.2	29.1	29.1	109.7	109.7	7.7	7.7	12.0		13		94				<0.2		1.0	
						10.4	0.5	72	25.0		8.2		29.1		109.6		7.7		12.0		14		95				<0.2		1.0	
C3	Fine	Moderate	12:10	11.4	Surface	1.0	0.4	80	25.0	25.0	8.0	8.0	30.2	30.2	106.3	106.3	7.4	7.4	13.1	12.9	11	12	83	89	822115	817818	<0.2	<0.2	1.1	1.1
						1.0	0.4	84	25.0		8.0		30.2		106.3		7.4		13.1		12		86				<0.2		1.1	
					Middle	5.7	0.4	91	25.0	25.0	8.0	8.0	30.3	30.3	106.8	106.9	7.4		12.6		12		88				<0.2		1.0	
						5.7	0.5	94	25.0		8.0		30.3		106.9		7.4		12.7		13		89				<0.2		1.1	
					Bottom	10.4	0.4	95	25.0	25.0	8.0	8.0	30.4	30.4	107.0	107.0	7.4	7.4	12.9		12		93				<0.2		1.1	
						10.4	0.4	101	25.0		8.0		30.4		106.9		7.4		12.9		13		93				<0.2		1.1	
IM1	Fine	Rough	13:52	4.6	Surface	1.0	0.5	197	25.0	25.0	8.1	8.1	30.9	30.9	109.5	109.5	7.6	7.6	12.5	17.2	12	14	90	92	817947	807140	<0.2	<0.2	1.2	1.2
						1.0	0.5	200	25.0		8.1		30.9		109.5		7.6		12.5		13		90				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	203	25.0	25.0	8.0	8.0	30.9	30.9	108.4	108.4	7.5	7.5	21.8		16		93				<0.2		1.2	
						3.6	0.3	217	25.0		8.0		30.9		108.4		7.5		22.0		15		93				<0.2		1.3	
IM2	Fine	Rough	14:00	7.2	Surface	1.0	0.3	205	25.1	25.1	8.1	8.1	30.8	30.8	109.5	109.5	7.6	7.6	11.3	11.6	10	12	86	90	818160	806156	<0.2	<0.2	1.5	1.4
						1.0	0.4	208	25.1		8.1		30.8		109.5		7.6		11.4		11		86				<0.2		1.5	
					Middle	3.6	0.3	197	25.1	25.1	8.1	8.1	30.9	30.9	108.1	108.1	7.5		11.6		11		90				<0.2		1.4	
						3.6	0.3	203	25.1		8.1		30.9		108.1		7.5		11.6		12		90				<0.2		1.4	
					Bottom	6.2	0.2	195	25.0	25.0	8.1	8.1	31.1	31.1	107.7	107.7	7.5	7.5	11.8		12		93				<0.2		1.4	
						6.2	0.2	205	25.0		8.1		31.1		107.7		7.5		11.8		13		94				<0.2		1.4	
IM3	Fine	Rough	14:09	7.3	Surface	1.0	0.6	209	25.1	25.1	8.1	8.1	30.9	30.9	108.7	108.7	7.5	7.5	18.3	19.0	22	23	86	91	818790	805582	<0.2	<0.2	1.1	1.2
						1.0	0.6	211	25.1		8.1		30.9		108.7		7.5		18.2		22		87				<0.2		1.1	
					Middle	3.7	0.6	202	25.1	25.1	8.1	8.1	30.9	30.9	107.8	107.8	7.5		18.7		22		90				<0.2		1.3	
						3.7	0.6	221	25.1		8.1		30.9		107.8		7.5		18.8		24		92				<0.2		1.2	
					Bottom	6.3	0.3	198	25.1	25.1	8.1	8.1	31.0	31.0	107.0	107.0	7.4	7.4	20.0		24		96				<0.2		1.3	
						6.3	0.3	209	25.1		8.1		31.0		107.0		7.4		20.1		23		96				<0.2		1.2	
IM4	Fine	Moderate	14:20	7.2	Surface	1.0	0.7	164	25.0	25.0	8.1	8.1	30.3	30.3	109.0	109.0	7.6	7.6	16.1	18.1	18	20	88	93	819737	804595	<0.2	<0.2	1.0	0.9
						1.0	0.7	178	25.0		8.1		30.3		109.0		7.6		16.1		19		89				<0.2		0.9	
					Middle	3.6	0.6	167	25.0	25.0	8.1	8.1	30.4	30.4	108.3	108.3	7.5		17.8		20		92				<0.2		0.8	
						3.6	0.6	176	25.0		8.1		30.4		108.3		7.5		17.8		20		93				<0.2		1.0	
					Bottom	6.2	0.4	150	25.0	25.0	8.1	8.1	30.4	30.4	107.5	107.5	7.5	7.5	20.7		21		98				<0.2		0.9	
						6.2	0.4	162	25.0		8.1		30.4		107.5		7.5		20.2		20		99				<0.2		0.9	
IM5	Fine	Moderate	14:30	6.6	Surface	1.0	0.5	175	25.1	25.1	8.1	8.1	29.8	29.8	111.5	111.6	7.8	7.8	13.6	16.5	17	19	88	89	820721	804887	<0.2	<0.2	1.1	1.0
						1.0	0.5	187	25.1		8.1		29.8		111.6		7.8		13.6		17		87				<0.2		1.0	
					Middle	3.3	0.4	195	25.0	25.0	8.1	8.1	29.9	29.9	110.0	110.0	7.7		16.5		19		88				<0.2		1.0	
						3.3	0.4	208	25.0		8.1		29.9		110.0		7.7		16.4		18		89				<0.2		1.0	
					Bottom	5.6	0.4	190	25.0	25.0	8.1	8.1	30.0	30.0	108.9	108.9	7.6	7.6	19.4		20		92				<0.2		1.0	
						5.6	0.5	193	25.0		8.1		30.0		108.9		7.6		19.3		20		92				<0.2		0.9	
IM6	Fine	Moderate	14:40	6.2	Surface	1.0	0.3	243	25.1	25.1	8.1	8.1	29.7	29.7	113.5	113.5	7.9	7.9	14.8	16.5	15	17	87	90	821051	805808	<0.2	<0.2	1.0	1.0
						1.0	0.3	266	25.1		8.1		29.7		113.5		7.9		14.8		14		87				<0.2		1.1	
					Middle	3.1	0.3	256	25.1	25.1	8.1	8.1	29.7	29.7	112.9	112.9	7.9		15.3		17		90				<0.2		1.1	
						3.1	0.3	269	25.1		8.1		29.7		112.9		7.9		15.3		17		91				<0.2		0.9	
					Bottom	5.2	0.3	244	25.1	25.1	8.1	8.1	29.7	29.7	110.7	110.7	7.7	7.7	19.4		19		93				<0.2		1.1	
						5.2	0.3	259	25.1		8.1		29.7		110.6		7.7		19.6		20		94				<0.2		1.0	
IM7	Fine	Moderate	14:49	7.7	Surface	1.0	0.3	244	25.1	25.1	8.1	8.1	30.0	30.0	111.7	111.7	7.8	7.8	9.8	10.3	7	8	85	90	821362	806855	<0.2	<0.2	1.0	1.1
						1.0	0.3	261	25.1		8.1		30.0		111.7		7.8		9.8		6		87				<0.2		1.0	
					Middle	3.9	0.2	260	25.1	25.1	8.1	8.1	30.1	30.1	110.2	110.2	7.7		10.3		7		89				<0.2		1.1	
						3.9	0.3	285	25.1		8.1		30.1		110.2		7.7		10.3		7		90				<0.2		1.1	
					Bottom	6.7	0.2	255	25.0	25.0	8.1	8.1	30.3	30.3	109.5	109.5	7.6	7.6	10.7		11		94				<0.2		1.1	
						6.7	0.3	261	25.0		8.1		30.3		109.5		7.6		10.7		10		95				<0.2		1.2	
IM8	Fine	Rough	13:38	7.7	Surface	1.0	0.3	111	25.1	25.1	8.3	8.3	28.6	28.5	112.1	112.0	7.9	7.8	11.5	14.8	15	16	84	89	821832	808142	<0.2	<0.2	1.1	1.1
						1.0	0.3	114	25.1		8.3		28.5		111.9		7.9		11.5		14		85				<0.2		1.2	
					Middle	3.9	0.2	94	25.1	25.1	8.3	8.3	28.6	28.6	110.4	110.4	7.7		15.1		16		90				<0.2		1.1	
						3.9	0.3	101	25.1		8.3		28.6		110.3		7.7		15.1		15		91				<0.2		1.0	
					Bottom	6.7	0.4	90	25.0	25.0	8.3	8.3	28.7	28.7	109.1	109.1	7.7	7.7	18.0		16		92				<0.2		1.1	
						6.7	0.4	91	25.0		8.3		28.7		109.0		7.6		17.8		17		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 08 November 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	Rough	13:25	6.9	Surface	1.0	0.6	112	25.0	25.0	8.2	8.2	29.1	29.1	109.5	109.5	7.7	7.7	18.4	19.5	17	19	83	89	822080	808816	<0.2	<0.2	1.1	1.2
						1.0	0.6	112	25.0		8.2		29.1		109.5		7.7		18.4		18		84				<0.2		1.2	
					Middle	3.5	0.5	99	25.0	25.0	8.2	8.2	29.1	29.1	108.4	108.5	7.6		20.4		18		90				<0.2		1.1	
						3.5	0.6	105	25.0		8.2		29.1		108.5		7.6		20.4		18		90				<0.2		1.1	
					Bottom	5.9	0.4	87	25.0	25.0	8.2	8.2	29.1	29.1	107.9	107.9	7.6	7.6	19.8		21		93				<0.2		1.2	
						5.9	0.5	91	25.0		8.2		29.1		107.9		7.6		19.8		20		94				<0.2		1.2	
IM10	Fine	Rough	13:11	7.2	Surface	1.0	0.5	122	25.1	25.1	8.2	8.2	29.7	29.7	109.1	109.2	7.6	7.6	17.4	20.5	21	23	86	90	822399	809799	<0.2	<0.2	1.2	1.2
						1.0	0.6	132	25.1		8.2		29.7		109.2		7.6		17.4		22		87				<0.2		1.2	
					Middle	3.6	0.5	98	25.1	25.1	8.2	8.2	29.7	29.7	107.9	107.9	7.5		20.3		24		89				<0.2		1.2	
						3.6	0.6	105	25.1		8.2		29.7		107.9		7.5		20.3		23		89				<0.2		1.3	
					Bottom	6.2	0.4	77	25.1	25.1	8.2	8.2	29.7	29.7	107.3	107.4	7.5	7.5	23.7		24		94				<0.2		1.1	
						6.2	0.5	82	25.1		8.2		29.7		107.5		7.5		23.7		23		94				<0.2		1.0	
IM11	Fine	Rough	13:01	7.9	Surface	1.0	0.6	129	25.1	25.1	8.1	8.1	29.6	29.6	109.9	109.9	7.7	7.6	12.2	12.8	10	13	84	88	822080	811462	<0.2	<0.2	1.1	1.1
						1.0	0.6	139	25.1		8.1		29.6		109.8		7.7		12.3		11		85				<0.2		1.0	
					Middle	4.0	0.5	109	25.1	25.1	8.1	8.1	29.6	29.6	108.0	108.0	7.5		12.9		12		88				<0.2		1.1	
						4.0	0.6	117	25.1		8.1		29.6		107.9		7.5		12.9		12		89				<0.2		1.2	
					Bottom	6.9	0.4	81	25.1	25.1	8.1	8.1	29.9	29.9	107.7	107.8	7.5	7.5	13.2		16		92				<0.2		1.2	
						6.9	0.5	87	25.1		8.1		29.9		107.8		7.5		13.3		17		92				<0.2		1.2	
IM12	Fine	Rough	12:53	8.2	Surface	1.0	0.6	114	25.1	25.1	8.1	8.1	29.6	29.6	109.6	109.7	7.7	7.7	14.0	17.3	14	17	83	88	821470	812061	<0.2	<0.2	1.2	1.2
						1.0	0.7	118	25.1		8.1		29.6		109.7		7.7		14.0		15		84				<0.2		1.2	
					Middle	4.1	0.6	100	25.1	25.1	8.1	8.1	29.6	29.6	108.7	108.8	7.6		16.1		16		88				<0.2		1.2	
						4.1	0.6	107	25.1		8.1		29.6		108.8		7.6		16.3		17		88				<0.2		1.2	
					Bottom	7.2	0.4	92	25.1	25.1	7.9	7.9	29.7	29.7	108.3	108.3	7.6	7.6	21.8		20		93				<0.2		1.2	
						7.2	0.4	93	25.1		7.9		29.7		108.2		7.5		21.7		19		94				<0.2		1.2	
SR1A	Fine	Moderate	12:35	7.3	Surface	1.0	-	-	25.0	25.0	8.1	8.1	29.4	29.4	108.5	108.4	7.6	7.5	12.3	13.9	7	9	-	-	820074	812582	-	-	-	-
						1.0	-	-	25.0		8.1		29.4		108.3		7.6		12.3		8		-				-		-	
					Middle	3.7	-	-	25.0	25.0	8.1	8.1	29.7	29.7	106.0	106.0	7.4		14.0		9		-				-		-	
						3.7	-	-	25.0		8.1		29.7		106.0		7.4		14.1		8		-				-		-	
					Bottom	6.3	-	-	25.0	25.0	8.1	8.1	29.8	29.8	105.6	105.6	7.4	7.4	15.2		11		-				-		-	
						6.3	-	-	25.0		8.1		29.8		105.5		7.4		15.2		10		-				-		-	
SR2	Fine	Moderate	12:18	4.5	Surface	1.0	0.4	76	25.0	25.0	8.1	8.1	29.4	29.4	108.8	108.8	7.6	7.6	12.5	12.8	11	13	85	89	821474	814165	<0.2	<0.2	1.2	1.2
						1.0	0.4	78	25.0		8.1		29.4		108.8		7.6		12.5		12		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	82	25.0	25.0	8.1	8.1	29.6	29.6	107.7	107.8	7.5	7.5	13.1		15		93				<0.2		1.1	
						3.5	0.3	87	25.0		8.1		29.6		107.8		7.5		13.2		14		93				<0.2		1.2	
SR3	Fine	Rough	13:57	8.5	Surface	1.0	0.3	132	25.1	25.1	8.3	8.3	28.5	28.5	113.8	113.8	8.0	8.0	13.0	14.2	20	22	-	-	822129	807573	-	-	-	-
						1.0	0.3	138	25.1		8.3		28.5		113.8		8.0		13.0		20		-				-		-	
					Middle	4.3	0.3	109	25.1	25.1	8.3	8.3	28.5	28.5	113.2	113.2	8.0		13.9		21		-				-		-	
						4.3	0.3	111	25.1		8.3		28.5		113.1		7.9		13.9		22		-				-		-	
					Bottom	7.5	0.4	81	25.1	25.1	8.3	8.3	28.5	28.5	111.1	111.1	7.8	7.8	15.7		23		-				-		-	
						7.5	0.4	86	25.1		8.3		28.5		111.0		7.8		15.7		24		-				-		-	
SR4A	Fine	Calm	13:04	8.9	Surface	1.0	0.5	231	25.0	25.0	8.1	8.1	30.7	30.7	107.9	107.9	7.5	7.4	11.3	12.5	11	13	-	-	817191	807824	-	-	-	-
						1.0	0.5	248	25.0		8.1		30.7		107.8		7.5		11.3		12		-				-		-	
					Middle	4.5	0.5	239	25.0	25.0	8.1	8.1	30.9	30.9	105.9	105.9	7.4		12.5		12		-				-		-	
						4.5	0.5	241	25.0		8.1		30.9		105.9		7.3		12.5		13		-				-		-	
					Bottom	7.9	0.5	229	25.0	25.0	8.0	8.0	31.0	31.0	105.4	105.4	7.3	7.3	13.6		13		-				-		-	
						7.9	0.5	235	25.0		8.0		31.0		105.4		7.3		13.6		14		-				-		-	
SR5A	Fine	Calm	12:47	4.2	Surface	1.0	0.2	118	25.0	25.0	8.1	8.1	31.4	31.4	106.2	106.2	7.3	7.3	11.9	12.1	13	14	-	-	816600	810693	-	-	-	-
						1.0	0.2	124	25.0		8.1		31.4		106.2		7.3		11.8		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	24	25.0	25.0	8.1	8.1	31.7	31.6	106.3	106.4	7.3	7.3	12.4		13		-				-		-	
						3.2	0.1	26	25.0		8.1		31.6		106.4		7.3		12.3		14		-				-		-	
SR6	Fine	Calm	12:21	4.5	Surface	1.0	0.0	99	25.1	25.1	8.1	8.1	31.3	31.3	119.7	119.7	8.3	8.3	8.9	8.9	10	11	-	-	817904	814654	-	-	-	-
						1.0	0.0	107	25.1		8.1		31.3		119.6		8.3		8.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	135	25.0	25.0	7.9	7.9	31.4	31.4	115.6	115.6	8.0	8.0	8.9		12		-				-		-	
						3.5	0.0	142	25.0		7.9		31.4		115.6		8.0		8.9		11		-				-		-	
SR7	Fine	Moderate	11:42	16.3	Surface	1.0	0.3	74	25.1	25.1	8.0	8.0	30.2	30.2	119.8	119.8	8.3	8.3	8.8	11.1	11	12	-	-	823644	823722	-	-	-	-
						1.0	0.4	75	25.1		8.0		30.2		119.8		8.3		8.8		10		-				-		-	
					Middle	8.2	0.3	77	25.1	25.1	8.0	8.0	30.2	30.2	118.1	118.1	8.2		10.2		10		-				-		-	
						8.2	0.4	79	25.1		8.0		30.2		118.1		8.2		10.3		12		-				-		-	
					Bottom	15.3	0.2	20	25.1	25.1	8.0	8.0	30.3	30.3	116.5	116.6	8.1	8.1	14.1		13		-				-		-	
						15.3	0.3	20	25.1		8.0		30.3		116.6		8.1		14.3		13		-				-		-	
SR8	Fine	Moderate	12:44	4.2	Surface	1.0	-	-	25.0	25.0	8.1	8.1	29.4	29.4	107.0	107.0	7.5	7.5	12.0	13.8	17	17	-	-	820505	811666	-	-	-	-
						1.0	-	-	25.0		8.1		29.4		107.0		7.5		12.0		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	25.0	25.0	8.1	8.1	29.4	29.4	105.3	105.3	7.4	7.4	15.5		18		-				-		-	
						3.2	-	-	25.0		8.1		29.4		105.3		7.4		15.5		18		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: SR8 cannot be accessed due to windy weather. 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 November 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	18:23	7.8	Surface	1.0	0.5	90	25.1	25.1	8.1	8.1	31.1	31.1	108.3	108.3	7.5	7.5	15.5	17.1	19	19	84	89	815634	804244	<0.2	<0.2	0.8	0.9
						1.0	0.5	95	25.1		8.1		31.1		108.3		7.5		15.5		18		85				<0.2		1.0	
					Middle	3.9	0.5	109	25.1	25.1	8.1	8.1	31.1	31.1	107.6	107.6	7.4		16.8		18		90				<0.2		0.9	
						3.9	0.5	121	25.1		8.1		31.1		107.6		7.4		16.9		20		91				<0.2		0.9	
					Bottom	6.8	0.3	104	25.1	25.1	8.1	8.1	31.1	31.1	106.9	106.9	7.4	7.4	18.9		20		93				<0.2		0.9	
						6.8	0.4	106	25.1		8.1		31.1		106.9		7.4		18.9		21		93				<0.2		0.9	
C2	Fine	Moderate	17:15	11.7	Surface	1.0	0.2	316	25.1	25.1	8.2	8.2	28.8	28.8	112.4	112.5	7.9	7.9	10.8	11.6	14	15	85	90	825704	806932	<0.2	<0.2	1.2	1.2
						1.0	0.2	332	25.1		8.2		28.8		112.5		7.9		10.8		13		85				<0.2		1.2	
					Middle	5.9	0.3	29	25.1	25.1	8.1	8.1	28.9	28.9	110.9	111.0	7.8		11.7		16		89				<0.2		1.1	
						5.9	0.3	30	25.1		8.1		28.9		111.0		7.8		11.6		15		90				<0.2		1.2	
					Bottom	10.7	0.4	54	25.0	25.0	8.2	8.2	29.0	29.0	110.2	110.1	7.7	7.7	12.2		16		94				<0.2		1.1	
						10.7	0.4	54	25.0		8.2		29.0		110.0		7.7		12.2		17		95				<0.2		1.2	
C3	Fine	Moderate	19:28	9.8	Surface	1.0	0.3	224	25.1	25.1	8.1	8.1	29.4	29.4	108.2	108.3	7.6	7.5	11.1	12.3	7	9	85	90	822106	817785	<0.2	<0.2	1.2	1.2
						1.0	0.3	246	25.1		8.1		29.4		108.3		7.6		11.1		7		87				<0.2		1.2	
					Middle	4.9	0.3	228	25.0	25.0	8.1	8.1	29.6	29.6	105.9	105.9	7.4		12.9		8		90				<0.2		1.2	
						4.9	0.3	234	25.0		8.1		29.6		105.9		7.4		12.8		8		90				<0.2		1.2	
					Bottom	8.8	0.2	241	25.0	25.0	8.1	8.1	29.7	29.7	105.7	105.7	7.4	7.4	13.2		12		93				<0.2		1.1	
						8.8	0.3	251	25.0		8.1		29.7		105.7		7.4		12.9		12		93				<0.2		1.2	
IM1	Fine	Moderate	18:06	4.6	Surface	1.0	0.1	52	25.1	25.1	8.1	8.1	31.0	31.0	114.6	114.6	7.9	7.9	10.0	10.1	12	13	86	88	817931	807131	<0.2	<0.2	1.0	1.0
						1.0	0.1	54	25.1		8.1		31.0		114.6		7.9		10.0		13		87				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	48	25.1	25.1	8.1	8.1	31.0	31.0	110.5	110.5	7.6	7.6	10.2		13		88				<0.2		0.9	
						3.6	0.0	51	25.1		8.1		31.0		110.4		7.6		10.1		14		89				<0.2		1.0	
IM2	Fine	Moderate	18:00	6.6	Surface	1.0	0.5	88	25.1	25.1	8.1	8.1	30.7	30.7	112.5	112.5	7.8	7.7	11.6	13.3	11	12	85	90	818163	806147	<0.2	<0.2	0.9	0.9
						1.0	0.5	91	25.1		8.1		30.7		112.5		7.8		11.6		11		86				<0.2		1.0	
					Middle	3.3	0.5	0	25.1	25.1	8.1	8.1	30.9	30.9	109.9	110.0	7.6		14.4		12		90				<0.2		1.0	
						3.3	0.5	0	25.1		8.1		30.9		110.0		7.6		14.4		11		90				<0.2		0.9	
					Bottom	5.6	0.4	94	25.1	25.1	8.1	8.1	31.0	31.0	109.5	109.5	7.6	7.6	14.0		13		93				<0.2		0.9	
						5.6	0.4	94	25.1		8.1		31.0		109.5		7.6		14.0		14		93				<0.2		0.9	
IM3	Fine	Moderate	17:52	6.8	Surface	1.0	0.5	44	25.1	25.1	8.1	8.1	30.4	30.4	111.7	111.7	7.8	7.7	13.6	14.1	18	19	85	89	818782	805606	<0.2	<0.2	1.0	1.0
						1.0	0.5	47	25.1		8.1		30.4		111.7		7.8		13.6		18		85				<0.2		1.0	
					Middle	3.4	0.6	38	25.1	25.1	8.1	8.1	30.6	30.6	109.9	109.9	7.6		14.2		19		88				<0.2		1.1	
						3.4	0.6	48	25.1		8.1		30.6		109.9		7.6		14.2		18		89				<0.2		1.0	
					Bottom	5.8	0.3	51	25.1	25.0	8.1	8.1	30.7	30.7	109.1	109.1	7.6	7.6	14.6		20		94				<0.2		0.9	
						5.8	0.4	61	25.0		8.1		30.7		109.1		7.6		14.6		21		95				<0.2		1.0	
IM4	Fine	Moderate	17:43	7.0	Surface	1.0	0.8	90	25.1	25.1	8.1	8.1	29.9	29.9	112.1	112.1	7.8	7.8	16.4	17.1	18	21	84	89	819703	804616	<0.2	<0.2	1.0	1.1
						1.0	0.8	92	25.1		8.1		29.9		112.1		7.8		16.3		18		84				<0.2		1.2	
					Middle	3.5	0.8	26	25.1	25.1	8.1	8.1	29.9	29.9	111.5	111.5	7.8		17.3		20		88				<0.2		1.0	
						3.5	0.8	25	25.1		8.1		29.9		111.5		7.8		17.1		21		89				<0.2		1.1	
					Bottom	6.0	0.6	98	25.1	25.1	8.1	8.1	29.9	29.9	109.6	109.6	7.6	7.6	17.7		24		93				<0.2		1.0	
						6.0	0.7	107	25.1		8.1		29.9		109.5		7.6		17.7		25		93				<0.2		1.1	
IM5	Fine	Moderate	17:37	6.6	Surface	1.0	0.8	15	25.1	25.1	8.1	8.1	29.6	29.6	113.9	113.9	8.0	8.0	14.7	15.8	20	21	86	89	820717	804865	<0.2	<0.2	1.3	1.2
						1.0	0.9	20	25.1		8.1		29.6		113.9		8.0		14.7		20		87				<0.2		1.1	
					Middle	3.3	0.7	13	25.1	25.1	8.1	8.1	29.6	29.6	112.6	112.6	7.9		15.5		21		90				<0.2		1.1	
						3.3	0.8	13	25.1		8.1		29.6		112.6		7.9		15.5		21		90				<0.2		1.1	
					Bottom	5.6	0.6	19	25.1	25.1	8.0	8.0	29.7	29.7	111.3	111.3	7.8	7.8	17.1		22		91				<0.2		1.2	
						5.6	0.6	18	25.1		8.0		29.7		111.2		7.8		17.1		21		91				<0.2		1.1	
IM6	Fine	Moderate	17:30	6.5	Surface	1.0	0.7	20	25.1	25.1	8.1	8.1	29.6	29.6	114.2	114.2	8.0	8.0	13.9	17.0	19	21	84	89	821066	805818	<0.2	<0.2	1.1	1.1
						1.0	0.7	21	25.1		8.1		29.6		114.1		8.0		14.0		19		85				<0.2		1.0	
					Middle	3.3	0.6	16	25.1	25.1	8.1	8.1	29.6	29.6	113.2	113.2	7.9		16.3		21		90				<0.2		1.2	
						3.3	0.6	18	25.1		8.1		29.6		113.2		7.9		16.4		22		91				<0.2		1.2	
					Bottom	5.5	0.5	100	25.1	25.1	8.1	8.1	29.7	29.7	111.9	111.9	7.8	7.8	20.6		23		92				<0.2		1.2	
						5.5	0.5	101	25.1		8.1		29.7		111.9		7.8		20.8		22		93				<0.2		1.1	
IM7	Fine	Moderate	17:16	7.7	Surface	1.0	0.5	54	25.1	25.1	8.1	8.1	30.0	30.0	112.5	112.5	7.8	7.8	9.8	10.7	10	12	89	94	821363	806833	<0.2	<0.2	1.2	1.2
						1.0	0.5	57	25.1		8.1		30.0		112.5		7.8		9.8		11		90				<0.2		1.3	
					Middle	3.9	0.5	50	25.1	25.1	8.1	8.1	30.1	30.1	110.6	110.6	7.7		10.7		12		94				<0.2		1.2	
						3.9	0.5	64	25.1		8.1		30.1		110.6		7.7		10.8		12		94				<0.2		1.2	
					Bottom	6.7	0.3	62	25.0	25.0	8.1	8.1	30.3	30.3	109.7	109.7	7.6	7.6	11.7		14		96				<0.2		1.1	
						6.7	0.3	70	25.0		8.1		30.3		109.7		7.6		11.6		13		98				<0.2		1.4	
IM8	Fine	Moderate	17:41	7.8	Surface	1.0	0.2	259	25.1	25.1	8.2	8.2	28.4	28.4	114.2	114.2	8.0	8.0	15.9	17.0	17	20	85	90	821850	808125	<0.2	<0.2	1.2	1.3
						1.0	0.2	261	25.1		8.2		28.4		114.2		8.0		15.8		17		86				<0.2		1.3	
					Middle	3.9	0.4	271	25.1	25.1	8.2	8.2	28.4	28.4	112.6	112.7	7.9		16.9		20		88				<0.2		1.3	
						3.9	0.4	273	25.1		8.2		28.4		112.7		7.9		16.9		19		90				<0.2		1.4	
					Bottom	6.8	0.4	262	25.1	25.1	8.2	8.2	28.5	28.5	111.6	111.6	7.8	7.8	18.0		23		94				<0.2		1.3	
						6.8	0.5	264	25.1		8.2		28.5		111.5		7.8		18.2		23		95				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 November 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	17:47	7.3	Surface	1.0	0.3	298	25.1	25.1	8.2	8.2	28.6	28.6	112.3	112.3	7.9	7.9	18.8	19.5	21	23	<0.2	89	822080	808825	<0.2	<0.2	1.3	1.3
						1.0	0.3	306	25.1		8.2		28.6		112.3		7.9		18.8		22		<0.2				<0.2		1.2	
					Middle	3.7	0.2	291	25.1	25.1	8.2	8.2	28.7	28.7	111.6	111.6	7.8		19.9		23		88				<0.2		1.2	
						3.7	0.2	299	25.1		8.2		28.7		111.6		7.8		19.9		22		90				<0.2		1.3	
					Bottom	6.3	0.2	276	25.1	25.1	8.2	8.2	28.7	28.7	109.5	109.5	7.7	7.7	19.8		24		92				<0.2		1.3	
						6.3	0.2	277	25.1		8.2		28.7		109.4		7.7		19.7		25		94				<0.2		1.2	
IM10	Fine	Moderate	17:55	8.5	Surface	1.0	0.2	280	25.1	25.1	8.2	8.2	29.1	29.1	111.6	111.7	7.8	7.8	15.2	15.9	19	20	83	89	822402	809796	<0.2	<0.2	1.2	1.3
						1.0	0.2	281	25.1		8.2		29.1		111.7		7.8		15.1		18		85				<0.2		1.4	
					Middle	4.3	0.2	227	25.1	25.1	8.2	8.2	29.3	29.3	110.2	110.2	7.7		16.0		21		90				<0.2		1.2	
						4.3	0.2	228	25.1		8.2		29.3		110.1		7.7		16.1		22		91				<0.2		1.2	
					Bottom	7.5	0.3	316	25.1	25.1	8.2	8.2	29.5	29.5	109.2	109.1	7.6	7.6	16.6		21		92				<0.2		1.3	
						7.5	0.3	334	25.1		8.2		29.5		109.0		7.6		16.5		21		92				<0.2		1.4	
IM11	Fine	Moderate	18:08	8.3	Surface	1.0	0.5	225	25.1	25.1	8.1	8.1	29.4	29.4	113.0	113.0	7.9	7.8	12.4	15.2	13	14	85	89	822075	811443	<0.2	<0.2	1.2	1.2
						1.0	0.5	227	25.1		8.1		29.4		112.9		7.9		12.4		13		86				<0.2		1.2	
					Middle	4.2	0.2	222	25.1	25.1	8.1	8.1	29.6	29.6	110.2	110.3	7.7		15.9		14		89				<0.2		1.2	
						4.2	0.2	228	25.1		8.1		29.6		110.3		7.7		15.8		14		89				<0.2		1.2	
					Bottom	7.3	0.2	220	25.1	25.1	8.1	8.1	29.7	29.7	109.3	109.4	7.6	7.6	17.3		15		93				<0.2		1.3	
						7.3	0.2	226	25.1		8.1		29.7		109.4		7.6		17.3		16		94				<0.2		1.2	
IM12	Fine	Moderate	18:17	9.0	Surface	1.0	0.2	230	25.1	25.1	8.2	8.2	29.7	29.7	114.6	114.6	8.0	8.0	10.9	11.1	14	16	85	89	821480	812054	<0.2	<0.2	1.3	1.3
						1.0	0.3	230	25.1		8.2		29.7		114.6		8.0		10.9		14		85				<0.2		1.2	
					Middle	4.5	0.3	236	25.1	25.1	8.2	8.2	29.7	29.7	113.0	113.0	7.9		10.9		16		89				<0.2		1.3	
						4.5	0.3	237	25.1		8.2		29.7		113.0		7.9		11.0		15		89				<0.2		1.2	
					Bottom	8.0	0.3	221	25.1	25.1	8.2	8.2	29.7	29.7	110.8	110.8	7.7	7.7	11.4		19		94				<0.2		1.2	
						8.0	0.3	240	25.1		8.2		29.7		110.8		7.7		11.4		18		94				<0.2		1.3	
SR1A	Fine	Moderate	18:42	7.0	Surface	1.0	-	-	25.1	25.1	8.1	8.1	29.8	29.8	108.6	108.7	7.6	7.6	15.1	17.8	16	19	-	-	820063	812583	-	-	-	-
						1.0	-	-	25.1		8.1		29.8		108.7		7.6		15.3		17		-				-		-	
					Middle	3.5	-	-	25.1	25.1	8.1	8.1	29.8	29.8	108.2	108.2	7.5		18.0		19		-				-		-	
						3.5	-	-	25.1		8.1		29.8		108.1		7.5		18.0		19		-				-		-	
					Bottom	6.0	-	-	25.1	25.1	8.1	8.1	29.8	29.8	107.3	107.4	7.5	7.5	20.3		22		-				-		-	
						6.0	-	-	25.1		8.1		29.8		107.4		7.5		20.3		22		-				-		-	
SR2	Fine	Moderate	18:58	5.7	Surface	1.0	0.4	232	25.1	25.1	8.1	8.1	29.5	29.5	108.1	108.1	7.6	7.6	11.1	12.9	10	12	85	90	821477	814169	<0.2	<0.2	1.2	1.2
						1.0	0.4	246	25.1		8.1		29.5		108.1		7.5		11.2		10		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.3	239	25.0	25.0	8.1	8.1	29.7	29.7	105.3	105.3	7.4	7.4	14.5		14		93				<0.2		1.2	
						4.7	0.3	251	25.0		8.1		29.7		105.3		7.4		14.6		15		94				<0.2		1.3	
SR3	Fine	Moderate	17:35	9.1	Surface	1.0	0.5	87	25.1	25.1	8.2	8.2	28.3	28.3	114.4	114.4	8.0	8.0	11.9	15.9	22	24	-	-	822167	807564	-	-	-	-
						1.0	0.6	94	25.1		8.2		28.3		114.3		8.0		12.0		22		-				-		-	
					Middle	4.6	0.5	90	25.1	25.1	8.2	8.2	28.4	28.4	113.4	113.4	8.0		14.6		24		-				-		-	
						4.6	0.5	95	25.1		8.2		28.4		113.3		8.0		14.7		24		-				-		-	
					Bottom	8.1	0.5	95	25.1	25.1	8.1	8.1	28.5	28.5	112.1	112.1	7.9	7.9	21.0		27		-				-		-	
						8.1	0.5	102	25.1		8.1		28.5		112.0		7.9		20.9		26		-				-		-	
SR4A	Fine	Moderate	18:45	8.0	Surface	1.0	0.5	231	25.1	25.1	8.1	8.1	30.8	30.8	107.7	107.7	7.5	7.4	10.1	15.1	10	12	-	-	817206	807827	-	-	-	-
						1.0	0.6	236	25.1		8.1		30.8		107.6		7.5		10.1		11		-				-		-	
					Middle	4.0	0.6	239	25.0	25.0	8.1	8.1	30.9	30.9	104.8	104.8	7.3		12.9		12		-				-		-	
						4.0	0.6	243	25.0		8.1		30.9		104.8		7.3		13.0		11		-				-		-	
					Bottom	7.0	0.5	233	25.0	25.0	8.1	8.1	31.0	31.0	104.7	104.7	7.3	7.3	22.2		15		-				-		-	
						7.0	0.5	233	25.0		8.1		31.0		104.7		7.3		22.2		14		-				-		-	
SR5A	Fine	Calm	19:06	4.8	Surface	1.0	0.4	270	25.0	25.0	8.1	8.1	31.3	31.3	106.5	106.5	7.4	7.4	11.1	13.6	14	15	-	-	816589	810691	-	-	-	-
						1.0	0.4	282	25.0		8.1		31.3		106.4		7.4		11.2		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	289	25.0	25.0	8.1	8.1	31.5	31.5	104.3	104.3	7.2	7.2	15.9		16		-				-		-	
						3.8	0.3	308	25.0		8.1		31.5		104.2		7.2		16.2		16		-				-		-	
SR6	Fine	Calm	19:36	4.1	Surface	1.0	0.2	255	25.0	25.0	8.1	8.1	31.3	31.3	107.3	107.3	7.4	7.4	10.2	10.6	10	11	-	-	817881	814644	-	-	-	-
						1.0	0.2	271	25.0		8.1		31.3		107.2		7.4		10.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	241	25.0	25.0	8.1	8.1	31.4	31.4	106.1	106.1	7.3	7.3	11.0		11		-				-		-	
						3.1	0.2	257	25.0		8.1		31.4		106.1		7.3		11.0		12		-				-		-	
SR7	Fine	Moderate	19:54	16.0	Surface	1.0	0.1	69	25.1	25.1	8.1	8.1	29.5	29.5	107.8	107.8	7.5	7.4	11.4	16.6	10	12	-	-	823623	823750	-	-	-	-
						1.0	0.1	73	25.1		8.1		29.5		107.8		7.5		11.5		10		-				-		-	
					Middle	8.0	0.3	72	25.0	25.0	8.1	8.1	29.7	29.7	104.9	104.9	7.3		15.0		12		-				-		-	
						8.0	0.3	74	25.0		8.1		29.7		104.9		7.3		15.1		11		-				-		-	
					Bottom	15.0	0.2	95	25.0	25.0	8.1	8.1	29.7	29.7	104.5	104.5	7.3	7.3	23.0		13		-				-		-	
						15.0	0.2	103	25.0		8.1		29.7		104.4		7.3		23.5		14		-				-		-	
SR8	Fine	Moderate	18:32	4.6	Surface	1.0	-	-	25.1	25.1	8.1	8.1	29.8	29.8	108.2	108.3	7.5	7.5	19.5	18.9	22	23	-	-	820503	811682	-	-	-	-
						1.0	-	-	25.1		8.1		29.8		108.3		7.5		19.4		21		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	25.1	25.1	8.1	8.1	29.8	29.8	108.3	108.4	7.6	7.6	18.2		24		-				-		-	
						3.6	-	-	25.1		8.1		29.8		108.4		7.6		18.3		25		-				-		-	

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: SR8 cannot be accessed due to windy weather. 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 10 November 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	14:13	9.1	Surface	1.0	0.1	139	24.8	24.8	8.2	8.2	31.2	31.2	104.9	104.9	7.3	7.2	12.2	17.3	16	19	84	89	815612	804251	<0.2	<0.2	1.0	1.0
						1.0	0.2	141	24.8		8.2		31.2		104.8		7.3		12.2		15		85				<0.2		1.0	
					Middle	4.6	0.1	158	24.8	24.8	8.2	8.2	32.3	32.3	100.8	100.8	7.0		18.0		20		90				<0.2		1.2	
						4.6	0.1	159	24.8		8.2		32.3		100.8		7.0		18.1		21		91				<0.2		1.0	
					Bottom	8.1	0.2	141	24.7	24.7	8.2	8.2	32.5	32.5	100.4	100.4	6.9	6.9	21.7		21		93				<0.2		0.9	
						8.1	0.2	143	24.7		8.2		32.5		100.4		6.9		21.6		20		93				<0.2		1.0	
C2	Cloudy	Moderate	13:00	11.4	Surface	1.0	1.0	166	24.8	24.8	8.2	8.2	29.7	29.7	101.9	101.9	7.1	7.1	15.7	18.8	34	36	83	87	825670	806940	<0.2	<0.2	0.9	0.9
						1.0	1.1	167	24.8		8.2		29.7		101.9		7.1		15.7		37		82				<0.2		0.9	
					Middle	5.7	0.8	160	24.7	24.7	8.2	8.2	29.9	29.9	100.9	100.9	7.1		17.4		36		87				<0.2		1.0	
						5.7	0.8	172	24.7		8.2		29.9		100.9		7.1		17.5		38		86				<0.2		0.9	
					Bottom	10.4	0.4	169	24.7	24.7	8.2	8.2	30.1	30.1	101.0	101.0	7.1	7.1	23.2		34		91				<0.2		0.9	
						10.4	0.4	171	24.7		8.2		30.1		101.0		7.1		23.2		37		91				<0.2		1.0	
C3	Cloudy	Moderate	15:11	12.6	Surface	1.0	0.3	111	24.9	24.9	8.2	8.2	30.7	30.7	106.3	106.2	7.4	7.4	11.5	12.4	10	14	83	87	822118	817823	<0.2	<0.2	0.9	1.0
						1.0	0.3	114	24.9		8.2		30.7		106.0		7.4		11.6		9		84				<0.2		0.9	
					Middle	6.3	0.2	105	24.7	24.7	8.2	8.2	30.7	30.7	104.2	104.3	7.3		12.0		13		87				<0.2		1.0	
						6.3	0.2	114	24.7		8.2		30.7		104.3		7.3		11.9		12		87				<0.2		0.9	
					Bottom	11.6	0.3	54	24.7	24.7	8.2	8.2	30.8	30.8	102.9	103.0	7.2	7.2	13.6		19		91				<0.2		1.0	
						11.6	0.3	55	24.7		8.2		30.8		103.0		7.2		13.6		19		92				<0.2		1.0	
IM1	Cloudy	Moderate	13:53	5.4	Surface	1.0	0.1	134	24.8	24.8	8.2	8.2	30.9	30.9	102.0	102.0	7.1	7.1	17.3	17.7	19	17	86	88	817957	807125	<0.2	<0.2	1.1	1.1
						1.0	0.1	127	24.8		8.2		30.9		101.9		7.1		17.3		18		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.0	139	24.6	24.6	8.2	8.2	31.0	31.0	100.0	100.1	7.0	7.0	18.2		15		88				<0.2		1.0	
						4.4	0.0	112	24.6		8.2		31.0		100.1		7.0		18.1		15		89				<0.2		1.1	
IM2	Cloudy	Moderate	13:45	7.8	Surface	1.0	0.2	170	24.8	24.8	8.2	8.2	30.9	30.9	102.7	102.7	7.2	7.1	17.0	20.4	21	20	85	90	818143	806149	<0.2	<0.2	1.1	1.0
						1.0	0.2	170	24.8		8.2		30.9		102.7		7.1		17.0		22		86				<0.2		1.2	
					Middle	3.9	0.2	163	24.7	24.7	8.2	8.2	31.0	31.0	100.1	100.1	7.0		20.0		21		90				<0.2		1.1	
						3.9	0.2	163	24.7		8.2		31.0		100.0		7.0		20.0		19		90				<0.2		1.1	
					Bottom	6.8	0.2	183	24.6	24.6	8.2	8.2	31.1	31.1	99.9	100.0	7.0	7.0	24.4		19		93				<0.2		0.8	
						6.8	0.2	183	24.6		8.2		31.1		100.0		7.0		24.3		20		94				<0.2		0.8	
IM3	Cloudy	Moderate	13:38	8.1	Surface	1.0	0.3	115	24.8	24.8	8.2	8.2	30.9	30.9	102.9	102.9	7.2	7.1	15.5	18.4	16	17	85	90	818800	805611	<0.2	<0.2	0.8	0.8
						1.0	0.3	115	24.8		8.2		30.9		102.8		7.2		15.5		19		85				<0.2		0.8	
					Middle	4.1	0.2	110	24.7	24.7	8.2	8.2	31.1	31.1	100.1	100.1	7.0		18.4		17		89				<0.2		0.8	
						4.1	0.3	110	24.7		8.2		31.1		100.0		7.0		18.4		17		89				<0.2		0.8	
					Bottom	7.1	0.2	126	24.6	24.6	8.2	8.2	31.5	31.5	99.2	99.3	6.9	6.9	21.5		16		94				<0.2		0.8	
						7.1	0.2	125	24.6		8.2		31.5		99.3		6.9		21.4		15		95				<0.2		0.8	
IM4	Cloudy	Moderate	13:28	8.4	Surface	1.0	0.3	154	24.7	24.7	8.2	8.2	30.8	30.8	101.9	101.9	7.1	7.0	16.7	18.7	20	19	84	89	819718	804617	<0.2	<0.2	0.8	0.8
						1.0	0.3	156	24.7		8.2		30.8		101.8		7.1		16.8		20		85				<0.2		0.8	
					Middle	4.2	0.3	202	24.7	24.7	8.2	8.2	31.0	31.0	99.6	99.6	6.9		18.5		19		88				<0.2		0.8	
						4.2	0.3	207	24.7		8.2		31.0		99.5		6.9		18.7		18		89				<0.2		0.8	
					Bottom	7.4	0.2	207	24.7	24.7	8.2	8.2	31.0	31.0	99.6	99.6	6.9	6.9	20.7		18		93				<0.2		0.9	
						7.4	0.3	207	24.7		8.2		31.0		99.6		6.9		20.9		19		94				<0.2		0.8	
IM5	Cloudy	Moderate	13:18	7.6	Surface	1.0	0.4	207	24.7	24.7	8.2	8.2	31.0	31.0	101.0	101.0	7.0	7.0	16.8	19.4	17	23	86	89	820723	804857	<0.2	<0.2	0.9	0.8
						1.0	0.4	207	24.7		8.2		31.0		101.0		7.0		16.9		18		87				<0.2		0.7	
					Middle	3.8	0.4	200	24.7	24.7	8.2	8.2	31.0	31.0	100.4	100.4	7.0		18.6		19		90				<0.2		0.7	
						3.8	0.5	200	24.7		8.2		31.0		100.4		7.0		18.8		18		90				<0.2		0.9	
					Bottom	6.6	0.3	187	24.7	24.7	8.2	8.2	30.9	30.9	100.2	100.3	7.0	7.0	22.5		33		91				<0.2		0.9	
						6.6	0.3	187	24.7		8.2		30.9		100.3		7.0		22.6		34		91				<0.2		0.8	
IM6	Cloudy	Moderate	13:10	8.0	Surface	1.0	0.3	244	24.8	24.8	8.2	8.2	30.6	30.6	102.6	102.6	7.2	7.2	15.7	18.5	16	23	84	89	821043	805832	<0.2	<0.2	0.8	0.8
						1.0	0.3	226	24.8		8.2		30.6		102.6		7.2		15.8		16		85				<0.2		0.9	
					Middle	4.0	0.3	253	24.8	24.8	8.2	8.2	30.6	30.6	102.3	102.3	7.1		17.4		19		90				<0.2		0.8	
						4.0	0.3	228	24.8		8.2		30.6		102.3		7.1		17.4		20		91				<0.2		0.8	
					Bottom	7.0	0.2	237	24.8	24.8	8.2	8.2	30.6	30.6	102.1	102.1	7.1	7.1	22.4		35		92				<0.2		0.7	
						7.0	0.2	237	24.8		8.2		30.6		102.1		7.1		22.5		31		93				<0.2		0.8	
IM7	Cloudy	Moderate	13:00	9.4	Surface	1.0	0.0	253	24.8	24.8	8.2	8.2	29.7	29.7	102.0	102.0	7.1	7.1	15.9	17.3	20	27	85	89	821343	806819	<0.2	<0.2	1.0	1.0
						1.0	0.0	266	24.8		8.2		29.7		102.0		7.1		15.8		19		86				<0.2		1.0	
					Middle	4.7	0.2	233	24.8	24.8	8.2	8.2	29.7	29.7	101.3	101.3	7.1		16.8		21		89				<0.2		1.0	
						4.7	0.2	235	24.8		8.2		29.7		101.3		7.1		16.7		21		89				<0.2		1.0	
					Bottom	8.4	0.1	264	24.7	24.7	8.2	8.2	30.0	30.0	100.7	100.7	7.1	7.1	19.4		41		93				<0.2		1.0	
						8.4	0.2	268	24.7		8.2		30.0		100.7		7.1		19.3		40		93				<0.2		1.1	
IM8	Cloudy	Moderate	13:31	8.2	Surface	1.0	0.7	176	24.7	24.7	8.2	8.2	31.0	31.0	100.9	101.0	7.0	7.0	18.8	20.9	26	28	84	88	821833	808125	<0.2	<0.2	0.9	0.8
						1.0	0.7	183	24.7		8.2		31.0		101.0		7.0		19.0		26		83				<0.2		0.8	
					Middle	4.1	0.4	170	24.7	24.7	8.2	8.2	31.0	31.0	100.4	100.4	7.0		20.4		22		87				<0.2		0.7	
						4.1	0.4	186	24.7		8.2		31.0		100.4		7.0		20.6		22		88				<0.2		0.8	
					Bottom	7.2	0.3	198	24.7	24.7	8.2	8.2	30.9	30.9	100.2	100.2	7.0	7.0	23.2		34		91				<0.2		0.8	
						7.2	0.3	210	24.7		8.2		30.9		100.2		7.0		23.5		35		92				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 November 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	13:38	7.7	Surface	1.0	0.4	169	24.8	24.8	8.2	8.2	30.7	30.7	102.2	102.2	7.1	7.0	15.9	18.4	15	18	84	87	822102	808793	<0.2	<0.2	0.8	0.8
						1.0	0.4	172	24.8		8.2		30.7		102.1		7.1		16.0		16		83				<0.2		0.8	
					Middle	3.9	0.3	155	24.7	24.7	8.2	8.2	31.0	31.0	99.4	99.4	6.9		18.3		17		87				<0.2		0.8	
						3.9	0.3	158	24.7		8.2		31.0		99.4		6.9		18.2		17		87				<0.2		0.9	
					Bottom	6.7	0.1	103	24.7	24.7	8.2	8.2	31.0	31.0	99.6	99.7	6.9	7.0	20.9		21		91				<0.2		0.8	
						6.7	0.1	109	24.7		8.2		31.0		99.7		7.0		21.0		20		91				<0.2		0.8	
IM10	Cloudy	Moderate	13:49	7.4	Surface	1.0	0.6	143	24.9	24.9	8.2	8.2	30.9	30.9	103.3	103.3	7.2	7.1	14.9	18.7	13	21	84	88	822364	809804	<0.2	<0.2	0.9	0.9
						1.0	0.7	143	24.9		8.2		30.9		103.2		7.2		15.0		14		83				<0.2		1.0	
					Middle	3.7	0.6	148	24.7	24.7	8.2	8.2	31.2	31.2	100.1	100.1	7.0		19.7		15		88				<0.2		0.9	
						3.7	0.6	162	24.7		8.2		31.2		100.0		7.0		19.7		15		88				<0.2		0.8	
					Bottom	6.4	0.5	132	24.6	24.6	8.2	8.2	31.5	31.5	99.3	99.4	6.9	6.9	21.6		34		91				<0.2		0.9	
						6.4	0.5	136	24.6		8.2		31.5		99.4		6.9		21.3		35		91				<0.2		0.9	
IM11	Cloudy	Moderate	14:01	7.8	Surface	1.0	0.6	112	24.8	24.8	8.2	8.2	30.9	30.9	102.3	102.3	7.1	7.1	17.4	20.6	14	23	84	88	822073	811475	<0.2	<0.2	0.8	0.8
						1.0	0.7	115	24.8		8.2		30.9		102.2		7.1		17.4		13		83				<0.2		0.8	
					Middle	3.9	0.5	118	24.7	24.7	8.2	8.2	31.0	31.0	100.0	100.0	7.0		19.9		18		87				<0.2		0.9	
						3.9	0.5	122	24.7		8.2		31.0		100.0		7.0		19.8		18		88				<0.2		0.8	
					Bottom	6.8	0.4	100	24.6	24.6	8.2	8.2	31.1	31.1	99.7	99.8	7.0	7.0	24.6		37		92				<0.2		0.9	
						6.8	0.4	104	24.6		8.2		31.1		99.8		7.0		24.6		36		92				<0.2		0.8	
IM12	Cloudy	Moderate	14:09	8.7	Surface	1.0	0.5	105	24.8	24.8	8.2	8.2	30.9	30.9	102.2	102.2	7.1	7.1	17.4	17.9	20	20	83	87	821458	812036	<0.2	<0.2	0.9	0.9
						1.0	0.5	107	24.8		8.2		30.9		102.2		7.1		17.5		19		83				<0.2		0.9	
					Middle	4.4	0.5	101	24.7	24.7	8.2	8.2	30.9	30.9	101.2	101.2	7.0		17.8		20		86				<0.2		0.9	
						4.4	0.5	108	24.7		8.2		30.9		101.1		7.0		17.9		20		87				<0.2		0.8	
					Bottom	7.7	0.3	92	24.6	24.6	8.2	8.2	31.0	31.0	99.9	100.0	7.0	7.0	18.3		20		91				<0.2		1.0	
						7.7	0.4	98	24.6		8.2		31.0		100.0		7.0		18.3		21		91				<0.2		0.8	
SR1A	Cloudy	Moderate	14:33	7.1	Surface	1.0	-	-	24.8	24.8	8.2	8.2	30.7	30.7	103.7	103.7	7.2	7.2	14.3	16.3	20	22	-	-	820063	812592	-	-	-	-
						1.0	-	-	24.8		8.2		30.7		103.7		7.2		14.4		20		-				-		-	
					Middle	3.6	-	-	24.8	24.8	8.2	8.2	30.7	30.7	103.4	103.4	7.2		16.6		21		-				-		-	
						3.6	-	-	24.8		8.2		30.7		103.3		7.2		16.9		20		-				-		-	
					Bottom	6.1	-	-	24.8	24.8	8.2	8.2	30.7	30.7	102.9	102.9	7.2	7.2	17.8		26		-				-		-	
						6.1	-	-	24.8		8.2		30.7		102.9		7.2		17.6		27		-				-		-	
SR2	Cloudy	Moderate	14:49	4.8	Surface	1.0	0.6	90	24.8	24.8	8.2	8.2	30.7	30.7	103.8	103.8	7.2	7.2	15.1	15.9	12	12	83	85	821448	814150	<0.2	<0.2	0.8	0.9
						1.0	0.6	91	24.8		8.2		30.7		103.8		7.2		15.3		11		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	91	24.8	24.8	8.2	8.2	30.7	30.7	103.4	103.5	7.2	7.2	16.6		12		87				<0.2		0.9	
						3.8	0.3	96	24.8		8.2		30.7		103.5		7.2		16.7		11		87				<0.2		0.9	
SR3	Cloudy	Moderate	13:24	9.7	Surface	1.0	0.7	170	24.8	24.8	8.2	8.2	30.6	30.6	102.7	102.7	7.2	7.2	17.4	21.0	38	37	-	-	822168	807593	-	-	-	-
						1.0	0.8	173	24.8		8.2		30.6		102.7		7.2		17.8		40		-				-		-	
					Middle	4.9	0.4	185	24.8	24.8	8.2	8.2	30.6	30.6	102.1	102.1	7.1		20.5		36		-				-		-	
						4.9	0.4	188	24.8		8.2		30.6		102.1		7.1		20.7		36		-				-		-	
					Bottom	8.7	0.3	212	24.7	24.7	8.2	8.2	30.6	30.6	101.8	101.8	7.1	7.1	24.7		37		-				-		-	
						8.7	0.3	212	24.7		8.2		30.6		101.8		7.1		24.7		35		-				-		-	
SR4A	Cloudy	Moderate	14:34	8.6	Surface	1.0	0.2	77	24.8	24.8	8.2	8.2	30.7	30.7	103.5	103.5	7.2	7.2	16.8	17.0	21	18	-	-	817189	807806	-	-	-	-
						1.0	0.3	79	24.8		8.2		30.7		103.5		7.2		16.8		19		-				-		-	
					Middle	4.3	0.2	77	24.8	24.8	8.2	8.2	30.7	30.7	103.2	103.2	7.2		17.6		18		-				-		-	
						4.3	0.2	81	24.8		8.2		30.7		103.2		7.2		16.1		17		-				-		-	
					Bottom	7.6	0.2	58	24.8	24.8	8.2	8.2	30.7	30.7	102.4	102.4	7.1	7.1	17.5		17		-				-		-	
						7.6	0.2	59	24.8		8.2		30.7		102.4		7.1		17.3		16		-				-		-	
SR5A	Cloudy	Moderate	14:50	5.0	Surface	1.0	0.1	20	24.8	24.8	8.2	8.2	30.7	30.7	105.8	105.7	7.4	7.4	10.9	11.9	11	11	-	-	816594	810694	-	-	-	-
						1.0	0.1	21	24.8		8.2		30.7		105.5		7.3		11.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	65	24.7	24.7	8.2	8.2	30.8	30.8	103.1	103.1	7.2	7.2	12.8		10		-				-		-	
						4.0	0.0	65	24.7		8.2		30.8		103.1		7.2		12.9		11		-				-		-	
SR6	Cloudy	Moderate	15:20	4.3	Surface	1.0	0.1	90	24.8	24.8	8.3	8.3	30.5	30.5	115.3	115.2	8.0	8.0	10.5	11.0	8	9	-	-	817892	814642	-	-	-	-
						1.0	0.1	96	24.8		8.3		30.5		115.1		8.0		10.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	76	24.7	24.7	8.3	8.3	30.6	30.6	109.6	109.5	7.7	7.7	11.5		10		-				-		-	
						3.3	0.1	80	24.7		8.3		30.6		109.3		7.6		11.6		10		-				-		-	
SR7	Cloudy	Moderate	15:37	15.6	Surface	1.0	0.7	87	24.8	24.8	8.3	8.3	30.5	30.5	116.1	116.1	8.1	8.1	10.3	11.4	7	9	-	-	823622	823750	-	-	-	-
						1.0	0.8	89	24.8		8.3		30.5		116.1		8.1		10.3		7		-				-		-	
					Middle	7.8	0.4	90	24.8	24.8	8.3	8.3	30.5	30.5	114.6	114.6	8.0		10.5		9		-				-		-	
						7.8	0.4	90	24.8		8.3		30.5		114.5		8.0		10.6		9		-				-		-	
					Bottom	14.6	0.2	24	24.7	24.7	8.2	8.2	30.6	30.6	108.7	108.7	7.6	7.6	13.3		10		-				-		-	
						14.6	0.2	24	24.7		8.3		30.6		108.7		7.6		13.4		10		-				-		-	
SR8	Cloudy	Moderate	14:25	3.9	Surface	1.0	-	-	24.8	24.8	8.2	8.2	31.2	31.2	105.0	105.0	7.3	7.3	12.1	13.0	21	21	-	-	820491	811649	-	-	-	-
						1.0	-	-	24.8		8.2		31.2		104.9		7.3		12.2		22		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	24.8	24.8	8.2	8.2	31.8	31.8	103.2	103.3	7.1	7.2	13.9		22		-				-		-	
						2.9	-	-	24.8		8.2		31.8		103.3		7.2		14.0		20		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
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 10 November 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	09:14	8.5	Surface	1.0	0.5	45	24.7	24.7	8.1	8.1	30.6	30.6	101.9	101.9	7.1	7.0	14.5	17.0	16	17	86	89	815614	804223	<0.2	<0.2	1.0	0.9
						1.0	0.6	45	24.7		8.1		30.6		101.8		7.1		14.6		17		85				<0.2		0.8	
					Middle	4.3	0.6	43	24.7	24.7	8.1	8.1	31.8	31.8	99.8	99.8	6.9		16.3		17		90				<0.2		0.8	
						4.3	0.6	43	24.7		8.1		31.8		99.8		6.9		16.2		17		89				<0.2		0.8	
					Bottom	7.5	0.6	36	24.7	24.7	8.2	8.2	32.1	32.1	99.8	99.8	6.9	6.9	20.1		17		90				<0.2		0.9	
						7.5	0.6	37	24.7		8.2		32.1		99.8		6.9		20.1		17		94				<0.2		0.9	
C2	Fine	Moderate	10:31	11.3	Surface	1.0	0.8	177	24.8	24.8	8.2	8.2	29.7	29.7	102.0	102.0	7.2	7.2	14.7	19.4	38	35	87	91	825686	806941	<0.2	<0.2	0.9	1.0
						1.0	0.8	182	24.8		8.2		29.7		102.0		7.2		14.6		36		86				<0.2		1.0	
					Middle	5.7	0.2	180	24.8	24.8	8.2	8.2	29.8	29.8	101.2	101.2	7.1		17.9		34		90				<0.2		1.1	
						5.7	0.3	182	24.8		8.2		29.8		101.2		7.1		18.0		35		91				<0.2		1.0	
					Bottom	10.3	0.1	215	24.7	24.7	8.2	8.2	30.2	30.2	100.5	100.6	7.0	7.0	25.1		35		95				<0.2		1.1	
						10.3	0.1	221	24.7		8.2		30.2		100.6		7.0		26.3		34		94				<0.2		1.0	
C3	Cloudy	Moderate	08:26	10.6	Surface	1.0	0.5	254	24.6	24.6	8.1	8.1	30.7	30.7	101.7	101.7	7.1	7.1	12.3	13.7	11	12	85	89	822104	817801	<0.2	<0.2	1.0	1.0
						1.0	0.5	269	24.6		8.1		30.7		101.7		7.1		12.4		11		85				<0.2		1.0	
					Middle	5.3	0.5	255	24.6	24.6	8.1	8.1	30.7	30.7	101.4	101.4	7.1		13.5		12		89				<0.2		0.9	
						5.3	0.5	259	24.6		8.1		30.7		101.3		7.1		13.6		13		89				<0.2		1.0	
					Bottom	9.6	0.4	271	24.6	24.6	8.1	8.1	30.7	30.7	101.3	101.3	7.1	7.1	15.3		13		93				<0.2		1.0	
						9.6	0.4	292	24.6		8.1		30.7		101.3		7.1		15.2		12		93				<0.2		0.9	
IM1	Fine	Moderate	09:33	5.3	Surface	1.0	0.3	359	24.6	24.6	8.1	8.1	31.1	31.1	101.0	101.0	7.1	7.1	17.6	19.4	22	19	91	93	817951	807131	<0.2	<0.2	1.0	1.0
						1.0	0.3	330	24.6		8.1		31.1		101.0		7.0		17.6		20		92				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	14	24.5	24.5	8.2	8.2	31.2	31.2	99.9	99.9	7.0	7.0	21.2		18		94				<0.2		1.0	
						4.3	0.2	15	24.5		8.2		31.2		99.9		7.0		21.1		16		95				<0.2		0.9	
IM2	Fine	Moderate	09:41	7.3	Surface	1.0	0.4	21	24.8	24.8	8.2	8.2	31.0	31.0	102.0	102.0	7.1	7.1	19.4	19.7	17	22	88	92	818180	806175	<0.2	<0.2	1.0	1.0
						1.0	0.4	22	24.8		8.2		31.0		102.0		7.1		19.1		16		88				<0.2		1.0	
					Middle	3.7	0.4	26	24.7	24.7	8.2	8.2	31.0	31.0	101.2	101.2	7.1		17.4		24		91				<0.2		1.0	
						3.7	0.4	27	24.7		8.2		31.0		101.2		7.1		17.8		24		92				<0.2		1.0	
					Bottom	6.3	0.3	27	24.7	24.7	8.1	8.1	31.1	31.1	100.4	100.4	7.0	7.0	22.3		24		95				<0.2		1.0	
						6.3	0.3	27	24.7		8.1		31.1		100.4		7.0		22.3		24		96				<0.2		1.1	
IM3	Fine	Moderate	09:49	7.7	Surface	1.0	0.5	24	24.7	24.7	8.2	8.2	31.1	31.1	101.0	101.0	7.0	7.0	14.6	17.9	21	21	88	93	818790	805584	<0.2	<0.2	1.0	1.0
						1.0	0.5	26	24.7		8.2		31.1		101.0		7.0		14.3		22		89				<0.2		0.9	
					Middle	3.9	0.4	25	24.7	24.7	8.2	8.2	31.1	31.1	100.2	100.2	7.0		16.6		20		92				<0.2		1.0	
						3.9	0.4	27	24.7		8.2		31.1		100.2		7.0		16.6		20		93				<0.2		1.0	
					Bottom	6.7	0.3	14	24.6	24.6	8.2	8.2	31.1	31.1	99.8	99.8	7.0	7.0	22.5		22		98				<0.2		1.0	
						6.7	0.3	15	24.6		8.2		31.1		99.8		7.0		22.6		22		98				<0.2		1.0	
IM4	Fine	Moderate	09:58	7.7	Surface	1.0	0.5	8	24.7	24.7	8.2	8.2	31.0	31.0	101.1	101.1	7.0	7.0	14.3	16.9	27	31	86	91	819728	804594	<0.2	<0.2	1.0	1.0
						1.0	0.5	8	24.7		8.2		31.0		101.0		7.0		14.2		27		87				<0.2		1.0	
					Middle	3.9	0.4	1	24.6	24.6	8.2	8.2	31.0	31.0	100.4	100.4	7.0		15.4		33		90				<0.2		0.9	
						3.9	0.5	1	24.6		8.2		31.0		100.4		7.0		15.6		30		90				<0.2		1.0	
					Bottom	6.7	0.3	1	24.6	24.6	8.2	8.2	31.0	31.0	100.1	100.1	7.0	7.0	20.7		33		95				<0.2		1.0	
						6.7	0.3	1	24.6		8.2		31.0		100.1		7.0		20.8		35		96				<0.2		0.9	
IM5	Fine	Moderate	10:06	6.7	Surface	1.0	0.5	359	24.7	24.7	8.2	8.2	30.7	30.7	101.0	101.0	7.1	7.1	14.8	18.6	24	25	89	91	820745	804854	<0.2	<0.2	0.9	1.0
						1.0	0.5	330	24.7		8.2		30.7		101.0		7.1		14.8		23		89				<0.2		1.0	
					Middle	3.4	0.5	12	24.6	24.6	8.2	8.2	30.8	30.8	100.1	100.1	7.0		18.0		22		90				<0.2		0.9	
						3.4	0.5	12	24.6		8.2		30.8		100.1		7.0		18.4		24		91				<0.2		0.9	
					Bottom	5.7	0.4	14	24.6	24.6	8.2	8.2	31.0	31.0	99.5	99.5	6.9	6.9	22.8		27		94				<0.2		1.0	
						5.7	0.4	14	24.6		8.2		31.0		99.5		6.9		22.8		27		94				<0.2		1.0	
IM6	Fine	Moderate	10:16	7.1	Surface	1.0	0.2	338	24.7	24.7	8.2	8.2	30.5	30.5	102.2	102.2	7.1	7.1	16.2	19.0	16	17	89	92	821074	805849	<0.2	<0.2	0.9	0.9
						1.0	0.3	347	24.7		8.2		30.5		102.2		7.1		16.3		17		88				<0.2		0.9	
					Middle	3.6	0.2	334	24.7	24.7	8.2	8.2	30.5	30.5	102.0	102.0	7.1		19.5		17		92				<0.2		0.9	
						3.6	0.2	342	24.7		8.2		30.5		102.0		7.1		19.8		16		93				<0.2		1.0	
					Bottom	6.1	0.2	358	24.7	24.7	8.2	8.2	30.5	30.5	101.8	101.8	7.1	7.1	21.2		17		95				<0.2		0.9	
						6.1	0.2	329	24.7		8.2		30.5		101.8		7.1		21.1		18		96				<0.2		0.9	
IM7	Fine	Moderate	10:24	8.5	Surface	1.0	0.1	234	24.8	24.8	8.2	8.2	29.7	29.7	101.8	101.8	7.1	7.1	14.9	19.4	18	18	86	92	821359	806854	<0.2	<0.2	0.9	0.9
						1.0	0.1	242	24.8		8.2		29.7		101.7		7.1		14.9		18		88				<0.2		0.9	
					Middle	4.3	0.0	43	24.8	24.8	8.2	8.2	29.8	29.8	101.0	101.0	7.1		18.8		18		91				<0.2		0.9	
						4.3	0.0	45	24.8		8.2		29.8		101.0		7.1		18.9		17		92				<0.2		0.8	
					Bottom	7.5	0.1	63	24.7	24.7	8.2	8.2	29.9	29.9	100.6	100.6	7.1	7.1	24.6		20		96				<0.2		0.8	
						7.5	0.1	63	24.7		8.2		29.9		100.6		7.1		24.3		19		96				<0.2		0.9	
IM8	Fine	Moderate	10:00	7.8	Surface	1.0	0.4	199	24.7	24.7	8.2	8.2	30.7	30.7	101.3	101.3	7.1	7.1	15.7	18.3	17	18	86	90	821819	808143	<0.2	<0.2	0.9	0.9
						1.0	0.4	202	24.7		8.2		30.7		101.2		7.1		15.6		17		86				<0.2		1.0	
					Middle	3.9	0.3	200	24.7	24.7	8.2	8.2	30.8	30.8	100.5	100.5	7.0		17.2		17		91				<0.2		0.8	
						3.9	0.3	205	24.7		8.2		30.8		100.5		7.0		17.1		17		90				<0.2		0.8	
					Bottom	6.8	0.2	221	24.6	24.6	8.2	8.2	30.9	30.9	99.8	99.9	7.0	7.0	22.2		20		94				<0.2		0.9	
						6.8	0.3	237	24.6		8.2		30.9		99.9		7.0		22.1		18		95				<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 10 November 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	09:51	7.6	Surface	1.0	0.3	215	24.7	24.7	8.2	8.2	31.0	31.0	101.2	101.2	7.1	7.1	17.5	19.7	17	22	87	90	822115	808820	<0.2	<0.2	0.8	1.0
						1.0	0.3	226	24.7		8.2		31.0		101.2		7.1		17.5		18		86				<0.2		1.0	
					Middle	3.8	0.2	249	24.7	24.7	8.2	8.2	31.0	31.0	100.5	100.5	7.0		19.2		19		90				<0.2		0.9	
						3.8	0.2	269	24.7		8.2		31.0		100.5		7.0		19.0		18		90				<0.2		1.0	
					Bottom	6.6	0.2	270	24.6	24.6	8.2	8.2	31.0	31.0	100.1	100.2	7.0	7.0	22.6		29		94				<0.2		1.1	
						6.6	0.2	281	24.6		8.2		31.0		100.2		7.0		22.5		28		94				<0.2		1.1	
IM10	Fine	Moderate	09:42	8.1	Surface	1.0	0.1	188	24.7	24.7	8.2	8.2	31.1	31.1	100.8	100.8	7.0	7.0	18.4	21.0	21	27	86	90	822380	809782	<0.2	<0.2	1.0	1.1
						1.0	0.1	206	24.7		8.2		31.1		100.7		7.0		18.6		20		87				<0.2		1.0	
					Middle	4.1	0.1	325	24.7	24.7	8.2	8.2	31.1	31.1	100.3	100.3	7.0		20.2		22		90				<0.2		1.1	
						4.1	0.1	355	24.7		8.2		31.1		100.3		7.0		20.2		25		90				<0.2		1.0	
					Bottom	7.1	0.1	309	24.7	24.7	8.2	8.2	31.1	31.1	99.9	99.9	7.0	7.0	24.2		35		94				<0.2		1.0	
						7.1	0.1	324	24.7		8.2		31.1		99.9		7.0		24.3		36		94				<0.2		1.2	
IM11	Fine	Moderate	09:31	7.8	Surface	1.0	0.1	210	24.7	24.7	8.2	8.2	31.0	31.0	101.8	101.8	7.1	7.1	14.6	16.9	17	23	86	90	822049	811441	<0.2	<0.2	1.2	1.1
						1.0	0.1	214	24.7		8.2		31.0		101.8		7.1		14.6		18		87				<0.2		1.0	
					Middle	3.9	0.1	300	24.7	24.7	8.2	8.2	31.1	31.1	100.6	100.6	7.0		16.7		22		90				<0.2		1.1	
						3.9	0.1	317	24.7		8.2		31.1		100.6		7.0		16.7		22		90				<0.2		1.1	
					Bottom	6.8	0.2	322	24.7	24.7	8.2	8.2	31.1	31.1	100.5	100.5	7.0	7.0	19.6		30		94				<0.2		1.1	
						6.8	0.2	329	24.7		8.2		31.1		100.5		7.0		19.5		31		94				<0.2		1.1	
IM12	Fine	Moderate	09:23	8.9	Surface	1.0	0.1	244	24.6	24.6	8.2	8.2	31.1	31.1	101.2	101.2	7.1	7.1	17.4	19.2	22	24	86	90	821437	812045	<0.2	<0.2	1.0	1.0
						1.0	0.1	252	24.6		8.2		31.1		101.2		7.1		17.5		23		86				<0.2		1.1	
					Middle	4.5	0.2	289	24.6	24.6	8.1	8.1	31.1	31.1	100.3	100.3	7.0		18.0		24		91				<0.2		1.0	
						4.5	0.2	291	24.6		8.1		31.1		100.3		7.0		18.1		25		90				<0.2		1.0	
					Bottom	7.9	0.3	291	24.5	24.5	8.1	8.1	31.2	31.2	99.6	99.6	7.0	7.0	22.2		23		95				<0.2		1.0	
						7.9	0.3	294	24.5		8.1		31.2		99.6		7.0		22.2		24		94				<0.2		1.0	
SR1A	Cloudy	Moderate	08:58	6.9	Surface	1.0	-	-	24.6	24.6	8.1	8.1	30.8	30.8	99.7	99.7	7.0	7.0	13.5	14.6	15	14	-	-	820073	812580	-	-	-	-
						1.0	-	-	24.6		8.1		30.8		99.7		7.0		13.5		14		-				-		-	
					Middle	3.5	-	-	24.6	24.6	8.1	8.1	30.8	30.8	99.4	99.4	6.9		14.1		16		-				-		-	
						3.5	-	-	24.6		8.1		30.8		99.3		6.9		14.1		15		-				-		-	
					Bottom	5.9	-	-	24.5	24.5	8.1	8.1	31.1	31.1	98.7	98.7	6.9	6.9	16.2		14		-				-		-	
						5.9	-	-	24.5		8.1		31.1		98.7		6.9		16.3		12		-				-		-	
SR2	Cloudy	Moderate	08:46	4.8	Surface	1.0	0.1	33	24.6	24.6	8.1	8.1	30.8	30.8	99.7	99.7	7.0	7.0	13.6	13.9	17	17	86	88	821452	814179	<0.2	<0.2	1.0	1.1
						1.0	0.1	34	24.6		8.1		30.8		99.7		7.0		13.7		16		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	14	24.6	24.6	8.1	8.1	30.8	30.8	99.4	99.4	7.0	7.0	14.2		16		90				<0.2		1.1	
						3.8	0.1	14	24.6		8.1		30.8		99.4		7.0		14.1		18		90				<0.2		1.0	
SR3	Fine	Moderate	10:09	8.2	Surface	1.0	0.6	180	24.7	24.7	8.2	8.2	30.5	30.5	102.3	102.3	7.1	7.1	14.8	19.5	18	19	-	-	822146	807585	-	-	-	-
						1.0	0.6	196	24.7		8.2		30.5		102.3		7.1		15.0		19		-				-		-	
					Middle	4.1	0.3	235	24.7	24.7	8.2	8.2	30.5	30.5	101.9	101.9	7.1		19.8		19		-				-		-	
						4.1	0.3	240	24.7		8.2		30.5		101.9		7.1		19.8		19		-				-		-	
					Bottom	7.2	0.4	247	24.7	24.7	8.2	8.2	30.5	30.5	101.9	101.9	7.1	7.1	23.7		20		-				-		-	
						7.2	0.4	269	24.7		8.2		30.5		101.9		7.1		23.9		20		-				-		-	
SR4A	Cloudy	Calm	08:51	8.8	Surface	1.0	0.2	73	24.6	24.6	8.1	8.1	30.8	30.8	99.6	99.6	7.0	7.0	13.6	14.9	16	18	-	-	817202	807808	-	-	-	-
						1.0	0.2	74	24.6		8.1		30.8		99.6		7.0		13.6		18		-				-		-	
					Middle	4.4	0.3	75	24.6	24.6	8.1	8.1	30.9	30.9	99.3	99.3	6.9		14.3		17		-				-		-	
						4.4	0.3	81	24.6		8.1		30.9		99.2		6.9		14.3		17		-				-		-	
					Bottom	7.8	0.3	64	24.5	24.5	8.1	8.1	31.2	31.2	98.4	98.4	6.9	6.9	16.9		20		-				-		-	
						7.8	0.3	68	24.5		8.1		31.2		98.4		6.9		17.0		18		-				-		-	
SR5A	Cloudy	Calm	08:34	4.2	Surface	1.0	0.1	317	24.6	24.6	8.1	8.1	30.7	30.7	101.4	101.4	7.1	7.1	13.4	14.5	13	11	-	-	816583	810672	-	-	-	-
						1.0	0.1	340	24.6		8.1		30.7		101.3		7.1		13.3		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	325	24.6	24.6	8.1	8.1	30.7	30.7	101.1	101.1	7.1	7.1	15.7		9		-				-		-	
						3.2	0.1	347	24.6		8.1		30.7		101.1		7.1		15.8		9		-				-		-	
SR6	Cloudy	Calm	08:06	3.8	Surface	1.0	0.1	242	24.6	24.6	8.0	8.0	30.5	30.5	102.8	102.8	7.2	7.2	14.3	14.8	14	17	-	-	817891	814673	-	-	-	-
						1.0	0.1	265	24.6		8.0		30.5		102.8		7.2		14.3		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	238	24.6	24.6	8.0	8.0	30.5	30.5	102.3	102.4	7.2	7.2	15.4		19		-				-		-	
						2.8	0.1	248	24.6		8.0		30.5		102.4		7.2		15.4		19		-				-		-	
SR7	Cloudy	Moderate	08:00	14.8	Surface	1.0	0.1	272	24.6	24.6	8.1	8.1	30.5	30.5	103.3	103.3	7.2	7.2	14.1	14.7	13	16	-	-	823644	823718	-	-	-	-
						1.0	0.1	293	24.6		8.1		30.5		103.3		7.2		14.0		13		-				-		-	
					Middle	7.4	0.1	86	24.6	24.6	8.1	8.1	30.5	30.5	102.9	102.9	7.2		14.3		17		-				-		-	
						7.4	0.1	86	24.6		8.1		30.5		102.9		7.2		14.2		17		-				-		-	
					Bottom	13.8	0.1	90	24.6	24.6	8.0	8.0	30.5	30.5	102.6	102.7	7.2	7.2	14.5		18		-				-		-	
						13.8	0.1	94	24.6		8.0		30.5		102.7		7.2		16.9		18		-				-		-	
SR8	Fine	Moderate	09:13	5.1	Surface	1.0	-	-	24.7	24.7	8.2	8.2	30.4	30.4	101.9	101.9	7.1	7.1	13.7	17.2	17	18	-	-	820485	811676	-	-	-	-
						1.0	-	-	24.7		8.2		30.4		101.8		7.1		13.9		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.7	24.7	8.1	8.1	31.8	31.8	99.9	100.0	6.9	6.9	20.5		18		-				-		-	
						4.1	-	-	24.7		8.1		31.8		100.0		6.9		20.5		19		-				-		-	

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 November 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	03:34	8.1	Surface	1.0	0.1	162	24.9	24.9	8.0	8.0	29.6	29.6	95.5	95.5	6.7	6.7	11.2	12.3	12	10	91	92	815617	804264	<0.2	<0.2	1.4	1.4
						1.0	0.1	163	24.9		8.0		29.6		95.4		6.7		11.2		12		92				<0.2		1.3	
					Middle	4.1	0.2	154	24.9	24.9	8.0	8.0	29.8	29.8	94.6	94.6	6.6		12.1		10		92				<0.2		1.6	
						4.1	0.2	154	24.9		8.0		29.8		94.6		6.6		12.1		9		92				<0.2		1.4	
					Bottom	7.1	0.0	167	24.8	24.8	8.0	8.0	30.5	30.5	94.3	94.4	6.6	6.6	13.5		9		93				<0.2		1.2	
						7.1	0.0	172	24.8		8.0		30.5		94.4		6.6		13.6		7		94				<0.2		1.4	
C2	Cloudy	Moderate	04:54	11.2	Surface	1.0	0.2	150	25.1	25.1	7.9	7.9	25.5	25.5	91.7	91.7	6.6	6.6	14.3	16.0	6	6	86	88	825665	806941	<0.2	<0.2	2.6	2.5
						1.0	0.2	162	25.1		7.9		25.5		91.7		6.6		14.3		5		85				<0.2		2.4	
					Middle	5.6	0.3	212	25.1	25.1	8.0	8.0	28.0	28.0	91.9	91.9	6.5		14.4		4		87				<0.2		2.4	
						5.6	0.3	216	25.1		8.0		28.0		91.9		6.5		14.4		7		87				<0.2		2.5	
					Bottom	10.2	0.2	180	25.1	25.1	8.0	8.0	28.4	28.4	93.2	93.2	6.5	6.5	19.3		6		89				<0.2		2.5	
						10.2	0.3	190	25.1		8.0		28.4		93.2		6.5		19.3		5		91				<0.2		2.6	
C3	Cloudy	Moderate	02:53	11.4	Surface	1.0	0.1	63	25.0	25.0	7.9	7.9	28.3	28.3	94.2	94.2	6.6	6.6	10.2	10.9	9	9	87	89	822113	817825	<0.2	<0.2	1.7	1.7
						1.0	0.1	62	25.0		7.9		28.3		94.2		6.6		10.2		8		88				<0.2		1.6	
					Middle	5.7	0.2	75	25.1	25.1	7.9	7.9	28.6	28.6	93.1	93.1	6.5		10.9		9		89				<0.2		1.5	
						5.7	0.2	90	25.1		7.9		28.6		93.1		6.5		10.9		10		88				<0.2		1.6	
					Bottom	10.4	0.2	65	25.1	25.1	7.9	7.9	29.2	29.2	93.9	93.9	6.6	6.6	11.7		7		91				<0.2		1.9	
						10.4	0.2	76	25.1		7.9		29.2		93.9		6.6		11.7		8		91				<0.2		1.8	
IM1	Cloudy	Moderate	03:52	4.6	Surface	1.0	0.1	177	24.9	24.9	8.0	8.0	30.0	30.0	93.9	93.9	6.6	6.6	15.5	16.2	10	10	86	90	817965	807114	<0.2	<0.2	1.2	1.3
						1.0	0.1	182	24.9		8.0		30.0		93.9		6.6		15.6		10		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	167	24.8	24.8	8.0	8.0	30.3	30.3	94.9	95.0	6.6	6.6	16.9		10		93				<0.2		1.3	
						3.6	0.2	171	24.8		8.0		30.3		95.0		6.6		16.9		10		94				<0.2		1.2	
IM2	Cloudy	Moderate	04:00	6.7	Surface	1.0	0.2	165	24.9	24.9	8.1	8.1	29.3	29.3	95.5	95.5	6.7	6.7	11.0	11.4	10	11	86	90	818174	806179	<0.2	<0.2	1.3	1.4
						1.0	0.2	172	24.9		8.1		29.3		95.5		6.7		11.0		9		87				<0.2		1.3	
					Middle	3.4	0.2	290	24.9	24.9	8.1	8.1	29.6	29.6	94.9	94.9	6.6		11.5		9		89				<0.2		1.3	
						3.4	0.2	303	24.9		8.1		29.6		94.9		6.6		11.5		11		91				<0.2		1.4	
					Bottom	5.7	0.1	284	24.9	24.9	8.1	8.1	29.6	29.6	95.2	95.3	6.7	6.7	11.6		14		94				<0.2		1.4	
						5.7	0.2	284	24.9		8.1		29.6		95.3		6.7		11.7		13		95				<0.2		1.5	
IM3	Cloudy	Moderate	04:06	7.0	Surface	1.0	0.2	188	24.9	24.9	8.0	8.0	28.5	28.5	95.7	95.7	6.7	6.7	11.9	14.2	8	9	86	90	818784	805589	<0.2	<0.2	1.8	1.8
						1.0	0.2	192	24.9		8.0		28.5		95.7		6.7		11.9		6		86				<0.2		1.7	
					Middle	3.5	0.1	126	24.9	24.9	8.1	8.1	28.9	28.9	96.0	96.1	6.7		14.1		10		89				<0.2		2.0	
						3.5	0.1	135	24.9		8.1		29.0		96.1		6.7		14.1		11		90				<0.2		1.9	
					Bottom	6.0	0.1	115	24.9	24.9	8.1	8.1	29.1	29.1	96.6	96.6	6.8	6.8	16.5		9		93				<0.2		1.6	
						6.0	0.1	122	24.9		8.1		29.1		96.6		6.8		16.4		10		93				<0.2		2.0	
IM4	Cloudy	Moderate	04:14	6.8	Surface	1.0	0.3	217	25.0	25.0	8.0	8.0	28.4	28.4	95.1	95.1	6.7	6.7	11.6	13.7	12	10	86	90	819729	804599	<0.2	<0.2	1.6	1.6
						1.0	0.4	222	25.0		8.0		28.4		95.1		6.7		11.7		14		87				<0.2		1.5	
					Middle	3.4	0.2	226	24.9	24.9	8.0	8.0	28.9	28.9	95.7	95.7	6.7		14.4		8		90				<0.2		1.5	
						3.4	0.2	237	24.9		8.0		28.9		95.7		6.7		14.5		8		91				<0.2		1.8	
					Bottom	5.8	0.2	240	24.9	24.9	8.0	8.0	29.0	29.0	96.1	96.1	6.7	6.8	15.0		9		92				<0.2		1.7	
						5.8	0.3	222	24.9		8.0		29.0		96.1		6.8		15.0		9		93				<0.2		1.7	
IM5	Cloudy	Moderate	04:20	6.5	Surface	1.0	0.4	251	25.0	25.0	8.0	8.0	28.2	28.2	94.8	94.8	6.7	6.7	10.3	11.9	9	8	86	90	820714	804851	<0.2	<0.2	1.8	1.9
						1.0	0.4	270	25.0		8.0		28.2		94.8		6.7		10.4		7		88				<0.2		1.9	
					Middle	3.3	0.4	233	25.0	25.0	8.0	8.0	28.8	28.8	95.7	95.7	6.7		12.1		6		90				<0.2		2.2	
						3.3	0.4	245	25.0		8.0		28.8		95.7		6.7		12.2		8		91				<0.2		2.0	
					Bottom	5.5	0.1	190	24.9	24.9	8.0	8.0	29.0	29.0	96.3	96.3	6.8	6.8	13.3		8		92				<0.2		1.8	
						5.5	0.1	202	24.9		8.0		29.0		96.3		6.8		13.3		8		92				<0.2		1.9	
IM6	Cloudy	Moderate	04:28	6.3	Surface	1.0	0.5	222	25.0	25.0	8.0	8.0	27.8	27.8	93.1	93.2	6.6	6.6	10.7	11.5	9	11	86	89	821051	805806	<0.2	<0.2	2.0	2.0
						1.0	0.5	232	25.0		8.0		27.8		93.2		6.6		10.8		9		86				<0.2		2.1	
					Middle	3.2	0.3	238	25.0	25.0	8.0	8.0	27.8	27.8	93.8	93.8	6.6		11.4		10		89				<0.2		2.2	
						3.2	0.4	253	25.0		8.0		27.8		93.8		6.6		11.4		12		90				<0.2		1.9	
					Bottom	5.3	0.3	224	25.0	25.0	8.0	8.0	27.8	27.8	94.8	94.9	6.7	6.7	12.3		11		92				<0.2		1.8	
						5.3	0.3	234	25.0		8.0		27.8		94.9		6.7		12.4		12		93				<0.2		1.9	
IM7	Cloudy	Moderate	04:34	7.5	Surface	1.0	0.4	218	25.1	25.1	7.9	7.9	27.6	27.6	93.3	93.3	6.6	6.6	9.6	9.9	10	10	86	90	821328	806820	<0.2	<0.2	2.1	2.1
						1.0	0.5	228	25.1		7.9		27.6		93.3		6.6		9.6		8		87				<0.2		2.1	
					Middle	3.8	0.5	232	25.0	25.0	8.0	8.0	27.7	27.7	93.8	93.8	6.6		9.9		12		90				<0.2		2.0	
						3.8	0.5	241	25.0		8.0		27.7		93.8		6.6		9.9		10		91				<0.2		2.2	
					Bottom	6.5	0.4	248	25.0	25.0	8.0	8.0	27.8	27.8	95.1	95.2	6.7	6.7	10.3		12		93				<0.2		2.2	
						6.5	0.4	251	25.0		8.0		27.8		95.2		6.7		10.3		10		93				<0.2		2.0	
IM8	Cloudy	Moderate	04:17	7.2	Surface	1.0	0.3	136	24.9	24.9	8.1	8.1	27.7	27.7	87.4	87.5	6.2	6.3	13.0	11.4	7	7	86	89	821806	808149	<0.2	<0.2	1.9	2.0
						1.0	0.3	143	24.9		8.1		27.7		87.6		6.2		13.0		7		85				<0.2		2.1	
					Middle	3.6	0.2	148	24.8	24.8	8.1	8.1	29.4	29.4	89.3	89.3	6.3		9.1		7		89				<0.2		2.0	
						3.6	0.2	155	24.8		8.1		29.4		89.3		6.3		9.1		7		90				<0.2		1.9	
					Bottom	6.2	0.2	155	24.8	24.8	8.1	8.1	29.5	29.5	89.7	89.8	6.3	6.3	12.2		7		92				<0.2		2.0	
						6.2	0.2	166	24.8		8.1		29.4		89.8		6.3		12.2		6		92				<0.2		2.0	

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 13 November 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	04:12	7.2	Surface	1.0	0.3	120	24.7	24.7	8.1	8.1	28.7	28.8	89.2	89.2	6.3	6.3	7.1	9.3	7	7	85	89	822114	808793	<0.2	<0.2	2.2	2.2
						1.0	0.3	128	24.7		8.1		28.8		89.2		6.3		7.5		9		85				<0.2		2.2	
					Middle	3.6	0.3	133	24.8	24.8	8.1	8.1	29.7	29.6	89.0	89.0	6.2		11.0		9		89				<0.2		2.2	
						3.6	0.3	144	24.8		8.1		29.6		88.9		6.2		11.0		8		91				<0.2		2.1	
					Bottom	6.2	0.2	148	24.7	24.7	8.1	8.1	29.1	29.1	88.2	88.1	6.2	6.2	9.9		5		92				<0.2		2.0	
						6.2	0.2	149	24.7		8.1		29.1		88.0		6.2		9.6		5		92				<0.2		2.2	
IM10	Cloudy	Moderate	04:05	7.2	Surface	1.0	0.1	132	24.8	24.8	8.1	8.1	29.2	29.2	86.4	86.3	6.1	5.9	8.8	12.0	7	6	85	89	822381	809780	<0.2	<0.2	2.1	2.0
						1.0	0.1	150	24.8		8.1		29.3		86.2		6.1		9.0		5		86				<0.2		2.0	
					Middle	3.6	0.1	182	24.8	24.8	8.1	8.1	29.8	29.8	82.9	82.3	5.8		10.6		6		90				<0.2		2.0	
						3.6	0.1	185	24.8		8.1		29.8		81.7		5.7		10.7		6		90				<0.2		2.0	
					Bottom	6.2	0.2	166	24.8	24.8	8.1	8.1	29.9	29.9	74.8	74.9	5.2	5.3	16.3		6		92				<0.2		2.1	
						6.2	0.2	176	24.8		8.1		29.9		75.0		5.3		16.3		6		91				<0.2		2.0	
IM11	Cloudy	Moderate	03:56	7.3	Surface	1.0	0.1	133	24.8	24.8	8.1	8.1	28.4	28.4	91.6	91.6	6.5	6.5	10.2	9.3	5	5	85	89	822053	811439	<0.2	<0.2	2.1	2.2
						1.0	0.1	137	24.8		8.1		28.4		91.6		6.5		10.3		7		87				<0.2		2.0	
					Middle	3.7	0.1	133	24.7	24.7	8.1	8.1	28.4	28.4	91.6	91.6	6.5		9.4		4		91				<0.2		2.3	
						3.7	0.1	156	24.7		8.1		28.4		91.6		6.5		9.2		5		89				<0.2		2.2	
					Bottom	6.3	0.1	188	24.8	24.8	8.1	8.1	28.4	28.4	92.0	92.1	6.5	6.5	8.4		4		92				<0.2		2.4	
						6.3	0.1	206	24.8		8.1		28.4		92.1		6.5		8.4		5		92				<0.2		2.2	
IM12	Cloudy	Moderate	03:45	8.7	Surface	1.0	0.0	141	25.0	25.0	8.1	8.1	27.8	27.8	95.3	95.3	6.7	6.7	6.9	7.1	6	7	86	89	821438	812056	<0.2	<0.2	1.5	1.7
						1.0	0.0	143	25.0		8.1		27.8		95.3		6.7		6.9		8		86				<0.2		1.8	
					Middle	4.4	0.1	160	25.1	25.1	8.1	8.1	27.9	27.9	94.1	94.1	6.6		7.8		6		89				<0.2		1.8	
						4.4	0.1	165	25.1		8.1		27.9		94.1		6.6		7.8		8		89				<0.2		1.7	
					Bottom	7.7	0.1	165	25.1	25.1	8.1	8.1	28.0	28.0	94.7	94.7	6.7	6.7	6.6		6		92				<0.2		1.8	
						7.7	0.1	171	25.1		8.1		28.0		94.7		6.7		6.6		8		92				<0.2		1.8	
SR1A	Cloudy	Moderate	03:27	6.8	Surface	1.0	-	-	25.0	25.0	8.0	8.0	28.1	28.1	95.5	95.5	6.7	6.7	9.5	12.8	8	8	-	-	820073	812586	-	-	-	-
						1.0	-	-	25.0		8.0		28.1		95.5		6.7		9.5		7		-				-		-	
					Middle	3.4	-	-	25.1	25.1	8.0	8.0	28.3	28.3	95.5	95.5	6.7		9.9		8		-				-		-	
						3.4	-	-	25.1		8.0		28.3		95.5		6.7		9.9		8		-				-		-	
					Bottom	5.8	-	-	25.1	25.1	8.0	8.0	28.8	28.8	95.1	95.1	6.7	6.7	18.9		7		-				-		-	
						5.8	-	-	25.1		8.0		28.8		95.1		6.7		18.9		9		-				-		-	
SR2	Cloudy	Moderate	03:15	4.1	Surface	1.0	0.1	139	25.0	25.0	7.9	7.9	28.1	28.1	95.5	95.5	6.7	6.7	10.7	11.2	11	10	87	89	821443	814187	<0.2	<0.2	1.7	1.7
						1.0	0.1	141	25.0		7.9		28.1		95.5		6.7		10.7		10		86				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	116	25.0	25.0	8.0	8.0	28.2	28.2	96.4	96.4	6.8	6.8	11.6		9		91				<0.2		1.6	
						3.1	0.1	117	25.0		8.0		28.2		96.4		6.8		11.6		11		91				<0.2		1.8	
SR3	Cloudy	Moderate	04:34	8.2	Surface	1.0	0.2	181	24.9	24.9	8.1	8.1	26.1	26.1	85.0	85.0	6.1	6.1	6.8	8.4	7	8	-	-	822138	807587	-	-	-	-
						1.0	0.2	185	24.9		8.1		26.2		84.9		6.1		6.9		7		-				-		-	
					Middle	4.1	0.2	218	24.9	24.9	8.1	8.1	26.3	26.3	84.9	84.9	6.1		8.0		9		-				-		-	
						4.1	0.2	219	24.9		8.1		26.3		84.9		6.1		8.1		7		-				-		-	
					Bottom	7.2	0.2	228	24.9	24.9	8.1	8.1	26.4	26.4	85.0	85.0	6.1	6.1	10.2		8		-				-		-	
						7.2	0.2	239	24.9		8.1		26.4		85.0		6.1		10.2		8		-				-		-	
SR4A	Cloudy	Calm	03:15	7.3	Surface	1.0	0.3	61	25.0	25.0	8.0	8.0	30.2	30.2	93.0	93.0	6.5	6.5	14.0	14.6	20	20	-	-	817200	807806	-	-	-	-
						1.0	0.3	65	25.0		8.0		30.2		93.0		6.5		14.1		18		-				-		-	
					Middle	3.7	0.3	54	25.0	25.0	8.0	8.0	30.2	30.2	93.1	93.1	6.5		14.7		20		-				-		-	
						3.7	0.3	55	25.0		8.0		30.2		93.1		6.5		14.7		21		-				-		-	
					Bottom	6.3	0.2	108	25.0	25.0	8.0	8.0	30.2	30.2	94.0	94.1	6.6	6.6	15.1		23		-				-		-	
						6.3	0.2	109	25.0		8.0		30.2		94.1		6.6		15.1		20		-				-		-	
SR5A	Cloudy	Calm	03:00	3.8	Surface	1.0	0.1	146	24.9	24.9	8.0	8.0	30.2	30.2	95.6	95.6	6.7	6.7	12.0	12.0	14	13	-	-	816569	810689	-	-	-	-
						1.0	0.1	151	24.9		8.0		30.2		95.6		6.7		12.0		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	77	24.9	24.9	8.0	8.0	30.2	30.2	96.2	96.2	6.7	6.7	12.0		12		-				-		-	
						2.8	0.1	82	24.9		8.0		30.2		96.2		6.7		12.0		12		-				-		-	
SR6	Cloudy	Calm	02:31	3.6	Surface	1.0	0.1	124	24.9	24.9	8.0	8.0	30.3	30.3	95.1	95.1	6.6	6.6	9.5	10.9	8	9	-	-	817916	814639	-	-	-	-
						1.0	0.1	125	24.9		8.0		30.3		95.0		6.6		9.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	161	25.0	25.0	8.0	8.0	30.5	30.5	95.5	95.5	6.6	6.6	12.2		10		-				-		-	
						2.6	0.1	165	25.0		8.0		30.5		95.5		6.6		12.2		10		-				-		-	
SR7	Cloudy	Moderate	02:18	16.2	Surface	1.0	0.3	71	25.0	25.0	7.9	7.9	28.8	28.8	94.8	94.9	6.7	6.7	8.9	11.4	9	8	-	-	823612	823743	-	-	-	-
						1.0	0.3	78	25.0		7.9		28.8		95.0		6.7		8.9		9		-				-		-	
					Middle	8.1	0.2	36	25.0	25.0	7.9	7.9	28.9	28.9	94.2	94.3	6.6		9.1		9		-				-		-	
						8.1	0.2	38	25.0		7.9		28.9		94.3		6.6		9.1		8		-				-		-	
					Bottom	15.2	0.1	9	25.0	25.0	7.9	7.9	29.0	29.0	93.4	93.4	6.6	6.6	15.8		8		-				-		-	
						15.2	0.1	9	25.0		7.9		29.0		93.4		6.6		16.5		7		-				-		-	
SR8	Cloudy	Moderate	03:36	4.9	Surface	1.0	-	-	25.1	25.1	8.0	8.0	27.9	27.9	95.5	95.5	6.7	6.7	7.2	7.1	9	9	-	-	820490	811637	-	-	-	-
						1.0	-	-	25.1		8.0		27.9		95.5		6.7		7.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	25.1	25.1	8.0	8.0	28.1	28.1	95.9	95.9	6.8	6.8	7.0		8		-				-		-	
						3.9	-	-	25.1		8.0		28.1		95.9		6.8		7.0		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: 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 November 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	11:03	8.2	Surface	1.0	0.0	89	24.9	24.9	8.0	8.0	29.7	29.7	95.1	95.1	6.7	6.6	15.0	16.3	8	12	87	90	815621	804253	<0.2	<0.2	1.4	1.3
						1.0	0.0	94	24.9		8.0		29.7		95.0		6.6		15.2		10		87				<0.2		1.2	
					Middle	4.1	0.1	80	24.8	24.8	8.0	8.0	30.5	30.5	94.0	94.0	6.6		13.3		13		90				<0.2		1.1	
						4.1	0.1	81	24.8		8.0		30.5		94.0		6.6		13.3		13		91				<0.2		1.2	
					Bottom	7.2	0.1	72	24.8	24.8	8.0	8.0	30.9	30.9	94.3	94.3	6.6	6.6	20.6		12		93				<0.2		1.5	
						7.2	0.1	78	24.8		8.0		30.9		94.3		6.6		20.5		13		93				<0.2		1.3	
C2	Cloudy	Moderate	10:00	10.7	Surface	1.0	0.3	181	25.1	25.1	7.9	7.9	25.9	25.9	92.2	92.2	6.6	6.6	5.0	5.6	5	5	87	89	825663	806963	<0.2	<0.2	2.5	2.7
						1.0	0.3	189	25.1		7.9		25.9		92.2		6.6		5.0		6		88				<0.2		2.6	
					Middle	5.4	0.2	277	25.1	25.1	8.0	8.0	28.2	28.2	93.2	93.2	6.5		5.4		5		89				<0.2		2.7	
						5.4	0.2	286	25.1		8.0		28.2		93.2		6.5		5.5		4		90				<0.2		2.7	
					Bottom	9.7	0.3	304	25.1	25.1	8.0	8.0	28.4	28.4	94.6	94.6	6.6	6.6	6.3		4		89				<0.2		2.9	
						9.7	0.3	312	25.1		8.0		28.4		94.6		6.6		6.2		7		92				<0.2		2.9	
C3	Cloudy	Moderate	11:51	11.7	Surface	1.0	0.4	261	25.1	25.1	8.0	8.0	29.1	29.1	94.2	94.2	6.6	6.6	10.1	13.1	6	6	83	87	822093	817788	<0.2	<0.2	1.3	1.3
						1.0	0.5	283	25.1		8.0		29.1		94.2		6.6		10.1		4		84				<0.2		1.3	
					Middle	5.9	0.4	263	25.1	25.1	8.0	8.0	29.7	29.7	94.5	94.5	6.6		14.2		5		86				<0.2		1.3	
						5.9	0.4	266	25.1		8.0		29.7		94.5		6.6		14.2		5		88				<0.2		1.3	
					Bottom	10.7	0.3	259	25.1	25.1	8.1	8.1	29.7	29.7	96.5	96.5	6.7	6.7	15.0		8		91				<0.2		1.4	
						10.7	0.3	263	25.1		8.1		29.7		96.5		6.7		15.0		6		90				<0.2		1.3	
IM1	Cloudy	Calm	10:43	4.7	Surface	1.0	0.1	98	25.0	25.0	8.0	8.0	30.1	30.1	95.0	95.0	6.6	6.6	11.9	12.9	9	9	85	88	817966	807115	<0.2	<0.2	1.2	1.2
						1.0	0.1	98	25.0		8.0		30.1		95.0		6.6		12.1		8		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	132	25.0	25.0	8.0	8.0	30.2	30.2	96.0	96.1	6.7	6.7	13.7		8		90				<0.2		1.2	
						3.7	0.1	144	25.0		8.0		30.2		96.1		6.7		13.8		10		90				<0.2		1.2	
IM2	Cloudy	Moderate	10:37	7.2	Surface	1.0	0.2	99	25.0	25.0	8.1	8.1	29.4	29.4	94.8	94.8	6.6	6.6	11.4	14.4	7	8	86	89	818141	806157	<0.2	<0.2	1.6	1.5
						1.0	0.2	107	25.0		8.1		29.4		94.7		6.6		11.5		8		87				<0.2		1.4	
					Middle	3.6	0.1	103	24.8	24.8	8.0	8.0	30.3	30.3	93.7	93.7	6.5		16.0		8		89				<0.2		1.5	
						3.6	0.1	105	24.8		8.0		30.3		93.7		6.5		15.9		8		90				<0.2		1.5	
					Bottom	6.2	0.2	87	24.8	24.8	8.0	8.0	30.6	30.6	95.0	95.1	6.6	6.6	15.9		8		93				<0.2		1.5	
						6.2	0.2	91	24.8		8.0		30.6		95.2		6.6		15.9		9		89				<0.2		1.6	
IM3	Cloudy	Moderate	10:32	6.9	Surface	1.0	0.1	86	25.0	25.0	8.0	8.0	28.8	28.8	95.9	95.9	6.7	6.7	14.6	17.4	5	6	86	90	818786	805603	<0.2	<0.2	1.8	1.8
						1.0	0.1	90	25.0		8.0		28.8		95.9		6.7		14.8		6		87				<0.2		1.8	
					Middle	3.5	0.1	92	24.9	24.9	8.0	8.0	29.1	29.1	95.8	95.8	6.7		18.8		7		90				<0.2		1.7	
						3.5	0.1	94	24.9		8.0		29.1		95.8		6.7		18.9		5		91				<0.2		1.9	
					Bottom	5.9	0.2	66	24.9	24.9	8.0	8.0	29.1	29.1	96.1	96.1	6.7	6.7	18.8		6		93				<0.2		1.8	
						5.9	0.2	69	24.9		8.0		29.1		96.1		6.7		18.7		5		93				<0.2		1.8	
IM4	Cloudy	Moderate	10:21	7.1	Surface	1.0	0.2	68	25.0	25.0	8.0	8.0	28.7	28.7	95.8	95.8	6.7	6.7	12.7	15.7	10	11	87	90	819745	804614	<0.2	<0.2	1.7	1.7
						1.0	0.2	73	25.0		8.0		28.7		95.8		6.7		13.1		12		87				<0.2		1.7	
					Middle	3.6	0.1	342	25.0	25.0	8.0	8.0	28.7	28.7	96.1	96.1	6.7		15.1		13		90				<0.2		1.7	
						3.6	0.1	315	25.0		8.0		28.7		96.1		6.7		15.3		11		91				<0.2		1.6	
					Bottom	6.1	0.1	340	24.9	24.9	8.0	8.0	29.0	29.0	96.5	96.5	6.8	6.8	19.1		9		93				<0.2		1.7	
						6.1	0.1	313	24.9		8.0		29.0		96.5		6.8		19.0		10		93				<0.2		1.7	
IM5	Cloudy	Moderate	10:12	6.6	Surface	1.0	0.1	333	25.0	25.0	8.0	8.0	28.8	28.8	95.5	95.5	6.7	6.7	13.5	16.6	12	12	85	89	820747	804854	<0.2	<0.2	1.6	1.6
						1.0	0.1	358	25.0		8.0		28.8		95.5		6.7		13.6		10		86				<0.2		1.6	
					Middle	3.3	0.2	16	24.9	24.9	8.0	8.0	29.0	29.0	95.7	95.7	6.7		16.6		10		90				<0.2		1.6	
						3.3	0.2	16	24.9		8.0		29.0		95.7		6.7		16.7		11		90				<0.2		1.5	
					Bottom	5.6	0.2	32	24.9	24.9	8.0	8.0	29.1	29.0	96.7	96.7	6.8	6.8	19.4		13		92				<0.2		1.6	
						5.6	0.2	33	24.9		8.0		29.0		96.7		6.8		19.5		14		92				<0.2		1.6	
IM6	Cloudy	Moderate	10:06	6.5	Surface	1.0	0.0	132	25.0	25.0	8.0	8.0	28.1	28.1	94.7	94.7	6.7	6.7	9.2	9.5	10	9	86	90	821051	805838	<0.2	<0.2	1.8	1.9
						1.0	0.0	141	25.0		8.0		28.1		94.7		6.7		9.2		9		87				<0.2		1.8	
					Middle	3.3	0.1	43	25.0	25.0	8.0	8.0	28.2	28.2	95.1	95.2	6.7		9.4		10		90				<0.2		1.8	
						3.3	0.1	45	25.0		8.0		28.2		95.2		6.7		9.5		8		90				<0.2		1.9	
					Bottom	5.5	0.1	36	24.9	24.9	8.0	8.0	28.2	28.2	96.1	96.2	6.8	6.8	9.8		8		92				<0.2		1.8	
						5.5	0.1	37	24.9		8.0		28.2		96.2		6.8		9.8		9		93				<0.2		2.1	
IM7	Cloudy	Moderate	10:00	7.3	Surface	1.0	0.1	251	25.1	25.1	7.9	7.9	27.5	27.5	93.3	93.3	6.6	6.6	9.5	9.8	7	7	90	92	821355	806839	<0.2	<0.2	2.2	2.2
						1.0	0.1	257	25.1		8.0		27.6		93.3		6.6		9.6		6		91				<0.2		2.2	
					Middle	3.7	0.1	70	25.0	25.0	8.0	8.0	27.7	27.7	93.5	93.6	6.6		9.8		8		92				<0.2		2.2	
						3.7	0.1	76	25.0		8.0		27.7		93.6		6.6		9.8		7		92				<0.2		2.1	
					Bottom	6.3	0.1	87	25.0	25.0	8.0	8.0	27.8	27.8	95.0	95.1	6.7	6.7	10.0		8		94				<0.2		2.1	
						6.3	0.1	92	25.0		8.0		27.8		95.1		6.7		10.0		8		94				<0.2		2.2	
IM8	Cloudy	Moderate	10:23	6.7	Surface	1.0	0.1	121	25.1	25.1	8.0	8.0	26.7	26.7	95.5	95.5	6.8	6.9	10.4	13.3	6	7	86	89	821809	808122	<0.2	<0.2	2.1	2.0
						1.0	0.1	127	25.1		8.0		26.7		95.5		6.8		10.3		7		87				<0.2		2.1	
					Middle	3.4	0.1	242	25.1	25.1	8.0	8.0	26.8	26.8	96.9	96.9	6.9		13.6		7		89				<0.2		2.0	
						3.4	0.1	258	25.1		8.0		26.8		96.9		6.9		13.6		7		88				<0.2		2.0	
					Bottom	5.7	0.0	170	25.1	25.1	8.0	8.0	26.9	26.9	99.0	99.0	7.0	7.0	16.0		7		92				<0.2		2.0	
						5.7	0.0	172	25.1		8.0		26.9		99.0		7.0		15.9		5		92				<0.2		2.0	

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 13 November 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	10:28	6.5	Surface	1.0	0.1	65	25.2	25.2	8.0	8.0	27.0	27.0	94.5	94.5	6.7	6.7	15.0	11.6	6	6	86	88	822086	808808	<0.2	<0.2	2.0	2.0
						1.0	0.1	68	25.2		8.0		27.0		94.5		6.7		14.9		6		85				<0.2		1.9	
					Middle	3.3	0.1	38	25.1	25.1	8.0	8.0	27.1	27.1	95.2	95.2	6.7		9.5		8		87				<0.2		1.9	
						3.3	0.2	40	25.1		8.0		27.1		95.2		6.7		9.6		6		87				<0.2		2.0	
					Bottom	5.5	0.1	36	25.1	25.1	8.0	8.0	27.2	27.2	97.1	97.1	6.9	6.9	10.3		5		91				<0.2		1.9	
						5.5	0.1	39	25.1		8.0		27.2		97.1		6.9		10.4		6		91				<0.2		2.0	
IM10	Cloudy	Moderate	10:35	7.4	Surface	1.0	0.1	337	25.2	25.2	8.1	8.1	27.8	27.8	95.8	95.8	6.7	6.8	13.3	11.0	8	7	85	89	822375	809775	<0.2	<0.2	1.6	1.7
						1.0	0.1	343	25.2		8.1		27.8		95.8		6.7		13.3		7		87				<0.2		1.7	
					Middle	3.7	0.1	319	25.1	25.1	8.1	8.1	27.9	27.9	96.7	96.7	6.8		8.4		7		89				<0.2		1.8	
						3.7	0.2	343	25.1		8.1		27.9		96.7		6.8		8.6		7		91				<0.2		1.6	
					Bottom	6.4	0.2	340	25.1	25.1	8.1	8.1	27.9	27.9	100.0	100.0	7.0	7.0	11.2		6		92				<0.2		1.7	
						6.4	0.2	351	25.1		8.1		27.9		100.0		7.0		11.3		5		91				<0.2		1.6	
IM11	Cloudy	Moderate	10:48	7.2	Surface	1.0	0.4	311	25.1	25.1	8.1	8.1	28.2	28.2	96.8	96.8	6.8	6.8	8.3	10.1	8	9	87	90	822035	811469	<0.2	<0.2	1.5	1.5
						1.0	0.4	332	25.1		8.1		28.2		96.8		6.8		8.4		10		87				<0.2		1.5	
					Middle	3.6	0.4	308	25.0	25.0	8.1	8.1	28.4	28.4	97.2	97.2	6.8		9.5		9		89				<0.2		1.5	
						3.6	0.4	309	25.0		8.1		28.4		97.2		6.8		9.6		7		91				<0.2		1.6	
					Bottom	6.2	0.3	320	25.0	25.0	8.2	8.2	28.4	28.4	98.6	98.6	6.9	6.9	12.4		10		93				<0.2		1.4	
						6.2	0.3	322	25.0		8.2		28.4		98.6		6.9		12.4		8		92				<0.2		1.5	
IM12	Cloudy	Moderate	10:55	7.6	Surface	1.0	0.5	291	25.1	25.1	8.1	8.1	28.6	28.6	95.9	95.9	6.7	6.8	16.3	12.2	12	15	87	89	821444	812032	<0.2	<0.2	1.3	1.3
						1.0	0.5	291	25.1		8.1		28.6		95.9		6.7		18.1		12		85				<0.2		1.3	
					Middle	3.8	0.5	298	25.0	25.0	8.1	8.1	28.7	28.7	96.6	96.6	6.8		10.2		12		88				<0.2		1.3	
						3.8	0.5	301	25.0		8.1		28.7		96.6		6.8		10.3		10		88				<0.2		1.2	
					Bottom	6.6	0.4	300	25.0	25.0	8.1	8.1	28.7	28.7	98.5	98.5	6.9	6.9	9.4		21		91				<0.2		1.4	
						6.6	0.4	302	25.0		8.1		28.7		98.5		6.9		9.2		24		92				<0.2		1.4	
SR1A	Cloudy	Moderate	11:13	6.9	Surface	1.0	-	-	25.1	25.1	8.1	8.1	28.2	28.2	97.8	97.8	6.9	6.9	7.1	9.3	5	6	-	-	820067	812584	-	-	-	-
						1.0	-	-	25.1		8.1		28.2		97.8		6.9		7.5		5		-				-		-	
					Middle	3.5	-	-	25.0	25.0	8.1	8.1	28.9	28.9	98.9	98.9	-		11.0		5		-				-		-	
						3.5	-	-	25.0		8.1		28.9		98.9		-		10.9		7		-				-		-	
					Bottom	5.9	-	-	25.1	25.1	8.1	8.1	28.7	28.7	102.1	102.1	7.2	7.2	9.9		6		-				-		-	
						5.9	-	-	25.1		8.1		28.7		102.1		7.2		9.6		5		-				-		-	
SR2	Cloudy	Moderate	11:27	4.3	Surface	1.0	0.0	340	25.1	25.1	8.1	8.1	28.7	28.7	96.3	96.3	6.8	6.8	7.5	7.5	12	11	87	89	821483	814158	<0.2	<0.2	1.3	1.3
						1.0	0.0	313	25.1		8.1		28.7		96.3		6.8		7.6		11		88				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	325	25.1	25.1	8.1	8.1	28.7	28.7	98.2	98.2	6.9	6.9	7.5		11		90				<0.2		1.3	
						3.3	0.1	329	25.1		8.1		28.7		98.2		6.9		7.3		10		91				<0.2		1.3	
SR3	Cloudy	Moderate	10:18	8.2	Surface	1.0	0.1	215	25.2	25.2	7.9	7.9	26.4	26.4	93.9	93.9	6.7	6.7	5.5	7.9	4	5	-	-	822158	807569	-	-	-	-
						1.0	0.1	215	25.2		7.9		26.4		93.9		6.7		5.6		5		-				-		-	
					Middle	4.1	0.3	305	25.1	25.1	7.9	7.9	26.7	26.7	94.3	94.3	6.7		8.6		5		-				-		-	
						4.1	0.3	333	25.1		7.9		26.7		94.3		6.7		8.8		7		-				-		-	
					Bottom	7.2	0.3	325	25.1	25.1	8.0	8.0	26.8	26.8	96.4	96.4	6.8	6.8	9.5		6		-				-		-	
						7.2	0.3	331	25.1		8.0		26.8		96.4		6.8		9.3		5		-				-		-	
SR4A	Cloudy	Calm	11:21	7.9	Surface	1.0	0.2	243	25.2	25.1	8.0	8.0	30.3	30.3	94.4	94.4	6.6	6.6	11.6	12.3	10	12	-	-	817170	807787	-	-	-	-
						1.0	0.2	264	25.1		8.0		30.3		94.4		6.6		11.6		12		-				-		-	
					Middle	4.0	0.1	251	25.1	25.1	8.0	8.0	30.3	30.3	94.6	94.7	6.6		12.4		12		-				-		-	
						4.0	0.1	255	25.1		8.0		30.3		94.7		6.6		12.4		12		-				-		-	
					Bottom	6.9	0.0	257	25.0	25.0	8.0	8.0	30.3	30.3	94.9	94.9	6.6	6.6	12.8		12		-				-		-	
						6.9	0.0	275	25.0		8.0		30.3		94.9		6.6		12.8		13		-				-		-	
SR5A	Cloudy	Calm	11:35	4.3	Surface	1.0	0.1	300	25.1	25.1	8.0	8.0	30.2	30.2	96.5	96.5	6.7	6.7	12.3	12.5	12	11	-	-	816605	810673	-	-	-	-
						1.0	0.1	308	25.1		8.0		30.2		96.5		6.7		12.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	307	25.0	25.0	8.0	8.0	30.2	30.2	97.3	97.4	6.8	6.8	12.7		12		-				-		-	
						3.3	0.0	317	25.0		8.0		30.2		97.4		6.8		12.7		10		-				-		-	
SR6	Cloudy	Calm	11:58	4.4	Surface	1.0	0.0	221	25.2	25.2	8.0	8.0	29.7	29.7	97.3	97.3	6.8	6.8	13.9	16.7	6	7	-	-	817919	814684	-	-	-	-
						1.0	0.0	229	25.2		8.0		29.7		97.3		6.8		14.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	237	25.1	25.1	8.0	8.0	30.4	30.4	97.2	97.2	6.7	6.8	19.3		8		-				-		-	
						3.4	0.0	258	25.1		8.0		30.4		97.2		6.8		19.6		7		-				-		-	
SR7	Cloudy	Moderate	12:24	16.6	Surface	1.0	0.0	84	25.3	25.3	8.0	8.0	29.6	29.6	92.9	92.9	6.5	6.5	8.3	7.6	8	7	-	-	823641	823726	-	-	-	-
						1.0	0.0	85	25.3		8.0		29.6		92.9		6.5		8.2		7		-				-		-	
					Middle	8.3	0.4	301	25.0	25.0	8.0	8.0	30.2	30.2	92.5	92.5	6.4		6.8		7		-				-		-	
						8.3	0.4	330	25.0		8.0		30.2		92.5		6.4		6.8		6		-				-		-	
					Bottom	15.6	0.1	250	25.0	25.0	8.0	8.0	30.2	30.2	94.2	94.2	6.6	6.6	7.9		8		-				-		-	
						15.6	0.1	273	25.0		8.0		30.2		94.2		6.6		8.0		6		-				-		-	
SR8	Cloudy	Moderate	11:04	5.3	Surface	1.0	-	-	25.1	25.1	8.1	8.1	28.0	28.0	100.6	100.6	7.1	7.1	8.8	9.8	6	6	-	-	820482	811641	-	-	-	-
						1.0	-	-	25.1		8.1		28.0		100.6		7.1		9.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	25.0	25.0	8.1	8.1	28.2	28.2	104.5	104.5	7.4	7.4	10.6		6		-				-		-	
						4.3	-	-	25.0		8.1		28.2		104.5		7.4		10.7		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: 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 November 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	04:51	8.0	Surface	1.0	0.5	211	24.7	24.7	8.0	8.0	29.9	29.9	93.8	93.8	6.6	6.6	9.2	14.7	7	6	86	90	815611	804262	<0.2	<0.2	1.2	1.3
						1.0	0.5	222	24.7		8.0		29.9		93.8		6.6		9.3		8		87				<0.2		1.4	
					Middle	4.0	0.2	200	24.7	24.7	8.0	8.0	30.5	30.5	92.5	92.5	6.5		18.0		6		89				<0.2		1.3	
						4.0	0.2	214	24.7		8.0		30.5		92.4		6.5		18.3		6		90				<0.2		1.2	
					Bottom	7.0	0.1	217	24.7	24.7	8.0	8.0	30.6	30.6	92.9	92.9	6.5	6.5	17.1		6		93				<0.2		1.4	
						7.0	0.1	221	24.7		8.0		30.6		92.8		6.5		16.4		5		92				<0.2		1.4	
C2	Cloudy	Rough	06:40	11.4	Surface	1.0	0.5	177	25.1	25.1	8.0	8.0	26.1	26.1	93.7	93.7	6.7	6.7	7.9	16.5	6	6	87	90	825659	806949	<0.2	<0.2	1.1	1.3
						1.0	0.6	192	25.1		8.0		26.1		93.7		6.7		8.0		7		87				<0.2		1.1	
					Middle	5.7	0.3	167	25.0	25.0	8.0	8.0	26.6	26.6	93.8	93.8	6.7		15.9		6		90				<0.2		1.9	
						5.7	0.3	180	25.0		8.0		26.6		93.8		6.7		16.0		6		91				<0.2		1.4	
					Bottom	10.4	0.1	142	24.7	24.7	8.1	8.1	28.7	28.7	93.1	93.1	6.6	6.6	25.6		6		92				<0.2		1.1	
						10.4	0.1	142	24.7		8.1		28.7		93.1		6.6		25.8		6		92				<0.2		1.1	
C3	Cloudy	Moderate	04:23	10.5	Surface	1.0	0.1	46	24.5	24.5	7.9	7.9	29.0	29.0	93.5	93.5	6.6	6.6	9.4	9.1	12	11	85	89	822088	817821	<0.2	<0.2	1.0	1.0
						1.0	0.1	46	24.5		7.9		29.0		93.4		6.6		9.4		12		86				<0.2		1.0	
					Middle	5.3	0.1	87	24.5	24.5	7.9	7.9	29.0	29.0	93.5	93.5	6.6		8.9		11		89				<0.2		1.0	
						5.3	0.1	92	24.5		7.9		29.0		93.4		6.6		8.8		11		90				<0.2		0.9	
					Bottom	9.5	0.2	70	24.5	24.5	7.9	7.9	29.0	29.0	93.6	93.7	6.6	6.6	9.1		10		92				<0.2		1.0	
						9.5	0.2	71	24.5		7.9		29.0		93.8		6.6		9.2		10		93				<0.2		1.0	
IM1	Cloudy	Moderate	05:16	5.4	Surface	1.0	0.1	227	25.1	25.1	7.9	7.9	26.2	26.2	94.0	94.1	6.7	6.7	6.2	6.7	5	7	86	89	817936	807132	<0.2	<0.2	1.4	1.4
						1.0	0.1	231	25.1		7.9		26.2		94.1		6.7		6.2		5		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.0	209	25.1	25.1	7.9	7.9	26.5	26.5	93.8	93.8	6.7	6.7	7.4		8		91				<0.2		1.4	
						4.4	0.0	222	25.1		7.9		26.5		93.8		6.7		7.1		8		92				<0.2		1.2	
IM2	Cloudy	Moderate	05:24	6.7	Surface	1.0	0.2	199	25.1	25.1	7.9	7.9	26.2	26.2	93.7	93.7	6.7	6.7	7.7	9.6	9	8	87	90	818181	806155	<0.2	<0.2	1.8	1.6
						1.0	0.2	211	25.1		7.9		26.2		93.6		6.7		7.8		8		87				<0.2		1.9	
					Middle	3.4	0.1	170	25.0	25.0	7.9	7.9	26.7	26.7	93.4	93.5	6.6		10.3		9		90				<0.2		1.5	
						3.4	0.1	181	25.0		7.9		26.8		93.5		6.6		10.4		9		90				<0.2		1.6	
					Bottom	5.7	0.0	152	24.9	24.9	7.9	7.9	27.3	27.3	93.3	93.3	6.6	6.6	10.6		7		92				<0.2		1.5	
						5.7	0.0	160	24.9		7.9		27.3		93.3		6.6		10.5		6		93				<0.2		1.4	
IM3	Cloudy	Moderate	05:32	6.9	Surface	1.0	0.4	210	25.2	25.1	7.9	7.9	26.2	26.2	93.5	93.4	6.6	6.6	6.3	8.1	6	6	86	90	818764	805575	<0.2	<0.2	1.5	1.3
						1.0	0.4	227	25.1		7.9		26.2		93.2		6.6		6.5		6		86				<0.2		1.4	
					Middle	3.5	0.2	224	25.0	25.0	7.9	7.9	26.6	26.6	93.7	93.6	6.7		8.7		6		89				<0.2		1.4	
						3.5	0.2	242	25.0		7.9		26.6		93.5		6.6		8.7		5		90				<0.2		1.4	
					Bottom	5.9	0.1	188	24.9	24.9	8.0	8.0	27.2	27.3	93.0	93.0	6.6	6.6	9.3		6		93				<0.2		1.2	
						5.9	0.1	198	24.9		8.0		27.3		93.0		6.6		9.3		6		93				<0.2		1.1	
IM4	Cloudy	Rough	05:43	7.0	Surface	1.0	0.5	216	25.1	25.1	7.9	7.9	26.2	26.2	93.5	93.6	6.6	6.6	6.1	7.2	6	5	84	87	819745	804615	<0.2	<0.2	1.3	1.3
						1.0	0.5	234	25.1		7.9		26.2		93.6		6.7		6.1		6		84				<0.2		1.2	
					Middle	3.5	0.5	213	25.1	25.1	7.9	7.9	26.4	26.4	93.4	93.5	6.6		7.4		6		86				<0.2		1.2	
						3.5	0.5	230	25.1		8.0		26.5		93.5		6.6		7.7		5		87				<0.2		1.2	
					Bottom	6.0	0.2	227	25.0	25.0	8.0	8.0	26.7	26.7	93.1	93.1	6.6	6.6	7.8		3		91				<0.2		1.3	
						6.0	0.3	239	25.0		8.0		26.7		93.0		6.6		7.8		3		91				<0.2		1.3	
IM5	Cloudy	Rough	05:55	6.5	Surface	1.0	0.4	201	25.2	25.2	7.9	7.9	26.1	26.1	93.6	93.6	6.7	6.7	5.6	7.2	5	5	83	87	820719	804847	<0.2	<0.2	1.4	1.2
						1.0	0.5	208	25.2		7.9		26.1		93.5		6.6		5.8		6		84				<0.2		1.4	
					Middle	3.3	0.4	215	25.0	25.0	8.0	8.0	26.5	26.5	93.6	93.6	6.7		7.8		6		86				<0.2		1.2	
						3.3	0.4	225	25.0		8.0		26.6		93.6		6.7		7.8		5		87				<0.2		1.2	
					Bottom	5.5	0.3	219	25.0	25.0	8.0	8.0	26.9	26.9	93.3	93.4	6.6	6.6	8.1		5		91				<0.2		1.1	
						5.5	0.4	228	25.0		8.0		26.9		93.5		6.6		8.1		4		92				<0.2		1.1	
IM6	Cloudy	Rough	05:59	6.2	Surface	1.0	0.4	221	25.2	25.1	8.0	8.0	26.1	26.1	93.6	93.6	6.7	6.7	5.6	6.6	6	7	86	90	821062	805836	<0.2	<0.2	1.2	1.2
						1.0	0.4	228	25.1		8.0		26.1		93.5		6.6		5.8		5		87				<0.2		1.3	
					Middle	3.1	0.3	215	25.1	25.1	8.0	8.0	26.3	26.3	93.5	93.5	6.7		6.7		6		90				<0.2		1.2	
						3.1	0.3	230	25.1		8.0		26.3		93.5		6.6		6.8		6		91				<0.2		1.2	
					Bottom	5.2	0.2	229	25.0	25.0	8.0	8.0	26.8	26.9	93.5	93.4	6.6	6.6	7.5		8		92				<0.2		1.2	
						5.2	0.2	236	25.0		8.0		26.9		93.2		6.6		7.4		8		93				<0.2		1.1	
IM7	Cloudy	Rough	06:11	7.3	Surface	1.0	0.4	216	25.2	25.2	8.0	8.0	26.1	26.1	93.9	93.8	6.7	6.7	5.2	9.4	5	6	86	90	821367	806828	<0.2	<0.2	1.2	1.3
						1.0	0.4	236	25.2		8.0		26.1		93.7		6.7		5.3		6		87				<0.2		1.3	
					Middle	3.7	0.4	224	25.0	25.0	8.0	8.0	26.7	26.7	93.7	93.8	6.7		9.9		6		89				<0.2		1.3	
						3.7	0.4	230	25.0		8.0		26.7		93.8		6.7		10.0		6		91				<0.2		1.3	
					Bottom	6.3	0.3	244	24.8	24.8	8.1	8.1	28.4	28.4	93.3	93.3	6.6	6.6	12.9		6		93				<0.2		1.3	
						6.3	0.3	267	24.8		8.1		28.4		93.3		6.6		12.9		6		93				<0.2		1.3	
IM8	Cloudy	Moderate	06:10	7.6	Surface	1.0	0.3	202	25.1	25.1	7.9	7.9	26.2	26.2	93.2	93.2	6.6	6.6	6.3	7.7	5	6	86	90	821842	808150	<0.2	<0.2	1.0	1.1
						1.0	0.3	218	25.1		7.9		26.2		93.2		6.6		6.4		5		87				<0.2		1.1	
					Middle	3.8	0.2	195	25.1	25.1	8.0	8.0	26.5	26.5	93.4	93.5	6.6		8.1		6		89				<0.2		1.1	
						3.8	0.2	205	25.1		8.0		26.5		93.6		6.7		8.1		6		90				<0.2		1.1	
					Bottom	6.6	0.1	231	25.0	24.9	8.0	8.0	27.0	27.1	93.5	93.4	6.6	6.6	8.7		6		92				<0.2		1.2	
						6.6	0.1	254	24.9		8.0		27.1		93.3		6.6		8.7		6		93				<0.2		1.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 November 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	06:04	7.5	Surface	1.0	0.2	180	25.1	25.1	7.9	7.9	26.2	26.2	93.3	93.3	6.6	6.6	7.0	8.4	4	4	87	90	822094	808829	<0.2	<0.2	1.1	1.2
						1.0	0.2	180	25.1		7.9		26.2		93.3		6.6		7.0		4		87				<0.2		1.1	
					Middle	3.8	0.2	155	25.1	25.1	7.9	7.9	26.4	26.4	93.3	93.4	6.6		8.7		4		90				<0.2		1.2	
						3.8	0.2	169	25.1		7.9		26.4		93.4		6.6		8.7		4		90				<0.2		1.2	
					Bottom	6.5	0.0	15	24.9	24.9	8.0	8.0	28.3	28.3	93.3	93.3	6.6	6.6	9.5		5		93				<0.2		1.2	
						6.5	0.0	15	25.0		8.0		28.3		93.3		6.6		9.2		4		94				<0.2		1.2	
IM10	Cloudy	Moderate	05:55	8.2	Surface	1.0	0.2	132	25.2	25.2	7.9	7.9	26.2	26.2	93.8	93.8	6.7	6.7	6.8	9.0	5	5	86	90	822400	809792	<0.2	<0.2	0.9	0.9
						1.0	0.2	142	25.2		7.9		26.2		93.8		6.7		6.9		6		86				<0.2		0.9	
					Middle	4.1	0.2	127	25.1	25.0	7.9	7.9	26.4	26.4	93.8	93.8	6.7		9.2		5		90				<0.2		0.9	
						4.1	0.3	136	25.0		7.9		26.4		93.8		6.7		9.3		5		90				<0.2		0.8	
					Bottom	7.2	0.2	111	24.9	24.9	8.0	8.0	27.5	27.5	93.3	93.3	6.6	6.6	10.9		4		92				<0.2		0.9	
						7.2	0.2	115	24.9		8.0		27.5		93.3		6.6		10.9		4		93				<0.2		0.9	
IM11	Cloudy	Moderate	05:42	7.6	Surface	1.0	0.2	142	25.2	25.1	7.9	7.9	26.2	26.2	93.5	93.5	6.6	6.7	5.1	7.5	5	5	86	90	822055	811446	<0.2	<0.2	1.0	0.9
						1.0	0.2	153	25.1		7.9		26.2		93.5		6.6		5.1		5		87				<0.2		0.9	
					Middle	3.8	0.2	125	25.0	25.0	7.9	7.9	26.7	26.7	93.7	93.8	6.7		8.8		5		90				<0.2		0.9	
						3.8	0.3	132	25.0		7.9		26.7		93.8		6.7		8.8		5		90				<0.2		0.9	
					Bottom	6.6	0.1	117	25.0	25.0	7.9	7.9	27.0	27.0	93.2	93.2	6.6	6.6	8.7		4		92				<0.2		0.9	
						6.6	0.1	123	25.0		7.9		27.0		93.1		6.6		8.7		5		93				<0.2		0.9	
IM12	Cloudy	Moderate	05:30	8.8	Surface	1.0	0.2	98	25.2	25.2	7.9	7.9	26.2	26.2	94.8	94.9	6.7	6.8	5.7	7.9	6	6	86	90	821450	812062	<0.2	<0.2	1.1	1.5
						1.0	0.2	101	25.2		7.9		26.2		94.9		6.7		5.9		5		86				<0.2		1.0	
					Middle	4.4	0.3	110	25.1	25.1	7.9	7.9	26.5	26.5	95.8	95.9	6.8		8.5		5		89				<0.2		2.5	
						4.4	0.3	110	25.1		7.9		26.5		95.9		6.8		8.5		6		90				<0.2		2.6	
					Bottom	7.8	0.1	92	25.0	25.0	7.9	7.9	26.9	26.9	98.6	98.7	7.0	7.0	9.3		6		93				<0.2		1.0	
						7.8	0.1	96	25.0		7.9		26.9		98.7		7.0		9.5		6		93				<0.2		1.0	
SR1A	Cloudy	Moderate	05:06	6.6	Surface	1.0	-	-	24.7	24.7	8.0	8.0	29.9	29.9	93.5	93.5	6.6	6.6	11.5	14.1	4	5	-	-	820065	812590	-	-	-	-
						1.0	-	-	24.7		8.0		29.9		93.4		6.6		11.8		5		-				-		-	
					Middle	3.3	-	-	24.7	24.7	8.0	8.0	30.5	30.5	93.4	93.4	6.5		13.3		5		-				-		-	
						3.3	-	-	24.7		8.0		30.5		93.4		6.5		13.3		5		-				-		-	
					Bottom	5.6	-	-	24.7	24.7	8.0	8.0	30.6	30.6	94.0	94.1	6.6	6.6	17.5		4		-				-		-	
						5.6	-	-	24.7		8.0		30.6		94.2		6.6		17.4		5		-				-		-	
SR2	Cloudy	Moderate	04:50	4.6	Surface	1.0	0.2	87	24.5	24.5	8.0	8.0	29.2	29.2	93.0	93.0	6.6	6.6	8.0	8.2	10	9	86	88	821480	814153	<0.2	<0.2	1.1	1.0
						1.0	0.2	87	24.5		8.0		29.2		93.0		6.6		8.1		9		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	91	24.5	24.5	7.9	7.9	29.2	29.2	93.1	93.1	6.6	6.6	8.3		8		89				<0.2		1.0	
						3.6	0.2	93	24.5		7.9		29.2		93.1		6.6		8.2		9		89				<0.2		1.0	
SR3	Cloudy	Rough	06:18	8.1	Surface	1.0	0.4	187	25.2	25.2	8.0	8.0	26.1	26.1	93.7	93.7	6.7	6.7	6.1	9.0	4	5	-	-	822126	807550	-	-	-	-
						1.0	0.4	195	25.2		8.0		26.1		93.6		6.7		6.2		5		-				-		-	
					Middle	4.1	0.3	208	25.0	25.0	8.0	8.0	26.4	26.4	93.5	93.5	6.7		9.5		5		-				-		-	
						4.1	0.3	226	25.0		8.0		26.4		93.5		6.7		9.7		5		-				-		-	
					Bottom	7.1	0.2	255	24.8	24.8	8.0	8.0	28.7	28.7	92.7	92.7	6.5	6.5	11.3		4		-				-		-	
						7.1	0.2	261	24.8		8.0		28.7		92.7		6.5		11.1		4		-				-		-	
SR4A	Cloudy	Calm	04:30	7.9	Surface	1.0	0.3	254	24.5	24.5	7.9	7.9	29.2	29.2	93.3	93.3	6.6	6.6	8.3	9.1	9	11	-	-	817171	807811	-	-	-	-
						1.0	0.3	265	24.5		7.9		29.2		93.2		6.6		8.3		10		-				-		-	
					Middle	4.0	0.3	259	24.5	24.5	7.9	7.9	29.3	29.3	93.4	93.5	6.6		9.0		11		-				-		-	
						4.0	0.3	268	24.5		7.9		29.3		93.5		6.6		9.1		11		-				-		-	
					Bottom	6.9	0.2	250	24.5	24.5	7.9	7.9	29.3	29.3	94.7	94.8	6.7	6.7	9.9		11		-				-		-	
						6.9	0.2	250	24.5		7.9		29.3		94.8		6.7		9.9		13		-				-		-	
SR5A	Cloudy	Calm	04:15	4.6	Surface	1.0	0.1	324	24.5	24.5	7.9	7.9	29.0	29.0	94.9	95.0	6.7	6.7	8.8	8.5	11	12	-	-	816616	810708	-	-	-	-
						1.0	0.2	350	24.5		7.9		29.0		95.1		6.7		9.0		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	321	24.5	24.5	7.9	7.9	29.0	29.0	98.1	98.1	6.9	6.9	8.0		12		-				-		-	
						3.6	0.1	334	24.5		7.9		29.0		98.1		6.9		8.0		14		-				-		-	
SR6	Cloudy	Calm	03:52	4.4	Surface	1.0	0.1	290	24.6	24.6	7.9	7.9	28.8	28.8	95.8	96.0	6.8	6.8	7.6	9.0	6	7	-	-	817895	814657	-	-	-	-
						1.0	0.1	304	24.6		7.9		28.8		96.1		6.8		7.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	329	24.6	24.6	7.9	7.9	28.9	28.9	99.0	99.5	7.0	7.1	10.3		8		-				-		-	
						3.4	0.1	303	24.6		8.0		28.9		99.9		7.1		10.3		7		-				-		-	
SR7	Cloudy	Moderate	03:46	15.2	Surface	1.0	0.3	71	24.6	24.6	7.9	7.9	28.8	28.8	93.3	93.4	6.6	6.6	9.4	10.6	9	9	-	-	823620	823757	-	-	-	-
						1.0	0.3	77	24.6		7.9		28.8		93.4		6.6		9.4		10		-				-		-	
					Middle	7.6	0.1	322	24.6	24.6	7.9	7.9	28.8	28.8	93.5	93.5	6.6		10.1		9		-				-		-	
						7.6	0.1	324	24.6		7.9		28.8		93.5		6.6		10.1		9		-				-		-	
					Bottom	14.2	0.3	308	24.6	24.6	7.9	7.9	28.8	28.8	93.2	93.2	6.6	6.6	12.4		8		-				-		-	
						14.2	0.3	320	24.6		7.9		28.8		93.2		6.6		12.3		9		-				-		-	
SR8	Cloudy	Moderate	05:17	5.2	Surface	1.0	-	-	24.6	24.6	8.0	8.0	29.9	29.9	94.2	94.2	6.6	6.6	6.7	7.6	7	8	-	-	820487	811642	-	-	-	-
						1.0	-	-	24.6		8.0		29.9		94.1		6.6		6.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	24.7	24.7	8.0	8.0	30.2	30.2	93.9	93.9	6.6	6.6	8.6		9		-				-		-	
						4.2	-	-	24.7		8.0		30.2		93.8		6.6		8.5		9		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
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 15 November 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	17:37	8.3	Surface	1.0	0.3	25	24.8	24.8	8.0	8.0	30.3	30.3	94.1	94.1	6.6	6.6	9.1	15.3	4	7	88	91	815642	804237	<0.2	<0.2	1.4	1.4
						1.0	0.3	27	24.8		8.0		30.3		94.0		6.6		9.4		5		88				<0.2		1.5	
					Middle	4.2	0.4	39	24.8	24.8	8.0	8.0	30.6	30.6	93.7	93.7	6.5		13.5		8		91				<0.2		1.3	
						4.2	0.4	41	24.8		8.0		30.6		93.7		6.5		13.8		7		91				<0.2		1.4	
					Bottom	7.3	0.4	36	24.8	24.8	8.0	8.0	30.9	30.9	93.5	93.5	6.5	6.5	22.8		8		92				<0.2		1.3	
						7.3	0.4	39	24.8		8.0		30.9		93.5		6.5		23.0		8		93				<0.2		1.4	
C2	Cloudy	Rough	16:13	11.2	Surface	1.0	0.1	265	25.1	25.1	8.0	8.0	26.1	26.1	93.9	93.9	6.7	6.7	5.9	11.6	8	11	87	90	825663	806946	<0.2	<0.2	0.9	0.9
						1.0	0.1	284	25.1		8.0		26.1		93.8		6.7		6.0		9		88				<0.2		1.0	
					Middle	5.6	0.1	340	24.8	24.8	8.0	8.0	27.8	27.8	93.9	93.9	6.6		11.2		11		90				<0.2		0.9	
						5.6	0.2	345	24.8		8.0		27.8		93.8		6.6		11.3		12		91				<0.2		1.0	
					Bottom	10.2	0.1	295	24.7	24.7	8.1	8.1	28.9	28.9	93.4	93.4	6.6	6.6	17.6		12		92				<0.2		0.8	
						10.2	0.2	320	24.7		8.1		28.9		93.4		6.6		17.5		13		93				<0.2		0.8	
C3	Cloudy	Moderate	18:30	12.6	Surface	1.0	0.4	266	24.5	24.5	7.9	7.9	29.0	29.0	94.7	94.8	6.7	6.8	7.5	9.2	8	7	87	90	822113	817791	<0.2	<0.2	1.3	1.1
						1.0	0.4	288	24.5		7.9		29.0		94.8		6.7		7.6		7		87				<0.2		1.2	
					Middle	6.3	0.3	269	24.5	24.5	7.9	7.9	29.0	29.0	95.5	95.5	6.8		8.7		7		91				<0.2		1.0	
						6.3	0.3	272	24.5		7.9		29.0		95.5		6.8		8.7		7		91				<0.2		1.0	
					Bottom	11.6	0.2	287	24.5	24.5	7.9	7.9	29.0	29.0	96.6	96.6	6.8	6.8	11.2		7		92				<0.2		0.9	
						11.6	0.2	299	24.5		7.9		29.0		96.6		6.8		11.3		7		93				<0.2		0.9	
IM1	Cloudy	Moderate	17:18	4.8	Surface	1.0	0.1	24	24.7	24.7	8.0	8.0	29.9	29.9	94.8	94.8	6.6	6.6	9.0	9.5	6	6	86	88	817955	807147	<0.2	<0.2	1.1	1.2
						1.0	0.1	25	24.7		8.0		29.9		94.8		6.6		9.0		5		87				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	11	24.7	24.7	8.0	8.0	29.9	29.9	94.5	94.5	6.6	6.6	9.9		5		89				<0.2		1.3	
						3.8	0.1	11	24.7		8.0		29.9		94.5		6.6		9.9		6		90				<0.2		1.1	
IM2	Cloudy	Rough	17:13	7.1	Surface	1.0	0.1	320	24.6	24.6	8.0	8.0	29.6	29.6	94.9	94.9	6.7	6.7	7.1	8.5	7	7	86	90	818163	806173	<0.2	<0.2	1.0	1.1
						1.0	0.1	329	24.6		8.0		29.7		94.9		6.7		7.2		7		87				<0.2		1.0	
					Middle	3.6	0.1	0	24.6	24.6	8.0	8.0	29.8	29.8	94.3	94.3	6.6		8.9		8		90				<0.2		1.1	
						3.6	0.2	0	24.6		8.0		29.8		94.3		6.6		9.0		7		90				<0.2		1.0	
					Bottom	6.1	0.1	69	24.6	24.6	8.0	8.0	29.8	29.8	95.1	95.2	6.7	6.7	9.4		6		93				<0.2		1.1	
						6.1	0.1	72	24.6		8.0		29.8		95.2		6.7		9.5		6		93				<0.2		1.2	
IM3	Cloudy	Rough	17:04	6.2	Surface	1.0	0.3	10	24.6	24.6	8.0	8.0	29.4	29.4	95.7	95.7	6.7	6.7	6.9	8.5	6	7	86	90	818769	805597	<0.2	<0.2	1.1	1.2
						1.0	0.3	10	24.6		8.0		29.4		95.6		6.7		6.9		6		87				<0.2		1.2	
					Middle	3.1	0.2	31	24.6	24.6	8.0	8.0	29.5	29.6	94.1	94.1	6.6		9.1		7		89				<0.2		1.2	
						3.1	0.2	31	24.6		8.0		29.6		94.1		6.6		9.2		7		90				<0.2		1.2	
					Bottom	5.2	0.2	44	24.6	24.6	8.0	8.0	29.8	29.8	94.9	94.9	6.7	6.7	9.5		8		92				<0.2		1.1	
						5.2	0.3	45	24.6		8.0		29.8		94.8		6.7		9.4		7		93				<0.2		1.1	
IM4	Cloudy	Rough	16:56	6.5	Surface	1.0	0.3	331	24.7	24.7	8.0	8.0	28.9	28.9	97.2	97.1	6.9	6.8	6.0	6.8	5	6	86	90	819715	804608	<0.2	<0.2	1.1	1.4
						1.0	0.3	336	24.7		8.0		28.9		97.0		6.8		6.0		6		87				<0.2		1.2	
					Middle	3.3	0.4	35	24.6	24.6	8.0	8.0	29.0	29.0	96.4	96.4	6.8		7.0		6		89				<0.2		1.5	
						3.3	0.4	35	24.6		8.0		29.0		96.3		6.8		7.0		5		90				<0.2		1.5	
					Bottom	5.5	0.2	20	24.6	24.6	8.0	8.0	29.1	29.1	96.6	96.6	6.8	6.8	7.5		6		92				<0.2		1.6	
						5.5	0.3	21	24.6		8.0		29.1		96.6		6.8		7.5		7		93				<0.2		1.4	
IM5	Cloudy	Rough	16:47	6.8	Surface	1.0	0.3	332	24.7	24.7	8.1	8.1	28.9	28.9	96.5	96.5	6.8	6.8	6.3	11.0	6	6	86	90	820746	804877	<0.2	<0.2	1.5	1.5
						1.0	0.3	332	24.7		8.1		28.9		96.5		6.8		6.3		6		87				<0.2		1.5	
					Middle	3.4	0.3	350	24.7	24.7	8.1	8.1	29.2	29.2	95.5	95.5	6.7		8.2		6		90				<0.2		1.4	
						3.4	0.3	322	24.7		8.1		29.2		95.5		6.7		8.3		6		91				<0.2		1.5	
					Bottom	5.8	0.2	329	24.6	24.6	8.1	8.1	29.2	29.2	95.2	95.3	6.7	6.7	18.3		6		92				<0.2		1.4	
						5.8	0.2	349	24.6		8.1		29.2		95.3		6.7		18.6		6		92				<0.2		1.4	
IM6	Cloudy	Rough	16:40	6.9	Surface	1.0	0.2	347	25.1	25.1	7.9	7.9	26.5	26.5	95.2	95.2	6.8	6.8	7.9	13.9	6	7	86	90	821080	805841	<0.2	<0.2	1.1	1.4
						1.0	0.2	358	25.1		7.9		26.5		95.2		6.8		7.9		6		87				<0.2		1.0	
					Middle	3.5	0.2	359	24.8	24.8	8.0	8.0	28.3	28.2	94.5	94.6	6.7		17.7		6		90				<0.2		1.5	
						3.5	0.2	330	24.8		8.0		28.2		94.6		6.7		17.6		6		91				<0.2		1.6	
					Bottom	5.9	0.3	4	24.7	24.7	8.0	8.0	29.2	29.2	94.7	94.7	6.7	6.7	16.2		8		92				<0.2		1.6	
						5.9	0.3	4	24.7		8.0		29.2		94.6		6.7		16.1		8		93				<0.2		1.6	
IM7	Cloudy	Rough	16:19	7.3	Surface	1.0	0.1	221	25.1	25.1	8.0	8.0	26.1	26.1	94.0	94.0	6.7	6.7	5.5	6.9	5	5	87	90	821348	806815	<0.2	<0.2	1.1	1.1
						1.0	0.1	241	25.1		8.0		26.1		93.9		6.7		5.5		5		88				<0.2		1.1	
					Middle	3.7	0.1	287	25.1	25.0	8.0	8.0	26.5	26.5	94.2	94.2	6.7		7.0		4		89				<0.2		0.9	
						3.7	0.1	309	25.0		8.0		26.6		94.1		6.7		7.1		5		90				<0.2		1.0	
					Bottom	6.3	0.1	292	24.8	24.8	8.1	8.1	28.0	28.0	93.6	93.6	6.6	6.6	8.0		4		93				<0.2		1.2	
						6.3	0.1	314	24.8		8.1		28.0		93.5		6.6		8.0		6		93				<0.2		1.0	
IM8	Cloudy	Rough	16:44	8.0	Surface	1.0	0.1	190	24.7	24.7	8.1	8.1	29.1	29.1	96.6	96.5	6.8	6.8	6.4	7.2	5	5	86	90	821825	808126	<0.2	<0.2	1.1	1.0
						1.0	0.1	198	24.7		8.1		29.1		96.4		6.8		6.4		4		87				<0.2		1.1	
					Middle	4.0	0.1	130	24.6	24.6	8.1	8.1	29.2	29.2	96.6	96.6	6.8		7.6		6		90				<0.2		0.9	
						4.0	0.1	137	24.6		8.1		29.2		96.6		6.8		7.5		5		91				<0.2		1.0	
					Bottom	7.0	0.1	226	24.6	24.6	8.1	8.1	29.2	29.2	97.4	97.5	6.9	6.9	7.7		6		93				<0.2		0.9	
						7.0	0.2	244	24.6		8.1		29.2		97.6		6.9		7.7		5		93				<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 15 November 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	Rough	16:50	7.5	Surface	1.0	0.1	43	24.7	24.7	8.0	8.0	29.0	29.0	97.7	97.8	6.9	6.9	5.7	6.9	7	5	86	90	822071	808826	<0.2	<0.2	0.9	0.9
						1.0	0.1	43	24.7		8.0		29.0		97.8		6.9		5.8		6		87				<0.2		0.8	
					Middle	3.8	0.1	40	24.7	24.7	8.0	8.0	29.0	29.0	97.9	98.0	6.9		6.7		5		91				<0.2		1.0	
						3.8	0.1	42	24.7		8.0		29.0		98.0		6.9		6.8		5		91				<0.2		0.9	
					Bottom	6.5	0.0	102	24.7	24.7	8.0	8.0	29.1	29.1	98.9	98.9	7.0	7.0	8.1		4		91				<0.2		1.0	
						6.5	0.0	110	24.7		8.0		29.1		98.9		7.0		8.2		4		93				<0.2		1.0	
IM10	Cloudy	Rough	17:00	7.3	Surface	1.0	0.4	312	24.6	24.6	8.0	8.0	29.4	29.4	96.0	96.0	6.8	6.8	6.9	9.2	5	6	86	90	822378	809810	<0.2	<0.2	1.0	1.0
						1.0	0.4	316	24.6		8.0		29.4		95.9		6.8		7.0		6		87				<0.2		1.0	
					Middle	3.7	0.4	322	24.6	24.6	8.0	8.0	29.5	29.5	95.7	95.7	6.7		8.1		5		89				<0.2		0.9	
						3.7	0.4	334	24.6		8.0		29.5		95.6		6.7		8.1		5		90				<0.2		0.9	
					Bottom	6.3	0.3	327	24.6	24.6	8.0	8.0	29.8	29.8	96.3	96.4	6.8	6.8	12.5		6		93				<0.2		0.9	
						6.3	0.3	346	24.6		8.0		29.8		96.5		6.8		12.5		6		93				<0.2		1.0	
IM11	Cloudy	Rough	17:13	7.7	Surface	1.0	0.5	300	24.6	24.6	8.0	8.0	29.6	29.6	95.3	95.3	6.7	6.7	9.8	10.9	7	7	87	90	822045	811441	<0.2	<0.2	1.0	0.9
						1.0	0.5	327	24.6		8.0		29.6		95.2		6.7		9.6		6		87				<0.2		0.9	
					Middle	3.9	0.4	290	24.6	24.6	8.0	8.0	29.8	29.8	95.1	95.1	6.7		10.1		6		89				<0.2		0.9	
						3.9	0.4	311	24.6		8.0		29.8		95.1		6.7		10.4		6		91				<0.2		0.9	
					Bottom	6.7	0.2	297	24.6	24.6	8.0	8.0	29.8	29.8	97.5	97.7	6.9	6.9	12.5		7		93				<0.2		0.9	
						6.7	0.2	303	24.6		8.0		29.8		97.9		6.9		12.9		7		93				<0.2		0.9	
IM12	Cloudy	Rough	17:24	8.6	Surface	1.0	0.4	265	24.7	24.7	8.0	8.0	29.9	29.9	95.0	95.0	6.7	6.7	10.6	11.0	6	5	86	90	821447	812069	<0.2	<0.2	1.3	1.0
						1.0	0.5	279	24.7		8.0		29.9		95.0		6.7		10.6		6		87				<0.2		1.5	
					Middle	4.3	0.3	282	24.7	24.7	8.0	8.0	30.0	30.0	95.1	95.2	6.7		11.7		5		89				<0.2		0.7	
						4.3	0.3	285	24.7		8.0		30.0		95.2		6.7		11.8		5		90				<0.2		0.7	
					Bottom	7.6	0.1	265	24.7	24.7	8.0	8.0	30.0	30.0	95.4	96.4	6.7	6.8	10.7		5		92				<0.2		0.8	
						7.6	0.2	289	24.7		8.0		30.0		97.4		6.8		10.8		5		93				<0.2		0.8	
SR1A	Cloudy	Moderate	17:46	7.2	Surface	1.0	-	-	24.8	24.8	8.0	8.0	30.2	30.2	95.4	95.4	6.7	6.7	7.2	9.3	5	6	-	-	820070	812588	-	-	-	-
						1.0	-	-	24.8		8.0		30.2		95.3		6.7		7.2		6		-				-		-	
					Middle	3.6	-	-	24.8	24.8	8.0	8.0	30.6	30.6	95.1	95.1	6.6		9.6		5		-				-		-	
						3.6	-	-	24.8		8.0		30.6		95.1		6.6		9.7		6		-				-		-	
					Bottom	6.2	-	-	24.8	24.8	8.0	8.0	30.8	30.8	96.3	96.4	6.7	6.7	11.2		5		-				-		-	
						6.2	-	-	24.8		8.0		30.8		96.5		6.7		11.0		6		-				-		-	
SR2	Cloudy	Moderate	18:02	4.6	Surface	1.0	0.3	315	24.6	24.6	7.9	7.9	29.3	29.3	96.0	96.1	6.8	6.8	6.2	6.3	6	6	87	88	821484	814149	<0.2	<0.2	0.9	0.8
						1.0	0.3	321	24.6		7.9		29.3		96.2		6.8		6.2		6		87				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	310	24.6	24.6	8.0	8.0	29.4	29.4	99.1	99.2	7.0	7.0	6.3		6		89				<0.2		0.9	
						3.6	0.1	316	24.6		8.0		29.4		99.2		7.0		6.3		6		90				<0.2		0.7	
SR3	Cloudy	Rough	16:35	9.6	Surface	1.0	0.1	236	25.0	25.0	7.9	7.9	26.6	26.6	95.6	95.7	6.8	6.8	10.7	16.5	11	10	-	-	822125	807583	-	-	-	-
						1.0	0.1	255	25.0		7.9		26.6		95.7		6.8		10.9		11		-				-		-	
					Middle	4.8	0.1	312	24.7	24.7	8.0	8.0	29.2	29.2	95.8	95.8	6.8		15.9		10		-				-		-	
						4.8	0.1	339	24.7		8.0		29.2		95.7		6.7		15.9		10		-				-		-	
					Bottom	8.6	0.1	190	24.7	24.7	8.0	8.0	29.3	29.3	97.6	97.6	6.9	6.9	22.8		10		-				-		-	
						8.6	0.1	196	24.7		8.0		29.3		97.6		6.9		22.7		10		-				-		-	
SR4A	Cloudy	Calm	17:56	8.6	Surface	1.0	0.0	342	24.5	24.5	8.0	8.0	29.3	29.3	93.6	93.7	6.6	6.6	6.4	6.9	7	8	-	-	817177	807788	-	-	-	-
						1.0	0.0	315	24.5		8.0		29.3		93.7		6.6		6.3		8		-				-		-	
					Middle	4.3	0.2	76	24.7	24.7	8.0	8.0	29.6	29.6	93.6	93.7	6.6		7.0		8		-				-		-	
						4.3	0.2	77	24.7		8.0		29.6		93.7		6.6		7.1		9		-				-		-	
					Bottom	7.6	0.2	65	24.7	24.7	8.0	8.0	29.9	29.9	94.3	94.4	6.6	6.6	7.3		8		-				-		-	
						7.6	0.2	71	24.7		8.0		29.9		94.4		6.6		7.1		8		-				-		-	
SR5A	Cloudy	Calm	18:11	4.2	Surface	1.0	0.1	241	24.5	24.5	7.9	7.9	29.0	29.0	94.3	94.3	6.7	6.7	7.0	7.1	8	8	-	-	816600	810683	-	-	-	-
						1.0	0.1	260	24.5		7.9		29.0		94.2		6.7		7.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	279	24.5	24.5	7.9	7.9	29.0	29.0	94.4	94.5	6.7	6.7	7.1		9		-				-		-	
						3.2	0.1	283	24.5		7.9		29.0		94.5		6.7		7.1		8		-				-		-	
SR6	Cloudy	Calm	18:54	4.3	Surface	1.0	0.1	60	24.6	24.6	8.0	8.0	28.8	28.8	94.8	94.9	6.7	6.7	7.3	8.0	6	8	-	-	817909	814647	-	-	-	-
						1.0	0.1	65	24.6		8.0		28.8		94.9		6.7		7.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	158	24.6	24.6	8.0	8.0	28.8	28.8	95.1	95.2	6.7	6.7	8.6		8		-				-		-	
						3.3	0.0	160	24.6		8.0		28.8		95.2		6.7		8.8		8		-				-		-	
SR7	Cloudy	Moderate	19:08	15.7	Surface	1.0	0.1	342	24.6	24.6	7.9	7.9	28.8	28.8	95.9	95.9	6.8	6.8	5.2	8.7	6	7	-	-	823651	823760	-	-	-	-
						1.0	0.1	359	24.6		7.9		28.8		95.9		6.8		5.5		7		-				-		-	
					Middle	7.9	0.1	98	24.6	24.6	7.9	7.9	28.8	28.8	96.5	96.5	6.8		7.1		6		-				-		-	
						7.9	0.1	106	24.6		7.9		28.8		96.5		6.8		6.9		6		-				-		-	
					Bottom	14.7	0.1	90	24.6	24.6	7.9	7.9	28.8	28.8	97.3	97.5	6.9	6.9	13.5		8		-				-		-	
						14.7	0.1	98	24.6		7.9		28.8		97.7		6.9		13.7		7		-				-		-	
SR8	Cloudy	Moderate	17:36	4.3	Surface	1.0	-	-	24.7	24.7	8.0	8.0	29.9	29.9	96.4	96.4	6.8	6.8	8.1	8.4	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	24.7		8.0		29.9		96.4		6.8		8.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	24.7	24.7	8.0	8.0	29.9	29.9	96.9	97.0	6.8	6.8	8.6		7		-				-		-	
						3.3	-	-	24.7		8.1		29.9		97.0		6.8		8.6		7		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 November 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	21:28	8.0	Surface	1.0	0.6	176	24.6	24.6	7.9	7.9	25.8	25.8	93.5	93.6	6.7	6.7	4.3	5.0	3	4	87	90	815619	804230	<0.2	<0.2	2.8	2.7
						1.0	0.6	184	24.6		7.9		25.8		93.6		6.7		4.3		4		87				<0.2		2.6	
					Middle	4.0	0.3	216	24.6	24.6	7.9	7.9	29.0	29.0	94.3	94.4	6.7		5.1		3		90				<0.2		2.9	
						4.0	0.3	230	24.6		7.9		29.0		94.4		6.7		5.2		3		91				<0.2		2.8	
					Bottom	7.0	0.2	213	24.6	24.6	7.9	7.9	29.3	29.3	94.4	94.4	6.7	6.7	5.6		5		93				<0.2		2.5	
						7.0	0.2	227	24.6		7.9		29.3		94.4		6.7		5.6		3		93				<0.2		2.5	
C2	Cloudy	Rough	22:57	11.2	Surface	1.0	0.5	170	24.8	24.8	7.9	7.9	23.8	23.9	90.1	90.2	6.5	6.5	4.2	4.5	4	3	88	90	825672	806921	<0.2	<0.2	2.6	2.7
						1.0	0.5	172	24.8		7.9		23.9		90.3		6.5		4.2		2		88				<0.2		2.7	
					Middle	5.6	0.3	164	24.9	24.8	7.9	7.9	24.9	24.9	90.2	90.3	6.5		4.3		2		90				<0.2		2.5	
						5.6	0.3	172	24.8		7.9		24.8		90.4		6.5		4.6		4		91				<0.2		2.7	
					Bottom	10.2	0.1	144	24.7	24.7	8.0	8.0	29.7	29.7	90.2	90.2	6.3	6.3	4.6		3		93				<0.2		2.7	
						10.2	0.1	145	24.7		8.0		29.7		90.1		6.3		5.2		3		92				<0.2		2.9	
C3	Cloudy	Moderate	20:59	12.5	Surface	1.0	0.1	54	24.7	24.7	7.8	7.8	29.9	29.9	91.3	91.4	6.4	6.4	9.9	9.1	4	5	87	90	822097	817817	<0.2	<0.2	2.4	2.6
						1.0	0.1	56	24.7		7.8		29.9		91.4		6.4		9.8		5		88				<0.2		2.4	
					Middle	6.3	0.1	80	24.7	24.7	7.8	7.8	30.2	30.2	91.7	91.7	6.4		8.7		4		89				<0.2		2.7	
						6.3	0.1	80	24.7		7.8		30.2		91.6		6.4		8.6		5		90				<0.2		2.6	
					Bottom	11.5	0.2	76	24.8	24.8	7.8	7.8	30.2	30.2	91.9	92.0	6.4	6.4	8.7		4		92				<0.2		2.7	
						11.5	0.2	76	24.8		7.8		30.2		92.0		6.4		8.6		5		93				<0.2		2.7	
IM1	Cloudy	Moderate	21:49	4.4	Surface	1.0	0.1	205	24.7	24.7	7.9	7.9	28.4	28.4	93.1	93.1	6.6	6.6	6.2	6.3	6	5	86	88	817927	807142	<0.2	<0.2	3.2	3.3
						1.0	0.1	220	24.7		7.9		28.5		93.1		6.6		6.2		5		86				<0.2		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	<0.2	-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	180	24.7	24.7	7.9	7.9	29.6	29.6	93.2	93.3	6.5	6.6	6.4		4		89				<0.2		3.3	
						3.4	0.1	184	24.7		7.9		29.6		93.3		6.6		6.4		3		90				<0.2		3.4	
IM2	Cloudy	Moderate	21:56	6.8	Surface	1.0	0.4	229	24.7	24.7	7.9	7.9	26.6	26.6	92.6	92.6	6.6	6.6	5.4	5.7	6	6	86	90	818168	806186	<0.2	<0.2	3.4	3.4
						1.0	0.4	251	24.7		7.9		26.6		92.6		6.6		5.5		7		87				<0.2		3.3	
					Middle	3.4	0.2	228	24.8	24.8	8.0	8.0	29.1	29.1	92.2	92.2	6.5		5.7		5		90				<0.2		3.5	
						3.4	0.2	237	24.8		8.0		29.1		92.1		6.5		5.7		6		91				<0.2		3.1	
					Bottom	5.8	0.1	271	24.8	24.8	8.0	8.0	30.4	30.4	92.2	92.2	6.4	6.4	5.8		6		92				<0.2		3.5	
						5.8	0.1	281	24.8		8.0		30.4		92.2		6.4		5.8		6		93				<0.2		3.5	
IM3	Cloudy	Moderate	22:03	6.7	Surface	1.0	0.4	205	24.7	24.7	7.9	7.9	26.4	26.4	92.6	92.7	6.6	6.6	6.6	6.5	5	6	82	86	818762	805604	<0.2	<0.2	1.9	2.9
						1.0	0.4	220	24.7		7.9		26.4		92.7		6.6		6.6		5		83				<0.2		2.0	
					Middle	3.4	0.4	210	24.8	24.8	7.9	7.9	27.8	27.8	92.7	92.7	6.6		6.3		6		86				<0.2		3.4	
						3.4	0.4	224	24.8		7.9		27.8		92.7		6.6		6.3		6		86				<0.2		3.3	
					Bottom	5.7	0.3	192	24.7	24.7	7.9	7.9	29.3	29.3	92.7	92.7	6.5	6.5	6.6		6		90				<0.2		3.5	
						5.7	0.3	204	24.7		7.9		29.3		92.6		6.5		6.5		6		91				<0.2		3.4	
IM4	Cloudy	Moderate	22:14	7.0	Surface	1.0	0.6	167	24.7	24.7	7.8	7.8	22.0	22.0	90.4	90.5	6.6	6.6	6.2	7.2	6	7	83	87	819732	804617	<0.2	<0.2	3.6	3.5
						1.0	0.6	179	24.7		7.8		22.0		90.5		6.6		6.3		8		83				<0.2		3.5	
					Middle	3.5	0.2	160	24.7	24.7	7.9	7.9	27.0	27.0	90.6	90.6	6.5		8.3		7		86				<0.2		3.5	
						3.5	0.3	165	24.7		7.9		27.0		90.6		6.5		8.3		7		87				<0.2		3.6	
					Bottom	6.0	0.0	64	24.7	24.7	7.9	7.9	29.8	29.8	90.5	90.5	6.3	6.3	7.0		6		90				<0.2		3.5	
						6.0	0.0	66	24.7		7.9		29.8		90.5		6.3		7.0		8		91				<0.2		3.4	
IM5	Cloudy	Moderate	22:25	6.3	Surface	1.0	0.5	189	24.8	24.8	7.8	7.8	22.0	22.0	89.7	89.7	6.6	6.6	5.0	8.7	3	3	86	90	820730	804854	<0.2	<0.2	2.2	3.0
						1.0	0.6	189	24.8		7.8		22.0		89.6		6.6		5.0		3		87				<0.2		2.3	
					Middle	3.2	0.4	207	24.8	24.8	7.9	7.9	24.3	24.3	90.6	90.6	6.5		8.3		3		90				<0.2		3.3	
						3.2	0.5	220	24.8		7.9		24.3		90.5		6.5		8.5		4		91				<0.2		3.4	
					Bottom	5.3	0.4	226	24.7	24.7	7.9	7.9	28.9	28.9	90.1	90.1	6.4	6.4	12.7		3		92				<0.2		3.3	
						5.3	0.4	241	24.7		7.9		29.0		90.0		6.3		12.7		3		93				<0.2		3.3	
IM6	Cloudy	Moderate	22:35	6.1	Surface	1.0	0.2	263	24.8	24.8	7.9	7.9	25.0	25.0	91.4	91.4	6.6	6.6	5.0	6.2	4	4	86	89	821069	805815	<0.2	<0.2	3.3	3.0
						1.0	0.2	270	24.8		7.9		25.0		91.4		6.6		5.0		4		86				<0.2		3.3	
					Middle	3.1	0.2	257	24.8	24.8	7.9	7.9	25.4	25.4	91.5	91.5	6.6		6.0		4		90				<0.2		2.5	
						3.1	0.2	271	24.8		7.9		25.4		91.5		6.6		6.1		4		90				<0.2		2.7	
					Bottom	5.1	0.2	266	24.8	24.8	7.9	7.9	26.2	26.2	91.6	91.6	6.5	6.5	7.4		4		92				<0.2		3.2	
						5.1	0.2	280	24.8		7.9		26.2		91.5		6.5		7.4		4		92				<0.2		3.2	
IM7	Cloudy	Moderate	22:43	7.5	Surface	1.0	0.5	223	24.8	24.8	7.9	7.9	23.8	23.9	90.1	90.2	6.5	6.5	4.2	4.7	4	4	87	90	821369	806854	<0.2	<0.2	3.4	3.6
						1.0	0.5	229	24.8		7.9		23.9		90.3		6.5		4.2		3		87				<0.2		3.4	
					Middle	3.8	0.5	238	24.9	24.8	7.9	7.9	24.9	24.9	90.2	90.3	6.5		4.3		3		90				<0.2		3.7	
						3.8	0.5	250	24.8		7.9		24.8		90.4		6.5		4.6		3		90				<0.2		3.6	
					Bottom	6.5	0.3	212	24.7	24.7	8.0	8.0	29.7	29.7	90.2	90.2	6.3	6.3	5.4		4		92				<0.2		3.7	
						6.5	0.3	213	24.7		8.0		29.7		90.1		6.3		5.2		4		93				<0.2		3.8	
IM8	Cloudy	Rough	22:34	8.2	Surface	1.0	0.3	200	24.8	24.8	7.8	7.8	21.9	21.9	90.4	90.4	6.6	6.7	4.6	5.3	4	6	86	90	821842	808122	<0.2	<0.2	3.2	3.5
						1.0	0.3	209	24.8		7.8		21.9		90.4		6.6		4.6		5		87				<0.2		3.2	
					Middle	4.1	0.2	185	24.8	24.8	7.8	7.8	24.2	24.2	92.8	92.9	6.7		5.2		8		90				<0.2		3.8	
						4.1	0.2	185	24.8		7.8		24.2		92.9		6.7		5.2		7		90				<0.2		3.7	
					Bottom	7.2	0.1	236	24.8	24.8	7.9	7.9	27.5	27.5	94.8	94.9	6.7	6.7	6.1		7		92				<0.2		3.7	
						7.2	0.1	244	24.8		7.9		27.5		94.9		6.7		6.1		6		93				<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 17 November 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	Rough	22:29	7.4	Surface	1.0	0.2	187	24.7	24.7	7.8	7.8	21.9	21.9	90.6	90.6	6.6	6.6	5.6	7.8	6	5	83	87	822075	808788	<0.2	<0.2	2.7	3.2
						1.0	0.2	195	24.7		7.8		21.9		90.6		6.6		5.7		5		83				<0.2		2.6	
					Middle	3.7	0.2	151	24.7	24.7	7.9	7.9	28.1	28.1	91.5	91.6	6.5		9.6		5		86				<0.2		3.6	
						3.7	0.2	151	24.7		7.9		28.0		91.6		6.5		9.6		5		87				<0.2		3.6	
					Bottom	6.4	0.0	23	24.8	24.8	7.9	7.9	30.0	30.0	92.7	92.7	6.5	6.5	8.2		4		90				<0.2		3.4	
						6.4	0.0	23	24.8		7.9		30.1		92.7		6.5		8.2		6		90				<0.2		3.5	
IM10	Cloudy	Rough	22:20	7.6	Surface	1.0	0.2	139	24.7	24.7	7.9	7.9	25.9	25.9	93.6	93.6	6.7	6.7	6.7	6.6	6	6	87	90	822395	809785	<0.2	<0.2	3.7	3.6
						1.0	0.2	145	24.7		7.9		25.9		93.6		6.7		6.6		6		87				<0.2		3.7	
					Middle	3.8	0.2	122	24.8	24.8	7.9	7.9	27.6	27.6	94.2	94.2	6.7		6.2		6		90				<0.2		3.6	
						3.8	0.2	133	24.8		7.9		27.6		94.2		6.7		6.3		5		91				<0.2		3.6	
					Bottom	6.6	0.2	105	24.8	24.8	8.0	8.0	30.1	30.1	96.2	96.3	6.7	6.7	7.1		7		92				<0.2		3.6	
						6.6	0.2	106	24.8		8.0		30.1		96.3		6.7		6.9		8		93				<0.2		3.5	
IM11	Cloudy	Moderate	22:07	7.7	Surface	1.0	0.2	143	24.7	24.7	7.9	7.9	26.7	26.7	92.8	92.8	6.6	6.6	5.6	6.1	3	4	87	90	822037	811439	<0.2	<0.2	2.5	2.9
						1.0	0.3	155	24.7		7.9		26.8		92.8		6.6		5.6		4		88				<0.2		2.4	
					Middle	3.9	0.2	129	24.8	24.8	7.9	7.9	30.0	30.0	92.6	92.7	6.5		6.2		3		90				<0.2		2.7	
						3.9	0.2	138	24.8		7.9		30.0		92.7		6.5		6.2		4		91				<0.2		2.7	
					Bottom	6.7	0.1	112	24.8	24.8	7.9	7.9	30.4	30.4	93.5	93.6	6.5	6.5	6.6		3		93				<0.2		3.5	
						6.7	0.1	117	24.8		7.9		30.4		93.7		6.5		6.6		4		93				<0.2		3.7	
IM12	Cloudy	Moderate	21:58	8.8	Surface	1.0	0.2	106	24.7	24.7	7.9	7.9	28.4	28.4	93.8	93.8	6.6	6.7	6.3	6.6	5	5	86	89	821474	812060	<0.2	<0.2	3.5	3.2
						1.0	0.3	108	24.7		7.9		28.4		93.8		6.6		6.3		6		86				<0.2		3.6	
					Middle	4.4	0.3	101	24.7	24.7	7.9	7.9	28.9	28.9	94.5	94.6	6.7		6.6		5		89				<0.2		3.4	
						4.4	0.3	108	24.7		7.9		28.9		94.6		6.7		6.6		5		90				<0.2		3.4	
					Bottom	7.8	0.1	90	24.7	24.7	7.9	7.9	30.2	30.2	96.4	96.5	6.7	6.8	6.8		4		92				<0.2		2.4	
						7.8	0.1	90	24.7		7.9		30.2		96.5		6.8		6.8		6		93				<0.2		2.7	
SR1A	Cloudy	Moderate	21:40	7.0	Surface	1.0	-	-	24.7	24.7	7.8	7.8	26.5	26.4	94.4	94.5	6.8	6.8	4.8	5.3	3	4	-	-	820071	812581	-	-	-	-
						1.0	-	-	24.7		7.8		26.4		94.6		6.8		4.9		4		-				-		-	
					Middle	3.5	-	-	24.6	24.6	7.9	7.9	28.5	28.5	95.6	95.7	6.8		5.4		5		-				-		-	
						3.5	-	-	24.6		7.9		28.5		95.7		6.8		5.4		5		-				-		-	
					Bottom	6.0	-	-	24.6	24.6	7.9	7.9	29.4	29.4	97.2	97.2	6.8	6.8	5.7		5		-				-		-	
						6.0	-	-	24.6		7.9		29.4		97.2		6.8		5.8		4		-				-		-	
SR2	Cloudy	Moderate	21:25	4.6	Surface	1.0	0.2	85	24.7	24.7	7.9	7.9	29.8	29.8	94.4	94.5	6.6	6.6	5.2	5.5	5	5	86	88	821443	814158	<0.2	<0.2	2.5	2.4
						1.0	0.2	91	24.7		7.9		29.8		94.5		6.6		5.2		5		87				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	98	24.6	24.6	7.9	7.9	29.9	29.9	96.9	97.0	6.8	6.8	5.7		5		89				<0.2		2.3	
						3.6	0.2	101	24.6		7.9		29.9		97.0		6.8		5.7		5		90				<0.2		2.6	
SR3	Cloudy	Rough	22:41	8.9	Surface	1.0	0.4	180	24.8	24.8	7.8	7.8	23.9	23.9	90.8	90.8	6.6	6.6	5.1	4.7	8	8	-	-	822135	807564	-	-	-	-
						1.0	0.4	195	24.8		7.8		23.9		90.8		6.6		5.3		7		-				-		-	
					Middle	4.5	0.3	209	24.9	24.9	7.9	7.9	25.1	25.1	92.3	92.4	6.6		4.3		8		-				-		-	
						4.5	0.3	224	24.9		7.9		25.1		92.4		6.6		4.4		8		-				-		-	
					Bottom	7.9	0.2	250	24.8	24.8	7.9	7.9	28.7	28.7	94.4	94.4	6.7	6.7	4.4		8		-				-		-	
						7.9	0.2	261	24.8		7.9		28.7		94.4		6.7		4.5		9		-				-		-	
SR4A	Cloudy	Calm	21:07	8.6	Surface	1.0	0.1	267	24.7	24.7	7.9	7.9	29.8	29.8	93.1	93.1	6.5	6.5	5.7	5.9	4	5	-	-	817212	807822	-	-	-	-
						1.0	0.1	270	24.7		7.9		29.8		93.1		6.5		5.7		4		-				-		-	
					Middle	4.3	0.2	273	24.7	24.7	7.9	7.9	30.0	30.0	92.6	92.6	6.5		6.0		4		-				-		-	
						4.3	0.2	285	24.7		7.9		30.0		92.6		6.5		6.0		4		-				-		-	
					Bottom	7.6	0.2	266	24.7	24.7	7.9	7.9	30.0	30.0	92.9	93.0	6.5	6.5	6.0		5		-				-		-	
						7.6	0.2	266	24.7		7.9		30.0		93.0		6.5		6.0		6		-				-		-	
SR5A	Cloudy	Calm	20:52	4.9	Surface	1.0	0.0	208	24.7	24.7	7.9	7.9	29.9	29.9	91.0	91.1	6.4	6.4	10.5	9.9	4	5	-	-	816609	810717	-	-	-	-
						1.0	0.0	210	24.7		7.9		29.9		91.2		6.4		10.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	159	24.7	24.7	7.9	7.9	30.2	30.2	91.0	91.0	6.4	6.4	9.5		6		-				-		-	
						3.9	0.0	166	24.7		7.9		30.2		90.9		6.4		9.6		5		-				-		-	
SR6	Cloudy	Calm	20:27	4.5	Surface	1.0	0.0	176	24.6	24.6	7.8	7.8	28.7	28.7	87.2	87.2	6.2	6.2	6.9	7.5	5	5	-	-	817915	814645	-	-	-	-
						1.0	0.0	182	24.6		7.8		28.7		87.1		6.2		7.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	98	24.6	24.6	7.8	7.8	29.1	29.1	87.1	87.1	6.1	6.1	8.1		5		-				-		-	
						3.5	0.0	99	24.6		7.8		29.1		87.1		6.1		8.1		4		-				-		-	
SR7	Cloudy	Moderate	20:26	18.5	Surface	1.0	0.3	77	24.6	24.6	7.8	7.8	28.6	28.6	87.2	87.2	6.2	6.2	8.4	13.5	5	6	-	-	823640	823755	-	-	-	-
						1.0	0.3	77	24.6		7.8		28.6		87.2		6.2		8.5		4		-				-		-	
					Middle	9.3	0.1	329	24.6	24.6	7.8	7.8	29.1	29.1	87.5	87.5	6.2		12.7		6		-				-		-	
						9.3	0.1	342	24.6		7.8		29.1		87.5		6.2		12.9		6		-				-		-	
					Bottom	17.5	0.3	301	24.6	24.6	7.8	7.8	29.2	29.2	88.0	88.1	6.2	6.2	19.1		6		-				-		-	
						17.5	0.3	319	24.6		7.8		29.2		88.1		6.2		19.4		6		-				-		-	
SR8	Cloudy	Moderate	21:50	4.4	Surface	1.0	-	-	24.6	24.6	7.9	7.9	29.8	29.8	92.5	92.6	6.5	6.5	5.6	5.7	4	4	-	-	820506	811663	-	-	-	-
						1.0	-	-	24.6		7.9		29.8		92.6		6.5		5.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	24.6	24.6	7.9	7.9	29.9	29.9	92.3	92.3	6.5	6.5	5.8		4		-				-		-	
						3.4	-	-	24.6		7.9		29.9		92.2		6.5		5.8		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
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 17 November 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	15:26	8.1	Surface	1.0	0.2	55	24.7	24.7	7.9	7.9	23.8	23.8	91.3	91.3	6.6	6.5	6.3	16.1	5	4	82	86	815616	804242	<0.2	<0.2	2.4	2.4
						1.0	0.2	59	24.7		7.9		23.8		91.3		6.6		6.7		4		83				<0.2		2.4	
					Middle	4.1	0.4	46	24.6	24.6	8.0	8.0	28.9	28.9	90.7	90.7	6.4		17.5		4		86				<0.2		2.4	
						4.1	0.4	49	24.6		8.0		28.9		90.7		6.4		17.8		4		86				<0.2		2.4	
					Bottom	7.1	0.4	39	24.7	24.7	8.0	8.0	30.3	30.3	90.6	90.6	6.3	6.3	24.2		4		89				<0.2		2.3	
						7.1	0.5	42	24.7		8.0		30.3		90.6		6.3		23.9		5		90				<0.2		2.4	
C2	Cloudy	Rough	14:06	11.3	Surface	1.0	0.1	260	24.9	24.9	7.8	7.8	24.4	24.4	90.4	90.4	6.5	6.5	5.6	10.2	4	4	89	91	825662	806936	<0.2	<0.2	2.4	2.5
						1.0	0.1	279	24.9		7.8		24.4		90.3		6.5		5.6		4		89				<0.2		2.4	
					Middle	5.7	0.1	337	24.8	24.8	7.8	7.8	28.5	28.4	90.0	90.0	6.4		9.3		4		91				<0.2		2.4	
						5.7	0.1	310	24.8		7.8		28.4		90.0		6.4		9.5		3		92				<0.2		2.4	
					Bottom	10.3	0.1	298	24.8	24.8	7.8	7.8	29.6	29.6	90.1	90.2	6.3	6.3	15.3		3		93				<0.2		2.7	
						10.3	0.2	321	24.8		7.8		29.6		90.2		6.3		15.7		3		93				<0.2		2.6	
C3	Cloudy	Moderate	15:50	10.7	Surface	1.0	0.3	265	24.8	24.8	8.0	8.0	29.9	29.9	90.8	90.9	6.4	6.4	7.8	8.0	6	6	83	86	822114	817809	<0.2	<0.2	2.6	2.4
						1.0	0.4	283	24.8		8.0		29.9		90.9		6.4		7.8		7		82				<0.2		2.5	
					Middle	5.4	0.3	261	24.7	24.7	8.0	8.0	29.9	29.9	90.4	90.5	6.3		8.1		6		86				<0.2		2.4	
						5.4	0.3	283	24.7		8.0		29.9		90.5		6.3		8.1		6		86				<0.2		2.4	
					Bottom	9.7	0.2	277	24.7	24.7	8.0	8.0	29.9	29.9	90.7	90.7	6.4	6.4	8.0		7		90				<0.2		2.2	
						9.7	0.2	301	24.7		8.0		29.9		90.6		6.4		8.0		6		91				<0.2		2.4	
IM1	Cloudy	Moderate	14:49	5.0	Surface	1.0	0.2	9	24.7	24.7	8.0	8.0	28.6	28.6	93.2	93.2	6.6	6.6	6.2	6.6	6	5	82	87	817927	807129	<0.2	<0.2	2.6	2.5
						1.0	0.2	9	24.7		8.0		28.6		93.2		6.6		6.3		6		83				<0.2		2.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	4	24.7	24.7	8.0	8.0	29.6	29.6	93.3	93.4	6.6	6.6	7.0		4		90				<0.2		2.3	
						4.0	0.3	4	24.7		8.0		29.6		93.4		6.6		7.0		4		91				<0.2		2.4	
IM2	Cloudy	Moderate	14:42	6.5	Surface	1.0	0.1	262	24.8	24.8	8.0	8.0	28.0	28.0	92.5	92.6	6.6	6.6	6.4	7.1	8	7	82	87	818167	806164	<0.2	<0.2	2.4	2.5
						1.0	0.1	266	24.8		8.0		28.0		92.7		6.6		6.4		8		83				<0.2		2.3	
					Middle	3.3	0.2	347	24.7	24.7	8.0	8.0	28.9	28.9	92.5	92.5	6.5		7.3		7		87				<0.2		2.6	
						3.3	0.2	319	24.7		8.0		28.9		92.4		6.5		7.4		7		87				<0.2		2.6	
					Bottom	5.5	0.3	350	24.7	24.7	8.0	8.0	29.8	29.8	92.2	92.2	6.5	6.5	7.7		7		90				<0.2		2.6	
						5.5	0.3	322	24.7		8.0		29.8		92.2		6.5		7.6		6		91				<0.2		2.3	
IM3	Cloudy	Moderate	14:35	6.8	Surface	1.0	0.2	247	24.8	24.8	7.9	7.9	26.4	26.5	91.9	91.9	6.6	6.5	6.8	8.7	9	8	87	90	818802	805582	<0.2	<0.2	2.6	2.6
						1.0	0.2	261	24.8		7.9		26.5		91.8		6.6		7.0		8		87				<0.2		2.6	
					Middle	3.4	0.1	338	24.7	24.7	8.0	8.0	28.9	28.9	91.3	91.3	6.4		8.3		7		89				<0.2		2.7	
						3.4	0.1	358	24.7		8.0		28.9		91.3		6.4		8.4		8		90				<0.2		2.5	
					Bottom	5.8	0.1	24	24.7	24.7	8.0	8.0	30.4	30.4	91.2	91.3	6.4	6.4	10.9		8		92				<0.2		2.7	
						5.8	0.1	26	24.7		8.0		30.4		91.3		6.4		10.8		9		92				<0.2		2.5	
IM4	Cloudy	Moderate	14:26	6.9	Surface	1.0	0.1	323	24.8	24.8	7.9	7.9	26.1	26.0	92.1	92.0	6.6	6.6	5.7	6.1	6	5	83	87	819724	804603	<0.2	<0.2	2.5	2.4
						1.0	0.1	344	24.8		7.9		26.0		91.9		6.6		5.8		5		85				<0.2		2.4	
					Middle	3.5	0.2	321	24.8	24.8	7.9	7.9	27.3	27.3	91.7	91.8	6.5		6.6		5		86				<0.2		2.5	
						3.5	0.2	343	24.8		7.9		27.3		91.8		6.5		6.5		5		87				<0.2		2.4	
					Bottom	5.9	0.2	27	24.7	24.7	8.0	7.9	30.3	30.3	92.0	92.0	6.4	6.4	6.1		5		89				<0.2		2.4	
						5.9	0.3	27	24.7		7.9		30.3		92.0		6.4		6.1		5		91				<0.2		2.3	
IM5	Cloudy	Moderate	14:19	6.5	Surface	1.0	0.4	274	24.8	24.8	7.9	7.9	24.2	24.2	90.7	90.8	6.6	6.6	4.8	5.9	4	3	83	86	820722	804860	<0.2	<0.2	2.4	2.5
						1.0	0.4	285	24.8		7.9		24.2		90.8		6.6		4.9		3		83				<0.2		2.3	
					Middle	3.3	0.2	296	24.8	24.8	7.9	7.9	26.0	26.0	91.2	91.2	6.5		6.6		3		86				<0.2		2.4	
						3.3	0.2	317	24.8		7.9		26.0		91.1		6.5		6.6		3		86				<0.2		2.4	
					Bottom	5.5	0.2	330	24.8	24.8	7.9	7.9	28.3	28.3	90.8	90.9	6.4	6.4	6.3		4		90				<0.2		2.6	
						5.5	0.2	343	24.8		7.9		28.4		90.9		6.4		6.3		3		90				<0.2		2.6	
IM6	Cloudy	Moderate	14:12	6.2	Surface	1.0	0.4	279	24.8	24.8	7.8	7.8	24.1	24.1	90.3	90.3	6.5	6.5	4.5	5.1	3	3	87	90	821044	805828	<0.2	<0.2	2.3	2.4
						1.0	0.5	303	24.8		7.8		24.1		90.3		6.5		4.5		3		87				<0.2		2.2	
					Middle	3.1	0.4	282	24.8	24.8	7.8	7.8	24.7	24.7	90.3	90.4	6.5		5.3		3		90				<0.2		2.6	
						3.1	0.4	297	24.8		7.8		24.7		90.4		6.5		5.3		3		90				<0.2		2.4	
					Bottom	5.2	0.3	257	24.8	24.8	7.9	7.9	28.4	28.4	90.6	90.6	6.4	6.4	5.5		3		93				<0.2		2.4	
						5.2	0.3	269	24.8		7.9		28.4		90.6		6.4		5.5		3		93				<0.2		2.4	
IM7	Cloudy	Moderate	14:06	7.2	Surface	1.0	0.4	266	24.9	24.9	7.8	7.8	24.4	24.4	89.8	89.9	6.5	6.5	4.5	5.1	2	3	87	90	821360	806842	<0.2	<0.2	1.9	2.0
						1.0	0.5	278	24.9		7.8		24.4		89.9		6.5		4.5		3		87				<0.2		2.2	
					Middle	3.6	0.4	275	24.8	24.8	7.8	7.8	24.6	24.6	89.7	89.7	6.5		5.3		3		90				<0.2		2.0	
						3.6	0.4	277	24.8		7.8		24.6		89.7		6.5		5.3		3		91				<0.2		2.0	
					Bottom	6.2	0.3	266	24.8	24.8	7.9	7.9	29.5	29.5	89.6	89.6	6.3	6.3	5.6		3		93				<0.2		1.8	
						6.2	0.3	280	24.8		7.9		29.5		89.5		6.3		5.5		4		92				<0.2		1.8	
IM8	Cloudy	Rough	14:31	7.6	Surface	1.0	0.1	188	24.8	24.8	7.8	7.8	24.2	24.2	91.8	91.8	6.6	6.7	4.8	5.9	4	4	86	90	821821	808133	<0.2	<0.2	1.9	1.7
						1.0	0.1	192	24.8		7.8		24.2		91.8		6.6		4.9		4		87				<0.2		1.6	
					Middle	3.8	0.1	135	24.8	24.8	7.9	7.9	25.8	25.8	93.3	93.5	6.7		6.0		3		90				<0.2		1.7	
						3.8	0.1	141	24.8		7.9		25.8		93.6		6.7		6.0		4		91				<0.2		1.6	
					Bottom	6.6	0.1	220	24.8	24.8	8.0	8.0	27.8	28.2	95.7	95.8	6.8	6.8	6.6		3		93				<0.2		1.8	
						6.6	0.2	225	24.8		8.0		28.7		95.8		6.8		6.8		3		93				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 November 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	Rough	14:36	7.2	Surface	1.0	0.1	54	24.8	24.8	7.9	7.9	25.9	25.9	93.4	93.4	6.7	6.7	5.8	6.2	2	3	85	90	822070	808800	<0.2	<0.2	1.7	2.1
						1.0	0.1	55	24.8		7.9		25.9		93.4		6.7		5.8		2		86				<0.2		1.7	
					Middle	3.6	0.1	49	24.8	24.8	7.9	7.9	26.7	26.7	94.3	94.4	6.7		6.2		3		90				<0.2		2.4	
						3.6	0.1	49	24.8		7.9		26.7		94.4		6.7		6.2		4		91				<0.2		2.2	
					Bottom	6.2	0.0	100	24.8	24.8	8.0	8.0	29.2	29.2	96.4	96.5	6.8	6.8	6.4		4		94				<0.2		2.3	
						6.2	0.0	107	24.8		8.0		29.2		96.6		6.8		6.6		4		94				<0.2		2.3	
IM10	Cloudy	Rough	14:44	8.1	Surface	1.0	0.4	310	24.8	24.8	7.9	7.9	26.0	26.0	92.7	92.8	6.6	6.6	7.3	9.8	<2	3	87	90	822364	809801	<0.2	<0.2	2.2	2.2
						1.0	0.4	311	24.8		7.9		26.0		92.8		6.6		7.3		2		88				<0.2		2.3	
					Middle	4.1	0.4	327	24.8	24.8	7.9	7.9	28.6	28.6	92.4	92.4	6.5		8.8		3		90				<0.2		2.1	
						4.1	0.4	357	24.8		7.9		28.6		92.4		6.5		9.0		3		91				<0.2		2.1	
					Bottom	7.1	0.3	315	24.7	24.7	8.0	8.0	30.4	30.4	93.5	93.6	6.5	6.5	13.2		5		92				<0.2		2.3	
						7.1	0.3	343	24.7		8.0		30.4		93.6		6.5		13.4		5		93				<0.2		2.4	
IM11	Cloudy	Moderate	14:55	7.7	Surface	1.0	0.5	291	24.8	24.8	8.0	8.0	27.9	27.9	93.1	93.2	6.6	6.6	6.4	7.1	3	3	86	90	822069	811448	<0.2	<0.2	2.4	2.5
						1.0	0.5	292	24.8		8.0		27.9		93.2		6.6		6.4		3		87				<0.2		2.4	
					Middle	3.9	0.4	284	24.7	24.7	8.0	8.0	29.1	29.1	93.1	93.1	6.6		7.2		2		91				<0.2		2.5	
						3.9	0.4	295	24.7		8.0		29.1		93.1		6.6		7.2		<2		91				<0.2		2.5	
					Bottom	6.7	0.2	290	24.6	24.6	8.0	8.0	29.7	29.7	94.0	94.0	6.6	6.6	7.7		4		93				<0.2		2.4	
						6.7	0.2	317	24.6		8.0		29.7		94.0		6.6		7.7		3		93				<0.2		2.6	
IM12	Cloudy	Moderate	14:48	8.6	Surface	1.0	0.4	258	24.7	24.7	8.0	8.0	28.6	28.6	93.3	93.3	6.6	6.6	8.0	13.8	5	5	85	89	821478	812062	<0.2	<0.2	2.7	2.5
						1.0	0.5	270	24.7		8.0		28.7		93.2		6.6		8.4		5		86				<0.2		2.4	
					Middle	4.3	0.3	280	24.7	24.7	8.0	8.0	29.7	29.7	93.1	93.2	6.5		14.5		5		90				<0.2		2.5	
						4.3	0.3	288	24.7		8.0		29.7		93.2		6.5		14.9		5		90				<0.2		2.6	
					Bottom	7.6	0.1	264	24.7	24.7	8.0	8.0	29.9	29.8	94.4	94.5	6.6	6.6	18.5		4		92				<0.2		2.4	
						7.6	0.2	278	24.7		8.0		29.8		94.6		6.6		18.6		5		93				<0.2		2.4	
SR1A	Cloudy	Moderate	15:08	7.1	Surface	1.0	-	-	24.7	24.7	7.8	7.8	23.8	23.8	91.9	92.0	6.7	6.6	5.3	9.7	8	9	-	-	820064	812591	-	-	-	-
						1.0	-	-	24.7		7.8		23.8		92.0		6.7		5.4		9		-				-		-	
					Middle	3.6	-	-	24.7	24.7	7.9	7.9	25.7	25.7	91.1	91.2	6.5		8.5		8		-				-		-	
						3.6	-	-	24.7		7.9		25.7		91.2		6.6		8.6		9		-				-		-	
					Bottom	6.1	-	-	24.7	24.7	7.9	7.9	29.8	29.8	91.4	91.4	6.4	6.4	15.1		8		-				-		-	
						6.1	-	-	24.7		7.9		29.9		91.4		6.4		15.3		9		-				-		-	
SR2	Cloudy	Moderate	15:22	4.6	Surface	1.0	0.3	311	24.8	24.8	7.9	7.9	29.9	29.9	93.3	93.3	6.5	6.5	7.7	7.8	8	8	85	88	821454	814154	<0.2	<0.2	2.4	2.4
						1.0	0.3	330	24.8		7.9		29.9		93.2		6.5		7.8		7		86				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	305	24.8	24.8	7.9	7.9	29.9	29.9	95.1	95.2	6.7	6.7	7.8		9		89				<0.2		2.4	
						3.6	0.2	312	24.8		7.9		29.9		95.3		6.7		7.7		9		90				<0.2		2.4	
SR3	Cloudy	Rough	14:26	8.1	Surface	1.0	0.1	226	24.8	24.8	7.8	7.8	24.1	24.1	91.6	91.8	6.6	6.6	4.5	5.6	4	4	-	-	822140	807556	-	-	-	-
						1.0	0.1	241	24.8		7.8		24.1		92.0		6.7		4.6		4		-				-		-	
					Middle	4.1	0.1	313	24.8	24.8	7.9	7.9	25.9	25.9	92.7	92.8	6.6		4.9		4		-				-		-	
						4.1	0.1	338	24.8		7.9		25.9		92.8		6.6		4.9		3		-				-		-	
					Bottom	7.1	0.1	196	24.8	24.8	8.0	8.0	28.5	28.5	96.4	96.5	6.8	6.8	7.2		4		-				-		-	
						7.1	0.1	214	24.8		8.0		28.5		96.5		6.8		7.2		3		-				-		-	
SR4A	Cloudy	Calm	15:49	8.9	Surface	1.0	0.2	259	24.8	24.8	7.9	7.9	29.9	29.9	91.0	91.0	6.4	6.4	7.9	8.0	8	9	-	-	817177	807799	-	-	-	-
						1.0	0.2	269	24.8		7.9		29.9		90.9		6.4		7.9		8		-				-		-	
					Middle	4.5	0.1	253	24.7	24.7	7.9	7.9	29.9	29.9	91.2	91.2	6.4		8.0		9		-				-		-	
						4.5	0.1	265	24.7		7.9		29.9		91.2		6.4		8.0		8		-				-		-	
					Bottom	7.9	0.0	83	24.7	24.7	7.9	7.9	29.9	29.9	91.5	91.5	6.4	6.4	8.1		9		-				-		-	
						7.9	0.0	86	24.8		7.9		29.9		91.4		6.4		7.9		10		-				-		-	
SR5A	Cloudy	Calm	16:06	5.3	Surface	1.0	0.1	309	24.7	24.7	7.9	7.9	29.2	29.2	93.1	93.2	6.6	6.6	8.8	9.0	9	10	-	-	816607	810686	-	-	-	-
						1.0	0.1	331	24.7		7.9		29.2		93.2		6.6		8.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	304	24.7	24.7	7.9	7.9	29.4	29.4	95.5	95.5	6.7	6.7	9.2		10		-				-		-	
						4.3	0.2	321	24.7		7.9		29.4		95.5		6.7		9.3		9		-				-		-	
SR6	Cloudy	Calm	16:29	4.2	Surface	1.0	0.1	244	24.9	24.9	7.9	7.9	27.6	27.6	92.7	92.7	6.6	6.6	6.8	6.9	9	10	-	-	817912	814666	-	-	-	-
						1.0	0.1	252	24.9		7.9		27.6		92.7		6.6		6.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	229	24.7	24.7	7.9	7.9	28.6	28.6	93.5	94.6	6.6	6.7	7.2		13		-				-		-	
						3.2	0.0	234	24.8		7.9		28.5		95.7		6.8		6.8		11		-				-		-	
SR7	Cloudy	Moderate	16:16	15.3	Surface	1.0	0.1	337	24.7	24.7	7.9	7.9	29.1	29.1	90.9	91.0	6.4	6.4	9.2	10.6	6	6	-	-	823612	823748	-	-	-	-
						1.0	0.1	310	24.7		7.9		29.1		91.0		6.4		9.3		6		-				-		-	
					Middle	7.7	0.1	91	24.7	24.7	7.9	7.9	29.3	29.3	90.9	90.9	6.4		10.6		5		-				-		-	
						7.7	0.1	99	24.7		7.9		29.3		90.9		6.4		10.6		5		-				-		-	
					Bottom	14.3	0.1	88	24.7	24.7	7.9	7.9	29.6	29.6	91.4	91.5	6.4	6.4	11.9		5		-				-		-	
						14.3	0.1	94	24.7		7.9		29.6		91.5		6.4		12.2		6		-				-		-	
SR8	Cloudy	Moderate	14:59	5.1	Surface	1.0	-	-	24.7	24.7	8.0	8.0	28.7	28.7	92.9	92.9	6.6	6.6	7.2	8.8	4	5	-	-	820498	811654	-	-	-	-
						1.0	-	-	24.7		8.0		28.7		92.8		6.6		7.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	24.7	24.7	8.0	8.0	29.8	29.8	92.4	92.4	6.5	6.5	10.4		6		-				-		-	
						4.1	-	-	24.7		8.0		29.9		92.3		6.5		10.4		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 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 November 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	11:04	8.8	Surface	1.0	0.4	229	24.3	24.3	8.0	8.0	31.1	31.3	94.4	94.1	6.6	6.5	4.5	7.3	4	5	84	90	815603	804235	<0.2	<0.2	1.4	1.4
						1.0	0.4	234	24.3		8.0		31.4		93.8		6.6		4.6		4		87				<0.2		1.4	
					Middle	4.4	0.2	185	24.4	24.4	8.0	8.0	31.9	32.0	92.6	92.5	6.5		6.6		4		89				<0.2		1.4	
						4.4	0.3	191	24.4		8.0		32.1		92.3		6.4		7.3		4		90				<0.2		1.3	
					Bottom	7.8	0.3	184	24.4	24.4	8.0	8.0	32.3	32.3	92.1	92.2	6.4	6.4	10.5		5		94				<0.2		1.4	
						7.8	0.3	189	24.4		8.0		32.3		92.2		6.4		10.6		6		94				<0.2		1.2	
C2	Fine	Moderate	11:47	11.3	Surface	1.0	0.7	166	24.7	24.7	7.9	7.9	29.0	29.0	92.5	92.5	6.5	6.3	3.4	6.4	4	4	87	91	825661	806949	<0.2	<0.2	1.9	1.8
						1.0	0.7	167	24.7		7.9		29.0		92.4		6.5		3.4		4		87				<0.2		1.8	
					Middle	5.7	0.6	171	24.8	24.8	7.9	7.9	30.4	30.4	87.6	87.6	6.1		8.2		4		91				<0.2		1.7	
						5.7	0.6	178	24.8		7.9		30.4		87.6		6.1		8.2		4		91				<0.2		1.7	
					Bottom	10.3	0.3	161	24.8	24.8	7.9	7.9	31.5	31.5	87.0	87.0	6.0	6.0	7.7		5		96				<0.2		1.9	
						10.3	0.3	170	24.8		7.9		31.5		87.0		6.0		7.7		4		95				<0.2		1.8	
C3	Fine	Moderate	09:43	11.5	Surface	1.0	0.2	74	24.6	24.6	7.9	7.9	30.5	30.5	92.0	92.0	6.4	6.3	2.3	3.1	3	3	86	90	822107	817802	<0.2	<0.2	1.5	1.4
						1.0	0.2	76	24.6		7.9		30.5		91.9		6.4		2.4		3		86				<0.2		1.3	
					Middle	5.8	0.3	93	24.7	24.7	7.8	7.8	30.8	30.8	89.4	89.4	6.2		2.5		2		90				<0.2		1.3	
						5.8	0.3	93	24.7		7.8		30.8		89.3		6.2		2.5		3		90				<0.2		1.5	
					Bottom	10.5	0.2	94	24.7	24.7	7.8	7.8	32.4	32.4	86.0	86.0	5.9	5.9	4.3		2		94				<0.2		1.4	
						10.5	0.3	96	24.7		7.8		32.4		86.0		5.9		4.3		2		94				<0.2		1.4	
IM1	Fine	Rough	11:23	5.9	Surface	1.0	0.2	153	24.4	24.4	8.0	8.0	31.6	31.6	90.2	90.2	6.3	6.3	8.6	8.3	4	4	86	90	817966	807154	<0.2	<0.2	1.0	1.0
						1.0	0.2	165	24.4		8.0		31.6		90.1		6.3		8.2		4		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.2	177	24.5	24.5	8.0	8.0	31.5	31.5	86.9	86.7	6.1	6.1	7.9		4		94				<0.2		1.0	
						4.9	0.2	185	24.5		8.0		31.5		86.5		6.0		8.6		4		94				<0.2		0.9	
IM2	Fine	Rough	11:29	7.2	Surface	1.0	0.4	215	24.4	24.4	8.0	8.0	31.1	31.1	93.0	92.9	6.5	6.5	5.1	7.5	4	5	86	90	818146	806186	<0.2	<0.2	1.0	1.0
						1.0	0.5	221	24.4		8.0		31.1		92.8		6.5		5.1		3		87				<0.2		1.0	
					Middle	3.6	0.4	217	24.4	24.4	8.0	8.0	31.4	31.4	91.8	91.8	6.4		6.1		4		90				<0.2		1.0	
						3.6	0.4	232	24.4		8.0		31.4		91.8		6.4		6.0		5		90				<0.2		0.9	
					Bottom	6.2	0.2	203	24.4	24.4	8.0	8.0	31.9	31.9	91.7	91.9	6.4	6.4	11.8		7		94				<0.2		0.9	
						6.2	0.2	218	24.4		8.0		31.9		92.0		6.4		11.2		7		95				<0.2		0.9	
IM3	Fine	Rough	11:34	7.0	Surface	1.0	0.4	206	24.3	24.3	8.0	8.0	30.0	30.0	94.3	94.2	6.7	6.6	5.0	9.7	5	5	84	90	818765	805610	<0.2	<0.2	1.0	1.0
						1.0	0.4	221	24.3		8.0		30.0		94.1		6.6		5.0		6		87				<0.2		1.0	
					Middle	3.5	0.2	196	24.4	24.4	8.0	8.0	31.0	31.3	92.5	92.0	6.5		10.6		6		89				<0.2		1.1	
						3.5	0.3	211	24.4		8.0		31.6		91.5		6.4		10.6		4		91				<0.2		0.9	
					Bottom	6.0	0.3	157	24.4	24.4	8.0	8.0	31.9	31.9	91.7	91.9	6.4	6.4	13.6		4		95				<0.2		0.8	
						6.0	0.3	166	24.4		8.0		31.9		92.0		6.4		13.4		4		96				<0.2		1.1	
IM4	Fine	Rough	11:44	7.5	Surface	1.0	0.6	180	24.5	24.5	8.1	8.1	29.8	29.9	94.0	94.0	6.6	6.6	5.0	8.1	4	4	85	90	819713	804598	<0.2	<0.2	0.9	0.9
						1.0	0.7	192	24.5		8.1		29.9		93.9		6.6		5.3		3		85				<0.2		0.9	
					Middle	3.8	0.5	175	24.4	24.4	8.1	8.1	30.7	30.9	92.6	92.4	6.5		8.5		4		89				<0.2		1.0	
						3.8	0.5	181	24.4		8.1		31.1		92.2		6.5		8.9		4		91				<0.2		0.9	
					Bottom	6.5	0.3	147	24.4	24.4	8.1	8.1	31.6	31.6	92.1	92.2	6.4	6.4	10.5		4		93				<0.2		1.0	
						6.5	0.3	157	24.4		8.1		31.6		92.2		6.4		10.6		3		94				<0.2		0.9	
IM5	Fine	Rough	11:52	6.8	Surface	1.0	0.7	197	24.4	24.4	8.0	8.0	30.2	30.3	94.4	94.2	6.6	6.6	6.3	11.0	6	5	84	90	820752	804888	<0.2	<0.2	1.0	1.0
						1.0	0.7	207	24.4		8.0		30.4		93.9		6.6		6.5		6		86				<0.2		1.0	
					Middle	3.4	0.6	190	24.4	24.4	8.0	8.0	30.9	30.9	93.3	93.3	6.5		10.0		6		91				<0.2		1.0	
						3.4	0.6	205	24.3		8.0		30.8		93.2		6.5		9.8		6		92				<0.2		0.9	
					Bottom	5.8	0.4	186	24.4	24.4	8.0	8.1	31.3	31.3	92.8	92.9	6.5	6.5	16.6		4		93				<0.2		1.0	
						5.8	0.4	187	24.4		8.1		31.3		92.9		6.5		16.6		4		93				<0.2		1.1	
IM6	Fine	Rough	12:00	6.9	Surface	1.0	0.5	252	24.7	24.7	8.0	8.0	29.1	29.1	92.4	92.5	6.5	6.5	3.7	6.4	4	3	86	90	821083	805840	<0.2	<0.2	1.2	1.3
						1.0	0.5	265	24.7		8.0		29.1		92.5		6.5		3.8		3		87				<0.2		1.2	
					Middle	3.5	0.5	244	24.6	24.6	8.0	8.0	29.8	29.9	92.4	92.4	6.5		5.0		4		90				<0.2		1.3	
						3.5	0.5	261	24.6		8.0		29.9		92.4		6.5		5.5		3		90				<0.2		1.3	
					Bottom	5.9	0.3	213	24.4	24.4	8.0	8.0	31.2	31.2	92.3	92.3	6.5	6.5	10.1		3		94				<0.2		1.4	
						5.9	0.3	227	24.4		8.1		31.3		92.3		6.5		10.4		3		94				<0.2		1.3	
IM7	Fine	Rough	12:10	7.5	Surface	1.0	0.5	217	24.6	24.6	8.1	8.1	28.7	28.7	93.4	93.2	6.6	6.5	3.1	6.7	4	4	85	90	821351	806819	<0.2	<0.2	1.3	1.4
						1.0	0.6	231	24.6		8.1		28.7		93.0		6.6		3.2		4		85				<0.2		1.4	
					Middle	3.8	0.4	223	24.7	24.7	8.1	8.0	29.4	29.3	89.4	89.5	6.3		4.1		4		90				<0.2		1.3	
						3.8	0.4	242	24.7		8.0		29.3		89.6		6.3		4.1		3		90				<0.2		1.4	
					Bottom	6.5	0.2	196	24.5	24.5	8.0	8.0	31.3	31.2	91.2	91.3	6.4	6.4	13.2		3		93				<0.2		1.3	
						6.5	0.2	213	24.5		8.0		31.1		91.3		6.4		12.3		4		94				<0.2		1.4	
IM8	Fine	Moderate	11:17	7.3	Surface	1.0	0.2	168	24.8	24.8	8.0	8.0	29.1	29.1	93.4	93.4	6.6	6.5	3.5	4.3	4	4	86	91	821841	808117	<0.2	<0.2	1.9	1.8
						1.0	0.3	179	24.8		8.0		29.1		93.4		6.6		3.6		3		87				<0.2		1.8	
					Middle	3.7	0.2	163	24.7	24.7	8.0	8.0	29.9	29.9	91.4	91.5	6.4		4.2		4		91				<0.2		1.7	
						3.7	0.3	168	24.7		8.0		29.9		91.5		6.4		4.2		4		91				<0.2		1.6	
					Bottom	6.3	0.1	79	24.6	24.6	8.0	8.0	31.0	31.0	92.1	92.2	6.4	6.4	5.2		3		95				<0.2		1.9	
						6.3	0.1	79	24.6		8.0		31.0		92.3		6.4		5.2		3		95				<0.2		1.7	

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 20 November 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	11:10	6.9	Surface	1.0	0.3	138	24.8	24.8	8.0	8.0	29.3	29.3	92.9	92.9	6.5	6.5	3.6	5.1	4	3	87	91	822084	808810	<0.2	<0.2	1.8	1.8
						1.0	0.3	150	24.8		8.0		29.3		92.8		6.5		3.6		3		87				<0.2		1.8	
					Middle	3.5	0.3	128	24.7	24.7	8.0	8.0	30.0	30.0	91.6	91.6	6.4		5.4		3		91				<0.2		1.8	
						3.5	0.3	139	24.7		8.0		30.0		91.6		6.4		5.4		3		90				<0.2		1.6	
					Bottom	5.9	0.3	91	24.6	24.6	8.0	8.0	30.9	30.9	92.1	92.1	6.4	6.4	6.3		3		95				<0.2		1.9	
						5.9	0.3	92	24.6		8.0		30.9		92.1		6.4		6.3		3		95				<0.2		1.9	
IM10	Fine	Moderate	11:01	8.0	Surface	1.0	0.5	122	24.8	24.8	8.0	8.0	29.8	29.8	90.5	90.5	6.3	6.3	3.3	4.4	4	4	87	91	822389	809770	<0.2	<0.2	1.7	1.7
						1.0	0.5	127	24.8		8.0		29.8		90.4		6.3		3.3		4		87				<0.2		1.7	
					Middle	4.0	0.5	121	24.8	24.8	7.9	7.9	30.8	30.8	88.3	88.4	6.2		4.2		3		91				<0.2		1.7	
						4.0	0.5	125	24.8		7.9		30.8		88.4		6.2		4.3		4		90				<0.2		1.6	
					Bottom	7.0	0.4	121	24.7	24.7	7.9	7.9	31.0	31.0	90.3	90.4	6.3	6.3	5.5		5		95				<0.2		1.6	
						7.0	0.4	123	24.7		7.9		31.0		90.5		6.3		5.5		4		95				<0.2		1.7	
IM11	Fine	Moderate	10:46	8.4	Surface	1.0	0.4	111	24.6	24.6	8.0	8.0	29.7	29.7	92.5	92.5	6.5	6.5	3.3	4.5	4	4	87	91	822054	811439	<0.2	<0.2	1.6	1.6
						1.0	0.5	112	24.6		8.0		29.7		92.5		6.5		3.3		4		87				<0.2		1.5	
					Middle	4.2	0.5	113	24.7	24.7	8.0	8.0	30.0	30.0	90.7	90.7	6.4		3.8		4		90				<0.2		1.6	
						4.2	0.5	118	24.7		8.0		30.0		90.7		6.4		3.8		5		91				<0.2		1.7	
					Bottom	7.4	0.2	103	24.7	24.7	7.9	7.9	30.9	30.9	89.5	89.5	6.2	6.2	6.5		4		94				<0.2		1.5	
						7.4	0.2	111	24.7		7.9		30.9		89.4		6.2		6.5		3		94				<0.2		1.8	
IM12	Fine	Moderate	10:38	9.8	Surface	1.0	0.4	106	24.7	24.7	8.0	8.0	29.9	29.9	90.3	90.3	6.3	6.3	3.5	4.3	5	5	87	91	821444	812042	<0.2	<0.2	1.6	1.5
						1.0	0.5	116	24.7		8.0		29.9		90.2		6.3		3.5		4		86				<0.2		1.5	
					Middle	4.9	0.4	102	24.7	24.7	8.0	8.0	30.1	30.1	88.6	88.6	6.2		4.4		5		91				<0.2		1.5	
						4.9	0.4	109	24.7		8.0		30.1		88.5		6.2		4.4		5		91				<0.2		1.5	
					Bottom	8.8	0.3	100	24.8	24.8	7.9	7.9	30.6	30.6	89.4	89.5	6.2	6.2	5.1		4		96				<0.2		1.5	
						8.8	0.3	107	24.8		7.9		30.6		89.5		6.2		5.1		5		95				<0.2		1.4	
SR1A	Fine	Moderate	10:19	7.4	Surface	1.0	-	-	24.7	24.7	7.9	7.9	30.0	30.0	90.2	90.2	6.3	6.2	4.6	7.1	5	5	-	-	820073	812589	-	-	-	-
						1.0	-	-	24.7		7.9		30.0		90.1		6.3		4.6		5		-				-		-	
					Middle	3.7	-	-	24.8	24.8	7.9	7.9	30.3	30.3	87.7	87.7	6.1		6.2		4		-				-		-	
						3.7	-	-	24.8		7.9		30.3		87.7		6.1		6.2		5		-				-		-	
					Bottom	6.4	-	-	24.8	24.8	7.9	7.9	30.8	30.8	87.8	87.8	6.1	6.1	10.4		5		-				-		-	
						6.4	-	-	24.8		7.9		30.8		87.8		6.1		10.4		6		-				-		-	
SR2	Fine	Moderate	10:06	5.5	Surface	1.0	0.4	95	24.7	24.7	7.9	7.9	30.5	30.5	88.3	88.2	6.2	6.2	4.5	5.3	4	3	86	89	821483	814178	<0.2	<0.2	1.4	1.5
						1.0	0.4	96	24.7		7.9		30.5		88.1		6.2		4.5		3		86				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	92	24.8	24.8	7.9	7.9	31.3	31.3	86.6	86.7	6.0	6.0	6.2		3		91				<0.2		1.5	
						4.5	0.3	94	24.8		7.9		31.3		86.7		6.0		6.1		3		91				<0.2		1.7	
SR3	Fine	Moderate	11:23	8.5	Surface	1.0	0.4	190	24.7	24.7	8.0	8.0	28.9	28.9	93.9	93.9	6.6	6.5	3.2	4.3	5	3	-	-	822134	807576	-	-	-	-
						1.0	0.4	202	24.7		8.0		28.9		93.9		6.6		3.2		4		-				-		-	
					Middle	4.3	0.2	186	24.7	24.7	8.0	8.0	29.7	29.7	90.8	90.9	6.4		4.1		3		-				-		-	
						4.3	0.2	191	24.7		8.0		29.7		90.9		6.4		4.1		3		-				-		-	
					Bottom	7.5	0.0	338	24.6	24.6	8.0	8.0	30.9	30.9	90.7	90.7	6.3	6.3	5.5		2		-				-		-	
						7.5	0.0	340	24.6		8.0		30.9		90.7		6.3		5.5		2		-				-		-	
SR4A	Fine	Moderate	10:44	9.2	Surface	1.0	0.2	61	24.4	24.5	8.0	8.0	30.8	30.9	91.0	90.8	6.4	6.3	6.4	9.9	4	4	-	-	817171	807806	-	-	-	-
						1.0	0.3	62	24.5		8.0		30.9		90.6		6.3		6.9		3		-				-		-	
					Middle	4.6	0.3	69	24.5	24.5	8.0	8.0	31.5	31.5	88.9	89.0	6.2		10.7		4		-				-		-	
						4.6	0.3	73	24.5		8.0		31.5		89.0		6.2		10.5		4		-				-		-	
					Bottom	8.2	0.2	61	24.5	24.5	7.9	7.9	31.5	31.5	89.1	89.1	6.2	6.2	12.5		5		-				-		-	
						8.2	0.2	61	24.5		7.9		31.5		89.1		6.2		12.5		5		-				-		-	
SR5A	Fine	Moderate	10:29	5.2	Surface	1.0	0.1	7	24.7	24.7	7.9	7.9	29.4	29.4	88.8	88.8	6.2	6.2	4.8	6.6	4	4	-	-	816575	810713	-	-	-	-
						1.0	0.1	7	24.7		7.9		29.4		88.8		6.2		4.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	111	24.5	24.5	7.9	7.9	30.0	30.0	88.3	88.4	6.2	6.2	8.4		4		-				-		-	
						4.2	0.1	114	24.5		7.9		30.0		88.4		6.2		8.3		4		-				-		-	
SR6	Fine	Moderate	10:02	4.8	Surface	1.0	0.1	299	24.5	24.5	7.9	7.9	29.1	29.1	87.6	87.6	6.2	6.2	4.3	8.4	4	4	-	-	817893	814652	-	-	-	-
						1.0	0.1	309	24.5		7.9		29.1		87.5		6.2		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	109	24.7	24.7	7.9	7.9	29.4	29.4	87.7	87.9	6.2	6.2	12.6		4		-				-		-	
						3.8	0.1	109	24.7		7.9		29.4		88.0		6.2		12.5		4		-				-		-	
SR7	Fine	Moderate	09:08	15.4	Surface	1.0	0.2	89	24.7	24.7	7.9	7.9	32.2	32.2	86.0	86.1	6.0	6.0	3.2	4.9	4	3	-	-	823644	823720	-	-	-	-
						1.0	0.3	96	24.7		7.9		32.2		86.1		6.0		3.2		3		-				-		-	
					Middle	7.7	0.1	86	24.7	24.7	7.8	7.8	32.6	32.6	85.1	85.1	5.9		5.3		3		-				-		-	
						7.7	0.1	90	24.7		7.8		32.6		85.1		5.9		5.3		4		-				-		-	
					Bottom	14.4	0.1	187	24.7	24.7	7.8	7.8	32.8	32.8	84.6	84.6	5.8	5.8	6.2		3		-				-		-	
						14.4	0.1	205	24.7		7.8		32.8		84.6		5.8		6.1		3		-				-		-	
SR8	Fine	Moderate	10:29	4.1	Surface	1.0	-	-	25.0	25.0	8.1	8.1	29.8	29.8	92.3	92.3	6.4	6.4	7.0	7.6	8	7	-	-	820486	811639	-	-	-	-
						1.0	-	-	25.0		8.1		29.8		92.3		6.4		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	24.7	24.7	8.1	8.1	30.3	30.3	92.0	92.0	6.4	6.4	8.2		6		-				-		-	
						3.1	-	-	24.7		8.1		30.3		92.0		6.4		8.3		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**
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 November 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	Rough	16:39	8.5	Surface	1.0	0.2	17	24.5	24.5	7.9	7.9	31.3	31.3	93.6	93.5	6.5	6.5	6.4	9.5	4	3	85	90	815600	804224	<0.2	<0.2	1.0	1.0
						1.0	0.2	21	24.5		7.9		31.3		93.4		6.5		6.5		3		87				<0.2		1.1	
					Middle	4.3	0.1	19	24.4	24.4	7.8	7.8	31.6	31.7	91.9	91.8	6.4		8.7		3		89				<0.2		0.9	
						4.3	0.1	19	24.4		7.8		31.7		91.6		6.4		8.7		3		91				<0.2		1.0	
					Bottom	7.5	0.0	22	24.4	24.4	7.9	7.9	32.0	32.0	91.0	91.1	6.3	6.3	13.3		3		93				0.9			
						7.5	0.0	23	24.4		7.9		32.0		91.1		6.3		13.3		4		94				<0.2		1.0	
C2	Fine	Rough	15:23	11.4	Surface	1.0	0.5	13	25.0	25.0	7.8	7.8	29.4	29.4	95.3	95.3	6.7	6.7	2.8	7.0	2	2	84	87	825678	806947	<0.2	<0.2	1.8	1.8
						1.0	0.5	17	25.0		7.8		29.4		95.2		6.7		2.8		3		83				<0.2		1.7	
					Middle	5.7	0.6	13	24.9	24.9	7.8	7.8	29.5	29.5	93.8	93.8	6.6		5.6		2		87				<0.2		1.8	
						5.7	0.6	13	24.9		7.8		29.5		93.7		6.6		5.7		2		87				<0.2		1.8	
					Bottom	10.4	0.3	19	24.8	24.8	7.8	7.8	29.8	29.8	92.3	92.3	6.5	6.5	12.5		<2		92				<0.2		1.8	
						10.4	0.3	19	24.8		7.8		29.8		92.3		6.5		12.5		2		91				<0.2		1.8	
C3	Fine	Moderate	17:27	12.4	Surface	1.0	0.4	248	24.8	24.8	7.9	7.9	30.5	30.5	91.5	91.5	6.4	6.2	6.4	10.5	4	3	84	88	822095	817825	<0.2	<0.2	1.4	1.4
						1.0	0.4	254	24.8		7.9		30.5		91.4		6.4		6.5		4		85				<0.2		1.3	
					Middle	6.2	0.4	262	24.8	24.8	7.9	7.9	31.3	31.3	86.3	86.3	6.0		8.9		3		88				<0.2		1.3	
						6.2	0.4	268	24.8		7.9		31.3		86.3		6.0		9.0		3		88				<0.2		1.3	
					Bottom	11.4	0.3	254	24.8	24.8	7.8	7.8	31.7	31.7	85.2	85.2	5.9	5.9	16.1		2		92				<0.2		1.4	
						11.4	0.3	258	24.8		7.8		31.7		85.1		5.9		16.1		3		92				<0.2		1.4	
IM1	Fine	Rough	16:22	5.8	Surface	1.0	0.0	348	24.5	24.5	7.9	7.9	31.4	31.4	91.3	91.2	6.4	6.4	8.4	8.9	7	8	84	89	817971	807144	<0.2	<0.2	1.4	1.4
						1.0	0.0	320	24.5		7.9		31.5		91.1		6.4		8.5		8		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.0	59	24.5	24.5	7.9	7.9	31.5	31.5	90.6	90.6	6.3	6.3	9.3		8		93				<0.2		1.4	
						4.8	0.0	59	24.5		7.9		31.5		90.6		6.3		9.5		8		94				<0.2		1.4	
IM2	Fine	Rough	16:16	6.7	Surface	1.0	0.3	102	24.6	24.6	7.9	7.9	31.0	31.0	93.3	93.3	6.5	6.5	10.6	11.5	8	9	85	90	818180	806162	<0.2	<0.2	1.4	1.4
						1.0	0.3	108	24.6		7.9		31.0		93.2		6.5		10.8		7		87				<0.2		1.4	
					Middle	3.4	0.2	105	24.5	24.5	7.9	7.9	31.1	31.1	92.5	92.5	6.5		11.1		9		90				<0.2		1.4	
						3.4	0.2	105	24.5		7.9		31.1		92.4		6.5		11.2		9		91				<0.2		1.4	
					Bottom	5.7	0.1	45	24.5	24.5	7.9	7.9	31.2	31.2	91.9	91.9	6.4	6.4	12.5		10		93				<0.2		1.4	
						5.7	0.1	49	24.5		7.9		31.2		91.9		6.4		12.7		10		95				<0.2		1.4	
IM3	Fine	Rough	16:10	6.4	Surface	1.0	0.3	72	24.6	24.6	7.9	7.9	30.6	30.6	92.9	92.9	6.5	6.5	7.1	8.6	9	11	86	90	818760	805588	<0.2	<0.2	1.4	1.4
						1.0	0.3	79	24.6		7.9		30.6		92.9		6.5		7.3		9		88				<0.2		1.3	
					Middle	3.2	0.3	51	24.6	24.6	7.9	7.9	30.6	30.6	92.6	92.6	6.5		8.4		10		90				<0.2		1.4	
						3.2	0.3	50	24.6		7.9		30.6		92.6		6.5		8.3		12		91				<0.2		1.3	
					Bottom	5.4	0.2	57	24.6	24.6	7.9	7.9	30.6	30.6	92.7	92.8	6.5	6.5	10.2		12		92				<0.2		1.4	
						5.4	0.2	60	24.5		7.9		30.6		92.8		6.5		10.3		13		94				<0.2		1.4	
IM4	Fine	Rough	16:01	6.2	Surface	1.0	0.6	33	24.6	24.6	7.9	7.9	30.3	30.4	92.0	91.9	6.4	6.4	12.1	15.4	4	6	85	90	819704	804590	<0.2	<0.2	1.5	1.4
						1.0	0.7	30	24.6		7.9		30.4		91.7		6.4		12.1		4		87				<0.2		1.3	
					Middle	3.1	0.5	38	24.5	24.5	8.0	8.0	30.6	30.6	91.5	91.5	6.4		16.6		6		89				<0.2		1.4	
						3.1	0.5	43	24.5		8.0		30.6		91.5		6.4		16.8		6		91				<0.2		1.3	
					Bottom	5.2	0.5	36	24.5	24.5	8.0	8.0	30.6	30.6	91.5	91.5	6.4	6.4	17.5		8		94				<0.2		1.4	
						5.2	0.5	34	24.5		8.0		30.6		91.5		6.4		17.3		7		94				<0.2		1.4	
IM5	Fine	Rough	15:54	6.5	Surface	1.0	0.7	25	24.7	24.7	8.0	8.0	29.6	29.6	93.1	93.1	6.5	6.5	5.9	8.3	4	4	85	90	820731	804885	<0.2	<0.2	1.4	1.4
						1.0	0.8	22	24.7		8.0		29.7		93.0		6.5		6.2		3		87				<0.2		1.4	
					Middle	3.3	0.6	18	24.6	24.6	8.0	8.0	30.2	30.2	92.7	92.7	6.5		8.0		3		89				<0.2		1.4	
						3.3	0.6	21	24.6		8.0		30.2		92.7		6.5		8.3		4		91				<0.2		1.3	
					Bottom	5.5	0.5	28	24.6	24.6	8.0	8.0	30.4	30.4	92.6	92.6	6.5	6.5	10.5		4		93				<0.2		1.4	
						5.5	0.5	25	24.6		8.0		30.4		92.6		6.5		10.8		4		94				<0.2		1.4	
IM6	Fine	Rough	15:49	7.1	Surface	1.0	0.6	67	24.7	24.7	7.9	7.9	29.4	29.4	92.0	92.0	6.5	6.5	4.7	7.7	3	4	85	90	821045	805847	<0.2	<0.2	1.3	1.4
						1.0	0.6	63	24.7		7.9		29.4		92.0		6.5		4.8		4		86				<0.2		1.5	
					Middle	3.6	0.4	60	24.5	24.5	7.9	7.9	30.6	30.6	91.7	91.7	6.4		9.0		3		89				<0.2		1.4	
						3.6	0.4	63	24.5		7.9		30.6		91.7		6.4		9.1		4		90				<0.2		1.4	
					Bottom	6.1	0.4	47	24.5	24.5	7.9	7.9	30.7	30.7	91.6	91.6	6.4	6.4	9.4		3		94				<0.2		1.4	
						6.1	0.4	52	24.5		8.0		30.7		91.6		6.4		9.4		4		95				<0.2		1.4	
IM7	Fine	Rough	15:41	7.7	Surface	1.0	0.6	57	24.8	24.8	8.0	8.0	28.7	28.7	92.7	92.5	6.5	6.4	3.4	7.3	2	3	85	90	821353	806813	<0.2	<0.2	1.6	1.4
						1.0	0.6	52	24.8		8.0		28.8		92.3		6.5		3.5		2		85				<0.2		1.4	
					Middle	3.9	0.5	63	24.6	24.6	8.0	7.9	29.8	29.9	90.1	90.0	6.3		7.4		2		89				<0.2		1.4	
						3.9	0.6	62	24.6		7.9		30.0		89.9		6.3		7.7		2		90				<0.2		1.4	
					Bottom	6.7	0.3	86	24.5	24.5	7.9	7.9	31.2	31.2	89.4	89.4	6.2	6.2	10.7		4		93				<0.2		1.4	
						6.7	0.4	94	24.5		8.0		31.2		89.3		6.2		11.0		4		95				<0.2		1.4	
IM8	Fine	Moderate	15:51	8.2	Surface	1.0	0.5	228	24.9	24.9	7.9	7.9	29.4	29.4	94.3	94.4	6.6	6.5	4.2	5.8	3	3	85	88	821834	808132	<0.2	<0.2	1.8	1.8
						1.0	0.5	243	24.9		7.9		29.4		94.4		6.6		4.2		3		84				<0.2		1.8	
					Middle	4.1	0.4	225	24.8	24.8	7.9	7.9	30.4	30.4	90.4	90.4	6.3		5.8		3		88				<0.2		1.9	
						4.1	0.4	237	24.8		7.9		30.4		90.4		6.3		5.8		2		89				<0.2		1.7	
					Bottom	7.2	0.2	252	24.7	24.7	7.9	7.9	30.6	30.6	91.0	91.0	6.4	6.4	7.3		2		92				<0.2		1.7	
						7.2	0.2	264	24.7		7.9		30.6		91.0		6.4		7.2		3		92				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 November 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	15:58	7.7	Surface	1.0	0.3	224	25.0	25.0	7.9	7.9	29.5	29.5	93.5	93.6	6.5	6.4	4.4	6.0	3	4	84	88	822117	808797	<0.2	<0.2	1.9	1.8
						1.0	0.3	240	25.0		7.9		29.5		93.6		6.6		4.4		4		84				<0.2		1.7	
					Middle	3.9	0.2	223	24.8	24.8	7.9	7.9	30.5	30.5	89.9	89.9	6.3		6.5		3		88				<0.2		1.6	
						3.9	0.3	226	24.8		7.9		30.5		89.9		6.3		6.6		3		88				<0.2		1.8	
					Bottom	6.7	0.2	247	24.8	24.8	7.9	7.9	30.5	30.5	90.2	90.1	6.3	6.3	7.0		4		92				<0.2		1.9	
						6.7	0.2	249	24.8		7.9		30.5		90.0		6.3		7.0		4		92				<0.2		1.8	
IM10	Fine	Moderate	16:08	7.4	Surface	1.0	0.2	227	25.0	25.0	7.9	7.9	29.6	29.6	92.7	92.7	6.5	6.4	2.6	4.4	4	4	84	88	822385	809773	<0.2	<0.2	1.7	1.7
						1.0	0.2	203	25.0		7.9		29.6		92.6		6.5		2.6		3		83				<0.2		1.7	
					Middle	3.7	0.2	220	24.8	24.8	7.9	7.9	30.4	30.4	89.3	89.3	6.2		4.7		6		88				<0.2		1.6	
						3.7	0.2	243	24.8		7.9		30.4		89.2		6.2		4.7		5		89				<0.2		1.8	
					Bottom	6.4	0.2	247	24.8	24.8	7.9	7.9	30.5	30.5	90.7	90.7	6.3	6.3	6.0		4		92				<0.2		1.7	
						6.4	0.2	271	24.8		7.9		30.5		90.7		6.3		6.0		4		92				<0.2		1.6	
IM11	Fine	Moderate	16:21	7.8	Surface	1.0	0.1	223	24.8	24.8	7.9	7.9	29.7	29.7	93.2	93.2	6.5	6.4	1.5	3.2	4	4	85	88	822051	811453	<0.2	<0.2	1.6	1.6
						1.0	0.1	239	24.8		7.9		29.7		93.1		6.5		1.5		5		84				<0.2		1.6	
					Middle	3.9	0.1	253	24.8	24.8	7.9	7.9	30.1	30.1	90.6	90.6	6.3		3.3		4		88				<0.2		1.6	
						3.9	0.1	271	24.8		7.9		30.1		90.5		6.3		3.4		4		89				<0.2		1.5	
					Bottom	6.8	0.1	300	24.7	24.7	7.9	7.9	30.5	30.5	91.2	91.3	6.4	6.4	4.6		4		92				<0.2		1.8	
						6.8	0.1	309	24.7		7.9		30.5		91.3		6.4		4.6		4		92				<0.2		1.7	
IM12	Fine	Moderate	16:28	8.7	Surface	1.0	0.2	265	25.0	25.0	7.9	7.9	29.8	29.8	95.5	95.5	6.7	6.6	4.7	5.7	2	4	84	88	821452	812027	<0.2	<0.2	1.7	1.6
						1.0	0.3	286	25.0		7.9		29.8		95.5		6.7		4.7		2		84				<0.2		1.7	
					Middle	4.4	0.2	256	24.9	24.9	7.9	7.9	30.0	30.0	93.1	93.1	6.5		5.6		4		87				<0.2		1.6	
						4.4	0.2	257	24.9		7.9		30.0		93.0		6.5		5.6		4		88				<0.2		1.7	
					Bottom	7.7	0.2	286	24.7	24.7	7.9	7.9	30.4	30.4	92.2	92.3	6.4	6.5	6.8		5		91				<0.2		1.5	
						7.7	0.2	292	24.7		7.9		30.4		92.3		6.5		6.8		5		92				<0.2		1.6	
SR1A	Fine	Moderate	16:47	7.1	Surface	1.0	-	-	24.8	24.8	8.0	8.0	29.9	29.9	94.3	94.3	6.6	6.6	8.3	8.7	6	6	-	-	820068	812584	-	-	-	-
						1.0	-	-	24.8		8.0		29.9		94.2		6.6		8.3		6		-				-		-	
					Middle	3.6	-	-	24.8	24.8	7.9	7.9	30.0	30.0	92.5	92.5	6.5		9.0		6		-	-			-		-	
						3.6	-	-	24.8		7.9		30.0		92.4		6.5		9.0		6		-				-		-	
					Bottom	6.1	-	-	24.8	24.8	7.9	7.9	30.3	30.3	91.5	91.6	6.4	6.4	8.8		6		-				-		-	
						6.1	-	-	24.8		7.9		30.3		91.6		6.4		8.8		6		-				-		-	
SR2	Fine	Moderate	17:00	4.8	Surface	1.0	0.2	301	24.8	24.8	7.9	7.9	29.8	29.8	95.2	95.1	6.7	6.7	7.9	9.2	3	3	84	86	821483	814166	<0.2	<0.2	1.6	1.6
						1.0	0.2	316	24.8		7.9		29.8		95.0		6.7		7.9		3		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	294	24.8	24.8	7.9	7.9	30.1	30.1	93.2	93.3	6.5	6.5	10.4		4		88				<0.2		1.6	
						3.8	0.2	307	24.8		7.9		30.1		93.3		6.5		10.4		3		88				<0.2		1.7	
SR3	Fine	Moderate	15:44	9.7	Surface	1.0	0.6	25	24.9	24.9	7.9	7.9	29.4	29.4	93.8	93.8	6.6	6.5	5.6	7.1	3	4	-	-	822131	807592	-	-	-	-
						1.0	0.6	29	24.9		7.9		29.4		93.8		6.6		5.6		4		-				-		-	
					Middle	4.9	0.4	16	24.7	24.7	7.8	7.8	30.4	30.4	90.4	90.5	6.3		7.3		3		-	-			-		-	
						4.9	0.5	17	24.7		7.8		30.4		90.5		6.3		7.3		4		-				-		-	
					Bottom	8.7	0.3	27	24.7	24.7	7.8	7.8	30.6	30.6	92.1	92.2	6.4	6.4	8.5		5		-				-		-	
						8.7	0.4	24	24.7		7.8		30.6		92.2		6.4		8.5		5		-				-		-	
SR4A	Fine	Moderate	16:59	7.2	Surface	1.0	0.6	238	24.8	24.8	7.8	7.8	29.8	29.8	92.3	92.4	6.5	6.5	6.3	9.5	6	5	-	-	817201	807816	-	-	-	-
						1.0	0.6	250	24.8		7.8		29.8		92.4		6.5		6.2		6		-				-		-	
					Middle	3.6	0.5	244	24.6	24.6	7.8	7.8	30.2	30.3	91.3	91.1	6.4		8.3		4		-	-			-		-	
						3.6	0.5	260	24.6		7.8		30.4		90.9		6.4		8.4		5		-				-		-	
					Bottom	6.2	0.3	249	24.5	24.5	7.8	7.8	31.0	30.9	90.3	90.5	6.3	6.3	14.3		4		-				-		-	
						6.2	0.3	270	24.5		7.8		30.9		90.7		6.3		13.6		5		-				-		-	
SR5A	Fine	Moderate	17:18	5.6	Surface	1.0	0.4	297	24.7	24.7	7.9	7.9	29.8	29.8	89.7	89.7	6.3	6.3	8.2	9.1	5	5	-	-	816595	810675	-	-	-	-
						1.0	0.4	314	24.7		7.9		29.8		89.6		6.3		8.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	289	24.7	24.7	7.9	7.9	29.9	29.9	89.5	89.6	6.3	6.3	10.0		4		-				-		-	
						4.6	0.2	317	24.7		7.9		29.9		89.6		6.3		10.2		5		-				-		-	
SR6	Fine	Moderate	18:00	3.8	Surface	1.0	0.2	232	24.8	24.8	7.7	7.7	29.4	29.4	86.8	86.7	6.1	6.1	8.0	8.5	5	6	-	-	817917	814683	-	-	-	-
						1.0	0.2	245	24.8		7.7		29.4		86.5		6.1		8.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	239	24.8	24.8	7.6	7.6	29.4	29.4	86.2	86.1	6.1	6.1	8.7		5		-				-		-	
						2.8	0.3	259	24.8		7.6		29.4		86.0		6.0		8.9		6		-				-		-	
SR7	Fine	Moderate	18:02	14.7	Surface	1.0	0.3	270	24.8	24.8	7.9	7.9	31.7	31.7	89.0	89.0	6.2	6.1	5.9	6.6	2	2	-	-	823643	823761	-	-	-	-
						1.0	0.3	270	24.8		7.9		31.8		89.0		6.2		5.9		2		-				-		-	
					Middle	7.4	0.2	255	24.7	24.7	7.9	7.9	32.1	32.1	86.7	86.7	6.0		6.6		2		-	-			-		-	
						7.4	0.2	257	24.7		7.9		32.1		86.7		6.0		6.7		<2		-				-		-	
					Bottom	13.7	0.2	270	24.7	24.7	7.8	7.8	32.2	32.2	87.2	87.2	6.0	6.0	7.3		3		-				-		-	
						13.7	0.3	275	24.7		7.8		32.2		87.2		6.0		7.3		2		-				-		-	
SR8	Fine	Moderate	16:38	3.9	Surface	1.0	-	-	24.9	24.9	7.9	7.9	29.8	29.8	97.1	97.1	6.8	6.8	5.7	6.4	3	4	-	-	820488	811677	-	-	-	-
						1.0	-	-	24.9		7.9		29.8		97.1		6.8		5.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	24.8	24.8	8.0	8.0	29.9	29.9	96.8	96.9	6.8	6.8	7.0		5		-				-		-	
						2.9	-	-	24.8		8.0		29.9		97.0		6.8		7.0		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: 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 November 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	11:34	7.9	Surface	1.0	0.3	221	23.6	23.6	8.2	8.2	31.2	31.2	97.9	97.9	6.9	6.9	9.6	13.4	10	10	84	89	815603	804252	<0.2	<0.2	1.0	1.0
						1.0	0.3	235	23.6		8.2		31.2		97.8		6.9		9.6		9		85				<0.2		1.0	
					Middle	4.0	0.3	216	23.6	23.6	8.2	8.2	31.3	31.3	96.4	96.4	6.8	6.9	10.0		10		89				<0.2		1.1	
						4.0	0.3	221	23.6		8.2		31.3		96.3		6.8		10.0		9		89				<0.2		1.0	
					Bottom	6.9	0.2	216	23.6	23.6	8.2	8.2	32.4	32.4	94.6	94.6	6.7	6.7	20.3		10		93				<0.2		1.0	
						6.9	0.3	233	23.6		8.2		32.4		94.6		6.7		20.7		9		94				<0.2		0.9	
C2	Fine	Moderate	13:33	10.7	Surface	1.0	0.7	160	23.8	23.8	8.1	8.1	29.8	29.8	96.7	96.7	6.9	6.9	10.7	12.9	9	10	86	90	825687	806960	<0.2	<0.2	1.1	1.2
						1.0	0.7	169	23.8		8.1		29.8		96.7		6.9		10.7		10		86				<0.2		1.2	
					Middle	5.4	0.6	179	23.7	23.7	8.1	8.1	30.4	30.4	96.2	96.2	6.8	6.9	12.0		9		91				<0.2		1.2	
						5.4	0.6	192	23.7		8.1		30.4		96.1		6.8		12.1		10		90				<0.2		1.3	
					Bottom	9.7	0.3	154	23.7	23.7	8.1	8.1	30.8	30.8	95.7	95.7	6.8	6.8	15.9		12		94				<0.2		1.2	
						9.7	0.3	165	23.7		8.1		30.8		95.7		6.8		15.9		10		94				<0.2		1.1	
C3	Fine	Moderate	10:54	9.8	Surface	1.0	0.2	80	24.0	24.0	8.1	8.1	30.7	30.7	92.7	92.8	6.6	6.6	7.9	10.2	7	8	86	91	822107	817782	<0.2	<0.2	1.1	1.1
						1.0	0.2	85	24.0		8.1		30.7		92.8		6.6		7.9		7		87				<0.2		1.3	
					Middle	4.9	0.3	90	23.9	23.9	8.1	8.1	30.9	30.9	93.0	93.1	6.6	6.6	8.8		8		91				<0.2		1.0	
						4.9	0.3	97	23.9		8.1		30.9		93.1		6.6		8.7		8		91				<0.2		1.1	
					Bottom	8.8	0.2	99	23.7	23.7	8.1	8.1	31.5	31.5	93.2	93.1	6.6	6.6	14.1		9		95				<0.2		1.1	
						8.8	0.3	104	23.7		8.1		31.5		93.0		6.6		13.7		9		95				<0.2		1.1	
IM1	Fine	Moderate	11:59	4.8	Surface	1.0	0.2	186	23.7	23.7	8.2	8.2	31.1	31.1	96.9	96.9	6.9	6.9	11.5	14.4	13	12	85	89	817931	807155	<0.2	<0.2	0.9	1.0
						1.0	0.2	201	23.7		8.2		31.1		96.9		6.9		11.5		11		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	197	23.6	23.6	8.1	8.1	31.2	31.2	96.4	96.4	6.8	6.8	17.1		12		92				<0.2		1.0	
						3.8	0.2	215	23.6		8.1		31.2		96.4		6.8		17.3		13		93				<0.2		1.0	
IM2	Fine	Moderate	12:07	6.3	Surface	1.0	0.3	193	23.7	23.7	8.2	8.2	31.1	31.1	96.2	96.2	6.8	6.8	8.6	11.2	9	10	87	90	818151	806158	<0.2	<0.2	1.0	1.0
						1.0	0.3	210	23.7		8.2		31.1		96.1		6.8		8.6		9		87				<0.2		1.0	
					Middle	3.2	0.3	201	23.6	23.6	8.1	8.1	31.4	31.4	94.9	94.9	6.7	6.8	9.5		10		89				<0.2		1.0	
						3.2	0.3	204	23.6		8.1		31.4		94.9		6.7		9.7		10		89				<0.2		1.1	
					Bottom	5.3	0.2	185	23.6	23.6	8.1	8.1	31.7	31.7	94.8	94.8	6.7	6.7	15.5		10		92				<0.2		1.0	
						5.3	0.2	196	23.6		8.1		31.7		94.8		6.7		15.4		11		93				<0.2		1.0	
IM3	Fine	Moderate	12:15	6.6	Surface	1.0	0.2	198	23.8	23.8	8.1	8.1	31.0	31.0	96.4	96.4	6.8	6.8	10.9	11.4	12	13	87	92	818788	805600	<0.2	<0.2	1.0	1.0
						1.0	0.2	199	23.8		8.1		31.0		96.3		6.8		10.9		13		88				<0.2		1.0	
					Middle	3.3	0.2	201	23.8	23.8	8.1	8.1	31.1	31.1	95.8	95.8	6.8	6.8	10.6		14		92				<0.2		1.0	
						3.3	0.3	205	23.8		8.1		31.1		95.8		6.8		10.8		13		93				<0.2		1.1	
					Bottom	5.6	0.2	197	23.7	23.7	8.1	8.1	31.6	31.6	94.5	94.6	6.7	6.7	12.5		13		95				<0.2		1.1	
						5.6	0.2	197	23.7		8.1		31.6		94.6		6.7		12.7		12		96				<0.2		1.0	
IM4	Fine	Moderate	12:25	6.8	Surface	1.0	0.5	193	23.8	23.8	8.1	8.1	30.6	30.6	97.8	97.8	6.9	6.9	12.0	17.4	11	12	87	90	819706	804622	<0.2	<0.2	1.2	1.2
						1.0	0.5	197	23.8		8.1		30.6		97.8		6.9		12.4		12		87				<0.2		1.2	
					Middle	3.4	0.4	187	23.7	23.7	8.1	8.1	30.7	30.7	97.1	97.1	6.9	6.9	15.7		11		90				<0.2		1.3	
						3.4	0.4	197	23.7		8.1		30.7		97.1		6.9		15.9		12		90				<0.2		1.3	
					Bottom	5.8	0.3	189	23.7	23.7	8.1	8.1	30.8	30.8	96.8	96.8	6.9	6.9	24.2		12		93				<0.2		1.2	
						5.8	0.3	191	23.7		8.1		30.8		96.8		6.9		24.4		12		93				<0.2		1.1	
IM5	Fine	Moderate	12:38	6.1	Surface	1.0	0.5	195	23.9	23.9	8.1	8.1	30.1	30.1	96.7	96.7	6.9	6.9	12.2	18.1	12	12	88	93	820725	804860	<0.2	<0.2	1.4	1.4
						1.0	0.6	206	23.9		8.1		30.1		96.7		6.9		12.2		12		89				<0.2		1.3	
					Middle	3.1	0.4	194	23.7	23.7	8.1	8.1	30.8	30.8	95.4	95.4	6.8	6.9	17.2		13		93				<0.2		1.4	
						3.1	0.4	212	23.7		8.1		30.8		95.4		6.8		17.3		13		94				<0.2		1.4	
					Bottom	5.1	0.3	193	23.7	23.7	8.1	8.1	30.9	30.9	95.1	95.1	6.7	6.7	25.0		12		96				<0.2		1.4	
						5.1	0.3	205	23.7		8.1		30.9		95.1		6.7		24.9		12		97				<0.2		1.5	
IM6	Fine	Moderate	12:50	6.5	Surface	1.0	0.3	213	23.8	23.8	8.1	8.1	29.8	29.8	96.5	96.5	6.9	6.9	11.0	15.5	10	11	89	93	821069	805847	<0.2	<0.2	1.7	1.6
						1.0	0.3	231	23.8		8.1		29.8		96.4		6.9		10.9		10		89				<0.2		1.6	
					Middle	3.3	0.3	221	23.7	23.7	8.1	8.1	30.7	30.7	95.6	95.6	-	6.9	13.1		10		93				<0.2		1.6	
						3.3	0.3	231	23.7		8.1		30.7		95.6		-		13.3		11		94				<0.2		1.6	
					Bottom	5.5	0.2	248	23.7	23.7	8.1	8.1	31.0	31.0	94.9	94.9	6.7	6.7	22.1		12		97				<0.2		1.5	
						5.5	0.2	262	23.7		8.1		31.0		94.9		6.7		22.4		11		98				<0.2		1.4	
IM7	Fine	Moderate	12:58	7.1	Surface	1.0	0.4	215	23.8	23.8	8.1	8.1	29.8	29.8	96.6	96.6	6.9	6.9	10.9	14.0	9	10	88	93	821370	806852	<0.2	<0.2	1.7	1.6
						1.0	0.4	233	23.8		8.1		29.8		96.6		6.9		10.9		9		89				<0.2		1.6	
					Middle	3.6	0.3	232	23.7	23.7	8.1	8.1	30.6	30.6	95.9	95.9	6.8	6.9	12.7		9		92				<0.2		1.6	
						3.6	0.3	238	23.7		8.1		30.6		95.8		6.8		12.7		10		93				<0.2		1.4	
					Bottom	6.1	0.2	235	23.7	23.7	8.1	8.1	30.9	30.9	95.2	95.2	6.8	6.8	18.0		10		96				<0.2		1.8	
						6.1	0.2	239	23.7		8.1		30.9		95.2		6.8		18.6		9		97				<0.2		1.7	
IM8	Fine	Moderate	12:56	7.4	Surface	1.0	0.2	170	23.9	23.9	8.1	8.1	30.1	30.1	97.0	97.0	6.9	6.9	12.2	16.9	12	13	87	91	821810	808117	<0.2	<0.2	1.0	1.2
						1.0	0.2	185	23.9		8.1		30.1		96.9		6.9		12.2		12		86				<0.2		1.2	
					Middle	3.7	0.2	167	23.7	23.7	8.1	8.1	30.7	30.7	95.9	95.9	6.8	6.9	15.5		13		91				<0.2		1.5	
						3.7	0.3	170	23.7		8.1		30.7		95.9		6.8		15.6		14		91				<0.2		1.4	
					Bottom	6.4	0.1	82	23.7	23.7	8.1	8.1	30.8	30.8	95.6	95.7	6.8	6.8	21.7		14		95				<0.2		1.1	
						6.4	0.1	84	23.7		8.1		30.8		95.7		6.8		24.2		14		95				<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 November 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	12:47	6.9	Surface	1.0	0.3	134	23.8	23.8	8.1	8.1	30.5	30.5	98.0	98.0	7.0	7.0	11.3	17.0	14	13	86	91	822075	808815	<0.2	<0.2	1.1	1.1
						1.0	0.3	145	23.8		8.1		30.5		98.0		7.0		11.6		14		87				<0.2		1.1	
					Middle	3.5	0.3	122	23.7	23.7	8.1	8.1	30.8	30.8	97.1	97.1	6.9		17.9		13		90				<0.2		1.1	
						3.5	0.3	124	23.7		8.1		30.8		97.1		6.9		17.9		12		91				<0.2		1.1	
					Bottom	5.9	0.3	98	23.7	23.7	8.1	8.1	30.8	30.8	96.9	96.9	6.9	6.9	21.5		11		95				<0.2		1.0	
						5.9	0.3	98	23.7		8.1		30.8		96.9		6.9		21.9		12		95				<0.2		1.1	
IM10	Fine	Moderate	12:33	7.0	Surface	1.0	0.5	132	23.8	23.8	8.1	8.1	31.0	31.0	96.6	96.6	6.8	6.8	10.7	11.8	12	13	86	91	822388	809808	<0.2	<0.2	1.5	1.3
						1.0	0.5	135	23.8		8.1		31.0		96.5		6.8		10.6		13		87				<0.2		1.3	
					Middle	3.5	0.5	139	23.8	23.8	8.1	8.1	31.1	31.1	95.5	95.5	6.8		10.6		12		92				<0.2		1.0	
						3.5	0.5	139	23.8		8.1		31.1		95.4		6.8		10.7		12		91				<0.2		1.2	
					Bottom	6.0	0.4	133	23.7	23.7	8.1	8.1	31.7	31.7	94.2	94.3	6.7	6.7	14.0		14		94				<0.2		1.5	
						6.0	0.4	136	23.7		8.1		31.7		94.4		6.7		14.1		13		95				<0.2		1.5	
IM11	Fine	Moderate	12:15	8.5	Surface	1.0	0.4	113	23.7	23.7	8.2	8.2	31.1	31.1	96.4	96.4	6.8	6.8	8.5	10.6	10	9	86	91	822067	811469	<0.2	<0.2	1.2	1.3
						1.0	0.5	114	23.7		8.2		31.1		96.3		6.8		8.5		9		87				<0.2		1.0	
					Middle	4.3	0.5	111	23.7	23.7	8.2	8.2	31.3	31.3	94.9	94.9	6.7		9.4		9		91				<0.2		1.4	
						4.3	0.5	116	23.7		8.2		31.3		94.9		6.7		9.5		9		91				<0.2		1.4	
					Bottom	7.5	0.2	100	23.6	23.6	8.2	8.2	31.7	31.7	94.7	94.8	6.7	6.7	13.8		9		95				<0.2		1.4	
						7.5	0.3	106	23.6		8.2		31.7		94.8		6.7		13.9		8		95				<0.2		1.4	
IM12	Fine	Moderate	12:06	9.9	Surface	1.0	0.4	109	23.7	23.7	8.2	8.2	31.1	31.1	97.5	97.5	6.9	6.9	11.4	14.5	13	14	86	92	821469	812063	<0.2	<0.2	1.1	1.2
						1.0	0.4	109	23.7		8.2		31.1		97.4		6.9		11.5		14		91				<0.2		1.1	
					Middle	5.0	0.4	105	23.7	23.7	8.2	8.2	31.2	31.2	96.7	96.7	6.9		11.4		14		91				<0.2		1.1	
						5.0	0.4	109	23.7		8.2		31.2		96.6		6.8		11.8		13		91				<0.2		1.2	
					Bottom	8.9	0.3	101	23.7	23.7	8.2	8.2	31.2	31.2	96.3	96.3	6.8	6.8	20.2		15		95				<0.2		1.2	
						8.9	0.3	102	23.7		8.2		31.2		96.3		6.8		20.5		14		95				<0.2		1.2	
SR1A	Fine	Moderate	11:34	7.3	Surface	1.0	-	-	23.6	23.6	8.1	8.1	31.2	31.2	96.8	96.8	6.9	6.9	14.5	15.1	11	12	-	-	820070	812585	-	-	-	-
						1.0	-	-	23.6		8.1		31.2		96.7		6.9		14.6		11		-				-		-	
					Middle	3.7	-	-	23.6	23.6	8.1	8.1	31.5	31.5	96.1	96.1	6.8		12.8		11		-				-		-	
						3.7	-	-	23.6		8.1		31.5		96.0		6.8		13.0		11		-				-		-	
					Bottom	6.3	-	-	23.6	23.6	8.1	8.1	31.7	31.6	95.5	95.5	6.8	6.8	17.7		14		-				-		-	
						6.3	-	-	23.6		8.1		31.6		95.5		6.8		17.8		14		-				-		-	
SR2	Fine	Moderate	11:16	5.0	Surface	1.0	0.4	90	23.6	23.6	8.1	8.1	31.2	31.2	97.4	97.4	6.9	6.9	14.0	15.9	15	15	86	88	821444	814153	<0.2	<0.2	1.5	1.3
						1.0	0.4	96	23.6		8.1		31.2		97.4		6.9		14.3		14		86				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	86	23.6	23.6	8.1	8.1	31.4	31.4	96.2	96.2	6.8	6.8	17.7		15		91				<0.2		1.1	
						4.0	0.3	88	23.6		8.1		31.4		96.2		6.8		17.5		16		90				<0.2		1.1	
SR3	Fine	Moderate	13:05	8.1	Surface	1.0	0.4	199	23.8	23.8	8.1	8.1	29.8	29.8	96.7	96.7	6.9	6.9	10.7	14.8	10	11	-	-	822137	807593	-	-	-	-
						1.0	0.4	218	23.8		8.1		29.8		96.7		6.9		10.8		10		-				-		-	
					Middle	4.1	0.2	187	23.7	23.7	8.1	8.1	30.5	30.5	96.0	96.0	6.8		12.2		11		-				-		-	
						4.1	0.2	190	23.7		8.1		30.5		96.0		6.8		12.1		11		-				-		-	
					Bottom	7.1	0.0	321	23.7	23.7	8.1	8.1	30.9	30.9	95.6	95.7	6.8	6.8	21.1		12		-				-		-	
						7.1	0.0	333	23.7		8.1		30.9		95.7		6.8		22.1		13		-				-		-	
SR4A	Fine	Calm	11:11	7.7	Surface	1.0	0.2	57	23.6	23.6	8.1	8.1	31.4	31.4	96.3	96.3	6.8	6.8	15.7	16.7	14	14	-	-	817167	807827	-	-	-	-
						1.0	0.2	60	23.6		8.1		31.4		96.2		6.8		15.7		14		-				-		-	
					Middle	3.9	0.2	60	23.6	23.6	8.1	8.1	31.5	31.5	95.5	95.5	6.8		17.4		14		-				-		-	
						3.9	0.2	62	23.6		8.1		31.5		95.4		6.8		17.3		14		-				-		-	
					Bottom	6.7	0.2	50	23.6	23.6	8.1	8.1	31.7	31.7	94.9	94.9	6.7	6.7	17.1		14		-				-		-	
						6.7	0.2	53	23.6		8.1		31.7		94.9		6.7		16.9		14		-				-		-	
SR5A	Fine	Calm	10:52	5.1	Surface	1.0	0.1	85	24.0	24.0	8.1	8.1	30.7	30.7	92.4	92.4	6.5	6.5	8.1	8.6	7	7	-	-	816592	810689	-	-	-	-
						1.0	0.1	93	24.0		8.1		30.7		92.4		6.5		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	119	23.9	23.9	8.1	8.1	30.9	30.9	92.9	93.0	6.6	6.6	9.1		7		-				-		-	
						4.1	0.2	126	23.9		8.1		30.9		93.0		6.6		9.3		8		-				-		-	
SR6	Fine	Calm	10:25	3.8	Surface	1.0	0.2	22	24.0	24.0	8.1	8.1	30.3	30.3	92.1	92.1	6.5	6.5	7.6	7.7	8	9	-	-	817897	814674	-	-	-	-
						1.0	0.2	22	24.0		8.1		30.3		92.1		6.5		7.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	41	23.9	23.9	8.1	8.1	30.3	30.3	92.4	92.6	6.6	6.6	7.9		9		-				-		-	
						2.8	0.2	43	23.9		8.1		30.3		92.7		6.6		7.8		9		-				-		-	
SR7	Fine	Moderate	10:24	15.9	Surface	1.0	0.2	92	24.0	24.0	8.1	8.1	30.3	30.3	91.9	91.9	6.5	6.5	7.6	9.2	8	8	-	-	823656	823761	-	-	-	-
						1.0	0.3	96	24.0		8.1		30.3		91.9		6.5		7.5		8		-				-		-	
					Middle	8.0	0.1	95	23.9	23.9	8.1	8.1	30.3	30.3	91.5	91.5	6.5		9.2		8		-				-		-	
						8.0	0.1	100	23.9		8.1		30.3		91.5		6.5		9.2		8		-				-		-	
					Bottom	14.9	0.1	174	23.9	23.9	8.1	8.1	30.3	30.3	91.4	91.4	6.5	6.5	10.7		8		-				-		-	
						14.9	0.1	179	23.9		8.1		30.3		91.4		6.5		11.3		8		-				-		-	
SR8	Fine	Moderate	11:46	3.6	Surface	1.0	-	-	23.6	23.6	8.2	8.2	31.2	31.2	98.0	98.0	6.9	6.9	9.5	9.7	10	11	-	-	820517	811649	-	-	-	-
						1.0	-	-	23.6		8.2		31.2		97.9		6.9		9.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	23.6	23.6	8.2	8.2	31.4	31.4	97.1	97.2	6.9	6.9	10.0		12		-				-		-	
						2.6	-	-	23.6		8.2		31.4		97.2		6.9		9.9		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**
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 November 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	17:35	7.7	Surface	1.0	0.2	99	23.8	23.8	8.1	8.1	31.1	31.1	98.5	98.5	7.0	7.0	8.5	14.1	8	8	90	94	815628	804240	<0.2	<0.2	1.5	1.3
						1.0	0.2	102	23.8		8.1		31.1		98.4		7.0		8.5		8		91				<0.2		1.3	
					Middle	3.9	0.2	90	23.8	23.8	8.1	8.1	31.3	31.3	96.5	96.5	-		10.1		8		94				<0.2		1.1	
						3.9	0.2	90	23.8		8.1		31.3		96.4		-		10.1		8		95				<0.2		1.3	
					Bottom	6.7	0.1	92	23.7	23.7	8.1	8.1	32.1	32.1	95.1	95.3	6.7	6.7	24.2		8		97				<0.2		1.3	
						6.7	0.1	99	23.7		8.1		32.0		95.4		6.7		23.3		9		97				<0.2		1.3	
C2	Cloudy	Moderate	16:17	11.4	Surface	1.0	0.2	111	23.8	23.8	8.1	8.1	29.8	29.8	96.6	96.6	6.9	6.9	10.7	13.7	10	10	89	93	825695	806944	<0.2	<0.2	1.2	1.3
						1.0	0.2	115	23.8		8.1		29.8		96.6		6.9		10.7		11		90				<0.2		1.4	
					Middle	5.7	0.0	108	23.7	23.7	8.1	8.1	30.2	30.2	96.2	96.2	-		12.1		10		93				<0.2		1.5	
						5.7	0.0	110	23.7		8.1		30.2		96.2		-		12.0		10		93				<0.2		1.3	
					Bottom	10.4	0.1	215	23.7	23.7	8.1	8.1	30.7	30.7	96.0	96.1	6.8	6.8	18.1		11		97				<0.2		1.2	
						10.4	0.1	231	23.7		8.1		30.8		96.1		6.8		18.7		10		98				<0.2		1.2	
C3	Cloudy	Moderate	17:47	9.7	Surface	1.0	0.6	75	23.9	23.9	8.1	8.1	31.0	31.0	93.8	93.8	6.6	6.6	7.5	8.6	8	7	89	93	822131	817804	<0.2	<0.2	1.3	1.4
						1.0	0.7	79	23.9		8.1		31.0		93.8		6.6		7.4		7		89				<0.2		1.4	
					Middle	4.9	0.6	79	23.9	23.9	8.1	8.1	31.1	31.1	94.1	94.1	6.6	6.6	8.7	8.6	6	7	93	93	822131	817804	<0.2	<0.2	1.4	1.4
						4.9	0.7	84	23.9		8.1		31.1		94.0		6.6		8.7		7		92				<0.2		1.3	
					Bottom	8.7	0.5	70	23.9	23.9	8.1	8.1	31.1	31.1	93.8	93.8	6.6	6.6	9.6		7		97				<0.2		1.4	
						8.7	0.6	76	23.9		8.1		31.1		93.8		6.6		9.7		7		96				<0.2		1.4	
IM1	Cloudy	Moderate	17:15	4.6	Surface	1.0	0.1	78	23.7	23.7	8.2	8.2	31.2	31.2	98.0	98.0	6.9	6.9	9.1	11.2	9	10	87	91	817928	807147	<0.2	<0.2	1.1	1.1
						1.0	0.1	85	23.7		8.2		31.2		97.9		6.9		9.1		9		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	107	23.7	23.7	8.1	8.1	31.3	31.3	97.3	97.4	6.9	6.9	12.7		12		94				<0.2		1.1	
						3.6	0.0	112	23.7		8.1		31.3		97.4		6.9		14.0		11		94				<0.2		1.0	
IM2	Cloudy	Moderate	17:08	6.7	Surface	1.0	0.2	178	23.8	23.8	8.1	8.1	30.8	30.8	96.6	96.6	6.9	6.8	10.0	10.4	15	17	86	91	818167	806159	<0.2	<0.2	1.1	1.2
						1.0	0.2	192	23.8		8.1		30.8		96.5		6.8		10.1		13		88				<0.2		1.2	
					Middle	3.4	0.2	174	23.7	23.7	8.1	8.1	31.3	31.3	95.2	95.2	6.7		9.7		17		90				<0.2		1.1	
						3.4	0.2	183	23.7		8.1		31.3		95.2		6.7		9.6		17		90				<0.2		1.2	
					Bottom	5.7	0.1	145	23.7	23.7	8.1	8.1	31.6	31.6	94.9	95.0	6.7	6.7	11.6		19		94				<0.2		1.2	
						5.7	0.1	146	23.7		8.1		31.6		95.1		6.7		11.5		19		96				<0.2		1.1	
IM3	Cloudy	Moderate	17:01	6.8	Surface	1.0	0.5	21	23.7	23.7	8.1	8.1	30.9	30.9	97.6	97.6	6.9	6.9	14.1	17.3	18	19	87	91	818798	805588	<0.2	<0.2	1.1	1.2
						1.0	0.6	21	23.7		8.1		30.9		97.6		6.9		14.1		18		88				<0.2		1.1	
					Middle	3.4	0.4	19	23.7	23.7	8.1	8.1	30.9	30.9	97.4	97.4	6.9	6.9	13.9		20		91				<0.2		1.2	
						3.4	0.5	19	23.7		8.1		30.9		97.3		6.9		13.9		19		91				<0.2		1.1	
					Bottom	5.8	0.4	15	23.7	23.7	8.1	8.1	31.0	31.0	97.4	97.4	6.9	6.9	23.9		20		94				<0.2		1.2	
						5.8	0.4	15	23.7		8.1		31.0		97.4		6.9		23.7		20		94				<0.2		1.2	
IM4	Cloudy	Moderate	16:51	7.0	Surface	1.0	0.6	24	23.8	23.8	8.1	8.1	30.1	30.1	96.6	96.6	6.9	6.9	10.7	14.5	15	14	88	91	819706	804601	<0.2	<0.2	1.4	1.4
						1.0	0.6	25	23.8		8.1		30.1		96.6		6.9		10.7		15		87				<0.2		1.5	
					Middle	3.5	0.4	11	23.8	23.8	8.1	8.1	30.5	30.5	95.9	95.9	6.8		14.3		14		90				<0.2		1.5	
						3.5	0.4	11	23.8		8.1		30.5		95.8		6.8		14.5		13		91				<0.2		1.4	
					Bottom	6.0	0.3	342	23.7	23.7	8.1	8.1	30.8	30.8	95.8	95.9	6.8	6.8	18.6		15		94				<0.2		1.4	
						6.0	0.3	346	23.7		8.1		30.8		95.9		6.8		18.5		13		95				<0.2		1.4	
IM5	Cloudy	Moderate	16:44	6.5	Surface	1.0	0.6	350	23.8	23.8	8.1	8.1	30.3	30.3	96.0	96.0	6.8	6.8	12.2	16.3	14	14	86	91	820728	804844	<0.2	<0.2	1.5	1.6
						1.0	0.7	352	23.8		8.1		30.3		96.0		6.8		12.3		12		87				<0.2		1.5	
					Middle	3.3	0.5	344	23.7	23.7	8.1	8.1	30.7	30.7	95.3	95.3	6.8		15.9		14		90				<0.2		1.6	
						3.3	0.6	348	23.7		8.1		30.7		95.3		6.8		16.0		13		91				<0.2		1.7	
					Bottom	5.5	0.4	354	23.7	23.7	8.1	8.1	30.8	30.8	95.6	95.7	6.8	6.8	20.5		17		96				<0.2		1.7	
						5.5	0.4	326	23.7		8.1		30.8		95.7		6.8		20.6		16		96				<0.2		1.6	
IM6	Cloudy	Moderate	16:31	6.2	Surface	1.0	0.4	76	23.8	23.8	8.1	8.1	29.8	29.8	96.8	96.8	6.9	6.9	10.4	12.2	12	13	86	91	821071	805844	<0.2	<0.2	1.6	1.6
						1.0	0.4	81	23.8		8.1		29.8		96.8		6.9		10.3		11		87				<0.2		1.6	
					Middle	3.1	0.4	70	23.7	23.7	8.1	8.1	30.4	30.4	96.3	96.3	6.8		12.1		14		90				<0.2		1.6	
						3.1	0.5	76	23.7		8.1		30.4		96.3		6.9		12.1		14		91				<0.2		1.6	
					Bottom	5.2	0.3	80	23.7	23.7	8.1	8.1	30.6	30.6	96.1	96.1	6.8	6.8	14.1		13		94				<0.2		1.7	
						5.2	0.3	82	23.7		8.1		30.6		96.1		6.8		14.1		14		95				<0.2		1.7	
IM7	Cloudy	Moderate	16:20	7.5	Surface	1.0	0.3	99	23.8	23.8	8.1	8.1	29.8	29.8	96.8	96.8	6.9	6.9	10.4	12.4	12	12	88	91	821343	806825	<0.2	<0.2	1.7	1.6
						1.0	0.3	102	23.8		8.1		29.8		96.7		6.9		10.4		12		88				<0.2		1.7	
					Middle	3.8	0.4	90	23.7	23.7	8.1	8.1	30.3	30.3	96.2	96.2	6.8		11.8		13		90				<0.2		1.7	
						3.8	0.4	90	23.7		8.1		30.3		96.2		6.8		11.9		13		92				<0.2		1.6	
					Bottom	6.5	0.3	92	23.7	23.7	8.1	8.1	30.7	30.7	95.9	96.0	6.8	6.8	14.9		11		93				<0.2		1.6	
						6.5	0.3	99	23.7		8.1		30.7		96.0		6.8		15.1		12		94				<0.2		1.4	
IM8	Cloudy	Moderate	16:37	7.5	Surface	1.0	0.3	196	23.8	23.8	8.1	8.1	30.2	30.2	96.1	96.1	6.8	6.8	11.6	15.2	13	14	90	93	821837	808155	<0.2	<0.2	1.0	1.3
						1.0	0.3	199	23.8		8.1		30.2		96.1		6.8		11.5		13		89				<0.2		1.5	
					Middle	3.8	0.3	209	23.7	23.7	8.1	8.1	30.7	30.7	95.1	95.1	6.8		14.4		13		93				<0.2		1.3	
						3.8	0.3	218	23.7		8.1		30.7		95.1		6.8		14.8		13		94				<0.2		1.4	
					Bottom	6.5	0.2	231	23.7	23.7	8.1	8.1	30.8	30.8	95.0	95.0	6.7	6.8	19.5		16		97				<0.2		1.4	
						6.5	0.3	245	23.7		8.1		30.8		95.0		6.8		19.5		16		97				<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 November 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	16:47	7.2	Surface	1.0	0.3	270	23.8	23.8	8.1	8.1	30.1	30.1	96.7	96.7	6.9	6.9	10.5	15.2	12	13	90	93	822111	808825	<0.2	<0.2	1.2	1.1
						1.0	0.3	284	23.8		8.1		30.1		96.6		6.9		10.4		13		89				<0.2		1.0	
					Middle	3.6	0.4	267	23.7	23.7	8.1	8.1	30.5	30.5	95.7	95.7	6.8		15.5		12		93				<0.2		1.2	
						3.6	0.4	273	23.7		8.1		30.6		95.6		6.8		16.1		12		94				<0.2		0.9	
					Bottom	6.2	0.3	277	23.7	23.7	8.1	8.1	30.8	30.8	95.5	95.6	6.8	6.8	19.6		12		97				<0.2		1.1	
						6.2	0.3	287	23.7		8.1		30.8		95.6		6.8		19.0		14		97				<0.2		1.4	
IM10	Cloudy	Moderate	16:57	6.3	Surface	1.0	0.5	321	23.7	23.7	8.1	8.1	30.9	30.9	97.6	97.6	6.9	6.9	13.5	13.1	16	18	89	93	822405	809809	<0.2	<0.2	0.9	1.2
						1.0	0.5	350	23.7		8.1		30.9		97.6		6.9		13.4		17		89				<0.2		1.2	
					Middle	3.2	0.5	329	23.7	23.7	8.1	8.1	30.9	30.9	97.4	97.4	6.9		12.6		17		94				<0.2		1.4	
						3.2	0.5	349	23.7		8.1		30.9		97.3		6.9		12.7		18		93				<0.2		1.0	
					Bottom	5.3	0.4	318	23.7	23.7	8.1	8.1	31.0	31.0	97.4	97.4	6.9	6.9	13.5		19		97				<0.2		1.6	
						5.3	0.4	347	23.7		8.1		31.0		97.4		6.9		13.3		18		97				<0.2		1.0	
IM11	Cloudy	Moderate	17:08	7.4	Surface	1.0	0.3	290	23.8	23.8	8.1	8.1	30.8	30.8	96.7	96.7	6.9	6.8	10.0	10.5	12	11	89	93	822069	811466	<0.2	<0.2	1.6	1.4
						1.0	0.3	294	23.8		8.1		30.8		96.6		6.9		10.0		12		89				<0.2		1.3	
					Middle	3.7	0.3	287	23.7	23.7	8.1	8.1	31.4	31.4	94.8	94.8	6.7		10.0		12		93				<0.2		1.4	
						3.7	0.3	294	23.7		8.1		31.4		94.7		6.7		10.2		12		94				<0.2		1.4	
					Bottom	6.4	0.3	300	23.7	23.7	8.1	8.1	31.6	31.6	94.7	94.8	6.7	6.7	11.5		10		97				<0.2		1.0	
						6.4	0.4	313	23.7		8.1		31.6		94.8		6.7		11.4		10		98				<0.2		1.5	
IM12	Cloudy	Moderate	17:14	8.4	Surface	1.0	0.4	266	23.7	23.7	8.2	8.2	31.3	31.3	98.2	98.2	7.0	7.0	8.7	10.2	10	10	89	94	821481	812047	<0.2	<0.2	1.4	1.4
						1.0	0.4	282	23.7		8.2		31.3		98.2		7.0		8.7		9		90				<0.2		1.4	
					Middle	4.2	0.4	250	23.7	23.7	8.2	8.2	31.3	31.3	97.9	97.9	6.9		9.4		10		93				<0.2		1.5	
						4.2	0.5	260	23.7		8.2		31.3		97.8		6.9		10.0		9		94				<0.2		1.2	
					Bottom	7.4	0.4	243	23.7	23.7	8.2	8.2	31.3	31.3	97.6	97.6	6.9	6.9	11.7		10		97				<0.2		1.4	
						7.4	0.4	263	23.7		8.2		31.3		97.6		6.9		12.4		9		98				<0.2		1.5	
SR1A	Cloudy	Moderate	17:38	7.1	Surface	1.0	-	-	23.7	23.7	8.1	8.1	31.4	31.4	95.8	95.9	6.8	6.8	11.3	16.5	10	10	-	-	820070	812581	-	-	-	-
						1.0	-	-	23.7		8.1		31.4		95.9		6.8		11.4		9		-				-		-	
					Middle	3.6	-	-	23.7	23.7	8.1	8.1	31.4	31.4	95.0	95.0	6.7		11.6		10		-				-		-	
						3.6	-	-	23.7		8.1		31.4		94.9		6.7		11.8		10		-				-		-	
					Bottom	6.1	-	-	23.6	23.6	8.1	8.1	31.6	31.6	94.0	94.1	6.7	6.7	26.5		9		-				-		-	
						6.1	-	-	23.6		8.1		31.6		94.1		6.7		26.4		11		-				-		-	
SR2	Cloudy	Moderate	17:25	4.7	Surface	1.0	0.3	324	23.7	23.7	8.1	8.1	31.4	31.4	95.6	95.6	6.8	6.8	11.0	11.7	10	9	90	91	821447	814165	<0.2	<0.2	1.2	1.2
						1.0	0.3	326	23.7		8.1		31.4		95.6		6.8		11.3		9		89				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	329	23.7	23.7	8.1	8.1	31.4	31.4	95.6	95.6	6.8	6.8	12.2		9		93				<0.2		1.4	
						3.7	0.3	358	23.7		8.1		31.4		95.6		6.8		12.2		9		93				<0.2		1.4	
SR3	Cloudy	Moderate	16:31	8.6	Surface	1.0	0.4	66	23.8	23.8	8.1	8.1	29.8	29.8	96.6	96.6	6.9	6.9	10.2	12.8	11	12	-	-	822152	807577	-	-	-	-
						1.0	0.4	68	23.8		8.1		29.8		96.6		6.9		10.2		11		-				-		-	
					Middle	4.3	0.4	70	23.7	23.7	8.1	8.1	30.3	30.3	96.0	96.0	6.8		12.7		11		-				-		-	
						4.3	0.4	75	23.7		8.1		30.3		96.0		6.8		12.7		12		-				-		-	
					Bottom	7.6	0.3	77	23.7	23.7	8.1	8.1	30.7	30.7	95.7	95.8	6.8	6.8	15.4		13		-				-		-	
						7.6	0.4	81	23.7		8.1		30.7		95.8		6.8		15.6		11		-				-		-	
SR4A	Cloudy	Calm	17:57	8.0	Surface	1.0	0.3	252	23.7	23.7	8.1	8.1	31.3	31.3	96.0	96.0	6.8	6.8	9.5	16.8	11	13	-	-	817210	807788	-	-	-	-
						1.0	0.3	262	23.7		8.1		31.3		95.9		6.8		9.6		11		-				-		-	
					Middle	4.0	0.3	251	23.7	23.7	8.1	8.1	31.5	31.5	94.4	94.4	6.7		18.8		13		-				-		-	
						4.0	0.4	255	23.7		8.1		31.5		94.4		6.7		18.3		13		-				-		-	
					Bottom	7.0	0.2	255	23.6	23.6	8.1	8.1	31.6	31.6	92.5	92.5	6.5	6.5	22.8		13		-				-		-	
						7.0	0.2	276	23.6		8.1		31.6		92.5		6.5		21.7		14		-				-		-	
SR5A	Cloudy	Calm	18:19	4.8	Surface	1.0	0.2	286	23.9	23.9	8.1	8.1	30.9	30.9	94.0	94.0	6.6	6.6	7.4	8.7	8	8	-	-	816571	810699	-	-	-	-
						1.0	0.2	291	23.9		8.1		30.9		94.0		6.6		7.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	300	23.9	23.9	8.1	8.1	31.1	31.1	94.1	94.2	6.6	6.7	10.0		7		-				-		-	
						3.8	0.2	320	23.9		8.1		31.1		94.2		6.7		10.0		7		-				-		-	
SR6	Cloudy	Calm	18:46	3.9	Surface	1.0	0.2	267	23.8	23.8	8.2	8.2	30.3	30.3	94.1	94.1	6.7	6.7	9.7	14.3	10	12	-	-	817895	814644	-	-	-	-
						1.0	0.2	293	23.8		8.2		30.3		94.1		6.7		9.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	261	23.8	23.8	8.1	8.1	30.3	30.3	94.5	94.6	6.7	6.7	18.0		12		-				-		-	
						2.9	0.2	276	23.8		8.1		30.3		94.6		6.7		19.8		13		-				-		-	
SR7	Cloudy	Moderate	18:12	14.7	Surface	1.0	0.1	213	23.8	23.8	8.2	8.2	30.3	30.3	93.3	93.3	6.6	6.6	9.9	10.6	12	11	-	-	823657	823756	-	-	-	-
						1.0	0.1	218	23.8		8.2		30.3		93.3		6.6		9.8		10		-				-		-	
					Middle	7.4	0.1	298	23.8	23.8	8.2	8.2	30.3	30.3	93.2	93.2	6.6		10.4		11		-				-		-	
						7.4	0.1	307	23.8		8.2		30.3		93.2		6.6		10.9		11		-				-		-	
					Bottom	13.7	0.1	232	23.8	23.8	8.2	8.2	30.3	30.3	93.5	93.6	6.6	6.6	11.3		12		-				-		-	
						13.7	0.1	236	23.8		8.2		30.3		93.6		6.6		11.1		12		-				-		-	
SR8	Cloudy	Moderate	17:27	4.5	Surface	1.0	-	-	23.8	23.8	8.1	8.1	31.1	31.1	98.6	98.6	7.0	7.0	8.5	8.9	10	10	-	-	820489	811655	-	-	-	-
						1.0	-	-	23.8		8.1		31.1		98.6		7.0		8.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	23.8	23.8	8.1	8.1	31.2	31.2	98.1	98.1	6.9	6.9	9.4		10		-				-		-	
						3.5	-	-	23.8		8.1		31.2		98.1		6.9		9.4		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 24 November 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	13:36	8.5	Surface	1.0	0.0	210	24.5	24.5	7.9	7.9	31.3	31.3	93.6	93.5	6.5	6.5	6.4	9.5	18	12	85	90	815615	804257	<0.2	<0.2	1.2	1.2
						1.0	0.0	220	24.5		7.9		31.3		93.4		6.5		6.5		25		87				<0.2		1.2	
					Middle	4.3	0.2	142	24.4	24.4	7.8	7.8	31.6	31.7	91.9	91.8	-		8.7		7		89				<0.2		1.2	
						4.3	0.2	142	24.4		7.8		31.7		91.6		-		8.7		6		91				<0.2		1.2	
					Bottom	7.5	0.2	237	24.4	24.4	7.9	7.9	32.0	32.0	91.0	91.1	6.3	6.3	13.3		8		93				<0.2		1.3	
						7.5	0.2	244	24.4		7.9		32.0		91.1		6.3		13.3		9		94				<0.2		1.2	
C2	Fine	Moderate	11:52	11.3	Surface	1.0	0.1	32	23.5	23.5	8.1	8.1	30.7	30.7	90.9	90.9	6.5	6.5	13.2	15.0	18	20	93	95	825675	806931	<0.2	<0.2	1.0	1.0
						1.0	0.1	34	23.5		8.1		30.7		90.9		6.5		13.1		18		92				<0.2		1.0	
					Middle	5.7	0.2	51	23.5	23.5	8.1	8.1	30.8	30.8	91.2	91.2	6.5		15.2		19		94				<0.2		1.0	
						5.7	0.2	51	23.5		8.1		30.8		91.2		6.5		15.1		20		95				<0.2		1.0	
					Bottom	10.3	0.4	69	23.3	23.3	8.1	8.1	31.4	31.4	91.9	91.9	6.5	6.5	16.6		23		98				<0.2		1.0	
						10.3	0.4	75	23.3		8.1		31.4		91.9		6.5		16.7		22		97				<0.2		1.0	
C3	Fine	Moderate	13:37	10.0	Surface	1.0	0.5	91	23.6	23.6	8.1	8.1	32.1	32.1	87.0	87.0	6.1	6.1	7.5	11.2	9	9	91	93	822110	817784	<0.2	<0.2	1.0	1.0
						1.0	0.5	95	23.6		8.1		32.1		86.9		6.1		7.5		8		91				<0.2		1.0	
					Middle	5.0	0.5	96	23.6	23.6	8.1	8.1	32.2	32.2	86.4	86.4	-		9.4		9		93				<0.2		1.0	
						5.0	0.6	104	23.6		8.1		32.2		86.4		-		9.4		10		92				<0.2		0.9	
					Bottom	9.0	0.5	96	23.6	23.6	8.1	8.1	32.2	32.2	87.4	87.5	6.2	6.2	16.7		10		95				<0.2		1.1	
						9.0	0.5	98	23.6		8.1		32.2		87.6		6.2		16.9		10		96				<0.2		1.0	
IM1	Fine	Rough	13:04	5.8	Surface	1.0	0.1	136	24.5	24.5	7.9	7.9	31.4	31.4	91.3	91.2	6.4	6.4	8.4	8.9	14	16	84	89	817946	807125	<0.2	<0.2	1.3	1.3
						1.0	0.1	142	24.5		7.9		31.5		91.1		6.4		8.5		14		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	111	24.5	24.5	7.9	7.9	31.5	31.5	90.6	90.6	6.3	6.3	9.3		17		93				<0.2		1.3	
						4.8	0.1	113	24.5		7.9		31.5		90.6		6.3		9.5		18		94				<0.2		1.3	
IM2	Fine	Rough	12:51	6.7	Surface	1.0	0.2	76	24.6	24.6	7.9	7.9	31.0	31.0	93.3	93.3	6.5	6.5	10.6	11.5	14	15	85	90	818182	806171	<0.2	<0.2	2.0	2.1
						1.0	0.2	76	24.6		7.9		31.0		93.2		6.5		10.8		13		87				<0.2		2.0	
					Middle	3.4	0.1	122	24.5	24.5	7.9	7.9	31.1	31.1	92.5	92.5	6.5		11.1		15		90				<0.2		2.0	
						3.4	0.1	132	24.5		7.9		31.1		92.4		6.5		11.2		16		91				<0.2		2.0	
					Bottom	5.7	0.1	271	24.5	24.5	7.9	7.9	31.2	31.2	91.9	91.9	6.4	6.4	12.5		18		93				<0.2		2.4	
						5.7	0.1	294	24.5		7.9		31.2		91.9		6.4		12.7		16		95				<0.2		1.9	
IM3	Fine	Rough	12:39	6.4	Surface	1.0	0.2	16	24.6	24.6	7.9	7.9	30.6	30.6	92.9	92.9	6.5	6.5	7.1	8.6	10	12	86	90	818798	805597	<0.2	<0.2	2.2	2.1
						1.0	0.2	16	24.6		7.9		30.6		92.9		6.5		7.3		11		88				<0.2		2.2	
					Middle	3.2	0.1	8	24.6	24.6	7.9	7.9	30.6	30.6	92.6	92.6	6.5		8.4		12		90				<0.2		2.0	
						3.2	0.1	8	24.6		7.9		30.6		92.6		6.5		8.3		11		91				<0.2		2.1	
					Bottom	5.4	0.1	5	24.6	24.6	7.9	7.9	30.6	30.6	92.7	92.8	6.5	6.5	10.2		12		92				<0.2		2.0	
						5.4	0.1	5	24.5		7.9		30.6		92.8		6.5		10.3		13		94				<0.2		1.9	
IM4	Fine	Rough	12:26	6.2	Surface	1.0	0.2	7	24.6	24.6	7.9	7.9	30.3	30.4	92.0	91.9	6.4	6.4	12.1	15.4	12	13	85	90	819739	804594	<0.2	<0.2	1.5	1.7
						1.0	0.3	7	24.6		7.9		30.4		91.7		6.4		12.1		12		87				<0.2		1.7	
					Middle	3.1	0.2	16	24.5	24.5	8.0	8.0	30.6	30.6	91.5	91.5	6.4		16.6		13		89				<0.2		1.6	
						3.1	0.2	16	24.5		8.0		30.6		91.5		6.4		16.8		14		91				<0.2		1.8	
					Bottom	5.2	0.2	16	24.5	24.5	8.0	8.0	30.6	30.6	91.5	91.5	6.4	6.4	17.5		13		94				<0.2		1.7	
						5.2	0.2	16	24.5		8.0		30.6		91.5		6.4		17.3		14		94				<0.2		1.6	
IM5	Fine	Rough	12:15	6.5	Surface	1.0	0.3	13	24.7	24.7	8.0	8.0	29.6	29.6	93.1	93.1	6.5	6.5	5.9	8.3	13	14	85	90	820725	804860	<0.2	<0.2	1.7	1.8
						1.0	0.3	14	24.7		8.0		29.7		93.0		6.5		6.2		14		87				<0.2		1.8	
					Middle	3.3	0.2	10	24.6	24.6	8.0	8.0	30.2	30.2	92.7	92.7	6.5		8.0		14		89				<0.2		1.7	
						3.3	0.2	10	24.6		8.0		30.2		92.7		6.5		8.3		15		91				<0.2		1.8	
					Bottom	5.5	0.2	33	24.6	24.6	8.0	8.0	30.4	30.4	92.6	92.6	6.5	6.5	10.5		14		93				<0.2		1.8	
						5.5	0.2	35	24.6		8.0		30.4		92.6		6.5		10.8		16		94				<0.2		1.7	
IM6	Fine	Rough	12:06	7.1	Surface	1.0	0.2	1	24.7	24.7	7.9	7.9	29.4	29.4	92.0	92.0	6.5	6.5	4.7	7.7	14	14	85	90	821047	805810	<0.2	<0.2	1.5	1.7
						1.0	0.2	1	24.7		7.9		29.4		92.0		6.5		4.8		13		86				<0.2		1.6	
					Middle	3.6	0.3	8	24.5	24.5	7.9	7.9	30.6	30.6	91.7	91.7	6.4		9.0		13		89				<0.2		1.5	
						3.6	0.3	8	24.5		7.9		30.6		91.7		6.4		9.1		14		90				<0.2		1.8	
					Bottom	6.1	0.2	28	24.5	24.5	7.9	7.9	30.7	30.7	91.6	91.6	6.4	6.4	9.4		15		94				<0.2		1.8	
						6.1	0.2	28	24.5		8.0		30.7		91.6		6.4		9.4		15		95				<0.2		1.7	
IM7	Fine	Rough	11:53	7.7	Surface	1.0	0.1	359	24.8	24.8	8.0	8.0	28.7	28.7	92.7	92.5	6.5	6.4	3.4	7.3	12	14	85	90	821361	806854	<0.2	<0.2	1.7	1.6
						1.0	0.1	330	24.8		8.0		28.8		92.3		6.5		3.5		13		85				<0.2		1.5	
					Middle	3.9	0.2	10	24.6	24.6	8.0	7.9	29.8	29.9	90.1	90.0	6.3		7.4		14		89				<0.2		1.7	
						3.9	0.2	10	24.6		7.9		30.0		89.9		6.3		7.7		14		90				<0.2		1.6	
					Bottom	6.7	0.3	23	24.5	24.5	7.9	7.9	31.2	31.2	89.4	89.4	6.2	6.2	10.7		15		93				<0.2		1.5	
						6.7	0.3	23	24.5		8.0		31.2		89.3		6.2		11.0		14		95				<0.2		1.6	
IM8	Fine	Moderate	12:15	7.9	Surface	1.0	0.2	86	23.6	23.6	8.1	8.1	30.8	30.8	92.9	92.9	6.6	6.7	12.2	17.3	16	18	89	91	821851	808131	<0.2	<0.2	1.1	1.3
						1.0	0.2	89	23.6		8.1		30.8		92.9		6.6		12.2		16		89				<0.2		1.4	
					Middle	4.0	0.3	88	23.2	23.2	8.2	8.2	31.9	31.9	93.7	93.7	6.7		16.5		17		91				<0.2		1.3	
						4.0	0.4	93	23.2		8.2		31.9		93.7		6.7		16.8		17		91				<0.2		1.3	
					Bottom	6.9	0.3	80	23.2	23.2	8.1	8.1	32.0	32.0	94.6	94.7	6.7	6.7	23.0		21		93				<0.2		1.3	
						6.9	0.3	80	23.2		8.1		32.0		94.7		6.7		23.4		20		93				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 November 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	12:22	7.4	Surface	1.0	0.3	95	23.4	23.4	8.1	8.1	31.2	31.2	92.7	92.8	6.6	6.6	12.7	17.3	14	15	90	92	822097	808818	<0.2	<0.2	1.3	1.3
						1.0	0.3	98	23.4		8.1		31.2		92.8		6.6		12.8		15		90				<0.2		1.3	
					Middle	3.7	0.4	92	23.3	23.3	8.2	8.2	31.6	31.6	92.8	92.8	6.6		15.7		15		92				<0.2		1.3	
						3.7	0.4	98	23.3		8.2		31.6		92.8		6.6		15.7		14		93				<0.2		1.3	
					Bottom	6.4	0.3	93	23.2	23.2	8.2	8.2	31.8	31.8	93.1	93.1	6.6	6.6	23.3		15		94				<0.2		1.2	
						6.4	0.3	99	23.2		8.2		31.8		93.1		6.6		23.8		16		94				<0.2		1.3	
IM10	Fine	Moderate	12:28	6.8	Surface	1.0	0.4	113	23.3	23.3	8.1	8.1	31.5	31.5	91.4	91.4	6.5	6.5	12.3	17.1	13	14	91	93	822391	809783	<0.2	<0.2	1.3	1.2
						1.0	0.4	115	23.3		8.1		31.5		91.4		6.5		12.4		14		91				<0.2		1.2	
					Middle	3.4	0.4	111	23.3	23.3	8.1	8.1	31.6	31.6	91.4	91.4	6.5		16.5		15		92				<0.2		1.3	
						3.4	0.4	115	23.3		8.1		31.6		91.4		6.5		16.6		14		93				<0.2		1.3	
					Bottom	5.8	0.4	107	23.2	23.2	8.1	8.1	31.7	31.7	91.8	91.9	6.5	6.5	22.4		14		94				<0.2		1.1	
						5.8	0.4	117	23.2		8.1		31.7		91.9		6.5		22.7		15		94				<0.2		1.1	
IM11	Fine	Moderate	12:38	8.3	Surface	1.0	0.2	100	23.4	23.4	8.1	8.1	31.6	31.6	92.0	92.0	6.5	6.5	7.7	9.1	12	11	90	92	822072	811464	<0.2	<0.2	1.2	1.2
						1.0	0.2	103	23.4		8.1		31.6		92.0		6.5		7.7		11		90				<0.2		1.2	
					Middle	4.2	0.2	111	23.4	23.4	8.1	8.1	31.6	31.6	91.3	91.3	6.5		8.4		10		92				<0.2		1.3	
						4.2	0.2	112	23.4		8.1		31.6		91.3		6.5		8.5		12		92				<0.2		1.2	
					Bottom	7.3	0.2	101	23.4	23.4	8.1	8.1	31.7	31.7	91.5	91.5	6.5	6.5	11.1		11		94				<0.2		1.2	
						7.3	0.3	106	23.4		8.1		31.7		91.5		6.5		11.1		12		94				<0.2		1.2	
IM12	Fine	Moderate	12:45	9.8	Surface	1.0	0.3	96	23.4	23.4	8.1	8.1	31.6	31.6	91.7	91.7	6.5	6.5	7.9	9.1	10	10	90	92	821462	812025	<0.2	<0.2	1.1	1.2
						1.0	0.3	102	23.4		8.1		31.6		91.7		6.5		7.9		10		89				<0.2		1.1	
					Middle	4.9	0.3	105	23.4	23.4	8.1	8.1	31.6	31.6	91.4	91.4	6.5		8.0		10		91				<0.2		1.2	
						4.9	0.3	110	23.4		8.1		31.6		91.4		6.5		8.0		11		92				<0.2		1.1	
					Bottom	8.8	0.3	110	23.4	23.4	8.1	8.1	31.6	31.6	91.6	91.7	6.5	6.5	11.4		11		94				<0.2		1.2	
						8.8	0.3	111	23.4		8.1		31.6		91.7		6.5		11.2		10		95				<0.2		1.3	
SR1A	Fine	Moderate	13:07	5.8	Surface	1.0	-	-	23.3	23.3	8.1	8.1	31.2	31.2	91.0	91.0	6.5	6.5	7.5	9.8	11	13	-	-	820073	812589	-	-	-	-
						1.0	-	-	23.3		8.1		31.2		91.0		6.5		7.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	-	-	23.4	23.4	8.1	8.1	31.5	31.5	90.8	90.9	6.5	6.5	12.1		16		-				-		-	
						4.8	-	-	23.4		8.1		31.5		90.9		6.5		12.1		16		-				-		-	
SR2	Fine	Moderate	13:19	5.0	Surface	1.0	0.4	107	23.5	23.5	8.1	8.1	31.7	31.7	91.1	91.1	6.5	6.5	10.2	10.7	11	11	90	90	821458	814180	<0.2	<0.2	1.1	1.1
						1.0	0.4	111	23.5		8.1		31.7		91.1		6.5		10.4		10		89				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	116	23.5	23.5	8.1	8.1	31.7	31.7	91.7	91.8	6.5	6.5	11.2		10		90				<0.2		1.1	
						4.0	0.3	125	23.5		8.1		31.7		91.8		6.5		11.3		11		91				<0.2		1.1	
SR3	Fine	Moderate	12:11	8.7	Surface	1.0	0.3	116	23.7	23.7	8.1	8.1	29.9	29.9	91.2	91.2	6.5	6.6	9.6	14.1	12	13	-	-	822140	807568	-	-	-	-
						1.0	0.3	121	23.7		8.1		29.9		91.2		6.5		9.7		13		-				-		-	
					Middle	4.4	0.3	82	23.5	23.5	8.1	8.1	31.3	31.3	93.8	93.8	6.7		14.8		13		-				-		-	
						4.4	0.3	83	23.5		8.1		31.3		93.8		6.7		14.8		12		-				-		-	
					Bottom	7.7	0.3	75	23.3	23.3	8.2	8.2	31.9	31.9	94.4	94.5	6.7	6.7	18.0		12		-				-		-	
						7.7	0.3	77	23.3		8.2		31.9		94.5		6.7		18.0		13		-				-		-	
SR4A	Fine	Rough	14:02	7.2	Surface	1.0	0.2	95	24.8	24.8	7.8	7.8	29.8	29.8	92.3	92.4	6.5	6.5	6.3	9.5	13	14	-	-	817174	807789	-	-	-	-
						1.0	0.2	100	24.8		7.8		29.8		92.4		6.5		6.2		12		-				-		-	
					Middle	3.6	0.2	91	24.6	24.6	7.8	7.8	30.2	30.3	91.3	91.1	-		8.3		13		-				-		-	
						3.6	0.2	95	24.6		7.8		30.4		90.9		-		8.4		13		-				-		-	
					Bottom	6.2	0.2	89	24.5	24.5	7.8	7.8	31.0	30.9	90.3	90.5	6.3	6.3	14.3		16		-				-		-	
						6.2	0.2	91	24.5		7.8		30.9		90.7		6.3		13.6		15		-				-		-	
SR5A	Fine	Rough	14:23	5.6	Surface	1.0	0.0	14	24.7	24.7	7.9	7.9	29.8	29.8	89.7	89.7	6.3	6.3	8.2	9.1	12	13	-	-	816591	810701	-	-	-	-
						1.0	0.0	15	24.7		7.9		29.8		89.6		6.3		8.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	177	24.7	24.7	7.9	7.9	29.9	29.9	89.5	89.6	6.3	6.3	10.0		14		-				-		-	
						4.6	0.1	177	24.7		7.9		29.9		89.6		6.3		10.2		13		-				-		-	
SR6	Fine	Rough	14:48	3.8	Surface	1.0	0.0	37	24.8	24.8	7.7	7.7	29.4	29.4	86.8	86.7	6.1	6.1	8.0	8.5	10	12	-	-	817897	814668	-	-	-	-
						1.0	0.0	39	24.8		7.7		29.4		86.5		6.1		8.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	137	24.8	24.8	7.6	7.6	29.4	29.4	86.2	86.1	6.1	6.1	8.7		13		-				-		-	
						2.8	0.1	141	24.8		7.6		29.4		86.0		6.0		8.9		14		-				-		-	
SR7	Fine	Moderate	14:03	14.5	Surface	1.0	0.4	92	23.6	23.6	8.1	8.1	32.2	32.2	87.2	87.2	6.1	6.1	5.6	6.7	8	9	-	-	823619	823733	-	-	-	-
						1.0	0.4	93	23.6		8.1		32.2		87.2		6.1		5.7		8		-				-		-	
					Middle	7.3	0.2	82	23.7	23.7	8.1	8.1	32.2	32.2	87.1	87.1	-		5.7		8		-				-		-	
						7.3	0.3	83	23.7		8.1		32.2		87.1		-		5.8		9		-				-		-	
					Bottom	13.5	0.1	10	23.6	23.6	8.1	8.1	32.3	32.3	86.8	86.9	6.1	6.1	8.8		8		-				-		-	
						13.5	0.1	10	23.6		8.1		32.3		86.9		6.1		8.8		10		-				-		-	
SR8	Fine	Moderate	12:56	4.6	Surface	1.0	-	-	23.4	23.4	8.2	8.2	31.5	31.5	92.4	92.4	6.6	6.6	12.2	15.3	16	19	-	-	820480	811653	-	-	-	-
						1.0	-	-	23.4		8.2		31.5		92.4		6.6		12.3		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	23.3	23.3	8.2	8.2	31.6	31.6	92.7	92.8	6.6	6.6	18.6		22		-				-		-	
						3.6	-	-	23.3		8.2		31.6		92.8		6.6		18.1		22		-				-		-	

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 24 November 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	08:11	8.8	Surface	1.0	0.1	75	24.3	24.3	8.0	8.0	31.1	31.3	94.4	94.1	6.6	6.5	4.5	7.3	30	37	84	90	815604	804263	<0.2	<0.2	1.2	1.3
						1.0	0.1	82	24.3		8.0		31.4		93.8		6.6		4.6		31		87				<0.2		1.4	
					Middle	4.4	0.0	61	24.4	24.4	8.0	8.0	31.9	32.0	92.6	92.5	6.5		6.6		41		89				<0.2		1.2	
						4.4	0.0	64	24.4		8.0		32.1		92.3		6.4		7.3		42		90				<0.2		1.3	
					Bottom	7.8	0.1	31	24.4	24.4	8.0	8.0	32.3	32.3	92.1	92.2	6.4	6.4	10.5		40		94				<0.2		1.3	
						7.8	0.1	32	24.4		8.0		32.3		92.2		6.4		10.6		40		94				<0.2		1.2	
C2	Fine	Moderate	09:46	11.1	Surface	1.0	0.2	15	23.3	23.3	8.1	8.1	31.2	31.2	91.9	91.9	6.5	6.6	15.5	18.7	23	23	94	96	825699	806946	<0.2	<0.2	1.1	1.1
						1.0	0.2	18	23.3		8.1		31.2		91.9		6.6		15.4		22		94				<0.2		1.1	
					Middle	5.6	0.0	14	23.2	23.2	8.2	8.2	31.8	31.8	92.2	92.2	-		18.4		22		96				<0.2		1.2	
						5.6	0.0	12	23.2		8.2		31.8		92.2		-		18.4		23		97				<0.2		1.0	
					Bottom	10.1	0.1	19	23.2	23.2	8.2	8.2	31.9	31.9	92.5	92.6	6.6	6.6	22.3		25		99				<0.2		1.1	
						10.1	0.1	20	23.2		8.2		31.9		92.6		6.6		22.3		25		98				<0.2		1.1	
C3	Fine	Moderate	07:45	10.2	Surface	1.0	0.5	263	23.6	23.6	8.1	8.1	31.9	31.9	87.5	87.5	6.2	6.2	13.5	17.8	22	23	92	96	822122	817780	<0.2	<0.2	1.7	1.7
						1.0	0.5	284	23.6		8.1		31.9		87.5		6.2		13.5		22		92				<0.2		1.6	
					Middle	5.1	0.5	265	23.6	23.6	8.1	8.1	31.9	31.9	87.2	87.2	6.2		16.2		23		97				<0.2		2.1	
						5.1	0.5	265	23.6		8.1		31.9		87.2		6.2		16.0		24		97				<0.2		1.9	
					Bottom	9.2	0.4	274	23.6	23.6	8.1	8.1	31.9	31.9	87.4	87.4	6.2	6.2	23.6		23		98				<0.2		1.3	
						9.2	0.4	292	23.6		8.1		31.9		87.4		6.2		24.0		24		98				<0.2		1.6	
IM1	Fine	Rough	08:29	5.9	Surface	1.0	0.4	59	24.4	24.4	8.0	8.0	31.6	31.6	90.2	90.2	6.3	6.3	8.6	8.3	24	25	86	90	817927	807112	<0.2	<0.2	1.3	1.3
						1.0	0.4	62	24.4		8.0		31.6		90.1		6.3		8.2		25		86				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.5	56	24.5	24.5	8.0	8.0	31.5	31.5	86.9	86.7	6.1	6.1	7.9		24		94				<0.2		1.3	
						4.9	0.5	59	24.5		8.0		31.5		86.5		6.0		8.6		25		94				<0.2		1.3	
IM2	Fine	Rough	08:40	7.2	Surface	1.0	0.2	-	24.4	24.4	8.0	8.0	31.1	31.1	93.0	92.9	6.5	6.5	5.1	7.5	14	17	86	90	818177	806161	<0.2	<0.2	1.8	1.6
						1.0	0.3	-	24.4		8.0		31.1		92.8		6.5		5.1		14		87				<0.2		1.6	
					Middle	3.6	0.2	21	24.4	24.4	8.0	8.0	31.4	31.4	91.8	91.8	6.4		6.1		16		90				<0.2		1.6	
						3.6	0.2	22	24.4		8.0		31.4		91.8		6.4		6.0		15		90				<0.2		1.8	
					Bottom	6.2	0.2	5	24.4	24.4	8.0	8.0	31.9	31.9	91.7	91.9	6.4	6.4	11.8		20		94				<0.2		1.6	
						6.2	0.2	5	24.4		8.0		31.9		92.0		6.4		11.2		20		95				<0.2		1.2	
IM3	Fine	Rough	08:52	7.0	Surface	1.0	0.5	8	24.3	24.3	8.0	8.0	30.0	30.0	94.3	94.2	6.7	6.6	5.0	9.7	15	17	84	90	818799	805602	<0.2	<0.2	1.9	1.7
						1.0	0.5	8	24.3		8.0		30.0		94.1		6.6		5.0		16		87				<0.2		1.7	
					Middle	3.5	0.4	11	24.4	24.4	8.0	8.0	31.0	31.3	92.5	92.0	6.5	6.6	10.6		17		89				<0.2		1.7	
						3.5	0.4	11	24.4		8.0		31.6		91.5		6.4		10.6		18		91				<0.2		1.8	
					Bottom	6.0	0.3	354	24.4	24.4	8.0	8.0	31.9	31.9	91.7	91.9	6.4	6.4	13.6		18		95				<0.2		1.6	
						6.0	0.3	326	24.4		8.0		31.9		92.0		6.4		13.4		19		96				<0.2		1.6	
IM4	Fine	Rough	09:02	7.5	Surface	1.0	0.5	14	24.5	24.5	8.1	8.1	29.8	29.9	94.0	94.0	6.6	6.6	5.0	8.1	22	22	85	90	819701	804614	<0.2	<0.2	1.3	1.3
						1.0	0.5	14	24.5		8.1		29.9		93.9		6.6		5.3		22		85				<0.2		1.2	
					Middle	3.8	0.4	0	24.4	24.4	8.1	8.1	30.7	30.9	92.6	92.4	6.5		8.5		22		89				<0.2		1.3	
						3.8	0.4	0	24.4		8.1		31.1		92.2		6.5		8.9		22		91				<0.2		1.3	
					Bottom	6.5	0.3	356	24.4	24.4	8.1	8.1	31.6	31.6	92.1	92.2	6.4	6.4	10.5		23		93				<0.2		1.2	
						6.5	0.3	328	24.4		8.1		31.6		92.2		6.4		10.6		23		94				<0.2		1.4	
IM5	Fine	Rough	09:11	6.8	Surface	1.0	0.6	15	24.4	24.4	8.0	8.0	30.2	30.3	94.4	94.2	6.6	6.6	6.3	11.0	15	15	84	90	820719	804869	<0.2	<0.2	1.3	1.3
						1.0	0.6	15	24.4		8.0		30.4		93.9		6.6		6.5		14		86				<0.2		1.3	
					Middle	3.4	0.5	15	24.4	24.4	8.0	8.0	30.9	30.9	93.3	93.3	6.5		10.0		14		91				<0.2		1.3	
						3.4	0.5	16	24.3		8.0		30.8		93.2		6.5		9.8		15		92				<0.2		1.3	
					Bottom	5.8	0.5	13	24.4	24.4	8.0	8.1	31.3	31.3	92.8	92.9	6.5	6.5	16.6		15		93				<0.2		1.3	
						5.8	0.5	13	24.4		8.1		31.3		92.9		6.5		16.6		16		93				<0.2		1.2	
IM6	Fine	Rough	09:23	6.9	Surface	1.0	0.1	108	24.7	24.7	8.0	8.0	29.1	29.1	92.4	92.5	6.5	6.5	3.7	6.4	10	12	86	90	821076	805816	<0.2	<0.2	1.2	1.2
						1.0	0.1	117	24.7		8.0		29.1		92.5		6.5		3.8		11		87				<0.2		1.3	
					Middle	3.5	0.2	60	24.6	24.6	8.0	8.0	29.8	29.9	92.4	92.4	6.5		5.0		12		90				<0.2		1.2	
						3.5	0.2	62	24.6		8.0		29.9		92.4		6.5		5.5		12		90				<0.2		1.2	
					Bottom	5.9	0.2	103	24.4	24.4	8.0	8.0	31.2	31.2	92.3	92.3	6.5	6.5	10.1		13		94				<0.2		1.2	
						5.9	0.2	111	24.4		8.1		31.3		92.3		6.5		10.4		12		94				<0.2		1.2	
IM7	Fine	Rough	09:35	7.5	Surface	1.0	0.0	280	24.6	24.6	8.1	8.1	28.7	28.7	93.4	93.2	6.6	6.5	3.1	6.7	12	13	85	90	821369	806843	<0.2	<0.2	1.3	1.3
						1.0	0.0	281	24.6		8.1		28.7		93.0		6.6		3.2		12		85				<0.2		1.2	
					Middle	3.8	0.0	351	24.7	24.7	8.1	8.0	29.4	29.3	89.4	89.5	6.3		4.1		13		90				<0.2		1.3	
						3.8	0.0	323	24.7		8.0		29.3		89.6		6.3		4.1		13		90				<0.2		1.2	
					Bottom	6.5	0.1	15	24.5	24.5	8.0	8.0	31.3	31.2	91.2	91.3	6.4	6.4	13.2		13		93				<0.2		1.2	
						6.5	0.1	15	24.5		8.0		31.1		91.3		6.4		12.3		12		94				<0.2		1.3	
IM8	Fine	Moderate	09:22	7.8	Surface	1.0	0.3	56	23.4	23.4	8.1	8.1	31.1	31.1	91.8	91.8	6.5	6.6	14.4	17.9	15	25	92	95	821837	808150	<0.2	<0.2	1.2	1.1
						1.0	0.3	56	23.4		8.1		31.1		91.8		6.5		15.0		15		92				<0.2		1.1	
					Middle	3.9	0.4	51	23.2	23.2	8.2	8.2	31.8	31.8	92.4	92.4	6.6		17.0		29		95				<0.2		1.1	
						3.9	0.4	54	23.2		8.2		31.8		92.4		6.6		16.8		30		96				<0.2		1.0	
					Bottom	6.8	0.4	37	23.2	23.2	8.2	8.2	31.9	31.9	92.9	93.0	6.6	6.6	21.9		29		98				<0.2		1.2	
						6.8	0.4	37	23.2		8.2		31.9		93.0		6.6		22.1		29		99				<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 24 November 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	09:09	7.0	Surface	1.0	0.1	323	23.4	23.4	8.2	8.2	30.7	30.7	89.8	89.8	6.4	6.4	12.5	15.1	21	23	91	95	822109	808797	<0.2	<0.2	1.2	1.2
						1.0	0.1	340	23.4		8.2		30.7		89.8		6.4		12.2		22		91				<0.2		1.2	
					Middle	3.5	0.2	327	23.3	23.3	8.2	8.2	30.8	30.8	89.9	89.9	6.4		14.1		22		94				<0.2		1.1	
						3.5	0.2	329	23.3		8.2		30.8		89.9		6.4		14.0		21		95				<0.2		1.1	
					Bottom	6.0	0.2	336	23.3	23.3	8.2	8.2	30.9	30.9	90.0	90.0	6.4	6.4	18.8		25		98				<0.2		1.2	
						6.0	0.2	309	23.3		8.2		30.9		90.0		6.4		18.8		25		98				<0.2		1.1	
IM10	Fine	Moderate	09:01	7.8	Surface	1.0	0.3	334	23.4	23.4	8.1	8.1	31.5	31.5	91.4	91.4	6.5	6.5	16.2	19.5	17	19	90	94	822403	809793	<0.2	<0.2	1.2	1.1
						1.0	0.3	307	23.4		8.1		31.5		91.4		6.5		16.2		17		89				<0.2		1.3	
					Middle	3.9	0.3	325	23.3	23.3	8.1	8.1	31.5	31.5	91.4	91.4	6.5		19.8		19		90				<0.2		1.1	
						3.9	0.4	340	23.3		8.1		31.5		91.4		6.5		19.8		20		91				<0.2		1.0	
					Bottom	6.8	0.3	327	23.3	23.3	8.1	8.1	31.5	31.5	91.7	91.7	6.5	6.5	22.3		21		101				<0.2		1.0	
						6.8	0.3	355	23.3		8.1		31.5		91.7		6.5		22.7		22		101				<0.2		1.0	
IM11	Fine	Moderate	08:51	7.2	Surface	1.0	0.4	279	23.3	23.3	8.1	8.1	31.5	31.5	91.3	91.3	6.5	6.5	11.2	15.0	13	15	90	94	822062	811436	<0.2	<0.2	1.1	1.1
						1.0	0.4	282	23.3		8.1		31.5		91.3		6.5		11.0		14		90				<0.2		1.1	
					Middle	3.6	0.4	295	23.3	23.3	8.1	8.1	31.5	31.5	91.1	91.1	6.5		14.8		14		95				<0.2		1.1	
						3.6	0.4	295	23.3		8.1		31.5		91.1		6.5		14.6		15		95				<0.2		1.4	
					Bottom	6.2	0.4	279	23.3	23.3	8.1	8.1	31.5	31.5	91.3	91.3	6.5	6.5	19.5		16		98				<0.2		1.1	
						6.2	0.4	290	23.3		8.1		31.5		91.3		6.5		19.3		16		97				<0.2		1.0	
IM12	Fine	Moderate	08:57	8.1	Surface	1.0	0.4	280	23.4	23.4	8.1	8.1	31.7	31.7	91.2	91.2	6.5	6.5	13.1	14.4	12	15	93	97	821445	812026	<0.2	<0.2	1.4	1.2
						1.0	0.5	306	23.4		8.1		31.7		91.2		6.5		13.1		12		93				<0.2		1.4	
					Middle	4.1	0.4	282	23.3	23.3	8.1	8.1	31.7	31.7	91.1	91.1	6.5		13.7		15		97				<0.2		1.0	
						4.1	0.5	297	23.3		8.1		31.7		91.1		6.5		13.6		14		98				<0.2		1.0	
					Bottom	7.1	0.4	276	23.3	23.3	8.1	8.1	31.7	31.7	91.3	91.3	6.5	6.5	16.5		20		100				<0.2			
						7.1	0.4	286	23.3		8.1		31.7		91.3		6.5		16.6		19		100				<0.2		1.0	
SR1A	Fine	Moderate	08:21	5.6	Surface	1.0	-	-	23.3	23.3	8.1	8.1	31.2	31.2	88.8	88.8	6.3	6.3	8.5	9.2	10	12	-	-	820073	812591	-	-	1.1	-
						1.0	-	-	23.3		8.1		31.2		88.8		6.3		8.5		10		-				-		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	23.3	23.3	8.1	8.1	31.2	31.2	89.0	89.1	6.4	6.4	9.7		13		-				-		-	
						4.6	-	-	23.3		8.1		31.2		89.1		6.4		10.0		13		-				-		-	
SR2	Fine	Moderate	08:06	4.2	Surface	1.0	0.0	320	23.3	23.3	8.1	8.1	31.6	31.6	90.2	90.2	6.4	6.4	13.6	14.2	12	14	93	94	821482	814168	<0.2	<0.2	1.4	1.5
						1.0	0.0	340	23.3		8.1		31.6		90.2		6.4		13.6		12		93				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	1	23.3	23.3	8.1	8.1	31.6	31.6	90.5	90.6	6.4	6.4	14.8		16		96				<0.2		1.5	
						3.2	0.0	1	23.3		8.1		31.6		90.6		6.4		15.0		16		95				<0.2		1.5	
SR3	Fine	Moderate	09:27	8.6	Surface	1.0	0.4	48	23.4	23.4	8.1	8.1	31.1	31.1	91.7	91.8	6.5	6.5	15.3	17.5	18	18	-	-	822123	807569	-	-	-	-
						1.0	0.4	51	23.4		8.1		31.1		91.8		6.5		15.2		18		-				-		-	
					Middle	4.3	0.4	57	23.2	23.2	8.2	8.2	31.8	31.8	92.1	92.1	-		17.1		18		-				-		-	
						4.3	0.4	61	23.2		8.2		31.8		92.1		-		17.0		18		-				-		-	
					Bottom	7.6	0.3	44	23.2	23.2	8.2	8.2	31.9	31.9	91.9	91.9	6.5	6.5	20.2		18		-				-		-	
						7.6	0.3	44	23.2		8.2		31.9		91.9		6.5		20.1		18		-				-		-	
SR4A	Fine	Rough	07:43	9.2	Surface	1.0	0.1	302	24.4	24.5	8.0	8.0	30.8	30.9	91.0	90.8	6.4	6.3	6.4	9.9	8	11	-	-	817194	807805	-	-	-	-
						1.0	0.1	326	24.5		8.0		30.9		90.6		6.3		6.9		9		-				-		-	
					Middle	4.6	0.1	303	24.5	24.5	8.0	8.0	31.5	31.5	88.9	89.0	6.2		10.7		11		-				-		-	
						4.6	0.1	312	24.5		8.0		31.5		89.0		6.2		10.5		11		-				-		-	
					Bottom	8.2	0.1	302	24.5	24.5	7.9	7.9	31.5	31.5	89.1	89.1	6.2	6.2	12.5		12		-				-		-	
						8.2	0.1	305	24.5		7.9		31.5		89.1		6.2		12.5		12		-				-		-	
SR5A	Fine	Rough	07:22	5.2	Surface	1.0	0.1	229	24.7	24.7	7.9	7.9	29.4	29.4	88.8	88.8	6.2	6.2	4.8	6.6	5	6	-	-	816593	810674	-	-	-	-
						1.0	0.1	244	24.7		7.9		29.4		88.8		6.2		4.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	236	24.5	24.5	7.9	7.9	30.0	30.0	88.3	88.4	6.2	6.2	8.4		6		-				-		-	
						4.2	0.1	247	24.5		7.9		30.0		88.4		6.2		8.3		7		-				-		-	
SR6	Fine	Rough	07:02	4.8	Surface	1.0	0.0	295	24.5	24.5	7.9	7.9	29.1	29.1	87.6	87.6	6.2	6.2	4.3	8.4	6	6	-	-	817901	814661	-	-	-	-
						1.0	0.0	319	24.5		7.9		29.1		87.5		6.2		4.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	304	24.7	24.7	7.9	7.9	29.4	29.4	87.7	87.9	6.2	6.2	12.6		6		-				-		-	
						3.8	0.1	316	24.7		7.9		29.4		88.0		6.2		12.5		7		-				-		-	
SR7	Fine	Moderate	07:18	14.7	Surface	1.0	0.2	202	23.6	23.6	8.1	8.1	31.9	31.9	87.6	87.6	6.2	6.2	7.6	14.7	9	10	-	-	823638	823728	-	-	-	-
						1.0	0.2	204	23.6		8.1		31.9		87.5		6.2		7.5		9		-				-		-	
					Middle	7.4	0.2	291	23.6	23.6	8.1	8.1	32.1	32.1	86.6	86.6	-		17.5		10		-				-		-	
						7.4	0.2	292	23.6		8.1		32.1		86.6		-		17.8		10		-				-		-	
					Bottom	13.7	0.2	258	23.6	23.6	8.1	8.1	32.1	32.1	86.8	86.9	6.1	6.1	18.7		11		-				-		-	
						13.7	0.2	259	23.6		8.1		32.1		86.9		6.1		18.8		12		-				-		-	
SR8	Fine	Moderate	08:35	4.3	Surface	1.0	-	-	23.4	23.4	8.2	8.2	31.5	31.5	92.1	92.1	6.5	6.5	11.6	14.6	18	21	-	-	820506	811682	-	-	-	-
						1.0	-	-	23.4		8.2		31.5		92.1		6.5		11.6		18		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	23.3	23.3	8.2	8.2	31.7	31.7	91.8	91.8	6.5	6.5	17.4		23		-				-		-	
						3.3	-	-	23.3		8.2		31.7		91.8		6.5		17.7		23		-				-		-	

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 November 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	15:24	8.2	Surface	1.0	0.4	150	23.0	23.0	7.8	7.8	30.3	30.3	93.8	93.8	6.8	6.8	15.0	16.6	14	14	85	88	815621	804261	<0.2	<0.2	1.2	1.2
						1.0	0.5	153	23.0		7.8		30.3		93.7		6.8		15.0		15		85				<0.2		1.2	
					Middle	4.1	0.5	231	23.0	23.0	7.8	7.8	30.9	30.9	94.8	94.9	-	6.8	16.6		14		88				<0.2		1.2	
						4.1	0.5	232	23.0		7.8		31.0		94.9		-		16.5		14		88				<0.2		1.3	
					Bottom	7.2	0.3	251	23.0	23.0	7.8	7.8	31.2	31.2	96.8	96.9	6.9	6.9	18.1		14		91				<0.2		1.2	
						7.2	0.3	222	23.0		7.8		31.2		96.9		6.9		18.2		14		91				<0.2		1.2	
C2	Fine	Rough	14:19	12.2	Surface	1.0	0.3	145	23.2	23.2	7.9	7.9	28.5	28.5	84.0	84.1	6.1	6.1	20.3	24.1	16	14	85	90	825661	806944	<0.2	<0.2	1.9	1.8
						1.0	0.3	153	23.2		7.9		28.5		84.1		6.1		20.1		16		85				<0.2		1.8	
					Middle	6.1	0.3	139	23.2	23.2	7.9	7.9	28.6	28.6	84.2	84.2	6.1	6.1	24.4		14		90				<0.2		1.7	
						6.1	0.3	139	23.2		7.9		28.6		84.2		6.1		24.6		15		91				<0.2		1.8	
					Bottom	11.2	0.3	207	23.2	23.2	7.9	7.9	28.7	28.7	84.3	84.3	6.1	6.1	27.6		12		93				<0.2		1.8	
						11.2	0.3	207	23.2		7.9		28.7		84.3		6.1		27.6		12		93				<0.2		1.8	
C3	Rainy	Rough	16:06	11.6	Surface	1.0	0.1	11	23.4	23.4	8.0	8.0	31.3	31.3	85.8	85.8	6.1	6.2	9.5	9.9	7	7	85	90	822100	817821	<0.2	<0.2	1.9	1.9
						1.0	0.1	11	23.4		8.0		31.3		85.8		6.1		9.4		7		86				<0.2		1.9	
					Middle	5.8	0.1	20	23.4	23.4	8.0	8.0	31.4	31.4	86.5	86.6	6.2	6.2	10.0		7		89				<0.2		1.9	
						5.8	0.1	18	23.4		8.0		31.4		86.7		6.2		10.1		8		89				<0.2		1.9	
					Bottom	10.6	0.1	67	23.4	23.4	8.0	8.0	31.4	31.4	88.1	88.2	6.3	6.3	10.3		8		94				<0.2		1.9	
						10.6	0.1	77	23.4		8.0		31.4		88.2		6.3		10.2		7		95				<0.2		1.8	
IM1	Rainy	Moderate	15:10	4.9	Surface	1.0	0.2	202	23.0	23.0	7.9	7.9	31.7	31.7	93.4	93.5	6.7	6.7	16.1	16.6	18	18	87	90	817963	807111	<0.2	<0.2	1.0	0.9
						1.0	0.2	202	23.0		7.9		31.7		93.5		6.7		16.1		20		88				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-				-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	227	23.0	23.0	7.9	7.9	31.8	31.8	95.3	95.4	6.8	6.8	17.0		18		92				<0.2		0.9	
						3.9	0.2	241	23.0		7.9		31.8		95.4		6.8		17.0		15		92				<0.2		0.9	
IM2	Rainy	Moderate	15:04	7.6	Surface	1.0	0.5	141	23.0	23.0	7.9	7.9	31.0	31.0	93.2	93.2	6.7	6.7	15.9	17.9	17	18	85	89	818185	806185	<0.2	<0.2	1.1	1.1
						1.0	0.5	142	23.0		7.9		31.0		93.1		6.7		15.9		18		85				<0.2		1.2	
					Middle	3.8	0.3	210	23.0	23.0	7.9	7.9	31.6	31.6	93.1	93.1	6.7	6.7	17.4		18		89				<0.2		1.1	
						3.8	0.4	210	23.0		7.9		31.6		93.1		6.7		17.4		17		89				<0.2		1.1	
					Bottom	6.6	0.2	246	23.0	23.0	7.8	7.8	31.7	31.7	94.2	94.2	6.7	6.7	20.3		18		92				<0.2		1.1	
						6.6	0.2	248	23.0		7.8		31.7		94.2		6.7		20.2		17		91				<0.2		1.1	
IM3	Rainy	Moderate	14:56	7.8	Surface	1.0	0.4	129	22.9	22.9	7.9	7.9	31.0	31.0	93.1	93.1	6.7	6.7	17.4	19.2	14	15	85	89	818773	805594	<0.2	<0.2	1.2	1.1
						1.0	0.4	130	22.9		7.9		31.0		93.0		6.7		17.6		14		85				<0.2		1.1	
					Middle	3.9	0.4	168	23.0	23.0	7.9	7.9	31.6	31.6	93.4	93.4	6.7	6.7	19.4		15		89				<0.2		1.1	
						3.9	0.4	188	23.0		7.9		31.6		93.3		6.7		19.7		15		89				<0.2		1.1	
					Bottom	6.8	0.4	215	23.0	23.0	7.8	7.8	31.7	31.7	94.7	94.8	6.8	6.8	20.7		16		92				<0.2		1.1	
						6.8	0.4	200	23.0		7.8		31.7		94.8		6.8		20.6		16		92				<0.2		1.1	
IM4	Cloudy	Moderate	14:46	7.7	Surface	1.0	0.5	189	22.9	22.9	7.9	7.9	30.1	30.1	93.2	93.2	6.7	6.7	16.8	19.2	18	19	84	88	819737	804601	<0.2	<0.2	1.2	1.2
						1.0	0.5	194	22.9		7.9		30.1		93.2		6.7		17.0		19		85				<0.2		1.2	
					Middle	3.9	0.4	149	23.0	23.0	7.9	7.9	31.4	31.4	92.7	92.7	6.6	6.7	19.0		20		88				<0.2		1.2	
						3.9	0.4	121	23.0		7.9		31.4		92.7		6.6		19.0		20		89				<0.2		1.1	
					Bottom	6.7	0.4	152	23.0	23.0	7.9	7.9	31.4	31.4	93.4	93.4	6.7	6.7	21.8		18		91				<0.2		1.1	
						6.7	0.4	146	23.0		7.9		31.4		93.4		6.7		21.8		19		91				<0.2		1.2	
IM5	Rainy	Moderate	14:36	7.2	Surface	1.0	0.5	206	22.9	22.9	7.9	7.9	30.8	30.8	92.5	92.5	6.7	6.7	18.7	20.6	17	17	85	88	820745	804879	<0.2	<0.2	1.4	1.5
						1.0	0.5	206	22.9		7.9		30.8		92.4		6.6		19.1		16		85				<0.2		1.4	
					Middle	3.6	0.4	210	23.0	23.0	7.9	7.9	30.8	30.8	92.6	92.7	6.7	6.7	20.7		16		88				<0.2		1.6	
						3.6	0.4	201	23.0		7.9		30.8		92.7		6.7		21.0		17		88				<0.2		1.4	
					Bottom	6.2	0.1	199	23.0	23.0	7.9	7.9	30.8	30.8	95.6	95.7	6.9	6.9	22.2		17		91				<0.2		1.5	
						6.2	0.1	213	23.0		7.9		30.8		95.7		6.9		21.9		17		91				<0.2		1.5	
IM6	Rainy	Moderate	14:28	7.3	Surface	1.0	0.0	128	23.1	23.1	7.9	7.9	30.9	30.9	89.8	89.8	6.4	6.4	18.8	20.2	17	18	85	88	821039	805807	<0.2	<0.2	1.5	1.5
						1.0	0.0	128	23.1		7.9		30.9		89.8		6.4		18.9		19		85				<0.2		1.4	
					Middle	3.7	0.1	214	23.1	23.1	7.9	7.9	30.9	30.9	89.5	89.5	6.4	6.4	20.3		18		88				<0.2		1.5	
						3.7	0.1	223	23.1		7.9		30.9		89.5		6.4		20.3		18		88				<0.2		1.4	
					Bottom	6.3	0.1	256	23.1	23.1	7.9	7.9	30.9	30.9	89.9	89.9	6.4	6.4	21.4		19		91				<0.2		1.5	
						6.3	0.1	227	23.1		7.9		30.9		89.8		6.4		21.5		19		91				<0.2		1.4	
IM7	Rainy	Moderate	14:17	8.5	Surface	1.0	0.0	213	23.2	23.2	7.8	7.8	29.8	29.8	87.6	87.6	6.3	6.3	18.0	20.0	21	22	84	87	821353	806829	<0.2	<0.2	1.7	1.7
						1.0	0.0	213	23.2		7.8		29.8		87.6		6.3		18.1		23		84				<0.2		1.7	
					Middle	4.3	0.1	223	23.2	23.2	7.9	7.9	30.2	30.2	87.6	87.7	6.3	6.3	20.0		22		87				<0.2		1.6	
						4.3	0.2	245	23.2		7.9		30.2		87.7		6.3		20.0		22		87				<0.2		1.6	
					Bottom	7.5	0.1	230	23.1	23.1	7.9	7.9	31.1	31.1	88.5	88.5	6.3	6.3	21.5		21		90				<0.2		1.6	
						7.5	0.1	246	23.1		7.9		31.1		88.5		6.3		22.1		21		91				<0.2		1.7	
IM8	Fine	Rough	14:40	7.0	Surface	1.0	0.1	143	23.1	23.1	8.0	8.0	29.4	29.4	89.5	89.6	6.5	6.5	18.9	20.8	14	17	85	89	821813	808159	<0.2	<0.2	2.1	2.0
						1.0	0.1	151	23.0		8.0		29.5		89.7		6.5		18.8		13		85				<0.2		1.8	
					Middle	3.5	0.1	168	22.9	22.9	8.1	8.1	30.3	30.3	90.2	90.3	6.5	6.5	20.2		18		89				<0.2		2.0	
						3.5	0.1	170	22.9		8.1		30.4		90.3		6.5		21.2		18		89				<0.2		1.9	
					Bottom	6.0	0.2	127	22.9	22.9	8.1	8.1	30.5	30.5	90.6	90.7	6.5	6.5	22.8		18		94				<0.2		1.9	
						6.0	0.2	132	22.9		8.1		30.5		90.7		6.5		22.8		18		94				<0.2		2.0	

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 27 November 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	Rainy	Rough	14:47	8.1	Surface	1.0	0.2	110	23.1	23.1	8.1	8.1	29.1	29.2	87.6	87.7	6.3	6.4	17.1	19.1	16	18	85	89	822094	808799	<0.2	<0.2	2.0	2.1
						1.0	0.2	117	23.1		8.1		29.2		87.7		6.4		17.1		17		86				<0.2		2.1	
					Middle	4.1	0.1	103	23.1	23.1	8.1	8.1	29.4	29.5	88.4	88.5	6.4		20.3		18		89				<0.2		2.1	
						4.1	0.1	107	23.1		8.1		29.5		88.6		6.4		20.0		18		89				<0.2		2.1	
					Bottom	7.1	0.1	258	23.1	23.1	8.1	8.1	29.7	29.7	89.6	89.7	6.5	6.5	19.9		18		93				<0.2		2.1	
						7.1	0.1	264	23.1		8.1		29.7		89.7		6.5		19.9		18		94				<0.2		2.1	
IM10	Rainy	Rough	14:53	7.5	Surface	1.0	0.3	76	23.1	23.1	8.1	8.1	29.4	29.4	87.2	87.2	6.3	6.3	18.9	19.6	20	19	85	89	822361	809775	<0.2	<0.2	2.0	2.0
						1.0	0.3	77	23.1		8.1		29.4		87.2		6.3		18.9		19		86				<0.2		2.0	
					Middle	3.8	0.2	102	23.1	23.1	8.1	8.0	29.5	29.5	87.5	87.6	6.3		19.5		19		88				<0.2		2.0	
						3.8	0.2	108	23.1		8.0		29.5		87.7		6.3		19.5		19		89				<0.2		2.1	
					Bottom	6.5	0.2	138	23.0	23.0	8.0	8.0	30.3	30.3	89.2	89.2	6.4	6.4	20.3		19		93				<0.2		2.0	
						6.5	0.2	151	23.0		8.0		30.3		89.2		6.4		20.4		18		94				<0.2		2.1	
IM11	Rainy	Rough	15:06	9.0	Surface	1.0	0.2	120	23.1	23.1	8.0	8.0	30.4	30.4	89.5	89.5	6.4	6.5	15.3	15.7	21	21	86	90	822045	811446	<0.2	<0.2	1.9	2.1
						1.0	0.2	137	23.1		8.0		30.4		89.5		6.4		15.3		22		86				<0.2		2.2	
					Middle	4.5	0.2	131	23.1	23.1	8.0	8.0	30.4	30.4	89.7	89.8	6.5		13.7		19		90				<0.2		2.1	
						4.5	0.2	113	23.1		8.0		30.4		89.8		6.5		15.5		19		90				<0.2		2.0	
					Bottom	8.0	0.1	150	23.0	23.0	8.0	8.0	30.4	30.4	90.0	90.1	6.5	6.5	17.1		22		94				<0.2		2.1	
						8.0	0.1	158	23.0		8.0		30.4		90.1		6.5		17.1		21		94				<0.2		2.1	
IM12	Rainy	Rough	15:12	8.7	Surface	1.0	0.1	132	23.0	23.0	8.1	8.1	30.4	30.4	89.8	89.8	6.5	6.5	12.4	16.0	12	14	85	90	821469	812044	<0.2	<0.2	2.0	2.0
						1.0	0.1	144	23.0		8.1		30.4		89.8		6.5		12.4		13		86				<0.2		2.0	
					Middle	4.4	0.1	128	23.0	23.0	8.1	8.1	30.4	30.4	89.8	89.8	6.5		16.3		15		90				<0.2		2.0	
						4.4	0.1	135	23.0		8.1		30.4		89.8		6.5		16.3		15		90				<0.2		2.0	
					Bottom	7.7	0.1	134	23.0	23.0	8.1	8.1	30.4	30.4	90.7	90.8	6.5	6.5	19.1		15		94				<0.2		2.0	
						7.7	0.1	144	23.0		8.1		30.4		90.8		6.5		19.6		15		94				<0.2		2.1	
SR1A	Rainy	Rough	15:34	6.1	Surface	1.0	-	-	22.9	22.9	8.0	8.0	30.4	30.4	90.4	90.4	6.5	6.5	11.0	11.4	12	13	-	-	820072	812587	-	-	-	-
						1.0	-	-	22.9		8.0		30.4		90.4		6.5		11.1		12		-				-		-	
					Middle	3.1	-	-	22.9	22.9	8.0	8.0	30.4	30.4	89.7	89.7	6.5		11.0		11		-				-		-	
						3.1	-	-	22.9		8.0		30.4		89.6		6.5		11.1		12		-				-		-	
					Bottom	5.1	-	-	22.9	22.9	8.0	8.0	30.5	30.5	89.7	89.9	6.5	6.5	12.1		14		-				-		-	
						5.1	-	-	22.9		8.0		30.5		90.0		6.5		12.2		15		-				-		-	
SR2	Rainy	Rough	15:46	4.5	Surface	1.0	0.1	57	23.1	23.1	8.1	8.1	30.4	30.4	89.1	89.1	6.4	6.4	12.9	14.7	16	17	85	89	821471	814146	<0.2	<0.2	2.0	1.9
						1.0	0.1	68	23.1		8.1		30.4		89.0		6.4		12.9		17		85				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	102	23.1	23.1	8.1	8.1	30.4	30.4	88.8	88.9	6.4	6.4	16.5		17		93				<0.2		1.9	
						3.5	0.1	114	23.1		8.1		30.4		88.9		6.4		16.5		17		93				<0.2		1.8	
SR3	Fine	Rough	14:35	8.9	Surface	1.0	0.4	148	23.0	23.0	8.0	8.0	30.0	30.0	89.2	89.3	6.4	6.5	28.9	24.5	12	13	-	-	822145	807552	-	-	-	-
						1.0	0.5	166	23.0		8.0		30.0		89.3		6.5		28.9		12		-				-		-	
					Middle	4.5	0.4	152	22.9	22.9	8.1	8.1	30.2	30.2	90.3	90.3	6.5		20.6		13		-				-		-	
						4.5	0.4	155	22.9		8.1		30.2		90.3		6.5		20.6		13		-				-		-	
					Bottom	7.9	0.3	145	22.9	22.9	8.1	8.1	30.2	30.2	91.3	91.4	6.6	6.6	24.1		14		-				-		-	
						7.9	0.3	160	22.9		8.1		30.2		91.5		6.6		24.1		14		-				-		-	
SR4A	Cloudy	Calm	15:49	9.4	Surface	1.0	0.3	95	23.0	23.0	7.9	7.9	31.2	31.2	93.2	93.2	6.7	6.7	17.8	19.8	15	15	-	-	817173	807831	-	-	-	-
						1.0	0.4	103	23.0		7.9		31.2		93.2		6.7		17.9		16		-				-		-	
					Middle	4.7	0.3	96	23.0	23.0	7.8	7.8	31.3	31.3	93.5	93.5	6.7		19.7		15		-				-		-	
						4.7	0.3	100	23.0		7.8		31.3		93.5		6.7		19.7		15		-				-		-	
					Bottom	8.4	0.3	82	23.0	23.0	7.8	7.8	31.5	31.5	95.4	95.4	6.8	6.8	21.8		14		-				-		-	
						8.4	0.4	89	23.0		7.8		31.5		95.4		6.8		21.8		14		-				-		-	
SR5A	Rainy	Calm	16:04	4.7	Surface	1.0	0.1	105	23.0	23.0	7.8	7.8	31.3	31.3	89.9	90.0	6.4	6.5	14.7	14.7	12	13	-	-	816607	810689	-	-	-	-
						1.0	0.1	127	23.0		7.8		31.3		90.0		6.5		14.7		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	117	23.0	23.0	7.8	7.8	31.3	31.3	91.5	91.6	6.6	6.6	14.7		15		-				-		-	
						3.7	0.1	139	23.0		7.8		31.3		91.6		6.6		14.7		14		-				-		-	
SR6	Rainy	Calm	16:45	4.4	Surface	1.0	0.2	100	23.2	23.2	7.8	7.8	31.3	31.3	90.3	90.3	6.5	6.5	11.5	11.7	10	10	-	-	817894	814656	-	-	-	-
						1.0	0.2	106	23.2		7.8		31.3		90.3		6.5		11.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	97	23.1	23.1	7.8	7.8	31.3	31.3	92.6	92.7	6.6	6.6	11.9		9		-				-		-	
						3.4	0.2	101	23.1		7.8		31.3		92.7		6.6		11.9		10		-				-		-	
SR7	Rainy	Rough	16:33	15.7	Surface	1.0	0.1	48	23.4	23.4	8.0	8.0	31.4	31.4	84.3	84.3	6.0	6.0	9.3	9.1	8	8	-	-	823629	823740	-	-	-	-
						1.0	0.1	49	23.4		8.0		31.4		84.3		6.0		9.4		8		-				-		-	
					Middle	7.9	0.0	87	23.4	23.4	8.0	8.0	31.6	31.6	83.6	83.5	5.9		9.2		8		-				-		-	
						7.9	0.0	106	23.4		8.0		31.6		83.3		5.9		9.3		8		-				-		-	
					Bottom	14.7	0.0	81	23.4	23.4	8.0	8.0	31.7	31.7	78.9	78.7	5.6	5.6	9.1		9		-				-		-	
						14.7	0.0	82	23.4		8.0		31.7		78.4		5.6		8.1		8		-				-		-	
SR8	Rainy	Rough	15:24	4.3	Surface	1.0	-	-	23.0	23.0	8.1	8.1	30.2	30.2	89.9	90.0	6.5	6.5	11.8	12.3	11	12	-	-	820484	811672	-	-	-	-
						1.0	-	-	23.0		8.1		30.3		90.0		6.5		11.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	23.0	23.0	8.1	8.1	30.4	30.4	90.8	90.9	6.6	6.6	12.9		12		-				-		-	
						3.3	-	-	23.0		8.1		30.4		90.9		6.6		12.8		13		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
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 November 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	Moderate	10:57	7.8	Surface	1.0	0.2	36	23.0	23.0	7.9	7.9	31.6	31.6	91.9	92.0	6.6	6.6	17.1	19.5	18	19	86	89	815600	804230	<0.2	<0.2	1.0	1.1
						1.0	0.2	37	23.0		7.9		31.6		92.0		6.6		17.1		17		86				<0.2		1.2	
					Middle	3.9	0.2	42	23.0	23.0	7.9	7.9	31.7	31.7	91.9	91.9	6.6		19.4		21		89				<0.2		1.1	
						3.9	0.2	42	23.0		7.9		31.7		91.9		6.6		19.5		20		89				<0.2		1.0	
					Bottom	6.8	0.3	31	23.1	23.1	7.9	7.9	31.7	31.7	91.9	92.0	6.6	6.6	21.9		20		93				<0.2		1.1	
						6.8	0.3	33	23.1		7.9		31.7		92.0		6.6		21.9		20		92				<0.2		0.9	
C2	Fine	Rough	11:43	11.6	Surface	1.0	0.3	1	23.2	23.2	7.9	7.9	28.3	28.3	84.8	84.8	6.2	6.2	17.1	22.0	14	14	84	89	825668	806921	<0.2	<0.2	2.1	2.0
						1.0	0.3	1	23.2		7.9		28.3		84.8		6.2		17.5		14		85				<0.2		2.0	
					Middle	5.8	0.3	17	23.2	23.2	7.9	7.9	28.3	28.3	85.1	85.2	6.2		22.3		15		88				<0.2		1.9	
						5.8	0.3	17	23.2		7.9		28.3		85.2		6.2		22.3		14		90				<0.2		1.9	
					Bottom	10.6	0.4	29	23.2	23.2	7.9	8.0	28.3	28.3	87.1	88.0	6.3	6.4	26.4		14		94				<0.2		2.0	
						10.6	0.4	30	23.2		8.0		28.3		88.8		6.5		26.4		12		95				<0.2		1.9	
C3	Fine	Rough	09:48	11.0	Surface	1.0	0.5	298	23.1	23.1	8.0	8.0	30.5	30.5	88.6	88.7	6.4	6.4	11.5	15.4	9	9	85	89	822123	817824	<0.2	<0.2	2.0	1.9
						1.0	0.6	311	23.1		8.0		30.5		88.7		6.4		11.6		9		85				<0.2		1.9	
					Middle	5.5	0.5	301	23.1	23.1	8.0	8.0	30.5	30.5	89.0	89.0	6.4		16.3		9		89				<0.2		1.8	
						5.5	0.5	311	23.1		8.0		30.5		89.0		6.4		16.3		8		89				<0.2		1.9	
					Bottom	10.0	0.4	301	23.1	23.1	8.0	8.0	30.5	30.5	89.3	89.4	6.4	6.4	18.2		10		93				<0.2		1.9	
						10.0	0.4	313	23.1		8.0		30.5		89.4		6.4		18.2		9		94				<0.2		1.9	
IM1	Cloudy	Moderate	11:08	4.8	Surface	1.0	0.3	357	23.0	23.0	7.9	7.9	31.6	31.6	92.0	92.0	6.6	6.6	19.8	20.5	21	15	87	90	817963	807119	<0.2	<0.2	1.1	1.1
						1.0	0.3	328	23.0		7.9		31.6		92.0		6.6		19.9		19		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	4	23.0	23.0	7.9	7.9	31.7	31.7	93.5	93.5	6.7	6.7	21.2		10		92				<0.2		1.1	
						3.8	0.3	4	23.0		7.9		31.7		93.4		6.7		21.2		10		92				<0.2		1.0	
IM2	Cloudy	Moderate	11:16	7.1	Surface	1.0	0.5	5	23.0	23.0	7.9	7.9	31.3	31.3	92.3	92.3	6.6	6.6	19.4	21.3	19	19	85	88	818141	806148	<0.2	<0.2	1.1	1.1
						1.0	0.5	5	23.0		7.9		31.3		92.3		6.6		19.3		19		85				<0.2		1.2	
					Middle	3.6	0.4	0	23.0	23.0	7.9	7.9	31.3	31.3	92.7	92.7	6.6		21.4		18		88				<0.2		1.1	
						3.6	0.4	0	23.0		7.9		31.3		92.7		6.6		21.8		19		88				<0.2		1.0	
					Bottom	6.1	0.3	2	23.0	23.0	7.9	7.9	31.3	31.3	94.5	94.5	6.8	6.8	23.1		19		92				<0.2		1.1	
						6.1	0.3	2	23.0		7.9		31.3		94.5		6.8		23.0		18		91				<0.2		1.1	
IM3	Cloudy	Moderate	11:22	7.3	Surface	1.0	0.5	24	23.0	23.0	7.8	7.8	30.7	30.7	92.3	92.3	6.6	6.6	21.1	25.9	17	16	85	88	818764	805589	<0.2	<0.2	1.2	1.2
						1.0	0.5	24	23.0		7.8		30.7		92.3		6.6		21.3		15		85				<0.2		1.2	
					Middle	3.7	0.4	8	23.0	23.0	7.8	7.8	30.8	30.8	92.5	92.6	6.6		25.4		15		88				<0.2		1.2	
						3.7	0.4	8	23.0		7.8		30.8		92.7		6.7		26.2		16		88				<0.2		1.3	
					Bottom	6.3	0.3	4	23.0	23.0	7.9	7.9	31.2	31.2	94.6	94.7	6.8	6.8	30.7		17		91				<0.2		1.2	
						6.3	0.3	4	23.0		7.9		31.2		94.8		6.8		30.8		17		91				<0.2		1.1	
IM4	Rainy	Moderate	11:31	7.6	Surface	1.0	0.5	357	23.0	23.0	7.8	7.8	30.8	30.8	92.3	92.4	6.6	6.7	22.5	26.8	20	21	85	88	819745	804594	<0.2	<0.2	1.2	1.2
						1.0	0.5	328	23.0		7.8		30.8		92.5		6.6		22.5		19		85				<0.2		1.2	
					Middle	3.8	0.4	350	23.0	23.0	7.8	7.8	30.8	30.8	94.0	94.0	6.8		26.2		20		87				<0.2		1.3	
						3.8	0.4	322	23.0		7.8		30.8		94.0		6.8		26.2		20		88				<0.2		1.2	
					Bottom	6.6	0.4	5	23.0	23.0	7.8	7.8	30.8	30.8	96.2	96.3	6.9	6.9	31.8		24		90				<0.2		1.1	
						6.6	0.4	5	23.0		7.8		30.8		96.4		6.9		31.8		22		91				<0.2		1.2	
IM5	Rainy	Moderate	11:38	6.9	Surface	1.0	0.6	3	23.0	23.0	7.8	7.8	30.8	30.8	91.2	91.2	6.6	6.6	20.5	24.8	25	25	85	88	820744	804859	<0.2	<0.2	1.4	1.4
						1.0	0.6	3	23.0		7.8		30.8		91.2		6.5		20.7		25		84				<0.2		1.3	
					Middle	3.5	0.6	-	23.0	23.0	7.8	7.8	30.9	30.9	91.4	91.4	6.6		25.2		24		88				<0.2		1.3	
						3.5	0.6	-	23.0		7.8		30.9		91.4		6.6		25.4		23		88				<0.2		1.4	
					Bottom	5.9	0.5	357	23.0	23.0	7.8	7.8	30.9	30.9	93.9	94.0	6.7	6.7	28.5		26		91				<0.2		1.3	
						5.9	0.5	328	23.0		7.8		30.9		94.0		6.7		28.5		28		91				<0.2		1.5	
IM6	Rainy	Moderate	11:45	7.0	Surface	1.0	0.2	356	23.1	23.1	7.8	7.8	30.9	30.9	90.5	90.5	6.5	6.5	21.8	25.8	23	22	86	88	821037	805833	<0.2	<0.2	1.7	1.6
						1.0	0.2	328	23.1		7.8		30.9		90.4		6.5		21.7		23		85				<0.2		1.6	
					Middle	3.5	0.1	358	23.1	23.1	7.8	7.8	31.0	31.0	90.5	90.6	6.5		25.5		22		88				<0.2		1.6	
						3.5	0.1	329	23.1		7.8		31.0		90.6		6.5		25.6		21		88				<0.2		1.7	
					Bottom	6.0	0.2	359	23.1	23.1	7.8	7.8	31.0	31.0	92.2	92.3	6.6	6.6	30.1		22		91				<0.2		1.6	
						6.0	0.2	330	23.1		7.8		31.0		92.3		6.6		30.0		21		91				<0.2		1.6	
IM7	Cloudy	Moderate	11:52	8.3	Surface	1.0	0.1	304	23.2	23.2	7.8	7.8	29.8	29.8	88.6	88.6	6.4	6.4	20.6	24.8	18	21	84	87	821347	806813	<0.2	<0.2	1.6	1.7
						1.0	0.1	333	23.2		7.8		29.8		88.6		6.4		20.9		18		83				<0.2		1.7	
					Middle	4.2	0.2	357	23.2	23.1	7.8	7.8	30.5	30.5	89.2	89.1	6.4		24.4		21		87				<0.2		1.5	
						4.2	0.2	328	23.1		7.8		30.5		89.0		6.4		24.6		20		87				<0.2		1.6	
					Bottom	7.3	0.2	345	23.1	23.1	7.8	7.8	31.1	31.1	89.2	89.2	6.4	6.4	29.0		22		90				<0.2		1.7	
						7.3	0.2	317	23.1		7.8		31.1		89.2		6.4		29.2		24		90				<0.2		1.8	
IM8	Fine	Rough	11:16	8.6	Surface	1.0	0.2	41	23.2	23.2	8.0	8.0	28.6	28.6	85.8	85.9	6.2	6.3	20.3	22.4	14	18	84	89	821851	808122	<0.2	<0.2	1.5	1.4
						1.0	0.2	41	23.2		8.0		28.6		86.0		6.2		20.3		13		85				<0.2		1.4	
					Middle	4.3	0.4	65	23.1	23.1	8.0	8.0	29.0	29.0	87.4	87.5	6.3		22.2		16		89				<0.2		1.4	
						4.3	0.4	67	23.1		8.0		29.1		87.5		6.3		22.2		17		90				<0.2		1.3	
					Bottom	7.6	0.3	50	23.1	23.1	8.0	8.0	29.3	29.3	88.2	88.3	6.4	6.4	24.8		23		94				<0.2		1.4	
						7.6	0.4	52	23.1		8.0		29.3		88.4		6.4		24.8		24		94				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 November 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	Rough	11:11	7.1	Surface	1.0	0.2	136	23.2	23.2	8.0	8.0	28.6	28.6	85.0	85.1	6.2	6.2	19.4	23.1	14	19	85	90	822093	808827	<0.2	<0.2	1.9	1.8
						1.0	0.2	137	23.2		8.0		28.6		85.1		6.2		19.4		13		85				<0.2		2.0	
					Middle	3.6	0.2	116	23.2	23.2	8.0	8.0	28.9	28.9	85.8	85.8	6.2		24.4		17		89				<0.2		2.1	
						3.6	0.3	124	23.2		8.0		29.0		85.8		6.2		24.4		17		89				<0.2		2.1	
					Bottom	6.1	0.2	120	23.1	23.1	8.0	8.0	29.0	29.0	85.9	85.9	6.2	6.2	25.6		26		94				<0.2		1.5	
						6.1	0.2	123	23.1		8.0		29.0		85.9		6.2		25.6		24		95				<0.2		1.4	
IM10	Fine	Rough	11:01	6.8	Surface	1.0	0.3	92	23.1	23.1	8.0	8.0	29.7	29.7	87.7	87.7	6.3	6.3	21.5	24.4	22	20	85	90	822408	809810	<0.2	<0.2	2.0	2.0
						1.0	0.3	99	23.1		8.0		29.7		87.7		6.3		21.5		21		85				<0.2		2.0	
					Middle	3.4	0.3	63	23.1	23.1	8.0	8.0	29.9	29.9	87.5	87.5	6.3		25.3		23		90				<0.2		2.0	
						3.4	0.3	64	23.1		8.0		29.9		87.5		6.3		25.3		23		90				<0.2		1.9	
					Bottom	5.8	0.2	68	23.1	23.1	8.0	8.0	29.9	29.9	87.5	87.5	6.3	6.3	26.4		14		93				<0.2		2.1	
						5.8	0.2	71	23.1		8.0		29.9		87.5		6.3		26.4		14		94				<0.2		2.0	
IM11	Fine	Rough	10:49	8.3	Surface	1.0	0.3	49	23.0	23.0	8.0	8.0	30.3	30.3	88.9	88.9	6.4	6.4	22.1	25.2	23	27	86	90	822079	811455	<0.2	<0.2	1.9	2.0
						1.0	0.3	49	23.0		8.0		30.3		88.9		6.4		22.4		23		86				<0.2		2.1	
					Middle	4.2	0.4	32	23.0	23.0	8.0	8.0	30.3	30.3	88.8	88.8	6.4		24.6		24		90				<0.2		1.8	
						4.2	0.4	32	23.0		8.0		30.3		88.8		6.4		24.6		26		91				<0.2		2.0	
					Bottom	7.3	0.4	18	23.0	23.0	8.0	8.0	30.4	30.4	89.1	89.2	6.4	6.4	28.8		34		93				<0.2		1.9	
						7.3	0.4	18	23.0		8.0		30.4		89.2		6.4		28.8		34		93				<0.2		2.0	
IM12	Fine	Rough	10:43	7.4	Surface	1.0	0.5	327	23.0	23.0	8.0	8.0	30.4	30.4	88.6	88.6	6.4	6.4	25.8	26.3	19	23	85	89	821441	812063	<0.2	<0.2	1.8	1.9
						1.0	0.5	330	23.0		8.0		30.4		88.6		6.4		25.7		20		86				<0.2		1.8	
					Middle	3.7	0.5	320	23.1	23.1	8.0	8.0	30.4	30.4	88.6	88.6	6.4		26.9		19		89				<0.2		1.8	
						3.7	0.5	347	23.1		8.0		30.4		88.6		6.4		26.9		19		89				<0.2		1.8	
					Bottom	6.4	0.4	318	23.1	23.1	8.0	8.0	30.4	30.4	88.6	88.6	6.4	6.4	26.2		29		93				<0.2		2.0	
						6.4	0.4	329	23.1		8.0		30.4		88.6		6.4		26.2		30		94				<0.2		2.0	
SR1A	Fine	Rough	10:18	6.8	Surface	1.0	-	-	22.9	22.9	8.0	8.0	30.3	30.3	88.1	88.1	6.4	6.4	13.8	15.3	26	26	-	-	820074	812588	-	-	-	-
						1.0	-	-	22.9		8.0		30.3		88.1		6.4		13.8		22		-				-		-	
					Middle	3.4	-	-	22.9	22.9	8.0	8.0	30.4	30.4	87.5	87.5	-		14.8		20		-				-		-	
						3.4	-	-	22.9		8.0		30.4		87.5		-		14.9		18		-				-		-	
					Bottom	5.8	-	-	22.9	22.9	8.0	8.0	30.5	30.5	87.7	87.7	6.3	6.3	17.5		35		-				-		-	
						5.8	-	-	22.9		8.0		30.5		87.7		6.3		17.2		32		-				-		-	
SR2	Fine	Rough	10:07	4.1	Surface	1.0	0.5	283	23.0	23.0	8.0	8.0	30.3	30.3	90.0	90.1	6.5	6.5	19.4	20.9	10	12	85	89	821440	814180	<0.2	<0.2	2.0	2.0
						1.0	0.5	300	23.0		8.0		30.3		90.2		6.5		19.4		9		86				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	289	23.0	23.0	8.0	8.0	30.3	30.3	91.0	91.2	6.6	6.6	22.3		15		93				<0.2		1.9	
						3.1	0.3	296	23.0		8.0		30.3		91.3		6.6		22.3		15		93				<0.2		2.0	
SR3	Fine	Rough	11:23	9.6	Surface	1.0	0.2	25	23.2	23.2	7.9	7.9	28.2	28.2	84.5	84.6	6.1	6.2	19.3	21.3	16	18	-	-	822168	807570	-	-	-	-
						1.0	0.2	25	23.2		7.9		28.2		84.6		6.2		19.3		18		-				-		-	
					Middle	4.8	0.3	8	23.2	23.2	7.9	7.9	28.7	28.7	86.0	86.0	6.2		18.8		18		-				-		-	
						4.8	0.3	8	23.2		7.9		28.7		86.0		6.2		18.8		18		-				-		-	
					Bottom	8.6	0.3	26	23.1	23.1	7.9	7.9	28.8	28.8	86.2	86.2	6.3	6.3	25.9		20		-				-		-	
						8.6	0.3	28	23.1		7.9		28.8		86.2		6.3		25.9		19		-				-		-	
SR4A	Cloudy	Calm	10:44	9.1	Surface	1.0	0.1	115	22.9	22.9	7.8	7.8	31.3	31.3	88.6	88.6	6.4	6.4	14.7	16.7	14	14	-	-	817181	807788	-	-	-	-
						1.0	0.1	125	22.9		7.8		31.3		88.6		6.4		14.7		15		-				-		-	
					Middle	4.6	0.1	102	22.9	22.9	7.8	7.8	31.3	31.3	89.5	89.5	-		17.2		13		-				-		-	
						4.6	0.1	108	22.9		7.8		31.3		89.5		-		17.2		14		-				-		-	
					Bottom	8.1	0.1	76	22.9	22.9	7.8	7.8	31.3	31.3	90.4	90.4	6.5	6.5	18.1		12		-				-		-	
						8.1	0.1	78	22.9		7.8		31.3		90.4		6.5		18.1		14		-				-		-	
SR5A	Cloudy	Calm	10:27	3.6	Surface	1.0	0.1	287	22.9	22.9	7.8	7.8	31.3	31.3	90.1	90.2	6.5	6.5	15.5	15.9	14	17	-	-	816608	810701	-	-	-	-
						1.0	0.1	304	22.9		7.8		31.3		90.2		6.5		15.5		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	285	22.9	22.9	7.8	7.8	31.4	31.4	92.2	92.3	6.6	6.6	16.2		21		-				-		-	
						2.6	0.1	294	22.9		7.8		31.4		92.4		6.6		16.2		21		-				-		-	
SR6	Cloudy	Calm	10:03	3.6	Surface	1.0	0.2	245	23.1	23.1	7.7	7.7	31.5	31.5	89.8	89.9	6.4	6.4	20.1	20.0	13	13	-	-	817911	814676	-	-	-	-
						1.0	0.2	267	23.1		7.7		31.5		89.9		6.4		20.1		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	240	23.1	23.1	7.7	7.7	31.5	31.5	91.9	92.0	6.6	6.6	19.9		14		-				-		-	
						2.6	0.2	253	23.1		7.7		31.5		92.1		6.6		20.0		13		-				-		-	
SR7	Fine	Rough	09:23	15.1	Surface	1.0	0.2	8	23.4	23.4	7.9	7.9	31.0	31.0	86.4	86.5	6.2	6.2	20.3	17.5	16	16	-	-	823628	823721	-	-	-	-
						1.0	0.2	8	23.4		7.9		31.0		86.5		6.2		18.4		17		-				-		-	
					Middle	7.6	0.2	9	23.4	23.4	7.9	7.9	31.0	31.0	86.7	86.9	-		17.4		18		-				-		-	
						7.6	0.2	9	23.4		7.9		31.0		87.0		-		17.7		17		-				-		-	
					Bottom	14.1	0.3	354	23.4	23.4	7.9	7.9	31.0	31.0	87.4	87.4	6.2	6.2	14.9		16		-				-		-	
						14.1	0.3	326	23.4		7.9		31.0		87.4		6.2		16.3		14		-				-		-	
SR8	Fine	Rough	10:33	4.2	Surface	1.0	-	-	23.0	23.0	8.0	8.0	30.4	30.4	88.8	88.8	6.4	6.4	20.5	21.9	32	32	-	-	820493	811678	-	-	-	-
						1.0	-	-	23.0		8.0		30.4		88.8		6.4		20.5		33		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	23.0	23.0	8.0	8.0	30.4	30.4	88.8	88.9	6.4	6.4	23.2		31		-				-		-	
						3.2	-	-	23.0		8.0		30.4		88.9		6.4		23.2		32		-				-		-	

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 November 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	17:55	9.1	Surface	1.0	0.5	226	23.2	23.2	7.8	7.8	30.7	30.7	94.2	94.3	6.8	6.8	14.0	22.0	6	7	90	94	815610	804231	<0.2	<0.2	1.3	1.5
						1.0	0.5	26	23.2		7.8		30.7		94.3		6.8		14.1		6		90				<0.2		1.7	
					Middle	4.6	0.3	224	23.1	23.1	7.8	7.8	32.5	32.5	94.4	94.4	6.7		24.3		6		93				<0.2		1.4	
						4.6	0.3	225	23.1		7.8		32.5		94.4		6.7		24.4		7		94				<0.2		1.4	
					Bottom	8.1	0.2	222	23.1	23.1	7.8	7.8	32.6	32.6	95.6	95.7	6.8	6.8	27.5		7		97				<0.2		1.5	
						8.1	0.2	223	23.1		7.8		32.6		95.8		6.8		27.8		7		98				<0.2		1.4	
C2	Fine	Moderate	16:41	11.3	Surface	1.0	0.4	206	23.3	23.3	7.9	7.9	27.8	27.8	84.5	84.5	6.2	6.1	9.5	15.8	8	16	85	89	825660	806963	<0.2	<0.2	2.9	2.7
						1.0	0.4	206	23.3		7.9		27.9		84.4		6.1		9.6		7		85				<0.2		2.9	
					Middle	5.7	0.4	152	23.1	23.1	7.9	7.9	28.4	28.5	82.8	82.7	6.0		15.5		6		90				<0.2		2.8	
						5.7	0.4	153	23.1		7.9		28.5		82.6		6.0		15.4		6		90				<0.2		2.8	
					Bottom	10.3	0.5	218	23.0	23.0	7.9	7.9	28.8	28.8	81.9	82.8	6.0	6.1	22.4		35		93				<0.2		2.4	
						10.3	0.5	216	23.0		7.9		28.8		83.7		6.1		22.4		35		93				<0.2		2.5	
C3	Fine	Moderate	18:53	18.8	Surface	1.0	0.2	45	23.2	23.2	8.0	8.0	31.0	31.0	86.7	86.7	6.2	6.2	7.3	9.4	5	5	85	90	822096	817797	<0.2	<0.2	2.3	2.7
						1.0	0.2	45	23.2		8.0		31.0		86.6		6.2		7.3		4		86				<0.2		2.4	
					Middle	9.4	0.1	54	23.2	23.2	8.0	8.0	31.2	31.2	85.5	85.6	6.1		10.3		4		90				<0.2		2.4	
						9.4	0.1	53	23.2		8.0		31.2		85.7		6.1		10.4		5		90				<0.2		2.9	
					Bottom	17.8	0.1	33	23.2	23.2	8.0	8.0	31.2	31.2	87.0	87.2	6.2	6.2	10.6		4		93				<0.2		2.9	
						17.8	0.1	36	23.2		8.0		31.2		87.4		6.2		10.5		5		93				<0.2		3.0	
IM1	Fine	Moderate	17:33	4.9	Surface	1.0	0.1	252	23.4	23.4	7.8	7.8	30.7	30.7	94.2	94.2	6.7	6.7	13.5	16.0	7	7	89	92	817953	807119	<0.2	<0.2	1.7	1.7
						1.0	0.1	254	23.4		7.8		30.7		94.1		6.7		13.5		7		89				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	192	23.1	23.1	7.9	7.9	31.1	31.1	95.8	95.9	6.9	6.9	18.7		8		94				<0.2		1.6	
						3.9	0.0	203	23.1		7.9		31.1		95.9		6.9		18.3		7		95				<0.2		1.7	
IM2	Fine	Moderate	17:27	7.2	Surface	1.0	0.3	155	23.3	23.3	7.8	7.8	30.5	30.5	94.3	94.4	6.8	6.8	12.5	15.7	7	7	90	93	818172	806149	<0.2	<0.2	1.6	1.5
						1.0	0.3	157	23.3		7.8		30.6		94.4		6.8		12.6		7		90				<0.2		1.6	
					Middle	3.6	0.2	139	23.0	23.0	7.8	7.8	31.3	31.3	93.4	93.4	6.7		17.2		7		93				<0.2		1.5	
						3.6	0.2	142	23.0		7.8		31.3		93.4		6.7		17.2		7		93				<0.2		1.4	
					Bottom	6.2	0.2	202	23.0	23.0	7.8	7.8	31.4	31.4	94.7	94.8	6.8	6.8	17.4		8		97				<0.2		1.4	
						6.2	0.2	202	23.0		7.8		31.4		94.8		6.8		17.4		8		97				<0.2		1.3	
IM3	Fine	Moderate	17:21	7.6	Surface	1.0	0.4	200	23.2	23.2	7.8	7.8	30.7	30.7	93.5	93.5	6.7	6.7	14.3	17.4	12	14	94	97	818762	805597	<0.2	<0.2	1.2	1.3
						1.0	0.4	200	23.2		7.8		30.7		93.5		6.7		14.4		13		94				<0.2		1.3	
					Middle	3.8	0.3	210	23.0	23.0	7.8	7.8	31.3	31.3	93.5	93.5	6.7		18.2		12		97				<0.2		1.3	
						3.8	0.3	210	23.0		7.8		31.3		93.5		6.7		18.2		13		97				<0.2		1.3	
					Bottom	6.6	0.2	203	23.0	23.0	7.9	7.9	31.4	31.4	96.1	96.2	6.9	6.9	19.5		18		99				<0.2		1.3	
						6.6	0.2	206	23.0		7.9		31.4		96.2		6.9		19.5		18		100				<0.2		1.2	
IM4	Fine	Moderate	17:12	7.6	Surface	1.0	0.4	142	23.4	23.4	7.8	7.8	30.3	30.3	94.1	94.1	6.7	6.7	13.3	22.0	10	11	91	95	819748	804626	<0.2	<0.2	1.4	1.4
						1.0	0.4	143	23.4		7.8		30.3		94.1		6.7		13.4		10		92				<0.2		1.3	
					Middle	3.8	0.4	228	22.9	22.9	7.8	7.8	31.3	31.3	92.6	92.7	6.6		22.9		11		94				<0.2		1.4	
						3.8	0.4	230	22.9		7.8		31.3		92.7		6.7		23.0		11		94				<0.2		1.4	
					Bottom	6.6	0.3	213	22.9	22.9	7.8	7.8	31.3	31.3	94.2	94.3	6.8	6.8	29.5		11		98				<0.2		1.3	
						6.6	0.4	208	22.9		7.8		31.3		94.3		6.8		29.6		12		98				<0.2		1.4	
IM5	Fine	Moderate	17:00	7.1	Surface	1.0	0.5	228	23.2	23.2	7.8	7.8	30.5	30.5	94.1	94.1	6.7	6.8	17.1	22.0	13	12	88	93	820713	804873	<0.2	<0.2	1.3	1.4
						1.0	0.5	228	23.2		7.8		30.5		94.1		6.8		17.1		14		89				<0.2		1.4	
					Middle	3.6	0.5	225	23.0	23.0	7.8	7.8	30.7	30.7	93.9	93.9	6.8		24.0		12		94				<0.2		1.4	
						3.6	0.5	226	23.0		7.8		30.7		93.8		6.7		24.1		12		95				<0.2		1.4	
					Bottom	6.1	0.4	231	22.9	22.9	7.8	7.8	30.7	30.7	95.6	95.7	6.9	6.9	24.9		12		97				<0.2		1.4	
						6.1	0.4	239	22.9		7.8		30.7		95.8		6.9		24.7		11		97				<0.2		1.4	
IM6	Fine	Moderate	16:50	7.0	Surface	1.0	0.2	180	23.2	23.2	7.8	7.8	30.6	30.6	93.7	93.7	6.7	6.8	15.5	15.5	15	15	90	94	821083	805848	<0.2	<0.2	1.4	1.4
						1.0	0.2	170	23.2		7.8		30.6		93.6		6.7		15.5		13		91				<0.2		1.4	
					Middle	3.5	0.2	226	23.2	23.2	7.8	7.8	30.6	30.6	94.8	94.8	6.8		15.2		15		94				<0.2		1.4	
						3.5	0.2	226	23.2		7.8		30.6		94.8		6.8		15.2		15		94				<0.2		1.3	
					Bottom	6.0	0.1	220	23.2	23.2	7.8	7.8	30.7	30.7	98.0	98.1	7.0	7.0	15.9		15		96				<0.2		1.4	
						6.0	0.1	218	23.2		7.8		30.7		98.1		7.0		15.8		14		97				<0.2		1.3	
IM7	Fine	Moderate	16:42	8.1	Surface	1.0	0.0	204	23.4	23.4	7.8	7.8	29.6	29.6	89.1	89.2	6.4	6.4	16.2	18.0	12	13	83	86	821330	806840	<0.2	<0.2	1.4	1.4
						1.0	0.0	220	23.4		7.8		29.6		89.2		6.4		16.3		12		84				<0.2		1.3	
					Middle	4.1	0.2	153	23.3	23.3	7.8	7.8	29.9	29.9	89.7	89.7	6.4		18.7		12		86				<0.2		1.3	
						4.1	0.2	156	23.3		7.8		29.9		89.7		6.5		18.7		13		87				<0.2		1.4	
					Bottom	7.1	0.3	169	23.2	23.2	7.9	7.9	30.4	30.5	89.9	89.9	6.5	6.5	19.1		14		89				<0.2		1.4	
						7.1	0.3	172	23.2		7.9		30.5		89.8		6.5		19.1		13		89				<0.2		1.4	
IM8	Fine	Moderate	17:21	7.5	Surface	1.0	0.1	125	23.2	23.2	8.0	8.0	29.0	29.1	89.1	89.2	6.4	6.5	16.7	19.1	13	14	85	89	821840	808155	<0.2	<0.2	2.5	2.4
						1.0	0.1	137	23.2		8.0		29.1		89.3		6.5		16.7		14		85				<0.2		2.4	
					Middle	3.8	0.2	103	23.1	23.1	8.1	8.1	29.9	29.9	90.0	90.0	6.5		19.2		15		89				<0.2		2.4	
						3.8	0.3	105	23.1		8.1		29.9		90.0		6.5		19.4		15		89				<0.2		2.4	
					Bottom	6.5	0.2	95	23.0	23.0	8.1	8.1	30.0	30.0	89.9	89.9	6.5	6.5	21.2		14		94				<0.2		2.5	
						6.5	0.2	99	23.0		8.1		30.0		89.9		6.5		21.3		14		94				<0.2		2.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 November 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	17:27	7.3	Surface	1.0	0.1	227	23.3	23.3	8.1	8.1	29.2	29.2	89.9	90.0	6.5	6.5	14.8	17.9	16	16	89	93	822101	808827	<0.2	<0.2	2.5	2.5
						1.0	0.1	229	23.3		8.1		29.2		90.0		6.5		14.9		16		89				<0.2		2.4	
					Middle	3.7	0.1	201	23.3	23.3	8.1	8.1	29.4	29.4	90.6	90.6	6.5		18.6		16		94				<0.2		2.5	
						3.7	0.1	210	23.3		8.1		29.4		90.6		6.5		18.6		16		95				<0.2		2.4	
					Bottom	6.3	0.1	215	23.3	23.3	8.1	8.1	29.6	29.6	91.1	91.2	6.6	6.6	20.2		15		94				<0.2		2.5	
						6.3	0.1	215	23.3		8.1		29.6		91.2		6.6		20.1		14		94				<0.2		2.4	
IM10	Fine	Moderate	17:36	8.3	Surface	1.0	0.5	138	23.1	23.1	8.0	8.0	29.9	29.9	91.0	91.0	6.6	6.6	10.9	13.9	8	8	95	93	822380	809778	<0.2	<0.2	1.3	2.3
						1.0	0.5	140	23.1		8.0		29.9		91.0		6.6		10.9		8		95				<0.2		2.4	
					Middle	4.2	0.3	123	23.0	23.0	8.0	8.0	30.0	30.0	90.1	90.1	6.5		14.2		8		90				<0.2		2.6	
						4.2	0.3	137	23.0		8.0		30.0		90.1		6.5		14.2		9		90				<0.2		2.4	
					Bottom	7.3	0.2	100	23.0	23.0	8.0	8.0	30.0	30.0	90.5	90.6	6.5	6.5	16.7		9		94				<0.2		2.4	
						7.3	0.2	117	23.0		8.0		30.0		90.6		6.5		16.7		8		94				<0.2		2.6	
IM11	Fine	Moderate	17:50	9.4	Surface	1.0	0.1	183	22.9	22.9	8.0	8.0	30.0	30.0	89.5	89.5	6.5	6.5	14.9	16.0	8	10	93	93	822049	811447	<0.2	<0.2	2.6	2.6
						1.0	0.1	184	22.9		8.0		30.0		89.5		6.5		15.3		10		93				<0.2		2.5	
					Middle	4.7	0.2	115	22.9	22.9	8.0	8.0	30.0	30.0	89.7	89.7	6.5		16.2		10		94				<0.2		2.4	
						4.7	0.2	126	22.9		8.0		30.0		89.7		6.5		16.3		10		94				<0.2		2.8	
					Bottom	8.4	0.3	131	22.9	22.9	8.0	8.0	30.0	30.0	90.2	90.3	6.5	6.5	16.7		10		93				<0.2		2.6	
						8.4	0.3	124	22.9		8.0		30.0		90.3		6.5		16.4		10		93				<0.2		2.4	
IM12	Fine	Moderate	17:57	9.9	Surface	1.0	0.2	134	22.9	22.9	8.0	8.0	30.0	30.0	88.8	88.8	6.4	6.4	14.5	14.8	10	13	89	90	821443	812062	<0.2	<0.2	2.7	2.6
						1.0	0.2	148	22.9		8.0		30.0		88.8		6.4		14.7		11		89				<0.2		2.5	
					Middle	5.0	0.2	130	22.9	22.9	8.0	8.0	30.0	30.0	88.7	88.7	-		13.2		13		89				<0.2		2.8	
						5.0	0.2	133	22.9		8.0		30.0		88.7		-		13.4		12		89				<0.2		2.4	
					Bottom	8.9	0.1	133	22.9	22.9	8.0	8.0	30.0	30.0	88.9	89.0	6.4	6.4	16.5		15		93				<0.2		2.9	
						8.9	0.1	155	22.9		8.0		30.0		89.0		6.4		16.6		14		93				<0.2		2.4	
SR1A	Fine	Moderate	18:17	6.2	Surface	1.0	-	-	23.2	23.2	8.0	8.0	30.1	30.1	90.5	90.5	6.5	6.5	10.4	11.3	8	9	-	-	820074	812589	-	-	-	-
						1.0	-	-	23.2		8.0		30.1		90.5		6.5		10.4		8		-				-		-	
					Middle	3.1	-	-	23.0	23.0	8.0	8.0	30.1	30.1	88.2	88.4	6.4		11.0		9		-				-		-	
						3.1	-	-	23.0		8.0		30.1		88.5		6.4		11.0		8		-				-		-	
					Bottom	5.2	-	-	23.0	23.0	8.0	8.0	30.1	30.1	88.6	88.7	6.4	6.4	12.5		9		-				-		-	
						5.2	-	-	23.0		8.0		30.1		88.7		6.4		12.2		9		-				-		-	
SR2	Fine	Moderate	18:31	4.9	Surface	1.0	0.1	104	23.0	23.0	8.0	8.0	30.0	30.0	89.8	89.8	6.5	6.5	11.2	11.4	9	10	85	91	821479	814182	<0.2	<0.2	3.0	2.7
						1.0	0.1	104	23.0		8.0		30.0		89.8		6.5		11.2		10		89				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	120	23.0	23.0	8.0	8.0	30.1	30.1	90.2	90.3	6.5	6.5	11.3		10		94				<0.2		2.9	
						3.9	0.1	126	23.0		8.0		30.1		90.4		6.5		11.7		9		94				<0.2		2.3	
SR3	Fine	Moderate	17:14	8.7	Surface	1.0	0.3	47	23.2	23.2	8.0	8.0	29.3	29.3	89.0	89.0	6.4	6.4	14.1	16.1	7	10	-	-	822128	807549	-	-	-	-
						1.0	0.3	49	23.2		8.0		29.3		89.0		6.4		14.2		7		-				-		-	
					Middle	4.4	0.3	74	23.1	23.1	8.0	8.0	29.8	29.8	89.9	89.9	-		15.9		9		-				-		-	
						4.4	0.3	80	23.1		8.0		29.8		89.9		-		15.9		9		-				-		-	
					Bottom	7.7	0.4	60	23.0	23.0	8.0	8.0	30.0	30.0	89.6	89.6	6.5	6.5	18.4		14		-				-		-	
						7.7	0.4	63	23.0		8.0		30.0		89.5		6.5		18.2		14		-				-		-	
SR4A	Cloudy	Calm	18:14	8.5	Surface	1.0	0.3	43	23.5	23.5	7.8	7.8	30.4	30.4	95.7	95.8	6.8	6.9	12.9	13.8	6	8	-	-	817209	807814	-	-	-	-
						1.0	0.3	44	23.5		7.8		30.4		95.9		6.9		13.0		6		-				-		-	
					Middle	4.3	0.2	36	23.4	23.4	7.8	7.8	30.9	30.9	96.2	96.3	-		14.0		8		-				-		-	
						4.3	0.3	39	23.4		7.8		30.9		96.3		-		14.0		8		-				-		-	
					Bottom	7.5	0.3	62	23.4	23.4	7.8	7.8	31.1	31.1	97.8	97.8	7.0	7.0	14.5		9		-				-		-	
						7.5	0.3	67	23.4		7.8		31.1		97.8		7.0		14.4		9		-				-		-	
SR5A	Cloudy	Calm	18:28	5.4	Surface	1.0	0.1	133	23.6	23.6	7.8	7.8	31.0	31.0	94.6	94.6	6.7	6.7	13.1	13.6	9	10	-	-	816590	810679	-	-	-	-
						1.0	0.1	133	23.6		7.8		31.0		94.6		6.7		13.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	160	23.2	23.2	7.8	7.8	30.9	30.9	97.0	97.1	6.9	7.0	14.0		10		-				-		-	
						4.4	0.2	169	23.2		7.8		30.9		97.2		7.0		14.0		10		-				-		-	
SR6	Cloudy	Calm	18:58	4.7	Surface	1.0	0.0	103	23.1	23.1	7.8	7.8	30.9	30.9	90.3	90.4	6.5	6.5	12.7	13.6	9	9	-	-	817891	814643	-	-	-	-
						1.0	0.0	112	23.1		7.8		30.9		90.4		6.5		12.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	112	23.1	23.1	7.8	7.8	30.9	30.9	93.5	93.6	6.7	6.7	14.4		9		-				-		-	
						3.7	0.1	120	23.1		7.8		30.9		93.7		6.7		14.5		10		-				-		-	
SR7	Fine	Moderate	19:23	15.6	Surface	1.0	0.0	124	23.2	23.2	8.0	8.0	31.3	31.3	87.2	87.2	6.2	6.3	7.7	7.7	4	4	-	-	823659	823733	-	-	-	-
						1.0	0.0	134	23.2		8.0		31.3		87.2		6.2		7.7		3		-				-		-	
					Middle	7.8	0.0	109	23.2	23.2	8.0	8.0	31.3	31.3	87.7	87.8	6.3		7.6		4		-				-		-	
						7.8	0.0	103	23.2		8.0		31.3		87.9		6.3		7.6		3		-				-		-	
					Bottom	14.6	0.0	98	23.2	23.2	8.0	8.0	31.2	31.2	89.3	89.5	6.4	6.4	7.7		4		-				-		-	
						14.6	0.0	99	23.2		8.0		31.3		89.6		6.4		7.8		4		-				-		-	
SR8	Fine	Moderate	18:07	5.3	Surface	1.0	-	-	22.9	22.9	8.0	8.0	29.9	29.9	89.3	89.3	6.5	6.5	12.1	12.3	7	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.9		8.0		29.9		89.2		6.5		12.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	22.9	22.9	8.0	8.0	30.0	29.9	89.3	89.4	6.5	6.5	12.5		8		-				-		-	
						4.3	-	-	22.9		8.0		29.9		89.4		6.5		12.3		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 29 November 18 during Mid-Flood Tide

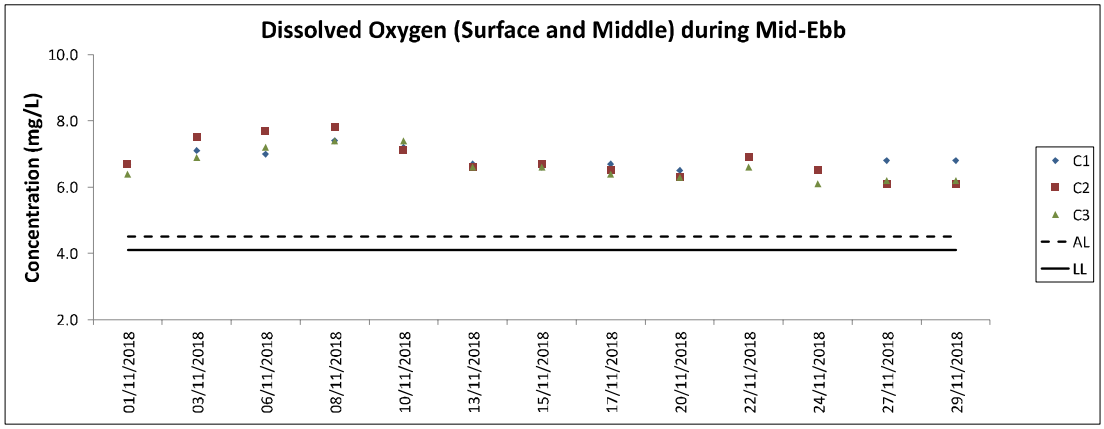
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	12:22	8.2	Surface	1.0	0.5	30	23.2	23.2	7.8	7.8	30.4	30.4	93.2	93.2	6.7	6.7	16.0	29.5	12	22	90	94	815632	804245	<0.2	<0.2	1.3	1.4
						1.0	0.5	32	23.2		7.8		30.4		93.2		6.7		16.1		11		90				<0.2		1.4	
					Middle	4.1	0.4	25	23.0	23.0	7.8	7.8	31.7	31.7	92.2	92.2	6.6		30.8		14		94				<0.2		1.3	
						4.1	0.5	26	23.0		7.8		31.7		92.2		6.6		30.9		15		95				<0.2		1.4	
					Bottom	7.2	0.4	16	23.0	23.0	7.8	7.8	31.8	31.8	92.6	92.7	6.6	6.6	41.5		39		97				<0.2		1.5	
						7.2	0.4	16	23.0		7.8		31.8		92.7		6.6		41.7		40		98				<0.2		1.3	
C2	Fine	Moderate	13:39	11.5	Surface	1.0	0.4	15	23.4	23.4	7.9	7.9	27.5	27.6	84.5	84.3	6.1	6.1	9.7	18.3	7	21	84	89	825682	806963	<0.2	<0.2	2.6	2.4
						1.0	0.4	16	23.4		7.9		27.6		84.1		6.1		9.7		7		85				<0.2		2.5	
					Middle	5.8	0.4	346	23.0	23.0	7.9	7.9	28.8	28.9	82.3	82.4	-		15.6		14		89				<0.2		2.4	
						5.8	0.4	318	23.0		7.9		28.9		82.4		-		15.8		13		89				<0.2		2.2	
					Bottom	10.5	0.4	351	23.1	23.1	7.9	7.9	29.7	29.7	83.2	83.2	6.0	6.0	29.4		42		93				<0.2		2.3	
						10.5	0.4	359	23.1		7.9		29.7		83.2		6.0		29.4		41		93				<0.2		2.3	
C3	Fine	Moderate	11:49	12.3	Surface	1.0	0.3	243	23.0	23.0	7.9	7.9	29.8	29.8	89.2	89.2	6.4	6.4	9.8	9.8	6	6	86	89	822118	817794	<0.2	<0.2	2.1	2.1
						1.0	0.3	258	23.0		7.9		29.9		89.1		6.4		9.8		6		85				<0.2		1.9	
					Middle	6.2	0.4	277	23.0	23.0	7.9	7.9	30.0	30.0	88.8	88.8	6.4		9.8		5		89				<0.2		2.2	
						6.2	0.4	289	23.0		7.9		30.0		88.8		6.4		9.7		6		89				<0.2		2.2	
					Bottom	11.3	0.5	284	22.9	22.9	7.9	7.9	30.0	30.0	89.2	89.4	6.5	6.5	9.8		6		93				<0.2		2.1	
						11.3	0.5	299	22.9		7.9		30.0		89.5		6.5		9.8		7		93				<0.2		2.2	
IM1	Fine	Moderate	12:40	5.0	Surface	1.0	0.2	23	23.3	23.3	7.9	7.9	31.0	31.0	95.6	95.6	6.8	6.8	11.6	11.7	9	9	89	93	817965	807110	<0.2	<0.2	1.0	1.1
						1.0	0.2	23	23.3		7.9		31.0		95.6		6.8		11.6		8		90				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	26	23.2	23.2	7.8	7.8	31.1	31.1	97.3	97.3	7.0	7.0	11.7		9		96				<0.2		1.0	
						4.0	0.3	26	23.2		7.8		31.1		97.3		7.0		11.7		9		97				<0.2		1.1	
IM2	Fine	Moderate	12:49	7.2	Surface	1.0	0.4	21	23.0	23.0	7.8	7.8	31.1	31.0	92.9	92.9	6.7	6.7	16.1	18.4	8	10	90	94	818158	806161	<0.2	<0.2	1.0	1.1
						1.0	0.4	22	23.0		7.8		31.0		92.8		6.7		16.2		8		91				<0.2		0.9	
					Middle	3.6	0.3	6	23.0	23.0	7.8	7.8	31.2	31.2	93.1	93.2	6.7		18.5		12		93				<0.2		1.1	
						3.6	0.3	6	23.0		7.8		31.2		93.2		6.7		18.6		10		94				<0.2		1.0	
					Bottom	6.2	0.3	357	23.0	23.0	7.8	7.8	31.3	31.3	94.4	94.5	6.8	6.8	20.5		10		98				<0.2		1.3	
						6.2	0.3	328	23.0		7.8		31.3		94.6		6.8		20.5		11		98				<0.2		1.2	
IM3	Fine	Moderate	12:55	7.5	Surface	1.0	0.3	30	22.9	22.9	7.8	7.8	31.0	31.0	92.2	92.3	6.6	6.6	18.6	23.7	7	8	95	98	818801	805615	<0.2	<0.2	1.0	0.9
						1.0	0.4	31	22.9		7.8		31.0		92.3		6.6		18.7		8		95				<0.2		1.0	
					Middle	3.8	0.2	33	22.9	22.9	7.8	7.8	31.0	31.0	92.1	92.2	6.6		23.8		8		98				<0.2		0.9	
						3.8	0.3	36	22.9		7.8		31.0		92.2		6.6		23.8		8		99				<0.2		0.9	
					Bottom	6.5	0.3	35	22.9	22.9	7.8	7.8	31.0	31.0	94.0	94.1	6.8	6.8	28.4		9		100				<0.2		0.9	
						6.5	0.3	35	22.9		7.8		31.0		94.1		6.8		28.7		7		101				<0.2		0.8	
IM4	Fine	Moderate	13:04	7.7	Surface	1.0	0.5	355	23.4	23.4	7.8	7.8	30.1	30.0	94.1	94.1	6.8	6.8	15.0	19.9	7	8	94	99	819711	804605	<0.2	<0.2	1.3	1.2
						1.0	0.5	327	23.4		7.8		30.0		94.1		6.8		15.1		7		96				<0.2		1.1	
					Middle	3.9	0.4	341	23.0	23.0	7.8	7.8	30.8	30.8	93.3	93.3	6.7		19.5		8		99				<0.2		1.2	
						3.9	0.4	314	23.0		7.8		30.8		93.2		6.7		19.6		8		99				<0.2		1.2	
					Bottom	6.7	0.4	337	22.9	22.9	7.8	7.8	30.8	30.8	96.0	96.0	6.9	6.9	25.3		8		101				<0.2		1.2	
						6.7	0.4	340	22.9		7.8		30.8		96.0		6.9		25.0		8		102				<0.2		1.2	
IM5	Fine	Moderate	13:11	7.2	Surface	1.0	0.6	0	23.3	23.3	7.8	7.8	29.9	29.9	94.5	94.6	6.8	6.8	14.5	17.7	11	11	89	94	820746	804849	<0.2	<0.2	0.9	1.0
						1.0	0.6	0	23.3		7.8		29.9		94.6		6.8		14.5		12		89				<0.2		0.9	
					Middle	3.6	0.6	359	23.2	23.2	7.8	7.8	30.2	30.2	94.1	94.0	6.8		17.0		12		95				<0.2		0.9	
						3.6	0.7	330	23.2		7.8		30.2		93.9		6.8		16.9		10		95				<0.2		1.1	
					Bottom	6.2	0.5	347	22.9	22.9	7.8	7.8	30.7	30.7	94.9	94.9	6.8	6.8	21.5		11		98				<0.2		0.9	
						6.2	0.5	319	22.9		7.8		30.7		94.9		6.8		21.5		11		99				<0.2		1.1	
IM6	Fine	Moderate	13:18	7.0	Surface	1.0	0.3	37	23.2	23.2	7.8	7.8	30.4	30.4	92.4	92.5	6.6	6.7	16.4	17.6	10	13	92	98	821060	805828	<0.2	<0.2	0.9	0.9
						1.0	0.3	38	23.2		7.8		30.4		92.5		6.6		16.4		10		93				<0.2		1.0	
					Middle	3.5	0.2	51	23.1	23.1	7.8	7.8	30.7	30.7	93.1	93.1	6.7		17.8		14		98				<0.2		0.8	
						3.5	0.2	54	23.1		7.8		30.7		93.1		6.7		17.8		14		99				<0.2		1.0	
					Bottom	6.0	0.1	37	23.1	23.1	7.8	7.8	30.8	30.8	95.6	95.6	6.9	6.9	18.4		13		102				<0.2		0.7	
						6.0	0.1	40	23.1		7.8		30.8		95.6		6.9		18.6		14		102				<0.2		1.0	
IM7	Fine	Moderate	13:24	7.8	Surface	1.0	0.1	337	23.4	23.4	7.8	7.8	29.7	29.7	90.9	90.9	6.5	6.6	15.8	17.5	13	14	88	94	821334	806850	<0.2	<0.2	0.6	0.7
						1.0	0.1	352	23.4		7.8		29.7		90.9		6.5		15.9		13		89				<0.2		0.7	
					Middle	3.9	0.2	48	23.2	23.2	7.8	7.8	30.0	30.0	93.1	93.2	6.7		17.6		13		94				<0.2		0.6	
						3.9	0.2	50	23.2		7.8		30.1		93.2		6.7		17.5		13		95				<0.2		0.9	
					Bottom	6.8	0.2	43	23.1	23.1	7.9	7.9	30.7	30.7	97.1	97.2	7.0	7.0	19.1		17		99				<0.2		0.6	
						6.8	0.2	46	23.1		7.9		30.7		97.3		7.0		19.1		16		100				<0.2		0.7	
IM8	Fine	Moderate	13:11	7.3	Surface	1.0	0.0	106	23.3	23.3	8.0	8.0	28.6	28.6	87.3	87.4	6.3	6.4	15.3	19.1	11	13	85	89	821823	808153	<0.2	<0.2	1.9	1.9
						1.0	0.0	114	23.3		8.0		28.6		87.4		6.3		15.3		10		85				<0.2		1.7	
					Middle	3.7	0.1	100	23.1	23.1	8.0	8.0	29.2	29.3	88.5	88.5	6.4		20.2		13		89				<0.2		1.8	
						3.7	0.2	100	23.1		8.0		29.3		88.5		6.4		20.4		13		90				<0.2		1.8	
					Bottom	6.3	0.1	46	23.1	23.1	8.0	7.9	29.4	29.4	88.3	88.3	6.4	6.4	21.7		15		93				<0.2		1.8	
						6.3	0.1	48	23.1		7.9		29.4		88.2		6.4		21.8		14		93				<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 29 November 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	13:04	7.8	Surface	1.0	0.2	144	23.2	23.2	8.0	8.0	28.7	28.7	86.8	86.9	6.3	6.4	18.9	20.2	20	25	89	91	822080	808790	<0.2	<0.2	1.9	1.9
						1.0	0.2	152	23.2		8.0		28.7		87.0		6.3		18.8		22		89							
					Middle	3.9	0.2	112	23.3	23.3	8.0	8.0	29.1	29.1	88.7	88.8	6.4		20.2		26		90				<0.2		1.9	
						3.9	0.2	116	23.3		8.0		29.1		88.8		6.4		20.4		26		90				<0.2		1.9	
					Bottom	6.8	0.2	128	23.4	23.4	8.0	8.0	29.2	29.2	89.0	89.0	6.4	6.4	21.5		29		94				<0.2		1.8	
						6.8	0.2	137	23.4		8.0		29.2		89.0		6.4		21.5		29		95				<0.2		1.8	
IM10	Fine	Moderate	12:57	7.4	Surface	1.0	0.3	99	23.1	23.1	8.0	8.0	29.6	29.6	90.0	90.0	6.5	6.5	12.7	15.0	11	11	95	94	822401	809776	<0.2	<0.2	1.7	1.8
						1.0	0.3	108	23.0		8.0		29.6		89.9		6.5		13.1		10		95				<0.2		1.5	
					Middle	3.7	0.3	76	22.9	22.9	8.0	8.0	29.6	29.6	89.3	89.4	6.5		15.9		10		95				<0.2		1.8	
						3.7	0.4	82	22.9		8.0		29.6		89.4		6.5		15.9		11		95				<0.2		1.8	
					Bottom	6.4	0.2	77	22.9	22.9	8.0	8.0	29.6	29.6	89.7	89.8	6.5	6.5	16.1		11		93				<0.2		1.9	
						6.4	0.3	77	22.9		8.0		29.6		89.8		6.5		16.1		11		93				<0.2		1.8	
IM11	Fine	Moderate	12:46	8.7	Surface	1.0	0.7	299	23.0	23.0	8.0	8.0	29.7	29.7	89.0	89.0	6.4	6.4	15.3	18.2	8	9	93	94	822063	811456	<0.2	<0.2	1.9	2.0
						1.0	0.7	319	22.9		8.0		29.8		88.9		6.4		15.8		8		93				<0.2		1.9	
					Middle	4.4	0.6	297	22.9	22.9	8.0	8.0	29.8	29.8	88.8	88.8	-		18.3		8		94				<0.2		2.0	
						4.4	0.6	302	22.9		8.0		29.8		88.8		-		18.8		10		94				<0.2		1.9	
					Bottom	7.7	0.5	302	22.8	22.8	8.0	8.0	29.8	29.8	89.0	89.0	6.4	6.5	20.2		9		95				<0.2		2.0	
						7.7	0.5	303	22.8		8.0		29.8		89.0		6.5		20.8		8		94				<0.2		2.0	
IM12	Fine	Moderate	12:38	9.6	Surface	1.0	0.3	276	22.8	22.8	8.0	8.0	30.0	30.0	88.4	88.4	6.4	6.4	18.5	20.5	5	6	89	92	821465	812066	<0.2	<0.2	1.9	1.8
						1.0	0.4	281	22.8		8.0		30.0		88.3		6.4		18.6		6		89				<0.2		1.8	
					Middle	4.8	0.4	269	22.8	22.8	8.0	8.0	30.0	30.0	88.0	88.0	6.4		20.3		5		89				<0.2		1.8	
						4.8	0.4	282	22.8		8.0		30.0		88.0		6.4		20.5		5		94				<0.2		1.7	
					Bottom	8.6	0.3	269	22.8	22.8	8.0	8.0	30.0	30.0	88.1	88.3	6.4	6.4	22.6		6		94				<0.2		1.9	
						8.6	0.3	293	22.8		8.0		30.0		88.5		6.4		22.5		6		94				<0.2		1.8	
SR1A	Fine	Moderate	12:20	6.5	Surface	1.0	-	-	22.8	22.9	8.0	8.0	29.9	30.0	85.2	86.5	6.2	6.3	16.6	15.6	5	5	-	-	820065	812580	-	-	-	-
						1.0	-	-	22.9		8.0		30.1		87.7		6.3		16.8		6		-				-		-	
					Middle	3.3	-	-	22.9	22.9	8.0	8.0	30.1	30.1	87.6	87.5	6.3		13.3		4		-				-		-	
						3.3	-	-	22.9		8.0		30.1		87.3		6.3		13.5		5		-				-		-	
					Bottom	5.5	-	-	22.9	22.9	8.0	7.9	30.1	30.1	87.2	87.2	6.3	6.3	16.7		6		-				-		-	
						5.5	-	-	22.9		7.9		30.1		87.2		6.3		16.4		6		-				-		-	
SR2	Fine	Moderate	12:08	4.6	Surface	1.0	0.2	144	23.0	23.0	7.9	7.9	29.8	29.8	90.7	90.8	6.6	6.6	12.4	12.4	5	6	85	90	821483	814171	<0.2	<0.2	1.8	1.9
						1.0	0.2	149	23.0		7.9		29.8		90.8		6.6		12.4		5		85				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	146	23.0	23.0	7.9	7.9	29.8	29.8	92.3	92.5	6.7	6.7	12.5		8		94				<0.2		1.8	
						3.6	0.2	153	23.0		7.9		29.8		92.7		6.7		12.5		7		94				<0.2		2.0	
SR3	Fine	Moderate	13:19	8.5	Surface	1.0	0.0	281	23.1	23.1	7.9	7.9	28.4	28.4	85.4	85.5	6.2	6.2	10.5	19.7	5	6	-	-	822167	807587	-	-	-	-
						1.0	0.0	294	23.1		8.0		28.5		85.6		6.2		10.5		5		-				-		-	
					Middle	4.3	0.1	21	23.0	23.0	8.0	8.0	29.0	29.1	86.6	86.7	-		20.6		5		-				-		-	
						4.3	0.1	22	23.0		8.0		29.1		86.7		-		20.6		6		-				-		-	
					Bottom	7.5	0.2	46	23.0	23.0	8.0	8.0	29.2	29.2	86.2	86.1	6.3	6.3	28.0		6		-				-		-	
						7.5	0.2	49	23.0		8.0		29.2		86.0		6.2		28.0		6		-				-		-	
SR4A	Fine	Calm	12:01	8.0	Surface	1.0	0.1	68	22.9	22.9	7.8	7.8	31.0	31.0	91.0	91.0	6.5	6.6	16.8	18.1	8	12	-	-	817177	807820	-	-	-	-
						1.0	0.1	68	22.9		7.8		31.0		91.0		6.5		17.0		7		-				-		-	
					Middle	4.0	0.1	59	22.9	22.9	7.7	7.7	31.0	31.0	92.4	92.4	6.6		18.5		13		-				-		-	
						4.0	0.1	63	22.9		7.7		31.0		92.4		6.6		18.4		15		-				-		-	
					Bottom	7.0	0.2	77	22.9	22.9	7.8	7.8	31.1	31.1	95.6	95.8	6.9	6.9	19.0		15		-				-		-	
						7.0	0.2	78	22.9		7.8		31.1		95.9		6.9		18.6		15		-				-		-	
SR5A	Fine	Calm	11:45	4.7	Surface	1.0	0.1	318	23.0	23.0	7.7	7.7	30.9	30.9	91.9	91.9	6.6	6.6	17.0	18.3	7	7	-	-	816582	810692	-	-	-	-
						1.0	0.1	334	23.0		7.7		30.9		91.9		6.6		17.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	335	22.9	22.9	7.7	7.7	30.9	30.9	96.0	96.0	6.9	6.9	19.6		8		-				-		-	
						3.7	0.1	342	22.9		7.7		30.9		96.0		6.9		19.6		7		-				-		-	
SR6	Fine	Calm	11:15	4.1	Surface	1.0	0.1	223	23.0	23.0	7.8	7.8	31.0	31.0	87.0	87.0	6.2	6.2	14.8	14.2	9	10	-	-	817916	814639	-	-	-	-
						1.0	0.1	232	23.0		7.8		31.0		87.0		6.2		15.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	219	22.9	22.9	7.8	7.8	31.0	31.0	86.7	86.7	6.2	6.2	14.0		11		-				-		-	
						3.1	0.1	231	22.9		7.8		31.0		86.7		6.2		12.8		9		-				-		-	
SR7	Fine	Moderate	11:20	15.4	Surface	1.0	0.3	275	23.1	23.1	7.9	7.9	30.6	30.6	85.8	85.8	6.2	6.2	10.6	10.8	8	8	-	-	823645	823751	-	-	-	-
						1.0	0.3	281	23.1		7.9		30.6		85.8		6.2		10.8		8		-				-		-	
					Middle	7.7	0.3	241	23.1	23.1	7.9	7.9	30.7	30.7	85.9	85.9	6.2		10.7		8		-				-		-	
						7.7	0.4	244	23.1		7.9		30.7		85.9		6.2		10.8		8		-				-		-	
					Bottom	14.4	0.6	229	23.1	23.1	7.9	7.9	30.8	30.7	86.1	86.1	6.2	6.2	10.8		8		-				-		-	
						14.4	0.6	231	23.1		7.9		30.7		86.1		6.2		11.0		8		-				-		-	
SR8	Fine	Moderate	12:30	5.3	Surface	1.0	-	-	23.0	23.0	8.0	8.0	29.7	29.7	89.0	89.0	6.4	6.4	12.8	14.7	7	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	22.9		8.0		29.7		88.9		6.4		13.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	22.8	22.8	8.0	8.0	29.9	29.9	86.2	86.1	6.2	6.2	16.2		5		-				-		-	
						4.3	-	-	22.8		8.0		29.9		86.0		6.2		16.4		5		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
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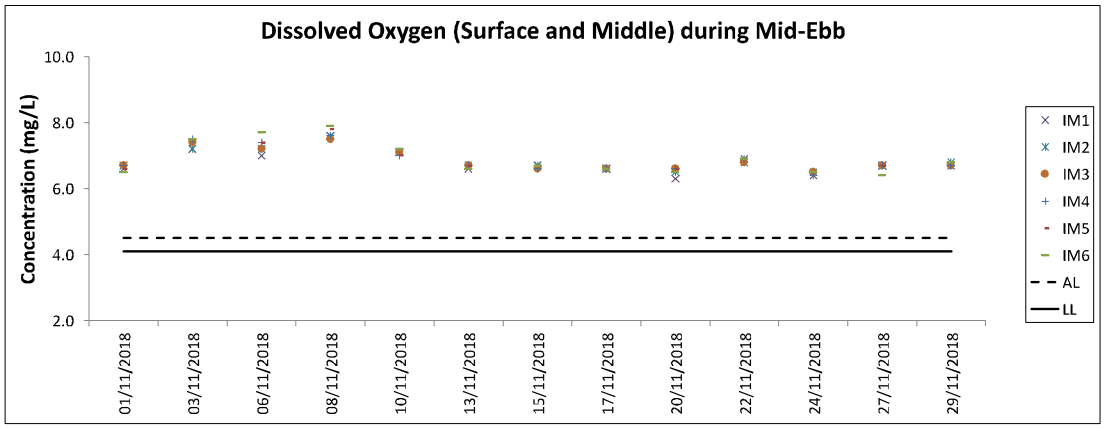
22/11/2018
24/11/2018
27/11/2018
29/11/2018
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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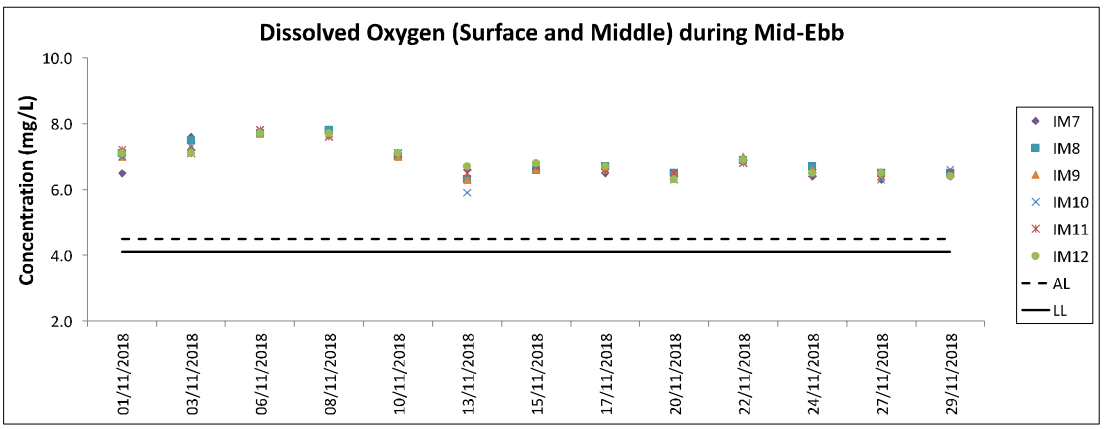
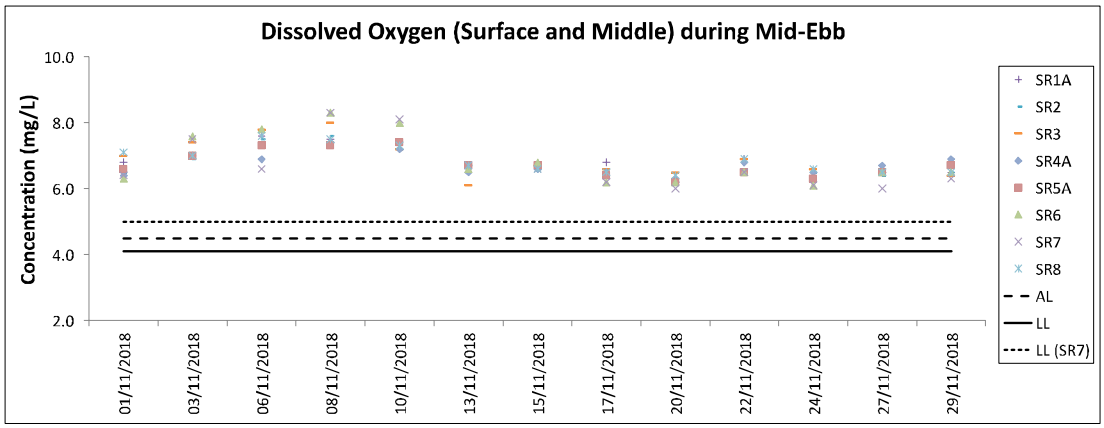
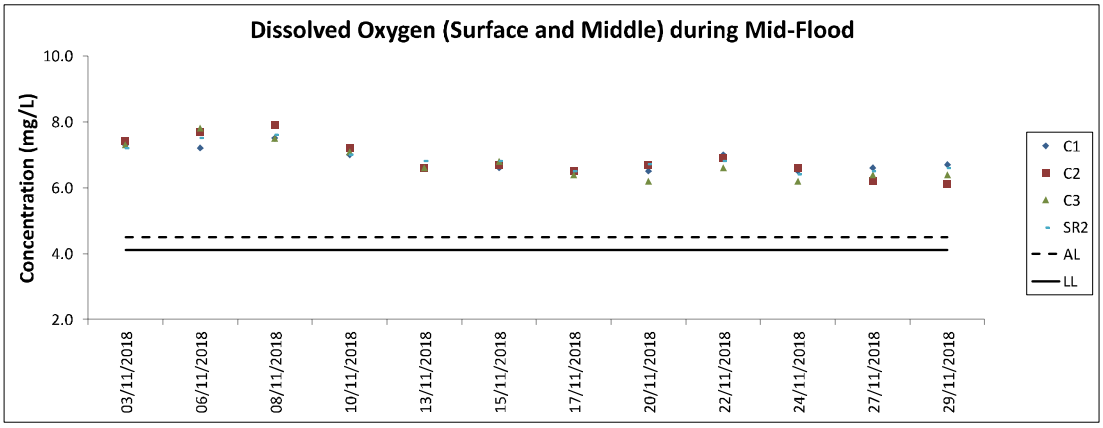
29/11/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
24/11/2018
27/11/2018
29/11/2018
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
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
24/11/2018
27/11/2018
29/11/2018
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
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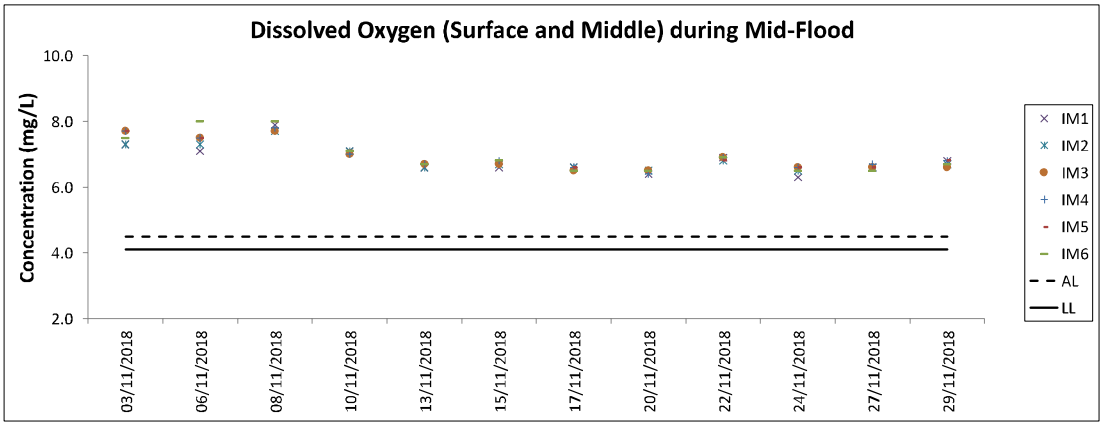
29/11/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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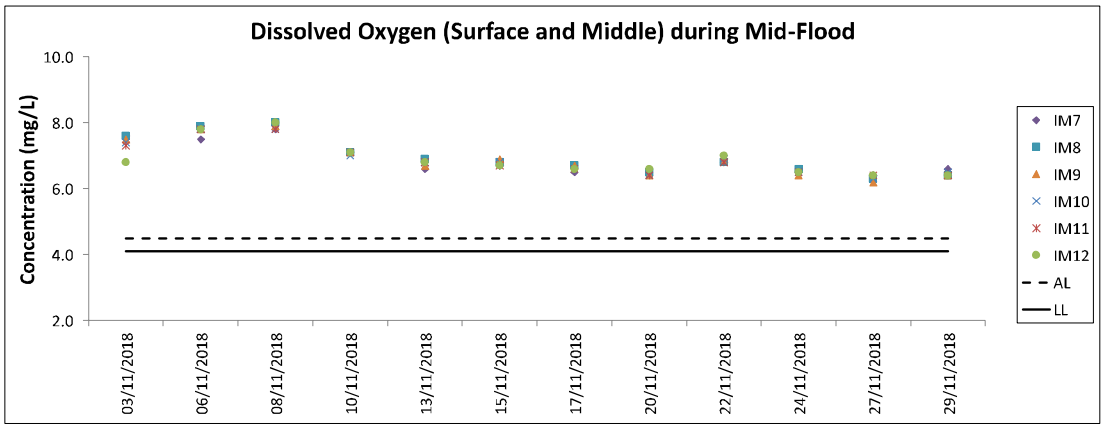
27/11/2018
29/11/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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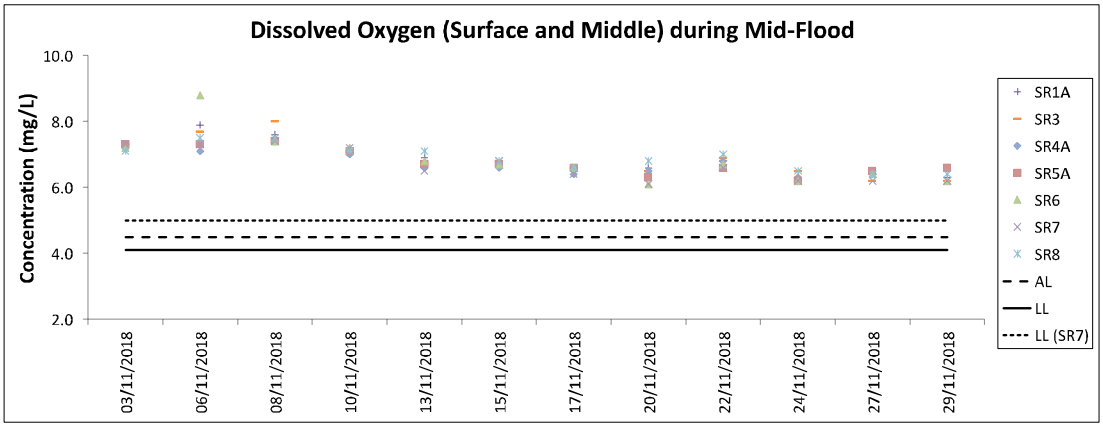
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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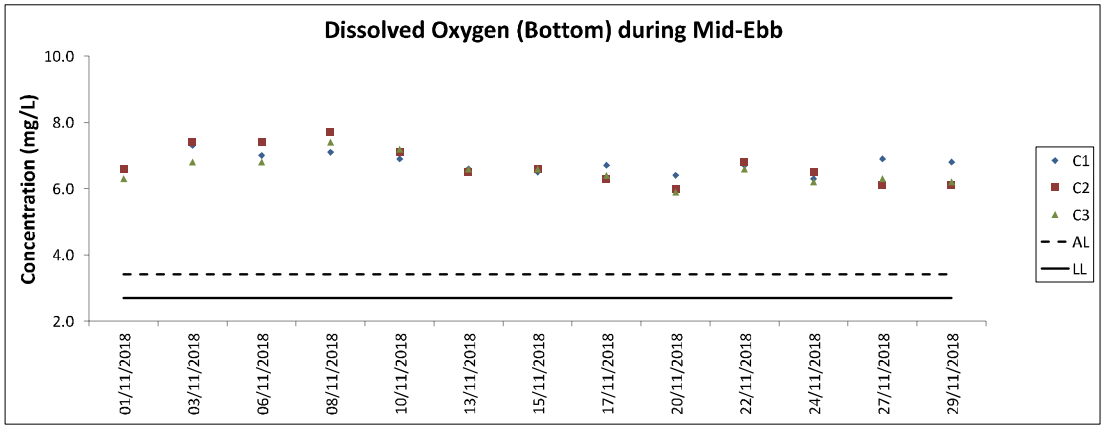
8.0
6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
24/11/2018
27/11/2018
29/11/2018
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
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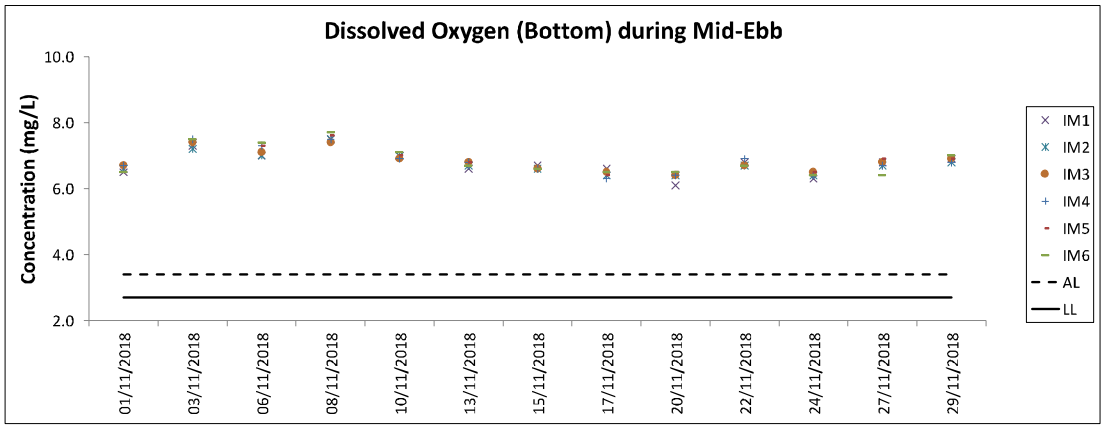
27/11/2018
29/11/2018
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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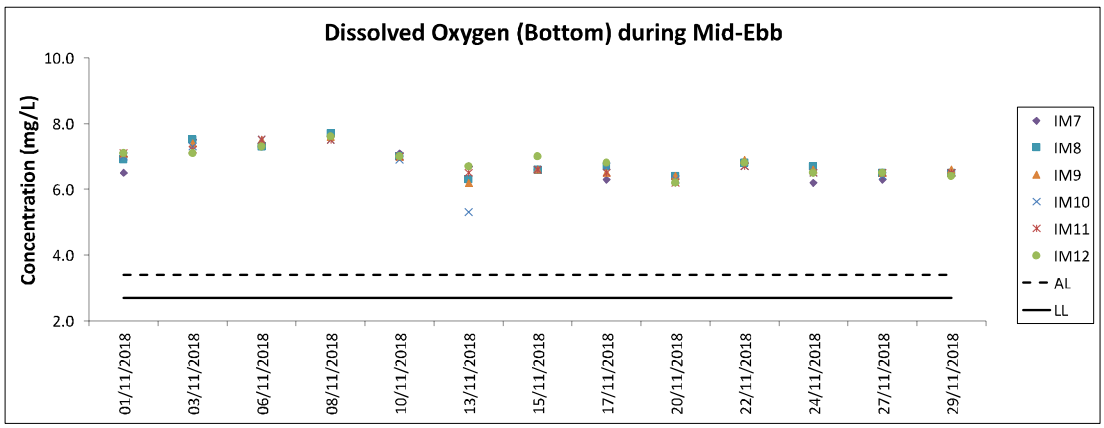
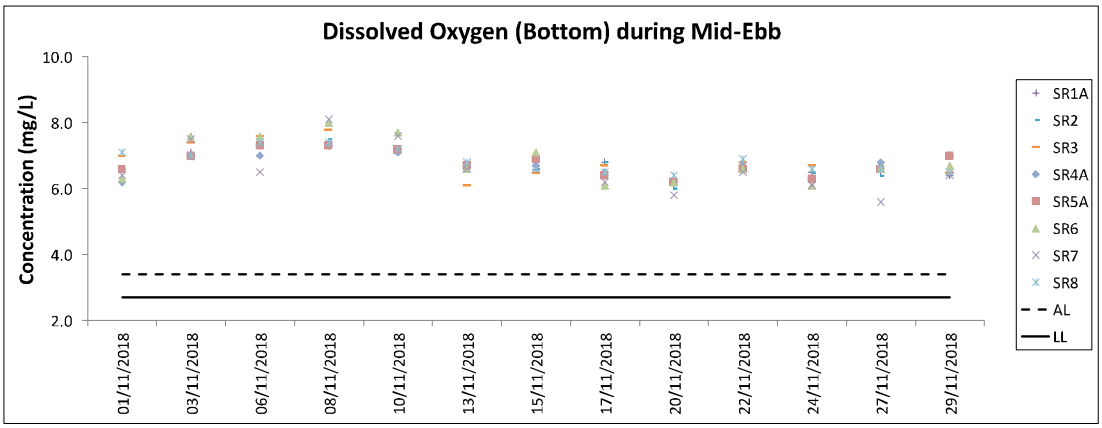
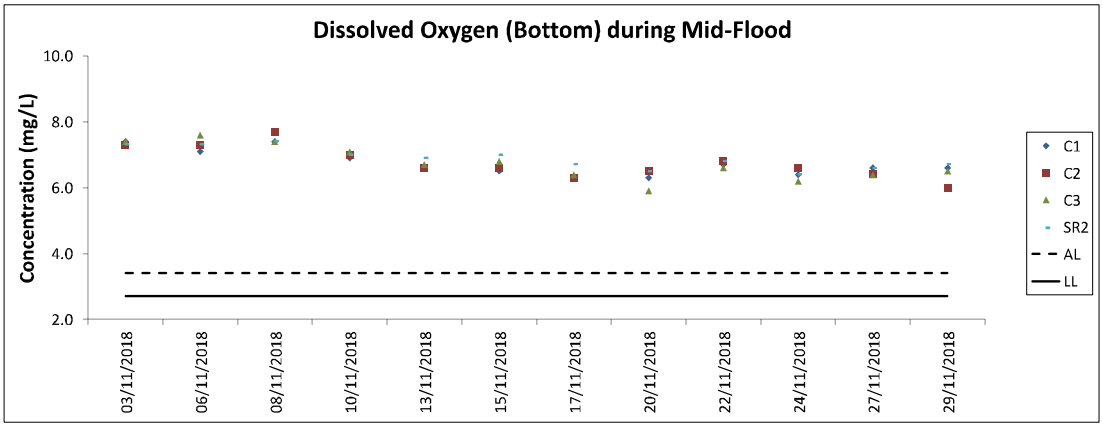
27/11/2018
29/11/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
24/11/2018
27/11/2018
29/11/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/11/2018
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
24/11/2018
27/11/2018
29/11/2018
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
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
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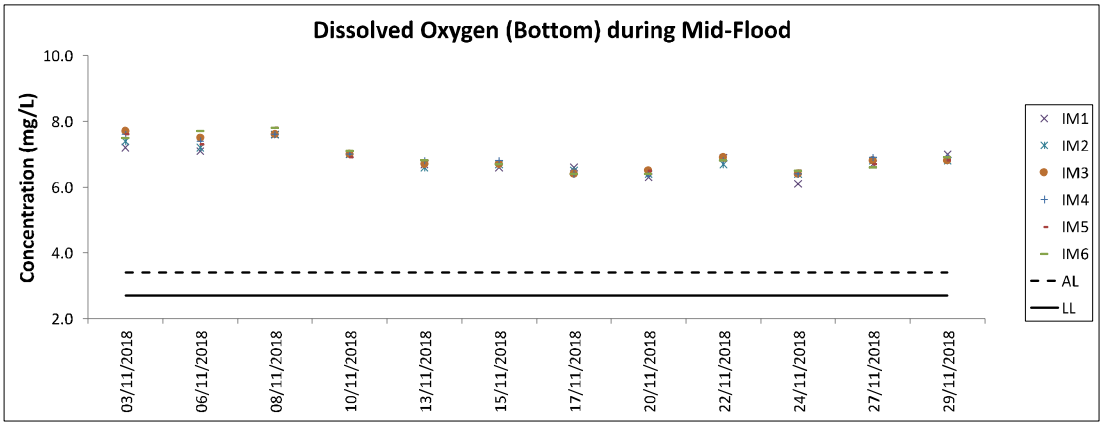
29/11/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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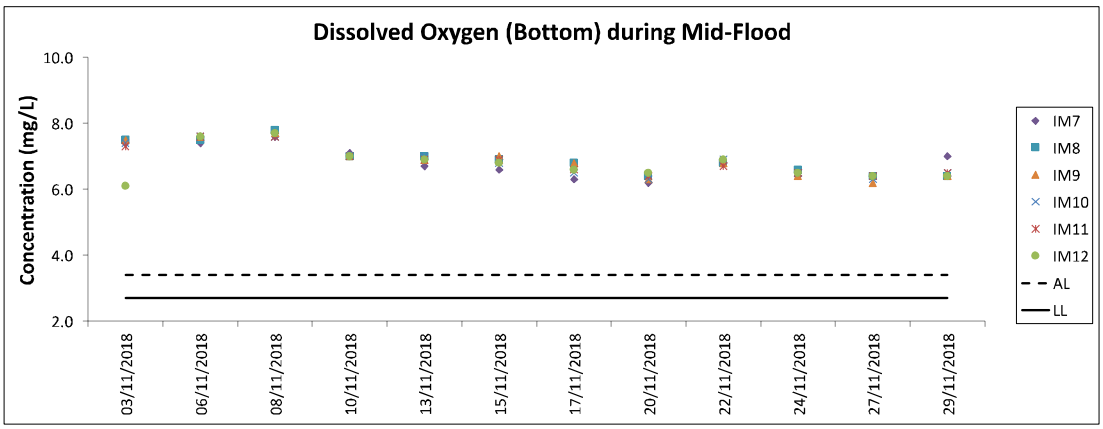
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
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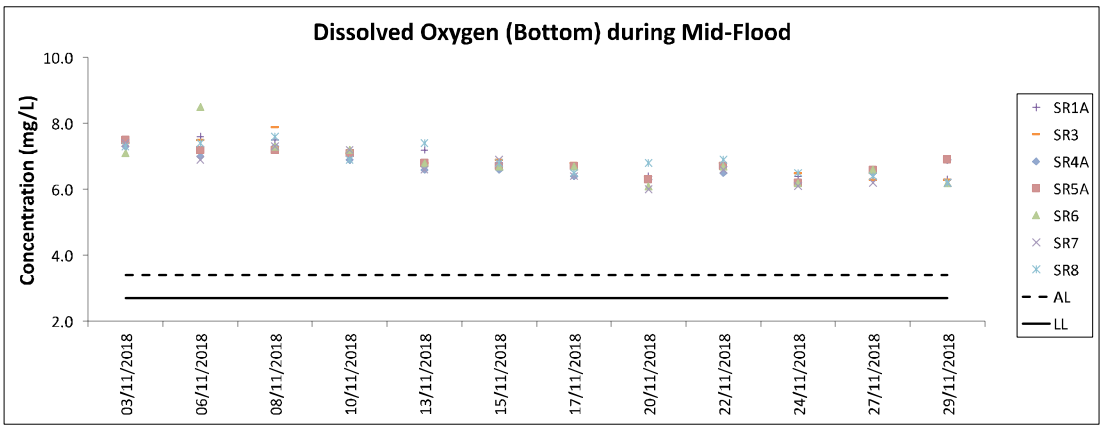
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
03/11/2018
06/11/2018
08/11/2018
10/11/2018
13/11/2018
15/11/2018
17/11/2018
20/11/2018
22/11/2018
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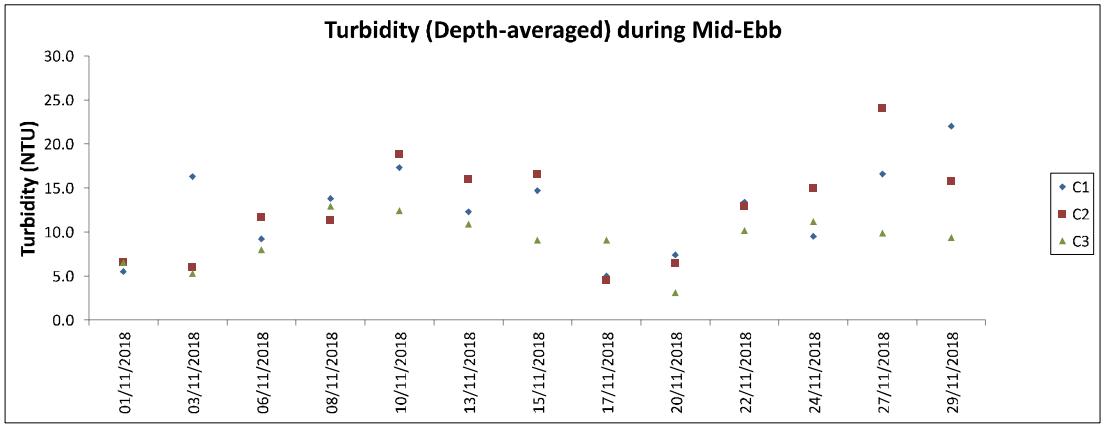
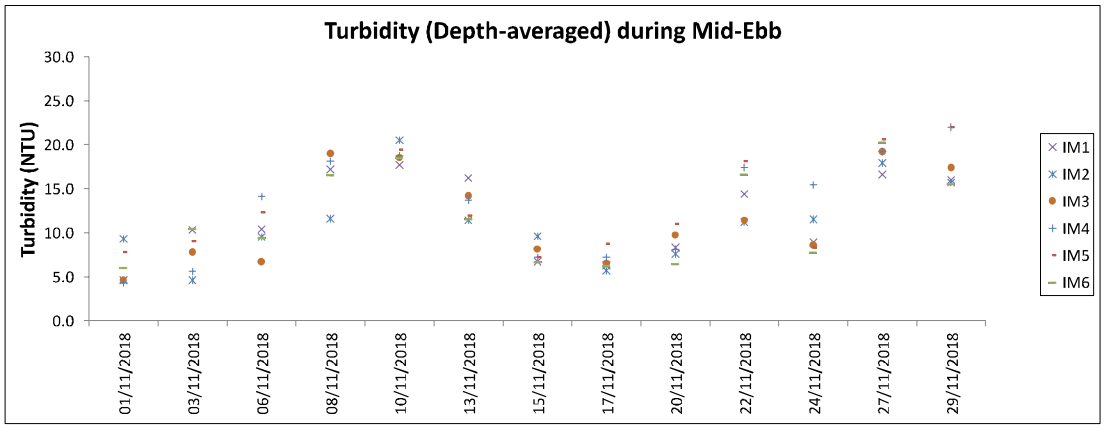
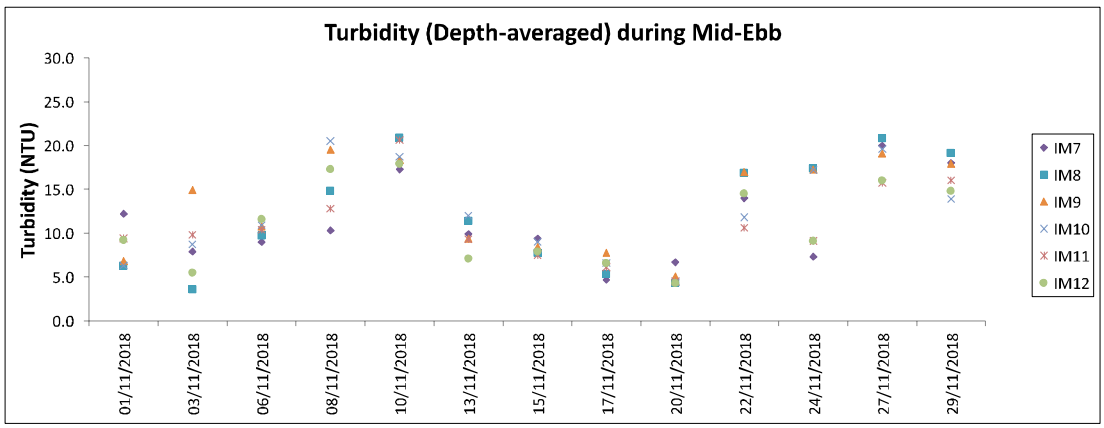
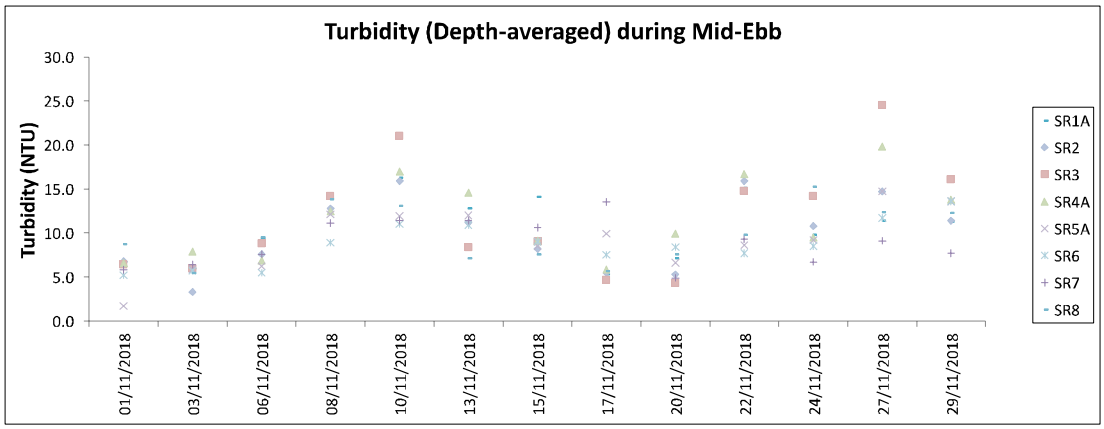
29/11/2018
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

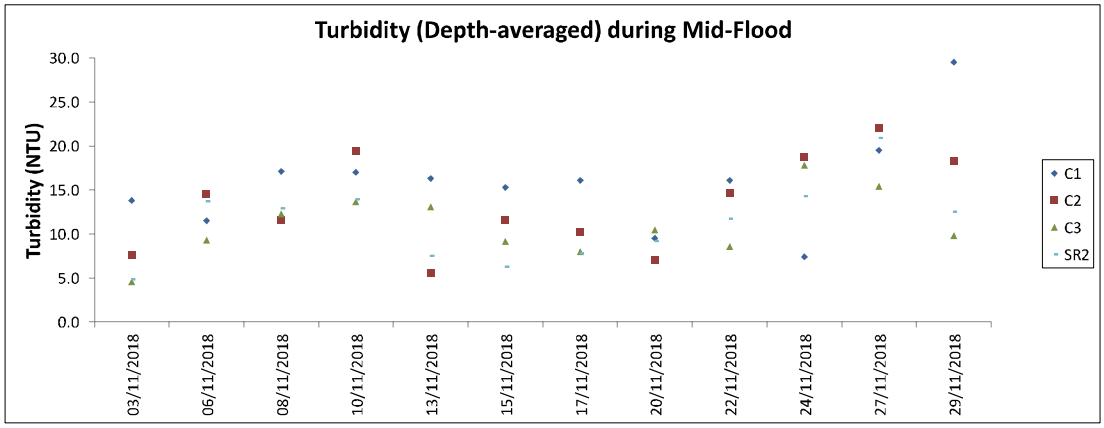


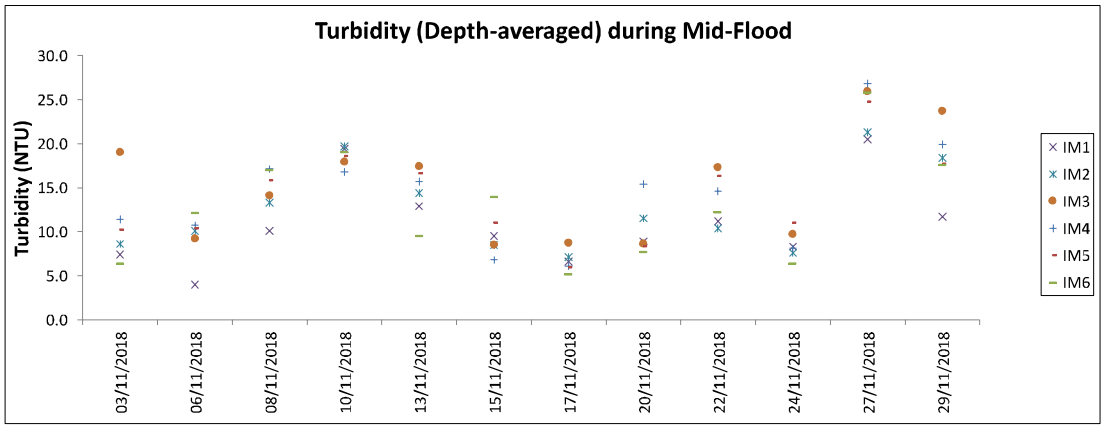


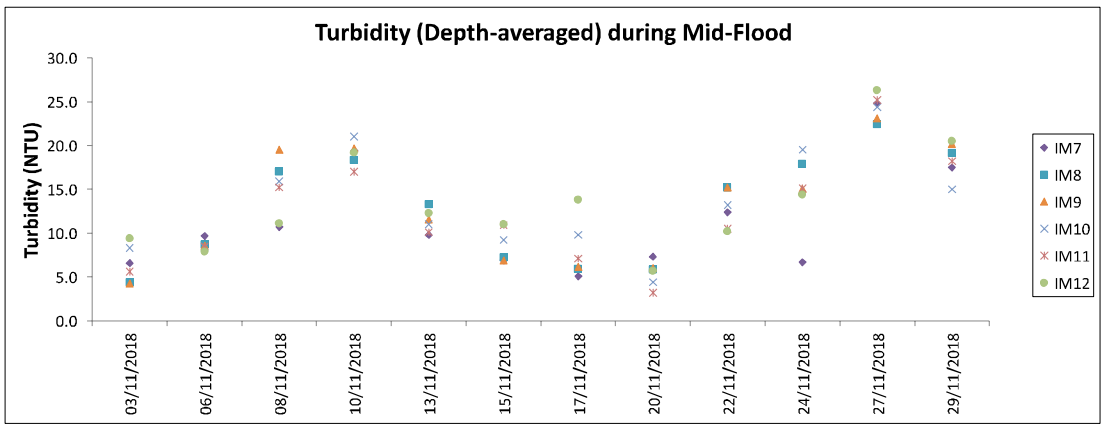


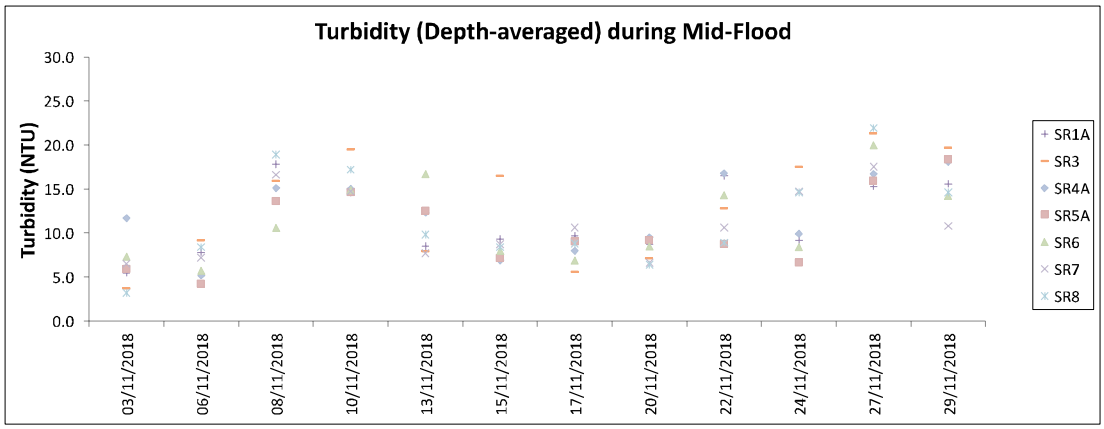


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

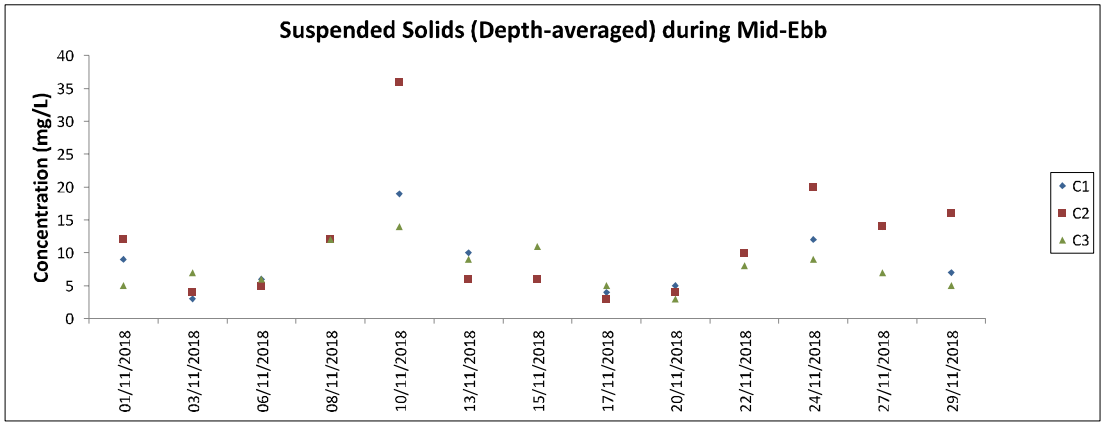


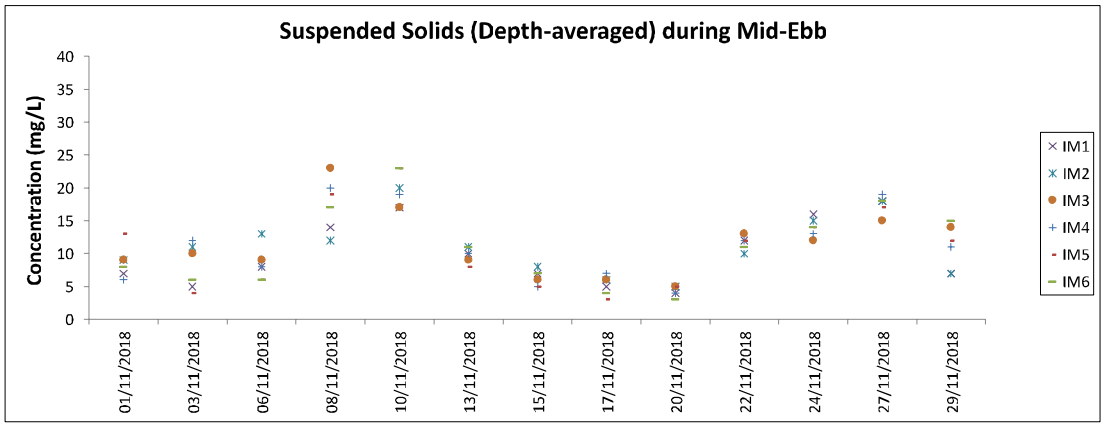


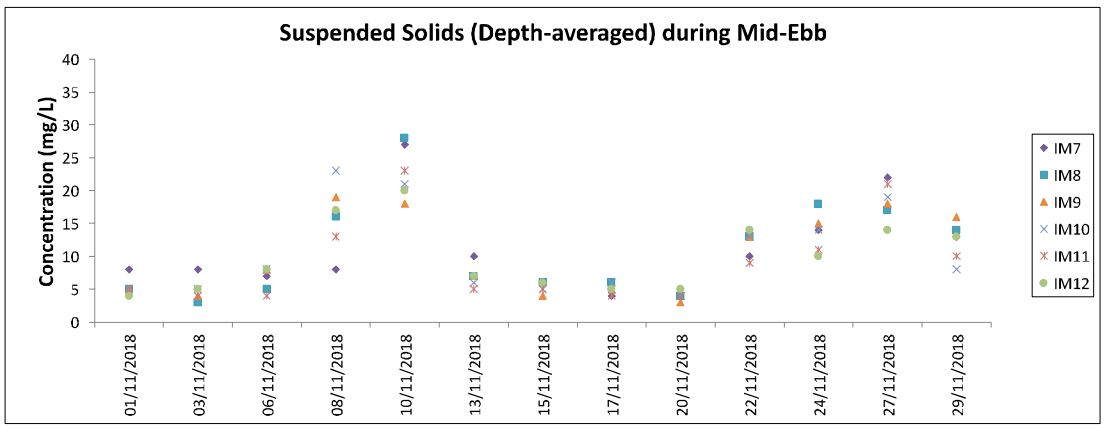


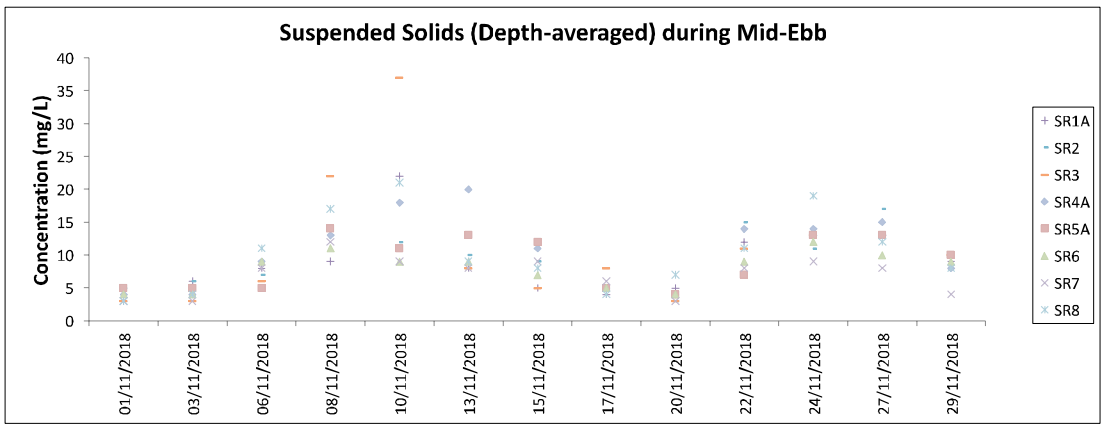


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

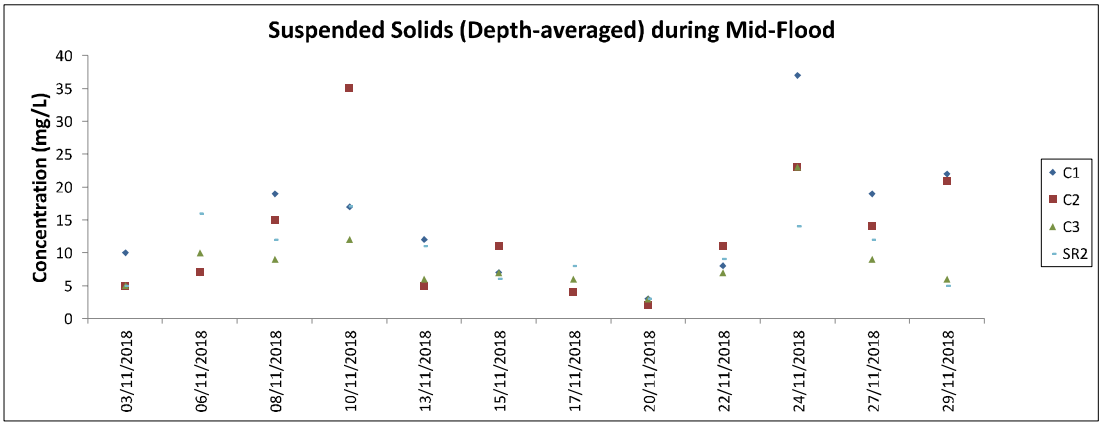


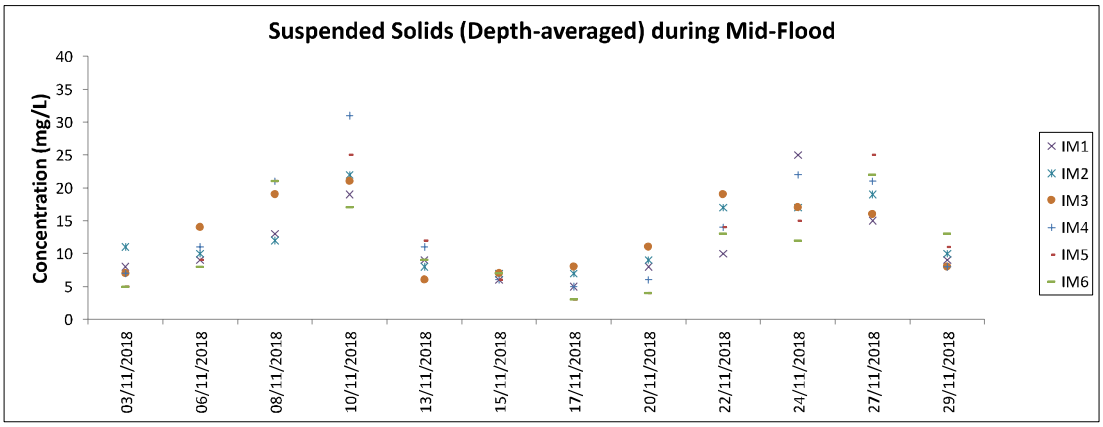


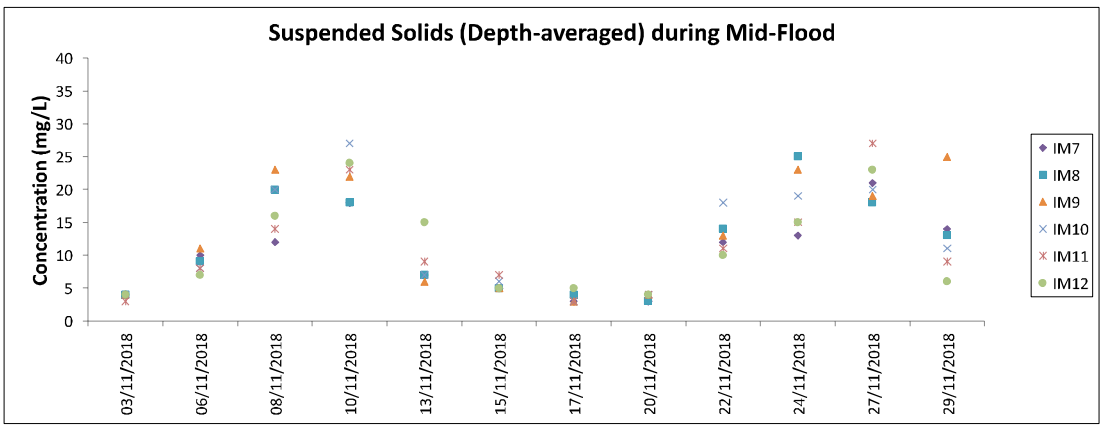


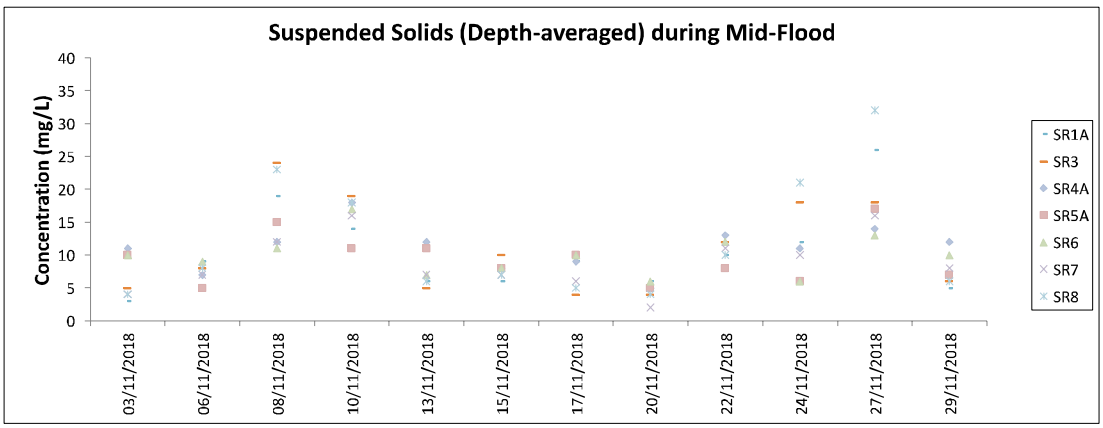


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

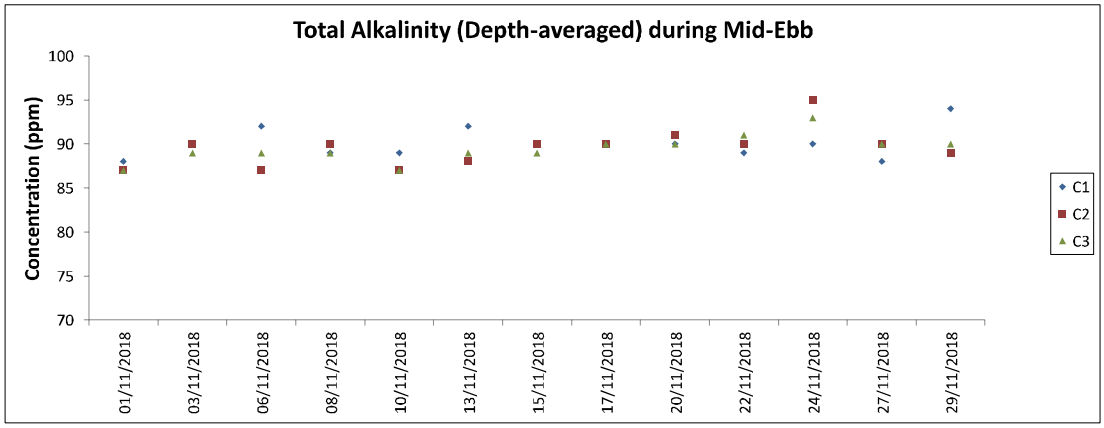


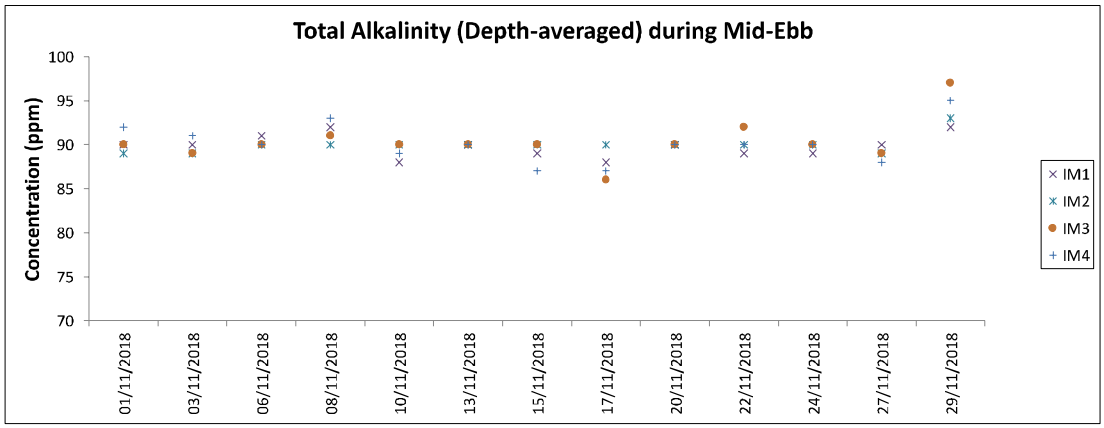


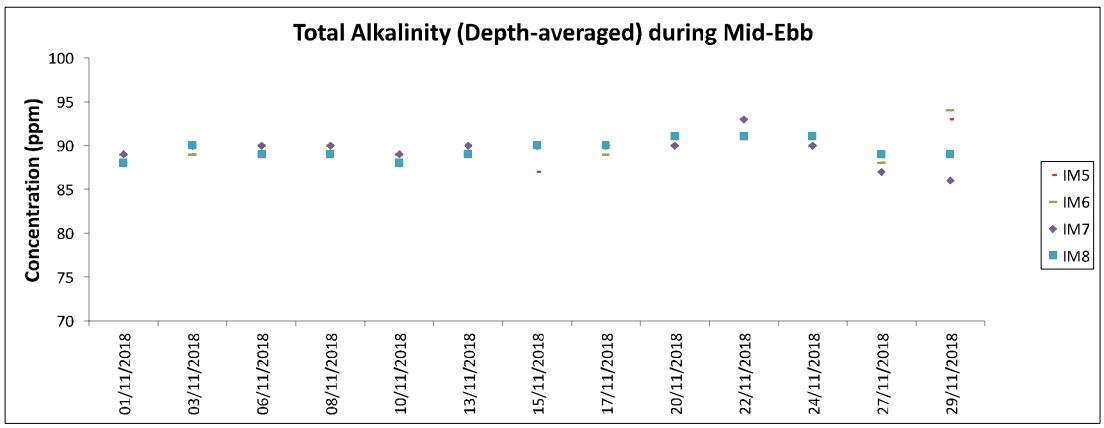


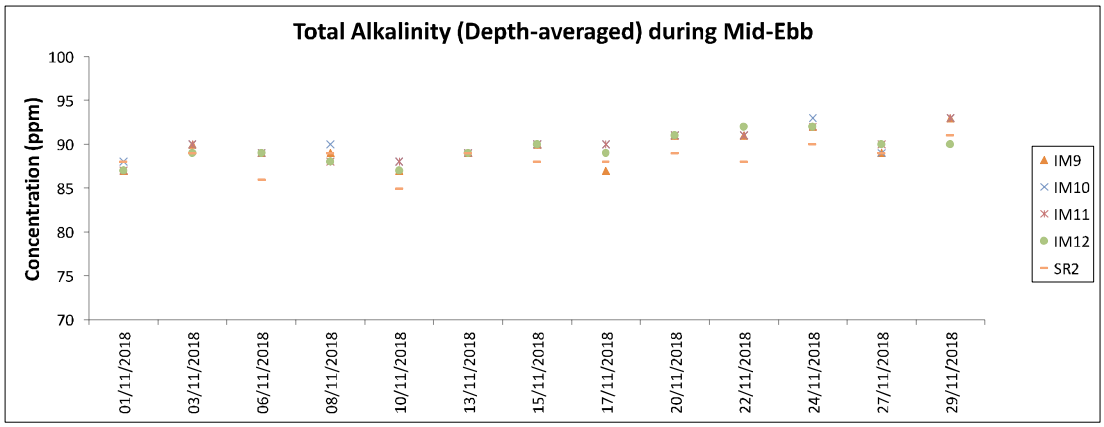


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

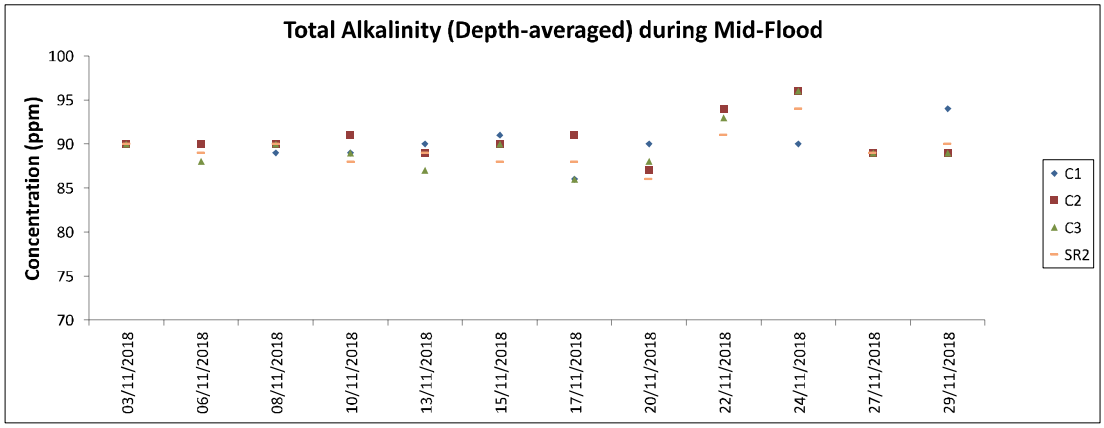


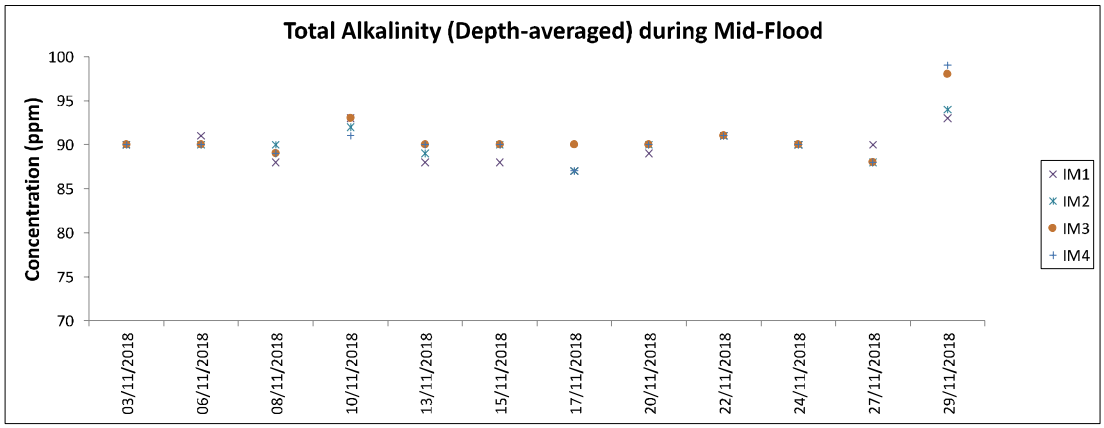


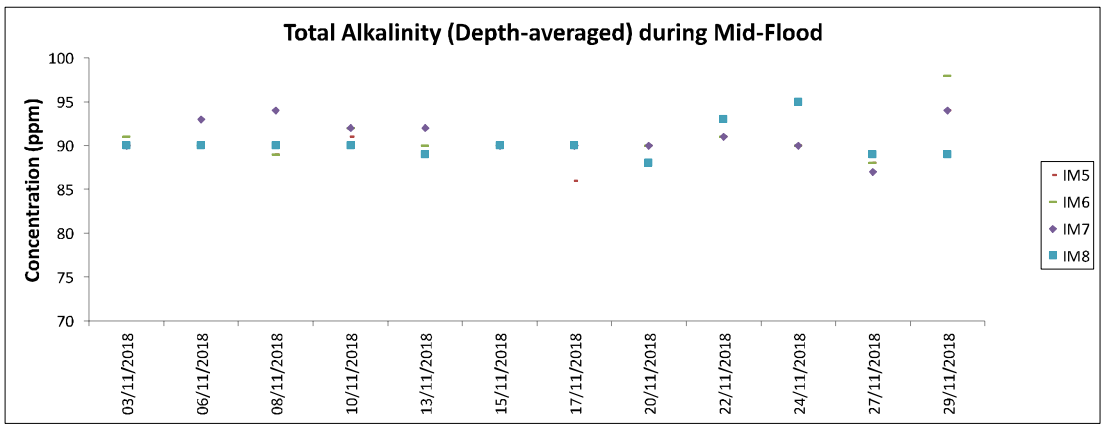


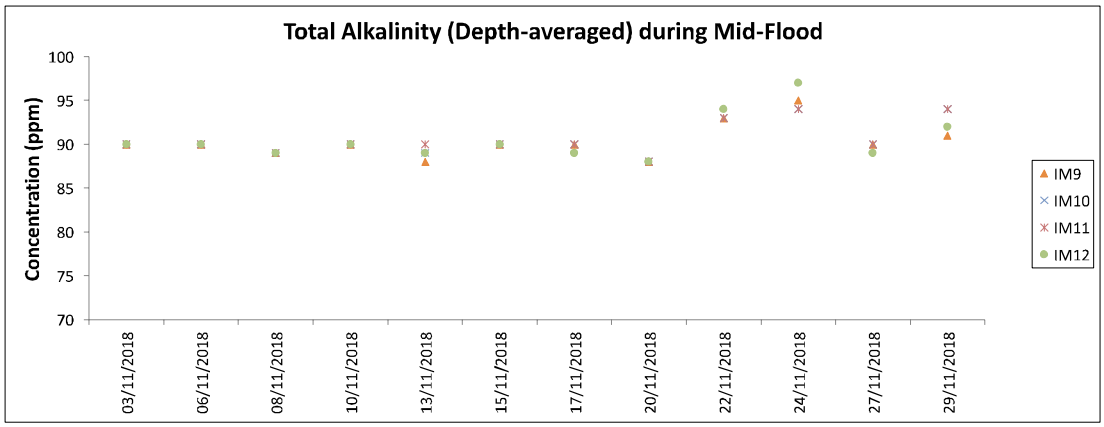


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

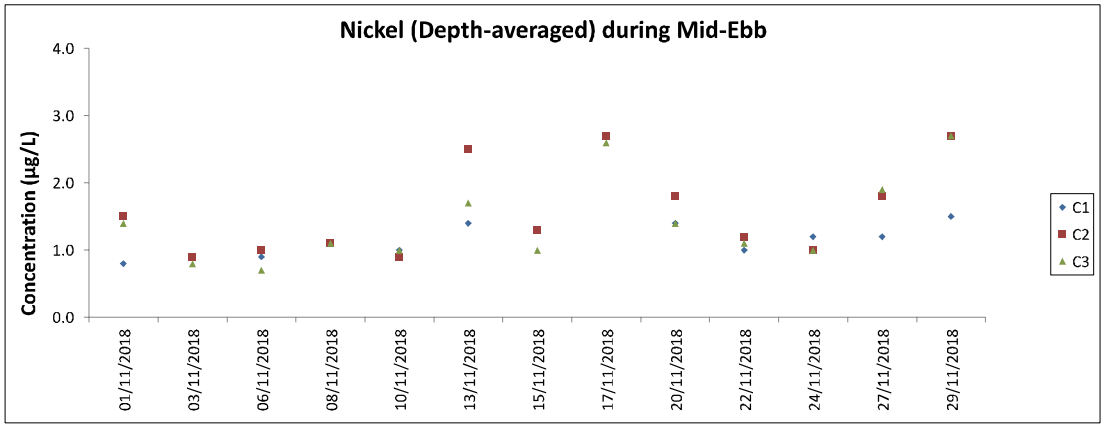


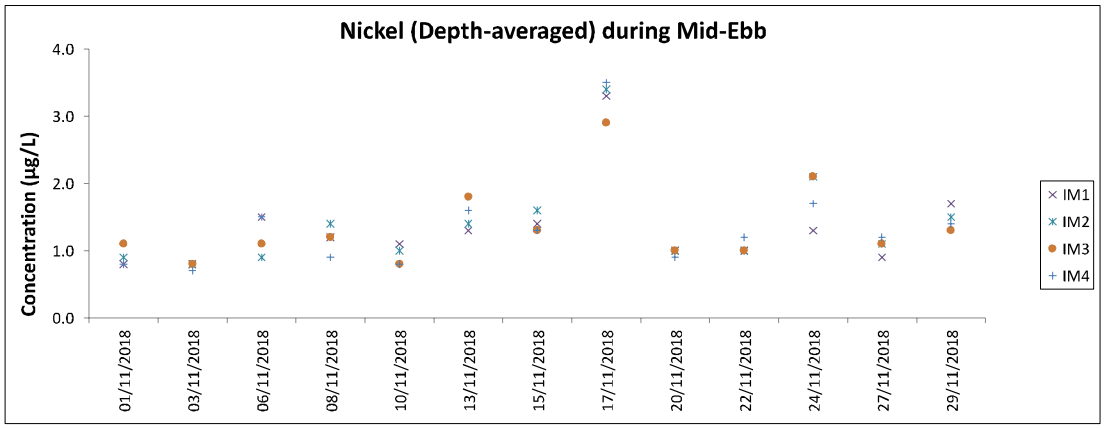


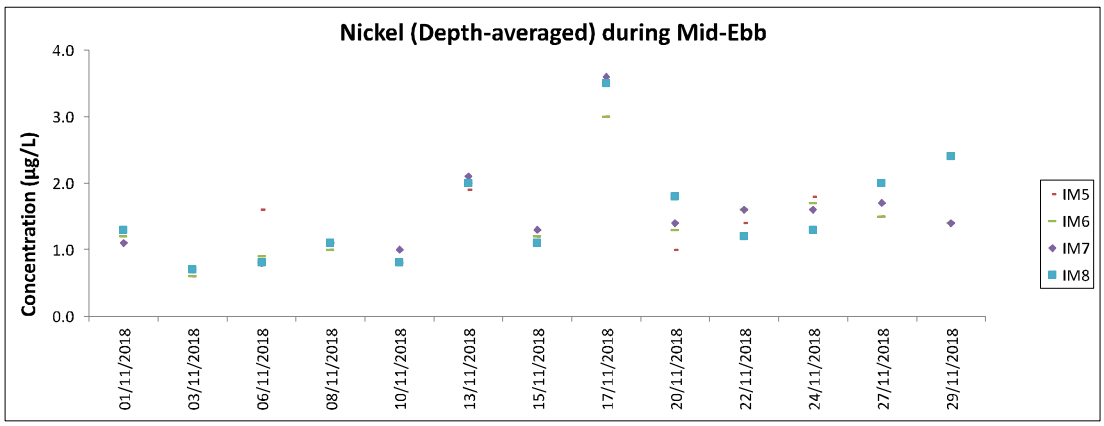


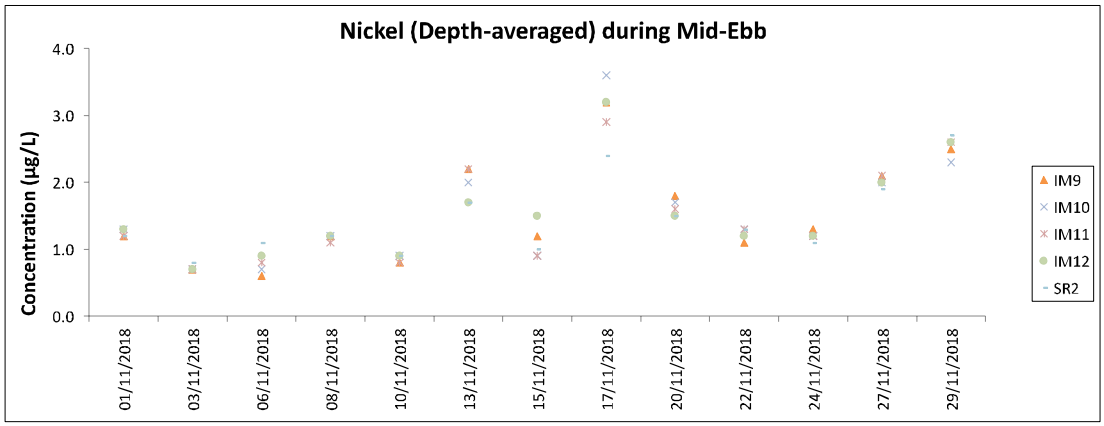


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

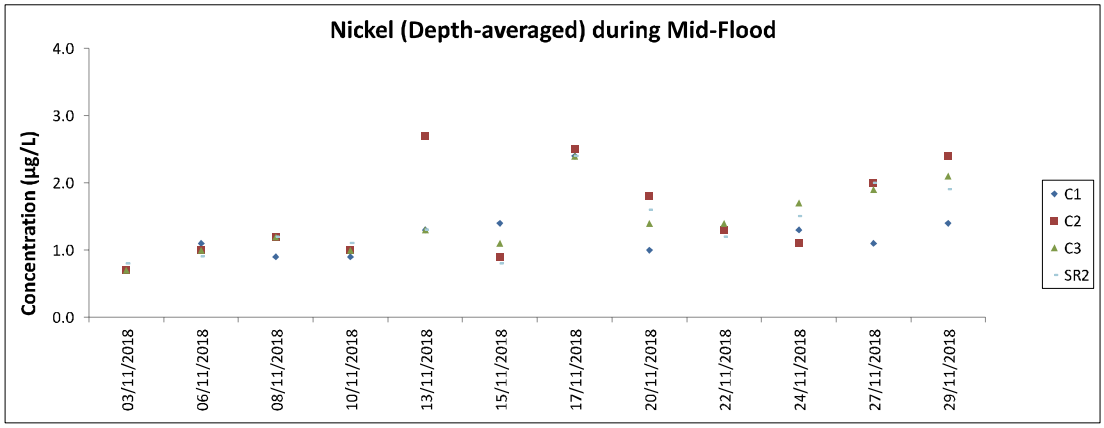


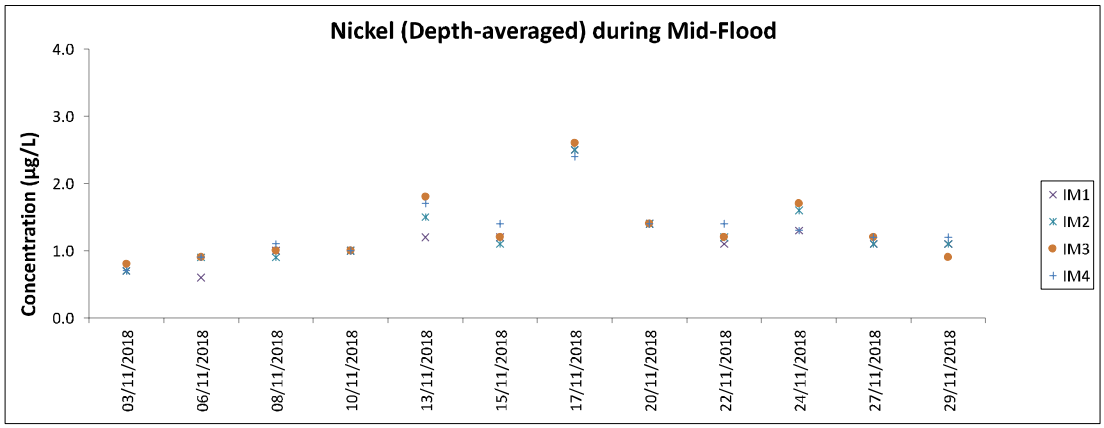


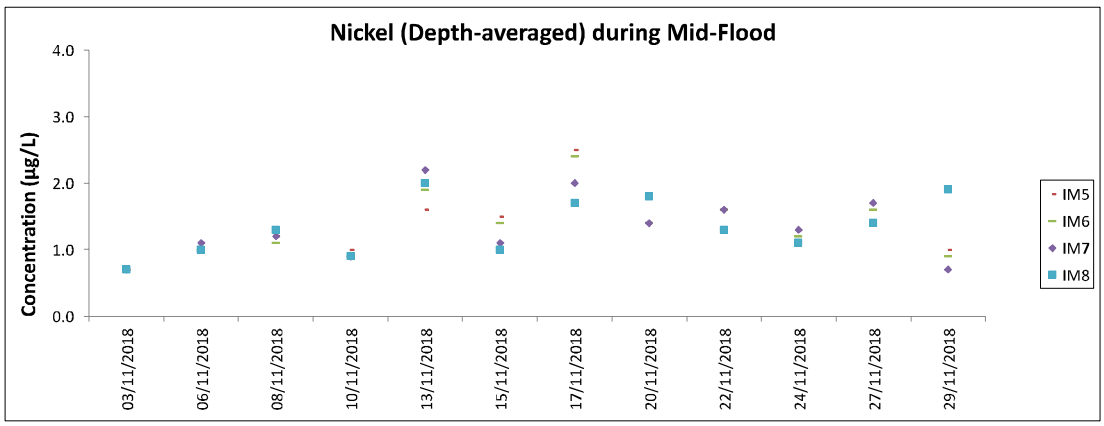


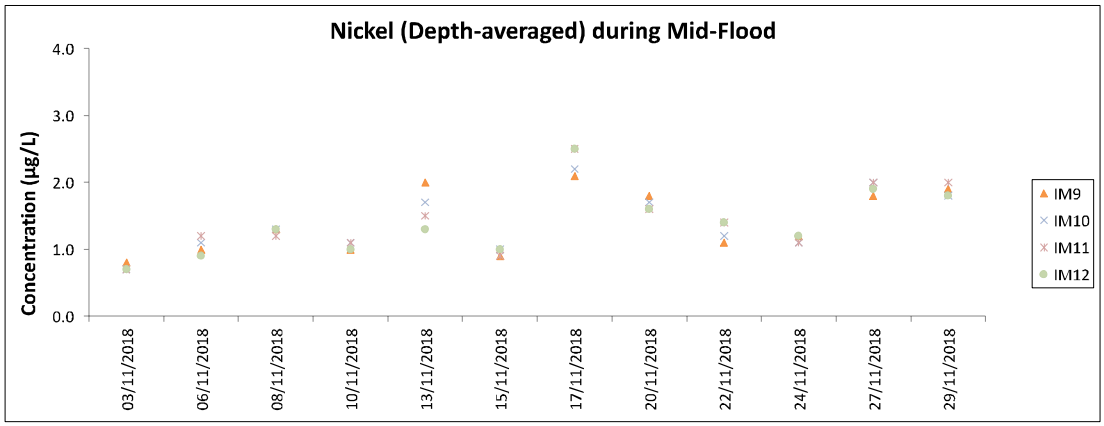


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period were below the reporting limit 0.2 µg/L.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Sep-18	SWL	1	0.800	AUTUMN	32166	3RS ET	P
7-Sep-18	SWL	2	43.560	AUTUMN	32166	3RS ET	P
7-Sep-18	SWL	3	11.660	AUTUMN	32166	3RS ET	P
7-Sep-18	SWL	1	1.500	AUTUMN	32166	3RS ET	S
7-Sep-18	SWL	2	8.130	AUTUMN	32166	3RS ET	S
7-Sep-18	SWL	3	4.900	AUTUMN	32166	3RS ET	S
10-Sep-18	NEL	2	37.280	AUTUMN	32166	3RS ET	P
10-Sep-18	NEL	2	8.640	AUTUMN	32166	3RS ET	S
10-Sep-18	NEL	3	1.080	AUTUMN	32166	3RS ET	S
14-Sep-18	NWL	1	1.400	AUTUMN	32166	3RS ET	P
14-Sep-18	NWL	2	58.520	AUTUMN	32166	3RS ET	P
14-Sep-18	NWL	3	3.600	AUTUMN	32166	3RS ET	P
14-Sep-18	NWL	2	11.780	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	2	4.900	AUTUMN	32166	3RS ET	P
18-Sep-18	NEL	3	28.270	AUTUMN	32166	3RS ET	P
18-Sep-18	NEL	4	4.070	AUTUMN	32166	3RS ET	P
18-Sep-18	NEL	2	1.000	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	3	8.260	AUTUMN	32166	3RS ET	S
18-Sep-18	NEL	4	1.000	AUTUMN	32166	3RS ET	S
19-Sep-18	SWL	2	42.334	AUTUMN	32166	3RS ET	P
19-Sep-18	SWL	3	12.170	AUTUMN	32166	3RS ET	P
19-Sep-18	SWL	2	13.810	AUTUMN	32166	3RS ET	S
19-Sep-18	SWL	3	0.900	AUTUMN	32166	3RS ET	S
20-Sep-18	AW	2	4.940	AUTUMN	32166	3RS ET	P
20-Sep-18	WL	2	6.421	AUTUMN	32166	3RS ET	P
20-Sep-18	WL	3	11.471	AUTUMN	32166	3RS ET	P
20-Sep-18	WL	2	5.212	AUTUMN	32166	3RS ET	S
20-Sep-18	WL	3	6.235	AUTUMN	32166	3RS ET	S
21-Sep-18	AW	2	4.690	AUTUMN	32166	3RS ET	P
21-Sep-18	WL	2	4.136	AUTUMN	32166	3RS ET	P
21-Sep-18	WL	3	13.589	AUTUMN	32166	3RS ET	P
21-Sep-18	WL	2	2.288	AUTUMN	32166	3RS ET	S
21-Sep-18	WL	3	7.393	AUTUMN	32166	3RS ET	S
26-Sep-18	NWL	2	40.190	AUTUMN	32166	3RS ET	P
26-Sep-18	NWL	3	21.690	AUTUMN	32166	3RS ET	P
26-Sep-18	NWL	2	6.418	AUTUMN	32166	3RS ET	S
26-Sep-18	NWL	3	3.520	AUTUMN	32166	3RS ET	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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
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
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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
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

Notes: CWD monitoring survey data of the two preceding survey months (i.e. September and October 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
7-Sep-18	1	1408	FP	1	SWL	2	244	ON	3RS ET	22.1951	113.9275	AUTUMN	NONE	P
7-Sep-18	2	1425	FP	5	SWL	2	147	ON	3RS ET	22.1751	113.9282	AUTUMN	NONE	P
14-Sep-18	1	1326	CWD	1	NWL	2	38	ON	3RS ET	22.3994	113.8982	AUTUMN	NONE	P
19-Sep-18	1	1041	CWD	9	SWL	2	808	ON	3RS ET	22.1925	113.8590	AUTUMN	NONE	P
19-Sep-18	2	1112	CWD	3	SWL	2	208	ON	3RS ET	22.1937	113.8589	AUTUMN	NONE	P
19-Sep-18	3	1303	CWD	1	SWL	3	49	ON	3RS ET	22.1726	113.8970	AUTUMN	NONE	P
20-Sep-18	1	1025	CWD	5	WL	3	38	ON	3RS ET	22.2686	113.8478	AUTUMN	NONE	P
20-Sep-18	2	1047	CWD	10	WL	2	18	ON	3RS ET	22.2686	113.8526	AUTUMN	NONE	P
20-Sep-18	3	1108	CWD	1	WL	2	72	ON	3RS ET	22.2600	113.8497	AUTUMN	NONE	P
20-Sep-18	4	1135	CWD	3	WL	3	66	ON	3RS ET	22.2416	113.8462	AUTUMN	NONE	P
20-Sep-18	5	1145	CWD	2	WL	3	8	ON	3RS ET	22.2415	113.8406	AUTUMN	NONE	P
20-Sep-18	6	1250	CWD	7	WL	3	77	ON	3RS ET	22.1964	113.8414	AUTUMN	NONE	P
20-Sep-18	7	1317	CWD	1	WL	3	83	ON	3RS ET	22.1871	113.8399	AUTUMN	NONE	P
20-Sep-18	8	1327	CWD	2	WL	3	81	ON	3RS ET	22.1870	113.8312	AUTUMN	NONE	P
21-Sep-18	1	1026	CWD	6	WL	3	44	ON	3RS ET	22.2688	113.8523	AUTUMN	NONE	P
21-Sep-18	2	1105	CWD	2	WL	3	520	ON	3RS ET	22.2499	113.8394	AUTUMN	NONE	P
21-Sep-18	3	1142	CWD	3	WL	3	4	ON	3RS ET	22.2285	113.8377	AUTUMN	NONE	S
21-Sep-18	4	1208	CWD	6	WL	3	279	ON	3RS ET	22.2143	113.8313	AUTUMN	NONE	P
21-Sep-18	5	1237	CWD	1	WL	2	2	ON	3RS ET	22.2135	113.8351	AUTUMN	NONE	P
21-Sep-18	6	1306	CWD	4	WL	3	57	ON	3RS ET	22.1957	113.8348	AUTUMN	NONE	P
26-Sep-18	1	1030	CWD	2	NWL	2	77	ON	3RS ET	22.2832	113.8697	AUTUMN	NONE	P
26-Sep-18	2	1050	CWD	1	NWL	2	125	ON	3RS ET	22.2713	113.8721	AUTUMN	NONE	S
26-Sep-18	3	1221	CWD	1	NWL	3	387	ON	3RS ET	22.3863	113.8878	AUTUMN	NONE	P
26-Sep-18	4	1426	CWD	1	NWL	2	131	ON	3RS ET	22.3659	113.9188	AUTUMN	NONE	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

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
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
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

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. September and October 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 November 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 392.038 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 19 on-effort sightings and total number of 56 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in November 2018 are shown as below:

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

$$STG = \frac{19}{392.038}\ x\ 100 = 4.85$$

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

$$ANI = \frac{56}{392.038}\ x\ 100 = 14.28$$

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

A total of 1258.595 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 54 on-effort sightings and total number of 166 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)

$$STG = \frac{54}{1258.595}\ x\ 100 = 4.29$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{166}{1258.595}\ x\ 100 = 13.19$$

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

	
NLMM012_20181106_1_4	NLMM039_20181106_1_2
	
NLMM004_20181106_2_1_Lower	NLMM006_20181106_2_6
	
NLMM013_20181106_2_5	NLMM037_20181106_2_10
	
NLMM068_20181106_2_6	WLMM127_20181106_2_1

	
WLMM060_20181112_1_2	WLMM071_20181112_1_7
	
NLMM023_20181112_2_6	NLMM052_20181112_2_3
	
SLMM003_20181116_1_6	SLMM007_20181116_1_8
	
SLMM052_20181116_1_8	WLMM079_20181116_1_1

	
WLMM063_20181116_3_8	WLMM001_20181116_8_3
	
WLMM007_20181116_8_1	WLMM079_20181116_8_2
	
WLMM109_20181116_8_14	SLMM028_20181120_1_8
	
NLMM018_20181120_2_7	SLMM003_20181120_2_7

	
SLMM037_20181120_2_13	WLMM131_20181120_2_6
	
NLMM018_20181120_3_9	SLMM059_20181120_3_2
	
WLMM056_20181120_3_12	WLMM125_20181120_3_1
	
WLMM018_20181120_4_3	SLMM014_20181121_1_2

	
SLMM034_20181121_2_2	SLMM014_20181121_3_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
5/Nov/18	Lung Kwu Chau	8:50	14:50	6:00	2-3	2-3	6	1-3
13/Nov/18	Lung Kwu Chau	8:36	14:36	6:00	2-3	3-4	4	2-5
14/Nov/18	Sha Chau	8:37	14:37	6:00	2-3	2-3	0	N/A
21/Nov/18	Lung Kwu Chau	8:53	14:53	6:00	2-3	2-3	2	2-5
27/Nov/18	Sha Chau	8:27	14:27	6:00	2	3	0	N/A

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 D. Calibration Certificates

Equipment Verification Report (TSP) – Amendment 1

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	597337
Equipment Ref:	Nil
Job Order	HK1846685

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	21 September 2018

Equipment Verification Results:

Testing Date: 28 September & 2 October 2018

Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr01min	09:37 ~ 11:38	27.6	1009.9	32	3003	24.8
2hr	11:51 ~ 13:51	27.6	1009.9	54	5161	43.0
2hr	14:02 ~ 16:02	27.6	1009.9	56	5139	42.8
2hr02min	09:41 ~ 11:43	27.2	1014.9	39	3874	31.7
2hr16min	12:06 ~ 14:22	27.2	1014.9	44	4406	32.5

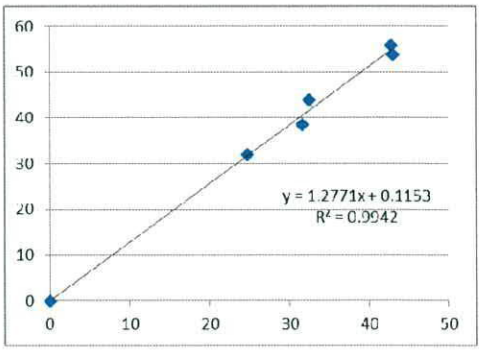
Linear Regression of Y or X

Slope (K-factor): 1.2771 (µg/m3)/CPM

Correlation Coefficient 0.9971

Date of Issue 5 October 2018 (1st issue)

8 November 2018 (Amendment 1)



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 1.2771 (µg/m3)/CPM should be applied for TSP monitoring

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

Operator : Fai So Signature : Date : 8 November 2018

QC Reviewer : Ben Tam Signature : Date : 8 November 2018

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	21-Sep-18
Location ID :	Calibration Room	Next Calibration Date:	21-Dec-18

CONDITIONS

Sea Level Pressure (hPa)	1011.6	Corrected Pressure (mm Hg)	758.7
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.02017
Model->	5025A	Qstd Intercept ->	-0.03691
Calibration Date->	13-Feb-18	Expiry Date->	13-Feb-19

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	5.4	5.4	10.8	1.632	56	55.56	Slope = 37.2548
13	4.3	4.3	8.6	1.459	48	47.62	Intercept = -5.5606
10	3.3	3.3	6.6	1.280	43	42.66	Corr. coeff. = 0.9970
8	2.1	2.1	4.2	1.025	34	33.73	
5	1.3	1.3	2.6	0.810	24	23.81	

Calculations :

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

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

Qstd = standard flow rate

IC = corrected chart respones

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K)

Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

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

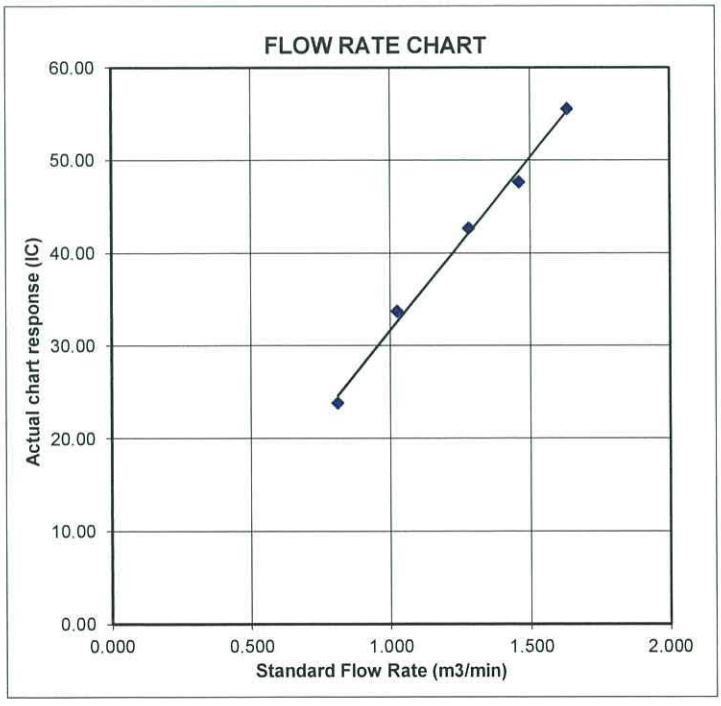
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



Equipment Verification Report (TSP) – Amendment 1

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	296098
Equipment Ref:	Nil
Job Order	HK1853698

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	21 September 2018

Equipment Verification Results:

Testing Date: 15 & 16 October 2018

Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr	09:20 ~ 11:20	25.6	1014.6	41	3424	28.5
2hr	11:24 ~ 13:24	25.6	1014.6	34	2606	21.7
2h01min	13:28 ~ 15:29	25.6	1014.6	42	3595	29.8
2hr08min	15:34 ~ 17:42	25.6	1014.6	38	3162	24.7
2hr17min	09:31 ~ 11:48	24.3	1013.2	34	3181	23.2

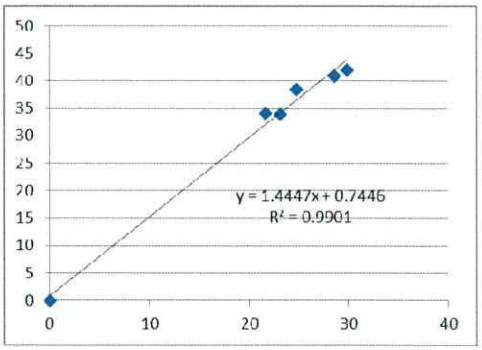
Linear Regression of Y or X

Slope (K-factor): 1.4447 (µg/m3)/CPM

Correlation Coefficient 0.9950

Date of Issue 22 October 2018 (1st issue)

8 November 2018 (Amendment 1)



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 1.4447 (µg/m3)/CPM should be applied for TSP monitoring

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

Operator : Fai So Signature : Date : 8 November 2018

QC Reviewer : Ben Tam Signature : Date : 8 November 2018

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	21-Sep-18
Location ID :	Calibration Room	Next Calibration Date:	21-Dec-18

CONDITIONS

Sea Level Pressure (hPa)	1011.6	Corrected Pressure (mm Hg)	758.7
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.02017
Model->	5025A	Qstd Intercept ->	-0.03691
Calibration Date->	13-Feb-18	Expiry Date->	13-Feb-19

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	5.4	5.4	10.8	1.632	56	55.56	Slope = 37.2548
13	4.3	4.3	8.6	1.459	48	47.62	Intercept = -5.5606
10	3.3	3.3	6.6	1.280	43	42.66	Corr. coeff. = 0.9970
8	2.1	2.1	4.2	1.025	34	33.73	
5	1.3	1.3	2.6	0.810	24	23.81	

Calculations :

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

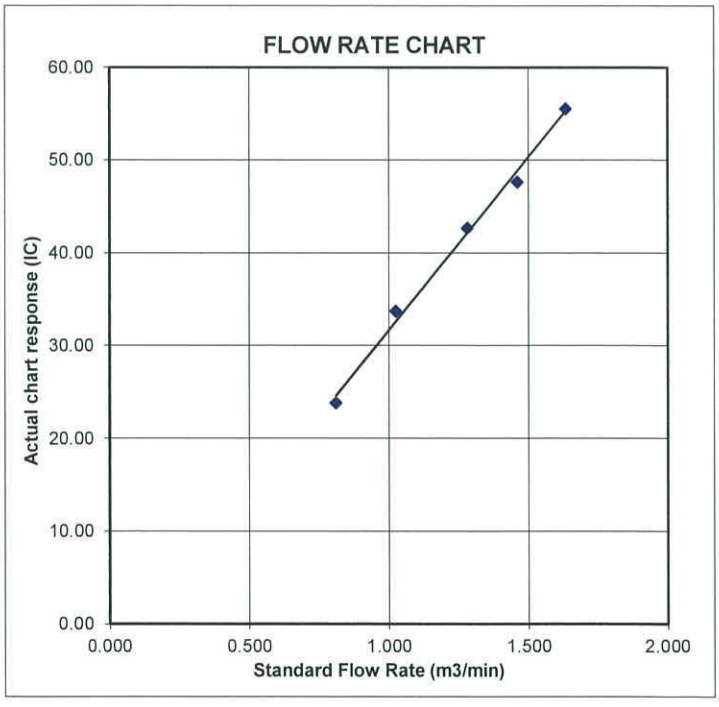
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

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

For subsequent calculation of sampler flow:

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

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



TISCH Environmental

RECALIBRATION DUE DATE:
February 13, 2019

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	February 13, 2018	**Rootsmeter S/N:** 438320	**Ta:** 293	°K
Operator:	Jim Tisch		**Pa:** 763.3	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1612**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.3970	3.2	2.00
2	3	4	1	1.0000	6.3	4.00
3	5	6	1	0.8900	7.9	5.00
4	7	8	1	0.8440	8.7	5.50
5	9	10	1	0.7010	12.6	8.00

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
1.0172	0.7281	1.4293	0.9958	0.7128	0.8762
1.0130	1.0130	2.0213	0.9917	0.9917	1.2392
1.0109	1.1358	2.2599	0.9896	1.1120	1.3854
1.0098	1.1964	2.3702	0.9886	1.1713	1.4530
1.0046	1.4331	2.8586	0.9835	1.4030	1.7524
QSTD	**m=**	**2.02017**	**QA**	**m=**	**1.26500**
	b=	**-0.03691**		**b=**	**-0.02263**
	r=	**0.99988**		**r=**	**0.99988**

Calculations

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

For subsequent flow rate calculations:

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

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

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

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

RECALIBRATION

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

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.cor
TOLL FREE: (877)263-761(
FAX: (513)467-900

Hong Kong Calibration Ltd.
香 港 校 正 有限公司

Calibration Certificate

Certificate No. **807532** Page 1 of 3 Pages

Customer : Mott MacDonald Hong Kong Limited

Address : 20/F, Two Landmark East, 100 How Ming Street, Kwun Tong, Kowloon, Hong Kong.

Order No. : Q82248 **Date of receipt :** 25-Jul-18

Item Tested

Description : Precision Integrating Sound Level Meter

Manufacturer : Rion **I.D.** : --

Model : NL-31 **Serial No.** : 01262786

Test Conditions

Date of Test : 7-Aug-18 **Supply Voltage** : --

Ambient Temperature : (23 ± 3)°C **Relative Humidity :** (50 ± 25) %

Test Specifications

Calibration check.

Ref. Document/Procedure : Z01, IEC 61672.

Test Results

All results were within the IEC 61672 Type1 or manufacturer's specification.

The results are shown in the attached page(s).

Main Test equipment used:

Equipment No.	Description	Cert. No.	Traceable to
S017	Multi-Function Generator	C170120	SCL-HKSAR
S240	Sound Level Calibrator	803357	NIM-PRC & SCL-HKSAR

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant.
The test results apply to the above Unit-Under-Test only

Calibrated by : _____
Elva Chong

Approved by : _____
Kin Wong

Date: 7-Aug-18

This Certificate is issued by:
Hong Kong Calibration Ltd.
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

Calibration Certificate

Results :

1. **Self-generated noise:** 16.5 dBA (Mfr's Spec ≤ 20 dBA)

2. **Acoustical signal test**

UUT Setting			Applied Value (dB)	UUT Reading (dB)
Level Range (dB)	Weight	Response		
20 – 100	L_A	Fast	94.0	93.7
		Slow		93.7
	L_C	Fast		93.8
	Lp	Fast		93.8
30 – 120	L_A	Fast	94.0	93.7
		Slow		93.7
	L_C	Fast		93.7
	Lp	Fast		93.7
30 – 120	L_A	Fast	114.0	113.8
		Slow		113.8
	L_C	Fast		113.9
	Lp	Fast		113.9

IEC 61672 Type 1 Spec. : ± 1.1 dB
Uncertainty : ± 0.1 dB

3 **Electrical signal tests of frequency weightings** (A weighting)

Frequency	Attenuation (dB)	IEC 61672 Type 1 Spec.
31.5 Hz	-39.5	- 39.4 dB, ± 2 dB
63 Hz	-26.2	- 26.2 dB, ± 1.5 dB
125 Hz	-16.2	- 16.1 dB, ± 1.5 dB
250 Hz	-8.7	- 8.6 dB, ± 1 dB
500 Hz	-3.2	- 3.2 dB, ± 1.4 dB
1 kHz	0.0 (Ref.)	0 dB, ± 1.1 dB
2 kHz	+1.3	+ 1.2 dB, ± 1.6 dB
4 kHz	+1.1	+ 1.0 dB, ± 1.6 dB
8 kHz	-1.1	- 1.1 dB, + 2.1 dB ~ -3.1 dB
16 kHz	-6.7	- 6.6 dB, + 3.5 dB ~ - 17.0 dB

Uncertainty : ± 0.1 dB

Calibration Certificate

4. Frequency & Time weightings at 1 kHz

4.1 Frequency Weighting (Fast)

UUT Setting	Applied Value (dB)	UUT Reading (dB)	Difference (dB)	IEC 61672 Type 1 Spec.
A	94.0	94.0 (Ref.)	- -	± 0.4 dB
C	94.0	94.0	0.0	
P	94.0	94.1	+0.1	

4.2 Time Weighting (A-weighted)

UUT Setting	Applied Value (dB)	UUT Reading (dB)	Difference (dB)	IEC 61672 Type 1 Spec.
Fast	94.0	94.0 (Ref.)	- -	± 0.3 dB
Slow	94.0	94.0	0.0	
Time-averaging	94.0	94.0	0.0	

Uncertainty : ± 0.1 dB

Remarks : 1. UUT : Unit-Under-Test
2. The uncertainty claimed is for a confidence probability of not less than 95%.
3. Atmospheric Pressure : 1 004hPa.
4. Preamplifier model : NH-21 , S/N : 21741
5. The UUT's internal calibration was performed before the calibration.

---------- END ----------

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: M2211 Measurement Microphone
  consisting of
  MA220 Serial Number: 7681
  Capsule Serial Number: 72079

- Certificate Issued: 28 August 2018
- Certificate Number: 43340-7681-M2211
- Results: PASSED
  (for detailed report see next page)

Tested by: M. Frick

Signature:

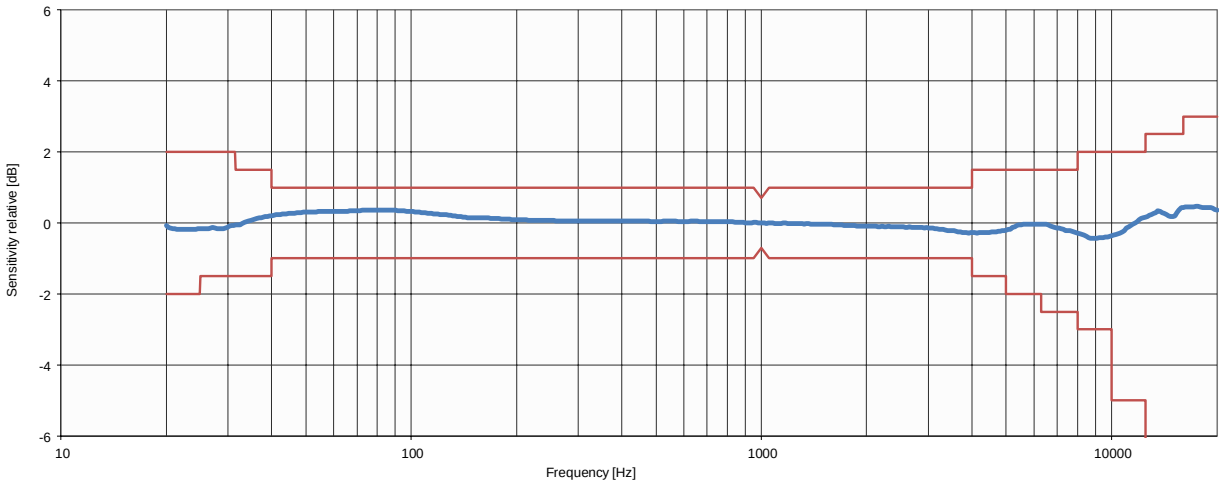
Stamp:

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

Date:	28 August 2018			
Calibration of:	M2211	consisting of		
		MA220	Serial Number:	7681
		Capsule	Serial Number:	72079

- Detailed Calibration Test Results:

		actual	tolerance	calibration uncertainty[1]
Sensitivity @ 1 kHz, 114 dBSPL		21.0 mV/Pa	14-28 mV/Pa	±2.85%
Frequency response	Class 1	acc. IEC 61672		



- Test Conditions:

Temperature:	23°C	±0.5 °C
Relative Humidity:	49.2%	±2%
Air Pressure:	96.06 kPa	±0.25 kPa

- Calibration Equipment Used:

  - Norsonic Sound Calibrator, Type 1251, S/No. 30930
    Last Calibration: 05.12.2016, Next Calibration: 05.12.2018
    Calibrated by Metas, Switzerland

  - NTi Audio FX100, S/No. 11094
    Last Calibration: 14.08.2018, Next Calibration: 16.08.2019
    Calibrated by NTi Audio meeting product specifications

  - MTG MV203, S/No. 0630 / Mic Capsule, MK221 S./No. 16502
    Last Calibration: 11.12.2017, Next Calibration: 11.12.2019
    Calibrated by MTG, Germany

[1] 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.

Hong Kong Calibration Ltd.
香 港 校 正 有 限 公 司

Calibration Certificate

Certificate No. **807533** Page 1 of 2 Pages

Customer : Mott MacDonald Hong Kong Limited

Address : 20/F, Two Landmark East, 100 How Ming Street, Kwun Tong, Kowloon, Hong Kong.

Order No. : Q82248 **Date of receipt :** 25-Jul-18

Item Tested

Description : Acoustic Calibrator

Manufacturer : Castle **I.D.** : --

Model : GA607 **Serial No.** : 040162

Test Conditions

Date of Test : 7-Aug-18 **Supply Voltage** : --

Ambient Temperature : (23 ± 3)°C **Relative Humidity :** (50 ± 25) %

Test Specifications

Calibration check.

Ref. Document/Procedure : F06, F20, Z02.

Test Results

All results were within the IEC 60942 Class 1 specification.

The results are shown in the attached page(s).

Main Test equipment used:

Equipment No.	Description	Cert. No.	Traceable to
S014	Spectrum Analyzer	805025	NIM-PRC & SCL-HKSAR
S240	Sound Level Calibrator	803357	NIM-PRC & SCL-HKSAR
S041	Universal Counter	802061	SCL-HKSAR
S206	Sound Level Meter	805027	SCL-HKSAR

The values given in this Calibration Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI), or by reference to a natural constant.
The test results apply to the above Unit-Under-Test only

Calibrated by : Elva Chong

Approved by : Kin Wong

Date: 7-Aug-18

This Certificate is issued by:
Hong Kong Calibration Ltd.
Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong.
Tel: 2425 8801 Fax: 2425 8646

Calibration Certificate

Results :

1. Generated Sound Pressure Level

UUT Nominal Value (dB)	Measured Value (dB)	IEC 60942 Class 1 Spec.
94.0	94.0	± 0.4 dB

Uncertainty : ± 0.2 dB

2. Short-term Level Fluctuation : 0.0 dB

IEC 60942 Class 1 Spec. : ± 0.1 dB
Uncertainty : ± 0.01 dB

3. Frequency

UUT Nominal Value (kHz)	Measured Value (kHz)	IEC 60942 Class 1 Spec.
1	1.000	± 1 %

Uncertainty : ± 3.6 x 10^{-6}

4. Total Distortion : < 0.7%

IEC 60942 Class 1 Spec. : < 4 %
Uncertainty : ± 2.3 % of reading

Remark : 1. UUT : Unit-Under-Test
2. The uncertainty claimed is for a confidence probability of not less than 95%.
3. Atmospheric Pressure : 1 004 hPa.

---------- END ----------

CASELLA CEL

Certificate of Conformance and Calibration for

CEL-120 Acoustic Calibrator

Applicable Standards :-IEC 60942: 2003 & ANSI S1.40: 2006

CEL-120/1 Class 1 [✓]

CEL-120/2 Class 2 [ ]

Serial No: 2383737

Firmware: 04

Temperature: 19 °C Pressure: 1013 mb %RH 50

Frequency = 1.00kHz ± 2Hz T.H.D. = < 1%	Calibration Level
SPL @ 114.0dB Setting	114.00 dB
SPL @ 94.0dB Setting (CEL-120/1 only)	93.97 dB/N.A

Engineer :- [signature] Date :- 17 OCT 2018

Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO9001 Quality System.

DECLARATION OF CONFORMITY

This certificate confirms that the instrument specified above has been produced and tested to comply with the manufacturer's published specifications and the relevant European Community CE directives.

Casella CEL (U.K.),
Regent House, Wolseley Road, Kempston, Bedford. MK42 7JY
Phone: +44 (0) 1234 844100 Fax: +44 (0) 1234 841490
E-mail: info@casellacel.com
Web: www.casellameasurement.com

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH100038
Date of Issue : 04 October 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 – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104233
Date of Received	:	Oct 03, 2018
Date of Calibration	:	Oct 03, 2018
Date of Next Calibration[a]	:	Jan 03, 2019

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.01	0.01	Satisfactory
7.42	7.42	0	Satisfactory
10.01	10.00	-0.01	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
7.6	7.5	-0.1	Satisfactory
25.0	24.7	-0.3	Satisfactory
35.5	35.6	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

Report No. : AH100038
Date of Issue : 04 October 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.34	0.28	-0.06	Satisfactory
7.75	7.83	0.08	Satisfactory
8.20	8.02	-0.18	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	144.8	-1.4	Satisfactory
0.01	1412	1350	-4.4	Satisfactory
0.1	12890	12175	-5.5	Satisfactory
0.5	58670	56033	-4.5	Satisfactory
1.0	111900	108180	-3.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.54	-4.6	Satisfactory
20	19.64	-1.8	Satisfactory
30	29.86	-0.5	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0	--	--
10	10.50	5.0	Satisfactory
20	21.58	7.9	Satisfactory
100	101.89	1.9	Satisfactory
800	788.25	-1.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH100036
Date of Issue : 04 October 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 – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Oct 03, 2018
Date of Calibration	:	Oct 03, 2018
Date of Next Calibration[a]	:	Jan 03, 2019

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.99	-0.01	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	9.96	-0.05	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
7.6	7.1	-0.5	Satisfactory
25.0	24.6	-0.4	Satisfactory
35.5	34.9	-0.6	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.*
[b] *The results relate only to the calibrated equipment as received*
[c] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[d] *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
[e] *The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by QPT or quoted form 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
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Email: info@qualityprotest.com; Website: www.qualityprotest.com
Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH100036
Date of Issue : 04 October 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.34	0.26	-0.08	Satisfactory
7.75	7.82	0.07	Satisfactory
8.20	8.00	-0.20	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	145.8	-0.7	Satisfactory
0.01	1412	1380	-2.3	Satisfactory
0.1	12890	12434	-3.5	Satisfactory
0.5	58670	57510	-2.0	Satisfactory
1.0	111900	110518	-1.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.66	-3.4	Satisfactory
20	19.84	-0.8	Satisfactory
30	30.38	1.3	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	--
10	10.47	4.7	Satisfactory
20	21.75	8.8	Satisfactory
100	93.90	-6.1	Satisfactory
800	730.06	-8.7	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH110107
Date of Issue : 20 November 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 – DESCRIPTION

Name of Equipment	:	YSI 6920 v2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	00019CB2
Date of Received	:	Nov 19, 2018
Date of Calibration	:	Nov 19, 2018
Date of Next Calibration[a]	:	Feb 19, 2019

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.01	0.01	Satisfactory
7.42	7.38	-0.04	Satisfactory
10.01	10.00	-0.01	Satisfactory

Tolerance of pH should be less than ±0.10 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
12	11.98	-0.02	Satisfactory
24	23.97	-0.03	Satisfactory
57	57.62	0.62	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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

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

Report No. : AH110107
Date of Issue : 20 November 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0	0.08	0.08	Satisfactory
3.32	3.30	-0.02	Satisfactory
5.51	5.48	-0.03	Satisfactory
8.14	8.09	-0.05	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.20 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	151	2.8	Satisfactory
0.01	1412	1405	-0.5	Satisfactory
0.1	12890	12917	0.2	Satisfactory
0.5	58670	58726	0.1	Satisfactory
1.0	111900	112876	0.9	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.97	-0.3	Satisfactory
20	20.25	1.3	Satisfactory
30	30.37	1.2	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g](%)	Results
0	0.1	--	--
10	10.4	4.0	Satisfactory
20	20.9	4.5	Satisfactory
100	100.6	0.6	Satisfactory
800	792.8	-0.9	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
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
	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
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0429-18	Valid until 24 Nov 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	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-RS0431-18	Valid until 24 Nov 2018
	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	Valid until 19 Apr 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

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0596-18	Valid until 10 Jan 2019
			GW-RS0951-18	Superseded by GW-RS1044-18 on 17 Nov 2018
			GW-RS1044-18	Valid until 15 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
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-RS0541-18	Superseded by GW-RS0945-18 on 1 Nov 2018
			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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 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	Valid until 10 Apr 2019
		Stockpiling area of 3503	GW-RS0384-18	Superseded by GW-RS1031-18 on 13 Nov 2018
			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-RS0497-18	Valid until 31 Oct 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
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-RS0875-18	Superseded by GW-RS1098-18 on 29 Nov 2018
			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

Appendix F. 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	1	0	0
From 28 December 2015 to end of the reporting period	16	1	1

Appendix G. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 2018)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 November 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-Nov	08:17	8S210	XZM	Arrival	12.9	-	-
01-Nov	08:22	3A061	YFT	Arrival	11.8	-	-
01-Nov	10:04	3A062	YFT	Arrival	12	-	-
01-Nov	10:20	3A163	YFT	Departure	11.9	-	-
01-Nov	10:37	8S212	XZM	Arrival	11.8	-	-
01-Nov	10:51	3A081	ZUI	Arrival	12.9	-	-
01-Nov	11:05	8S121	XZM	Departure	11.8	-	-
01-Nov	11:15	3A063	YFT	Arrival	11.9	-	-
01-Nov	12:07	3A181	ZUI	Departure	13.2	-	-
01-Nov	12:12	3A168	YFT	Departure	11.8	-	-
01-Nov	12:35	8S215	XZM	Arrival	11.8	-	-
01-Nov	12:51	3A064	YFT	Arrival	12.6	-	-
01-Nov	13:19	8S123	XZM	Departure	13.2	-	-
01-Nov	13:55	3A082	ZUI	Arrival	12.8	-	-
01-Nov	14:25	3A164	YFT	Departure	14	-	-
01-Nov	14:28	3A182	ZUI	Departure	12	-	-
01-Nov	14:57	3A065	YFT	Arrival	11.5	-	-
01-Nov	16:21	3A167	YFT	Departure	11.9	-	-
01-Nov	16:24	8S218	XZM	Arrival	11.6	-	-
01-Nov	16:59	3A083	ZUI	Arrival	12.5	-	-
01-Nov	17:00	3A067	YFT	Arrival	13.3	-	-
01-Nov	17:13	3A183	ZUI	Departure	13.6	-	-
01-Nov	17:16	8S126	XZM	Departure	13.2	<= 5	< 1min
01-Nov	19:04	3A166	YFT	Departure	12.6	-	-
01-Nov	19:59	3A084	ZUI	Arrival	12.9	-	-
01-Nov	20:12	3A185	ZUI	Departure	13.4	-	-
01-Nov	20:56	3A169	YFT	Departure	12.5	-	-
01-Nov	21:07	8S2113	XZM	Arrival	11.4	-	-
01-Nov	21:52	8S522	XZM	Departure	11.6	-	-
02-Nov	08:16	3A061	YFT	Arrival	11.7	-	-
02-Nov	08:26	8S210	XZM	Arrival	12.7	-	-
02-Nov	09:54	3A062	YFT	Arrival	12.7	-	-
02-Nov	10:17	3A163	YFT	Departure	13.5	-	-
02-Nov	10:51	3A081	ZUI	Arrival	13.1	-	-
02-Nov	10:52	8S212	XZM	Arrival	12.3	-	-
02-Nov	11:13	8S121	XZM	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)
02-Nov	11:20	3A063	YFT	Arrival	12.3	-	-
02-Nov	12:17	3A181	ZUI	Departure	12.8	-	-
02-Nov	12:17	3A168	YFT	Departure	13.3	-	-
02-Nov	12:43	8S215	XZM	Arrival	12.6	-	-
02-Nov	12:55	3A064	YFT	Arrival	12.9	<= 5	< 1min
02-Nov	13:15	8S123	XZM	Departure	13	-	-
02-Nov	13:57	3A082	ZUI	Arrival	13.4	-	-
02-Nov	14:15	3A164	YFT	Departure	13.5	-	-
02-Nov	14:16	3A182	ZUI	Departure	13	-	-
02-Nov	14:55	3A065	YFT	Arrival	12.5	-	-
02-Nov	16:13	3A167	YFT	Departure	13.3	-	-
02-Nov	16:39	8S218	XZM	Arrival	12.1	-	-
02-Nov	16:53	3A083	ZUI	Arrival	12.6	-	-
02-Nov	16:55	3A067	YFT	Arrival	12.8	-	-
02-Nov	17:08	3A183	ZUI	Departure	13.1	-	-
02-Nov	17:09	8S126	XZM	Departure	12.8	-	-
02-Nov	18:56	3A166	YFT	Departure	12.5	-	-
02-Nov	19:55	3A084	ZUI	Arrival	13	-	-
02-Nov	20:10	3A185	ZUI	Departure	13	-	-
02-Nov	20:58	8S2113	XZM	Arrival	11.8	-	-
02-Nov	20:59	3A169	YFT	Departure	11.6	-	-
02-Nov	21:57	8S522	XZM	Departure	12	-	-
03-Nov	08:17	3A061	YFT	Arrival	11.5	-	-
03-Nov	08:20	8S210	XZM	Arrival	12.9	-	-
03-Nov	09:54	3A062	YFT	Arrival	12.6	-	-
03-Nov	10:09	3A163	YFT	Departure	12	-	-
03-Nov	10:36	8S212	XZM	Arrival	13	-	-
03-Nov	10:48	3A081	ZUI	Arrival	13.2	-	-
03-Nov	11:01	8S121	XZM	Departure	13.2	-	-
03-Nov	11:17	3A063	YFT	Arrival	12.2	-	-
03-Nov	12:20	3A181	ZUI	Departure	12.5	-	-
03-Nov	12:21	3A168	YFT	Departure	12.2	-	-
03-Nov	12:47	8S215	XZM	Arrival	12.2	-	-
03-Nov	12:59	3A064	YFT	Arrival	12.2	-	-
03-Nov	13:17	8S123	XZM	Departure	12.6	-	-
03-Nov	13:46	3A082	ZUI	Arrival	12.2	-	-
03-Nov	14:22	3A182	ZUI	Departure	12.5	-	-
03-Nov	14:23	3A164	YFT	Departure	12.8	-	-
03-Nov	14:54	3A065	YFT	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)
03-Nov	16:14	3A167	YFT	Departure	11.8	-	-
03-Nov	16:49	8S218	XZM	Arrival	12	-	-
03-Nov	16:58	3A083	ZUI	Arrival	12.4	-	-
03-Nov	17:01	3A067	YFT	Arrival	11.9	-	-
03-Nov	17:05	8S126	XZM	Departure	12.1	-	-
03-Nov	17:07	3A183	ZUI	Departure	13.6	-	-
03-Nov	19:10	3A166	YFT	Departure	12.2	-	-
03-Nov	19:52	3A084	ZUI	Arrival	13.1	-	-
03-Nov	20:09	3A185	ZUI	Departure	13	-	-
03-Nov	21:04	8S2113	XZM	Arrival	12	-	-
03-Nov	21:06	3A169	YFT	Departure	12.9	-	-
03-Nov	21:57	8S522	XZM	Departure	12.5	-	-
04-Nov	08:11	3A061	YFT	Arrival	12.5	-	-
04-Nov	08:17	8S210	XZM	Arrival	12.5	-	-
04-Nov	09:51	3A062	YFT	Arrival	13.4	-	-
04-Nov	10:20	3A163	YFT	Departure	13.4	-	-
04-Nov	10:36	8S212	XZM	Arrival	12	-	-
04-Nov	10:45	3A081	ZUI	Arrival	13.3	-	-
04-Nov	11:01	8S121	XZM	Departure	11.4	-	-
04-Nov	11:18	3A063	YFT	Arrival	12.4	-	-
04-Nov	12:29	3A168	YFT	Departure	12.4	-	-
04-Nov	12:34	3A181	ZUI	Departure	11.8	-	-
04-Nov	12:51	8S215	XZM	Arrival	12.8	-	-
04-Nov	12:56	3A064	YFT	Arrival	12.9	-	-
04-Nov	13:27	8S123	XZM	Departure	12.1	-	-
04-Nov	13:46	3A082	ZUI	Arrival	12.6	-	-
04-Nov	14:19	3A182	ZUI	Departure	12.6	-	-
04-Nov	14:23	3A164	YFT	Departure	13.8	-	-
04-Nov	14:54	3A065	YFT	Arrival	11.2	-	-
04-Nov	16:17	3A167	YFT	Departure	12.8	-	-
04-Nov	16:42	8S218	XZM	Arrival	11.2	-	-
04-Nov	16:47	3A083	ZUI	Arrival	12.2	-	-
04-Nov	16:59	3A067	YFT	Arrival	12.8	-	-
04-Nov	17:25	8S126	XZM	Departure	13.2	-	-
04-Nov	17:26	3A183	ZUI	Departure	12.8	-	-
04-Nov	19:10	3A166	YFT	Departure	13.1	-	-
04-Nov	20:09	3A084	ZUI	Arrival	13.3	-	-
04-Nov	20:23	3A185	ZUI	Departure	13.3	-	-
04-Nov	20:53	8S2113	XZM	Arrival	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)
04-Nov	20:56	3A169	YFT	Departure	11.4	-	-
04-Nov	22:03	8S522	XZM	Departure	12.7	-	-
05-Nov	08:16	3A061	YFT	Arrival	11.7	-	-
05-Nov	08:25	8S210	XZM	Arrival	12.3	-	-
05-Nov	10:07	3A062	YFT	Arrival	12.8	-	-
05-Nov	10:26	3A163	YFT	Departure	13.2	-	-
05-Nov	10:40	8S212	XZM	Arrival	13.1	-	-
05-Nov	10:40	3A081	ZUI	Arrival	12.4	-	-
05-Nov	11:04	8S121	XZM	Departure	12.7	-	-
05-Nov	11:17	3A063	YFT	Arrival	12.6	-	-
05-Nov	12:15	3A168	YFT	Departure	13	-	-
05-Nov	12:22	3A181	ZUI	Departure	11.3	-	-
05-Nov	12:53	8S215	XZM	Arrival	12.4	-	-
05-Nov	12:58	3A064	YFT	Arrival	13	-	-
05-Nov	13:19	8S123	XZM	Departure	12.6	-	-
05-Nov	13:56	3A082	ZUI	Arrival	12.1	-	-
05-Nov	14:25	3A164	YFT	Departure	12.7	-	-
05-Nov	14:28	3A182	ZUI	Departure	12.8	-	-
05-Nov	14:56	3A065	YFT	Arrival	11.5	-	-
05-Nov	16:22	3A167	YFT	Departure	12.8	-	-
05-Nov	16:48	3A083	ZUI	Arrival	10.4	-	-
05-Nov	16:51	8S218	XZM	Arrival	10.6	-	-
05-Nov	16:56	3A067	YFT	Arrival	12.5	-	-
05-Nov	17:00	3A183	ZUI	Departure	12.3	-	-
05-Nov	17:07	8S126	XZM	Departure	12.4	-	-
05-Nov	19:08	3A166	YFT	Departure	13.1	-	-
05-Nov	19:50	3A084	ZUI	Arrival	12.9	-	-
05-Nov	20:12	3A185	ZUI	Departure	10.9	-	-
05-Nov	20:46	8S2113	XZM	Arrival	13.1	-	-
05-Nov	20:57	3A169	YFT	Departure	13.3	-	-
05-Nov	21:58	8S522	XZM	Departure	12.7	-	-
06-Nov	08:18	3A061	YFT	Arrival	11.7	-	-
06-Nov	08:19	8S210	XZM	Arrival	12.4	-	-
06-Nov	10:00	3A062	YFT	Arrival	12.3	-	-
06-Nov	10:16	3A163	YFT	Departure	11.9	-	-
06-Nov	10:37	8S212	XZM	Arrival	12.5	-	-
06-Nov	10:44	3A081	ZUI	Arrival	13	-	-
06-Nov	11:00	8S121	XZM	Departure	12.4	-	-
06-Nov	11:21	3A063	YFT	Arrival	11.2	-	-

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)
06-Nov	12:17	3A181	ZUI	Departure	12.3	-	-
06-Nov	12:19	3A168	YFT	Departure	9.9	-	-
06-Nov	12:54	8S215	XZM	Arrival	11.5	-	-
06-Nov	12:56	3A064	YFT	Arrival	11.7	-	-
06-Nov	13:29	8S123	XZM	Departure	12.2	-	-
06-Nov	13:59	3A082	ZUI	Arrival	13.1	-	-
06-Nov	14:19	3A164	YFT	Departure	11.8	-	-
06-Nov	14:21	3A182	ZUI	Departure	12.1	-	-
06-Nov	15:01	3A065	YFT	Arrival	10.9	-	-
06-Nov	16:18	3A167	YFT	Departure	11.3	-	-
06-Nov	16:42	8S218	XZM	Arrival	10.4	-	-
06-Nov	16:44	3A083	ZUI	Arrival	9.5	-	-
06-Nov	16:55	3A067	YFT	Arrival	11.8	-	-
06-Nov	17:10	8S126	XZM	Departure	12.7	-	-
06-Nov	17:13	3A183	ZUI	Departure	20.3	> 15	< 3min
06-Nov	19:14	3A166	YFT	Departure	12.1	-	-
06-Nov	19:51	3A084	ZUI	Arrival	12.7	-	-
06-Nov	20:11	3A185	ZUI	Departure	13.4	-	-
06-Nov	20:49	8S2113	XZM	Arrival	11.8	-	-
06-Nov	21:01	3A169	YFT	Departure	12.8	-	-
06-Nov	22:02	8S522	XZM	Departure	11.8	-	-
07-Nov	08:08	3A061	YFT	Arrival	12.4	-	-
07-Nov	08:19	8S210	XZM	Arrival	11	-	-
07-Nov	10:05	3A062	YFT	Arrival	12.4	-	-
07-Nov	10:23	3A163	YFT	Departure	12.5	-	-
07-Nov	10:46	3A081	ZUI	Arrival	13.1	-	-
07-Nov	11:16	3A063	YFT	Arrival	12	-	-
07-Nov	11:24	8S212	XZM	Arrival	0.0 **	-	-
07-Nov	11:49	8S121	XZM	Departure	0.0 **	-	-
07-Nov	12:20	3A181	ZUI	Departure	12.2	-	-
07-Nov	12:24	3A168	YFT	Departure	11.3	-	-
07-Nov	12:46	8S215	XZM	Arrival	12.5	-	-
07-Nov	12:55	3A064	YFT	Arrival	12.9	-	-
07-Nov	13:13	8S123	XZM	Departure	11.4	-	-
07-Nov	13:56	3A082	ZUI	Arrival	13	-	-
07-Nov	14:14	3A182	ZUI	Departure	12.5	-	-
07-Nov	14:21	3A164	YFT	Departure	12	-	-
07-Nov	15:00	3A065	YFT	Arrival	11.6	-	-
07-Nov	16:16	3A167	YFT	Departure	12.2	-	-

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)
07-Nov	16:45	8S218	XZM	Arrival	12.6	-	-
07-Nov	16:47	3A083	ZUI	Arrival	11.8	-	-
07-Nov	17:00	3A067	YFT	Arrival	12.8	-	-
07-Nov	17:02	3A183	ZUI	Departure	11.2	-	-
07-Nov	17:03	8S126	XZM	Departure	12.7	-	-
07-Nov	19:03	3A166	YFT	Departure	12.1	-	-
07-Nov	19:51	3A084	ZUI	Arrival	12.5	-	-
07-Nov	20:05	3A185	ZUI	Departure	13.4	-	-
07-Nov	20:57	8S2113	XZM	Arrival	0.0 **	-	-
07-Nov	21:00	3A169	YFT	Departure	12.1	-	-
07-Nov	21:54	8S522	XZM	Departure	0.0 **	-	-
08-Nov	08:12	3A061	YFT	Arrival	11.8	-	-
08-Nov	08:14	8S210	XZM	Arrival	0.0 **	-	-
08-Nov	10:04	3A062	YFT	Arrival	11.3	-	-
08-Nov	10:18	3A163	YFT	Departure	11.4	-	-
08-Nov	10:33	8S212	XZM	Arrival	12.3	-	-
08-Nov	10:47	3A081	ZUI	Arrival	13.1	-	-
08-Nov	11:11	8S121	XZM	Departure	12.5	-	-
08-Nov	11:22	3A063	YFT	Arrival	11.4	-	-
08-Nov	12:14	3A168	YFT	Departure	10.4	-	-
08-Nov	12:15	3A181	ZUI	Departure	12.3	-	-
08-Nov	12:32	8S215	XZM	Arrival	12.7	-	-
08-Nov	13:01	3A064	YFT	Arrival	10.8	-	-
08-Nov	13:22	8S123	XZM	Departure	12.6	-	-
08-Nov	13:52	3A082	ZUI	Arrival	13	-	-
08-Nov	14:15	3A182	ZUI	Departure	13.3	-	-
08-Nov	14:19	3A164	YFT	Departure	11.5	-	-
08-Nov	15:07	3A065	YFT	Arrival	10.9	-	-
08-Nov	16:26	3A167	YFT	Departure	11.4	-	-
08-Nov	16:37	8S218	XZM	Arrival	12.7	-	-
08-Nov	16:44	3A083	ZUI	Arrival	12.8	-	-
08-Nov	16:57	3A067	YFT	Arrival	11.7	-	-
08-Nov	17:11	3A183	ZUI	Departure	13	-	-
08-Nov	17:11	8S126	XZM	Departure	12.8	-	-
08-Nov	19:02	3A166	YFT	Departure	13.2	-	-
08-Nov	19:55	3A084	ZUI	Arrival	12.3	-	-
08-Nov	20:15	3A185	ZUI	Departure	13	-	-
08-Nov	20:49	8S2113	XZM	Arrival	11.8	-	-
08-Nov	21:01	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-Nov	21:58	8S522	XZM	Departure	11.7	-	-
09-Nov	08:18	8S210	XZM	Arrival	12.1	-	-
09-Nov	08:21	3A061	YFT	Arrival	11.9	-	-
09-Nov	09:55	3A062	YFT	Arrival	11.6	-	-
09-Nov	10:19	3A163	YFT	Departure	12.8	-	-
09-Nov	10:42	8S212	XZM	Arrival	11.3	-	-
09-Nov	10:48	3A081	ZUI	Arrival	12.6	-	-
09-Nov	11:03	8S121	XZM	Departure	10.9	-	-
09-Nov	11:10	3A063	YFT	Arrival	12.5	-	-
09-Nov	12:20	3A181	ZUI	Departure	12.8	-	-
09-Nov	12:23	3A168	YFT	Departure	12.9	-	-
09-Nov	12:50	8S215	XZM	Arrival	12	-	-
09-Nov	12:59	3A064	YFT	Arrival	12.3	-	-
09-Nov	13:33	8S123	XZM	Departure	12.5	-	-
09-Nov	13:51	3A082	ZUI	Arrival	13.3	-	-
09-Nov	14:12	3A164	YFT	Departure	12.1	-	-
09-Nov	14:15	3A182	ZUI	Departure	12.8	-	-
09-Nov	14:56	3A065	YFT	Arrival	13.1	<= 5	< 1min
09-Nov	16:21	3A167	YFT	Departure	12.4	-	-
09-Nov	16:41	8S218	XZM	Arrival	12.9	-	-
09-Nov	16:47	3A083	ZUI	Arrival	13.1	-	-
09-Nov	16:56	3A067	YFT	Arrival	12	-	-
09-Nov	17:07	3A183	ZUI	Departure	12.8	-	-
09-Nov	17:08	8S126	XZM	Departure	13.6	-	-
09-Nov	19:03	3A166	YFT	Departure	12.1	-	-
09-Nov	19:43	3A084	ZUI	Arrival	12.2	-	-
09-Nov	20:06	3A185	ZUI	Departure	11.9	-	-
09-Nov	20:51	8S2113	XZM	Arrival	12.1	-	-
09-Nov	20:59	3A169	YFT	Departure	11.6	-	-
09-Nov	21:59	8S522	XZM	Departure	11.8	-	-
10-Nov	08:15	8S210	XZM	Arrival	12.2	-	-
10-Nov	08:19	3A061	YFT	Arrival	10.5	-	-
10-Nov	09:55	3A062	YFT	Arrival	12.1	-	-
10-Nov	10:21	3A163	YFT	Departure	12.1	-	-
10-Nov	10:36	8S212	XZM	Arrival	12.5	-	-
10-Nov	10:48	3A081	ZUI	Arrival	12.8	-	-
10-Nov	11:00	8S121	XZM	Departure	13.4	-	-
10-Nov	11:15	3A063	YFT	Arrival	12.2	-	-
10-Nov	12:18	3A168	YFT	Departure	11.6	-	-

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)
10-Nov	12:27	3A181	ZUI	Departure	12.9	-	-
10-Nov	12:49	8S215	XZM	Arrival	12.1	-	-
10-Nov	12:56	3A064	YFT	Arrival	12	-	-
10-Nov	13:25	8S123	XZM	Departure	12.9	-	-
10-Nov	13:50	3A082	ZUI	Arrival	12.5	-	-
10-Nov	14:21	3A182	ZUI	Departure	12.1	-	-
10-Nov	14:24	3A164	YFT	Departure	12.4	-	-
10-Nov	15:01	3A065	YFT	Arrival	11.5	-	-
10-Nov	16:19	3A167	YFT	Departure	11.7	<= 15	< 1min
10-Nov	16:47	3A083	ZUI	Arrival	13.2	-	-
10-Nov	16:48	8S218	XZM	Arrival	11.8	-	-
10-Nov	16:53	3A067	YFT	Arrival	12.2	-	-
10-Nov	17:02	3A183	ZUI	Departure	12.9	-	-
10-Nov	17:05	8S126	XZM	Departure	12.6	-	-
10-Nov	19:14	3A166	YFT	Departure	13.6	-	-
10-Nov	19:53	3A084	ZUI	Arrival	12.6	-	-
10-Nov	20:15	3A185	ZUI	Departure	13.2	-	-
10-Nov	20:54	8S2113	XZM	Arrival	12.6	-	-
10-Nov	20:59	3A169	YFT	Departure	10.6	-	-
10-Nov	22:04	8S522	XZM	Departure	13.5	-	-
11-Nov	08:15	3A061	YFT	Arrival	11	-	-
11-Nov	08:24	8S210	XZM	Arrival	11.9	-	-
11-Nov	10:02	3A062	YFT	Arrival	11.1	-	-
11-Nov	10:17	3A163	YFT	Departure	12.4	-	-
11-Nov	10:33	8S212	XZM	Arrival	12.1	-	-
11-Nov	10:47	3A081	ZUI	Arrival	12.4	-	-
11-Nov	11:07	8S121	XZM	Departure	12.4	-	-
11-Nov	11:17	3A063	YFT	Arrival	11.9	-	-
11-Nov	12:14	3A168	YFT	Departure	12.2	-	-
11-Nov	12:21	3A181	ZUI	Departure	13.6	-	-
11-Nov	12:51	8S215	XZM	Arrival	12.4	-	-
11-Nov	12:55	3A064	YFT	Arrival	11.5	-	-
11-Nov	13:12	8S123	XZM	Departure	12.4	-	-
11-Nov	13:52	3A082	ZUI	Arrival	13.5	-	-
11-Nov	14:20	3A182	ZUI	Departure	11.6	-	-
11-Nov	14:23	3A164	YFT	Departure	12.3	-	-
11-Nov	14:58	3A065	YFT	Arrival	12.1	-	-
11-Nov	16:28	3A167	YFT	Departure	12.1	-	-
11-Nov	16:59	8S218	XZM	Arrival	12.7	-	-

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)
11-Nov	17:02	3A083	ZUI	Arrival	11.8	-	-
11-Nov	17:04	3A067	YFT	Arrival	12	-	-
11-Nov	17:18	3A183	ZUI	Departure	12.4	-	-
11-Nov	17:24	8S126	XZM	Departure	13.2	-	-
11-Nov	19:11	3A166	YFT	Departure	12.5	-	-
11-Nov	19:40	3A084	ZUI	Arrival	11.7	-	-
11-Nov	20:08	3A185	ZUI	Departure	11.7	-	-
11-Nov	20:49	8S2113	XZM	Arrival	12.3	-	-
11-Nov	21:03	3A169	YFT	Departure	13.8	-	-
11-Nov	21:58	8S522	XZM	Departure	11.3	-	-
12-Nov	08:13	3A061	YFT	Arrival	11.9	-	-
12-Nov	08:17	8S210	XZM	Arrival	11.8	-	-
12-Nov	10:00	3A062	YFT	Arrival	12.3	-	-
12-Nov	10:16	3A163	YFT	Departure	12	-	-
12-Nov	10:32	8S212	XZM	Arrival	12.7	-	-
12-Nov	10:48	3A081	ZUI	Arrival	12.6	-	-
12-Nov	11:05	8S121	XZM	Departure	12.5	-	-
12-Nov	12:15	3A063	YFT	Arrival	13.5	<= 5	< 1min
12-Nov	12:33	3A168	YFT	Departure	12.7	-	-
12-Nov	12:35	3A181	ZUI	Departure	13	-	-
12-Nov	12:52	8S215	XZM	Arrival	11.9	-	-
12-Nov	12:59	3A064	YFT	Arrival	12.1	-	-
12-Nov	13:17	8S123	XZM	Departure	13.4	-	-
12-Nov	13:45	3A082	ZUI	Arrival	12.2	-	-
12-Nov	14:15	3A182	ZUI	Departure	11.7	-	-
12-Nov	14:18	3A164	YFT	Departure	11.8	-	-
12-Nov	14:57	3A065	YFT	Arrival	12.5	-	-
12-Nov	16:16	3A167	YFT	Departure	11.9	-	-
12-Nov	16:47	8S218	XZM	Arrival	11.8	-	-
12-Nov	16:48	3A083	ZUI	Arrival	13.3	-	-
12-Nov	16:57	3A067	YFT	Arrival	12.1	-	-
12-Nov	17:23	3A183	ZUI	Departure	12.9	-	-
12-Nov	17:27	8S126	XZM	Departure	13.1	-	-
12-Nov	19:13	3A166	YFT	Departure	13.1	-	-
12-Nov	20:08	3A084	ZUI	Arrival	12.9	-	-
12-Nov	20:21	3A185	ZUI	Departure	13.7	-	-
12-Nov	20:45	8S2113	XZM	Arrival	12.4	-	-
12-Nov	21:05	3A169	YFT	Departure	12.3	-	-
12-Nov	21:54	8S522	XZM	Departure	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)
13-Nov	08:12	3A061	YFT	Arrival	11.4	-	-
13-Nov	08:19	8S210	XZM	Arrival	12	-	-
13-Nov	09:57	3A062	YFT	Arrival	10.9	-	-
13-Nov	10:22	3A163	YFT	Departure	11.9	-	-
13-Nov	10:35	8S212	XZM	Arrival	11.7	-	-
13-Nov	10:48	3A081	ZUI	Arrival	12.2	-	-
13-Nov	11:03	8S121	XZM	Departure	11.6	-	-
13-Nov	11:18	3A063	YFT	Arrival	11.6	-	-
13-Nov	12:34	3A181	ZUI	Departure	13.4	-	-
13-Nov	12:34	3A168	YFT	Departure	12	-	-
13-Nov	12:39	8S215	XZM	Arrival	12.2	-	-
13-Nov	12:59	3A064	YFT	Arrival	11.2	-	-
13-Nov	13:17	8S123	XZM	Departure	13.7	-	-
13-Nov	13:49	3A082	ZUI	Arrival	13.5	-	-
13-Nov	14:18	3A182	ZUI	Departure	12.5	-	-
13-Nov	14:19	3A164	YFT	Departure	11.8	-	-
13-Nov	15:02	3A065	YFT	Arrival	11.6	-	-
13-Nov	16:27	3A167	YFT	Departure	12.1	-	-
13-Nov	16:51	8S218	XZM	Arrival	12.9	-	-
13-Nov	16:55	3A083	ZUI	Arrival	11.6	-	-
13-Nov	17:01	3A067	YFT	Arrival	11.6	-	-
13-Nov	17:12	3A183	ZUI	Departure	12.1	-	-
13-Nov	17:13	8S126	XZM	Departure	14.4	<= 10	< 2min
13-Nov	19:12	3A166	YFT	Departure	11.6	-	-
13-Nov	19:50	3A084	ZUI	Arrival	13.3	-	-
13-Nov	20:11	3A185	ZUI	Departure	13.5	-	-
13-Nov	20:52	8S2113	XZM	Arrival	11.4	-	-
13-Nov	21:14	3A169	YFT	Departure	13.2	-	-
13-Nov	21:55	8S522	XZM	Departure	12.2	-	-
14-Nov	08:24	3A061	YFT	Arrival	12.2	-	-
14-Nov	08:56	8S210	XZM	Arrival	12.7	-	-
14-Nov	09:57	3A062	YFT	Arrival	11	-	-
14-Nov	10:14	3A163	YFT	Departure	12.3	-	-
14-Nov	10:41	8S212	XZM	Arrival	11.9	-	-
14-Nov	10:54	3A081	ZUI	Arrival	12.4	-	-
14-Nov	11:03	8S121	XZM	Departure	12.4	-	-
14-Nov	11:16	3A063	YFT	Arrival	12.2	-	-
14-Nov	12:21	3A181	ZUI	Departure	12.8	-	-
14-Nov	12:23	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-Nov	12:41	8S215	XZM	Arrival	11.5	-	-
14-Nov	13:04	3A064	YFT	Arrival	11.2	-	-
14-Nov	13:22	8S123	XZM	Departure	12.9	-	-
14-Nov	13:52	3A082	ZUI	Arrival	12.8	-	-
14-Nov	14:31	3A164	YFT	Departure	12.4	-	-
14-Nov	14:38	3A182	ZUI	Departure	12.3	-	-
14-Nov	15:14	3A065	YFT	Arrival	11.4	-	-
14-Nov	16:17	3A167	YFT	Departure	12.8	-	-
14-Nov	16:47	8S218	XZM	Arrival	12.1	-	-
14-Nov	16:49	3A083	ZUI	Arrival	12.7	-	-
14-Nov	16:59	3A067	YFT	Arrival	11.8	-	-
14-Nov	17:07	3A183	ZUI	Departure	13.4	-	-
14-Nov	17:10	8S126	XZM	Departure	12.9	-	-
14-Nov	18:59	3A166	YFT	Departure	12.5	-	-
14-Nov	19:53	3A084	ZUI	Arrival	12.7	-	-
14-Nov	20:10	3A185	ZUI	Departure	13.9	-	-
14-Nov	20:51	8S2113	XZM	Arrival	11.8	-	-
14-Nov	21:05	3A169	YFT	Departure	12.8	-	-
14-Nov	21:58	8S522	XZM	Departure	11.1	-	-
15-Nov	08:15	3A061	YFT	Arrival	13.3	-	-
15-Nov	08:20	8S210	XZM	Arrival	12.8	-	-
15-Nov	09:56	3A062	YFT	Arrival	12.8	-	-
15-Nov	10:23	3A163	YFT	Departure	12.6	-	-
15-Nov	10:42	8S212	XZM	Arrival	12.1	-	-
15-Nov	10:48	3A081	ZUI	Arrival	12.9	-	-
15-Nov	11:07	8S121	XZM	Departure	11.6	-	-
15-Nov	11:20	3A063	YFT	Arrival	11.3	-	-
15-Nov	12:09	3A181	ZUI	Departure	13.1	-	-
15-Nov	12:21	3A168	YFT	Departure	11.6	-	-
15-Nov	12:45	8S215	XZM	Arrival	11.9	-	-
15-Nov	12:59	3A064	YFT	Arrival	12.6	-	-
15-Nov	13:17	8S123	XZM	Departure	11.9	-	-
15-Nov	13:58	3A082	ZUI	Arrival	12.8	-	-
15-Nov	14:19	3A182	ZUI	Departure	13	-	-
15-Nov	14:21	3A164	YFT	Departure	13.1	-	-
15-Nov	15:05	3A065	YFT	Arrival	10.8	-	-
15-Nov	16:33	3A167	YFT	Departure	12.1	-	-
15-Nov	16:51	8S218	XZM	Arrival	10.8	-	-
15-Nov	16:54	3A083	ZUI	Arrival	12.6	-	-

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)
15-Nov	17:06	3A183	ZUI	Departure	13.7	-	-
15-Nov	17:10	3A067	YFT	Arrival	12.4	-	-
15-Nov	17:13	8S126	XZM	Departure	11.9	-	-
15-Nov	19:15	3A166	YFT	Departure	12.6	-	-
15-Nov	19:59	3A084	ZUI	Arrival	13	-	-
15-Nov	20:18	3A185	ZUI	Departure	13.5	-	-
15-Nov	20:51	8S2113	XZM	Arrival	11.6	-	-
15-Nov	21:04	3A169	YFT	Departure	12.3	-	-
15-Nov	21:56	8S522	XZM	Departure	12	-	-
16-Nov	08:14	3A061	YFT	Arrival	13.5	-	-
16-Nov	08:23	8S210	XZM	Arrival	11.7	-	-
16-Nov	10:06	3A062	YFT	Arrival	11.9	-	-
16-Nov	10:25	3A163	YFT	Departure	11.7	-	-
16-Nov	10:39	8S212	XZM	Arrival	11.9	-	-
16-Nov	10:50	3A081	ZUI	Arrival	12.8	-	-
16-Nov	11:21	8S121	XZM	Departure	12.8	-	-
16-Nov	11:25	3A063	YFT	Arrival	11.4	-	-
16-Nov	12:18	3A168	YFT	Departure	12.1	-	-
16-Nov	12:18	3A181	ZUI	Departure	13.2	-	-
16-Nov	12:32	8S215	XZM	Arrival	12	-	-
16-Nov	12:58	3A064	YFT	Arrival	12	-	-
16-Nov	13:14	8S123	XZM	Departure	13.3	-	-
16-Nov	13:55	3A082	ZUI	Arrival	13	-	-
16-Nov	14:20	3A164	YFT	Departure	12	-	-
16-Nov	14:21	3A182	ZUI	Departure	13	-	-
16-Nov	15:10	3A065	YFT	Arrival	11.6	-	-
16-Nov	16:28	3A167	YFT	Departure	12.2	-	-
16-Nov	16:41	8S218	XZM	Arrival	12.1	-	-
16-Nov	16:54	3A083	ZUI	Arrival	12.6	-	-
16-Nov	17:05	3A067	YFT	Arrival	11.9	-	-
16-Nov	17:10	3A183	ZUI	Departure	13.7	-	-
16-Nov	17:17	8S126	XZM	Departure	13.2	-	-
16-Nov	19:09	3A166	YFT	Departure	12.7	-	-
16-Nov	19:53	3A084	ZUI	Arrival	12.8	-	-
16-Nov	20:14	3A185	ZUI	Departure	13.6	-	-
16-Nov	20:52	8S2113	XZM	Arrival	13.4	-	-
16-Nov	21:01	3A169	YFT	Departure	12.6	-	-
16-Nov	21:57	8S522	XZM	Departure	12.1	-	-
17-Nov	08:14	3A061	YFT	Arrival	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)
17-Nov	08:17	8S210	XZM	Arrival	13	-	-
17-Nov	09:55	3A062	YFT	Arrival	11.3	-	-
17-Nov	10:15	3A163	YFT	Departure	10.9	-	-
17-Nov	10:35	8S212	XZM	Arrival	12.3	-	-
17-Nov	10:53	3A081	ZUI	Arrival	12.7	-	-
17-Nov	11:11	8S121	XZM	Departure	11.8	-	-
17-Nov	11:19	3A063	YFT	Arrival	12.8	-	-
17-Nov	12:14	3A181	ZUI	Departure	12.9	-	-
17-Nov	12:17	3A168	YFT	Departure	11.9	-	-
17-Nov	12:40	8S215	XZM	Arrival	12.3	-	-
17-Nov	12:58	3A064	YFT	Arrival	12.1	-	-
17-Nov	13:15	8S123	XZM	Departure	12.6	-	-
17-Nov	13:44	3A082	ZUI	Arrival	12.3	-	-
17-Nov	14:13	3A182	ZUI	Departure	12	-	-
17-Nov	14:16	3A164	YFT	Departure	12.1	-	-
17-Nov	14:59	3A065	YFT	Arrival	12.1	-	-
17-Nov	16:23	3A167	YFT	Departure	13.3	-	-
17-Nov	16:49	8S218	XZM	Arrival	11.8	-	-
17-Nov	16:51	3A083	ZUI	Arrival	12.4	-	-
17-Nov	17:03	3A067	YFT	Arrival	11.9	-	-
17-Nov	17:13	3A183	ZUI	Departure	13.4	-	-
17-Nov	17:14	8S126	XZM	Departure	12.7	-	-
17-Nov	19:16	3A166	YFT	Departure	14.1	-	-
17-Nov	19:55	3A084	ZUI	Arrival	12.7	-	-
17-Nov	20:12	3A185	ZUI	Departure	13.4	-	-
17-Nov	20:48	8S2113	XZM	Arrival	11.7	-	-
17-Nov	20:55	3A169	YFT	Departure	12.4	-	-
17-Nov	22:03	8S522	XZM	Departure	12.3	-	-
18-Nov	08:14	3A061	YFT	Arrival	11.9	-	-
18-Nov	08:17	8S210	XZM	Arrival	12.8	-	-
18-Nov	09:57	3A062	YFT	Arrival	12.2	-	-
18-Nov	10:15	3A163	YFT	Departure	12.5	-	-
18-Nov	10:46	8S212	XZM	Arrival	12.3	-	-
18-Nov	10:53	3A081	ZUI	Arrival	13.1	-	-
18-Nov	11:06	8S121	XZM	Departure	12.4	-	-
18-Nov	11:16	3A063	YFT	Arrival	11.1	-	-
18-Nov	12:26	3A181	ZUI	Departure	12.7	-	-
18-Nov	12:32	3A168	YFT	Departure	12.5	-	-
18-Nov	12:53	8S215	XZM	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)
18-Nov	12:58	3A064	YFT	Arrival	11.9	-	-
18-Nov	13:24	8S123	XZM	Departure	11.8	-	-
18-Nov	13:54	3A082	ZUI	Arrival	13	-	-
18-Nov	14:18	3A164	YFT	Departure	12.5	-	-
18-Nov	14:19	3A182	ZUI	Departure	11.6	-	-
18-Nov	14:54	3A065	YFT	Arrival	11.9	-	-
18-Nov	16:24	3A167	YFT	Departure	11.9	-	-
18-Nov	16:48	8S218	XZM	Arrival	12.1	-	-
18-Nov	16:53	3A083	ZUI	Arrival	12.9	-	-
18-Nov	17:03	3A067	YFT	Arrival	12.2	-	-
18-Nov	17:14	8S126	XZM	Departure	13	-	-
18-Nov	17:18	3A183	ZUI	Departure	13.5	-	-
18-Nov	19:07	3A166	YFT	Departure	12.5	-	-
18-Nov	19:59	3A084	ZUI	Arrival	13.1	-	-
18-Nov	20:17	3A185	ZUI	Departure	13.3	-	-
18-Nov	20:58	8S2113	XZM	Arrival	12.6	-	-
18-Nov	21:09	3A169	YFT	Departure	12.9	<= 5	< 1min
18-Nov	21:59	8S522	XZM	Departure	12.5	-	-
19-Nov	08:16	3A061	YFT	Arrival	12.2	-	-
19-Nov	08:27	8S210	XZM	Arrival	13.4	-	-
19-Nov	09:53	3A062	YFT	Arrival	10.2	-	-
19-Nov	10:10	3A163	YFT	Departure	10.4	-	-
19-Nov	10:39	8S212	XZM	Arrival	12.3	-	-
19-Nov	10:48	3A081	ZUI	Arrival	13	-	-
19-Nov	11:08	8S121	XZM	Departure	12.9	-	-
19-Nov	11:20	3A063	YFT	Arrival	12.2	-	-
19-Nov	12:17	3A168	YFT	Departure	10.9	-	-
19-Nov	12:18	3A181	ZUI	Departure	12.2	-	-
19-Nov	12:55	3A064	YFT	Arrival	12.9	-	-
19-Nov	13:00	8S215	XZM	Arrival	12.4	-	-
19-Nov	13:43	8S123	XZM	Departure	13.1	-	-
19-Nov	13:58	3A082	ZUI	Arrival	12.9	-	-
19-Nov	14:18	3A164	YFT	Departure	13.8	-	-
19-Nov	14:20	3A182	ZUI	Departure	13.8	-	-
19-Nov	14:59	3A065	YFT	Arrival	12.1	-	-
19-Nov	16:33	3A167	YFT	Departure	12.6	-	-
19-Nov	17:06	3A083	ZUI	Arrival	12.3	-	-
19-Nov	17:07	8S218	XZM	Arrival	13.4	-	-
19-Nov	17:10	3A067	YFT	Arrival	13.1	-	-

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)
19-Nov	17:20	3A183	ZUI	Departure	13.4	-	-
19-Nov	17:27	8S126	XZM	Departure	12.6	-	-
19-Nov	19:22	3A166	YFT	Departure	12.8	-	-
19-Nov	19:50	3A084	ZUI	Arrival	12.1	-	-
19-Nov	20:20	3A185	ZUI	Departure	12.5	-	-
19-Nov	21:12	8S2113	XZM	Arrival	12.8	-	-
19-Nov	21:17	3A169	YFT	Departure	12.4	-	-
19-Nov	22:10	8S522	XZM	Departure	12.5	-	-
20-Nov	08:20	3A061	YFT	Arrival	10.5	-	-
20-Nov	08:23	8S210	XZM	Arrival	12.8	-	-
20-Nov	10:04	3A062	YFT	Arrival	12.3	-	-
20-Nov	10:25	3A163	YFT	Departure	12.3	-	-
20-Nov	10:35	8S212	XZM	Arrival	12.4	-	-
20-Nov	10:49	3A081	ZUI	Arrival	12.8	-	-
20-Nov	11:00	8S121	XZM	Departure	12.5	-	-
20-Nov	11:15	3A063	YFT	Arrival	12.1	-	-
20-Nov	12:14	3A181	ZUI	Departure	12.6	-	-
20-Nov	12:18	3A168	YFT	Departure	11.8	-	-
20-Nov	12:53	8S215	XZM	Arrival	12.2	-	-
20-Nov	13:01	3A064	YFT	Arrival	12.5	-	-
20-Nov	13:16	8S123	XZM	Departure	13	-	-
20-Nov	13:55	3A082	ZUI	Arrival	12	-	-
20-Nov	14:17	3A164	YFT	Departure	11.6	-	-
20-Nov	14:19	3A182	ZUI	Departure	11.7	-	-
20-Nov	15:06	3A065	YFT	Arrival	11.8	-	-
20-Nov	16:23	3A167	YFT	Departure	12.6	-	-
20-Nov	16:48	8S218	XZM	Arrival	10.8	-	-
20-Nov	16:49	3A083	ZUI	Arrival	12.4	-	-
20-Nov	16:58	3A067	YFT	Arrival	11.4	-	-
20-Nov	17:03	3A183	ZUI	Departure	13.5	-	-
20-Nov	17:06	8S126	XZM	Departure	13.1	-	-
20-Nov	18:57	3A166	YFT	Departure	12.7	-	-
20-Nov	19:52	3A084	ZUI	Arrival	12.8	-	-
20-Nov	20:16	3A185	ZUI	Departure	13.4	-	-
20-Nov	20:51	8S2113	XZM	Arrival	12.8	-	-
20-Nov	21:09	3A169	YFT	Departure	12.4	-	-
20-Nov	22:04	8S522	XZM	Departure	12.6	-	-
21-Nov	08:11	8S210	XZM	Arrival	13.2	-	-
21-Nov	08:17	3A061	YFT	Arrival	11.6	-	-

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)
21-Nov	10:07	3A062	YFT	Arrival	11.6	-	-
21-Nov	10:23	3A163	YFT	Departure	11.5	-	-
21-Nov	10:36	3A081	ZUI	Arrival	12	-	-
21-Nov	10:38	8S212	XZM	Arrival	12.3	-	-
21-Nov	11:01	8S121	XZM	Departure	11.9	-	-
21-Nov	11:12	3A063	YFT	Arrival	13.3	-	-
21-Nov	12:08	3A181	ZUI	Departure	11	-	-
21-Nov	12:13	3A168	YFT	Departure	12.9	-	-
21-Nov	12:42	8S215	XZM	Arrival	11.6	-	-
21-Nov	13:04	3A064	YFT	Arrival	11.4	-	-
21-Nov	13:27	8S123	XZM	Departure	11.6	-	-
21-Nov	14:09	3A082	ZUI	Arrival	13.2	-	-
21-Nov	14:28	3A182	ZUI	Departure	12.5	-	-
21-Nov	14:32	3A164	YFT	Departure	11.1	-	-
21-Nov	14:48	3A065	YFT	Arrival	12.7	-	-
21-Nov	16:22	3A167	YFT	Departure	13.3	-	-
21-Nov	16:39	8S218	XZM	Arrival	11.4	-	-
21-Nov	16:58	3A083	ZUI	Arrival	11.5	-	-
21-Nov	17:03	3A067	YFT	Arrival	11.5	-	-
21-Nov	17:11	3A183	ZUI	Departure	12.3	-	-
21-Nov	17:14	8S126	XZM	Departure	11.7	-	-
21-Nov	19:18	3A166	YFT	Departure	13.7	-	-
21-Nov	19:36	3A084	ZUI	Arrival	13.1	-	-
21-Nov	20:12	3A185	ZUI	Departure	12.7	-	-
21-Nov	20:51	8S2113	XZM	Arrival	12.5	-	-
21-Nov	20:57	3A169	YFT	Departure	12.7	-	-
21-Nov	21:55	8S522	XZM	Departure	12.1	-	-
22-Nov	08:18	8S210	XZM	Arrival	12.7	-	-
22-Nov	08:20	3A061	YFT	Arrival	12.5	-	-
22-Nov	09:56	3A062	YFT	Arrival	12.4	-	-
22-Nov	10:19	3A163	YFT	Departure	11.8	-	-
22-Nov	10:35	8S212	XZM	Arrival	12.4	-	-
22-Nov	10:51	3A081	ZUI	Arrival	12.9	-	-
22-Nov	11:00	8S121	XZM	Departure	12.7	-	-
22-Nov	11:21	3A063	YFT	Arrival	11.2	-	-
22-Nov	12:12	3A181	ZUI	Departure	12.8	-	-
22-Nov	12:15	3A168	YFT	Departure	11.6	-	-
22-Nov	12:48	8S215	XZM	Arrival	12.4	-	-
22-Nov	12:55	3A064	YFT	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)
22-Nov	13:14	8S123	XZM	Departure	11.8	-	-
22-Nov	13:47	3A082	ZUI	Arrival	12.2	-	-
22-Nov	14:11	3A182	ZUI	Departure	13.1	-	-
22-Nov	14:16	3A164	YFT	Departure	12.7	-	-
22-Nov	14:59	3A065	YFT	Arrival	11.2	-	-
22-Nov	16:13	3A167	YFT	Departure	11.8	-	-
22-Nov	16:36	8S218	XZM	Arrival	12.7	-	-
22-Nov	16:44	3A083	ZUI	Arrival	12.7	-	-
22-Nov	16:58	3A067	YFT	Arrival	12.3	-	-
22-Nov	17:05	8S126	XZM	Departure	13.9	-	-
22-Nov	17:06	3A183	ZUI	Departure	13.7	-	-
22-Nov	19:01	3A166	YFT	Departure	12.9	-	-
22-Nov	19:54	3A084	ZUI	Arrival	12.7	-	-
22-Nov	20:07	3A185	ZUI	Departure	13.7	-	-
22-Nov	20:50	8S2113	XZM	Arrival	13	-	-
22-Nov	21:08	3A169	YFT	Departure	11.9	-	-
22-Nov	21:53	8S522	XZM	Departure	13.1	-	-
23-Nov	08:14	3A061	YFT	Arrival	11	-	-
23-Nov	08:20	8S210	XZM	Arrival	11.6	-	-
23-Nov	10:13	3A062	YFT	Arrival	11.7	-	-
23-Nov	10:31	3A163	YFT	Departure	10.9	-	-
23-Nov	10:39	8S212	XZM	Arrival	13	-	-
23-Nov	10:49	3A081	ZUI	Arrival	12.8	-	-
23-Nov	11:01	8S121	XZM	Departure	13.4	-	-
23-Nov	11:18	3A063	YFT	Arrival	12	-	-
23-Nov	12:18	3A168	YFT	Departure	11.4	-	-
23-Nov	12:21	3A181	ZUI	Departure	12.6	-	-
23-Nov	12:42	8S215	XZM	Arrival	13.6	-	-
23-Nov	13:01	3A064	YFT	Arrival	11.4	-	-
23-Nov	13:25	8S123	XZM	Departure	13.5	-	-
23-Nov	13:50	3A082	ZUI	Arrival	12.7	-	-
23-Nov	14:13	3A182	ZUI	Departure	12.2	-	-
23-Nov	14:17	3A164	YFT	Departure	11.9	-	-
23-Nov	15:12	3A065	YFT	Arrival	12	-	-
23-Nov	16:15	3A167	YFT	Departure	11.2	-	-
23-Nov	16:38	8S218	XZM	Arrival	12.5	-	-
23-Nov	16:45	3A083	ZUI	Arrival	13.3	-	-
23-Nov	17:01	3A183	ZUI	Departure	13.8	-	-
23-Nov	17:02	3A067	YFT	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)
23-Nov	17:03	8S126	XZM	Departure	13.4	-	-
23-Nov	19:04	3A166	YFT	Departure	13.1	-	-
23-Nov	19:54	3A084	ZUI	Arrival	12.4	-	-
23-Nov	20:07	3A185	ZUI	Departure	13.7	-	-
23-Nov	20:55	3A169	YFT	Departure	11.4	-	-
23-Nov	21:14	8S2113	XZM	Arrival	12	-	-
23-Nov	21:59	8S522	XZM	Departure	11.8	-	-
24-Nov	08:16	3A061	YFT	Arrival	11.8	-	-
24-Nov	08:17	8S210	XZM	Arrival	11.5	-	-
24-Nov	09:55	3A062	YFT	Arrival	12.5	-	-
24-Nov	10:14	3A163	YFT	Departure	12.2	-	-
24-Nov	10:33	8S212	XZM	Arrival	12.3	-	-
24-Nov	10:55	3A081	ZUI	Arrival	12.7	-	-
24-Nov	11:05	8S121	XZM	Departure	10.7	-	-
24-Nov	11:12	3A063	YFT	Arrival	12.4	-	-
24-Nov	12:16	3A181	ZUI	Departure	13.1	-	-
24-Nov	12:18	3A168	YFT	Departure	13	-	-
24-Nov	12:52	8S215	XZM	Arrival	11.7	-	-
24-Nov	12:58	3A064	YFT	Arrival	13	-	-
24-Nov	13:19	8S123	XZM	Departure	13.5	-	-
24-Nov	13:44	3A082	ZUI	Arrival	12.6	-	-
24-Nov	14:20	3A164	YFT	Departure	12.7	-	-
24-Nov	14:23	3A182	ZUI	Departure	13	-	-
24-Nov	14:58	3A065	YFT	Arrival	13	<= 5	< 1min
24-Nov	16:18	3A167	YFT	Departure	12.7	-	-
24-Nov	16:38	8S218	XZM	Arrival	12.6	-	-
24-Nov	16:41	3A083	ZUI	Arrival	13	-	-
24-Nov	16:53	3A067	YFT	Arrival	12.5	-	-
24-Nov	16:58	3A183	ZUI	Departure	13.1	-	-
24-Nov	16:59	8S126	XZM	Departure	14	-	-
24-Nov	19:09	3A166	YFT	Departure	12.3	-	-
24-Nov	19:54	3A084	ZUI	Arrival	12	-	-
24-Nov	20:06	3A185	ZUI	Departure	13.7	-	-
24-Nov	20:47	8S2113	XZM	Arrival	11.8	-	-
24-Nov	20:56	3A169	YFT	Departure	10.1	-	-
24-Nov	21:55	8S522	XZM	Departure	12.5	-	-
25-Nov	08:19	3A061	YFT	Arrival	10.3	-	-
25-Nov	08:22	8S210	XZM	Arrival	11.1	-	-
25-Nov	10:03	3A062	YFT	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)
25-Nov	10:20	3A163	YFT	Departure	12.2	-	-
25-Nov	10:42	8S212	XZM	Arrival	11.2	-	-
25-Nov	10:47	3A081	ZUI	Arrival	12.4	-	-
25-Nov	11:14	8S121	XZM	Departure	11.3	-	-
25-Nov	11:20	3A063	YFT	Arrival	11.7	-	-
25-Nov	12:14	3A181	ZUI	Departure	13.4	-	-
25-Nov	12:15	3A168	YFT	Departure	11.5	-	-
25-Nov	12:49	8S215	XZM	Arrival	11.4	-	-
25-Nov	12:54	3A064	YFT	Arrival	12.5	-	-
25-Nov	13:19	8S123	XZM	Departure	12.3	-	-
25-Nov	13:44	3A082	ZUI	Arrival	13	-	-
25-Nov	14:13	3A182	ZUI	Departure	11.5	-	-
25-Nov	14:14	3A164	YFT	Departure	13.2	-	-
25-Nov	15:00	3A065	YFT	Arrival	12.3	-	-
25-Nov	16:28	3A167	YFT	Departure	12.1	-	-
25-Nov	16:48	8S218	XZM	Arrival	10.7	-	-
25-Nov	16:52	3A083	ZUI	Arrival	13.2	-	-
25-Nov	16:58	3A067	YFT	Arrival	12.3	-	-
25-Nov	17:13	3A183	ZUI	Departure	13	-	-
25-Nov	17:15	8S126	XZM	Departure	13.2	-	-
25-Nov	19:10	3A166	YFT	Departure	13	-	-
25-Nov	20:02	3A084	ZUI	Arrival	12.4	-	-
25-Nov	20:16	3A185	ZUI	Departure	13.5	-	-
25-Nov	20:52	8S2113	XZM	Arrival	11.2	-	-
25-Nov	21:01	3A169	YFT	Departure	12	-	-
25-Nov	22:01	8S522	XZM	Departure	12	-	-
26-Nov	08:12	3A061	YFT	Arrival	11.9	-	-
26-Nov	08:13	8S210	XZM	Arrival	12.4	-	-
26-Nov	10:03	3A062	YFT	Arrival	11.1	-	-
26-Nov	10:22	3A163	YFT	Departure	12.4	-	-
26-Nov	10:35	8S212	XZM	Arrival	12.4	-	-
26-Nov	10:47	3A081	ZUI	Arrival	12.9	-	-
26-Nov	11:10	8S121	XZM	Departure	12.2	-	-
26-Nov	11:16	3A063	YFT	Arrival	11.5	-	-
26-Nov	12:24	3A168	YFT	Departure	12.5	-	-
26-Nov	12:26	3A181	ZUI	Departure	13.4	-	-
26-Nov	12:46	8S215	XZM	Arrival	13.6	-	-
26-Nov	12:53	3A064	YFT	Arrival	12.5	-	-
26-Nov	13:23	8S123	XZM	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)
26-Nov	13:39	3A082	ZUI	Arrival	13.1	-	-
26-Nov	14:20	3A182	ZUI	Departure	12.4	-	-
26-Nov	14:22	3A164	YFT	Departure	11.8	-	-
26-Nov	14:55	3A065	YFT	Arrival	12.1	-	-
26-Nov	16:21	3A167	YFT	Departure	11.9	-	-
26-Nov	16:40	8S218	XZM	Arrival	11.8	-	-
26-Nov	16:45	3A083	ZUI	Arrival	13.2	-	-
26-Nov	17:03	3A067	YFT	Arrival	12.4	-	-
26-Nov	17:11	8S126	XZM	Departure	13.1	-	-
26-Nov	17:16	3A183	ZUI	Departure	12.6	-	-
26-Nov	19:11	3A166	YFT	Departure	12.7	-	-
26-Nov	20:03	3A084	ZUI	Arrival	12.6	-	-
26-Nov	20:20	3A185	ZUI	Departure	13.4	-	-
26-Nov	20:56	8S2113	XZM	Arrival	11.3	-	-
26-Nov	21:03	3A169	YFT	Departure	13.3	-	-
26-Nov	21:56	8S522	XZM	Departure	11.5	-	-
27-Nov	08:15	3A061	YFT	Arrival	11.2	-	-
27-Nov	08:17	8S210	XZM	Arrival	11.2	-	-
27-Nov	09:56	3A062	YFT	Arrival	11.9	-	-
27-Nov	10:17	3A163	YFT	Departure	12.7	-	-
27-Nov	10:33	3A081	ZUI	Arrival	12.5	-	-
27-Nov	10:42	8S212	XZM	Arrival	11.8	-	-
27-Nov	11:13	8S121	XZM	Departure	11.3	-	-
27-Nov	11:18	3A063	YFT	Arrival	12.7	-	-
27-Nov	12:13	3A181	ZUI	Departure	11.9	-	-
27-Nov	12:15	3A168	YFT	Departure	13.2	-	-
27-Nov	12:46	8S215	XZM	Arrival	12.2	-	-
27-Nov	12:57	3A064	YFT	Arrival	11.8	-	-
27-Nov	13:16	8S123	XZM	Departure	13.2	-	-
27-Nov	13:56	3A082	ZUI	Arrival	13.4	-	-
27-Nov	14:13	3A164	YFT	Departure	13.2	-	-
27-Nov	14:17	3A182	ZUI	Departure	13	-	-
27-Nov	14:48	3A065	YFT	Arrival	13	-	-
27-Nov	16:16	3A167	YFT	Departure	13.6	-	-
27-Nov	16:36	8S218	XZM	Arrival	12	-	-
27-Nov	16:40	3A083	ZUI	Arrival	13.1	-	-
27-Nov	17:02	3A067	YFT	Arrival	12.8	-	-
27-Nov	17:11	8S126	XZM	Departure	12.5	-	-
27-Nov	17:14	3A183	ZUI	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)
27-Nov	19:16	3A166	YFT	Departure	11.4	-	-
27-Nov	19:54	3A084	ZUI	Arrival	13	-	-
27-Nov	20:14	3A185	ZUI	Departure	13.3	-	-
27-Nov	20:49	8S2113	XZM	Arrival	12.5	-	-
27-Nov	21:07	3A169	YFT	Departure	12.9	-	-
27-Nov	22:04	8S522	XZM	Departure	13.5	-	-
28-Nov	08:15	3A061	YFT	Arrival	11.4	-	-
28-Nov	08:17	8S210	XZM	Arrival	11.6	-	-
28-Nov	10:03	3A062	YFT	Arrival	12.3	-	-
28-Nov	10:21	3A163	YFT	Departure	13.5	-	-
28-Nov	10:35	8S212	XZM	Arrival	12.1	-	-
28-Nov	10:53	3A081	ZUI	Arrival	12.8	-	-
28-Nov	11:05	8S121	XZM	Departure	12.7	-	-
28-Nov	11:17	3A063	YFT	Arrival	11.4	-	-
28-Nov	12:18	3A168	YFT	Departure	12	-	-
28-Nov	12:23	3A181	ZUI	Departure	13.4	-	-
28-Nov	12:39	8S215	XZM	Arrival	12.6	-	-
28-Nov	13:01	3A064	YFT	Arrival	13	-	-
28-Nov	13:27	8S123	XZM	Departure	13	-	-
28-Nov	13:40	3A082	ZUI	Arrival	12.1	-	-
28-Nov	14:12	3A182	ZUI	Departure	13.5	-	-
28-Nov	14:12	3A164	YFT	Departure	13.5	-	-
28-Nov	14:55	3A065	YFT	Arrival	12	-	-
28-Nov	16:12	8S218	XZM	Arrival	13.1	-	-
28-Nov	16:19	3A167	YFT	Departure	12.4	-	-
28-Nov	16:57	3A083	ZUI	Arrival	12.8	-	-
28-Nov	17:05	3A067	YFT	Arrival	13.2	-	-
28-Nov	17:08	3A183	ZUI	Departure	13	-	-
28-Nov	17:09	8S126	XZM	Departure	12.9	-	-
28-Nov	19:11	3A166	YFT	Departure	12.3	-	-
28-Nov	19:52	3A084	ZUI	Arrival	12.7	-	-
28-Nov	20:09	3A185	ZUI	Departure	13.1	-	-
28-Nov	20:58	8S2113	XZM	Arrival	12.9	-	-
28-Nov	20:59	3A169	YFT	Departure	12.7	-	-
28-Nov	21:54	8S522	XZM	Departure	12.7	-	-
29-Nov	08:20	8S210	XZM	Arrival	12.1	-	-
29-Nov	08:22	3A061	YFT	Arrival	11.5	-	-
29-Nov	09:53	3A062	YFT	Arrival	11.7	-	-
29-Nov	10:26	3A163	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)
29-Nov	10:49	3A081	ZUI	Arrival	12.8	-	-
29-Nov	10:51	8S212	XZM	Arrival	11.9	-	-
29-Nov	11:17	3A063	YFT	Arrival	11.6	-	-
29-Nov	11:22	8S121	XZM	Departure	12.4	-	-
29-Nov	12:21	3A181	ZUI	Departure	13.2	-	-
29-Nov	12:21	3A168	YFT	Departure	12.9	-	-
29-Nov	12:42	8S215	XZM	Arrival	13.2	-	-
29-Nov	12:59	3A064	YFT	Arrival	12.2	-	-
29-Nov	13:25	8S123	XZM	Departure	12.3	-	-
29-Nov	13:47	3A082	ZUI	Arrival	12	-	-
29-Nov	14:19	3A182	ZUI	Departure	12.4	-	-
29-Nov	14:21	3A164	YFT	Departure	12.7	-	-
29-Nov	14:57	3A065	YFT	Arrival	12.2	-	-
29-Nov	16:12	3A167	YFT	Departure	13.3	-	-
29-Nov	16:38	8S218	XZM	Arrival	11.4	-	-
29-Nov	16:50	3A083	ZUI	Arrival	9.4	-	-
29-Nov	16:53	3A067	YFT	Arrival	12.5	-	-
29-Nov	17:04	3A183	ZUI	Departure	13.1	-	-
29-Nov	17:10	8S126	XZM	Departure	13.7	-	-
29-Nov	19:10	3A166	YFT	Departure	13	-	-
29-Nov	19:55	3A084	ZUI	Arrival	12.9	-	-
29-Nov	20:14	3A185	ZUI	Departure	12.9	-	-
29-Nov	20:49	8S2113	XZM	Arrival	12.4	-	-
29-Nov	21:06	3A169	YFT	Departure	11.7	-	-
29-Nov	21:54	8S522	XZM	Departure	12.9	-	-
30-Nov	08:19	8S210	XZM	Arrival	13.1	-	-
30-Nov	08:21	3A061	YFT	Arrival	12.5	-	-
30-Nov	10:04	3A062	YFT	Arrival	12.5	-	-
30-Nov	10:27	3A163	YFT	Departure	12.1	-	-
30-Nov	10:40	8S212	XZM	Arrival	11.8	-	-
30-Nov	10:49	3A081	ZUI	Arrival	12.7	-	-
30-Nov	11:07	8S121	XZM	Departure	12.2	-	-
30-Nov	11:15	3A063	YFT	Arrival	11.8	-	-
30-Nov	12:18	3A168	YFT	Departure	12.1	-	-
30-Nov	12:22	3A181	ZUI	Departure	13.4	-	-
30-Nov	12:50	8S215	XZM	Arrival	10.8	-	-
30-Nov	12:56	3A064	YFT	Arrival	11.7	-	-
30-Nov	13:29	8S123	XZM	Departure	13.4	-	-
30-Nov	13:45	3A082	ZUI	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)
30-Nov	14:24	3A182	ZUI	Departure	12.9	-	-
30-Nov	14:27	3A164	YFT	Departure	13.5	-	-
30-Nov	14:55	3A065	YFT	Arrival	12	-	-
30-Nov	16:19	3A167	YFT	Departure	12.1	-	-
30-Nov	16:44	8S218	XZM	Arrival	9.7	-	-
30-Nov	16:48	3A083	ZUI	Arrival	9.1	-	-
30-Nov	17:02	3A067	YFT	Arrival	12.4	-	-
30-Nov	17:08	3A183	ZUI	Departure	13.5	-	-
30-Nov	17:22	8S126	XZM	Departure	13.2	-	-
30-Nov	19:12	3A166	YFT	Departure	12.3	-	-
30-Nov	19:52	3A084	ZUI	Arrival	13.3	-	-
30-Nov	20:12	3A185	ZUI	Departure	12.9	-	-
30-Nov	20:53	8S2113	XZM	Arrival	11.9	-	-
30-Nov	21:00	3A169	YFT	Departure	13	-	-
30-Nov	21:55	8S522	XZM	Departure	12.8	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in November 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 8 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.

5 HSFs with no transmission of AIS data was received in November 2018.