MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.46 (For October 2019)

November 2019

Airport Authority Hong Kong

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This Monthly EM&A Report No. 46 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 November 2019

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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 November 2019

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 46 (October 2019)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 46 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 November 2019.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CNP	Construction Noise Permit
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EAR	Ecological Acoustic Recorder
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
FCZ	Fish Culture Zone
HDD	Horizontal Directional Drilling
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
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 46th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 October 2019.

Key Activities in the Reporting Period

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

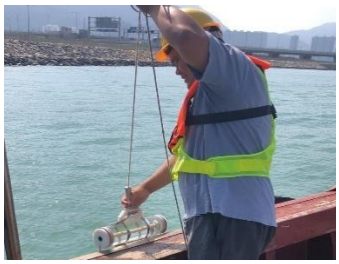
EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	14
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	3

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

Snapshots of EM&A Activities in the Reporting Period

		
Chemical Spill Drill Conducted by Contractor	Regular Water Quality Monitoring Conducted by ET	Dust Suppression Measure Conducted by Contractor

Results of Impact Monitoring

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

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

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

- Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction; and
- Marine filling.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation
- Footing and utilities work; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Lateral supports and excavation works;
- Drawpit and duct laying works;
- Manhole and pipe construction works; and
- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

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

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

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Modification works at APM depot.

Airport Support Infrastructure & Logistic Works:

Contract 3721 Construction Support Infrastructure Works

- Excavation for utilities works; and
- Construction of utilities

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works
- Demolition works; and
- Site clearance.

Summary Table

The following table summarises the key findings of the EM&A programme during the reporting period:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received		√	No construction activities-related complaint was received	Nil
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

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

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 46th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 31 October 2019.

1.3 Project Organisation

The Project's organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, 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 9141

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 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	William Chan	5408 3045

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)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Nelson Tam	9721 3942

Party	Position	Name	Telephone
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Wan Cheung Lee	6100 6075
	Environmental Officer	Wilmer Ng	3919 9421
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Pan Fong	9436 9435

Third Runway Concourse and Integrated Airport Centres Works:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Contracts Manager	Vincent Kwan	9833 1313
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	David Ng	9010 7871
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Stephen Tsang	5508 6361

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 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Gary Hong	6015 0795
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included deep cement mixing (DCM) works, marine filling, and seawall construction. Land-side works involved mainly airfield works, 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 key construction activities are presented in **Figure 1.1**.

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going

Parameters	Status
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	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, and CWD were carried out in the reporting period.

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, environmental trainings and regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Five skipper training sessions provided by ET: 9, 15, 17, 18 & 23 October 2019

- Nine environmental management meetings for EM&A review with works contracts: 4, 16, 18, 23, 29, 30 and 31 October 2019

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	24 Oct 2019	**Appendix E**
	SIBATA LD-3B-1 (Serial No. 597337)	19 Sep 2019	Monthly EM&A Report No. 45, Appendix D

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.

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

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in **Appendix E**, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	11 - 48	306	500
AR2	17 - 85	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. No major sources of dust was observed at the monitoring stations during the monitoring sessions. 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 four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2(1)	Tung Chung West Development	To be determined
NM3A(2)	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Note:

(1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.

(2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq(30mins)}$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A)(1)

Note:

(1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	NTi XL2 (Serial No. A2A-14829-E0)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

a. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
b. The meter and calibrator were sent to the supplier or laboratory accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS) to check and calibrate at yearly intervals.

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring listed in **Table 3.3** are valid in the reporting period.

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	71 - 73	75
NM4(1)	63 - 66	70(2)
NM5(1)	57 - 59	75
NM6(1)	62 - 68	75

Notes:

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

(2) Reduced to 65dB(A) during school examination periods at NM4. School examination took place from 23 to 25 Oct 2019 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 noise near NM1A, school activities at NM4 and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

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

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A(1)	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

Monitoring Station	Description	Coordinates		Parameters
SR5A	San Tau Beach SSSI	810696	816593	
SR6A(5)	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8(6)	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.

(2) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

(3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

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

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

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

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring and regular DCM monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring and regular DCM monitoring are presented in **Table 4.3**.

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

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5mg/L		Surface and Middle 4.1mg/L 5mg/L for Fish Culture Zone (SR7) only	
		Bottom 3.4mg/L		Bottom 2.7mg/L	
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/L	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/L	3.2		3.6	
Action and Limit Levels SR1A					
SS (mg/l)		33		42	
Action and Limit Levels SR8					
SS (mg/l)		52		60	

Notes:

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

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

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

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

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

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

(1) As per findings of Baseline Water Quality Monitoring Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	28 Oct 2019	**Appendix E**
	YSI 6920V2 (Serial No. 00019CB2)	28 Oct 2019	
	YSI 6920V2 (Serial No. 18A104824)	2 Aug 2019	Monthly EM&A Report No. 44, Appendix D
	YSI ProDSS (Serial No. 17H105557)	27 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	YSI ProDSS (Serial No. 16H104233)	27 Sep 2019	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N64701)	9 Sep 2019	Monthly EM&A Report No. 45, Appendix D

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4ºC without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument was checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of SS (in mg/L). Accuracy check of the digital titrator was performed at least once per monitoring day.

Calibration certificates of the monitoring equipment used in the reporting period 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	2mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2µg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2µg/L

4.4 Summary of Monitoring Results

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

The water quality monitoring results for DO, turbidity, total alkalinity, nickel, and chromium obtained during the reporting period were within their corresponding Action and Limit Level. The detailed monitoring results are presented in **Appendix D**.

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR2	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/10/2019																				
03/10/2019																				
05/10/2019																				
08/10/2019																				
10/10/2019																				
12/10/2019																				
15/10/2019																				
17/10/2019																				
19/10/2019																				
22/10/2019																				
24/10/2019																				
26/10/2019																				
29/10/2019																				
31/10/2019																				
No. of result triggereing Action or Limit Level	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR1A	SR3	SR4A	SR5A	SR6A	SR7	SR8
01/10/2019																			
03/10/2019																			
05/10/2019																			
08/10/2019																			
10/10/2019																			
12/10/2019																			
15/10/2019																			
17/10/2019																			
19/10/2019																			
22/10/2019																			
24/10/2019																			
26/10/2019																			
29/10/2019								D	D					D					
31/10/2019																			
No. of result triggereing Action or Limit Level	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0

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

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

Action and Limit Levels were triggered on 15 and 29 October 2019. Some cases occurred at monitoring station upstream of the Project during respective 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 and site observations on the concerned monitoring days were collected. Findings were summarised in **Table 4.9**.

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

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
29/10/2019	Marine filling	Around 1km	Relevant section of seawalls partially completed	No	No	No

The investigation confirmed that marine filling works which are closest to the monitoring station (around 1km) were operating normally. Relevant section of seawalls was also partially completed with rock core to high tide mark and filter layer on the inner side, which could contain the SS generated from marine filling activities within the reclamation area. The cases seemed to be an one-off event without an observable temporal trend, where no SS monitoring result triggered any Action or Limit Levels in the following monitoring days. Also, the SS monitoring result at SR3 was found to be within its baseline range during baseline monitoring. With no silt plume observed during the marine construction works and mitigation measures properly implemented, the case was considered not due to Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

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

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

Table 5.2: Construction Waste Statistics

	C&D[(1)] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
September 2019[(2)(3)]	*4,369	*499	*11,672	3,963	75	3,600	748
October 2019[(2)(4)]	1,948	10,986	8,330	3,600	0	3,000	796

Notes:

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

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

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

(4) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

6 Chinese White Dolphin Monitoring

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

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual. Supplemental theodolite tracking survey of one additional day has also been conducted at LKC, i.e. in total twice per month at the LKC 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 summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

	NEL, NWL, AW, WL and SWL as a Whole
Action Level[3]	Running quarterly[1] STG < 1.86 & ANI < 9.35
Limit Level[3]	Two consecutive running quarterly[2] (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

(1) Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months.

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.

(3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This also provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

The planned vessel survey transect lines 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
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462

Waypoint	Easting	Northing	Waypoint	Easting	Northing
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL 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 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each

series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens), then followed until they were lost from view. At that point, the boat returned (off effort) to the survey line at the closest point after obtaining photo records of the dolphin group and began to survey on effort again.

Focal follows of dolphins would be used for providing supplementary information only where practicable (i.e. when individual dolphins or small stable groups of dolphins with at least one member that could be readily identifiable with unaided eyes during observations and weather conditions are favourable). These would involve the boat following (at an appropriate distance to minimise disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

CWDs can be identified by their unique features like presence of scratches, nick marks, cuts, wounds, deformities of their dorsal fin and distinguished colouration and spotting patterns.

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to 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 (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking

of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

Theodolite tracking included focal follows of CWD groups and vessels. Priority was given to tracking individual or groups of CWD. The survey team also attempted to track all vessels moving within 1 km of the focal CWD.

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 2, 3, 4, 10, 11, 16, 17 and 22 October 2019, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

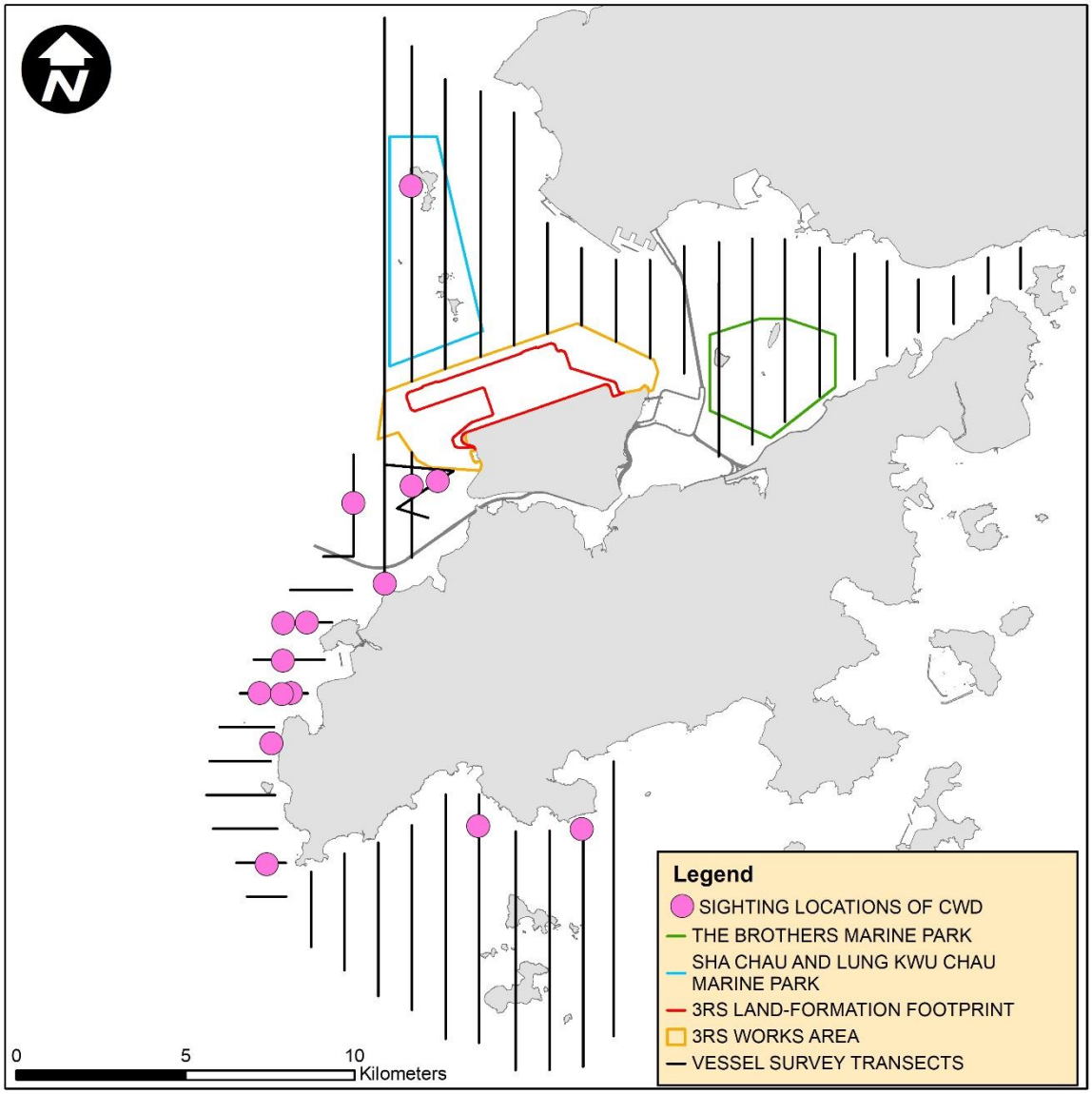
A total of around 449.99km of survey effort was collected from these surveys and all the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In October 2019, 15 sightings with 54 dolphins were sighted. Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in October 2019 is illustrated in **Figure 6.3**. In NWL including the AW transect, the CWD sightings were distributed at the western side of Lung Kwu Chau, western waters of the Hong Kong International Airport outside the 3RS works area and the southwestern tip of the survey area. In WL, CWD sightings were recorded from northernmost transect all the way to Fan Lau with the majority of the sightings distributed between Tai O and Peaked Hill. In SWL, CWD sightings were located at the coastal waters around Shek Pik and Lo Kei Wan. No sightings of CWD were recorded in NEL.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 15 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from October 2019. They included the number of dolphin sightings per 100km survey effort (STG) and total number of dolphins per 100km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{Total\ No.of\ \ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{Total\ No.of\ Dolphins\ from\ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

(Notes: Only data collected under Beaufort 3 or below condition were used)

In October 2019, a total of around 449.99km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 15 on-effort sightings with 54 dolphins were sighted under such condition. Calculation of the encounter rates in September 2019 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from August 2019 to October 2019), a total of around 1305.76km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 51 on-effort sightings and a total number of 200 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of October 2019 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)
October 2019	3.33	12.00
Running Quarter from August 2019 to October 2019(1)	3.91	15.32
Action Level	Running quarterly(1) STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from August 2019 to October 2019, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In October 2019, 15 groups with 54 dolphins were sighted, and the average group size of CWDs was 3.6 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. There was one CWD sighting with large group size (i.e. 10 or more dolphins) recorded in WL.

Activities and Association with Fishing Boats

One sighting of CWDs were recorded engaging in feeding activities in October 2019 on AW transect. No CWD sightings were observed in association with operating fishing boat in the reporting month.

Mother-calf Pair

In October 2019, there were three sightings of CWD with the presence of mother-and-unspotted juvenile pair. All these sightings were recorded in WL survey area.

6.4.2 Photo Identification

In October 2019, a total number of 38 different CWD individuals were identified for totally 43 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM004	3-Oct-19	1	AW	SLMM049	3-Oct-19	8	WL
		2	WL	SLMM052	3-Oct-19	4	WL
	10-Oct-19	3	NWL	SLMM053	3-Oct-19	8	WL
NLMM006	10-Oct-19	3	NWL	SLMM060	2-Oct-19	3	SWL
NLMM013	10-Oct-19	3	NWL	WLMM007	3-Oct-19	8	WL
NLMM016	3-Oct-19	6	WL	WLMM011	3-Oct-19	6	WL
NLMM018	3-Oct-19	1	AW	WLMM018	3-Oct-19	8	WL
		2	WL	WLMM029	3-Oct-19	8	WL
NLMM019	3-Oct-19	1	AW	WLMM049	10-Oct-19	1	NWL
NLMM023	10-Oct-19	2	NWL	WLMM054	4-Oct-19	5	SWL
NLMM052	3-Oct-19	1	AW		11-Oct-19	1	WL
NLMM053	3-Oct-19	1	AW			2	WL
NLMM068	3-Oct-19	1	AW	WLMM071	3-Oct-19	5	WL
NLMM071	3-Oct-19	1	AW	WLMM073	3-Oct-19	7	WL
SLMM003	3-Oct-19	7	WL	WLMM078	3-Oct-19	8	WL
SLMM010	3-Oct-19	8	WL	WLMM079	3-Oct-19	7	WL
SLMM014	3-Oct-19	8	WL	WLMM104	3-Oct-19	3	WL
SLMM022	3-Oct-19	8	WL	WLMM107	3-Oct-19	6	WL
SLMM025	3-Oct-19	8	WL	WLMM131	3-Oct-19	7	WL
SLMM028	3-Oct-19	8	WL	WLMM132	3-Oct-19	7	WL
SLMM029	3-Oct-19	8	WL	WLMM149	3-Oct-19	6	WL
SLMM037	3-Oct-19	7	WL				

6.4.3 Land-based Theodolite Tracking Survey

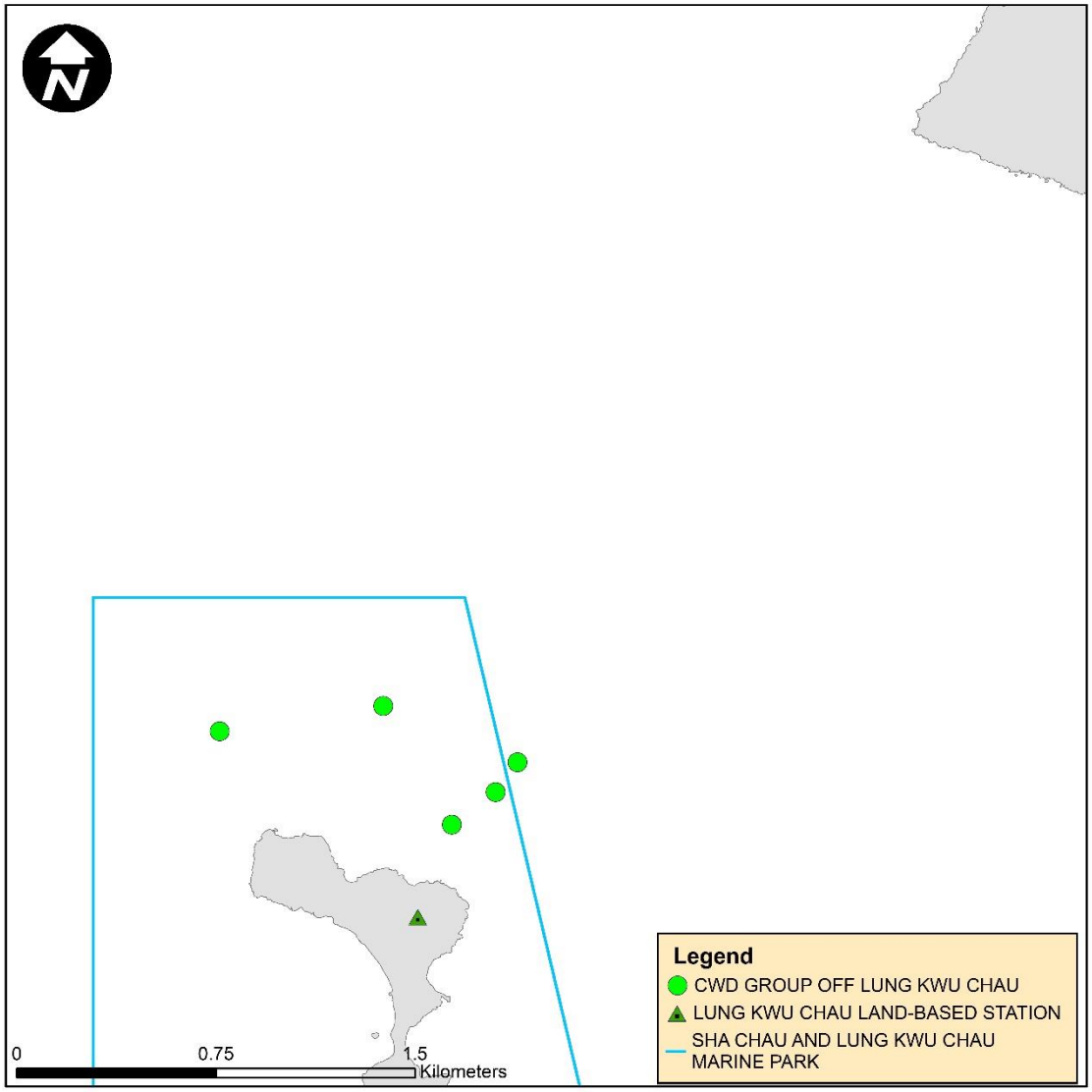
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 11 and 21 October 2019 and at SC on 22 October 2019, with a total of three days of land-based theodolite tracking survey effort accomplished in this reporting period. Five CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in October 2019 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	2	12:00	5	0.42
Sha Chau	1	6:00	0	0
TOTAL	**3**	**18:00**	**5**	**0.28**

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 23 October 2019 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialised team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 3 to 8 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 679 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 three days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the appropriate recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice were given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised 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 summarised in **Appendix B**.

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

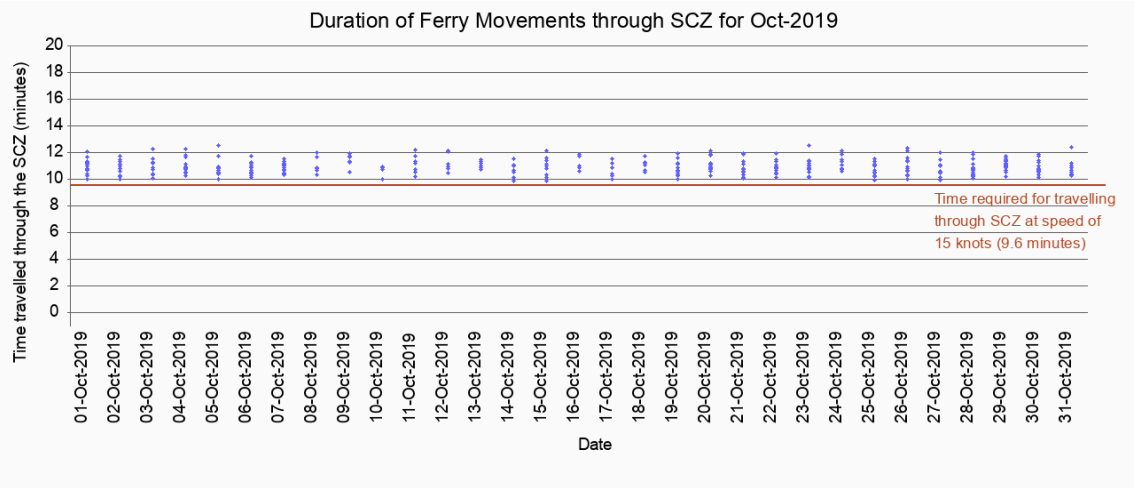
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 81 to 102 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, 529 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in October 2019 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in October 2019 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for October 2019



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.

As reported in the Construction Phase Monthly EM&A Report No. 45, three ferries were recorded with route deviation on 1 September (2 cases) and 20 September 2019 (1 case). ET's investigation found that one of the deviations was due to giving way to vessel in order to avoid collision and the others were due to strong tidal wave and current.

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

Requirements in the SkyPier Plan	1 to 30 October2019
Total number of ferry movements recorded and audited	529
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 10.6 to 13.8 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	81-102 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:

- Five skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET
- One skipper training session was held by a contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 69 skippers were trained by ET and 3 skippers were trained by a contractor's Environmental Officer. In total, 1253 skippers were trained from August 2016 to October 2019.
- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM works and seawall construction according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.

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

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.6 Compliance with Other Statutory Environmental Requirements

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

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

7.7.1 Complaints

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

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

DCM Works:

Contract 3205 DCM works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Land base ground improvement works;
- Seawall construction; and
- Marine filling.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation
- Footing and utilities work; and
- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Lateral supports and excavation works;
- Drawpit and duct laying works;
- Manhole and pipe construction works; and
- Site establishment.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

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

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

- Site clearance.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Modification works at APM depot.

Airport Support Infrastructure & Logistic Works:

Contract 3721 Construction Support Infrastructure Works

- Excavation for utilities works; and
- Construction of utilities

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Cofferdam installation for box culvert;
- Rising main installation;
- Drilling and grouting works;
- Piling and foundation works
- Demolition works; and
- Site clearance.

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

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

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

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

The water quality monitoring results for DO, turbidity, total alkalinity, nickel, 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, some testing results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the case was not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

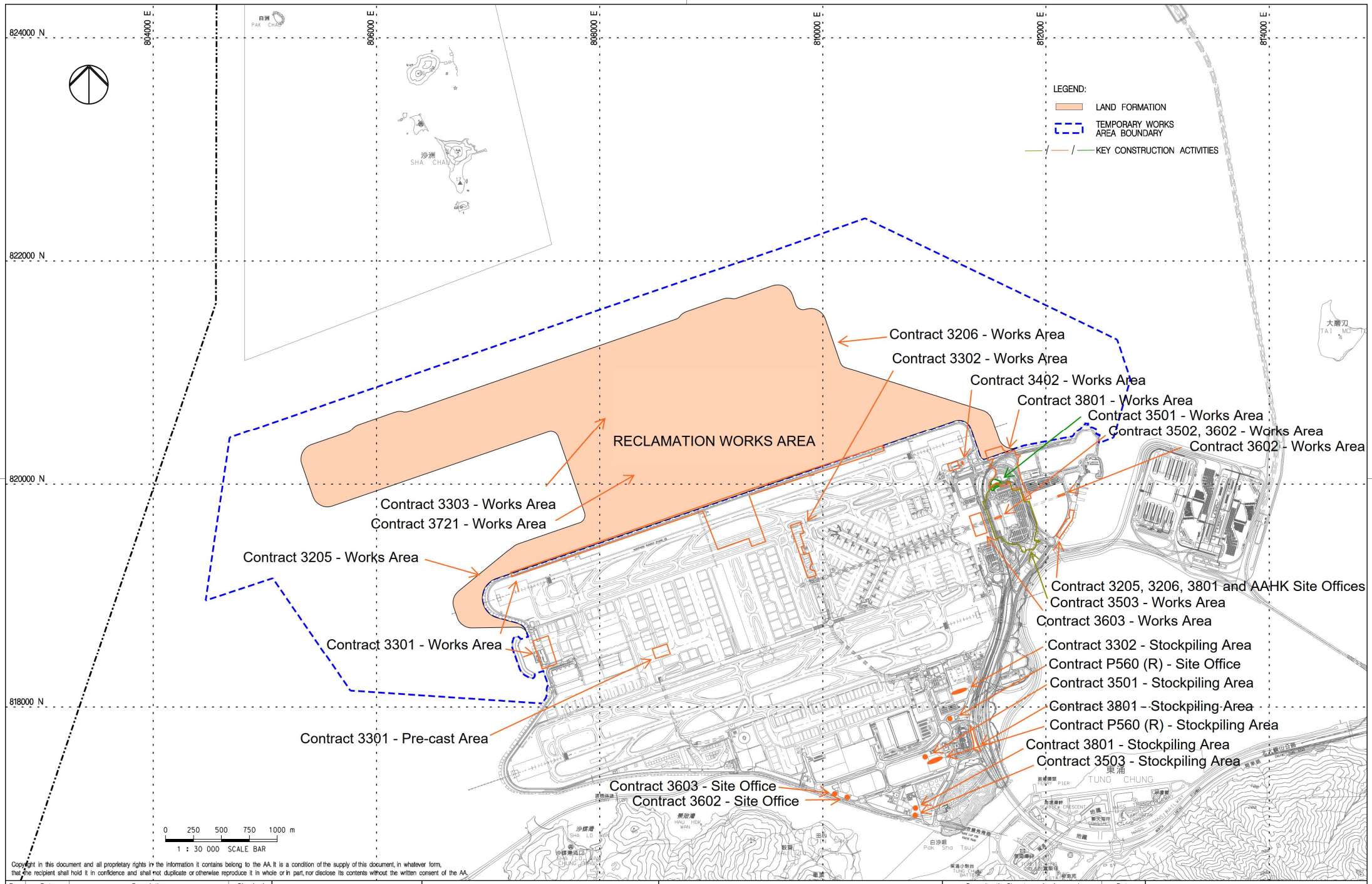
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in October 2019 were in the range of 81 to 102 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 529 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 10.6 to 13.8 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. Zero deviation from the diverted route in October 2019 were recorded in the HSF monitoring. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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

programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures



Rev.	Date	Description	Checked
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Tel : (852) 2188 7111 Fax : (852) 2824 0717

MOTT MACDONALD

Title

LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No.

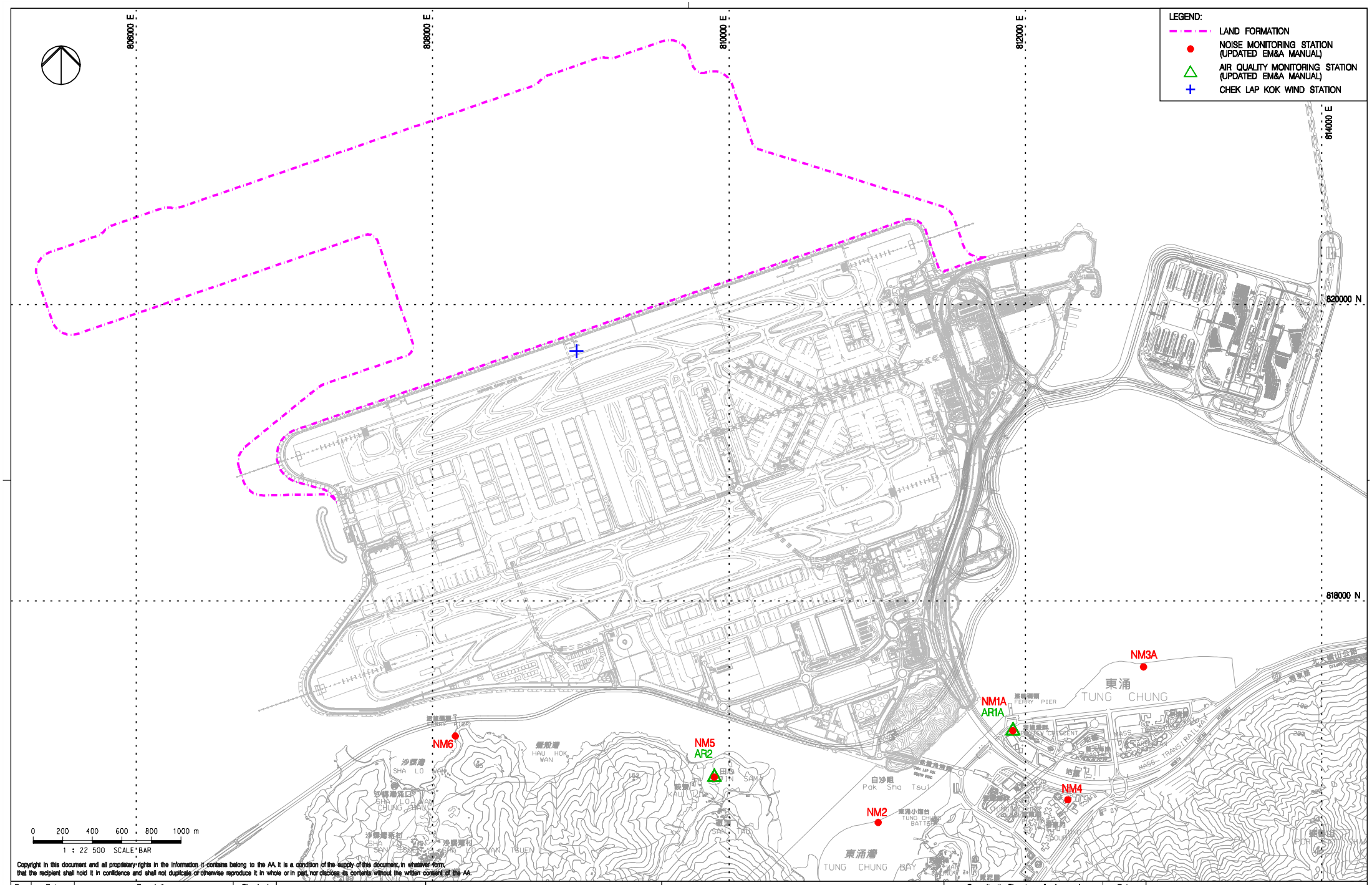
FIGURE 1.1

Scale at A3 1 : 30000

Rev. B

Filename: J:\355482\REPORT\ENV\EMA\190404\FIG 1.1.dgn

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



Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

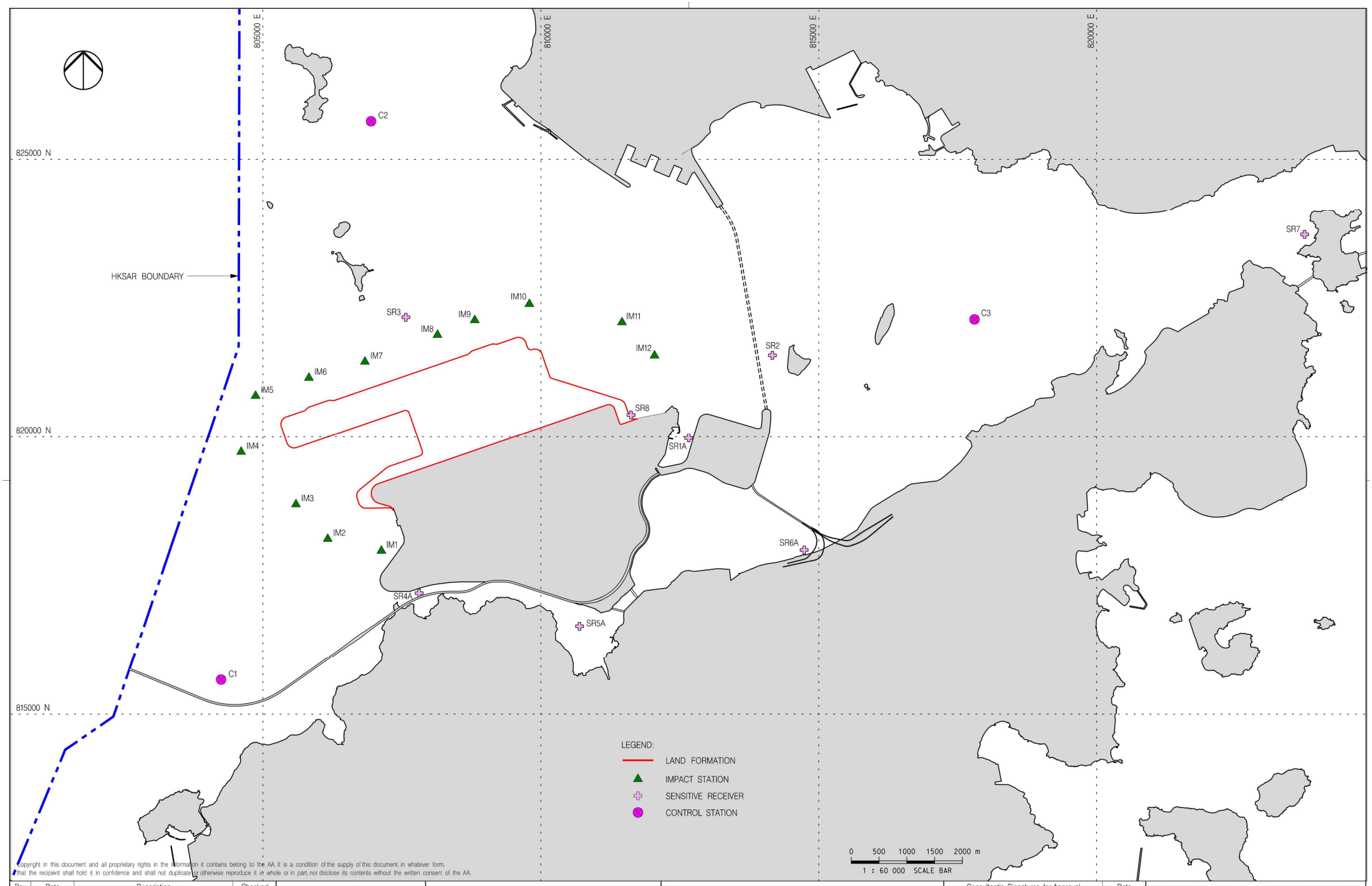
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



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A	21AUG19	FIRST ISSUE	VL

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	21AUG19
Checkers	DC / TK	21AUG19
Approver	EC	21AUG19

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

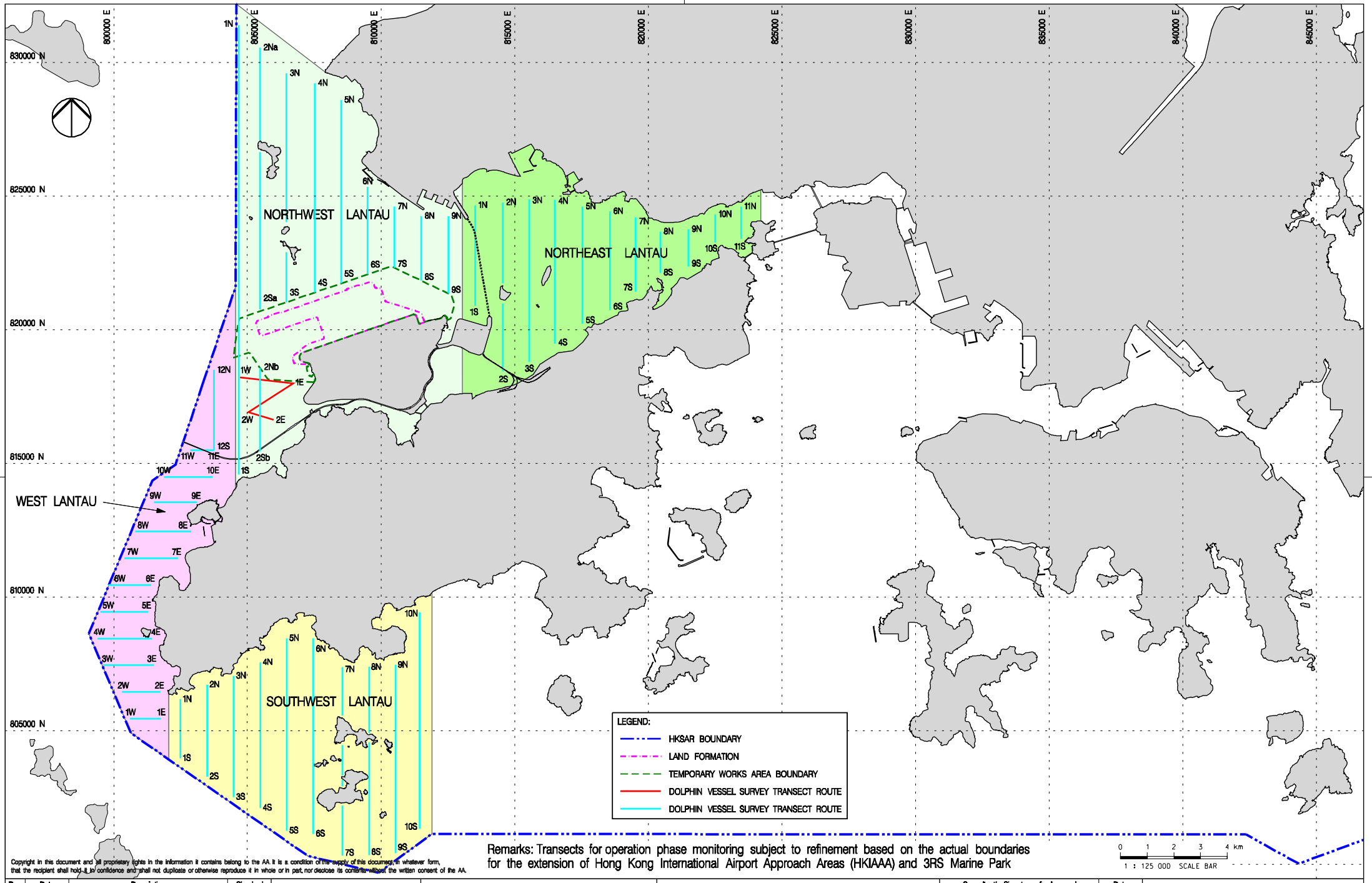
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

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



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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

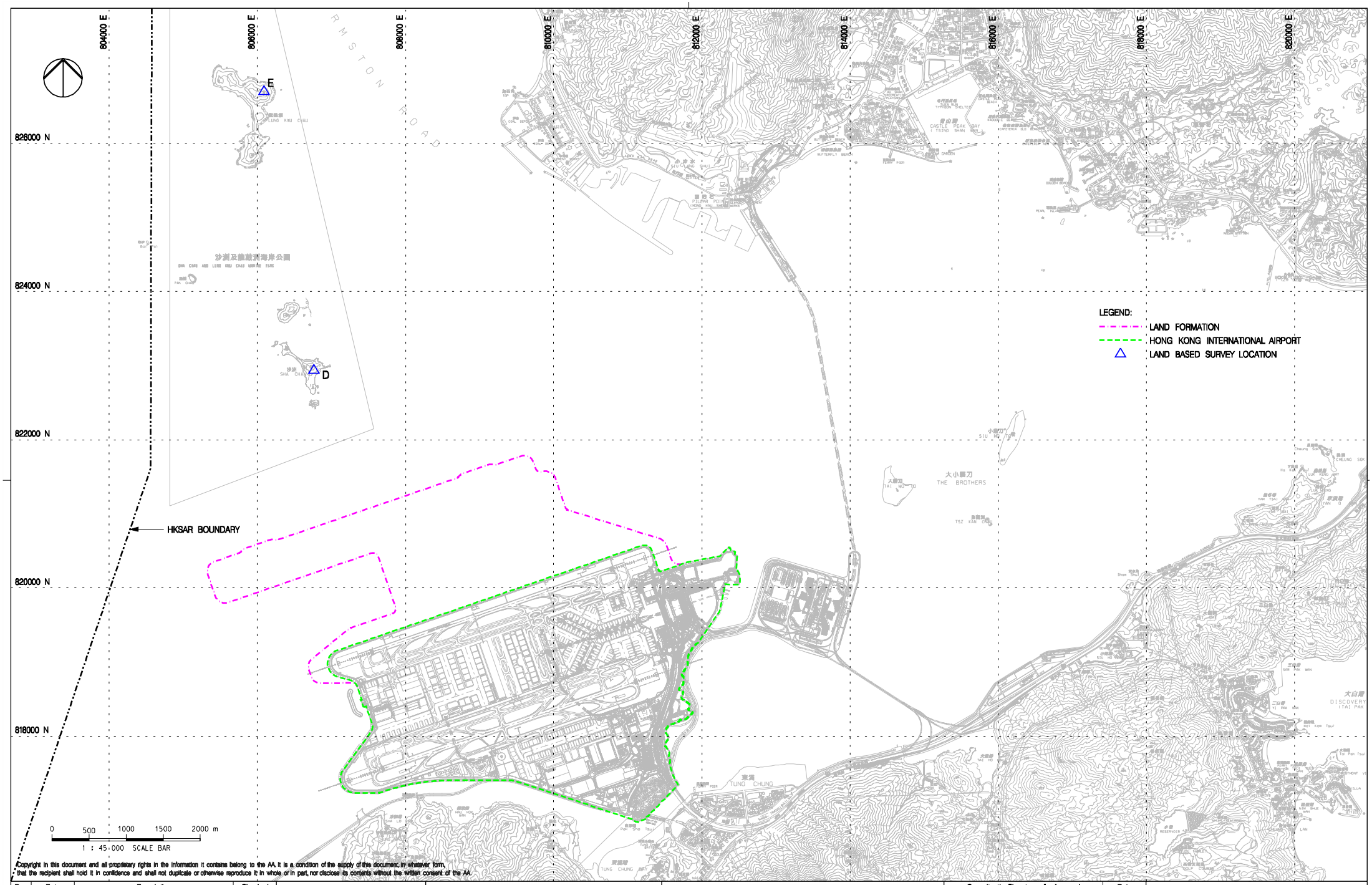
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



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A	02DEC15	FIRST ISSUE	JC
B	08FEB17	GENERAL REVISION	JC
C	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

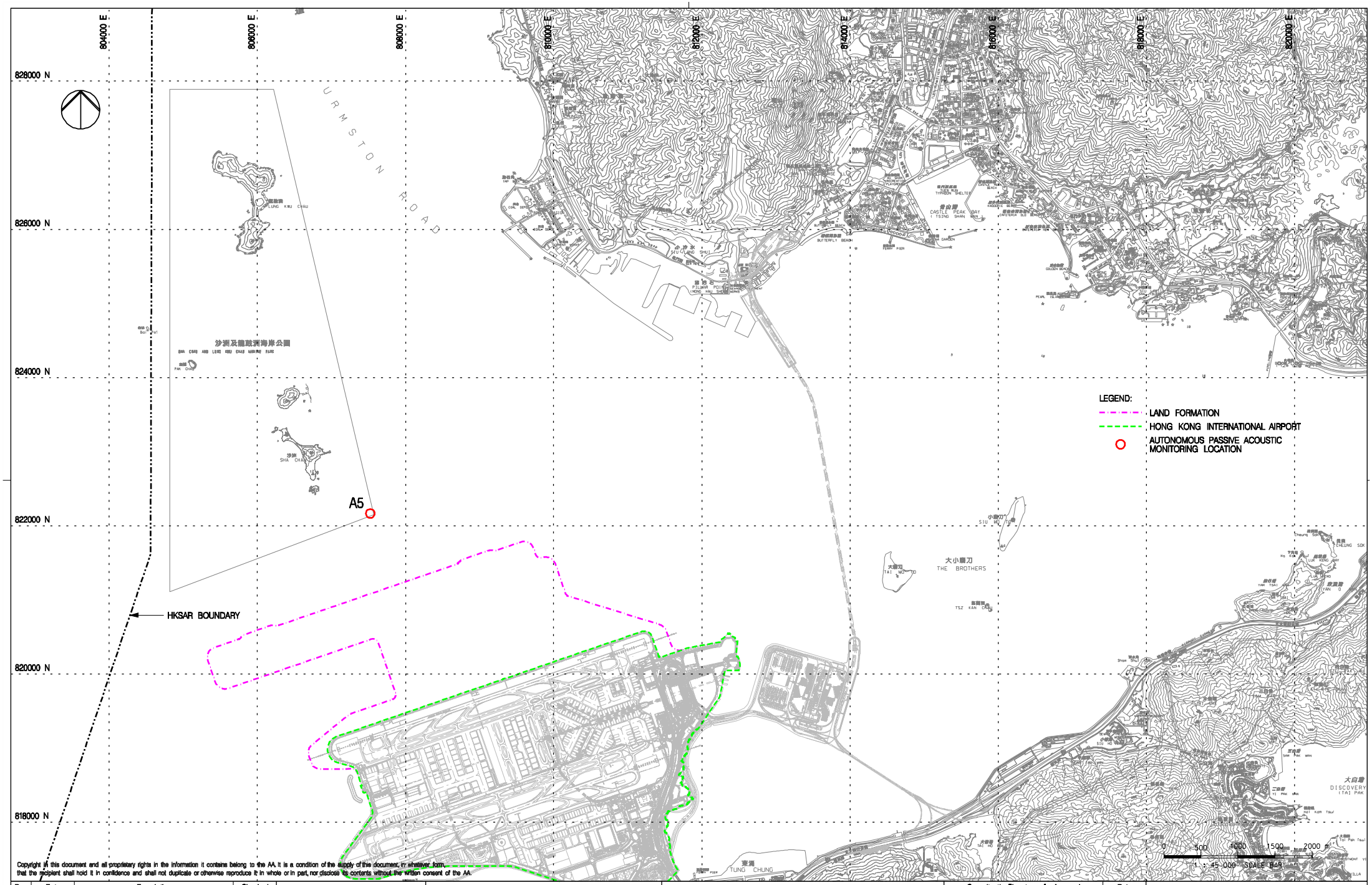
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



Rev.	Date	Description	Checked
A	29AUG17	FIRST ISSUE	JT
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香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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Approver	EC	29OCT18

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. Contract Information

Contract Description

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

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following: • Foundation and structural works; • Cast-in / Underground electrical & mechanical works and utility services; and • All associated testing and commissioning works.
3303	Third Runway and Associated Works	SAPR Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following: • New runway, taxiways, and associated works; • Infrastructure works; • Construction of ancillary buildings and facilities; • Set up of various airport systems; and • All associated testing and commissioning works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition;

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3501	Antenna Farm and Sewage Pumping Station	Build King Construction Limited	The works covered by the Contract 3501 comprise the construction of antenna farm and sewage pumping station. The major construction activities include without limitation the following: • Civil and structural engineering works; • Building services works; • Architectural builder's works and finishes; • Trenchless excavation for sewage rising mains; and • All associated works.
3502	Terminal 2 APM Depot Modification Works	Build King Construction Limited	The works covered by the Contract 3502 comprise the modification of the existing Automatic People Mover (APM) Depot in the basement of T2, for the APM line running between T1 East Hall, West Hall and Midfield Concourse. The major construction activities include without limitation the following: • Removal of the existing steel guide rails; • Removal of the existing mass concrete fill and re-construction of the reinforced concrete fill; • Construction of separation walls and walkways; • Removal of re-provision of existing building services and airport systems; and • All associated testing and commissioning works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• All associated testing and commissioning works.
3505	Terminal 2 Spectrum Lighting Mock-ups	Union Contractors Ltd.	The works covered by the Contract 3505 comprise the design, supply, manufacture, delivery, and installation of the Spectrum Lighting Mock-ups to demonstrate the lighting effects on various interior elements of the new Terminal 2.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	VISH Consortium	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: • Project site road; • Utilities; • Cargo loading quays; and • Security fencing and hoarding.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

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

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

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

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

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

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

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

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		▪ Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	▪ Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	▪ A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	▪ The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	I
			▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions;		I
			▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;		I
			▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			▪ Treated and untreated sediment should be clearly separated and stored separately; and		I
			▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.		I
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly	Project Site Area / Construction Phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal: ▪ Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; ▪ Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; and ▪ Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.		
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	▪ General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	▪ The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
12.7.2.3 and 12.7.2.6	9.1	2.30	**Avoidance and Minimisation of Direct Impact to Egretry** ▪ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry; ▪ In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and ▪ The containment pit at the daylighting location shall be covered or camouflaged.	During construction phase at Sheung Sha Chau Island	I
12.7.2.5	9.1	2.30	**Preservation of Nesting Vegetation** ▪ The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	During construction phase at Sheung Sha Chau Island	I
12.7.2.4 and 12.7.2.6	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season** ▪ All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	**Ecological Monitoring** ▪ During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	▪ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.1.7 to 13.11.1.10	-	2.31	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		N/A
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		I
			▪ Prohibition of underwater percussive piling; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				to completion of construction	
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	I
			Other mitigation measures ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;	Marine waters around land formation works area during construction phase	I
			▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and		I
			▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.		N/A
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan** ▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.	Construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.5.21 to 13.11.5.23	10.6.1	-	**Construction Vessel Speed Limits and Skipper Training** ▪ A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and ▪ Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
14.9.1.11	-		**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.		
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. –	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				may be disassembled in phases	
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works; Upon handover and completion of works.	N/A
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Oct-19

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 WQ General & Regular DCM mid-ebb: 14:49 mid-flood: 08:41	**2** CWD Survey (Vessel)	**3** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 16:19 mid-flood: 10:37	**4** Site Inspection CWD Survey (Vessel)	**5** WQ General & Regular DCM mid-ebb: 05:24 mid-flood: 13:27
6	**7** Site Inspection	**8** Site Inspection WQ General & Regular DCM mid-ebb: 09:16 mid-flood: 17:11	**9** AR1A, AR2 NM1A, NM4, NM5, NM6	**10** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 11:01 mid-flood: 18:03	**11** Site Inspection CWD Survey (Land-based, Vessel)	**12** WQ General & Regular DCM mid-ebb: 12:14 mid-flood: 18:44
13	**14** Site Inspection	**15** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 13:44 mid-flood: 07:49	**16** CWD Survey (Vessel)	**17** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 14:51 mid-flood: 09:10	**18** Site Inspection	**19** WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 10:59
20	**21** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6	**22** Site Inspection CWD Survey (Land-based, Vessel) WQ General & Regular DCM mid-ebb: 06:33 mid-flood: 19:29	**23**	**24** Site Inspection WQ General & Regular DCM mid-ebb: 09:30 mid-flood: 16:49	**25** Site Inspection	**26** AR1A, AR2 WQ General & Regular DCM mid-ebb: 11:25 mid-flood: 17:53
27	**28**	**29** Site Inspection WQ General & Regular DCM mid-ebb: 13:46 mid-flood: 07:50	**30** Site Inspection	**31** Site Inspection WQ General & Regular DCM mid-ebb: 15:15 mid-flood: 09:40		

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

Tentative Monitoring Schedule of Next Reporting Period

Nov-19

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**2** WQ General & Regular DCM mid-ebb: 16:44 mid-flood: 11:36
3	**4**	**5** Site Inspection WQ General & Regular DCM mid-ebb: 06:49 mid-flood: 15:45	**6** Site Inspection	**7** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 09:22 mid-flood: 16:49	**8** Site Inspection CWD Survey (Vessel)	**9** WQ General & Regular DCM mid-ebb: 11:00 mid-flood: 17:32
10	**11** CWD Survey (Vessel)	**12** Site Inspection CWD Survey (Land-based, Vessel) WQ General & Regular DCM mid-ebb: 12:44 mid-flood: 18:29	**13** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	**14** Site Inspection WQ General & Regular DCM mid-ebb: 13:57 mid-flood: 08:26	**15** Site Inspection	**16** WQ General & Regular DCM mid-ebb: 15:20 mid-flood: 10:04
17	**18**	**19** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 05:09 mid-flood: 17:40	**20** Site Inspection	**21** Site Inspection CWD Survey (Land-based, Vessel) WQ General & Regular DCM mid-ebb: 21:30 mid-flood: 15:27	**22** Site Inspection CWD Survey (Vessel)	**23** WQ General & Regular DCM mid-ebb: 10:09 mid-flood: 16:40
24	**25** CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	**26** Site Inspection WQ General & Regular DCM mid-ebb: 12:47 mid-flood: 18:15	**27** Site Inspection	**28** Site Inspection WQ General & Regular DCM mid-ebb: 14:15 mid-flood: 08:49	**29** Site Inspection	**30** AR1A, AR2 WQ General & Regular DCM mid-ebb: 15:35 mid-flood: 10:25
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

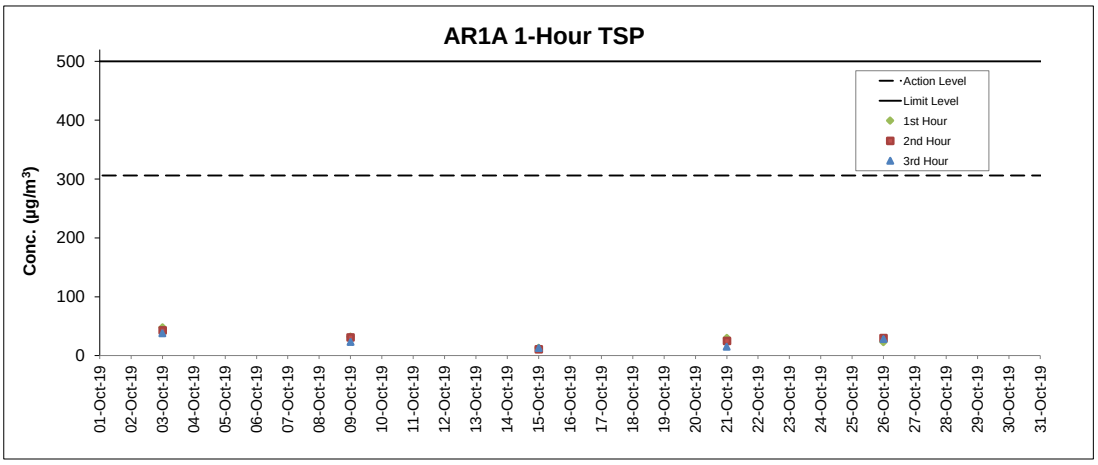
Station: AR1A- Man Tung Road Park

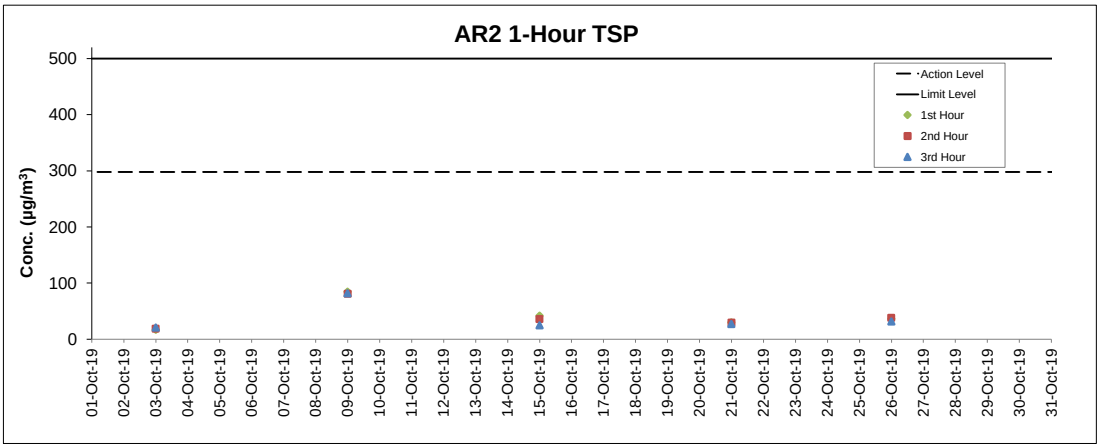
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
03-Oct-19	9:10	Sunny	4.4	229	48	306	500
03-Oct-19	10:10	Sunny	4.1	268	43	306	500
03-Oct-19	11:10	Sunny	4.1	269	38	306	500
09-Oct-19	13:30	Cloudy	6.4	125	32	306	500
09-Oct-19	14:30	Cloudy	6.2	115	31	306	500
09-Oct-19	15:30	Cloudy	6.7	112	23	306	500
15-Oct-19	13:18	Sunny	5.9	114	13	306	500
15-Oct-19	14:18	Sunny	6.0	105	11	306	500
15-Oct-19	15:18	Sunny	4.5	72	13	306	500
21-Oct-19	14:17	Sunny	4.8	240	30	306	500
21-Oct-19	15:17	Sunny	4.5	158	25	306	500
21-Oct-19	16:17	Sunny	5.8	152	15	306	500
26-Oct-19	13:34	Sunny	4.1	Variable	23	306	500
26-Oct-19	14:34	Sunny	4.4	112	30	306	500
26-Oct-19	15:34	Sunny	4.2	102	28	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
03-Oct-19	13:10	Cloudy	4.2	262	17	298	500
03-Oct-19	14:10	Cloudy	4.7	256	19	298	500
03-Oct-19	15:10	Cloudy	4.7	254	21	298	500
09-Oct-19	9:28	Cloudy	6.4	78	85	298	500
09-Oct-19	10:28	Cloudy	5.4	85	81	298	500
09-Oct-19	11:28	Cloudy	6.0	98	82	298	500
15-Oct-19	9:33	Sunny	6.4	60	42	298	500
15-Oct-19	10:33	Sunny	5.6	47	36	298	500
15-Oct-19	11:33	Sunny	4.8	58	25	298	500
21-Oct-19	9:15	Sunny	3.8	61	30	298	500
21-Oct-19	10:15	Sunny	3.4	56	30	298	500
21-Oct-19	11:15	Sunny	2.0	334	27	298	500
26-Oct-19	9:59	Sunny	5.6	93	36	298	500
26-Oct-19	10:59	Sunny	5.6	87	38	298	500
26-Oct-19	11:59	Sunny	5.6	103	32	298	500





Notes

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

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Oct-19	Sunny	9:22	72.9	53.5	72
03-Oct-19	Sunny	9:27	72.7	54.0	
03-Oct-19	Sunny	9:32	73.5	53.1	
03-Oct-19	Sunny	9:37	71.9	53.4	
03-Oct-19	Sunny	9:42	72.2	55.3	
03-Oct-19	Sunny	9:47	73.8	54.1	
09-Oct-19	Cloudy	13:52	73.3	54.3	72
09-Oct-19	Cloudy	13:57	72.7	52.8	
09-Oct-19	Cloudy	14:02	72.1	52.9	
09-Oct-19	Cloudy	14:07	73.6	54.6	
09-Oct-19	Cloudy	14:12	74.4	55.4	
09-Oct-19	Cloudy	14:17	73.1	55.1	
15-Oct-19	Sunny	13:58	73.0	55.9	73
15-Oct-19	Sunny	14:03	74.3	57.1	
15-Oct-19	Sunny	14:08	73.5	57.6	
15-Oct-19	Sunny	14:13	75.3	56.2	
15-Oct-19	Sunny	14:18	73.9	57.8	
15-Oct-19	Sunny	14:23	73.3	57.2	
21-Oct-19	Sunny	13:27	71.4	53.3	71
21-Oct-19	Sunny	13:32	72.0	53.8	
21-Oct-19	Sunny	13:37	73.4	54.6	
21-Oct-19	Sunny	13:42	73.1	53.3	
21-Oct-19	Sunny	13:47	71.8	54.3	
21-Oct-19	Sunny	13:52	72.5	53.8	

Remarks:

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

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Oct-19	Cloudy	10:55	61.6	58.1	63
03-Oct-19	Cloudy	11:00	60.7	57.8	
03-Oct-19	Cloudy	11:05	61.7	57.8	
03-Oct-19	Cloudy	11:10	60.9	58.2	
03-Oct-19	Cloudy	11:15	62.3	58.8	
03-Oct-19	Cloudy	11:20	62.9	59.3	
09-Oct-19	Cloudy	14:10	62.6	57.7	63
09-Oct-19	Cloudy	14:15	61.9	57.5	
09-Oct-19	Cloudy	14:20	61.9	58.3	
09-Oct-19	Cloudy	14:25	63.0	58.9	
09-Oct-19	Cloudy	14:30	63.2	58.4	
09-Oct-19	Cloudy	14:35	60.2	57.4	
15-Oct-19	Sunny	14:06	63.6	59.1	64
15-Oct-19	Sunny	14:11	63.7	59.1	
15-Oct-19	Sunny	14:16	64.7	60.0	
15-Oct-19	Sunny	14:21	62.2	58.5	
15-Oct-19	Sunny	14:26	61.7	58.3	
15-Oct-19	Sunny	14:31	61.8	58.2	
21-Oct-19	Sunny	13:49	64.3	59.6	66
21-Oct-19	Sunny	13:54	65.3	59.7	
21-Oct-19	Sunny	13:59	63.3	59.0	
21-Oct-19	Sunny	14:04	65.3	59.0	
21-Oct-19	Sunny	14:09	64.0	59.3	
21-Oct-19	Sunny	14:14	67.1	60.3	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Oct-19	Cloudy	13:19	50.0	42.7	57
03-Oct-19	Cloudy	13:24	61.0	44.6	
03-Oct-19	Cloudy	13:29	51.9	43.9	
03-Oct-19	Cloudy	13:34	51.6	43.4	
03-Oct-19	Cloudy	13:39	50.6	44.2	
03-Oct-19	Cloudy	13:44	53.1	44.7	
09-Oct-19	Cloudy	9:30	53.2	47.6	58
09-Oct-19	Cloudy	9:35	61.4	48.9	
09-Oct-19	Cloudy	9:40	52.9	47.6	
09-Oct-19	Cloudy	9:45	53.6	47.5	
09-Oct-19	Cloudy	9:50	57.7	50.2	
09-Oct-19	Cloudy	9:55	58.7	49.6	
15-Oct-19	Sunny	9:50	57.4	50.5	59
15-Oct-19	Sunny	9:55	56.7	51.5	
15-Oct-19	Sunny	10:00	63.3	51.3	
15-Oct-19	Sunny	10:05	59.4	50.1	
15-Oct-19	Sunny	10:10	57.7	50.1	
15-Oct-19	Sunny	10:15	57.0	49.2	
21-Oct-19	Sunny	10:30	56.9	46.1	57
21-Oct-19	Sunny	10:35	54.8	46.4	
21-Oct-19	Sunny	10:40	52.0	44.9	
21-Oct-19	Sunny	10:45	53.2	44.3	
21-Oct-19	Sunny	10:50	54.0	45.3	
21-Oct-19	Sunny	10:55	60.0	46.6	

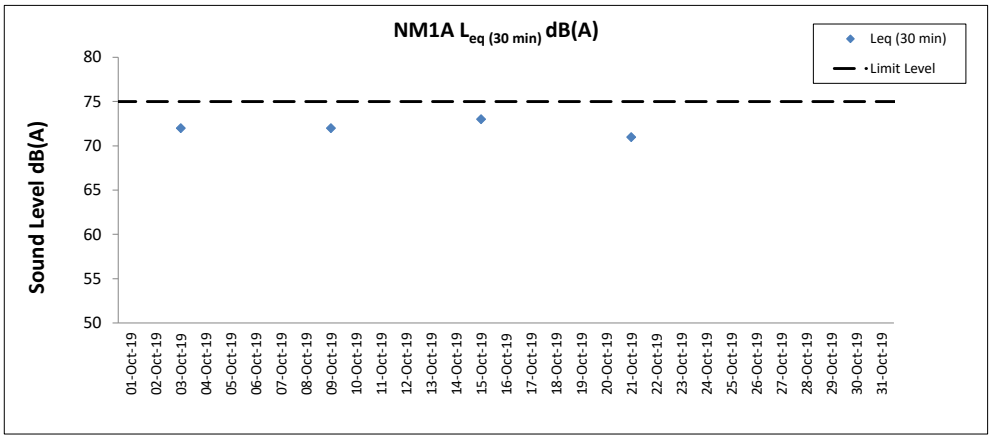
Remarks:
+3dB (A) correction was applied to free-field measurement.

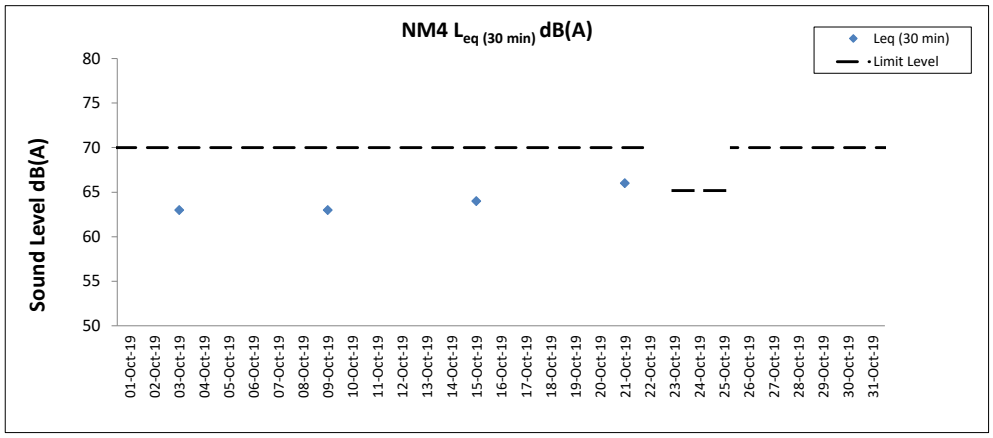
Noise Measurement Results

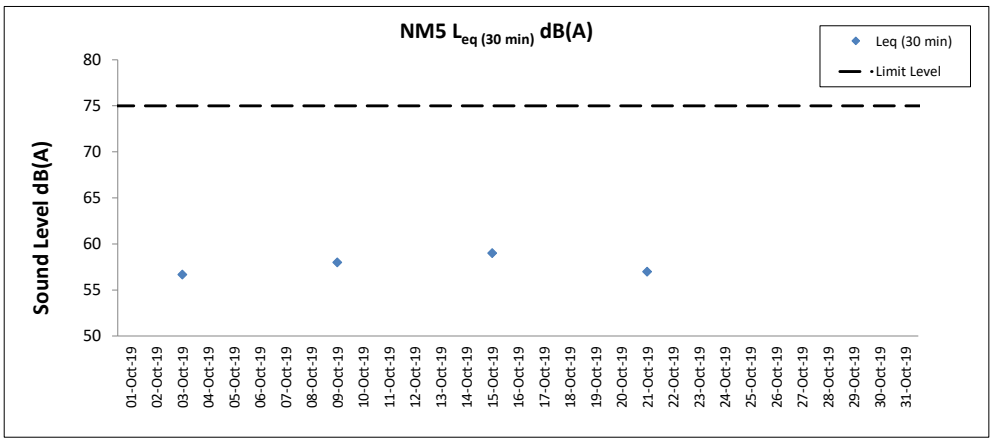
Station: NM6- House No.1 Sha Lo Wan

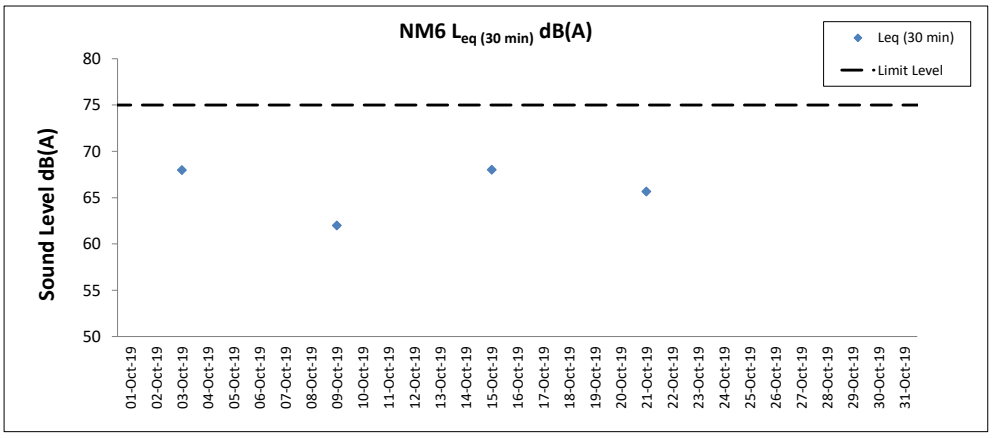
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Oct-19	Cloudy	9:45	73.3	49.1	68
03-Oct-19	Cloudy	9:50	70.4	47.5	
03-Oct-19	Cloudy	9:55	75.3	47.9	
03-Oct-19	Cloudy	10:00	73.3	46.9	
03-Oct-19	Cloudy	10:05	70.9	46.8	
03-Oct-19	Cloudy	10:10	66.4	49.8	
09-Oct-19	Sunny	15:42	63.0	44.0	62
09-Oct-19	Sunny	15:47	49.3	42.8	
09-Oct-19	Sunny	15:52	63.8	52.0	
09-Oct-19	Sunny	15:57	65.7	48.4	
09-Oct-19	Sunny	16:02	60.1	47.2	
09-Oct-19	Sunny	16:07	62.2	52.3	
15-Oct-19	Sunny	15:52	67.9	49.0	68
15-Oct-19	Sunny	15:57	69.8	46.5	
15-Oct-19	Sunny	16:02	70.8	50.0	
15-Oct-19	Sunny	16:07	62.4	49.1	
15-Oct-19	Sunny	16:12	65.4	49.5	
15-Oct-19	Sunny	16:17	70.2	57.1	
21-Oct-19	Sunny	15:42	72.9	45.9	66
21-Oct-19	Sunny	15:47	70.7	45.7	
21-Oct-19	Sunny	15:52	66.5	43.5	
21-Oct-19	Sunny	15:57	70.3	43.6	
21-Oct-19	Sunny	16:02	71.0	44.9	
21-Oct-19	Sunny	16:07	64.2	45.2	

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









Notes

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

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 01 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Calm	14:23	8.0	Surface	1.0	0.1	232	29.2	29.2	8.0	8.0	28.7	28.7	85.7	85.6	5.6	5.6	7.3	12.0	8	13	84	88	815623	804269	<0.2	<0.2	0.9	1.0
						1.0	0.1	243	29.2		8.0		28.7		85.5		5.6		7.4		7		85				<0.2		0.9	
					Middle	4.0	0.1	226	29.1	29.1	8.0	8.0	29.0	29.0	85.3	85.4	5.6		10.2		13		88				<0.2		0.9	
						4.0	0.1	240	29.1		8.0		29.0		85.4		5.6		10.1		12		88				<0.2		1.1	
					Bottom	7.0	0.0	209	29.1	29.1	8.0	8.0	29.3	29.3	84.9	85.3	5.5	5.6	18.7		18		90				<0.2		1.1	
						7.0	0.0	209	29.1		8.0		29.3		85.6		5.6		18.4		18		90				<0.2		1.0	
C2	Fine	Moderate	13:11	11.4	Surface	1.0	0.3	255	28.4	28.4	7.9	7.9	23.9	23.9	82.3	82.3	5.6	5.7	11.8	14.1	9	11	83	86	825677	806949	<0.2	<0.2	1.3	1.2
						1.0	0.3	226	28.4		7.9		23.9		82.3		5.6		11.8		9		82				<0.2		1.2	
					Middle	5.7	0.4	223	28.4	28.4	7.9	7.9	24.5	24.5	83.2	83.2	5.7		10.4		10		86				<0.2		1.2	
						5.7	0.4	224	28.4		7.9		24.5		83.2		5.7		10.5		10		86				<0.2		1.3	
					Bottom	10.4	0.5	245	28.2	28.2	8.0	8.0	25.2	25.2	83.7	83.7	5.7	5.7	20.7		14		91				<0.2		1.2	
						10.4	0.6	246	28.2		8.0		25.2		83.7		5.7		19.8		14		90				<0.2		1.2	
C3	Fine	Moderate	14:48	12.6	Surface	1.0	0.3	72	28.4	28.4	7.9	7.9	26.3	26.3	80.1	80.1	5.4	5.4	4.0	4.3	7	7	83	87	822124	817816	<0.2	<0.2	0.9	0.9
						1.0	0.3	74	28.4		7.9		26.3		80.1		5.4		4.0		7		83				<0.2		0.8	
					Middle	6.3	0.1	93	28.3	28.3	7.9	7.9	26.4	26.4	78.4	78.4	5.3		4.5		7		87				<0.2		0.8	
						6.3	0.1	108	28.3		7.9		26.4		78.4		5.3		4.6		6		87				<0.2		1.1	
					Bottom	11.6	0.2	109	28.3	28.3	8.0	8.0	26.5	26.5	78.2	78.3	5.3	5.3	4.4		6		90				<0.2		1.0	
						11.6	0.2	109	28.3		8.0		26.5		78.3		5.3		4.3		6		91				<0.2		0.9	
IM1	Cloudy	Moderate	13:59	5.3	Surface	1.0	0.0	125	30.1	30.0	8.0	8.0	28.0	28.0	89.4	89.4	5.8	5.8	5.1	6.2	7	9	84	86	817967	807127	<0.2	<0.2	1.4	1.4
						1.0	0.0	128	30.0		8.0		28.0		89.3		5.8		5.2		8		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.0	245	29.2	29.3	8.0	8.0	28.0	28.0	91.0	91.5	6.0	6.0	7.3		9		87				<0.2		1.3	
						4.3	0.0	267	29.3		8.0		28.0		92.0		6.0		7.3		10		87				<0.2		1.3	
IM2	Cloudy	Moderate	13:52	8.1	Surface	1.0	0.1	228	29.4	29.4	8.0	8.0	28.3	28.3	86.6	86.8	5.7	5.7	5.8	6.3	10	11	84	88	818178	806167	<0.2	<0.2	1.3	1.3
						1.0	0.1	230	29.4		8.0		28.3		87.0		5.7		5.9		10		84				<0.2		1.3	
					Middle	4.1	0.1	217	29.3	29.3	8.0	8.0	28.5	28.5	86.8	86.8	5.7		6.8		10		88				<0.2		1.2	
						4.1	0.1	218	29.3		8.0		28.5		86.8		5.7		6.3		11		88				<0.2		1.3	
					Bottom	7.1	0.1	224	29.2	29.2	8.0	8.0	28.7	28.7	87.8	88.0	5.7	5.8	6.4		13		91				<0.2		1.4	
						7.1	0.1	225	29.2		8.0		28.7		88.1		5.8		6.4		12		91				<0.2		1.2	
IM3	Cloudy	Moderate	13:45	8.0	Surface	1.0	0.3	226	29.7	29.7	8.0	8.0	27.9	27.9	87.8	87.8	5.7	5.7	7.0	10.8	8	10	83	88	818794	805601	<0.2	<0.2	1.3	1.3
						1.0	0.3	227	29.7		8.0		28.0		87.8		5.7		7.2		7		84				<0.2		1.3	
					Middle	4.0	0.2	249	29.2	29.2	8.0	8.0	28.8	28.8	85.5	85.5	5.6		12.0		11		88				<0.2		1.2	
						4.0	0.2	221	29.2		8.0		28.8		85.5		5.6		12.1		10		88				<0.2		1.3	
					Bottom	7.0	0.2	201	29.2	29.2	8.0	8.0	28.9	28.9	89.0	89.0	5.8	5.8	13.2		13		91				<0.2		1.3	
						7.0	0.2	199	29.2		8.0		28.9		89.0		5.8		13.2		13		92				<0.2		1.4	
IM4	Cloudy	Moderate	13:35	7.8	Surface	1.0	0.4	209	29.6	29.6	8.0	8.0	28.7	28.7	88.1	87.9	5.7	5.7	4.8	8.1	7	10	84	87	819721	804595	<0.2	<0.2	1.4	1.4
						1.0	0.4	211	29.6		8.0		28.7		87.7		5.7		5.0		8		84				<0.2		1.3	
					Middle	3.9	0.5	213	29.3	29.3	8.0	8.0	28.9	28.9	86.8	87.0	5.7		8.8		10		88				<0.2		1.4	
						3.9	0.5	203	29.3		8.0		28.9		87.2		5.7		8.9		10		88				<0.2		1.5	
					Bottom	6.8	0.4	195	29.2	29.2	8.0	8.0	29.0	29.0	88.5	88.8	5.8	5.8	10.7		13		90				<0.2		1.4	
						6.8	0.4	189	29.2		8.0		29.0		89.1		5.8		10.6		12		90				<0.2		1.5	
IM5	Cloudy	Moderate	13:25	7.7	Surface	1.0	0.4	209	29.3	29.3	8.0	8.0	28.2	28.2	85.4	85.5	5.6	5.6	14.3	18.0	7	13	83	87	820725	804855	<0.2	<0.2	1.7	1.6
						1.0	0.4	208	29.3		8.0		28.2		85.5		5.6		14.4		8		84				<0.2		1.7	
					Middle	3.9	0.4	212	29.2	29.2	8.0	8.0	28.2	28.2	84.9	84.7	5.6		18.9		10		88				<0.2		1.6	
						3.9	0.4	213	29.2		8.0		28.2		84.4		5.5		18.9		9		88				<0.2		1.6	
					Bottom	6.7	0.3	198	29.2	29.2	8.0	8.0	28.3	28.3	85.1	85.3	5.6	5.6	20.9		22		90				<0.2		1.5	
						6.7	0.3	188	29.2		8.0		28.3		85.5		5.6		20.7		23		90				<0.2		1.6	
IM6	Cloudy	Moderate	13:15	8.1	Surface	1.0	0.1	192	29.4	29.4	8.0	8.0	27.8	27.8	85.5	85.5	5.6	5.6	12.6	14.2	14	16	84	87	821048	805804	<0.2	<0.2	1.1	1.3
						1.0	0.2	198	29.5		8.0		27.8		85.5		5.6		12.6		15		84				<0.2		1.2	
					Middle	4.1	0.2	199	29.4	29.4	8.0	8.0	27.8	27.8	85.2	85.2	5.6		13.4		15		87				<0.2		1.3	
						4.1	0.2	204	29.4		8.0		27.8		85.2		5.6		13.4		15		87				<0.2		1.4	
					Bottom	7.1	0.1	199	29.3	29.3	8.0	8.0	27.8	27.8	87.7	88.0	5.8	5.8	16.7		17		90				<0.2		1.4	
						7.1	0.1	187	29.3		8.0		27.8		88.3		5.8		16.4		18		91				<0.2		1.3	
IM7	Cloudy	Moderate	13:05	8.5	Surface	1.0	0.0	186	29.7	29.6	7.9	7.9	26.3	26.3	84.7	84.8	5.6	5.6	5.2	9.0	6	10	85	88	821343	806856	<0.2	<0.2	1.5	1.5
						1.0	0.0	180	29.6		7.9		26.3		84.8		5.6		5.4		6		85				<0.2		1.4	
					Middle	4.3	0.2	196	29.3	29.3	7.9	7.9	27.5	27.4	83.7	83.8	5.5		8.1		7		87				<0.2		1.4	
						4.3	0.2	204	29.3		7.9		27.4		83.8		5.5		8.0		7		87				<0.2		1.6	
					Bottom	7.5	0.2	187	29.3	29.3	7.9	7.9	27.7	27.7	83.4	83.5	5.5	5.5	13.7		16		91				<0.2		1.6	
						7.5	0.2	188	29.3		7.9		27.7		83.5		5.5		13.7		16		92				<0.2		1.5	
IM8	Fine	Moderate	13:37	7.7	Surface	1.0	0.2	181	28.4	28.4	7.9	7.9	24.0	24.0	84.2	84.2	5.7	5.7	7.6	12.7	9	9	84	87	821811	808126	<0.2	<0.2	1.3	1.4
						1.0	0.2	184	28.4		7.9		24.0		84.2		5.7		7.6		9		83				<0.2		1.3	
					Middle	3.9	0.2	186	28.3	28.3	7.9	7.9	24.9	24.9	83.5	83.6	5.7		14.4		9		87				<0.2		1.3	
						3.9	0.2	177	28.3		7.9		24.9		83.6		5.7		14.3		10		87				<0.2		1.3	
					Bottom	6.7	0.1	160	28.2	28.2	8.0	8.0	25.2	25.2	83.0	83.0	5.6	5.6	16.2		8		90				<0.2		1.3	
						6.7	0.1	175	28.2		8.0		25.2		83.0		5.6		16.3		9		91				<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 01 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:43	7.8	Surface	1.0	0.2	175	28.4	28.4	7.9	7.9	23.9	23.9	82.7	82.7	5.6	5.7	6.8	9.2	7	9	83	87	822108	808815	<0.2	<0.2	1.4	1.4
						1.0	0.2	174	28.4		7.9		23.9		82.7		5.6		6.8		8		83				<0.2		1.6	
					Middle	3.9	0.2	170	28.3	28.3	7.9	7.9	24.2	24.2	83.4	83.4	5.7		6.6		9		86				<0.2		1.4	
						3.9	0.2	176	28.3		7.9		24.2		83.4		5.7		6.6		9		87				<0.2		1.4	
					Bottom	6.8	0.1	156	28.1	28.1	8.0	8.0	25.3	25.3	83.0	83.0	5.6	5.6	14.1		10		91				<0.2		1.3	
						6.8	0.1	160	28.1		8.0		25.3		83.0		5.6		14.1		10		91				<0.2		1.5	
IM10	Fine	Moderate	13:51	7.5	Surface	1.0	0.1	173	28.5	28.5	7.9	7.9	24.0	23.9	83.9	83.9	5.7	5.7	7.2	8.4	7	9	83	87	822372	809783	<0.2	<0.2	1.4	1.3
						1.0	0.1	173	28.5		7.9		23.9		83.9		5.7		7.2		8		82				<0.2		1.3	
					Middle	3.8	0.2	154	28.4	28.4	7.9	7.9	24.3	24.3	83.8	83.8	5.7		7.9		8		87				<0.2		1.3	
						3.8	0.2	151	28.4		7.9		24.3		83.8		5.7		7.9		9		88				<0.2		1.3	
					Bottom	6.5	0.2	158	28.4	28.4	7.9	7.9	24.7	24.7	83.1	83.1	5.6	5.6	10.1		11		91				<0.2		1.2	
						6.5	0.2	151	28.4		7.9		24.7		83.1		5.6		10.0		10		91				<0.2		1.5	
IM11	Fine	Moderate	14:04	7.8	Surface	1.0	0.1	158	28.5	28.5	7.9	7.9	25.1	25.1	84.0	84.0	5.7	5.7	6.7	10.1	9	9	83	87	822072	811474	<0.2	<0.2	1.0	1.0
						1.0	0.1	159	28.5		7.9		25.1		84.0		5.7		6.8		8		83				<0.2		1.0	
					Middle	3.9	0.1	151	28.3	28.3	7.9	7.9	25.2	25.2	82.1	82.1	5.6		9.1		10		87				<0.2		1.0	
						3.9	0.1	145	28.3		7.9		25.2		82.1		5.6		9.2		9		87				<0.2		1.0	
					Bottom	6.8	0.1	131	28.3	28.3	7.9	7.9	25.2	25.2	81.9	81.9	5.5	5.5	14.3		10		91				<0.2		1.1	
						6.8	0.1	132	28.3		7.9		25.2		81.9		5.5		14.6		10		91				<0.2		1.1	
IM12	Fine	Moderate	14:11	8.7	Surface	1.0	0.2	126	28.4	28.4	7.9	7.9	25.0	25.0	84.2	84.3	5.7	5.6	6.7	10.8	9	10	82	87	821446	812051	<0.2	<0.2	1.0	1.0
						1.0	0.2	126	28.4		7.9		25.0		84.3		5.7		6.8		9		83				<0.2		1.0	
					Middle	4.4	0.2	135	28.3	28.3	7.9	7.9	25.0	25.0	81.8	81.8	5.5		11.9		9		86				<0.2		1.0	
						4.4	0.2	118	28.3		7.9		25.0		81.8		5.6		12.0		9		87				<0.2		1.1	
					Bottom	7.7	0.2	142	28.3	28.3	7.9	7.9	25.1	25.1	81.5	81.5	5.5	5.5	13.9		11		90				<0.2		1.0	
						7.7	0.2	128	28.3		7.9		25.1		81.5		5.5		13.7		10		91				<0.2		1.1	
SR1A	Fine	Moderate	14:14	5.4	Surface	1.0	-	-	28.4	28.4	7.9	7.9	25.0	25.0	83.9	83.9	5.7	5.7	7.1	10.1	8	9	-	-	819978	812663	-	-	-	-
						1.0	-	-	28.4		7.9		25.0		83.9		5.7		7.0		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.2	28.2	7.9	7.9	25.1	25.1	81.3	81.3	5.5	5.5	13.1		10		-				-		-	
						4.4	-	-	28.2		7.9		25.1		81.3		5.5		13.0		8		-				-		-	
SR2	Fine	Moderate	14:28	5.2	Surface	1.0	0.2	13	28.5	28.5	8.0	8.0	25.1	25.1	84.7	84.7	5.7	5.7	5.2	5.2	6	7	83	85	821473	814149	<0.2	<0.2	1.0	1.1
						1.0	0.2	13	28.5		8.0		25.1		84.7		5.7		5.2		6		83				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	62	28.4	28.4	8.0	8.0	25.3	25.3	84.4	84.5	5.7	5.7	5.3		9		86				<0.2		1.1	
						4.2	0.1	65	28.4		8.0		25.3		84.5		5.7		5.3		8		86				<0.2		1.1	
SR3	Fine	Moderate	13:31	8.8	Surface	1.0	0.3	194	28.5	28.5	7.9	7.9	23.7	23.7	83.4	83.4	5.7	5.7	6.7	8.5	9	10	-	-	822129	807589	-	-	-	-
						1.0	0.3	197	28.5		7.9		23.7		83.4		5.7		6.7		9		-				-		-	
					Middle	4.4	0.4	171	28.4	28.4	7.9	7.9	24.3	24.3	84.2	84.2	5.7		7.9		10		-				-		-	
						4.4	0.4	173	28.4		7.9		24.3		84.1		5.7		8.0		10		-				-		-	
					Bottom	7.8	0.5	166	28.4	28.4	8.0	8.0	24.7	24.7	84.2	84.2	5.7	5.7	10.8		11		-				-		-	
						7.8	0.5	172	28.4		8.0		24.7		84.2		5.7		10.7		12		-				-		-	
SR4A	Cloudy	Calm	14:51	8.4	Surface	1.0	0.4	73	29.5	29.5	7.9	7.9	28.0	28.0	87.6	87.5	5.7	5.7	6.2	9.7	10	12	-	-	817187	807815	-	-	-	-
						1.0	0.4	80	29.5		7.9		28.0		87.4		5.7		6.2		10		-				-		-	
					Middle	4.2	0.3	70	29.3	29.3	7.9	7.9	28.2	28.2	86.2	86.2	5.6		8.9		12		-				-		-	
						4.2	0.3	76	29.3		7.9		28.2		86.1		5.6		9.0		12		-				-		-	
					Bottom	7.4	0.3	47	29.3	29.3	7.9	7.9	28.3	28.2	86.9	86.9	5.7	5.7	14.0		14		-				-		-	
						7.4	0.3	50	29.3		7.9		28.2		86.9		5.7		14.0		13		-				-		-	
SR5A	Cloudy	Calm	15:17	5.1	Surface	1.0	0.1	41	30.0	30.0	7.8	7.8	27.9	27.9	87.6	87.5	5.7	5.7	4.8	6.4	7	11	-	-	816607	810692	-	-	-	-
						1.0	0.1	44	30.0		7.8		27.9		87.4		5.7		4.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	37	29.3	29.3	7.8	7.8	27.9	27.9	89.1	89.6	5.8	5.9	8.4		13		-				-		-	
						4.1	0.2	39	29.3		7.8		27.9		90.1		5.9		7.5		14		-				-		-	
SR6A	Cloudy	Calm	15:42	4.7	Surface	1.0	0.0	28	30.1	30.1	7.8	7.8	27.6	27.6	91.9	91.9	6.0	6.0	1.6	2.2	5	5	-	-	817975	814739	-	-	-	-
						1.0	0.0	29	30.1		7.8		27.6		91.8		6.0		1.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	32	29.8	29.8	7.8	7.8	27.7	27.7	94.2	94.9	6.1	6.2	2.8		6		-				-		-	
						3.7	0.1	33	29.8		7.8		27.7		95.5		6.2		2.8		6		-				-		-	
SR7	Fine	Moderate	15:17	14.7	Surface	1.0	0.6	71	28.2	28.2	7.9	7.9	26.6	26.6	77.4	77.4	5.2	5.2	6.2	6.7	8	11	-	-	823645	823738	-	-	-	-
						1.0	0.7	71	28.2		7.9		26.6		77.4		5.2		6.1		9		-				-		-	
					Middle	7.4	0.1	65	28.1	28.1	7.9	7.9	26.7	26.7	76.3	76.3	5.1		6.8		10		-				-		-	
						7.4	0.1	65	28.1		7.9		26.7		76.3		5.1		6.8		11		-				-		-	
					Bottom	13.7	0.1	34	28.1	28.1	8.0	8.0	26.8	26.8	76.6	76.7	5.2	5.2	7.2		12		-				-		-	
						13.7	0.1	35	28.1		8.0		26.8		76.7		5.2		7.3		13		-				-		-	
SR8	Fine	Moderate	14:12	4.8	Surface	1.0	-	-	28.4	28.4	7.9	7.9	25.0	25.0	83.8	83.8	5.7	5.7	6.7	9.5	8	9	-	-	820382	811599	-	-	-	-
						1.0	-	-	28.4		7.9		25.0		83.8		5.7		6.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.2	28.2	7.9	7.9	25.1	25.1	81.8	81.8	5.6	5.6	12.4		9		-				-		-	
						3.8	-	-	28.2		7.9		25.1		81.8		5.6		12.3		10		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:34	8.1	Surface	1.0	0.4	19	29.3	29.3	7.8	7.8	28.3	28.3	85.2	85.2	5.6	5.6	9.8	11.7	13	13	85	88	815631	804266	<0.2	<0.2	1.1	1.0
						1.0	0.4	20	29.3		7.8		28.3		85.2		5.6		9.9		13		86				<0.2		1.0	
					Middle	4.1	0.4	14	29.1	29.1	7.9	7.9	28.9	28.9	84.3	84.5	5.5		11.1		13		88				<0.2		1.0	
						4.1	0.4	14	29.1		7.9		28.9		84.6		5.5		11.4		14		88				<0.2		1.0	
					Bottom	7.1	0.3	16	29.1	29.1	7.9	7.9	28.9	28.9	84.8	84.9	5.6	5.6	13.9		10		90				<0.2		1.0	
						7.1	0.3	16	29.1		7.9		28.9		84.9		5.6		14.1		12		91				<0.2		1.1	
C2	Fine	Moderate	07:50	11.2	Surface	1.0	0.3	354	28.4	28.4	7.9	7.9	23.9	23.9	82.3	82.3	5.6	5.6	12.3	12.4	15	15	86	90	825679	806965	<0.2	<0.2	1.5	1.5
						1.0	0.3	326	28.4		7.9		23.9		82.3		5.6		12.2		14		86				<0.2		1.3	
					Middle	5.6	0.3	13	28.4	28.4	7.9	7.9	24.1	24.1	82.7	82.7	5.6		10.7		15		90				<0.2		1.6	
						5.6	0.4	13	28.4		7.9		24.1		82.7		5.6		10.6		15		90				<0.2		1.4	
					Bottom	10.2	0.6	44	28.2	28.2	8.0	8.0	25.3	25.3	83.7	83.7	5.7	5.7	14.6		17		94				<0.2		1.5	
						10.2	0.6	47	28.2		8.0		25.3		83.7		5.7		14.3		16		93				<0.2		1.5	
C3	Fine	Moderate	08:55	10.6	Surface	1.0	0.6	259	28.3	28.3	7.9	7.9	25.6	25.6	81.0	81.0	5.5	5.4	5.0	8.7	8	8	85	89	822093	817781	<0.2	<0.2	1.4	1.4
						1.0	0.6	262	28.3		7.9		25.6		81.0		5.5		5.0		7		85				<0.2		1.4	
					Middle	5.3	0.6	262	28.2	28.2	7.9	7.9	25.8	25.8	78.6	78.6	5.3		7.6		7		89				<0.2		1.2	
						5.3	0.7	282	28.2		7.9		25.8		78.6		5.3		7.6		8		89				<0.2		1.4	
					Bottom	9.6	0.5	270	28.2	28.2	7.9	7.9	25.9	25.9	78.6	78.6	5.3	5.3	13.6		9		92				<0.2		1.5	
						9.6	0.6	282	28.2		7.9		25.9		78.6		5.3		13.2		9		92				<0.2		1.5	
IM1	Cloudy	Moderate	08:53	5.6	Surface	1.0	0.2	296	29.4	29.4	7.8	7.8	27.9	27.9	88.1	88.3	5.8	5.8	5.8	5.9	6	8	84	86	817955	807123	<0.2	<0.2	1.5	1.3
						1.0	0.2	324	29.4		7.8		27.9		88.5		5.8		6.0		7		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	332	29.4	29.4	7.8	7.8	27.9	27.9	90.4	90.9	5.9	6.0	6.0		9		87				<0.2		1.2	
						4.6	0.1	356	29.4		7.8		27.9		91.4		6.0		5.7		9		87				<0.2		1.3	
IM2	Cloudy	Moderate	09:00	7.9	Surface	1.0	0.3	10	29.4	29.4	7.8	7.8	28.0	28.0	86.5	86.6	5.7	5.7	9.0	13.2	13	16	85	88	818163	806149	<0.2	<0.2	1.4	1.7
						1.0	0.3	10	29.4		7.8		28.0		86.6		5.7		9.3		12		85				<0.2		1.6	
					Middle	4.0	0.2	4	29.2	29.2	7.8	7.8	28.1	28.1	85.0	85.0	5.6		14.9		13		87				<0.2		1.9	
						4.0	0.2	4	29.2		7.8		28.1		85.0		5.6		14.9		14		88				<0.2		1.6	
					Bottom	6.9	0.2	12	29.2	29.2	7.8	7.8	28.1	28.1	87.4	87.6	5.7	5.8	15.8		23		90				<0.2		1.7	
						6.9	0.2	12	29.2		7.8		28.1		87.7		5.8		15.5		22		90				<0.2		1.9	
IM3	Cloudy	Moderate	09:07	8.1	Surface	1.0	0.3	353	29.5	29.5	7.9	7.9	28.2	28.2	86.4	86.5	5.6	5.6	9.0	11.5	18	18	84	88	818787	805576	<0.2	<0.2	1.2	1.5
						1.0	0.4	354	29.5		7.9		28.2		86.5		5.7		9.3		17		85				<0.2		1.6	
					Middle	4.1	0.4	351	29.2	29.2	7.8	7.8	28.3	28.3	85.1	85.0	5.6		13.9		19		88				<0.2		1.5	
						4.1	0.4	323	29.2		7.8		28.3		84.9		5.6		13.9		19		88				<0.2		1.6	
					Bottom	7.1	0.4	346	29.2	29.2	7.8	7.8	28.3	28.3	86.7	86.7	5.7	5.7	11.1		18		91				<0.2		1.4	
						7.1	0.4	318	29.2		7.8		28.3		86.6		5.7		11.5		19		92				<0.2		1.5	
IM4	Cloudy	Moderate	09:18	7.6	Surface	1.0	0.6	19	29.3	29.3	7.9	7.9	28.3	28.3	85.4	85.5	5.6	5.6	10.1	14.5	20	23	84	88	819743	804598	<0.2	<0.2	1.7	2.2
						1.0	0.7	19	29.3		7.9		28.3		85.5		5.6		10.3		20		84				<0.2		1.8	
					Middle	3.8	0.6	14	29.3	29.3	7.9	7.9	28.3	28.3	85.3	85.3	5.6		14.4		21		87				<0.2		2.3	
						3.8	0.6	15	29.3		7.9		28.3		85.3		5.6		14.9		21		88				<0.2		2.5	
					Bottom	6.6	0.4	14	29.2	29.2	7.9	7.9	28.4	28.4	86.9	87.0	5.7	5.7	18.9		26		92				<0.2		2.5	
						6.6	0.5	14	29.2		7.9		28.4		87.1		5.7		18.5		27		91				<0.2		2.1	
IM5	Cloudy	Moderate	09:24	7.1	Surface	1.0	0.7	3	29.3	29.3	7.9	7.9	28.1	28.1	85.0	85.1	5.6	5.6	7.4	11.3	14	16	83	88	820729	804850	<0.2	<0.2	2.1	1.7
						1.0	0.7	3	29.3		7.9		28.1		85.1		5.6		7.6		13		84				<0.2		1.6	
					Middle	3.6	0.6	358	29.2	29.2	7.9	7.9	28.1	28.1	85.0	85.1	5.6		14.3		17		88				<0.2		1.6	
						3.6	0.6	329	29.2		7.9		28.1		85.1		5.6		14.1		16		88				<0.2		1.6	
					Bottom	6.1	0.5	358	29.2	29.2	7.9	7.9	28.2	28.2	86.1	86.3	5.7	5.7	12.1		17		91				<0.2		1.7	
						6.1	0.6	329	29.2		7.9		28.2		86.5		5.7		12.5		16		91				<0.2		1.6	
IM6	Cloudy	Moderate	09:32	7.7	Surface	1.0	0.4	344	29.4	29.4	7.9	7.9	27.9	27.9	85.0	85.1	5.6	5.6	9.1	9.4	16	17	84	88	821073	805846	<0.2	<0.2	1.8	2.1
						1.0	0.4	349	29.4		7.9		27.9		85.2		5.6		9.0		16		84				<0.2		1.7	
					Middle	3.9	0.3	345	29.3	29.3	7.9	7.9	27.9	27.9	85.6	85.7	5.6		9.6		16		88				<0.2		2.5	
						3.9	0.4	354	29.3		7.9		27.9		85.8		5.6		9.6		17		88				<0.2		2.6	
					Bottom	6.7	0.2	338	29.3	29.3	7.9	7.9	27.9	27.9	88.9	88.9	5.8	5.8	9.7		20		91				<0.2		2.0	
						6.7	0.3	357	29.3		7.9		27.9		88.9		5.8		9.6		19		91				<0.2		1.9	
IM7	Cloudy	Moderate	09:41	8.3	Surface	1.0	0.0	274	29.8	29.8	7.9	7.9	26.0	26.0	86.5	86.5	5.7	5.7	4.0	6.2	6	9	85	88	821343	806839	<0.2	<0.2	1.9	2.0
						1.0	0.0	300	29.8		7.9		26.0		86.4		5.7		4.0		5		85				<0.2		2.0	
					Middle	4.2	0.2	95	29.3	29.3	7.9	7.9	27.5	27.5	85.1	85.3	5.6		7.5		9		88				<0.2		2.0	
						4.2	0.2	102	29.3		7.9		27.4		85.5		5.6		7.5		9		88				<0.2		2.0	
					Bottom	7.3	0.1	107	29.3	29.3	7.9	7.9	27.6	27.6	89.0	89.1	5.9	5.9	7.0		12		91				<0.2		2.0	
						7.3	0.1	109	29.3		7.9		27.6		89.2		5.9		6.9		13		91				<0.2		1.8	
IM8	Fine	Moderate	10:21	7.9	Surface	1.0	0.2	55	28.5	28.5	7.9	7.9	23.2	23.2	83.3	83.3	5.7	5.7	5.2	9.8	6	8	85	90	821806	808156	<0.2	<0.2	2.0	1.9
						1.0	0.2	57	28.5		7.9		23.2		83.3		5.7		5.1		6		86				<0.2		1.9	
					Middle	4.0	0.3	98	28.3	28.3	7.9	7.9	24.2	24.2	83.3	83.3	5.7		7.7		7		90				<0.2		1.7	
						4.0	0.3	100	28.3		7.9		24.2		83.3		5.7		7.6		7		89				<0.2		1.8	
					Bottom	6.9	0.2	98	28.1	28.1	7.9	7.9	25.3	25.3	83.6	83.7	5.7	5.7	16.7		10		93				<0.2		2.0	
						6.9	0.2	98	28.1		7.9		25.3		83.7		5.7		16.7		9		94				<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 01 October 19 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	10:12	7.6	Surface	1.0	0.3	54	28.5	28.5	7.9	7.9	23.2	23.2	83.9	83.9	5.7	5.7	5.3	8.0	9	10	86	90	822116	808820	<0.2	<0.2	2.0	2.0
						1.0	0.3	58	28.5		7.9		23.2		83.9		5.7		5.3		9		85				<0.2		1.9	
					Middle	3.8	0.2	45	28.3	28.3	7.9	7.9	23.6	23.6	82.2	82.3	5.6		7.6		11		90				<0.2		2.1	
						3.8	0.2	45	28.3		7.9		23.6		82.3		5.6		7.6		10		89				<0.2		1.9	
					Bottom	6.6	0.2	337	28.2	28.2	7.9	7.9	24.6	24.6	83.9	84.0	5.7	5.7	11.2		11		93				<0.2		1.9	
						6.6	0.2	350	28.2		7.9		24.6		84.0		5.7		11.1		11		94				<0.2		2.0	
IM10	Fine	Moderate	10:03	8.2	Surface	1.0	0.3	313	28.3	28.3	7.9	7.9	24.9	24.9	83.3	83.3	5.7	5.7	10.3	12.5	7	8	86	90	822371	809810	<0.2	<0.2	1.9	1.8
						1.0	0.3	327	28.3		7.9		24.9		83.2		5.7		10.4		7		86				<0.2		1.9	
					Middle	4.1	0.4	318	28.3	28.3	7.9	7.9	25.0	25.0	82.2	82.2	5.6		12.9		8		90				<0.2		1.8	
						4.1	0.4	341	28.3		7.9		25.0		82.2		5.6		12.8		7		89				<0.2		1.8	
					Bottom	7.2	0.3	325	28.2	28.2	7.9	7.9	25.0	25.0	82.2	82.2	5.6	5.6	14.3		8		93				<0.2		1.6	
						7.2	0.3	338	28.2		7.9		25.0		82.2		5.6		14.2		8		94				<0.2		1.8	
IM11	Fine	Moderate	10:01	7.8	Surface	1.0	0.4	309	28.3	28.3	7.9	7.9	24.8	24.8	83.2	83.2	5.7	5.7	10.7	13.6	22	23	85	89	822041	811455	<0.2	<0.2	1.4	1.5
						1.0	0.5	328	28.3		7.9		24.8		83.2		5.7		10.6		22		86				<0.2		1.4	
					Middle	3.9	0.4	320	28.3	28.3	7.9	7.9	25.0	25.0	82.6	82.6	5.6		13.2		22		89				<0.2		1.6	
						3.9	0.4	327	28.3		7.9		25.0		82.6		5.6		13.4		23		90				<0.2		1.4	
					Bottom	6.8	0.3	338	28.2	28.2	7.9	7.9	25.0	25.0	82.1	82.1	5.6	5.6	16.8		25		93				<0.2		1.5	
						6.8	0.3	341	28.2		7.9		25.0		82.1		5.6		16.7		24		93				<0.2		1.6	
IM12	Fine	Moderate	09:47	8.9	Surface	1.0	0.4	276	28.3	28.3	7.9	7.9	25.1	25.1	82.0	82.0	5.6	5.6	13.6	15.1	21	22	86	90	821451	812052	<0.2	<0.2	1.2	1.4
						1.0	0.4	278	28.3		7.9		25.1		82.0		5.6		13.4		21		85				<0.2		1.5	
					Middle	4.5	0.3	273	28.2	28.2	7.9	7.9	25.1	25.1	81.4	81.4	5.5		14.3		22		90				<0.2		1.5	
						4.5	0.4	288	28.2		7.9		25.1		81.4		5.5		14.1		22		89				<0.2		1.4	
					Bottom	7.9	0.3	278	28.2	28.2	7.9	7.9	25.1	25.1	81.6	81.6	5.5	5.5	17.4		22		94				<0.2		1.5	
						7.9	0.3	287	28.2		7.9		25.1		81.6		5.5		17.7		21		94				<0.2		1.4	
SR1A	Fine	Moderate	09:28	5.5	Surface	1.0	-	-	28.1	28.1	7.9	7.9	25.1	25.1	82.1	82.1	5.6	5.6	7.1	7.7	10	10	-	-	819978	812655	-	-	-	-
						1.0	-	-	28.1		7.9		25.1		82.1		5.6		7.2		10		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.0	28.0	7.9	7.9	25.2	25.2	80.5	80.6	5.5	5.5	8.2		10		-				-		-	
						4.5	-	-	28.0		7.9		25.2		80.6		5.5		8.4		10		-				-		-	
SR2	Fine	Moderate	09:16	5.0	Surface	1.0	0.8	307	28.3	28.3	7.9	7.9	25.0	25.0	84.8	84.8	5.8	5.8	4.7	8.5	8	9	85	88	821458	814179	<0.2	<0.2	1.5	1.5
						1.0	0.8	310	28.3		7.9		25.0		84.8		5.8		4.7		9		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.6	308	28.2	28.2	7.9	7.9	25.2	25.2	81.3	81.3	5.5	5.5	12.5		8		90				<0.2		1.5	
						4.0	0.6	329	28.2		7.9		25.2		81.3		5.5		12.1		9		90				<0.2		1.4	
SR3	Fine	Moderate	08:15	8.2	Surface	1.0	0.2	34	28.5	28.5	7.9	7.9	23.2	23.2	84.4	84.4	5.8	5.8	4.7	10.5	6	6	-	-	822151	807551	-	-	-	-
						1.0	0.2	35	28.5		7.9		23.2		84.3		5.8		4.7		6		-				-		-	
					Middle	4.1	0.3	78	28.4	28.4	7.9	7.9	23.9	23.9	84.2	84.2	5.7		8.2		6		-				-		-	
						4.1	0.3	80	28.4		7.9		23.9		84.2		5.7		8.2		6		-				-		-	
					Bottom	7.2	0.5	82	28.2	28.2	7.9	7.9	25.2	25.2	83.7	83.7	5.7	5.7	18.5		5		-				-		-	
						7.2	0.5	87	28.2		7.9		25.2		83.7		5.7		18.8		6		-				-		-	
SR4A	Cloudy	Calm	08:04	8.8	Surface	1.0	0.5	74	29.2	29.2	7.9	7.9	27.9	27.9	86.3	86.5	5.7	5.7	11.6	15.0	10	12	-	-	817173	807811	-	-	-	-
						1.0	0.5	76	29.2		7.9		27.9		86.6		5.7		11.4		9		-				-		-	
					Middle	4.4	0.5	75	29.2	29.2	7.9	7.9	27.9	27.9	86.3	86.3	5.7		15.3		10		-				-		-	
						4.4	0.5	80	29.2		7.9		27.9		86.2		5.7		15.1		9		-				-		-	
					Bottom	7.8	0.4	73	29.2	29.2	7.9	7.9	28.0	28.0	86.4	86.8	5.7	5.7	18.2		17		-				-		-	
						7.8	0.4	79	29.2		7.9		28.0		87.2		5.7		18.3		17		-				-		-	
SR5A	Cloudy	Calm	07:45	5.2	Surface	1.0	0.1	153	29.3	29.3	7.9	7.9	28.0	28.0	84.4	84.6	5.5	5.6	5.0	5.5	14	20	-	-	816602	810715	-	-	-	-
						1.0	0.1	163	29.3		7.9		28.0		84.8		5.6		5.1		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	124	29.2	29.2	7.9	7.9	28.0	28.0	86.6	87.0	5.7	5.7	5.9		25		-				-		-	
						4.2	0.1	135	29.2		7.9		28.0		87.3		5.7		6.1		25		-				-		-	
SR6A	Cloudy	Calm	07:18	4.1	Surface	1.0	0.1	217	29.2	29.2	7.9	7.9	28.0	28.0	82.7	82.7	5.4	5.4	6.6	6.6	10	11	-	-	817966	814760	-	-	-	-
						1.0	0.1	227	29.2		7.9		28.0		82.7		5.4		6.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	212	29.2	29.2	7.8	7.8	28.1	28.1	84.5	84.6	5.6	5.6	6.6		11		-				-		-	
						3.1	0.1	227	29.2		7.8		28.1		84.6		5.6		6.6		12		-				-		-	
SR7	Fine	Moderate	08:27	14.9	Surface	1.0	0.2	248	28.2	28.2	7.9	7.9	25.7	25.7	79.2	79.2	5.4	5.4	7.9	9.6	10	12	-	-	823646	823718	-	-	-	-
						1.0	0.2	256	28.2		7.9		25.7		79.2		5.4		7.8		10		-				-		-	
					Middle	7.5	0.3	221	28.2	28.2	7.9	7.9	25.8	25.8	78.7	78.7	5.3		9.1		12		-				-		-	
						7.5	0.3	230	28.2		7.9		25.8		78.7		5.3		9.1		12		-				-		-	
					Bottom	13.9	0.5	221	28.1	28.1	7.9	7.9	26.1	26.1	78.0	78.0	5.3	5.3	11.8		12		-				-		-	
						13.9	0.5	225	28.1		7.9		26.1		78.0		5.3		11.7		13		-				-		-	
SR8	Fine	Moderate	09:39	5.2	Surface	1.0	-	-	29.0	29.0	7.9	7.9	24.8	24.8	86.7	86.8	5.8	5.8	8.1	9.2	13	13	-	-	820382	811619	-	-	-	-
						1.0	-	-	29.0		7.9		24.8		86.8		5.8		8.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.3	28.3	7.9	7.9	24.9	24.9	83.8	83.8	5.7	5.7	10.4		14		-				-		-	
						4.2	-	-	28.3		7.9		24.9		83.8		5.7		10.1		14		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	15:38	8.2	Surface	1.0	0.3	144	29.3	29.3	8.0	8.0	28.4	28.4	85.3	85.3	5.6	5.6	18.7	18.1	9	11	86	89	815618	804253	<0.2	<0.2	1.1	1.1
						1.0	0.3	140	29.3		8.0		28.4		85.3		5.6		18.7		10		86				<0.2		1.1	
					Middle	4.1	0.3	131	29.3	29.3	8.0	8.0	28.5	28.5	85.8	85.9	5.6		16.0		11		88				<0.2		1.0	
						4.1	0.3	141	29.3		8.0		28.5		85.9		5.6		16.0		11		89				<0.2		1.1	
					Bottom	7.2	0.2	129	29.3	29.3	8.0	8.0	28.5	28.5	86.9	87.0	5.7	5.7	19.7		12		91				<0.2		1.1	
						7.2	0.2	130	29.3		8.0		28.5		87.0		5.7		19.7		12		91				<0.2		1.1	
C2	Fine	Moderate	14:35	11.8	Surface	1.0	0.4	126	29.7	29.6	8.0	8.0	25.3	25.3	83.8	83.8	5.5	5.5	11.4	12.9	9	9	79	83	825666	806931	<0.2	<0.2	1.5	1.7
						1.0	0.4	128	29.6		8.0		25.3		83.8		5.6		11.6		8		80				<0.2		1.6	
					Middle	5.9	0.4	151	29.5	29.5	8.0	8.0	26.3	26.3	83.1	83.1	5.5		12.2		9		84				<0.2		1.6	
						5.9	0.4	155	29.5		8.0		26.3		83.1		5.5		12.2		9		83				<0.2		1.7	
					Bottom	10.8	0.2	143	29.7	29.7	8.0	8.0	28.1	28.1	78.1	78.1	5.1	5.1	14.9		9		87				<0.2		1.7	
						10.8	0.2	153	29.7		8.0		28.1		78.1		5.1		15.2		10		87				<0.2		1.8	
C3	Cloudy	Moderate	16:35	11.7	Surface	1.0	0.2	88	30.2	30.2	8.0	8.0	28.4	28.4	87.2	87.2	5.6	5.5	3.0	6.7	8	8	82	85	822127	817803	<0.2	<0.2	1.2	1.1
						1.0	0.3	91	30.2		8.0		28.4		87.2		5.6		3.0		7		83				<0.2		1.2	
					Middle	5.9	0.2	92	29.9	29.9	8.0	8.0	28.9	28.9	82.5	82.5	5.3		4.6		8		85				<0.2		1.1	
						5.9	0.2	96	29.9		8.0		28.9		82.4		5.3		4.7		8		85				<0.2		1.0	
					Bottom	10.7	0.1	20	29.5	29.5	8.0	8.0	30.0	30.0	79.2	79.3	5.1	5.1	12.5		9		88				<0.2		0.9	
						10.7	0.1	20	29.5		8.0		30.0		79.3		5.1		12.4		9		89				<0.2		1.0	
IM1	Fine	Moderate	15:25	5.3	Surface	1.0	0.3	102	29.6	29.6	8.0	8.0	27.9	27.9	88.9	88.9	5.8	5.8	6.6	7.0	14	14	86	88	817943	807128	<0.2	<0.2	1.1	1.0
						1.0	0.3	113	29.6		8.0		27.9		88.9		5.8		6.6		13		85				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	121	29.5	29.5	8.0	8.0	28.1	28.1	88.8	88.9	5.8	5.8	7.4		14		90				<0.2		1.0	
						4.3	0.2	143	29.5		8.0		28.1		88.9		5.8		7.5		15		89				<0.2		0.9	
IM2	Fine	Moderate	15:20	7.2	Surface	1.0	0.3	250	29.4	29.4	8.0	8.0	27.9	27.9	85.7	85.8	5.6	5.6	11.8	13.6	14	15	85	88	818144	806188	<0.2	<0.2	1.1	1.2
						1.0	0.3	222	29.4		8.0		27.9		85.8		5.6		11.9		14		86				<0.2		1.2	
					Middle	3.6	0.3	245	29.4	29.4	8.0	8.0	28.0	28.0	85.9	86.0	5.6		12.9		16		88				<0.2		1.2	
						3.6	0.3	227	29.4		8.0		28.0		86.0		5.6		13.0		16		88				<0.2		1.1	
					Bottom	6.2	0.2	220	29.4	29.4	8.0	8.0	28.0	28.0	87.6	87.7	5.7	5.8	16.0		15		90				<0.2		1.2	
						6.2	0.2	234	29.3		8.0		28.0		87.8		5.8		16.0		16		90				<0.2		1.2	
IM3	Fine	Moderate	15:14	7.1	Surface	1.0	0.3	233	29.5	29.5	8.0	8.0	27.7	27.7	85.5	85.5	5.6	5.6	10.4	12.3	14	15	85	88	818770	805588	<0.2	<0.2	1.2	1.1
						1.0	0.3	235	29.5		8.0		27.7		85.4		5.6		10.4		15		85				<0.2		1.1	
					Middle	3.6	0.3	209	29.3	29.3	8.0	8.0	28.1	28.1	85.1	85.2	5.6		12.6		15		88				<0.2		1.1	
						3.6	0.3	201	29.3		8.0		28.1		85.2		5.6		12.6		16		88				<0.2		0.8	
					Bottom	6.1	0.3	235	29.4	29.4	8.0	8.0	28.1	28.1	86.6	86.7	5.7	5.7	13.9		15		90				<0.2		1.1	
						6.1	0.3	240	29.4		8.0		28.1		86.8		5.7		13.9		16		90				<0.2		1.1	
IM4	Fine	Moderate	15:04	7.8	Surface	1.0	0.6	216	29.4	29.4	8.0	8.0	27.4	27.4	84.7	84.7	5.6	5.6	12.9	13.1	18	19	85	88	819711	804592	<0.2	<0.2	1.0	1.0
						1.0	0.6	220	29.4		8.0		27.4		84.6		5.6		12.4		18		85				<0.2		1.0	
					Middle	3.9	0.6	202	29.3	29.3	8.0	8.0	27.6	27.6	84.3	84.3	5.5		13.5		19		88				<0.2		0.9	
						3.9	0.6	198	29.3		8.0		27.6		84.3		5.5		13.5		19		89				<0.2		0.9	
					Bottom	6.8	0.5	252	29.3	29.3	8.0	8.0	27.9	27.9	85.7	85.7	5.6	5.6	13.1		19		91				<0.2		0.9	
						6.8	0.5	255	29.3		8.0		27.9		85.7		5.6		13.1		20		91				<0.2		1.0	
IM5	Fine	Moderate	14:54	7.6	Surface	1.0	0.8	198	29.4	29.4	8.0	8.0	27.6	27.6	84.3	84.3	5.5	5.5	15.0	14.5	18	18	86	88	820714	804882	<0.2	<0.2	2.0	1.4
						1.0	0.8	199	29.4		8.0		27.6		84.3		5.5		15.1		18		85				<0.2		1.2	
					Middle	3.8	0.7	171	29.4	29.4	8.0	8.0	27.7	27.7	84.0	84.0	5.5		13.2		18		88				<0.2		1.3	
						3.8	0.8	189	29.4		8.0		27.7		84.0		5.5		13.9		18		87				<0.2		1.3	
					Bottom	6.6	0.6	214	29.4	29.4	8.0	8.0	27.7	27.7	84.6	84.7	5.6	5.6	15.0		18		91				<0.2		1.2	
						6.6	0.7	220	29.4		8.0		27.7		84.7		5.6		14.7		17		91				<0.2		1.3	
IM6	Fine	Moderate	14:45	7.4	Surface	1.0	0.7	183	29.5	29.5	8.0	8.0	28.0	28.0	86.6	86.6	5.7	5.7	11.0	12.8	20	19	86	88	821042	805837	<0.2	<0.2	1.2	1.2
						1.0	0.7	199	29.5		8.0		28.0		86.6		5.7		11.0		21		85				<0.2		1.1	
					Middle	3.7	0.6	148	29.5	29.5	8.0	8.0	28.0	28.0	86.8	86.8	5.7		14.2		18		87				<0.2		1.2	
						3.7	0.7	141	29.5		8.0		28.0		86.8		5.7		14.2		18		88				<0.2		1.2	
					Bottom	6.4	0.6	184	29.3	29.3	8.0	8.0	28.1	28.1	88.0	88.1	5.8	5.8	13.1		18		91				<0.2		1.1	
						6.4	0.6	185	29.3		8.0		28.1		88.1		5.8		13.1		17		90				<0.2		1.1	
IM7	Fine	Moderate	14:39	7.9	Surface	1.0	0.6	183	29.5	29.5	8.0	8.0	28.0	28.0	86.3	86.3	5.6	5.6	13.7	13.0	22	22	86	88	821327	806840	<0.2	<0.2	1.1	1.1
						1.0	0.6	179	29.5		8.0		28.0		86.3		5.6		13.9		23		85				<0.2		1.2	
					Middle	4.0	0.5	187	29.5	29.5	8.0	8.0	28.0	28.0	86.1	86.1	5.6		14.4		22		88				<0.2		1.2	
						4.0	0.5	191	29.5		8.0		28.0		86.1		5.6		14.3		21		88				<0.2		0.9	
					Bottom	6.9	0.4	187	29.5	29.5	8.0	8.0	28.0	28.0	86.3	86.4	5.6	5.6	10.7		22		91				<0.2		1.0	
						6.9	0.4	193	29.5		8.0		28.0		86.4		5.6		10.7		21		90				<0.2		1.2	
IM8	Fine	Moderate	15:03	7.9	Surface	1.0	0.1	167	29.9	29.9	8.0	8.0	25.2	25.2	88.1	88.1	5.8	5.8	4.1	10.5	6	7	81	84	821837	808152	<0.2	<0.2	1.5	1.4
						1.0	0.1	166	29.9		8.0		25.2		88.1		5.8		4.1		5		80				<0.2		1.5	
					Middle	4.0	0.2	179	29.7	29.7	8.0	8.0	26.7	26.7	87.1	87.1	5.7		10.7		6		83				<0.2		1.4	
						4.0	0.2	184	29.7		8.0		26.7		87.1		5.7		10.9		7		84				<0.2		1.2	
					Bottom	6.9	0.2	185	29.7	29.7	8.0	8.0	27.9	27.9	88.4	88.3	5.8	5.8	16.7		8		86				<0.2		1.3	
						6.9	0.2	186	29.7		8.0		27.9		88.2		5.8		16.7		9		87				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	15:11	7.3	Surface	1.0	0.3	163	29.7	29.7	8.0	8.0	25.5	25.5	87.3	87.3	5.8	5.7	6.7	9.6	11	12	81	84	822094	808789	<0.2	<0.2	1.6	1.5
						1.0	0.3	166	29.7		8.0		25.5		87.2		5.8		6.7		10		80				<0.2		1.3	
					Middle	3.7	0.2	164	29.6	29.6	8.0	8.0	26.6	26.6	85.3	85.3	5.6		10.1		12		84				<0.2		1.3	
						3.7	0.2	160	29.6		8.0		26.6		85.3		5.6		10.1		13		84				<0.2		1.5	
					Bottom	6.3	0.2	172	29.6	29.6	8.0	8.0	27.0	27.0	84.8	84.9	5.6	5.6	11.9		12		87				<0.2		1.5	
						6.3	0.2	173	29.6		8.0		27.0		84.9		5.6		11.9		13		87				<0.2		1.6	
IM10	Fine	Moderate	15:18	6.7	Surface	1.0	0.2	153	29.9	29.9	8.0	8.0	25.6	25.6	88.9	88.9	5.9	5.8	6.8	10.5	9	9	81	84	822378	809793	<0.2	<0.2	1.5	1.4
						1.0	0.2	158	29.9		8.0		25.6		88.9		5.9		6.9		10		80				<0.2		1.4	
					Middle	3.4	0.2	158	29.8	29.8	8.0	8.0	26.4	26.4	87.5	87.5	5.7		9.8		9		85				<0.2		1.5	
						3.4	0.2	169	29.8		8.0		26.4		87.5		5.7		9.8		9		85				<0.2		1.2	
					Bottom	5.7	0.2	162	29.8	29.8	8.0	8.0	27.5	27.5	87.1	87.1	5.7	5.7	14.8		8		87				<0.2		1.4	
						5.7	0.2	163	29.8		8.0		27.5		87.1		5.7		14.8		9		87				<0.2		1.5	
IM11	Fine	Moderate	15:30	8.4	Surface	1.0	0.0	140	29.7	29.7	8.0	8.0	27.9	27.9	83.6	83.6	5.4	5.4	13.5	17.7	14	14	81	84	822061	811481	<0.2	<0.2	1.2	1.1
						1.0	0.0	143	29.7		8.0		27.9		83.6		5.4		13.6		15		80				<0.2		1.0	
					Middle	4.2	0.0	152	29.6	29.6	8.0	8.0	28.0	28.0	82.3	82.3	5.4		18.6		13		84				<0.2		1.0	
						4.2	0.0	153	29.6		8.0		28.0		82.3		5.4		18.6		14		85				<0.2		1.0	
					Bottom	7.4	0.1	144	29.6	29.6	8.0	8.0	28.0	28.0	82.2	82.2	5.4	5.4	21.0		15		87				<0.2		1.0	
						7.4	0.1	166	29.6		8.0		28.0		82.2		5.4		21.0		15		88				<0.2		1.1	
IM12	Fine	Moderate	15:37	9.6	Surface	1.0	0.2	138	29.9	29.9	8.0	8.0	27.8	27.8	85.5	85.5	5.6	5.6	9.8	14.9	14	13	80	83	821444	812026	<0.2	<0.2	1.2	1.3
						1.0	0.2	133	29.9		8.0		27.8		85.5		5.6		9.9		14		80				<0.2		1.2	
					Middle	4.8	0.1	142	29.7	29.7	8.0	8.0	27.9	27.9	83.9	83.9	5.5		16.0		13		83				<0.2		1.4	
						4.8	0.1	145	29.7		8.0		27.9		83.9		5.5		16.0		12		84				<0.2		1.4	
					Bottom	8.6	0.1	146	29.7	29.7	8.0	8.0	28.0	28.0	84.3	84.3	5.5	5.5	18.7		12		86				<0.2		1.2	
						8.6	0.2	139	29.7		8.0		28.0		84.3		5.5		18.7		13		87				<0.2		1.2	
SR1A	Fine	Moderate	16:01	5.2	Surface	1.0	-	-	30.0	30.0	8.0	8.0	27.9	27.9	88.3	88.3	5.7	5.7	5.4	11.7	9	9	-	-	819979	812662	-	-	-	-
						1.0	-	-	30.0		8.0		27.9		88.2		5.7		5.4		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	29.6	29.6	8.0	8.0	28.1	28.1	83.1	83.1	5.4	5.4	17.9		9		-				-		-	
						4.2	-	-	29.6		8.0		28.1		83.1		5.4		17.9		8		-				-		-	
SR2	Cloudy	Moderate	16:12	4.7	Surface	1.0	0.3	51	29.9	29.9	8.0	8.0	27.9	27.9	85.7	85.7	5.6	5.6	6.5	10.6	7	6	84	85	821473	814176	<0.2	<0.2	1.1	1.1
						1.0	0.3	55	29.9		8.0		27.9		85.6		5.6		6.7		6		84				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	55	29.6	29.6	8.0	8.0	28.1	28.1	82.7	82.7	5.4	5.4	14.6		6		86				<0.2		1.1	
						3.7	0.2	56	29.6		8.0		28.1		82.7		5.4		14.6		6		86				<0.2		1.0	
SR3	Fine	Moderate	14:56	9.0	Surface	1.0	0.3	165	30.1	30.1	8.0	8.0	25.3	25.3	88.6	88.6	5.8	5.9	5.1	9.8	9	9	-	-	822134	807588	-	-	-	-
						1.0	0.3	168	30.1		8.0		25.3		88.6		5.8		5.1		9		-				-		-	
					Middle	4.5	0.4	165	30.0	30.0	8.0	8.0	25.8	25.8	89.2	89.2	5.9		8.2		8		-				-		-	
						4.5	0.4	170	30.0		8.0		25.8		89.2		5.9		8.2		8		-				-		-	
					Bottom	8.0	0.4	167	29.7	29.7	8.0	8.0	27.9	27.9	87.8	87.8	5.7	5.7	16.1		9		-				-		-	
						8.0	0.4	171	29.7		8.0		27.9		87.8		5.7		16.1		8		-				-		-	
SR4A	Fine	Moderate	15:50	8.5	Surface	1.0	0.6	53	29.6	29.6	8.0	8.0	27.8	27.8	88.2	88.2	5.8	5.8	12.6	13.6	16	16	-	-	817176	807804	-	-	-	-
						1.0	0.6	56	29.6		8.0		27.8		88.2		5.8		12.8		16		-				-		-	
					Middle	4.3	0.5	56	29.6	29.6	8.0	8.0	27.8	27.8	88.2	88.2	5.8		13.0		16		-				-		-	
						4.3	0.5	57	29.6		8.0		27.8		88.2		5.8		13.0		16		-				-		-	
					Bottom	7.5	0.4	47	29.6	29.6	8.0	8.0	27.9	27.9	89.0	89.1	5.8	5.8	14.9		15		-				-		-	
						7.5	0.4	50	29.6		8.0		27.9		89.1		5.8		15.0		16		-				-		-	
SR5A	Fine	Moderate	16:02	4.5	Surface	1.0	0.7	91	29.6	29.6	8.0	8.0	28.3	28.3	86.0	86.0	5.6	5.6	9.2	10.7	11	11	-	-	816595	810715	-	-	-	-
						1.0	0.7	97	29.6		8.0		28.3		86.0		5.6		9.3		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.5	89	29.4	29.4	8.0	8.0	28.4	28.4	87.4	87.4	5.7	5.7	12.1		12		-				-		-	
						3.5	0.5	92	29.4		8.0		28.4		87.4		5.7		12.1		11		-				-		-	
SR6A	Fine	Moderate	16:46	4.4	Surface	1.0	0.0	74	30.0	30.0	8.0	8.0	27.8	27.8	87.2	87.0	5.7	5.7	6.2	7.0	8	8	-	-	817948	814744	-	-	-	-
						1.0	0.0	74	30.0		8.0		27.8		86.7		5.6		6.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	339	29.6	29.6	8.0	8.0	28.3	28.3	84.8	85.1	5.5	5.6	7.8		10		-				-		-	
						3.4	0.1	344	29.6		8.0		28.3		85.3		5.6		7.8		11		-				-		-	
SR7	Cloudy	Rough	17:03	16.0	Surface	1.0	0.2	99	29.7	29.7	8.0	8.0	29.8	29.8	80.9	80.9	5.2	5.2	5.5	5.6	6	6	-	-	823653	823764	-	-	-	-
						1.0	0.2	107	29.7		8.0		29.8		80.9		5.2		5.5		6		-				-		-	
					Middle	8.0	0.1	108	29.6	29.6	8.0	8.0	30.1	30.1	78.7	78.7	5.1		5.4		6		-				-		-	
						8.0	0.1	113	29.6		8.0		30.1		78.7		5.1		5.5		6		-				-		-	
					Bottom	15.0	0.1	279	29.5	29.5	8.0	8.0	30.4	30.4	79.8	79.9	5.2	5.2	5.8		6		-				-		-	
						15.0	0.1	306	29.5		8.0		30.4		79.9		5.2		5.8		7		-				-		-	
SR8	Fine	Moderate	15:49	4.9	Surface	1.0	-	-	29.9	29.9	8.0	8.0	27.8	27.8	85.4	85.4	5.6	5.6	9.8	11.7	11	11	-	-	820376	811624	-	-	-	-
						1.0	-	-	29.9		8.0		27.8		85.4		5.6		9.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	29.7	29.7	8.0	8.0	27.9	27.9	84.0	84.0	5.5	5.5	13.8		12		-				-		-	
						3.9	-	-	29.7		8.0		27.9		84.0		5.5		13.5		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	10:24	8.1	Surface	1.0	0.5	58	29.4	29.4	8.0	8.0	27.9	27.9	85.1	85.1	5.6	5.6	8.2	10.2	11	12	85	88	815621	804223	<0.2	<0.2	1.2	1.2
						1.0	0.5	59	29.4		8.0		27.9		85.1		5.6		8.4		11		86				<0.2		1.2	
					Middle	4.1	0.4	49	29.3	29.3	8.0	8.0	28.2	28.2	84.7	85.0	5.6		11.0		12		87				<0.2		1.1	
						4.1	0.4	50	29.3		8.0		28.2		85.2		5.6		10.0		11		88				<0.2		1.2	
					Bottom	7.1	0.3	41	29.3	29.3	8.0	8.0	28.2	28.2	86.5	86.6	5.7	5.7	11.6		13		90				<0.2		1.1	
						7.1	0.3	42	29.2		8.0		28.2		86.6		5.7		11.8		14		90				<0.2		1.1	
C2	Fine	Rough	11:40	11.4	Surface	1.0	0.4	13	29.7	29.7	8.0	8.0	25.3	25.3	83.8	83.8	5.5	5.5	9.4	11.3	5	5	80	84	825692	806921	<0.2	<0.2	1.6	1.5
						1.0	0.4	13	29.7		8.0		25.3		83.8		5.5		9.4		5		80				<0.2		1.6	
					Middle	5.7	0.3	40	29.5	29.5	8.0	8.0	26.3	26.3	82.0	82.0	5.4		11.1		4		84				<0.2		1.5	
						5.7	0.3	42	29.5		8.0		26.3		81.9		5.4		10.9		5		84				<0.2		1.4	
					Bottom	10.4	0.2	24	29.6	29.6	8.0	8.0	27.8	27.8	80.4	80.5	5.3	5.3	13.5		5		87				<0.2		1.4	
						10.4	0.2	25	29.6		8.0		27.8		80.5		5.3		13.5		6		87				<0.2		1.6	
C3	Fine	Moderate	09:50	11.2	Surface	1.0	0.6	262	29.8	29.8	8.0	8.0	27.7	27.7	84.3	84.3	5.5	5.5	6.5	11.5	7	7	82	85	822089	817811	<0.2	<0.2	1.4	1.3
						1.0	0.6	283	29.8		8.0		27.7		84.3		5.5		6.5		6		81				<0.2		1.4	
					Middle	5.6	0.7	265	29.6	29.6	8.0	8.0	28.4	28.4	82.1	82.2	5.4		12.6		7		85				<0.2		1.1	
						5.6	0.8	285	29.6		8.0		28.4		82.2		5.4		12.8		6		84				<0.2		1.2	
					Bottom	10.2	0.6	263	29.6	29.6	8.0	8.0	29.0	29.0	80.2	80.2	5.2	5.2	15.3		6		88				<0.2		1.3	
						10.2	0.6	280	29.6		8.0		29.0		80.2		5.2		15.1		7		88				<0.2		1.4	
IM1	Fine	Moderate	10:34	5.6	Surface	1.0	0.3	343	29.3	29.3	8.0	8.0	27.9	27.9	84.8	84.8	5.6	5.6	8.1	9.6	9	10	86	88	817935	807111	<0.2	<0.2	1.1	1.1
						1.0	0.3	316	29.3		8.0		27.9		84.7		5.6		8.4		10		87				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	344	29.4	29.4	8.0	8.0	28.0	28.0	84.4	84.4	5.5	5.5	10.9		11		90				<0.2		1.0	
						4.6	0.2	347	29.4		8.0		28.0		84.4		5.5		10.9		10		89				<0.2		1.0	
IM2	Fine	Moderate	10:40	7.2	Surface	1.0	0.4	28	29.5	29.5	8.0	8.0	27.9	27.9	85.8	85.8	5.6	5.6	8.9	10.5	9	10	86	89	818175	806160	<0.2	<0.2	1.1	1.2
						1.0	0.4	29	29.5		8.0		27.9		85.8		5.6		9.2		9		86				<0.2		1.2	
					Middle	3.6	0.3	12	29.4	29.4	8.0	8.0	28.0	28.0	85.7	85.8	5.6		10.9		10		88				<0.2		1.2	
						3.6	0.4	12	29.4		8.0		28.0		85.8		5.6		10.8		10		89				<0.2		1.2	
					Bottom	6.2	0.3	351	29.4	29.4	8.0	8.0	28.0	28.0	85.8	85.8	5.6	5.6	11.9		10		92				<0.2		1.0	
						6.2	0.3	323	29.4		8.0		28.0		85.8		5.6		11.3		10		91				<0.2		1.2	
IM3	Fine	Moderate	10:45	7.6	Surface	1.0	0.4	11	29.6	29.6	8.0	8.0	27.1	27.2	86.8	86.8	5.7	5.6	6.9	10.2	9	10	85	88	818770	805609	<0.2	<0.2	1.2	1.2
						1.0	0.4	11	29.6		8.0		27.2		86.7		5.7		7.1		10		86				<0.2		1.2	
					Middle	3.8	0.4	350	29.4	29.4	8.0	8.0	28.0	28.0	84.4	84.4	5.5		11.4		9		87				<0.2		1.2	
						3.8	0.4	358	29.4		8.0		28.0		84.4		5.5		11.4		9		88				<0.2		1.2	
					Bottom	6.6	0.4	339	29.4	29.4	8.0	8.0	28.2	28.2	84.8	84.9	5.6	5.6	12.2		11		90				<0.2		1.2	
						6.6	0.4	347	29.4		8.0		28.2		84.9		5.6		12.5		11		90				<0.2		1.1	
IM4	Fine	Moderate	10:52	7.8	Surface	1.0	0.8	5	29.4	29.4	8.0	8.0	27.5	27.5	84.7	84.7	5.6	5.6	12.8	13.0	13	16	86	88	819710	804586	<0.2	<0.2	1.3	1.2
						1.0	0.9	5	29.4		8.0		27.5		84.7		5.6		12.8		14		85				<0.2		1.2	
					Middle	3.9	0.6	5	29.4	29.4	8.0	8.0	27.5	27.5	84.6	84.6	5.6		12.9		16		87				<0.2		1.2	
						3.9	0.7	5	29.4		8.0		27.6		84.6		5.6		12.7		17		89				<0.2		1.2	
					Bottom	6.8	0.5	1	29.3	29.3	8.0	8.0	27.8	27.8	85.3	85.4	5.6	5.6	13.0		18		90				<0.2		1.2	
						6.8	0.6	1	29.2		8.0		27.8		85.4		5.6		13.9		16		90				<0.2		1.3	
IM5	Fine	Moderate	10:58	7.4	Surface	1.0	0.8	30	29.4	29.4	8.0	8.0	27.5	27.5	84.1	84.1	5.5	5.5	11.3	13.0	16	17	85	88	820751	804865	<0.2	<0.2	1.6	1.5
						1.0	0.8	30	29.4		8.0		27.5		84.0		5.5		11.3		16		86				<0.2		1.7	
					Middle	3.7	0.8	25	29.4	29.4	8.0	8.0	27.5	27.5	84.0	84.0	5.5		13.0		16		88				<0.2		1.7	
						3.7	0.8	27	29.4		8.0		27.5		84.0		5.5		13.0		17		87				<0.2		1.4	
					Bottom	6.4	0.7	30	29.4	29.4	8.0	8.0	27.5	27.5	85.3	85.5	5.6	5.6	14.4		18		90				<0.2		1.3	
						6.4	0.7	31	29.4		8.0		27.5		85.6		5.6		15.0		18		90				<0.2		1.3	
IM6	Fine	Moderate	11:03	7.2	Surface	1.0	0.4	342	29.5	29.5	8.0	8.0	27.8	27.8	85.9	85.9	5.6	5.6	10.8	11.5	16	17	86	88	821061	805846	<0.2	<0.2	1.2	1.2
						1.0	0.4	315	29.5		8.0		27.8		85.9		5.6		10.8		16		87				<0.2		1.3	
					Middle	3.6	0.3	347	29.5	29.5	8.0	8.0	27.8	27.8	86.0	86.0	5.6		11.2		16		88				<0.2		1.2	
						3.6	0.3	319	29.5		8.0		27.8		86.0		5.6		11.2		17		87				<0.2		1.1	
					Bottom	6.2	0.2	338	29.5	29.5	8.0	8.0	27.9	27.9	88.2	88.3	5.8	5.8	12.4		17		90				<0.2		1.1	
						6.2	0.3	343	29.5		8.0		27.9		88.4		5.8		12.4		17		90				<0.2		1.2	
IM7	Fine	Moderate	11:08	7.9	Surface	1.0	0.6	63	29.6	29.6	8.0	8.0	28.0	28.0	86.8	86.8	5.7	5.7	12.7	14.5	16	17	86	88	821369	806821	<0.2	<0.2	1.2	1.1
						1.0	0.6	64	29.6		8.0		28.0		86.8		5.7		13.0		17		85				<0.2		1.1	
					Middle	4.0	0.6	63	29.5	29.5	8.0	8.0	28.0	28.0	86.8	86.8	5.7		14.2		17		87				<0.2		1.1	
						4.0	0.6	67	29.5		8.0		28.0		86.8		5.7		14.2		16		88				<0.2		1.1	
					Bottom	6.9	0.6	68	29.5	29.5	8.0	8.0	28.0	28.0	87.3	87.4	5.7	5.7	16.5		17		90				<0.2		1.0	
						6.9	0.6	68	29.5		8.0		28.0		87.5		5.7		16.5		17		90				<0.2		1.1	
IM8	Fine	Moderate	11:13	7.5	Surface	1.0	0.1	106	29.8	29.8	8.0	8.0	25.0	25.0	86.7	86.7	5.7	5.7	4.6	6.0	6	6	80	83	821810	808126	<0.2	<0.2	1.7	1.7
						1.0	0.1	111	29.8		8.0		25.0		86.7		5.7		4.6		5		80				<0.2		1.7	
					Middle	3.8	0.1	89	29.6	29.6	8.0	8.0	25.3	25.3	84.8	84.8	5.6		5.7		6		84				<0.2		1.6	
						3.8	0.2	95	29.6		8.0		25.3		84.8		5.6		5.7		5		83				<0.2		1.8	
					Bottom	6.5	0.2	67	29.5	29.5	8.0	8.0	25.7	25.7	84.3	84.3	5.6	5.6	7.7		7		86				<0.2		1.5	
						6.5	0.2	68	29.5		8.0		25.7		84.3		5.6		7.7		8		86				<0.2		1.6	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:06	7.0	Surface	1.0	0.2	79	29.7	29.7	8.0	8.0	25.5	25.5	86.9	86.9	5.7	5.7	5.6	8.7	7	7	81	83	822102	808806	<0.2	<0.2	1.7	1.6
						1.0	0.2	81	29.7		8.0		25.5		86.9		5.7		5.6		7		80				<0.2		1.6	
					Middle	3.5	0.1	107	29.7	29.7	8.0	8.0	26.5	26.5	87.0	87.0	5.7		7.3		6		83				<0.2		1.7	
						3.5	0.1	116	29.7		8.0		26.5		87.0		5.7		7.3		6		82				<0.2		1.7	
					Bottom	6.0	0.0	130	29.6	29.6	8.0	8.0	27.1	27.1	86.1	86.2	5.7	5.7	13.3		7		86				<0.2		1.5	
						6.0	0.0	139	29.6		8.0		27.1		86.2		5.7		13.3		6		87				<0.2		1.6	
IM10	Fine	Moderate	10:58	7.8	Surface	1.0	0.4	312	29.7	29.7	8.0	8.0	27.2	27.2	87.4	87.4	5.7	5.7	10.7	14.4	10	10	80	83	822393	809812	<0.2	<0.2	1.6	1.5
						1.0	0.5	330	29.7		8.0		27.2		87.4		5.7		10.7		10		81				<0.2		1.5	
					Middle	3.9	0.4	304	29.6	29.6	8.0	8.0	27.4	27.4	84.7	84.8	5.6		14.6		10		83				<0.2		1.4	
						3.9	0.4	325	29.6		8.0		27.4		84.8		5.6		14.5		10		83				<0.2		1.4	
					Bottom	6.8	0.4	304	29.6	29.6	8.0	8.0	27.4	27.4	85.3	85.3	5.6	5.6	17.8		10		86				<0.2		1.4	
						6.8	0.4	320	29.6		8.0		27.4		85.3		5.6		17.8		10		86				<0.2		1.4	
IM11	Fine	Moderate	10:48	7.9	Surface	1.0	0.5	292	29.7	29.7	8.0	8.0	27.0	27.0	86.2	86.2	5.6	5.6	8.3	15.4	12	12	80	83	822042	811452	<0.2	<0.2	1.5	1.6
						1.0	0.5	313	29.7		8.0		27.0		86.2		5.6		8.3		12		81				<0.2		1.5	
					Middle	4.0	0.5	305	29.6	29.6	8.0	8.0	27.4	27.4	85.6	85.6	5.6		14.7		12		83				<0.2		1.7	
						4.0	0.5	312	29.6		8.0		27.4		85.6		5.6		14.9		13		83				<0.2		1.8	
					Bottom	6.9	0.3	314	29.6	29.6	8.0	8.0	28.1	28.1	84.7	84.8	5.5	5.5	23.0		13		86				<0.2		1.5	
						6.9	0.3	335	29.6		8.0		28.1		84.8		5.5		23.0		12		86				<0.2		1.3	
IM12	Fine	Moderate	10:41	8.6	Surface	1.0	0.6	282	29.7	29.7	8.0	8.0	27.3	27.3	86.1	86.1	5.6	5.6	15.1	17.5	14	15	80	83	821456	812051	<0.2	<0.2	1.1	1.2
						1.0	0.6	291	29.7		8.0		27.3		86.0		5.6		15.3		15		80				<0.2		1.1	
					Middle	4.3	0.5	291	29.6	29.6	8.0	8.0	27.9	27.9	83.7	83.7	5.5		17.2		14		83				<0.2		1.3	
						4.3	0.5	302	29.6		8.0		27.9		83.7		5.5		17.5		15		83				<0.2		1.2	
					Bottom	7.6	0.4	294	29.5	29.5	8.0	8.0	28.2	28.2	85.2	85.3	5.6	5.6	20.2		15		87				<0.2		1.4	
						7.6	0.4	319	29.5		8.0		28.2		85.3		5.6		19.9		14		86				<0.2		1.3	
SR1A	Fine	Moderate	10:23	4.8	Surface	1.0	-	-	29.7	29.7	8.0	8.0	28.1	28.1	88.1	88.1	5.7	5.7	7.3	6.6	12	22	-	-	819976	812666	-	-	-	-
						1.0	-	-	29.7		8.0		28.1		88.1		5.7		7.2		13		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.7	29.7	8.1	8.1	28.2	28.2	88.1	88.2	5.7	5.7	6.0		30		-				-		-	
						3.8	-	-	29.7		8.1		28.2		88.2		5.7		6.0		31		-				-		-	
SR2	Fine	Moderate	10:11	3.7	Surface	1.0	0.1	167	29.6	29.6	8.1	8.1	27.7	27.7	85.7	85.7	5.6	5.6	11.8	13.0	19	21	81	84	821483	814156	<0.2	<0.2	1.2	1.3
						1.0	0.1	174	29.6		8.1		27.7		85.7		5.6		11.9		19		81				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	171	29.6	29.6	8.1	8.1	27.8	27.8	86.5	86.6	5.7	5.7	14.1		22		86				<0.2		1.4	
						2.7	0.1	184	29.6		8.1		27.8		86.6		5.7		14.2		22		86				<0.2		1.3	
SR3	Fine	Moderate	11:19	8.6	Surface	1.0	0.1	24	29.7	29.7	8.0	8.0	25.2	25.2	86.8	86.8	5.7	5.7	6.0	9.0	5	6	-	-	822162	807554	-	-	-	-
						1.0	0.1	26	29.7		8.0		25.2		86.7		5.7		6.0		5		-				-		-	
					Middle	4.3	0.3	57	29.6	29.6	8.0	8.0	26.2	26.2	85.0	85.0	5.6		8.9		7		-				-		-	
						4.3	0.4	57	29.6		8.0		26.2		84.9		5.6		8.9		7		-				-		-	
					Bottom	7.6	0.4	66	29.6	29.6	8.0	8.0	27.7	27.7	87.0	87.1	5.7	5.7	12.1		6		-				-		-	
						7.6	0.4	71	29.6		8.0		27.7		87.1		5.7		12.1		6		-				-		-	
SR4A	Fine	Moderate	10:10	8.8	Surface	1.0	0.1	321	29.4	29.4	8.0	8.0	28.4	28.4	81.8	81.8	5.3	5.3	10.3	11.9	16	16	-	-	817179	807819	-	-	-	-
						1.0	0.1	334	29.4		8.0		28.4		81.8		5.3		10.3		16		-				-		-	
					Middle	4.4	0.1	276	29.4	29.4	8.0	8.0	28.5	28.5	81.6	81.6	5.3		11.9		17		-				-		-	
						4.4	0.1	293	29.4		8.0		28.5		81.6		5.3		11.9		17		-				-		-	
					Bottom	7.8	0.1	343	29.4	29.4	8.0	8.0	28.5	28.5	82.1	82.2	5.4	5.4	13.5		16		-				-		-	
						7.8	0.1	359	29.4		8.0		28.5		82.2		5.4		13.6		16		-				-		-	
SR5A	Fine	Moderate	09:56	4.6	Surface	1.0	0.2	290	29.4	29.4	8.0	8.0	28.6	28.6	81.8	81.8	5.3	5.3	15.3	14.9	19	20	-	-	816584	810676	-	-	-	-
						1.0	0.2	296	29.4		8.0		28.6		81.8		5.3		15.2		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	299	29.2	29.2	8.0	8.0	28.7	28.7	83.0	83.1	5.4	5.4	14.6		20		-				-		-	
						3.6	0.1	310	29.2		8.0		28.7		83.2		5.4		14.7		21		-				-		-	
SR6A	Fine	Moderate	09:32	4.2	Surface	1.0	0.1	263	29.5	29.5	8.0	8.0	28.3	28.3	82.1	82.1	5.4	5.4	10.1	11.4	13	14	-	-	817949	814753	-	-	-	-
						1.0	0.1	280	29.5		8.0		28.3		82.0		5.4		10.2		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	219	29.4	29.4	8.0	8.0	28.4	28.4	81.8	81.9	5.3	5.4	12.6		13		-				-		-	
						3.2	0.0	228	29.4		8.0		28.4		81.9		5.4		12.6		14		-				-		-	
SR7	Fine	Rough	09:19	15.6	Surface	1.0	0.4	245	29.7	29.7	8.0	8.0	28.4	28.4	83.0	83.0	5.4	5.4	6.8	9.0	9	10	-	-	823614	823724	-	-	-	-
						1.0	0.4	221	29.7		8.0		28.4		83.0		5.4		6.8		8		-				-		-	
					Middle	7.8	0.3	221	29.7	29.7	7.9	7.9	28.5	28.5	82.9	82.9	5.4		8.6		9		-				-		-	
						7.8	0.4	223	29.7		7.9		28.5		82.8		5.4		8.7		9		-				-		-	
					Bottom	14.6	0.4	355	29.6	29.6	7.9	7.9	28.7	28.7	82.4	82.5	5.4	5.4	11.4		11		-				-		-	
						14.6	0.5	327	29.6		7.9		28.7		82.5		5.4		11.4		11		-				-		-	
SR8	Fine	Moderate	10:33	4.5	Surface	1.0	-	-	30.0	30.0	8.0	8.0	27.2	27.2	87.8	87.8	5.7	5.7	12.2	12.0	15	17	-	-	820413	811635	-	-	-	-
						1.0	-	-	30.0		8.0		27.2		87.7		5.7		12.2		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	29.6	29.6	8.1	8.1	27.6	27.6	87.6	87.6	5.7	5.7	11.7		18		-				-		-	
						3.5	-	-	29.6		8.1		27.6		87.6		5.7		11.7		17		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 October 19 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	05:50	8.2	Surface	1.0	0.1	199	29.4	29.4	8.0	8.0	27.4	27.4	85.7	85.7	5.6	5.6	4.2	4.9	8	9	86	88	815637	804230	<0.2	<0.2	1.0	1.0
						1.0	0.1	202	29.4		8.0		27.4		85.7		5.6		4.2		8		86				<0.2		1.0	
					Middle	4.1	0.1	169	29.4	29.4	8.0	8.0	27.9	27.9	83.5	83.5	5.5		5.1		9		88				<0.2		1.0	
						4.1	0.1	171	29.4		8.0		27.9		83.5		5.5		5.1		10		87				<0.2		1.1	
					Bottom	7.2	0.1	152	29.4	29.4	8.0	8.0	27.8	27.8	83.4	83.4	5.5	5.5	5.2		10		90				<0.2		1.0	
						7.2	0.1	152	29.4		8.0		27.8		83.3		5.5		5.3		9		90				<0.2		1.0	
C2	Fine	Moderate	06:25	10.8	Surface	1.0	0.3	194	29.8	29.8	7.8	7.8	23.7	23.7	79.4	79.4	5.3	5.2	5.1	7.1	3	4	84	88	825705	806946	<0.2	<0.2	2.8	2.7
						1.0	0.3	201	29.8		7.8		23.7		79.3		5.3		5.1		3		84				<0.2		2.7	
					Middle	5.4	0.2	192	29.7	29.7	7.9	7.9	26.1	26.1	76.9	76.9	5.1		5.8		4		89				<0.2		2.6	
						5.4	0.2	203	29.7		7.9		26.1		76.9		5.1		5.8		4		88				<0.2		2.6	
					Bottom	9.8	0.2	210	29.7	29.7	7.9	7.9	26.6	26.6	75.9	75.9	5.0	5.0	10.2		6		92				<0.2		2.6	
						9.8	0.2	226	29.7		7.9		26.6		75.9		5.0		10.4		4		92				<0.2		2.7	
C3	Fine	Moderate	03:43	12.3	Surface	1.0	0.2	3	29.8	29.8	7.9	7.9	26.7	26.7	80.9	80.9	5.3	5.3	6.2	8.0	8	10	84	89	822087	817808	<0.2	<0.2	1.3	1.4
						1.0	0.2	3	29.7		7.9		26.7		80.8		5.3		6.2		8		85				<0.2		1.3	
					Middle	6.2	0.2	143	29.5	29.5	7.9	7.9	27.1	27.1	79.1	79.1	5.2		8.6		10		89				<0.2		1.4	
						6.2	0.2	155	29.5		7.9		27.1		79.1		5.2		8.6		11		89				<0.2		1.4	
					Bottom	11.3	0.2	161	29.5	29.5	7.9	7.9	27.6	27.6	77.1	77.1	5.1	5.1	9.2		10		93				<0.2		1.5	
						11.3	0.2	169	29.5		7.9		27.6		77.1		5.1		9.1		11		92				<0.2		1.4	
IM1	Fine	Moderate	06:02	5.1	Surface	1.0	0.1	217	29.5	29.5	8.0	8.0	27.8	28.0	85.9	83.7	5.6	5.5	3.5	5.5	4	5	86	88	817928	807114	<0.2	<0.2	1.0	1.0
						1.0	0.1	198	29.4		8.0		28.1		81.5		5.3		4.0		3		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	251	29.3	29.3	8.0	8.0	28.4	28.4	80.6	80.6	5.3	5.3	7.2		6		89				<0.2		1.0	
						4.1	0.1	222	29.3		8.0		28.4		80.6		5.3		7.2		5		90				<0.2		1.1	
IM2	Fine	Moderate	06:11	7.2	Surface	1.0	0.1	217	29.6	29.6	8.0	8.0	27.0	27.0	86.6	86.5	5.7	5.5	3.8	7.9	5	7	85	88	818171	806180	<0.2	<0.2	1.0	1.0
						1.0	0.1	218	29.6		8.0		27.0		86.4		5.7		3.9		5		87				<0.2		1.0	
					Middle	3.6	0.2	237	29.4	29.4	8.0	8.0	27.8	27.8	81.8	81.7	5.4		7.4		6		88				<0.2		1.0	
						3.6	0.2	224	29.4		8.0		27.8		81.5		5.3		7.6		8		87				<0.2		1.0	
					Bottom	6.2	0.2	218	29.3	29.3	8.0	8.0	28.3	28.3	81.4	81.5	5.3	5.3	12.5		8		90				<0.2		1.0	
						6.2	0.2	211	29.3		8.0		28.3		81.6		5.3		12.5		8		90				<0.2		1.0	
IM3	Fine	Moderate	06:17	7.8	Surface	1.0	0.3	205	29.6	29.6	8.0	8.0	27.2	27.2	85.1	85.1	5.6	5.6	4.8	7.4	6	6	86	88	818766	805604	<0.2	<0.2	1.8	1.8
						1.0	0.3	218	29.5		8.0		27.2		85.1		5.6		4.7		6		85				<0.2		1.7	
					Middle	3.9	0.2	220	29.4	29.4	8.0	8.0	27.5	27.5	84.7	84.7	5.6		7.3		6		87				<0.2		1.8	
						3.9	0.2	209	29.4		8.0		27.6		84.6		5.6		7.6		7		88				<0.2		1.8	
					Bottom	6.8	0.3	193	29.3	29.3	8.0	8.0	28.4	28.4	80.1	80.2	5.2	5.3	10.0		6		90				<0.2		1.7	
						6.8	0.3	194	29.3		8.0		28.4		80.3		5.3		10.0		7		90				<0.2		1.8	
IM4	Fine	Moderate	06:24	7.3	Surface	1.0	0.2	205	29.6	29.6	8.0	8.0	25.9	26.0	86.0	86.0	5.7	5.6	4.1	7.7	7	7	85	88	819733	804617	<0.2	<0.2	1.7	1.8
						1.0	0.2	228	29.6		8.0		26.0		85.9		5.7		4.1		6		86				<0.2		1.8	
					Middle	3.7	0.2	200	29.5	29.5	8.0	8.0	26.9	26.9	84.5	84.4	5.6		5.7		7		87				<0.2		1.9	
						3.7	0.2	199	29.5		8.0		27.0		84.2		5.5		5.7		6		88				<0.2		1.8	
					Bottom	6.3	0.3	195	29.4	29.4	8.0	8.0	27.6	27.6	83.8	83.9	5.5	5.5	13.4		8		90				<0.2		1.7	
						6.3	0.4	184	29.3		8.0		27.6		83.9		5.5		13.4		9		91				<0.2		1.7	
IM5	Fine	Moderate	06:32	7.1	Surface	1.0	0.4	197	29.5	29.5	8.0	8.0	24.0	24.1	86.2	86.2	5.8	5.7	5.8	7.8	6	6	86	89	820757	804883	<0.2	<0.2	1.7	1.7
						1.0	0.4	199	29.5		8.0		24.1		86.1		5.8		5.8		5		87				<0.2		1.6	
					Middle	3.6	0.3	204	29.4	29.4	8.0	8.0	24.4	24.4	84.5	84.4	5.6		7.4		6		89				<0.2		1.8	
						3.6	0.3	192	29.4		8.0		24.4		84.2		5.6		7.4		6		88				<0.2		1.6	
					Bottom	6.1	0.2	197	29.3	29.4	8.0	8.0	27.1	27.1	83.4	83.5	5.5	5.5	10.3		7		90				<0.2		1.6	
						6.1	0.2	186	29.4		8.0		27.1		83.5		5.5		10.3		6		91				<0.2		1.6	
IM6	Fine	Moderate	06:40	7.6	Surface	1.0	0.4	185	29.6	29.6	8.0	8.0	24.1	24.1	86.7	86.7	5.8	5.8	4.9	7.0	7	7	86	88	821055	805849	<0.2	<0.2	1.5	1.6
						1.0	0.4	183	29.6		8.0		24.1		86.7		5.8		4.9		7		85				<0.2		1.6	
					Middle	3.8	0.4	196	29.5	29.5	8.0	8.0	24.1	24.1	86.7	86.7	5.8		5.3		8		88				<0.2		1.6	
						3.8	0.4	188	29.5		8.0		24.1		86.7		5.8		5.3		7		87				<0.2		1.6	
					Bottom	6.6	0.3	179	29.5	29.5	8.0	8.0	24.1	24.1	88.0	88.2	5.9	5.9	10.9		6		90				<0.2		1.6	
						6.6	0.3	184	29.5		8.0		24.1		88.4		5.9		10.9		6		90				<0.2		1.6	
IM7	Fine	Moderate	06:46	7.9	Surface	1.0	0.4	185	29.6	29.6	8.0	8.0	23.9	23.9	86.6	86.6	5.8	5.8	4.4	6.5	5	5	86	88	821354	806824	<0.2	<0.2	1.5	1.5
						1.0	0.4	189	29.6		8.0		23.9		86.6		5.8		4.4		4		87				<0.2		1.4	
					Middle	4.0	0.3	185	29.5	29.5	8.0	8.0	24.2	24.2	86.2	86.2	5.8		6.3		4		87				<0.2		1.4	
						4.0	0.3	190	29.5		8.0		24.2		86.2		5.8		6.4		5		88				<0.2		1.4	
					Bottom	6.9	0.3	176	29.5	29.5	8.0	8.0	24.2	24.2	86.9	87.0	5.8	5.8	8.9		6		90				<0.2		1.5	
						6.9	0.3	178	29.5		8.0		24.2		87.1		5.8		8.9		5		91				<0.2		1.5	
IM8	Fine	Moderate	05:59	7.7	Surface	1.0	0.3	189	29.7	29.7	7.9	7.9	22.9	22.9	88.0	88.0	5.9	5.9	3.8	5.0	3	4	85	89	821819	808140	<0.2	<0.2	1.9	1.9
						1.0	0.3	174	29.7		7.9		22.9		88.0		5.9		3.8		3		84				<0.2		1.8	
					Middle	3.9	0.2	164	29.6	29.6	7.9	7.9	23.4	23.4	87.2	87.2	5.8		4.2		4		89				<0.2		1.9	
						3.9	0.2	173	29.6		7.9		23.4		87.2		5.8		4.2		3		89				<0.2		1.9	
					Bottom	6.7	0.2	166	29.6	29.6	7.9	7.9	23.4	23.4	87.1	87.1	5.8	5.8	7.2		4		93				<0.2		1.9	
						6.7	0.3	176	29.6		7.9		23.4		87.1		5.8		7.0		6		93				<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 05 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	05:53	7.1	Surface	1.0	0.2	180	29.7	29.7	7.9	7.9	23.9	23.9	86.0	86.0	5.7	5.7	3.6	4.0	4	5	84	89	822103	808794	<0.2	<0.2	2.0	1.9
						1.0	0.2	171	29.7		7.9		23.9		86.0		5.7		3.6		4		85				<0.2		1.8	
					Middle	3.6	0.2	169	29.6	29.6	7.9	7.9	24.1	24.1	85.8	85.8	5.7		3.8		4		88				<0.2		1.8	
						3.6	0.2	172	29.6		7.9		24.1		85.7		5.7		3.8		4		89				<0.2		1.9	
					Bottom	6.1	0.1	163	29.5	29.5	7.9	7.9	24.4	24.4	84.3	84.4	5.6	5.6	4.8		6		93				<0.2		1.8	
						6.1	0.1	177	29.5		7.9		24.4		84.4		5.6		4.7		6		92				<0.2		1.9	
IM10	Fine	Moderate	05:42	8.3	Surface	1.0	0.1	169	29.7	29.7	7.9	7.9	24.2	24.2	85.2	85.2	5.7	5.7	3.7	4.5	4	5	84	89	822362	809782	<0.2	<0.2	1.9	1.9
						1.0	0.1	170	29.7		7.9		24.2		85.1		5.7		3.7		5		85				<0.2		1.9	
					Middle	4.2	0.1	157	29.6	29.6	7.9	7.9	24.5	24.5	84.2	84.2	5.6		4.0		6		89				<0.2		1.9	
						4.2	0.1	162	29.6		7.9		24.5		84.2		5.6		4.0		5		89				<0.2		2.0	
					Bottom	7.3	0.1	166	29.6	29.6	7.9	7.9	24.7	24.7	83.0	83.1	5.5	5.5	6.0		5		92				<0.2		1.9	
						7.3	0.2	154	29.6		7.9		24.7		83.1		5.5		5.8		5		93				<0.2		1.8	
IM11	Fine	Moderate	05:27	7.6	Surface	1.0	0.1	168	29.7	29.7	7.9	7.9	24.4	24.4	84.4	84.4	5.6	5.6	3.8	5.8	3	3	84	89	822046	811436	<0.2	<0.2	1.8	1.7
						1.0	0.1	157	29.7		7.9		24.4		84.4		5.6		3.8		3		85				<0.2		1.8	
					Middle	3.8	0.1	156	29.6	29.6	7.9	7.9	24.8	24.8	84.0	84.0	5.6		4.7		3		89				<0.2		1.6	
						3.8	0.1	161	29.6		7.9		24.8		84.0		5.6		4.8		4		89				<0.2		1.6	
					Bottom	6.6	0.1	163	29.7	29.7	7.9	7.9	25.5	25.5	82.2	82.2	5.4	5.4	8.9		3		93				<0.2		1.7	
						6.6	0.1	152	29.7		7.9		25.5		82.2		5.4		8.9		3		93				<0.2		1.7	
IM12	Fine	Moderate	05:21	9.6	Surface	1.0	0.0	170	29.7	29.7	7.9	7.9	25.1	25.1	84.7	84.7	5.6	5.6	4.7	9.1	4	6	84	90	821448	812053	<0.2	<0.2	1.6	1.7
						1.0	0.0	158	29.7		7.9		25.1		84.7		5.6		4.6		3		89				<0.2		1.8	
					Middle	4.8	0.1	163	29.5	29.5	7.9	7.9	25.8	25.8	83.7	83.7	5.5		8.3		7		89				<0.2		1.6	
						4.8	0.1	151	29.5		7.9		25.8		83.7		5.5		8.4		6		89				<0.2		1.6	
					Bottom	8.6	0.1	143	29.5	29.5	7.9	7.9	26.2	26.2	83.4	83.5	5.5	5.5	14.4		8		93				<0.2		1.7	
						8.6	0.1	145	29.5		7.9		26.2		83.5		5.5		14.3		8		93				<0.2		1.6	
SR1A	Fine	Moderate	05:01	5.4	Surface	1.0	-	-	29.7	29.7	7.9	7.9	24.9	24.9	85.3	85.3	5.7	5.7	5.5	7.0	3	6	-	-	819980	812666	-	-	-	-
						1.0	-	-	29.7		7.9		25.0		85.2		5.7		5.5		3		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	29.7	29.7	7.9	7.9	25.3	25.3	84.3	84.3	5.6	5.6	8.4		9		-				-		-	
						4.4	-	-	29.7		7.9		25.3		84.3		5.6		8.7		8		-				-		-	
SR2	Fine	Moderate	04:47	4.7	Surface	1.0	0.0	144	29.7	29.7	7.9	7.9	25.1	25.1	85.2	85.2	5.6	5.6	5.8	6.7	5	7	84	86	821448	814161	<0.2	<0.2	1.6	1.6
						1.0	0.0	151	29.7		7.9		25.1		85.2		5.6		5.8		5		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	144	29.7	29.7	7.9	7.9	25.4	25.4	84.4	84.4	5.6	5.6	7.5		8		89				<0.2		1.5	
						3.7	0.0	157	29.7		7.9		25.4		84.4		5.6		7.5		10		88				<0.2		1.6	
SR3	Fine	Moderate	06:05	8.4	Surface	1.0	0.3	177	29.7	29.7	7.8	7.8	22.9	22.9	86.3	86.4	5.8	5.7	3.4	4.2	3	3	-	-	822128	807592	-	-	-	-
						1.0	0.3	175	29.7		7.8		22.9		86.4		5.8		3.3		2		-				-		-	
					Middle	4.2	0.2	185	29.6	29.6	7.8	7.8	24.3	24.3	84.1	84.1	5.6		4.4		3		-				-		-	
						4.2	0.2	194	29.6		7.8		24.3		84.1		5.6		4.4		3		-				-		-	
					Bottom	7.4	0.2	164	29.6	29.6	7.8	7.8	24.5	24.5	83.6	83.6	5.6	5.6	4.9		3		-				-		-	
						7.4	0.2	157	29.6		7.8		24.5		83.6		5.6		4.9		4		-				-		-	
SR4A	Fine	Moderate	05:38	8.4	Surface	1.0	0.7	73	29.4	29.4	8.0	8.0	27.7	27.7	80.9	80.9	5.3	5.3	13.2	15.2	19	19	-	-	817199	807828	-	-	-	-
						1.0	0.8	81	29.4		8.0		27.7		80.9		5.3		13.2		19		-				-		-	
					Middle	4.2	0.7	76	29.4	29.4	8.0	8.0	27.7	27.7	81.2	81.3	5.3		14.9		18		-				-		-	
						4.2	0.7	84	29.4		8.0		27.7		81.3		5.3		14.9		19		-				-		-	
					Bottom	7.4	0.5	74	29.4	29.4	8.0	8.0	27.7	27.7	82.5	82.6	5.4	5.4	17.4		21		-				-		-	
						7.4	0.6	85	29.4		8.0		27.7		82.7		5.4		17.4		20		-				-		-	
SR5A	Fine	Moderate	05:24	4.7	Surface	1.0	0.4	71	29.6	29.6	8.0	8.0	27.7	27.7	83.6	83.7	5.5	5.5	11.5	12.1	8	10	-	-	816602	810699	-	-	-	-
						1.0	0.4	85	29.6		8.0		27.7		83.7		5.5		11.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	78	29.6	29.6	8.0	8.0	27.7	27.7	84.4	84.4	5.5	5.5	12.8		12		-				-		-	
						3.7	0.4	99	29.6		8.0		27.7		84.4		5.5		12.9		12		-				-		-	
SR6A	Fine	Moderate	04:49	4.8	Surface	1.0	0.1	82	29.3	29.3	7.9	7.9	27.2	27.2	78.2	78.3	5.2	5.2	5.8	7.5	6	6	-	-	817963	814734	-	-	-	-
						1.0	0.1	101	29.3		7.9		27.2		78.4		5.2		5.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	70	29.5	29.5	7.9	7.9	27.5	27.5	77.5	77.6	5.1	5.1	9.3		5		-				-		-	
						3.8	0.0	82	29.5		7.9		27.5		77.6		5.1		9.3		5		-				-		-	
SR7	Fine	Moderate	03:39	14.5	Surface	1.0	0.4	71	29.6	29.6	7.9	7.9	27.0	27.0	82.1	82.1	5.4	5.4	4.3	4.8	4	4	-	-	823650	823764	-	-	-	-
						1.0	0.5	74	29.6		7.9		27.0		82.1		5.4		4.3		3		-				-		-	
					Middle	7.3	0.3	346	29.6	29.6	7.9	7.9	27.2	27.2	80.9	80.9	5.3		4.7		4		-				-		-	
						7.3	0.3	318	29.6		7.9		27.2		80.9		5.3		4.7		5		-				-		-	
					Bottom	13.5	0.2	59	29.5	29.5	7.9	7.9	27.3	27.3	80.5	80.6	5.3	5.3	5.3		5		-				-		-	
						13.5	0.2	63	29.5		7.9		27.3		80.6		5.3		5.2		5		-				-		-	
SR8	Fine	Moderate	05:12	4.2	Surface	1.0	-	-	29.7	29.7	7.9	7.9	24.8	24.8	85.6	85.6	5.7	5.7	5.5	6.8	4	6	-	-	820395	811609	-	-	-	-
						1.0	-	-	29.7		7.9		24.9		85.6		5.7		5.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	29.7	29.7	7.9	7.9	25.2	25.2	84.4	84.4	5.6	5.6	8.2		7		-				-		-	
						3.2	-	-	29.7		7.9		25.2		84.4		5.6		8.2		8		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 October 19 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	12:42	8.2	Surface	1.0	0.3	45	29.5	29.5	8.0	8.0	26.6	26.6	84.7	84.7	5.6	5.6	6.8	9.7	11	11	86	88	815618	804235	<0.2	<0.2	1.0	1.1
						1.0	0.3	45	29.5		8.0		26.6		84.6		5.6		6.7		11		87				<0.2		1.0	
					Middle	4.1	0.3	45	29.3	29.3	8.0	8.0	27.4	27.3	83.9	84.0	5.5		8.0		11		88				<0.2		1.0	
						4.1	0.3	45	29.3		8.0		27.3		84.0		5.5		8.0		11		87				<0.2		1.1	
					Bottom	7.2	0.3	20	29.3	29.3	8.0	8.0	28.0	28.0	81.4	81.5	5.3	5.3	14.3		12		91				<0.2		1.2	
						7.2	0.3	21	29.3		8.0		28.0		81.5		5.3		14.3		12		90				<0.2		1.1	
C2	Fine	Moderate	11:44	9.8	Surface	1.0	0.3	199	29.7	29.7	7.8	7.8	21.7	21.7	83.5	83.4	5.6	5.4	3.6	7.3	3	4	87	91	825684	806932	<0.2	<0.2	2.6	2.8
						1.0	0.4	205	29.7		7.8		21.8		83.3		5.6		3.6		3		87				<0.2		2.8	
					Middle	4.9	0.2	232	29.7	29.7	7.9	7.9	25.9	25.9	77.1	77.1	5.1		5.8		4		90				<0.2		2.8	
						4.9	0.2	249	29.7		7.9		25.9		77.1		5.1		5.8		5		91				<0.2		2.8	
					Bottom	8.8	0.2	318	29.7	29.7	7.9	7.9	26.5	26.5	76.1	76.1	5.0	5.0	12.4		4		94				<0.2		2.8	
						8.8	0.2	330	29.7		7.9		26.5		76.1		5.0		12.4		5		95				<0.2		2.7	
C3	Fine	Moderate	13:47	10.8	Surface	1.0	0.2	228	30.1	30.1	7.9	7.9	26.9	26.9	85.4	85.4	5.6	5.5	3.6	4.2	4	5	87	91	822092	817785	<0.2	<0.2	1.5	1.4
						1.0	0.2	242	30.1		7.9		26.9		85.3		5.6		3.6		4		87				<0.2		1.6	
					Middle	5.4	0.3	256	29.9	29.9	7.9	7.9	27.2	27.2	82.4	82.3	5.4		3.7		4		91				<0.2		1.4	
						5.4	0.3	278	29.8		7.9		27.3		82.2		5.4		3.7		5		90				<0.2		1.3	
					Bottom	9.8	0.4	287	29.5	29.5	8.0	8.0	29.1	29.1	75.2	75.3	4.9	4.9	5.4		5		95				<0.2		1.3	
						9.8	0.4	298	29.5		8.0		29.1		75.3		4.9		5.5		5		94				<0.2		1.5	
IM1	Fine	Moderate	12:29	5.7	Surface	1.0	0.3	327	29.8	29.8	8.0	8.0	27.7	27.7	86.7	86.7	5.6	5.6	3.4	6.0	8	8	86	88	817947	807139	<0.2	<0.2	1.1	1.1
						1.0	0.4	327	29.8		8.0		27.7		86.6		5.6		3.4		8		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.3	345	29.4	29.4	8.0	8.0	28.2	28.2	83.2	83.3	5.4	5.5	8.8		7		90				<0.2		1.0	
						4.7	0.3	317	29.4		8.0		28.2		83.4		5.5		8.5		7		90				<0.2		1.1	
IM2	Fine	Moderate	12:24	7.2	Surface	1.0	0.2	337	29.9	29.9	8.0	8.0	27.0	27.0	87.1	87.1	5.7	5.5	4.2	7.8	8	8	86	88	818150	806159	<0.2	<0.2	1.1	1.1
						1.0	0.2	310	29.9		8.0		27.0		87.0		5.7		4.2		7		86				<0.2		1.2	
					Middle	3.6	0.3	340	29.6	29.6	8.0	8.0	28.0	28.1	81.5	81.4	5.3		8.7		8		87				<0.2		1.2	
						3.6	0.3	350	29.5		8.0		28.1		81.2		5.3		8.7		9		88				<0.2		1.0	
					Bottom	6.2	0.2	344	29.3	29.3	8.0	8.0	28.6	28.6	80.7	80.8	5.3	5.3	10.6		8		91				<0.2		1.0	
						6.2	0.2	359	29.3		8.0		28.6		80.8		5.3		10.6		8		90				<0.2		1.1	
IM3	Fine	Moderate	12:18	7.3	Surface	1.0	0.3	332	29.8	29.8	8.0	8.0	26.9	26.9	87.0	87.0	5.7	5.7	4.2	5.9	8	9	86	88	818796	805596	<0.2	<0.2	1.2	1.2
						1.0	0.3	339	29.8		8.0		26.9		87.0		5.7		4.2		9		87				<0.2		1.3	
					Middle	3.7	0.3	321	29.8	29.8	8.0	8.0	27.0	27.1	86.5	86.5	5.7		3.7		9		87				<0.2		1.2	
						3.7	0.3	330	29.7		8.0		27.1		86.4		5.7		3.7		9		87				<0.2		1.3	
					Bottom	6.3	0.2	331	29.3	29.3	8.0	8.0	28.1	28.1	80.9	81.0	5.3	5.3	9.8		8		90				<0.2		1.2	
						6.3	0.2	347	29.3		8.0		28.1		81.0		5.3		9.8		8		91				<0.2		1.2	
IM4	Fine	Moderate	12:09	7.0	Surface	1.0	0.4	306	29.5	29.5	8.0	8.0	27.3	27.3	85.2	85.2	5.6	5.6	4.3	5.1	11	10	86	88	819734	804604	<0.2	<0.2	1.2	1.2
						1.0	0.4	328	29.5		8.0		27.3		85.2		5.6		4.3		10		87				<0.2		1.2	
					Middle	3.5	0.4	316	29.5	29.5	8.0	8.0	27.4	27.4	84.5	84.5	5.5		4.4		10		88				<0.2		1.2	
						3.5	0.5	328	29.5		8.0		27.4		84.4		5.5		4.5		9		87				<0.2		1.2	
					Bottom	6.0	0.2	316	29.4	29.4	8.0	8.0	27.8	27.8	83.4	83.5	5.5	5.5	6.7		9		91				<0.2		1.3	
						6.0	0.3	341	29.4		8.0		27.8		83.6		5.5		6.4		9		90				<0.2		1.1	
IM5	Fine	Moderate	12:01	7.2	Surface	1.0	0.4	314	29.5	29.5	8.0	8.0	25.5	25.5	84.8	84.8	5.6	5.5	6.1	7.8	9	10	86	88	820729	804887	<0.2	<0.2	1.1	1.1
						1.0	0.4	318	29.5		8.0		25.5		84.7		5.6		6.0		10		87				<0.2		1.2	
					Middle	3.6	0.4	335	29.4	29.4	8.0	8.0	27.9	27.8	81.3	81.3	5.3		7.4		10		88				<0.2		1.1	
						3.6	0.4	340	29.4		8.0		27.8		81.3		5.3		7.3		10		87				<0.2		1.2	
					Bottom	6.2	0.3	347	29.3	29.3	8.0	8.0	28.0	28.0	82.5	82.6	5.4	5.4	9.9		10		90				<0.2		1.1	
						6.2	0.3	357	29.3		8.0		28.0		82.6		5.4		9.9		11		91				<0.2		1.1	
IM6	Fine	Moderate	11:54	7.4	Surface	1.0	0.4	304	29.6	29.6	8.0	8.0	24.0	24.0	87.1	87.1	5.8	5.8	4.6	6.6	9	9	86	88	821062	805823	<0.2	<0.2	1.0	1.1
						1.0	0.4	323	29.6		8.0		24.0		87.1		5.8		4.7		8		85				<0.2		1.1	
					Middle	3.7	0.4	301	29.6	29.6	8.0	8.0	24.0	24.0	87.2	87.2	5.8		5.7		9		87				<0.2		1.1	
						3.7	0.4	308	29.6		8.0		24.0		87.2		5.8		6.0		8		88				<0.2		1.1	
					Bottom	6.4	0.3	305	29.5	29.5	8.0	8.0	24.0	24.0	89.3	89.5	6.0	6.0	9.5		9		90				<0.2		1.1	
						6.4	0.3	314	29.5		8.0		24.0		89.6		6.0		9.5		9		91				<0.2		1.2	
IM7	Fine	Moderate	11:47	8.0	Surface	1.0	0.4	272	29.6	29.6	8.0	8.0	24.0	24.0	86.1	86.1	5.7	5.7	4.6	6.5	8	7	85	88	821341	806834	<0.2	<0.2	1.1	1.1
						1.0	0.4	283	29.6		8.0		24.0		86.0		5.7		4.8		7		86				<0.2		1.1	
					Middle	4.0	0.4	275	29.5	29.5	8.0	8.0	24.2	24.2	85.7	85.7	5.7		6.1		8		87				<0.2		1.1	
						4.0	0.4	286	29.5		8.0		24.2		85.6		5.7		6.7		7		87				<0.2		1.1	
					Bottom	7.0	0.3	285	29.5	29.6	8.0	8.0	24.2	24.1	86.1	86.2	5.7	5.8	8.5		7		90				<0.2		1.1	
						7.0	0.3	299	29.6		8.0		24.1		86.2		5.8		8.5		7		90				<0.2		1.1	
IM8	Fine	Moderate	12:13	7.7	Surface	1.0	0.2	224	30.0	30.0	7.9	7.9	22.6	22.6	88.9	89.0	5.9	5.9	3.2	5.7	8	7	88	91	821810	808120	<0.2	<0.2	2.5	2.6
						1.0	0.2	234	30.0		7.9		22.6		89.0		5.9		3.2		6		87				<0.2		2.6	
					Middle	3.9	0.2	254	29.8	29.8	7.9	7.9	23.1	23.1	88.6	88.6	5.9		3.6		7		91				<0.2		2.7	
						3.9	0.2	272	29.8		7.9		23.1		88.6		5.9		3.6		7		91				<0.2		2.6	
					Bottom	6.7	0.2	292	29.6	29.6	7.9	7.9	23.8	23.8	86.6	86.6	5.8	5.8	10.7		6		95				<0.2		2.7	
						6.7	0.2	320	29.6		7.9		23.8		86.5		5.8		10.0		7		95				<0.2		2.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	12:21	7.3	Surface	1.0	0.1	277	30.0	30.0	7.9	7.9	23.6	23.6	88.5	88.6	5.9	5.8	3.5	5.7	10	11	87	91	822076	808788	<0.2	<0.2	2.6	2.6
						1.0	0.1	300	30.0		7.9		23.6		88.6		5.9		3.5		9		87				<0.2		2.6	
					Middle	3.7	0.1	281	29.5	29.5	7.9	7.9	24.2	24.2	85.0	85.1	5.7		6.7		10		91				<0.2		2.7	
						3.7	0.1	283	29.5		7.9		24.2		85.1		5.7		6.7		11		91				<0.2		2.6	
					Bottom	6.3	0.2	286	29.5	29.5	7.9	7.9	24.3	24.3	84.7	84.7	5.7	5.7	6.8		11		95				<0.2		2.6	
						6.3	0.2	286	29.5		7.9		24.3		84.7		5.7		6.8		12		95				<0.2		2.7	
IM10	Fine	Moderate	12:30	7.5	Surface	1.0	0.4	303	29.8	29.8	7.9	7.9	24.8	24.8	86.8	86.8	5.8	5.7	5.9	9.4	12	12	87	91	822401	809786	<0.2	<0.2	2.3	2.4
						1.0	0.4	327	29.8		7.9		24.8		86.8		5.8		5.9		11		87				<0.2		2.3	
					Middle	3.8	0.4	306	29.6	29.6	7.9	7.9	25.1	25.1	84.7	84.7	5.6		9.3		11		91				<0.2		2.4	
						3.8	0.4	326	29.6		7.9		25.1		84.6		5.6		9.5		11		91				<0.2		2.4	
					Bottom	6.5	0.3	300	29.6	29.6	7.9	7.9	25.3	25.3	84.0	84.1	5.6	5.6	13.1		12		94				<0.2		2.4	
						6.5	0.3	325	29.6		7.9		25.3		84.1		5.6		12.9		13		95				<0.2		2.3	
IM11	Fine	Moderate	12:42	8.3	Surface	1.0	0.4	301	29.6	29.6	7.9	7.9	25.7	25.7	84.1	84.1	5.6	5.6	8.2	11.3	8	12	86	91	822065	811477	<0.2	<0.2	2.1	2.1
						1.0	0.5	324	29.6		7.9		25.8		84.0		5.6		8.6		9		87				<0.2		2.2	
					Middle	4.2	0.4	300	29.5	29.5	7.9	7.9	25.9	25.9	82.9	82.9	5.5		12.4		13		91				<0.2		2.1	
						4.2	0.4	303	29.5		7.9		25.9		82.9		5.5		12.3		12		91				<0.2		2.0	
					Bottom	7.3	0.3	288	29.5	29.5	8.0	8.0	26.1	26.1	82.4	82.5	5.4	5.5	13.6		14		94				<0.2		2.1	
						7.3	0.3	308	29.5		8.0		26.1		82.5		5.5		12.5		15		95				<0.2		2.0	
IM12	Fine	Moderate	12:51	7.8	Surface	1.0	0.3	275	30.1	30.1	7.9	7.9	25.2	25.2	88.2	88.2	5.8	5.7	4.0	8.1	6	8	87	91	821444	812063	<0.2	<0.2	2.0	2.1
						1.0	0.3	301	30.1		7.9		25.2		88.1		5.8		4.0		7		87				<0.2		2.2	
					Middle	3.9	0.4	275	29.7	29.7	7.9	7.9	25.9	25.9	84.1	84.1	5.5		4.9		7		91				<0.2		2.0	
						3.9	0.5	295	29.7		7.9		25.9		84.1		5.5		4.9		8		91				<0.2		2.0	
					Bottom	6.8	0.3	278	29.5	29.5	7.9	7.9	27.3	27.3	79.0	79.0	5.2	5.2	15.5		10		94				<0.2		2.0	
						6.8	0.4	289	29.5		7.9		27.3		79.0		5.2		15.2		11		95				<0.2		2.1	
SR1A	Fine	Moderate	13:09	5.6	Surface	1.0	-	-	30.3	30.3	7.9	7.9	25.1	25.1	90.2	90.2	5.9	5.9	3.7	7.7	10	10	-	-	819973	812656	-	-	-	-
						1.0	-	-	30.3		7.9		25.1		90.1		5.9		3.7		9		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	29.9	29.9	7.9	7.9	27.3	27.3	78.8	78.9	5.1	5.2	11.5		10		-				-		-	
						4.6	-	-	29.9		7.9		27.3		79.0		5.2		12.0		10		-				-		-	
SR2	Fine	Moderate	13:23	5.0	Surface	1.0	0.2	353	30.0	30.0	7.9	7.9	26.3	26.3	84.8	84.8	5.6	5.6	6.3	9.6	12	14	87	89	821478	814183	<0.2	<0.2	1.6	1.8
						1.0	0.2	358	30.0		7.9		26.3		84.8		5.6		6.3		14		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	352	29.7	29.8	7.9	7.9	27.0	27.0	79.7	79.8	5.2	5.2	13.0		14		90				<0.2		2.1	
						4.0	0.2	324	29.8		7.9		27.0		79.8		5.2		12.9		14		90				<0.2		2.0	
SR3	Fine	Moderate	12:06	8.5	Surface	1.0	0.3	209	29.9	29.9	7.8	7.8	22.3	22.3	87.0	87.0	5.8	5.8	3.0	4.4	5	5	-	-	822149	807559	-	-	-	-
						1.0	0.3	211	29.9		7.8		22.3		86.9		5.8		3.0		4		-				-		-	
					Middle	4.3	0.3	227	29.8	29.8	7.8	7.8	23.7	23.7	85.2	85.2	5.7		3.7		5		-				-		-	
						4.3	0.3	233	29.8		7.8		23.7		85.1		5.7		3.7		4		-				-		-	
					Bottom	7.5	0.2	228	29.7	29.7	7.8	7.8	25.0	25.0	82.7	82.8	5.5	5.5	6.6		6		-				-		-	
						7.5	0.2	242	29.7		7.8		25.0		82.8		5.5		6.5		6		-				-		-	
SR4A	Fine	Moderate	12:55	8.8	Surface	1.0	0.2	241	29.8	29.8	8.0	8.0	27.7	27.7	83.0	83.0	5.4	5.4	10.3	13.0	13	13	-	-	817200	807787	-	-	-	-
						1.0	0.2	242	29.8		8.0		27.7		82.9		5.4		10.5		12		-				-		-	
					Middle	4.4	0.1	224	29.7	29.7	8.0	8.0	27.7	27.7	82.5	82.5	5.4		13.5		13		-				-		-	
						4.4	0.1	235	29.7		8.0		27.7		82.5		5.4		13.7		14		-				-		-	
					Bottom	7.8	0.2	223	29.7	29.7	8.0	8.0	27.7	27.7	83.3	83.4	5.4	5.5	14.9		13		-				-		-	
						7.8	0.2	243	29.7		8.0		27.7		83.5		5.5		15.0		13		-				-		-	
SR5A	Fine	Moderate	13:11	4.9	Surface	1.0	0.1	316	29.8	29.8	8.0	8.0	27.5	27.5	84.9	84.9	5.5	5.5	13.3	14.6	10	10	-	-	816586	810719	-	-	-	-
						1.0	0.1	347	29.8		8.0		27.5		85.0		5.5		13.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	336	29.8	29.8	8.0	8.0	27.5	27.5	87.5	87.7	5.7	5.7	15.9		9		-				-		-	
						3.9	0.1	340	29.8		8.0		27.5		87.8		5.7		15.9		9		-				-		-	
SR6A	Fine	Moderate	13:36	4.8	Surface	1.0	0.0	150	30.1	30.1	8.0	8.0	26.0	26.1	87.8	87.7	5.8	5.8	3.8	4.3	21	20	-	-	817956	814759	-	-	-	-
						1.0	0.0	163	30.0		8.0		26.1		87.6		5.7		3.9		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	76	29.9	29.9	8.0	8.0	26.3	26.3	87.2	87.3	5.7	5.7	4.7		19		-				-		-	
						3.8	0.0	82	29.9		8.0		26.3		87.3		5.7		4.8		20		-				-		-	
SR7	Fine	Moderate	14:19	14.6	Surface	1.0	0.1	250	29.6	29.6	7.9	7.9	28.7	28.7	78.6	78.6	5.2	5.0	3.7	5.3	6	9	-	-	823654	823735	-	-	-	-
						1.0	0.1	272	29.6		7.9		28.7		78.6		5.2		3.6		7		-				-		-	
					Middle	7.3	0.1	241	29.4	29.4	8.0	8.0	30.2	30.2	73.9	73.9	4.8		5.5		9		-				-		-	
						7.3	0.1	251	29.4		8.0		30.2		73.8		4.8		5.5		10		-				-		-	
					Bottom	13.6	0.1	161	29.3	29.3	8.0	8.0	30.8	30.8	75.0	75.1	4.8	4.8	6.9		11		-				-		-	
						13.6	0.1	175	29.3		8.0		30.8		75.1		4.8		6.8		12		-				-		-	
SR8	Fine	Moderate	12:59	4.4	Surface	1.0	-	-	30.3	30.3	7.9	7.9	24.9	24.9	89.4	89.4	5.9	5.9	5.1	11.6	9	10	-	-	820399	811612	-	-	-	-
						1.0	-	-	30.3		7.9		24.9		89.3		5.9		5.2		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.5	29.5	7.9	7.9	26.3	26.3	81.7	81.8	5.4	5.4	18.1		9		-				-		-	
						3.4	-	-	29.5		7.9		26.3		81.8		5.4		17.9		10		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 October 19 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	09:36	7.8	Surface	1.0	0.3	231	27.5	27.5	7.9	7.9	26.3	26.3	82.6	82.6	5.6	5.5	4.2	5.8	5	6	83	88	815614	804235	<0.2	<0.2	0.7	0.7
						1.0	0.3	238	27.5		7.9		26.3		82.5		5.6		4.3		6		84				<0.2		0.9	
					Middle	3.9	0.4	220	27.7	27.7	7.8	7.8	26.6	26.6	78.1	78.1	5.3		6.0		6		87				<0.2		0.8	
						3.9	0.4	222	27.7		7.8		26.6		78.1		5.3		6.1		6		87				<0.2		0.6	
					Bottom	6.8	0.2	232	27.7	27.8	7.8	7.8	26.6	26.7	77.0	77.0	5.2	5.2	7.2		7		92				<0.2		0.6	
						6.8	0.2	236	27.8		7.8		26.7		76.9		5.2		7.3		8		92				<0.2		0.6	
C2	Cloudy	Moderate	10:56	8.7	Surface	1.0	0.6	166	29.0	29.0	7.9	7.9	27.2	27.3	84.4	84.3	5.6	5.4	6.1	7.9	6	6	86	89	825672	806940	<0.2	<0.2	1.5	1.5
						1.0	0.7	178	29.0		7.9		27.4		84.2		5.6		6.1		5		86				<0.2		1.4	
					Middle	4.4	0.4	158	29.0	29.0	7.9	7.9	28.2	28.2	78.9	78.9	5.2		9.3		6		89				<0.2		1.4	
						4.4	0.4	169	29.0		7.9		28.3		78.8		5.2		9.2		6		89				<0.2		1.6	
					Bottom	7.7	0.2	167	29.1	29.1	7.8	7.8	29.5	29.5	75.0	75.2	4.9	4.9	8.4		7		91				<0.2		1.6	
						7.7	0.2	175	29.0		7.8		29.5		75.3		4.9		8.4		6		91				<0.2		1.5	
C3	Cloudy	Moderate	08:51	9.6	Surface	1.0	0.4	67	28.9	28.9	7.9	7.9	28.4	28.4	82.0	81.9	5.4	5.0	5.4	5.5	6	5	85	89	822088	817818	<0.2	<0.2	1.0	1.2
						1.0	0.5	73	28.9		7.9		28.4		81.7		5.4		5.3		5		86				<0.2		1.0	
					Middle	4.8	0.4	48	29.1	29.1	7.9	7.9	30.1	30.1	71.0	71.0	4.6		6.8		6		89				<0.2		0.9	
						4.8	0.4	49	29.1		7.9		30.1		71.0		4.6		7.1		5		89				<0.2		1.1	
					Bottom	8.6	0.2	69	29.1	29.1	7.9	7.8	30.6	30.6	72.4	72.5	4.7	4.7	4.1		5		91				<0.2		1.6	
						8.6	0.2	71	29.1		7.8		30.6		72.6		4.7		4.3		5		91				<0.2		1.5	
IM1	Fine	Moderate	10:03	5.2	Surface	1.0	0.2	104	27.7	27.7	7.9	7.9	26.2	26.2	80.6	80.6	5.5	5.5	3.5	4.6	5	5	83	86	817939	807145	<0.2	<0.2	0.7	0.7
						1.0	0.2	112	27.7		7.9		26.2		80.5		5.5		3.5		5		84				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	221	27.8	27.8	7.9	7.9	26.5	26.5	78.1	78.3	5.3	5.3	5.8		5		88				<0.2		0.7	
						4.2	0.0	240	27.8		7.9		26.5		78.4		5.3		5.8		6		89				<0.2		0.6	
IM2	Fine	Moderate	10:10	6.8	Surface	1.0	0.2	206	27.5	27.5	7.9	7.9	26.2	26.2	82.7	82.7	5.6	5.6	2.5	3.7	6	6	83	88	818176	806168	<0.2	<0.2	0.6	0.7
						1.0	0.2	209	27.5		7.9		26.2		82.6		5.6		2.5		6		84				<0.2		0.8	
					Middle	3.4	0.2	183	27.6	27.6	7.9	7.9	26.3	26.3	81.5	81.5	5.6		3.5		7		88				<0.2		0.6	
						3.4	0.2	194	27.6		7.9		26.3		81.4		5.6		3.5		6		89				<0.2		0.7	
					Bottom	5.8	0.1	194	27.7	27.7	7.9	7.9	26.5	26.6	77.1	77.1	5.2	5.2	5.1		6		91				<0.2		0.7	
						5.8	0.1	203	27.7		7.9		26.6		77.0		5.2		5.2		7		92				<0.2		0.7	
IM3	Fine	Moderate	10:17	6.7	Surface	1.0	0.1	193	27.7	27.7	7.9	7.9	25.9	25.9	81.4	81.4	5.6	5.5	4.3	5.3	7	7	83	87	818794	805587	<0.2	<0.2	0.8	0.8
						1.0	0.1	195	27.7		7.9		25.9		81.4		5.5		4.3		6		83				<0.2		0.8	
					Middle	3.4	0.2	146	27.7	27.7	7.9	7.9	26.1	26.1	79.5	79.5	5.4		5.6		7		88				<0.2		0.8	
						3.4	0.2	146	27.7		7.9		26.2		79.4		5.4		5.7		6		88				<0.2		0.8	
					Bottom	5.7	0.2	114	27.7	27.7	7.9	7.9	26.5	26.5	79.8	79.9	5.4	5.4	6.0		7		91				<0.2		0.8	
						5.7	0.2	122	27.7		7.9		26.5		80.0		5.4		6.1		7		91				<0.2		0.8	
IM4	Fine	Moderate	10:25	7.6	Surface	1.0	0.7	179	27.8	27.8	7.9	7.9	24.0	24.0	88.0	88.0	6.0	5.9	2.9	4.7	4	7	80	86	819715	804622	<0.2	<0.2	0.8	0.8
						1.0	0.7	188	27.8		7.9		24.0		87.9		6.0		2.9		5		80				<0.2		0.8	
					Middle	3.8	0.6	176	27.5	27.5	7.9	7.9	25.5	25.5	84.5	84.5	5.8		5.3		7		88				<0.2		0.8	
						3.8	0.6	186	27.5		7.9		25.5		84.5		5.8		5.3		6		88				<0.2		0.8	
					Bottom	6.6	0.4	158	27.5	27.5	7.9	7.9	25.4	25.4	86.3	86.5	5.9	5.9	6.0		9		91				<0.2		0.7	
						6.6	0.4	167	27.5		7.9		25.4		86.7		5.9		6.0		9		91				<0.2		0.7	
IM5	Fine	Moderate	10:34	7.5	Surface	1.0	0.7	215	27.8	27.8	7.9	7.9	23.7	23.7	90.5	90.5	6.2	6.0	3.0	4.6	4	5	83	88	820729	804854	<0.2	<0.2	0.8	0.8
						1.0	0.7	232	27.8		7.9		23.7		90.4		6.2		3.1		5		84				<0.2		0.8	
					Middle	3.8	0.7	206	27.6	27.6	7.9	7.9	25.0	25.0	84.4	84.5	5.8		4.1		4		88				<0.2		0.9	
						3.8	0.7	211	27.6		7.9		24.9		84.5		5.8		4.1		4		88				<0.2		0.8	
					Bottom	6.5	0.6	206	27.6	27.6	7.9	7.9	25.7	25.7	81.9	82.0	5.6	5.6	6.6		6		91				<0.2		0.8	
						6.5	0.6	220	27.6		7.9		25.7		82.0		5.6		6.6		5		91				<0.2		0.8	
IM6	Fine	Moderate	10:43	7.4	Surface	1.0	0.4	228	27.9	27.9	7.9	7.9	23.8	23.8	89.0	89.0	6.1	5.9	3.2	5.5	5	5	83	87	821066	805822	<0.2	<0.2	0.8	0.8
						1.0	0.5	247	27.9		7.9		23.8		88.9		6.1		3.2		4		84				<0.2		0.7	
					Middle	3.7	0.4	219	27.7	27.7	7.9	7.9	25.1	25.2	82.5	82.4	5.7		6.2		4		87				<0.2		0.7	
						3.7	0.4	228	27.7		7.9		25.2		82.3		5.6		6.3		5		87				<0.2		0.7	
					Bottom	6.4	0.3	208	27.6	27.6	7.9	7.9	26.0	26.0	81.9	82.0	5.6	5.6	7.1		5		91				<0.2		0.7	
						6.4	0.3	224	27.6		7.9		26.0		82.0		5.6		7.1		6		92				<0.2		0.9	
IM7	Fine	Moderate	10:56	7.3	Surface	1.0	0.4	255	27.8	27.8	7.9	7.9	24.3	24.3	86.4	86.4	5.9	5.7	3.6	5.7	3	4	83	88	821371	806819	<0.2	<0.2	1.0	1.0
						1.0	0.4	277	27.7		7.9		24.4		86.3		5.9		3.6		4		87				<0.2		0.9	
					Middle	3.7	0.4	261	27.6	27.6	7.9	7.9	25.6	25.6	80.5	80.5	5.5		5.8		4		88				<0.2		0.9	
						3.7	0.4	267	27.6		7.9		25.6		80.5		5.5		5.8		5		88				<0.2		0.9	
					Bottom	6.3	0.3	223	27.6	27.6	7.9	7.9	26.2	26.2	81.0	81.1	5.5	5.5	7.8		5		92				<0.2		1.0	
						6.3	0.3	234	27.6		7.9		26.2		81.1		5.5		7.7		5		92				<0.2		1.0	
IM8	Cloudy	Moderate	10:31	7.3	Surface	1.0	0.2	200	29.0	29.0	7.9	7.9	27.3	27.4	91.0	90.9	6.0	5.9	3.7	4.2	4	4	85	88	821811	808127	<0.2	<0.2	1.3	1.3
						1.0	0.2	203	28.9		7.9		27.5		90.8		6.0		3.7		4		85				<0.2		1.4	
					Middle	3.7	0.2	212	28.7	28.7	7.9	7.9	28.3	28.3	85.6	85.7	5.7		4.2		4		88				<0.2		1.2	
						3.7	0.2	226	28.7		7.9		28.3		85.7		5.7		4.2		5		89				<0.2		1.2	
					Bottom	6.3	0.2	209	28.6	28.6	7.9	7.9	28.6	28.6	87.6	87.8	5.8	5.8	4.7		4		90				<0.2		1.2	
						6.3	0.2	222	28.5		7.9		28.7		88.0		5.8		4.7		5		90				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:25	6.7	Surface	1.0	0.2	132	28.8	28.8	7.9	7.9	28.0	28.0	85.3	85.3	5.6	5.6	4.0	4.5	4	5	85	88	822109	808815	<0.2	<0.2	1.2	1.3
						1.0	0.2	134	28.8		7.9		28.1		85.2		5.6		4.1		4		85				<0.2		1.1	
					Middle	3.4	0.2	106	28.8	28.8	7.9	7.9	28.2	28.2	84.7	84.6	5.6		4.3		5		89				<0.2		1.4	
						3.4	0.2	109	28.7		7.9		28.3		84.5		5.6		4.4		5		89				<0.2		1.2	
					Bottom	5.7	0.2	117	28.7	28.7	7.9	7.9	28.7	28.6	85.1	85.4	5.6	5.7	5.1		5		90				<0.2		1.4	
						5.7	0.2	127	28.7		7.9		28.6		85.7		5.7		4.9		5		90				<0.2		1.5	
IM10	Cloudy	Moderate	10:13	6.8	Surface	1.0	0.5	116	29.1	29.1	7.9	7.9	27.5	27.6	86.7	86.5	5.7	5.6	3.5	7.3	5	4	86	89	822397	809807	<0.2	<0.2	1.2	1.2
						1.0	0.5	122	29.1		7.9		27.7		86.2		5.7		3.4		4		86				<0.2		1.2	
					Middle	3.4	0.5	104	28.7	28.7	7.9	7.9	28.5	28.5	83.6	83.6	5.5		7.9		4		88				<0.2		1.1	
						3.4	0.5	106	28.7		7.9		28.6		83.6		5.5		8.0		4		89				<0.2		1.2	
					Bottom	5.8	0.3	89	28.7	28.7	7.9	7.9	28.7	28.7	85.2	85.3	5.6	5.6	10.6		4		91				<0.2		1.3	
						5.8	0.3	96	28.7		7.9		28.7		85.4		5.6		10.6		5		91				<0.2		1.2	
IM11	Cloudy	Moderate	10:02	7.8	Surface	1.0	0.5	114	29.1	29.1	7.9	7.9	27.7	27.7	86.3	86.3	5.7	5.7	3.2	5.2	5	5	85	88	822074	811471	<0.2	<0.2	1.2	1.2
						1.0	0.5	118	29.1		7.9		27.7		86.3		5.7		3.3		5		85				<0.2		1.1	
					Middle	3.9	0.5	108	28.8	28.8	7.9	7.9	28.0	28.0	84.3	84.2	5.6		4.9		5		89				<0.2		1.2	
						3.9	0.5	117	28.8		7.9		28.1		84.1		5.6		5.2		4		89				<0.2		1.1	
					Bottom	6.8	0.3	108	28.8	28.8	7.9	7.9	28.5	28.5	84.5	84.8	5.6	5.6	7.5		4		89				<0.2		1.2	
						6.8	0.4	113	28.8		7.9		28.5		85.0		5.6		7.3		5		89				<0.2		1.1	
IM12	Cloudy	Moderate	09:51	9.4	Surface	1.0	0.5	116	28.9	28.9	7.9	7.9	27.8	27.8	84.9	84.8	5.6	5.5	3.9	7.8	5	5	84	88	821461	812043	<0.2	<0.2	1.0	1.1
						1.0	0.5	122	28.9		7.9		27.8		84.6		5.6		4.1		6		85				<0.2		1.0	
					Middle	4.7	0.4	112	28.8	28.8	7.8	7.8	28.4	28.5	82.4	82.3	5.4		7.2		5		88				<0.2		1.1	
						4.7	0.4	115	28.8		7.8		28.5		82.2		5.4		8.0		5		89				<0.2		1.0	
					Bottom	8.4	0.2	92	28.8	28.8	7.8	7.8	28.7	28.7	84.8	85.1	5.6	5.6	11.9		5		90				<0.2		1.0	
						8.4	0.2	100	28.8		7.8		28.7		85.3		5.6		12.0		6		90				<0.2		1.2	
SR1A	Cloudy	Calm	09:32	4.9	Surface	1.0	-	-	28.9	28.9	7.8	7.8	27.9	27.9	81.1	80.9	5.4	5.4	5.1	7.2	5	6	-	-	819976	812655	-	-	-	-
						1.0	-	-	28.9		7.8		27.9		80.7		5.3		5.4		6		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.9	28.9	7.7	7.7	28.4	28.4	78.6	78.6	5.2	5.2	9.1		6		-				-		-	
						3.9	-	-	28.9		7.7		28.4		78.5		5.2		9.3		6		-				-		-	
SR2	Cloudy	Moderate	09:17	4.3	Surface	1.0	0.3	86	28.9	29.0	7.9	7.9	28.1	28.1	80.9	80.9	5.3	5.3	4.4	6.3	6	6	84	87	821451	814150	<0.2	<0.2	1.3	1.3
						1.0	0.3	93	29.0		7.9		28.2		80.8		5.3		4.7		5		84				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	86	29.1	29.1	7.9	7.9	28.9	28.9	74.6	74.7	4.9	4.9	8.1		5		89				<0.2		1.3	
						3.3	0.2	91	29.1		7.9		28.9		74.7		4.9		8.1		6		89				<0.2		1.2	
SR3	Cloudy	Moderate	10:36	8.3	Surface	1.0	0.4	180	29.0	29.0	8.0	8.0	27.4	27.5	87.8	87.7	5.8	5.6	4.8	5.8	5	6	-	-	822166	807558	-	-	-	-
						1.0	0.4	185	29.0		8.0		27.6		87.6		5.8		4.9		6		-				-		-	
					Middle	4.2	0.2	213	28.7	28.7	7.9	7.9	28.9	29.0	81.6	81.4	5.4		5.6		6		-				-		-	
						4.2	0.2	214	28.7		7.9		29.1		81.2		5.4		5.7		4		-				-		-	
					Bottom	7.3	0.2	264	28.7	28.7	7.9	7.9	29.6	29.6	81.3	81.5	5.3	5.4	6.7		6		-				-		-	
						7.3	0.2	275	28.7		7.9		29.6		81.6		5.4		6.9		7		-				-		-	
SR4A	Fine	Moderate	09:12	9.5	Surface	1.0	0.1	245	27.4	27.4	7.8	7.8	24.9	25.0	78.3	78.4	5.4	5.4	2.9	4.3	4	5	-	-	817174	807791	-	-	-	-
						1.0	0.1	259	27.4		7.8		25.0		78.5		5.4		3.0		5		-				-		-	
					Middle	4.8	0.1	261	27.5	27.5	7.8	7.8	26.5	26.5	79.2	79.2	5.4		4.7		5		-				-		-	
						4.8	0.1	277	27.5		7.8		26.5		79.2		5.4		4.7		4		-				-		-	
					Bottom	8.5	0.1	266	27.7	27.7	7.8	7.8	26.6	26.6	78.6	78.8	5.3	5.4	5.2		6		-				-		-	
						8.5	0.1	273	27.6		7.8		26.6		78.9		5.4		5.2		7		-				-		-	
SR5A	Fine	Moderate	08:57	4.2	Surface	1.0	0.0	36	27.2	27.2	7.8	7.8	23.8	23.7	81.1	81.1	5.7	5.7	4.0	3.7	6	6	-	-	816614	810678	-	-	-	-
						1.0	0.0	36	27.2		7.8		23.7		81.0		5.6		4.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	115	27.7	27.7	7.8	7.8	25.3	25.3	79.3	79.4	5.4	5.4	3.3		7		-				-		-	
						3.2	0.1	120	27.7		7.8		25.3		79.4		5.4		3.4		7		-				-		-	
SR6A	Fine	Moderate	08:31	4.5	Surface	1.0	0.1	253	27.9	27.9	7.8	7.8	24.3	24.3	76.2	76.2	5.2	5.2	4.3	3.9	8	8	-	-	817968	814762	-	-	-	-
						1.0	0.1	271	27.9		7.8		24.3		76.2		5.2		4.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	275	28.0	28.0	7.8	7.8	25.1	25.1	77.6	77.7	5.3	5.3	3.5		8		-				-		-	
						3.5	0.0	285	28.0		7.8		25.1		77.7		5.3		3.5		8		-				-		-	
SR7	Cloudy	Moderate	08:09	14.5	Surface	1.0	0.5	73	28.8	28.8	7.9	7.9	29.0	29.0	80.5	80.5	5.3	5.1	3.0	2.9	3	4	-	-	823645	823743	-	-	-	-
						1.0	0.5	77	28.8		7.9		29.0		80.4		5.3		3.0		4		-				-		-	
					Middle	7.3	0.2	16	29.0	29.0	7.9	7.9	31.1	31.1	74.1	74.1	4.8		2.9		3		-				-		-	
						7.3	0.2	17	29.0		7.9		31.1		74.1		4.8		2.9		4		-				-		-	
					Bottom	13.5	0.2	1	29.0	29.0	7.9	7.9	31.3	31.3	75.3	75.4	4.9	4.9	3.0		4		-				-		-	
						13.5	0.2	1	29.0		7.9		31.3		75.5		4.9		3.0		4		-				-		-	
SR8	Cloudy	Calm	09:42	5.1	Surface	1.0	-	-	28.9	28.9	7.9	7.9	28.1	28.1	85.4	85.5	5.6	5.6	5.1	5.0	3	4	-	-	820408	811617	-	-	-	-
						1.0	-	-	28.9		7.9		28.1		85.5		5.6		5.1		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.9	28.9	7.8	7.8	28.1	28.1	86.6	86.8	5.7	5.7	5.0		6		-				-		-	
						4.1	-	-	28.9		7.8		28.1		86.9		5.7		5.0		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	16:33	7.0	Surface	1.0	0.2	37	27.8	27.8	7.9	7.9	26.3	26.3	84.2	84.2	5.7	5.7	3.5	5.7	4	6	83	88	815633	804229	<0.2	<0.2	0.6	0.6
						1.0	0.2	40	27.8		7.9		26.3		84.2		5.7		3.5		5		84				<0.2		0.6	
					Middle	3.5	0.1	50	27.8	27.8	7.9	7.9	26.4	26.4	83.1	83.0	5.6		4.7		5		87				<0.2		0.6	
						3.5	0.1	45	27.8		7.9		26.4		82.9		5.6		4.7		5		88				<0.2		0.5	
					Bottom	6.0	0.1	28	27.8	27.8	7.9	7.9	26.7	26.7	78.2	78.3	5.3	5.3	8.8		8		91				<0.2		0.6	
						6.0	0.1	27	27.8		7.9		26.7		78.3		5.3		8.8		9		92				<0.2		0.6	
C2	Cloudy	Moderate	15:28	8.5	Surface	1.0	0.6	67	29.0	29.0	7.9	7.9	26.9	27.1	83.9	83.8	5.6	5.3	5.1	7.8	2	3	84	87	825664	806921	<0.2	<0.2	1.1	1.3
						1.0	0.6	68	29.0		7.9		27.2		83.7		5.5		5.0		3		85				<0.2		1.0	
					Middle	4.3	0.3	63	29.0	29.0	7.9	7.9	28.6	28.7	77.1	77.1	5.1		9.7		3		88				<0.2		1.3	
						4.3	0.4	64	29.0		7.9		28.7		77.0		5.1		9.5		3		88				<0.2		1.4	
					Bottom	7.5	0.2	53	29.1	29.1	7.9	7.9	29.4	29.4	72.4	72.5	4.7	4.7	8.8		3		89				<0.2		1.4	
						7.5	0.2	56	29.1		7.9		29.4		72.6		4.7		8.8		3		90				<0.2		1.4	
C3	Cloudy	Moderate	17:28	11.6	Surface	1.0	0.1	274	29.5	29.5	7.9	7.9	28.7	28.7	84.1	84.1	5.5	5.4	4.0	5.7	2	3	85	88	822094	817800	<0.2	<0.2	1.7	1.6
						1.0	0.1	299	29.5		7.9		28.8		84.1		5.5		4.1		3		86				<0.2		1.7	
					Middle	5.8	0.2	244	29.2	29.2	7.9	7.9	29.1	29.1	79.1	79.1	5.2		5.5		3		88				<0.2		1.6	
						5.8	0.2	261	29.2		7.9		29.2		79.0		5.2		5.9		2		89				<0.2		1.6	
					Bottom	10.6	0.1	222	29.2	29.2	7.9	7.9	29.5	29.4	74.0	74.3	4.8	4.9	7.3		3		90				<0.2		1.6	
						10.6	0.1	223	29.2		7.9		29.4		74.5		4.9		7.3		3		90				<0.2		1.6	
IM1	Cloudy	Rough	16:04	4.8	Surface	1.0	0.1	64	27.9	27.9	7.9	7.9	26.3	26.3	77.7	77.6	5.3	5.3	3.6	4.5	6	7	83	87	817950	807121	<0.2	<0.2	1.0	0.9
						1.0	0.1	68	27.9		7.9		26.3		77.5		5.3		3.7		7		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	61	27.8	27.8	7.9	7.9	26.6	26.6	76.9	76.9	5.2	5.2	5.4		7		91				<0.2		0.9	
						3.8	0.0	63	27.8		7.9		26.6		76.9		5.2		5.4		7		91				<0.2		0.8	
IM2	Cloudy	Rough	15:59	7.1	Surface	1.0	0.2	86	27.8	27.8	7.9	7.9	25.7	25.7	82.3	82.3	5.6	5.6	2.4	5.1	7	8	86	88	818171	806147	<0.2	<0.2	0.9	0.9
						1.0	0.2	90	27.8		7.9		25.7		82.2		5.6		2.5		6		85				<0.2		0.9	
					Middle	3.6	0.1	57	27.7	27.7	7.9	7.9	26.1	26.1	80.5	80.4	5.5		4.8		6		88				<0.2		1.0	
						3.6	0.1	56	27.7		7.9		26.2		80.2		5.5		4.8		7		90				<0.2		0.9	
					Bottom	6.1	0.1	34	27.7	27.7	7.9	7.9	26.6	26.6	78.1	78.1	5.3	5.3	8.1		10		89				<0.2		0.9	
						6.1	0.1	36	27.7		7.9		26.6		78.0		5.3		8.1		11		90				<0.2		0.9	
IM3	Cloudy	Rough	15:53	6.9	Surface	1.0	0.2	22	28.1	28.1	7.9	7.9	24.9	24.9	91.0	91.0	6.2	5.9	5.0	7.4	6	7	84	88	818771	805570	<0.2	<0.2	1.0	1.0
						1.0	0.2	23	28.0		7.9		25.0		90.9		6.2		5.0		6		85				<0.2		1.0	
					Middle	3.5	0.1	22	27.7	27.7	7.9	7.9	25.8	25.8	81.7	81.7	5.6		7.3		7		88				<0.2		1.0	
						3.5	0.1	24	27.7		7.9		25.8		81.7		5.6		7.3		7		89				<0.2		0.9	
					Bottom	5.9	0.0	66	27.7	27.7	7.9	7.9	25.8	25.8	81.3	81.3	5.5	5.5	9.8		9		90				<0.2		0.9	
						5.9	0.0	62	27.7		7.9		25.8		81.2		5.5		9.8		8		89				<0.2		0.9	
IM4	Cloudy	Rough	15:46	7.8	Surface	1.0	0.8	75	27.8	27.8	7.9	7.9	24.3	24.3	86.8	86.8	6.0	5.9	4.6	7.1	5	7	86	88	819738	804592	<0.2	<0.2	0.9	1.0
						1.0	0.8	73	27.8		7.9		24.3		86.7		5.9		4.6		5		85				<0.2		1.0	
					Middle	3.9	0.6	73	27.7	27.7	7.9	7.9	24.7	24.7	85.3	85.3	5.9		7.3		8		88				<0.2		1.0	
						3.9	0.7	76	27.7		7.9		24.7		85.3		5.9		7.3		7		88				<0.2		1.0	
					Bottom	6.8	0.5	82	27.7	27.7	7.9	7.9	24.8	24.8	86.0	86.0	5.9	5.9	9.4		8		91				<0.2		0.9	
						6.8	0.5	89	27.7		7.9		24.8		86.0		5.9		9.4		8		90				<0.2		1.0	
IM5	Cloudy	Rough	15:40	7.2	Surface	1.0	0.7	69	27.7	27.7	7.9	7.9	23.8	23.7	89.0	89.0	6.1	5.9	3.7	5.0	6	5	85	87	820758	804883	<0.2	<0.2	0.9	0.9
						1.0	0.7	63	27.7		7.9		23.7		88.9		6.1		3.8		6		85				<0.2		0.9	
					Middle	3.6	0.6	64	27.7	27.7	7.9	7.9	25.3	25.3	82.6	82.6	5.6		5.3		4		88				<0.2		0.9	
						3.6	0.7	66	27.7		7.9		25.3		82.6		5.6		5.3		5		87				<0.2		0.9	
					Bottom	6.2	0.4	68	27.7	27.7	7.9	7.9	25.5	25.5	83.1	83.2	5.7	5.7	6.0		4		89				<0.2		0.9	
						6.2	0.5	62	27.7		7.9		25.5		83.2		5.7		6.0		5		90				<0.2		0.9	
IM6	Cloudy	Rough	15:34	7.5	Surface	1.0	0.5	56	27.9	27.9	7.9	7.9	24.0	24.0	87.8	87.8	6.0	6.0	3.3	4.9	6	6	86	88	821041	805827	<0.2	<0.2	1.2	1.2
						1.0	0.5	57	27.9		7.9		24.0		87.7		6.0		3.3		6		85				<0.2		1.2	
					Middle	3.8	0.4	53	27.7	27.7	7.9	7.9	24.4	24.4	86.5	86.5	5.9		3.6		6		87				<0.2		1.1	
						3.8	0.4	54	27.7		7.9		24.4		86.4		5.9		3.6		6		88				<0.2		1.2	
					Bottom	6.5	0.4	49	27.7	27.8	7.9	7.9	24.5	24.5	86.2	86.3	5.9	5.9	7.7		7		90				<0.2		1.1	
						6.5	0.4	50	27.8		7.9		24.5		86.3		5.9		7.8		7		91				<0.2		1.2	
IM7	Cloudy	Rough	15:28	7.6	Surface	1.0	0.4	53	27.8	27.8	7.9	7.9	24.0	24.1	86.1	86.1	5.9	5.7	3.5	5.0	5	6	87	88	821335	806849	<0.2	<0.2	1.1	1.1
						1.0	0.4	56	27.8		7.9		24.1		86.1		5.9		3.5		5		86				<0.2		1.1	
					Middle	3.8	0.4	40	27.6	27.6	7.9	7.9	25.7	25.7	80.2	80.2	5.5		5.2		5		88				<0.2		1.1	
						3.8	0.4	39	27.6		7.9		25.7		80.2		5.5		5.2		6		89				<0.2		1.1	
					Bottom	6.6	0.3	43	27.6	27.6	7.9	7.9	25.8	25.8	81.3	81.4	5.6	5.6	6.3		6		90				<0.2		1.1	
						6.6	0.3	48	27.6		7.9		25.8		81.5		5.6		6.3		6		89				<0.2		1.1	
IM8	Cloudy	Rough	15:49	7.1	Surface	1.0	0.3	19	29.0	29.0	7.9	7.9	27.5	27.5	87.2	87.1	5.8	5.7	4.0	4.3	4	5	84	88	821839	808126	<0.2	<0.2	1.4	1.4
						1.0	0.3	20	29.0		7.9		27.5		87.0		5.7		4.0		5		85				<0.2		1.4	
					Middle	3.6	0.3	20	28.9	28.9	7.9	7.9	27.9	27.9	85.7	85.7	5.7		4.4		5		88				<0.2		1.4	
						3.6	0.3	20	28.9		7.9		28.0		85.7		5.7		4.3		6		88				<0.2		1.4	
					Bottom	6.1	0.2	23	28.8	28.8	7.9	7.9	28.3	28.3	86.2	86.3	5.7	5.7	4.6		5		90				<0.2		1.4	
						6.1	0.2	23	28.8		7.9		28.3		86.4		5.7		4.7		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 08 October 19 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	15:58	6.4	Surface	1.0	0.3	356	29.2	29.2	7.9	7.9	27.2	27.3	90.8	90.8	6.0	5.8	3.4	4.0	5	5	85	88	822086	808812	<0.2	<0.2	1.4	1.6
						1.0	0.3	342	29.2		7.9		27.3		90.8		6.0		3.5		5		86				<0.2		1.4	
					Middle	3.2	0.2	333	29.0	29.0	7.9	7.9	27.7	27.8	85.9	85.7	5.7		4.1		5		88				<0.2		1.7	
						3.2	0.2	331	29.0		7.9		27.9		85.5		5.6		4.1		5		88				<0.2		1.5	
					Bottom	5.4	0.1	340	28.9	28.9	7.9	7.9	28.3	28.3	85.5	85.7	5.6	5.7	4.5		6		90				<0.2		1.6	
						5.4	0.1	341	28.9		7.9		28.3		85.8		5.7		4.6		6		90				<0.2		1.7	
IM10	Cloudy	Rough	16:07	7.3	Surface	1.0	0.4	339	29.2	29.2	7.9	7.9	27.4	27.4	87.5	87.4	5.8	5.7	3.7	4.5	6	6	86	89	822373	809774	<0.2	<0.2	1.3	1.3
						1.0	0.4	314	29.2		7.9		27.4		87.2		5.8		3.8		6		87				<0.2		1.2	
					Middle	3.7	0.4	292	29.0	29.0	7.9	7.9	27.8	27.9	85.3	85.3	5.6		4.5		5		89				<0.2		1.2	
						3.7	0.4	299	29.0		7.9		27.9		85.2		5.6		4.6		6		90				<0.2		1.2	
					Bottom	6.3	0.2	305	28.8	28.8	7.9	7.8	28.2	28.2	86.1	86.3	5.7	5.7	5.1		6		91				<0.2		1.4	
						6.3	0.2	287	28.8		7.8		28.3		86.5		5.7		5.2		6		91				<0.2		1.3	
IM11	Cloudy	Rough	16:17	7.4	Surface	1.0	0.4	279	29.3	29.3	7.9	7.9	27.9	27.9	84.8	84.6	5.6	5.5	3.9	5.2	5	5	86	89	822052	811465	<0.2	<0.2	1.3	1.4
						1.0	0.4	262	29.3		7.9		27.9		84.4		5.5		4.1		5		86				<0.2		1.4	
					Middle	3.7	0.3	269	29.1	29.1	7.9	7.9	28.1	28.1	83.2	83.3	5.5		4.8		6		90				<0.2		1.4	
						3.7	0.3	263	29.1		7.9		28.1		83.3		5.5		4.8		5		90				<0.2		1.5	
					Bottom	6.4	0.2	278	29.0	29.0	7.8	7.8	28.4	28.4	85.8	86.0	5.7	5.7	6.9		5		91				<0.2		1.5	
						6.4	0.2	275	28.9		7.8		28.4		86.1		5.7		6.9		6		91				<0.2		1.4	
IM12	Cloudy	Rough	16:25	7.7	Surface	1.0	0.3	250	29.2	29.2	7.9	7.9	27.7	27.7	86.1	85.9	5.7	5.6	4.4	7.3	6	5	85	88	821459	812041	<0.2	<0.2	1.3	1.2
						1.0	0.3	252	29.1		7.9		27.7		85.7		5.6		4.2		5		85				<0.2		1.2	
					Middle	3.9	0.2	243	28.9	28.9	7.9	7.9	28.0	28.0	83.5	83.5	5.5		5.8		5		89				<0.2		1.2	
						3.9	0.2	251	28.9		7.9		28.0		83.4		5.5		6.0		5		89				<0.2		1.2	
					Bottom	6.7	0.2	263	28.9	28.9	7.9	7.9	28.1	28.1	83.5	83.5	5.5	5.5	11.8		5		91				<0.2		1.3	
						6.7	0.2	267	28.9		7.9		28.1		83.5		5.5		11.8		4		91				<0.2		1.2	
SR1A	Cloudy	Calm	16:49	4.3	Surface	1.0	-	-	29.1	29.1	8.0	8.0	27.7	27.7	87.0	86.9	5.7	5.7	4.4	4.5	5	5	-	-	819977	812664	-	-	-	-
						1.0	-	-	29.1		8.0		27.7		86.8		5.7		4.5		4		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	29.1	29.1	8.0	8.0	27.8	27.7	87.3	87.5	5.8	5.8	4.6		6		-				-		-	
						3.3	-	-	29.1		8.0		27.7		87.6		5.8		4.5		6		-				-		-	
SR2	Cloudy	Moderate	17:04	4.1	Surface	1.0	0.2	269	29.2	29.2	7.9	7.9	27.9	27.9	88.6	88.6	5.8	5.8	4.4	6.4	4	5	85	87	821467	814142	<0.2	<0.2	1.4	1.3
						1.0	0.2	273	29.1		7.9		28.0		88.6		5.8		4.9		4		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	255	28.9	28.9	7.8	7.8	28.4	28.4	84.6	84.8	5.6	5.6	8.1		6		88				<0.2		1.3	
						3.1	0.1	252	28.8		7.8		28.4		84.9		5.6		8.1		5		88				<0.2		1.2	
SR3	Cloudy	Moderate	15:44	8.0	Surface	1.0	0.6	15	29.1	29.1	7.9	7.9	26.9	26.9	90.1	90.1	6.0	5.7	3.4	4.8	5	6	-	-	822130	807577	-	-	-	-
						1.0	0.6	16	29.1		7.9		26.9		90.1		6.0		3.6		5		-				-		-	
					Middle	4.0	0.3	26	28.8	28.8	7.9	7.9	28.6	28.6	82.4	82.4	5.4		5.2		6		-				-		-	
						4.0	0.3	27	28.8		7.9		28.6		82.4		5.4		5.3		5		-				-		-	
					Bottom	7.0	0.2	24	28.8	28.8	7.9	7.9	28.9	28.8	83.5	83.8	5.5	5.5	5.6		6		-				-		-	
						7.0	0.2	25	28.8		7.9		28.8		84.0		5.5		5.6		7		-				-		-	
SR4A	Cloudy	Moderate	16:59	9.8	Surface	1.0	0.6	248	27.8	27.8	7.8	7.8	25.0	25.0	81.3	81.3	5.6	5.4	5.3	7.7	7	7	-	-	817198	807813	-	-	-	-
						1.0	0.6	264	27.8		7.8		25.0		81.2		5.6		5.4		6		-				-		-	
					Middle	4.9	0.4	242	27.7	27.7	7.8	7.8	26.2	26.3	76.4	76.4	5.2		7.9		8		-				-		-	
						4.9	0.4	263	27.7		7.8		26.3		76.3		5.2		7.9		7		-				-		-	
					Bottom	8.8	0.4	260	27.7	27.7	7.9	7.9	26.6	26.6	76.0	76.1	5.2	5.2	9.9		8		-				-		-	
						8.8	0.4	267	27.7		7.9		26.6		76.1		5.2		9.9		8		-				-		-	
SR5A	Cloudy	Moderate	17:18	4.2	Surface	1.0	0.3	339	27.8	27.8	7.8	7.8	25.3	25.3	80.2	80.3	5.5	5.5	5.5	6.3	6	7	-	-	816589	810674	-	-	-	-
						1.0	0.3	342	27.8		7.8		25.3		80.3		5.5		5.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	323	27.8	27.8	7.8	7.8	25.6	25.6	81.6	81.7	5.6	5.6	7.1		8		-				-		-	
						3.2	0.2	335	27.8		7.8		25.6		81.8		5.6		7.2		8		-				-		-	
SR6A	Cloudy	Moderate	17:45	3.9	Surface	1.0	0.0	232	28.2	28.2	7.8	7.8	24.1	24.1	78.7	78.7	5.4	5.4	2.5	3.2	6	7	-	-	817984	814761	-	-	-	-
						1.0	0.0	252	28.2		7.8		24.1		78.7		5.4		2.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	72	28.1	28.1	7.8	7.8	24.4	24.4	77.5	77.6	5.3	5.3	4.0		8		-				-		-	
						2.9	0.1	78	28.1		7.8		24.5		77.6		5.3		3.9		8		-				-		-	
SR7	Cloudy	Moderate	17:55	14.1	Surface	1.0	0.3	213	29.1	29.1	7.9	7.9	28.5	28.5	84.2	84.2	5.5	5.3	3.2	3.3	6	7	-	-	823620	823748	-	-	-	-
						1.0	0.3	217	29.1		7.9		28.5		84.1		5.5		3.2		6		-				-		-	
					Middle	7.1	0.2	269	28.9	29.0	7.9	7.9	29.0	29.0	78.5	78.5	5.2		3.4		8		-				-		-	
						7.1	0.2	282	29.0		7.9		29.0		78.4		5.1		3.4		7		-				-		-	
					Bottom	13.1	0.2	280	29.0	29.0	7.9	7.9	29.2	29.2	79.6	79.9	5.2	5.3	3.4		8		-				-		-	
						13.1	0.2	273	29.0		7.9		29.2		80.2		5.3		3.4		8		-				-		-	
SR8	Cloudy	Moderate	16:36	5.3	Surface	1.0	-	-	29.2	29.2	7.9	7.9	27.6	27.7	87.7	87.5	5.8	5.8	4.0	7.8	6	6	-	-	820394	811613	-	-	-	-
						1.0	-	-	29.2		7.9		27.7		87.2		5.7		4.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	29.1	29.1	7.9	7.9	27.8	27.8	86.1	86.3	5.7	5.7	11.7		5		-				-		-	
						4.3	-	-	29.1		7.9		27.8		86.4		5.7		11.5		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:01	8.8	Surface	1.0	0.5	231	29.4	29.4	8.1	8.1	28.8	28.8	90.2	90.1	5.9	5.9	2.8	6.8	7	5	85	89	815643	804267	<0.2	<0.2	1.1	0.9
						1.0	0.5	253	29.4		8.1		28.8		90.0		5.9		3.1		6		85				<0.2		0.9	
					Middle	4.4	0.5	243	29.0	29.0	8.2	8.2	29.1	29.1	88.9	89.0	5.8		4.3		6		89				<0.2		1.0	
						4.4	0.5	260	29.1		8.2		29.1		89.0		5.8		4.3		4		90				<0.2		0.9	
					Bottom	7.8	0.3	233	28.9	28.9	8.2	8.2	29.2	29.2	91.6	91.7	6.0	6.0	13.0		4		91				<0.2		0.8	
						7.8	0.4	247	28.9		8.2		29.2		91.8		6.0		13.0		5		91				<0.2		0.9	
C2	Cloudy	Moderate	12:04	11.2	Surface	1.0	0.8	164	29.1	29.1	8.0	8.0	26.9	26.9	99.6	99.4	6.6	6.0	3.8	5.6	5	4	87	89	825679	806931	<0.2	<0.2	1.3	1.3
						1.0	0.8	174	29.1		8.0		27.0		99.2		6.6		4.0		4		86				<0.2		1.3	
					Middle	5.6	0.7	165	29.0	29.0	7.9	7.9	28.6	28.6	81.8	81.7	5.4		5.4		4		88				<0.2		1.4	
						5.6	0.7	168	29.0		7.9		28.7		81.6		5.4		5.4		5		90				<0.2		1.2	
					Bottom	10.2	0.3	171	29.1	29.1	7.9	7.9	29.5	29.5	77.3	77.5	5.0	5.1	7.3		4		90				<0.2		1.3	
						10.2	0.4	182	29.1		7.9		29.5		77.6		5.1		7.5		4		91				<0.2		1.3	
C3	Cloudy	Moderate	10:03	11.2	Surface	1.0	0.4	87	28.9	28.9	7.9	7.9	29.5	29.5	80.5	80.3	5.3	5.1	3.7	4.9	4	4	86	88	822103	817801	<0.2	<0.2	1.3	1.4
						1.0	0.4	93	28.9		7.9		29.5		80.0		5.2		3.8		3		85				<0.2		1.5	
					Middle	5.6	0.3	88	28.9	28.9	7.9	7.9	29.9	29.9	77.0	76.9	5.0		4.2		3		88				<0.2		1.4	
						5.6	0.3	94	28.9		7.9		30.0		76.8		5.0		4.5		4		88				<0.2		1.3	
					Bottom	10.2	0.3	89	28.9	28.9	7.9	7.9	30.6	30.6	75.8	75.9	4.9	4.9	6.6		4		90				<0.2		1.4	
						10.2	0.3	89	28.9		7.9		30.6		76.0		4.9		6.7		3		91				<0.2		1.2	
IM1	Cloudy	Moderate	11:31	5.6	Surface	1.0	0.1	214	29.1	29.1	8.1	8.1	28.5	28.5	88.4	88.4	5.8	5.8	2.5	2.8	6	7	84	86	817935	807154	<0.2	<0.2	0.8	0.9
						1.0	0.1	231	29.1		8.1		28.5		88.3		5.8		2.4		6		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	256	29.1	29.1	8.1	8.1	28.8	28.8	88.3	88.5	5.8	5.8	3.2		7		88				<0.2		0.9	
						4.6	0.1	262	29.1		8.2		28.8		88.7		5.8		3.2		8		88				<0.2		0.9	
IM2	Cloudy	Moderate	11:38	6.7	Surface	1.0	0.2	162	29.0	29.0	8.1	8.1	28.5	28.5	88.8	88.9	5.8	5.8	2.5	4.0	5	6	85	88	818145	806160	<0.2	<0.2	0.8	0.8
						1.0	0.2	166	29.0		8.1		28.5		88.9		5.8		2.5		5		85				<0.2		0.8	
					Middle	3.4	0.2	173	28.9	28.9	8.1	8.1	28.6	28.6	87.8	88.0	5.8		3.5		7		89				<0.2		0.7	
						3.4	0.2	188	28.9		8.1		28.6		88.1		5.8		3.5		5		89				<0.2		0.8	
					Bottom	5.7	0.2	158	28.9	28.9	8.1	8.1	28.9	28.9	88.7	88.8	5.8	5.8	5.8		7		91				<0.2		0.8	
						5.7	0.2	173	28.9		8.1		28.9		88.9		5.8		5.9		6		91				<0.2		0.8	
IM3	Cloudy	Moderate	11:44	6.9	Surface	1.0	0.3	146	28.9	28.9	8.1	8.1	28.3	28.3	89.3	89.2	5.9	5.9	7.4	8.1	18	15	85	88	818804	805596	<0.2	<0.2	0.9	0.9
						1.0	0.3	149	28.9		8.1		28.3		89.1		5.9		7.6		18		85				<0.2		0.9	
					Middle	3.5	0.2	161	28.7	28.7	8.1	8.1	28.6	28.6	88.5	88.7	5.8		7.6		14		89				<0.2		0.9	
						3.5	0.2	169	28.7		8.1		28.6		88.8		5.9		7.8		14		89				<0.2		1.0	
					Bottom	5.9	0.1	192	28.7	28.7	8.2	8.2	28.8	28.8	90.0	90.1	5.9	5.9	8.9		13		91				<0.2		0.9	
						5.9	0.1	197	28.7		8.2		28.8		90.1		5.9		9.2		14		91				<0.2		0.8	
IM4	Cloudy	Moderate	11:54	7.4	Surface	1.0	0.9	176	29.2	29.1	8.1	8.1	27.1	27.1	93.7	93.7	6.2	6.2	4.7	6.7	6	8	84	88	819722	804614	<0.2	<0.2	1.2	1.2
						1.0	0.9	185	29.1		8.1		27.2		93.6		6.2		5.3		6		85				<0.2		1.3	
					Middle	3.7	0.8	172	29.0	29.0	8.2	8.2	27.4	27.4	93.8	93.8	6.2		7.5		8		89				<0.2		1.2	
						3.7	0.8	178	29.0		8.2		27.4		93.8		6.2		7.3		7		89				<0.2		1.0	
					Bottom	6.4	0.6	164	29.0	29.0	8.2	8.2	27.5	27.5	94.1	94.2	6.2	6.2	7.6		9		90				<0.2		1.3	
						6.4	0.7	170	29.0		8.2		27.5		94.3		6.2		8.0		10		90				<0.2		1.1	
IM5	Cloudy	Moderate	12:06	6.8	Surface	1.0	0.8	194	29.3	29.2	8.2	8.2	26.0	26.0	101.0	100.0	6.7	6.3	3.4	6.0	4	6	84	88	820739	804848	<0.2	<0.2	1.1	1.1
						1.0	0.9	202	29.2		8.2		26.0		99.0		6.6		3.7		5		85				<0.2		1.2	
					Middle	3.4	0.6	199	28.8	28.8	8.2	8.2	28.0	28.0	90.9	90.9	6.0		7.0		6		89				<0.2		1.0	
						3.4	0.7	217	28.8		8.2		28.1		90.9		6.0		7.1		7		89				<0.2		1.2	
					Bottom	5.8	0.6	215	28.8	28.8	8.2	8.2	28.2	28.2	92.7	93.4	6.1	6.2	7.3		8		90				<0.2		1.1	
						5.8	0.6	216	28.8		8.2		28.2		94.1		6.2		7.3		6		90				<0.2		1.1	
IM6	Cloudy	Moderate	12:15	6.3	Surface	1.0	0.6	228	29.2	29.2	8.1	8.1	26.6	26.6	95.0	94.6	6.3	6.0	3.9	4.6	5	6	85	88	821056	805811	<0.2	<0.2	1.3	1.3
						1.0	0.6	236	29.2		8.1		26.6		94.1		6.2		4.2		5		86				<0.2		1.3	
					Middle	3.2	0.5	222	28.9	28.9	8.1	8.1	27.8	27.8	87.7	87.7	5.8		4.4		6		88				<0.2		1.2	
						3.2	0.5	226	28.9		8.1		27.7		87.7		5.8		4.4		6		89				<0.2		1.3	
					Bottom	5.3	0.4	218	28.9	28.9	8.1	8.1	28.0	28.0	89.1	89.2	5.9	5.9	5.3		5		90				<0.2		1.3	
						5.3	0.4	230	28.9		8.1		28.0		89.3		5.9		5.4		6		90				<0.2		1.2	
IM7	Cloudy	Moderate	12:22	7.8	Surface	1.0	0.4	223	29.3	29.3	8.0	8.0	27.8	27.8	100.9	101.1	6.6	6.4	3.1	5.4	4	5	86	88	821361	806830	<0.2	<0.2	1.2	1.2
						1.0	0.4	234	29.3		8.0		27.8		101.3		6.7		3.1		4		86				<0.2		1.3	
					Middle	3.9	0.5	238	28.8	28.8	7.9	7.9	28.6	28.7	92.1	92.1	6.1		5.2		4		88				<0.2		1.2	
						3.9	0.5	261	28.8		7.9		28.8		92.0		6.1		5.6		5		89				<0.2		1.2	
					Bottom	6.8	0.3	247	28.7	28.7	7.8	7.8	29.5	29.5	87.6	87.7	5.8	5.8	7.9		6		90				<0.2		1.2	
						6.8	0.3	270	28.7		7.8		29.5		87.7		5.8		7.9		5		90				<0.2		1.2	
IM8	Cloudy	Moderate	11:35	7.3	Surface	1.0	0.2	175	29.2	29.2	8.0	8.0	27.7	27.8	96.5	96.3	6.4	6.0	3.4	4.8	5	4	87	88	821843	808154	<0.2	<0.2	1.3	1.4
						1.0	0.2	177	29.1		8.0		27.8		96.1		6.3		3.6		4		86				<0.2		1.4	
					Middle	3.7	0.1	173	28.8	28.8	8.0	8.0	28.6	28.7	86.7	86.6	5.7		5.3		5		87				<0.2		1.3	
						3.7	0.1	174	28.8		8.0		28.8		86.5		5.7		5.4		4		89				<0.2		1.4	
					Bottom	6.3	0.1	24	28.8	28.8	8.0	8.0	29.0	28.9	86.1	86.3	5.7	5.7	5.8		4		90				<0.2		1.4	
						6.3	0.1	24	28.8		8.0		28.8		86.4		5.7		5.6		4		90				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:28	7.5	Surface	1.0	0.2	170	29.1	29.1	8.0	8.0	27.6	27.7	96.4	96.1	6.4	6.0	3.2	4.8	6	5	86	88	822098	808809	<0.2	<0.2	1.4	1.3
						1.0	0.3	180	29.1		8.0		27.7		95.7		6.3		3.6		6		85				<0.2		1.4	
					Middle	3.8	0.2	184	28.8	28.8	8.0	8.0	28.5	28.6	86.7	86.6	5.7		5.3		4		90				<0.2		1.2	
						3.8	0.2	198	28.8		8.0		28.7		86.5		5.7		5.5		4		88				<0.2		1.3	
					Bottom	6.5	0.0	323	28.8	28.8	8.0	8.0	28.9	28.8	87.4	87.5	5.8	5.8	5.6		6		91				<0.2		1.4	
						6.5	0.0	353	28.8		8.0		28.7		87.6		5.8		5.3		6		90				<0.2		1.2	
IM10	Cloudy	Moderate	11:22	7.8	Surface	1.0	0.3	132	29.1	29.1	8.0	8.0	27.6	27.6	95.7	95.8	6.3	6.1	3.5	4.4	7	7	86	88	822372	809804	<0.2	<0.2	1.1	1.2
						1.0	0.3	138	29.1		8.0		27.6		95.9		6.3		3.5		6		85				<0.2		1.2	
					Middle	3.9	0.3	145	29.0	29.0	8.0	8.0	28.1	28.1	90.1	90.1	5.9		4.0		8		88				<0.2		1.2	
						3.9	0.3	156	28.9		8.0		28.2		90.1		5.9		4.3		6		90				<0.2		1.3	
					Bottom	6.8	0.2	117	28.8	28.9	8.0	8.0	28.9	28.9	86.4	86.5	5.7	5.7	5.6		8		91				<0.2		1.3	
						6.8	0.2	119	28.9		8.0		28.8		86.6		5.7		5.5		7		90				<0.2		1.3	
IM11	Cloudy	Moderate	11:14	8.0	Surface	1.0	0.6	133	29.2	29.2	8.0	8.0	27.4	27.4	98.2	98.1	6.5	6.3	3.4	6.2	6	6	87	88	822039	811451	<0.2	<0.2	1.3	1.3
						1.0	0.6	139	29.1		8.0		27.5		97.9		6.5		3.6		5		86				<0.2		1.2	
					Middle	4.0	0.5	120	28.9	28.9	7.9	7.9	28.3	28.3	90.7	90.7	6.0		6.5		4		88				<0.2		1.3	
						4.0	0.5	126	28.9		7.9		28.4		90.7		6.0		7.0		5		88				<0.2		1.2	
					Bottom	7.0	0.4	111	28.9	28.9	7.9	7.9	28.7	28.7	85.0	85.1	5.6	5.6	8.5		7		90				<0.2		1.2	
						7.0	0.5	115	28.9		7.9		28.7		85.1		5.6		8.5		8		90				<0.2		1.3	
IM12	Cloudy	Moderate	11:02	8.1	Surface	1.0	0.6	121	29.0	29.0	7.9	7.9	28.2	28.2	88.9	88.8	5.9	5.6	6.1	7.4	6	7	86	89	821469	812027	<0.2	<0.2	1.0	1.2
						1.0	0.6	130	29.0		7.9		28.3		88.6		5.8		6.8		7		88				<0.2		1.1	
					Middle	4.1	0.6	112	28.9	28.9	7.9	7.9	28.9	28.9	81.9	81.9	5.4		7.2		7		88				<0.2		1.2	
						4.1	0.6	112	28.9		7.9		28.9		81.9		5.4		7.5		6		90				<0.2		1.2	
					Bottom	7.1	0.5	111	28.9	28.9	7.9	7.9	28.9	28.9	83.1	83.3	5.5	5.5	8.6		7		90				<0.2		1.2	
						7.1	0.5	120	28.9		7.9		28.9		83.5		5.5		8.4		9		91				<0.2		1.2	
SR1A	Cloudy	Moderate	10:44	4.9	Surface	1.0	-	-	29.0	29.0	7.9	7.9	28.4	28.4	85.2	85.0	5.6	5.6	6.7	7.8	8	10	-	-	819976	812655	-	-	-	-
						1.0	-	-	29.0		7.9		28.5		84.8		5.6		7.0		10		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.9	28.9	7.9	7.9	28.8	28.8	83.4	83.5	5.5	5.5	8.8		10		-				-		-	
						3.9	-	-	28.9		7.9		28.8		83.5		5.5		8.5		10		-				-		-	
SR2	Cloudy	Moderate	10:29	4.4	Surface	1.0	0.4	85	28.9	28.9	7.9	7.9	28.8	28.9	83.8	83.6	5.5	5.5	8.3	10.3	8	8	87	87	821482	814169	<0.2	<0.2	1.1	1.2
						1.0	0.5	89	28.9		7.9		28.9		83.4		5.5		9.1		9		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	74	28.9	28.9	7.9	7.9	29.1	29.1	83.0	83.1	5.4	5.5	11.8		7		88				<0.2		1.2	
						3.4	0.3	80	28.9		7.9		29.1		83.1		5.5		12.0		6		88				<0.2		1.2	
SR3	Cloudy	Moderate	11:40	8.2	Surface	1.0	0.3	182	28.9	28.9	8.0	8.0	27.9	27.9	94.1	93.9	6.2	6.0	4.6	5.8	6	6	-	-	822133	807552	-	-	-	-
						1.0	0.3	196	28.9		8.0		27.9		93.7		6.2		4.6		5		-				-		-	
					Middle	4.1	0.1	218	28.8	28.8	8.0	8.0	28.5	28.6	87.0	86.9	5.7		5.7		6		-				-		-	
						4.1	0.1	224	28.8		8.0		28.7		86.8		5.7		6.0		5		-				-		-	
					Bottom	7.2	0.1	330	28.7	28.7	8.0	8.0	29.4	29.4	86.8	86.9	5.7	5.7	7.1		5		-				-		-	
						7.2	0.1	333	28.7		8.0		29.3		86.9		5.7		6.7		6		-				-		-	
SR4A	Cloudy	Calm	10:36	8.3	Surface	1.0	0.1	74	29.2	29.2	8.1	8.1	29.0	29.0	85.4	85.4	5.6	5.6	4.9	6.1	9	9	-	-	817183	807824	-	-	-	-
						1.0	0.1	76	29.2		8.1		29.0		85.3		5.6		5.0		9		-				-		-	
					Middle	4.2	0.1	359	29.0	29.0	8.1	8.1	29.0	29.0	84.5	84.5	5.5		6.3		9		-				-		-	
						4.2	0.1	330	29.0		8.1		29.0		84.5		5.5		6.2		9		-				-		-	
					Bottom	7.3	0.1	84	29.0	29.0	8.2	8.2	29.0	29.0	85.3	85.4	5.6	5.6	7.0		10		-				-		-	
						7.3	0.1	87	29.0		8.2		29.0		85.4		5.6		7.0		10		-				-		-	
SR5A	Cloudy	Calm	10:18	5.4	Surface	1.0	0.1	48	29.0	29.0	8.1	8.1	28.3	28.3	87.6	87.7	5.8	5.8	4.8	4.8	7	8	-	-	816602	810707	-	-	-	-
						1.0	0.1	50	29.0		8.1		28.3		87.8		5.8		4.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	136	29.0	29.0	8.2	8.2	28.5	28.5	91.4	91.5	6.0	6.0	4.7		9		-				-		-	
						4.4	0.2	141	29.0		8.2		28.5		91.5		6.0		4.7		9		-				-		-	
SR6A	Cloudy	Calm	09:39	4.4	Surface	1.0	0.0	222	29.1	29.1	8.1	8.1	27.6	27.6	84.7	84.6	5.6	5.6	2.1	2.9	7	6	-	-	817975	814719	-	-	-	-
						1.0	0.0	233	29.1		8.1		27.6		84.5		5.6		2.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	256	28.9	28.9	8.1	8.1	27.9	27.9	87.7	87.9	5.8	5.8	3.6		5		-				-		-	
						3.4	0.0	262	28.9		8.1		27.9		88.0		5.8		3.7		6		-				-		-	
SR7	Cloudy	Moderate	09:24	16.4	Surface	1.0	0.5	61	28.9	28.9	7.9	7.9	31.1	31.1	84.4	84.4	5.3	5.0	3.5	4.0	5	5	-	-	823619	823739	-	-	-	-
						1.0	0.5	61	28.9		7.9		31.1		84.3		5.2		3.6		5		-				-		-	
					Middle	8.2	0.4	27	28.9	28.9	7.9	7.9	31.4	31.4	73.4	73.4	4.8		4.0		5		-				-		-	
						8.2	0.4	29	28.9		7.9		31.4		73.4		4.8		4.1		4		-				-		-	
					Bottom	15.4	0.3	18	28.9	28.9	7.9	7.9	31.4	31.4	73.9	73.9	4.8	4.8	4.5		5		-				-		-	
						15.4	0.3	19	28.9		7.9		31.4		73.9		4.8		4.5		5		-				-		-	
SR8	Cloudy	Moderate	10:54	5.0	Surface	1.0	-	-	29.0	29.0	7.9	7.9	28.5	28.6	87.7	87.3	5.8	5.8	7.6	8.8	6	7	-	-	820376	811599	-	-	-	-
						1.0	-	-	29.0		7.9		28.6		86.8		5.7		7.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	28.9	28.9	7.9	7.9	28.9	28.9	81.5	81.6	5.4	5.4	10.0		7		-				-		-	
						4.0	-	-	28.9		7.9		28.9		81.6		5.4		10.0		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 October 19 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	17:21	8.4	Surface	1.0	0.2	168	29.1	29.1	7.8	7.8	29.4	29.4	92.3	92.3	6.0	5.8	7.8	8.6	10	11	86	88	815613	804266	<0.2	<0.2	0.8	0.9
						1.0	0.2	172	29.1		7.8		29.4		92.2		6.0		7.5		8		86				<0.2		0.9	
					Middle	4.2	0.2	182	28.8	28.8	7.8	7.8	30.3	30.3	86.4	86.4	5.6		8.2		13		88				<0.2		0.9	
						4.2	0.2	196	28.8		7.8		30.3		86.3		5.6		8.0		12		87				<0.2		0.8	
					Bottom	7.4	0.1	208	28.8	28.8	7.8	7.8	30.4	30.4	86.9	87.0	5.7	5.7	9.9		10		90				<0.2		0.9	
						7.4	0.2	214	28.8		7.8		30.4		87.1		5.7		10.1		11		91				<0.2		0.9	
C2	Cloudy	Moderate	16:18	11.0	Surface	1.0	0.8	166	29.0	29.0	8.0	8.0	26.9	26.9	98.3	98.1	6.5	5.8	5.4	7.2	4	3	86	88	825663	806929	<0.2	<0.2	1.5	1.4
						1.0	0.8	173	29.0		8.0		26.9		97.9		6.5		5.3		3		86				<0.2		1.3	
					Middle	5.5	0.6	170	29.1	29.1	7.9	7.9	29.2	29.2	75.9	75.9	5.0		6.6		3		88				<0.2		1.3	
						5.5	0.6	171	29.1		7.9		29.2		75.8		5.0		6.6		3		88				<0.2		1.3	
					Bottom	10.0	0.3	166	29.1	29.1	7.9	7.9	29.7	29.7	76.5	76.7	5.0	5.0	9.8		3		90				<0.2		1.4	
						10.0	0.3	179	29.1		7.9		29.7		76.9		5.0		9.5		4		91				<0.2		1.4	
C3	Cloudy	Moderate	17:59	11.7	Surface	1.0	0.5	99	29.2	29.2	7.9	7.9	28.8	28.8	82.9	82.7	5.4	5.3	8.3	9.1	7	8	86	88	822119	817802	<0.2	<0.2	1.3	1.2
						1.0	0.5	106	29.2		7.9		28.9		82.5		5.4		8.5		7		86				<0.2		1.2	
					Middle	5.9	0.4	99	29.1	29.1	7.9	7.9	29.3	29.3	80.6	80.5	5.3		9.0		9		88				<0.2		1.1	
						5.9	0.4	100	29.1		7.9		29.4		80.3		5.2		9.3		9		89				<0.2		1.1	
					Bottom	10.7	0.2	91	29.1	29.1	7.9	7.9	29.6	29.6	81.0	81.2	5.3	5.3	9.6		8		90				<0.2		1.2	
						10.7	0.3	97	29.1		7.9		29.6		81.4		5.3		9.6		8		90				<0.2		1.1	
IM1	Cloudy	Moderate	16:59	5.5	Surface	1.0	0.1	66	28.9	28.9	7.8	7.8	29.7	29.8	87.9	87.8	5.7	5.7	5.4	9.9	10	11	88	89	817926	807141	<0.2	<0.2	0.9	0.9
						1.0	0.1	69	28.9		7.8		29.8		87.7		5.7		5.6		12		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	38	28.9	28.9	7.7	7.7	30.4	30.4	87.0	87.1	5.7	5.7	14.4		9		91				<0.2		0.8	
						4.5	0.1	34	28.8		7.7		30.4		87.2		5.7		14.2		11		90				<0.2		0.9	
IM2	Cloudy	Moderate	16:53	6.2	Surface	1.0	0.0	71	28.9	28.9	7.8	7.8	29.5	29.5	90.1	90.0	5.9	5.8	10.2	11.0	13	15	86	88	818174	806187	<0.2	<0.2	0.9	0.9
						1.0	0.0	77	28.9		7.8		29.6		89.8		5.9		10.1		15		87				<0.2		1.0	
					Middle	3.1	0.0	57	28.8	28.8	7.8	7.8	29.8	29.8	87.8	87.8	5.7		9.1		16		87				<0.2		0.9	
						3.1	0.0	55	28.8		7.8		29.8		87.8		5.7		9.9		16		88				<0.2		0.9	
					Bottom	5.2	0.0	28	28.7	28.7	7.7	7.7	30.3	30.3	89.1	89.4	5.8	5.9	13.6		14		90				<0.2		0.8	
						5.2	0.0	30	28.6		7.7		30.3		89.6		5.9		13.4		15		90				<0.2		0.8	
IM3	Cloudy	Moderate	16:48	6.5	Surface	1.0	0.3	72	29.0	29.0	7.7	7.7	29.1	29.1	90.5	90.4	5.9	5.9	7.2	8.5	10	12	86	88	818781	805572	<0.2	<0.2	1.0	1.0
						1.0	0.3	83	29.0		7.7		29.1		90.2		5.9		7.3		12		85				<0.2		0.9	
					Middle	3.3	0.2	52	28.9	28.9	7.7	7.7	29.5	29.5	88.8	88.8	5.8		8.6		13		89				<0.2		1.0	
						3.3	0.3	53	28.9		7.7		29.5		88.8		5.8		8.8		12		87				<0.2		1.0	
					Bottom	5.5	0.2	42	28.8	28.8	7.7	7.7	29.6	29.6	89.3	89.5	5.8	5.9	9.5		12		91				<0.2		0.9	
						5.5	0.2	46	28.8		7.7		29.6		89.6		5.9		9.7		11		91				<0.2		0.9	
IM4	Cloudy	Moderate	16:39	7.2	Surface	1.0	0.6	57	28.9	28.9	7.7	7.7	28.7	28.7	91.2	91.2	6.0	6.0	7.4	8.9	14	13	86	88	819721	804597	<0.2	<0.2	1.0	1.1
						1.0	0.6	54	28.9		7.7		28.8		91.1		6.0		7.4		13		85				<0.2		1.1	
					Middle	3.6	0.5	53	28.9	28.9	7.7	7.7	28.9	28.9	90.5	90.5	6.0		8.6		10		88				<0.2		1.1	
						3.6	0.6	56	28.9		7.7		28.9		90.5		6.0		8.8		11		87				<0.2		1.0	
					Bottom	6.2	0.6	68	28.9	28.9	7.7	7.7	28.8	28.8	91.3	91.5	6.0	6.0	10.6		14		89				<0.2		1.0	
						6.2	0.6	64	28.9		7.7		28.8		91.6		6.0		10.6		13		91				<0.2		1.1	
IM5	Cloudy	Moderate	16:32	6.5	Surface	1.0	1.0	49	29.2	29.2	7.8	7.8	27.8	27.8	102.3	102.3	6.7	6.5	4.2	7.9	4	6	86	88	820712	804852	<0.2	<0.2	1.2	1.2
						1.0	1.1	45	29.1		7.8		27.8		102.2		6.7		4.6		5		86				<0.2		1.2	
					Middle	3.3	0.8	40	28.9	28.9	7.7	7.7	28.6	28.6	93.8	93.7	6.2		9.0		7		88				<0.2		1.3	
						3.3	0.9	41	28.8		7.7		28.6		93.6		6.2		9.1		8		89				<0.2		1.2	
					Bottom	5.5	0.7	38	28.8	28.8	7.7	7.7	28.8	28.7	93.9	94.1	6.2	6.2	10.4		6		90				<0.2		1.2	
						5.5	0.7	35	28.8		7.7		28.7		94.3		6.2		10.3		5		90				<0.2		1.3	
IM6	Cloudy	Moderate	16:25	6.6	Surface	1.0	0.8	45	29.0	29.0	7.7	7.7	28.1	28.1	94.7	94.7	6.2	6.0	3.8	5.9	6	6	86	88	821082	805810	<0.2	<0.2	1.4	1.4
						1.0	0.8	42	29.0		7.7		28.2		94.6		6.2		4.1		8		85				<0.2		1.4	
					Middle	3.3	0.6	49	28.8	28.8	7.7	7.7	28.9	28.9	88.1	88.1	5.8		6.2		6		87				<0.2		1.3	
						3.3	0.6	48	28.8		7.7		28.9		88.1		5.8		6.3		4		89				<0.2		1.4	
					Bottom	5.6	0.6	45	28.8	28.8	7.7	7.7	29.1	29.1	89.4	89.8	5.9	5.9	7.4		7		90				<0.2		1.4	
						5.6	0.6	63	28.8		7.7		29.1		90.2		5.9		7.6		5		90				<0.2		1.3	
IM7	Cloudy	Moderate	16:20	7.5	Surface	1.0	0.5	32	29.2	29.2	7.7	7.7	27.9	27.9	100.5	100.4	6.6	6.2	3.2	5.2	5	4	86	88	821364	806847	<0.2	<0.2	1.2	1.2
						1.0	0.5	35	29.2		7.7		27.9		100.2		6.6		3.4		4		85				<0.2		1.3	
					Middle	3.8	0.5	32	28.8	28.8	7.7	7.7	28.7	28.8	89.2	89.0	5.9		5.4		4		88				<0.2		1.4	
						3.8	0.5	36	28.8		7.7		28.9		88.8		5.8		5.7		4		89				<0.2		1.3	
					Bottom	6.5	0.4	59	28.7	28.7	7.7	7.7	29.4	29.4	88.5	88.6	5.8	5.8	7.0		3		90				<0.2		1.0	
						6.5	0.4	60	28.7		7.7		29.3		88.7		5.8		6.7		4		91				<0.2		1.1	
IM8	Cloudy	Moderate	16:38	8.0	Surface	1.0	0.2	351	29.1	29.1	8.0	8.0	27.8	27.8	102.6	102.3	6.8	6.4	5.1	6.9	3	4	86	89	821831	808155	<0.2	<0.2	1.4	1.5
						1.0	0.2	344	29.1		8.0		27.9		101.9		6.7		5.3		4		87				<0.2		1.4	
					Middle	4.0	0.1	345	29.0	29.0	8.0	8.0	28.2	28.2	92.6	92.7	6.1		7.2		3		89				<0.2		1.6	
						4.0	0.1	358	29.0		8.0		28.2		92.7		6.1		7.4		4		92				<0.2		1.5	
					Bottom	7.0	0.1	344	29.0	29.1	8.0	8.0	28.2	28.1	92.7	92.8	6.1	6.1	8.1		5		90				<0.2		1.3	
						7.0	0.1	349	29.1		8.0		28.1		92.8		6.1		8.1		4		91				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:47	7.9	Surface	1.0	0.3	322	29.0	29.0	8.0	8.0	27.9	28.0	95.8	95.7	6.3	6.1	5.3	6.3	4	4	86	88	822072	808794	<0.2	<0.2	1.5	1.4
						1.0	0.4	323	29.0		8.0		28.0		95.6		6.3		5.5		4		85				<0.2		1.4	
					Middle	4.0	0.2	307	28.9	28.9	8.0	8.0	28.5	28.5	88.7	88.7	5.8		6.5		4		88				<0.2		1.4	
						4.0	0.3	328	28.9		8.0		28.5		88.6		5.8		6.6		3		87				<0.2		1.4	
					Bottom	6.9	0.2	317	28.8	28.9	8.0	8.0	28.6	28.6	88.8	88.9	5.9	5.9	6.9		3		90				<0.2		1.4	
						6.9	0.2	310	28.9		8.0		28.6		88.9		5.9		6.9		4		91				<0.2		1.5	
IM10	Cloudy	Moderate	16:53	7.3	Surface	1.0	0.5	310	29.4	29.4	8.0	8.0	27.5	27.5	102.5	102.4	6.7	6.4	4.0	6.0	6	5	86	88	822386	809793	<0.2	<0.2	1.4	1.5
						1.0	0.6	314	29.3		8.0		27.6		102.3		6.7		4.3		5		87				<0.2		1.5	
					Middle	3.7	0.5	292	28.9	28.9	8.0	8.0	28.2	28.2	91.7	91.7	6.0		6.6		4		88				<0.2		1.5	
						3.7	0.5	288	28.9		8.0		28.2		91.6		6.0		6.7		5		89				<0.2		1.5	
					Bottom	6.3	0.5	281	29.1	29.1	8.0	8.0	28.2	28.2	91.4	91.6	6.0	6.0	7.4		4		90				<0.2		1.5	
						6.3	0.5	299	29.1		8.0		28.2		91.8		6.0		7.3		3		90				<0.2		1.6	
IM11	Cloudy	Moderate	17:04	7.8	Surface	1.0	0.5	287	29.2	29.2	8.0	8.0	27.9	27.9	96.4	96.2	6.3	6.1	6.1	8.1	5	5	87	89	822041	811461	<0.2	<0.2	1.6	1.5
						1.0	0.5	286	29.1		8.0		28.0		96.0		6.3		6.6		5		86				<0.2		1.5	
					Middle	3.9	0.4	267	28.9	28.9	8.0	8.0	28.2	28.2	89.1	89.1	5.9		8.6		4		88				<0.2		1.5	
						3.9	0.4	268	28.9		8.0		28.3		89.1		5.9		8.8		5		89				<0.2		1.4	
					Bottom	6.8	0.3	265	29.0	29.1	8.0	8.0	28.2	28.2	89.5	89.6	5.9	5.9	9.2		5		90				<0.2		1.4	
						6.8	0.4	269	29.1		8.0		28.2		89.6		5.9		9.2		7		91				<0.2		1.4	
IM12	Cloudy	Moderate	17:10	8.4	Surface	1.0	0.4	251	29.3	29.3	8.0	8.0	27.8	27.9	96.8	96.9	6.4	6.1	5.3	7.5	4	5	86	88	821455	812044	<0.2	<0.2	1.5	1.5
						1.0	0.5	255	29.2		8.0		27.9		97.0		6.4		5.5		5		85				<0.2		1.4	
					Middle	4.2	0.4	245	29.0	29.0	8.0	8.0	28.3	28.3	88.9	88.8	5.9		8.1		4		88				<0.2		1.6	
						4.2	0.4	249	29.0		8.0		28.3		88.6		5.8		8.4		5		87				<0.2		1.5	
					Bottom	7.4	0.3	272	29.0	29.0	8.0	8.0	28.4	28.4	89.0	89.1	5.9	5.9	9.0		6		90				<0.2		1.4	
						7.4	0.3	278	29.0		8.0		28.4		89.1		5.9		8.7		4		91				<0.2		1.5	
SR1A	Cloudy	Moderate	17:25	5.0	Surface	1.0	-	-	29.4	29.4	8.0	7.9	28.2	28.2	91.4	91.3	6.0	6.0	5.4	6.5	8	7	-	-	819974	812659	-	-	-	-
						1.0	-	-	29.3		7.9		28.3		91.2		6.0		5.4		8		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	29.1	29.1	7.9	7.9	28.8	28.8	83.5	83.7	5.5	5.5	7.5		7		-				-		-	
						4.0	-	-	29.1		7.9		28.8		83.9		5.5		7.6		5		-				-		-	
SR2	Cloudy	Moderate	17:38	4.8	Surface	1.0	0.2	271	29.0	29.0	7.9	7.9	28.5	28.5	85.9	85.8	5.6	5.6	10.6	11.6	6	6	86	88	821468	814149	<0.2	<0.2	1.4	1.4
						1.0	0.2	267	29.0		7.9		28.5		85.6		5.6		11.0		6		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	261	29.0	29.0	7.9	7.9	28.6	28.6	85.2	85.3	5.6	5.6	12.4		5		89				<0.2		1.4	
						3.8	0.2	256	29.0		7.9		28.6		85.3		5.6		12.6		5		90				<0.2		1.4	
SR3	Cloudy	Moderate	16:33	8.2	Surface	1.0	0.4	19	29.2	29.2	8.0	8.0	27.3	27.3	101.1	100.9	6.7	6.2	3.6	5.6	6	5	-	-	822134	807582	-	-	-	-
						1.0	0.4	20	29.2		8.0		27.4		100.6		6.6		3.7		4		-				-		-	
					Middle	4.1	0.2	20	28.8	28.8	8.0	8.0	28.5	28.5	88.2	88.2	5.8		6.2		6		-				-		-	
						4.1	0.2	21	28.8		8.0		28.6		88.2		5.8		6.2		5		-				-		-	
					Bottom	7.2	0.2	26	28.7	28.7	8.0	8.0	29.3	29.3	87.1	87.2	5.7	5.7	6.9		3		-				-		-	
						7.2	0.2	27	28.7		8.0		29.2		87.2		5.7		6.8		5		-				-		-	
SR4A	Cloudy	Calm	17:59	8.6	Surface	1.0	0.7	242	29.3	29.3	7.7	7.7	29.6	29.6	87.2	87.1	5.7	5.7	6.8	11.3	9	8	-	-	817184	807815	-	-	-	-
						1.0	0.8	263	29.3		7.7		29.6		87.0		5.7		6.7		7		-				-		-	
					Middle	4.3	0.6	243	29.1	29.1	7.8	7.8	30.1	30.1	85.5	85.5	5.6		11.8		8		-				-		-	
						4.3	0.6	264	29.1		7.8		30.1		85.5		5.6		12.0		8		-				-		-	
					Bottom	7.6	0.6	241	29.1	29.1	7.8	7.8	30.1	30.1	86.7	86.8	5.6	5.7	15.3		10		-				-		-	
						7.6	0.7	248	29.1		7.8		30.1		86.9		5.7		15.2		8		-				-		-	
SR5A	Cloudy	Calm	18:18	5.5	Surface	1.0	0.4	294	29.1	29.1	7.7	7.7	29.5	29.5	86.1	86.2	5.6	5.6	7.9	8.7	12	13	-	-	816573	810712	-	-	-	-
						1.0	0.4	323	29.1		7.7		29.5		86.2		5.6		7.9		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	303	29.0	29.0	7.8	7.8	29.7	29.7	90.0	90.3	5.9	5.9	9.5		12		-				-		-	
						4.5	0.3	325	29.0		7.8		29.7		90.6		5.9		9.5		13		-				-		-	
SR6A	Cloudy	Calm	18:47	4.1	Surface	1.0	0.1	203	29.1	29.1	7.7	7.7	28.9	28.9	85.5	85.6	5.6	5.6	6.9	7.4	12	12	-	-	817976	814740	-	-	-	-
						1.0	0.1	205	29.1		7.7		28.9		85.6		5.6		6.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	214	29.1	29.1	7.7	7.7	28.9	28.9	86.6	86.8	5.7	5.7	8.0		11		-				-		-	
						3.1	0.1	225	29.1		7.7		28.9		86.9		5.7		7.8		12		-				-		-	
SR7	Cloudy	Moderate	18:25	16.7	Surface	1.0	0.5	185	29.2	29.2	7.9	7.9	29.0	29.1	85.4	85.4	5.6	5.4	4.1	4.8	4	4	-	-	823653	823745	-	-	-	-
						1.0	0.6	187	29.2		7.9		29.1		85.3		5.6		4.3		3		-				-		-	
					Middle	8.4	0.2	202	29.1	29.1	7.9	7.9	29.7	29.7	79.3	79.3	5.2		5.1		4		-				-		-	
						8.4	0.3	206	29.1		7.9		29.7		79.3		5.2		5.2		5		-				-		-	
					Bottom	15.7	0.0	244	29.0	29.0	7.9	7.9	29.7	29.7	79.6	79.7	5.2	5.2	5.0		3		-				-		-	
						15.7	0.0	253	29.0		7.9		29.7		79.7		5.2		5.0		4		-				-		-	
SR8	Cloudy	Moderate	17:16	5.2	Surface	1.0	-	-	29.4	29.4	8.0	8.0	28.2	28.2	93.0	93.0	6.1	6.1	5.8	6.1	7	7	-	-	820389	811600	-	-	-	-
						1.0	-	-	29.4		8.0		28.2		92.9		6.1		5.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	29.3	29.3	8.0	8.0	28.3	28.3	92.1	92.1	6.0	6.0	6.3		6		-				-		-	
						4.2	-	-	29.3		8.0		28.3		92.0		6.0		6.4		7		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:35	8.0	Surface	1.0	0.5	230	28.8	28.8	7.9	7.9	27.4	27.4	110.5	110.5	7.3	7.0	7.6	8.2	9	9	86	88	815624	804253	<0.2	<0.2	1.5	1.5
						1.0	0.5	241	28.8		7.9		27.4		110.4		7.3		7.9		10		85				<0.2		1.5	
					Middle	4.0	0.4	241	28.9	28.9	7.9	7.9	29.2	29.2	100.8	100.7	6.6		8.5		9		88				<0.2		1.3	
						4.0	0.5	256	28.9		7.9		29.2		100.5		6.6		8.1		10		89				<0.2		1.5	
					Bottom	7.0	0.0	228	28.9	28.9	7.9	7.9	30.0	30.0	97.9	98.0	6.4	6.4	8.8		9		91				<0.2		1.4	
						7.0	0.0	249	28.9		7.9		30.0		98.1		6.4		8.2		9		90				<0.2		1.5	
C2	Fine	Moderate	13:39	10.7	Surface	1.0	0.2	151	29.3	29.3	8.1	8.1	26.1	26.1	115.5	115.5	7.7	7.4	10.0	13.0	8	11	85	89	825669	806938	<0.2	<0.2	1.8	1.8
						1.0	0.2	156	29.3		8.1		26.1		115.4		7.7		10.0		8		85				<0.2		1.7	
					Middle	5.4	0.2	163	29.1	29.1	8.1	8.1	27.5	27.5	105.6	105.6	7.0		13.6		10		90				<0.2		1.7	
						5.4	0.2	178	29.1		8.1		27.5		105.5		7.0		13.5		11		89				<0.2		1.8	
					Bottom	9.7	0.3	170	29.2	29.2	8.0	8.0	29.1	29.1	83.0	83.1	5.4	5.4	15.3		13		93				<0.2		1.8	
						9.7	0.4	177	29.2		8.0		29.1		83.1		5.4		15.3		14		93				<0.2		1.7	
C3	Fine	Moderate	11:00	9.8	Surface	1.0	0.5	68	29.4	29.4	8.1	8.1	28.5	28.4	107.4	107.6	7.0	6.2	8.8	7.3	11	12	85	90	822087	817789	<0.2	<0.2	1.2	1.2
						1.0	0.5	69	29.4		8.1		28.4		107.8		7.0		9.0		12		86				<0.2		1.1	
					Middle	4.9	0.2	71	29.1	29.1	8.0	8.0	30.1	30.1	82.0	82.0	5.3		6.5		13		89				<0.2		1.2	
						4.9	0.2	75	29.1		8.0		30.1		82.0		5.3		6.5		13		90				<0.2		1.3	
					Bottom	8.8	0.3	81	29.1	29.1	8.0	8.0	30.1	30.1	82.4	82.4	5.4	5.4	6.4		11		94				<0.2		1.2	
						8.8	0.3	88	29.1		8.0		30.2		82.4		5.4		6.4		10		93				<0.2		1.4	
IM1	Fine	Moderate	11:49	5.7	Surface	1.0	0.2	149	29.2	29.2	8.0	8.0	27.2	27.2	128.1	128.0	8.4	8.4	5.6	7.7	7	9	86	88	817934	807122	<0.2	<0.2	1.7	1.6
						1.0	0.3	153	29.2		8.0		27.2		127.8		8.4		5.6		8		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.3	171	29.2	29.2	7.9	7.9	27.8	27.8	112.8	112.8	7.4	7.4	9.9		9		89				<0.2		1.5	
						4.7	0.3	186	29.2		7.9		27.8		112.8		7.4		9.9		11		90				<0.2		1.5	
IM2	Fine	Moderate	11:57	7.6	Surface	1.0	0.1	172	29.0	29.0	7.9	7.9	26.8	26.9	116.9	116.8	7.8	7.5	5.1	8.2	7	7	86	88	818181	806189	<0.2	<0.2	1.7	1.6
						1.0	0.1	188	29.0		7.9		26.9		116.7		7.7		5.5		6		85				<0.2		1.6	
					Middle	3.8	0.1	154	29.0	29.0	7.9	7.9	28.1	28.2	108.9	108.9	7.2		8.4		7		87				<0.2		1.6	
						3.8	0.1	155	29.0		7.9		28.2		108.8		7.2		8.3		7		88				<0.2		1.6	
					Bottom	6.6	0.1	129	29.0	29.0	7.9	7.9	28.7	28.7	103.2	103.3	6.8	6.8	11.2		6		90				<0.2		1.4	
						6.6	0.1	132	29.0		7.9		28.7		103.4		6.8		11.0		8		90				<0.2		1.5	
IM3	Fine	Moderate	12:04	7.8	Surface	1.0	0.1	113	29.0	29.0	7.9	7.9	27.7	27.8	116.0	115.9	7.7	7.2	7.1	9.2	6	6	86	88	818766	805573	<0.2	<0.2	1.8	1.7
						1.0	0.1	116	29.0		7.9		27.8		115.7		7.6		7.3		6		86				<0.2		1.7	
					Middle	3.9	0.1	119	29.0	29.0	7.9	7.9	28.6	28.6	103.8	103.8	6.8		9.7		6		87				<0.2		1.8	
						3.9	0.1	125	29.0		7.9		28.6		103.8		6.8		9.8		7		88				<0.2		1.6	
					Bottom	6.8	0.1	113	29.0	29.0	7.9	7.9	28.9	28.9	101.3	101.5	6.7	6.7	10.6		6		90				<0.2		1.4	
						6.8	0.1	117	29.0		7.9		28.9		101.6		6.7		10.7		7		91				<0.2		1.7	
IM4	Fine	Moderate	12:11	8.2	Surface	1.0	0.5	165	29.2	29.2	7.9	7.9	25.2	25.2	122.0	121.9	8.1	7.4	2.9	8.2	4	4	86	88	819716	804591	<0.2	<0.2	1.2	1.3
						1.0	0.5	176	29.2		7.9		25.2		121.7		8.1		3.3		4		85				<0.2		1.4	
					Middle	4.1	0.3	164	28.9	28.9	7.9	7.9	28.9	28.9	100.6	100.5	6.6		10.8		4		89				<0.2		1.2	
						4.1	0.3	167	28.9		7.9		28.9		100.4		6.6		10.8		4		88				<0.2		1.3	
					Bottom	7.2	0.2	153	28.9	28.9	7.9	7.9	29.0	29.0	101.4	101.5	6.7	6.7	10.6		4		90				<0.2		1.3	
						7.2	0.3	162	28.9		7.9		29.0		101.5		6.7		10.5		4		91				<0.2		1.3	
IM5	Fine	Moderate	12:20	7.8	Surface	1.0	0.3	227	29.1	29.1	7.9	7.9	25.1	25.1	121.0	120.9	8.1	7.6	6.4	8.7	5	6	86	88	820739	804875	<0.2	<0.2	1.7	1.6
						1.0	0.3	227	29.1		7.9		25.1		120.8		8.1		6.5		7		86				<0.2		1.4	
					Middle	3.9	0.2	208	29.0	29.0	7.9	7.9	27.7	27.7	107.5	107.5	7.1		8.6		6		87				<0.2		1.6	
						3.9	0.2	214	29.0		7.9		27.7		107.5		7.1		8.7		6		89				<0.2		1.5	
					Bottom	6.8	0.2	159	29.0	29.0	7.9	7.9	28.7	28.7	103.2	103.4	6.8	6.8	10.9		6		90				<0.2		1.6	
						6.8	0.2	162	29.0		7.9		28.6		103.5		6.8		10.9		8		89				<0.2		1.6	
IM6	Fine	Moderate	12:26	7.9	Surface	1.0	0.4	282	29.2	29.2	7.9	7.9	26.3	26.2	115.7	115.7	7.7	7.4	7.4	9.7	6	7	86	88	821078	805832	<0.2	<0.2	1.6	1.5
						1.0	0.4	294	29.2		7.9		26.2		115.7		7.7		7.7		6		85				<0.2		1.5	
					Middle	4.0	0.2	275	29.0	29.0	7.9	7.9	27.5	27.5	107.1	107.0	7.1		9.4		6		87				<0.2		1.5	
						4.0	0.2	298	29.0		7.9		27.5		106.8		7.1		9.6		8		88				<0.2		1.4	
					Bottom	6.9	0.2	251	29.0	29.0	7.9	7.9	28.1	28.1	104.5	104.6	6.9	6.9	12.1		6		90				<0.2		1.5	
						6.9	0.2	272	29.0		7.9		28.1		104.7		6.9		12.0		8		91				<0.2		1.5	
IM7	Fine	Moderate	12:31	7.7	Surface	1.0	0.1	256	29.3	29.3	7.9	7.9	25.8	25.9	118.9	119.0	7.9	7.5	5.8	9.5	7	7	85	88	821361	806843	<0.2	<0.2	1.6	1.6
						1.0	0.1	269	29.3		7.9		25.9		119.0		7.9		5.9		7		86				<0.2		1.5	
					Middle	3.9	0.0	208	29.0	29.0	7.9	7.9	27.5	27.6	108.8	108.5	7.2		10.5		6		87				<0.2		1.6	
						3.9	0.0	222	29.0		7.9		27.6		108.2		7.1		10.7		8		88				<0.2		1.5	
					Bottom	6.7	0.1	168	29.0	29.0	7.9	7.9	27.8	27.8	104.8	104.9	6.9	6.9	12.1		6		90				<0.2		1.5	
						6.7	0.1	181	29.0		7.9		27.8		104.9		6.9		12.1		6		91				<0.2		1.6	
IM8	Fine	Moderate	13:02	7.4	Surface	1.0	0.3	115	29.5	29.5	8.2	8.2	25.3	25.3	125.2	125.2	8.3	7.7	4.9	11.1	6	8	86	90	821833	808148	<0.2	<0.2	1.7	1.7
						1.0	0.3	119	29.5		8.2		25.3		125.1		8.3		4.9		6		85				<0.2		1.8	
					Middle	3.7	0.3	105	29.2	29.2	8.1	8.1	26.8	26.8	106.2	106.2	7.0		14.0		7		90				<0.2		1.7	
						3.7	0.3	107	29.2		8.1		26.8		106.2		7.0		14.0		7		90				<0.2		1.6	
					Bottom	6.4	0.3	61	29.0	29.0	8.1	8.1	27.3	27.3	106.8	106.8	7.1	7.1	14.5		9		94				<0.2		1.7	
						6.4	0.3	65	29.0		8.1		27.3		106.8		7.1		14.4		10		93				<0.2		1.6	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 October 19 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	12:53	6.9	Surface	1.0	0.4	100	29.4	29.4	8.1	8.1	25.7	25.7	118.1	118.1	7.8	7.4	6.6	10.2	7	12	85	90	822094	808794	<0.2	<0.2	1.8	1.8
						1.0	0.4	107	29.4		8.1		25.7		118.0		7.8		6.7		8		86				<0.2		1.8	
					Middle	3.5	0.3	90	29.1	29.1	8.1	8.1	27.1	27.1	106.3	106.3	7.0		9.8		10		89				<0.2		1.8	
						3.5	0.3	96	29.1		8.1		27.1		106.3		7.0		9.8		11		90				<0.2		1.7	
					Bottom	5.9	0.3	80	29.0	29.0	8.1	8.1	27.3	27.3	107.2	107.2	7.1	7.1	14.1		17		94				<0.2		1.8	
						5.9	0.3	87	29.0		8.1		27.3		107.2		7.1		14.0		18		93				<0.2		1.7	
IM10	Fine	Moderate	12:39	7.0	Surface	1.0	0.6	122	29.3	29.3	8.1	8.1	26.1	26.1	113.4	113.3	7.5	7.2	8.1	10.7	6	10	85	90	822400	809773	<0.2	<0.2	2.0	1.9
						1.0	0.6	122	29.3		8.1		26.2		113.2		7.5		8.1		6		85				<0.2		2.0	
					Middle	3.5	0.6	111	29.2	29.2	8.1	8.1	27.0	27.0	104.6	104.6	6.9		10.7		10		90				<0.2		2.0	
						3.5	0.6	111	29.2		8.1		27.0		104.6		6.9		10.8		9		90				<0.2		1.8	
					Bottom	6.0	0.4	107	29.1	29.1	8.1	8.1	28.0	28.0	96.9	96.9	6.4	6.4	13.3		14		93				<0.2		1.8	
						6.0	0.4	109	29.1		8.1		28.0		96.9		6.4		13.3		12		94				<0.2		1.8	
IM11	Fine	Moderate	12:21	8.5	Surface	1.0	0.7	106	29.5	29.5	8.2	8.2	25.4	25.4	125.8	125.8	8.4	7.4	5.8	12.0	4	8	85	90	822064	811457	<0.2	<0.2	2.1	1.9
						1.0	0.7	106	29.5		8.2		25.4		125.8		8.3		5.8		5		85				<0.2		2.0	
					Middle	4.3	0.4	112	29.2	29.2	8.1	8.1	27.7	27.7	98.0	98.2	6.5		13.4		8		90				<0.2		1.9	
						4.3	0.5	120	29.2		8.1		27.7		98.3		6.5		13.3		8		90				<0.2		1.9	
					Bottom	7.5	0.4	113	29.2	29.2	8.0	8.0	28.1	28.1	93.8	93.8	6.2	6.2	16.9		11		94				<0.2		1.8	
						7.5	0.4	122	29.2		8.0		28.1		93.8		6.2		17.1		10		94				<0.2		1.9	
IM12	Fine	Moderate	12:12	9.9	Surface	1.0	0.6	107	29.5	29.5	8.2	8.2	25.7	25.7	126.9	126.8	8.4	7.7	6.8	10.3	8	9	85	90	821469	812031	<0.2	<0.2	2.0	1.9
						1.0	0.6	111	29.5		8.2		25.7		126.6		8.4		6.8		6		89				<0.2		1.8	
					Middle	5.0	0.4	91	29.2	29.2	8.1	8.1	27.1	27.1	106.3	106.3	7.0		12.6		8		90				<0.2		1.9	
						5.0	0.5	99	29.2		8.1		27.1		106.2		7.0		12.6		8		89				<0.2		1.8	
					Bottom	8.9	0.2	91	29.2	29.2	8.1	8.1	27.7	27.7	97.7	97.8	6.4	6.4	11.5		11		94				<0.2		1.9	
						8.9	0.2	93	29.2		8.1		27.7		97.8		6.4		11.6		12		93				<0.2		1.9	
SR1A	Fine	Moderate	11:40	5.3	Surface	1.0	-	-	29.7	29.7	8.2	8.2	27.1	27.1	122.0	121.8	8.0	8.0	4.2	7.9	4	6	-	-	819979	812663	-	-	-	-
						1.0	-	-	29.6		8.2		27.2		121.6		8.0		4.4		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	29.3	29.3	8.0	8.0	28.1	28.1	94.0	94.0	6.2	6.2	11.3		8		-				-		-	
						4.3	-	-	29.3		8.0		28.1		94.0		6.2		11.5		8		-				-		-	
SR2	Fine	Moderate	11:22	5.0	Surface	1.0	0.2	77	29.6	29.6	8.2	8.2	26.4	26.3	123.5	123.4	8.1	8.1	7.4	8.3	9	10	85	87	821480	814155	<0.2	<0.2	1.6	1.7
						1.0	0.2	80	29.6		8.2		26.3		123.3		8.1		7.3		8		85				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	27	29.4	29.4	8.1	8.1	26.9	26.9	115.5	115.5	7.6	7.6	9.3		12		90				<0.2		1.6	
						4.0	0.1	28	29.4		8.1		26.9		115.4		7.6		9.4		12		89				<0.2		1.7	
SR3	Fine	Moderate	13:11	8.1	Surface	1.0	0.1	105	29.3	29.3	8.2	8.2	25.8	25.8	121.1	121.1	8.0	7.5	7.4	10.3	6	9	-	-	822125	807589	-	-	-	-
						1.0	0.1	108	29.3		8.2		25.8		121.0		8.0		7.4		8		-				-		-	
					Middle	4.1	0.2	185	29.3	29.3	8.1	8.1	26.7	26.7	103.9	103.9	6.9		10.7		10		-				-		-	
						4.1	0.2	198	29.3		8.1		26.7		103.8		6.9		10.7		9		-				-		-	
					Bottom	7.1	0.1	125	29.2	29.2	8.1	8.1	27.3	27.3	101.8	101.8	6.7	6.7	12.8		11		-				-		-	
						7.1	0.1	133	29.2		8.1		27.4		101.8		6.7		12.8		11		-				-		-	
SR4A	Fine	Moderate	11:18	8.8	Surface	1.0	0.5	55	29.1	29.1	7.9	7.9	27.1	27.1	116.4	116.4	7.7	7.6	9.9	11.4	14	15	-	-	817184	807796	-	-	-	-
						1.0	0.5	55	29.1		7.9		27.1		116.4		7.7		9.9		15		-				-		-	
					Middle	4.4	0.4	59	29.1	29.1	7.9	7.9	27.2	27.2	113.7	113.7	7.5		10.9		15		-				-		-	
						4.4	0.5	60	29.1		7.9		27.2		113.6		7.5		11.0		15		-				-		-	
					Bottom	7.8	0.2	73	29.1	29.1	7.9	7.9	27.4	27.4	111.6	111.6	7.4	7.4	13.3		14		-				-		-	
						7.8	0.2	76	29.1		7.9		27.4		111.5		7.4		13.2		15		-				-		-	
SR5A	Fine	Moderate	11:01	4.9	Surface	1.0	0.3	122	29.2	29.2	7.8	7.8	27.7	27.7	104.5	104.5	6.9	6.9	11.3	12.0	10	10	-	-	816603	810705	-	-	-	-
						1.0	0.3	133	29.2		7.8		27.7		104.4		6.9		11.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	115	29.2	29.2	7.8	7.8	27.8	27.8	103.5	103.5	6.8	6.8	12.7		9		-				-		-	
						3.9	0.2	123	29.2		7.8		27.8		103.4		6.8		12.7		10		-				-		-	
SR6A	Fine	Moderate	10:34	4.7	Surface	1.0	0.1	318	29.2	29.2	7.9	7.9	26.7	26.7	109.2	109.0	7.2	7.2	6.3	6.3	9	9	-	-	817969	814741	-	-	-	-
						1.0	0.1	336	29.2		7.9		26.7		108.8		7.2		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	262	29.1	29.1	7.9	7.9	27.0	27.0	105.4	105.4	7.0	7.0	6.2		10		-				-		-	
						3.7	0.1	272	29.1		7.9		27.0		105.3		7.0		6.4		9		-				-		-	
SR7	Fine	Moderate	10:30	15.0	Surface	1.0	0.8	87	30.0	30.0	8.2	8.2	28.0	28.0	137.1	137.0	8.9	7.8	4.4	6.0	6	8	-	-	823613	823729	-	-	-	-
						1.0	0.8	95	30.0		8.2		28.0		136.9		8.9		4.4		5		-				-		-	
					Middle	7.5	0.2	64	29.4	29.4	8.1	8.1	29.3	29.3	103.6	103.7	6.7		6.7		6		-				-		-	
						7.5	0.2	66	29.4		8.1		29.3		103.8		6.8		6.6		7		-				-		-	
					Bottom	14.0	0.1	20	29.4	29.4	8.1	8.1	29.2	29.2	103.2	103.3	6.7	6.7	6.9		11		-				-		-	
						14.0	0.1	20	29.4		8.1		29.2		103.3		6.7		7.0		12		-				-		-	
SR8	Fine	Moderate	11:52	3.6	Surface	1.0	-	-	29.5	29.5	8.1	8.1	26.9	26.9	116.4	116.3	7.7	7.7	10.2	12.2	12	12	-	-	820385	811617	-	-	-	-
						1.0	-	-	29.5		8.1		26.9		116.1		7.6		10.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	29.3	29.3	8.1	8.1	27.5	27.5	104.6	104.8	6.9	6.9	14.3		12		-				-		-	
						2.6	-	-	29.3		8.1		27.5		105.0		6.9		14.1		13		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	17:50	8.2	Surface	1.0	0.1	49	29.2	29.2	7.9	7.9	27.6	27.7	118.3	118.1	7.8	7.3	7.1	9.3	5	6	86	88	815621	804234	<0.2	<0.2	1.9	1.9
						1.0	0.1	0	29.1		7.9		27.7		117.8		7.8		7.8		5		85				<0.2		2.0	
					Middle	4.1	0.1	85	29.0	29.0	7.9	7.9	28.8	28.8	103.4	103.4	6.8		11.5		6		87				<0.2		2.1	
						4.1	0.1	82	29.0		7.9		28.8		103.4		6.8		11.7		6		89				<0.2		1.9	
					Bottom	7.2	0.1	83	29.0	29.0	7.9	7.9	29.3	29.3	101.9	102.0	6.7	6.7	8.7		8		90				<0.2		1.8	
						7.2	0.1	77	29.0		7.9		29.3		102.1		6.7		9.0		8		90				<0.2		1.7	
C2	Fine	Moderate	17:05	10.9	Surface	1.0	0.2	56	29.3	29.3	8.1	8.1	26.1	26.1	114.6	114.6	7.6	7.3	10.3	13.7	7	8	88	92	825662	806959	<0.2	<0.2	1.8	1.7
						1.0	0.2	58	29.3		8.1		26.1		114.5		7.6		10.2		7		88				<0.2		1.7	
					Middle	5.5	0.2	51	29.1	29.1	8.1	8.1	27.5	27.5	105.0	105.0	6.9		13.2		9		91				<0.2		1.7	
						5.5	0.2	55	29.1		8.1		27.5		105.0		6.9		13.2		9		92				<0.2		1.7	
					Bottom	9.9	0.4	72	29.2	29.2	7.9	7.9	29.3	29.3	82.4	82.5	5.4	5.4	17.9		8		96				<0.2		1.6	
						9.9	0.4	76	29.2		7.9		29.3		82.5		5.4		17.3		8		96				<0.2		1.8	
C3	Fine	Moderate	19:05	9.7	Surface	1.0	0.1	223	29.2	29.2	8.0	8.0	28.8	28.8	95.1	95.2	6.2	5.7	4.3	8.0	4	5	88	92	822115	817781	<0.2	<0.2	1.8	1.6
						1.0	0.1	243	29.2		8.0		28.8		95.2		6.2		4.2		3		88				<0.2		1.6	
					Middle	4.9	0.0	241	29.0	29.0	8.0	8.0	30.6	30.6	80.1	80.1	5.2		8.6		4		92				<0.2		1.5	
						4.9	0.0	264	29.0		8.0		30.6		80.1		5.2		8.6		5		91				<0.2		1.5	
					Bottom	8.7	0.2	254	29.0	29.0	8.0	8.0	30.8	30.8	79.7	79.8	5.2	5.2	11.1		6		96				<0.2		1.5	
						8.7	0.2	266	29.0		8.0		30.8		79.8		5.2		11.4		6		95				<0.2		1.5	
IM1	Fine	Moderate	17:40	5.3	Surface	1.0	0.1	185	29.3	29.3	7.9	7.9	27.3	27.3	125.0	124.7	8.2	8.2	6.6	8.1	7	9	87	89	817936	807152	<0.2	<0.2	1.9	1.9
						1.0	0.1	194	29.2		7.9		27.4		124.3		8.2		7.1		8		86				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	199	29.2	29.2	7.9	7.9	27.9	27.9	110.2	110.3	7.2	7.3	9.4		10		90				<0.2		1.8	
						4.3	0.1	203	29.2		7.9		27.9		110.3		7.3		9.5		12		92				<0.2		1.8	
IM2	Fine	Moderate	17:34	7.5	Surface	1.0	0.2	354	29.0	29.0	7.9	7.9	27.0	26.7	119.3	118.7	7.9	7.5	5.6	7.3	4	4	86	88	818167	806145	<0.2	<0.2	1.8	1.8
						1.0	0.2	326	29.0		7.9		26.4		118.0		7.8		5.8		3		86				<0.2		1.9	
					Middle	3.8	0.1	344	29.0	29.0	7.9	7.9	28.2	28.2	108.7	108.7	7.2		7.6		3		89				<0.2		1.8	
						3.8	0.1	316	29.0		7.9		28.2		108.6		7.1		7.8		4		88				<0.2		1.8	
					Bottom	6.5	0.1	291	29.0	29.0	7.9	7.9	28.9	28.9	103.9	104.0	6.8	6.8	8.3		4		91				<0.2		1.8	
						6.5	0.1	305	29.0		7.9		28.9		104.1		6.8		8.8		5		90				<0.2		1.7	
IM3	Fine	Moderate	17:29	7.6	Surface	1.0	0.2	350	29.2	29.2	8.0	8.0	25.6	25.6	130.4	130.3	8.7	7.9	4.0	6.8	5	5	86	88	818771	805594	<0.2	<0.2	2.0	2.0
						1.0	0.2	322	29.2		8.0		25.6		130.2		8.7		4.3		3		85				<0.2		2.0	
					Middle	3.8	0.1	310	29.0	29.0	7.9	7.9	28.6	28.6	108.7	108.7	7.1		8.0		5		88				<0.2		2.0	
						3.8	0.1	338	29.0		7.9		28.6		108.6		7.1		8.0		4		89				<0.2		2.0	
					Bottom	6.6	0.0	241	29.0	29.0	7.9	7.9	28.9	28.9	103.8	103.9	6.8	6.8	8.2		6		91				<0.2		2.1	
						6.6	0.0	252	29.0		7.9		28.9		104.0		6.8		8.2		5		90				<0.2		2.0	
IM4	Fine	Moderate	17:22	7.6	Surface	1.0	0.0	16	29.2	29.2	7.9	7.9	26.4	26.4	118.7	118.5	7.9	7.2	6.6	9.2	7	8	86	88	819705	804612	<0.2	<0.2	1.9	1.9
						1.0	0.0	16	29.2		7.9		26.4		118.3		7.8		7.0		7		85				<0.2		1.9	
					Middle	3.8	0.1	16	29.0	29.0	7.9	7.9	28.8	28.8	100.3	100.3	6.6		10.2		6		87				<0.2		2.0	
						3.8	0.1	16	29.0		7.9		28.8		100.2		6.6		10.2		7		89				<0.2		1.8	
					Bottom	6.6	0.1	349	29.0	29.0	7.9	7.9	29.0	29.0	98.8	98.9	6.5	6.5	10.6		10		91				<0.2		1.8	
						6.6	0.1	354	29.0		7.9		29.0		98.9		6.5		10.6		9		90				<0.2		2.0	
IM5	Fine	Moderate	17:15	7.4	Surface	1.0	0.2	12	29.4	29.4	7.9	7.9	25.5	25.5	121.3	121.3	8.1	7.6	5.7	8.6	11	10	85	88	820748	804855	<0.2	<0.2	2.1	2.1
						1.0	0.2	12	29.3		7.9		25.5		121.2		8.1		5.6		11		86				<0.2		2.1	
					Middle	3.7	0.2	13	29.0	29.0	7.9	7.9	27.8	27.9	106.7	106.6	7.0		7.5		11		89				<0.2		2.1	
						3.7	0.2	13	29.0		7.9		27.9		106.5		7.0		7.7		10		88				<0.2		2.0	
					Bottom	6.4	0.1	22	28.9	28.9	7.9	7.9	28.9	28.9	97.8	97.9	6.4	6.4	12.5		9		91				<0.2		2.0	
						6.4	0.1	23	28.9		7.9		28.9		97.9		6.4		12.4		10		90				<0.2		2.1	
IM6	Fine	Moderate	17:08	7.9	Surface	1.0	0.2	25	29.2	29.2	7.9	7.9	25.9	25.9	115.3	115.2	7.7	7.3	7.4	10.3	11	9	86	88	821049	805844	<0.2	<0.2	1.9	2.0
						1.0	0.2	26	29.2		7.9		25.9		115.1		7.7		7.6		11		87				<0.2		2.0	
					Middle	4.0	0.1	22	29.0	29.0	7.9	7.9	28.1	28.1	103.5	103.5	6.8		9.9		9		88				<0.2		2.0	
						4.0	0.1	23	29.0		7.9		28.1		103.4		6.8		9.9		8		88				<0.2		1.8	
					Bottom	6.9	0.1	10	29.0	29.0	7.9	7.9	28.3	28.3	103.6	103.7	6.8	6.8	13.8		8		90				<0.2		2.0	
						6.9	0.1	11	29.0		7.9		28.3		103.7		6.8		13.5		9		90				<0.2		2.0	
IM7	Fine	Moderate	17:02	7.8	Surface	1.0	0.1	28	29.3	29.3	7.9	7.9	26.2	26.2	117.6	117.7	7.8	7.4	6.1	9.2	12	11	86	88	821370	806833	<0.2	<0.2	2.1	2.0
						1.0	0.1	30	29.3		7.9		26.1		117.7		7.8		6.2		11		85				<0.2		2.0	
					Middle	3.9	0.1	15	29.0	29.0	7.9	7.9	27.5	27.6	106.4	106.3	7.0		10.2		11		87				<0.2		2.0	
						3.9	0.1	17	29.0		7.9		27.6		106.2		7.0		10.2		10		88				<0.2		1.9	
					Bottom	6.8	0.2	13	29.0	29.0	7.9	7.9	27.8	27.8	106.7	106.8	7.0	7.1	11.6		11		91				<0.2		2.1	
						6.8	0.2	14	29.0		7.9		27.8		106.9		7.1		11.2		10		90				<0.2		2.0	
IM8	Fine	Moderate	17:25	7.5	Surface	1.0	0.4	346	29.4	29.4	8.1	8.1	25.5	25.5	115.9	115.9	7.7	7.5	6.1	8.9	7	9	89	92	821847	808138	<0.2	<0.2	1.8	1.8
						1.0	0.4	348	29.4		8.1		25.5		115.9		7.7		6.1		7		88				<0.2		1.7	
					Middle	3.8	0.4	342	29.2	29.2	8.1	8.1	26.0	26.0	109.5	109.5	7.3		8.2		9		92				<0.2		1.8	
						3.8	0.4	335	29.2		8.1		26.0		109.4		7.3		8.2		10		92				<0.2		1.8	
					Bottom	6.5	0.2	327	29.0	29.0	8.1	8.1	27.5	27.5	107.2	107.2	7.1	7.1	12.5		10		96				<0.2		1.7	
						6.5	0.2	322	29.0		8.1		27.5		107.2		7.1		12.5		12		96				<0.2		1.9	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 October 19 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	17:35	7.2	Surface	1.0	0.3	316	29.4	29.4	8.1	8.1	25.7	25.7	114.4	114.4	7.6	7.4	8.4	12.3	9	15	88	92	822084	808795	<0.2	<0.2	1.8	1.8
						1.0	0.3	317	29.4		8.1		25.7		114.4		7.6		8.3		9		88				<0.2		1.7	
					Middle	3.6	0.4	297	29.1	29.1	8.1	8.1	27.1	27.1	109.5	109.5	7.2		11.7		16		92				<0.2		1.8	
						3.6	0.4	285	29.1		8.1		27.1		109.5		7.2		11.8		15		93				<0.2		1.8	
					Bottom	6.2	0.2	282	29.1	29.1	8.1	8.1	27.5	27.5	105.6	105.7	7.0	7.0	16.7		19		96				<0.2		1.8	
						6.2	0.2	289	29.1		8.1		27.5		105.7		7.0		16.7		20		96				<0.2		1.8	
IM10	Fine	Moderate	17:45	6.3	Surface	1.0	0.5	281	29.4	29.4	8.1	8.1	25.7	25.7	114.0	114.0	7.6	7.4	7.1	10.7	5	9	88	92	822402	809817	<0.2	<0.2	1.8	1.7
						1.0	0.5	288	29.4		8.1		25.7		113.9		7.6		7.1		6		88				<0.2		1.7	
					Middle	3.2	0.3	286	29.3	29.3	8.1	8.1	26.5	26.5	107.0	107.0	7.1		11.3		8		92				<0.2		1.6	
						3.2	0.3	292	29.3		8.1		26.5		107.0		7.1		11.3		10		92				<0.2		1.7	
					Bottom	5.3	0.2	273	29.3	29.3	8.0	8.0	27.0	27.0	102.4	102.5	6.8	6.8	13.6		13		96				<0.2		1.8	
						5.3	0.2	275	29.3		8.0		27.0		102.5		6.8		13.7		14		96				<0.2		1.8	
IM11	Fine	Moderate	17:56	7.4	Surface	1.0	0.1	271	29.3	29.3	8.1	8.1	27.8	27.8	100.2	100.2	6.6	6.4	11.2	11.9	14	16	88	92	822071	811443	<0.2	<0.2	1.6	1.6
						1.0	0.1	278	29.3		8.1		27.8		100.2		6.6		11.2		15		88				<0.2		1.6	
					Middle	3.7	0.2	247	29.2	29.2	8.0	8.0	28.1	28.1	94.5	94.5	6.2		13.0		16		92				<0.2		1.4	
						3.7	0.2	249	29.2		8.0		28.1		94.4		6.2		12.9		15		92				<0.2		1.6	
					Bottom	6.4	0.2	283	29.2	29.2	8.0	8.0	29.3	29.3	86.1	86.1	5.6	5.6	11.5		18		96				<0.2		1.6	
						6.4	0.2	287	29.2		8.0		29.3		86.1		5.6		11.5		17		96				<0.2		1.6	
IM12	Fine	Moderate	18:02	8.4	Surface	1.0	0.1	258	29.3	29.3	8.0	8.0	27.9	27.9	99.7	99.7	6.6	6.5	11.4	11.8	17	17	88	92	821445	812068	<0.2	<0.2	1.5	1.5
						1.0	0.1	262	29.3		8.0		27.9		99.6		6.5		11.5		15		88				<0.2		1.7	
					Middle	4.2	0.1	250	29.2	29.2	8.0	8.0	27.9	27.9	97.6	97.6	6.4		12.6		16		92				<0.2		1.4	
						4.2	0.1	260	29.2		8.0		27.9		97.6		6.4		12.7		17		92				<0.2		1.5	
					Bottom	7.4	0.2	147	29.2	29.2	8.0	8.0	28.4	28.4	93.5	93.6	6.1	6.1	11.5		17		96				<0.2		1.5	
						7.4	0.2	151	29.2		8.0		28.4		93.6		6.1		11.4		17		97				<0.2		1.6	
SR1A	Fine	Moderate	18:26	5.1	Surface	1.0	-	-	29.3	29.3	8.1	8.1	27.1	27.0	110.0	110.0	7.3	7.3	6.0	11.0	7	11	-	-	819980	812656	-	-	-	-
						1.0	-	-	29.3		8.1		27.0		109.9		7.3		6.0		8		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	29.2	29.2	8.0	8.0	28.0	28.0	96.0	96.2	6.3	6.3	16.1		14		-				-		-	
						4.1	-	-	29.2		8.0		28.0		96.3		6.3		16.1		14		-				-		-	
SR2	Fine	Moderate	18:43	4.7	Surface	1.0	0.2	330	29.3	29.3	8.1	8.1	27.2	27.2	107.1	107.0	7.1	7.1	7.1	10.3	8	14	88	90	821467	814151	<0.2	<0.2	1.5	1.5
						1.0	0.2	304	29.2		8.1		27.2		106.8		7.0		7.1		7		88				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	11	29.2	29.2	8.0	8.0	28.5	28.4	89.9	90.1	5.9	5.9	13.6		20		91				<0.2		1.5	
						3.7	0.1	11	29.2		8.0		28.4		90.3		5.9		13.5		22		92				<0.2		1.6	
SR3	Fine	Moderate	17:19	8.6	Surface	1.0	0.4	12	29.3	29.3	8.1	8.1	25.4	25.4	111.0	111.0	7.4	7.2	6.3	12.8	4	7	-	-	822160	807566	-	-	-	-
						1.0	0.4	12	29.3		8.1		25.4		111.0		7.4		6.3		4		-				-		-	
					Middle	4.3	0.3	11	29.2	29.2	8.1	8.1	26.6	26.6	106.3	106.3	7.0		15.3		8		-				-		-	
						4.3	0.3	12	29.2		8.1		26.6		106.3		7.0		15.2		7		-				-		-	
					Bottom	7.6	0.3	17	29.1	29.1	8.1	8.1	26.8	26.8	107.2	107.2	7.1	7.1	16.9		9		-				-		-	
						7.6	0.3	20	29.1		8.1		26.8		107.1		7.1		17.0		9		-				-		-	
SR4A	Fine	Moderate	18:03	8.4	Surface	1.0	0.1	229	29.4	29.4	7.9	7.9	27.3	27.3	121.7	121.5	8.0	7.8	13.6	13.0	8	10	-	-	817176	807791	-	-	-	-
						1.0	0.1	241	29.4		7.9		27.3		121.2		8.0		13.8		10		-				-		-	
					Middle	4.2	0.2	280	29.2	29.2	7.9	7.9	27.8	27.8	114.7	114.6	7.5		12.0		11		-				-		-	
						4.2	0.3	286	29.2		7.9		27.9		114.5		7.5		12.1		10		-				-		-	
					Bottom	7.4	0.3	271	29.2	29.2	7.9	7.9	28.1	28.0	107.7	107.7	7.1	7.1	13.1		10		-				-		-	
						7.4	0.3	273	29.2		7.9		28.0		107.7		7.1		13.4		11		-				-		-	
SR5A	Fine	Moderate	18:17	4.9	Surface	1.0	0.2	287	29.3	29.3	7.9	7.9	27.3	27.3	118.4	118.2	7.8	7.8	12.2	12.5	18	19	-	-	816593	810698	-	-	-	-
						1.0	0.2	288	29.3		7.9		27.3		118.0		7.8		12.2		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	279	29.2	29.2	7.9	7.9	27.4	27.4	113.3	113.2	7.5	7.5	12.5		20		-				-		-	
						3.9	0.1	285	29.2		8.0		27.4		113.1		7.5		13.0		19		-				-		-	
SR6A	Fine	Moderate	18:49	4.4	Surface	1.0	0.1	229	29.3	29.3	7.9	7.9	27.1	27.1	116.0	115.3	7.6	7.6	8.5	10.6	10	11	-	-	817985	814739	-	-	-	-
						1.0	0.1	230	29.3		7.9		27.2		114.5		7.6		8.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	278	29.3	29.3	7.9	7.9	27.4	27.4	99.9	100.0	6.6	6.6	12.6		12		-				-		-	
						3.4	0.1	279	29.3		7.9		27.4		100.0		6.6		12.6		14		-				-		-	
SR7	Fine	Moderate	19:36	14.7	Surface	1.0	0.1	287	29.1	29.1	8.0	8.0	30.4	30.4	79.8	79.8	5.2	5.2	6.4	8.4	6	9	-	-	823651	823738	-	-	-	-
						1.0	0.1	306	29.1		8.0		30.4		79.8		5.2		6.5		7		-				-		-	
					Middle	7.4	0.1	242	29.0	29.0	8.0	8.0	30.7	30.7	80.4	80.4	5.2		8.5		9		-				-		-	
						7.4	0.1	244	29.0		8.0		30.7		80.4		5.2		8.5		8		-				-		-	
					Bottom	13.7	0.1	283	29.0	29.0	8.0	8.0	31.0	31.0	80.1	80.1	5.2	5.2	10.2		10		-				-		-	
						13.7	0.1	288	29.0		8.0		31.0		80.1		5.2		10.2		12		-				-		-	
SR8	Fine	Moderate	18:15	4.5	Surface	1.0	-	-	29.3	29.3	8.1	8.1	27.0	27.0	110.9	110.9	7.3	7.3	5.7	9.5	8	10	-	-	820380	811624	-	-	-	-
						1.0	-	-	29.3		8.1		27.1		110.9		7.3		5.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	29.2	29.2	8.0	8.0	27.9	27.9	99.3	99.4	6.5	6.5	13.3		10		-				-		-	
						3.5	-	-	29.2		8.0		27.9		99.4		6.5		13.3		11		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:23	8.1	Surface	1.0	0.3	133	28.6	28.6	8.1	8.1	31.1	31.2	87.3	87.2	5.7	5.7	9.6	9.2	12	12	86	88	815609	804227	<0.2	<0.2	0.8	0.7
						1.0	0.3	146	28.6		8.1		31.2		87.1		5.7		9.6		14		87				<0.2		0.7	
					Middle	4.1	0.2	142	28.6	28.6	8.1	8.1	31.7	31.7	85.8	85.8	5.6		9.4		12		88				<0.2		0.8	
						4.1	0.2	143	28.6		8.1		31.7		85.8		5.6		9.4		12		87				<0.2		0.6	
					Bottom	7.1	0.2	129	28.6	28.6	8.1	8.1	31.7	31.7	86.0	86.0	5.6	5.6	8.5		10		91				<0.2		0.7	
						7.1	0.2	130	28.6		8.1		31.7		86.0		5.6		8.5		11		90				<0.2		0.8	
C2	Cloudy	Rough	12:04	8.2	Surface	1.0	0.4	142	28.8	28.8	7.8	7.8	27.5	27.5	90.1	90.1	6.0	6.0	4.3	8.7	11	11	83	88	825672	806929	<0.2	<0.2	0.8	0.9
						1.0	0.4	151	28.8		7.8		27.5		90.1		6.0		4.3		10		84				<0.2		0.8	
					Middle	4.1	0.4	120	28.7	28.7	7.8	7.8	27.8	27.8	89.9	90.0	6.0		8.1		9		87				<0.2		1.0	
						4.1	0.4	133	28.7		7.8		27.8		90.0		6.0		8.1		9		88				<0.2		0.9	
					Bottom	7.2	0.4	143	28.6	28.6	7.8	7.8	28.0	28.0	93.5	93.7	6.2	6.2	13.8		12		91				<0.2		0.8	
						7.2	0.4	156	28.6		7.8		28.0		93.9		6.2		13.8		14		92				<0.2		0.9	
C3	Cloudy	Rough	14:29	10.5	Surface	1.0	0.2	127	28.9	28.9	7.8	7.8	30.5	30.5	85.4	85.4	5.6	5.6	6.6	5.0	8	9	83	87	822112	817788	<0.2	<0.2	0.9	0.9
						1.0	0.2	142	28.9		7.8		30.5		85.3		5.6		6.6		10		83				<0.2		1.0	
					Middle	5.3	0.1	120	28.8	28.8	7.8	7.8	30.9	30.9	85.4	85.5	5.6		4.1		10		88				<0.2		1.0	
						5.3	0.1	125	28.8		7.8		30.9		85.6		5.6		4.2		9		88				<0.2		0.8	
					Bottom	9.5	0.2	133	28.8	28.8	7.8	7.8	30.9	30.9	87.6	87.8	5.7	5.7	4.4		9		91				<0.2		0.8	
						9.5	0.2	135	28.8		7.8		30.9		87.9		5.7		4.3		9		91				<0.2		0.7	
IM1	Cloudy	Moderate	12:55	5.6	Surface	1.0	0.2	105	28.4	28.4	8.1	8.1	30.6	30.6	87.3	87.4	5.7	5.7	9.9	10.3	9	11	86	88	817930	807131	<0.2	<0.2	0.6	0.7
						1.0	0.2	112	28.4		8.1		30.6		87.4		5.7		10.0		10		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	165	28.3	28.3	8.1	8.1	30.6	30.6	88.3	88.4	5.8	5.8	10.5		13		89				<0.2		0.6	
						4.6	0.2	168	28.3		8.1		30.6		88.4		5.8		10.6		12		90				<0.2		0.8	
IM2	Cloudy	Moderate	12:49	7.7	Surface	1.0	0.2	159	28.5	28.5	8.1	8.1	30.9	30.9	87.0	87.0	5.7	5.7	10.5	12.4	15	14	86	88	818175	806184	<0.2	<0.2	0.8	0.8
						1.0	0.2	130	28.5		8.1		30.9		86.9		5.7		10.8		14		86				<0.2		0.8	
					Middle	3.9	0.1	136	28.4	28.4	8.1	8.1	30.9	30.9	85.7	85.7	5.6		15.3		14		87				<0.2		0.8	
						3.9	0.1	133	28.4		8.1		30.9		85.7		5.6		15.5		14		88				<0.2		0.8	
					Bottom	6.7	0.1	126	28.4	28.4	8.1	8.1	30.9	30.9	86.2	86.4	5.7	5.7	11.4		15		90				<0.2		0.8	
						6.7	0.1	140	28.4		8.1		30.9		86.5		5.7		11.2		14		90				<0.2		0.7	
IM3	Cloudy	Moderate	12:41	7.8	Surface	1.0	0.2	159	28.5	28.5	8.1	8.1	31.2	31.2	87.2	87.2	5.7	5.7	14.7	13.5	19	20	86	88	818786	805614	<0.2	<0.2	0.7	0.7
						1.0	0.2	130	28.5		8.1		31.2		87.2		5.7		14.7		17		85				<0.2		0.6	
					Middle	3.9	0.2	107	28.4	28.4	8.1	8.1	31.2	31.2	86.4	86.4	5.7		12.3		20		87				<0.2		0.7	
						3.9	0.2	114	28.4		8.1		31.2		86.4		5.7		12.3		20		89				<0.2		0.8	
					Bottom	6.8	0.2	122	28.4	28.4	8.1	8.1	31.2	31.2	87.6	87.7	5.7	5.7	13.6		21		90				<0.2		0.7	
						6.8	0.2	115	28.4		8.1		31.2		87.8		5.7		13.6		22		91				<0.2		0.7	
IM4	Cloudy	Moderate	12:31	7.7	Surface	1.0	0.3	183	28.4	28.4	8.1	8.1	30.8	30.8	87.5	87.5	5.7	5.7	11.9	11.9	16	20	86	88	819728	804611	<0.2	<0.2	0.7	0.7
						1.0	0.3	186	28.4		8.1		30.8		87.4		5.7		11.7		17		86				<0.2		0.8	
					Middle	3.9	0.3	189	28.4	28.4	8.1	8.1	30.9	30.9	86.1	86.1	5.6		11.6		20		88				<0.2		0.8	
						3.9	0.3	190	28.4		8.1		30.9		86.1		5.6		11.5		19		89				<0.2		0.6	
					Bottom	6.7	0.3	188	28.4	28.4	8.0	8.0	30.9	30.9	87.1	87.2	5.7	5.7	12.7		23		90				<0.2		0.7	
						6.7	0.3	199	28.4		8.0		30.9		87.3		5.7		12.0		23		91				<0.2		0.7	
IM5	Cloudy	Moderate	12:22	7.4	Surface	1.0	0.6	211	28.4	28.4	8.1	8.1	30.8	30.8	87.5	87.5	5.7	5.7	15.6	14.1	19	19	85	88	820734	804853	<0.2	<0.2	0.7	0.7
						1.0	0.6	218	28.4		8.1		30.8		87.4		5.7		15.6		21		86				<0.2		0.7	
					Middle	3.7	0.6	225	28.4	28.4	8.1	8.1	30.8	30.8	86.5	86.5	5.7		12.2		21		87				<0.2		0.8	
						3.7	0.6	226	28.4		8.1		30.8		86.5		5.7		12.2		20		89				<0.2		0.7	
					Bottom	6.4	0.5	242	28.4	28.4	8.1	8.1	30.8	30.8	86.8	86.9	5.7	5.7	14.7		17		91				<0.2		0.6	
						6.4	0.5	249	28.4		8.1		30.8		86.9		5.7		14.7		18		90				<0.2		0.7	
IM6	Cloudy	Moderate	12:14	7.7	Surface	1.0	0.2	169	28.3	28.3	8.1	8.1	30.4	30.4	86.6	86.6	5.7	5.7	9.8	10.1	10	12	86	88	821080	805830	<0.2	<0.2	0.9	0.9
						1.0	0.3	163	28.3		8.1		30.4		86.6		5.7		9.8		10		87				<0.2		0.8	
					Middle	3.9	0.2	170	28.3	28.3	8.0	8.0	30.4	30.4	86.5	86.5	5.7		9.8		12		87				<0.2		0.9	
						3.9	0.3	175	28.3		8.0		30.4		86.5		5.7		9.8		13		89				<0.2		0.7	
					Bottom	6.7	0.3	169	28.3	28.3	8.0	8.0	30.4	30.4	86.7	86.7	5.7	5.7	10.8		15		91				<0.2		0.9	
						6.7	0.3	173	28.3		8.0		30.4		86.7		5.7		10.9		14		90				<0.2		0.9	
IM7	Cloudy	Moderate	12:03	7.8	Surface	1.0	0.1	204	28.4	28.4	8.1	8.1	29.2	29.3	88.2	88.2	5.8	5.8	6.6	10.0	7	10	85	88	821362	806843	<0.2	<0.2	0.8	0.8
						1.0	0.1	213	28.4		8.1		29.3		88.1		5.8		6.7		8		86				<0.2		0.9	
					Middle	3.9	0.2	182	28.3	28.3	8.1	8.1	30.1	30.1	87.1	87.1	5.7		11.8		9		87				<0.2		0.8	
						3.9	0.3	186	28.3		8.1		30.1		87.1		5.7		11.8		11		88				<0.2		0.9	
					Bottom	6.8	0.2	116	28.3	28.3	8.0	8.0	30.3	30.3	87.1	87.1	5.7	5.7	11.7		13		90				<0.2		0.8	
						6.8	0.2	120	28.3		8.0		30.3		87.1		5.7		11.6		14		90				<0.2		0.8	
IM8	Cloudy	Rough	12:41	7.9	Surface	1.0	0.1	162	28.6	28.6	7.8	7.8	28.4	28.4	89.5	89.4	5.9	5.8	4.2	5.5	15	16	84	87	821847	808160	<0.2	<0.2	0.8	0.9
						1.0	0.1	151	28.6		7.8		28.5		89.2		5.9		4.3		15		85				<0.2		1.0	
					Middle	4.0	0.3	163	28.3	28.3	7.9	7.9	29.9	29.9	87.0	87.0	5.7		5.8		16		87				<0.2		1.0	
						4.0	0.3	163	28.3		7.9		29.9		87.0		5.7		5.8		17		85				<0.2		0.8	
					Bottom	6.9	0.2	164	28.3	28.3	7.9	7.9	30.0	30.0	87.6	87.8	5.8	5.8	6.4		17		91				<0.2		0.7	
						6.9	0.3	156	28.3		7.9		30.0		87.9		5.8		6.4		16		91				<0.2		0.9	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	12:47	8.3	Surface	1.0	0.1	144	28.5	28.5	7.8	7.8	28.3	28.3	90.7	90.6	6.0	5.9	4.2	5.1	15	14	86	90	822090	808801	<0.2	<0.2	0.9	0.9
						1.0	0.1	147	28.5		7.8		28.3		90.5		6.0		4.2		14		87				<0.2		1.0	
					Middle	4.2	0.1	167	28.4	28.4	7.8	7.8	29.2	29.2	87.6	87.6	5.8		5.1		14		88				<0.2		0.8	
						4.2	0.2	158	28.4		7.8		29.3		87.5		5.8		5.1		12		89				<0.2		0.9	
					Bottom	7.3	0.3	143	28.4	28.4	7.8	7.8	29.6	29.6	87.8	87.9	5.8	5.8	6.0		14		93				<0.2		1.0	
						7.3	0.3	148	28.4		7.8		29.5		88.0		5.8		6.1		14		94				<0.2		1.0	
IM10	Cloudy	Rough	12:53	7.7	Surface	1.0	0.2	139	28.6	28.6	7.8	7.8	28.6	28.6	89.2	89.2	5.9	5.9	4.9	7.0	18	18	83	88	822372	809812	<0.2	<0.2	0.8	1.0
						1.0	0.2	142	28.6		7.8		28.6		89.2		5.9		4.9		18		84				<0.2		1.0	
					Middle	3.9	0.2	133	28.6	28.6	7.8	7.8	28.7	28.7	88.9	88.9	5.9		6.3		17		87				<0.2		1.0	
						3.9	0.2	131	28.6		7.8		28.7		88.9		5.9		6.3		17		88				<0.2		1.1	
					Bottom	6.7	0.1	121	28.6	28.6	7.8	7.8	28.8	28.8	89.9	89.9	5.9	5.9	9.8		18		92				<0.2		0.9	
						6.7	0.1	128	28.6		7.8		28.8		89.9		5.9		9.8		19		93				<0.2		1.0	
IM11	Cloudy	Rough	13:09	7.6	Surface	1.0	0.2	123	28.6	28.6	7.8	7.8	28.5	28.5	91.9	92.1	6.1	6.0	5.2	6.2	12	15	83	88	822047	811457	<0.2	<0.2	0.9	0.9
						1.0	0.2	122	28.6		7.8		28.5		92.3		6.1		5.2		14		84				<0.2		1.0	
					Middle	3.8	0.1	128	28.6	28.6	7.8	7.8	28.7	28.7	88.9	88.9	5.9		4.2		15		88				<0.2		1.0	
						3.8	0.1	143	28.6		7.8		28.7		88.9		5.9		4.2		17		89				<0.2		1.0	
					Bottom	6.6	0.2	131	28.6	28.6	7.8	7.8	28.8	28.8	89.5	89.6	5.9	5.9	9.3		16		91				<0.2		0.8	
						6.6	0.2	138	28.6		7.8		28.8		89.6		5.9		9.3		18		92				<0.2		0.9	
IM12	Cloudy	Rough	13:20	8.2	Surface	1.0	0.3	114	28.7	28.7	7.8	7.8	28.8	28.8	87.9	87.9	5.8	5.8	3.6	5.9	14	19	85	89	821442	812042	<0.2	<0.2	0.8	1.0
						1.0	0.3	116	28.7		7.8		28.8		87.9		5.8		3.6		13		85				<0.2		0.9	
					Middle	4.1	0.3	104	28.7	28.7	7.8	7.8	28.9	28.9	88.0	88.0	5.8		5.5		22		88				<0.2		1.1	
						4.1	0.3	120	28.7		7.8		28.9		88.0		5.8		5.6		22		87				<0.2		0.9	
					Bottom	7.2	0.3	134	28.7	28.7	7.8	7.8	28.9	28.9	88.9	89.1	5.9	5.9	8.6		23		93				<0.2		1.0	
						7.2	0.3	125	28.7		7.8		28.9		89.2		5.9		8.7		21		93				<0.2		1.0	
SR1A	Cloudy	Rough	13:39	4.6	Surface	1.0	-	-	28.8	28.8	7.8	7.8	28.9	28.9	87.9	87.9	5.8	5.8	11.4	13.4	9	9	-	-	819982	812655	-	-	-	-
						1.0	-	-	28.8		7.8		28.9		87.9		5.8		11.4		10		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.8	28.8	7.8	7.8	28.9	28.9	87.5	87.5	5.8	5.8	15.3		8		-				-		-	
						3.6	-	-	28.8		7.8		28.9		87.5		5.8		15.4		7		-				-		-	
SR2	Cloudy	Rough	13:53	4.8	Surface	1.0	0.0	64	28.8	28.8	7.8	7.8	29.0	29.0	89.0	89.1	5.9	5.9	5.6	6.0	10	13	83	86	821460	814171	<0.2	<0.2	0.9	0.9
						1.0	0.0	68	28.8		7.8		29.0		89.1		5.9		5.7		11		83				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	100	28.8	28.8	7.8	7.8	29.2	29.2	88.5	88.6	5.8	5.8	6.4		14		88				<0.2		0.9	
						3.8	0.1	101	28.8		7.8		29.2		88.7		5.8		6.4		16		88				<0.2		0.8	
SR3	Cloudy	Rough	12:35	8.4	Surface	1.0	0.1	190	28.6	28.6	7.8	7.8	28.3	28.3	90.4	90.4	6.0	6.0	5.9	7.9	14	18	-	-	822133	807569	-	-	-	-
						1.0	0.1	204	28.6		7.8		28.4		90.3		6.0		5.9		16		-				-		-	
					Middle	4.2	0.3	166	28.5	28.5	7.8	7.8	28.9	28.9	89.5	89.5	5.9		8.6		18		-				-		-	
						4.2	0.3	172	28.4		7.8		28.9		89.4		5.9		8.6		18		-				-		-	
					Bottom	7.4	0.3	167	28.4	28.4	7.8	7.8	29.0	29.0	89.4	89.4	5.9	5.9	9.2		20		-				-		-	
						7.4	0.4	172	28.4		7.8		29.0		89.4		5.9		9.2		20		-				-		-	
SR4A	Cloudy	Moderate	13:52	8.5	Surface	1.0	0.2	73	28.4	28.4	8.1	8.1	30.8	30.8	86.1	86.1	5.6	5.6	13.4	15.2	17	18	-	-	817188	807820	-	-	-	-
						1.0	0.2	74	28.4		8.1		30.8		86.0		5.6		14.0		16		-				-		-	
					Middle	4.3	0.3	79	28.4	28.4	8.1	8.1	30.8	30.8	85.9	85.9	5.6		16.1		18		-				-		-	
						4.3	0.3	83	28.4		8.1		30.8		85.9		5.6		16.1		18		-				-		-	
					Bottom	7.5	0.2	62	28.3	28.3	8.1	8.1	30.9	30.9	87.0	87.1	5.7	5.7	15.7		21		-				-		-	
						7.5	0.2	63	28.3		8.1		30.9		87.1		5.7		15.7		20		-				-		-	
SR5A	Cloudy	Moderate	14:09	4.9	Surface	1.0	0.1	70	28.4	28.4	8.0	8.0	29.5	29.6	87.7	87.7	5.8	5.8	8.3	9.5	8	9	-	-	816609	810689	-	-	-	-
						1.0	0.1	72	28.4		8.0		29.6		87.7		5.8		8.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	125	28.2	28.2	8.0	8.0	30.5	30.5	88.2	88.3	5.8	5.8	10.8		9		-				-		-	
						3.9	0.2	125	28.1		8.0		30.5		88.4		5.8		10.8		10		-				-		-	
SR6A	Cloudy	Moderate	14:44	5.0	Surface	1.0	0.0	25	28.8	28.8	8.0	8.0	28.2	28.2	87.8	87.8	5.8	5.8	8.5	9.4	10	9	-	-	817945	814760	-	-	-	-
						1.0	0.0	25	28.8		8.0		28.2		87.7		5.8		8.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	135	28.7	28.7	8.0	8.0	28.3	28.3	88.3	88.4	5.8	5.8	10.2		8		-				-		-	
						4.0	0.1	138	28.7		8.0		28.3		88.4		5.8		10.2		8		-				-		-	
SR7	Cloudy	Rough	14:56	15.9	Surface	1.0	0.3	9	28.8	28.8	7.8	7.8	31.1	31.1	84.3	84.3	5.5	5.5	3.6	4.0	5	5	-	-	823617	823730	-	-	-	-
						1.0	0.3	9	28.8		7.8		31.1		84.3		5.5		3.7		6		-				-		-	
					Middle	8.0	0.2	36	28.7	28.7	7.8	7.8	31.3	31.3	84.1	84.2	5.5		3.8		4		-				-		-	
						8.0	0.2	37	28.7		7.8		31.3		84.3		5.5		3.9		6		-				-		-	
					Bottom	14.9	0.1	139	28.7	28.7	7.8	7.8	31.4	31.4	85.7	85.8	5.6	5.6	4.6		4		-				-		-	
						14.9	0.1	145	28.7		7.8		31.4		85.9		5.6		4.6		4		-				-		-	
SR8	Cloudy	Rough	13:26	4.4	Surface	1.0	-	-	28.8	28.8	7.8	7.8	28.9	28.9	88.0	88.0	5.8	5.8	13.1	13.6	18	20	-	-	820396	811622	-	-	-	-
						1.0	-	-	28.8		7.8		28.9		88.0		5.8		13.1		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	28.7	28.7	7.8	7.8	28.9	28.9	89.8	90.1	5.9	5.9	14.1		22		-				-		-	
						3.4	-	-	28.7		7.8		28.9		90.3		5.9		14.1		20		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 15 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	08:07	8.4	Surface	1.0	0.4	30	28.5	28.5	8.1	8.0	31.4	31.4	85.0	85.0	5.6	5.5	11.5	12.8	19	21	86	88	815642	804240	<0.2	<0.2	0.5	0.6
						1.0	0.5	31	28.5		8.0		31.4		85.0		5.5		11.5		19		85				<0.2		0.6	
					Middle	4.2	0.4	36	28.5	28.5	8.0	8.0	31.4	31.4	84.8	84.8	5.5		13.3		20		88				<0.2		0.6	
						4.2	0.4	37	28.5		8.0		31.4		84.8		5.5		13.3		19		87				<0.2		0.5	
					Bottom	7.4	0.3	35	28.4	28.4	8.0	8.0	31.3	31.3	83.9	83.9	5.5	5.5	13.7		25		91				<0.2		0.6	
						7.4	0.4	37	28.4		8.0		31.2		83.8		5.5		13.7		26		90				<0.2		0.5	
C2	Cloudy	Rough	09:23	7.9	Surface	1.0	0.4	338	28.8	28.8	7.8	7.8	27.6	27.6	90.0	90.0	6.0	6.0	6.0	8.6	16	13	85	89	825665	806953	<0.2	<0.2	0.7	0.9
						1.0	0.4	342	28.8		7.8		27.6		89.9		6.0		6.0		15		85				<0.2		0.9	
					Middle	4.0	0.4	2	28.8	28.8	7.8	7.8	27.9	27.9	90.1	90.2	6.0		9.7		13		88				<0.2		0.8	
						4.0	0.4	2	28.8		7.8		27.9		90.2		6.0		9.8		13		89				<0.2		0.9	
					Bottom	6.9	0.3	6	28.8	28.8	7.7	7.7	27.9	27.9	91.0	91.1	6.0	6.0	10.2		10		93				<0.2		1.1	
						6.9	0.4	6	28.8		7.7		27.9		91.1		6.0		10.1		10		94				<0.2		1.0	
C3	Cloudy	Rough	07:28	11.6	Surface	1.0	0.6	294	28.8	28.8	7.8	7.8	29.3	29.3	87.0	87.0	5.7	5.6	4.0	6.2	5	8	83	87	822124	817792	<0.2	<0.2	1.2	1.0
						1.0	0.6	320	28.8		7.8		29.3		86.9		5.7		4.0		6		83				<0.2		1.0	
					Middle	5.8	0.6	286	28.9	28.9	7.8	7.8	29.8	29.8	85.0	84.9	5.6		6.1		8		87				<0.2		0.8	
						5.8	0.6	304	28.9		7.8		29.9		84.8		5.5		6.2		9		87				<0.2		1.0	
					Bottom	10.6	0.5	295	28.9	28.9	7.8	7.8	30.3	30.3	85.3	85.4	5.6	5.6	8.5		10		91				<0.2		0.8	
						10.6	0.5	314	28.9		7.8		30.3		85.5		5.6		8.5		9		91				<0.2		1.0	
IM1	Cloudy	Moderate	08:34	5.3	Surface	1.0	0.2	349	28.3	28.3	8.0	8.0	30.6	30.6	86.0	86.0	5.7	5.7	13.3	15.2	18	19	86	88	817945	807138	<0.2	<0.2	0.8	0.8
						1.0	0.2	352	28.3		8.0		30.6		86.0		5.7		13.3		17		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	22	28.2	28.2	8.0	8.0	30.6	30.6	86.8	86.9	5.7	5.7	17.1		20		89				<0.2		0.6	
						4.3	0.2	24	28.2		8.0		30.6		87.0		5.7		17.1		19		91				<0.2		0.8	
IM2	Cloudy	Moderate	08:43	7.2	Surface	1.0	0.2	356	28.4	28.4	8.1	8.1	30.7	30.7	86.4	86.4	5.7	5.7	11.2	13.6	21	22	86	88	818182	806165	<0.2	<0.2	0.8	0.7
						1.0	0.2	328	28.4		8.1		30.7		86.4		5.7		11.2		21		87				<0.2		0.7	
					Middle	3.6	0.3	1	28.4	28.4	8.0	8.0	30.9	30.9	86.2	86.2	5.7		12.3		21		88				<0.2		0.6	
						3.6	0.3	1	28.4		8.0		30.9		86.2		5.7		12.3		20		87				<0.2		0.7	
					Bottom	6.2	0.2	22	28.3	28.3	8.0	8.0	31.0	31.0	87.5	87.6	5.7	5.7	17.3		24		91				<0.2		0.8	
						6.2	0.2	23	28.3		8.0		31.0		87.6		5.7		17.3		25		90				<0.2		0.8	
IM3	Cloudy	Moderate	08:49	7.3	Surface	1.0	0.3	354	28.4	28.4	8.1	8.1	30.9	30.9	85.7	85.7	5.6	5.6	11.5	12.6	25	26	86	88	818780	805608	<0.2	<0.2	1.1	0.9
						1.0	0.3	326	28.4		8.1		30.9		85.6		5.6		11.4		24		86				<0.2		0.9	
					Middle	3.7	0.3	351	28.4	28.4	8.0	8.0	31.0	31.0	84.6	84.6	5.5		11.2		25		87				<0.2		0.8	
						3.7	0.4	323	28.4		8.0		31.0		84.5		5.5		11.9		27		88				<0.2		0.8	
					Bottom	6.3	0.3	352	28.4	28.4	8.0	8.0	30.9	30.8	83.5	83.5	5.5	5.5	15.0		26		90				<0.2		1.0	
						6.3	0.4	324	28.4		8.0		30.8		83.4		5.5		15.0		27		90				<0.2		1.0	
IM4	Cloudy	Moderate	08:58	7.8	Surface	1.0	0.5	357	28.3	28.3	8.1	8.1	30.6	30.6	87.4	87.4	5.7	5.7	12.0	12.5	18	22	86	88	819740	804619	<0.2	<0.2	0.8	0.9
						1.0	0.5	328	28.3		8.1		30.6		87.3		5.7		12.1		18		85				<0.2		0.9	
					Middle	3.9	0.5	352	28.4	28.4	8.0	8.0	30.8	30.8	86.2	86.3	5.7		12.3		22		88				<0.2		0.8	
						3.9	0.5	324	28.4		8.0		30.8		86.3		5.7		12.9		23		89				<0.2		0.9	
					Bottom	6.8	0.4	354	28.4	28.4	8.0	8.0	30.9	30.9	87.4	87.5	5.7	5.7	12.9		23		90				<0.2		0.9	
						6.8	0.4	358	28.4		8.0		30.9		87.6		5.7		12.8		25		91				<0.2		1.1	
IM5	Cloudy	Moderate	09:04	7.8	Surface	1.0	0.6	10	28.4	28.4	8.1	8.1	30.7	30.7	86.2	86.2	5.7	5.7	10.6	12.4	8	14	85	88	820722	804860	<0.2	<0.2	0.9	1.0
						1.0	0.6	10	28.4		8.1		30.7		86.2		5.7		10.6		10		86				<0.2		1.0	
					Middle	3.9	0.6	12	28.4	28.4	8.0	8.0	30.8	30.8	86.3	86.3	5.7		12.2		12		88				<0.2		1.0	
						3.9	0.6	12	28.4		8.0		30.8		86.3		5.7		12.2		11		89				<0.2		1.0	
					Bottom	6.8	0.5	14	28.4	28.4	8.0	8.0	30.7	30.7	87.5	87.5	5.7	5.7	14.2		19		91				<0.2		0.9	
						6.8	0.5	14	28.4		8.0		30.7		87.5		5.7		14.2		21		90				<0.2		0.9	
IM6	Cloudy	Moderate	09:11	7.9	Surface	1.0	0.3	121	28.3	28.3	8.0	8.0	30.3	30.3	87.1	87.1	5.7	5.7	17.4	17.3	9	13	86	88	821071	805842	<0.2	<0.2	0.8	0.9
						1.0	0.3	128	28.3		8.0		30.3		87.1		5.7		17.5		8		85				<0.2		0.8	
					Middle	4.0	0.3	124	28.3	28.3	8.0	8.0	30.3	30.3	87.0	87.0	5.7		18.0		10		88				<0.2		0.9	
						4.0	0.3	127	28.3		8.0		30.3		87.0		5.7		18.0		9		89				<0.2		1.0	
					Bottom	6.9	0.3	103	28.3	28.3	8.0	8.0	30.3	30.3	87.4	87.5	5.8	5.8	16.3		20		91				<0.2		0.9	
						6.9	0.3	110	28.3		8.0		30.3		87.5		5.8		16.3		21		90				<0.2		1.0	
IM7	Cloudy	Moderate	09:19	8.0	Surface	1.0	0.0	255	28.5	28.5	8.0	8.0	28.8	28.8	89.6	89.6	5.9	5.9	9.3	12.2	7	10	86	88	821356	806835	<0.2	<0.2	0.8	0.9
						1.0	0.0	268	28.5		8.0		28.9		89.5		5.9		9.3		5		87				<0.2		0.8	
					Middle	4.0	0.2	93	28.3	28.3	8.0	8.0	29.9	29.9	88.8	88.9	5.9		10.7		9		89				<0.2		1.0	
						4.0	0.2	95	28.3		8.0		29.9		88.9		5.9		10.8		9		87				<0.2		0.8	
					Bottom	7.0	0.3	107	28.3	28.3	8.0	8.0	30.2	30.2	89.3	89.4	5.9	5.9	16.6		15		91				<0.2		1.0	
						7.0	0.3	115	28.3		8.0		30.2		89.5		5.9		16.6		15		90				<0.2		1.0	
IM8	Cloudy	Rough	08:50	7.4	Surface	1.0	0.2	45	28.5	28.5	7.8	7.8	28.2	28.2	90.8	90.8	6.0	6.0	5.2	7.1	14	16	84	89	821813	808151	<0.2	<0.2	1.4	1.6
						1.0	0.2	45	28.5		7.8		28.2		90.7		6.0		5.2		15		85				<0.2		1.3	
					Middle	3.7	0.2	69	28.6	28.6	7.8	7.8	28.7	28.7	88.8	88.7	5.9		7.8		17		88				<0.2		1.5	
						3.7	0.2	74	28.5		7.8		28.8		88.6		5.9		7.8		17		88				<0.2		1.5	
					Bottom	6.4	0.3	75	28.4	28.4	7.8	7.8	29.9	29.9	88.6	88.7	5.8	5.8	8.3		16		93				<0.2		1.8	
						6.4	0.3	75	28.4		7.8		29.9		88.7		5.8		8.3		17		93				<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 15 October 19 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	08:45	7.6	Surface	1.0	0.1	98	28.5	28.5	7.8	7.8	28.3	28.3	90.4	90.4	6.0	6.0	3.6	5.0	4	8	83	89	822101	808822	<0.2	<0.2	1.6	1.5
						1.0	0.1	100	28.5		7.8		28.3		90.4		6.0		3.7		6		85				<0.2		1.4	
					Middle	3.8	0.2	47	28.5	28.5	7.8	7.8	28.3	28.3	90.0	90.0	6.0		5.2		4		90				<0.2		1.5	
						3.8	0.2	50	28.5		7.8		28.3		90.0		6.0		5.2		5		90				<0.2		1.6	
					Bottom	6.6	0.2	69	28.5	28.5	7.8	7.8	28.3	28.3	90.1	90.1	6.0	6.0	6.1		14		92				<0.2		1.3	
						6.6	0.2	69	28.5		7.8		28.3		90.1		6.0		6.1		14		92				<0.2		1.5	
IM10	Cloudy	Rough	08:35	7.1	Surface	1.0	0.2	122	28.5	28.5	7.8	7.8	28.3	28.3	90.5	90.5	6.0	6.0	2.8	4.6	14	13	85	89	822408	809812	<0.2	<0.2	1.7	1.4
						1.0	0.2	132	28.5		7.8		28.3		90.5		6.0		2.8		15		85				<0.2		1.7	
					Middle	3.6	0.1	151	28.5	28.5	7.8	7.8	28.3	28.3	90.7	90.7	6.0		4.5		15		88				<0.2		1.2	
						3.6	0.1	161	28.5		7.8		28.3		90.7		6.0		4.6		16		89				<0.2		1.3	
					Bottom	6.1	0.1	106	28.5	28.5	7.8	7.8	28.3	28.3	91.0	91.1	6.0	6.0	6.5		10		91				<0.2		1.4	
						6.1	0.1	106	28.5		7.8		28.3		91.1		6.0		6.5		10		93				<0.2		1.2	
IM11	Cloudy	Rough	08:27	6.9	Surface	1.0	0.5	319	28.6	28.6	7.8	7.8	28.6	28.6	90.0	90.0	6.0	6.0	5.8	7.1	16	14	85	89	822069	811469	<0.2	<0.2	1.1	1.4
						1.0	0.5	324	28.6		7.8		28.6		89.9		6.0		5.8		18		85				<0.2		1.3	
					Middle	3.5	0.5	320	28.6	28.6	7.8	7.8	28.6	28.6	89.9	89.9	5.9		6.9		14		88				<0.2		1.5	
						3.5	0.5	350	28.6		7.8		28.6		89.9		5.9		6.9		13		90				<0.2		1.5	
					Bottom	5.9	0.4	326	28.6	28.6	7.8	7.8	28.6	28.6	90.2	90.3	6.0	6.0	8.7		11		94				<0.2		1.4	
						5.9	0.4	355	28.6		7.8		28.6		90.3		6.0		8.7		9		94				<0.2		1.6	
IM12	Cloudy	Rough	08:14	7.3	Surface	1.0	0.3	227	28.7	28.7	7.8	7.8	28.8	28.8	89.2	89.2	5.9	5.9	3.5	6.1	20	14	85	89	821437	812047	<0.2	<0.2	1.6	1.5
						1.0	0.3	228	28.7		7.8		28.8		89.2		5.9		3.5		21		85				<0.2		1.5	
					Middle	3.7	0.3	236	28.7	28.7	7.8	7.8	28.8	28.8	89.7	89.8	5.9		6.2		13		89				<0.2		1.6	
						3.7	0.3	238	28.7		7.8		28.8		89.8		5.9		6.3		13		89				<0.2		1.4	
					Bottom	6.3	0.4	233	28.7	28.7	7.8	7.8	28.8	28.8	90.1	90.2	5.9	6.0	8.6		10		93				<0.2		1.3	
						6.3	0.4	255	28.7		7.8		28.8		90.2		6.0		8.6		9		93				<0.2		1.4	
SR1A	Cloudy	Rough	07:57	4.8	Surface	1.0	-	-	28.6	28.6	7.8	7.8	27.9	27.9	88.1	88.1	5.8	5.8	3.0	3.8	8	8	-	-	819975	812659	-	-	-	-
						1.0	-	-	28.6		7.8		27.9		88.1		5.8		3.0		7		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.6	28.6	7.8	7.8	27.9	27.9	89.2	89.3	5.9	5.9	4.6		7		-				-		-	
						3.8	-	-	28.6		7.8		27.9		89.4		5.9		4.6		8		-				-		-	
SR2	Cloudy	Rough	07:47	4.5	Surface	1.0	0.8	312	28.7	28.7	7.8	7.8	28.8	28.8	88.9	89.0	5.9	5.9	4.8	5.6	7	7	88	90	821453	814189	<0.2	<0.2	1.4	1.3
						1.0	0.8	323	28.7		7.8		28.8		89.0		5.9		4.8		5		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.6	321	28.7	28.7	7.8	7.8	28.9	28.9	90.0	90.2	5.9	6.0	6.4		7		91				<0.2		1.3	
						3.5	0.6	327	28.7		7.8		28.9		90.4		6.0		6.5		8		91				<0.2		1.2	
SR3	Cloudy	Rough	08:55	8.2	Surface	1.0	0.4	341	28.6	28.6	7.8	7.8	28.2	28.2	91.4	91.4	6.1	6.1	5.0	6.8	18	16	-	-	822148	807578	-	-	-	-
						1.0	0.4	348	28.6		7.8		28.2		91.3		6.1		5.3		18		-				-		-	
					Middle	4.1	0.4	353	28.6	28.6	7.8	7.8	28.2	28.2	90.6	90.6	6.0		5.9		15		-				-		-	
						4.1	0.4	354	28.6		7.8		28.2		90.6		6.0		5.9		15		-				-		-	
					Bottom	7.2	0.4	354	28.3	28.3	7.8	7.8	29.9	29.9	92.0	92.3	6.1	6.1	9.3		14		-				-		-	
						7.2	0.4	326	28.3		7.8		29.9		92.5		6.1		9.3		15		-				-		-	
SR4A	Cloudy	Moderate	07:32	8.4	Surface	1.0	0.4	272	28.3	28.3	8.1	8.1	30.6	30.6	85.8	85.8	5.6	5.6	15.2	13.3	19	20	-	-	817197	807815	-	-	-	-
						1.0	0.5	240	28.3		8.1		30.6		85.8		5.6		15.2		18		-				-		-	
					Middle	4.2	0.5	267	28.2	28.2	8.0	8.0	30.6	30.6	85.6	85.7	5.6		11.9		20		-				-		-	
						4.2	0.5	269	28.2		8.0		30.6		85.7		5.6		11.9		21		-				-		-	
					Bottom	7.4	0.4	270	28.2	28.2	8.0	8.0	30.6	30.6	86.5	86.6	5.7	5.7	12.8		20		-				-		-	
						7.4	0.4	271	28.2		8.0		30.6		86.6		5.7		12.8		20		-				-		-	
SR5A	Cloudy	Moderate	07:14	4.9	Surface	1.0	0.1	204	28.5	28.5	8.0	8.0	28.2	28.2	86.6	86.6	5.8	5.8	8.0	8.9	9	11	-	-	816602	810694	-	-	-	-
						1.0	0.1	213	28.5		8.0		28.2		86.6		5.8		8.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	263	28.5	28.5	8.0	8.0	28.3	28.3	86.4	86.4	5.7	5.7	9.7		12		-				-		-	
						3.9	0.0	265	28.5		8.0		28.3		86.4		5.7		9.7		12		-				-		-	
SR6A	Cloudy	Moderate	06:45	4.0	Surface	1.0	0.1	227	28.8	28.8	8.0	8.0	27.9	27.9	86.3	86.3	5.7	5.7	8.7	11.1	7	8	-	-	817941	814736	-	-	-	-
						1.0	0.1	233	28.8		8.0		27.9		86.3		5.7		8.7		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	280	28.9	28.9	7.9	7.9	28.5	28.5	86.5	86.6	5.7	5.7	13.3		7		-				-		-	
						3.0	0.1	281	28.9		7.9		28.6		86.6		5.7		13.7		8		-				-		-	
SR7	Cloudy	Rough	07:04	16.8	Surface	1.0	0.2	297	28.7	28.7	7.8	7.8	29.4	29.4	85.7	85.7	5.6	5.6	4.2	4.5	4	6	-	-	823645	823727	-	-	-	-
						1.0	0.2	304	28.7		7.8		29.4		85.7		5.6		4.3		4		-				-		-	
					Middle	8.4	0.2	202	28.8	28.8	7.8	7.8	29.8	29.8	85.1	85.1	5.6		4.6		5		-				-		-	
						8.4	0.2	207	28.8		7.8		29.8		85.1		5.6		4.7		4		-				-		-	
					Bottom	15.8	0.1	201	28.8	28.8	7.8	7.8	29.8	29.8	85.2	85.2	5.6	5.6	4.6		8		-				-		-	
						15.8	0.1	204	28.8		7.8		29.8		85.2		5.6		4.6		10		-				-		-	
SR8	Cloudy	Rough	08:06	4.3	Surface	1.0	-	-	28.6	28.7	7.8	7.8	28.5	28.5	90.6	90.7	6.0	6.0	11.8	12.9	8	8	-	-	820401	811624	-	-	-	-
						1.0	-	-	28.7		7.8		28.5		90.7		6.0		11.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.7	28.7	7.8	7.8	28.6	28.6	92.2	92.6	6.1	6.1	13.9		8		-				-		-	
						3.3	-	-	28.7		7.8		28.6		92.9		6.1		14.0		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 17 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Sunny	Moderate	14:07	7.4	Surface	1.0	0.3	138	27.2	27.2	8.2	8.2	30.9	31.0	88.2	88.1	5.9	5.9	13.4	16.8	10	10	87	88	815643	804262	<0.2	<0.2	1.2	1.0
						1.0	0.4	133	27.1		8.2		31.0		88.0		5.9		14.4		11		85				<0.2		1.1	
					Middle	3.7	0.3	135	27.1	27.1	8.2	8.2	31.2	31.2	87.9	87.9	5.9		17.3		11		88				<0.2		1.0	
						3.7	0.3	137	27.1		8.2		31.2		87.9		5.9		17.4		10		87				<0.2		0.8	
					Bottom	6.4	0.2	144	27.1	27.1	8.1	8.1	31.2	31.2	89.1	89.4	6.0	6.0	19.2		10		90				<0.2		1.0	
						6.4	0.3	152	27.1		8.1		31.2		89.6		6.0		19.2		9		89				<0.2		1.0	
C2	Fine	Moderate	13:07	12.1	Surface	1.0	0.3	161	28.6	28.6	7.9	7.9	26.8	26.8	88.3	88.3	5.9	5.8	6.7	9.2	7	7	83	87	825700	806933	<0.2	<0.2	1.5	1.9
						1.0	0.3	188	28.6		7.9		26.8		88.3		5.9		6.7		6		83				<0.2		1.6	
					Middle	6.1	0.2	181	28.7	28.7	7.9	7.9	27.1	27.1	86.0	86.0	5.7		11.7		6		88				<0.2		2.1	
						6.1	0.3	172	28.7		7.9		27.1		86.0		5.7		11.7		7		88				<0.2		2.1	
					Bottom	11.1	0.2	156	28.7	28.7	7.9	7.9	27.4	27.4	87.5	87.5	5.8	5.8	9.3		7		89				<0.2		2.1	
						11.1	0.2	165	28.7		7.9		27.4		87.5		5.8		9.3		7		89				<0.2		1.9	
C3	Fine	Moderate	15:09	12.5	Surface	1.0	0.1	46	28.8	28.8	7.8	7.8	30.9	30.9	83.1	83.1	5.4	5.4	6.3	8.9	8	10	87	88	822119	817797	<0.2	<0.2	1.7	1.6
						1.0	0.1	52	28.8		7.8		30.9		83.1		5.4		6.3		8		87				<0.2		1.8	
					Middle	6.3	0.2	44	28.7	28.7	7.8	7.8	30.9	30.9	83.1	83.1	5.4		8.4		8		88				<0.2		1.7	
						6.3	0.2	50	28.7		7.8		30.9		83.1		5.4		8.4		10		89				<0.2		1.5	
					Bottom	11.5	0.2	48	28.7	28.7	7.8	7.8	30.9	30.9	84.6	84.6	5.5	5.5	11.9		13		89				<0.2		1.3	
						11.5	0.2	52	28.7		7.8		30.9		84.6		5.5		11.9		15		89				<0.2		1.3	
IM1	Sunny	Moderate	13:53	5.2	Surface	1.0	0.1	210	27.1	27.1	8.2	8.2	30.7	30.8	91.2	91.1	6.1	6.1	8.0	8.1	9	9	85	87	817956	807110	<0.2	<0.2	1.1	1.6
						1.0	0.1	208	27.1		8.2		30.8		91.0		6.1		8.1		9		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	220	26.9	26.9	8.1	8.1	31.4	31.4	91.8	91.9	6.2	6.2	8.1		10		88				<0.2		2.2	
						4.2	0.1	214	26.8		8.1		31.5		92.0		6.2		8.2		9		90				<0.2		2.0	
IM2	Sunny	Moderate	13:46	7.1	Surface	1.0	0.2	209	27.2	27.2	8.2	8.2	30.9	30.9	88.5	88.3	5.9	5.9	10.7	12.5	9	9	85	87	818184	806151	<0.2	<0.2	1.8	1.6
						1.0	0.2	211	27.2		8.2		31.0		88.0		5.9		11.1		10		86				<0.2		1.7	
					Middle	3.6	0.2	205	27.1	27.1	8.2	8.2	31.1	31.1	87.1	87.1	5.8		12.4		9		86				<0.2		1.7	
						3.6	0.2	204	27.1		8.2		31.1		87.1		5.8		12.1		9		87				<0.2		1.6	
					Bottom	6.1	0.2	217	27.1	27.1	8.2	8.2	31.1	31.1	87.5	87.6	5.9	5.9	14.8		9		89				<0.2		1.3	
						6.1	0.2	203	27.1		8.2		31.1		87.7		5.9		14.1		10		90				<0.2		1.4	
IM3	Sunny	Moderate	13:38	8.0	Surface	1.0	0.3	200	27.2	27.2	8.2	8.2	31.0	31.0	89.2	89.1	6.0	5.9	12.6	16.4	12	11	85	87	818771	805590	<0.2	<0.2	1.3	1.5
						1.0	0.3	220	27.2		8.2		31.0		88.9		5.9		13.4		11		86				<0.2		1.2	
					Middle	4.0	0.3	234	27.1	27.1	8.2	8.2	31.2	31.2	87.5	87.5	5.8		18.0		11		86				<0.2		1.3	
						4.0	0.3	235	27.1		8.2		31.2		87.4		5.8		17.7		11		87				<0.2		1.2	
					Bottom	7.0	0.2	220	27.1	27.1	8.2	8.2	31.2	31.2	87.4	87.5	5.8	5.9	18.6		10		89				<0.2		2.1	
						7.0	0.2	218	27.1		8.2		31.2		87.5		5.9		18.3		9		90				<0.2		2.0	
IM4	Sunny	Moderate	13:29	8.2	Surface	1.0	0.6	248	27.2	27.2	8.2	8.2	30.4	30.4	91.0	91.0	6.1	6.0	10.7	14.6	8	11	85	87	819742	804588	<0.2	<0.2	1.9	2.2
						1.0	0.6	255	27.2		8.2		30.4		90.9		6.1		10.6		8		85				<0.2		2.0	
					Middle	4.1	0.5	253	27.1	27.1	8.2	8.2	31.1	31.1	87.4	87.4	5.8		15.7		12		87				<0.2		2.4	
						4.1	0.5	242	27.1		8.2		31.1		87.4		5.8		15.3		12		88				<0.2		2.3	
					Bottom	7.2	0.4	251	27.1	27.1	8.1	8.1	31.2	31.2	87.5	87.6	5.9	5.9	17.6		11		90				<0.2		2.5	
						7.2	0.4	232	27.1		8.1		31.2		87.7		5.9		17.8		12		89				<0.2		2.3	
IM5	Sunny	Moderate	13:20	7.1	Surface	1.0	0.6	216	27.1	27.1	8.2	8.2	30.8	30.8	86.7	86.7	5.8	5.8	12.8	14.9	12	13	85	87	820741	804889	<0.2	<0.2	1.0	1.0
						1.0	0.7	220	27.1		8.2		30.9		86.7		5.8		12.4		12		85				<0.2		0.9	
					Middle	3.6	0.6	211	27.0	27.0	8.2	8.2	31.0	31.0	86.7	86.7	5.8		14.6		12		86				<0.2		1.0	
						3.6	0.6	220	27.0		8.2		31.0		86.7		5.8		14.6		11		86				<0.2		1.0	
					Bottom	6.1	0.5	216	27.0	27.0	8.2	8.1	31.0	31.0	86.7	86.8	5.8	5.8	17.5		14		89				<0.2		1.0	
						6.1	0.5	208	27.0		8.1		31.0		86.8		5.8		17.6		14		89				<0.2		0.9	
IM6	Sunny	Moderate	13:12	7.5	Surface	1.0	0.3	226	27.0	27.0	8.2	8.2	31.0	31.0	88.1	88.1	5.9	5.9	13.2	13.3	16	17	86	87	821054	805840	<0.2	<0.2	1.0	0.9
						1.0	0.3	222	27.0		8.2		31.0		88.0		5.9		13.2		16		85				<0.2		0.9	
					Middle	3.8	0.2	235	27.0	27.0	8.1	8.1	31.0	31.0	88.0	88.0	5.9		13.4		17		86				<0.2		0.8	
						3.8	0.2	237	27.0		8.1		31.0		88.0		5.9		13.4		18		87				<0.2		0.8	
					Bottom	6.5	0.2	259	27.0	27.0	8.1	8.1	31.0	31.0	88.5	88.6	5.9	5.9	13.5		17		89				<0.2		0.8	
						6.5	0.2	230	27.0		8.1		31.0		88.6		5.9		13.4		18		89				<0.2		0.9	
IM7	Sunny	Moderate	13:06	8.5	Surface	1.0	0.1	219	27.3	27.3	8.1	8.1	29.2	29.3	88.1	88.1	5.9	5.9	8.6	13.4	12	11	85	87	821333	806811	<0.2	<0.2	0.8	0.8
						1.0	0.1	201	27.2		8.1		29.5		88.0		5.9		9.4		11		86				<0.2		0.8	
					Middle	4.3	0.3	237	27.1	27.1	8.2	8.2	30.6	30.6	87.9	87.9	5.9		13.7		12		87				<0.2		1.0	
						4.3	0.3	241	27.0		8.2		30.7		87.9		5.9		14.2		12		86				<0.2		0.8	
					Bottom	7.5	0.3	225	27.0	27.0	8.2	8.2	31.2	31.2	88.0	88.1	5.9	5.9	17.4		10		89				<0.2		0.7	
						7.5	0.3	229	27.0		8.2		31.1		88.2		5.9		17.5		10		90				<0.2		0.8	
IM8	Fine	Moderate	13:43	7.4	Surface	1.0	0.2	200	28.6	28.6	8.0	8.0	27.4	27.4	90.6	90.6	6.0	6.0	9.4	10.7	7	7	84	87	821823	808162	<0.2	<0.2	1.1	1.1
						1.0	0.2	194	28.6		8.0		27.4		90.6		6.0		9.4		7		84				<0.2		1.0	
					Middle	3.7	0.2	192	28.3	28.3	8.0	8.0	28.7	28.7	90.5	90.5	6.0		10.2		7		88				<0.2		1.2	
						3.7	0.3	217	28.3		8.0		28.7		90.5		6.0		10.2		7		88				<0.2		1.1	
					Bottom	6.4	0.1	213	28.2	28.2	8.0	8.0	29.9	29.9	93.4	93.4	6.2	6.2	12.6		8		88				<0.2		1.2	
						6.4	0.2	209	28.2		8.0		29.9		93.4		6.2		12.6		7		89				<0.2		1.1	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:49	7.6	Surface	1.0	0.2	196	28.6	28.6	8.0	8.0	27.5	27.5	91.6	91.6	6.1	6.1	6.7	8.3	7	7	84	87	822110	808798	<0.2	<0.2	1.0	1.1
						1.0	0.2	185	28.6		8.0		27.5		91.6		6.1		6.7		8		85				<0.2		1.0	
					Middle	3.8	0.2	176	28.5	28.5	8.0	8.0	27.9	27.9	90.0	90.0	6.0		8.8		6		88				<0.2		1.0	
						3.8	0.2	180	28.5		8.0		27.9		90.0		6.0		8.8		7		88				<0.2		1.0	
					Bottom	6.6	0.0	183	28.3	28.3	8.0	8.0	28.9	28.9	94.7	94.7	6.3	6.3	9.5		7		89				<0.2		1.4	
						6.6	0.0	194	28.3		8.0		28.9		94.7		6.3		9.5		6		89				<0.2		1.3	
IM10	Fine	Moderate	13:56	7.4	Surface	1.0	0.2	183	28.4	28.4	8.1	8.1	29.3	29.3	90.2	90.2	6.0	6.0	14.5	15.1	16	15	84	87	822395	809808	<0.2	<0.2	1.2	1.2
						1.0	0.2	185	28.4		8.1		29.3		90.2		6.0		14.5		16		84				<0.2		1.2	
					Middle	3.7	0.3	173	28.4	28.4	8.1	8.1	29.3	29.3	90.8	90.8	6.0		15.2		16		87				<0.2		1.2	
						3.7	0.3	179	28.4		8.1		29.3		90.8		6.0		15.2		14		87				<0.2		1.2	
					Bottom	6.4	0.3	197	28.3	28.3	8.1	8.1	29.4	29.4	92.3	92.3	6.1	6.1	15.5		14		88				<0.2		1.2	
						6.4	0.3	174	28.3		8.1		29.4		92.3		6.1		15.5		16		89				<0.2		1.3	
IM11	Fine	Moderate	14:07	8.0	Surface	1.0	0.2	169	28.5	28.5	8.0	8.0	29.5	29.5	90.0	90.0	5.9	6.0	14.3	15.4	14	13	85	87	822046	811462	<0.2	<0.2	1.2	1.3
						1.0	0.2	153	28.5		8.0		29.5		90.0		5.9		14.3		15		85				<0.2		1.2	
					Middle	4.0	0.2	162	28.5	28.5	8.0	8.0	29.5	29.5	91.6	91.6	6.0		15.2		13		87				<0.2		1.3	
						4.0	0.2	164	28.5		8.0		29.5		91.6		6.0		15.2		13		88				<0.2		1.4	
					Bottom	7.0	0.2	143	28.4	28.4	8.1	8.1	29.5	29.5	94.8	94.8	6.3	6.3	16.6		12		89				<0.2		1.4	
						7.0	0.2	147	28.4		8.1		29.5		94.8		6.3		16.6		13		90				<0.2		1.4	
IM12	Fine	Moderate	14:13	8.5	Surface	1.0	0.2	141	28.5	28.5	8.0	8.0	29.5	29.5	89.5	89.5	5.9	6.0	14.8	14.7	16	17	83	87	821450	812051	<0.2	<0.2	1.4	1.3
						1.0	0.2	152	28.5		8.0		29.5		89.5		5.9		14.8		17		83				<0.2		1.3	
					Middle	4.3	0.2	157	28.5	28.5	8.0	8.0	29.5	29.5	90.3	90.3	6.0		14.0		17		88				<0.2		1.3	
						4.3	0.3	154	28.5		8.0		29.5		90.3		6.0		14.0		18		88				<0.2		1.2	
					Bottom	7.5	0.2	144	28.4	28.4	8.1	8.1	29.6	29.6	93.2	93.2	6.1	6.1	15.2		16		89				<0.2		1.2	
						7.5	0.2	142	28.4		8.1		29.6		93.2		6.1		15.2		16		89				<0.2		1.2	
SR1A	Fine	Moderate	14:31	5.1	Surface	1.0	-	-	28.5	28.5	7.8	7.8	29.6	29.6	89.3	89.3	5.9	5.9	13.5	14.6	13	14	-	-	819971	812663	-	-	-	-
						1.0	-	-	28.5		7.8		29.6		89.3		5.9		13.5		13		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.5	28.5	7.9	7.9	29.6	29.6	88.3	88.3	5.8	5.8	15.6		14		-				-		-	
						4.1	-	-	28.5		7.9		29.6		88.3		5.8		15.6		14		-				-		-	
SR2	Fine	Moderate	14:45	4.8	Surface	1.0	0.3	134	28.5	28.5	7.8	7.8	29.6	29.6	88.5	88.5	5.8	5.8	13.7	14.2	14	14	83	85	821464	814186	<0.2	<0.2	1.1	1.2
						1.0	0.3	137	28.5		7.8		29.6		88.5		5.8		13.7		13		83				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	143	28.5	28.5	7.8	7.8	29.6	29.6	88.5	88.5	5.8	5.8	14.7		13		87				<0.2		1.2	
						3.8	0.3	149	28.5		7.8		29.6		88.5		5.8		14.7		14		88				<0.2		1.2	
SR3	Fine	Moderate	13:37	8.3	Surface	1.0	0.0	152	28.7	28.7	7.9	7.9	27.2	27.2	88.9	88.9	5.9	5.9	7.2	9.9	7	7	-	-	822124	807567	-	-	-	-
						1.0	0.0	152	28.7		7.9		27.2		88.9		5.9		7.2		8		-				-		-	
					Middle	4.2	0.2	147	28.5	28.5	8.0	8.0	27.7	27.7	88.9	88.9	5.9		10.0		8		-				-		-	
						4.2	0.2	149	28.5		8.0		27.7		88.9		5.9		10.0		6		-				-		-	
					Bottom	7.3	0.3	158	28.2	28.2	7.9	7.9	29.8	29.8	91.8	91.8	6.1	6.1	12.4		6		-				-		-	
						7.3	0.3	168	28.2		7.9		29.8		91.8		6.1		12.4		5		-				-		-	
SR4A	Sunny	Moderate	14:21	8.6	Surface	1.0	0.6	62	27.2	27.2	8.2	8.2	30.7	30.7	91.7	91.7	6.1	6.1	9.9	13.2	13	13	-	-	817177	807802	-	-	-	-
						1.0	0.6	66	27.2		8.2		30.7		91.6		6.1		9.9		12		-				-		-	
					Middle	4.3	0.5	71	27.1	27.1	8.2	8.2	30.8	30.8	90.5	90.4	6.1		11.3		14		-				-		-	
						4.3	0.5	71	27.1		8.2		30.8		90.2		6.0		11.4		14		-				-		-	
					Bottom	7.6	0.4	77	27.0	27.0	8.2	8.2	31.0	31.0	90.3	90.4	6.1	6.1	18.5		14		-				-		-	
						7.6	0.4	78	27.0		8.2		31.0		90.4		6.1		18.1		13		-				-		-	
SR5A	Sunny	Calm	14:36	5.5	Surface	1.0	0.1	346	27.1	27.1	8.1	8.1	30.9	30.9	85.8	85.7	5.8	5.8	9.6	12.6	7	6	-	-	816598	810711	-	-	-	-
						1.0	0.1	318	27.0		8.1		30.9		85.5		5.7		10.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	7	26.9	26.9	8.1	8.1	31.0	31.0	85.1	85.2	5.7	5.7	15.0		5		-				-		-	
						4.5	0.1	7	26.9		8.1		31.0		85.2		5.7		15.2		6		-				-		-	
SR6A	Sunny	Calm	15:03	4.4	Surface	1.0	0.0	10	27.4	27.4	8.1	8.1	30.3	30.4	84.3	84.4	5.6	5.6	10.1	10.6	6	6	-	-	817977	814757	-	-	-	-
						1.0	0.0	10	27.4		8.1		30.4		84.5		5.6		10.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	14	27.3	27.4	8.1	8.1	30.4	30.4	85.9	86.0	5.7	5.8	11.1		6		-				-		-	
						3.4	0.0	14	27.4		8.1		30.4		86.1		5.8		11.1		6		-				-		-	
SR7	Fine	Moderate	15:42	16.7	Surface	1.0	0.1	184	28.8	28.8	7.9	7.9	31.0	31.0	82.9	82.9	5.4	5.4	5.4	7.0	6	7	-	-	823621	823726	-	-	-	-
						1.0	0.1	186	28.8		7.9		31.0		82.9		5.4		5.4		5		-				-		-	
					Middle	8.4	0.1	88	28.7	28.7	7.9	7.9	31.4	31.4	81.7	81.7	5.3	5.4	7.2		7		-				-		-	
						8.4	0.1	91	28.7		7.9		31.4		81.7		5.3		7.2		7		-				-		-	
					Bottom	15.7	0.1	97	28.7	28.7	7.9	7.9	31.5	31.5	82.2	82.2	5.3	5.3	8.3		9		-				-		-	
						15.7	0.1	102	28.7		7.9		31.5		82.2		5.3		8.3		8		-				-		-	
SR8	Fine	Moderate	14:23	4.8	Surface	1.0	-	-	28.5	28.5	7.9	7.9	29.6	29.6	90.8	90.8	6.0	6.0	14.9	15.6	12	12	-	-	820394	811606	-	-	-	-
						1.0	-	-	28.5		7.9		29.6		90.8		6.0		14.9		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.5	28.5	7.9	7.9	29.6	29.6	92.8	92.8	6.1	6.1	16.2		12		-				-		-	
						3.8	-	-	28.5		7.9		29.6		92.8		6.1		16.2		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 October 19 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	09:34	7.2	Surface	1.0	0.5	31	27.0	27.0	8.2	8.2	31.2	31.2	88.5	88.4	5.9	5.9	11.3	13.0	12	11	86	88	815602	804228	<0.2	<0.2	0.8	1.0
						1.0	0.5	32	27.0		8.2		31.2		88.3		5.9		11.3		11		85				<0.2		1.0	
					Middle	3.6	0.5	22	27.0	27.0	8.2	8.2	31.4	31.4	87.7	87.7	5.9		12.0		11		87				<0.2		1.0	
						3.6	0.5	24	27.0		8.2		31.4		87.6		5.9		12.5		11		88				<0.2		1.0	
					Bottom	6.2	0.4	19	27.0	27.0	8.2	8.2	31.4	31.4	87.4	87.4	5.8	5.8	15.2		12		89				<0.2		1.0	
						6.2	0.4	20	27.0		8.2		31.4		87.4		5.8		15.5		11		90				<0.2		1.0	
C2	Fine	Moderate	09:50	11.3	Surface	1.0	0.3	349	28.6	28.6	7.8	7.8	26.8	26.8	89.0	89.0	5.9	5.9	7.3	13.0	3	4	84	88	825703	806949	<0.2	<0.2	1.2	1.1
						1.0	0.3	321	28.6		7.8		26.8		89.0		5.9		7.3		4		84				<0.2		1.4	
					Middle	5.7	0.3	0	28.7	28.7	7.8	7.8	27.1	27.1	89.1	89.1	5.9		15.0		4		88				<0.2		1.1	
						5.7	0.3	0	28.7		7.8		27.1		89.1		5.9		15.0		4		88				<0.2		1.1	
					Bottom	10.3	0.3	345	28.7	28.7	7.8	7.8	27.6	27.6	94.3	94.3	6.3	6.3	16.8		5		91				<0.2		1.0	
						10.3	0.3	317	28.7		7.8		27.6		94.3		6.3		16.8		5		92				<0.2		1.0	
C3	Fine	Moderate	08:20	11.5	Surface	1.0	0.4	283	28.5	28.5	8.0	8.0	29.6	29.6	88.5	88.5	5.8	5.7	8.3	10.2	9	11	86	88	822108	817817	<0.2	<0.2	1.3	1.1
						1.0	0.5	286	28.5		8.0		29.6		88.5		5.8		8.3		10		87				<0.2		1.2	
					Middle	5.8	0.5	282	28.5	28.5	8.0	8.0	30.0	30.0	85.8	85.8	5.6		10.6		10		88				<0.2		1.1	
						5.8	0.5	298	28.5		8.0		30.0		85.8		5.6		10.6		10		89				<0.2		1.0	
					Bottom	10.5	0.5	286	28.6	28.6	8.0	8.0	30.4	30.4	89.6	89.6	5.9	5.9	11.8		13		90				<0.2		1.2	
						10.5	0.5	311	28.6		8.0		30.4		89.6		5.9		11.8		14		90				<0.2		1.0	
IM1	Fine	Calm	09:47	5.1	Surface	1.0	0.2	353	26.9	26.9	8.2	8.2	31.5	31.5	87.7	87.7	5.9	5.9	12.5	14.8	16	18	85	88	817925	807117	<0.2	<0.2	0.5	0.7
						1.0	0.2	325	26.9		8.2		31.5		87.6		5.9		12.4		17		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	358	26.9	26.9	8.2	8.2	31.5	31.5	87.6	87.6	5.9	5.9	17.2		19		92				<0.2		0.6	
						4.1	0.2	358	26.9		8.2		31.5		87.6		5.9		17.3		19		90				<0.2		0.8	
IM2	Fine	Moderate	09:53	7.2	Surface	1.0	0.3	16	27.0	27.0	8.2	8.2	30.5	30.5	89.3	89.3	6.0	6.0	11.0	13.1	16	16	85	87	818156	806145	<0.2	<0.2	1.0	0.9
						1.0	0.3	17	27.0		8.2		30.5		89.3		6.0		11.0		16		85				<0.2		0.9	
					Middle	3.6	0.3	4	27.0	27.0	8.2	8.2	30.7	30.7	88.9	88.8	6.0		11.9		16		87				<0.2		0.8	
						3.6	0.3	4	27.0		8.2		30.8		88.7		6.0		12.4		15		87				<0.2		0.9	
					Bottom	6.2	0.2	336	26.9	26.9	8.1	8.1	31.3	31.3	88.3	88.4	5.9	5.9	16.2		17		89				<0.2		1.0	
						6.2	0.3	309	26.9		8.1		31.3		88.4		5.9		15.9		15		90				<0.2		1.0	
IM3	Fine	Moderate	09:59	7.4	Surface	1.0	0.4	10	27.1	27.1	8.2	8.2	30.1	30.1	88.5	88.4	6.0	5.9	12.2	15.2	12	13	86	87	818799	805614	<0.2	<0.2	1.8	1.6
						1.0	0.4	10	27.1		8.2		30.2		88.2		5.9		12.9		12		85				<0.2		1.7	
					Middle	3.7	0.4	2	27.1	27.1	8.2	8.1	30.9	30.9	86.8	86.8	5.8		14.6		13		86				<0.2		1.7	
						3.7	0.4	2	27.1		8.1		31.0		86.8		5.8		14.4		14		87				<0.2		1.5	
					Bottom	6.4	0.3	332	27.0	27.0	8.1	8.1	31.2	31.2	87.0	87.0	5.8	5.8	18.7		14		89				<0.2		1.5	
						6.4	0.3	333	27.0		8.1		31.2		87.0		5.8		18.3		13		90				<0.2		1.5	
IM4	Fine	Moderate	10:07	7.8	Surface	1.0	0.5	348	27.1	27.1	8.2	8.2	30.2	30.2	87.2	87.2	5.9	5.9	12.7	15.6	14	14	85	88	819712	804595	<0.2	<0.2	1.3	1.6
						1.0	0.5	320	27.1		8.2		30.2		87.2		5.9		12.4		15		86				<0.2		1.3	
					Middle	3.9	0.4	359	27.0	27.0	8.2	8.2	30.4	30.4	86.8	86.8	5.8		14.9		14		87				<0.2		1.7	
						3.9	0.4	330	27.0		8.2		30.4		86.8		5.8		14.7		15		88				<0.2		1.9	
					Bottom	6.8	0.4	4	27.0	27.0	8.1	8.1	30.4	30.4	86.8	86.9	5.8	5.8	19.4		14		89				<0.2		1.6	
						6.8	0.4	4	27.0		8.1		30.4		86.9		5.8		19.9		14		90				<0.2		1.6	
IM5	Fine	Moderate	10:14	7.5	Surface	1.0	0.7	13	27.1	27.1	8.2	8.2	30.2	30.2	87.7	87.6	5.9	5.9	14.1	16.5	11	13	85	88	820737	804848	<0.2	<0.2	1.8	1.6
						1.0	0.8	13	27.1		8.2		30.3		87.5		5.9		14.2		11		86				<0.2		1.7	
					Middle	3.8	0.6	11	27.1	27.1	8.1	8.1	30.7	30.7	87.1	87.1	5.8		16.7		13		87				<0.2		1.4	
						3.8	0.6	11	27.1		8.1		30.7		87.1		5.8		17.0		13		88				<0.2		1.4	
					Bottom	6.5	0.5	12	27.0	27.0	8.1	8.1	30.8	30.7	87.5	87.6	5.9	5.9	18.6		15		90				<0.2		1.5	
						6.5	0.6	12	27.0		8.1		30.7		87.7		5.9		18.3		14		90				<0.2		1.5	
IM6	Fine	Moderate	10:21	7.3	Surface	1.0	0.3	324	27.0	27.0	8.2	8.2	31.1	31.1	88.0	88.0	5.9	5.9	13.4	13.8	15	16	85	87	821069	805821	<0.2	<0.2	1.6	1.3
						1.0	0.3	347	27.0		8.2		31.1		88.0		5.9		13.5		16		86				<0.2		1.4	
					Middle	3.7	0.2	313	27.0	27.0	8.1	8.1	31.1	31.1	88.0	88.0	5.9		13.9		16		86				<0.2		1.4	
						3.7	0.2	325	27.0		8.1		31.1		88.0		5.9		13.9		17		87				<0.2		1.4	
					Bottom	6.3	0.2	291	27.0	27.0	8.1	8.1	31.1	31.1	88.4	88.5	5.9	5.9	13.9		16		89				<0.2		1.1	
						6.3	0.2	303	27.0		8.1		31.1		88.5		5.9		14.1		16		89				<0.2		1.1	
IM7	Fine	Moderate	10:28	8.3	Surface	1.0	0.1	122	27.3	27.3	8.1	8.1	29.0	29.1	88.2	88.2	5.9	5.9	8.1	12.8	9	10	85	88	821332	806844	<0.2	<0.2	1.4	1.2
						1.0	0.1	126	27.3		8.1		29.2		88.1		5.9		8.7		9		86				<0.2		1.6	
					Middle	4.2	0.3	82	27.0	27.0	8.1	8.1	30.9	30.9	87.7	87.7	5.9		14.5		10		88				<0.2		1.2	
						4.2	0.3	86	27.0		8.1		31.0		87.7		5.9		14.7		10		88				<0.2		1.2	
					Bottom	7.3	0.3	91	27.0	27.0	8.1	8.1	31.2	31.2	88.2	88.2	5.9	5.9	15.1		10		89				<0.2		0.8	
						7.3	0.3	95	27.0		8.1		31.2		88.2		5.9		15.6		9		90				<0.2		0.8	
IM8	Fine	Moderate	09:32	7.0	Surface	1.0	0.2	39	28.6	28.6	7.8	7.8	27.5	27.5	90.3	90.3	6.0	6.1	5.9	7.3	8	8	84	88	821851	808127	<0.2	<0.2	1.2	1.2
						1.0	0.2	40	28.6		7.8		27.5		90.3		6.0		5.9		7		84				<0.2		1.2	
					Middle	3.5	0.0	224	28.5	28.5	7.8	7.8	27.6	27.6	91.7	91.7	6.1		7.6		9		87				<0.2		1.2	
						3.5	0.0	240	28.5		7.8		27.6		91.7		6.1		7.6		8		88				<0.2		1.1	
					Bottom	6.0	0.1	256	28.3	28.3	7.9	7.9	28.5	28.5	96.5	96.5	6.4	6.4	8.4		8		91				<0.2		1.1	
						6.0	0.2	268	28.3		7.9		28.5		96.5		6.4		8.4		8		92				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 October 19 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	09:26	7.5	Surface	1.0	0.2	225	28.2	28.2	7.8	7.8	28.6	28.6	92.2	92.2	6.1	6.1	8.6	10.9	13	12	84	88	822101	808801	<0.2	<0.2	1.4	1.3
						1.0	0.2	235	28.2		7.8		28.6		92.2		6.1		8.6		14		84				<0.2		1.3	
					Middle	3.8	0.2	228	28.2	28.2	7.9	7.9	28.7	28.7	92.0	92.0	6.1		12.2		12		88				<0.2		1.2	
						3.8	0.2	236	28.2		7.9		28.7		92.0		6.1		12.2		11		88				<0.2		1.3	
					Bottom	6.5	0.2	249	28.2	28.2	7.9	7.9	28.9	28.9	100.1	100.1	6.7	6.7	12.0		10		91				<0.2		1.2	
						6.5	0.2	255	28.2		7.9		28.9		100.1		6.7		12.0		9		92				<0.2		1.1	
IM10	Fine	Moderate	09:20	7.9	Surface	1.0	0.5	296	28.4	28.4	7.8	7.8	29.1	29.1	89.8	89.8	5.9	6.0	11.5	12.5	11	12	83	88	822370	809776	<0.2	<0.2	1.1	1.2
						1.0	0.6	296	28.4		7.8		29.1		89.8		5.9		11.5		10		84				<0.2		1.1	
					Middle	4.0	0.5	305	28.4	28.4	7.8	7.8	29.1	29.1	90.9	90.9	6.0		12.5		12		88				<0.2		1.2	
						4.0	0.5	330	28.4		7.8		29.1		90.9		6.0		12.5		13		88				<0.2		1.1	
					Bottom	6.9	0.5	295	28.4	28.4	7.9	7.9	29.1	29.1	92.8	92.8	6.1	6.1	13.4		12		91				<0.2		1.2	
						6.9	0.5	299	28.4		7.9		29.1		92.8		6.1		13.4		13		92				<0.2		1.3	
IM11	Fine	Moderate	09:10	7.5	Surface	1.0	0.5	295	28.4	28.4	7.8	7.8	29.3	29.3	90.9	90.9	6.0	6.1	14.4	15.4	11	13	84	87	822058	811446	<0.2	<0.2	1.1	1.2
						1.0	0.5	319	28.4		7.8		29.3		90.9		6.0		14.4		10		84				<0.2		1.3	
					Middle	3.8	0.5	295	28.4	28.4	7.8	7.8	29.3	29.3	93.8	93.8	6.2		16.1		13		88				<0.2		1.3	
						3.8	0.5	321	28.4		7.8		29.3		93.8		6.2		16.1		13		88				<0.2		1.2	
					Bottom	6.5	0.5	291	28.4	28.4	7.9	7.9	29.3	29.3	98.0	98.0	6.5	6.5	15.7		13		89				<0.2		1.1	
						6.5	0.5	315	28.4		7.9		29.3		98.0		6.5		15.7		15		89				<0.2		1.2	
IM12	Fine	Moderate	09:06	8.5	Surface	1.0	0.5	255	28.4	28.4	7.8	7.8	29.3	29.3	89.4	89.4	5.9	6.0	10.2	11.9	11	13	84	87	821441	812039	<0.2	<0.2	1.1	1.1
						1.0	0.5	262	28.4		7.8		29.3		89.4		5.9		10.2		11		84				<0.2		1.1	
					Middle	4.3	0.4	274	28.4	28.4	7.8	7.8	29.4	29.4	90.1	90.1	6.0		12.4		12		87				<0.2		1.1	
						4.3	0.4	275	28.4		7.8		29.4		90.1		6.0		12.4		11		87				<0.2		1.1	
					Bottom	7.5	0.5	284	28.3	28.3	7.9	7.9	29.5	29.5	95.7	95.7	6.3	6.3	13.2		15		88				<0.2		1.2	
						7.5	0.5	285	28.3		7.9		29.5		95.7		6.3		13.2		17		89				<0.2		1.1	
SR1A	Fine	Moderate	08:50	4.9	Surface	1.0	-	-	28.2	28.2	8.1	8.1	29.4	29.4	87.6	87.6	5.8	5.8	10.8	11.2	23	21	-	-	819977	812656	-	-	-	-
						1.0	-	-	28.2		8.1		29.4		87.6		5.8		10.8		24		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.2	28.2	8.1	8.1	29.4	29.4	91.8	91.8	6.1	6.1	11.6		17		-				-		-	
						3.9	-	-	28.2		8.1		29.4		91.8		6.1		11.6		18		-				-		-	
SR2	Fine	Moderate	08:39	4.5	Surface	1.0	0.4	278	28.3	28.3	8.0	8.0	29.6	29.6	94.5	94.5	6.2	6.2	12.2	10.9	12	17	82	84	821479	814183	<0.2	<0.2	0.9	1.1
						1.0	0.4	281	28.3		8.0		29.6		94.5		6.2		12.2		13		82				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.5	284	28.3	28.3	8.1	8.1	29.6	29.6	102.6	102.9	6.8	6.8	9.6		21		87				<0.2		1.3	
						3.5	0.5	309	28.3		8.1		29.6		103.1		6.8		9.6		22		86				<0.2		1.2	
SR3	Fine	Moderate	09:37	8.7	Surface	1.0	0.1	33	28.6	28.6	7.8	7.8	26.9	26.9	89.4	89.4	6.0	6.0	6.0	8.3	7	6	-	-	822151	807574	-	-	-	-
						1.0	0.1	34	28.6		7.8		26.9		89.4		6.0		6.0		7		-				-		-	
					Middle	4.4	0.1	24	28.6	28.6	7.8	7.8	27.3	27.3	89.0	89.0	5.9		8.7		6		-				-		-	
						4.4	0.1	24	28.6		7.8		27.3		89.0		5.9		8.7		5		-				-		-	
					Bottom	7.7	0.2	21	28.5	28.5	7.8	7.8	27.6	27.6	92.2	92.2	6.1	6.1	10.1		6		-				-		-	
						7.7	0.2	21	28.5		7.8		27.6		92.2		6.1		10.1		5		-				-		-	
SR4A	Fine	Moderate	09:18	8.9	Surface	1.0	0.1	262	26.9	26.9	8.2	8.2	31.1	31.1	85.6	85.6	5.7	5.7	9.2	11.4	10	11	-	-	817196	807817	-	-	-	-
						1.0	0.1	266	26.9		8.2		31.1		85.5		5.7		9.4		10		-				-		-	
					Middle	4.5	0.2	274	26.8	26.8	8.2	8.2	31.1	31.1	84.9	84.9	5.7		11.3		11		-				-		-	
						4.5	0.2	277	26.8		8.2		31.1		84.8		5.7		11.7		11		-				-		-	
					Bottom	7.9	0.2	278	26.8	26.8	8.2	8.2	31.2	31.2	84.6	84.6	5.7	5.7	13.3		11		-				-		-	
						7.9	0.2	284	26.8		8.2		31.2		84.6		5.7		13.3		13		-				-		-	
SR5A	Fine	Calm	09:00	5.3	Surface	1.0	0.1	284	26.9	26.9	8.1	8.1	30.6	30.6	84.3	84.3	5.7	5.7	8.9	9.5	8	9	-	-	816586	810675	-	-	-	-
						1.0	0.2	300	26.9		8.1		30.6		84.3		5.7		9.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	284	26.9	26.9	8.1	8.1	30.8	30.8	84.2	84.2	5.7	5.7	9.9		10		-				-		-	
						4.3	0.1	290	26.9		8.1		30.8		84.2		5.7		10.1		9		-				-		-	
SR6A	Fine	Calm	08:40	3.8	Surface	1.0	0.0	237	27.1	27.1	8.1	8.1	30.2	30.3	79.0	78.9	5.3	5.3	10.6	11.7	8	8	-	-	817939	814758	-	-	-	-
						1.0	0.0	254	27.1		8.1		30.3		78.8		5.3		11.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	238	27.2	27.2	8.1	8.1	30.4	30.4	78.6	78.7	5.3	5.3	12.3		8		-				-		-	
						2.8	0.0	257	27.2		8.1		30.4		78.7		5.3		12.0		8		-				-		-	
SR7	Fine	Moderate	07:53	16.8	Surface	1.0	0.4	249	28.6	28.6	8.0	8.0	30.2	30.2	85.5	85.5	5.6	5.6	6.6	6.9	10	10	-	-	823655	823723	-	-	-	-
						1.0	0.4	253	28.6		8.0		30.2		85.5		5.6		6.6		10		-				-		-	
					Middle	8.4	0.4	250	28.6	28.6	7.9	7.9	30.2	30.2	84.1	84.1	5.5		6.8		9		-				-		-	
						8.4	0.4	251	28.6		7.9		30.2		84.1		5.5		6.8		10		-				-		-	
					Bottom	15.8	0.4	255	28.6	28.6	7.9	7.9	30.2	30.2	83.8	83.8	5.5	5.5	7.3		9		-				-		-	
						15.8	0.4	241	28.6		7.9		30.2		83.8		5.5		7.3		9		-				-		-	
SR8	Fine	Moderate	08:58	5.0	Surface	1.0	-	-	28.3	28.3	8.1	8.1	29.3	29.3	92.7	92.7	6.1	6.1	16.3	17.6	14	14	-	-	820366	811641	-	-	-	-
						1.0	-	-	28.3		8.1		29.3		92.7		6.1		16.3		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	28.2	28.2	8.1	8.1	29.3	29.3	98.0	98.0	6.5	6.5	18.8		13		-				-		-	
						4.0	-	-	28.2		8.1		29.3		98.0		6.5		18.8		14		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 October 19 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	15:50	8.2	Surface	1.0	0.3	169	27.0	27.0	8.2	8.2	30.7	30.8	88.1	87.9	5.9	5.9	9.4	12.4	8	11	86	88	815615	804255	<0.2	<0.2	1.3	1.0
						1.0	0.3	162	26.9		8.2		30.8		87.6		5.9		9.4		10		87				<0.2		1.1	
					Middle	4.1	0.3	142	26.8	26.8	8.2	8.2	31.1	31.1	87.5	87.6	5.9		12.4		10		87				<0.2		1.1	
						4.1	0.3	151	26.8		8.2		31.1		87.7		5.9		12.4		10		88				<0.2		0.8	
					Bottom	7.2	0.2	110	26.9	26.9	8.2	8.2	31.1	31.0	90.1	90.2	6.1	6.1	15.5		13		91				<0.2		0.8	
						7.2	0.2	114	26.9		8.2		31.0		90.3		6.1		15.5		14		90				<0.2		0.8	
C2	Fine	Rough	14:36	8.5	Surface	1.0	0.1	141	28.3	28.3	5.8	5.8	27.5	27.5	86.1	86.0	5.8	5.7	1.0	3.9	6	7	83	88	825698	806937	<0.2	<0.2	1.3	1.3
						1.0	0.1	150	28.3		5.8		27.5		85.8		5.7		1.0		7		84				<0.2		1.2	
					Middle	4.3	0.3	140	28.3	28.3	7.9	7.9	28.0	28.0	84.8	84.8	5.7		3.6		6		88				<0.2		1.3	
						4.3	0.3	139	28.3		7.9		28.1		84.8		5.7		3.5		8		88				<0.2		1.4	
					Bottom	7.5	0.3	145	28.3	28.3	8.8	8.9	28.2	28.2	85.9	86.0	5.7	5.7	7.1		9		91				<0.2		1.3	
						7.5	0.3	137	28.3		8.9		28.2		86.1		5.7		7.0		8		92				<0.2		1.4	
C3	Fine	Rough	17:15	10.8	Surface	1.0	0.2	128	28.4	28.4	5.3	5.4	31.0	31.0	81.1	81.1	5.3	5.3	1.1	5.1	9	10	83	87	822097	817818	<0.2	<0.2	0.6	0.7
						1.0	0.2	132	28.4		5.4		31.0		81.1		5.3		1.1		8		84				<0.2		0.8	
					Middle	5.4	0.2	130	28.4	28.4	8.0	8.0	31.0	31.0	80.2	80.2	5.3		4.7		8		87				<0.2		0.6	
						5.4	0.2	137	28.4		8.1		31.0		80.2		5.3		4.7		9		87				<0.2		0.7	
					Bottom	9.8	0.2	127	28.4	28.4	9.5	9.5	31.0	31.0	80.5	80.6	5.3	5.3	9.3		13		91				<0.2		0.7	
						9.8	0.2	129	28.4		9.5		31.0		80.7		5.3		9.4		12		92				<0.2		0.7	
IM1	Fine	Moderate	15:29	5.0	Surface	1.0	0.1	184	27.1	27.1	8.2	8.2	30.2	30.2	92.8	92.8	6.2	6.2	6.1	5.9	10	10	86	89	817934	807132	<0.2	<0.2	1.2	1.2
						1.0	0.1	199	27.1		8.2		30.2		92.7		6.2		5.9		9		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	222	27.1	27.1	8.2	8.2	30.6	30.5	93.1	93.2	6.3	6.3	5.7		9		90				<0.2		1.3	
						4.0	0.2	233	27.1		8.2		30.5		93.3		6.3		5.7		10		90				<0.2		1.2	
IM2	Fine	Moderate	15:22	7.5	Surface	1.0	0.2	221	26.8	26.8	8.2	8.2	30.4	30.4	89.6	89.6	6.0	6.0	9.2	12.9	10	11	86	89	818181	806175	<0.2	<0.2	1.3	1.3
						1.0	0.2	222	26.8		8.2		30.4		89.6		6.0		9.4		9		86				<0.2		1.3	
					Middle	3.8	0.2	210	26.7	26.7	8.2	8.2	30.7	30.8	89.4	89.5	6.0		12.7		11		89				<0.2		1.5	
						3.8	0.2	211	26.7		8.2		30.8		89.5		6.0		12.7		11		88				<0.2		1.3	
					Bottom	6.5	0.2	221	26.8	26.8	8.2	8.2	31.0	31.0	92.2	92.4	6.2	6.2	16.9		13		90				<0.2		1.1	
						6.5	0.2	225	26.8		8.2		31.0		92.5		6.2		16.9		14		92				<0.2		1.3	
IM3	Fine	Moderate	15:14	7.4	Surface	1.0	0.3	237	27.1	27.1	8.2	8.2	30.0	30.0	89.8	89.7	6.0	6.0	6.5	12.3	12	14	86	88	818792	805572	<0.2	<0.2	1.2	1.2
						1.0	0.3	238	27.1		8.2		30.0		89.6		6.0		6.5		10		85				<0.2		1.2	
					Middle	3.7	0.3	229	26.8	26.8	8.2	8.2	30.8	30.8	88.4	88.5	6.0		13.5		13		87				<0.2		1.3	
						3.7	0.3	213	26.8		8.2		30.8		88.5		6.0		13.5		11		88				<0.2		1.2	
					Bottom	6.4	0.2	192	26.8	26.8	8.2	8.2	30.8	30.8	90.0	90.1	6.1	6.1	17.0		19		90				<0.2		1.1	
						6.4	0.2	186	26.8		8.2		30.8		90.2		6.1		17.0		19		91				<0.2		1.2	
IM4	Fine	Moderate	15:04	7.9	Surface	1.0	0.4	234	27.0	27.0	8.2	8.2	29.5	29.5	89.7	89.6	6.1	6.0	7.5	12.9	10	17	86	89	819715	804620	<0.2	<0.2	1.2	1.1
						1.0	0.4	225	27.0		8.2		29.6		89.4		6.0		7.5		11		87				<0.2		1.2	
					Middle	4.0	0.4	231	26.8	26.8	8.2	8.2	30.6	30.6	86.9	87.0	5.9		13.9		15		89				<0.2		1.0	
						4.0	0.4	212	26.8		8.2		30.6		87.0		5.9		13.9		16		88				<0.2		1.0	
					Bottom	6.9	0.4	198	26.9	26.9	8.1	8.1	30.6	30.6	89.3	89.4	6.0	6.0	17.5		26		91				<0.2		1.2	
						6.9	0.4	204	26.9		8.1		30.6		89.4		6.0		17.5		26		91				<0.2		1.1	
IM5	Fine	Moderate	14:54	7.7	Surface	1.0	0.7	213	26.9	26.9	8.2	8.2	30.1	30.1	87.8	87.8	5.9	5.9	13.4	14.2	13	20	85	88	820725	804859	<0.2	<0.2	1.5	1.3
						1.0	0.7	220	26.9		8.2		30.1		87.7		5.9		13.7		14		86				<0.2		1.3	
					Middle	3.9	0.6	206	26.8	26.8	8.2	8.2	30.5	30.5	87.3	87.3	5.9		13.9		20		88				<0.2		1.4	
						3.9	0.6	217	26.8		8.2		30.5		87.3		5.9		13.9		20		87				<0.2		1.2	
					Bottom	6.7	0.4	211	26.8	26.8	8.1	8.1	30.8	30.8	89.4	89.5	6.0	6.0	15.1		24		90				<0.2		1.1	
						6.7	0.5	218	26.8		8.1		30.8		89.6		6.0		15.1		26		90				<0.2		1.2	
IM6	Fine	Moderate	14:45	7.2	Surface	1.0	0.3	221	26.9	26.9	8.2	8.2	30.7	30.7	90.7	90.7	6.1	6.1	11.7	11.4	15	17	86	88	821041	805819	<0.2	<0.2	1.3	1.2
						1.0	0.3	213	26.9		8.2		30.7		90.7		6.1		11.8		16		86				<0.2		1.2	
					Middle	3.6	0.3	213	26.9	26.9	8.2	8.2	30.7	30.7	90.8	90.8	6.1		11.0		18		87				<0.2		1.2	
						3.6	0.3	204	26.9		8.2		30.7		90.8		6.1		11.1		16		88				<0.2		1.2	
					Bottom	6.2	0.3	201	26.9	26.9	8.2	8.2	30.8	30.8	91.6	91.7	6.2	6.2	11.5		18		90				<0.2		1.1	
						6.2	0.3	195	26.9		8.2		30.8		91.7		6.2		11.5		17		90				<0.2		1.2	
IM7	Fine	Moderate	14:35	8.0	Surface	1.0	0.1	198	27.1	27.1	8.2	8.2	29.6	29.7	90.1	90.1	6.1	6.1	6.7	9.8	9	8	85	88	821359	806819	<0.2	<0.2	1.2	1.2
						1.0	0.1	199	27.1		8.2		29.8		90.0		6.1		6.7		8		87				<0.2		1.2	
					Middle	4.0	0.3	212	26.9	26.9	8.2	8.2	30.6	30.6	88.7	88.7	6.0		10.6		8		87				<0.2		1.3	
						4.0	0.3	213	26.9		8.2		30.6		88.6		6.0		10.8		8		88				<0.2		1.2	
					Bottom	7.0	0.2	205	26.9	26.9	8.2	8.2	30.7	30.7	88.6	88.7	6.0	6.0	12.1		8		91				<0.2		1.2	
						7.0	0.2	192	26.9		8.2		30.7		88.7		6.0		12.1		9		90				<0.2		1.1	
IM8	Fine	Rough	15:09	8.2	Surface	1.0	0.1	177	28.4	28.4	4.8	4.8	28.0	28.0	90.4	90.4	6.0	6.0	1.1	4.1	7	7	84	88	821827	808146	<0.2	<0.2	1.2	1.4
						1.0	0.1	179	28.4		4.8		28.0		90.3		6.0		1.1		6		84				<0.2		1.2	
					Middle	4.1	0.0	185	28.1	28.1	7.5	7.5	28.4	28.4	89.6	89.6	6.0		4.1		7		87				<0.2		1.4	
						4.1	0.0	167	28.1		7.6		28.4		89.6		6.0		4.1		7		89				<0.2		1.4	
					Bottom	7.2	0.1	188	27.9	27.9	8.7	8.7	28.7	28.7	90.2	90.2	6.0	6.0	7.2		8		91				<0.2		1.5	
						7.2	0.1	173	27.9		8.7		28.7		90.2		6.0		7.2		9		92				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 October 19 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	15:14	8.4	Surface	1.0	0.2	166	27.9	27.9	3.1	3.1	28.8	28.8	89.7	89.7	6.0	6.0	0.9	3.8	12	15	86	89	822091	808821	<0.2	<0.2	1.4	1.2
						1.0	0.2	171	27.9		3.1		28.8		89.6		6.0		0.9		12		87				<0.2		1.4	
					Middle	4.2	0.1	156	27.9	27.9	5.1	5.1	28.8	28.8	89.0	89.0	6.0		3.6		14		88				<0.2		1.0	
						4.2	0.1	167	27.8		5.2		28.8		89.0		6.0		3.6		16		89				<0.2		1.3	
					Bottom	7.4	0.1	134	27.9	27.9	8.6	8.6	28.8	28.8	89.0	89.1	6.0	6.0	7.0		18		91				<0.2		1.0	
						7.4	0.1	144	27.9		8.6		28.8		89.1		6.0		7.0		17		91				<0.2		1.1	
IM10	Fine	Rough	15:20	7.8	Surface	1.0	0.3	136	28.1	28.1	5.1	5.1	28.9	28.9	88.0	88.0	5.9	5.9	0.9	3.9	14	15	83	88	822372	809772	<0.2	<0.2	1.1	1.1
						1.0	0.4	138	28.1		5.2		28.9		88.0		5.9		0.9		14		84				<0.2		1.2	
					Middle	3.9	0.5	134	28.0	28.0	6.3	6.3	28.9	28.9	87.1	87.2	5.8		4.1		15		89				<0.2		1.2	
						3.9	0.5	139	28.0		6.3		28.9		87.2		5.8		4.1		15		90				<0.2		1.2	
					Bottom	6.8	0.3	137	28.0	28.0	7.7	7.7	28.9	28.9	87.8	87.9	5.9	5.9	6.7		15		91				<0.2		1.0	
						6.8	0.3	123	28.0		7.7		28.9		88.0		5.9		6.7		16		92				<0.2		1.1	
IM11	Fine	Rough	15:46	7.7	Surface	1.0	0.2	134	28.2	28.2	6.4	6.5	29.4	29.4	85.3	85.3	5.7	5.7	0.9	3.5	20	19	84	89	822051	811460	<0.2	<0.2	1.3	1.2
						1.0	0.3	137	28.2		6.5		29.4		85.3		5.7		0.9		20		85				<0.2		1.3	
					Middle	3.9	0.3	124	28.1	28.1	7.0	7.0	29.4	29.4	85.2	85.2	5.7		3.1		19		90				<0.2		1.3	
						3.9	0.3	113	28.1		7.0		29.4		85.2		5.7		3.1		18		90				<0.2		1.3	
					Bottom	6.7	0.2	132	28.1	28.1	8.3	8.3	29.4	29.4	85.7	85.8	5.7	5.7	6.5		18		92				<0.2		0.9	
						6.7	0.2	148	28.1		8.4		29.4		85.9		5.7		6.5		20		92				<0.2		0.9	
IM12	Fine	Rough	16:28	7.4	Surface	1.0	0.3	124	28.2	28.2	10.3	10.3	29.4	29.4	86.1	86.1	5.7	5.7	1.2	4.0	10	14	84	88	821457	812026	<0.2	<0.2	0.9	1.2
						1.0	0.3	129	28.2		10.3		29.4		86.1		5.7		1.2		11		85				<0.2		1.0	
					Middle	3.7	0.3	126	28.2	28.2	12.5	12.5	29.4	29.4	86.0	86.1	5.7		4.0		14		88				<0.2		1.0	
						3.7	0.3	127	28.2		12.5		29.4		86.1		5.7		4.0		14		88				<0.2		1.4	
					Bottom	6.4	0.2	125	28.2	28.2	15.1	15.1	29.4	29.4	86.6	86.7	5.7	5.8	6.7		18		91				<0.2		1.4	
						6.4	0.2	127	28.2		15.1		29.4		86.8		5.8		6.7		19		91				<0.2		1.3	
SR1A	Fine	Rough	16:51	4.5	Surface	1.0	-	-	28.3	28.3	3.9	3.9	29.6	29.6	84.3	84.3	5.6	5.6	1.1	2.5	14	14	-	-	819977	812660	-	-	-	-
						1.0	-	-	28.3		3.9		29.6		84.3		5.6		1.1		14		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.3	28.3	5.9	5.9	29.8	29.8	81.9	81.9	5.4	5.4	4.0		14		-				-		-	
						3.5	-	-	28.3		6.0		29.8		81.9		5.4		4.0		15		-				-		-	
SR2	Fine	Rough	17:02	4.8	Surface	1.0	0.3	131	28.3	28.3	6.0	6.0	29.5	29.5	84.1	84.0	5.6	5.6	0.9	2.2	15	16	87	89	821464	814182	<0.2	<0.2	0.9	1.0
						1.0	0.3	139	28.3		6.0		29.5		83.9		5.5		0.8		15		88				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	139	28.3	28.3	8.1	8.1	29.8	29.8	82.1	82.1	5.4	5.4	3.5		16		91				<0.2		1.2	
						3.8	0.3	153	28.3		8.2		29.8		82.1		5.4		3.5		16		91				<0.2		1.0	
SR3	Fine	Rough	15:03	8.0	Surface	1.0	0.1	186	28.4	28.4	4.4	4.4	27.5	27.5	89.3	89.3	6.0	5.9	1.1	4.5	5	6	-	-	822162	807591	-	-	-	-
						1.0	0.1	177	28.4		4.4		27.5		89.2		6.0		1.1		5		-				-		-	
					Middle	4.0	0.1	165	28.2	28.2	5.8	5.8	28.1	28.1	86.6	86.6	5.8		4.7		6		-				-		-	
						4.0	0.1	169	28.2		5.8		28.1		86.6		5.8		4.7		6		-				-		-	
					Bottom	7.0	0.2	183	28.1	28.1	6.4	6.4	28.4	28.4	87.1	87.3	5.8	5.8	7.8		6		-				-		-	
						7.0	0.2	192	28.1		6.4		28.4		87.5		5.8		7.8		5		-				-		-	
SR4A	Fine	Moderate	16:10	8.4	Surface	1.0	0.3	83	27.1	27.1	8.2	8.2	30.1	30.1	93.1	93.0	6.3	6.1	7.6	10.6	8	9	-	-	817173	807787	-	-	-	-
						1.0	0.4	88	27.1		8.2		30.1		92.9		6.2		7.7		8		-				-		-	
					Middle	4.2	0.2	64	27.0	27.0	8.2	8.2	30.8	30.8	89.3	89.3	6.0		11.7		10		-				-		-	
						4.2	0.3	69	27.0		8.2		30.8		89.3		6.0		11.9		10		-				-		-	
					Bottom	7.4	0.2	53	27.0	27.0	8.2	8.2	30.9	30.9	89.9	90.0	6.0	6.0	12.5		10		-				-		-	
						7.4	0.2	58	27.0		8.2		30.9		90.1		6.0		12.5		10		-				-		-	
SR5A	Fine	Moderate	16:34	5.0	Surface	1.0	0.1	60	27.0	27.0	8.2	8.2	30.3	30.3	89.1	89.1	6.0	6.0	8.8	9.5	8	10	-	-	816596	810683	-	-	-	-
						1.0	0.1	63	27.0		8.2		30.3		89.1		6.0		8.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	116	26.9	26.9	8.2	8.2	30.3	30.3	91.4	91.5	6.2	6.2	10.0		12		-				-		-	
						4.0	0.1	120	26.9		8.2		30.3		91.6		6.2		10.1		10		-				-		-	
SR6A	Fine	Moderate	17:06	4.9	Surface	1.0	0.0	141	27.7	27.7	8.1	8.1	30.3	30.3	92.7	92.7	6.2	6.2	7.7	9.8	5	6	-	-	817944	814752	-	-	-	-
						1.0	0.0	151	27.6		8.1		30.3		92.6		6.2		7.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	73	27.1	27.1	8.1	8.1	30.4	30.4	86.5	86.7	5.8	5.8	11.5		7		-				-		-	
						3.9	0.0	77	27.1		8.1		30.4		86.8		5.8		12.1		7		-				-		-	
SR7	Fine	Rough	17:46	16.2	Surface	1.0	0.1	330	28.7	28.7	3.5	3.5	30.9	30.9	81.6	81.6	5.3	5.3	0.9	8.0	3	5	-	-	823616	823751	-	-	-	-
						1.0	0.1	348	28.7		3.6		30.9		81.5		5.3		0.9		4		-				-		-	
					Middle	8.1	0.1	111	28.4	28.4	4.6	4.6	31.4	31.4	80.5	80.6	5.3		8.1		5		-				-		-	
						8.1	0.1	111	28.4		4.6		31.4		80.6		5.3		8.1		6		-				-		-	
					Bottom	15.2	0.1	158	28.4	28.4	5.5	5.6	31.4	31.4	82.1	82.2	5.4	5.4	15.1		6		-				-		-	
						15.2	0.1	173	28.4		5.6		31.4		82.3		5.4		15.0		6		-				-		-	
SR8	Fine	Rough	16:42	4.3	Surface	1.0	-	-	28.3	28.3	6.9	6.9	29.6	29.6	84.1	84.1	5.6	5.6	1.2	2.1	14	15	-	-	820406	811626	-	-	-	-
						1.0	-	-	28.3		6.9		29.6		84.0		5.6		1.2		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.3	28.3	8.7	8.7	29.7	29.7	83.8	83.8	5.5	5.5	2.9		15		-				-		-	
						3.3	-	-	28.3		8.7		29.7		83.8		5.5		2.9		17		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	10:28	8.0	Surface	1.0	0.3	41	26.7	26.7	8.1	8.1	29.9	29.9	88.9	88.9	6.0	6.0	11.9	14.7	11	15	85	88	815623	804245	<0.2	<0.2	1.5	1.6
						1.0	0.3	42	26.7		8.1		30.0		88.8		6.0		11.9		12		86				<0.2		1.4	
					Middle	4.0	0.3	34	26.7	26.7	8.1	8.1	30.6	30.6	88.5	88.6	6.0		15.1		13		88				<0.2		1.6	
						4.0	0.3	35	26.7		8.1		30.6		88.6		6.0		15.6		14		89				<0.2		1.4	
					Bottom	7.0	0.2	14	26.7	26.7	8.1	8.1	30.7	30.7	89.3	89.4	6.0	6.0	16.7		18		90				<0.2		1.4	
						7.0	0.2	14	26.7		8.1		30.7		89.4		6.0		16.8		19		91				<0.2		2.0	
C2	Sunny	Moderate	12:18	7.9	Surface	1.0	0.3	322	28.3	28.3	6.0	6.1	27.6	27.6	85.3	85.3	5.7	5.7	1.2	4.2	5	5	85	89	825698	806950	<0.2	<0.2	2.0	1.6
						1.0	0.4	353	28.3		6.1		27.7		85.2		5.7		1.2		5		85				<0.2		2.0	
					Middle	4.0	0.3	17	28.3	28.3	8.5	8.5	28.2	28.2	84.2	84.2	5.6		3.8		6		88				<0.2		1.1	
						4.0	0.3	18	28.3		8.5		28.2		84.2		5.6		3.8		5		89				<0.2		1.7	
					Bottom	6.9	0.3	345	28.3	28.3	10.7	10.7	28.3	28.3	85.6	85.7	5.7	5.7	7.7		5		93				<0.2		1.5	
						6.9	0.3	359	28.3		10.7		28.3		85.8		5.7		7.7		5		94				<0.2		1.3	
C3	Sunny	Moderate	09:45	11.8	Surface	1.0	0.5	287	28.1	28.1	5.8	5.9	29.5	29.5	84.7	84.6	5.6	5.6	1.2	5.9	10	9	83	88	822096	817824	<0.2	<0.2	0.9	1.3
						1.0	0.5	302	28.1		5.9		29.5		84.5		5.6		1.2		9		83				<0.2		0.8	
					Middle	5.9	0.5	288	28.2	28.2	6.2	6.3	29.6	29.6	83.4	83.3	5.5		5.6		9		88				<0.2		1.0	
						5.9	0.5	299	28.2		6.3		29.6		83.2		5.5		5.4		8		89				<0.2		1.7	
					Bottom	10.8	0.5	286	28.3	28.3	7.1	7.1	29.8	29.8	83.0	83.1	5.5	5.5	11.0		9		91				<0.2		1.8	
						10.8	0.5	288	28.3		7.1		29.8		83.2		5.5		10.9		10		92				<0.2		1.4	
IM1	Fine	Moderate	10:44	5.6	Surface	1.0	0.2	352	26.9	26.9	8.2	8.2	30.8	30.8	88.2	88.3	5.9	5.9	10.3	13.1	12	13	86	89	817933	807143	<0.2	<0.2	1.4	1.5
						1.0	0.2	324	26.9		8.2		30.8		88.3		5.9		10.3		12		87				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	17	26.8	26.8	8.2	8.2	31.0	31.0	91.4	91.5	6.1	6.2	16.0		14		90				<0.2		1.6	
						4.6	0.2	17	26.8		8.2		31.0		91.6		6.2		16.0		15		91				<0.2		1.7	
IM2	Fine	Moderate	10:51	7.7	Surface	1.0	0.4	16	27.0	27.0	8.2	8.2	29.8	29.8	90.8	90.8	6.1	6.0	7.1	10.5	7	11	86	88	818181	806144	<0.2	<0.2	1.3	1.5
						1.0	0.4	16	27.0		8.2		29.8		90.7		6.1		7.1		7		86				<0.2		1.2	
					Middle	3.9	0.3	10	26.8	26.8	8.2	8.2	30.8	30.8	88.3	88.3	5.9		11.2		10		87				<0.2		1.2	
						3.9	0.3	10	26.8		8.2		30.8		88.3		5.9		11.2		10		88				<0.2		1.5	
					Bottom	6.7	0.2	352	26.8	26.8	8.1	8.1	30.9	30.9	91.1	91.2	6.1	6.1	13.4		14		90				<0.2		1.7	
						6.7	0.2	353	26.8		8.1		30.9		91.3		6.1		13.4		14		91				<0.2		1.8	
IM3	Fine	Moderate	10:58	7.0	Surface	1.0	0.4	9	26.9	26.9	8.2	8.2	30.1	30.1	88.2	88.2	6.0	5.9	10.5	11.7	10	12	85	88	818761	805587	<0.2	<0.2	1.4	1.5
						1.0	0.4	9	26.9		8.2		30.1		88.1		5.9		10.6		9		86				<0.2		1.4	
					Middle	3.5	0.3	359	26.8	26.8	8.2	8.2	30.5	30.5	87.4	87.4	5.9		11.6		11		88				<0.2		1.8	
						3.5	0.4	330	26.8		8.2		30.5		87.3		5.9		11.5		11		87				<0.2		1.7	
					Bottom	6.0	0.3	334	26.9	26.9	8.1	8.1	31.0	30.9	87.9	88.0	5.9	5.9	13.1		14		90				<0.2		1.7	
						6.0	0.3	341	26.9		8.1		30.9		88.0		5.9		13.1		16		91				<0.2		1.2	
IM4	Fine	Moderate	11:07	7.3	Surface	1.0	0.6	359	26.8	26.8	8.2	8.2	29.6	29.6	88.7	88.7	6.0	6.0	10.9	13.5	10	14	86	89	819743	804621	<0.2	<0.2	1.5	1.6
						1.0	0.7	330	26.8		8.2		29.6		88.6		6.0		11.1		10		86				<0.2		1.6	
					Middle	3.7	0.5	351	26.8	26.8	8.2	8.2	30.1	30.1	88.0	88.0	6.0		14.1		15		89				<0.2		1.4	
						3.7	0.6	323	26.8		8.2		30.1		88.0		6.0		14.1		15		88				<0.2		1.3	
					Bottom	6.3	0.4	340	26.8	26.8	8.1	8.1	30.2	30.2	88.5	88.6	6.0	6.0	15.3		16		91				<0.2		2.0	
						6.3	0.4	346	26.8		8.1		30.2		88.6		6.0		15.3		16		91				<0.2		2.0	
IM5	Fine	Moderate	11:15	7.7	Surface	1.0	0.7	9	26.8	26.8	8.2	8.2	30.2	30.2	88.2	88.2	6.0	5.9	14.1	15.0	10	15	86	89	820744	804890	<0.2	<0.2	2.7	2.4
						1.0	0.7	9	26.8		8.2		30.2		88.1		5.9		14.7		11		86				<0.2		2.8	
					Middle	3.9	0.6	7	26.8	26.8	8.1	8.1	30.5	30.5	88.1	88.1	5.9		14.9		16		87				<0.2		1.7	
						3.9	0.7	7	26.8		8.1		30.5		88.1		5.9		14.9		15		89				<0.2		2.0	
					Bottom	6.7	0.5	8	26.8	26.8	8.1	8.1	30.5	30.5	89.6	89.7	6.0	6.1	15.9		19		92				<0.2		2.7	
						6.7	0.5	8	26.8		8.1		30.5		89.8		6.1		15.9		21		91				<0.2		2.5	
IM6	Fine	Moderate	11:21	7.8	Surface	1.0	0.1	42	26.8	26.8	8.2	8.2	30.7	30.7	88.6	88.6	6.0	6.0	15.4	16.3	21	20	86	88	821042	805843	<0.2	<0.2	2.3	2.0
						1.0	0.1	45	26.8		8.2		30.7		88.6		6.0		15.4		20		87				<0.2		2.4	
					Middle	3.9	0.1	51	26.8	26.8	8.2	8.2	30.7	30.7	88.6	88.6	6.0		16.1		20		88				<0.2		1.9	
						3.9	0.1	51	26.8		8.2		30.7		88.6		6.0		15.8		19		87				<0.2		1.8	
					Bottom	6.8	0.1	82	26.8	26.8	8.2	8.2	30.7	30.7	89.4	89.5	6.0	6.0	17.4		19		90				<0.2		1.9	
						6.8	0.1	88	26.8		8.2		30.7		89.5		6.0		17.5		19		91				<0.2		1.9	
IM7	Fine	Moderate	11:29	7.9	Surface	1.0	0.1	137	27.1	27.1	8.2	8.2	30.0	30.0	90.5	90.5	6.1	6.1	7.7	9.4	6	10	86	89	821356	806855	<0.2	<0.2	1.5	1.5
						1.0	0.1	146	27.1		8.2		30.0		90.5		6.1		7.7		6		87				<0.2		1.5	
					Middle	4.0	0.2	115	27.0	27.0	8.2	8.2	30.2	30.3	90.5	90.5	6.1		8.4		9		89				<0.2		1.5	
						4.0	0.2	124	27.0		8.2		30.3		90.4		6.1		8.8		9		87				<0.2		1.6	
					Bottom	6.9	0.3	110	26.9	26.9	8.2	8.2	30.6	30.6	91.3	91.4	6.1	6.2	12.0		14		90				<0.2		1.6	
						6.9	0.3	112	26.9		8.2		30.6		91.5		6.2		12.0		14		92				<0.2		1.5	
IM8	Sunny	Moderate	11:22	8.3	Surface	1.0	0.1	216	28.3	28.3	4.7	4.7	27.6	27.6	88.5	88.5	5.9	5.9	1.0	4.6	7	8	84	89	821850	808163	<0.2	<0.2	2.2	1.9
						1.0	0.1	228	28.3		4.8		27.6		88.5		5.9		1.0		7		85				<0.2		2.1	
					Middle	4.2	0.1	304	28.3	28.3	5.9	5.9	27.7	27.9	87.4	87.1	5.8		4.7		8		88				<0.2		2.2	
						4.2	0.1	316	28.2		5.9		28.1		86.8		5.8		4.7		8		88				<0.2		2.1	
					Bottom	7.3	0.1	2	28.2	28.2	6.6	6.6	28.1	28.2	86.8	86.8	5.8	5.8	8.0		9		93				<0.2		1.2	
						7.3	0.1	2	28.2		6.6		28.4		86.7		5.8		8.1		10		93				<0.2		1.5	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	11:11	8.5	Surface	1.0	0.1	236	28.2	28.2	3.2	3.2	28.0	28.0	87.4	87.4	5.8	5.8	1.1	3.9	9	8	83	89	822112	808810	<0.2	<0.2	1.8	1.8
						1.0	0.1	259	28.2		3.2		28.0		87.4		5.8		1.1		8		85				<0.2		1.9	
					Middle	4.3	0.1	315	28.2	28.2	3.7	3.8	28.2	28.2	87.4	87.5	5.8		3.6		8		90				<0.2		2.0	
						4.3	0.1	323	28.2		3.8		28.2		87.5		5.8		3.6		6		90				<0.2		2.0	
					Bottom	7.5	0.1	3	28.2	28.2	5.7	5.8	28.2	28.1	88.0	88.1	5.9	5.9	7.1		8		92				<0.2		1.5	
						7.5	0.1	3	28.2		5.8		28.1		88.1		5.9		7.1		7		92				<0.2		1.5	
IM10	Sunny	Moderate	11:00	8.2	Surface	1.0	0.5	299	28.2	28.2	4.6	4.7	28.0	28.0	87.1	87.1	5.8	5.8	1.1	4.1	5	7	85	89	822370	809817	<0.2	<0.2	1.6	1.3
						1.0	0.5	320	28.2		4.7		28.1		87.1		5.8		1.1		6		85				<0.2		1.5	
					Middle	4.1	0.5	300	28.1	28.1	6.3	6.3	28.4	28.4	86.5	86.5	5.8		3.6		7		88				<0.2		1.2	
						4.1	0.5	329	28.1		6.4		28.4		86.4		5.8		3.5		6		89				<0.2		1.2	
					Bottom	7.2	0.5	291	28.1	28.1	7.4	7.3	28.4	28.4	86.3	86.3	5.8	5.8	7.7		9		91				<0.2		1.1	
						7.2	0.6	294	28.1		7.3		28.4		86.3		5.8		7.7		9		93				<0.2		1.4	
IM11	Sunny	Moderate	10:59	7.3	Surface	1.0	0.5	290	28.2	28.2	5.4	5.5	28.0	28.0	87.1	87.1	5.8	5.8	0.9	3.6	6	7	85	89	822055	811456	<0.2	<0.2	1.5	1.8
						1.0	0.5	316	28.2		5.5		28.1		87.1		5.8		0.8		6		85				<0.2		1.6	
					Middle	3.7	0.5	296	28.2	28.2	6.0	6.0	28.2	28.3	86.8	86.8	5.8		3.6		8		88				<0.2		1.9	
						3.7	0.5	297	28.2		6.0		28.3		86.7		5.8		3.6		8		90				<0.2		2.1	
					Bottom	6.3	0.4	293	28.2	28.2	5.9	5.9	28.3	28.2	86.7	86.8	5.8	5.8	6.3		8		94				<0.2		1.9	
						6.3	0.5	294	28.2		5.9		28.1		86.8		5.8		6.3		8		94				<0.2		1.8	
IM12	Sunny	Moderate	10:48	7.5	Surface	1.0	0.1	248	28.3	28.3	3.1	3.1	27.8	27.8	87.3	87.3	5.8	5.8	0.8	3.6	7	7	85	89	821479	812058	<0.2	<0.2	1.3	1.3
						1.0	0.1	269	28.3		3.1		27.9		87.3		5.8		0.8		6		85				<0.2		1.4	
					Middle	3.8	0.1	301	28.1	28.1	5.2	5.2	28.3	28.3	86.7	86.7	5.8		3.2		7		89				<0.2		1.1	
						3.8	0.1	325	28.1		5.2		28.3		86.6		5.8		3.2		7		89				<0.2		1.0	
					Bottom	6.5	0.1	359	28.1	28.1	6.5	6.6	28.4	28.4	87.2	87.3	5.8	5.8	6.6		6		94				<0.2		1.2	
						6.5	0.1	330	28.1		6.6		28.4		87.3		5.8		6.6		6		94				<0.2		1.7	
SR1A	Sunny	Moderate	10:14	4.3	Surface	1.0	-	-	28.1	28.1	6.1	6.1	29.3	29.3	85.8	85.7	5.7	5.7	1.0	2.2	9	12	-	-	819971	812665	-	-	-	-
						1.0	-	-	28.1		6.1		29.3		85.6		5.7		1.0		10		-				-		-	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.0	28.0	8.2	8.2	29.3	29.3	85.0	85.1	5.7	5.7	3.3		15		-				-		-	
						3.3	-	-	28.0		8.2		29.3		85.1		5.7		3.3		14		-				-		-	
SR2	Sunny	Moderate	10:03	4.6	Surface	1.0	0.6	316	28.0	28.0	6.4	6.4	29.0	29.0	87.6	87.6	5.8	5.8	0.8	2.4	8	9	83	85	821475	814175	<0.2	<0.2	1.5	1.6
						1.0	0.6	332	28.0		6.5		29.0		87.6		5.8		0.8		7		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	322	28.0	28.0	7.2	7.2	29.4	29.4	85.2	85.4	5.7	5.7	4.0		10		87				<0.2		1.6	
						3.6	0.4	328	28.0		7.2		29.4		85.5		5.7		4.0		11		87				<0.2		1.7	
SR3	Sunny	Moderate	11:33	8.0	Surface	1.0	0.1	80	28.2	28.2	5.6	5.6	27.7	27.7	89.7	89.9	6.0	6.0	1.1	4.0	4	4	-	-	822156	807563	-	-	-	-
						1.0	0.1	83	28.2		5.6		27.7		90.1		6.0		1.1		4		-				-		-	
					Middle	4.0	0.1	298	28.3	28.3	5.1	5.0	27.7	27.7	87.9	87.9	5.9		3.4		5		-				-		-	
						4.0	0.1	326	28.3		5.0		27.7		87.9		5.9		3.3		4		-				-		-	
					Bottom	7.0	0.1	281	28.3	28.3	5.2	5.2	27.8	27.8	87.6	87.7	5.9	5.9	7.4		4		-				-		-	
						7.0	0.1	305	28.3		5.3		27.8		87.7		5.9		7.4		5		-				-		-	
SR4A	Fine	Moderate	10:05	8.2	Surface	1.0	0.1	232	26.8	26.8	8.1	8.1	30.3	30.3	86.6	86.6	5.8	5.8	10.5	11.6	12	14	-	-	817172	807809	-	-	-	-
						1.0	0.1	251	26.8		8.1		30.3		86.6		5.8		10.6		12		-				-		-	
					Middle	4.1	0.1	239	26.8	26.8	8.1	8.1	30.3	30.3	86.5	86.6	5.8		11.9		14		-				-		-	
						4.1	0.1	252	26.8		8.1		30.3		86.6		5.8		11.8		13		-				-		-	
					Bottom	7.2	0.1	249	26.7	26.7	8.1	8.1	30.3	30.3	87.5	87.6	5.9	5.9	12.3		14		-				-		-	
						7.2	0.1	249	26.7		8.1		30.3		87.6		5.9		12.4		16		-				-		-	
SR5A	Fine	Moderate	09:43	5.2	Surface	1.0	0.2	294	26.8	26.8	8.1	8.1	30.4	30.4	85.4	85.4	5.8	5.8	12.3	14.1	15	16	-	-	816572	810699	-	-	-	-
						1.0	0.3	318	26.8		8.1		30.4		85.3		5.8		12.5		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	294	26.8	26.8	8.1	8.1	30.4	30.4	85.9	86.0	5.8	5.8	15.7		18		-				-		-	
						4.2	0.2	301	26.8		8.1		30.4		86.0		5.8		15.7		17		-				-		-	
SR6A	Fine	Moderate	09:16	4.6	Surface	1.0	0.0	229	27.0	27.0	8.0	8.0	30.1	30.1	82.1	82.1	5.5	5.5	10.5	11.9	7	13	-	-	817975	814738	-	-	-	-
						1.0	0.0	233	27.0		8.0		30.1		82.0		5.5		10.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	223	27.0	27.0	8.0	8.0	30.4	30.4	81.0	81.1	5.4	5.4	13.1		19		-				-		-	
						3.6	0.0	242	27.0		8.0		30.4		81.1		5.4		13.1		20		-				-		-	
SR7	Sunny	Moderate	09:16	16.4	Surface	1.0	0.1	208	28.3	28.3	5.0	4.9	29.9	29.9	84.1	84.1	5.5	5.5	0.9	8.0	6	7	-	-	823659	823739	-	-	-	-
						1.0	0.1	214	28.3		4.9		29.9		84.1		5.5		0.9		6		-				-		-	
					Middle	8.2	0.2	213	28.3	28.3	5.7	5.7	30.0	30.0	82.9	82.9	5.5		8.5		7		-				-		-	
						8.2	0.2	220	28.3		5.7		30.0		82.9		5.5		8.5		7		-				-		-	
					Bottom	15.4	0.1	151	28.3	28.3	5.6	5.6	30.1	30.1	82.8	82.9	5.5	5.5	14.6		8		-				-		-	
						15.4	0.1	159	28.3		5.6		30.1		82.9		5.5		14.6		7		-				-		-	
SR8	Sunny	Moderate	10:22	3.9	Surface	1.0	-	-	28.0	28.0	10.0	10.0	28.9	28.9	88.0	88.0	5.9	5.9	0.8	1.6	10	11	-	-	820392	811619	-	-	-	-
						1.0	-	-	28.0		10.1		28.9		88.0		5.9		0.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	28.0	28.0	12.6	12.6	28.9	28.9	88.0	88.1	5.9	5.9	2.4		11		-				-		-	
						2.9	-	-	28.0		12.6		28.9		88.1		5.9		2.3		11		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 19 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	06:39	7.6	Surface	1.0	0.1	223	27.6	27.6	8.0	8.0	29.4	29.4	87.9	87.9	5.9	5.7	4.7	8.6	5	6	83	86	815598	804267	<0.2	<0.2	0.9	1.0
						1.0	0.1	224	27.6		8.0		29.4		87.8		5.9		4.7		6		84				<0.2		1.0	
					Middle	3.8	0.2	212	27.8	27.8	8.0	8.0	30.3	30.3	83.1	83.2	5.5		7.7		6	6	86				<0.2		1.0	
						3.8	0.2	213	27.8		8.0		30.3		83.3		5.5		7.5		6		87				<0.2		0.9	
					Bottom	6.6	0.2	198	27.9	27.9	8.0	8.0	30.9	30.9	82.2	82.3	5.4	5.4	13.0		7		88				<0.2		1.0	
						6.6	0.2	198	27.9		8.0		30.9		82.3		5.4		13.7		6		88				<0.2		1.0	
C2	Fine	Moderate	07:36	8.1	Surface	1.0	0.2	160	26.6	26.6	8.1	8.1	23.4	23.3	97.1	97.1	6.8	6.4	4.0	6.0	6	5	83	88	825691	806931	<0.2	<0.2	1.5	1.5
						1.0	0.3	157	26.6		8.1		23.3		97.0		6.8		4.0		5		84				<0.2		1.5	
					Middle	4.1	0.3	178	26.9	26.9	8.1	8.1	27.6	27.7	86.5	86.6	5.9		6.0		5		87				<0.2		1.5	
						4.1	0.3	183	26.9		8.1		27.8		86.7		5.9		6.1		4		89				<0.2		1.5	
					Bottom	7.1	0.3	163	26.9	26.9	8.1	8.1	28.5	28.5	88.6	88.8	6.0	6.1	8.0		6		91				<0.2		1.5	
						7.1	0.3	166	26.9		8.1		28.5		89.0		6.1		8.1		5		91				<0.2		1.4	
C3	Fine	Moderate	05:36	10.9	Surface	1.0	0.3	79	26.8	26.8	8.1	8.1	30.4	30.4	85.1	85.1	5.7	5.7	4.4	4.8	3	4	83	87	822120	817798	<0.2	<0.2	1.6	1.5
						1.0	0.3	83	26.8		8.1		30.4		85.1		5.7		4.4		3		84				<0.2		1.4	
					Middle	5.5	0.2	65	26.8	26.8	8.1	8.1	30.5	30.5	85.2	85.3	5.7		4.8		4		87				<0.2		1.5	
						5.5	0.3	61	26.8		8.1		30.5		85.4		5.8		4.8		3		87				<0.2		1.5	
					Bottom	9.9	0.2	66	26.8	26.8	8.1	8.1	30.6	30.6	86.8	86.9	5.9	5.9	5.1		5		91				<0.2		1.5	
						9.9	0.2	68	26.8		8.1		30.6		87.0		5.9		5.2		4		91				<0.2		1.5	
IM1	Cloudy	Moderate	06:51	4.9	Surface	1.0	0.1	223	27.8	27.8	8.0	8.0	29.5	29.5	88.3	88.3	5.9	5.9	4.6	5.1	5	5	84	85	817931	807154	<0.2	<0.2	0.9	0.9
						1.0	0.1	225	27.8		8.0		29.5		88.2		5.9		4.6		5		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	194	27.7	27.7	8.0	8.0	30.2	30.2	82.9	82.9	5.5	5.5	5.6		6		86				<0.2		0.9	
						3.9	0.4	195	27.7		8.0		30.3		82.9		5.5		5.7		5		86				<0.2		1.0	
IM2	Cloudy	Moderate	06:56	6.3	Surface	1.0	0.2	223	27.6	27.6	8.1	8.1	29.2	29.2	87.3	87.3	5.9	5.8	7.5	8.2	8	8	83	85	818173	806155	<0.2	<0.2	1.0	1.0
						1.0	0.2	213	27.6		8.1		29.2		87.2		5.8		7.6		8		83				<0.2		1.0	
					Middle	3.2	0.2	222	27.5	27.5	8.1	8.1	29.2	29.2	86.6	86.6	5.8		8.5		8		86				<0.2		1.0	
						3.2	0.2	202	27.5		8.1		29.2		86.6		5.8		8.4		8		85				<0.2		0.9	
					Bottom	5.3	0.2	199	27.8	27.8	8.0	8.0	30.0	30.0	82.1	82.1	5.5	5.5	8.5		9		87				<0.2		1.0	
						5.3	0.2	193	27.8		8.0		30.0		82.0		5.5		8.6		8		88				<0.2		1.0	
IM3	Cloudy	Moderate	07:03	6.6	Surface	1.0	0.5	286	27.7	27.7	8.1	8.1	28.9	28.9	87.9	87.9	5.9	5.9	7.8	8.0	11	10	83	85	818786	805593	<0.2	<0.2	1.0	1.1
						1.0	0.5	284	27.7		8.1		28.9		87.9		5.9		7.8		10		83				<0.2		1.0	
					Middle	3.3	0.5	263	27.7	27.7	8.1	8.1	29.0	29.0	87.5	87.5	5.9		7.6		10		85				<0.2		1.0	
						3.3	0.5	246	27.7		8.1		29.0		87.5		5.9		7.6		10		85				<0.2		1.1	
					Bottom	5.6	0.3	242	27.7	27.8	8.1	8.1	29.3	29.3	87.7	87.7	5.9	5.9	8.4		9		87				<0.2		1.1	
						5.6	0.4	243	27.8		8.1		29.3		87.7		5.9		8.4		9		87				<0.2		1.1	
IM4	Cloudy	Moderate	07:11	7.1	Surface	1.0	0.5	247	27.6	27.6	8.0	8.0	28.7	28.7	88.7	88.7	6.0	6.0	10.4	11.5	12	13	83	85	819722	804609	<0.2	<0.2	1.1	1.1
						1.0	0.5	239	27.6		8.0		28.7		88.7		6.0		10.3		13		83				<0.2		1.1	
					Middle	3.6	0.5	260	27.6	27.6	8.0	8.0	28.9	28.9	87.9	87.9	5.9		11.5		13		85				<0.2		1.2	
						3.6	0.5	231	27.6		8.0		28.9		87.9		5.9		11.4		13		85				<0.2		1.1	
					Bottom	6.1	0.3	211	27.6	27.6	8.0	8.0	29.0	29.0	87.4	87.4	5.9	5.9	12.7		12		86				<0.2		1.0	
						6.1	0.3	212	27.6		8.0		29.0		87.4		5.9		12.6		12		87				<0.2		1.0	
IM5	Cloudy	Moderate	07:22	6.5	Surface	1.0	0.7	276	27.7	27.7	8.0	8.0	28.3	28.3	87.4	87.4	5.9	5.9	9.2	9.6	11	11	82	84	820754	804882	<0.2	<0.2	1.1	1.2
						1.0	0.7	277	27.7		8.0		28.3		87.4		5.9		9.2		11		83				<0.2		1.1	
					Middle	3.3	0.7	208	27.7	27.7	8.0	8.0	28.3	28.3	87.4	87.4	5.9		9.3		12		84				<0.2		1.2	
						3.3	0.7	235	27.7		8.0		28.3		87.4		5.9		9.3		11		85				<0.2		1.2	
					Bottom	5.5	0.5	231	27.7	27.7	8.0	8.0	28.3	28.3	87.5	87.5	5.9	5.9	10.4		11		86				<0.2		1.2	
						5.5	0.5	244	27.7		8.0		28.3		87.5		5.9		10.2		11		86				<0.2		1.2	
IM6	Cloudy	Moderate	07:30	6.0	Surface	1.0	0.1	216	27.8	27.8	8.0	8.0	28.0	28.0	87.4	87.4	5.9	5.9	7.0	7.4	8	8	82	85	821082	805839	<0.2	<0.2	1.3	1.3
						1.0	0.2	219	27.8		8.0		28.0		87.4		5.9		6.9		8		83				<0.2		1.2	
					Middle	3.0	0.2	258	27.8	27.8	8.0	8.0	28.0	28.0	87.4	87.4	5.9		7.4		7		85				<0.2		1.4	
						3.0	0.2	265	27.8		8.0		28.0		87.4		5.9		7.5		8		85				<0.2		1.4	
					Bottom	5.0	0.3	291	27.8	27.8	8.0	8.0	28.1	28.1	87.3	87.4	5.9	5.9	7.9		8		86				<0.2		1.3	
						5.0	0.3	294	27.8		8.0		28.1		87.4		5.9		7.9		8		87				<0.2		1.3	
IM7	Cloudy	Moderate	07:38	6.7	Surface	1.0	0.2	211	27.8	27.8	8.0	8.0	27.2	27.2	87.5	87.5	5.9	5.9	3.4	5.7	6	5	82	84	821339	806848	<0.2	<0.2	1.5	1.6
						1.0	0.2	225	27.8		8.0		27.2		87.5		5.9		3.4		5		82				<0.2		1.6	
					Middle	3.4	0.3	257	27.9	27.9	8.0	8.0	28.1	28.1	86.3	86.3	5.8		6.4		4		84				<0.2		1.6	
						3.4	0.3	266	27.9		8.0		28.1		86.3		5.8		6.5		4		84				<0.2		1.6	
					Bottom	5.7	0.2	320	27.8	27.8	7.9	7.9	28.2	28.2	86.3	86.3	5.8	5.8	7.3		4		86				<0.2		1.7	
						5.7	0.2	340	27.8		7.9		28.2		86.3		5.8		7.3		4		86				<0.2		1.6	
IM8	Fine	Moderate	06:59	8.6	Surface	1.0	0.4	200	26.9	26.9	8.1	8.1	28.9	28.9	87.4	87.4	5.9	5.9	3.6	8.3	4	4	83	87	821828	808116	<0.2	<0.2	1.4	1.4
						1.0	0.4	206	26.9		8.1		28.9		87.4		5.9		3.6		4		84				<0.2		1.4	
					Middle	4.3	0.4	213	26.7	26.7	8.1	8.1	29.2	29.2	87.3	87.3	5.9		9.5		4		87				<0.2		1.3	
						4.3	0.4	225	26.7		8.1		29.2		87.3		5.9		9.5		5		87				<0.2		1.5	
					Bottom	7.6	0.3	254	26.7	26.7	8.1	8.1	29.2	29.2	87.5	87.6	6.0	6.0	11.9		5		90				<0.2		1.6	
						7.6	0.3	258	26.7		8.1		29.2		87.6		6.0		11.9		4		91				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 19 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	06:54	8.3	Surface	1.0	0.2	185	26.9	26.9	8.1	8.1	29.0	29.0	86.9	86.9	5.9	5.9	3.5	3.9	4	4	83	87	822076	808791	<0.2	<0.2	1.4	1.5
						1.0	0.3	189	26.9		8.1		29.0		86.9		5.9		3.6		5		84				<0.2		1.3	
					Middle	4.2	0.3	195	26.8	26.8	8.1	8.1	29.2	29.2	86.9	87.2	5.9		3.9		4		86				<0.2		1.5	
						4.2	0.3	195	26.8		8.1		29.2		87.4		5.9		3.9		4		88				<0.2		1.5	
					Bottom	7.3	0.2	206	26.8	26.8	8.1	8.1	29.3	29.2	88.7	88.9	6.0	6.1	4.1		4		90				<0.2		1.5	
						7.3	0.2	211	26.8		8.1		29.2		89.1		6.1		4.1		4		91				<0.2		1.6	
IM10	Fine	Moderate	06:46	7.7	Surface	1.0	0.4	186	26.8	26.8	8.2	8.2	29.2	29.2	86.0	86.0	5.8	5.8	4.0	4.4	3	4	83	87	822381	809789	<0.2	<0.2	1.3	1.4
						1.0	0.4	189	26.8		8.2		29.2		85.9		5.8		4.1		4		84				<0.2		1.4	
					Middle	3.9	0.4	163	26.8	26.8	8.2	8.2	29.4	29.4	85.7	85.7	5.8		4.5		5		86				<0.2		1.4	
						3.9	0.4	165	26.8		8.2		29.4		85.6		5.8		4.6		4		87				<0.2		1.3	
					Bottom	6.7	0.3	189	26.8	26.8	8.1	8.1	29.4	29.4	90.6	90.8	6.2	6.2	4.7		4		90				<0.2		1.4	
						6.7	0.3	174	26.8		8.1		29.4		90.9		6.2		4.7		4		90				<0.2		1.3	
IM11	Fine	Moderate	06:35	7.3	Surface	1.0	0.5	163	26.8	26.8	8.1	8.1	29.2	29.2	87.3	87.3	5.9	5.9	4.1	4.6	6	5	82	87	822062	811468	<0.2	<0.2	1.6	1.4
						1.0	0.5	148	26.8		8.1		29.2		87.3		5.9		4.1		5		83				<0.2		1.5	
					Middle	3.7	0.5	129	26.8	26.8	8.1	8.1	29.3	29.3	87.0	87.0	5.9		4.4		5		87				<0.2		1.3	
						3.7	0.5	134	26.8		8.1		29.3		87.0		5.9		4.4		5		87				<0.2		1.4	
					Bottom	6.3	0.3	130	26.8	26.8	8.1	8.1	29.3	29.3	87.6	87.7	6.0	6.0	5.2		5		90				<0.2		1.3	
						6.3	0.3	135	26.8		8.1		29.3		87.7		6.0		5.2		5		90				<0.2		1.4	
IM12	Fine	Moderate	06:28	6.9	Surface	1.0	0.4	170	26.6	26.6	8.2	8.2	29.3	29.3	88.6	88.6	6.0	6.0	3.9	5.5	6	7	83	87	821440	812055	<0.2	<0.2	1.3	1.3
						1.0	0.4	165	26.6		8.2		29.3		88.5		6.0		3.9		5		83				<0.2		1.3	
					Middle	3.5	0.4	147	26.6	26.6	8.1	8.1	29.5	29.5	87.7	87.7	6.0		5.1		6		86				<0.2		1.3	
						3.5	0.4	121	26.6		8.1		29.5		87.7		6.0		5.1		5		87				<0.2		1.3	
					Bottom	5.9	0.3	125	26.6	26.6	8.1	8.1	29.6	29.6	88.2	88.3	6.0	6.0	7.3		8		90				<0.2		1.4	
						5.9	0.3	128	26.6		8.1		29.6		88.3		6.0		7.3		9		91				<0.2		1.2	
SR1A	Fine	Moderate	06:11	5.1	Surface	1.0	-	-	26.7	26.7	8.1	8.1	29.8	29.8	85.0	85.0	5.8	5.8	4.7	5.0	5	5	-	-	819979	812659	-	-	-	-
						1.0	-	-	26.7		8.1		29.8		85.0		5.8		4.6		6		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	26.7	26.7	8.1	8.1	29.8	29.8	86.0	86.1	5.8	5.8	5.4		5		-				-		-	
						4.1	-	-	26.7		8.1		29.8		86.2		5.8		5.4		5		-				-		-	
SR2	Fine	Moderate	05:58	4.6	Surface	1.0	0.1	140	26.7	26.7	8.2	8.2	29.8	29.7	86.3	86.4	5.9	5.9	6.0	6.4	5	6	82	86	821464	814143	<0.2	<0.2	1.4	1.4
						1.0	0.1	133	26.7		8.2		29.7		86.4		5.9		6.0		7		83				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	113	26.8	26.8	8.1	8.1	29.8	29.8	87.5	87.6	5.9	5.9	6.8		6		90				<0.2		1.4	
						3.6	0.1	133	26.8		8.1		29.8		87.6		5.9		6.8		7		90				<0.2		1.5	
SR3	Fine	Moderate	07:05	8.4	Surface	1.0	0.4	206	26.8	26.8	8.1	8.1	28.4	28.4	87.7	87.7	6.0	5.9	3.1	4.4	3	4	-	-	822159	807582	-	-	-	-
						1.0	0.4	219	26.8		8.1		28.4		87.7		6.0		3.1		4		-				-		-	
					Middle	4.2	0.4	182	26.8	26.8	8.1	8.1	29.2	29.2	85.6	85.6	5.8		4.9		5		-				-		-	
						4.2	0.4	185	26.8		8.1		29.3		85.6		5.8		5.0		4		-				-		-	
					Bottom	7.4	0.4	174	26.8	26.8	8.1	8.1	29.4	29.4	86.1	86.2	5.8	5.9	5.2		5		-				-		-	
						7.4	0.4	195	26.8		8.1		29.4		86.3		5.9		5.2		4		-				-		-	
SR4A	Cloudy	Calm	06:27	9.1	Surface	1.0	0.1	104	27.6	27.6	8.0	8.0	29.6	29.6	85.0	85.0	5.7	5.6	5.5	8.7	6	7	-	-	817211	807808	-	-	-	-
						1.0	0.1	110	27.6		8.0		29.6		85.0		5.7		5.5		6		-				-		-	
					Middle	4.6	0.0	54	27.7	27.7	8.0	8.0	30.0	30.0	82.7	82.7	5.5		8.6		7		-				-		-	
						4.6	0.0	54	27.7		8.0		30.0		82.7		5.5		8.4		6		-				-		-	
					Bottom	8.1	0.2	43	27.8	27.8	8.0	8.0	30.4	30.4	81.5	81.5	5.4	5.4	12.4		9		-				-		-	
						8.1	0.2	45	27.8		8.0		30.4		81.5		5.4		12.1		10		-				-		-	
SR5A	Cloudy	Calm	06:14	3.5	Surface	1.0	0.6	54	27.7	27.7	8.0	8.0	29.2	29.2	88.6	88.6	5.9	5.9	4.4	4.4	4	5	-	-	816585	810681	-	-	-	-
						1.0	0.6	56	27.7		8.0		29.2		88.5		5.9		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.4	0	27.6	27.6	8.0	8.0	29.3	29.3	88.4	88.5	5.9	5.9	4.4		5		-				-		-	
						2.5	0.5	0	27.6		8.0		29.3		88.5		5.9		4.4		6		-				-		-	
SR6A	Cloudy	Calm	05:50	4.2	Surface	1.0	0.1	146	27.5	27.5	7.9	7.9	29.3	29.3	81.6	81.6	5.5	5.5	4.9	6.7	6	7	-	-	817967	814749	-	-	-	-
						1.0	0.1	151	27.5		7.9		29.3		81.5		5.5		4.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	151	27.8	27.8	7.9	7.9	29.7	29.7	76.6	76.6	5.1	5.1	8.7		7		-				-		-	
						3.2	0.0	153	27.8		7.9		29.7		76.5		5.1		8.5		8		-				-		-	
SR7	Fine	Moderate	04:53	15.4	Surface	1.0	0.3	88	26.7	26.7	8.1	8.1	30.9	30.9	85.4	85.4	5.8	5.7	2.2	2.5	3	4	-	-	823651	823725	-	-	-	-
						1.0	0.3	90	26.7		8.1		30.9		85.3		5.8		2.2		4		-				-		-	
					Middle	7.7	0.0	290	26.7	26.7	8.1	8.1	31.0	31.0	83.9	83.9	5.7		2.3		3		-				-		-	
						7.7	0.0	308	26.7		8.1		31.0		83.8		5.6		2.3		4		-				-		-	
					Bottom	14.4	0.1	67	26.8	26.8	8.1	8.1	31.4	31.4	82.4	82.4	5.5	5.5	3.0		4		-				-		-	
						14.4	0.1	67	26.8		8.1		31.4		82.4		5.5		3.1		5		-				-		-	
SR8	Fine	Moderate	06:20	4.7	Surface	1.0	-	-	26.8	26.8	8.1	8.1	29.5	29.5	91.6	91.6	6.2	6.2	8.1	7.8	8	9	-	-	820407	811622	-	-	-	-
						1.0	-	-	26.8		8.1		29.5		91.5		6.2		8.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	26.6	26.6	8.1	8.1	29.5	29.5	92.3	92.5	6.3	6.3	7.5		10		-				-		-	
						3.7	-	-	26.6		8.1		29.5		92.6		6.3		7.5		10		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	18:35	7.4	Surface	1.0	0.1	322	27.6	27.6	8.1	8.1	28.9	28.9	87.6	87.6	5.9	5.8	10.9	11.9	12	14	84	86	815625	804264	<0.2	<0.2	1.2	1.1
						1.0	0.1	348	27.6		8.1		28.9		87.6		5.9		10.8		13		84				<0.2		1.1	
					Middle	3.7	0.1	339	27.6	27.6	8.1	8.1	29.2	29.2	85.1	85.1	5.7		11.1		15		86				<0.2		1.0	
						3.7	0.1	341	27.6		8.1		29.2		85.0		5.7		11.0		14		86				<0.2		1.0	
					Bottom	6.4	0.2	340	27.9	27.9	8.1	8.1	30.8	30.8	80.0	80.0	5.3	5.3	14.0		14		88				<0.2		1.0	
						6.4	0.2	343	27.9		8.1		30.8		80.0		5.3		13.8		14		89				<0.2		1.1	
C2	Fine	Rough	17:47	8.3	Surface	1.0	0.2	211	26.6	26.6	8.2	8.2	22.9	22.9	96.8	96.7	6.8	6.3	4.8	6.9	3	3	83	87	825689	806942	<0.2	<0.2	1.3	1.3
						1.0	0.2	220	26.6		8.2		22.9		96.6		6.8		4.8		4		83				<0.2		1.3	
					Middle	4.2	0.3	301	26.9	26.9	8.1	8.1	26.5	26.5	84.7	84.6	5.8		5.6		3		88				<0.2		1.3	
						4.2	0.3	327	26.9		8.1		26.5		84.4		5.8		5.6		3		88				<0.2		1.4	
					Bottom	7.3	0.3	326	27.0	27.0	8.1	8.1	28.8	28.8	84.4	84.6	5.7	5.8	10.4		3		90				<0.2		1.4	
						7.3	0.3	340	27.0		8.1		28.8		84.8		5.8		10.4		3		91				<0.2		1.2	
C3	Fine	Rough	19:58	11.4	Surface	1.0	0.5	255	27.1	27.1	8.2	8.2	30.1	30.1	89.0	89.0	6.0	5.9	3.5	4.6	3	4	83	86	822104	817806	<0.2	<0.2	1.5	1.4
						1.0	0.5	271	27.1		8.2		30.1		88.9		6.0		3.5		3		83				<0.2		1.4	
					Middle	5.7	0.4	270	26.9	26.9	8.1	8.1	30.3	30.3	85.3	85.4	5.8		4.4		4		87				<0.2		1.4	
						5.7	0.4	289	26.9		8.1		30.3		85.5		5.8		4.4		4		87				<0.2		1.3	
					Bottom	10.4	0.3	262	26.9	26.9	8.1	8.1	30.3	30.3	86.6	86.8	5.8	5.9	6.0		4		90				<0.2		1.2	
						10.4	0.3	266	26.9		8.1		30.4		86.9		5.9		6.1		4		87				<0.2		1.4	
IM1	Cloudy	Moderate	18:25	4.7	Surface	1.0	0.4	344	27.8	27.8	8.1	8.1	29.5	29.5	89.7	89.7	6.0	6.0	4.2	7.4	3	5	84	85	817969	807139	<0.2	<0.2	1.0	1.0
						1.0	0.4	316	27.8		8.1		29.5		89.7		6.0		4.2		4		84				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	351	27.8	27.8	8.0	8.0	30.1	30.1	83.3	83.4	5.5	5.5	10.6		6		87				<0.2		1.1	
						3.7	0.3	352	27.8		8.0		30.1		83.4		5.5		10.6		6		86				<0.2		1.0	
IM2	Cloudy	Moderate	18:19	6.4	Surface	1.0	0.3	325	27.7	27.7	8.1	8.1	29.3	29.3	87.4	87.4	5.8	5.8	6.5	8.0	8	8	83	85	818164	806170	<0.2	<0.2	1.0	1.0
						1.0	0.3	327	27.7		8.1		29.3		87.3		5.8		6.5		8		83				<0.2		0.9	
					Middle	3.2	0.4	329	27.6	27.6	8.1	8.1	29.3	29.3	85.6	85.6	5.7		7.0		8		85				<0.2		1.1	
						3.2	0.4	351	27.6		8.1		29.3		85.6		5.7		7.1		7		85				<0.2		1.0	
					Bottom	5.4	0.3	322	27.9	27.9	8.1	8.1	30.5	30.5	79.2	79.2	5.2	5.2	10.2		8		88				<0.2		1.1	
						5.4	0.3	331	27.9		8.1		30.5		79.2		5.2		10.6		9		88				<0.2		1.0	
IM3	Cloudy	Moderate	18:12	6.2	Surface	1.0	0.5	329	27.7	27.7	8.1	8.1	29.1	29.1	88.0	88.0	5.9	5.9	7.5	7.6	10	12	83	85	818795	805583	<0.2	<0.2	1.1	1.1
						1.0	0.6	333	27.7		8.1		29.1		88.0		5.9		7.6		10		83				<0.2		1.0	
					Middle	3.1	0.5	328	27.7	27.7	8.1	8.1	29.3	29.3	87.1	87.1	5.8		7.4		12		85				<0.2		1.1	
						3.1	0.6	340	27.7		8.1		29.3		87.1		5.8		7.4		11		85				<0.2		1.1	
					Bottom	5.2	0.4	358	27.7	27.7	8.1	8.1	29.4	29.4	86.6	86.7	5.8	5.8	7.9		13		87				<0.2		1.0	
						5.2	0.4	329	27.7		8.1		29.4		86.7		5.8		7.9		13		87				<0.2		1.0	
IM4	Cloudy	Moderate	18:03	6.8	Surface	1.0	0.4	13	27.7	27.7	8.0	8.0	28.2	28.2	89.0	89.0	6.0	6.0	13.2	13.7	18	19	82	85	819708	804605	<0.2	<0.2	1.3	1.3
						1.0	0.5	13	27.7		8.0		28.2		89.0		6.0		12.9		19		83				<0.2		1.2	
					Middle	3.4	0.6	23	27.7	27.7	8.0	8.0	28.4	28.4	88.5	88.5	6.0		13.3		18		85				<0.2		1.2	
						3.4	0.7	25	27.7		8.0		28.4		88.5		6.0		13.3		19		85				<0.2		1.3	
					Bottom	5.8	0.5	347	27.7	27.7	8.0	8.0	28.8	28.7	88.0	88.0	5.9	5.9	14.9		22		87				<0.2		1.2	
						5.8	0.5	319	27.7		8.0		28.7		88.0		5.9		14.9		20		87				<0.2		1.3	
IM5	Cloudy	Moderate	17:56	6.3	Surface	1.0	0.2	18	27.8	27.8	8.0	8.0	28.1	28.1	87.3	87.3	5.9	5.9	7.3	8.1	10	10	82	85	820753	804880	<0.2	<0.2	1.3	1.3
						1.0	0.3	19	27.8		8.0		28.1		87.3		5.9		7.4		9		83				<0.2		1.2	
					Middle	3.2	0.3	17	27.8	27.8	8.0	8.0	28.1	28.1	87.0	87.0	5.8		7.9		9		85				<0.2		1.2	
						3.2	0.3	17	27.8		8.0		28.1		87.0		5.8		7.9		10		85				<0.2		1.4	
					Bottom	5.3	0.4	23	27.8	27.8	8.0	8.0	28.2	28.2	87.0	87.0	5.8	5.8	9.0		9		87				<0.2		1.3	
						5.3	0.4	24	27.8		8.0		28.2		87.0		5.8		9.0		10		87				<0.2		1.3	
IM6	Cloudy	Moderate	17:52	6.1	Surface	1.0	0.2	299	27.8	27.8	8.0	8.0	28.1	28.1	87.3	87.3	5.9	5.9	7.3	7.6	10	9	83	85	821046	805818	<0.2	<0.2	1.2	1.3
						1.0	0.3	301	27.8		8.0		28.1		87.3		5.9		7.4		11		83				<0.2		1.3	
					Middle	3.1	0.1	12	27.8	27.8	8.0	8.0	28.1	28.1	87.4	87.4	5.9		7.2		8		85				<0.2		1.3	
						3.1	0.1	12	27.8		8.0		28.1		87.4		5.9		7.2		8		85				<0.2		1.4	
					Bottom	5.1	0.1	10	27.8	27.8	8.0	8.0	28.1	28.1	87.2	87.2	5.9	5.9	8.2		7		87				<0.2		1.4	
						5.1	0.1	10	27.8		8.0		28.1		87.2		5.9		8.3		8		87				<0.2		1.2	
IM7	Cloudy	Moderate	17:45	6.9	Surface	1.0	0.2	327	27.9	27.9	8.0	8.0	27.4	27.4	87.4	87.4	5.9	5.9	3.8	6.2	5	5	82	84	821353	806819	<0.2	<0.2	1.6	1.6
						1.0	0.2	354	27.9		8.0		27.4		87.4		5.9		3.8		4		82				<0.2		1.5	
					Middle	3.5	0.1	342	27.8	27.8	8.0	8.0	28.0	28.0	86.5	86.5	5.8		6.4		5		84				<0.2		1.6	
						3.5	0.1	315	27.8		8.0		28.0		86.5		5.8		6.3		4		85				<0.2		1.6	
					Bottom	5.9	0.1	339	27.8	27.8	8.0	8.0	28.1	28.1	86.4	86.4	5.8	5.8	8.5		5		86				<0.2		1.5	
						5.9	0.2	349	27.8		8.0		28.1		86.4		5.8		8.6		4		87				<0.2		1.5	
IM8	Fine	Rough	18:20	8.2	Surface	1.0	0.1	241	26.8	26.8	8.1	8.1	28.6	28.6	87.6	87.7	6.0	6.0	3.9	5.3	6	6	83	87	821837	808143	<0.2	<0.2	1.3	1.4
						1.0	0.1	250	26.8		8.1		28.6		87.7		6.0		3.9		5		83				<0.2		1.3	
					Middle	4.1	0.3	254	26.8	26.8	8.1	8.1	28.7	28.7	88.8	88.9	6.0		5.2		6		87				<0.2		1.4	
						4.1	0.3	260	26.8		8.1		28.7		88.9		6.1		5.2		5		87				<0.2		1.4	
					Bottom	7.2	0.3	268	26.8	26.8	8.1	8.1	28.9	28.9	89.6	89.7	6.1	6.1	6.7		5		90				<0.2		1.3	
						7.2	0.3	287	26.8		8.1		28.9		89.7		6.1		6.8		6		91				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 22 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Rough	18:27	8.0	Surface	1.0	0.3	244	26.8	26.8	8.1	8.1	28.3	28.3	88.1	88.1	6.0	6.0	3.1	3.7	2	3	83	87	822079	808808	<0.2	<0.2	1.5	1.5
						1.0	0.3	245	26.8		8.1		28.4		88.1		6.0		3.2		3		84				<0.2		1.5	
					Middle	4.0	0.3	268	26.9	26.9	8.1	8.1	28.9	28.9	88.3	88.4	6.0		3.5		4		86				<0.2		1.5	
						4.0	0.3	275	26.9		8.1		28.9		88.4		6.0		3.5		3		87				<0.2		1.5	
					Bottom	7.0	0.3	271	26.8	26.8	8.1	8.1	29.0	29.0	88.7	88.8	6.0	6.0	4.4		4		91				<0.2		1.4	
						7.0	0.3	287	26.8		8.1		29.0		88.8		6.0		4.4		3		91				<0.2		1.3	
IM10	Fine	Rough	18:34	7.8	Surface	1.0	0.1	350	26.8	26.8	8.1	8.1	27.9	27.9	88.3	88.3	6.0	6.0	2.7	4.2	5	5	83	87	822401	809786	<0.2	<0.2	1.3	1.4
						1.0	0.1	322	26.8		8.1		27.9		88.2		6.0		2.7		5		84				<0.2		1.5	
					Middle	3.9	0.2	342	26.8	26.8	8.1	8.1	28.8	28.8	87.5	87.6	6.0		4.3		5		86				<0.2		1.4	
						3.9	0.3	315	26.8		8.1		28.9		87.6		6.0		4.4		6		86				<0.2		1.4	
					Bottom	6.8	0.2	300	26.8	26.8	8.1	8.1	29.1	29.1	88.3	88.4	6.0	6.0	5.5		5		90				<0.2		1.4	
						6.8	0.2	328	26.8		8.1		29.1		88.5		6.0		5.5		4		91				<0.2		1.5	
IM11	Fine	Rough	18:43	7.7	Surface	1.0	0.5	308	27.1	27.1	8.1	8.1	28.6	28.6	88.4	88.4	6.0	6.0	3.2	4.2	4	6	82	87	822075	811450	<0.2	<0.2	1.4	1.4
						1.0	0.5	331	27.1		8.1		28.6		88.3		6.0		3.2		6		82				<0.2		1.3	
					Middle	3.9	0.3	304	26.9	26.9	8.1	8.1	29.0	29.0	87.5	87.5	5.9		4.4		6		87				<0.2		1.3	
						3.9	0.3	325	26.9		8.1		29.0		87.5		5.9		4.4		6		88				<0.2		1.4	
					Bottom	6.7	0.4	317	26.9	26.9	8.1	8.1	29.1	29.1	88.4	88.5	6.0	6.0	5.0		6		91				<0.2		1.6	
						6.7	0.5	333	26.9		8.1		29.1		88.5		6.0		5.1		7		91				<0.2		1.4	
IM12	Fine	Rough	18:49	7.6	Surface	1.0	0.5	299	26.9	26.9	8.1	8.1	29.1	29.1	87.5	87.4	5.9	5.9	4.5	6.6	3	4	83	87	821462	812055	<0.2	<0.2	1.3	1.4
						1.0	0.5	300	26.9		8.1		29.1		87.3		5.9		4.5		3		83				<0.2		1.3	
					Middle	3.8	0.5	293	26.7	26.7	8.1	8.1	29.4	29.4	85.7	85.7	5.8		7.3		4		87				<0.2		1.5	
						3.8	0.6	317	26.7		8.1		29.4		85.6		5.8		7.3		4		87				<0.2		1.4	
					Bottom	6.6	0.4	323	26.7	26.7	8.1	8.1	29.5	29.5	85.8	85.9	5.8	5.8	8.0		4		91				<0.2		1.5	
						6.6	0.4	339	26.7		8.1		29.5		85.9		5.8		8.1		4		91				<0.2		1.4	
SR1A	Fine	Rough	19:17	5.6	Surface	1.0	-	-	26.7	26.7	8.2	8.2	29.6	29.6	88.7	88.7	6.0	6.0	5.2	6.3	9	8	-	-	819979	812665	-	-	-	-
						1.0	-	-	26.7		8.2		29.6		88.7		6.0		5.2		9		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	26.6	26.6	8.1	8.1	29.7	29.7	88.2	88.3	6.0	6.0	7.3		7		-				-		-	
						4.6	-	-	26.6		8.1		29.7		88.4		6.0		7.3		8		-				-		-	
SR2	Fine	Rough	19:35	4.8	Surface	1.0	0.6	321	26.7	26.7	8.2	8.2	29.7	29.7	87.3	87.3	5.9	5.9	6.2	7.4	5	5	82	85	821480	814165	<0.2	<0.2	1.4	1.4
						1.0	0.6	340	26.7		8.2		29.7		87.3		5.9		6.2		5		83				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.4	328	26.7	26.7	8.2	8.2	29.7	29.7	87.7	87.8	6.0	6.0	8.5		5		87				<0.2		1.4	
						3.8	0.5	355	26.7		8.2		29.7		87.8		6.0		8.6		6		87				<0.2		1.3	
SR3	Fine	Rough	18:14	7.9	Surface	1.0	0.2	47	26.6	26.6	8.1	8.1	27.2	27.2	89.0	89.0	6.1	6.0	2.4	4.1	3	4	-	-	822155	807572	-	-	-	-
						1.0	0.2	48	26.6		8.1		27.3		89.0		6.1		2.4		4		-				-		-	
					Middle	4.0	0.1	29	26.8	26.8	8.1	8.1	28.9	28.9	86.3	86.4	5.9		4.9		4		-				-		-	
						4.0	0.1	26	26.8		8.1		28.9		86.4		5.9		5.0		5		-				-		-	
					Bottom	6.9	0.2	28	26.8	26.8	8.1	8.1	29.3	29.2	88.4	88.5	6.0	6.0	5.1		5		-				-		-	
						6.9	0.2	29	26.8		8.1		29.2		88.6		6.0		5.1		4		-				-		-	
SR4A	Cloudy	Calm	18:49	8.9	Surface	1.0	0.4	255	27.8	27.8	8.0	8.0	29.4	29.4	85.3	85.3	5.7	5.7	13.2	15.4	17	19	-	-	817165	807818	-	-	-	-
						1.0	0.4	260	27.8		8.0		29.4		85.3		5.7		13.3		16		-				-		-	
					Middle	4.5	0.5	259	27.8	27.8	8.0	8.0	29.4	29.4	85.0	85.0	5.7		15.8		19		-				-		-	
						4.5	0.5	244	27.8		8.0		29.4		85.0		5.7		16.2		19		-				-		-	
					Bottom	7.9	0.3	258	27.8	27.8	8.0	8.0	29.4	29.4	85.0	85.1	5.7	5.7	16.9		21		-				-		-	
						7.9	0.3	227	27.8		8.0		29.4		85.1		5.7		17.1		19		-				-		-	
SR5A	Cloudy	Calm	19:07	3.3	Surface	1.0	0.1	243	27.8	27.8	8.0	8.0	29.2	29.2	88.2	88.2	5.9	5.9	14.9	15.6	20	21	-	-	816599	810707	-	-	-	-
						1.0	0.1	247	27.8		8.0		29.2		88.2		5.9		14.5		21		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.2	266	27.8	27.8	8.0	8.0	29.2	29.2	88.2	88.2	5.9	5.9	16.7		22		-				-		-	
						2.3	0.2	271	27.8		8.0		29.2		88.2		5.9		16.4		22		-				-		-	
SR6A	Cloudy	Calm	19:45	3.8	Surface	1.0	0.0	203	27.7	27.7	8.0	8.0	29.3	29.3	86.3	86.3	5.8	5.8	9.6	10.6	7	9	-	-	817956	814720	-	-	-	-
						1.0	0.0	220	27.7		8.0		29.3		86.3		5.8		9.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	224	27.7	27.7	8.0	8.0	29.3	29.3	85.7	85.7	5.7	5.7	11.5		10		-				-		-	
						2.8	0.0	227	27.7		8.0		29.3		85.6		5.7		11.6		10		-				-		-	
SR7	Fine	Rough	20:30	16.8	Surface	1.0	0.0	213	26.9	26.9	8.2	8.2	30.3	30.3	88.3	88.3	6.0	5.9	2.7	3.0	8	8	-	-	823617	823726	-	-	-	-
						1.0	0.0	222	26.9		8.2		30.3		88.3		6.0		2.7		8		-				-		-	
					Middle	8.4	0.0	270	26.7	26.7	8.2	8.1	30.4	30.4	85.2	85.2	5.8		2.5		8		-				-		-	
						8.4	0.0	271	26.7		8.1		30.4		85.2		5.8		2.6		7		-				-		-	
					Bottom	15.8	0.1	237	26.7	26.7	8.1	8.1	30.5	30.5	86.1	86.3	5.8	5.8	3.6		7		-				-		-	
						15.8	0.1	240	26.7		8.1		30.5		86.4		5.8		3.6		7		-				-		-	
SR8	Fine	Rough	19:04	5.2	Surface	1.0	-	-	27.0	27.0	8.1	8.1	29.0	29.0	88.8	88.8	6.0	6.0	3.6	4.6	5	6	-	-	820378	811599	-	-	-	-
						1.0	-	-	27.0		8.1		29.0		88.7		6.0		3.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	26.8	26.8	8.2	8.2	29.3	29.3	86.7	86.7	5.9	5.9	5.7		5		-				-		-	
						4.2	-	-	26.8		8.2		29.3		86.7		5.9		5.7		6		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:52	8.4	Surface	1.0	0.4	215	26.6	26.6	8.2	8.2	30.6	30.6	87.1	87.1	5.9	5.7	4.9	6.7	5	6	86	90	815601	804235	<0.2	<0.2	1.0	0.9
						1.0	0.4	221	26.6		8.2		30.6		87.1		5.9		4.9		5		88				<0.2		0.8	
					Middle	4.2	0.3	222	26.7	26.7	8.2	8.2	31.8	31.8	81.0	80.9	5.4		8.0		5		89				<0.2		0.9	
						4.2	0.3	222	26.7		8.2		31.8		80.8		5.4		7.8		7		90				<0.2		1.0	
					Bottom	7.4	0.3	219	26.7	26.7	8.2	8.2	31.9	31.9	77.8	77.5	5.2	5.2	7.2		6		91				<0.2		0.9	
						7.4	0.3	232	26.7		8.2		31.9		77.2		5.2		7.2		7		93				<0.2		1.0	
C2	Cloudy	Moderate	11:07	10.8	Surface	1.0	0.7	177	27.8	27.8	8.0	8.0	26.5	26.6	89.1	89.0	6.0	5.9	2.9	7.7	5	5	89	90	825658	806950	<0.2	<0.2	1.6	1.6
						1.0	0.8	181	27.7		8.0		26.6		88.8		6.0		2.8		5		89				<0.2		1.7	
					Middle	5.4	0.7	170	27.8	27.9	8.0	8.0	27.4	27.4	86.4	86.1	5.8		6.6		4		90				<0.2		1.6	
						5.4	0.7	180	27.9		8.0		27.4		85.7		5.8		6.7		4		90				<0.2		1.5	
					Bottom	9.8	0.4	182	28.0	28.0	8.0	8.0	29.6	29.6	82.2	82.5	5.5	5.5	13.5		5		91				<0.2		1.6	
						9.8	0.4	192	28.0		8.0		29.6		82.7		5.5		13.9		6		91				<0.2		1.6	
C3	Cloudy	Moderate	08:59	11.9	Surface	1.0	0.4	80	27.5	27.5	8.0	8.0	29.6	29.6	84.9	84.9	5.7	5.5	3.0	4.4	4	4	88	91	822128	817798	<0.2	<0.2	1.0	1.0
						1.0	0.5	80	27.5		8.0		29.7		84.8		5.7		3.1		4		89				<0.2		1.0	
					Middle	6.0	0.3	79	27.9	27.9	8.0	8.0	30.8	30.9	79.9	80.0	5.3		4.9		4		91				<0.2		0.9	
						6.0	0.3	82	27.9		8.0		30.9		80.1		5.3		5.0		3		91				<0.2		1.0	
					Bottom	10.9	0.2	70	27.9	27.9	8.0	8.0	31.1	31.1	81.4	81.5	5.4	5.4	5.3		4		93				<0.2		1.0	
						10.9	0.3	76	27.9		8.0		31.1		81.6		5.4		5.1		4		94				<0.2		1.0	
IM1	Cloudy	Moderate	10:17	5.5	Surface	1.0	0.1	231	26.6	26.6	8.2	8.2	30.6	30.6	86.9	86.9	5.9	5.9	5.3	6.1	6	6	85	88	817927	807112	<0.2	<0.2	0.9	0.9
						1.0	0.1	253	26.6		8.2		30.7		86.8		5.9		5.4		5		86				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	140	26.6	26.6	8.2	8.2	31.1	31.1	86.4	86.6	5.8	5.9	6.7		7		89				<0.2		0.9	
						4.5	0.1	147	26.6		8.2		31.1		86.7		5.9		6.8		7		90				<0.2		0.8	
IM2	Cloudy	Moderate	10:22	7.0	Surface	1.0	0.1	180	26.5	26.5	8.2	8.2	30.7	30.7	85.4	85.4	5.8	5.7	6.5	8.7	6	6	86	88	818175	806154	<0.2	<0.2	0.8	0.8
						1.0	0.1	186	26.5		8.2		30.7		85.3		5.8		6.5		6		85				<0.2		0.8	
					Middle	3.5	0.1	165	26.5	26.5	8.2	8.2	31.2	31.2	82.7	82.7	5.6		8.8		6		88				<0.2		0.8	
						3.5	0.1	170	26.5		8.2		31.3		82.7		5.6		9.0		6		89				<0.2		0.8	
					Bottom	6.0	0.1	142	26.6	26.6	8.2	8.2	31.5	31.5	83.2	83.3	5.6	5.6	10.6		6		90				<0.2		0.8	
						6.0	0.1	146	26.6		8.2		31.5		83.3		5.6		10.6		7		90				<0.2		0.8	
IM3	Cloudy	Moderate	10:28	7.5	Surface	1.0	0.2	126	26.5	26.5	8.2	8.2	30.9	30.9	84.8	84.8	5.7	5.7	13.9	13.4	14	14	86	88	818788	805606	<0.2	<0.2	0.9	0.8
						1.0	0.2	130	26.5		8.2		30.9		84.8		5.7		13.9		15		86				<0.2		0.8	
					Middle	3.8	0.1	133	26.5	26.5	8.2	8.2	31.1	31.1	84.6	84.6	5.7		13.9		14		87				<0.2		0.8	
						3.8	0.1	134	26.5		8.2		31.1		84.5		5.7		13.7		14		88				<0.2		0.8	
					Bottom	6.5	0.1	171	26.5	26.5	8.2	8.2	31.5	31.5	84.5	84.7	5.7	5.7	12.4		14		90				<0.2		0.8	
						6.5	0.1	182	26.5		8.2		31.5		84.9		5.7		12.5		14		90				<0.2		0.8	
IM4	Cloudy	Calm	10:36	7.6	Surface	1.0	0.8	199	26.4	26.4	8.2	8.2	29.5	29.5	91.4	91.4	6.2	6.2	7.8	8.4	8	8	86	88	819704	804599	<0.2	<0.2	1.0	1.0
						1.0	0.9	201	26.4		8.2		29.5		91.4		6.2		7.9		8		87				<0.2		0.9	
					Middle	3.8	0.7	189	26.4	26.4	8.2	8.2	29.5	29.5	91.5	91.5	6.2		7.6		9		88				<0.2		1.0	
						3.8	0.7	206	26.4		8.2		29.6		91.4		6.2		7.5		8		89				<0.2		0.9	
					Bottom	6.6	0.6	190	26.3	26.3	8.2	8.2	29.6	29.6	92.5	92.6	6.3	6.3	9.9		9		90				<0.2		1.0	
						6.6	0.6	205	26.3		8.2		29.6		92.7		6.3		9.9		8		90				<0.2		0.9	
IM5	Cloudy	Calm	10:44	7.6	Surface	1.0	0.8	216	26.4	26.4	8.2	8.2	29.5	29.5	90.2	90.2	6.2	6.1	5.9	9.0	6	6	86	88	820756	804852	<0.2	<0.2	1.0	1.1
						1.0	0.9	218	26.4		8.2		29.5		90.1		6.2		6.0		6		85				<0.2		1.1	
					Middle	3.8	0.7	211	26.3	26.3	8.2	8.2	29.7	29.8	88.6	88.6	6.1		7.4		7		87				<0.2		1.1	
						3.8	0.7	217	26.3		8.2		29.8		88.5		6.0		7.7		6		88				<0.2		1.1	
					Bottom	6.6	0.6	207	26.3	26.3	8.2	8.2	30.3	30.3	91.0	91.2	6.2	6.2	13.8		6		90				<0.2		1.1	
						6.6	0.6	226	26.3		8.2		30.3		91.3		6.2		13.1		6		90				<0.2		1.1	
IM6	Cloudy	Moderate	10:49	7.4	Surface	1.0	0.6	246	26.4	26.4	8.2	8.2	29.1	29.2	90.9	90.7	6.2	6.2	5.5	7.9	4	5	86	88	821079	805804	<0.2	<0.2	1.1	1.2
						1.0	0.6	267	26.4		8.2		29.2		90.5		6.2		5.8		4		86				<0.2		1.2	
					Middle	3.7	0.6	251	26.3	26.3	8.2	8.2	29.5	29.5	90.2	90.2	6.2		7.3		6		87				<0.2		1.2	
						3.7	0.7	260	26.3		8.2		29.5		90.2		6.2		7.7		6		89				<0.2		1.2	
					Bottom	6.4	0.4	238	26.3	26.3	8.2	8.2	29.6	29.6	92.4	92.5	6.3	6.3	10.3		5		90				<0.2		1.2	
						6.4	0.5	260	26.3		8.2		29.6		92.6		6.3		10.8		5		91				<0.2		1.3	
IM7	Cloudy	Moderate	10:55	7.6	Surface	1.0	0.6	248	26.4	26.4	8.2	8.2	28.9	28.9	92.0	91.9	6.3	6.2	4.5	7.2	4	4	87	88	821369	806856	<0.2	<0.2	1.2	1.1
						1.0	0.6	266	26.4		8.2		28.9		91.8		6.3		4.7		4		86				<0.2		1.1	
					Middle	3.8	0.6	256	26.4	26.4	8.2	8.2	29.4	29.4	89.1	89.1	6.1		6.6		4		89				<0.2		1.1	
						3.8	0.6	277	26.4		8.2		29.4		89.1		6.1		6.6		4		88				<0.2		1.1	
					Bottom	6.6	0.4	260	26.4	26.4	8.2	8.2	29.5	29.5	91.7	91.8	6.3	6.3	10.2		4		90				<0.2		1.1	
						6.6	0.4	277	26.4		8.2		29.5		91.8		6.3		10.5		4		90				<0.2		1.1	
IM8	Cloudy	Moderate	10:35	7.3	Surface	1.0	0.2	188	27.5	27.5	8.1	8.1	27.7	27.7	92.2	92.0	6.2	6.2	4.1	4.4	3	3	89	90	821810	808121	<0.2	<0.2	1.2	1.3
						1.0	0.2	200	27.5		8.1		27.7		91.7		6.2		4.1		3		89				<0.2		1.4	
					Middle	3.7	0.1	205	27.4	27.4	8.1	8.1	28.1	28.1	90.0	89.9	6.1		4.3		4		90				<0.2		1.3	
						3.7	0.1	218	27.4		8.1		28.1		89.8		6.1		4.4		3		90				<0.2		1.3	
					Bottom	6.3	0.1	247	27.5	27.5	8.1	8.1	28.4	28.4	90.3	90.6	6.1	6.1	4.8		3		91				<0.2		1.2	
						6.3	0.1	259	27.5		8.1		28.4		90.8		6.1		4.7		4		91				<0.2		1.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:27	7.2	Surface	1.0	0.3	136	27.5	27.5	8.1	8.1	27.8	27.8	91.7	91.5	6.2	6.1	4.2	4.7	4	3	88	90	822107	808790	<0.2	<0.2	1.4	1.4
						1.0	0.3	145	27.5		8.1		27.8		91.3		6.2		4.3		3		88				<0.2		1.4	
					Middle	3.6	0.2	98	27.4	27.4	8.1	8.1	28.2	28.2	89.3	89.3	6.0		4.7		3		89				<0.2		1.4	
						3.6	0.2	98	27.4		8.1		28.3		89.3		6.0		4.8		3		90				<0.2		1.3	
					Bottom	6.2	0.1	69	27.4	27.4	8.1	8.1	28.6	28.6	89.6	89.8	6.0	6.1	5.2		3		91				<0.2		1.3	
						6.2	0.2	71	27.4		8.1		28.6		89.9		6.1		5.3		4		91				<0.2		1.3	
IM10	Cloudy	Moderate	10:18	8.1	Surface	1.0	0.5	116	27.5	27.5	8.1	8.1	27.4	27.5	93.1	93.1	6.3	6.1	4.0	6.1	3	4	88	90	822392	809784	<0.2	<0.2	1.3	1.3
						1.0	0.5	120	27.5		8.1		27.5		93.0		6.3		4.2		3		88				<0.2		1.3	
					Middle	4.1	0.5	121	27.4	27.4	8.1	8.1	28.3	28.4	87.8	87.7	5.9		5.9		5		89				<0.2		1.1	
						4.1	0.5	131	27.4		8.1		28.4		87.6		5.9		6.2		4		90				<0.2		1.2	
					Bottom	7.1	0.4	109	27.5	27.5	8.1	8.1	28.8	28.8	87.8	88.2	5.9	6.0	8.3		5		91				<0.2		1.3	
						7.1	0.4	111	27.5		8.1		28.8		88.5		6.0		8.1		5		91				<0.2		1.3	
IM11	Cloudy	Moderate	10:05	7.8	Surface	1.0	0.6	123	27.7	27.7	8.1	8.1	27.9	27.9	90.7	90.7	6.1	6.1	4.7	9.0	5	5	88	90	822080	811452	<0.2	<0.2	1.2	1.2
						1.0	0.7	123	27.7		8.1		27.9		90.7		6.1		4.8		4		88				<0.2		1.3	
					Middle	3.9	0.6	122	27.6	27.6	8.1	8.1	28.0	28.0	90.2	90.2	6.1		8.8		5		90				<0.2		1.3	
						3.9	0.6	131	27.6		8.1		28.0		90.2		6.1		9.9		5		90				<0.2		1.4	
					Bottom	6.8	0.5	117	27.6	27.6	8.1	8.1	28.1	28.1	91.5	91.6	6.2	6.2	13.0		5		91				<0.2		0.9	
						6.8	0.5	127	27.6		8.1		28.1		91.7		6.2		13.1		5		92				<0.2		1.2	
IM12	Cloudy	Moderate	09:58	9.3	Surface	1.0	0.5	115	27.6	27.6	8.1	8.1	28.0	28.0	91.8	91.8	6.2	6.1	5.2	10.1	5	6	89	90	821478	812067	<0.2	<0.2	0.9	1.1
						1.0	0.5	120	27.6		8.1		28.0		91.8		6.2		5.1		6		89				<0.2		1.1	
					Middle	4.7	0.4	110	27.5	27.5	8.1	8.1	28.5	28.5	87.3	87.3	5.9		11.7		5		90				<0.2		1.2	
						4.7	0.5	120	27.5		8.1		28.5		87.2		5.9		11.7		6		90				<0.2		1.2	
					Bottom	8.3	0.3	108	27.5	27.5	8.1	8.1	28.5	28.5	87.1	87.2	5.9	5.9	13.2		7		91				<0.2		1.2	
						8.3	0.3	117	27.5		8.1		28.5		87.2		5.9		13.6		7		91				<0.2		1.1	
SR1A	Cloudy	Calm	09:40	5.1	Surface	1.0	-	-	27.4	27.4	8.1	8.1	28.3	28.3	89.7	89.7	6.1	6.1	4.8	4.7	5	5	-	-	819982	812658	-	-	-	-
						1.0	-	-	27.4		8.1		28.3		89.7		6.1		4.8		4		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.4	27.4	8.1	8.1	28.4	28.4	90.0	90.2	6.1	6.1	4.7		6		-				-		-	
						4.1	-	-	27.4		8.1		28.4		90.4		6.1		4.7		6		-				-		-	
SR2	Cloudy	Moderate	09:27	4.6	Surface	1.0	0.4	89	27.5	27.5	8.1	8.1	28.4	28.5	89.0	88.8	6.0	6.0	4.1	5.0	6	7	88	91	821447	814145	<0.2	<0.2	1.1	1.1
						1.0	0.4	94	27.5		8.1		28.5		88.6		6.0		4.3		7		88				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	90	27.6	27.6	8.1	8.1	29.0	29.0	89.0	89.4	6.0	6.0	5.7		7		93				<0.2		1.1	
						3.6	0.3	98	27.6		8.1		29.0		89.8		6.0		5.8		7		94				<0.2		1.0	
SR3	Cloudy	Moderate	10:41	8.3	Surface	1.0	0.3	184	27.7	27.7	8.1	8.1	27.4	27.5	94.8	94.8	6.4	6.2	4.1	5.6	4	4	-	-	822127	807578	-	-	-	-
						1.0	0.3	201	27.7		8.1		27.5		94.7		6.4		4.3		4		-				-		-	
					Middle	4.2	0.2	197	27.5	27.5	8.1	8.1	27.9	27.9	89.4	89.3	6.0		5.5		5		-				-		-	
						4.2	0.2	210	27.5		8.1		27.9		89.2		6.0		5.5		4		-				-		-	
					Bottom	7.3	0.1	276	27.4	27.4	8.1	8.1	29.2	29.2	88.3	88.5	5.9	6.0	7.3		4		-				-		-	
						7.3	0.1	277	27.4		8.1		29.2		88.6		6.0		7.3		3		-				-		-	
SR4A	Cloudy	Moderate	09:35	8.7	Surface	1.0	0.1	65	26.6	26.6	8.2	8.2	30.6	30.6	84.8	84.8	5.7	5.7	5.2	6.9	6	5	-	-	817211	807815	-	-	-	-
						1.0	0.1	60	26.6		8.2		30.6		84.8		5.7		5.1		6		-				-		-	
					Middle	4.4	0.1	63	26.7	26.7	8.2	8.2	31.3	31.3	82.9	82.9	5.6		6.8		6		-				-		-	
						4.4	0.1	65	26.6		8.2		31.2		82.9		5.6		6.8		5		-				-		-	
					Bottom	7.7	0.1	58	26.7	26.7	8.2	8.2	31.5	31.5	82.7	82.8	5.6	5.6	8.7		4		-				-		-	
						7.7	0.1	69	26.7		8.2		31.5		82.8		5.6		8.8		4		-				-		-	
SR5A	Cloudy	Moderate	09:20	4.9	Surface	1.0	0.0	68	26.4	26.4	8.2	8.2	30.1	30.1	88.5	88.5	6.0	6.0	6.2	6.9	5	5	-	-	816606	810713	-	-	-	-
						1.0	0.0	68	26.4		8.2		30.1		88.4		6.0		6.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	80	26.3	26.3	8.2	8.2	30.1	30.1	89.2	89.5	6.1	6.1	7.5		5		-				-		-	
						3.9	0.1	90	26.3		8.2		30.1		89.7		6.1		7.6		4		-				-		-	
SR6A	Cloudy	Moderate	08:50	4.8	Surface	1.0	0.0	32	26.2	26.2	8.1	8.1	29.7	29.7	88.1	88.1	6.0	6.0	3.0	4.4	5	5	-	-	817982	814719	-	-	-	-
						1.0	0.0	35	26.2		8.1		29.7		88.0		6.0		3.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	48	26.4	26.4	8.1	8.1	30.1	30.1	83.9	84.1	5.7	5.7	5.9		5		-				-		-	
						3.8	0.0	46	26.4		8.1		30.1		84.2		5.7		5.6		5		-				-		-	
SR7	Cloudy	Moderate	08:17	14.9	Surface	1.0	0.5	52	27.8	27.8	8.0	8.0	31.2	31.2	80.0	80.0	5.3	5.3	2.4	2.8	3	3	-	-	823656	823728	-	-	-	-
						1.0	0.5	56	27.8		8.0		31.2		80.0		5.3		2.4		2		-				-		-	
					Middle	7.5	0.3	22	27.9	27.9	8.0	8.0	31.6	31.6	79.2	79.2	5.2		2.8		3		-				-		-	
						7.5	0.3	23	27.9		8.0		31.7		79.1		5.2		2.8		3		-				-		-	
					Bottom	13.9	0.3	354	27.9	27.9	8.0	8.0	31.9	31.9	78.9	79.0	5.2	5.2	3.0		3		-				-		-	
						13.9	0.4	354	27.9		8.0		31.9		79.0		5.2		3.1		3		-				-		-	
SR8	Cloudy	Calm	09:50	4.4	Surface	1.0	-	-	27.3	27.3	8.0	8.0	28.2	28.2	91.1	91.0	6.2	6.2	8.4	10.5	7	6	-	-	820368	811604	-	-	-	-
						1.0	-	-	27.3		8.0		28.2		90.9		6.2		8.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	27.3	27.3	8.0	8.0	28.4	28.4	90.3	90.5	6.1	6.1	12.3		5		-				-		-	
						3.4	-	-	27.3		8.0		28.4		90.6		6.1		12.5		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 October 19 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	Calm	15:57	8.2	Surface	1.0	0.2	80	26.6	26.6	8.2	8.2	30.8	30.8	87.3	87.3	5.9	5.8	4.8	11.2	5	6	86	88	815596	804236	<0.2	<0.2	0.6	0.7
						1.0	0.2	81	26.6		8.2		30.9		87.2		5.9		4.9		6		87				<0.2		0.7	
					Middle	4.1	0.1	88	26.6	26.6	8.2	8.2	31.5	31.5	82.9	83.0	5.6		16.2		6		88				<0.2		0.7	
						4.1	0.1	93	26.6		8.2		31.5		83.0		5.6		16.4		6		88				<0.2		0.7	
					Bottom	7.2	0.1	22	26.6	26.6	8.2	8.2	31.5	31.5	83.8	83.9	5.6	5.7	12.8		5		90				<0.2		0.7	
						7.2	0.1	22	26.6		8.2		31.5		83.9		5.7		12.4		6		91				<0.2		0.7	
C2	Cloudy	Moderate	15:10	10.4	Surface	1.0	0.8	17	27.7	27.7	8.1	8.1	26.8	26.8	88.8	88.7	6.0	5.9	3.3	7.9	3	4	89	91	825659	806941	<0.2	<0.2	1.6	1.5
						1.0	0.9	18	27.7		8.1		26.8		88.5		6.0		3.3		3		90				<0.2		1.5	
					Middle	5.2	0.6	17	27.8	27.8	8.1	8.1	27.2	27.1	85.8	85.6	5.8		8.1		4		91				<0.2		1.8	
						5.2	0.6	18	27.8		8.1		27.1		85.4		5.8		8.4		3		91				<0.2		1.6	
					Bottom	9.4	0.3	19	28.1	28.1	8.1	8.1	29.7	29.7	79.8	79.9	5.3	5.3	12.3		4		91				<0.2		1.4	
						9.4	0.3	19	28.0		8.1		29.7		80.0		5.3		12.0		4		91				<0.2		1.3	
C3	Cloudy	Moderate	16:54	11.4	Surface	1.0	0.1	217	27.9	27.9	8.1	8.1	28.9	28.9	87.5	87.4	5.9	5.7	7.0	8.5	7	7	89	90	822121	817821	<0.2	<0.2	1.5	1.4
						1.0	0.1	222	27.8		8.1		28.9		87.3		5.8		7.2		7		89				<0.2		1.4	
					Middle	5.7	0.1	253	27.8	27.8	8.1	8.1	29.8	29.8	82.1	82.1	5.5		9.2		6		90				<0.2		1.4	
						5.7	0.1	274	27.8		8.1		29.9		82.0		5.5		9.3		6		90				<0.2		1.2	
					Bottom	10.4	0.1	221	27.8	27.8	8.1	8.1	29.9	29.9	83.2	83.4	5.5	5.6	9.2		7		92				<0.2		1.2	
						10.4	0.1	230	27.8		8.1		29.9		83.6		5.6		9.2		7		92				<0.2		1.4	
IM1	Cloudy	Moderate	15:38	5.2	Surface	1.0	0.0	49	26.6	26.6	8.2	8.2	30.8	30.8	86.7	86.7	5.9	5.9	6.8	7.9	11	12	86	88	817957	807148	<0.2	<0.2	0.7	0.7
						1.0	0.0	46	26.6		8.2		30.8		86.6		5.9		6.9		10		86				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	48	26.5	26.5	8.2	8.2	31.0	31.0	88.7	88.9	6.0	6.0	9.0		12		90				<0.2		0.8	
						4.2	0.1	43	26.5		8.2		31.0		89.0		6.0		8.9		14		91				<0.2		0.6	
IM2	Cloudy	Moderate	15:32	7.2	Surface	1.0	0.1	19	26.5	26.5	8.2	8.2	30.6	30.6	86.4	86.4	5.9	5.8	7.7	9.8	10	10	86	88	818181	806155	<0.2	<0.2	0.8	0.8
						1.0	0.1	21	26.5		8.2		30.6		86.3		5.8		7.7		10		86				<0.2		0.7	
					Middle	3.6	0.1	24	26.6	26.6	8.2	8.2	31.0	31.0	85.4	85.4	5.8		9.5		11		87				<0.2		0.8	
						3.6	0.1	26	26.6		8.2		31.0		85.3		5.8		10.0		10		89				<0.2		0.6	
					Bottom	6.2	0.1	25	26.5	26.5	8.2	8.2	31.2	31.2	85.4	85.6	5.8	5.8	11.9		10		90				<0.2		0.8	
						6.2	0.1	24	26.4		8.2		31.2		85.8		5.8		11.8		10		91				<0.2		0.8	
IM3	Cloudy	Moderate	15:26	7.4	Surface	1.0	0.3	22	26.5	26.5	8.2	8.2	30.4	30.4	88.2	88.2	6.0	6.0	8.5	9.4	8	10	86	88	818782	805611	<0.2	<0.2	0.8	0.7
						1.0	0.4	23	26.5		8.2		30.4		88.1		6.0		8.2		10		87				<0.2		0.7	
					Middle	3.7	0.3	25	26.5	26.5	8.2	8.2	30.5	30.5	87.4	87.4	5.9		8.2		12		88				<0.2		0.8	
						3.7	0.3	29	26.5		8.2		30.5		87.4		5.9		8.4		10		88				<0.2		0.7	
					Bottom	6.4	0.3	24	26.5	26.5	8.2	8.2	30.6	30.6	88.7	88.8	6.0	6.0	11.5		10		90				<0.2		0.7	
						6.4	0.3	26	26.4		8.2		30.6		88.8		6.0		11.4		10		90				<0.2		0.6	
IM4	Cloudy	Moderate	15:19	7.8	Surface	1.0	0.8	18	26.4	26.4	8.2	8.2	28.9	28.9	93.8	93.8	6.4	6.4	9.8	10.6	12	11	86	88	819737	804597	<0.2	<0.2	0.9	0.9
						1.0	0.8	20	26.4		8.2		28.9		93.8		6.4		9.8		12		87				<0.2		0.9	
					Middle	3.9	0.7	19	26.4	26.4	8.2	8.2	28.9	28.9	93.9	93.9	6.4		10.8		11		88				<0.2		0.8	
						3.9	0.8	21	26.4		8.2		28.9		93.9		6.4		10.7		12		87				<0.2		1.0	
					Bottom	6.8	0.6	21	26.4	26.4	8.2	8.2	28.9	28.9	94.2	94.2	6.4	6.5	11.2		11		90				<0.2		0.9	
						6.8	0.6	20	26.4		8.2		28.9		94.2		6.5		11.1		10		91				<0.2		1.0	
IM5	Cloudy	Moderate	15:14	7.4	Surface	1.0	0.7	22	26.4	26.4	8.2	8.2	29.3	29.3	91.0	91.0	6.2	6.1	6.4	8.9	7	8	86	88	820727	804861	<0.2	<0.2	1.0	1.0
						1.0	0.8	22	26.4		8.2		29.3		91.0		6.2		6.2		6		86				<0.2		1.0	
					Middle	3.7	0.7	21	26.3	26.3	8.2	8.2	29.8	29.8	88.2	88.2	6.0		8.3		8		89				<0.2		0.9	
						3.7	0.7	23	26.3		8.2		29.8		88.2		6.0		8.2		8		87				<0.2		1.0	
					Bottom	6.4	0.5	22	26.3	26.3	8.2	8.2	30.2	30.2	88.4	88.6	6.0	6.0	12.1		8		90				<0.2		0.8	
						6.4	0.6	23	26.3		8.2		30.2		88.7		6.0		12.2		9		91				<0.2		1.0	
IM6	Cloudy	Moderate	15:10	7.6	Surface	1.0	0.7	24	26.4	26.4	8.2	8.2	29.3	29.3	88.6	88.5	6.1	6.0	7.5	10.1	6	5	86	88	821064	805811	<0.2	<0.2	1.0	1.0
						1.0	0.8	24	26.4		8.2		29.4		88.4		6.0		7.2		5		86				<0.2		1.0	
					Middle	3.8	0.6	25	26.3	26.3	8.2	8.2	30.1	30.1	86.7	86.8	5.9		10.2		5		88				<0.2		1.0	
						3.8	0.6	26	26.3		8.2		30.2		86.8		5.9		10.3		6		87				<0.2		1.0	
					Bottom	6.6	0.5	24	26.3	26.3	8.2	8.2	30.2	30.2	90.3	90.5	6.2	6.2	12.5		5		90				<0.2		1.0	
						6.6	0.5	25	26.3		8.2		30.2		90.6		6.2		12.9		5		90				<0.2		0.9	
IM7	Cloudy	Moderate	15:06	7.4	Surface	1.0	0.6	28	26.4	26.4	8.2	8.2	28.9	28.9	91.1	90.9	6.2	6.2	4.6	6.9	4	5	86	88	821341	806858	<0.2	<0.2	1.1	1.0
						1.0	0.7	27	26.4		8.2		29.0		90.7		6.2		4.7		4		86				<0.2		1.0	
					Middle	3.7	0.6	25	26.4	26.4	8.2	8.2	29.5	29.5	88.7	88.8	6.1		7.2		5		88				<0.2		1.0	
						3.7	0.6	27	26.4		8.2		29.5		88.8		6.1		7.3		6		87				<0.2		1.0	
					Bottom	6.4	0.4	27	26.4	26.4	8.2	8.2	29.2	29.2	91.4	91.5	6.2	6.3	8.9		6		90				<0.2		1.0	
						6.4	0.4	28	26.4		8.2		29.2		91.6		6.3		8.6		5		90				<0.2		1.0	
IM8	Cloudy	Moderate	15:35	7.7	Surface	1.0	0.2	331	27.6	27.6	8.1	8.1	28.1	28.1	90.8	90.8	6.1	6.2	5.7	8.4	5	7	89	90	821824	808139	<0.2	<0.2	1.2	1.2
						1.0	0.2	347	27.6		8.1		28.1		90.8		6.1		5.7		6		90				<0.2		1.1	
					Middle	3.9	0.2	337	27.6	27.6	8.1	8.1	28.1	28.1	91.4	91.5	6.2		6.0		6		90				<0.2		1.3	
						3.9	0.2	349	27.6		8.1		28.1		91.6		6.2		6.0		8		90				<0.2		1.2	
					Bottom	6.7	0.2	338	27.5	27.5	8.1	8.1	28.2	28.2	92.4	92.6	6.2	6.3	13.4		8		91				<0.2		1.2	
						6.7	0.2	348	27.4		8.2		28.2		92.7		6.3		13.9		6		91				<0.2		1.3	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 24 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	15:42	7.1	Surface	1.0	0.2	315	27.9	27.9	8.1	8.1	28.1	28.1	89.5	89.5	6.0	6.1	4.9	6.3	5	6	89	89	822088	808809	<0.2	<0.2	1.4	1.3
						1.0	0.2	316	27.9		8.1		28.1		89.5		6.0		4.9		6		89				<0.2		1.4	
					Middle	3.6	0.1	313	27.8	27.8	8.1	8.1	28.2	28.2	90.1	90.2	6.1		5.5		5		86				<0.2		1.2	
						3.6	0.1	318	27.8		8.1		28.2		90.2		6.1		5.4		6		87				<0.2		1.3	
					Bottom	6.1	0.1	347	27.7	27.7	8.1	8.1	28.2	28.2	91.8	91.9	6.2	6.2	8.5		7		91				<0.2		1.3	
						6.1	0.1	344	27.7		8.1		28.2		92.0		6.2		8.5		6		91				<0.2		1.2	
IM10	Cloudy	Moderate	15:50	7.3	Surface	1.0	0.4	293	28.1	28.1	8.1	8.1	28.0	28.0	88.4	88.4	5.9	5.9	4.1	6.2	5	5	88	90	822407	809809	<0.2	<0.2	1.1	1.1
						1.0	0.4	289	28.0		8.1		28.0		88.3		5.9		4.3		4		89				<0.2		1.1	
					Middle	3.7	0.3	294	27.8	27.8	8.1	8.1	28.4	28.4	87.6	87.7	5.9		7.0		4		89				<0.2		1.1	
						3.7	0.3	293	27.8		8.1		28.4		87.7		5.9		7.1		5		90				<0.2		1.1	
					Bottom	6.3	0.2	304	27.7	27.7	8.1	8.1	28.4	28.4	89.8	89.9	6.0	6.0	7.4		4		92				<0.2		1.0	
						6.3	0.2	296	27.7		8.1		28.4		90.0		6.0		7.5		5		91				<0.2		1.0	
IM11	Cloudy	Moderate	16:00	8.1	Surface	1.0	0.4	281	27.8	27.8	8.1	8.1	28.3	28.3	88.6	88.6	5.9	5.9	6.9	7.9	4	5	89	90	822040	811444	<0.2	<0.2	1.1	1.1
						1.0	0.5	283	27.8		8.1		28.3		88.6		5.9		7.1		5		89				<0.2		1.1	
					Middle	4.1	0.4	278	27.8	27.8	8.1	8.1	28.3	28.3	88.4	88.4	5.9		7.7		5		90				<0.2		1.2	
						4.1	0.4	283	27.8		8.1		28.3		88.4		5.9		7.9		6		90				<0.2		1.1	
					Bottom	7.1	0.3	274	27.7	27.7	8.1	8.1	28.3	28.3	89.0	89.2	6.0	6.0	9.0		6		91				<0.2		1.2	
						7.1	0.3	276	27.7		8.1		28.3		89.3		6.0		9.0		5		91				<0.2		1.0	
IM12	Cloudy	Moderate	16:07	7.6	Surface	1.0	0.4	261	27.7	27.7	8.1	8.1	28.0	28.0	91.4	91.3	6.2	6.1	7.1	8.1	7	7	89	90	821475	812026	<0.2	<0.2	1.0	1.0
						1.0	0.4	253	27.6		8.1		28.0		91.1		6.1		7.2		7		90				<0.2		1.0	
					Middle	3.8	0.4	242	27.6	27.6	8.1	8.1	28.1	28.1	90.2	90.2	6.1		8.1		8		89				<0.2		0.9	
						3.8	0.4	248	27.6		8.1		28.1		90.1		6.1		8.3		7		89				<0.2		1.0	
					Bottom	6.6	0.2	230	27.5	27.5	8.1	8.1	28.2	28.2	91.7	91.9	6.2	6.2	8.9		7		91				<0.2		1.0	
						6.6	0.2	239	27.5		8.1		28.2		92.1		6.2		8.9		7		91				<0.2		1.0	
SR1A	Cloudy	Calm	16:26	5.3	Surface	1.0	-	-	27.7	27.7	8.1	8.1	28.3	28.3	89.1	89.0	6.0	6.0	12.2	14.8	8	8	-	-	819981	812665	-	-	-	-
						1.0	-	-	27.6		8.1		28.3		88.8		6.0		12.3		8		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.5	27.5	8.1	8.1	28.4	28.4	89.3	89.9	6.0	6.1	17.5		8		-				-		-	
						4.3	-	-	27.5		8.1		28.4		90.5		6.1		17.4		7		-				-		-	
SR2	Cloudy	Moderate	16:33	5.0	Surface	1.0	0.1	246	27.7	27.7	8.1	8.1	28.3	28.3	88.8	88.8	6.0	6.0	12.1	10.8	6	7	88	89	821474	814147	<0.2	<0.2	1.2	1.1
						1.0	0.1	247	27.7		8.1		28.3		88.8		6.0		12.0		7		88				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	227	27.8	27.8	8.1	8.1	28.2	28.2	90.2	90.4	6.1	6.1	9.5		6		90				<0.2		1.0	
						4.0	0.2	226	27.8		8.1		28.2		90.6		6.1		9.6		7		90				<0.2		0.9	
SR3	Cloudy	Moderate	15:27	8.3	Surface	1.0	0.5	18	27.8	27.8	8.1	8.1	27.9	27.9	89.8	89.7	6.0	6.0	5.4	8.1	6	6	-	-	822130	807567	-	-	-	-
						1.0	0.5	20	27.8		8.1		27.9		89.6		6.0		5.5		6		-				-		-	
					Middle	4.2	0.3	20	27.6	27.6	8.1	8.1	28.4	28.4	87.6	87.6	5.9		8.9		6		-				-		-	
						4.2	0.3	21	27.6		8.1		28.4		87.6		5.9		9.1		6		-				-		-	
					Bottom	7.3	0.2	24	27.5	27.5	8.1	8.1	28.6	28.6	88.7	89.0	6.0	6.0	9.8		5		-				-		-	
						7.3	0.2	27	27.5		8.1		28.6		89.2		6.0		9.9		5		-				-		-	
SR4A	Cloudy	Calm	16:22	8.3	Surface	1.0	0.6	241	26.7	26.7	8.2	8.2	30.5	30.5	87.4	87.3	5.9	5.9	7.5	10.0	6	6	-	-	817169	807820	-	-	-	-
						1.0	0.6	251	26.7		8.2		30.5		87.2		5.9		8.0		6		-				-		-	
					Middle	4.2	0.5	258	26.6	26.6	8.2	8.2	30.7	30.7	86.6	86.7	5.9		10.7		6		-				-		-	
						4.2	0.6	259	26.6		8.2		30.7		86.8		5.9		10.9		6		-				-		-	
					Bottom	7.3	0.5	254	26.6	26.6	8.2	8.2	30.8	30.8	87.6	87.7	5.9	5.9	11.3		6		-				-		-	
						7.3	0.5	274	26.6		8.2		30.8		87.8		5.9		11.5		6		-				-		-	
SR5A	Cloudy	Moderate	16:43	4.5	Surface	1.0	0.3	324	26.5	26.5	8.2	8.2	30.2	30.2	89.6	89.8	6.1	6.1	8.0	8.1	8	9	-	-	816570	810676	-	-	-	-
						1.0	0.4	332	26.5		8.2		30.2		89.9		6.1		8.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	287	26.5	26.5	8.2	8.2	30.2	30.2	92.7	92.9	6.3	6.3	8.3		9		-				-		-	
						3.5	0.2	287	26.5		8.2		30.2		93.0		6.3		8.1		9		-				-		-	
SR6A	Cloudy	Moderate	17:18	4.3	Surface	1.0	0.1	346	26.6	26.6	8.2	8.2	30.1	30.1	87.9	87.9	6.0	6.0	7.6	7.9	8	8	-	-	817986	814715	-	-	-	-
						1.0	0.1	352	26.6		8.2		30.1		87.8		6.0		7.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	291	26.5	26.5	8.2	8.2	30.2	30.2	87.8	87.8	6.0	6.0	8.1		8		-				-		-	
						3.3	0.1	288	26.5		8.2		30.2		87.8		6.0		8.1		8		-				-		-	
SR7	Cloudy	Moderate	17:22	14.6	Surface	1.0	0.2	279	27.7	27.7	8.1	8.1	29.1	29.1	88.8	88.8	5.9	5.7	4.1	5.4	4	5	-	-	823633	823741	-	-	-	-
						1.0	0.2	283	27.7		8.1		29.1		88.7		5.9		4.2		4		-				-		-	
					Middle	7.3	0.1	271	27.7	27.7	8.1	8.1	30.0	30.0	82.6	82.6	5.5		5.8		5		-				-		-	
						7.3	0.1	277	27.7		8.1		30.0		82.6		5.5		6.0		4		-				-		-	
					Bottom	13.6	0.0	265	27.8	27.8	8.1	8.1	30.1	30.1	83.2	83.4	5.5	5.6	6.1		7		-				-		-	
						13.6	0.0	267	27.8		8.1		30.1		83.5		5.6		6.1		6		-				-		-	
SR8	Cloudy	Calm	16:13	4.2	Surface	1.0	-	-	27.7	27.7	8.1	8.1	28.0	28.0	91.3	91.2	6.2	6.2	6.8	6.8	6	6	-	-	820373	811646	-	-	-	-
						1.0	-	-	27.7		8.1		28.0		91.1		6.1		6.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	27.6	27.7	8.1	8.1	28.0	28.0	91.4	91.6	6.2	6.2	6.9		6		-				-		-	
						3.2	-	-	27.7		8.1		28.0		91.7		6.2		6.8		7		-				-		-	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	11:15	7.3	Surface	1.0	0.5	216	26.5	26.5	8.1	8.1	31.6	31.6	91.2	91.2	6.1	6.1	6.1	8.1	6	6	83	87	815604	804244	<0.2	<0.2	1.0	0.9
						1.0	0.5	237	26.5		8.1		31.6		91.2		6.1		6.1		6		84				<0.2		0.8	
					Middle	3.7	0.4	200	26.5	26.5	8.1	8.1	32.4	32.4	90.6	90.7	6.1		7.3		7		87				<0.2		0.8	
						3.7	0.4	202	26.5		8.1		32.4		90.7		6.1		7.3		5		87				<0.2		1.0	
					Bottom	6.3	0.4	209	26.4	26.4	8.1	8.1	32.4	32.4	91.4	91.5	6.1	6.2	10.8		7		91				<0.2		0.9	
						6.3	0.4	228	26.4		8.1		32.5		91.6		6.2		10.8		6		92				<0.2		1.0	
C2	Cloudy	Moderate	12:20	12.6	Surface	1.0	0.9	177	27.8	27.8	8.1	8.1	27.5	27.5	88.9	88.9	6.0	5.9	6.9	8.3	8	8	85	88	825701	806921	<0.2	<0.2	1.4	1.4
						1.0	1.0	178	27.8		8.1		27.5		88.8		6.0		7.0		7		86				<0.2		1.4	
					Middle	6.3	0.9	165	27.5	27.5	8.1	8.1	28.2	28.2	86.6	86.6	5.8		9.2		8		87				<0.2		1.7	
						6.3	0.9	170	27.5		8.1		28.2		86.5		5.8		9.2		7		88				<0.2		1.6	
					Bottom	11.6	0.4	160	27.6	27.6	8.1	8.1	28.9	28.9	85.6	85.7	5.7	5.8	8.8		7		90				<0.2		1.1	
						11.6	0.4	171	27.6		8.1		28.9		85.8		5.8		8.8		8		89				<0.2		1.0	
C3	Cloudy	Moderate	10:20	11.3	Surface	1.0	0.4	80	27.6	27.6	8.1	8.1	30.2	30.2	85.8	85.5	5.7	5.7	3.5	4.2	4	5	85	88	822092	817812	<0.2	<0.2	1.1	1.2
						1.0	0.5	82	27.6		8.1		30.3		85.1		5.7		3.6		5		86				<0.2		1.0	
					Middle	5.7	0.4	98	27.6	27.6	8.0	8.0	30.5	30.5	83.8	83.8	5.6		4.0		5		88				<0.2		1.2	
						5.7	0.4	104	27.6		8.0		30.6		83.8		5.6		4.0		5		88				<0.2		1.2	
					Bottom	10.3	0.3	100	27.7	27.7	8.0	8.0	31.1	31.1	82.4	82.4	5.5	5.5	5.1		5		90				<0.2		1.2	
						10.3	0.4	101	27.7		8.0		31.1		82.4		5.5		5.1		7		91				<0.2		1.2	
IM1	Cloudy	Rough	11:40	4.9	Surface	1.0	0.2	180	26.5	26.5	8.1	8.1	31.4	31.4	89.0	89.0	6.0	6.0	8.1	8.4	9	9	84	86	817961	807136	<0.2	<0.2	0.9	0.9
						1.0	0.2	190	26.5		8.1		31.4		89.0		6.0		8.1		9		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	199	26.5	26.5	8.1	8.1	31.7	31.7	89.2	89.3	6.0	6.0	8.8		10		87				<0.2		0.9	
						3.9	0.2	204	26.5		8.1		31.7		89.3		6.0		8.8		10		88				<0.2		1.0	
IM2	Cloudy	Rough	11:45	7.8	Surface	1.0	0.2	188	26.5	26.5	8.1	8.1	31.0	31.0	90.2	90.2	6.1	6.1	4.3	6.3	8	8	85	87	818178	806158	<0.2	<0.2	1.0	1.0
						1.0	0.2	202	26.5		8.1		31.0		90.2		6.1		4.3		7		84				<0.2		1.0	
					Middle	3.9	0.3	179	26.4	26.4	8.1	8.1	31.9	32.0	90.3	90.4	6.1		6.3		8		87				<0.2		1.0	
						3.9	0.3	195	26.4		8.1		32.0		90.4		6.1		6.3		9		89				<0.2		1.0	
					Bottom	6.8	0.2	160	26.4	26.4	8.1	8.1	32.1	32.1	90.9	91.2	6.1	6.1	8.3		9		90				<0.2		1.0	
						6.8	0.2	171	26.4		8.2		32.1		91.4		6.1		8.3		8		89				<0.2		1.0	
IM3	Cloudy	Rough	11:51	7.9	Surface	1.0	0.3	143	26.5	26.5	8.1	8.1	31.3	31.3	91.0	91.0	6.1	6.1	6.7	8.5	9	9	86	88	818782	805572	<0.2	<0.2	0.6	0.9
						1.0	0.4	148	26.5		8.1		31.3		91.0		6.1		6.7		8		85				<0.2		0.8	
					Middle	4.0	0.3	132	26.4	26.4	8.1	8.1	31.9	31.9	89.7	89.7	6.0		8.4		8		88				<0.2		1.0	
						4.0	0.3	132	26.4		8.1		31.9		89.7		6.0		8.4		8		87				<0.2		0.9	
					Bottom	6.9	0.3	136	26.4	26.4	8.1	8.1	32.0	32.0	91.0	91.1	6.1	6.1	10.4		9		91				<0.2		1.1	
						6.9	0.3	140	26.4		8.1		31.9		91.1		6.1		10.4		9		90				<0.2		1.0	
IM4	Cloudy	Rough	12:00	8.1	Surface	1.0	0.8	199	26.5	26.5	8.1	8.1	31.1	31.1	90.0	90.0	6.1	6.1	4.6	5.8	6	9	85	88	819732	804620	<0.2	<0.2	1.0	1.1
						1.0	0.9	216	26.5		8.1		31.1		89.9		6.1		4.6		7		86				<0.2		1.0	
					Middle	4.1	0.8	191	26.5	26.5	8.1	8.1	31.6	31.6	89.8	89.8	6.1		5.3		9		88				<0.2		1.0	
						4.1	0.8	194	26.5		8.1		31.6		89.8		6.1		5.4		9		87				<0.2		1.1	
					Bottom	7.1	0.7	195	26.5	26.5	8.1	8.1	31.6	31.6	91.4	91.5	6.2	6.2	7.4		12		90				<0.2		1.1	
						7.1	0.8	209	26.5		8.1		31.6		91.6		6.2		7.5		11		89				<0.2		1.1	
IM5	Cloudy	Rough	12:08	8.4	Surface	1.0	0.8	200	26.6	26.6	8.1	8.1	31.4	31.4	90.8	90.8	6.1	6.1	6.4	8.2	7	10	86	88	820730	804851	<0.2	<0.2	1.0	1.1
						1.0	0.8	200	26.6		8.1		31.4		90.7		6.1		6.4		6		85				<0.2		1.1	
					Middle	4.2	0.7	212	26.5	26.5	8.1	8.1	31.8	31.8	88.6	88.6	6.0		7.6		10		87				<0.2		1.0	
						4.2	0.7	216	26.5		8.1		31.8		88.6		6.0		7.6		9		89				<0.2		0.9	
					Bottom	7.4	0.7	208	26.5	26.5	8.1	8.1	31.9	31.9	88.3	88.3	5.9	5.9	10.5		13		90				<0.2		1.1	
						7.4	0.7	209	26.5		8.1		31.9		88.3		5.9		10.5		12		89				<0.2		1.2	
IM6	Cloudy	Rough	12:17	8.0	Surface	1.0	0.7	232	26.8	26.8	8.1	8.1	29.8	29.8	91.3	91.3	6.2	6.2	4.1	5.8	6	7	83	87	821046	805842	<0.2	<0.2	1.2	1.2
						1.0	0.7	244	26.8		8.1		29.8		91.3		6.2		4.2		5		84				<0.2		1.2	
					Middle	4.0	0.6	229	26.6	26.6	8.1	8.1	30.9	30.9	90.8	90.8	6.1		5.2		7		88				<0.2		1.2	
						4.0	0.6	251	26.6		8.1		30.9		90.8		6.1		5.3		6		87				<0.2		1.3	
					Bottom	7.0	0.5	221	26.4	26.4	8.1	8.1	31.7	31.7	92.1	92.3	6.2	6.2	7.9		8		91				<0.2		1.2	
						7.0	0.5	226	26.4		8.1		31.7		92.5		6.2		7.9		7		91				<0.2		1.3	
IM7	Cloudy	Rough	12:25	8.3	Surface	1.0	0.6	246	26.8	26.8	8.1	8.1	29.5	29.5	92.0	92.0	6.2	6.2	6.2	8.0	5	6	83	88	821367	806822	<0.2	<0.2	1.3	1.2
						1.0	0.6	265	26.8		8.1		29.5		91.9		6.2		6.2		6		85				<0.2		1.3	
					Middle	4.2	0.5	241	26.5	26.5	8.1	8.1	29.7	29.7	89.7	89.8	6.1		7.5		6		87				<0.2		1.1	
						4.2	0.6	249	26.5		8.1		29.8		89.9		6.1		7.5		6		88				<0.2		1.2	
					Bottom	7.3	0.5	255	26.4	26.4	8.1	8.1	31.1	31.1	91.7	91.9	6.2	6.2	10.4		7		92				<0.2		1.0	
						7.3	0.5	280	26.4		8.1		31.1		92.0		6.2		10.4		6		92				<0.2		1.2	
IM8	Cloudy	Moderate	11:52	7.6	Surface	1.0	0.2	166	27.4	27.4	8.1	8.1	29.1	29.1	88.8	88.8	6.0	6.0	8.6	9.4	8	8	86	88	821833	808139	<0.2	<0.2	1.2	1.2
						1.0	0.2	170	27.4		8.1		29.1		88.8		6.0		8.5		8		86				<0.2		1.3	
					Middle	3.8	0.1	141	27.4	27.4	8.1	8.1	29.5	29.5	89.1	89.1	6.0		8.3		8		87				<0.2		1.2	
						3.8	0.1	143	27.4		8.1		29.5		89.1		6.0		8.3		8		88				<0.2		1.2	
					Bottom	6.6	0.1	87	27.4	27.4	8.1	8.1	30.1	30.1	89.9	90.0	6.0	6.0	11.2		8		91				<0.2		1.2	
						6.6	0.1	92	27.4		8.1		30.1		90.0		6.0		11.2		7		90				<0.2		1.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:46	7.0	Surface	1.0	0.5	109	27.5	27.5	8.1	8.1	29.0	29.0	88.7	88.7	6.0	6.0	8.8	11.2	8	8	86	89	822093	808819	<0.2	<0.2	1.1	1.1
						1.0	0.5	113	27.5		8.1		29.0		88.7		6.0		8.8		7		87				<0.2		1.2	
					Middle	3.5	0.4	105	27.4	27.4	8.1	8.1	29.1	29.2	88.4	88.4	5.9		10.0		8		88				<0.2		1.3	
						3.5	0.4	111	27.4		8.1		29.2		88.4		5.9		10.0		7		87				<0.2		1.0	
					Bottom	6.0	0.4	81	27.4	27.4	8.1	8.1	29.7	29.7	88.8	88.9	6.0	6.0	14.8		9		91				<0.2		1.0	
						6.0	0.4	85	27.4		8.1		29.7		89.0		6.0		14.8		8		92				<0.2		1.1	
IM10	Cloudy	Moderate	11:39	7.7	Surface	1.0	0.7	109	27.6	27.6	8.1	8.1	29.0	29.0	88.3	88.2	5.9	5.9	6.9	7.7	6	8	86	88	822391	809804	<0.2	<0.2	1.2	1.1
						1.0	0.8	118	27.5		8.1		29.0		88.1		5.9		6.9		7		85				<0.2		1.2	
					Middle	3.9	0.7	112	27.5	27.5	8.1	8.1	29.4	29.4	87.6	87.6	5.9		7.6		8		87				<0.2		0.8	
						3.9	0.7	121	27.4		8.1		29.4		87.6		5.9		7.6		7		88				<0.2		0.9	
					Bottom	6.7	0.5	116	27.4	27.4	8.1	8.1	29.4	29.5	89.1	89.1	6.0	6.0	8.5		9		90				<0.2		1.2	
						6.7	0.5	125	27.4		8.1		29.5		89.1		6.0		8.6		10		91				<0.2		1.0	
IM11	Cloudy	Moderate	11:26	7.7	Surface	1.0	0.7	122	27.5	27.5	8.1	8.1	29.1	29.1	88.4	88.3	5.9	5.9	10.4	10.4	12	10	87	89	822059	811442	<0.2	<0.2	1.2	1.2
						1.0	0.8	123	27.5		8.1		29.1		88.2		5.9		10.1		11		86				<0.2		1.1	
					Middle	3.9	0.7	116	27.5	27.5	8.1	8.1	29.5	29.5	87.0	87.1	5.8		10.3		10		88				<0.2		1.1	
						3.9	0.8	117	27.5		8.1		29.5		87.1		5.8		10.3		11		89				<0.2		1.2	
					Bottom	6.7	0.6	123	27.5	27.5	8.1	8.1	29.5	29.5	88.7	88.8	5.9	6.0	10.5		9		90				<0.2		1.2	
						6.7	0.6	127	27.5		8.1		29.5		88.8		6.0		10.5		8		91				<0.2		1.1	
IM12	Cloudy	Moderate	11:18	8.5	Surface	1.0	0.6	115	27.6	27.6	8.1	8.1	28.7	28.7	91.1	91.0	6.1	6.0	5.9	10.0	8	10	86	88	821472	812042	<0.2	<0.2	1.3	1.3
						1.0	0.6	125	27.6		8.1		28.8		90.9		6.1		5.9		7		87				<0.2		1.4	
					Middle	4.3	0.5	109	27.4	27.4	8.1	8.1	29.2	29.2	88.4	88.4	5.9		10.8		10		87				<0.2		1.4	
						4.3	0.5	112	27.4		8.1		29.2		88.4		5.9		10.8		12		88				<0.2		1.2	
					Bottom	7.5	0.4	106	27.4	27.4	8.1	8.1	29.3	29.3	88.3	88.4	5.9	5.9	13.3		13		90				<0.2		1.1	
						7.5	0.4	116	27.4		8.1		29.3		88.5		5.9		13.3		11		92				<0.2		1.2	
SR1A	Cloudy	Moderate	10:59	5.7	Surface	1.0	-	-	27.5	27.5	8.1	8.1	29.3	29.3	85.6	85.5	5.7	5.7	7.4	8.9	6	8	-	-	819980	812661	-	-	-	-
						1.0	-	-	27.5		8.1		29.3		85.4		5.7		7.8		5		-				-		-	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	-	-	27.5	27.5	8.1	8.1	29.4	29.4	85.1	85.2	5.7	5.7	10.1		10		-				-		-	
						4.7	-	-	27.5		8.1		29.4		85.2		5.7		10.3		9		-				-		-	
SR2	Cloudy	Moderate	10:45	4.3	Surface	1.0	0.7	109	27.6	27.6	8.1	8.1	29.7	29.6	85.1	85.3	5.7	5.7	9.9	10.6	8	9	87	89	821481	814152	<0.2	<0.2	1.2	1.1
						1.0	0.7	119	27.6		8.1		29.6		85.5		5.7		9.6		9		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.4	117	27.6	27.6	8.1	8.1	29.7	29.7	87.4	87.7	5.8	5.9	11.4		8		90				<0.2		1.1	
						3.3	0.4	119	27.6		8.1		29.7		88.0		5.9		11.5		9		91				<0.2		1.0	
SR3	Cloudy	Moderate	11:57	8.6	Surface	1.0	0.2	176	27.7	27.7	8.1	8.1	28.6	28.6	90.4	90.3	6.1	6.0	6.1	9.5	7	8	-	-	822167	807553	-	-	-	-
						1.0	0.2	189	27.7		8.1		28.6		90.2		6.1		6.3		8		-				-		-	
					Middle	4.3	0.2	189	27.5	27.5	8.1	8.1	29.5	29.5	87.7	87.7	5.9		10.0		8		-				-		-	
						4.3	0.2	191	27.5		8.1		29.6		87.7		5.9		10.0		9		-				-		-	
					Bottom	7.6	0.1	192	27.5	27.5	8.1	8.1	30.1	30.1	88.1	88.2	5.9	5.9	12.2		8		-				-		-	
						7.6	0.1	199	27.5		8.1		30.1		88.2		5.9		12.3		8		-				-		-	
SR4A	Cloudy	Moderate	10:47	9.8	Surface	1.0	0.2	72	26.5	26.5	8.1	8.1	31.7	31.7	90.2	90.2	6.1	6.1	7.6	9.5	9	10	-	-	817208	807827	-	-	-	-
						1.0	0.2	73	26.5		8.1		31.7		90.2		6.1		7.7		10		-				-		-	
					Middle	4.9	0.2	88	26.4	26.4	8.1	8.1	31.8	31.8	89.4	89.4	6.0		8.7		10		-				-		-	
						4.9	0.2	90	26.4		8.1		31.8		89.4		6.0		8.7		10		-				-		-	
					Bottom	8.8	0.1	70	26.4	26.4	8.1	8.1	32.1	32.1	89.3	89.4	6.0	6.0	12.3		11		-				-		-	
						8.8	0.1	76	26.4		8.1		32.1		89.4		6.0		12.3		10		-				-		-	
SR5A	Cloudy	Moderate	10:32	4.2	Surface	1.0	0.3	98	26.3	26.3	8.1	8.1	30.2	30.2	89.3	89.4	6.1	6.1	8.7	9.0	10	9	-	-	816584	810694	-	-	-	-
						1.0	0.3	104	26.3		8.1		30.2		89.5		6.1		8.7		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	109	26.3	26.3	8.1	8.1	30.5	30.6	92.9	93.1	6.3	6.3	9.3		8		-				-		-	
						3.2	0.2	112	26.3		8.1		30.6		93.3		6.3		9.4		8		-				-		-	
SR6A	Cloudy	Moderate	10:06	4.4	Surface	1.0	0.1	209	26.4	26.4	8.0	8.0	30.1	30.1	89.1	89.1	6.1	6.1	4.7	6.2	6	8	-	-	817966	814743	-	-	-	-
						1.0	0.1	216	26.4		8.0		30.1		89.1		6.1		4.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	156	26.3	26.3	7.9	7.9	30.1	30.1	88.0	88.1	6.0	6.0	7.6		9		-				-		-	
						3.4	0.0	170	26.3		7.9		30.1		88.1		6.0		7.6		9		-				-		-	
SR7	Cloudy	Moderate	09:41	16.1	Surface	1.0	0.4	52	27.7	27.7	8.0	8.0	31.4	31.4	81.4	81.4	5.4	5.4	5.3	5.1	4	5	-	-	823618	823757	-	-	-	-
						1.0	0.4	56	27.7		8.0		31.4		81.4		5.4		5.4		5		-				-		-	
					Middle	8.1	0.4	33	27.7	27.7	8.0	8.0	31.5	31.5	81.4	81.4	5.4		4.9		5		-				-		-	
						8.1	0.4	36	27.7		8.0		31.5		81.4		5.4		4.9		6		-				-		-	
					Bottom	15.1	0.5	21	27.7	27.7	8.0	8.0	31.5	31.5	81.6	81.7	5.4	5.4	4.9		5		-				-		-	
						15.1	0.5	22	27.7		8.0		31.5		81.7		5.4		4.9		6		-				-		-	
SR8	Cloudy	Moderate	11:10	5.8	Surface	1.0	-	-	27.5	27.5	8.1	8.1	29.2	29.2	87.2	87.2	5.9	5.9	14.2	15.1	19	18	-	-	820369	811637	-	-	-	-
						1.0	-	-	27.5		8.1		29.2		87.2		5.8		14.2		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	-	-	27.5	27.5	8.1	8.1	29.2	29.2	87.9	88.2	5.9	5.9	16.0		17		-				-		-	
						4.8	-	-	27.5		8.1		29.2		88.4		5.9		16.0		16		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 October 19 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	17:17	7.5	Surface	1.0	0.3	19	26.7	26.7	8.1	8.1	31.4	31.4	90.8	90.8	6.1	6.1	7.3	6.6	5	8	83	88	815615	804250	<0.2	<0.2	0.8	0.9
						1.0	0.3	20	26.6		8.1		31.4		90.8		6.1		7.3		4		84				<0.2		0.9	
					Middle	3.8	0.2	19	26.5	26.5	8.1	8.1	31.9	31.9	89.6	89.6	6.0		5.9		8		88				<0.2		0.9	
						3.8	0.2	19	26.5		8.1		32.0		89.6		6.0		5.9		8		88				<0.2		0.9	
					Bottom	6.5	0.2	19	26.5	26.5	8.1	8.1	32.2	32.2	88.9	88.8	6.0	6.0	6.4		11		91				<0.2		1.0	
						6.5	0.2	20	26.5		8.1		32.2		88.7		6.0		6.5		11		92				<0.2		0.9	
C2	Cloudy	Moderate	16:11	11.8	Surface	1.0	0.9	17	27.8	27.8	8.1	8.1	27.5	27.5	89.2	89.2	6.0	5.9	6.7	8.2	6	7	86	88	825667	806941	<0.2	<0.2	1.4	1.4
						1.0	1.0	17	27.8		8.1		27.5		89.2		6.0		6.7		7		86				<0.2		1.4	
					Middle	5.9	0.8	16	27.5	27.5	8.1	8.1	28.2	28.2	86.6	86.6	5.8		9.3		7		88				<0.2		1.5	
						5.9	0.9	18	27.5		8.1		28.2		86.5		5.8		9.4		6		87				<0.2		1.4	
					Bottom	10.8	0.4	16	27.5	27.5	8.1	8.1	28.7	28.7	86.2	86.4	5.8	5.8	8.7		6		90				<0.2		1.4	
						10.8	0.5	17	27.5		8.1		28.7		86.5		5.8		8.7		7		90				<0.2		1.3	
C3	Cloudy	Moderate	18:03	12.3	Surface	1.0	0.6	210	27.8	27.8	8.2	8.2	29.9	29.9	86.4	86.4	5.8	5.7	11.5	10.6	16	17	86	88	822123	817825	<0.2	<0.2	1.0	1.0
						1.0	0.7	209	27.8		8.2		29.9		86.4		5.7		11.5		15		87				<0.2		1.0	
					Middle	6.2	0.4	214	27.8	27.8	8.2	8.2	29.9	29.9	86.2	86.2	5.7		9.5		17		88				<0.2		1.0	
						6.2	0.4	211	27.8		8.2		29.9		86.2		5.7		9.5		18		88				<0.2		1.0	
					Bottom	11.3	0.1	281	27.7	27.7	8.2	8.2	30.0	30.0	86.9	87.0	5.8	5.8	10.9		16		91				<0.2		1.0	
						11.3	0.1	288	27.7		8.2		30.0		87.1		5.8		10.9		17		90				<0.2		1.0	
IM1	Fine	Rough	16:52	5.6	Surface	1.0	0.1	68	26.6	26.6	8.1	8.1	31.2	31.2	89.8	89.8	6.1	6.1	8.0	9.9	11	12	83	89	817930	807144	<0.2	<0.2	1.3	1.1
						1.0	0.1	76	26.6		8.1		31.2		89.8		6.1		8.0		11		88				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.0	46	26.4	26.4	8.1	8.1	32.2	32.2	89.2	89.3	6.0	6.0	11.8		12		92				<0.2		1.1	
						4.6	0.0	44	26.4		8.1		32.2		89.3		6.0		11.8		14		92				<0.2		1.0	
IM2	Fine	Rough	16:46	7.9	Surface	1.0	0.1	70	26.6	26.6	8.1	8.1	31.4	31.4	89.7	89.8	6.0	6.0	7.4	9.0	22	20	82	87	818173	806172	<0.2	<0.2	1.1	1.0
						1.0	0.1	77	26.6		8.1		31.4		89.8		6.0		7.4		20		83				<0.2		0.9	
					Middle	4.0	0.1	72	26.6	26.6	8.1	8.1	31.4	31.4	89.6	89.6	6.0		8.4		21		88				<0.2		1.0	
						4.0	0.1	73	26.6		8.1		31.4		89.6		6.0		8.5		21		88				<0.2		1.0	
					Bottom	6.9	0.1	53	26.4	26.4	8.1	8.1	32.0	32.0	88.4	88.4	5.9	6.0	11.1		19		91				<0.2		1.1	
						6.9	0.1	55	26.4		8.1		32.0		88.4		6.0		11.2		19		92				<0.2		1.1	
IM3	Fine	Rough	16:40	8.5	Surface	1.0	0.3	43	26.5	26.5	8.1	8.1	31.3	31.3	88.8	88.8	6.0	6.0	4.8	7.6	21	20	81	87	818773	805601	<0.2	<0.2	1.2	1.2
						1.0	0.3	49	26.5		8.1		31.3		88.8		6.0		4.8		21		82				<0.2		1.2	
					Middle	4.3	0.2	55	26.5	26.5	8.1	8.1	31.4	31.4	89.6	89.7	6.0		8.4		20		88				<0.2		1.2	
						4.3	0.2	56	26.5		8.1		31.4		89.7		6.1		8.4		21		89				<0.2		1.2	
					Bottom	7.5	0.2	43	26.5	26.5	8.1	8.1	31.4	31.4	90.2	90.3	6.1	6.1	9.5		17		91				<0.2		1.1	
						7.5	0.2	41	26.5		8.1		31.4		90.3		6.1		9.6		17		92				<0.2		1.2	
IM4	Fine	Rough	16:33	8.2	Surface	1.0	1.1	38	26.5	26.5	8.1	8.1	31.2	31.2	89.7	89.7	6.1	6.1	4.3	5.3	12	15	82	86	819743	804593	<0.2	<0.2	1.2	1.1
						1.0	1.2	38	26.5		8.1		31.2		89.7		6.1		4.4		12		81				<0.2		1.1	
					Middle	4.1	0.9	39	26.5	26.5	8.1	8.1	31.2	31.2	89.9	90.0	6.1		4.9		17		88				<0.2		0.9	
						4.1	1.0	38	26.5		8.1		31.2		90.0		6.1		5.0		16		88				<0.2		1.1	
					Bottom	7.2	0.9	38	26.5	26.5	8.1	8.1	31.3	31.3	91.9	92.0	6.2	6.2	6.7		17		88				<0.2		0.9	
						7.2	1.0	39	26.5		8.1		31.3		92.0		6.2		6.8		18		89				<0.2		1.1	
IM5	Fine	Rough	16:21	8.0	Surface	1.0	1.0	21	26.5	26.5	8.1	8.1	31.3	31.3	90.6	90.6	6.1	6.2	6.7	8.3	14	18	84	87	820756	804889	<0.2	<0.2	1.1	1.1
						1.0	1.1	22	26.5		8.1		31.3		90.6		6.1		6.7		14		83				<0.2		1.0	
					Middle	4.0	0.9	22	26.4	26.4	8.1	8.1	31.4	31.4	91.2	91.4	6.2		8.3		18		89				<0.2		1.0	
						4.0	1.0	23	26.4		8.1		31.5		91.6		6.2		8.2		19		89				<0.2		1.2	
					Bottom	7.0	0.9	21	26.3	26.3	8.2	8.2	31.6	31.6	91.6	92.1	6.2	6.3	10.1		21		87				<0.2		1.1	
						7.0	0.9	23	26.3		8.2		31.7		92.6		6.3		10.1		20		87				<0.2		1.1	
IM6	Fine	Rough	16:15	8.4	Surface	1.0	0.9	24	26.7	26.7	8.1	8.1	29.6	29.6	91.2	91.2	6.2	6.2	6.4	8.4	9	11	84	86	821047	805836	<0.2	<0.2	1.3	1.2
						1.0	0.9	24	26.7		8.1		29.6		91.2		6.2		6.4		10		83				<0.2		1.2	
					Middle	4.2	0.8	23	26.5	26.5	8.1	8.1	30.6	30.6	90.6	90.6	6.1		8.8		10		89				<0.2		1.2	
						4.2	0.8	24	26.5		8.1		30.7		90.6		6.1		8.8		10		89				<0.2		1.2	
					Bottom	7.4	0.7	0	26.5	26.5	8.1	8.1	31.3	31.3	91.5	91.6	6.2	6.2	10.1		12		87				<0.2		1.2	
						7.4	0.7	0	26.5		8.1		31.3		91.6		6.2		10.1		13		86				<0.2		1.3	
IM7	Fine	Rough	16:10	8.3	Surface	1.0	0.6	23	26.7	26.7	8.1	8.1	29.5	29.5	90.6	90.5	6.2	6.1	6.6	8.1	8	10	83	87	821364	806838	<0.2	<0.2	1.1	1.2
						1.0	0.6	24	26.7		8.1		29.5		90.4		6.1		6.6		8		85				<0.2		1.1	
					Middle	4.2	0.5	22	26.5	26.5	8.1	8.1	30.5	30.5	87.7	87.7	6.0		9.0		8		88				<0.2		1.2	
						4.2	0.6	24	26.5		8.1		30.4		87.7		6.0		9.1		9		88				<0.2		1.1	
					Bottom	7.3	0.5	26	26.4	26.4	8.1	8.1	31.3	31.3	87.8	87.8	5.9	5.9	8.7		12		89				<0.2		1.2	
						7.3	0.5	27	26.4		8.1		31.3		87.8		5.9		8.7		12		88				<0.2		1.3	
IM8	Cloudy	Moderate	16:35	7.7	Surface	1.0	0.4	355	27.7	27.7	8.1	8.1	28.6	28.7	88.9	88.8	6.0	6.0	8.5	10.7	9	11	86	88	821836	808137	<0.2	<0.2	1.3	1.3
						1.0	0.4	353	27.7		8.1		28.7		88.7		6.0		8.8		9		86				<0.2		1.4	
					Middle	3.9	0.3	340	27.5	27.5	8.2	8.2	29.3	29.3	87.8	87.8	5.9		10.6		11		87				<0.2		1.2	
						3.9	0.3	348	27.5		8.2		29.3		87.8		5.9		10.7		12		89				<0.2		1.2	
					Bottom	6.7	0.3	328	27.5	27.5	8.2	8.2	29.6	29.6	87.8	88.1	5.9	5.9	12.8		11		90				<0.2		1.2	
						6.7	0.3	323	27.5		8.2		29.6		88.3		5.9		12.8		12		91				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:42	7.5	Surface	1.0	0.4	312	27.9	27.9	8.2	8.2	28.4	28.4	90.4	90.3	6.1	6.0	8.5	11.5	9	11	86	88	822073	808820	<0.2	<0.2	1.4	1.3
						1.0	0.4	314	27.8		8.2		28.4		90.2		6.0		8.9		9		87				<0.2		1.3	
					Middle	3.8	0.5	325	27.6	27.6	8.2	8.2	29.0	29.0	88.6	88.7	5.9		12.9		11		87				<0.2		1.4	
						3.8	0.5	304	27.6		8.2		29.0		88.7		6.0		12.9		11		88				<0.2		1.3	
					Bottom	6.5	0.4	291	27.5	27.5	8.2	8.2	29.6	29.6	89.3	89.4	6.0	6.0	12.8		12		90				<0.2		1.3	
						6.5	0.4	282	27.5		8.2		29.5		89.4		6.0		12.8		11		90				<0.2		1.2	
IM10	Cloudy	Moderate	16:49	7.6	Surface	1.0	0.8	283	27.7	27.7	8.2	8.2	28.4	28.4	89.5	89.4	6.0	6.0	10.1	10.8	8	8	86	88	822402	809797	<0.2	<0.2	1.3	1.4
						1.0	0.9	283	27.7		8.2		28.5		89.2		6.0		10.7		7		86				<0.2		1.4	
					Middle	3.8	0.7	291	27.6	27.6	8.2	8.2	29.1	29.1	88.3	88.3	5.9		10.8		8		87				<0.2		1.5	
						3.8	0.8	290	27.6		8.2		29.1		88.3		5.9		10.8		8		88				<0.2		1.4	
					Bottom	6.6	0.6	269	27.5	27.5	8.2	8.2	29.2	29.2	89.2	89.3	6.0	6.0	11.1		8		90				<0.2		1.3	
						6.6	0.7	263	27.5		8.2		29.2		89.3		6.0		11.1		8		90				<0.2		1.5	
IM11	Cloudy	Moderate	16:58	7.8	Surface	1.0	0.8	251	27.9	27.9	8.2	8.2	28.1	28.2	91.4	91.3	6.1	6.1	7.6	12.1	6	7	86	88	822069	811457	<0.2	<0.2	1.3	1.3
						1.0	0.8	260	27.9		8.2		28.2		91.2		6.1		7.6		7		86				<0.2		1.3	
					Middle	3.9	0.7	269	27.7	27.7	8.2	8.2	28.6	28.6	90.1	90.1	6.1		13.2		6		88				<0.2		1.3	
						3.9	0.7	258	27.7		8.2		28.6		90.1		6.1		13.3		7		89				<0.2		1.2	
					Bottom	6.8	0.5	249	27.7	27.7	8.2	8.2	28.6	28.6	90.6	90.7	6.1	6.1	15.6		7		90				<0.2		1.4	
						6.8	0.5	245	27.7		8.2		28.6		90.8		6.1		15.3		6		91				<0.2		1.4	
IM12	Cloudy	Moderate	17:04	8.6	Surface	1.0	0.6	244	27.6	27.6	8.2	8.2	28.9	28.9	89.6	89.5	6.0	6.0	12.6	12.9	12	12	86	88	821445	812066	<0.2	<0.2	1.3	1.3
						1.0	0.6	246	27.6		8.2		28.9		89.4		6.0		12.6		13		87				<0.2		1.3	
					Middle	4.3	0.5	230	27.6	27.6	8.2	8.2	29.2	29.2	89.2	89.3	6.0		10.2		12		88				<0.2		1.3	
						4.3	0.5	234	27.6		8.2		29.2		89.3		6.0		10.2		12		87				<0.2		1.4	
					Bottom	7.6	0.4	229	27.6	27.6	8.2	8.2	29.2	29.2	90.1	90.2	6.0	6.0	15.9		12		90				<0.2		1.2	
						7.6	0.5	218	27.6		8.2		29.2		90.2		6.0		15.9		11		91				<0.2		1.2	
SR1A	Cloudy	Moderate	17:26	4.9	Surface	1.0	-	-	27.7	27.7	8.2	8.2	29.2	29.2	89.0	89.0	6.0	6.0	7.1	8.3	12	15	-	-	819973	812661	-	-	-	-
						1.0	-	-	27.7		8.2		29.2		89.0		6.0		7.1		11		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.7	27.7	8.2	8.2	29.2	29.2	89.8	89.9	6.0	6.0	9.5		19		-				-		-	
						3.9	-	-	27.7		8.2		29.2		89.9		6.0		9.5		19		-				-		-	
SR2	Cloudy	Moderate	17:40	4.6	Surface	1.0	0.5	229	27.7	27.7	8.2	8.2	29.2	29.2	88.3	88.3	5.9	5.9	8.3	9.3	18	21	86	88	821444	814178	<0.2	<0.2	1.1	1.0
						1.0	0.6	225	27.7		8.2		29.2		88.3		5.9		8.3		19		87				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	249	27.7	27.7	8.2	8.2	29.2	29.2	88.4	88.4	5.9	5.9	10.3		23		89				<0.2		1.0	
						3.6	0.4	238	27.7		8.2		29.2		88.4		5.9		10.3		23		90				<0.2		1.0	
SR3	Cloudy	Moderate	16:29	8.2	Surface	1.0	0.5	18	27.8	27.8	8.1	8.1	28.7	28.7	90.1	90.1	6.0	6.0	7.6	9.7	8	8	-	-	822169	807563	-	-	-	-
						1.0	0.5	18	27.7		8.1		28.7		90.0		6.0		7.6		8		-				-		-	
					Middle	4.1	0.3	18	27.6	27.6	8.2	8.2	28.9	28.9	89.6	89.6	6.0		8.7		8		-				-		-	
						4.1	0.4	20	27.6		8.2		28.9		89.6		6.0		8.7		8		-				-		-	
					Bottom	7.2	0.2	20	27.5	27.5	8.2	8.2	29.4	29.4	89.5	89.6	6.0	6.0	13.0		7		-				-		-	
						7.2	0.2	20	27.5		8.2		29.4		89.6		6.0		13.0		8		-				-		-	
SR4A	Fine	Rough	17:44	10.0	Surface	1.0	0.9	260	26.9	26.9	8.1	8.1	30.9	30.9	88.9	88.9	6.0	6.0	8.4	11.4	6	7	-	-	817178	807790	-	-	-	-
						1.0	1.0	272	26.9		8.1		30.9		88.9		6.0		8.4		7		-				-		-	
					Middle	5.0	0.9	255	26.5	26.5	8.1	8.1	31.8	31.8	89.1	89.1	6.0		12.2		6		-				-		-	
						5.0	0.9	259	26.5		8.1		31.8		89.1		6.0		12.1		7		-				-		-	
					Bottom	9.0	0.7	258	26.4	26.4	8.1	8.1	32.0	32.0	89.9	90.1	6.0	6.1	13.7		8		-				-		-	
						9.0	0.7	278	26.4		8.1		32.0		90.3		6.1		13.7		8		-				-		-	
SR5A	Fine	Moderate	18:02	4.8	Surface	1.0	0.4	301	26.7	26.7	8.1	8.1	30.7	30.7	91.4	91.4	6.2	6.2	6.1	7.6	7	8	-	-	816616	810709	-	-	-	-
						1.0	0.4	320	26.7		8.1		30.7		91.3		6.2		6.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.4	300	26.5	26.5	8.1	8.1	31.1	31.1	89.9	90.0	6.1	6.1	9.0		8		-				-		-	
						3.8	0.4	301	26.5		8.1		31.1		90.0		6.1		9.0		9		-				-		-	
SR6A	Fine	Moderate	18:54	4.6	Surface	1.0	0.0	306	26.6	26.6	8.1	8.1	30.0	30.0	90.2	90.2	6.1	6.1	5.6	6.8	16	18	-	-	817986	814749	-	-	-	-
						1.0	0.0	314	26.6		8.1		30.0		90.2		6.1		5.7		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	277	26.6	26.6	8.1	8.1	30.0	30.0	89.9	90.0	6.1	6.1	8.0		19		-				-		-	
						3.6	0.0	290	26.6		8.1		30.0		90.1		6.1		8.0		20		-				-		-	
SR7	Cloudy	Moderate	18:38	16.2	Surface	1.0	0.9	199	27.7	27.7	8.1	8.1	30.0	30.0	84.0	84.0	5.6	5.6	8.6	8.2	12	12	-	-	823623	823744	-	-	-	-
						1.0	0.9	202	27.7		8.1		30.0		84.0		5.6		8.6		12		-				-		-	
					Middle	8.1	0.5	205	27.7	27.7	8.1	8.1	30.3	30.3	83.9	83.9	5.6		8.0		12		-				-		-	
						8.1	0.5	213	27.7		8.1		30.3		83.9		5.6		8.0		12		-				-		-	
					Bottom	15.2	0.2	243	27.7	27.7	8.1	8.1	30.3	30.3	85.1	85.3	5.7	5.7	8.1		11		-				-		-	
						15.2	0.3	228	27.7		8.1		30.3		85.4		5.7		8.1		12		-				-		-	
SR8	Cloudy	Moderate	17:14	5.0	Surface	1.0	-	-	27.7	27.7	8.2	8.2	28.8	28.9	90.6	90.6	6.1	6.1	9.8	11.3	8	8	-	-	820379	811638	-	-	-	-
						1.0	-	-	27.6		8.2		28.9		90.5		6.1		9.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.6	27.6	8.2	8.2	29.1	29.1	90.4	90.5	6.1	6.1	12.9		8		-				-		-	
						4.0	-	-	27.6		8.2		29.1		90.5		6.1		12.9		8		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Rough	13:23	8.8	Surface	1.0	0.3	221	25.5	25.5	8.2	8.2	31.3	31.4	92.3	92.3	6.3	6.3	9.6	12.0	20	21	87	89	815628	804223	<0.2	<0.2	0.8	0.9
						1.0	0.3	241	25.5		8.2		31.4		92.3		6.3		9.6		19		87				<0.2		0.9	
					Middle	4.4	0.3	216	25.6	25.6	8.2	8.2	32.0	32.0	92.8	92.9	6.3		11.3		20		89				<0.2		0.9	
						4.4	0.3	216	25.6		8.2		32.0		93.0		6.3		11.3		21		89				<0.2		1.1	
					Bottom	7.8	0.3	209	25.6	25.6	8.2	8.2	32.0	32.0	95.2	95.4	6.5	6.5	15.1		22		90				<0.2		0.9	
						7.8	0.3	226	25.6		8.2		32.0		95.6		6.5		15.1		23		90				<0.2		0.9	
C2	Cloudy	Rough	12:05	8.5	Surface	1.0	0.4	107	26.8	26.8	8.1	8.1	28.4	28.4	88.3	88.3	6.0	6.0	8.2	9.4	23	24	85	88	825677	806951	<0.2	<0.2	1.4	1.3
						1.0	0.4	107	26.8		8.1		28.4		88.3		6.0		8.3		22		86				<0.2		1.4	
					Middle	4.3	0.4	90	26.7	26.7	8.1	8.1	28.6	28.6	88.6	88.6	6.0		9.9		22		88				<0.2		1.2	
						4.3	0.5	97	26.7		8.1		28.6		88.6		6.1		9.9		23		88				<0.2		1.3	
					Bottom	7.5	0.4	68	26.7	26.7	8.1	8.1	28.9	28.9	89.5	89.5	6.1	6.1	10.1		27		91				<0.2		1.3	
						7.5	0.4	70	26.7		8.1		28.8		89.5		6.1		10.0		28		91				<0.2		1.2	
C3	Cloudy	Rough	14:21	10.4	Surface	1.0	0.5	78	27.3	27.3	8.2	8.2	31.4	31.4	83.5	83.5	5.6	5.5	5.0	6.7	14	18	84	88	822125	817808	<0.2	<0.2	1.0	0.9
						1.0	0.6	83	27.3		8.2		31.4		83.4		5.5		5.0		15		84				<0.2		1.0	
					Middle	5.2	0.5	99	27.3	27.3	8.2	8.2	31.6	31.6	82.9	83.0	5.5		6.1		19		88				<0.2		0.9	
						5.2	0.6	101	27.3		8.2		31.6		83.0		5.5		6.1		19		88				<0.2		0.8	
					Bottom	9.4	0.4	86	27.3	27.3	8.2	8.2	31.8	31.8	84.9	85.0	5.6	5.6	9.0		20		91				<0.2		0.8	
						9.4	0.4	92	27.2		8.2		31.8		85.0		5.6		9.0		22		91				<0.2		0.9	
IM1	Cloudy	Rough	12:56	5.2	Surface	1.0	0.3	215	25.4	25.4	8.2	8.2	30.8	30.8	93.2	93.3	6.4	6.4	13.8	14.4	18	18	86	87	817955	807147	<0.2	<0.2	0.8	0.8
						1.0	0.3	231	25.4		8.2		30.8		93.4		6.4		13.9		18		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	198	25.3	25.3	8.2	8.2	30.9	30.9	95.4	95.6	6.6	6.6	15.1		18		88				<0.2		0.8	
						4.2	0.1	213	25.3		8.2		30.9		95.8		6.6		15.0		18		89				<0.2		0.9	
IM2	Cloudy	Rough	12:52	7.2	Surface	1.0	0.2	176	25.5	25.5	8.2	8.2	30.4	30.3	92.6	92.6	6.4	6.3	11.1	12.6	17	18	86	89	818148	806145	<0.2	<0.2	1.0	0.9
						1.0	0.2	185	25.5		8.2		30.3		92.6		6.4		11.1		16		86				<0.2		0.8	
					Middle	3.6	0.2	169	25.4	25.4	8.2	8.2	30.6	30.6	90.0	90.0	6.2		13.1		18		89				<0.2		0.8	
						3.6	0.3	174	25.4		8.2		30.6		89.9		6.2		13.1		19		89				<0.2		0.9	
					Bottom	6.2	0.2	121	25.4	25.4	8.2	8.2	30.6	30.6	89.3	89.2	6.2	6.2	13.5		18		90				<0.2		0.9	
						6.2	0.2	132	25.4		8.2		30.6		89.1		6.2		13.5		19		91				<0.2		0.8	
IM3	Cloudy	Rough	12:47	7.5	Surface	1.0	0.2	208	25.5	25.5	8.2	8.2	30.3	30.4	92.4	92.4	6.4	6.5	11.5	13.1	18	18	86	89	818806	805575	<0.2	<0.2	0.8	0.9
						1.0	0.3	212	25.5		8.2		30.4		92.4		6.4		11.6		17		86				<0.2		0.8	
					Middle	3.8	0.1	166	25.5	25.5	8.2	8.2	30.7	30.7	94.0	94.0	6.5		13.1		18		89				<0.2		0.9	
						3.8	0.1	181	25.5		8.2		30.7		94.0		6.5		13.1		16		90				<0.2		0.9	
					Bottom	6.5	0.1	123	25.4	25.4	8.2	8.2	30.8	30.8	95.9	96.1	6.6	6.6	14.7		18		91				<0.2		0.9	
						6.5	0.1	132	25.4		8.2		30.8		96.2		6.6		14.7		18		91				<0.2		0.8	
IM4	Cloudy	Rough	12:39	7.6	Surface	1.0	0.2	178	25.5	25.5	8.2	8.2	30.3	30.3	90.7	90.6	6.3	6.2	13.9	13.8	18	18	85	88	819744	804611	<0.2	<0.2	0.9	0.9
						1.0	0.3	184	25.5		8.2		30.4		90.5		6.2		14.0		18		86				<0.2		0.8	
					Middle	3.8	0.2	170	25.6	25.6	8.2	8.2	30.7	30.7	90.0	90.0	6.2		13.8		17		88				<0.2		0.9	
						3.8	0.3	177	25.6		8.2		30.7		90.0		6.2		13.8		18		89				<0.2		0.9	
					Bottom	6.6	0.2	154	25.5	25.5	8.2	8.2	30.8	30.8	91.0	91.1	6.3	6.3	13.7		17		90				<0.2		0.9	
						6.6	0.2	168	25.5		8.2		30.8		91.1		6.3		13.7		18		90				<0.2		0.7	
IM5	Cloudy	Rough	12:31	7.4	Surface	1.0	0.2	204	25.5	25.5	8.2	8.2	30.5	30.5	91.9	91.9	6.3	6.4	12.5	13.0	13	15	86	88	820736	804862	<0.2	<0.2	0.9	0.8
						1.0	0.2	212	25.5		8.2		30.5		91.9		6.3		12.5		14		85				<0.2		0.8	
					Middle	3.7	0.2	156	25.5	25.5	8.2	8.2	30.5	30.5	92.9	92.9	6.4		14.3		14		88				<0.2		0.8	
						3.7	0.2	156	25.5		8.2		30.5		92.9		6.4		14.3		15		89				<0.2		0.8	
					Bottom	6.4	0.2	160	25.5	25.5	8.2	8.2	30.5	30.5	94.0	94.1	6.5	6.5	12.3		16		89				<0.2		0.8	
						6.4	0.2	160	25.5		8.2		30.5		94.1		6.5		12.3		16		90				<0.2		0.8	
IM6	Cloudy	Rough	12:15	7.4	Surface	1.0	0.2	271	25.5	25.5	8.1	8.1	30.5	30.5	91.1	91.1	6.3	6.3	15.1	15.1	16	18	87	88	821056	805819	<0.2	<0.2	0.9	0.9
						1.0	0.2	271	25.5		8.1		30.5		91.1		6.3		15.3		17		86				<0.2		0.9	
					Middle	3.7	0.1	264	25.5	25.5	8.1	8.1	30.6	30.6	91.8	91.9	6.3		14.5		17		88				<0.2		0.8	
						3.7	0.1	281	25.5		8.1		30.6		91.9		6.3		14.5		18		89				<0.2		0.9	
					Bottom	6.4	0.1	189	25.4	25.4	8.1	8.1	30.6	30.6	92.8	92.9	6.4	6.4	15.5		20		89				<0.2		0.8	
						6.4	0.1	192	25.4		8.1		30.6		93.0		6.4		15.5		20		90				<0.2		0.9	
IM7	Cloudy	Rough	12:07	7.9	Surface	1.0	0.1	300	25.5	25.5	8.2	8.2	30.2	30.2	90.1	90.1	6.2	6.2	11.6	13.6	17	18	86	88	821362	806843	<0.2	<0.2	0.9	0.8
						1.0	0.1	317	25.5		8.2		30.3		90.0		6.2		11.7		18		86				<0.2		0.9	
					Middle	4.0	0.0	206	25.5	25.5	8.2	8.2	30.6	30.6	89.7	89.7	6.2		13.3		17		89				<0.2		0.8	
						4.0	0.0	215	25.5		8.2		30.6		89.7		6.2		13.3		17		89				<0.2		0.7	
					Bottom	6.9	0.2	162	25.5	25.5	8.2	8.2	30.7	30.7	89.9	90.0	6.2	6.2	15.9		17		90				<0.2		0.6	
						6.9	0.2	167	25.5		8.2		30.7		90.0		6.2		15.9		19		90				<0.2		0.7	
IM8	Cloudy	Rough	12:41	7.9	Surface	1.0	0.3	111	26.8	26.8	8.1	8.1	28.7	28.7	90.4	90.5	6.2	6.2	5.2	7.8	14	14	85	88	821823	808162	<0.2	<0.2	1.4	1.3
						1.0	0.3	116	26.8		8.1		28.7		90.5		6.2		5.2		14		86				<0.2		1.4	
					Middle	4.0	0.3	98	26.5	26.5	8.1	8.1	29.5	29.5	90.9	90.9	6.2		7.6		14		88				<0.2		1.2	
						4.0	0.3	106	26.5		8.1		29.5		90.9		6.2		7.6		14		88				<0.2		1.2	
					Bottom	6.9	0.2	78	26.5	26.5	8.2	8.2	29.7	29.7	92.0	92.2	6.3	6.3	10.8		14		91				<0.2		1.1	
						6.9	0.2	79	26.5		8.2		29.7		92.3		6.3		10.8		14		92				<0.2		1.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 October 19 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	12:49	8.2	Surface	1.0	0.5	114	26.8	26.8	8.1	8.1	28.9	28.9	88.5	88.5	6.0	6.1	14.6	10.9	42	26	85	89	822112	808829	<0.2	<0.2	1.0	1.3
						1.0	0.5	121	26.8		8.1		28.9		88.5		6.0		14.6		18		86				<0.2		1.1	
					Middle	4.1	0.5	109	26.6	26.6	8.1	8.1	29.5	29.5	89.4	89.4	6.1		8.1		18		89				<0.2		1.4	
						4.1	0.5	110	26.6		8.1		29.6		89.3		6.1		8.1		39		90				<0.2		1.4	
					Bottom	7.2	0.3	87	26.5	26.5	8.1	8.1	29.8	29.8	89.2	89.2	6.1	6.1	10.1		22		91				<0.2		1.4	
						7.2	0.4	90	26.5		8.1		29.8		89.2		6.1		10.1		18		91				<0.2		1.5	
IM10	Cloudy	Rough	12:55	8.1	Surface	1.0	0.8	109	26.9	26.9	8.1	8.1	29.5	29.5	88.4	88.4	6.0	6.0	19.0	14.4	35	**38**	85	91	822403	809804	<0.2	<0.2	1.0	1.2
						1.0	0.8	118	26.9		8.1		29.5		88.4		6.0		19.0		36		86				<0.2		1.0	
					Middle	4.1	0.7	100	26.9	26.9	8.1	8.1	29.5	29.5	89.1	89.2	6.0		10.9		38		92				<0.2		1.2	
						4.1	0.7	102	26.9		8.1		29.5		89.2		6.0		11.0		36		93				<0.2		1.3	
					Bottom	7.1	0.6	98	26.8	26.8	8.1	8.1	29.4	29.4	92.2	92.4	6.2	6.3	13.3		41		94				<0.2		1.5	
						7.1	0.6	98	26.8		8.1		29.4		92.5		6.3		13.3		40		94				<0.2		1.4	
IM11	Cloudy	Rough	13:08	7.8	Surface	1.0	0.5	104	27.1	27.1	8.0	8.0	29.9	29.9	86.7	86.7	5.8	5.8	14.8	13.0	27	29	84	88	822065	811465	<0.2	<0.2	0.9	0.8
						1.0	0.5	108	27.1		8.0		29.9		86.7		5.8		14.9		26		84				<0.2		0.8	
					Middle	3.9	0.4	101	27.1	27.1	8.0	8.0	29.9	29.9	86.3	86.4	5.8		9.1		30		88				<0.2		0.8	
						3.9	0.5	107	27.1		8.0		29.9		86.4		5.8		9.1		29		89				<0.2		0.7	
					Bottom	6.8	0.3	110	27.1	27.1	8.0	8.0	29.9	29.9	87.2	87.4	5.9	5.9	15.0		32		91				<0.2		0.9	
						6.8	0.3	120	27.1		8.0		29.9		87.5		5.9		15.1		32		91				<0.2		0.9	
IM12	Cloudy	Rough	13:14	7.6	Surface	1.0	0.6	106	27.0	27.0	8.1	8.1	29.5	29.5	87.5	87.5	5.9	5.9	12.5	12.6	20	27	83	88	821470	812026	<0.2	<0.2	0.8	1.0
						1.0	0.6	109	27.0		8.1		29.5		87.5		5.9		12.6		19		84				<0.2		1.0	
					Middle	3.8	0.4	98	27.0	27.1	8.1	8.1	29.6	29.7	85.9	85.8	5.8		13.7		20		88				<0.2		0.9	
						3.8	0.5	104	27.1		8.1		29.7		85.7		5.8		13.8		32		89				<0.2		1.0	
					Bottom	6.6	0.4	99	27.2	27.2	8.1	8.1	30.1	30.1	85.2	85.3	5.7	5.7	11.5		36		91				<0.2		1.2	
						6.6	0.4	104	27.2		8.1		30.1		85.3		5.7		11.5		37		91				<0.2		1.2	
SR1A	Cloudy	Rough	13:41	5.3	Surface	1.0	-	-	27.2	27.2	8.1	8.1	30.2	30.2	83.6	83.5	5.6	5.6	5.5	7.5	12	13	-	-	819977	812655	-	-	-	-
						1.0	-	-	27.2		8.1		30.2		83.3		5.6		5.5		13		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.3	27.3	8.1	8.1	30.5	30.5	82.7	82.8	5.5	5.5	9.5		14		-				-		-	
						4.3	-	-	27.3		8.1		30.5		82.8		5.5		9.6		13		-				-		-	
SR2	Cloudy	Rough	14:00	4.6	Surface	1.0	0.5	60	27.2	27.2	8.1	8.1	30.0	30.0	85.2	85.2	5.7	5.7	11.3	12.5	11	15	83	86	821450	814146	<0.2	<0.2	1.1	1.0
						1.0	0.5	65	27.2		8.1		30.0		85.1		5.7		11.3		12		84				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	11	27.3	27.3	8.1	8.1	30.5	30.5	82.9	83.0	5.5	5.6	13.7		23		88				<0.2		0.9	
						3.6	0.4	11	27.3		8.1		30.5		83.0		5.6		13.7		13		88				<0.2		0.9	
SR3	Cloudy	Rough	12:35	8.3	Surface	1.0	0.2	122	26.7	26.7	8.1	8.1	29.0	29.0	90.1	90.1	6.1	6.2	6.9	10.6	14	16	-	-	822164	807550	-	-	-	-
						1.0	0.2	124	26.7		8.1		29.0		90.1		6.1		6.9		14		-				-		-	
					Middle	4.2	0.3	115	26.5	26.5	8.1	8.1	29.5	29.5	90.7	90.7	6.2		10.0		15		-				-		-	
						4.2	0.3	124	26.5		8.1		29.5		90.7		6.2		10.0		15		-				-		-	
					Bottom	7.3	0.3	90	26.6	26.6	8.1	8.1	29.4	29.4	91.2	91.3	6.2	6.2	14.8		19		-				-		-	
						7.3	0.3	97	26.6		8.1		29.4		91.3		6.2		14.9		20		-				-		-	
SR4A	Cloudy	Rough	13:45	8.4	Surface	1.0	0.3	58	25.4	25.4	8.2	8.2	30.7	30.7	92.8	92.8	6.4	6.5	14.4	14.1	23	24	-	-	817197	807816	-	-	-	-
						1.0	0.3	63	25.4		8.2		30.7		92.8		6.4		14.3		22		-				-		-	
					Middle	4.2	0.3	64	25.4	25.4	8.2	8.2	30.7	30.7	93.9	94.1	6.5		14.2		25		-				-		-	
						4.2	0.3	65	25.4		8.2		30.7		94.2		6.5		14.3		24		-				-		-	
					Bottom	7.4	0.2	70	25.3	25.3	8.2	8.2	30.7	30.7	96.0	96.1	6.6	6.6	14.4		25		-				-		-	
						7.4	0.2	74	25.3		8.2		30.7		96.2		6.6		13.3		25		-				-		-	
SR5A	Cloudy	Moderate	14:04	4.6	Surface	1.0	0.0	12	25.3	25.3	8.1	8.1	30.9	30.9	94.5	94.6	6.5	6.5	11.9	13.5	12	15	-	-	816606	810709	-	-	-	-
						1.0	0.0	12	25.3		8.1		30.9		94.6		6.5		11.9		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	196	25.3	25.3	8.1	8.1	30.9	30.9	95.6	96.0	6.6	6.6	15.1		18		-				-		-	
						3.6	0.1	211	25.3		8.1		30.9		96.3		6.6		15.1		17		-				-		-	
SR6A	Cloudy	Moderate	14:38	4.4	Surface	1.0	0.1	79	25.9	25.9	8.1	8.1	30.6	30.6	92.6	92.7	6.3	6.4	6.8	9.0	6	7	-	-	817954	814715	-	-	-	-
						1.0	0.1	82	25.9		8.1		30.6		92.7		6.4		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	49	25.7	25.7	8.1	8.1	30.6	30.6	93.1	93.3	6.4	6.4	11.1		8		-				-		-	
						3.4	0.1	53	25.7		8.1		30.6		93.4		6.4		11.0		8		-				-		-	
SR7	Cloudy	Rough	14:51	15.7	Surface	1.0	0.5	88	27.3	27.3	8.2	8.2	31.3	31.3	83.1	83.1	5.5	5.6	7.3	7.6	11	12	-	-	823626	823738	-	-	-	-
						1.0	0.6	93	27.3		8.2		31.3		83.1		5.5		7.4		12		-				-		-	
					Middle	7.9	0.3	56	27.3	27.3	8.2	8.2	31.4	31.4	83.7	83.7	5.6		7.9		11		-				-		-	
						7.9	0.3	60	27.3		8.2		31.4		83.7		5.6		7.9		11		-				-		-	
					Bottom	14.7	0.3	9	27.3	27.3	8.2	8.2	31.6	31.6	85.1	85.2	5.7	5.7	7.6		12		-				-		-	
						14.7	0.3	9	27.3		8.2		31.6		85.3		5.7		7.7		12		-				-		-	
SR8	Cloudy	Rough	13:28	4.8	Surface	1.0	-	-	27.2	27.2	8.1	8.1	30.0	30.0	84.8	84.8	5.7	5.7	13.4	14.6	15	14	-	-	820376	811631	-	-	-	-
						1.0	-	-	27.2		8.1		30.0		84.7		5.7		13.5		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.3	27.3	8.1	8.1	30.4	30.4	83.7	83.8	5.6	5.6	15.7		12		-				-		-	
						3.8	-	-	27.3		8.1		30.4		83.9		5.6		15.8		12		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 29 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	08:18	8.5	Surface	1.0	0.1	21	25.4	25.4	8.2	8.2	30.4	30.4	91.4	91.4	6.3	6.3	13.2	14.3	18	16	88	89	815610	804254	<0.2	<0.2	1.0	1.0
						1.0	0.1	22	25.4		8.2		30.4		91.4		6.3		13.2		19		89				<0.2		1.1	
					Middle	4.3	0.0	40	25.5	25.5	8.2	8.2	31.0	31.0	90.5	90.5	6.2		14.1		16		89				<0.2		1.0	
						4.3	0.0	42	25.5		8.2		31.0		90.5		6.2		14.1		15		90				<0.2		1.0	
					Bottom	7.5	0.1	108	25.5	25.5	8.2	8.2	30.9	30.9	92.1	92.3	6.3	6.4	15.7		15		90				<0.2		1.0	
						7.5	0.1	113	25.5		8.2		30.9		92.4		6.4		15.7		15		90				<0.2		1.1	
C2	Cloudy	Rough	09:02	8.2	Surface	1.0	0.5	49	26.7	26.7	8.0	8.0	28.4	28.4	88.5	88.6	6.1	6.1	15.2	17.1	6	27	84	88	825695	806936	<0.2	<0.2	1.2	1.3
						1.0	0.5	48	26.7		8.0		28.4		88.6		6.1		15.5		32		84				<0.2		1.3	
					Middle	4.1	0.5	36	26.7	26.7	8.0	8.0	28.6	28.6	89.3	89.3	6.1		17.7		28		88				<0.2		1.3	
						4.1	0.5	34	26.7		8.0		28.6		89.3		6.1		17.7		29		88				<0.2		1.4	
					Bottom	7.2	0.5	67	26.6	26.6	8.0	8.0	29.0	29.0	92.8	93.1	6.3	6.4	18.2		33		91				<0.2		1.4	
						7.2	0.5	68	26.6		8.0		29.0		93.4		6.4		18.2		35		91				<0.2		1.2	
C3	Cloudy	Rough	07:06	11.2	Surface	1.0	0.1	289	27.3	27.3	8.0	8.0	30.6	30.6	83.2	83.3	5.6	5.6	8.1	9.2	23	22	88	90	822116	817798	<0.2	<0.2	1.4	1.4
						1.0	0.1	291	27.3		8.0		30.6		83.3		5.6		8.2		24		88				<0.2		1.5	
					Middle	5.6	0.1	280	27.3	27.3	8.0	8.0	30.6	30.6	83.8	83.9	5.6		9.2		20		91				<0.2		1.5	
						5.6	0.1	296	27.3		8.0		30.6		83.9		5.6		9.2		21		91				<0.2		1.5	
					Bottom	10.2	0.1	276	27.3	27.3	8.0	8.0	30.6	30.6	84.2	84.2	5.6	5.6	10.4		20		92				<0.2		1.3	
						10.2	0.2	301	27.3		8.0		30.6		84.2		5.6		10.4		21		92				<0.2		1.4	
IM1	Cloudy	Rough	08:39	5.9	Surface	1.0	0.1	270	25.4	25.4	8.2	8.2	30.9	30.9	91.5	91.5	6.3	6.3	12.9	14.2	13	15	84	86	817967	807114	<0.2	<0.2	1.0	0.9
						1.0	0.1	289	25.4		8.2		30.9		91.5		6.3		12.9		14		85				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.1	67	25.4	25.4	8.2	8.2	31.0	31.0	93.6	93.6	6.5	6.5	15.5		16		87				<0.2		0.9	
						4.9	0.1	72	25.4		8.2		31.0		93.6		6.5		15.5		16		87				<0.2		0.9	
IM2	Cloudy	Rough	08:45	7.8	Surface	1.0	0.2	13	25.5	25.5	8.2	8.2	30.5	30.5	90.7	90.7	6.3	6.3	12.2	14.0	19	18	84	87	818150	806188	<0.2	<0.2	1.0	1.0
						1.0	0.2	13	25.5		8.2		30.5		90.7		6.3		12.2		18		84				<0.2		1.0	
					Middle	3.9	0.1	29	25.5	25.5	8.2	8.2	30.5	30.5	90.9	90.9	6.3		16.1		18		87				<0.2		0.9	
						3.9	0.1	30	25.5		8.2		30.5		90.9		6.3		16.1		17		87				<0.2		0.9	
					Bottom	6.8	0.0	10	25.5	25.5	8.2	8.2	30.5	30.5	91.7	91.8	6.3	6.3	13.8		17		88				<0.2		1.0	
						6.8	0.0	10	25.5		8.2		30.5		91.8		6.3		13.8		18		89				<0.2		1.2	
IM3	Cloudy	Rough	08:50	7.5	Surface	1.0	0.1	15	25.5	25.5	8.2	8.2	30.6	30.6	91.8	91.8	6.3	6.4	14.5	14.9	14	17	86	87	818772	805589	<0.2	<0.2	1.0	1.0
						1.0	0.1	17	25.5		8.2		30.6		91.8		6.3		14.5		15		84				<0.2		1.0	
					Middle	3.8	0.1	44	25.5	25.5	8.2	8.2	30.7	30.7	92.4	92.4	6.4		14.4		18		87				<0.2		1.0	
						3.8	0.1	47	25.5		8.2		30.7		92.4		6.4		14.4		19		88				<0.2		1.0	
					Bottom	6.5	0.1	43	25.4	25.4	8.2	8.2	30.7	30.7	93.1	93.2	6.4	6.4	15.9		19		89				<0.2		0.9	
						6.5	0.1	44	25.4		8.2		30.7		93.3		6.4		15.9		18		89				<0.2		1.0	
IM4	Cloudy	Rough	08:58	7.5	Surface	1.0	0.1	29	25.5	25.5	8.2	8.2	30.3	30.3	91.6	91.6	6.3	6.3	11.2	12.9	18	20	84	87	819733	804625	<0.2	<0.2	0.9	1.0
						1.0	0.1	38	25.5		8.2		30.3		91.6		6.3		11.2		20		85				<0.2		0.9	
					Middle	3.8	0.1	33	25.5	25.5	8.2	8.2	30.6	30.6	92.0	92.1	6.3		13.6		21		87				<0.2		1.0	
						3.8	0.1	35	25.5		8.2		30.6		92.2		6.4		13.6		20		88				<0.2		1.0	
					Bottom	6.5	0.1	11	25.5	25.5	8.2	8.2	30.6	30.6	93.0	93.1	6.4	6.4	13.9		21		88				<0.2		1.0	
						6.5	0.1	11	25.5		8.2		30.6		93.1		6.4		13.8		20		89				<0.2		1.0	
IM5	Cloudy	Rough	09:03	7.7	Surface	1.0	0.1	34	25.5	25.5	8.2	8.2	30.4	30.4	91.5	91.5	6.3	6.3	12.5	13.8	18	19	86	88	820742	804856	<0.2	<0.2	0.9	1.0
						1.0	0.1	31	25.5		8.2		30.4		91.5		6.3		12.5		18		86				<0.2		1.0	
					Middle	3.9	0.1	15	25.5	25.5	8.2	8.2	30.5	30.5	91.9	92.0	6.3		13.9		18		88				<0.2		1.0	
						3.9	0.1	15	25.5		8.2		30.5		92.0		6.3		13.9		20		88				<0.2		0.9	
					Bottom	6.7	0.1	51	25.5	25.5	8.2	8.2	30.5	30.5	93.7	93.8	6.5	6.5	15.1		20		89				<0.2		1.1	
						6.7	0.1	52	25.5		8.2		30.5		93.9		6.5		15.1		20		89				<0.2		1.0	
IM6	Cloudy	Rough	09:09	7.4	Surface	1.0	0.1	24	25.5	25.5	8.1	8.1	30.4	30.4	91.0	91.0	6.3	6.3	9.3	11.2	24	23	86	87	821055	805836	<0.2	<0.2	1.0	1.0
						1.0	0.1	26	25.5		8.1		30.4		91.0		6.3		9.3		24		85				<0.2		1.0	
					Middle	3.7	0.1	18	25.5	25.5	8.1	8.1	30.4	30.4	91.6	91.7	6.3		11.0		22		87				<0.2		1.0	
						3.7	0.1	18	25.5		8.1		30.4		91.7		6.3		11.0		23		87				<0.2		1.0	
					Bottom	6.4	0.0	18	25.5	25.5	8.1	8.1	30.4	30.4	92.5	92.7	6.4	6.4	12.8		22		88				<0.2		0.9	
						6.4	0.0	18	25.5		8.1		30.4		92.8		6.4		13.8		21		89				<0.2		1.0	
IM7	Cloudy	Rough	09:16	8.0	Surface	1.0	0.1	28	25.5	25.5	8.1	8.1	30.2	30.2	91.2	91.2	6.3	6.3	11.9	13.7	22	23	86	88	821326	806829	<0.2	<0.2	1.0	1.0
						1.0	0.1	26	25.5		8.1		30.2		91.2		6.3		11.9		22		86				<0.2		1.0	
					Middle	4.0	0.0	16	25.5	25.5	8.1	8.1	30.7	30.7	92.1	92.2	6.3		14.4		23		88				<0.2		1.1	
						4.0	0.0	17	25.5		8.1		30.7		92.2		6.4		14.5		23		87				<0.2		1.0	
					Bottom	7.0	0.2	12	25.4	25.4	8.2	8.2	30.7	30.7	93.2	93.3	6.4	6.4	14.8		24		90				<0.2		0.9	
						7.0	0.2	13	25.4		8.2		30.7		93.4		6.4		14.8		24		89				<0.2		0.9	
IM8	Cloudy	Rough	08:26	8.0	Surface	1.0	0.3	355	26.9	26.9	8.0	8.0	28.1	28.1	88.5	88.6	6.0	6.1	11.4	11.8	28	29	84	88	821828	808116	<0.2	<0.2	1.0	1.3
						1.0	0.3	345	26.9		8.0		28.1		88.6		6.0		11.5		28		85				<0.2		1.0	
					Middle	4.0	0.3	347	26.7	26.7	8.1	8.1	28.7	28.7	89.1	89.1	6.1		8.2		31		88				<0.2		1.4	
						4.0	0.4	338	26.7		8.1		28.7		89.1		6.1		8.2		30		89				<0.2		1.2	
					Bottom	7.0	0.3	356	26.5	26.5	8.1	8.1	29.9	29.9	90.1	90.2	6.1	6.1	15.6		29		91				<0.2		1.5	
						7.0	0.3	339	26.5		8.1		29.9		90.2		6.1		15.7		30		92				<0.2		1.5	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 29 October 19 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	08:20	7.4	Surface	1.0	0.3	316	26.9	26.9	8.0	8.0	28.1	28.1	87.3	87.3	6.0	6.0	12.4	14.0	31	27	83	88	822078	808795	<0.2	<0.2	1.4	1.3
						1.0	0.3	319	26.9		8.0		28.1		87.3		6.0		12.5		30		84				<0.2		1.2	
					Middle	3.7	0.4	317	26.9	26.9	8.0	8.0	28.1	28.1	87.4	87.5	6.0		13.7		26		88				<0.2		1.1	
						3.7	0.4	302	26.9		8.0		28.1		87.5		6.0		13.7		27		88				<0.2		1.1	
					Bottom	6.4	0.3	297	26.7	26.7	8.0	8.0	28.9	28.9	89.7	89.8	6.1	6.1	15.9		24		91				<0.2		1.3	
						6.4	0.3	289	26.7		8.0		28.9		89.8		6.1		16.0		23		91				<0.2		1.4	
IM10	Cloudy	Rough	08:12	7.5	Surface	1.0	0.2	296	26.9	26.9	8.0	8.0	29.4	29.4	87.4	87.4	5.9	6.0	8.1	10.6	19	19	85	89	822378	809812	<0.2	<0.2	1.2	1.3
						1.0	0.2	278	26.9		8.0		29.4		87.4		5.9		8.1		18		85				<0.2		1.3	
					Middle	3.8	0.2	268	26.9	26.9	8.0	8.0	29.5	29.5	88.0	88.0	6.0		10.8		18		90				<0.2		1.3	
						3.8	0.2	282	26.9		8.0		29.5		88.0		6.0		10.9		18		90				<0.2		1.3	
					Bottom	6.5	0.1	262	26.9	26.9	8.0	8.0	29.5	29.4	88.7	88.9	6.0	6.0	12.8		19		91				<0.2		1.2	
						6.5	0.1	275	26.9		8.0		29.4		89.0		6.0		12.7		19		91				<0.2		1.3	
IM11	Cloudy	Rough	08:02	7.8	Surface	1.0	0.1	263	26.9	26.9	8.0	8.0	29.6	29.6	87.5	87.5	5.9	5.9	6.7	9.0	16	18	85	89	822040	811449	<0.2	<0.2	1.4	1.3
						1.0	0.1	285	26.9		8.0		29.6		87.5		5.9		6.7		16		86				<0.2		1.4	
					Middle	3.9	0.1	243	27.0	27.0	8.0	8.0	29.6	29.6	87.3	87.4	5.9		8.1		18		89				<0.2		1.2	
						3.9	0.1	249	27.0		8.0		29.6		87.4		5.9		8.1		19		89				<0.2		1.4	
					Bottom	6.8	0.1	278	26.9	26.9	8.0	8.0	29.6	29.6	88.6	88.6	6.0	6.0	12.3		20		91				<0.2		1.4	
						6.8	0.1	267	26.9		8.0		29.6		88.6		6.0		12.3		20		91				<0.2		1.2	
IM12	Cloudy	Rough	07:56	7.1	Surface	1.0	0.1	222	27.0	27.0	8.0	8.0	29.6	29.6	86.6	86.6	5.8	5.9	8.0	11.8	18	18	83	88	821478	812066	<0.2	<0.2	1.2	1.2
						1.0	0.1	232	27.0		8.0		29.6		86.6		5.9		8.1		18		84				<0.2		1.2	
					Middle	3.6	0.1	229	27.0	27.0	8.0	8.0	29.6	29.6	87.2	87.2	5.9		13.1		18		88				<0.2		1.3	
						3.6	0.1	224	27.0		8.0		29.6		87.2		5.9		13.2		19		89				<0.2		1.3	
					Bottom	6.1	0.3	271	27.0	27.0	8.0	8.0	29.6	29.6	88.1	88.2	5.9	6.0	14.2		18		91				<0.2		1.1	
						6.1	0.3	262	27.0		8.0		29.6		88.2		6.0		14.2		19		91				<0.2		1.2	
SR1A	Cloudy	Rough	07:37	5.5	Surface	1.0	-	-	26.6	26.6	8.0	8.0	29.7	29.7	85.2	85.3	5.8	5.8	9.1	8.6	25	26	-	-	819976	812666	-	-	-	-
						1.0	-	-	26.6		8.0		29.7		85.3		5.8		9.1		24		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	26.6	26.6	7.9	7.9	29.8	29.8	89.4	89.6	6.1	6.1	8.2		28		-				-		-	
						4.5	-	-	26.6		7.9		29.8		89.7		6.1		8.2		27		-				-		-	
SR2	Cloudy	Rough	07:26	4.6	Surface	1.0	0.0	222	27.0	27.0	8.0	8.0	29.7	29.7	87.1	87.2	5.9	5.9	10.8	12.6	16	17	84	86	821460	814168	<0.2	<0.2	1.4	1.4
						1.0	0.0	226	27.0		8.0		29.7		87.2		5.9		10.9		15		84				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	252	27.0	27.0	8.0	8.0	29.7	29.7	88.2	88.3	6.0	6.0	14.3		17		88				<0.2		1.3	
						3.6	0.1	258	27.0		8.0		29.7		88.3		6.0		14.3		18		88				<0.2		1.3	
SR3	Cloudy	Rough	08:39	7.9	Surface	1.0	0.3	40	26.6	26.6	8.1	8.1	29.4	29.4	90.4	90.4	6.2	6.2	7.3	10.3	29	29	-	-	822136	807549	-	-	-	-
						1.0	0.3	42	26.6		8.1		29.4		90.4		6.2		7.3		29		-				-		-	
					Middle	4.0	0.3	12	26.5	26.5	8.1	8.1	29.7	29.7	90.8	90.8	6.2		10.3		29		-				-		-	
						4.0	0.3	12	26.5		8.1		29.7		90.8		6.2		10.4		28		-				-		-	
					Bottom	6.9	0.4	37	26.5	26.5	8.1	8.1	29.7	29.7	92.1	92.4	6.3	6.3	13.1		30		-				-		-	
						6.9	0.4	40	26.5		8.1		29.7		92.6		6.3		13.1		29		-				-		-	
SR4A	Cloudy	Rough	07:51	8.4	Surface	1.0	0.4	287	25.2	25.2	8.2	8.2	31.0	31.0	91.2	91.2	6.3	6.3	11.3	13.6	10	18	-	-	817188	807796	-	-	-	-
						1.0	0.4	294	25.2		8.2		31.0		91.2		6.3		11.3		11		-				-		-	
					Middle	4.2	0.3	267	25.1	25.1	8.2	8.2	31.1	31.1	91.2	91.2	6.3		13.7		20		-				-		-	
						4.2	0.3	255	25.1		8.2		31.1		91.2		6.3		13.7		19		-				-		-	
					Bottom	7.4	0.2	267	25.1	25.1	8.2	8.2	31.1	31.1	91.3	91.3	6.3	6.3	15.8		23		-				-		-	
						7.4	0.3	244	25.1		8.2		31.1		91.3		6.3		15.8		22		-				-		-	
SR5A	Cloudy	Moderate	07:33	4.5	Surface	1.0	0.3	212	25.5	25.5	8.2	8.2	30.9	30.9	86.7	86.7	6.0	6.0	8.7	8.6	14	14	-	-	816609	810673	-	-	-	-
						1.0	0.3	222	25.5		8.2		30.9		86.7		6.0		8.7		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	242	25.5	25.5	8.2	8.2	30.9	30.9	88.4	88.5	6.1	6.1	8.4		13		-				-		-	
						3.5	0.3	251	25.5		8.2		30.9		88.5		6.1		8.5		14		-				-		-	
SR6A	Cloudy	Moderate	07:08	4.6	Surface	1.0	0.2	251	25.5	25.5	8.2	8.2	30.6	30.6	86.2	86.3	5.9	5.9	8.4	9.3	15	15	-	-	817967	814744	-	-	-	-
						1.0	0.2	262	25.5		8.2		30.6		86.3		5.9		8.6		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	228	25.5	25.5	8.2	8.2	30.6	30.6	88.4	88.7	6.1	6.1	10.1		15		-				-		-	
						3.6	0.1	238	25.5		8.2		30.6		88.9		6.1		10.1		14		-				-		-	
SR7	Cloudy	Rough	06:37	16.8	Surface	1.0	0.1	314	27.2	27.2	8.0	8.0	30.6	30.6	83.2	83.2	5.6	5.6	8.7	9.5	15	17	-	-	823632	823757	-	-	-	-
						1.0	0.1	342	27.2		8.0		30.6		83.2		5.6		8.7		15		-				-		-	
					Middle	8.4	0.2	225	27.3	27.3	8.0	8.0	30.7	30.7	83.0	83.0	5.5		9.8		16		-				-		-	
						8.4	0.2	209	27.3		8.0		30.7		83.0		5.6		9.9		17		-				-		-	
					Bottom	15.8	0.2	213	27.3	27.3	7.9	7.9	30.7	30.7	83.5	83.5	5.6	5.6	9.9		18		-				-		-	
						15.8	0.2	215	27.3		7.9		30.7		83.5		5.6		9.9		18		-				-		-	
SR8	Cloudy	Rough	07:47	4.8	Surface	1.0	-	-	26.8	26.8	8.0	8.0	29.4	29.4	90.0	90.1	6.1	6.1	15.4	16.5	16	17	-	-	820398	811636	-	-	-	-
						1.0	-	-	26.8		8.0		29.4		90.2		6.1		15.5		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	26.7	26.7	8.0	8.0	29.3	29.3	93.6	93.8	6.4	6.4	17.6		18		-				-		-	
						3.8	-	-	26.7		8.0		29.3		94.0		6.4		17.6		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:30	7.9	Surface	1.0	0.1	269	26.0	26.0	8.2	8.2	31.4	31.4	93.3	93.3	6.3	6.4	11.1	11.6	14	12	87	89	815606	804249	<0.2	<0.2	0.7	0.6
						1.0	0.1	282	26.0		8.2		31.5		93.3		6.3		11.2		14		88				<0.2		0.6	
					Middle	4.0	0.0	142	26.0	26.0	8.2	8.2	31.5	31.5	93.9	94.1	6.4		11.6		12		88				<0.2		0.6	
						4.0	0.0	144	26.0		8.2		31.5		94.2		6.4		11.7		10		89				<0.2		0.6	
					Bottom	6.9	0.1	80	26.0	26.0	8.2	8.2	31.5	31.5	97.6	97.9	6.6	6.7	12.0		12		90				<0.2		0.7	
						6.9	0.1	87	26.0		8.2		31.5		98.2		6.7		12.1		11		90				<0.2		0.6	
C2	Cloudy	Rough	13:32	11.6	Surface	1.0	0.4	142	26.4	26.4	8.1	8.1	29.5	29.5	88.3	88.3	6.0	6.0	6.4	11.9	7	8	86	88	825667	806923	<0.2	<0.2	1.3	1.2
						1.0	0.4	134	26.4		8.1		29.5		88.2		6.0		6.4		8		86				<0.2		1.3	
					Middle	5.8	0.4	151	26.4	26.4	8.2	8.2	29.6	29.6	87.1	87.1	5.9		12.4		9		88				<0.2		1.2	
						5.8	0.4	144	26.4		8.2		29.6		87.1		5.9		12.7		8		87				<0.2		1.2	
					Bottom	10.6	0.3	129	26.3	26.3	8.2	8.2	30.2	30.2	87.1	87.1	5.9	5.9	16.9		9		89				<0.2		1.2	
						10.6	0.3	131	26.3		8.2		30.2		87.1		5.9		16.8		8		89				<0.2		1.2	
C3	Cloudy	Rough	15:16	11.4	Surface	1.0	0.3	43	26.9	26.9	8.3	8.3	32.4	32.4	85.5	85.5	5.7	5.7	4.6	8.9	8	9	87	90	822101	817801	<0.2	<0.2	0.8	0.9
						1.0	0.3	45	26.9		8.3		32.4		85.4		5.7		4.7		8		88				<0.2		1.0	
					Middle	5.7	0.2	113	26.9	26.9	8.2	8.2	32.5	32.5	84.4	84.4	5.6		9.1		9		89				<0.2		0.9	
						5.7	0.2	115	26.9		8.2		32.5		84.4		5.6		9.2		9		89				<0.2		0.9	
					Bottom	10.4	0.2	90	26.9	26.9	8.3	8.3	32.5	32.5	84.7	84.7	5.6	5.6	12.7		8		92				<0.2		0.9	
						10.4	0.2	91	26.9		8.3		32.5		84.7		5.6		12.8		9		92				<0.2		0.8	
IM1	Cloudy	Calm	14:14	5.6	Surface	1.0	0.4	167	26.1	26.1	8.2	8.2	31.5	31.6	93.7	93.7	6.4	6.4	7.1	7.1	8	10	88	89	817954	807111	<0.2	<0.2	0.6	0.6
						1.0	0.4	170	26.1		8.2		31.6		93.7		6.4		7.2		9		88				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	165	26.1	26.1	8.2	8.2	31.7	31.7	93.9	94.1	6.4	6.4	7.1		11		89				<0.2		0.7	
						4.6	0.2	174	26.0		8.2		31.7		94.2		6.4		7.0		11		89				<0.2		0.6	
IM2	Cloudy	Moderate	14:08	7.3	Surface	1.0	0.3	128	25.9	26.0	8.2	8.2	31.3	31.3	92.6	92.5	6.3	6.3	8.9	11.7	17	15	87	89	818183	806188	<0.2	<0.2	0.7	0.6
						1.0	0.3	131	26.0		8.2		31.3		92.4		6.3		8.9		17		88				<0.2		0.7	
					Middle	3.7	0.3	136	26.1	26.1	8.2	8.2	31.6	31.6	92.0	92.1	6.2		11.4		14		89				<0.2		0.6	
						3.7	0.3	137	26.1		8.2		31.6		92.2		6.3		11.7		14		89				<0.2		0.6	
					Bottom	6.3	0.2	151	26.1	26.1	8.2	8.2	31.7	31.7	93.6	93.8	6.3	6.4	14.8		12		90				<0.2		0.6	
						6.3	0.2	132	26.1		8.2		31.7		94.0		6.4		14.8		13		90				<0.2		0.6	
IM3	Cloudy	Moderate	14:03	7.5	Surface	1.0	0.4	166	26.0	26.0	8.2	8.2	31.2	31.2	91.8	91.8	6.3	6.3	12.2	14.5	19	18	88	89	818791	805607	<0.2	<0.2	0.6	0.6
						1.0	0.4	166	26.0		8.2		31.2		91.8		6.3		12.1		18		89				<0.2		0.7	
					Middle	3.8	0.2	132	26.1	26.1	8.2	8.2	31.4	31.4	91.8	91.9	6.2		13.8		18		89				<0.2		0.7	
						3.8	0.2	132	26.1		8.2		31.4		91.9		6.2		13.8		18		89				<0.2		0.6	
					Bottom	6.5	0.1	138	26.0	26.0	8.2	8.2	31.4	31.4	93.1	93.1	6.3	6.3	17.6		17		90				<0.2		0.6	
						6.5	0.1	139	26.0		8.2		31.4		93.1		6.3		17.7		18		90				<0.2		0.6	
IM4	Cloudy	Moderate	13:55	7.9	Surface	1.0	0.6	113	25.9	25.9	8.2	8.2	30.9	30.9	91.4	91.4	6.2	6.2	14.9	15.6	16	18	88	89	819748	804622	<0.2	<0.2	0.7	0.7
						1.0	0.6	127	25.9		8.2		30.9		91.4		6.2		14.9		17		88				<0.2		0.8	
					Middle	4.0	0.6	151	26.0	26.0	8.2	8.2	31.1	31.1	91.1	91.2	6.2		15.1		18		89				<0.2		0.7	
						4.0	0.6	152	26.0		8.2		31.2		91.3		6.2		15.1		20		89				<0.2		0.8	
					Bottom	6.9	0.6	157	26.1	26.1	8.2	8.2	31.3	31.3	92.7	93.0	6.3	6.3	16.7		20		90				<0.2		0.7	
						6.9	0.6	148	26.1		8.2		31.3		93.3		6.3		17.0		19		90				<0.2		0.7	
IM5	Cloudy	Moderate	13:47	6.8	Surface	1.0	0.8	161	26.0	26.0	8.2	8.2	31.0	31.0	90.7	90.8	6.2	6.2	11.9	12.5	15	16	88	89	820740	804879	<0.2	<0.2	0.8	0.7
						1.0	0.8	163	26.0		8.2		31.0		90.8		6.2		11.9		16		88				<0.2		0.7	
					Middle	3.4	0.8	168	26.0	26.0	8.2	8.2	31.1	31.1	91.4	91.5	6.2		11.4		16		89				<0.2		0.6	
						3.4	0.8	162	26.0		8.2		31.1		91.6		6.2		11.3		16		89				<0.2		0.6	
					Bottom	5.8	0.7	163	26.0	26.0	8.2	8.2	31.2	31.1	93.9	94.1	6.4	6.4	14.2		17		89				<0.2		0.7	
						5.8	0.8	174	26.0		8.2		31.1		94.3		6.4		14.4		16		90				<0.2		0.7	
IM6	Cloudy	Moderate	13:36	7.4	Surface	1.0	0.3	177	26.0	26.0	8.2	8.2	31.0	31.0	90.4	90.4	6.2	6.2	11.1	12.6	14	15	88	89	821040	805828	<0.2	<0.2	0.8	0.7
						1.0	0.3	189	26.0		8.2		31.0		90.4		6.2		11.4		15		89				<0.2		0.7	
					Middle	3.7	0.3	190	26.0	26.0	8.2	8.2	31.1	31.1	90.1	90.1	6.1		12.9		14		88				<0.2		0.8	
						3.7	0.3	205	26.0		8.2		31.1		90.1		6.1		13.1		14		89				<0.2		0.7	
					Bottom	6.4	0.3	186	26.0	26.0	8.2	8.2	31.1	31.1	90.2	90.3	6.1	6.2	13.5		15		90				<0.2		0.7	
						6.4	0.3	189	26.0		8.2		31.1		90.3		6.2		13.8		16		90				<0.2		0.6	
IM7	Cloudy	Moderate	13:31	7.7	Surface	1.0	0.1	218	26.0	26.0	8.2	8.2	31.0	31.0	90.4	90.4	6.2	6.2	11.2	12.9	14	16	88	89	821361	806823	<0.2	<0.2	0.8	0.7
						1.0	0.1	226	26.0		8.2		31.0		90.3		6.2		11.5		13		88				<0.2		0.7	
					Middle	3.9	0.3	109	26.0	26.0	8.2	8.2	31.1	31.1	90.1	90.1	6.1		12.9		17		89				<0.2		0.8	
						3.9	0.3	113	26.0		8.2		31.1		90.1		6.1		13.1		16		89				<0.2		0.6	
					Bottom	6.7	0.4	87	26.0	26.0	8.2	8.2	31.1	31.1	90.1	90.1	6.1	6.1	14.5		18		90				<0.2		0.7	
						6.7	0.4	91	26.0		8.2		31.1		90.1		6.1		14.4		18		90				<0.2		0.7	
IM8	Cloudy	Moderate	14:01	8.6	Surface	1.0	0.3	165	26.4	26.4	8.0	8.0	29.9	29.9	89.6	89.6	6.1	6.1	10.0	14.2	9	8	87	88	821809	808161	<0.2	<0.2	1.2	1.1
						1.0	0.3	170	26.4		8.0		29.9		89.6		6.1		10.1		8		87				<0.2		1.1	
					Middle	4.3	0.4	172	26.2	26.2	8.1	8.1	30.8	30.8	90.4	90.4	6.1		14.9		8		88				<0.2		1.1	
						4.3	0.4	174	26.2		8.1		30.8		90.4		6.1		15.1		7		89				<0.2		1.0	
					Bottom	7.6	0.3	181	26.2	26.2	8.1	8.1	31.7	31.7	91.3	91.3	6.2	6.2	17.6		7		89				<0.2		1.0	
						7.6	0.4	182	26.2		8.1		31.7		91.3		6.2		17.7		7		90				<0.2		1.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:07	8.2	Surface	1.0	0.3	158	26.4	26.4	8.0	8.0	30.0	30.0	91.0	91.0	6.2	6.2	8.0	11.5	10	11	87	88	822115	808807	<0.2	<0.2	1.1	1.1
						1.0	0.3	158	26.4		8.0		30.0		91.0		6.2		8.0		11		86				<0.2		1.0	
					Middle	4.1	0.3	165	26.3	26.3	8.0	8.0	30.2	30.2	89.1	89.2	6.1		11.7		11		88				<0.2		1.2	
						4.1	0.3	167	26.3		8.0		30.2		89.2		6.1		11.8		12		89				<0.2		1.1	
					Bottom	7.2	0.3	174	26.0	26.0	8.0	8.0	31.0	31.0	90.9	91.0	6.2	6.2	14.8		11		89				<0.2		1.1	
						7.2	0.4	179	26.0		8.0		31.0		91.0		6.2		14.8		11		90				<0.2		1.1	
IM10	Cloudy	Moderate	14:15	7.7	Surface	1.0	0.3	148	26.4	26.4	8.3	8.3	31.4	31.4	90.9	90.9	6.1	6.1	11.2	13.5	8	8	87	88	822408	809803	<0.2	<0.2	1.1	1.1
						1.0	0.4	149	26.4		8.3		31.4		90.9		6.1		11.2		8		86				<0.2		1.1	
					Middle	3.9	0.2	144	26.4	26.4	8.3	8.3	31.4	31.4	88.4	88.4	6.0		13.4		8		89				<0.2		1.1	
						3.9	0.2	147	26.4		8.3		31.4		88.4		6.0		13.4		9		89				<0.2		1.0	
					Bottom	6.7	0.0	159	26.4	26.4	8.2	8.2	31.4	31.4	89.2	89.2	6.0	6.0	15.8		8		90				<0.2		1.0	
						6.7	0.0	154	26.4		8.2		31.4		89.2		6.0		15.9		9		89				<0.2		1.2	
IM11	Cloudy	Moderate	14:27	8.0	Surface	1.0	0.1	138	26.3	26.3	8.3	8.3	31.4	31.4	89.1	89.1	6.0	6.1	9.5	11.1	12	12	87	88	822060	811440	<0.2	<0.2	1.0	1.0
						1.0	0.1	134	26.3		8.3		31.4		89.1		6.0		9.4		13		86				<0.2		1.0	
					Middle	4.0	0.1	148	26.3	26.3	8.2	8.2	31.4	31.4	91.0	91.0	6.2		10.5		13		88				<0.2		0.9	
						4.0	0.1	149	26.3		8.2		31.4		91.0		6.2		10.6		12		89				<0.2		1.0	
					Bottom	7.0	0.2	143	26.3	26.3	8.2	8.2	31.4	31.4	89.2	89.3	6.0	6.0	13.4		11		90				<0.2		1.1	
						7.0	0.2	153	26.3		8.2		31.4		89.3		6.0		13.4		11		90				<0.2		1.1	
IM12	Cloudy	Moderate	14:36	8.9	Surface	1.0	0.1	131	26.4	26.4	8.2	8.2	31.3	31.3	88.8	88.8	6.0	6.0	7.9	9.3	12	12	86	88	821442	812066	<0.2	<0.2	1.0	1.1
						1.0	0.2	137	26.4		8.2		31.3		88.8		6.0		7.9		12		87				<0.2		1.2	
					Middle	4.5	0.1	132	26.5	26.5	8.2	8.2	31.4	31.4	88.3	88.3	6.0		8.6		13		87				<0.2		1.2	
						4.5	0.1	134	26.5		8.2		31.4		88.2		6.0		8.6		12		88				<0.2		1.0	
					Bottom	7.9	0.2	159	26.5	26.5	8.2	8.2	31.4	31.4	88.3	88.3	6.0	6.0	11.4		12		89				<0.2		1.0	
						7.9	0.2	161	26.5		8.2		31.4		88.3		6.0		11.4		13		89				<0.2		1.0	
SR1A	Cloudy	Moderate	14:38	4.6	Surface	1.0	-	-	26.4	26.4	8.2	8.2	31.3	31.3	89.5	89.5	6.1	6.1	7.9	8.2	8	9	-	-	819979	812662	-	-	-	-
						1.0	-	-	26.4		8.2		31.3		89.4		6.0		8.0		9		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	26.5	26.5	8.2	8.2	31.4	31.4	88.0	88.0	5.9	5.9	8.3		9		-				-		-	
						3.6	-	-	26.5		8.2		31.4		88.0		5.9		8.4		8		-				-		-	
SR2	Cloudy	Rough	14:52	4.7	Surface	1.0	0.3	41	26.4	26.4	8.3	8.3	31.4	31.4	90.9	90.9	6.1	6.1	7.7	7.9	7	7	87	88	821454	814173	<0.2	<0.2	0.8	0.8
						1.0	0.3	41	26.4		8.3		31.4		90.9		6.1		7.7		7		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	14	26.4	26.4	8.3	8.3	31.4	31.4	91.7	91.7	6.2	6.2	8.1		6		89				<0.2		0.8	
						3.7	0.2	14	26.4		8.3		31.4		91.7		6.2		8.0		6		88				<0.2		0.8	
SR3	Cloudy	Moderate	13:54	9.3	Surface	1.0	0.3	143	26.4	26.4	8.2	8.2	29.8	29.8	91.3	91.3	6.2	6.2	7.3	12.2	8	9	-	-	822137	807569	-	-	-	-
						1.0	0.3	145	26.4		8.2		29.8		91.2		6.2		7.3		7		-				-		-	
					Middle	4.7	0.5	165	26.3	26.3	8.2	8.2	30.3	30.3	89.8	89.9	6.1		13.3		9		-				-		-	
						4.7	0.5	170	26.3		8.2		30.3		89.9		6.1		13.3		9		-				-		-	
					Bottom	8.3	0.5	170	26.1	26.1	8.2	8.2	31.8	31.8	90.9	90.9	6.2	6.2	16.1		10		-				-		-	
						8.3	0.6	171	26.1		8.2		31.8		90.9		6.2		15.9		9		-				-		-	
SR4A	Cloudy	Calm	14:52	8.2	Surface	1.0	0.3	108	26.0	26.0	8.2	8.2	31.5	31.5	92.1	92.1	6.3	6.3	11.2	11.5	14	14	-	-	817181	807797	-	-	-	-
						1.0	0.3	112	26.0		8.2		31.5		92.1		6.3		11.2		15		-				-		-	
					Middle	4.1	0.4	87	26.0	26.0	8.2	8.2	31.5	31.5	91.9	91.9	6.2		11.3		14		-				-		-	
						4.1	0.4	89	26.0		8.2		31.5		91.8		6.2		11.3		14		-				-		-	
					Bottom	7.2	0.4	65	26.0	26.0	8.2	8.2	31.5	31.5	91.8	91.9	6.2	6.2	11.9		13		-				-		-	
						7.2	0.4	66	26.0		8.2		31.5		91.9		6.2		12.0		13		-				-		-	
SR5A	Cloudy	Calm	15:07	5.5	Surface	1.0	0.1	12	25.9	25.9	8.2	8.2	30.4	30.4	91.8	92.0	6.3	6.3	7.0	7.1	9	10	-	-	816585	810687	-	-	-	-
						1.0	0.1	12	25.9		8.2		30.4		92.1		6.3		7.0		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	22	25.9	25.9	8.2	8.2	30.4	30.4	93.7	94.0	6.4	6.5	7.2		10		-				-		-	
						4.5	0.1	23	25.9		8.2		30.4		94.3		6.5		7.2		11		-				-		-	
SR6A	Cloudy	Calm	15:30	4.3	Surface	1.0	0.1	54	26.3	26.3	8.2	8.2	30.5	30.5	91.0	91.1	6.2	6.2	6.7	6.9	7	7	-	-	817949	814745	-	-	-	-
						1.0	0.1	57	26.3		8.2		30.5		91.2		6.2		6.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	60	26.3	26.3	8.2	8.2	30.5	30.5	93.8	96.0	6.4	6.6	7.0		6		-				-		-	
						3.3	0.1	65	26.3		8.2		30.5		98.1		6.7		7.0		8		-				-		-	
SR7	Cloudy	Rough	15:50	15.5	Surface	1.0	0.7	73	27.1	27.1	8.1	8.1	32.6	32.6	85.5	85.5	5.7	5.7	4.7	6.6	6	7	-	-	823618	823763	-	-	-	-
						1.0	0.7	79	27.1		8.1		32.6		85.5		5.7		4.7		6		-				-		-	
					Middle	7.8	0.3	62	26.9	26.9	8.1	8.1	32.8	32.8	84.5	84.5	5.6		6.7		6		-				-		-	
						7.8	0.3	65	26.9		8.1		32.8		84.5		5.6		6.8		7		-				-		-	
					Bottom	14.5	0.1	330	26.9	26.9	8.1	8.1	32.9	32.9	84.2	84.2	5.6	5.6	8.3		8		-				-		-	
						14.5	0.1	355	26.9		8.1		32.9		84.1		5.6		8.4		7		-				-		-	
SR8	Cloudy	Moderate	14:38	5.2	Surface	1.0	-	-	26.4	26.4	8.2	8.2	31.3	31.3	90.5	90.5	6.1	6.1	7.9	8.2	8	10	-	-	820382	811604	-	-	-	-
						1.0	-	-	26.4		8.2		31.3		90.5		6.1		8.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	26.5	26.5	8.2	8.2	31.4	31.4	89.5	89.5	6.0	6.0	8.5		12		-				-		-	
						4.2	-	-	26.5		8.2		31.4		89.5		6.0		8.4		11		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 19 during Mid-Flood Tide

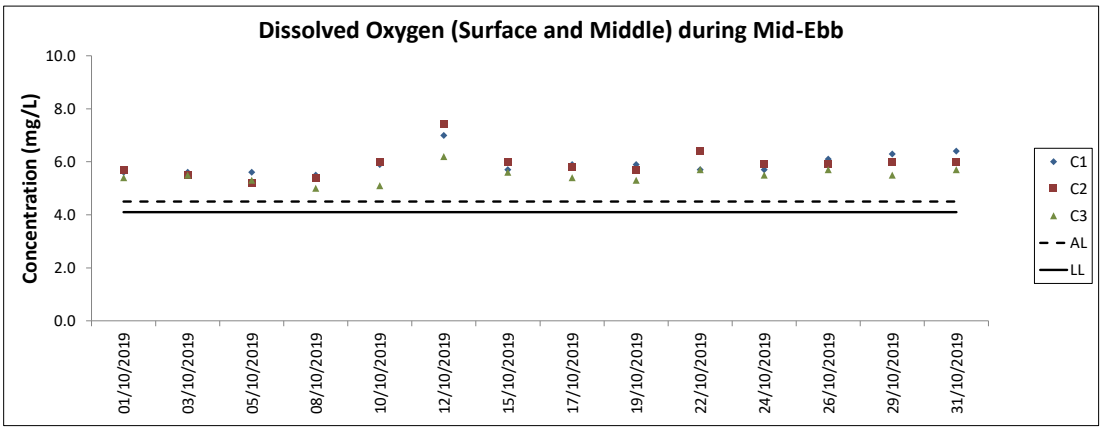
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:50	8.1	Surface	1.0	0.4	33	26.0	26.0	8.2	8.2	31.4	31.4	91.0	91.0	6.2	6.2	10.3	14.9	13	14	87	89	815615	804259	<0.2	<0.2	0.8	0.7
						1.0	0.4	33	26.0		8.2		31.4		90.9		6.2		10.4		12		87				<0.2		0.6	
					Middle	4.1	0.7	42	26.1	26.1	8.2	8.2	31.8	31.8	90.3	90.3	6.1		13.9		14		89				<0.2		0.7	
						4.1	0.7	43	26.1		8.2		31.8		90.3		6.1		13.8		15		89				<0.2		0.7	
					Bottom	7.1	0.6	50	26.1	26.1	8.2	8.2	31.8	31.8	89.9	89.9	6.1	6.1	20.7		15		90				<0.2		0.7	
						7.1	0.7	50	26.1		8.2		31.8		89.9		6.1		20.7		16		91				<0.2		0.7	
C2	Cloudy	Rough	10:41	11.8	Surface	1.0	0.3	332	26.4	26.4	8.2	8.2	29.5	29.5	90.2	90.2	6.2	6.1	6.5	10.3	9	9	86	87	825667	806934	<0.2	<0.2	0.8	0.8
						1.0	0.3	305	26.4		8.2		29.5		90.1		6.2		6.5		10		86				<0.2		0.7	
					Middle	5.9	0.4	4	26.4	26.4	8.3	8.3	29.7	29.7	87.0	87.0	5.9		10.2		8		87				<0.2		0.8	
						5.9	0.4	4	26.4		8.3		29.7		87.0		5.9		10.4		9		87				<0.2		0.9	
					Bottom	10.8	0.3	21	26.3	26.3	8.3	8.3	30.2	30.2	87.5	87.5	6.0	6.0	14.2		8		89				<0.2		0.8	
						10.8	0.3	21	26.3		8.3		30.2		87.5		6.0		14.0		8		88				<0.2		0.7	
C3	Cloudy	Rough	08:46	11.3	Surface	1.0	0.6	254	26.6	26.6	8.1	8.1	31.5	31.5	87.7	87.7	5.9	5.9	7.7	12.0	10	10	87	89	822096	817787	<0.2	<0.2	0.7	0.8
						1.0	0.7	254	26.6		8.1		31.5		87.7		5.9		7.7		9		86				<0.2		0.8	
					Middle	5.7	0.7	260	26.6	26.6	8.0	8.0	31.6	31.6	87.1	87.1	5.9		11.1		9		89				<0.2		0.8	
						5.7	0.8	285	26.6		8.0		31.6		87.1		5.9		11.2		10		88				<0.2		0.7	
					Bottom	10.3	0.5	266	26.7	26.7	8.0	8.0	31.7	31.7	87.8	87.8	5.9	5.9	17.0		10		91				<0.2		0.8	
						10.3	0.5	282	26.7		8.0		31.7		87.8		5.9		17.0		9		91				<0.2		0.7	
IM1	Cloudy	Calm	10:18	5.3	Surface	1.0	0.3	19	26.0	26.0	8.2	8.2	31.7	31.7	91.8	91.8	6.2	6.2	9.6	9.8	10	11	87	88	817939	807152	<0.2	<0.2	0.8	0.7
						1.0	0.3	19	26.0		8.2		31.7		91.8		6.2		9.6		11		87				<0.2		0.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	10	26.0	26.0	8.2	8.2	31.8	31.8	92.4	92.6	6.3	6.3	10.1		12		88				<0.2		0.7	
						4.3	0.3	10	26.0		8.2		31.8		92.8		6.3		10.1		12		89				<0.2		0.7	
IM2	Cloudy	Moderate	10:26	7.0	Surface	1.0	0.5	20	26.0	26.0	8.2	8.2	31.2	31.2	91.0	91.0	6.2	6.2	8.7	12.1	12	13	88	89	818139	806157	<0.2	<0.2	0.8	0.8
						1.0	0.5	21	26.0		8.2		31.2		90.9		6.2		8.7		11		88				<0.2		0.8	
					Middle	3.5	0.4	18	26.1	26.1	8.2	8.2	31.4	31.4	90.4	90.4	6.1		13.2		13		89				<0.2		0.7	
						3.5	0.4	19	26.1		8.2		31.4		90.4		6.1		13.2		12		89				<0.2		0.7	
					Bottom	6.0	0.4	12	26.1	26.1	8.2	8.2	31.5	31.5	89.6	89.5	6.1	6.1	14.5		14		90				<0.2		0.7	
						6.0	0.4	12	26.1		8.2		31.5		89.4		6.1		14.3		13		90				<0.2		0.8	
IM3	Cloudy	Moderate	10:30	7.3	Surface	1.0	0.5	13	25.9	25.9	8.2	8.2	30.9	30.9	91.5	91.5	6.3	6.2	9.1	12.5	11	12	87	89	818772	805606	<0.2	<0.2	0.8	0.9
						1.0	0.5	13	25.9		8.2		30.9		91.5		6.2		9.2		10		88				<0.2		0.9	
					Middle	3.7	0.4	8	26.1	26.1	8.2	8.2	31.4	31.4	91.3	91.4	6.2		15.2		13		88				<0.2		0.8	
						3.7	0.4	8	26.1		8.2		31.4		91.4		6.2		15.3		12		89				<0.2		0.9	
					Bottom	6.3	0.3	7	26.1	26.1	8.2	8.2	31.5	31.5	94.0	94.2	6.4	6.4	13.1		13		90				<0.2		0.8	
						6.3	0.3	7	26.1		8.2		31.5		94.3		6.4		13.4		14		90				<0.2		0.9	
IM4	Cloudy	Moderate	10:37	7.6	Surface	1.0	0.8	342	25.9	25.9	8.2	8.2	30.7	30.7	91.1	91.1	6.2	6.2	12.3	13.3	12	13	88	89	819720	804592	<0.2	<0.2	0.8	0.8
						1.0	0.9	354	25.9		8.2		30.7		91.1		6.2		12.3		13		88				<0.2		0.8	
					Middle	3.8	0.7	354	26.0	26.0	8.2	8.2	30.9	30.9	90.1	90.1	6.1		13.7		13		88				<0.2		0.8	
						3.8	0.7	326	26.0		8.2		30.9		90.1		6.1		13.6		14		89				<0.2		0.7	
					Bottom	6.6	0.6	350	26.1	26.1	8.2	8.2	31.3	31.3	91.3	91.4	6.2	6.2	14.0		14		90				<0.2		0.8	
						6.6	0.6	322	26.1		8.2		31.3		91.5		6.2		14.1		14		90				<0.2		1.0	
IM5	Cloudy	Moderate	10:43	6.9	Surface	1.0	1.0	15	26.0	26.0	8.1	8.1	30.8	30.8	90.4	90.4	6.2	6.2	12.6	14.5	15	15	87	88	820745	804878	<0.2	<0.2	0.8	0.8
						1.0	1.1	15	26.0		8.1		30.9		90.4		6.2		12.5		16		87				<0.2		0.8	
					Middle	3.5	0.9	17	26.0	26.1	8.1	8.1	31.0	31.1	90.9	91.0	6.2		14.7		14		88				<0.2		0.7	
						3.5	1.0	18	26.1		8.1		31.1		91.0		6.2		14.7		15		88				<0.2		0.7	
					Bottom	5.9	0.7	21	26.1	26.1	8.1	8.1	31.2	31.2	93.3	93.5	6.3	6.4	16.3		14		90				<0.2		0.7	
						5.9	0.8	23	26.1		8.1		31.2		93.7		6.4		16.4		14		90				<0.2		0.8	
IM6	Cloudy	Moderate	10:47	7.1	Surface	1.0	0.1	151	26.0	26.0	8.2	8.2	31.0	31.0	91.0	91.1	6.2	6.2	11.6	12.6	16	15	88	89	821050	805813	<0.2	<0.2	0.8	0.8
						1.0	0.1	157	26.0		8.2		31.0		91.1		6.2		11.7		15		88				<0.2		0.7	
					Middle	3.6	0.1	121	26.0	26.0	8.2	8.2	31.1	31.1	91.4	91.4	6.2		12.6		16		89				<0.2		0.8	
						3.6	0.1	127	26.0		8.2		31.1		91.4		6.2		12.5		16		89				<0.2		0.8	
					Bottom	6.1	0.2	100	26.0	26.0	8.2	8.2	31.1	31.1	92.1	92.2	6.3	6.3	13.4		15		90				<0.2		0.8	
						6.1	0.2	102	26.0		8.2		31.1		92.3		6.3		13.4		14		90				<0.2		0.8	
IM7	Cloudy	Moderate	11:00	7.5	Surface	1.0	0.1	177	26.0	26.0	8.2	8.2	31.0	31.0	90.5	90.5	6.2	6.2	11.8	12.5	14	14	88	89	821361	806824	<0.2	<0.2	0.7	0.7
						1.0	0.1	186	26.0		8.2		31.0		90.4		6.2		12.0		14		88				<0.2		0.7	
					Middle	3.8	0.2	98	26.0	26.0	8.2	8.2	31.1	31.1	90.3	90.3	6.2		13.1		13		89				<0.2		0.7	
						3.8	0.3	107	26.0		8.2		31.1		90.3		6.2		13.2		14		89				<0.2		0.8	
					Bottom	6.5	0.5	90	26.0	26.0	8.2	8.2	31.1	31.1	90.6	90.7	6.2	6.2	12.5		15		90				<0.2		0.8	
						6.5	0.5	96	26.0		8.2		31.1		90.7		6.2		12.2		14		90				<0.2		0.7	
IM8	Cloudy	Moderate	10:13	7.8	Surface	1.0	0.3	93	26.4	26.4	8.3	8.2	30.0	30.0	88.1	88.1	6.0	6.0	9.4	10.7	12	12	85	87	821817	808145	<0.2	<0.2	1.0	0.9
						1.0	0.3	96	26.4		8.2		30.0		88.1		6.0		9.4		13		86				<0.2		0.8	
					Middle	3.9	0.3	95	26.4	26.4	8.2	8.2	30.0	30.0	88.3	88.3	6.0		10.7		12		87				<0.2		0.9	
						3.9	0.3	97	26.4		8.2		30.0		88.3		6.0		10.7		12		87				<0.2		0.8	
					Bottom	6.8	0.2	121	26.2	26.2	8.2	8.2	30.4	30.4	89.3	89.3	6.1	6.1	11.9		12		88				<0.2		0.9	
						6.8	0.2	132	26.2		8.2		30.4		89.2		6.1		11.9		13		89				<0.2		0.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 October 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:06	7.9	Surface	1.0	0.4	46	26.3	26.3	8.3	8.3	30.2	30.2	90.5	90.5	6.2	6.2	10.1	13.3	12	13	86	87	822094	808832	<0.2	<0.2	0.8	0.8
						1.0	0.4	46	26.3		8.3		30.2		90.4		6.2		10.1		13		85				<0.2		0.8	
					Middle	4.0	0.3	51	26.2	26.2	8.3	8.3	30.4	30.4	89.8	89.8	6.1		10.7		13		87				<0.2		0.8	
						4.0	0.3	55	26.2		8.3		30.4		89.7		6.1		10.8		14		86				<0.2		0.8	
					Bottom	6.9	0.3	48	26.0	26.0	8.3	8.3	31.0	31.0	94.2	94.2	6.4	6.4	18.9		14		88				<0.2		0.8	
						6.9	0.3	49	26.0		8.3		31.0		94.2		6.4		18.9		14		89				<0.2		0.8	
IM10	Cloudy	Moderate	09:58	8.2	Surface	1.0	0.5	316	26.2	26.2	8.3	8.3	31.2	31.2	90.2	90.2	6.1	6.1	10.3	11.5	12	12	86	87	822389	809813	<0.2	<0.2	0.8	0.8
						1.0	0.6	333	26.2		8.3		31.2		90.2		6.1		10.3		11		86				<0.2		0.8	
					Middle	4.1	0.5	318	26.2	26.2	8.3	8.3	31.2	31.2	90.0	90.0	6.1		11.4		12		87				<0.2		0.8	
						4.1	0.5	326	26.2		8.3		31.2		89.9		6.1		11.5		12		86				<0.2		0.8	
					Bottom	7.2	0.4	300	26.2	26.2	8.3	8.3	31.2	31.2	89.8	89.9	6.1	6.1	12.8		12		88				<0.2		0.7	
						7.2	0.4	325	26.2		8.3		31.2		89.9		6.1		12.9		11		89				<0.2		0.8	
IM11	Cloudy	Moderate	09:45	8.1	Surface	1.0	0.7	309	26.3	26.3	8.3	8.3	31.2	31.2	96.4	96.4	6.5	6.3	14.4	16.6	17	16	85	87	822062	811460	<0.2	<0.2	0.7	0.7
						1.0	0.7	315	26.3		8.3		31.2		96.4		6.5		14.4		16		86				<0.2		0.7	
					Middle	4.1	0.5	310	26.3	26.3	8.2	8.2	31.2	31.2	88.8	88.8	6.0		16.4		16		86				<0.2		0.6	
						4.1	0.5	331	26.3		8.2		31.2		88.8		6.0		16.5		16		87				<0.2		0.5	
					Bottom	7.1	0.4	287	26.3	26.3	8.2	8.2	31.2	31.2	88.9	88.9	6.0	6.0	19.0		16		88				<0.2		0.7	
						7.1	0.4	302	26.3		8.2		31.2		88.9		6.0		18.8		16		88				<0.2		0.7	
IM12	Cloudy	Moderate	09:39	8.3	Surface	1.0	0.8	270	26.4	26.4	8.3	8.3	31.5	31.5	88.4	88.4	6.0	6.0	16.0	18.6	20	21	86	87	821467	812063	<0.2	<0.2	0.7	0.7
						1.0	0.8	284	26.4		8.3		31.5		88.4		6.0		16.0		21		85				<0.2		0.6	
					Middle	4.2	0.7	277	26.4	26.4	8.2	8.2	31.5	31.5	88.3	88.3	6.0		18.8		20		87				<0.2		0.7	
						4.2	0.8	293	26.4		8.2		31.5		88.3		6.0		18.8		20		87				<0.2		0.7	
					Bottom	7.3	0.6	271	26.4	26.4	8.2	8.2	31.5	31.5	88.2	88.2	6.0	6.0	21.0		22		89				<0.2		0.7	
						7.3	0.6	271	26.4		8.2		31.5		88.2		6.0		20.9		22		89				<0.2		0.7	
SR1A	Cloudy	Moderate	09:18	4.6	Surface	1.0	-	-	26.2	26.2	8.2	8.2	30.9	30.9	87.0	87.0	5.9	5.9	7.0	8.0	16	14	-	-	819973	812660	-	-	-	-
						1.0	-	-	26.2		8.2		30.9		87.0		5.9		7.0		15		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	26.2	26.2	8.1	8.1	31.0	31.0	87.9	87.9	6.0	6.0	9.0		13		-				-		-	
						3.6	-	-	26.2		8.1		31.0		87.8		6.0		9.0		12		-				-		-	
SR2	Cloudy	Moderate	09:05	4.3	Surface	1.0	0.5	321	26.3	26.3	8.2	8.2	31.4	31.4	89.1	89.1	6.0	6.0	16.0	16.6	18	19	86	87	821447	814152	<0.2	<0.2	0.7	0.7
						1.0	0.6	343	26.3		8.2		31.4		89.1		6.0		16.1		18		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.4	317	26.3	26.3	8.2	8.2	31.4	31.4	92.8	92.9	6.3	6.3	17.0		20		88				<0.2		0.7	
						3.3	0.4	338	26.3		8.2		31.4		92.9		6.3		17.2		19		87				<0.2		0.7	
SR3	Cloudy	Rough	10:20	9.5	Surface	1.0	0.2	50	26.3	26.3	8.2	8.2	29.7	29.7	88.9	88.9	6.1	6.1	9.3	13.2	10	10	-	-	822162	807594	-	-	-	-
						1.0	0.2	53	26.3		8.2		29.7		88.8		6.1		9.5		10		-				-		-	
					Middle	4.8	0.4	68	26.3	26.3	8.2	8.2	30.2	30.2	88.5	88.5	6.0		13.5		10		-				-		-	
						4.8	0.5	72	26.3		8.2		30.2		88.5		6.0		13.5		10		-				-		-	
					Bottom	8.5	0.3	67	26.1	26.1	8.2	8.2	31.8	31.8	90.4	90.4	6.1	6.1	16.7		11		-				-		-	
						8.5	0.3	70	26.1		8.2		31.8		90.4		6.1		16.8		11		-				-		-	
SR4A	Cloudy	Calm	09:30	8.4	Surface	1.0	0.1	22	26.0	26.0	8.2	8.2	31.4	31.4	91.0	91.0	6.2	6.2	11.6	15.0	16	16	-	-	817198	807794	-	-	-	-
						1.0	0.1	23	26.0		8.2		31.5		91.0		6.2		11.7		15		-				-		-	
					Middle	4.2	0.0	276	26.1	26.1	8.2	8.2	31.8	31.8	90.7	90.7	6.1		13.3		15		-				-		-	
						4.2	0.0	294	26.1		8.2		31.8		90.7		6.1		13.1		15		-				-		-	
					Bottom	7.4	0.1	88	26.1	26.1	8.2	8.2	31.8	31.8	90.8	90.9	6.2	6.2	20.1		16		-				-		-	
						7.4	0.1	96	26.1		8.2		31.8		90.9		6.2		20.2		16		-				-		-	
SR5A	Cloudy	Calm	09:16	5.2	Surface	1.0	0.2	241	25.9	25.9	8.1	8.1	30.2	30.2	86.4	86.4	5.9	5.9	9.9	10.7	12	13	-	-	816579	810688	-	-	-	-
						1.0	0.2	242	25.9		8.1		30.2		86.4		5.9		10.0		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	254	25.9	25.9	8.1	8.1	30.2	30.2	86.7	86.8	5.9	6.0	11.4		13		-				-		-	
						4.2	0.2	255	25.9		8.1		30.2		86.9		6.0		11.4		14		-				-		-	
SR6A	Cloudy	Calm	08:51	4.6	Surface	1.0	0.1	219	26.2	26.2	8.0	8.0	30.1	30.1	83.7	83.8	5.7	5.7	8.6	9.5	9	8	-	-	817958	814762	-	-	-	-
						1.0	0.1	234	26.2		8.0		30.1		83.8		5.7		8.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	224	26.1	26.1	8.0	8.0	30.1	30.1	84.4	84.5	5.8	5.8	10.5		7		-				-		-	
						3.6	0.1	235	26.1		8.0		30.1		84.6		5.8		10.4		7		-				-		-	
SR7	Cloudy	Rough	08:16	16.0	Surface	1.0	0.2	133	26.8	26.8	8.0	8.0	32.1	32.1	84.6	84.6	5.7	5.7	8.9	10.6	11	11	-	-	823617	823727	-	-	-	-
						1.0	0.2	143	26.8		8.0		32.1		84.6		5.7		8.9		10		-				-		-	
					Middle	8.0	0.4	282	26.8	26.8	7.9	7.9	32.1	32.1	84.3	84.4	5.6		10.0		11		-				-		-	
						8.0	0.4	284	26.8		7.9		32.1		84.4		5.6		10.0		10		-				-		-	
					Bottom	15.0	0.3	265	26.8	26.8	8.0	8.0	32.1	32.1	83.7	83.7	5.6	5.6	12.9		12		-				-		-	
						15.0	0.4	267	26.8		8.0		32.1		83.7		5.6		12.9		13		-				-		-	
SR8	Cloudy	Moderate	09:29	4.9	Surface	1.0	-	-	26.8	26.8	8.2	8.2	31.0	31.0	92.5	92.5	6.2	6.2	14.5	12.7	17	18	-	-	820375	811605	-	-	-	-
						1.0	-	-	26.8		8.2		31.0		92.4		6.2		14.4		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	26.3	26.3	8.2	8.2	31.2	31.2	90.3	90.3	6.1	6.1	10.9		19		-				-		-	
						3.9	-	-	26.3		8.2		31.2		90.3		6.1		10.9		18		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
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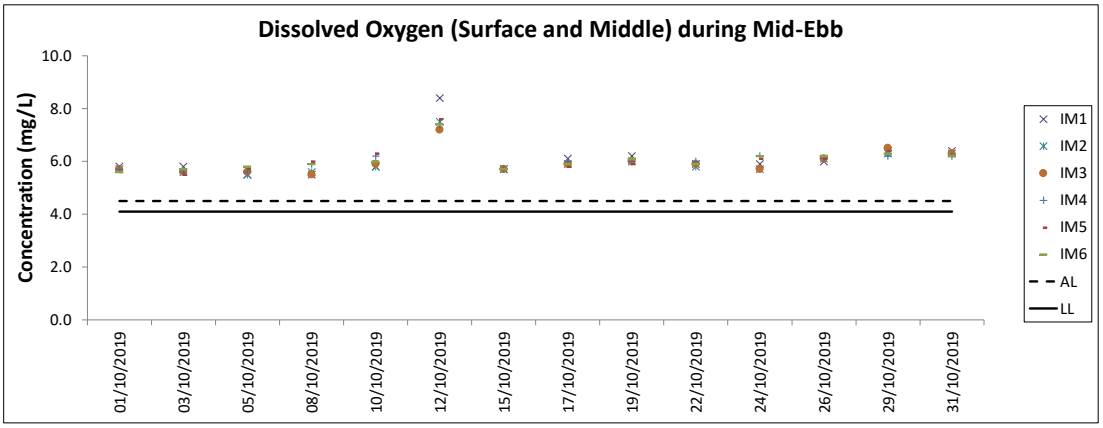
29/10/2019
31/10/2019
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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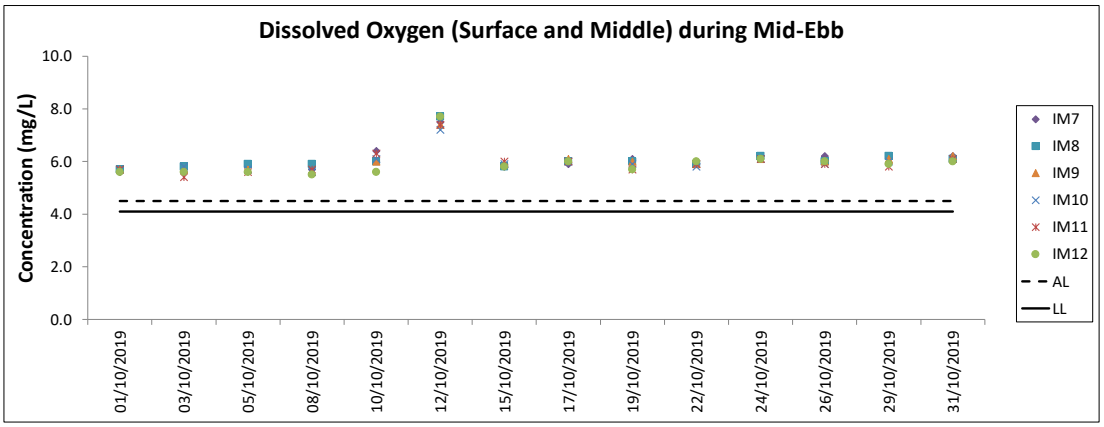
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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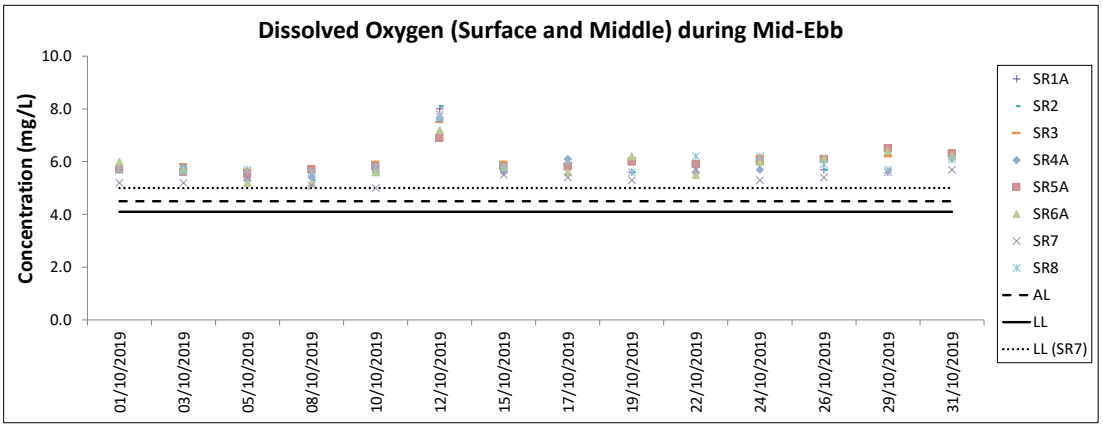
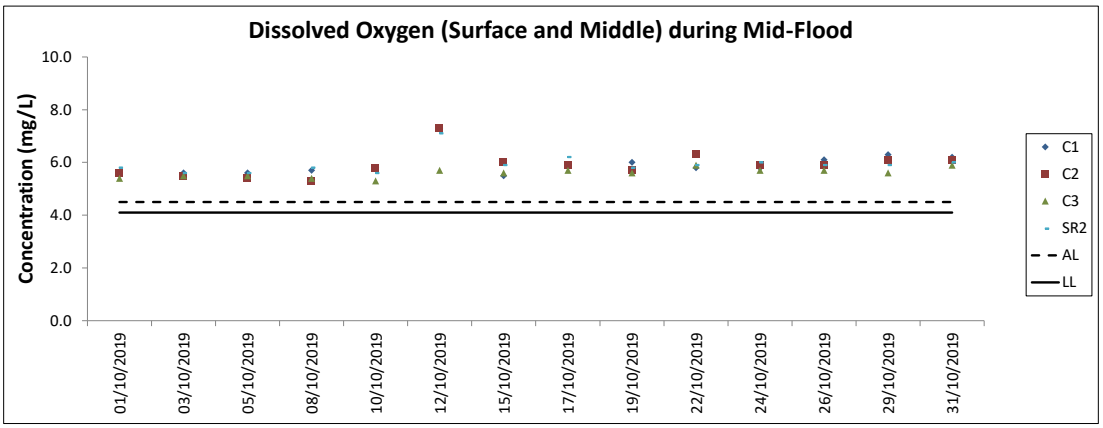
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
26/10/2019
29/10/2019
31/10/2019
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
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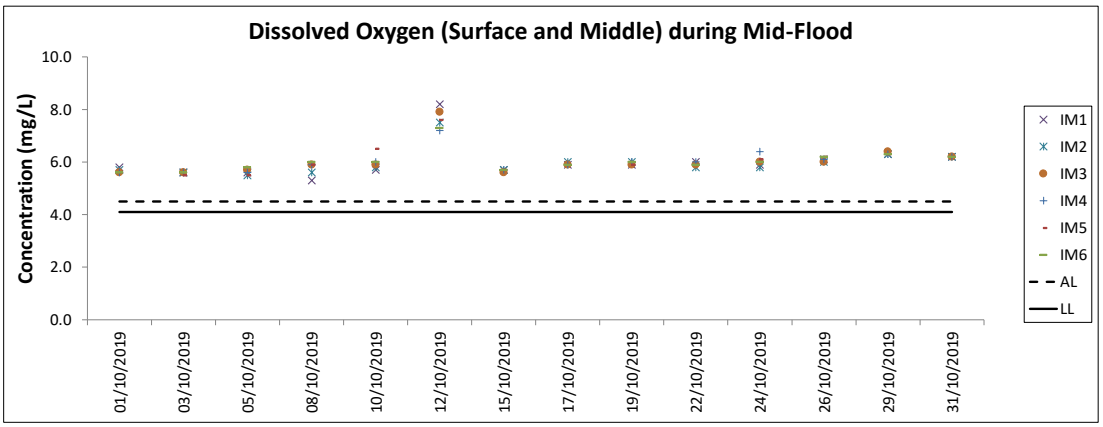
31/10/2019
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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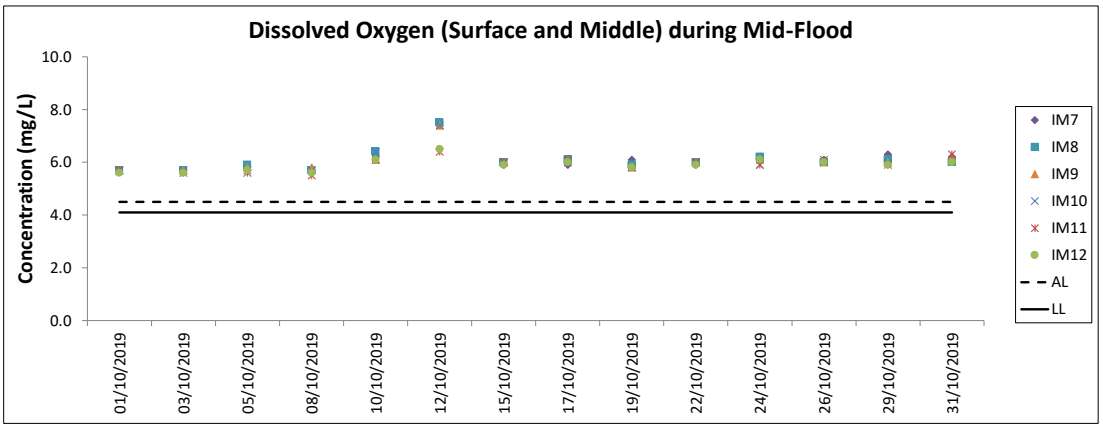
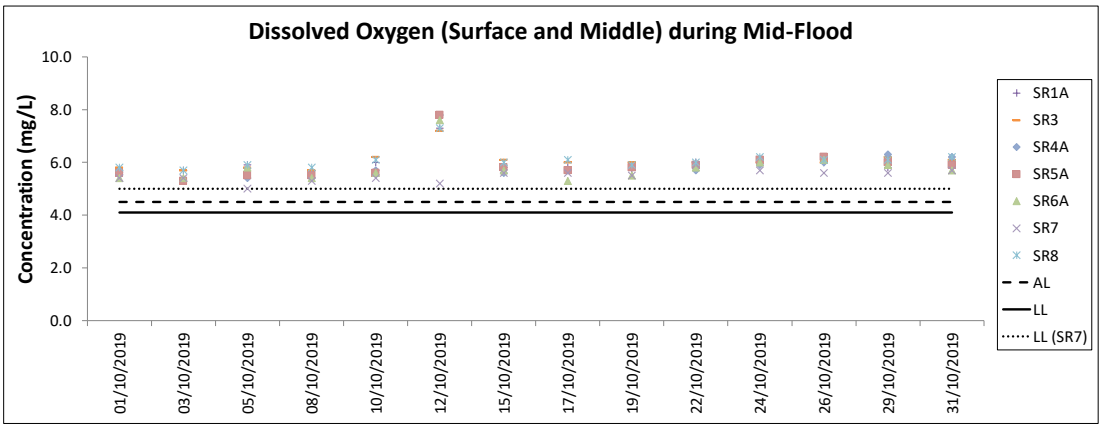
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
26/10/2019
29/10/2019
31/10/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
26/10/2019
29/10/2019
31/10/2019
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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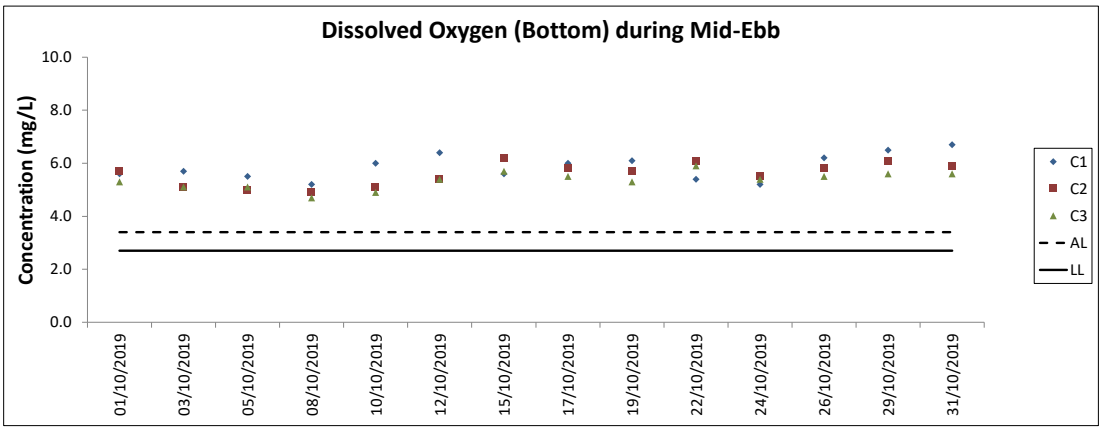
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
26/10/2019
29/10/2019
31/10/2019
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
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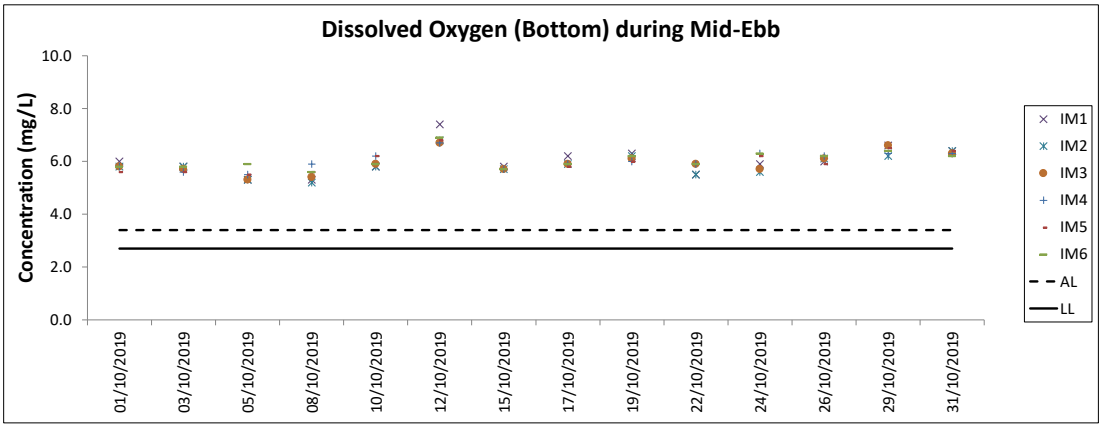
24/10/2019
26/10/2019
29/10/2019
31/10/2019
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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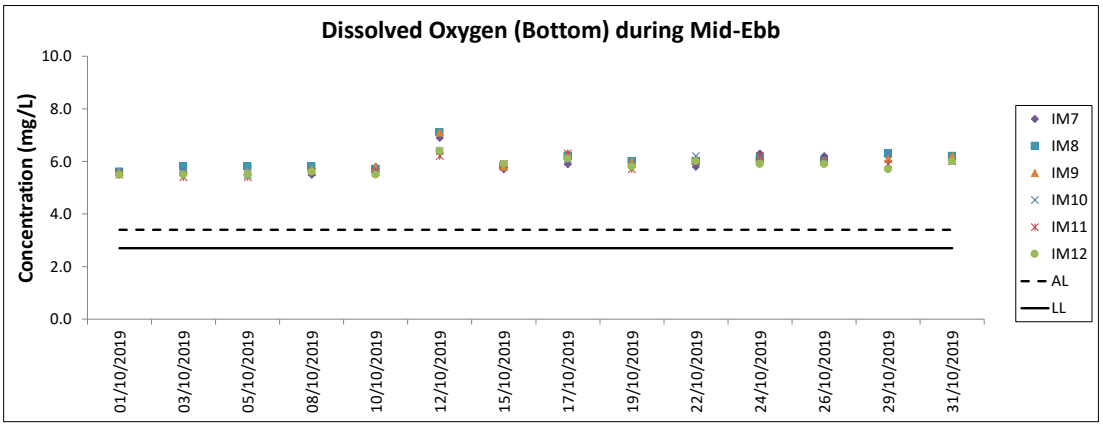
31/10/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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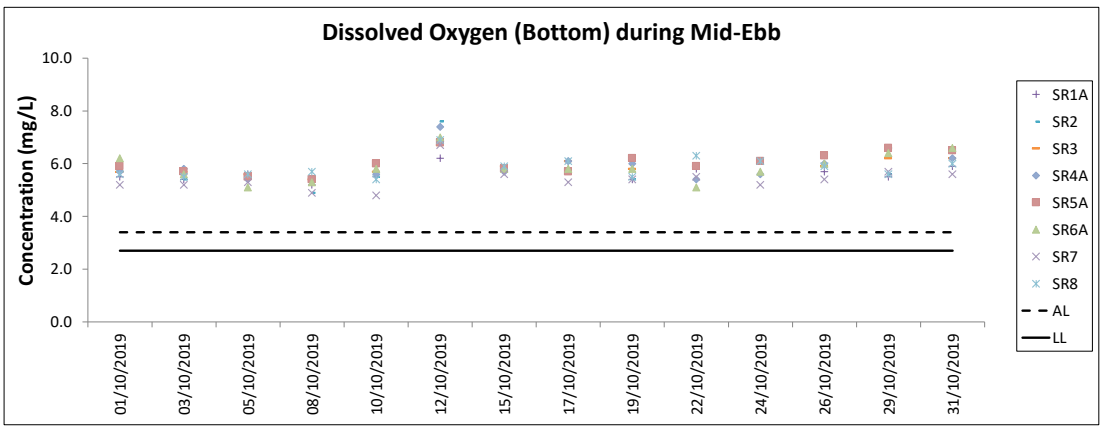
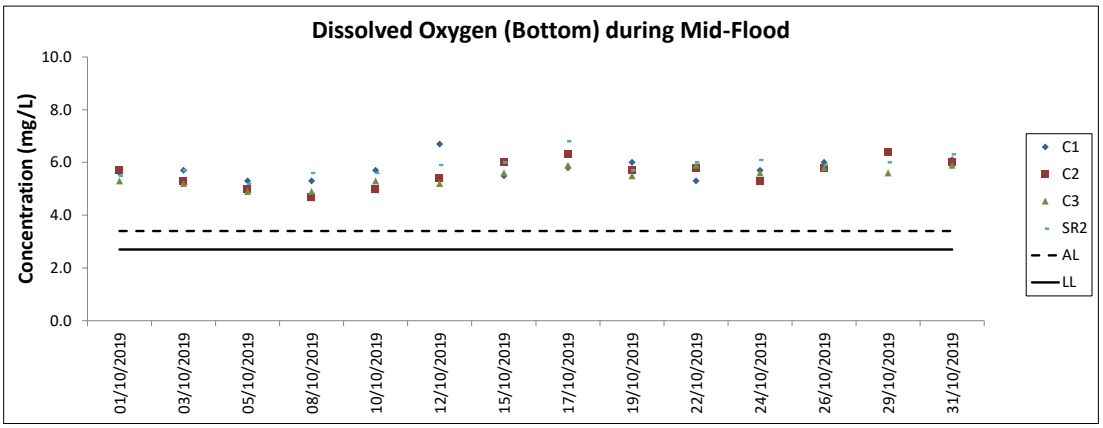
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
26/10/2019
29/10/2019
31/10/2019
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
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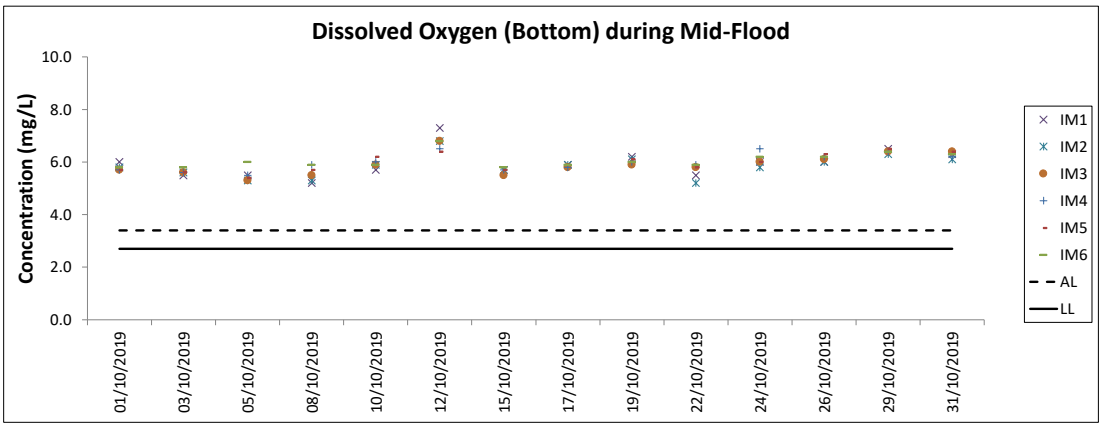
31/10/2019
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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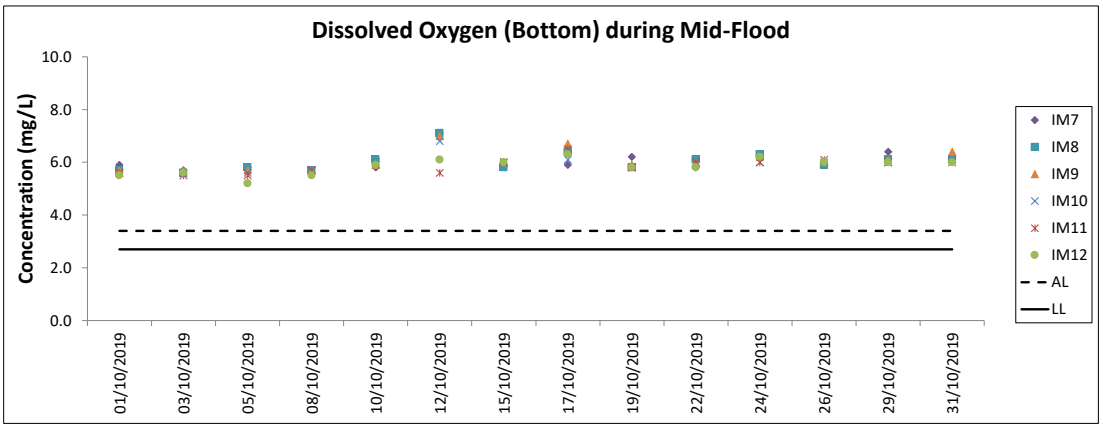
29/10/2019
31/10/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
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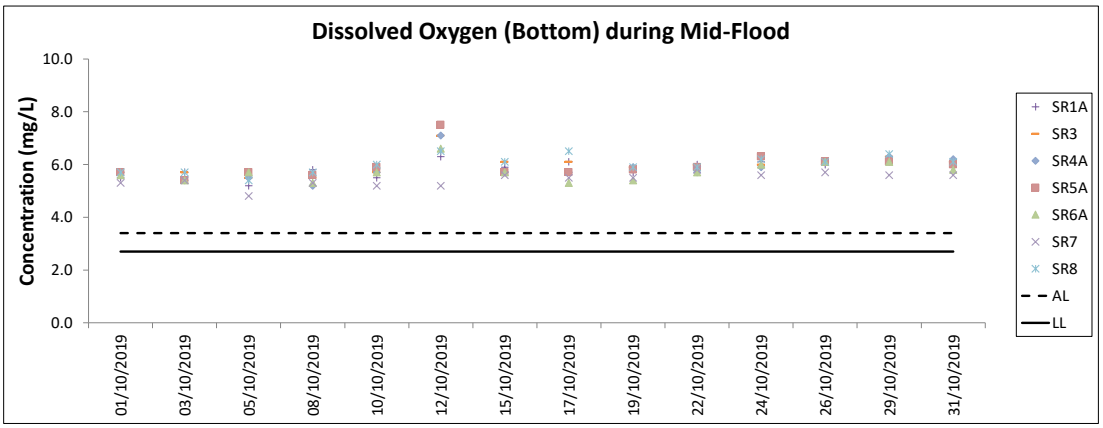
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
0.0
01/10/2019
03/10/2019
05/10/2019
08/10/2019
10/10/2019
12/10/2019
15/10/2019
17/10/2019
19/10/2019
22/10/2019
24/10/2019
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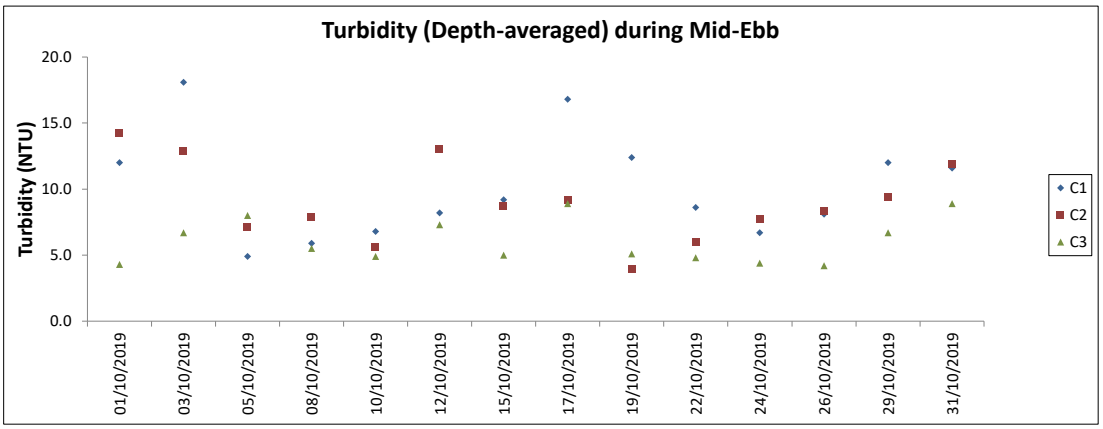
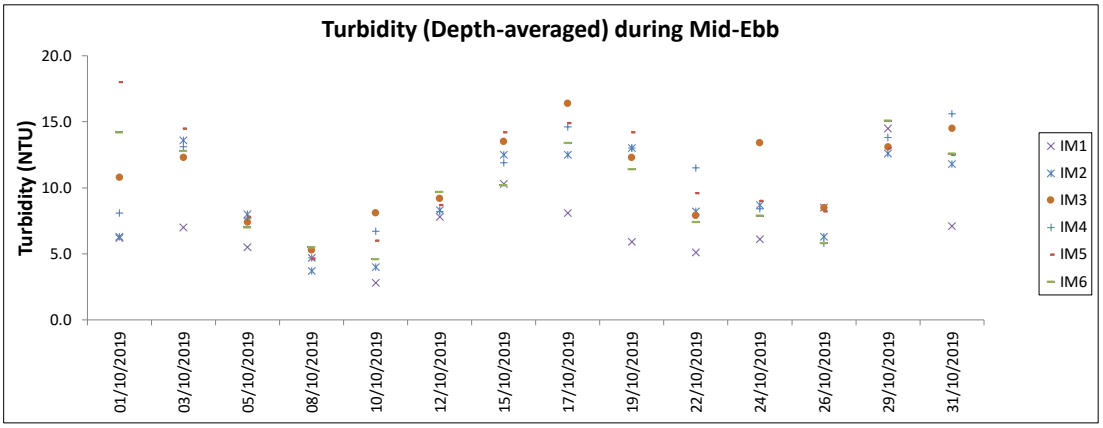
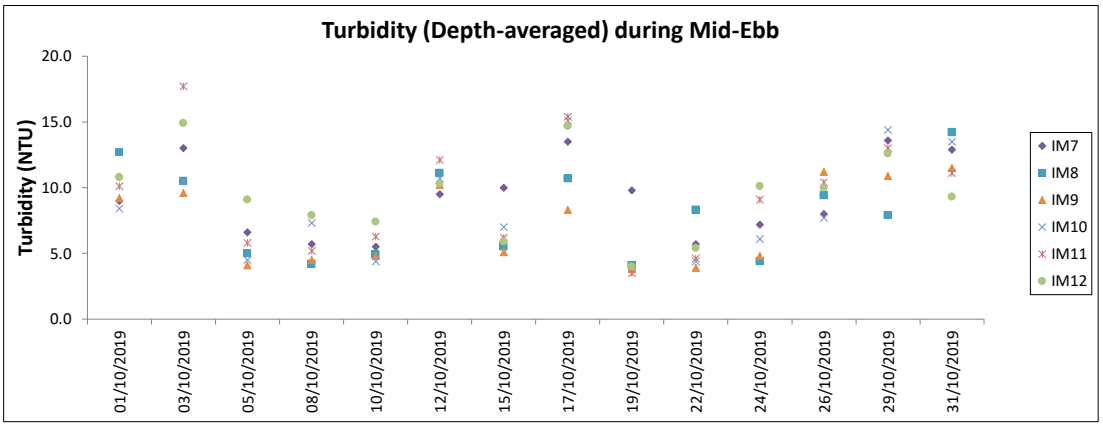
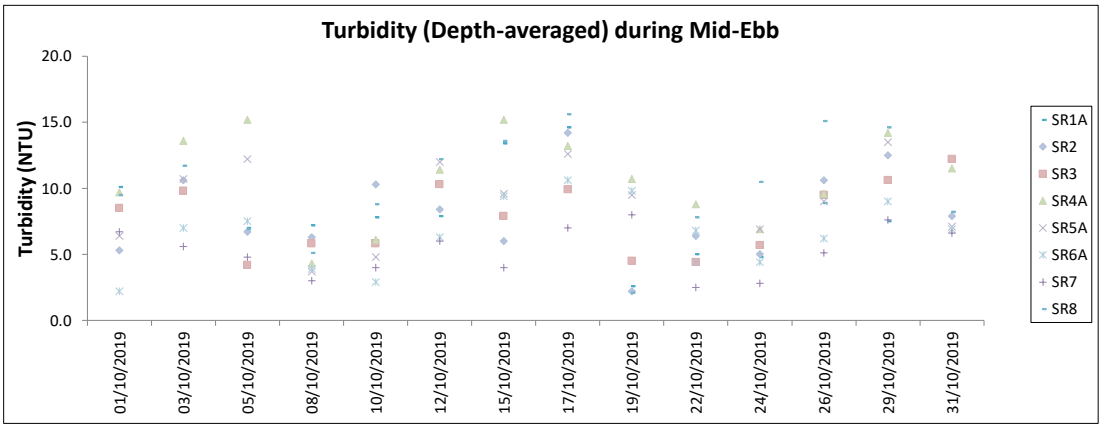
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

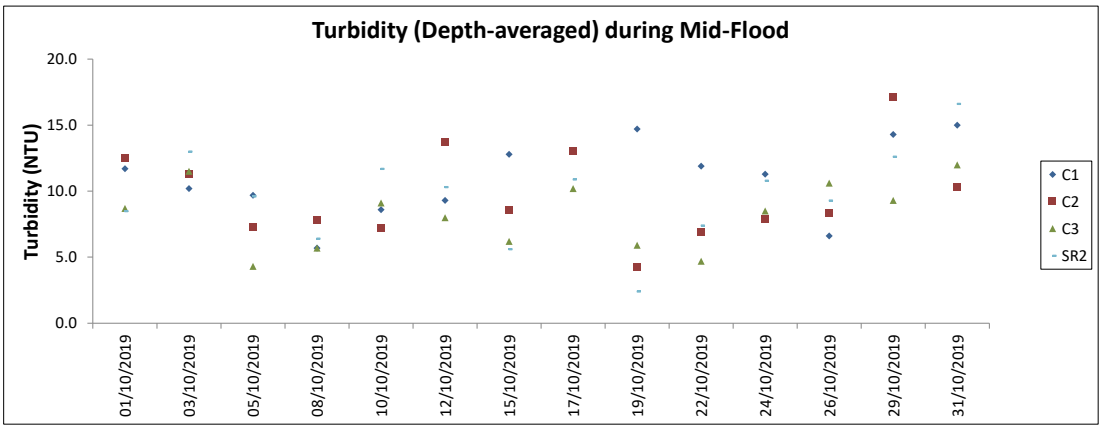


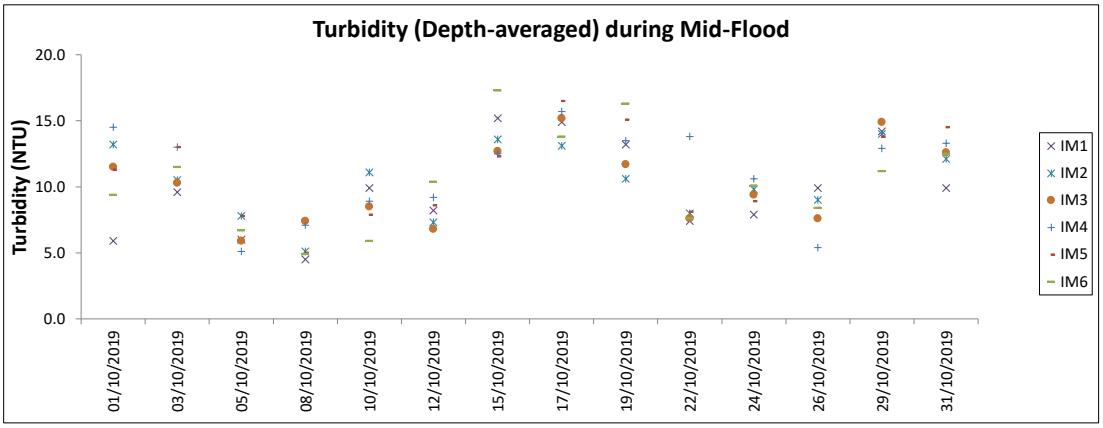


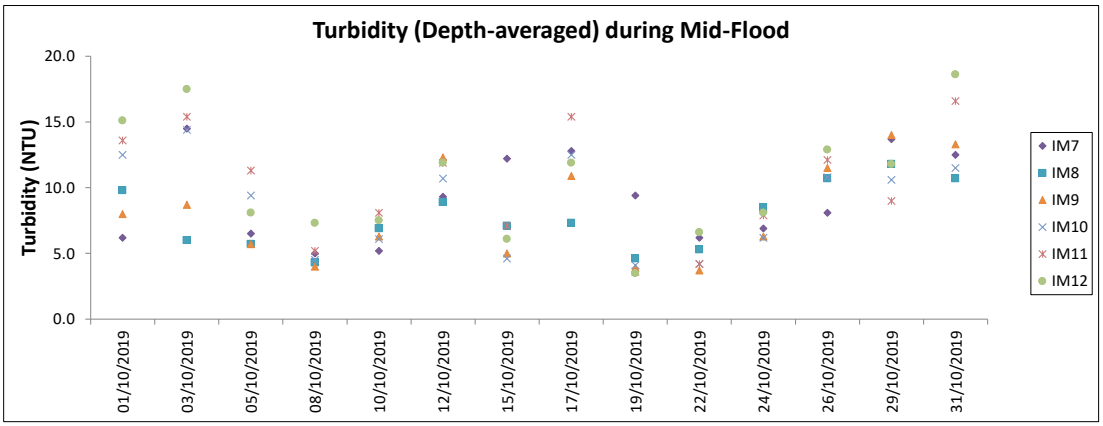


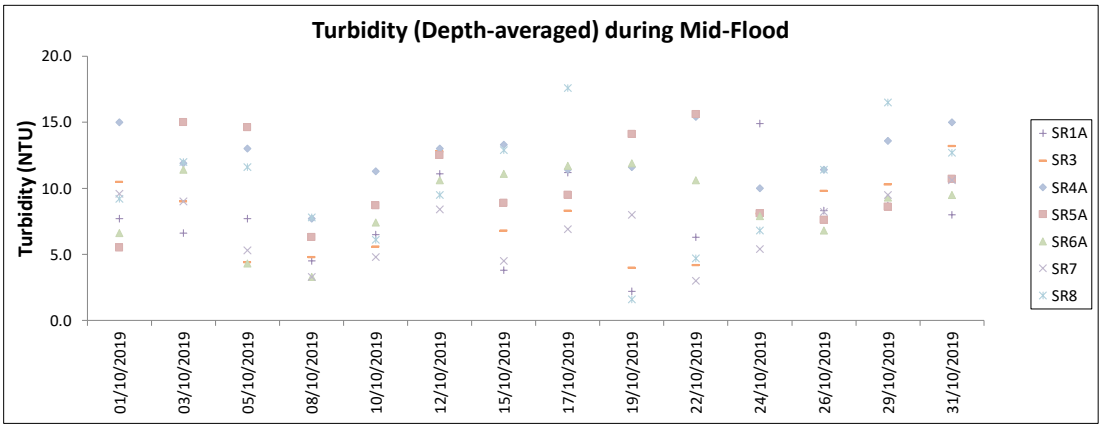


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

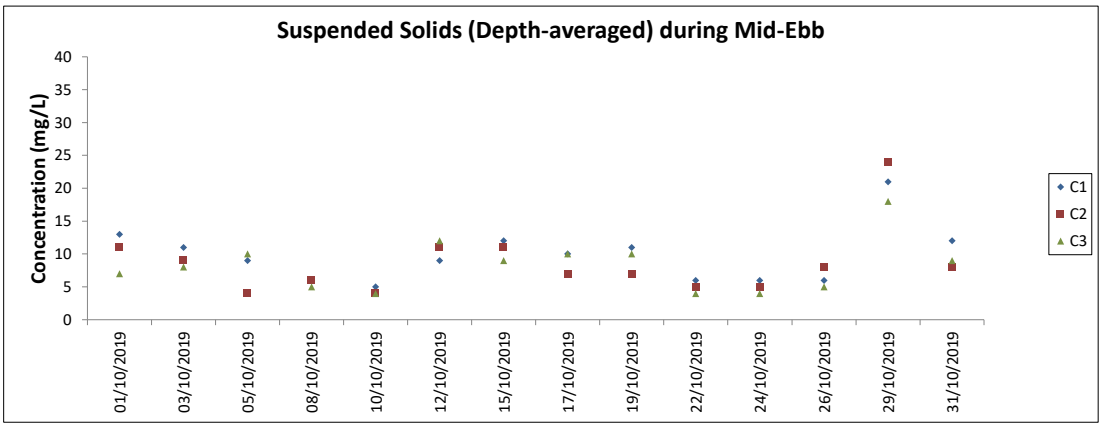


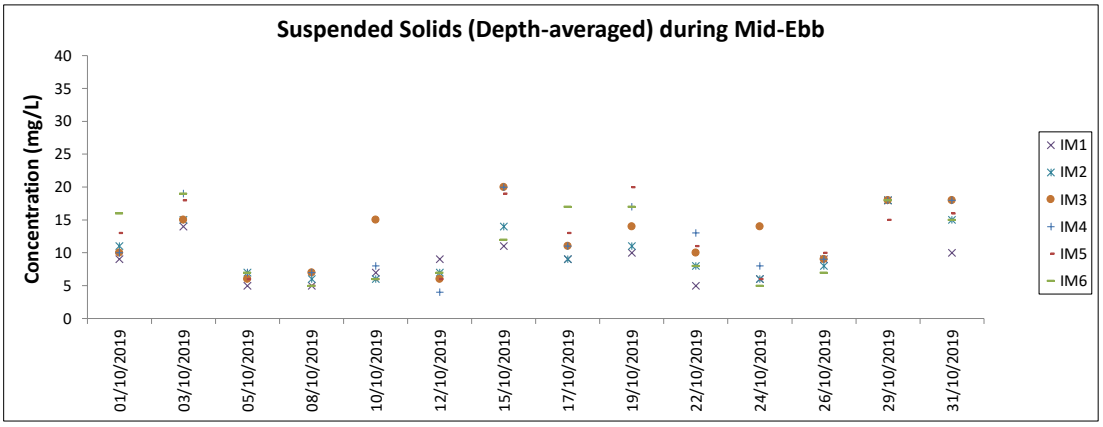


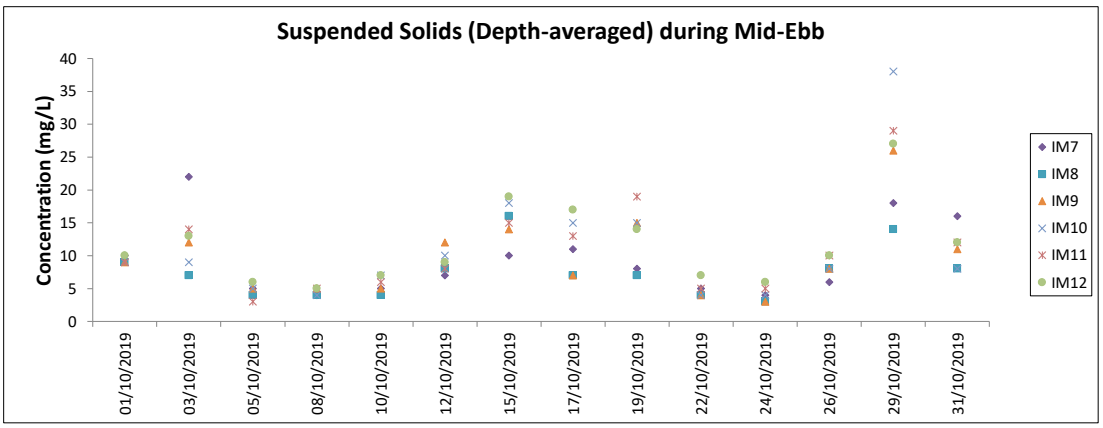


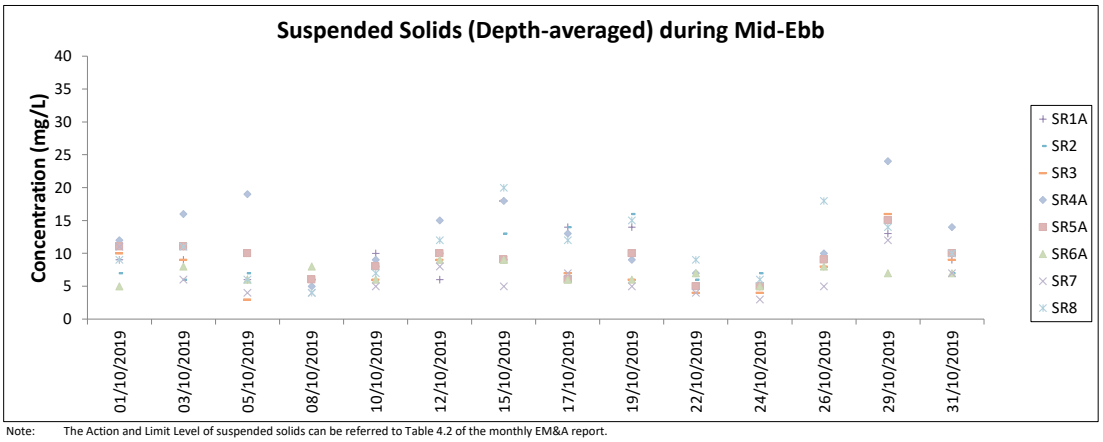


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

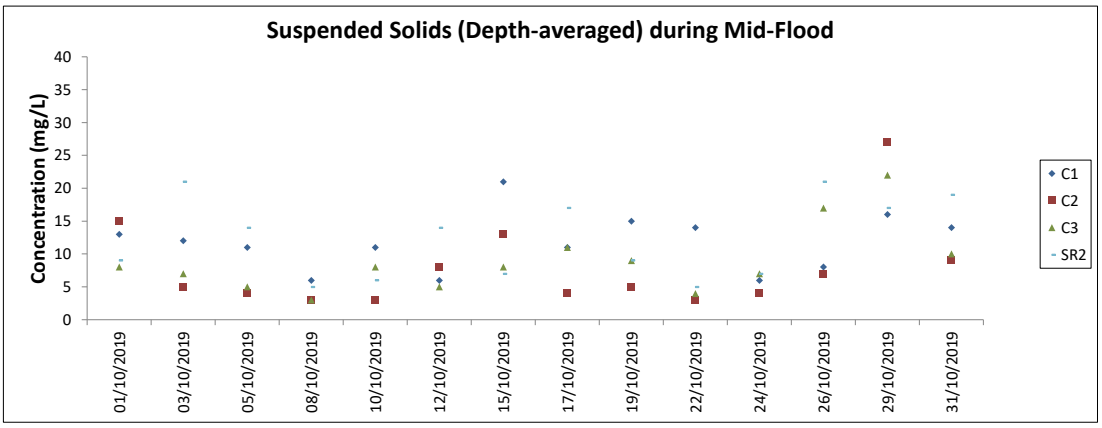


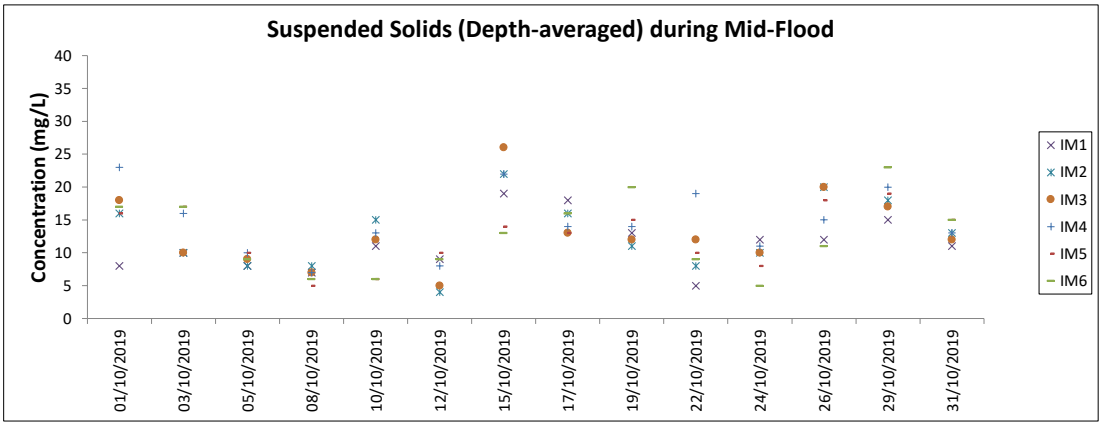


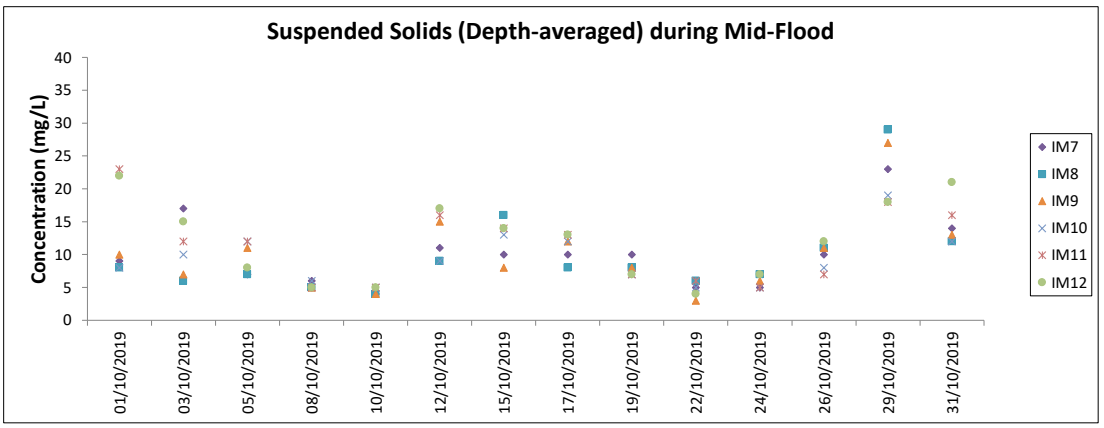


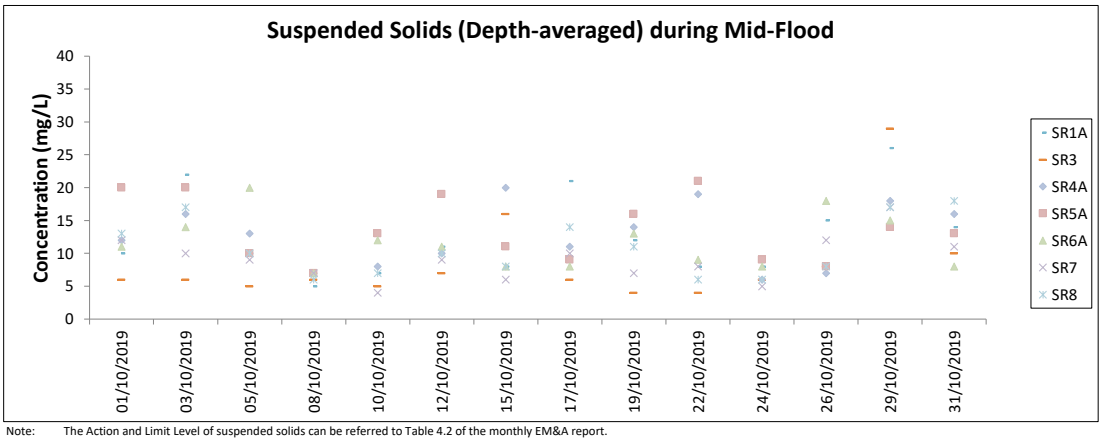


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

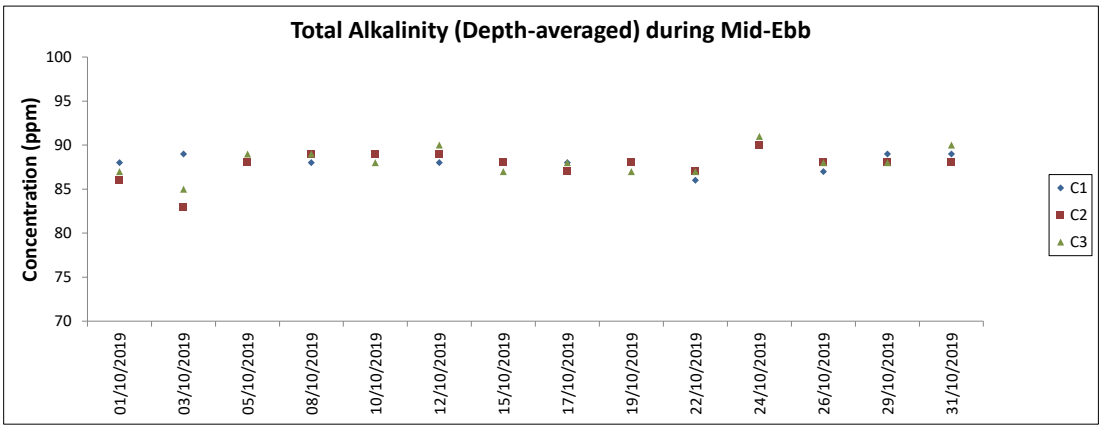


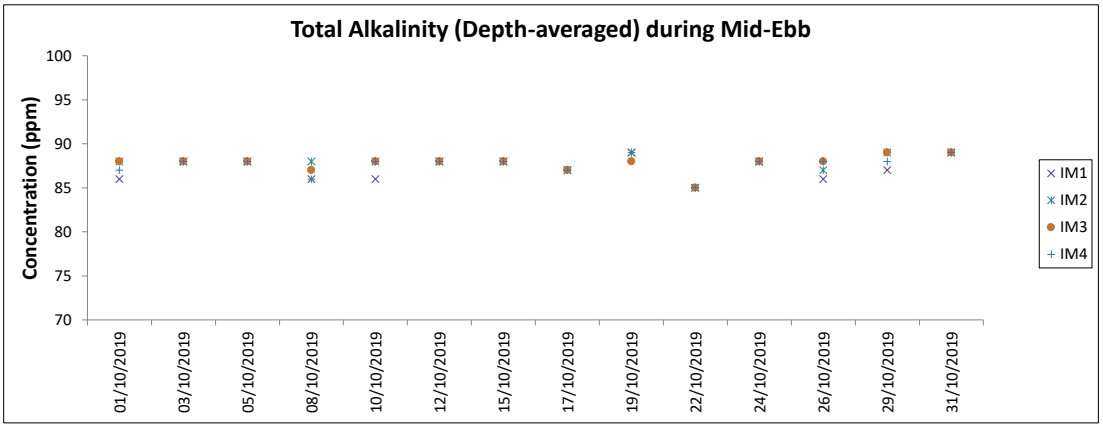


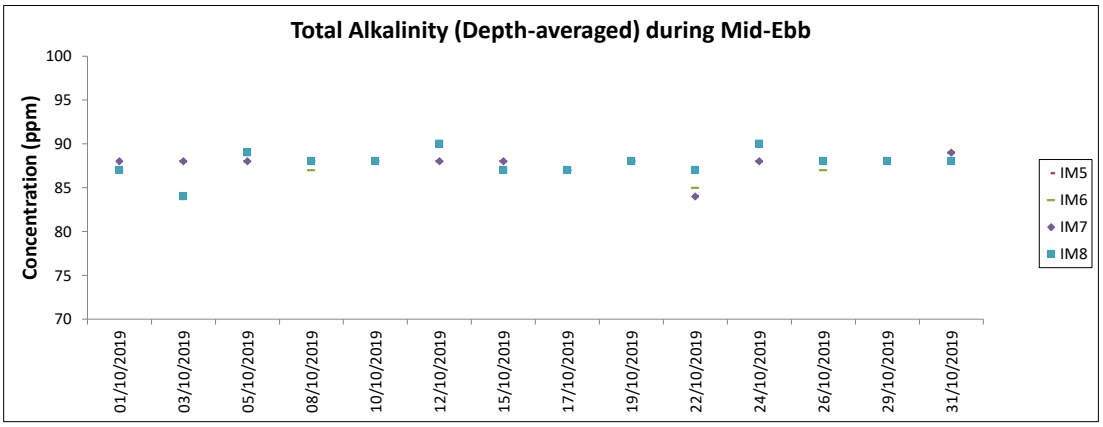


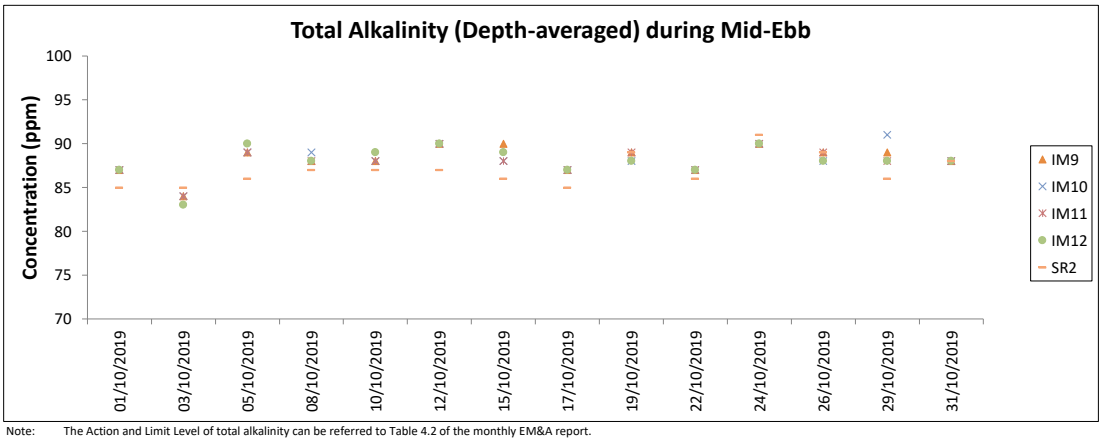


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

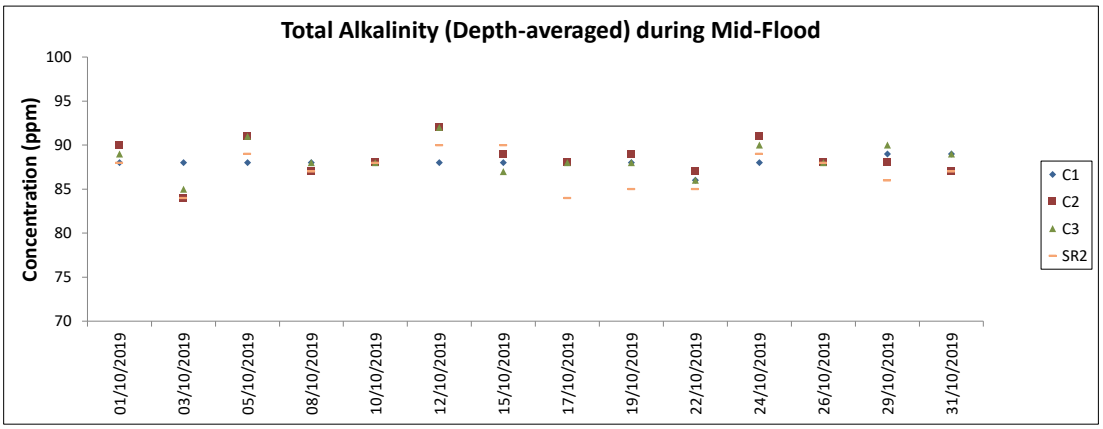


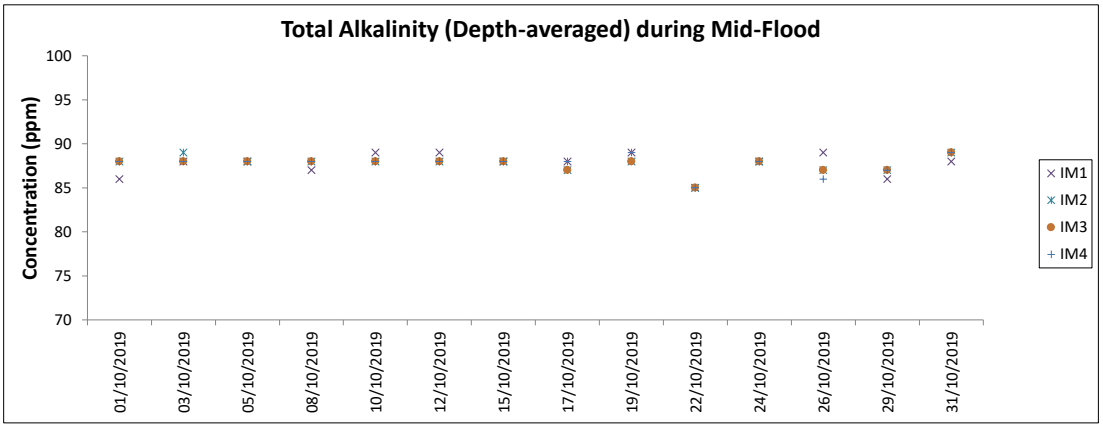


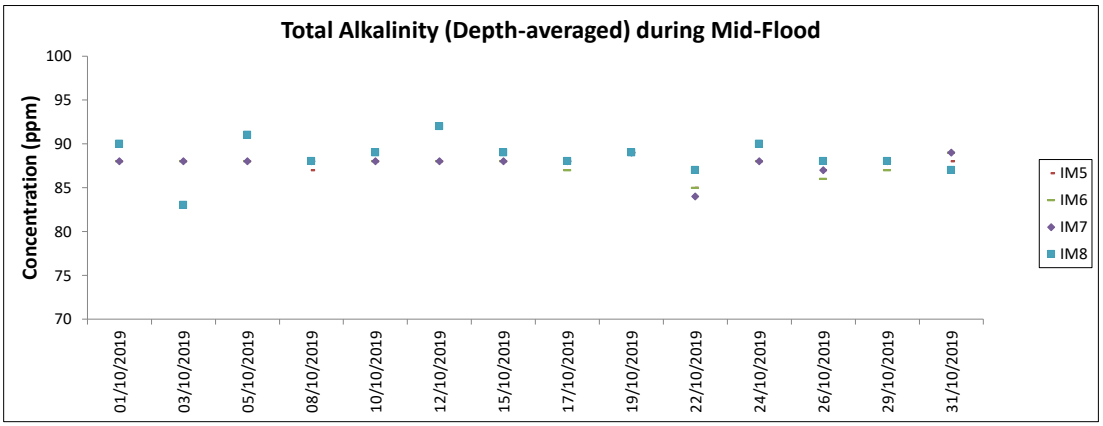


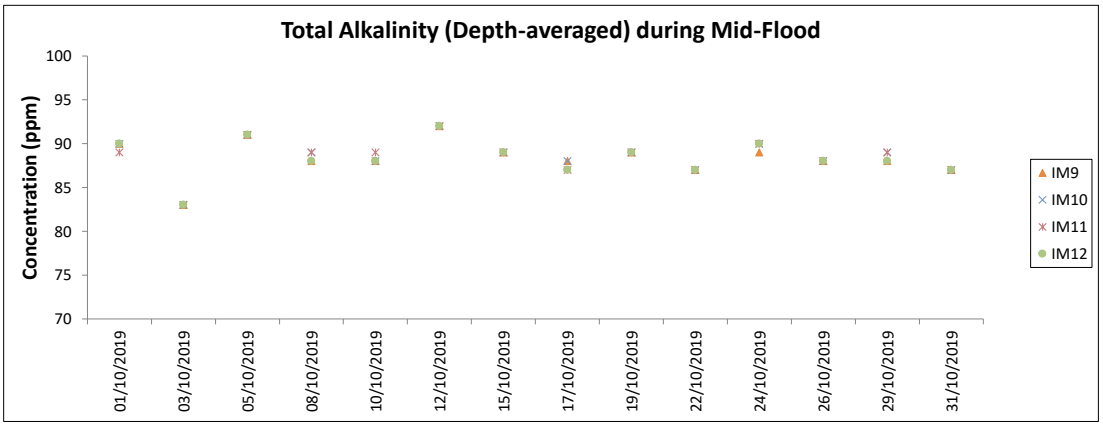


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

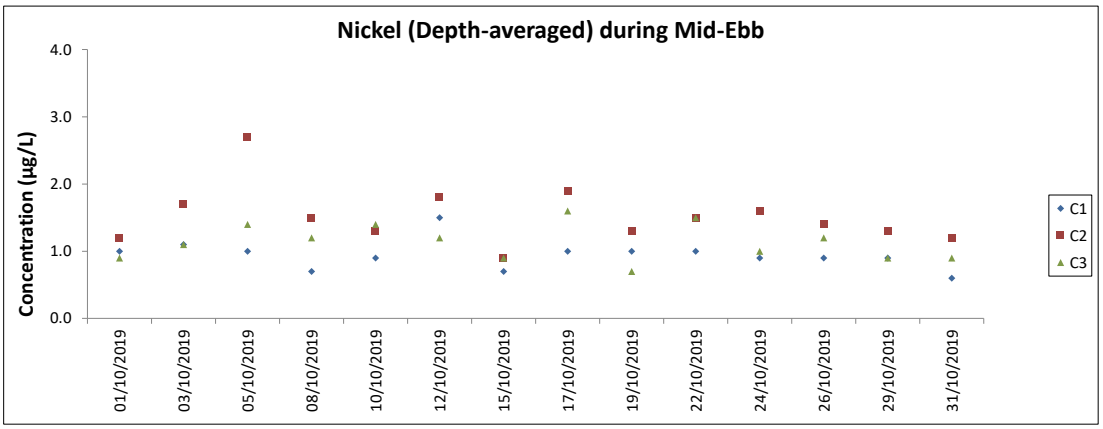


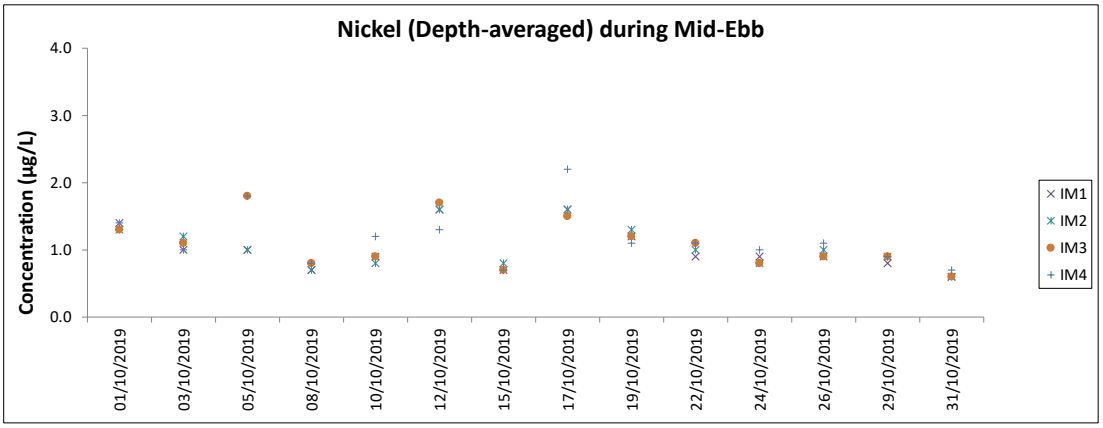


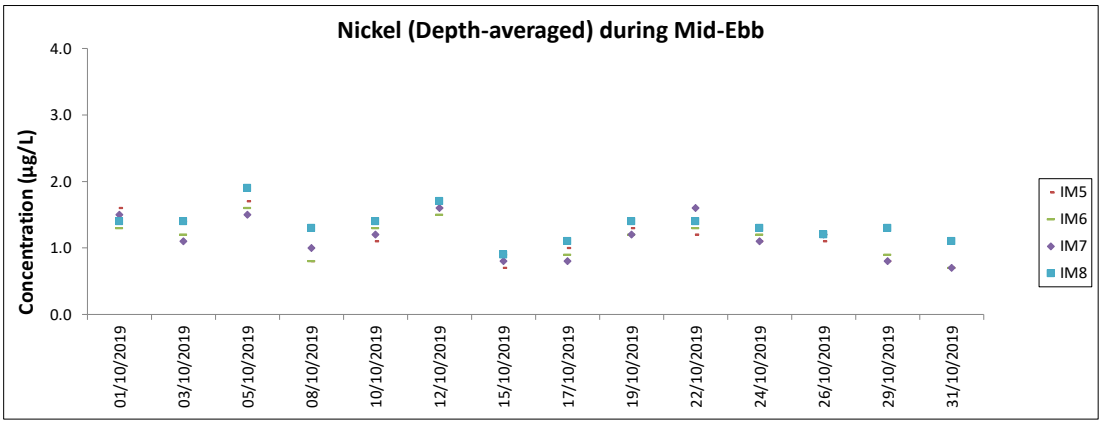


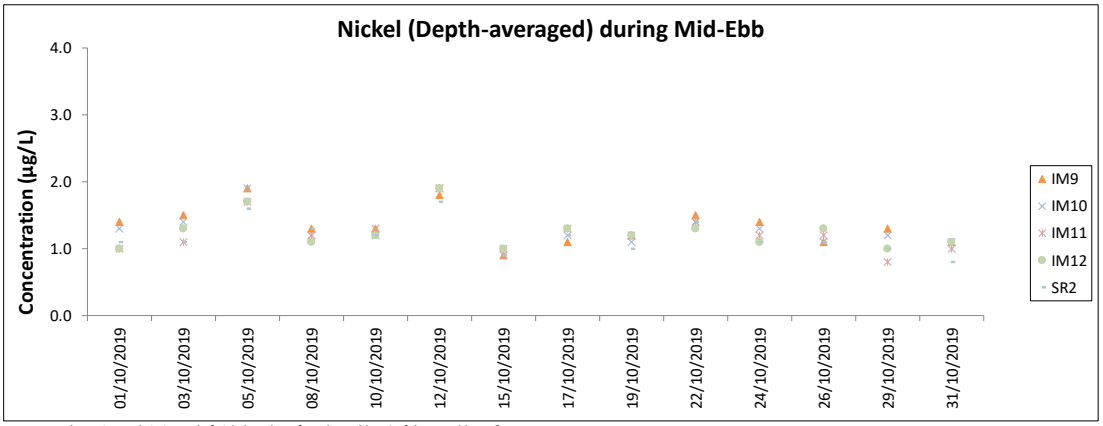


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

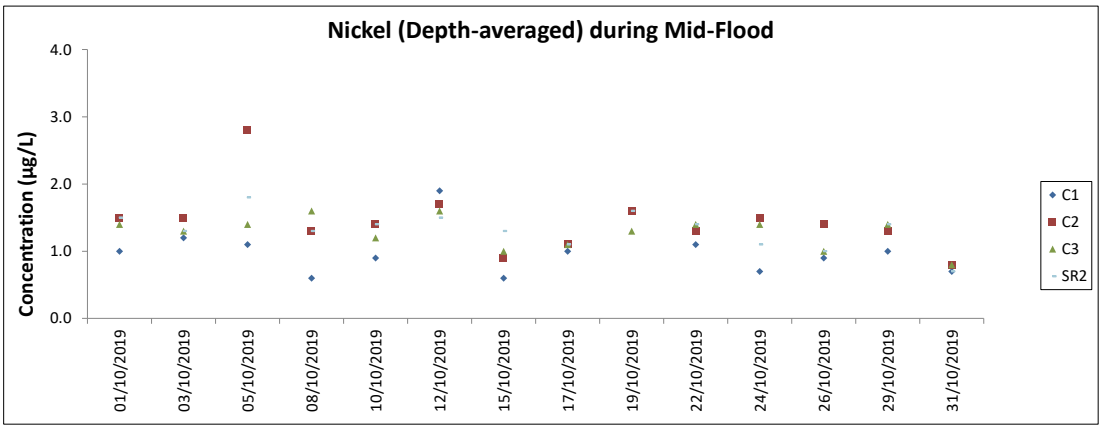


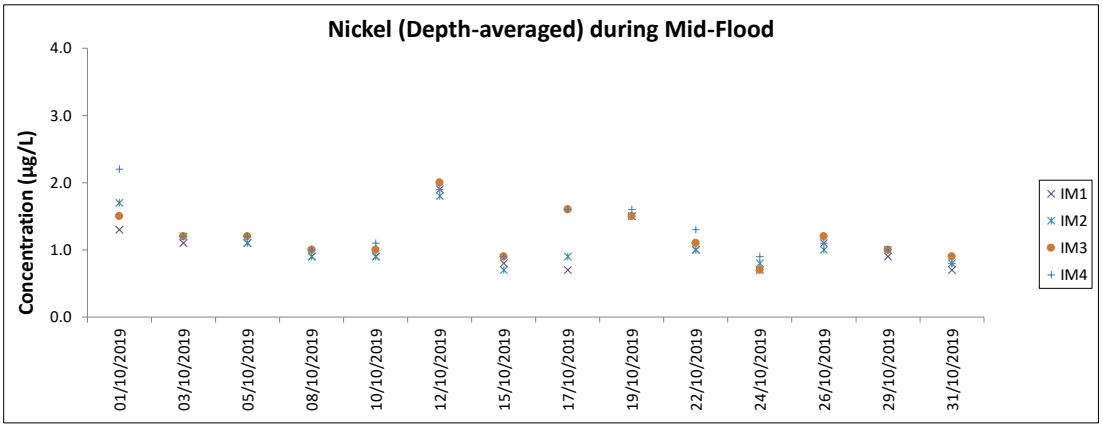


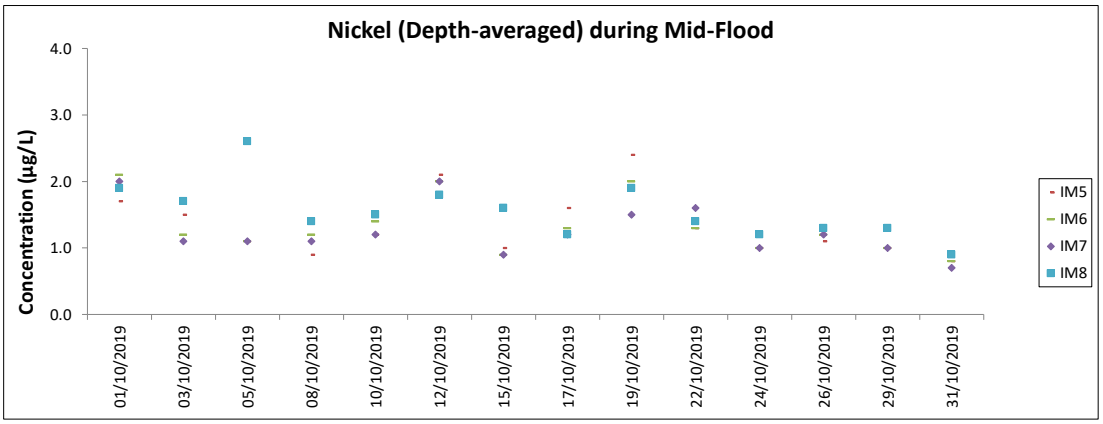


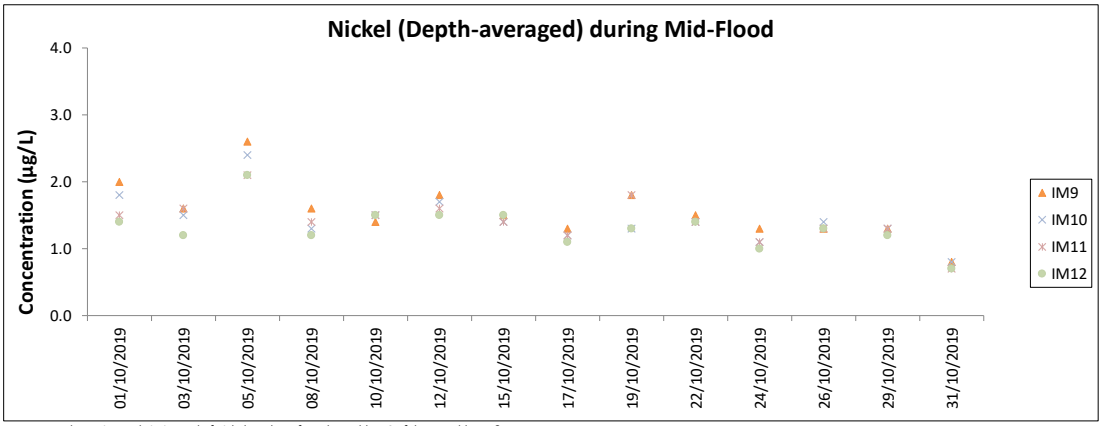


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Chinese White Dolphin Monitoring Result

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
7-Aug-19	SWL	2	24.140	SUMMER	32166	3RS ET	P
7-Aug-19	SWL	3	29.880	SUMMER	32166	3RS ET	P
7-Aug-19	SWL	2	6.300	SUMMER	32166	3RS ET	S
7-Aug-19	SWL	3	9.480	SUMMER	32166	3RS ET	S
8-Aug-19	AW	2	4.820	SUMMER	32166	3RS ET	P
8-Aug-19	WL	2	17.412	SUMMER	32166	3RS ET	P
8-Aug-19	WL	3	1.230	SUMMER	32166	3RS ET	P
8-Aug-19	WL	2	6.241	SUMMER	32166	3RS ET	S
8-Aug-19	WL	3	1.330	SUMMER	32166	3RS ET	S
12-Aug-19	NWL	2	3.080	SUMMER	32166	3RS ET	P
12-Aug-19	NWL	3	49.260	SUMMER	32166	3RS ET	P
12-Aug-19	NWL	4	9.700	SUMMER	32166	3RS ET	P
12-Aug-19	NWL	2	1.240	SUMMER	32166	3RS ET	S
12-Aug-19	NWL	3	9.320	SUMMER	32166	3RS ET	S
12-Aug-19	NWL	4	1.400	SUMMER	32166	3RS ET	S
13-Aug-19	NEL	2	32.600	SUMMER	32166	3RS ET	P
13-Aug-19	NEL	3	4.800	SUMMER	32166	3RS ET	P
13-Aug-19	NEL	2	7.900	SUMMER	32166	3RS ET	S
13-Aug-19	NEL	3	2.300	SUMMER	32166	3RS ET	S
16-Aug-19	NEL	2	18.650	SUMMER	32166	3RS ET	P
16-Aug-19	NEL	3	18.620	SUMMER	32166	3RS ET	P
16-Aug-19	NEL	2	8.230	SUMMER	32166	3RS ET	S
16-Aug-19	NEL	3	2.000	SUMMER	32166	3RS ET	S
21-Aug-19	AW	2	1.850	SUMMER	32166	3RS ET	P
21-Aug-19	AW	3	2.850	SUMMER	32166	3RS ET	P
21-Aug-19	WL	2	19.158	SUMMER	32166	3RS ET	P
21-Aug-19	WL	3	1.440	SUMMER	32166	3RS ET	P
21-Aug-19	WL	2	10.752	SUMMER	32166	3RS ET	S
22-Aug-19	SWL	2	54.700	SUMMER	32166	3RS ET	P
22-Aug-19	SWL	2	16.000	SUMMER	32166	3RS ET	S
26-Aug-19	NWL	2	14.600	SUMMER	32166	3RS ET	P
26-Aug-19	NWL	3	38.000	SUMMER	32166	3RS ET	P
26-Aug-19	NWL	4	10.340	SUMMER	32166	3RS ET	P
26-Aug-19	NWL	2	2.000	SUMMER	32166	3RS ET	S
26-Aug-19	NWL	3	10.060	SUMMER	32166	3RS ET	S
9-Sep-19	SWL	2	41.156	AUTUMN	32166	3RS ET	P
9-Sep-19	SWL	3	10.484	AUTUMN	32166	3RS ET	P
9-Sep-19	SWL	2	13.766	AUTUMN	32166	3RS ET	S
9-Sep-19	SWL	3	2.924	AUTUMN	32166	3RS ET	S
11-Sep-19	NWL	2	48.170	AUTUMN	32166	3RS ET	P
11-Sep-19	NWL	3	15.330	AUTUMN	32166	3RS ET	P
11-Sep-19	NWL	2	11.300	AUTUMN	32166	3RS ET	S
11-Sep-19	NWL	3	1.200	AUTUMN	32166	3RS ET	S
12-Sep-19	AW	2	4.730	AUTUMN	32166	3RS ET	P
12-Sep-19	WL	2	14.440	AUTUMN	32166	3RS ET	P
12-Sep-19	WL	3	4.590	AUTUMN	32166	3RS ET	P
12-Sep-19	WL	2	6.600	AUTUMN	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-Sep-19	WL	3	2.360	AUTUMN	32166	3RS ET	S
16-Sep-19	SWL	2	30.230	AUTUMN	32166	3RS ET	P
16-Sep-19	SWL	3	4.000	AUTUMN	32166	3RS ET	P
16-Sep-19	SWL	4	19.940	AUTUMN	32166	3RS ET	P
16-Sep-19	SWL	5	1.340	AUTUMN	32166	3RS ET	P
16-Sep-19	SWL	2	10.170	AUTUMN	32166	3RS ET	S
16-Sep-19	SWL	3	1.300	AUTUMN	32166	3RS ET	S
16-Sep-19	SWL	4	4.020	AUTUMN	32166	3RS ET	S
17-Sep-19	NEL	2	24.290	AUTUMN	32166	3RS ET	P
17-Sep-19	NEL	3	12.650	AUTUMN	32166	3RS ET	P
17-Sep-19	NEL	2	10.660	AUTUMN	32166	3RS ET	S
18-Sep-19	NEL	1	3.200	AUTUMN	32166	3RS ET	P
18-Sep-19	NEL	2	33.030	AUTUMN	32166	3RS ET	P
18-Sep-19	NEL	3	1.410	AUTUMN	32166	3RS ET	P
18-Sep-19	NEL	1	0.800	AUTUMN	32166	3RS ET	S
18-Sep-19	NEL	2	6.150	AUTUMN	32166	3RS ET	S
18-Sep-19	NEL	3	2.810	AUTUMN	32166	3RS ET	S
23-Sep-19	NWL	2	24.000	AUTUMN	32166	3RS ET	P
23-Sep-19	NWL	3	37.600	AUTUMN	32166	3RS ET	P
23-Sep-19	NWL	2	9.400	AUTUMN	32166	3RS ET	S
23-Sep-19	NWL	3	4.500	AUTUMN	32166	3RS ET	S
25-Sep-19	AW	2	4.870	AUTUMN	32166	3RS ET	P
25-Sep-19	WL	2	18.147	AUTUMN	32166	3RS ET	P
25-Sep-19	WL	2	9.262	AUTUMN	32166	3RS ET	S
2-Oct-19	SWL	2	21.630	AUTUMN	32166	3RS ET	P
2-Oct-19	SWL	3	32.292	AUTUMN	32166	3RS ET	P
2-Oct-19	SWL	2	4.878	AUTUMN	32166	3RS ET	S
2-Oct-19	SWL	3	11.810	AUTUMN	32166	3RS ET	S
3-Oct-19	AW	2	3.470	AUTUMN	32166	3RS ET	P
3-Oct-19	WL	2	17.515	AUTUMN	32166	3RS ET	P
3-Oct-19	WL	2	9.401	AUTUMN	32166	3RS ET	S
4-Oct-19	SWL	2	49.551	AUTUMN	32166	3RS ET	P
4-Oct-19	SWL	3	2.100	AUTUMN	32166	3RS ET	P
4-Oct-19	SWL	2	16.128	AUTUMN	32166	3RS ET	S
4-Oct-19	SWL	3	1.100	AUTUMN	32166	3RS ET	S
10-Oct-19	NWL	2	40.510	AUTUMN	32166	3RS ET	P
10-Oct-19	NWL	3	21.930	AUTUMN	32166	3RS ET	P
10-Oct-19	NWL	2	10.970	AUTUMN	32166	3RS ET	S
10-Oct-19	NWL	3	0.900	AUTUMN	32166	3RS ET	S
11-Oct-19	AW	2	4.930	AUTUMN	32166	3RS ET	P
11-Oct-19	WL	2	19.410	AUTUMN	32166	3RS ET	P
11-Oct-19	WL	2	10.760	AUTUMN	32166	3RS ET	S
16-Oct-19	NEL	2	15.140	AUTUMN	32166	3RS ET	P
16-Oct-19	NEL	3	22.770	AUTUMN	32166	3RS ET	P
16-Oct-19	NEL	2	5.040	AUTUMN	32166	3RS ET	S
16-Oct-19	NEL	3	5.350	AUTUMN	32166	3RS ET	S
17-Oct-19	NEL	2	37.340	AUTUMN	32166	3RS ET	P
17-Oct-19	NEL	2	10.060	AUTUMN	32166	3RS ET	S
22-Oct-19	NWL	2	41.400	AUTUMN	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
22-Oct-19	NWL	3	21.600	AUTUMN	32166	3RS ET	P
22-Oct-19	NWL	2	8.700	AUTUMN	32166	3RS ET	S
22-Oct-19	NWL	3	3.300	AUTUMN	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months (i.e. August and September 2019) are presented for reference only.

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
7-Aug-19	1	1500	CWD	2	SWL	2	511	ON	3RS ET	22.1883	113.8491	SUMMER	NONE	P
8-Aug-19	1	1029	CWD	10	WL	2	78	ON	3RS ET	22.2668	113.8594	SUMMER	NONE	S
8-Aug-19	2	1052	CWD	5	WL	2	272	ON	3RS ET	22.2600	113.8430	SUMMER	NONE	P
8-Aug-19	3	1120	CWD	1	WL	2	611	ON	3RS ET	22.2434	113.8488	SUMMER	NONE	S
8-Aug-19	4	1127	CWD	8	WL	2	836	ON	3RS ET	22.2415	113.8435	SUMMER	NONE	P
8-Aug-19	5	1211	CWD	2	WL	2	48	ON	3RS ET	22.2290	113.8379	SUMMER	NONE	S
8-Aug-19	6	1230	CWD	5	WL	2	413	ON	3RS ET	22.2136	113.8254	SUMMER	NONE	P
8-Aug-19	7	1250	CWD	6	WL	2	140	ON	3RS ET	22.2143	113.8344	SUMMER	NONE	P
8-Aug-19	8	1328	CWD	1	WL	2	333	ON	3RS ET	22.1890	113.8422	SUMMER	NONE	S
12-Aug-19	1	1051	CWD	1	NWL	3	472	ON	3RS ET	22.2794	113.8696	SUMMER	NONE	P
21-Aug-19	1	1039	CWD	3	WL	2	126	ON	3RS ET	22.2604	113.8523	SUMMER	NONE	P
21-Aug-19	2	1137	CWD	10	WL	2	501	ON	3RS ET	22.2340	113.8244	SUMMER	NONE	S
21-Aug-19	3	1203	CWD	5	WL	2	186	ON	3RS ET	22.2231	113.8360	SUMMER	NONE	P
21-Aug-19	4	1231	CWD	1	WL	2	21	ON	3RS ET	22.2144	113.8344	SUMMER	NONE	P
21-Aug-19	5	1251	CWD	7	WL	2	13	ON	3RS ET	22.2145	113.8355	SUMMER	NONE	P
21-Aug-19	6	1310	CWD	2	WL	2	162	ON	3RS ET	22.2057	113.8251	SUMMER	NONE	P
22-Aug-19	1	1106	FP	2	SWL	2	119	ON	3RS ET	22.1563	113.9277	SUMMER	NONE	P
22-Aug-19	2	1511	CWD	2	SWL	2	94	ON	3RS ET	22.1942	113.8492	SUMMER	NONE	P
9-Sep-19	1	1029	CWD	1	SWL	2	173	ON	3RS ET	22.2110	113.9357	AUTUMN	NONE	P
9-Sep-19	2	1146	CWD	1	SWL	2	426	ON	3RS ET	22.2020	113.9177	AUTUMN	NONE	P
9-Sep-19	3	1240	FP	7	SWL	2	2	ON	3RS ET	22.1551	113.9078	AUTUMN	NONE	P
9-Sep-19	4	1312	CWD	1	SWL	2	41	ON	3RS ET	22.2041	113.9078	AUTUMN	NONE	P
9-Sep-19	5	1332	CWD	2	SWL	2	851	ON	3RS ET	22.1974	113.8974	AUTUMN	NONE	P
9-Sep-19	6	1351	CWD	7	SWL	2	1298	ON	3RS ET	22.1819	113.8970	AUTUMN	NONE	P
12-Sep-19	1	1035	CWD	4	WL	2	253	ON	3RS ET	22.2648	113.8579	AUTUMN	NONE	S
12-Sep-19	2	1057	CWD	8	WL	2	687	ON	3RS ET	22.2569	113.8366	AUTUMN	NONE	S
12-Sep-19	3	1137	CWD	9	WL	2	656	ON	3RS ET	22.2315	113.8305	AUTUMN	NONE	P
12-Sep-19	4	1208	CWD	2	WL	2	163	ON	3RS ET	22.2240	113.8372	AUTUMN	NONE	S
12-Sep-19	5	1240	CWD	3	WL	2	92	ON	3RS ET	22.2139	113.8239	AUTUMN	NONE	P
16-Sep-19	1	1422	FP	1	SWL	5	14	ON	3RS ET	22.1717	113.9268	AUTUMN	NONE	P
25-Sep-19	1	1019	CWD	1	WL	2	167	ON	3RS ET	22.2785	113.8611	AUTUMN	NONE	P
25-Sep-19	2	1037	CWD	6	WL	2	698	ON	3RS ET	22.2776	113.8569	AUTUMN	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
25-Sep-19	3	1110	CWD	1	WL	2	163	ON	3RS ET	22.2601	113.8477	AUTUMN	NONE	P
25-Sep-19	4	1129	CWD	1	WL	2	2	ON	3RS ET	22.2516	113.8334	AUTUMN	NONE	S
25-Sep-19	5	1207	CWD	2	WL	2	353	ON	3RS ET	22.2315	113.8387	AUTUMN	NONE	P
25-Sep-19	6	1234	CWD	1	WL	2	486	ON	3RS ET	22.2134	113.8238	AUTUMN	NONE	P
25-Sep-19	7	1259	CWD	2	WL	2	24	ON	3RS ET	22.2051	113.8319	AUTUMN	NONE	P
25-Sep-19	8	1320	CWD	6	WL	2	166	ON	3RS ET	22.1962	113.8356	AUTUMN	NONE	P
25-Sep-19	9	1329	CWD	17	WL	2	390	ON	3RS ET	22.1951	113.8424	AUTUMN	NONE	S
2-Oct-19	1	1101	FP	2	SWL	3	1	ON	3RS ET	22.1476	113.9274	AUTUMN	NONE	P
2-Oct-19	2	1114	FP	1	SWL	3	25	ON	3RS ET	22.1706	113.9277	AUTUMN	NONE	P
2-Oct-19	3	1131	CWD	1	SWL	2	36	ON	3RS ET	22.2055	113.9269	AUTUMN	NONE	P
3-Oct-19	1	0937	CWD	7	AW	2	165	ON	3RS ET	22.2983	113.8853	AUTUMN	NONE	P
3-Oct-19	2	1026	CWD	4	WL	2	485	ON	3RS ET	22.2924	113.8612	AUTUMN	NONE	P
3-Oct-19	3	1110	CWD	2	WL	2	155	ON	3RS ET	22.2605	113.8479	AUTUMN	NONE	P
3-Oct-19	4	1122	CWD	1	WL	2	127	ON	3RS ET	22.2603	113.8411	AUTUMN	NONE	P
3-Oct-19	5	1146	CWD	3	WL	2	181	ON	3RS ET	22.2416	113.8434	AUTUMN	NONE	P
3-Oct-19	6	1157	CWD	4	WL	2	207	ON	3RS ET	22.2416	113.8344	AUTUMN	NONE	P
3-Oct-19	7	1220	CWD	7	WL	2	382	ON	3RS ET	22.2282	113.8378	AUTUMN	NONE	S
3-Oct-19	8	1308	CWD	14	WL	2	265	ON	3RS ET	22.1960	113.8365	AUTUMN	NONE	P
4-Oct-19	1	1103	FP	16	SWL	2	112	ON	3RS ET	22.1428	113.9283	AUTUMN	NONE	S
4-Oct-19	2	1154	FP	2	SWL	2	114	ON	3RS ET	22.1899	113.9181	AUTUMN	NONE	P
4-Oct-19	3	1233	FP	3	SWL	2	65	ON	3RS ET	22.1542	113.9067	AUTUMN	NONE	S
4-Oct-19	4	1242	FP	2	SWL	2	19	ON	3RS ET	22.1568	113.8996	AUTUMN	NONE	S
4-Oct-19	5	1321	CWD	1	SWL	2	296	ON	3RS ET	22.2063	113.8972	AUTUMN	NONE	P
4-Oct-19	6	1356	FP	2	SWL	2	270	ON	3RS ET	22.1486	113.8921	AUTUMN	NONE	S
4-Oct-19	7	1411	FP	1	SWL	2	223	ON	3RS ET	22.1727	113.8882	AUTUMN	NONE	P
10-Oct-19	1	1047	CWD	2	NWL	3	16	ON	3RS ET	22.2709	113.8702	AUTUMN	NONE	P
10-Oct-19	2	1107	CWD	1	NWL	2	100	ON	3RS ET	22.2970	113.8779	AUTUMN	NONE	P
10-Oct-19	3	1205	CWD	4	NWL	2	112	ON	3RS ET	22.3769	113.8775	AUTUMN	NONE	P
11-Oct-19	1	1050	CWD	2	WL	2	214	ON	3RS ET	22.2503	113.8411	AUTUMN	NONE	P
11-Oct-19	2	1114	CWD	1	WL	2	26	ON	3RS ET	22.2414	113.8408	AUTUMN	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months (i.e. August 2019 and September 2019) are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

Sighting data of finless porpoise (FP) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report. All FP sightings are excluded in calculation.

Calculation of the October 2019 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 449.985 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 15 on-effort sightings and total number of 54 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in October 2019 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in October 2019

$$STG = \frac{15}{449.985}\ x\ 100 = 3.33$$

Encounter Rate by Number of Dolphins (ANI) in October 2019

$$ANI = \frac{54}{449.985}\ x\ 100 = 12.00$$

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

A total of 1305.757 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 51 on-effort sightings and total number of 200 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)

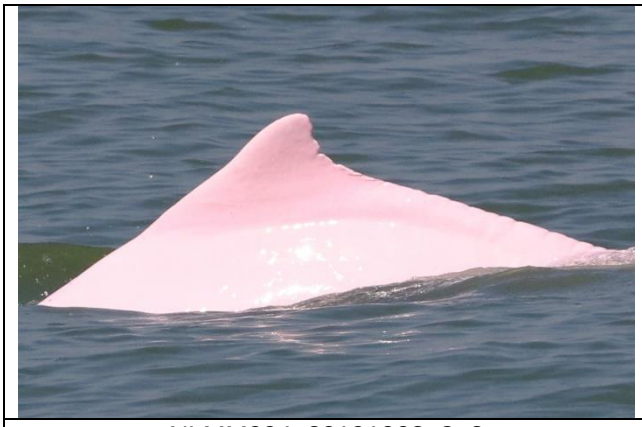
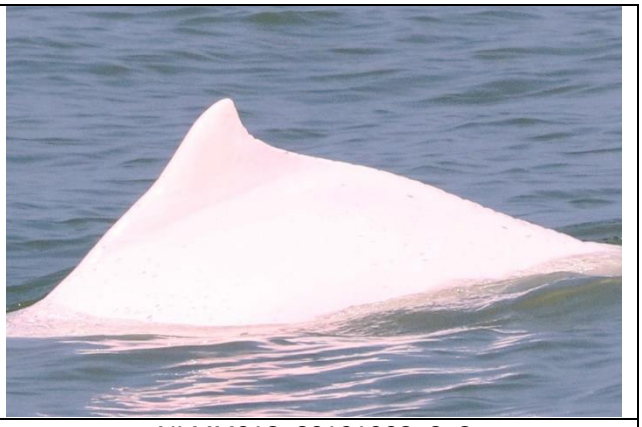
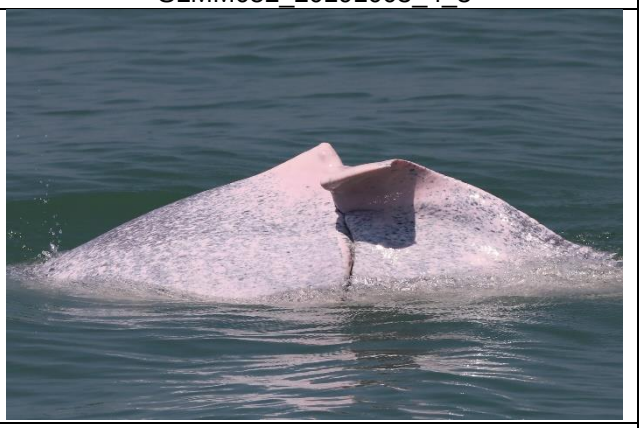
$$STG = \frac{51}{1305.757}\ x\ 100 = 3.91$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{200}{1305.757}\ x\ 100 = 15.32$$

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

	
SLMM060_20191002_3_10	NLMM004_20191003_1_1
	
NLMM018_20191003_1_5	NLMM019_20191003_1_8
	
NLMM052_20191003_1_6	NLMM053_20191003_1_1
	
NLMM068_20191003_1_4	NLMM071_20191003_1_6

	
NLMM004_20191003_2_2	NLMM018_20191003_2_3
	
WLMM104_20191003_3_2	SLMM052_20191003_4_3
	
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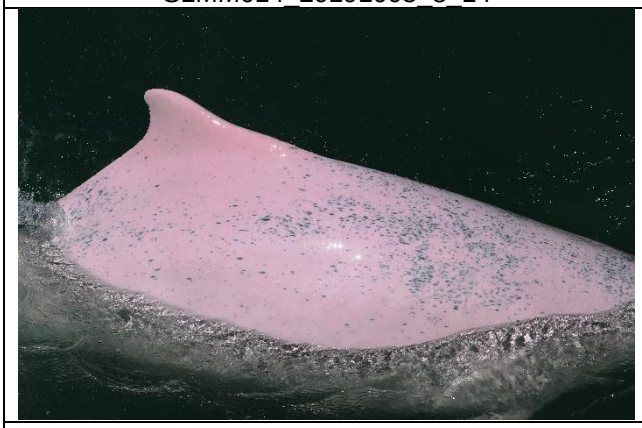
WLMM011_20191003_6_18	WLMM107_20191003_6_1

	
WLMM149_20191003_6_3_Right	SLMM003_20191003_7_2
	
SLMM037_20191003_7_14_Upper	WLMM073_20191003_7_7
	
WLMM079_20191003_7_5	WLMM131_20191003_7_9
	
WLMM132_20191003_7_11_Lower	SLMM010_20191003_8_1

SLMM014_20191003_8_14

SLMM022_20191003_8_2



SLMM025_20191003_8_11

SLMM028_20191003_8_15

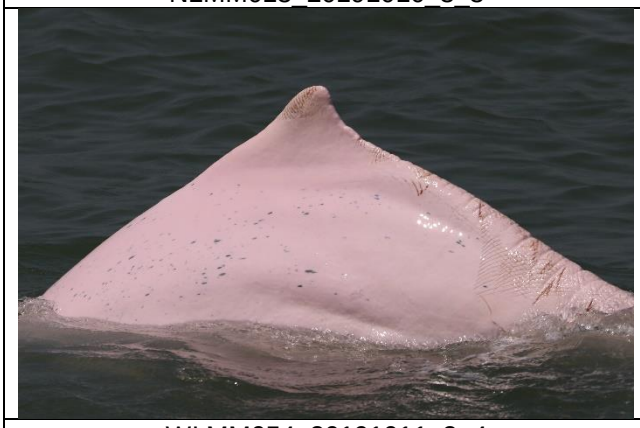
SLMM029_20191003_8_9

SLMM049_20191003_8_3

SLMM053_20191003_8_13

WLMM007_20191003_8_6

	
WLMM018_20191003_8_5	WLMM029_20191003_8_2
	
WLMM078_20191003_8_3	WLMM054_20191004_5_8
	
WLMM049_20191010_1_3	NLMM023_20191010_2_1
	
NLMM004_20191010_3_2	NLMM006_20191010_3_2

	
NLMM013_20191010_3_3	WLMM054_20191011_1_3
	
WLMM054_20191011_2_4	

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
11/Oct/19	Lung Kwu Chau	9:21	15:21	6:00	2-3	3	1	1
21/Oct/19	Lung Kwu Chau	8:45	14:45	6:00	2	2-3	4	1-2
22/Oct/19	Sha Chau	8:40	14:40	6:00	2	2	0	-

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

Appendix E. Calibration Certificates

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

SUB-CONTRACTING REPORT

CONTACT	:	MS VANESSA LI	WORK ORDER	: **HK1944863**
CLIENT	:	**MOTT MACDONALD HONG KONG LIMITED**		
ADDRESS	:	3/F INTERNATIONAL TRADE TOWER, 348 KWUN TONG ROAD, KWUN TONG, KOWLOON, HONG KONG	SUB-BATCH DATE RECEIVED DATE OF ISSUE	: 1 : 17-OCT-2019 : 30-OCT-2019
PROJECT	:	PERFORMANCE CHECK OF TSP DUST METER	NO. OF SAMPLES CLIENT ORDER	: 1 :---

General Comments

- **Sample(s) were received in ambient condition.**
- **Sample(s) analysed and reported on as received basis.**
- **Calibration was subcontracted to and analysed by Action United Enviro Services.**
- **Sample information (Project name, Sample ID, Sampling date/ time) is provided by client.**

Signatories

This document has been signed by those names that appear on this report and are the authorised signatories

Signatories	*Position*
Richard Fung	General Manager

This is the Final Report and supersedes any preliminary report with this batch number.

Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

ALS Technichem (HK) Pty Ltd
Part of the ALS Laboratory Group
11/F. Chung Shun Knitting Centre 1 - 3 Wing Yip Street Kwai Chung N.T. Hong Kong
Tel. +852 2610 1044 Fax. +852 2610 2021 **www.alsglobal.com**

WORK ORDER	: HK1944863
SUB-BATCH	: 1
CLIENT	: MOTT MACDONALD HONG KONG LIMITED
PROJECT	: PERFORMANCE CHECK OF TSP DUST METER

ALS Lab ID	Client's Sample ID	Sample Type	Sample Date	External Lab Report No.
HK1944863-001	S/N: 296098	Equipments	17-Oct-2019	S/N: 296098

Equipment Verification Report (TSP)

Equipment Calibrated:

Type:	Laser Dust monitor
Manufacturer:	Sibata LD-3B
Serial No.	296098
Equipment Ref:	Nil
Job Order	HK1944863

Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	AUES office (calibration room)
Equipment Ref:	HVS 018
Last Calibration Date:	22 August 2019

Equipment Verification Results:

Testing Date: 24 & 25 October 2019

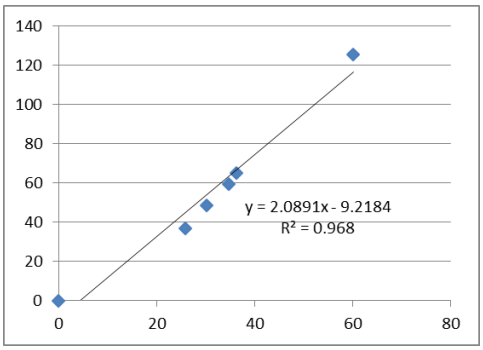
Hour	Time	Mean Temp °C	Mean Pressure (hPa)	Concentration in µg/m³ (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/min)
2hr02min	13:21 ~ 15:23	26.2	1014.9	37	3145	25.8
2hr01min	15:26 ~ 17:27	26.2	1014.9	49	3641	30.2
2h11min	09:13 ~ 11:24	25.8	1016.7	65	4764	36.3
2hr	11:27 ~ 13:27	25.8	1016.7	125	7210	60.1
2hr02min	13:31 ~ 15:33	25.8	1016.7	59	4218	34.6

Linear Regression of Y or X

Slope (K-factor): 2.0891 (µg/m3)/CPM

Correlation Coefficient 0.9839

Date of Issue 29 October 2019



Remarks:

1. **Strong** Correlation (R>0.8)
2. Factor 2.0891 (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 : 29 October 2019

QC Reviewer : Ben Tam Signature : Date : 29 October 2019

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Gold King Industrial Building, Kwai Chung	Date of Calibration:	22-Aug-19
Location ID :	Calibration Room	Next Calibration Date:	22-Nov-19

CONDITIONS

Sea Level Pressure (hPa)	1005.5	Corrected Pressure (mm Hg)	754.125
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	2.0968
Model->	5025A	Qstd Intercept ->	-0.00065
Calibration Date->	5-Feb-19	Expiry Date->	5-Feb-20

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.6	6.6	13.2	1.714	56	55.39	Slope = 37.1811
13	5.2	5.2	10.4	1.522	50	49.46	Intercept = -7.4343
10	4.1	4.1	8.2	1.351	44	43.52	Corr. coeff. = 0.9969
8	2.6	2.6	5.2	1.076	34	33.63	
5	1.7	1.7	3.4	0.870	24	23.74	

Calculations :

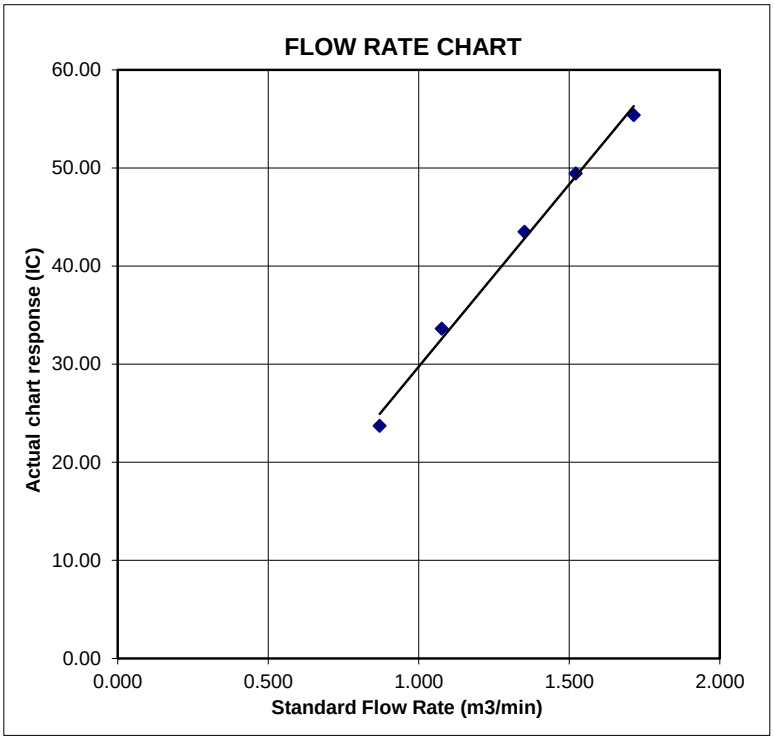
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

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 5, 2020

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	February 5, 2019	**Rootsmeter S/N:** 438320	**Ta:** 293	°K
Operator:	Jim Tisch		**Pa:** 753.1	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1941**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.4830	3.2	2.00
2	3	4	1	1.0430	6.4	4.00
3	5	6	1	0.9300	7.9	5.00
4	7	8	1	0.8870	8.7	5.50
5	9	10	1	0.7320	12.7	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)
1.0036	0.6767	1.4197	0.9958	0.6714	0.8821
0.9993	0.9581	2.0078	0.9915	0.9506	1.2475
0.9973	1.0723	2.2448	0.9895	1.0640	1.3947
0.9962	1.1231	2.3544	0.9884	1.1144	1.4628
0.9908	1.3536	2.8395	0.9831	1.3431	1.7642
QSTD	**m=**	**2.09680**	**QA**	**m=**	**1.31298**
	b=	**-0.00065**		**b=**	**-0.00040**
	r=	**0.99999**		**r=**	**0.99999**

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.
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Village of Cleves, OH 45002

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FAX: (513)467-9009

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. : AI100182
Date of Issue : 30 October 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	Oct 28, 2019
Date of Calibration	:	Oct 28, 2019
Date of Next Calibration[a]	:	Jan 27, 2020

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	4.07	0.07	Satisfactory
7.42	7.49	0.07	Satisfactory
10.01	10.05	0.04	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.0	15.1	0.1	Satisfactory
25.0	25.0	0.0	Satisfactory
35.0	35.0	0.0	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

LEE Chun-ning, Desmond
Senior Chemist

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QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI100182
Date of Issue : 30 October 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.04	0.90	-0.14	Satisfactory
4.10	4.40	0.3	Satisfactory
5.92	6.00	0.08	Satisfactory
7.81	8.10	0.29	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	156	6.19	Satisfactory
0.01	1412	1384	-1.98	Satisfactory
0.1	12890	12810	-0.62	Satisfactory
0.5	58670	57991	-1.16	Satisfactory
1.0	111900	110844	-0.94	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.08	0.80	Satisfactory
20	20.07	0.35	Satisfactory
30	30.1	0.33	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.50	--	Satisfactory
10	10.02	0.2	Satisfactory
20	20.47	2.3	Satisfactory
100	100.16	0.2	Satisfactory
800	798.93	-0.1	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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

Report No. : AI100183
Date of Issue : 30 October 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI 6920V2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	00019CB2
Date of Received	:	Oct 28, 2019
Date of Calibration	:	Oct 28, 2019
Date of Next Calibration[a]	:	Jan 27, 2020

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	3.95	-0.05	Satisfactory
7.42	7.36	-0.06	Satisfactory
10.01	9.93	-0.08	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.0	15.1	0.1	Satisfactory
25.0	24.9	-0.1	Satisfactory
35.0	34.9	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI100183
Date of Issue : 30 October 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
1.04	0.80	-0.24	Satisfactory
4.10	4.34	0.24	Satisfactory
5.92	5.94	0.02	Satisfactory
7.81	8.07	0.26	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	140.0	-4.70	Satisfactory
0.01	1412	1394	-1.27	Satisfactory
0.1	12890	12780	-0.85	Satisfactory
0.5	58670	57927	-1.27	Satisfactory
1.0	111900	110880	-0.91	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.90	-1.00	Satisfactory
20	19.88	-0.60	Satisfactory
30	29.89	-0.37	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.20	--	Satisfactory
10	9.98	-0.2	Satisfactory
20	19.88	-0.6	Satisfactory
100	100.20	0.2	Satisfactory
800	798.82	-0.1	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
	Discharge License under WPCO	Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	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
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-RS0593-19	Superseded by GW-RS0927-19 on 18 Oct 2019
			GW-RS0927-19	Valid until 17 Apr 2020
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0762-19	Superseded by GW-RS0917-19 on 18 Oct 2019
			GW-RS0917-19	Valid until 10 Apr 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-RS0858-19	Valid until 24 Mar 2020
		Works area of 3301	GW-RS0267-19	Valid until 11 Oct 2019
			GW-RS0865-19	Valid from 12 Oct 2019 to 11 Apr 2020
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0595-19	Valid until 6 Jan 2020
	Construction Noise Permit (Percussive Piling)	Works area of 3302	PP-RS0011-19	Valid until 31 Jan 2020
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0764-19	Valid until 28 Feb 2020
		Works area of 3303 (Reclamation area)	GW-RS0842-19	Valid until 15 Mar 2020
3402	Notification of Construction Work under APCO	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
		Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0720-19	Valid until 14 Jan 2020
			GW-RS0880-19	Valid from 2 Oct 2019 to 31 Oct 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

Contract No.	Description	Location	Permit/ Reference No.	Status
	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-RS0796-19	Valid from 5 Sep 2019 to 2 Mar 2020
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
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
		Stockpiling area of 3503	WT00031826-2018	Valid from 18 Sep 2018 to 30 Sep 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0777-19	Valid until 28 Feb 2020
		Stockpiling area of 3503	GW-RS0407-19	Valid until 13 Nov 2019
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0641-19	Superseded by GW-RS0888-19 on 8 Oct 2019
			GW-RS0888-19	Valid until 31 Mar 2020
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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0313-19	Superseded by GWRS0909-19 on 25 Oct 2019
			GW-RS0909-19	Valid until 23 Apr 2020
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 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-RS0782-19	Valid until 1 Mar 2020
		Works area of 3801 (Drill and grouting works)	GW-RS0857-19	Valid until 26 Dec 2019

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

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

		Total no. recorded in the reporting period	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
Waste	Action	0	0
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not project related, are not shown in this table.

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	17	1	1

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2019)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 31 October 2019)

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)
1-Oct	8:25	3A061	YFT	Arrival	11.3	-	-
1-Oct	10:04	3A081	ZUI	Arrival	12.1	-	-
1-Oct	10:05	8S212	XZM	Arrival	12.7	-	-
1-Oct	10:20	3A181	ZUI	Departure	11.6	-	-
1-Oct	11:05	8S121	XZM	Departure	12.2	-	-
1-Oct	11:55	3A063	YFT	Arrival	12.3	-	-
1-Oct	12:38	8S215	XZM	Arrival	12.5	-	-
1-Oct	13:57	3A082	ZUI	Arrival	13.6	-	-
1-Oct	14:13	3A182	ZUI	Departure	12.4	-	-
1-Oct	14:14	3A164	YFT	Departure	12.8	-	-
1-Oct	14:57	3A065	YFT	Arrival	12.8	-	-
1-Oct	16:11	3A167	YFT	Departure	12.2	-	-
1-Oct	16:55	3A067	YFT	Arrival	13.1	-	-
1-Oct	17:01	3A083	ZUI	Arrival	12	-	-
1-Oct	17:27	3A183	ZUI	Departure	12	-	-
1-Oct	18:04	8S126	XZM	Departure	12.6	-	-
1-Oct	20:40	3A084	ZUI	Arrival	12.3	-	-
1-Oct	20:52	8S2113	XZM	Arrival	12.4	-	-
1-Oct	20:54	3A185	ZUI	Departure	13.3	-	-
2-Oct	8:25	3A061	YFT	Arrival	11.6	-	-
2-Oct	10:03	3A081	ZUI	Arrival	12	-	-
2-Oct	10:12	8S212	XZM	Arrival	10.8	-	-
2-Oct	10:30	3A181	ZUI	Departure	13.6	-	-
2-Oct	11:02	8S121	XZM	Departure	12.6	-	-
2-Oct	12:37	8S215	XZM	Arrival	12.1	-	-
2-Oct	13:59	3A082	ZUI	Arrival	13.4	-	-
2-Oct	14:13	3A182	ZUI	Departure	12.8	-	-
2-Oct	14:53	3A065	YFT	Arrival	12.4	-	-
2-Oct	16:13	3A167	YFT	Departure	13.2	-	-
2-Oct	16:57	3A067	YFT	Arrival	11.9	-	-
2-Oct	16:58	3A083	ZUI	Arrival	13.3	-	-
2-Oct	17:15	3A183	ZUI	Departure	12.4	-	-
2-Oct	18:00	8S126	XZM	Departure	12.6	-	-
2-Oct	20:36	3A084	ZUI	Arrival	12.2	-	-
2-Oct	20:51	8S2113	XZM	Arrival	12	-	-
2-Oct	20:54	3A185	ZUI	Departure	13.6	-	-

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)
3-Oct	8:30	3A061	YFT	Arrival	12.2	-	-
3-Oct	9:58	3A081	ZUI	Arrival	11.8	-	-
3-Oct	10:21	8S212	XZM	Arrival	12	-	-
3-Oct	10:28	3A181	ZUI	Departure	13.1	-	-
3-Oct	11:02	8S121	XZM	Departure	13	-	-
3-Oct	12:30	8S215	XZM	Arrival	11.9	-	-
3-Oct	13:59	3A082	ZUI	Arrival	13.1	-	-
3-Oct	14:10	3A182	ZUI	Departure	12.7	-	-
3-Oct	14:56	3A065	YFT	Arrival	12.1	-	-
3-Oct	16:14	3A167	YFT	Departure	11.1	-	-
3-Oct	16:57	3A083	ZUI	Arrival	12.1	-	-
3-Oct	17:01	3A067	YFT	Arrival	12.1	-	-
3-Oct	17:23	3A183	ZUI	Departure	12.7	-	-
3-Oct	18:03	8S126	XZM	Departure	13.1	<= 5	< 1min
3-Oct	20:36	3A084	ZUI	Arrival	12.6	-	-
3-Oct	20:52	8S2113	XZM	Arrival	12.5	-	-
3-Oct	21:01	3A185	ZUI	Departure	13.5	-	-
4-Oct	8:22	3A061	YFT	Arrival	12.5	-	-
4-Oct	9:58	3A081	ZUI	Arrival	12.2	-	-
4-Oct	10:24	8S212	XZM	Arrival	11.1	-	-
4-Oct	10:28	3A181	ZUI	Departure	12.7	-	-
4-Oct	10:57	8S121	XZM	Departure	12.4	-	-
4-Oct	12:31	8S215	XZM	Arrival	12.6	-	-
4-Oct	13:57	3A082	ZUI	Arrival	12.5	-	-
4-Oct	14:20	3A182	ZUI	Departure	13	-	-
4-Oct	14:59	3A065	YFT	Arrival	12.6	-	-
4-Oct	16:13	3A167	YFT	Departure	12	-	-
4-Oct	16:53	3A067	YFT	Arrival	11.7	-	-
4-Oct	17:02	3A083	ZUI	Arrival	12.9	-	-
4-Oct	17:17	3A183	ZUI	Departure	12.6	-	-
4-Oct	18:11	8S126	XZM	Departure	12.6	-	-
4-Oct	20:44	3A084	ZUI	Arrival	12.8	-	-
4-Oct	20:48	8S2113	XZM	Arrival	13	-	-
4-Oct	21:12	3A185	ZUI	Departure	13.2	-	-
5-Oct	8:23	3A061	YFT	Arrival	12.4	-	-
5-Oct	9:59	3A081	ZUI	Arrival	12.8	-	-
5-Oct	10:25	3A181	ZUI	Departure	12.9	-	-
5-Oct	10:26	8S212	XZM	Arrival	12.6	-	-
5-Oct	10:59	8S121	XZM	Departure	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
5-Oct	12:39	8S215	XZM	Arrival	11.3	-	-
5-Oct	13:57	3A082	ZUI	Arrival	12.6	-	-
5-Oct	14:19	3A182	ZUI	Departure	13.6	-	-
5-Oct	14:55	3A065	YFT	Arrival	12.4	-	-
5-Oct	16:30	3A167	YFT	Departure	13.1	-	-
5-Oct	16:59	3A083	ZUI	Arrival	12.6	-	-
5-Oct	17:00	3A067	YFT	Arrival	11.6	-	-
5-Oct	17:31	3A183	ZUI	Departure	13	-	-
5-Oct	18:30	8S126	XZM	Departure	10.8	-	-
5-Oct	20:37	3A084	ZUI	Arrival	12.5	-	-
5-Oct	21:19	3A185	ZUI	Departure	12.9	-	-
5-Oct	21:26	8S2113	XZM	Arrival	11.4	-	-
6-Oct	8:26	3A061	YFT	Arrival	12.4	-	-
6-Oct	10:14	3A081	ZUI	Arrival	12.5	-	-
6-Oct	10:21	8S212	XZM	Arrival	12	-	-
6-Oct	10:52	3A181	ZUI	Departure	12.9	-	-
6-Oct	11:26	8S121	XZM	Departure	13.1	-	-
6-Oct	12:50	8S215	XZM	Arrival	11.8	-	-
6-Oct	13:59	3A082	ZUI	Arrival	12.3	-	-
6-Oct	14:16	3A182	ZUI	Departure	12.8	-	-
6-Oct	15:00	3A065	YFT	Arrival	11.6	-	-
6-Oct	16:29	3A167	YFT	Departure	13.4	-	-
6-Oct	17:03	3A083	ZUI	Arrival	12.5	-	-
6-Oct	17:04	3A067	YFT	Arrival	12.2	-	-
6-Oct	17:46	3A183	ZUI	Departure	13	-	-
6-Oct	18:22	8S126	XZM	Departure	13.2	-	-
6-Oct	20:38	3A084	ZUI	Arrival	12.9	-	-
6-Oct	21:07	8S2113	XZM	Arrival	12.9	-	-
6-Oct	21:23	3A185	ZUI	Departure	13.3	-	-
7-Oct	8:26	3A061	YFT	Arrival	12	-	-
7-Oct	10:02	3A081	ZUI	Arrival	12.7	-	-
7-Oct	10:30	8S212	XZM	Arrival	12.3	-	-
7-Oct	10:59	3A181	ZUI	Departure	13.1	-	-
7-Oct	11:25	8S121	XZM	Departure	12.2	-	-
7-Oct	12:46	8S215	XZM	Arrival	12.2	-	-
7-Oct	13:58	3A082	ZUI	Arrival	12.4	-	-
7-Oct	14:24	3A182	ZUI	Departure	13.1	-	-
7-Oct	14:59	3A065	YFT	Arrival	12.5	-	-
7-Oct	16:14	3A167	YFT	Departure	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)
7-Oct	17:01	3A067	YFT	Arrival	12.5	-	-
7-Oct	17:12	3A083	ZUI	Arrival	12.3	-	-
7-Oct	17:47	3A183	ZUI	Departure	13	-	-
7-Oct	18:15	8S126	XZM	Departure	11.8	-	-
7-Oct	20:38	3A084	ZUI	Arrival	12.7	-	-
7-Oct	21:09	8S2113	XZM	Arrival	11	-	-
7-Oct	21:24	3A185	ZUI	Departure	13.1	-	-
8-Oct	8:26	3A061	YFT	Arrival	11.9	-	-
8-Oct	9:56	3A081	ZUI	Arrival	13.4	-	-
8-Oct	10:24	8S212	XZM	Arrival	12.6	-	-
8-Oct	10:32	3A181	ZUI	Departure	13.3	-	-
8-Oct	11:32	8S121	XZM	Departure	12.5	-	-
8-Oct	12:38	8S215	XZM	Arrival	12.6	-	-
8-Oct	13:53	3A082	ZUI	Arrival	13	-	-
8-Oct	14:13	3A182	ZUI	Departure	12.6	-	-
8-Oct	14:56	3A065	YFT	Arrival	11.7	-	-
8-Oct	16:22	3A167	YFT	Departure	12.7	-	-
8-Oct	16:55	3A067	YFT	Arrival	11.4	-	-
8-Oct	16:55	3A083	ZUI	Arrival	13.3	-	-
8-Oct	17:29	3A183	ZUI	Departure	13	-	-
8-Oct	18:01	8S126	XZM	Departure	13.2	-	-
8-Oct	20:34	3A084	ZUI	Arrival	13.2	-	-
8-Oct	20:48	8S2113	XZM	Arrival	13.2	-	-
8-Oct	21:03	3A185	ZUI	Departure	13.2	-	-
9-Oct	8:25	3A061	YFT	Arrival	12	-	-
9-Oct	9:56	3A081	ZUI	Arrival	13.3	-	-
9-Oct	10:32	8S212	XZM	Arrival	11.5	-	-
9-Oct	10:49	3A181	ZUI	Departure	13.1	-	-
9-Oct	11:48	8S121	XZM	Departure	11.5	-	-
9-Oct	12:45	8S215	XZM	Arrival	12.2	-	-
9-Oct	13:52	3A082	ZUI	Arrival	13	-	-
9-Oct	14:10	3A182	ZUI	Departure	13.4	-	-
9-Oct	14:59	3A065	YFT	Arrival	11.6	-	-
9-Oct	16:16	3A167	YFT	Departure	12.9	-	-
9-Oct	16:54	3A083	ZUI	Arrival	13.2	-	-
9-Oct	17:01	3A067	YFT	Arrival	11.8	-	-
9-Oct	17:30	3A183	ZUI	Departure	13.6	-	-
9-Oct	18:11	8S126	XZM	Departure	12.1	-	-
9-Oct	20:32	3A084	ZUI	Arrival	13.5	-	-

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)
9-Oct	20:52	8S2113	XZM	Arrival	12.1	-	-
9-Oct	20:59	3A185	ZUI	Departure	12.8	-	-
10-Oct	8:25	3A061	YFT	Arrival	12.1	-	-
10-Oct	10:05	3A081	ZUI	Arrival	13.6	-	-
10-Oct	10:07	8S212	XZM	Arrival	12.3	-	-
10-Oct	10:29	3A181	ZUI	Departure	12.7	-	-
10-Oct	11:09	8S121	XZM	Departure	12.3	-	-
10-Oct	12:35	8S215	XZM	Arrival	12.5	-	-
10-Oct	13:51	3A082	ZUI	Arrival	13.7	-	-
10-Oct	14:09	3A182	ZUI	Departure	12.5	-	-
10-Oct	14:50	3A065	YFT	Arrival	12.5	-	-
10-Oct	16:25	3A167	YFT	Departure	13.6	-	-
10-Oct	16:57	3A067	YFT	Arrival	12.2	-	-
10-Oct	16:57	3A083	ZUI	Arrival	10.6	-	-
10-Oct	17:31	3A183	ZUI	Departure	13	-	-
10-Oct	18:06	8S126	XZM	Departure	12.7	-	-
10-Oct	20:40	3A084	ZUI	Arrival	12.1	-	-
10-Oct	20:57	8S2113	XZM	Arrival	12.8	-	-
10-Oct	20:57	3A185	ZUI	Departure	13.5	-	-
11-Oct	8:30	3A061	YFT	Arrival	11.2	-	-
11-Oct	9:54	3A081	ZUI	Arrival	12.2	-	-
11-Oct	10:03	8S212	XZM	Arrival	12.4	-	-
11-Oct	10:23	3A181	ZUI	Departure	12.9	-	-
11-Oct	10:58	8S121	XZM	Departure	12.6	-	-
11-Oct	12:39	8S215	XZM	Arrival	12	-	-
11-Oct	13:55	3A082	ZUI	Arrival	12.2	-	-
11-Oct	14:13	3A182	ZUI	Departure	13	-	-
11-Oct	14:56	3A065	YFT	Arrival	11.3	-	-
11-Oct	16:18	3A167	YFT	Departure	12.1	-	-
11-Oct	16:53	3A083	ZUI	Arrival	11.1	-	-
11-Oct	16:54	3A067	YFT	Arrival	11.6	-	-
11-Oct	17:19	3A183	ZUI	Departure	13	-	-
11-Oct	18:05	8S126	XZM	Departure	13.3	-	-
11-Oct	20:37	3A084	ZUI	Arrival	11.6	-	-
11-Oct	20:44	8S2113	XZM	Arrival	12.9	-	-
11-Oct	20:58	3A185	ZUI	Departure	13.2	-	-
12-Oct	8:26	3A061	YFT	Arrival	11.2	-	-
12-Oct	9:56	3A081	ZUI	Arrival	11.8	-	-
12-Oct	10:12	8S212	XZM	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
12-Oct	10:22	3A181	ZUI	Departure	13.1	-	-
12-Oct	11:01	8S121	XZM	Departure	13	-	-
12-Oct	12:35	8S215	XZM	Arrival	11.4	-	-
12-Oct	13:54	3A082	ZUI	Arrival	12.7	-	-
12-Oct	14:14	3A182	ZUI	Departure	13.2	-	-
12-Oct	14:58	3A065	YFT	Arrival	11.3	-	-
12-Oct	16:13	3A167	YFT	Departure	12.2	-	-
12-Oct	16:55	3A067	YFT	Arrival	12.6	-	-
12-Oct	16:58	3A083	ZUI	Arrival	10.8	-	-
12-Oct	17:19	3A183	ZUI	Departure	13	-	-
12-Oct	18:11	8S126	XZM	Departure	12.5	-	-
12-Oct	20:37	3A084	ZUI	Arrival	12	-	-
12-Oct	20:56	8S2113	XZM	Arrival	12.6	-	-
12-Oct	20:58	3A185	ZUI	Departure	13.3	-	-
13-Oct	8:29	3A061	YFT	Arrival	12	-	-
13-Oct	10:13	3A081	ZUI	Arrival	13.2	-	-
13-Oct	10:17	8S212	XZM	Arrival	12.1	-	-
13-Oct	10:44	3A181	ZUI	Departure	12.8	-	-
13-Oct	11:14	8S121	XZM	Departure	12.3	-	-
13-Oct	12:43	8S215	XZM	Arrival	12.5	-	-
13-Oct	13:54	3A082	ZUI	Arrival	12.4	-	-
13-Oct	14:10	3A182	ZUI	Departure	13.3	-	-
13-Oct	14:55	3A065	YFT	Arrival	12.1	-	-
13-Oct	16:16	3A167	YFT	Departure	12.6	-	-
13-Oct	16:56	3A083	ZUI	Arrival	12.1	-	-
13-Oct	16:57	3A067	YFT	Arrival	12.3	-	-
13-Oct	17:20	3A183	ZUI	Departure	13.2	-	-
13-Oct	18:04	8S126	XZM	Departure	12.7	-	-
13-Oct	20:41	3A084	ZUI	Arrival	13.1	-	-
13-Oct	20:51	8S2113	XZM	Arrival	11.8	-	-
13-Oct	20:57	3A185	ZUI	Departure	12.4	-	-
14-Oct	8:26	3A061	YFT	Arrival	12.6	-	-
14-Oct	10:09	3A081	ZUI	Arrival	12.7	-	-
14-Oct	10:10	8S212	XZM	Arrival	10.6	-	-
14-Oct	10:22	3A181	ZUI	Departure	13.2	-	-
14-Oct	11:05	8S121	XZM	Departure	11.8	-	-
14-Oct	12:40	8S215	XZM	Arrival	13.4	-	-
14-Oct	13:53	3A082	ZUI	Arrival	12	-	-
14-Oct	14:25	3A182	ZUI	Departure	13.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Oct	14:54	3A065	YFT	Arrival	12.8	-	-
14-Oct	16:20	3A167	YFT	Departure	12.4	-	-
14-Oct	16:59	3A067	YFT	Arrival	12.3	-	-
14-Oct	17:00	3A083	ZUI	Arrival	12.7	-	-
14-Oct	17:18	3A183	ZUI	Departure	13.5	-	-
14-Oct	18:02	8S126	XZM	Departure	13.8	-	-
14-Oct	20:37	3A084	ZUI	Arrival	11.8	-	-
14-Oct	20:44	8S2113	XZM	Arrival	13	-	-
14-Oct	20:57	3A185	ZUI	Departure	13	-	-
15-Oct	8:23	3A061	YFT	Arrival	12.5	-	-
15-Oct	10:05	3A081	ZUI	Arrival	12.3	-	-
15-Oct	10:11	8S212	XZM	Arrival	13	-	-
15-Oct	10:53	3A181	ZUI	Departure	13.5	-	-
15-Oct	11:12	8S121	XZM	Departure	13.1	-	-
15-Oct	12:40	8S215	XZM	Arrival	12.2	-	-
15-Oct	13:53	3A082	ZUI	Arrival	12.9	-	-
15-Oct	14:13	3A182	ZUI	Departure	13.2	-	-
15-Oct	14:55	3A065	YFT	Arrival	11.9	-	-
15-Oct	16:16	3A167	YFT	Departure	11.9	-	-
15-Oct	16:54	3A083	ZUI	Arrival	12.6	-	-
15-Oct	16:55	3A067	YFT	Arrival	12.2	-	-
15-Oct	17:15	3A183	ZUI	Departure	13.8	-	-
15-Oct	18:08	8S126	XZM	Departure	11.7	-	-
15-Oct	20:34	3A084	ZUI	Arrival	12.3	-	-
15-Oct	20:54	3A185	ZUI	Departure	13.4	-	-
15-Oct	20:54	8S2113	XZM	Arrival	11.8	-	-
16-Oct	8:21	3A061	YFT	Arrival	12.5	-	-
16-Oct	10:01	3A081	ZUI	Arrival	13	-	-
16-Oct	10:07	8S212	XZM	Arrival	12.5	-	-
16-Oct	10:28	3A181	ZUI	Departure	12.5	-	-
16-Oct	11:03	8S121	XZM	Departure	12.4	-	-
16-Oct	12:43	8S215	XZM	Arrival	12.5	-	-
16-Oct	13:52	3A082	ZUI	Arrival	12.4	-	-
16-Oct	14:16	3A182	ZUI	Departure	12.4	-	-
16-Oct	14:54	3A065	YFT	Arrival	12.7	-	-
16-Oct	16:16	3A167	YFT	Departure	12.8	-	-
16-Oct	16:55	3A067	YFT	Arrival	11.6	-	-
16-Oct	17:02	3A083	ZUI	Arrival	13.6	-	-
16-Oct	17:22	3A183	ZUI	Departure	13.4	-	-

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)
16-Oct	18:04	8S126	XZM	Departure	11.5	-	-
16-Oct	20:33	3A084	ZUI	Arrival	12.8	-	-
16-Oct	20:54	8S2113	XZM	Arrival	11.6	-	-
16-Oct	20:58	3A185	ZUI	Departure	12.4	-	-
17-Oct	8:25	3A061	YFT	Arrival	11.8	-	-
17-Oct	9:52	3A081	ZUI	Arrival	13	-	-
17-Oct	10:08	8S212	XZM	Arrival	11.3	-	-
17-Oct	10:23	3A181	ZUI	Departure	12.9	-	-
17-Oct	11:03	8S121	XZM	Departure	13	-	-
17-Oct	12:38	8S215	XZM	Arrival	13.2	-	-
17-Oct	13:53	3A082	ZUI	Arrival	13.5	-	-
17-Oct	14:09	3A182	ZUI	Departure	13	-	-
17-Oct	14:51	3A065	YFT	Arrival	12.5	-	-
17-Oct	16:13	3A167	YFT	Departure	13.1	-	-
17-Oct	16:54	3A083	ZUI	Arrival	13.3	-	-
17-Oct	16:59	3A067	YFT	Arrival	11.2	-	-
17-Oct	17:21	3A183	ZUI	Departure	13.2	-	-
17-Oct	18:13	8S126	XZM	Departure	13.6	<= 10	< 1min
17-Oct	20:33	3A084	ZUI	Arrival	12.5	-	-
17-Oct	20:53	8S2113	XZM	Arrival	12.2	-	-
17-Oct	20:57	3A185	ZUI	Departure	13.4	-	-
18-Oct	8:29	3A061	YFT	Arrival	11.6	-	-
18-Oct	9:55	3A081	ZUI	Arrival	12.6	-	-
18-Oct	10:06	8S212	XZM	Arrival	12.8	-	-
18-Oct	10:17	3A181	ZUI	Departure	13.2	-	-
18-Oct	10:59	8S121	XZM	Departure	12.7	-	-
18-Oct	12:51	8S215	XZM	Arrival	12.8	-	-
18-Oct	14:00	3A082	ZUI	Arrival	13.3	-	-
18-Oct	14:29	3A182	ZUI	Departure	13.3	-	-
18-Oct	14:51	3A065	YFT	Arrival	12.3	-	-
18-Oct	16:19	3A167	YFT	Departure	12.1	-	-
18-Oct	16:55	3A067	YFT	Arrival	12.1	-	-
18-Oct	17:03	3A083	ZUI	Arrival	12.9	-	-
18-Oct	17:20	3A183	ZUI	Departure	13.5	-	-
18-Oct	18:23	8S126	XZM	Departure	12.8	-	-
18-Oct	20:42	3A084	ZUI	Arrival	12.9	-	-
18-Oct	20:56	3A185	ZUI	Departure	13.1	-	-
18-Oct	21:17	8S2113	XZM	Arrival	12.9	-	-
19-Oct	8:28	3A061	YFT	Arrival	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Oct	10:03	3A081	ZUI	Arrival	12.1	-	-
19-Oct	10:16	8S212	XZM	Arrival	11.4	-	-
19-Oct	10:34	3A181	ZUI	Departure	13.3	-	-
19-Oct	11:03	8S121	XZM	Departure	12.5	-	-
19-Oct	12:37	8S215	XZM	Arrival	13.1	-	-
19-Oct	13:55	3A082	ZUI	Arrival	12.2	-	-
19-Oct	14:12	3A182	ZUI	Departure	12.5	-	-
19-Oct	15:06	3A065	YFT	Arrival	12.9	-	-
19-Oct	16:15	3A167	YFT	Departure	12.8	-	-
19-Oct	16:53	3A067	YFT	Arrival	13.6	-	-
19-Oct	17:01	3A083	ZUI	Arrival	13	-	-
19-Oct	17:16	3A183	ZUI	Departure	12.8	-	-
19-Oct	18:01	8S126	XZM	Departure	13.2	-	-
19-Oct	20:36	3A084	ZUI	Arrival	12.4	-	-
19-Oct	20:57	3A185	ZUI	Departure	12.8	-	-
19-Oct	20:57	8S2113	XZM	Arrival	12.9	-	-
20-Oct	8:28	3A061	YFT	Arrival	11.5	-	-
20-Oct	9:59	3A081	ZUI	Arrival	12.3	-	-
20-Oct	10:09	8S212	XZM	Arrival	12.9	-	-
20-Oct	10:32	3A181	ZUI	Departure	12.8	-	-
20-Oct	11:03	8S121	XZM	Departure	11.5	-	-
20-Oct	12:44	8S215	XZM	Arrival	12.1	-	-
20-Oct	13:55	3A082	ZUI	Arrival	12.4	-	-
20-Oct	14:15	3A182	ZUI	Departure	12.6	-	-
20-Oct	14:55	3A065	YFT	Arrival	12.5	-	-
20-Oct	16:19	3A167	YFT	Departure	12.8	-	-
20-Oct	16:53	3A067	YFT	Arrival	12.3	-	-
20-Oct	16:57	3A083	ZUI	Arrival	12.2	-	-
20-Oct	17:23	3A183	ZUI	Departure	12.7	-	-
20-Oct	18:29	8S126	XZM	Departure	12.8	-	-
20-Oct	20:42	3A084	ZUI	Arrival	12.5	-	-
20-Oct	21:09	3A185	ZUI	Departure	13.2	-	-
20-Oct	21:10	8S2113	XZM	Arrival	11.2	-	-
21-Oct	8:30	3A061	YFT	Arrival	11.4	-	-
21-Oct	9:59	3A081	ZUI	Arrival	12.2	-	-
21-Oct	10:03	8S212	XZM	Arrival	12.9	-	-
21-Oct	10:25	3A181	ZUI	Departure	12.8	-	-
21-Oct	11:04	8S121	XZM	Departure	13.1	-	-
21-Oct	12:41	8S215	XZM	Arrival	11.4	-	-

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)
21-Oct	13:57	3A082	ZUI	Arrival	12.6	-	-
21-Oct	14:12	3A182	ZUI	Departure	13.5	-	-
21-Oct	14:56	3A065	YFT	Arrival	12	-	-
21-Oct	16:21	3A167	YFT	Departure	12.8	-	-
21-Oct	16:54	3A067	YFT	Arrival	12.7	-	-
21-Oct	16:55	3A083	ZUI	Arrival	12.6	-	-
21-Oct	17:18	3A183	ZUI	Departure	13.5	-	-
21-Oct	18:11	8S126	XZM	Departure	12.8	-	-
21-Oct	20:37	3A084	ZUI	Arrival	12.7	-	-
21-Oct	20:54	8S2113	XZM	Arrival	12.3	-	-
21-Oct	20:55	3A185	ZUI	Departure	13.4	-	-
22-Oct	8:28	3A061	YFT	Arrival	12	-	-
22-Oct	9:52	3A081	ZUI	Arrival	12.3	-	-
22-Oct	10:05	8S212	XZM	Arrival	13.4	-	-
22-Oct	10:11	3A181	ZUI	Departure	12.3	-	-
22-Oct	11:06	8S121	XZM	Departure	13	-	-
22-Oct	12:44	8S215	XZM	Arrival	12.8	-	-
22-Oct	13:56	3A082	ZUI	Arrival	11.8	-	-
22-Oct	14:13	3A182	ZUI	Departure	13.1	-	-
22-Oct	14:57	3A065	YFT	Arrival	11.4	-	-
22-Oct	16:27	3A167	YFT	Departure	12.6	-	-
22-Oct	16:56	3A067	YFT	Arrival	12.5	-	-
22-Oct	16:56	3A083	ZUI	Arrival	12.4	-	-
22-Oct	17:28	3A183	ZUI	Departure	13	-	-
22-Oct	18:00	8S126	XZM	Departure	12.5	-	-
22-Oct	20:37	3A084	ZUI	Arrival	12.6	-	-
22-Oct	20:48	8S2113	XZM	Arrival	12.3	-	-
22-Oct	20:54	3A185	ZUI	Departure	13.2	-	-
23-Oct	8:23	3A061	YFT	Arrival	13.3	-	-
23-Oct	9:48	3A081	ZUI	Arrival	13.7	-	-
23-Oct	10:10	8S212	XZM	Arrival	12.6	-	-
23-Oct	10:31	3A181	ZUI	Departure	12.6	-	-
23-Oct	11:04	8S121	XZM	Departure	12.2	-	-
23-Oct	12:42	8S215	XZM	Arrival	12.2	-	-
23-Oct	13:55	3A082	ZUI	Arrival	12.5	-	-
23-Oct	14:12	3A182	ZUI	Departure	13.4	-	-
23-Oct	14:57	3A065	YFT	Arrival	10.8	-	-
23-Oct	16:19	3A167	YFT	Departure	12.6	-	-
23-Oct	16:52	3A067	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)
23-Oct	16:56	3A083	ZUI	Arrival	12	-	-
23-Oct	17:21	3A183	ZUI	Departure	13.4	-	-
23-Oct	18:06	8S126	XZM	Departure	12.9	-	-
23-Oct	20:34	3A084	ZUI	Arrival	12.3	-	-
23-Oct	20:53	3A185	ZUI	Departure	12.4	-	-
23-Oct	20:54	8S2113	XZM	Arrival	12.7	-	-
24-Oct	8:23	3A061	YFT	Arrival	11.9	-	-
24-Oct	10:01	3A081	ZUI	Arrival	13.2	-	-
24-Oct	10:21	8S212	XZM	Arrival	12.6	-	-
24-Oct	10:31	3A181	ZUI	Departure	12.2	-	-
24-Oct	10:57	8S121	XZM	Departure	11.4	-	-
24-Oct	12:41	8S215	XZM	Arrival	12	-	-
24-Oct	13:59	3A082	ZUI	Arrival	13.4	-	-
24-Oct	14:11	3A182	ZUI	Departure	13	-	-
24-Oct	14:57	3A065	YFT	Arrival	11.2	-	-
24-Oct	16:16	3A167	YFT	Departure	12.3	-	-
24-Oct	16:51	3A067	YFT	Arrival	12.6	-	-
24-Oct	16:56	3A083	ZUI	Arrival	12.8	-	-
24-Oct	17:20	3A183	ZUI	Departure	13.3	-	-
24-Oct	18:00	8S126	XZM	Departure	12	-	-
24-Oct	20:34	3A084	ZUI	Arrival	13.1	-	-
24-Oct	20:50	8S2113	XZM	Arrival	12.8	-	-
24-Oct	20:53	3A185	ZUI	Departure	13.4	-	-
25-Oct	8:27	3A061	YFT	Arrival	12.4	-	-
25-Oct	9:58	3A081	ZUI	Arrival	13.2	-	-
25-Oct	10:23	3A181	ZUI	Departure	12.4	-	-
25-Oct	10:27	8S212	XZM	Arrival	12.3	-	-
25-Oct	11:02	8S121	XZM	Departure	12.3	-	-
25-Oct	12:35	8S215	XZM	Arrival	12.2	-	-
25-Oct	13:59	3A082	ZUI	Arrival	12.7	-	-
25-Oct	14:12	3A182	ZUI	Departure	12.2	-	-
25-Oct	15:06	3A065	YFT	Arrival	12	-	-
25-Oct	16:19	3A167	YFT	Departure	13	-	-
25-Oct	16:55	3A067	YFT	Arrival	12	-	-
25-Oct	16:59	3A083	ZUI	Arrival	11.8	-	-
25-Oct	17:17	3A183	ZUI	Departure	13.6	-	-
25-Oct	18:10	8S126	XZM	Departure	13.7	-	-
25-Oct	20:34	3A084	ZUI	Arrival	12.9	-	-
25-Oct	20:45	8S2113	XZM	Arrival	13	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
25-Oct	20:56	3A185	ZUI	Departure	13.4	-	-
26-Oct	8:23	3A061	YFT	Arrival	12.9	-	-
26-Oct	9:57	3A081	ZUI	Arrival	13.3	-	-
26-Oct	10:22	3A181	ZUI	Departure	12.4	-	-
26-Oct	10:22	8S212	XZM	Arrival	11.2	-	-
26-Oct	11:00	8S121	XZM	Departure	12.7	-	-
26-Oct	12:40	8S215	XZM	Arrival	12.3	-	-
26-Oct	13:55	3A082	ZUI	Arrival	12.6	-	-
26-Oct	14:10	3A182	ZUI	Departure	12.1	-	-
26-Oct	14:55	3A065	YFT	Arrival	11.9	-	-
26-Oct	16:16	3A167	YFT	Departure	12	-	-
26-Oct	16:58	3A083	ZUI	Arrival	11	-	-
26-Oct	17:01	3A067	YFT	Arrival	11.8	-	-
26-Oct	17:22	3A183	ZUI	Departure	13.6	-	-
26-Oct	18:09	8S126	XZM	Departure	13.2	-	-
26-Oct	20:34	3A084	ZUI	Arrival	12.5	-	-
26-Oct	20:50	8S2113	XZM	Arrival	12.7	-	-
26-Oct	20:58	3A185	ZUI	Departure	13.6	-	-
27-Oct	8:25	3A061	YFT	Arrival	12.3	-	-
27-Oct	9:54	3A081	ZUI	Arrival	12.9	-	-
27-Oct	10:23	8S212	XZM	Arrival	12.7	-	-
27-Oct	10:24	3A181	ZUI	Departure	12.9	-	-
27-Oct	11:02	8S121	XZM	Departure	12.1	-	-
27-Oct	12:48	8S215	XZM	Arrival	12.8	-	-
27-Oct	13:57	3A082	ZUI	Arrival	13	-	-
27-Oct	14:12	3A182	ZUI	Departure	11.9	-	-
27-Oct	14:54	3A065	YFT	Arrival	12.9	-	-
27-Oct	16:15	3A167	YFT	Departure	13.4	-	-
27-Oct	16:56	3A083	ZUI	Arrival	12.3	-	-
27-Oct	17:00	3A067	YFT	Arrival	11.3	-	-
27-Oct	17:17	3A183	ZUI	Departure	13.7	-	-
27-Oct	18:06	8S126	XZM	Departure	11.9	-	-
27-Oct	20:34	3A084	ZUI	Arrival	12.9	-	-
27-Oct	20:53	8S2113	XZM	Arrival	11.9	-	-
27-Oct	20:56	3A185	ZUI	Departure	13.6	-	-
28-Oct	8:19	3A061	YFT	Arrival	12.6	-	-
28-Oct	9:59	3A081	ZUI	Arrival	12.1	-	-
28-Oct	10:11	8S212	XZM	Arrival	13	-	-
28-Oct	10:32	3A181	ZUI	Departure	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Oct	11:13	8S121	XZM	Departure	12.2	-	-
28-Oct	12:33	8S215	XZM	Arrival	13.5	-	-
28-Oct	14:00	3A082	ZUI	Arrival	12.8	-	-
28-Oct	14:14	3A182	ZUI	Departure	11.4	-	-
28-Oct	14:59	3A065	YFT	Arrival	12.9	-	-
28-Oct	16:13	3A167	YFT	Departure	12.7	-	-
28-Oct	16:52	3A067	YFT	Arrival	11.8	-	-
28-Oct	17:04	3A083	ZUI	Arrival	12.5	-	-
28-Oct	17:17	3A183	ZUI	Departure	13	-	-
28-Oct	18:02	8S126	XZM	Departure	13.2	-	-
28-Oct	20:36	3A084	ZUI	Arrival	12.6	-	-
28-Oct	20:50	8S2113	XZM	Arrival	12.7	-	-
28-Oct	20:56	3A185	ZUI	Departure	13.4	-	-
29-Oct	8:26	3A061	YFT	Arrival	12.4	-	-
29-Oct	9:56	3A081	ZUI	Arrival	12.8	-	-
29-Oct	10:24	8S212	XZM	Arrival	12.5	-	-
29-Oct	10:35	3A181	ZUI	Departure	12.7	-	-
29-Oct	11:08	8S121	XZM	Departure	12.9	-	-
29-Oct	12:40	8S215	XZM	Arrival	11.9	-	-
29-Oct	13:56	3A082	ZUI	Arrival	13.4	-	-
29-Oct	14:15	3A182	ZUI	Departure	12	-	-
29-Oct	14:51	3A065	YFT	Arrival	11.9	-	-
29-Oct	16:18	3A167	YFT	Departure	12.2	-	-
29-Oct	16:57	3A067	YFT	Arrival	11.6	-	-
29-Oct	17:03	3A083	ZUI	Arrival	12.3	-	-
29-Oct	17:17	3A183	ZUI	Departure	12	-	-
29-Oct	18:09	8S126	XZM	Departure	12.2	-	-
29-Oct	20:34	3A084	ZUI	Arrival	11.8	-	-
29-Oct	20:54	8S2113	XZM	Arrival	12.5	-	-
29-Oct	20:56	3A185	ZUI	Departure	12.5	-	-
30-Oct	8:26	3A061	YFT	Arrival	11.6	-	-
30-Oct	9:56	3A081	ZUI	Arrival	12.1	-	-
30-Oct	10:20	8S212	XZM	Arrival	12.7	-	-
30-Oct	10:21	3A181	ZUI	Departure	12.6	-	-
30-Oct	11:07	8S121	XZM	Departure	11.5	-	-
30-Oct	12:39	8S215	XZM	Arrival	12.8	-	-
30-Oct	13:57	3A082	ZUI	Arrival	13.2	-	-
30-Oct	14:16	3A182	ZUI	Departure	12.3	-	-
30-Oct	14:55	3A065	YFT	Arrival	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)
30-Oct	16:18	3A167	YFT	Departure	12.9	-	-
30-Oct	16:58	3A067	YFT	Arrival	11.9	-	-
30-Oct	17:06	3A083	ZUI	Arrival	12.6	-	-
30-Oct	17:24	3A183	ZUI	Departure	12.6	-	-
30-Oct	18:06	8S126	XZM	Departure	12.9	-	-
30-Oct	20:37	3A084	ZUI	Arrival	12.3	-	-
30-Oct	20:51	8S2113	XZM	Arrival	12.7	-	-
30-Oct	20:55	3A185	ZUI	Departure	13.4	-	-
31-Oct	8:31	3A061	YFT	Arrival	11	-	-
31-Oct	9:56	3A081	ZUI	Arrival	12.4	-	-
31-Oct	10:20	3A181	ZUI	Departure	13.2	-	-
31-Oct	10:21	8S212	XZM	Arrival	12.5	-	-
31-Oct	11:01	8S121	XZM	Departure	13.2	-	-
31-Oct	12:37	8S215	XZM	Arrival	11.4	-	-
31-Oct	13:55	3A082	ZUI	Arrival	12.8	-	-
31-Oct	14:13	3A182	ZUI	Departure	12.5	-	-
31-Oct	14:54	3A065	YFT	Arrival	12.5	-	-
31-Oct	16:15	3A167	YFT	Departure	12.9	-	-
31-Oct	16:54	3A067	YFT	Arrival	13.3	-	-
31-Oct	17:00	3A083	ZUI	Arrival	13.1	-	-
31-Oct	17:17	3A183	ZUI	Departure	12.3	-	-
31-Oct	18:14	8S126	XZM	Departure	12.6	-	-
31-Oct	20:37	3A084	ZUI	Arrival	12.2	-	-
31-Oct	20:53	8S2113	XZM	Arrival	12.2	-	-
31-Oct	20:55	3A185	ZUI	Departure	12.8	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in October 2019, 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 2 HSF movements of which the durations of all instantaneous speeding cases were less than 1 minute. The AIS data and ferry operators' responses showed the cases were due to local strong water and giving way to vessels. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

Referring to the data of SkyPier HSF movements in September 2019, the ferry operator's responses of the two instantaneous speeding cases (on 8 and 29 September 2019) showed the cases were due to local strong water. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.