MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.31 (For July 2018)

August 2018

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This Monthly EM&A Report No. 31 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)
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Date 14 August 2018

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By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
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Attn: Mr. Lawrence Tsui, Principal Manager

14 August 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 31 (July 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 31 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 August 2018.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

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

SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings
SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

Executive Summary

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

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 31st Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 31 July 2018.

Key Activities in the Reporting Period

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

EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	24
Water quality monitoring	12
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	5

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

Snapshots of EM&A Activities in the Reporting Period

Environmental Management Meeting for EM&A Review with Works Contracts	Wheel Washing Facilities for Vehicles	Checking of Wastewater Treatment Facilities

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 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 dissolved oxygen (DO) and suspended solids (SS), some of the testing results triggered the relevant Action or Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities in the reporting period did not introduce adverse impact to all water quality sensitive receivers.

Summary of Upcoming Key Issues

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation;
- Seawall construction;

- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation; and
- Electrical and mechanical (E&M) works and builders works of antenna farm.

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

- Site clearance;
- Brick laying;
- Fitting out of E&M works; and
- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Assembly of structural frame;
- Floor drilling; and
- Installation of lighting fittings and panels.

APM works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

The key environmental issues will be associated with construction dust, construction noise, water quality, construction waste management, and CWD. The implementation of required mitigation measures by the contractor will be monitored by the ET.

Summary Table

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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received	√		A complaint on suspected effluent discharge from a construction vessel was received on 3 Jul 2018.	Based on site investigation and contractor's records, no evidences were found related to the suspected effluent discharge.
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 existing 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 31st Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 31 July 2018.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9348

Advanced Works:

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

Deep Cement Mixing (DCM) Works:

Party	Position	Name	Telephone
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Sandra Lo	6329 3513
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
	Environmental Officer	Dickson Mak	9525 8408
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
	Environmental Officer	David Hung	9765 6151
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
	Environmental Officer	Kanny Cho	6799 8226

Deep Cement Mixing (DCM) Works:

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

Reclamation Works:

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

Airfield Works

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

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Raymond Au	6985 8860
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	Kivin Cheng	9380 3635
	Environmental Officer	Chun Pong Chan	9187 7118
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Construction Manager	Stephen O'Donoghue	9732 6787
	Environmental Officer	Stephen Tsang	5508 6361
Contract 3505 Terminal 2 Spectrum Lighting Mock-Ups (Union Contractors Ltd.)	Project Manager	Wylar Chan	9107 5920
	Environmental Officer	Kelvin Lam	9379 2446

Automated People Mover (APM) Works:

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

Airport Support Infrastructure and Logistic Works:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Fredrick Wong	9842 2703

1.4 Summary of Construction Works

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

The locations of the works area are presented in **Figure 1.1** to **Figure 1.2**.

1.5 Summary of EM&A Programme Requirements

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

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

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
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.

Parameters	Status
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	Construction works on Sheung Sha Chau Island was suspended during the ardeid's breeding season (between April and July). The ecological monitoring is therefore suspended.
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	On-going
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

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

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

- One dolphin observer training provided by ET: 23 July 2018
- Two skipper trainings provided by ET: 11 and 25 July 2018
- Nine environmental management meetings for EM&A review with works contracts: 6, 17, 18, 20, 27, 30 and 31 July 2018
- One training workshop for contractor on construction noise permit requirements provided by ET: 4 July 2018

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level (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-002 (Serial No. 974350)	11 Sep 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-003 (Serial No. 276018)	11 Sep 2017	

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

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

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

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of the Construction Phase Monthly EM&A Report No. 22, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are still valid.

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	5 – 18	306	500
AR2	1 – 21	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

General meteorological conditions throughout the impact monitoring period were recorded. Wind data including wind speed and wind direction for each monitoring day were collected from the Chek Lap Kok Wind Station.

2.5 Conclusion

No dust emission source from Project activities was observed during impact air quality monitoring. Major sources of dust observed at the monitoring stations during the monitoring sessions were local air pollution and nearby traffic emissions. It is considered that the monitoring work in the reporting period is effective and there was no adverse impact attributable to the Project activities.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq}, L_{10}, and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at five representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations. As described in Section 4.3.3 of the Manual, monitoring at NM2 will commence when the future residential buildings in Tung Chung West Development become occupied.

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) As described in Section 4.3.3 of the Manual, noise monitoring at NM3A will tentatively be suspended in August 2018 subjected to actual site conditions.

3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

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

Note:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	B&K 2238 (Serial No. 2381580)	10 May 2018	Monthly EM&A Report No. 30, Appendix D
	B&K 2238 (Serial No. 2808432)	30 Aug 2017	Monthly EM&A Report No. 21, Appendix E
Acoustic Calibrator	B&K 4231 (Serial No. 3003246)	23 Jun 2018	**Appendix E**
	B&K 4231 (Serial No. 3018753)	10 May 2018	Monthly EM&A Report No. 29, 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 1.2 m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3 dB(A) was applied to the free field measurements.
b. Façade measurements were made at the monitoring station NM3A.
c. Parameters such as frequency weighting, time weighting and measurement time were set.
d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1 dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
e. During the monitoring period, L_{eq}, L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
f. Noise measurement results were corrected with reference to the baseline monitoring levels.
g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	72 – 73	75
NM3A	61 – 65	75
NM4(1)	64 – 66	70(2)
NM5(1)	53 – 58	75
NM6(1)	66 – 71	75

Notes:

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

(2) Reduced to 65 dB(A) during school examination periods at NM4. No examination was held in this reporting period.

The monitoring results were within the corresponding Action and 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 road traffic noise at NM1A, aircraft noise at NM4, and aircraft and helicopter noise at NM3A, NM5, and NM6 during this reporting period. It is considered that the monitoring work during the reporting period is 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 22 water quality monitoring stations, comprising 12 impact (IM) stations, 7 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 3.1** shows the locations of the monitoring stations.

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

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1(1)	Future Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812586	820069	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

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

Notes:

(1) The seawater intakes of SR1 for the future HKBCF is not yet in operation, hence no water quality impact monitoring was conducted at this station. The future permanent location for SR1 during impact monitoring is subject to finalisation after the HKBCF seawater intake is commissioned.

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

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

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

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

4.1 Action and Limit Levels

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

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

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1& SR8)					
General Water Quality Monitoring	DO in mg/L (Surface, Middle & Bottom)	Surface and Middle 4.5 mg/L		Surface and Middle 4.1 mg/L 5 mg/L for Fish Culture Zone (SR7) only	
		Bottom 3.4 mg/L		Bottom 2.7 mg/L	
	Suspended Solids (SS) in mg/L	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium)	0.2		0.2	
	Representative Heavy Metals for	3.2		3.6	

Parameters	Action Level (AL)	Limit Level (LL)
regular DCM monitoring (Nickel)		
Action and Limit Levels SR1		
SS (mg/l)	33	42
Action and Limit Levels SR8		
SS (mg/l)	52	60

Notes:

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

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

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

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

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

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

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

4.2 Monitoring Equipment

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

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI ProDSS (Serial No. 16H104233)	27 Jun 2018	**Appendix E**
	YSI ProDSS (Serial No. 16H104234)	25 Jul 2018	
	YSI ProDSS (Serial No. 17E100747)	27 Jun 2018	
	YSI ProDSS (Serial No. 17H105557)	25 Jul 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	23 May 2018	Monthly EM&A Report No. 30, Appendix D
	YSI 6920 V2 (Serial No. 000109DF)	23 May 2018	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	19 Jun 2018	**Appendix E**

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

Calibration certificates of the monitoring equipment used in the reporting period listed in **Table 4.4** are still valid.

4.3.3 Laboratory Measurement / Analysis

Analysis of SS and heavy metals have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2 mg/L
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2 µg/L
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2 µg/L

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**. Monitoring session on 14 July 2018 was cancelled due to adverse weather. It should be noted that Tropical Storm Sou-Tinh and a tropical depression hit Hong Kong on 17, 18, 23 and 24 Jul 2018 during the reporting period. The water quality monitoring results might be affected by these weather events.

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

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
03/07/2018																		D
05/07/2018																		
07/07/2018																		
10/07/2018																		
12/07/2018																		
17/07/2018																		
19/07/2018																		
21/07/2018																		
24/07/2018																		
26/07/2018																		
28/07/2018																		
31/07/2018																		
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

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

Monitoring results triggered the Limit Level on one monitoring day at a SR station located downstream of the Project. However, all monitoring results recorded at the IM stations, which were located closer to active construction activities, were within the Action and Limit Levels. Therefore, the case was considered not due to the Project.

Table 4.8 presents a summary of the DO compliance status at IM and SR stations during mid-flood tide for the reporting period.

Table 4.8: Summary of DO (Surface and Middle) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7
03/07/2018																	
05/07/2018																	
07/07/2018																	
10/07/2018																	
12/07/2018																	
17/07/2018																	
19/07/2018																	
21/07/2018																	
24/07/2018																	
26/07/2018																	
28/07/2018																	
31/07/2018																	
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

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

Monitoring results triggered the corresponding Limit Level on one monitoring day. The case occurred at a monitoring station upstream of the Project during flood tide and would unlikely be affected by the Project.

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7	SR8
03/07/2018																			
05/07/2018																			
07/07/2018																			
10/07/2018																			
12/07/2018																			
17/07/2018	D																		
19/07/2018																			
21/07/2018																			
24/07/2018																			
26/07/2018																			
28/07/2018																			
31/07/2018																			
No. of result triggereing Action or Limit Level	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Monitoring results triggered the corresponding Action Level on one monitoring day at a monitoring station located downstream of the Project. Details of the Project's marine construction activities on the concerned monitoring day was collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.10**.

Table 4.10: Summary of Findings from Investigation of SS Monitoring Results (Mid-Ebb Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
17/07/2018	DCM works	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that DCM works were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For monitoring result at IM1 on 17 July 2018, results at other impact monitoring stations in the same tide, including IM2 which is similarly close to the active works area, were within the corresponding Action and Limit Levels. The case was therefore considered an isolated incident with no spatial nor temporal trend to indicate any connection to the Project. With no silt plume was observed during DCM works and mitigation measures implemented properly, the case was considered not due to Project.

Table 4.11 presents a summary of SS compliance status at IM and SR stations during mid-flood tide for the reporting period.

Table 4.11: Summary of SS Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6	SR7	SR8
03/07/2018																		
05/07/2018																		
07/07/2018																		
10/07/2018																		
12/07/2018																		
17/07/2018																		
19/07/2018																		
21/07/2018																		
24/07/2018																		
26/07/2018																		
28/07/2018																		
31/07/2018																		
No. of result triggereing Action or Limit Level	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0

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

Monitoring results triggered the corresponding Action Levels on three monitoring days. All the cases were recorded at monitoring stations located upstream of the Project during flood tide and would unlikely be affected by the Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

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

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

Table 5.2: Construction Waste Statistics

	Excavated Material (m^3)[1]	C&D[2] 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)
Jan 2018[3]	-	430	-	-	-	-	-
Jun 2018[3]	-	-	-	12,509	-	-	227
Jul 2018[4]	717	1,952	0	15,104	1,220	44,100	408

Notes:

(1) The excavated materials were temporarily stored at stockpiling area and will be reused in the Project.
(2) C&D refers to Construction and Demolition.
(3) Only updated figures are presented.
(4) Metals and paper were recycled in the reporting period.

6 Chinese White Dolphin Monitoring

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

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

6.1 Action and Limit Levels

The Action and Limit Levels for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of Action and Limit Levels for CWD monitoring were summarized in **Table 6.1**.

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

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

Notes: (referring to the baseline monitoring report)

(1) Action Level – running quarterly STG & ANI will be calculated from the three preceding survey months. For CWD monitoring for July 2018, data from 1 May 2018 to 31 July 2018 was used to calculate the running quarterly encounter rates STG & ANI;

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month June 2018 (calculated by data from April 2018 to June 2018) and the running quarterly encounter rates of this month (calculated by data from May 2018 to July 2018).

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

The planned vessel survey transect lines follow the waypoints set for construction phase monitoring as proposed in the Manual and depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas

Waypoint	Easting	Northing	Waypoint	Easting	Northing
		NEL			
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NWL			
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
		AW			
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		WL			
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
		SWL			
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL covering the AW, WL and SWL areas as proposed in the Manual and are consistent with the AFCD long-term monitoring programme (except AW). There are two types of transect lines:

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and going around islands.

All data collected on both primary and secondary transect lines were used for analysis of sighting distribution, group size, activities including association with fishing boat, and mother-calf pairs. Only on-effort data collected under conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20 m vessel with a flying bridge observation platform about 4 to 5 m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with

a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

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

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

6.3.2 Photo Identification

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

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to photo both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey obtains fine-scale information on the time of day and movement patterns of the CWDs. A digital theodolite (Sokkia/Sokkisha Model DT5 or similar equipment) with 30-power magnification and 5-s precision was used to obtain the vertical and horizontal angle of each dolphin and vessel position. Angles were converted to geographic coordinates (latitude and longitude) and data were recorded using *Pythagoras* software, Version 1.2. This method delivers precise positions of multiple spatially distant targets in a short period of time. The technique is fully non-invasive, and allows for time and cost-effective descriptions of dolphin habitat use patterns at all times of daylight.

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could

not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3 km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking of CWD, all vessels that moved within 2-3 km of the station were tracked, with effort made to obtain at least two positions for each vessel.

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 5, 9, 11, 17, 19, 20, 26, and 30 July 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

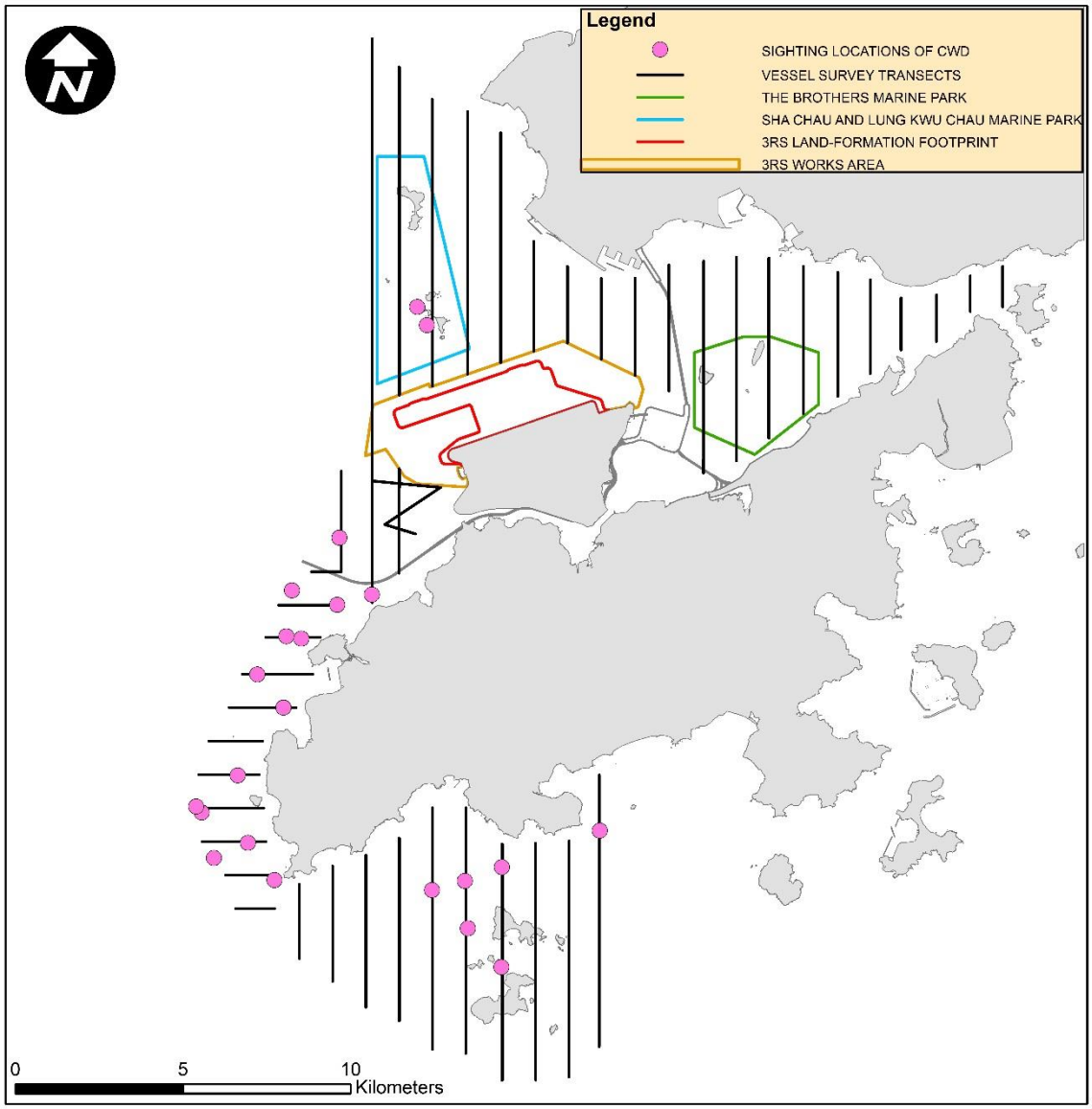
A total of around 452.91 km of survey effort was collected from these surveys, with around 87.61% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In July 2018, 22 sightings with 59 dolphins were sighted. Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in July 2018 is illustrated in **Figure 6.3**. In NWL, two CWD sightings were recorded at the western side of Sha Chau and Sheung Sha Chau within the Sha Chau and Lung Kwu Chau Marine Park, while another sighting was recorded at the southwestern tip of the survey area. In WL, CWD sightings were scattered from the northern part of the survey area down to Fan Lau with more sightings located around Tai O and Peaked Hill. In SWL, the majority of CWD sightings were recorded at the northern and central parts of Soko Islands. No sighting of CWD was recorded in NEL survey area.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 22 pink circles on the map indicating the sighting locations of CWD. Some of them were very close to each other and therefore appear overlapped on this distribution map.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from July 2018. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

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

Encounter Rate by Number of Dolphins (ANI)

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

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

In July 2018, a total of around 396.81 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 20 on-effort sightings with 55 dolphins were sighted under such condition. Calculation of the encounter rates in July 2018 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from May to July 2018), a total of around 1175.19 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 44 on-effort sightings and a total number of 136 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 July 2018 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger Action Level.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
July 2018	5.04	13.86
Running Quarter from May 2018 to July 2018(1)	3.74	11.57
Action Level	Running quarterly(1) < 1.86	Running quarterly(1) < 9.35

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from May to July 2018, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In July 2018, 22 groups with 59 dolphins were sighted, and the average group size of CWDs was 2.68 dolphins per group. Sightings with small group size (i.e. 1-2 dolphins) were dominant. Two sightings with large group size (i.e. 10 or more dolphins) were recorded in WL.

Activities and Association with Fishing Boats

Six out of 22 sightings of CWDs were recorded engaging in feeding activities in July 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In July 2018, five sightings were recorded with the presence of mother-and-unspotted calf, mother-and-unspotted juvenile or mother-and-spotted juvenile pairs. Three of these sightings were sighted in WL while other two were encountered in NWL.

6.4.2 Photo Identification

In July 2018, a total number of 35 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
NLMM006	20-Jul-18	2	NWL
		3	NWL
NLMM013	20-Jul-18	2	NWL
		3	NWL
NLMM016	11-Jul-18	2	WL
NLMM023	11-Jul-18	7	WL
NLMM043	11-Jul-18	7	WL
NLMM059	30-Jul-18	4	SWL
SLMM003	11-Jul-18	7	WL
SLMM019	30-Jul-18	3	SWL
SLMM027	17-Jul-18	5	WL
SLMM028	30-Jul-18	3	SWL
SLMM064	11-Jul-18	7	WL
WLMM001	11-Jul-18	8	WL
WLMM004	11-Jul-18	7	WL
WLMM005	11-Jul-18	8	WL
WLMM006	17-Jul-18	3	WL
WLMM009	17-Jul-18	3	WL
WLMM020	11-Jul-18	7	WL
WLMM027	30-Jul-18	2	SWL
		4	SWL
WLMM048	11-Jul-18	7	WL
		8	WL
WLMM051	11-Jul-18	4	WL
WLMM053	17-Jul-18	1	WL
WLMM060	11-Jul-18	8	WL
WLMM062	11-Jul-18	8	WL
WLMM063	11-Jul-18	7	WL
WLMM071	11-Jul-18	6	WL
		8	WL
WLMM075	11-Jul-18	6	WL
WLMM081	11-Jul-18	3	WL
WLMM085	11-Jul-18	7	WL
WLMM103	17-Jul-18	1	WL
WLMM107	11-Jul-18	7	WL
WLMM115	20-Jul-18	1	NWL
WLMM116	11-Jul-18	7	WL
		8	WL
	30-Jul-18	2	SWL
		4	SWL
WLMM117	11-Jul-18	7	WL
WLMM118	17-Jul-18	5	WL
SLMM066	26-Jul-18	1	SWL

6.4.3 Land-based Theodolite Tracking Survey

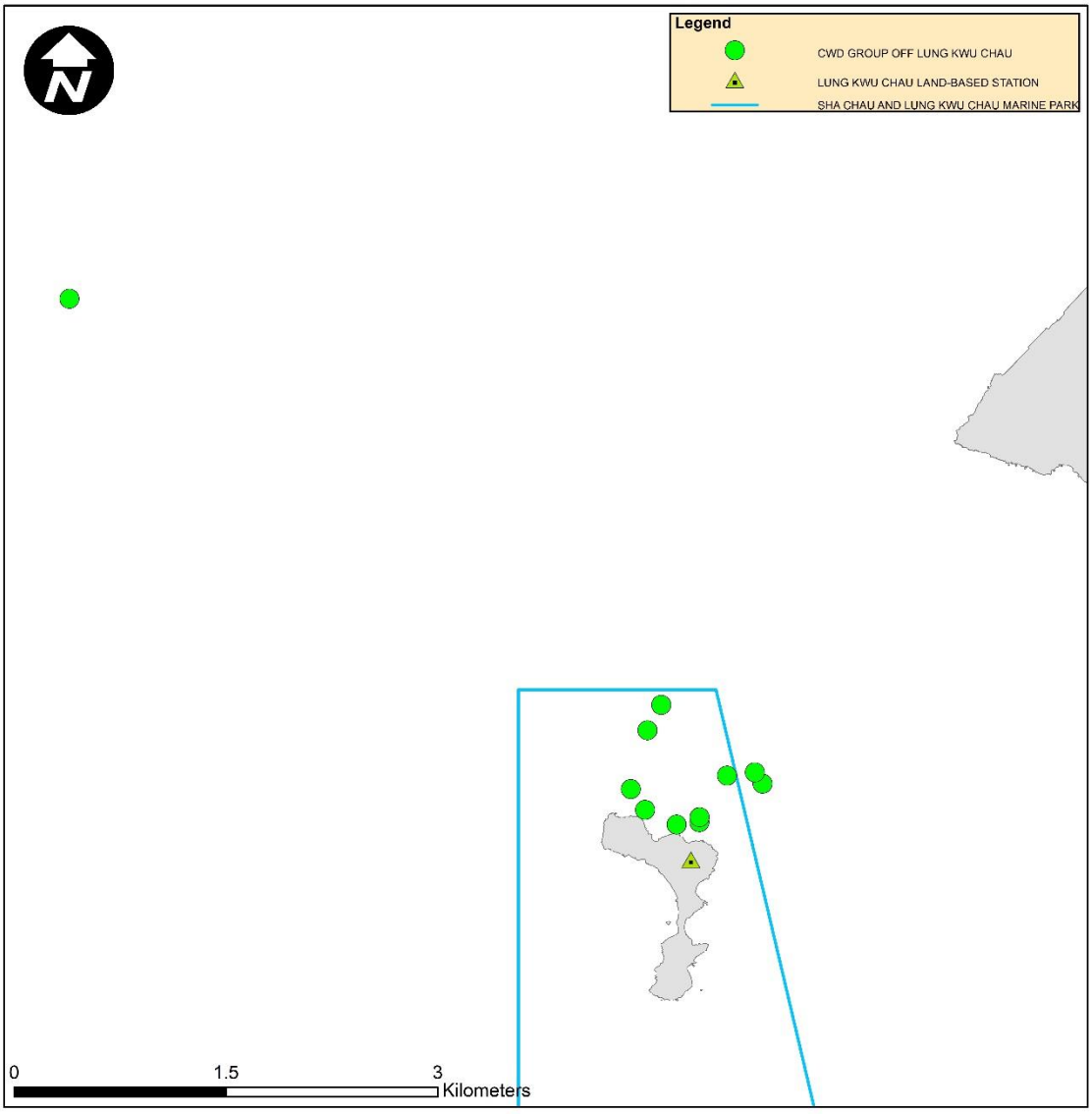
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 11, 12 and 20 July 2018 and at SC on 19 and 26 July 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 11 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 July 2018 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	3	18:00	11	0.61
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**11**	**0.37**

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 20 July 2018 and subsequently redeployed and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed

to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractors for sand blanket laying works, in which dolphin observers were deployed by each contractor in accordance with the MMWP. Teams of at least two dolphin observers were deployed at 16 to 23 dolphin observation stations by the contractors for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 637 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking survey and PAM will be provided in future annual reports after a larger sample size of data has been collected.

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and five days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed both within the site area as well as outside the project sites which was likely to be affected, directly or indirectly, by the site activities. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the appropriate recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

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

Good site practices were observed in site inspections during the reporting period. ET participated in environmental drills, such as chemical spill drills, as observer. Advice were given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organized for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

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

7.2 Audit of SkyPier High Speed Ferries

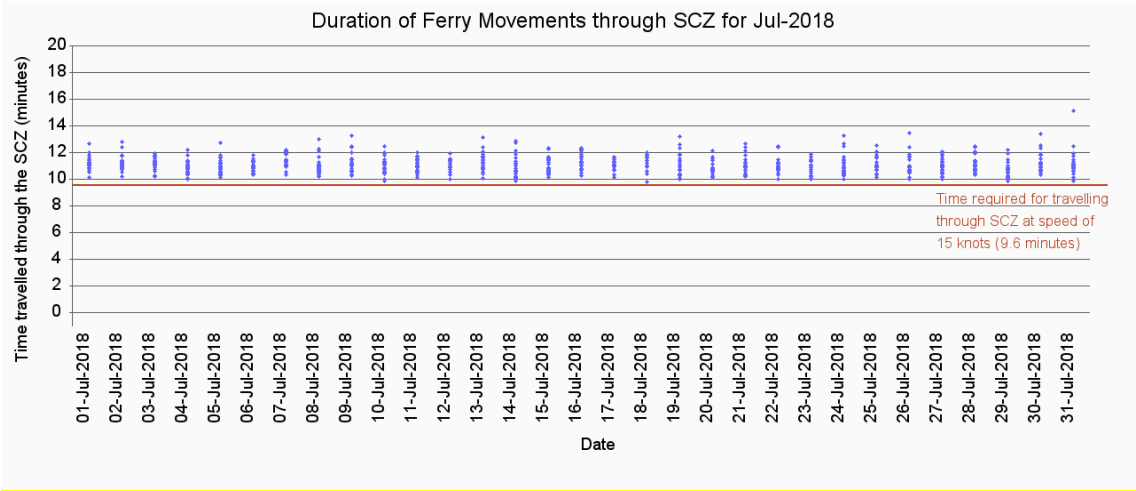
The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has

committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 88 to 90 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, 887 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in July 2018 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in July 2018 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

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



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

Three ferries were recorded with minor deviation from the diverted route on 12 July 2018, 14 July 2018, and 19 July 2018. Notices were sent to the ferry operators and the cases are under investigation by ET. The investigation results will be presented in the next monthly EM&A report.

As mentioned in the Construction Phase Monthly EM&A Report No. 30, there was one ferry recorded with minor deviation from the diverted route on 13 June 2018. Investigation was completed. ET's investigation found that the vessel captain had to give way to a vessel for safety reason.

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

Requirements in the SkyPier Plan	1 July to 31 July 2018
Total number of ferry movements recorded and audited	887
Use diverted route and enter / leave SCZ through Gate Access Points	3 deviations.

Requirements in the SkyPier Plan	1 July to 31 July 2018
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (9.0 knots to 13.9 knots), which complied with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	88 to 90 daily movements (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

The updated Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) was submitted and approved in November 2016 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Five skipper training sessions were held by contractor's Environmental Officer. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, six skippers were trained by ET and nine skippers were trained by contractor's Environmental Officer. In total, 1019 skippers were trained from August 2016 to July 2018.
- The Marine Surveillance System (MSS) automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

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

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

7.5 Ecological Monitoring

In accordance with the Manual, ecological monitoring shall be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island during the HDD construction works period from

August to March. Since the construction works on Sheung Sha Chau is suspended during the ardeid's breeding season between April and July, no ecological monitoring was carried out in this reporting period.

7.6 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

A complaint was received on 3 Jul 2018 regarding an incident of suspected effluent discharge from a construction vessel of Contract 3205. Investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project. Based on contractor's records, deck cleaning due to minor overflow of cement grout was conducted on the vessel during the said incident, and the wash water was collected to an onboard wastewater treatment facility for treatment and reuse. ET conducted a site inspection on the vessel next day after receiving the complaint, where the wastewater treatment facility was found in normal operation and no discharge was observed. Nevertheless, ET in conjunction with the AAHK, gave further briefing to

the contractor during the Environmental Management Meeting. ET would also continue the regular site audit to ensure the pollution control measures are properly implemented.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

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

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

- Laying of sand blanket;
- PVD installation;
- Seawall construction;
- Marine filling; and
- DCM works.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

- Excavation works;
- Pipe installation; and
- Electrical and mechanical (E&M) works and builders works of antenna farm.

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

- Site clearance;
- Brick laying;
- Fitting out of E&M works; and

- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, utility, and road work;
- Piling works; and
- Demolition of footbridge.

Contract 3505 Terminal 2 Spectrum Lighting Mock-ups

- Assembly of structural frame;
- Floor drilling; and
- Installation of lighting fittings and panels.

APM works:

Contract 3602 Existing APM System Modification Works

- Site establishment; and
- Construction of concrete plinth.

Baggage Handling System (BHS) works:

Contract 3603 3RS Baggage Handling System

- Site establishment.

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Site establishment;
- Diversion of underground utilities;
- Piling and foundation works; and
- Demolition of footbridge.

8.2 Key Environmental Issues for the Coming Reporting Period

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

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from laying of sand blanket, DCM works, and marine filling;
- DEZ monitoring for ground improvement works (DCM works and PVD installation) and seawall construction;
- Implementation of MMWP for silt curtain deployment by the contractors' dolphin observers;
- Terrestrial ecological monitoring on Sheung Sha Chau;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

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

All the monitoring works for construction dust, construction noise, water quality, construction waste, 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 turbidity, total alkalinity, nickel and chromium obtained during the reporting period complied with 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 DO and SS, some of the testing results triggered the relevant Action and Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

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

On the implementation of MMWP, dolphin observers were deployed by the contractors for laying of silt curtains for sand blanket works in accordance with the MMWP. On the implementation of DEZ Plan, dolphin observers at 16 to 23 dolphin observation stations were deployed for continuous monitoring of the DEZ by all contractors for ground improvement works (DCM works and PVD installation) and seawall construction in accordance with the DEZ Plan. Trainings for the proposed dolphin observers were provided by the ET prior to the aforementioned works, with 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. The contractor's record was checked by the ET during site inspection. Audits of acoustic decoupling measures for construction vessels were also carried out by the ET, and relevant recommendations were made during regular site inspections.

On the implementation of the SkyPier Plan, the daily movements of all SkyPier high speed ferries (HSFs) in July 2018 were in the range of 88 to 90 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 887 HSF movements under the SkyPier Plan were recorded in the reporting period. All HSFs had travelled through the SCZ with average speeds under 15 knots (9.0 to 13.9 knots), which were in compliance with the SkyPier Plan. Three deviations from the diverted route in July 2018 was recorded in the HSF monitoring. In summary,

the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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

Figures

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

Contract P560 (R)- Daylighting Location

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

RECLAMATION WORKS AREA (please refer to Figure 1.2)

Contract 3801 - Works Area
Contract 3501 - Works Area
Contract 3502, 3602 - Works Area
Contract 3505 - Works Area
Contract 3503 - Works Area
Contract 3201- 3206 and AAHK Site Offices
Contract 3301 - Works Area
Contract P560 (R)- Launching Site
Contract 3301 - Works Area
Contract 3301 - Pre-cast Area
Contract 3301 - Works Area
Contract 3602 - Site Office
Contract 3503 - Stockpiling Area
Contract P560 (R) - Site Office
Contract 3501 - Stockpiling Area
Contract 3801 - Stockpiling Area
Contract P560 (R) - Stockpiling Area
Contract 3801 - Stockpiling Area

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

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Mott MacDonald

Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. A

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

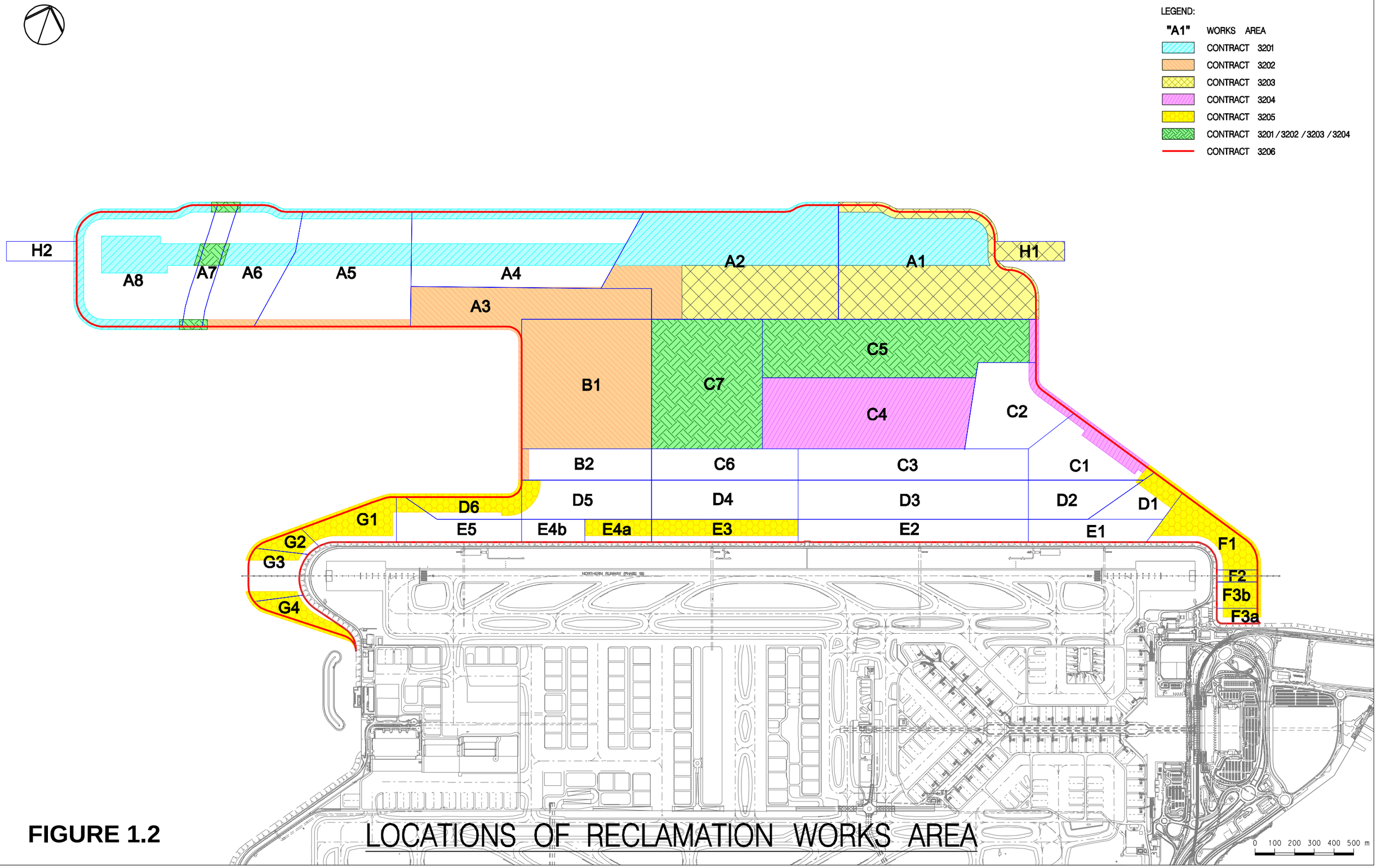
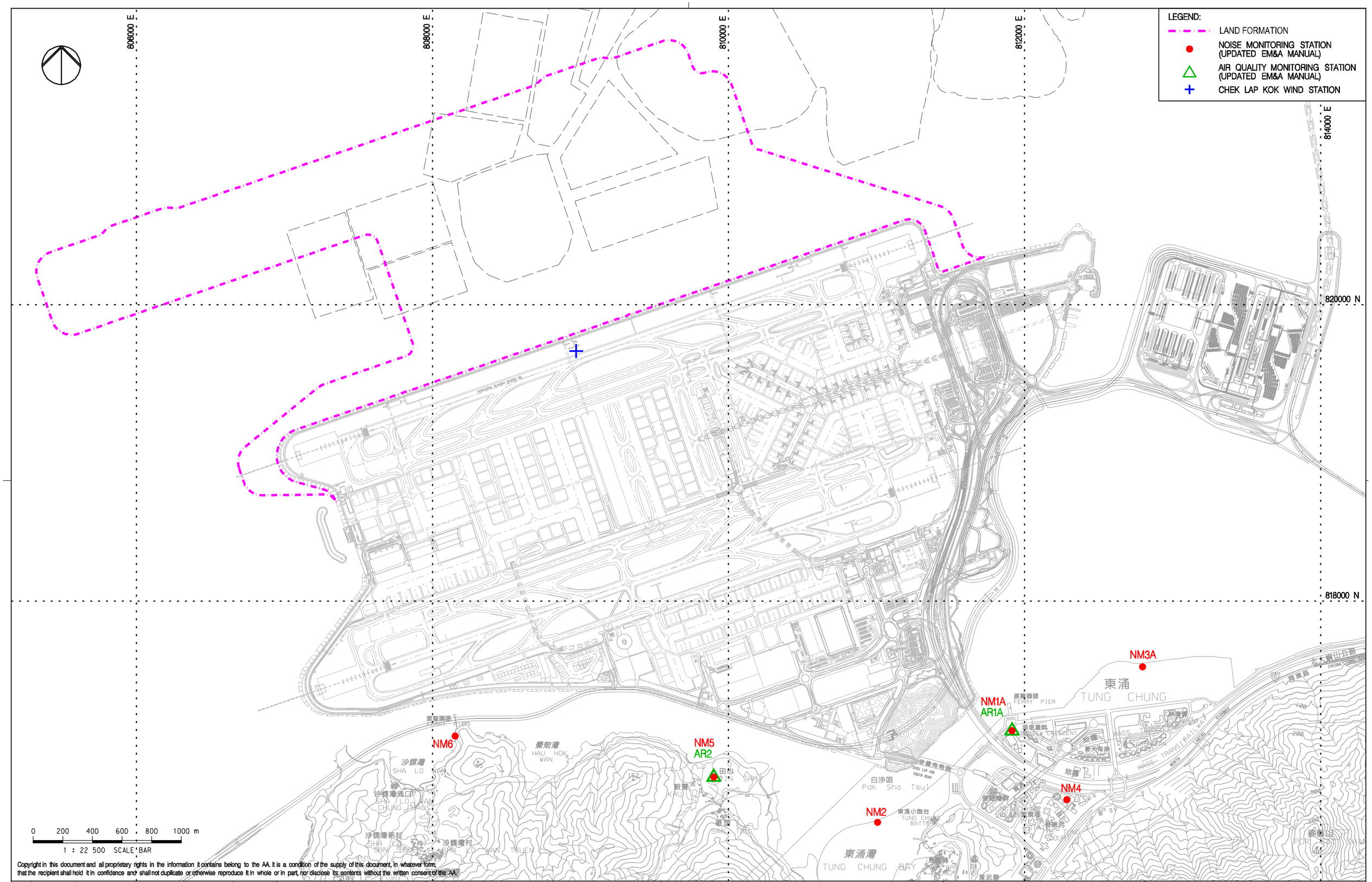


FIGURE 1.2

LOCATIONS OF RECLAMATION WORKS AREA



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

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Mott MacDonald

Title

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

Consultant's Signatures for Approval		Date
Design	AM	11FEB16
Checkers	AM / TK	11FEB16
Approver	EC	11FEB16

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

Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\160211\FIG 2.1.dgn

805000 E
810000 E
815000 E
820000 E
825000 N
820000 N
815000 N
HKSAR BOUNDARY
C1
C2
C3
IM1
IM2
IM3
IM4
IM5
IM6
IM7
IM8
IM9
IM10
IM11
IM12
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
LEGEND:
LAND FORMATION
IMPACT STATION
SENSITIVE RECEIVER
CONTROL STATION
0 500 1000 1500 2000 m
1 : 60 000 SCALE BAR

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A	25MAY17	FIRST ISSUE	HY
B	07AUG17	GENERAL REVISION	JL
C	25MAY18	GENERAL REVISION	SH

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MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	25MAY18
Checkers	DC / TK	25MAY18
Approver	EC	25MAY18

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

Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. C

Filename: J:\355482\SKETCH\SK018\SK018_C.dgn

800000 E
805000 E
810000 E
815000 E
820000 E
825000 E
830000 E
835000 E
840000 E
845000 E

830000 N
825000 N
820000 N
815000 N
810000 N
805000 N

NORTHWEST LANTAU
NORTHEAST LANTAU
SOUTHWEST LANTAU
AIRPORT WEST
WEST LANTAU

LEGEND:
- HKSAR BOUNDARY
- LAND FORMATION
- TEMPORARY WORKS AREA BOUNDARY
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE
- DOLPHIN VESSEL SURVEY TRANSECT ROUTE

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

0 1 2 3 4 km
1 : 125 000 SCALE BAR

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B	27JUL16	GENERAL REVISION	JT
C	06FEB17	GENERAL REVISION	JT
D	01MAR17	GENERAL REVISION	JT

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MOTT MACDONALD

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

Consultant's Signatures for Approval		Date
Design	JC	01MAR17
Checkers	JC / TK	01MAR17
Approver	EC	01MAR17

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

Drawing No. FIGURE 6.1

Scale at A3 1 : 125000

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\170301\MCL-P132-EMA-10-003.dgn

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

E
D

HKSAR BOUNDARY

LEGEND:
LAND FORMATION
HONG KONG INTERNATIONAL AIRPORT
LAND BASED SURVEY LOCATION

0 500 1000 1500 2000 m
1 : 45,000 SCALE BAR

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B	06FEB17	GENERAL REVISION	JC

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MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

Consultant's Signatures for Approval		Date
Design	JC	06FEB17
Checkers	JC / TK	06FEB17
Approver	EC	06FEB17

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

Drawing No.

FIGURE 6.2

Scale at A3
1 : 45000

Rev. B

Filename: J:\355482\REPORT\ENV\EMA\170206\MCL-P132-EMA-10-004.dgn

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

URMSTON ROAD

龍鼓洲
LUNG KWU CHAU

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

沙洲
SHA CHAU

A5

HKSAR BOUNDARY

LEGEND:

LAND FORMATION

HONG KONG INTERNATIONAL AIRPORT

AUTONOMOUS PASSIVE ACOUSTIC MONITORING LOCATION

0 500 1000 1500 2000 m

1 : 45 000 SCALE BAR

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A	29AUG17	FIRST ISSUE	JT

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MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

Consultant's Signatures for Approval		Date
Design	JC	29AUG17
Checkers	JC / TK	29AUG17
Approver	EC	29AUG17

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\170802\FIG 6.5.dgn

Appendix A. Contract Description

Contract Description

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

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	FJT-CHEC-ZHEC Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
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	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

Contract No.	Contract Title	Contractor	Key Construction Activities
	Substructure Works		of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3505	Terminal 2 Spectrum Lighting Mock-ups	Union Contractors Ltd.	The works covered by the Contract 3505 comprise the design, supply, manufacture, delivery, and installation of the Spectrum Lighting Mock-ups to demonstrate the lighting effects on various interior elements of the new Terminal 2.
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (HK) Ltd.	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and • Civil and structural engineering works.

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

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

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

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;		N/A
			▪ 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	NA *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, 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
			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	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 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.		N/A

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 and Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	**Modification of the Existing Seawall** ▪ Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** ▪ During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment. For construction of the eastern approach lights at the CMPs ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings; ▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site.	Within construction site / Duration of the construction phase	N/A
8.8.1.8	5.1	-	**Construction of Site Runoff and Drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended: ▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		
			▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I
			▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;		I
			▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		N/A
			▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	I
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	I
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;		I
			▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work;		I
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and		N/A

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

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

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

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

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

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

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

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

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

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

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jul-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 16:09 mid-flood: 9:16	4 Site Inspection	5 Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 17:32 mid-flood: 11:00	6 Site Inspection AR1A, AR2	7 WQ General & Regular DCM mid-ebb: 19:34 mid-flood: 13:40
8	9 Site Inspection CWD Survey (Vessel)	10 Site Inspection WQ General & Regular DCM mid-ebb: 10:44 mid-flood: 17:29	11 Site Inspection CWD Survey (Vessel, Land-based)	12 Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 12:19 mid-flood: 19:26	13 Site Inspection	14 WQ General & Regular DCM* mid-ebb: 13:55 mid-flood: 21:04
15	16 NM6	17 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:21 mid-flood: 9:29	18 AR1A, AR2 NM1A, NM3A, NM4, NM5	19 Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 18:07 mid-flood: 11:41	20 Site Inspection CWD Survey (Vessel, Land-based)	21 WQ General & Regular DCM mid-ebb: 20:23 mid-flood: 14:36
22	23	24 Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 11:07 mid-flood: 18:19	25 Site Inspection	26 Site Inspection CWD Survey (Vessel, Land-based) NM6 WQ General & Regular DCM mid-ebb: 12:22 mid-flood: 19:33	27 Site Inspection	28 WQ General & Regular DCM mid-ebb: 13:32 mid-flood: 20:37
29	30 CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	31 Site Inspection WQ General & Regular DCM mid-ebb: 15:08 mid-flood: 8:26				

Notes:

Contract Number - Site Inspection

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

NM1A/AR1A - Man Tung Road Park
NM3A - Site Office
NM4 - Ching Chung Hau Po Woon Primary School
NM5/AR2 - Village House, Tin Sum
NM6 - House No. 1, Sha Lo Wan

WQ - Water Quality

DCM - Deep Cemenet Mixing

* WQ monitoring session on 14 July 2018 was cancelled due to adverse weather.

Tentative Monitoring Schedule of Next Reporting Period

Aug-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Site Inspection CWD Survey (Land-based) NM6	**2** Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 16:16 mid-flood: 09:51	**3** Site Inspection AR1A, AR2	**4** WQ General & Regular DCM mid-ebb: 17:45 mid-flood: 11:50
5	**6** CWD Survey (Land-based)	**7** Site Inspection CWD Survey (Vessel) NM6 WQ General & Regular DCM mid-ebb: 15:14 mid-flood: 08:31	**8** Site Inspection	**9** Site Inspection CWD Survey (Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 Ecological Monitoring WQ General & Regular DCM mid-ebb: 11:13 mid-flood: 18:26	**10** Site Inspection	**11** WQ General & Regular DCM mid-ebb: 12:54 mid-flood: 19:58
12	**13** CWD Survey (Land-based) NM6	**14** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 09:51 mid-flood: 17:28	**15** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	**16** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:41 mid-flood: 10:17	**17** Site Inspection CWD Survey (Vessel)	**18** WQ General & Regular DCM mid-ebb: 18:26 mid-flood: 12:41
19	**20** CWD Survey (Vessel)	**21** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 11:07 mid-flood: 18:19	**22** Site Inspection	**23** Site Inspection NM6 WQ General & Regular DCM mid-ebb: 12:22 mid-flood: 19:33	**24** Site Inspection	**25** WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 19:36
26	**27** AR1A, AR2 NM1A, NM3A, NM4, NM5	**28** Site Inspection WQ General & Regular DCM mid-ebb: 14:10 mid-flood: 07:38	**29** Site Inspection NM6	**30** Site Inspection WQ General & Regular DCM mid-ebb: 15:13 mid-flood: 08:58	**31** Site Inspection AR1A, AR2	
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM3A - Site Office 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

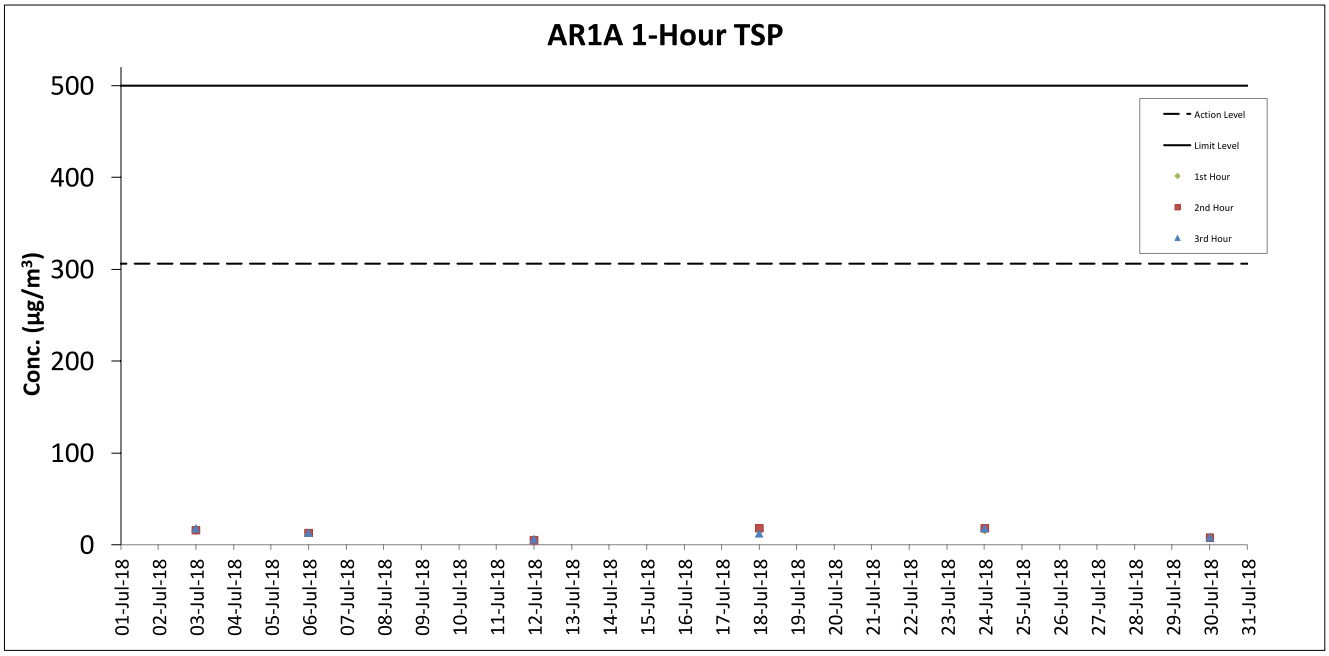
Air Quality Monitoring Results

1-hour TSP Results
Station: AR1A- Man Tung Road Park

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
03-Jul-18	14:10	Cloudy	5.8	195	15	306	500
03-Jul-18	15:10	Cloudy	6.3	206	16	306	500
03-Jul-18	16:10	Cloudy	6.5	209	18	306	500
06-Jul-18	13:00	Sunny	6.0	195	13	306	500
06-Jul-18	14:00	Sunny	5.9	206	13	306	500
06-Jul-18	15:00	Sunny	6.6	203	13	306	500
12-Jul-18	13:07	Sunny	5.6	195	6	306	500
12-Jul-18	14:07	Sunny	6.0	206	5	306	500
12-Jul-18	15:07	Sunny	6.5	124	6	306	500
18-Jul-18	09:00	Cloudy	9.0	195	16	306	500
18-Jul-18	10:00	Cloudy	7.6	206	18	306	500
18-Jul-18	11:00	Cloudy	6.2	93	12	306	500
24-Jul-18	13:00	Cloudy	7.2	195	16	306	500
24-Jul-18	14:00	Cloudy	5.5	206	18	306	500
24-Jul-18	15:00	Cloudy	5.3	157	18	306	500
30-Jul-18	13:00	Sunny	6.2	195	8	306	500
30-Jul-18	14:00	Sunny	5.7	206	8	306	500
30-Jul-18	15:00	Sunny	4.2	214	8	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 ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
03-Jul-18	09:00	Cloudy	8.0	195	18	298	500
03-Jul-18	10:00	Cloudy	7.9	206	12	298	500
03-Jul-18	11:00	Cloudy	8.6	212	16	298	500
06-Jul-18	09:00	Sunny	3.5	195	10	298	500
06-Jul-18	10:00	Sunny	4.0	206	9	298	500
06-Jul-18	11:00	Sunny	5.4	203	10	298	500
12-Jul-18	09:00	Sunny	5.0	195	2	298	500
12-Jul-18	10:00	Sunny	4.5	206	2	298	500
12-Jul-18	11:00	Sunny	4.1	113	2	298	500
18-Jul-18	09:00	Cloudy	9.0	195	6	298	500
18-Jul-18	10:00	Cloudy	7.6	206	9	298	500
18-Jul-18	11:00	Cloudy	6.2	93	14	298	500
24-Jul-18	09:00	Cloudy	8.5	195	21	298	500
24-Jul-18	10:00	Cloudy	5.8	206	14	298	500
24-Jul-18	11:00	Cloudy	5.4	152	14	298	500
30-Jul-18	08:50	Sunny	2.4	195	1	298	500
30-Jul-18	09:50	Sunny	1.5	206	1	298	500
30-Jul-18	10:50	Sunny	2.4	298	1	298	500


AR1A 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
05-Jul-18
06-Jul-18
07-Jul-18
08-Jul-18
09-Jul-18
10-Jul-18
11-Jul-18
12-Jul-18
13-Jul-18
14-Jul-18
15-Jul-18
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21-Jul-18
22-Jul-18
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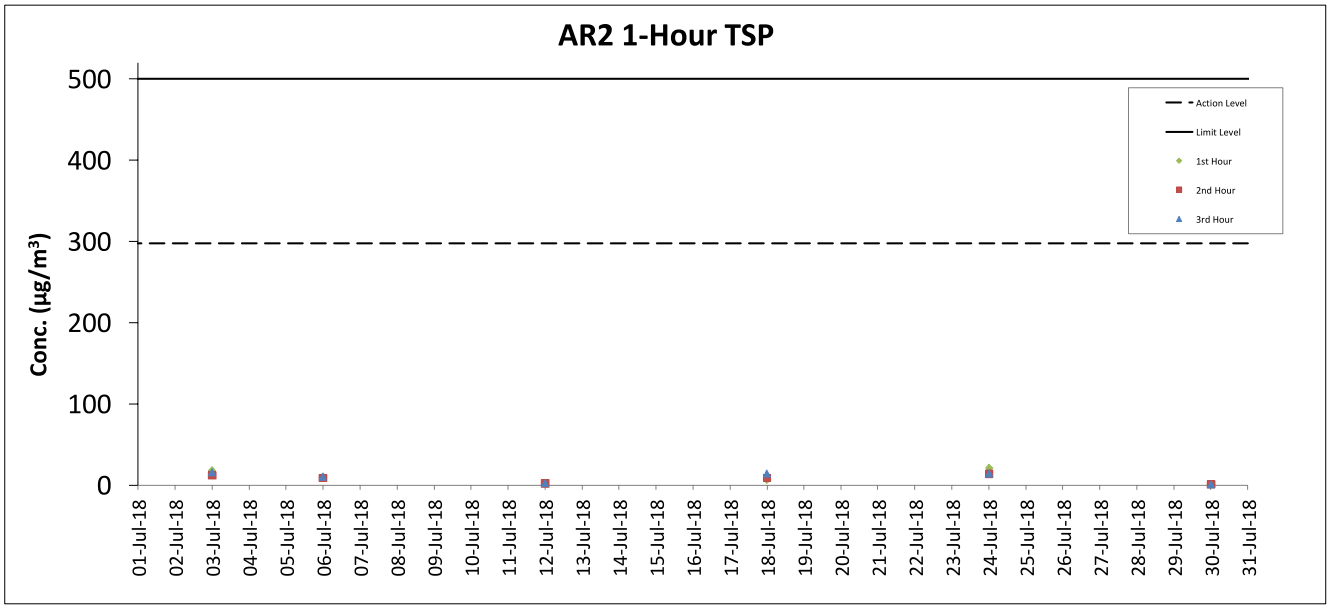
29-Jul-18
30-Jul-18
31-Jul-18


AR2 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
05-Jul-18
06-Jul-18
07-Jul-18
08-Jul-18
09-Jul-18
10-Jul-18
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26-Jul-18
27-Jul-18
28-Jul-18
29-Jul-18
30-Jul-18
31-Jul-18

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-Jul-18	Cloudy	14:30	73.0	62.5	73
03-Jul-18	Cloudy	14:35	73.5	63.0	
03-Jul-18	Cloudy	14:40	73.0	61.0	
03-Jul-18	Cloudy	14:45	71.5	59.5	
03-Jul-18	Cloudy	14:50	72.5	58.5	
03-Jul-18	Cloudy	14:55	71.5	58.5	
12-Jul-18	Sunny	13:20	72.0	66.5	73
12-Jul-18	Sunny	13:25	74.0	62.5	
12-Jul-18	Sunny	13:30	74.0	60.0	
12-Jul-18	Sunny	13:35	72.5	56.5	
12-Jul-18	Sunny	13:40	74.5	63.0	
12-Jul-18	Sunny	13:45	73.0	56.5	
18-Jul-18	Cloudy	09:20	73.5	61.5	72
18-Jul-18	Cloudy	09:25	70.0	58.5	
18-Jul-18	Cloudy	09:30	73.0	60.0	
18-Jul-18	Cloudy	09:35	73.5	60.5	
18-Jul-18	Cloudy	09:40	73.0	58.0	
18-Jul-18	Cloudy	09:45	71.5	58.0	
24-Jul-18	Cloudy	13:15	73.5	56.5	73
24-Jul-18	Cloudy	13:20	72.5	58.0	
24-Jul-18	Cloudy	13:25	73.5	57.0	
24-Jul-18	Cloudy	13:30	73.5	58.0	
24-Jul-18	Cloudy	13:35	75.0	58.0	
24-Jul-18	Cloudy	13:40	73.0	56.0	
30-Jul-18	Sunny	13:15	73.5	53.0	72
30-Jul-18	Sunny	13:20	71.0	53.5	
30-Jul-18	Sunny	13:25	72.0	52.0	
30-Jul-18	Sunny	13:30	71.0	53.0	
30-Jul-18	Sunny	13:35	72.5	55.5	
30-Jul-18	Sunny	13:40	72.0	53.5	

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

Noise Measurement Results
Station: NM3A- Site Office

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jul-18	Cloudy	09:45	66.5	64.0	61
03-Jul-18	Cloudy	09:50	65.5	64.0	
03-Jul-18	Cloudy	09:55	66.0	63.5	
03-Jul-18	Cloudy	10:00	66.0	64.0	
03-Jul-18	Cloudy	10:05	67.5	64.0	
03-Jul-18	Cloudy	10:10	66.0	64.0	
12-Jul-18	Sunny	09:35	68.0	63.0	65
12-Jul-18	Sunny	09:40	69.0	63.5	
12-Jul-18	Sunny	09:45	73.0	64.5	
12-Jul-18	Sunny	09:50	67.5	62.5	
12-Jul-18	Sunny	09:55	68.5	62.5	
12-Jul-18	Sunny	10:00	68.5	62.5	
18-Jul-18	Cloudy	14:35	69.0	61.5	61
18-Jul-18	Cloudy	14:40	67.5	62.0	
18-Jul-18	Cloudy	14:45	66.5	61.5	
18-Jul-18	Cloudy	14:50	66.5	61.0	
18-Jul-18	Cloudy	14:55	66.0	61.0	
18-Jul-18	Cloudy	15:00	70.5	62.0	
24-Jul-18	Cloudy	09:30	71.0	63.0	63
24-Jul-18	Cloudy	09:35	66.5	63.0	
24-Jul-18	Cloudy	09:40	69.5	63.0	
24-Jul-18	Cloudy	09:45	69.0	62.5	
24-Jul-18	Cloudy	09:50	67.5	62.5	
24-Jul-18	Cloudy	09:55	70.5	63.0	
30-Jul-18	Sunny	09:08	65.5	64.0	61
30-Jul-18	Sunny	09:13	66.0	64.0	
30-Jul-18	Sunny	09:18	68.0	64.0	
30-Jul-18	Sunny	09:23	65.5	63.5	
30-Jul-18	Sunny	09:28	67.0	64.0	
30-Jul-18	Sunny	09:33	65.0	64.0	

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-Jul-18	Cloudy	13:53	64.5	62.0	66
03-Jul-18	Cloudy	13:58	64.0	61.5	
03-Jul-18	Cloudy	14:03	63.5	61.5	
03-Jul-18	Cloudy	14:08	63.0	60.5	
03-Jul-18	Cloudy	14:13	64.0	61.0	
03-Jul-18	Cloudy	14:18	64.5	60.5	
12-Jul-18	Sunny	14:10	64.0	61.5	66
12-Jul-18	Sunny	14:15	64.0	61.5	
12-Jul-18	Sunny	14:20	65.0	62.0	
12-Jul-18	Sunny	14:25	65.0	62.0	
12-Jul-18	Sunny	14:30	65.0	62.0	
12-Jul-18	Sunny	14:35	64.0	62.0	
18-Jul-18	Cloudy	14:27	66.0	63.0	66
18-Jul-18	Cloudy	14:32	67.5	63.0	
18-Jul-18	Cloudy	14:37	68.0	64.0	
18-Jul-18	Cloudy	14:42	69.0	64.0	
18-Jul-18	Cloudy	14:47	67.0	62.5	
18-Jul-18	Cloudy	14:52	67.0	62.5	
24-Jul-18	Cloudy	14:11	64.0	60.5	66
24-Jul-18	Cloudy	14:16	64.0	60.0	
24-Jul-18	Cloudy	14:21	64.0	61.0	
24-Jul-18	Cloudy	14:26	64.0	61.0	
24-Jul-18	Cloudy	14:31	64.0	61.0	
24-Jul-18	Cloudy	14:36	64.5	61.0	
30-Jul-18	Sunny	13:47	62.5	58.5	64
30-Jul-18	Sunny	13:52	62.5	58.5	
30-Jul-18	Sunny	13:57	62.5	58.5	
30-Jul-18	Sunny	14:02	62.5	58.0	
30-Jul-18	Sunny	14:07	62.5	58.0	
30-Jul-18	Sunny	14:12	62.0	57.5	

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jul-18	Cloudy	09:00	51.5	43.0	53
03-Jul-18	Cloudy	09:05	50.5	44.0	
03-Jul-18	Cloudy	09:10	51.0	44.0	
03-Jul-18	Cloudy	09:15	54.5	45.5	
03-Jul-18	Cloudy	09:20	52.5	43.0	
03-Jul-18	Cloudy	09:25	54.0	44.0	
12-Jul-18	Sunny	09:00	55.5	52.5	57
12-Jul-18	Sunny	09:05	59.0	53.0	
12-Jul-18	Sunny	09:10	56.5	51.5	
12-Jul-18	Sunny	09:15	56.0	50.5	
12-Jul-18	Sunny	09:20	54.5	48.0	
12-Jul-18	Sunny	09:25	55.5	47.0	
18-Jul-18	Cloudy	09:17	56.0	50.5	57
18-Jul-18	Cloudy	09:22	61.0	54.5	
18-Jul-18	Cloudy	09:27	61.5	55.5	
18-Jul-18	Cloudy	09:32	61.5	55.0	
18-Jul-18	Cloudy	09:37	60.5	55.5	
18-Jul-18	Cloudy	09:42	58.0	54.0	
24-Jul-18	Cloudy	09:03	54.5	50.0	58
24-Jul-18	Cloudy	09:08	55.5	47.0	
24-Jul-18	Cloudy	09:13	56.5	47.5	
24-Jul-18	Cloudy	09:18	55.5	47.5	
24-Jul-18	Cloudy	09:23	62.0	47.5	
24-Jul-18	Cloudy	09:28	59.5	48.0	
30-Jul-18	Sunny	08:48	53.0	48.0	56
30-Jul-18	Sunny	08:53	53.0	48.5	
30-Jul-18	Sunny	08:58	56.0	49.5	
30-Jul-18	Sunny	09:03	54.5	47.0	
30-Jul-18	Sunny	09:08	52.5	48.0	
30-Jul-18	Sunny	09:13	52.0	48.5	

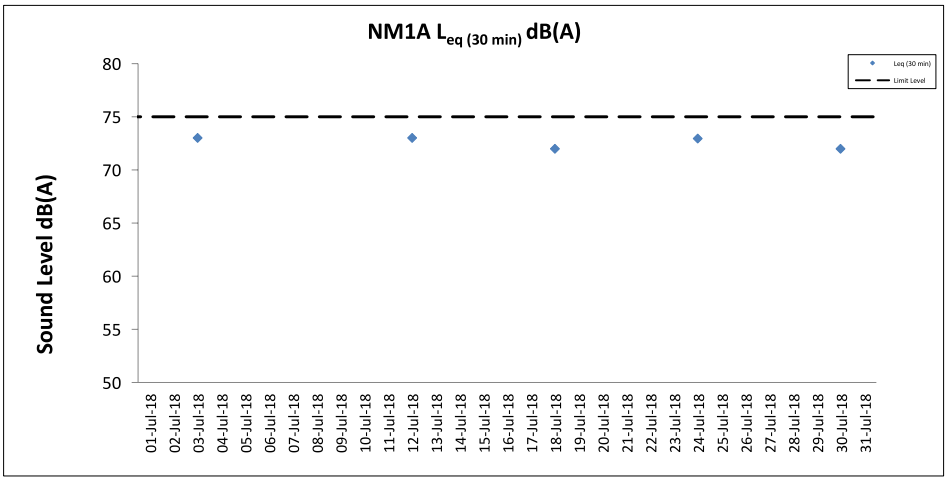
Remarks:
+3dB (A) correction was applied to free-field measurement.

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)
05-Jul-18	Fine	09:40	75.5	50.5	71
05-Jul-18	Fine	09:45	74.0	51.0	
05-Jul-18	Fine	09:50	76.5	62.5	
05-Jul-18	Fine	09:55	70.5	62.5	
05-Jul-18	Fine	10:00	73.0	62.0	
05-Jul-18	Fine	10:05	72.5	63.0	
12-Jul-18	Sunny	10:37	64.0	52.0	66
12-Jul-18	Sunny	10:42	66.0	54.5	
12-Jul-18	Sunny	10:47	63.5	51.5	
12-Jul-18	Sunny	10:52	68.0	53.0	
12-Jul-18	Sunny	10:57	71.0	53.0	
12-Jul-18	Sunny	11:02	65.5	52.0	
16-Jul-18	Cloudy	09:38	68.5	55.5	66
16-Jul-18	Cloudy	09:43	67.5	54.5	
16-Jul-18	Cloudy	09:48	68.5	54.5	
16-Jul-18	Cloudy	09:53	73.0	55.0	
16-Jul-18	Cloudy	09:58	73.0	59.0	
16-Jul-18	Cloudy	10:03	70.5	59.0	
26-Jul-18	Sunny	09:41	75.0	58.0	71
26-Jul-18	Sunny	09:46	74.0	56.5	
26-Jul-18	Sunny	09:51	75.5	57.5	
26-Jul-18	Sunny	09:56	76.0	58.5	
26-Jul-18	Sunny	10:01	78.0	59.0	
26-Jul-18	Sunny	10:06	71.0	56.0	

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


NM1A Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
05-Jul-18
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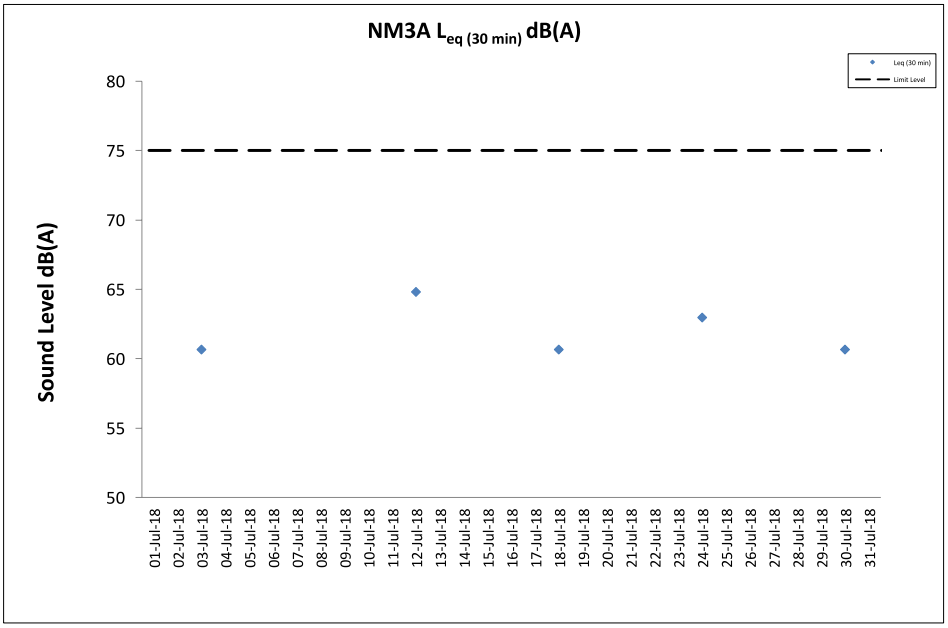
31-Jul-18


NM3A Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
05-Jul-18
06-Jul-18
07-Jul-18
08-Jul-18
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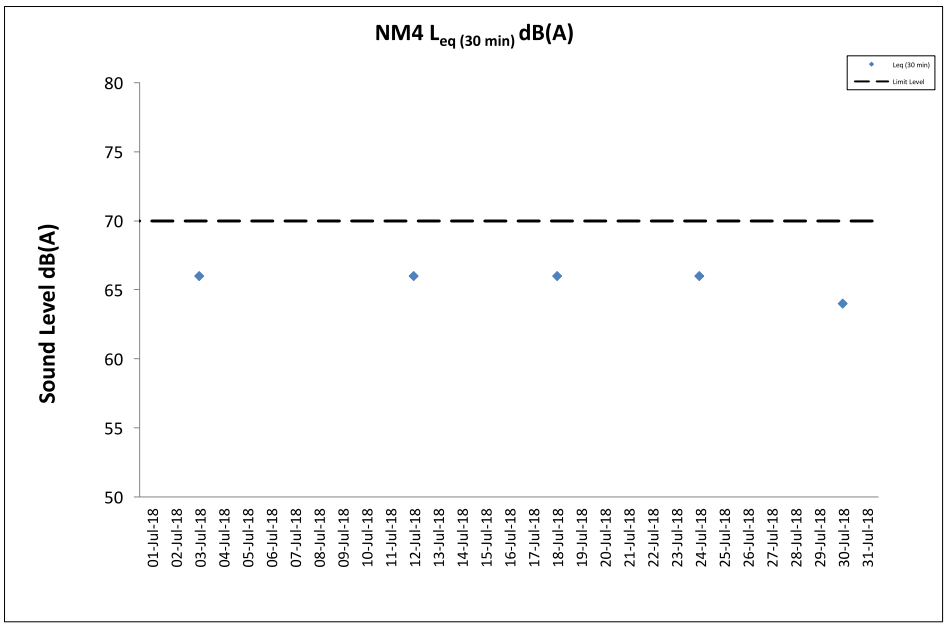
31-Jul-18


NM4 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
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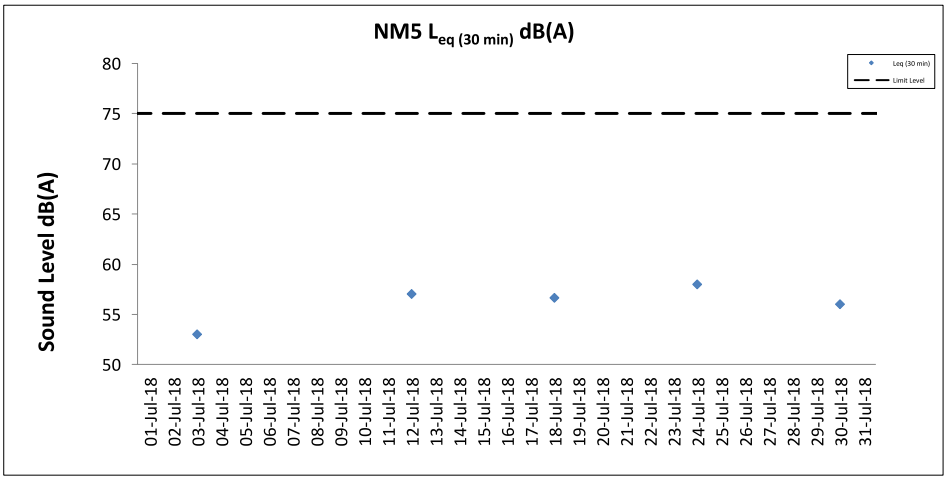
31-Jul-18


NM5 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
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06-Jul-18
07-Jul-18
08-Jul-18
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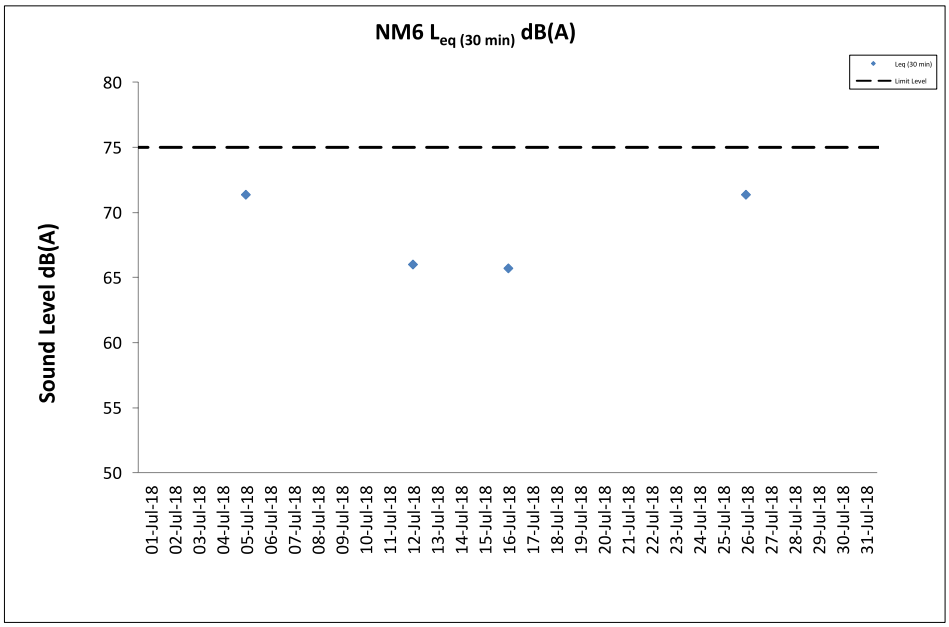
31-Jul-18


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
80
75
70
65
60
55
50
Leq (30 min)
Limit Level
01-Jul-18
02-Jul-18
03-Jul-18
04-Jul-18
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06-Jul-18
07-Jul-18
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30-Jul-18
31-Jul-18

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 03 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Rough	15:50	8.6	Surface	1.0	0.5	59	29.0	29.0	8.1	8.1	15.8	15.8	95.9	95.9	6.8	4.8	8.1	18.1	5	6	76	79	815618	804268	<0.2	<0.2	2.0	1.7
						1.0	0.5	62	29.0		8.1		15.8		95.9		6.8		8.1		6		76				<0.2		1.7	
					Middle	4.3	0.2	36	26.6	26.6	7.9	7.9	29.2	29.2	39.7	39.7	2.7		18.9		6		79				<0.2		1.4	
						4.3	0.2	36	26.6		7.9		29.2		39.7		2.7		19.0		6		79				<0.2		1.7	
					Bottom	7.6	0.2	44	26.4	26.4	7.9	7.9	29.9	29.9	44.4	44.4	3.0	3.0	27.3		6		82				<0.2		2.0	
						7.6	0.2	47	26.4		7.9		29.9		44.4		3.0		27.3		6		82				<0.2		1.4	
C2	Cloudy	Moderate	14:24	11.4	Surface	1.0	0.3	332	29.3	29.3	8.0	8.0	14.1	14.1	84.5	84.5	6.0	5.8	6.0	6.4	8	8	79	81	825695	806915	<0.2	<0.2	2.0	2.2
						1.0	0.3	356	29.3		8.0		14.1		84.5		6.0		6.0		7		78				<0.2		2.1	
					Middle	5.7	0.4	313	29.1	29.1	8.0	8.0	15.5	15.4	79.4	79.5	5.6		5.9		8		81				<0.2		2.1	
						5.7	0.4	330	29.1		8.0		15.4		79.6		5.6		5.9		7		82				<0.2		2.5	
					Bottom	10.4	0.4	319	28.9	28.9	8.0	8.0	17.8	17.8	75.8	75.9	5.3	5.3	7.3		9		83				<0.2		2.2	
						10.4	0.4	340	28.9		8.0		17.8		75.9		5.3		7.2		8		83				<0.2		2.1	
C3	Cloudy	Moderate	15:44	12.6	Surface	1.0	0.5	341	28.6	28.6	8.1	8.1	17.9	18.0	79.0	78.8	5.5	5.2	2.3	2.6	7	6	77	79	822095	817797	<0.2	<0.2	2.0	2.0
						1.0	0.5	314	28.6		8.1		18.1		78.6		5.5		2.3		6		77				<0.2		2.0	
					Middle	6.3	0.2	4	27.8	27.8	8.1	8.1	22.2	22.2	70.7	70.6	4.9		2.5		6		79				<0.2		1.9	
						6.3	0.2	4	27.8		8.1		22.2		70.5		4.9		2.5		6		79				<0.2		2.0	
					Bottom	11.6	0.1	356	27.6	27.6	8.0	8.0	23.0	23.1	66.8	66.7	4.6	4.6	3.0		7		82				<0.2		2.0	
						11.6	0.1	328	27.6		8.0		23.1		66.6		4.6		3.1		6		82				<0.2		2.0	
IM1	Cloudy	Rough	15:26	5.8	Surface	1.0	0.3	2	29.2	29.2	8.1	8.1	15.8	15.8	101.4	101.4	7.1	7.1	9.6	9.6	7	6	76	79	817975	807117	<0.2	<0.2	1.8	1.8
						1.0	0.3	2	29.2		8.1		15.8		101.4		7.1		9.6		6		76				<0.2		1.9	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.2	358	29.2	29.2	8.1	8.1	15.8	15.8	102.0	102.0	7.2	7.2	9.6		5		81				<0.2		1.8	
						4.8	0.2	329	29.2		8.1		15.8		102.0		7.2		9.6		7		81				<0.2		1.7	
IM2	Cloudy	Rough	15:17	8.2	Surface	1.0	0.6	33	29.0	29.0	8.0	8.0	15.3	15.3	94.9	94.9	6.7	6.7	8.6	9.0	7	7	76	79	818137	806145	<0.2	<0.2	1.5	1.7
						1.0	0.7	33	29.0		8.0		15.3		94.9		6.7		8.6		6		76				<0.2		2.1	
					Middle	4.1	0.4	16	29.0	29.0	8.0	8.0	15.6	15.6	92.8	92.8	6.6		9.0		7		79				<0.2		1.6	
						4.1	0.4	16	29.0		8.0		15.6		92.8		6.6		9.0		5		79				<0.2		1.5	
					Bottom	7.2	0.3	0	28.9	28.9	8.0	8.0	16.2	16.2	91.8	91.8	6.5	6.5	9.5		8		80				<0.2		1.6	
						7.2	0.4	0	28.9		8.0		16.2		91.8		6.5		9.5		6		81				<0.2		1.7	
IM3	Cloudy	Rough	15:09	8.2	Surface	1.0	0.5	32	29.0	29.0	8.0	8.0	15.4	15.4	90.7	90.7	6.4	6.2	8.9	12.8	7	7	76	79	818790	805610	<0.2	<0.2	2.4	1.9
						1.0	0.5	34	29.0		8.0		15.4		90.7		6.4		8.9		7		76				<0.2		2.3	
					Middle	4.1	0.5	17	28.9	28.9	8.0	8.0	16.1	16.1	84.9	84.8	6.0		10.1		7		79				<0.2		1.7	
						4.1	0.5	17	28.9		8.0		16.1		84.7		6.0		10.1		7		78				<0.2		1.7	
					Bottom	7.2	0.3	46	27.9	27.9	7.9	7.9	23.8	23.8	68.5	69.2	4.7	4.8	19.4		8		82				<0.2		1.6	
						7.2	0.3	47	27.9		7.9		23.9		69.8		4.8		19.2		7		81				<0.2		1.5	
IM4	Cloudy	Rough	14:58	8.2	Surface	1.0	0.6	25	29.1	29.1	8.0	8.0	15.3	15.3	91.4	91.4	6.5	6.2	8.5	10.0	8	9	77	79	819743	804623	<0.2	<0.2	1.7	1.7
						1.0	0.6	26	29.1		8.0		15.3		91.4		6.5		8.5		9		77				<0.2		1.7	
					Middle	4.1	0.5	18	29.0	29.0	8.0	8.0	15.4	15.4	83.2	83.2	5.9		9.3		9		78				<0.2		1.7	
						4.1	0.5	19	29.0		8.0		15.4		83.2		5.9		9.3		9		78				<0.2		1.8	
					Bottom	7.2	0.3	5	27.8	27.8	7.9	7.9	24.8	24.8	67.9	67.9	4.7	4.7	12.2		8		81				<0.2		1.7	
						7.2	0.4	5	27.8		7.9		24.8		67.9		4.7		12.2		8		82				<0.2		1.8	
IM5	Cloudy	Rough	14:48	7.5	Surface	1.0	0.5	16	29.2	29.2	8.0	8.0	14.6	14.6	89.4	89.3	6.3	6.0	9.4	10.2	8	8	77	78	820725	804894	<0.2	<0.2	1.9	1.8
						1.0	0.6	16	29.2		8.0		14.6		89.2		6.3		9.4		8		76				<0.2		1.8	
					Middle	3.8	0.6	7	29.0	29.0	8.0	8.0	15.5	15.5	79.9	79.9	5.6		10.0		8		78				<0.2		1.8	
						3.8	0.6	7	29.0		8.0		15.5		79.9		5.6		10.0		8		78				<0.2		1.9	
					Bottom	6.5	0.4	356	28.0	28.0	7.9	7.9	24.1	24.1	66.6	66.6	4.6	4.6	11.3		8		80				<0.2		1.7	
						6.5	0.4	328	28.0		7.9		24.1		66.6		4.6		11.3		9		80				<0.2		1.7	
IM6	Cloudy	Rough	14:39	7.4	Surface	1.0	0.5	27	29.2	29.2	8.0	8.0	14.4	14.4	89.7	89.7	6.4	6.0	16.1	19.1	12	15	76	79	821073	805855	<0.2	<0.2	1.9	1.8
						1.0	0.5	27	29.2		8.0		14.4		89.7		6.4		16.1		12		77				<0.2		1.8	
					Middle	3.7	0.5	32	29.0	29.0	8.0	8.0	15.8	15.8	79.4	79.4	5.6		16.8		16		79				<0.2		1.8	
						3.7	0.5	33	29.0		8.0		15.8		79.4		5.6		16.8		16		79				<0.2		1.9	
					Bottom	6.4	0.3	5	27.3	27.3	7.9	7.9	26.8	26.8	57.5	57.5	3.9	3.9	24.3		16		81				<0.2		1.7	
						6.4	0.3	5	27.3		7.9		26.8		57.5		3.9		24.3		17		81				<0.2		1.9	
IM7	Cloudy	Rough	14:27	9.2	Surface	1.0	0.6	40	29.1	29.1	8.1	8.1	14.8	14.8	92.6	92.6	6.5	6.1	10.1	13.6	7	8	76	79	821342	806826	<0.2	<0.2	1.6	1.8
						1.0	0.6	40	29.1		8.1		14.8		92.6		6.5		10.1		7		77				<0.2		1.9	
					Middle	4.6	0.5	27	29.0	29.0	8.0	8.0	15.7	15.7	79.8	79.8	5.6		13.7		7		79				<0.2		1.7	
						4.6	0.6	28	29.0		8.0		15.7		79.8		5.6		13.7		8		79				<0.2		1.7	
					Bottom	8.2	0.4	31	28.7	28.7	8.0	8.0	20.1	20.1	76.2	76.2	5.3	5.3	17.0		9		83				<0.2		1.9	
						8.2	0.4	32	28.7		8.0		20.1		76.2		5.3		17.0		8		82				<0.2		1.8	
IM8	Cloudy	Moderate	14:42	8.2	Surface	1.0	0.3	2	29.3	29.3	8.0	8.0	14.8	14.8	85.5	85.5	6.0	5.9	5.0	5.3	6	8	77	79	821805	808140	<0.2	<0.2	2.0	2.1
						1.0	0.3	2	29.3		8.0		14.8		85.4		6.0		5.0		8		78				<0.2		2.1	
					Middle	4.1	0.4	322	29.1	29.1	8.0	8.0	16.0	16.0	80.4	80.5	5.7		5.2		7		79				<0.2		2.0	
						4.1	0.4	352	29.1		8.0		16.0		80.5		5.7		5.2		8		79				<0.2		2.1	
					Bottom	7.2	0.5	310	28.8	28.8	8.0	8.0	16.9	17.5	75.0	75.2	5.3	5.3	5.6		8		81				<0.2		2.1	
						7.2	0.5	334	28.8		8.0		18.2		75.3		5.3		5.7		8		82				<0.2		2.2	

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 03 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:48	7.7	Surface	1.0	0.6	2	29.2	29.2	8.0	8.0	15.4	15.4	85.3	85.3	6.0	5.8	5.2	5.1	6	6	77	79	822101	808821	<0.2	<0.2	2.1	2.1
						1.0	0.6	2	29.2		8.0		15.4		85.2		6.0		5.2		5		77				<0.2		2.1	
					Middle	3.9	0.5	333	29.1	29.1	8.0	8.0	17.0	17.0	78.7	78.9	5.5		5.5		6		79				<0.2		2.0	
						3.9	0.5	357	29.1		8.0		17.0		79.0		5.5		5.4		6		80				<0.2		2.0	
					Bottom	6.7	0.6	311	28.8	28.8	8.0	8.0	18.2	18.3	77.4	77.5	5.4	5.4	4.6		6		81				<0.2		2.2	
						6.7	0.6	332	28.8		8.0		18.3		77.5		5.4		4.6		7		82				<0.2		2.1	
IM10	Cloudy	Moderate	14:56	7.4	Surface	1.0	0.5	5	29.2	29.2	8.0	8.0	15.6	15.6	82.8	82.8	5.8	5.6	7.2	7.2	5	6	78	80	822399	809823	<0.2	<0.2	1.9	2.0
						1.0	0.5	5	29.2		8.0		15.6		82.7		5.8		7.2		6		78				<0.2		1.9	
					Middle	3.7	0.5	317	28.9	28.9	8.0	8.0	17.2	17.2	76.4	76.4	5.4		7.3		6		79				<0.2		2.1	
						3.7	0.5	330	28.9		8.0		17.1		76.4		5.4		7.3		6		80				<0.2		2.1	
					Bottom	6.4	0.6	316	28.8	28.8	8.0	8.0	18.2	18.1	76.7	76.8	5.4	5.4	7.0		6		81				<0.2		2.1	
						6.4	0.6	335	28.8		8.0		18.1		76.8		5.4		7.0		7		82				<0.2		1.9	
IM11	Cloudy	Moderate	15:05	7.8	Surface	1.0	0.4	341	29.1	29.1	8.0	8.0	16.0	16.0	81.6	81.6	5.7	5.5	6.9	7.8	4	6	77	79	822075	811468	<0.2	<0.2	2.1	2.0
						1.0	0.4	350	29.1		8.0		16.0		81.6		5.7		6.9		6		77				<0.2		2.0	
					Middle	3.9	0.6	289	28.8	28.8	8.0	8.0	18.6	18.6	75.5	75.5	5.3		6.7		5		79				<0.2		2.0	
						3.9	0.6	303	28.8		8.0		18.5		75.4		5.3		6.7		5		80				<0.2		2.0	
					Bottom	6.8	0.3	343	28.1	28.1	8.0	8.0	20.0	20.1	69.3	69.3	4.9	4.9	9.8		7		81				<0.2		2.1	
						6.8	0.3	316	28.1		8.0		20.2		69.3		4.8		10.1		6		81				<0.2		2.0	
IM12	Cloudy	Moderate	15:10	8.7	Surface	1.0	0.6	323	29.1	29.1	8.0	8.0	16.0	16.0	82.0	82.0	5.8	5.6	7.8	7.5	5	4	77	79	821440	812025	<0.2	<0.2	2.0	2.0
						1.0	0.6	353	29.1		8.0		16.0		81.9		5.8		7.8		4		77				<0.2		1.9	
					Middle	4.4	0.6	288	28.8	28.8	8.0	8.0	18.4	18.4	77.0	77.0	5.4		7.5		5		79				<0.2		2.0	
						4.4	0.6	295	28.8		8.0		18.4		77.0		5.4		7.5		3		79				<0.2		2.0	
					Bottom	7.7	0.3	276	28.4	28.4	8.0	8.0	18.8	18.9	75.7	75.7	5.3	5.3	7.3		5		82				<0.2		2.0	
						7.7	0.3	288	28.4		8.0		18.9		75.6		5.3		7.3		4		82				<0.2		2.0	
SR2	Cloudy	Moderate	15:26	4.8	Surface	1.0	0.5	319	28.8	28.8	8.0	8.0	17.3	17.3	78.3	78.2	5.5	5.5	5.7	7.7	4	4	79	80	821440	814154	<0.2	<0.2	1.9	1.9
						1.0	0.5	326	28.8		8.0		17.4		78.1		5.5		5.8		3		79				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.5	298	28.3	28.4	8.0	8.0	20.2	20.2	72.6	72.8	5.1	5.1	9.7		4		81				<0.2		1.9	
						3.8	0.5	315	28.4		8.0		20.2		73.0		5.1		9.7		4		82				<0.2		1.9	
SR3	Cloudy	Moderate	14:38	9.7	Surface	1.0	0.4	19	29.3	29.3	8.0	8.0	14.4	14.4	86.7	86.7	6.1	5.9	4.1	4.5	4	5	-	-	822144	807597	-	-	-	-
						1.0	0.4	19	29.3		8.0		14.4		86.6		6.1		4.1		5		-				-		-	
					Middle	4.9	0.4	331	29.1	29.1	8.0	8.0	15.7	15.6	79.2	79.2	5.6		4.4		4		-				-		-	
						4.9	0.4	353	29.1		8.0		15.6		79.1		5.6		4.4		5		-				-		-	
					Bottom	8.7	0.5	311	28.7	28.8	8.0	8.0	19.0	19.0	73.0	73.1	5.1	5.1	5.0		5		-				-		-	
						8.7	0.5	317	28.8		8.0		19.0		73.1		5.1		5.0		4		-				-		-	
SR4A	Cloudy	Calm	16:16	9.2	Surface	1.0	0.3	68	29.1	29.1	8.1	8.1	15.7	15.7	96.0	96.0	6.8	6.4	12.3	15.5	5	8	-	-	817181	807834	-	-	-	-
						1.0	0.3	70	29.1		8.1		15.7		96.0		6.8		12.3		5		-				-		-	
					Middle	4.6	0.2	59	29.0	29.0	8.1	8.1	16.4	16.4	84.1	84.1	5.9		14.7		9		-				-		-	
						4.6	0.2	63	29.0		8.1		16.4		84.1		5.9		14.7		11		-				-		-	
					Bottom	8.2	0.2	76	28.4	28.4	7.9	7.9	24.2	24.2	79.5	79.5	5.4	5.4	19.5		10		-				-		-	
						8.2	0.2	79	28.4		7.9		24.2		79.5		5.4		19.5		9		-				-		-	
SR5A	Cloudy	Calm	16:30	5.2	Surface	1.0	0.1	297	29.3	29.3	8.1	8.1	17.6	17.6	91.8	91.8	6.4	6.4	10.4	11.1	9	9	-	-	816614	810716	-	-	-	-
						1.0	0.1	319	29.3		8.1		17.6		91.8		6.4		10.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	251	29.1	29.1	8.0	8.0	18.1	18.1	89.0	89.0	6.2	6.2	11.8		10		-				-		-	
						4.2	0.1	259	29.1		8.0		18.1		89.0		6.2		11.8		9		-				-		-	
SR6	Cloudy	Calm	16:52	4.9	Surface	1.0	0.1	98	29.2	29.2	8.0	8.0	16.2	16.2	87.1	87.1	6.1	6.1	9.8	10.3	6	6	-	-	817907	814640	-	-	-	-
						1.0	0.1	103	29.2		8.0		16.2		87.0		6.1		9.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	99	29.0	29.0	8.0	8.0	16.8	16.8	86.4	86.4	6.1	6.1	10.8		6		-				-		-	
						3.9	0.0	101	29.0		8.0		16.8		86.4		6.1		10.8		6		-				-		-	
SR7	Cloudy	Moderate	16:09	18.6	Surface	1.0	0.2	97	27.9	27.9	8.1	8.1	22.0	22.0	71.5	71.5	5.0	**4.6**	1.4	2.7	6	5	-	-	823632	823718	-	-	-	-
						1.0	0.2	105	27.9		8.1		22.0		71.4		5.0		1.3		5		-				-		-	
					Middle	9.3	0.3	272	26.8	26.8	8.0	8.0	26.2	26.2	58.9	58.9	4.1		2.6		4		-				-		-	
						9.3	0.3	287	26.8		8.0		26.2		58.8		4.1		2.7		5		-				-		-	
					Bottom	17.6	0.1	88	25.7	25.7	8.0	8.0	30.1	30.1	51.7	51.9	3.6	3.6	4.1		4		-				-		-	
						17.6	0.1	94	25.7		8.0		30.1		52.0		3.6		4.1		6		-				-		-	
SR8	Cloudy	Moderate	15:15	3.9	Surface	1.0	-	-	28.5	28.5	8.0	8.0	19.2	19.3	71.8	71.7	5.0	5.0	6.6	9.3	5	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.5		8.0		19.3		71.6		5.0		6.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	28.3	28.3	8.0	8.0	20.8	20.9	65.0	62.4	4.5	4.4	11.9		4		-				-		-	
						2.9	-	-	28.2		8.0		21.1		59.7		4.2		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 03 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:35	9.0	Surface	1.0	0.7	31	28.9	28.9	8.0	8.0	13.9	13.9	89.4	89.3	6.4	5.7	9.3	13.1	4	5	78	80	815604	804275	<0.2	<0.2	1.8	1.8
						1.0	0.7	33	28.9		8.0		13.9		89.2		6.4		9.4		4		77				<0.2		1.9	
					Middle	4.5	0.4	26	28.9	28.9	8.0	8.0	16.1	16.1	70.1	70.1	4.9		12.2		5		80				<0.2		1.8	
						4.5	0.4	27	28.9		8.0		16.1		70.1		4.9		12.2		5		80				<0.2		1.7	
					Bottom	8.0	0.3	10	27.4	27.4	7.9	7.9	26.1	26.1	59.6	59.6	4.1	4.1	17.7		6		83				<0.2		1.8	
						8.0	0.3	10	27.4		7.9		26.1		59.6		4.1		17.7		6		84				<0.2		1.9	
C2	Cloudy	Moderate	10:17	12.7	Surface	1.0	0.3	331	29.3	29.3	8.0	8.0	14.3	14.3	85.7	85.6	6.1	5.8	4.0	7.5	4	5	79	81	825697	806951	<0.2	<0.2	2.2	2.0
						1.0	0.4	340	29.3		8.0		14.3		85.5		6.1		4.0		4		80				<0.2		2.1	
					Middle	6.4	0.4	320	29.1	29.1	8.0	8.0	15.5	15.5	77.5	77.5	5.5		4.5		6		81				<0.2		2.0	
						6.4	0.4	327	29.1		8.0		15.5		77.5		5.5		4.6		6		82				<0.2		2.0	
					Bottom	11.7	0.4	322	28.8	28.8	8.0	8.0	17.0	17.0	71.2	71.1	5.0	5.0	13.6		6		83				<0.2		2.0	
						11.7	0.4	328	28.8		8.0		17.0		70.9		5.0		14.2		6		83				<0.2		1.9	
C3	Fine	Moderate	08:28	12.4	Surface	1.0	0.4	269	28.9	28.9	8.0	8.0	16.7	16.7	79.2	79.2	5.6	5.4	6.0	6.2	6	7	77	80	822119	817788	<0.2	<0.2	2.2	2.0
						1.0	0.4	280	28.9		8.0		16.7		79.1		5.6		5.9		7		78				<0.2		2.1	
					Middle	6.2	0.4	257	28.5	28.5	8.0	8.0	20.1	20.1	73.2	73.1	5.1		5.2		7		79				<0.2		2.1	
						6.2	0.4	259	28.5		8.0		20.1		72.9		5.1		5.2		7		80				<0.2		1.9	
					Bottom	11.4	0.3	281	26.7	26.7	8.0	8.0	27.5	27.5	57.1	57.2	3.9	3.9	7.5		8		81				<0.2		1.9	
						11.4	0.3	298	26.7		8.0		27.5		57.3		3.9		7.4		7		82				<0.2		2.0	
IM1	Cloudy	Moderate	09:54	5.2	Surface	1.0	0.2	45	29.0	29.0	8.0	8.0	15.5	15.5	96.6	96.6	6.8	6.8	9.1	9.5	6	6	78	80	817928	807105	<0.2	<0.2	1.7	1.6
						1.0	0.3	46	29.0		8.0		15.5		96.6		6.8		9.1		5		78				<0.2		1.6	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	358	29.0	29.0	8.0	8.0	15.9	15.9	96.8	96.8	6.8	6.8	9.8		6		82				<0.2		1.6	
						4.2	0.1	329	29.0		8.0		15.9		96.8		6.8		9.8		6		83				<0.2		1.6	
IM2	Cloudy	Moderate	10:01	7.7	Surface	1.0	0.5	26	29.1	29.1	8.0	8.0	15.2	15.2	94.1	94.1	6.6	6.6	9.4	9.5	4	6	77	79	818160	806166	<0.2	<0.2	1.9	2.1
						1.0	0.5	27	29.1		8.0		15.2		94.1		6.6		9.4		6		77				<0.2		2.2	
					Middle	3.9	0.4	18	29.1	29.1	8.0	8.0	15.3	15.3	92.8	92.8	6.6		9.5		6		79				<0.2		2.3	
						3.9	0.4	18	29.1		8.0		15.3		92.8		6.6		9.5		7		79				<0.2		2.2	
					Bottom	6.7	0.5	329	29.0	29.0	8.0	8.0	16.3	16.3	92.6	92.6	6.5	6.5	9.5		7		82				<0.2		2.0	
						6.7	0.5	329	29.0		8.0		16.3		92.6		6.5		9.5		8		82				<0.2		1.7	
IM3	Cloudy	Rough	10:08	8.0	Surface	1.0	0.5	19	29.2	29.2	8.0	8.0	14.2	14.2	92.7	92.7	6.6	6.1	9.2	10.6	8	7	78	80	818789	805586	<0.2	<0.2	1.8	1.7
						1.0	0.5	19	29.2		8.0		14.2		92.7		6.6		9.2		8		78				<0.2		1.8	
					Middle	4.0	0.5	358	29.0	29.0	8.0	8.0	15.4	15.4	79.6	79.4	5.6		10.3		6		79				<0.2		1.8	
						4.0	0.5	329	29.0		8.0		15.4		79.1		5.6		10.3		7		80				<0.2		1.6	
					Bottom	7.0	0.5	339	28.1	28.1	7.9	7.9	22.2	22.2	70.1	70.1	4.9	4.9	12.4		7		83				<0.2		1.6	
						7.0	0.5	312	28.1		7.9		22.2		70.1		4.9		12.4		7		83				<0.2		1.6	
IM4	Cloudy	Rough	10:16	8.1	Surface	1.0	0.6	20	29.2	29.2	8.0	8.0	13.1	13.1	91.5	91.5	6.5	6.1	9.5	10.8	6	7	77	81	819703	804593	<0.2	<0.2	1.7	1.8
						1.0	0.7	20	29.2		8.0		13.1		91.5		6.5		9.5		6		78				<0.2		1.8	
					Middle	4.1	0.6	357	29.1	29.1	8.0	8.0	16.3	16.3	79.5	79.5	5.6		9.8		7		81				<0.2		1.8	
						4.1	0.6	328	29.1		8.0		16.3		79.5		5.6		9.8		7		82				<0.2		1.7	
					Bottom	7.1	0.4	357	27.2	27.2	7.9	7.9	26.8	26.8	56.4	56.4	3.9	3.9	13.2		8		84				<0.2		1.7	
						7.1	0.5	328	27.2		7.9		26.8		56.4		3.9		13.2		7		84				<0.2		1.8	
IM5	Cloudy	Rough	10:24	7.5	Surface	1.0	0.5	15	29.2	29.2	8.0	8.0	14.2	14.2	88.5	88.5	6.3	5.8	10.1	11.6	5	5	77	81	820750	804837	<0.2	<0.2	1.8	1.8
						1.0	0.5	15	29.2		8.0		14.2		88.5		6.3		10.1		6		79				<0.2		1.8	
					Middle	3.8	0.5	17	29.0	29.0	8.0	8.0	14.7	14.7	74.2	74.2	5.3		11.2		4		81				<0.2		1.8	
						3.8	0.6	17	29.0		8.0		14.7		74.2		5.3		11.2		5		82				<0.2		1.8	
					Bottom	6.5	0.4	18	27.9	27.9	7.9	7.9	23.4	23.4	62.8	62.8	4.3	4.3	13.5		6		84				<0.2		1.9	
						6.5	0.4	19	27.9		7.9		23.4		62.8		4.3		13.5		6		84				<0.2		1.7	
IM6	Cloudy	Rough	10:33	7.5	Surface	1.0	0.4	30	29.2	29.2	8.0	8.0	14.1	14.1	86.5	86.5	6.1	5.8	10.9	13.8	6	6	78	80	821066	805802	<0.2	<0.2	1.8	1.8
						1.0	0.5	31	29.2		8.0		14.1		86.5		6.1		10.9		6		78				<0.2		1.9	
					Middle	3.8	0.4	15	29.1	29.1	8.0	8.0	14.4	14.4	75.9	75.9	5.4		12.9		6		80				<0.2		1.7	
						3.8	0.5	16	29.1		8.0		14.4		75.9		5.4		12.9		6		80				<0.2		1.8	
					Bottom	6.5	0.2	8	27.7	27.7	7.9	7.9	25.1	25.1	69.7	69.7	4.8	4.8	17.7		6		83				<0.2		1.8	
						6.5	0.2	8	27.7		7.9		25.1		69.7		4.8		17.7		6		83				<0.2		1.7	
IM7	Cloudy	Rough	10:41	9.0	Surface	1.0	0.6	25	29.1	29.1	8.0	8.0	14.8	14.8	94.0	94.0	6.6	6.5	9.8	11.9	5	6	77	80	821366	806814	<0.2	<0.2	1.7	1.7
						1.0	0.6	27	29.1		8.0		14.8		94.0		6.6		9.8		6		77				<0.2		1.9	
					Middle	4.5	0.5	16	29.0	29.0	8.0	8.0	15.8	15.8	90.2	90.2	6.4		11.2		6		80				<0.2		1.7	
						4.5	0.5	16	29.0		8.0		15.8		90.1		6.4		11.3		6		80				<0.2		1.7	
					Bottom	8.0	0.5	40	28.8	28.8	8.0	8.0	17.5	17.5	86.8	86.8	6.1	6.1	14.6		6		83				<0.2		1.6	
						8.0	0.5	42	28.8		8.0		17.5		86.8		6.1		14.6		6		82				<0.2		1.8	
IM8	Cloudy	Moderate	09:52	8.0	Surface	1.0	0.3	329	29.1	29.1	8.0	8.0	15.0	15.0	83.1	83.1	5.9	5.7	4.0	9.9	5	6	77	80	821801	808127	<0.2	<0.2	1.8	1.9
						1.0	0.3	348	29.1		8.0		15.0		83.1		5.9		4.0		6		78				<0.2		1.8	
					Middle	4.0	0.4	316	29.1	29.1	8.0	8.0	15.8	15.8	78.8	78.8	5.6		4.7		6		80				<0.2		2.0	
						4.0	0.4	319	29.1		8.0		15.8		78.7		5.5		4.7		6		80				<0.2		1.9	
					Bottom	7.0	0.4	306	28.6	28.6	8.0	8.0	19.6	19.6	68.8	69.0	4.8	4.8	20.8		6		81				<0.2		1.8	
						7.0	0.4	327	28.6		8.0		19.7		69.1		4.8		21.2		7		82				<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 03 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:46	7.9	Surface	1.0	0.3	310	29.1	29.1	8.0	8.0	15.2	15.2	83.2	83.2	5.9	5.7	9.3	12.4	6	6	77	80	822099	808830	<0.2	<0.2	2.0	2.0
						1.0	0.3	315	29.1		8.0		15.2		83.2		5.9		9.3		6		78				<0.2		1.9	
					Middle	4.0	0.5	309	29.0	29.0	8.0	8.0	16.0	16.0	78.4	78.4	5.5		9.9		4		79				<0.2		2.0	
						4.0	0.5	311	29.0		8.0		16.0		78.4		5.5		9.9		4		80				<0.2		2.0	
					Bottom	6.9	0.3	300	28.6	28.6	8.0	8.0	19.9	19.9	69.0	69.2	4.8	4.8	17.7		7		83				<0.2		1.9	
						6.9	0.3	303	28.5		8.0		20.0		69.3		4.8		18.1		6		83				<0.2		1.9	
IM10	Fine	Moderate	09:39	8.1	Surface	1.0	0.4	322	29.1	29.1	8.0	8.0	15.5	15.5	80.7	80.6	5.7	5.4	3.2	7.0	6	6	78	80	822355	809774	<0.2	<0.2	1.9	1.8
						1.0	0.4	327	29.1		8.0		15.5		80.4		5.7		3.2		6		78				<0.2		1.7	
					Middle	4.1	0.5	309	28.9	28.9	8.0	8.0	18.4	18.5	72.9	72.9	5.1		4.4		6		79				<0.2		1.8	
						4.1	0.5	330	28.9		8.0		18.6		72.9		5.1		4.2		7		79				<0.2		1.8	
					Bottom	7.1	0.4	285	28.4	28.4	8.0	8.0	20.5	20.6	66.1	66.1	4.6	4.6	13.4		6		82				<0.2		1.8	
						7.1	0.4	289	28.4		8.0		20.6		66.1		4.6		13.8		7		82				<0.2		2.0	
IM11	Fine	Moderate	09:28	8.2	Surface	1.0	0.4	302	29.2	29.2	8.0	8.0	15.0	15.0	82.9	82.8	5.9	5.4	3.0	8.6	5	5	77	80	822054	811448	<0.2	<0.2	2.0	1.9
						1.0	0.4	308	29.2		8.0		15.0		82.7		5.8		2.9		5		78				<0.2		1.9	
					Middle	4.1	0.5	289	28.8	28.8	8.0	8.0	18.5	18.5	70.6	70.5	4.9		5.0		5		80				<0.2		1.9	
						4.1	0.6	301	28.8		8.0		18.5		70.3		4.9		5.1		5		80				<0.2		1.8	
					Bottom	7.2	0.2	296	27.5	27.5	8.0	8.0	24.6	24.6	57.1	57.2	3.9	3.9	17.9		5		83				<0.2		1.9	
						7.2	0.2	309	27.5		8.0		24.6		57.2		3.9		17.9		6		83				<0.2		1.7	
IM12	Fine	Moderate	09:21	8.5	Surface	1.0	0.3	283	29.2	29.2	8.0	8.0	14.5	14.5	83.6	83.5	5.9	5.6	3.0	6.8	5	6	77	80	821435	812052	<0.2	<0.2	1.8	1.9
						1.0	0.4	297	29.2		8.0		14.5		83.4		5.9		3.0		5		77				<0.2		1.9	
					Middle	4.3	0.5	280	28.9	28.9	8.0	8.0	17.3	17.3	75.5	75.4	5.3		5.9		7		79				<0.2		2.0	
						4.3	0.5	294	28.9		8.0		17.3		75.3		5.3		6.4		5		80				<0.2		1.9	
					Bottom	7.5	0.4	279	28.7	28.7	8.0	8.0	18.8	18.8	75.0	75.2	5.2	5.2	11.5		7		82				<0.2		1.8	
						7.5	0.4	291	28.7		8.0		18.8		75.3		5.2		11.0		6		82				<0.2		1.9	
SR2	Fine	Moderate	08:50	5.3	Surface	1.0	0.3	132	29.0	29.0	8.0	8.0	16.0	16.0	76.8	76.7	5.4	5.4	5.0	8.4	6	6	77	80	821475	814161	<0.2	<0.2	2.1	1.9
						1.0	0.3	133	29.0		8.0		16.0		76.6		5.4		5.0		6		78				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	147	28.3	28.3	8.0	8.0	20.5	20.5	67.3	67.4	4.7	4.7	11.8		6		82				<0.2		1.8	
						4.3	0.2	149	28.3		8.0		20.5		67.4		4.7		11.6		5		82				<0.2		1.8	
SR3	Cloudy	Moderate	09:58	9.1	Surface	1.0	0.2	341	29.1	29.1	8.0	8.0	15.0	15.0	82.9	82.9	5.9	5.7	4.0	7.0	5	6	-	-	822162	807596	-	-	-	-
						1.0	0.3	314	29.1		8.0		15.0		82.8		5.9		3.9		5		-				-		-	
					Middle	4.6	0.3	324	29.1	29.1	8.0	8.0	15.7	15.7	78.5	78.5	5.5		4.9		6		-				-		-	
						4.6	0.3	354	29.1		8.0		15.7		78.4		5.5		5.2		6		-				-		-	
					Bottom	8.1	0.4	314	28.7	28.7	8.0	8.0	18.9	18.9	69.8	69.8	4.9	4.9	12.0		5		-				-		-	
						8.1	0.4	345	28.7		8.0		19.0		69.8		4.9		11.8		6		-				-		-	
SR4A	Cloudy	Calm	09:13	9.4	Surface	1.0	0.2	259	29.0	29.0	8.0	8.0	16.5	16.5	83.6	83.5	5.9	5.6	10.1	12.7	5	6	-	-	817169	807806	-	-	-	-
						1.0	0.2	259	29.0		8.0		16.5		83.3		5.9		10.1		6		-				-		-	
					Middle	4.7	0.3	252	29.0	29.0	8.0	8.0	18.3	18.3	74.3	74.3	5.2		11.6		6		-				-		-	
						4.7	0.3	256	29.0		8.0		18.3		74.3		5.2		11.6		6		-				-		-	
					Bottom	8.4	0.2	231	27.6	27.6	7.8	7.8	25.5	25.5	57.0	57.0	3.9	3.9	16.3		7		-				-		-	
						8.4	0.2	251	27.6		7.8		25.5		57.0		3.9		16.3		6		-				-		-	
SR5A	Cloudy	Calm	08:59	5.3	Surface	1.0	0.3	299	29.2	29.2	8.0	8.0	18.0	18.0	86.4	86.4	6.0	6.0	11.4	12.5	7	7	-	-	816601	810667	-	-	-	-
						1.0	0.3	305	29.2		8.0		18.0		86.4		6.0		11.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	286	29.1	29.1	8.0	8.0	18.7	18.7	87.3	87.3	6.1	6.1	13.5		6		-				-		-	
						4.3	0.2	296	29.1		8.0		18.7		87.3		6.1		13.5		6		-				-		-	
SR6	Rainy	Calm	08:35	4.3	Surface	1.0	0.2	236	29.1	29.1	7.9	7.9	16.3	16.3	85.6	85.6	6.0	6.0	11.4	13.9	7	9	-	-	817880	814692	-	-	-	-
						1.0	0.2	239	29.1		7.9		16.3		85.6		6.0		11.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	45	29.0	29.0	7.9	7.9	19.0	19.0	89.4	89.4	6.2	6.2	16.3		11		-				-		-	
						3.3	0.0	45	29.0		7.9		19.0		89.4		6.2		16.3		10		-				-		-	
SR7	Fine	Moderate	07:57	18.4	Surface	1.0	0.1	219	29.0	29.0	8.0	8.0	16.3	16.3	81.1	81.1	5.7	**4.8**	1.2	2.0	5	5	-	-	823637	823771	-	-	-	-
						1.0	0.1	231	29.0		8.0		16.3		81.0		5.7		1.2		6		-				-		-	
					Middle	9.2	0.1	111	27.2	27.2	8.0	8.0	25.6	25.6	56.1	56.2	3.9		2.1		7		-				-		-	
						9.2	0.1	111	27.2		8.0		25.5		56.2		3.9		2.1		5		-				-		-	
					Bottom	17.4	0.2	68	26.1	26.1	8.0	8.0	29.1	29.1	50.4	50.5	3.5	3.5	2.8		5		-				-		-	
						17.4	0.2	69	26.1		8.0		29.1		50.5		3.5		2.9		4		-				-		-	
SR8	Fine	Moderate	09:10	3.7	Surface	1.0	-	-	29.2	29.2	8.0	8.0	14.6	14.6	84.1	84.1	6.0	6.0	4.3	4.6	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.2		8.0		14.6		84.1		5.9		4.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	28.9	28.9	8.0	8.0	16.9	16.9	78.9	79.0	5.5	5.6	4.9		7		-				-		-	
						2.7	-	-	28.9		8.0		16.9		79.0		5.6		4.9		6		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	16:53	8.8	Surface	1.0	0.3	216	29.4	29.4	8.2	8.2	15.4	15.4	108.9	108.8	7.6	6.6	9.8	15.8	6	7	70	72	815637	804248	<0.2	<0.2	1.5	1.5
						1.0	0.4	226	29.4		8.2		15.4		108.7		7.6		9.8		6		70				<0.2		1.5	
					Middle	4.4	0.3	225	29.4	29.4	8.1	8.1	15.5	15.5	80.3	79.7	5.6		13.0		6		72				<0.2		1.6	
						4.4	0.3	228	29.4		8.1		15.5		79.0		5.5		13.2		7		72				<0.2		1.4	
					Bottom	7.8	0.5	203	26.3	26.3	7.9	7.9	29.5	29.5	51.0	51.3	3.5	3.5	24.4		9		75				<0.2		1.4	
						7.8	0.6	218	26.3		7.9		29.5		51.6		3.5		24.6		8		75				<0.2		1.4	
C2	Cloudy	Moderate	15:54	11.8	Surface	1.0	0.4	166	29.0	29.0	8.1	8.1	13.8	13.8	74.9	74.9	5.3	5.0	8.1	9.8	7	7	71	73	825677	806954	<0.2	<0.2	1.6	1.7
						1.0	0.4	166	29.0		8.1		13.8		74.9		5.3		8.1		7		71				<0.2		1.6	
					Middle	5.9	0.3	176	28.5	28.5	8.0	8.0	18.7	18.7	66.3	66.3	4.6		8.4		5		72				<0.2		1.7	
						5.9	0.3	180	28.5		8.0		18.7		66.3		4.6		8.4		6		73				<0.2		1.7	
					Bottom	10.8	0.5	171	26.7	26.7	8.0	8.0	26.5	26.5	60.5	60.5	4.2	4.2	12.8		6		75				<0.2		1.7	
						10.8	0.5	174	26.7		8.0		26.5		60.5		4.2		12.8		8		75				<0.2		1.6	
C3	Cloudy	Moderate	18:40	12.0	Surface	1.0	0.4	151	29.0	29.0	8.0	8.0	16.3	16.3	89.7	89.7	6.3	5.9	7.9	9.5	7	8	73	75	822100	817799	<0.2	<0.2	1.6	1.7
						1.0	0.4	156	29.0		8.0		16.3		89.7		6.3		7.9		7		73				<0.2		1.7	
					Middle	6.0	0.2	183	28.0	28.0	8.0	8.0	18.5	18.5	77.1	77.1	5.4		10.9		6		75				<0.2		1.7	
						6.0	0.2	183	28.0		8.0		18.5		77.1		5.4		10.9		6		75				<0.2		1.7	
					Bottom	11.0	0.4	166	28.0	28.0	8.0	8.0	23.3	23.3	88.2	88.2	6.1	6.1	9.8		11		76				<0.2		1.7	
						11.0	0.5	174	28.0		8.0		23.3		88.2		6.1		9.8		10		77				<0.2		1.6	
IM1	Cloudy	Moderate	16:34	5.1	Surface	1.0	0.1	146	29.5	29.5	8.2	8.2	15.2	15.2	107.3	107.3	7.5	7.5	10.2	10.4	7	7	70	72	817925	807135	<0.2	<0.2	1.4	1.4
						1.0	0.1	158	29.5		8.2		15.3		107.3		7.5		10.2		6		70				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	169	29.4	29.4	8.2	8.2	15.3	15.3	105.4	105.6	7.4	7.4	10.5		8		74				<0.2		1.4	
						4.1	0.2	174	29.4		8.2		15.3		105.8		7.4		10.8		8		75				<0.2		1.5	
IM2	Cloudy	Moderate	16:27	7.6	Surface	1.0	0.3	186	29.5	29.5	8.1	8.1	15.0	15.0	103.4	103.3	7.3	7.0	9.3	10.6	4	5	70	72	818137	806166	<0.2	<0.2	1.3	1.3
						1.0	0.3	195	29.5		8.1		15.0		103.1		7.2		9.3		6		70				<0.2		1.2	
					Middle	3.8	0.3	203	29.4	29.4	8.1	8.1	15.3	15.3	96.5	96.4	6.8		9.8		5		72				<0.2		1.4	
						3.8	0.4	214	29.4		8.1		15.3		96.3		6.8		9.8		5		72				<0.2		1.3	
					Bottom	6.6	0.1	138	26.8	26.8	7.9	7.9	27.8	27.8	66.6	67.1	4.6	4.6	12.3		4		74				<0.2		1.3	
						6.6	0.1	139	26.8		7.9		27.8		67.6		4.6		12.8		5		74				<0.2		1.3	
IM3	Cloudy	Moderate	16:21	7.7	Surface	1.0	0.2	191	29.4	29.4	8.1	8.1	14.9	14.9	94.0	93.2	6.6	6.1	11.8	13.4	5	5	70	72	818803	805584	<0.2	<0.2	1.3	1.4
						1.0	0.2	204	29.4		8.1		14.9		92.4		6.5		11.5		5		70				<0.2		1.3	
					Middle	3.9	0.2	188	29.3	29.3	8.0	8.0	15.2	15.2	81.2	80.9	5.7		12.8		4		72				<0.2		1.4	
						3.9	0.2	198	29.3		8.0		15.2		80.5		5.7		12.9		5		72				<0.2		1.3	
					Bottom	6.7	0.1	204	26.6	26.6	7.8	7.8	28.3	28.3	50.8	51.1	3.5	3.5	15.9		6		74				<0.2		1.4	
						6.7	0.1	207	26.6		7.8		28.4		51.3		3.5		15.5		7		75				<0.2		1.4	
IM4	Cloudy	Moderate	16:12	7.8	Surface	1.0	0.3	158	29.6	29.6	8.1	8.1	12.7	12.7	96.4	94.8	6.8	5.4	10.6	14.1	4	4	70	72	819711	804595	<0.2	<0.2	1.4	1.4
						1.0	0.3	171	29.6		8.1		12.7		93.1		6.6		10.9		2		70				<0.2		1.4	
					Middle	3.9	0.2	152	29.1	29.1	8.0	8.0	15.7	15.6	57.5	57.0	4.1		14.3		3		72				<0.2		1.4	
						3.9	0.2	154	29.1		8.0		15.6		56.4		4.0		14.6		4		72				<0.2		1.5	
					Bottom	6.8	0.3	152	26.7	26.7	7.8	7.8	27.9	27.9	55.7	57.9	3.8	4.0	16.9		6		74				<0.2		1.4	
						6.8	0.3	157	26.7		7.8		27.9		60.0		4.1		17.2		5		75				<0.2		1.3	
IM5	Cloudy	Moderate	16:05	7.6	Surface	1.0	0.2	147	29.6	29.6	8.1	8.1	12.3	12.3	95.4	95.2	6.8	6.1	12.3	15.0	4	4	70	72	820732	804850	<0.2	<0.2	1.3	1.4
						1.0	0.2	160	29.6		8.1		12.3		94.9		6.8		12.4		4		70				<0.2		1.3	
					Middle	3.8	0.1	238	29.1	29.1	8.0	8.0	15.8	15.8	76.3	76.0	5.4		15.4		3		72				<0.2		1.4	
						3.8	0.1	258	29.1		8.0		15.8		75.6		5.3		15.6		4		72				<0.2		1.4	
					Bottom	6.6	0.3	255	27.7	27.7	7.9	7.9	22.3	22.3	66.1	66.4	4.6	4.6	17.0		3		74				<0.2		1.5	
						6.6	0.3	268	27.7		7.9		22.3		66.6		4.6		17.3		4		74				<0.2		1.2	
IM6	Cloudy	Moderate	15:57	7.3	Surface	1.0	0.3	146	29.6	29.6	8.1	8.1	12.7	12.7	101.0	101.0	7.2	6.8	10.1	13.7	3	4	70	72	821040	805827	<0.2	<0.2	1.3	1.3
						1.0	0.3	152	29.6		8.1		12.7		101.0		7.2		10.1		3		70				<0.2		1.3	
					Middle	3.7	0.3	175	29.3	29.3	8.0	8.0	14.9	14.9	88.8	88.8	6.3		11.4		4		72				<0.2		1.3	
						3.7	0.3	180	29.3		8.0		14.9		88.8		6.3		11.4		4		72				<0.2		1.3	
					Bottom	6.3	0.3	222	28.1	28.1	7.9	7.9	21.0	21.0	64.3	64.3	4.5	4.5	19.6		4		75				<0.2		1.3	
						6.3	0.3	233	28.1		7.9		21.0		64.3		4.5		19.6		4		74				<0.2		1.3	
IM7	Cloudy	Moderate	15:47	9.0	Surface	1.0	0.3	132	29.5	29.5	8.1	8.1	13.6	13.6	91.9	91.7	6.5	5.9	10.8	15.0	4	4	69	72	821345	806820	<0.2	<0.2	1.3	1.3
						1.0	0.4	140	29.5		8.1		13.6		91.4		6.5		10.8		4		69				<0.2		1.3	
					Middle	4.5	0.2	198	29.0	29.0	7.9	7.9	16.7	16.7	75.5	74.6	5.3		13.0		4		72				<0.2		1.3	
						4.5	0.2	204	28.9		7.9		16.7		73.7		5.2		13.7		4		71				<0.2		1.3	
					Bottom	8.0	0.3	202	28.0	28.0	7.9	7.9	21.9	21.9	73.6	73.9	5.1	5.2	20.8		4		74				<0.2		1.3	
						8.0	0.3	202	28.0		7.9		21.9		74.2		5.2		20.8		4		74				<0.2		1.4	
IM8	Cloudy	Moderate	16:19	7.9	Surface	1.0	0.2	99	29.5	29.5	8.1	8.1	13.8	13.8	95.3	95.3	6.7	5.9	8.2	11.0	5	5	71	72	821810	808111	<0.2	<0.2	1.5	1.6
						1.0	0.2	102	29.5		8.1		13.8		95.3		6.7		8.2		4		72				<0.2		1.6	
					Middle	4.0	0.2	152	28.7	28.7	8.0	8.0	17.3	17.3	71.8	71.8	5.0		10.8		5		72				<0.2		1.6	
						4.0	0.2	156	28.7		8.0		17.3		71.8		5.0		10.8		5		73				<0.2		1.5	
					Bottom	6.9	0.1	161	28.2	28.2	7.9	7.9	20.2	20.2	69.6	69.6	4.9	4.9	14.1		7		74				<0.2		1.6	
						6.9	0.1	169	28.2		7.9		20.2		69.6		4.9		14.1		6		76				<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 05 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:30	7.2	Surface	1.0	0.2	129	29.4	29.4	8.1	8.1	14.3	14.3	88.4	88.4	6.2	5.7	10.7	16.2	5	5	71	73	822074	808814	<0.2	<0.2	1.6	1.6
						1.0	0.2	138	29.4		8.1		14.3		88.4		6.2		10.7		5		72				<0.2		1.6	
					Middle	3.6	0.2	95	28.6	28.6	8.0	8.0	19.4	19.4	74.8	74.8	5.2		17.2		5		72				<0.2		1.6	
						3.6	0.2	102	28.6		8.0		19.4		74.8		5.2		17.2		4		73				<0.2		1.6	
					Bottom	6.2	0.1	137	28.2	28.2	7.9	7.9	20.6	20.6	86.5	86.5	6.0	6.0	20.7		5		75				<0.2		1.6	
						6.2	0.1	143	28.2		7.9		20.6		86.5		6.0		20.7		5		75				<0.2		1.7	
IM10	Cloudy	Moderate	16:33	7.4	Surface	1.0	0.3	118	29.3	29.3	8.1	8.1	14.1	14.1	84.2	84.2	6.0	5.7	11.1	15.5	3	4	72	73	822357	809784	<0.2	<0.2	1.6	1.6
						1.0	0.3	128	29.3		8.1		14.1		84.2		6.0		11.1		4		71				<0.2		1.6	
					Middle	3.7	0.3	95	28.9	28.9	8.0	8.0	16.9	16.9	76.3	76.3	5.4		15.1		4		73				<0.2		1.6	
						3.7	0.4	101	28.9		8.0		16.9		76.3		5.4		15.1		4		74				<0.2		1.6	
					Bottom	6.4	0.2	116	28.0	28.0	7.9	7.9	21.2	21.2	75.2	75.2	5.2	5.2	20.2		4		75				<0.2		1.5	
						6.4	0.3	118	28.0		7.9		21.2		75.2		5.2		20.2		4		75				<0.2		1.6	
IM11	Cloudy	Moderate	16:46	7.3	Surface	1.0	0.4	114	29.4	29.4	8.1	8.1	14.8	14.8	93.8	93.8	6.6	6.2	9.2	12.6	4	5	72	75	822081	811442	<0.2	<0.2	1.6	1.6
						1.0	0.5	121	29.4		8.1		14.8		93.8		6.6		9.2		4		73				<0.2		1.6	
					Middle	3.7	0.4	103	28.9	28.9	8.1	8.1	16.3	16.3	81.6	81.6	5.7		12.2		5		75				<0.2		1.6	
						3.7	0.4	103	28.9		8.1		16.3		81.6		5.7		12.2		5		75				<0.2		1.6	
					Bottom	6.3	0.3	136	27.9	27.9	7.9	7.9	21.5	21.5	82.3	82.3	5.7	5.7	16.5		6		76				<0.2		1.6	
						6.3	0.3	148	27.9		7.9		21.5		82.3		5.7		16.5		5		77				<0.2		1.6	
IM12	Cloudy	Moderate	16:51	8.2	Surface	1.0	0.5	87	29.5	29.5	8.2	8.2	14.6	14.6	102.7	102.7	7.2	6.8	8.3	10.5	4	5	72	74	821430	812050	<0.2	<0.2	1.6	1.5
						1.0	0.5	87	29.5		8.2		14.6		102.7		7.2		8.3		4		73				<0.2		1.4	
					Middle	4.1	0.5	92	29.2	29.2	8.1	8.1	15.6	15.6	88.8	88.8	6.3		10.4		5		73				<0.2		1.5	
						4.1	0.5	98	29.2		8.1		15.6		88.8		6.3		10.4		5		73				<0.2		1.4	
					Bottom	7.2	0.3	100	28.7	28.7	8.0	8.0	19.0	19.0	93.2	93.2	6.5	6.5	12.9		4		75				<0.2		1.5	
						7.2	0.3	108	28.7		8.0		19.0		93.2		6.5		12.9		6		75				<0.2		1.5	
SR2	Cloudy	Moderate	17:18	4.6	Surface	1.0	0.3	93	29.4	29.4	8.2	8.2	14.8	14.8	99.2	99.2	7.0	7.0	9.0	10.0	7	7	72	74	821444	814152	<0.2	<0.2	1.6	1.6
						1.0	0.4	99	29.4		8.2		14.8		99.2		7.0		9.0		8		73				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	84	29.1	29.1	8.1	8.1	16.3	16.3	98.3	98.3	6.9	6.9	11.0		6		74				<0.2		1.6	
						3.6	0.2	84	29.1		8.1		16.3		98.3		6.9		11.0		6		75				<0.2		1.5	
SR3	Cloudy	Moderate	16:12	8.8	Surface	1.0	0.2	114	29.4	29.4	8.1	8.1	13.8	13.8	92.4	92.4	6.5	6.0	8.6	10.7	6	6	-	-	822131	807550	-	-	-	-
						1.0	0.2	122	29.4		8.1		13.8		92.4		6.5		8.6		5		-				-		-	
					Middle	4.4	0.2	139	28.8	28.8	8.0	8.0	17.4	17.4	77.9	77.9	5.5		10.4		6		-				-		-	
						4.4	0.2	140	28.8		8.0		17.4		77.9		5.5		10.4		5		-				-		-	
					Bottom	7.8	0.2	206	28.2	28.2	8.0	8.0	20.9	20.9	85.9	85.9	6.0	6.0	13.0		6		-				-		-	
						7.8	0.2	225	28.2		8.0		20.9		85.9		6.0		13.0		7		-				-		-	
SR4A	Cloudy	Moderate	17:17	8.2	Surface	1.0	0.1	356	29.4	29.4	8.2	8.2	15.4	15.4	88.6	88.1	6.2	5.7	12.6	16.7	7	7	-	-	817215	807795	-	-	-	-
						1.0	0.1	328	29.4		8.2		15.4		87.5		6.1		12.7		6		-				-		-	
					Middle	4.1	0.1	319	28.7	28.7	8.0	8.0	20.5	20.4	74.7	74.6	5.2		15.0		5		-				-		-	
						4.1	0.1	336	28.7		8.0		20.2		74.5		5.2		15.0		7		-				-		-	
					Bottom	7.2	-	155	27.0	27.0	7.9	7.9	26.9	26.9	62.9	63.3	4.3	4.4	22.6		9		-				-		-	
						7.2	-	165	27.0		7.9		26.9		63.6		4.4		22.4		9		-				-		-	
SR5A	Cloudy	Moderate	17:32	5.0	Surface	1.0	0.2	282	29.5	29.5	8.1	8.1	16.8	16.8	102.7	102.6	7.1	7.1	11.3	11.3	7	7	-	-	816622	810697	-	-	-	-
						1.0	0.2	298	29.5		8.1		16.8		102.5		7.1		11.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	221	29.4	29.4	8.0	8.0	17.9	17.9	103.8	104.0	7.2	7.2	11.2		7		-				-		-	
						4.0	0.1	231	29.5		8.0		17.9		104.2		7.2		11.2		7		-				-		-	
SR6	Cloudy	Moderate	17:59	4.1	Surface	1.0	0.2	19	29.6	29.6	8.0	8.0	16.4	16.4	92.6	92.5	6.4	6.4	13.3	14.5	8	8	-	-	817878	814681	-	-	-	-
						1.0	0.2	19	29.6		8.0		16.4		92.3		6.4		13.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	280	28.8	28.8	7.9	7.9	18.4	18.4	94.7	95.1	6.6	6.7	15.6		8		-				-		-	
						3.1	0.1	307	28.8		7.9		18.4		95.4		6.7		15.6		7		-				-		-	
SR7	Cloudy	Moderate	18:10	16.3	Surface	1.0	0.5	94	29.1	29.1	8.1	8.1	15.7	15.7	95.1	95.1	6.7	6.6	6.8	7.3	6	6	-	-	823618	823770	-	-	-	-
						1.0	0.5	96	29.1		8.1		15.7		95.1		6.7		6.8		5		-				-		-	
					Middle	8.2	0.1	106	28.9	28.9	8.1	8.1	16.5	16.5	91.8	91.8	6.5		6.9		6		-				-		-	
						8.2	0.1	113	28.9		8.1		16.5		91.8		6.5		6.9		7		-				-		-	
					Bottom	15.3	0.2	94	26.7	26.7	8.0	8.0	25.4	25.4	72.0	72.0	5.0	5.0	8.3		6		-				-		-	
						15.3	0.2	99	26.7		8.0		25.4		72.0		5.0		8.3		7		-				-		-	
SR8	Cloudy	Moderate	17:01	4.6	Surface	1.0	-	-	29.3	29.3	8.2	8.2	15.4	15.4	95.1	95.1	6.7	6.7	12.4	11.8	11	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.3		8.2		15.4		95.1		6.7		12.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	29.2	29.2	8.2	8.2	15.9	15.9	97.2	97.2	6.8	6.8	11.1		12		-				-		-	
						3.6	-	-	29.2		8.2		15.9		97.2		6.8		11.1		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 05 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:28	8.6	Surface	1.0	0.5	44	29.3	29.3	8.1	8.1	15.0	15.0	100.4	100.2	7.1	6.7	9.6	11.0	5	5	70	72	815634	804255	<0.2	<0.2	1.3	1.4
						1.0	0.5	46	29.3		8.1		15.0		100.0		7.0		9.7		4		70				<0.2		1.5	
					Middle	4.3	0.4	42	29.2	29.2	8.0	8.0	15.2	15.2	91.2	91.0	6.4		10.2		6		72				<0.2		1.4	
						4.3	0.4	43	29.2		8.0		15.2		90.8		6.4		10.3		6		72				<0.2		1.4	
					Bottom	7.6	0.3	27	27.7	27.6	7.9	7.9	18.3	18.4	71.8	72.1	5.1	5.2	13.1		6		74				<0.2		1.4	
						7.6	0.3	27	27.6		7.9		18.5		72.4		5.2		13.2		5		74				<0.2		1.5	
C2	Cloudy	Rough	12:10	12.1	Surface	1.0	0.9	5	29.3	29.3	8.0	8.0	12.6	12.6	90.0	90.0	6.4	5.7	8.6	9.1	5	6	71	73	825655	806956	<0.2	<0.2	1.8	2.1
						1.0	1.0	5	29.3		8.0		12.6		90.0		6.4		8.6		5		71				<0.2		1.7	
					Middle	6.1	0.5	356	28.2	28.2	7.9	7.9	20.7	20.7	69.9	69.9	4.9		9.1		4		73				<0.2		2.2	
						6.1	0.6	328	28.2		7.9		20.7		69.9		4.9		9.1		5		73				<0.2		2.2	
					Bottom	11.1	0.6	351	27.8	27.8	7.9	7.9	22.2	22.2	77.0	77.0	5.3	5.3	9.7		8		75				<0.2		2.2	
						11.1	0.7	323	27.8		7.9		22.2		77.0		5.3		9.7		9		74				<0.2		2.3	
C3	Cloudy	Moderate	09:55	12.2	Surface	1.0	0.6	20	29.0	29.0	8.0	8.0	15.5	15.5	86.9	86.9	6.1	6.0	7.3	7.6	5	4	72	75	822080	817829	<0.2	<0.2	2.2	2.3
						1.0	0.6	21	29.0		8.0		15.5		86.9		6.1		7.3		4		73				<0.2		2.4	
					Middle	6.1	0.5	227	28.7	28.7	8.0	8.0	17.4	17.4	82.0	82.0	5.8		7.3		4		75				<0.2		2.3	
						6.1	0.6	237	28.7		8.0		17.4		82.0		5.8		7.3		3		75				<0.2		2.4	
					Bottom	11.2	0.4	231	26.4	26.4	7.9	7.9	26.8	26.8	73.9	73.9	5.1	5.1	8.2		4		76				<0.2		2.2	
						11.2	0.5	243	26.4		7.9		26.8		73.9		5.1		8.2		3		77				<0.2		2.2	
IM1	Cloudy	Moderate	10:42	5.7	Surface	1.0	0.2	28	29.5	29.5	8.1	8.1	15.2	15.2	104.7	104.7	7.3	7.3	9.8	11.3	6	6	70	71	817936	807127	<0.2	<0.2	1.7	1.8
						1.0	0.3	29	29.5		8.1		15.2		104.7		7.3		9.8		6		70				<0.2		1.8	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.3	332	29.3	29.3	8.1	8.1	15.6	15.6	101.7	101.9	7.1	7.2	12.7		5		72				<0.2		1.7	
						4.7	0.3	305	29.3		8.1		15.6		102.1		7.2		12.7		5		72				<0.2		1.9	
IM2	Sunny	Rough	10:57	7.9	Surface	1.0	0.5	32	29.4	29.4	8.0	8.0	14.8	14.8	100.9	100.9	7.1	6.9	9.3	10.3	4	5	70	73	818157	806173	<0.2	<0.2	1.7	1.7
						1.0	0.5	34	29.4		8.0		14.8		100.8		7.1		9.4		6		71				<0.2		1.8	
					Middle	4.0	0.3	7	29.3	29.3	8.0	8.0	15.2	15.2	95.7	95.6	6.7		9.9		5		73				<0.2		1.6	
						4.0	0.3	7	29.3		8.0		15.2		95.4		6.7		9.9		5		72				<0.2		1.7	
					Bottom	6.9	0.4	343	29.1	29.1	8.0	8.0	17.3	17.2	91.8	92.0	6.4	6.4	11.7		6		75				<0.2		1.7	
						6.9	0.4	316	29.1		8.0		17.1		92.2		6.4		11.3		5		75				<0.2		1.7	
IM3	Sunny	Rough	11:12	7.7	Surface	1.0	0.4	23	29.5	29.5	8.0	8.0	14.6	14.6	97.1	97.0	6.8	6.6	10.0	11.2	5	4	71	73	818805	805577	<0.2	<0.2	1.8	1.7
						1.0	0.4	23	29.5		8.0		14.6		96.9		6.8		10.1		4		70				<0.2		1.8	
					Middle	3.9	0.3	11	29.4	29.4	8.0	8.0	14.7	14.7	90.4	90.3	6.4		10.4		4		72				<0.2		1.6	
						3.9	0.3	11	29.4		8.0		14.7		90.1		6.4		10.4		4		72				<0.2		1.6	
					Bottom	6.7	0.3	329	28.4	28.4	7.9	7.9	20.2	20.8	82.2	82.6	5.7	5.7	13.2		5		75				<0.2		1.7	
						6.7	0.4	356	28.4		7.9		21.5		82.9		5.7		13.1		4		75				<0.2		1.6	
IM4	Sunny	Rough	11:21	8.2	Surface	1.0	0.5	27	29.5	29.5	8.0	8.0	13.3	13.3	91.4	91.2	6.5	5.7	11.4	13.7	6	6	70	73	819727	804616	<0.2	<0.2	1.7	1.7
						1.0	0.5	28	29.5		8.0		13.3		91.0		6.5		11.4		5		70				<0.2		1.7	
					Middle	4.1	0.5	22	29.3	29.3	8.0	8.0	14.3	14.3	70.5	70.0	5.0		12.7		7		73				<0.2		1.6	
						4.1	0.5	22	29.3		8.0		14.3		69.5		4.9		12.8		5		72				<0.2		1.8	
					Bottom	7.2	0.4	344	26.7	26.7	7.8	7.8	28.5	28.5	61.0	61.0	4.2	4.2	16.8		7		75				<0.2		1.8	
						7.2	0.4	359	26.7		7.8		28.4		60.9		4.2		16.8		6		75				<0.2		1.8	
IM5	Sunny	Rough	11:33	7.5	Surface	1.0	0.4	19	29.5	29.5	8.0	8.0	14.1	14.1	97.3	97.2	6.9	6.8	10.6	11.6	4	5	70	72	820707	804849	<0.2	<0.2	1.9	1.8
						1.0	0.4	20	29.5		8.0		14.1		97.0		6.9		10.6		5		70				<0.2		1.8	
					Middle	3.8	0.5	18	29.3	29.3	8.0	8.0	14.4	14.4	94.1	94.1	6.6		10.6		5		72				<0.2		1.8	
						3.8	0.5	19	29.4		8.0		14.4		94.0		6.6		10.6		4		72				<0.2		1.8	
					Bottom	6.5	0.3	359	27.1	27.1	7.9	7.9	27.3	27.4	78.1	78.8	5.3	5.4	13.8		4		75				<0.2		1.6	
						6.5	0.3	330	27.1		7.9		27.4		79.4		5.4		13.6		5		75				<0.2		1.8	
IM6	Cloudy	Rough	11:43	7.5	Surface	1.0	0.3	35	29.5	29.5	8.0	8.0	14.0	14.0	97.2	97.1	6.9	6.6	10.6	14.3	4	5	70	73	821075	805810	<0.2	<0.2	1.7	1.8
						1.0	0.3	37	29.5		8.0		14.0		97.0		6.9		10.7		5		70				<0.2		1.9	
					Middle	3.8	0.4	40	29.3	29.3	8.0	8.0	14.7	14.7	90.1	90.1	6.4		11.7		4		72				<0.2		1.8	
						3.8	0.4	40	29.3		8.0		14.7		90.0		6.3		11.7		5		73				<0.2		1.8	
					Bottom	6.5	0.4	330	27.5	27.5	7.9	7.9	23.1	23.5	76.1	76.6	5.3	5.3	20.6		5		75				<0.2		1.6	
						6.5	0.4	344	27.4		7.9		24.0		77.1		5.3		20.6		5		75				<0.2		1.7	
IM7	Cloudy	Rough	11:56	8.6	Surface	1.0	0.5	44	29.5	29.5	8.1	8.1	15.2	15.2	101.7	101.7	7.1	6.5	10.2	15.8	5	5	70	73	821341	806861	<0.2	<0.2	1.8	1.9
						1.0	0.5	47	29.5		8.1		15.2		101.6		7.1		10.2		5		71				<0.2		1.7	
					Middle	4.3	0.3	43	29.2	29.2	8.1	8.1	16.0	16.0	84.0	83.8	5.9		13.6		6		72				<0.2		1.8	
						4.3	0.4	43	29.2		8.1		16.0		83.5		5.9		13.7		5		72				<0.2		1.8	
					Bottom	7.6	0.3	55	28.0	28.0	7.9	7.9	20.6	20.9	72.0	72.0	5.0	5.0	23.4		4		75				<0.2		1.8	
						7.6	0.3	55	28.0		7.9		21.2		72.0		5.0		23.8		4		75				<0.2		2.2	
IM8	Cloudy	Rough	11:42	8.1	Surface	1.0	0.2	323	29.4	29.4	8.0	8.0	14.1	14.1	90.0	90.0	6.4	6.1	10.0	11.5	4	5	71	73	821859	808154	<0.2	<0.2	2.2	2.2
						1.0	0.2	323	29.4		8.0		14.1		90.0		6.4		10.0		5		71				<0.2		2.2	
					Middle	4.1	0.2	286	29.1	29.1	8.0	8.0	15.0	15.0	80.1	80.1	5.7		11.7		5		72				<0.2		2.0	
						4.1	0.2	305	29.1		8.0		15.0		80.1		5.7		11.7		5		72				<0.2		2.2	
					Bottom	7.1	0.1	75	28.6	28.6	7.9	7.9	18.5	18.5	78.2	78.2	5.5	5.5	12.7		6		75				<0.2		2.2	
						7.1	0.1	78	28.6		7.9		18.5		78.2		5.5		12.7		6		74				<0.2		2.3	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 05 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Rough	11:35	7.6	Surface	1.0	0.1	332	29.3	29.3	8.0	8.0	14.1	14.1	92.4	92.4	6.5	6.5	8.5	10.6	4	5	71	73	822121	808808	<0.2	<0.2	2.1	2.2
						1.0	0.1	354	29.3		8.0		14.1		92.4		6.5		8.5		4		71				<0.2		2.2	
					Middle	3.8	0.1	300	29.2	29.2	8.0	8.0	14.6	14.6	90.7	90.7	6.4		9.6		4		73				<0.2		2.2	
						3.8	0.1	304	29.2		8.0		14.6		90.7		6.4		9.6		4		73				<0.2		2.3	
					Bottom	6.6	0.3	322	29.1	29.1	8.0	8.0	15.9	15.9	97.0	97.0	6.8	6.8	13.6		5		75				<0.2		2.0	
						6.6	0.3	347	29.1		8.0		15.9		97.0		6.8		13.6		6		75				<0.2		2.2	
IM10	Cloudy	Rough	11:27	7.6	Surface	1.0	0.2	324	29.3	29.3	8.0	8.0	13.7	13.7	90.7	90.7	6.4	6.2	9.0	10.5	4	4	73	74	822386	809806	<0.2	<0.2	2.2	2.2
						1.0	0.3	338	29.3		8.0		13.7		90.7		6.4		9.0		3		72				<0.2		2.2	
					Middle	3.8	0.1	284	29.0	29.0	8.0	8.0	15.8	15.8	85.7	85.7	6.0		11.1		3		74				<0.2		2.2	
						3.8	0.1	284	29.0		8.0		15.8		85.7		6.0		11.1		5		75				<0.2		2.2	
					Bottom	6.6	0.4	334	29.0	29.0	7.9	7.9	18.3	18.3	95.9	95.9	6.7	6.7	11.4		3		75				<0.2		2.1	
						6.6	0.4	357	29.0		7.9		18.3		95.9		6.7		11.4		5		76				<0.2		2.3	
IM11	Cloudy	Moderate	11:20	6.8	Surface	1.0	0.1	353	29.4	29.4	8.0	8.0	13.8	13.8	91.2	91.2	6.5	6.4	8.1	8.2	4	4	72	74	822065	811452	<0.2	<0.2	2.2	2.1
						1.0	0.1	325	29.4		8.0		13.8		91.2		6.5		8.1		4		72				<0.2		1.9	
					Middle	3.4	0.2	317	29.1	29.1	8.0	8.0	14.9	14.9	87.1	87.1	6.2		8.2		5		74				<0.2		2.0	
						3.4	0.2	325	29.1		8.0		14.9		87.1		6.2		8.2		5		74				<0.2		2.0	
					Bottom	5.8	0.5	284	29.0	29.0	8.0	8.0	17.9	17.9	92.1	92.1	6.4	6.4	8.4		4		75				<0.2		2.3	
						5.8	0.5	300	29.0		8.0		17.9		92.1		6.4		8.4		4		75				<0.2		2.1	
IM12	Cloudy	Moderate	11:12	8.4	Surface	1.0	0.3	296	29.3	29.3	8.0	8.0	13.7	13.7	86.4	86.4	6.1	5.8	8.2	8.9	4	5	72	74	821441	812062	<0.2	<0.2	2.2	2.2
						1.0	0.3	312	29.3		8.0		13.7		86.4		6.1		8.2		5		73				<0.2		2.2	
					Middle	4.2	0.4	295	28.7	28.7	8.0	8.0	17.7	17.7	77.3	77.3	5.4		9.0		6		74				<0.2		2.1	
						4.2	0.4	315	28.7		8.0		17.7		77.3		5.4		9.0		4		75				<0.2		2.1	
					Bottom	7.4	0.3	306	28.1	28.1	7.9	7.9	23.1	23.1	84.3	84.3	5.8	5.8	9.4		5		76				<0.2		2.2	
						7.4	0.3	310	28.1		7.9		23.1		84.3		5.8		9.4		5		76				<0.2		2.6	
SR2	Cloudy	Moderate	10:42	4.6	Surface	1.0	0.0	253	29.2	29.2	8.0	8.0	13.6	13.6	90.0	90.0	6.4	6.4	11.9	13.1	6	6	73	74	821441	814178	<0.2	<0.2	2.4	2.3
						1.0	0.0	271	29.2		8.0		13.6		90.0		6.4		11.9		6		72				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	312	29.0	29.0	8.0	8.0	15.6	15.6	92.1	92.1	6.5	6.5	14.3		5		75				<0.2		2.4	
						3.6	0.0	327	29.0		8.0		15.6		92.1		6.5		14.3		6		75				<0.2		2.3	
SR3	Cloudy	Rough	11:49	8.4	Surface	1.0	0.4	19	29.4	29.4	8.0	8.0	13.9	13.9	89.7	89.7	6.4	6.1	8.5	9.3	6	6	-	-	822136	807590	-	-	-	-
						1.0	0.4	20	29.4		8.0		13.9		89.7		6.4		8.5		6		-				-		-	
					Middle	4.2	0.3	4	29.0	29.0	8.0	8.0	16.2	16.2	82.2	82.2	5.8		9.1		7		-				-		-	
						4.2	0.4	4	29.0		8.0		16.2		82.2		5.8		9.1		6		-				-		-	
					Bottom	7.4	0.1	341	28.7	28.7	7.9	7.9	19.7	19.7	84.0	84.0	5.8	5.8	10.2		6		-				-		-	
						7.4	0.2	343	28.7		7.9		19.7		84.0		5.8		10.2		6		-				-		-	
SR4A	Cloudy	Moderate	10:01	8.7	Surface	1.0	0.2	223	29.2	29.2	8.0	8.0	16.6	16.6	87.9	87.8	6.1	5.5	10.6	16.1	5	6	-	-	817195	807807	-	-	-	-
						1.0	0.2	225	29.2		8.0		16.6		87.6		6.1		10.6		5		-				-		-	
					Middle	4.4	0.2	243	29.0	29.0	7.9	7.9	17.6	17.5	70.5	70.5	4.9		14.7		7		-				-		-	
						4.4	0.2	247	29.0		7.9		17.5		70.5		4.9		14.9		8		-				-		-	
					Bottom	7.7	0.1	243	27.1	27.1	7.8	7.8	26.5	26.5	69.4	70.4	4.8	4.9	22.8		6		-				-		-	
						7.7	0.1	261	27.1		7.8		26.5		71.4		4.9		22.9		7		-				-		-	
SR5A	Cloudy	Moderate	09:42	4.3	Surface	1.0	0.3	303	29.1	29.1	7.9	7.9	18.1	18.1	81.9	81.9	5.7	5.7	11.8	12.9	8	10	-	-	816601	810676	-	-	-	-
						1.0	0.3	317	29.1		7.9		18.1		81.8		5.7		11.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	310	29.0	29.0	7.9	7.9	18.7	18.7	81.4	81.5	5.7	5.7	13.9		11		-				-		-	
						3.3	0.2	317	29.0		7.9		18.7		81.5		5.7		14.0		10		-				-		-	
SR6	Rainy	Moderate	09:15	4.2	Surface	1.0	0.4	244	29.1	29.1	7.9	7.9	15.8	15.8	79.2	79.0	5.6	5.6	11.7	11.5	7	7	-	-	817907	814685	-	-	-	-
						1.0	0.4	265	29.1		7.9		15.8		78.8		5.6		11.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	212	28.8	28.8	7.9	7.9	18.5	18.5	74.1	74.1	5.2	5.2	11.3		7		-				-		-	
						3.2	0.1	224	28.8		7.9		18.5		74.1		5.2		11.3		7		-				-		-	
SR7	Cloudy	Moderate	09:15	16.5	Surface	1.0	0.1	123	29.0	29.0	8.0	8.0	15.4	15.4	87.2	87.2	6.2	5.5	7.1	7.4	4	4	-	-	823614	823722	-	-	-	-
						1.0	0.1	130	29.0		8.0		15.4		87.2		6.2		7.1		4		-				-		-	
					Middle	8.3	0.1	157	28.1	28.1	8.0	8.0	20.4	20.4	68.0	68.0	4.7		7.3		3		-				-		-	
						8.3	0.1	158	28.1		8.0		20.4		68.0		4.7		7.3		3		-				-		-	
					Bottom	15.5	0.1	226	25.6	25.6	7.9	7.9	29.1	29.1	51.1	51.1	3.5	3.5	7.7		5		-				-		-	
						15.5	0.1	238	25.6		7.9		29.1		51.1		3.5		7.7		5		-				-		-	
SR8	Cloudy	Moderate	11:00	5.3	Surface	1.0	-	-	29.2	29.2	8.1	8.1	14.1	14.1	97.1	97.2	6.9	6.9	8.2	8.2	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.2		8.1		14.1		97.2		6.9		8.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	29.1	29.1	8.1	8.1	14.9	14.9	102.4	102.4	7.2	7.2	8.2		4		-				-		-	
						4.3	-	-	29.1		8.1		14.9		102.4		7.2		8.2		3		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 07 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) Average	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	18:52	8.4	Surface	1.0	0.3	219	29.8	29.8	8.2	8.2	9.8	9.8	101.6	101.4	7.3	5.6	9.6	10.3	3	4	74	77	815616	804231	<0.2	<0.2	<0.2	1.4	1.5
						1.0	0.4	222	29.8		8.2		9.8		101.1		7.3		9.6		4		75				<0.2			1.5	
					Middle	4.2	0.3	222	27.7	27.7	7.9	7.9	22.9	22.9	56.5	56.5	3.9		10.3		4		76				<0.2	<0.2		1.5	1.5
						4.2	0.3	229	27.7		7.9		22.9		56.5		3.9		10.3		4		76				<0.2			1.6	
					Bottom	7.4	0.2	222	25.6	25.6	7.8	7.8	30.7	30.7	66.5	66.5	4.6	4.6	10.9		5		79				<0.2	<0.2		1.6	
						7.4	0.2	239	25.6		7.8		30.7		66.5		4.6		10.9		4		79				<0.2			1.5	
C2	Cloudy	Moderate	17:50	11.7	Surface	1.0	0.2	194	29.6	29.6	8.1	8.1	10.7	10.7	99.4	99.4	7.1	5.5	7.8	9.2	4	5	76	78	825708	806958	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	206	29.6		8.1		10.7		99.3		7.1		7.8		4		76				<0.2			1.8	
					Middle	5.9	0.1	188	27.1	27.1	7.9	7.9	24.2	24.2	54.6	54.6	3.8		9.1		6		78				<0.2	<0.2		1.8	
						5.9	0.1	202	27.1		7.9		24.2		54.6		3.8		9.1		6		78				<0.2			1.8	
					Bottom	10.7	0.2	155	26.3	26.3	7.9	7.9	26.9	26.9	60.8	61.1	4.2	4.3	10.7		6		80				<0.2	<0.2		1.9	
						10.7	0.2	169	26.3		7.9		26.9		61.3		4.3		10.6		5		80				<0.2			1.9	
C3	Cloudy	Moderate	19:39	12.1	Surface	1.0	0.1	106	29.4	29.4	8.2	8.2	14.0	14.0	109.3	109.2	7.7	6.6	6.4	5.9	2	3	77	79	822102	817783	<0.2	<0.2	<0.2	1.8	1.9
						1.0	0.1	110	29.4		8.2		14.0		109.0		7.7		6.4		3		77				<0.2			1.9	
					Middle	6.1	0.2	357	28.3	28.3	8.0	8.0	18.7	18.7	79.1	79.0	5.6		5.2		2		78				<0.2	<0.2		1.9	
						6.1	0.2	328	28.3		8.0		18.7		78.9		5.5		5.2		4		79				<0.2			1.8	
					Bottom	11.1	0.2	126	26.4	26.4	7.9	7.9	26.1	26.1	68.6	68.8	4.8	4.8	6.1		4		81				<0.2	<0.2		1.9	
						11.1	0.2	137	26.4		7.9		26.1		69.0		4.8		6.1		4		81				<0.2			1.9	
IM1	Cloudy	Moderate	18:34	5.2	Surface	1.0	0.2	158	29.8	29.8	8.2	8.2	10.7	10.7	99.1	99.1	7.1	7.1	10.6	13.8	3	3	75	76	817940	807115	<0.2	<0.2	<0.2	1.7	1.8
						1.0	0.2	171	29.8		8.2		10.7		99.1		7.1		10.6		3		75				<0.2			1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.2	0.1	132	26.6	26.6	7.8	7.8	27.2	27.2	60.5	60.5	4.2	4.2	17.0		4		76				<0.2	<0.2		1.8	
						4.2	0.1	132	26.6		7.8		27.2		60.5		4.2		17.0		3		76				<0.2			1.8	
IM2	Cloudy	Moderate	18:27	7.4	Surface	1.0	0.6	205	29.8	29.8	8.2	8.2	11.2	11.2	99.8	99.8	7.1	5.0	9.7	13.3	4	3	74	76	818178	806136	<0.2	<0.2	<0.2	1.6	1.7
						1.0	0.6	222	29.8		8.2		11.2		99.8		7.1		9.7		2		74				<0.2			1.9	
					Middle	3.7	0.2	186	26.6	26.6	7.9	7.9	25.8	25.8	41.5	41.5	2.9		12.7		4		76				<0.2	<0.2		1.7	
						3.7	0.2	187	26.6		7.9		25.8		41.5		2.9		12.7		3		76				<0.2			1.7	
					Bottom	6.4	0.0	143	26.2	26.2	7.8	7.8	28.6	28.6	49.7	49.7	3.4	3.4	17.5		2		78				<0.2	<0.2		1.8	
						6.4	0.0	144	26.2		7.8		28.6		49.7		3.4		17.5		3		78				<0.2			1.7	
IM3	Cloudy	Moderate	18:21	7.6	Surface	1.0	0.4	200	29.8	29.8	8.2	8.2	11.5	11.5	91.1	91.1	6.5	4.9	9.8	11.5	3	3	74	76	818758	805615	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.4	209	29.8		8.2		11.5		91.1		6.5		9.8		3		74				<0.2			1.9	
					Middle	3.8	0.3	180	26.6	26.6	7.8	7.8	27.0	27.0	48.5	48.5	3.3		11.0		4		76				<0.2	<0.2		1.7	
						3.8	0.3	185	26.6		7.8		27.0		48.5		3.3		11.0		3		77				<0.2			1.8	
					Bottom	6.6	0.1	114	26.0	26.0	7.8	7.8	29.4	29.4	60.3	60.3	4.1	4.1	13.6		3		78				<0.2	<0.2		1.8	
						6.6	0.1	119	26.0		7.8		29.4		60.3		4.1		13.6		3		79				<0.2			1.7	
IM4	Cloudy	Moderate	18:13	7.6	Surface	1.0	0.4	180	29.6	29.6	8.1	8.1	11.7	11.7	93.7	93.7	6.7	5.6	10.1	10.7	4	4	74	77	819709	804633	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.4	192	29.6		8.1		11.7		93.7		6.7		10.1		3		75				<0.2			1.8	
					Middle	3.8	0.3	194	28.5	28.5	7.9	7.9	18.7	18.7	63.4	63.4	4.4		10.5		4		76				<0.2	<0.2		1.9	
						3.8	0.3	210	28.5		7.9		18.7		63.4		4.4		10.5		6		76				<0.2			1.8	
					Bottom	6.6	0.2	171	26.3	26.3	7.8	7.8	28.5	28.5	50.8	50.8	3.5	3.5	11.5		4		79				<0.2	<0.2		1.8	
						6.6	0.2	175	26.3		7.8		28.5		50.8		3.5		11.5		4		79				<0.2			1.8	
IM5	Cloudy	Moderate	18:06	7.2	Surface	1.0	0.3	243	29.7	29.7	8.1	8.1	9.7	9.7	87.5	87.5	6.3	5.4	10.2	12.7	3	3	74	76	820722	804875	<0.2	<0.2	<0.2	2.0	2.0
						1.0	0.3	261	29.7		8.1		9.7		87.5		6.3		10.2		2		74				<0.2			2.0	
					Middle	3.6	0.4	244	28.2	28.2	7.9	7.9	19.7	19.7	62.7	62.7	4.4		11.5		3		75				<0.2	<0.2		2.0	
						3.6	0.4	256	28.2		7.9		19.7		62.7		4.4		11.5		3		76				<0.2			2.0	
					Bottom	6.2	0.2	209	26.4	26.4	7.8	7.8	28.1	28.1	60.7	60.7	4.2	4.2	16.4		3		78				<0.2	<0.2		2.0	
						6.2	0.2	222	26.4		7.8		28.1		60.7		4.2		16.4		2		78				<0.2			2.0	
IM6	Cloudy	Moderate	17:59	7.0	Surface	1.0	0.3	192	29.7	29.7	8.1	8.1	10.6	10.6	89.2	89.2	6.4	5.4	10.4	14.0	4	4	74	76	821057	805813	<0.2	<0.2	<0.2	2.1	2.1
						1.0	0.4	207	29.7		8.1		10.6		89.2		6.4		10.4		4		74				<0.2			2.1	
					Middle	3.5	0.3	231	28.1	28.1	7.9	7.9	20.6	20.6	62.6	62.6	4.4		11.9		3		76				<0.2	<0.2		2.2	
						3.5	0.3	233	28.1		7.9		20.6		62.6		4.4		11.9		4		76				<0.2			2.0	
					Bottom	6.0	0.3	237	27.2	27.2	7.8	7.8	24.4	24.4	57.2	57.2	4.0	4.0	19.6		3		78				<0.2	<0.2		2.0	
						6.0	0.3	242	27.2		7.8		24.4		57.2		4.0		19.6		3		78				<0.2			2.1	
IM7	Cloudy	Moderate	17:49	8.4	Surface	1.0	0.2	215	29.7	29.7	8.1	8.1	11.6	11.6	91.7	91.7	6.5	5.5	9.8	11.4	4	4	73	76	821325	806856	<0.2	<0.2	<0.2	1.9	1.9
						1.0	0.2	229	29.7		8.1		11.6		91.7		6.5		9.8		2		74				<0.2			1.8	
					Middle	4.2	0.3	208	28.1	28.1	7.9	7.9	20.0	20.0	62.2	62.2	4.4		9.6		4		76				<0.2	<0.2		1.9	
						4.2	0.3	218	28.1		7.9		20.0		62.2		4.4		9.6		4		76				<0.2			1.9	
					Bottom	7.4	0.3	242	27.5	27.5	7.8	7.8	24.5	24.5	55.8	55.8	3.9	3.9	14.7		3		78				<0.2	<0.2		2.0	
						7.4	0.4	265	27.5		7.8		24.5		55.8		3.9		14.7		5		79				<0.2			1.8	
IM8	Cloudy	Moderate	18:19	7.4	Surface	1.0	0.1	142	29.3	29.3	8.0	8.0	12.1	12.1	86.7	86.7	6.2	5.5	7.8	9.2	2	3	73	76	821807	808122	<0.2	<0.2	<0.2	2.0	1.9
						1.0	0.1	151	29.3		8.0		12.1		86.6		6.2		7.8		3		75				<0.2			1.8	
					Middle	3.7	0.2	170	28.2	28.2	7.9	7.9	19.4	19.4	67.4	67.4	4.7		7.9		3		76				<0.2	<0.2		1.9	
						3.7	0.2	181	28.2		7.9		19.4		67.4		4.7		7.9		4		76				<0.2			1.9	
					Bottom	6.4	0.2	170	27.5	27.5	7.9	7.9	22.6	22.6	57.5	57.6	4.0	4.0	11.9		3		78				<0.2	<0.2		2.0	
						6.4	0.2	184	27.5		7.9		22.6		57.6		4.0		12.0		4		78				<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 07 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
IM9	Cloudy	Moderate	18:26	7.2	Surface	1.0	0.3	125	29.5	29.5	8.0	8.0	11.4	11.4	93.4	93.4	6.7	5.7	7.6	11.0	3	4	77	79	822067	808794	<0.2	<0.2	<0.2	2.0	2.0
						1.0	0.3	134	29.5		8.0		11.4		93.3		6.7		7.6		3		76				<0.2			2.0	
					Middle	3.6	0.1	73	28.1	28.1	7.9	7.9	19.6	19.6	67.3	67.3	4.7		8.3		4		78				<0.2	<0.2		2.0	
						3.6	0.1	74	28.1		7.9		19.6		67.3		4.7		8.3		4		78				<0.2			2.0	
					Bottom	6.2	0.2	157	27.2	27.2	7.9	7.9	23.7	23.7	65.2	65.5	4.5	4.6	17.0		5		81				<0.2	<0.2		1.9	
						6.2	0.2	172	27.2		7.9		23.7		65.7		4.6		17.0		4		81				<0.2			2.0	
IM10	Cloudy	Moderate	18:34	6.9	Surface	1.0	0.3	128	29.4	29.4	8.0	8.0	11.6	11.6	92.7	92.6	6.6	6.3	7.7	9.0	4	4	76	78	822409	809809	<0.2	<0.2	<0.2	2.0	1.9
						1.0	0.3	134	29.4		8.0		11.6		92.5		6.6		7.7		5		76				<0.2			1.9	
					Middle	3.5	0.3	106	29.1	29.1	8.0	8.0	13.7	13.6	84.4	84.3	6.0		7.9		5		78				<0.2	<0.2		1.9	
						3.5	0.3	116	29.1		8.0		13.6		84.2		6.0		7.9		4		78				<0.2			1.9	
					Bottom	5.9	0.2	118	27.1	27.1	7.9	7.9	24.0	24.0	71.6	72.0	5.0	5.0	11.5		3		80				<0.2	<0.2		1.9	
						5.9	0.2	120	27.1		7.9		24.0		72.3		5.0		11.4		4		81				<0.2			1.8	
IM11	Cloudy	Moderate	18:47	9.1	Surface	1.0	0.4	105	29.4	29.4	8.1	8.1	12.2	12.2	94.0	94.0	6.7	6.1	7.6	9.3	2	3	78	80	822036	811486	<0.2	<0.2	<0.2	2.0	2.0
						1.0	0.4	114	29.4		8.1		12.2		94.0		6.7		7.6		3		79				<0.2			2.1	
					Middle	4.6	0.2	96	28.4	28.4	8.0	8.0	18.4	18.4	76.4	76.4	5.4		7.4		3		80				<0.2	<0.2		1.9	
						4.6	0.2	103	28.4		8.0		18.4		76.3		5.4		7.4		4		80				<0.2			1.9	
					Bottom	8.1	0.1	177	27.1	27.1	7.9	7.9	23.7	23.7	65.4	65.6	4.6	4.6	12.9		3		82				<0.2	<0.2		2.0	
						8.1	0.2	181	27.1		7.9		23.7		65.8		4.6		12.9		4		82				<0.2			2.0	
IM12	Cloudy	Moderate	18:53	8.7	Surface	1.0	0.3	87	29.5	29.5	8.1	8.1	11.6	11.6	98.8	98.8	7.1	6.3	8.4	8.0	4	4	77	80	821451	812021	<0.2	<0.2	<0.2	2.0	2.0
						1.0	0.3	87	29.5		8.1		11.6		98.7		7.1		8.4		3		77				<0.2			1.9	
					Middle	4.4	0.2	100	28.2	28.2	8.0	8.0	19.9	19.8	77.0	77.1	5.4		7.4		3		80				<0.2	<0.2		1.9	
						4.4	0.3	106	28.2		8.0		19.8		77.1		5.4		7.4		3		80				<0.2			1.9	
					Bottom	7.7	0.1	143	27.0	27.0	7.9	7.9	24.1	24.1	73.9	74.2	5.2	5.2	8.3		4		82				<0.2	<0.2		2.0	
						7.7	0.1	154	27.0		7.9		24.0		74.5		5.2		8.3		4		82				<0.2			2.0	
SR2	Cloudy	Moderate	19:17	3.2	Surface	1.0	0.2	68	29.4	29.4	8.1	8.1	11.3	11.3	105.0	105.0	7.5	7.5	7.4	8.0	4	4	78	79	821436	814173	<0.2	<0.2	<0.2	2.0	2.0
						1.0	0.3	72	29.4		8.1		11.3		104.9		7.5		7.4		4		78				<0.2			1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	2.2	0.2	65	29.4	29.4	8.1	8.1	14.5	14.5	101.8	101.8	7.2	7.2	8.6		4		80				<0.2	<0.2		2.0	
						2.2	0.3	70	29.4		8.1		14.5		101.8		7.2		8.5		3		80				<0.2			2.0	
SR3	Cloudy	Moderate	18:13	9.0	Surface	1.0	0.2	183	29.5	29.5	8.1	8.1	10.7	10.7	97.7	97.7	7.0	5.8	7.5	10.7	4	4	-	-	822166	807574	-	-	-	-	-
						1.0	0.3	191	29.5		8.1		10.7		97.6		7.0		7.5		4		-				-			-	
					Middle	4.5	0.3	185	28.0	28.0	7.9	7.9	19.8	19.8	64.2	64.2	4.5		9.4		4		-	-			-	-		-	
						4.5	0.3	193	28.0		7.9		19.8		64.1		4.5		9.5		4		-				-			-	
					Bottom	8.0	0.2	213	27.3	27.3	7.9	7.9	23.6	23.6	67.1	67.4	4.7	4.7	15.2		4		-				-	-		-	
						8.0	0.2	224	27.4		7.9		23.6		67.7		4.7		15.2		4		-				-			-	
SR4A	Cloudy	Moderate	19:13	8.9	Surface	1.0	0.2	252	29.9	29.9	8.2	8.2	11.7	11.7	99.5	99.3	7.1	5.1	10.8	16.8	5	5	-	-	817210	807829	-	-	-	-	-
						1.0	0.2	262	29.9		8.2		11.7		99.0		7.0		10.9		3		-				-			-	
					Middle	4.5	0.1	85	27.0	27.0	7.8	7.8	25.3	25.3	46.5	46.5	3.2		18.5		6		-	-			-	-		-	
						4.5	0.1	91	27.0		7.8		25.3		46.5		3.2		18.5		6		-				-			-	
					Bottom	7.9	0.2	73	26.5	26.5	7.8	7.8	27.7	27.7	56.1	56.1	3.9	3.9	21.1		5		-				-	-		-	
						7.9	0.2	76	26.5		7.8		27.7		56.1		3.9		21.1		5		-				-			-	
SR5A	Cloudy	Moderate	19:29	4.1	Surface	1.0	0.0	71	29.8	29.8	8.2	8.2	15.9	15.9	114.5	114.5	8.0	8.0	10.4	10.5	4	3	-	-	816604	810704	-	-	-	-	-
						1.0	0.0	71	29.8		8.2		15.9		114.5		8.0		10.5		3		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.1	0.0	154	29.7	29.7	8.1	8.1	16.9	16.9	110.7	110.7	7.7	7.7	10.6		3		-				-	-		-	
						3.1	0.0	161	29.7		8.1		16.9		110.7		7.7		10.6		3		-				-			-	
SR6	Cloudy	Moderate	19:52	4.4	Surface	1.0	0.0	79	29.7	29.7	8.1	8.1	15.6	15.6	110.4	110.4	7.7	7.7	10.3	11.2	5	5	-	-	817880	814674	-	-	-	-	-
						1.0	0.0	85	29.7		8.1		15.6		110.4		7.7		10.3		4		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.4	0.0	45	29.6	29.6	8.1	8.1	17.2	17.2	108.4	108.4	7.5	7.5	12.1		5		-				-	-		-	
						3.4	0.0	49	29.6		8.1		17.2		108.4		7.5		12.1		6		-				-			-	
SR7	Cloudy	Moderate	20:09	21.5	Surface	1.0	0.3	101	29.4	29.4	8.2	8.2	13.8	13.8	113.3	113.3	8.0	6.2	6.2	6.5	3	3	-	-	823653	823728	-	-	-	-	-
						1.0	0.3	109	29.4		8.2		13.8		113.2		8.0		6.2		3		-				-			-	
					Middle	10.8	0.2	121	26.5	26.5	8.0	8.0	25.7	25.7	63.8	63.9	4.4		6.2		2		-	-			-	-		-	
						10.8	0.2	130	26.5		8.0		25.7		64.0		4.5		6.2		2		-				-			-	
					Bottom	20.5	0.1	30	24.8	24.8	7.9	7.9	30.3	30.3	54.2	54.4	3.8	3.8	7.0		4		-				-	-		-	
						20.5	0.1	30	24.8		7.9		30.3		54.6		3.8		7.0		5		-				-			-	
SR8	Cloudy	Calm	19:04	3.4	Surface	1.0	-	-	29.5	29.5	8.2	8.2	11.7	11.7	102.8	102.7	7.3	7.3	10.1	10.4	5	6	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	29.5		8.2		11.7		102.6		7.3		10.1		6		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	2.4	-	-	29.0	29.0	8.1	8.1	15.9	15.9	90.1	90.2	6.4	6.4	10.6		7		-				-	-		-	
						2.4	-	-	29.0		8.1		15.9		90.3		6.4		10.6		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 07 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
C1	Cloudy	Moderate	14:04	8.9	Surface	1.0	0.2	32	29.7	29.7	8.1	8.1	11.0	11.0	98.7	98.5	7.1	6.3	9.5	13.1	4	4	76	78	815646	804243	<0.2	<0.2	<0.2	1.8	1.9
						1.0	0.2	32	29.7		8.1		11.0		98.3		7.0		9.6		4		76				<0.2			1.9	
					Middle	4.5	0.2	54	29.1	29.1	8.0	8.0	14.2	14.2	79.4	79.2	5.6		12.1		4		78				<0.2	<0.2		2.0	
						4.5	0.2	54	29.1		8.0		14.2		79.0		5.6		12.2		3		78				<0.2			1.9	
					Bottom	7.9	0.3	44	25.8	25.8	7.8	7.8	29.9	29.9	78.8	78.8	5.4	5.4	17.9		4		80				<0.2	<0.2		1.9	
						7.9	0.4	46	25.8		7.8		29.9		78.8		5.4		17.4		3		80				<0.2			1.8	
C2	Cloudy	Moderate	14:53	13.1	Surface	1.0	0.1	93	29.5	29.5	8.0	8.0	10.7	11.0	94.3	94.3	6.8	5.9	8.3	7.7	5	5	78	80	825681	806939	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.1	98	29.5		8.0		11.3		94.2		6.8		8.3		4		78				<0.2			1.8	
					Middle	6.6	0.1	324	28.3	28.3	7.9	7.9	19.1	19.1	69.8	69.8	4.9		7.5		6		80				<0.2	<0.2		1.8	
						6.6	0.1	325	28.3		7.9		19.1		69.8		4.9		7.5		6		81				<0.2			1.7	
					Bottom	12.1	0.1	340	27.6	27.6	7.9	7.9	22.3	22.3	71.0	71.0	5.0	5.0	7.2		6		82				<0.2	<0.2		1.7	
						12.1	0.1	350	27.6		7.9		22.3		71.0		5.0		7.2		5		82				<0.2			1.7	
C3	Cloudy	Calm	13:04	12.2	Surface	1.0	0.3	255	29.2	29.2	8.1	8.1	14.7	14.7	92.7	92.7	6.6	5.4	6.7	9.2	5	5	78	80	822084	817773	<0.2	<0.2	<0.2	1.9	1.7
						1.0	0.3	256	29.2		8.1		14.7		92.7		6.6		6.7		5		78				<0.2			1.6	
					Middle	6.1	0.2	250	26.6	26.6	7.9	7.9	24.5	24.5	59.6	59.6	4.2		8.9		5		80				<0.2	<0.2		1.7	
						6.1	0.2	262	26.6		7.9		24.5		59.6		4.2		9.1		5		80				<0.2			1.7	
					Bottom	11.2	0.2	280	25.7	25.7	7.9	7.9	29.2	29.2	70.1	70.1	4.9	4.9	11.8		4		82				<0.2	<0.2		1.6	
						11.2	0.2	289	25.7		7.9		29.2		70.1		4.9		11.8		5		82				<0.2			1.8	
IM1	Cloudy	Calm	14:25	5.1	Surface	1.0	0.3	27	29.9	29.9	8.2	8.2	10.9	10.9	112.2	112.1	8.0	8.0	9.5	9.5	4	4	76	77	817975	807136	<0.2	<0.2	<0.2	1.9	1.9
						1.0	0.4	27	29.9		8.2		10.9		111.9		8.0		9.5		3		76				<0.2			1.8	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.1	0.1	337	29.8	29.8	8.1	8.1	12.0	12.0	110.6	110.7	7.9	7.9	9.5		4		78				<0.2	<0.2		1.7	
						4.1	0.1	347	29.8		8.1		12.0		110.7		7.9		9.5		3		78				<0.2			2.0	
IM2	Cloudy	Moderate	14:32	7.4	Surface	1.0	0.2	32	29.9	29.9	8.1	8.1	10.4	10.4	106.6	106.5	7.6	7.2	10.2	12.7	4	3	76	78	818158	806144	<0.2	<0.2	<0.2	1.8	1.9
						1.0	0.2	34	29.9		8.1		10.4		106.4		7.6		10.3		3		76				<0.2			2.0	
					Middle	3.7	0.2	7	29.5	29.4	8.1	8.1	13.1	13.1	95.6	95.5	6.8		12.9		4		78				<0.2	<0.2		1.9	
						3.7	0.3	7	29.4		8.1		13.1		95.3		6.8		13.0		3		78				<0.2			2.0	
					Bottom	6.4	0.1	303	28.6	28.5	8.0	8.0	15.3	15.5	92.5	92.8	6.6	6.6	14.6		2		80				<0.2	<0.2		1.9	
						6.4	0.1	308	28.5		8.0		15.7		93.1		6.6		14.9		2		80				<0.2			2.0	
IM3	Cloudy	Moderate	14:39	7.8	Surface	1.0	0.3	54	29.8	29.8	8.1	8.1	9.8	9.8	103.8	103.7	7.5	7.1	9.6	10.8	2	3	75	78	818766	805568	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	58	29.8		8.1		9.8		103.6		7.5		9.6		3		76				<0.2			1.7	
					Middle	3.9	0.3	33	29.5	29.5	8.1	8.1	13.9	13.9	95.6	95.5	6.8		9.7		3		78				<0.2	<0.2		1.8	
						3.9	0.4	35	29.5		8.1		14.0		95.3		6.7		9.7		3		78				<0.2			1.9	
					Bottom	6.8	0.3	329	27.0	27.0	7.9	7.9	26.0	26.1	77.8	78.4	5.4	5.4	13.2		4		80				<0.2	<0.2		2.0	
						6.8	0.3	343	27.0		7.9		26.1		79.0		5.4		13.2		3		80				<0.2			1.7	
IM4	Cloudy	Moderate	14:50	7.4	Surface	1.0	0.2	70	29.8	29.8	8.1	8.1	9.0	9.0	101.7	101.7	7.3	6.9	9.8	9.4	3	4	76	78	819709	804577	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	71	29.8		8.1		9.0		101.6		7.3		9.8		3		76				<0.2			1.8	
					Middle	3.7	0.1	236	29.6	29.6	8.1	8.1	12.8	12.8	90.9	90.9	6.5		9.3		3		78				<0.2	<0.2		1.8	
						3.7	0.1	242	29.6		8.1		12.8		90.9		6.5		9.3		4		79				<0.2			1.7	
					Bottom	6.4	0.2	346	27.5	27.5	7.9	7.9	19.0	19.5	67.9	68.2	4.8	4.8	9.2		4		80				<0.2	<0.2		1.8	
						6.4	0.2	318	27.4		7.9		20.0		68.4		4.8		9.2		5		81				<0.2			1.8	
IM5	Cloudy	Moderate	14:57	7.0	Surface	1.0	0.2	15	29.8	29.8	8.1	8.1	9.4	9.4	100.6	100.6	7.2	6.6	9.9	11.7	5	4	75	78	820761	804846	<0.2	<0.2	<0.2	1.8	1.8
						1.0	0.2	15	29.8		8.1		9.4		100.5		7.2		9.9		4		75				<0.2			1.7	
					Middle	3.5	0.2	356	29.4	29.4	8.1	8.1	14.7	14.7	84.2	84.1	5.9		10.4		4		78				<0.2	<0.2		1.9	
						3.5	0.2	328	29.4		8.1		14.7		83.9		5.9		10.4		5		78				<0.2			1.8	
					Bottom	6.0	0.1	17	26.4	26.4	7.8	7.8	28.8	28.7	58.9	59.8	4.0	4.1	14.8		4		80				<0.2	<0.2		2.0	
						6.0	0.1	17	26.4		7.8		28.7		60.7		4.2		14.6		4		80				<0.2			1.8	
IM6	Cloudy	Moderate	15:05	6.9	Surface	1.0	0.4	353	29.4	29.4	8.1	8.1	14.3	14.3	99.4	99.4	7.0	6.8	10.6	12.1	5	6	76	78	821032	805798	<0.2	<0.2	<0.2	1.7	1.8
						1.0	0.4	325	29.4		8.1		14.3		99.3		7.0		10.6		6		76				<0.2			1.7	
					Middle	3.5	0.3	359	29.4	29.4	8.1	8.1	14.5	14.5	91.7	91.6	6.5		11.7		5		78				<0.2	<0.2		1.8	
						3.5	0.4	330	29.4		8.1		14.5		91.4		6.5		11.7		7		78				<0.2			1.8	
					Bottom	5.9	0.4	328	27.6	27.6	7.9	7.9	22.4	22.4	73.8	74.1	5.1	5.2	13.8		6		80				<0.2	<0.2		1.9	
						5.9	0.4	341	27.6		7.9		22.4		74.4		5.2		13.9		5		81				<0.2			1.7	
IM7	Cloudy	Moderate	15:12	8.5	Surface	1.0	0.2	7	29.7	29.7	8.1	8.1	12.1	12.1	108.0	108.0	7.7	7.6	9.9	10.2	6	5	76	78	821359	806861	<0.2	<0.2	<0.2	1.7	1.7
						1.0	0.2	7	29.7		8.1		12.1		108.0		7.7		9.9		5		77				<0.2			1.7	
					Middle	4.3	0.2	21	29.7	29.7	8.1	8.1	12.7	12.7	104.4	104.4	7.4		10.2		6		79				<0.2	<0.2		1.8	
						4.3	0.2	22	29.7		8.1		12.7		104.3		7.4		10.2		5		78				<0.2			1.7	
					Bottom	7.5	0.0	136	29.3	29.3	8.1	8.0	13.0	13.0	94.0	94.0	6.7	6.7	10.5		5		80				<0.2	<0.2		1.6	
						7.5	0.0	136	29.3		8.0		13.1		94.0		6.7		10.5		5		80				<0.2			1.7	
IM8	Cloudy	Moderate	14:28	8.0	Surface	1.0	0.1	277	29.6	29.6	8.1	8.1	10.0	10.0	92.4	92.4	6.7	6.0	8.1	8.4	4	4	78	80	821845	808148	<0.2	<0.2	<0.2	1.6	1.6
						1.0	0.1	288	29.6		8.1		10.0		92.4		6.7		8.1		5		78				<0.2			1.6	
					Middle	4.0	0.1	81	28.7	28.7	7.9	7.9	17.1	17.1	73.9	73.9	5.2		7.8		4		80				<0.2	<0.2		1.6	
						4.0	0.1	87	28.7		7.9		17.1		73.9		5.2		7.8		3		81				<0.2			1.8	
					Bottom	7.0	0.1	37	27.5	27.5	7.9	7.9	22.9	22.9	56.5	56.5	3.9	3.9	9.3		4		82				<0.2	<0.2		1.6	
						7.0	0.1	40	27.5		7.9		22.9		56.5		3.9		9.3		4		82				<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 07 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
IM9	Cloudy	Moderate	14:19	7.5	Surface	1.0	0.1	259	29.6	29.6	8.1	8.1	10.2	10.2	93.1	93.1	6.7	6.0	8.5	12.1	3	4	78	81	822075	808800	<0.2	<0.2	<0.2	1.6	1.6
						1.0	0.1	269	29.6		8.1		10.2		93.1		6.7		8.5		3		78				<0.2			1.6	
					Middle	3.8	0.0	42	28.8	28.8	8.0	8.0	15.7	15.7	74.0	74.0	5.2		10.8		3		81				<0.2	<0.2		1.6	
						3.8	0.0	45	28.8		8.0		15.7		74.0		5.2		10.8		4		81				<0.2			1.7	
					Bottom	6.5	0.2	90	27.6	27.6	7.9	7.9	22.1	22.1	68.4	68.4	4.8	4.8	16.9		4		82				<0.2	<0.2		1.6	
						6.5	0.2	97	27.6		7.9		22.1		68.4		4.8		16.9		4		83				<0.2			1.7	
IM10	Cloudy	Moderate	14:11	8.1	Surface	1.0	0.1	159	29.8	29.8	8.1	8.1	10.0	10.0	98.2	98.2	7.1	6.3	8.2	10.2	3	4	79	80	822384	809817	<0.2	<0.2	<0.2	1.7	2.2
						1.0	0.1	168	29.8		8.1		10.0		98.2		7.1		8.2		4		79				<0.2			1.6	
					Middle	4.1	0.1	351	29.3	29.3	8.0	8.0	13.0	13.0	77.6	77.6	5.5		9.5		4		80				<0.2	<0.2		1.6	
						4.1	0.1	323	29.3		8.0		13.0		77.6		5.5		9.5		3		80				<0.2			5.0	
					Bottom	7.1	0.3	322	27.8	27.8	7.9	7.9	20.8	20.8	66.8	66.8	4.7	4.7	12.9		4		82				<0.2	<0.2		1.5	
						7.1	0.3	351	27.8		7.9		20.8		66.8		4.7		12.9		4		82				<0.2			1.6	
IM11	Cloudy	Moderate	14:00	8.1	Surface	1.0	0.1	318	29.6	29.6	8.1	8.1	11.9	11.9	94.0	94.0	6.7	6.1	8.0	12.2	2	3	79	81	822031	811485	<0.2	<0.2	<0.2	1.8	1.7
						1.0	0.1	339	29.6		8.1		11.9		94.0		6.7		8.0		3		79				<0.2			1.7	
					Middle	4.1	0.4	282	28.9	28.9	8.0	8.0	16.0	16.0	76.3	76.3	5.4		10.3		3		80				<0.2	<0.2		1.6	
						4.1	0.4	294	28.9		8.0		16.0		76.3		5.4		10.3		2		81				<0.2			1.7	
					Bottom	7.1	0.2	336	27.4	27.4	7.9	7.9	22.7	22.7	69.2	69.2	4.8	4.8	18.3		2		82				<0.2	<0.2		1.8	
						7.1	0.3	353	27.4		7.9		22.7		69.2		4.8		18.3		3		82				<0.2			1.6	
IM12	Cloudy	Moderate	13:51	8.2	Surface	1.0	0.2	252	29.7	29.7	8.2	8.2	12.0	12.0	95.1	95.1	6.8	6.3	7.4	8.5	2	2	78	80	821440	812029	<0.2	<0.2	<0.2	1.6	1.7
						1.0	0.2	264	29.7		8.2		12.0		95.1		6.8		7.4		2		79				<0.2			1.6	
					Middle	4.1	0.5	285	28.7	28.7	8.0	8.0	17.9	17.9	80.6	80.6	5.7		7.7		2		80				<0.2	<0.2		1.6	
						4.1	0.6	298	28.7		8.0		17.9		80.6		5.7		7.7		3		80				<0.2			1.7	
					Bottom	7.2	0.2	302	27.3	27.3	7.9	7.9	22.9	22.9	77.1	77.1	5.4	5.4	10.5		3		82				<0.2	<0.2		1.7	
						7.2	0.2	323	27.3		7.9		22.9		77.1		5.4		10.5		2		82				<0.2			1.7	
SR2	Cloudy	Calm	13:26	4.8	Surface	1.0	0.3	174	29.6	29.6	8.1	8.1	12.7	12.7	95.2	95.2	6.8	6.8	8.9	10.3	3	3	78	79	821472	814168	<0.2	<0.2	<0.2	1.7	1.8
						1.0	0.3	181	29.6		8.1		12.7		95.2		6.8		8.9		3		78				<0.2			1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.1	157	28.9	28.9	8.0	8.0	16.0	16.0	85.9	85.9	6.1	6.1	11.7		3		80				<0.2	<0.2		1.7	
						3.8	0.1	163	28.9		8.0		16.0		85.9		6.1		11.7		4		80				<0.2			1.7	
SR3	Cloudy	Moderate	14:34	9.1	Surface	1.0	0.2	263	29.6	29.6	8.0	8.0	10.4	10.4	91.4	91.3	6.6	6.0	8.0	8.0	3	3	-	-	822130	807550	-	-	-	-	-
						1.0	0.2	284	29.6		8.0		10.4		91.1		6.6		8.0		3		-				-			-	
					Middle	4.6	0.1	78	28.9	28.9	7.9	7.9	15.1	15.1	76.6	76.6	5.4		7.7		4		-	-			-	-		-	
						4.6	0.1	82	28.9		7.9		15.1		76.6		5.4		7.7		3		-				-			-	
					Bottom	8.1	0.1	306	27.7	27.7	7.9	7.9	21.8	21.8	69.5	69.5	4.8	4.8	8.2		4		-	-			-	-		-	
						8.1	0.1	309	27.7		7.9		21.8		69.5		4.8		8.2		3		-				-			-	
SR4A	Cloudy	Calm	13:42	8.2	Surface	1.0	0.1	95	29.8	29.8	8.1	8.1	13.9	13.9	109.9	109.8	7.7	6.4	10.0	12.4	3	4	-	-	817196	807793	-	-	-	-	-
						1.0	0.1	97	29.8		8.1		13.9		109.7		7.7		10.0		3		-				-			-	
					Middle	4.1	0.2	251	29.5	29.5	8.0	8.0	16.9	16.9	74.7	74.3	5.2		12.6		4		-	-			-	-		-	
						4.1	0.2	273	29.5		8.0		16.9		73.9		5.1		12.7		5		-				-			-	
					Bottom	7.2	0.3	257	26.8	26.8	7.8	7.8	27.2	27.2	69.9	70.5	4.8	4.9	14.7		5		-	-			-	-		-	
						7.2	0.3	279	26.8		7.8		27.2		71.0		4.9		14.6		4		-				-			-	
SR5A	Cloudy	Calm	13:26	5.4	Surface	1.0	0.2	287	29.6	29.6	8.0	8.0	17.3	17.3	101.3	101.3	7.0	7.0	10.3	10.7	3	4	-	-	816575	810711	-	-	-	-	-
						1.0	0.2	298	29.6		8.0		17.3		101.2		7.0		10.3		3		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.4	0.2	311	29.2	29.2	8.0	8.0	18.7	18.7	95.1	95.3	6.6	6.6	11.1		4		-	-			-	-		-	
						4.4	0.2	316	29.2		8.0		18.7		95.5		6.6		11.1		4		-				-			-	
SR6	Cloudy	Calm	13:01	4.3	Surface	1.0	0.1	254	29.7	29.7	8.0	8.0	14.4	14.4	100.9	100.8	7.1	7.1	10.3	11.9	4	3	-	-	817880	814662	-	-	-	-	-
						1.0	0.1	268	29.7		8.0		14.5		100.7		7.1		10.4		3		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	0.0	254	29.1	29.1	7.9	7.9	17.5	17.5	88.1	88.3	6.1	6.2	13.4		3		-	-			-	-		-	
						3.3	0.0	271	29.2		7.9		17.5		88.4		6.2		13.5		3		-				-			-	
SR7	Cloudy	Calm	12:21	19.2	Surface	1.0	0.1	244	29.6	29.6	8.1	8.1	13.8	13.8	98.2	98.2	6.9	5.2	6.9	7.0	2	3	-	-	823635	823745	-	-	-	-	-
						1.0	0.1	251	29.6		8.1		13.8		98.2		6.9		6.9		2		-				-			-	
					Middle	9.6	0.1	158	25.9	25.9	8.0	8.0	28.1	28.1	49.6	49.6	3.4		7.2		3		-	-			-	-		-	
						9.6	0.1	166	25.9		8.0		28.1		49.6		3.4		7.2		4		-				-			-	
					Bottom	18.2	0.2	71	25.0	25.0	7.9	7.9	30.3	30.3	51.2	51.2	3.6	3.6	6.9		2		-	-			-	-		-	
						18.2	0.2	72	25.0		7.9		30.3		51.2		3.6		6.9		4		-				-			-	
SR8	Cloudy	Calm	13:40	5.0	Surface	1.0	-	-	29.6	29.6	8.1	8.1	13.4	13.4	96.4	96.4	6.8	6.8	7.6	7.5	3	3	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	29.6		8.1		13.4		96.4		6.8		7.6		4		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.0	-	-	29.1	29.1	8.0	8.0	17.3	17.3	97.5	97.5	6.8	6.8	7.4		4		-				-	-		-	
						4.0	-	-	29.1		8.0		17.3		97.5		6.8		7.4		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 10 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:55	9.2	Surface	1.0	0.7	234	28.4	28.4	8.2	8.2	18.3	18.3	106.2	106.1	7.5	6.8	5.7	7.1	5	6	78	80	815603	804273	<0.2	<0.2	2.1	1.6
						1.0	0.7	256	28.4		8.2		18.3		105.9		7.4		5.8		6		78				<0.2		2.0	
					Middle	4.6	0.7	232	27.8	27.8	8.2	8.2	22.0	22.0	89.6	89.4	6.2		6.4		7		80				<0.2		1.5	
						4.6	0.7	236	27.9		8.2		22.0		89.2		6.2		6.5		6		80				<0.2		1.4	
					Bottom	8.2	0.6	258	26.8	26.8	8.1	8.1	25.7	25.7	82.1	82.4	5.7	5.7	9.2		5		82				<0.2		1.4	
						8.2	0.6	270	26.8		8.1		25.8		82.6		5.7		9.2		6		83				<0.2		1.3	
C2	Fine	Moderate	12:02	13.2	Surface	1.0	0.2	182	28.1	28.1	8.2	8.2	20.1	20.1	104.6	104.6	7.3	5.8	8.6	11.7	5	6	80	83	825683	806945	<0.2	<0.2	1.4	1.3
						1.0	0.3	182	28.1		8.2		20.1		104.5		7.3		8.7		6		81				<0.2		1.6	
					Middle	6.6	0.1	171	27.2	27.2	8.0	8.0	24.2	24.2	61.2	61.2	4.3		11.3		6		83				<0.2		1.2	
						6.6	0.1	187	27.2		8.0		24.2		61.2		4.3		11.3		5		83				<0.2		1.5	
					Bottom	12.2	0.2	143	27.1	27.1	8.0	8.0	24.5	24.5	59.2	59.2	4.1	4.1	15.1		6		84				<0.2		1.1	
						12.2	0.2	157	27.1		8.0		24.5		59.2		4.1		15.2		5		85				<0.2		1.2	
C3	Cloudy	Moderate	09:44	12.1	Surface	1.0	0.1	112	28.6	28.6	8.3	8.3	19.8	19.8	119.6	119.5	8.3	8.1	10.9	10.2	7	7	78	81	822109	817802	<0.2	<0.2	1.1	1.2
						1.0	0.1	118	28.6		8.3		19.8		119.4		8.3		10.9		6		79				<0.2		1.3	
					Middle	6.1	0.2	343	28.6	28.6	8.3	8.3	20.0	20.0	112.3	112.2	7.8		10.8		7		80				<0.2		1.6	
						6.1	0.2	316	28.6		8.3		20.0		112.0		7.8		10.8		7		81				<0.2		0.9	
					Bottom	11.1	0.2	132	28.4	28.4	8.2	8.2	20.8	20.8	111.1	111.1	7.7	7.7	8.9		7		83				<0.2		1.1	
						11.1	0.2	144	28.4		8.2		20.8		111.1		7.7		8.6		6		82				<0.2		1.2	
IM1	Cloudy	Moderate	11:21	4.8	Surface	1.0	0.1	327	27.6	27.6	8.2	8.1	22.2	22.3	82.7	82.1	5.8	5.8	8.9	9.6	3	4	78	79	817960	807122	<0.2	<0.2	1.3	1.5
						1.0	0.1	340	27.5		8.1		22.4		81.4		5.7		9.0		4		78				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	206	27.1	27.1	8.1	8.1	24.2	24.2	83.4	83.7	5.8	5.8	10.2		5		80				<0.2		1.7	
						3.8	0.1	215	27.1		8.1		24.2		83.9		5.8		10.2		4		81				<0.2		1.4	
IM2	Cloudy	Moderate	11:27	7.2	Surface	1.0	0.8	213	28.3	28.3	8.2	8.2	18.9	18.9	90.1	89.7	6.3	5.6	9.4	13.7	7	7	79	81	818170	806162	<0.2	<0.2	1.2	1.4
						1.0	0.8	230	28.3		8.2		18.9		89.3		6.3		9.4		6		79				<0.2		1.2	
					Middle	3.6	0.7	212	27.2	27.2	8.0	8.0	23.5	23.5	68.4	68.4	4.8		14.2		6		80				<0.2		1.6	
						3.6	0.7	226	27.2		8.0		23.5		68.4		4.8		14.1		6		81				<0.2		1.6	
					Bottom	6.2	0.3	222	26.9	26.9	8.0	8.0	24.7	24.7	69.4	69.6	4.8	4.9	17.7		8		82				<0.2		1.4	
						6.2	0.3	231	26.9		8.0		24.7		69.8		4.9		17.6		7		82				<0.2		1.3	
IM3	Cloudy	Moderate	11:35	7.6	Surface	1.0	0.4	180	28.6	28.6	8.3	8.3	17.5	17.5	107.1	106.9	7.5	6.8	7.5	14.1	5	6	78	80	818755	805568	<0.2	<0.2	1.6	1.3
						1.0	0.4	195	28.6		8.3		17.5		106.6		7.5		7.6		6		79				<0.2		1.4	
					Middle	3.8	0.5	176	27.9	27.9	8.2	8.2	20.3	20.3	85.8	85.8	6.0		11.7		5		80				<0.2		1.1	
						3.8	0.5	176	27.9		8.2		20.3		85.8		6.0		11.7		5		80				<0.2		1.2	
					Bottom	6.6	0.3	193	27.0	27.0	8.0	8.0	24.5	24.5	81.0	81.4	5.6	5.7	23.0		6		82				<0.2		1.2	
						6.6	0.3	202	27.0		8.0		24.5		81.7		5.7		23.2		6		83				<0.2		1.0	
IM4	Cloudy	Moderate	11:45	7.5	Surface	1.0	0.7	169	28.7	28.7	8.3	8.3	16.8	16.8	103.3	103.1	7.3	6.5	8.2	11.1	6	6	78	80	819710	804619	<0.2	<0.2	1.3	1.5
						1.0	0.7	181	28.7		8.3		16.8		102.8		7.2		8.3		6		79				<0.2		1.3	
					Middle	3.8	0.6	178	27.9	27.9	8.1	8.1	21.4	21.4	81.2	81.1	5.7		11.3		7		80				<0.2		1.2	
						3.8	0.6	183	27.9		8.1		21.4		80.9		5.6		11.3		6		80				<0.2		1.4	
					Bottom	6.5	0.3	190	27.1	27.1	8.0	8.0	24.5	24.5	74.7	74.7	5.2	5.2	13.8		6		81				<0.2		1.8	
						6.5	0.3	199	27.1		8.0		24.5		74.7		5.2		13.8		7		82				<0.2		2.0	
IM5	Fine	Moderate	11:56	6.7	Surface	1.0	0.8	205	28.7	28.7	8.3	8.3	17.0	17.0	88.2	87.7	6.2	5.4	9.6	21.5	6	6	79	81	820709	804868	<0.2	<0.2	1.4	1.6
						1.0	0.9	219	28.7		8.3		17.0		87.1		6.1		9.7		7		79				<0.2		1.4	
					Middle	3.4	0.7	211	27.3	27.3	8.0	8.0	23.4	23.4	67.9	67.9	4.7		17.0		7		80				<0.2		1.8	
						3.4	0.7	214	27.3		8.0		23.4		67.9		4.7		17.3		5		81				<0.2		1.7	
					Bottom	5.7	0.5	211	27.2	27.2	8.0	8.0	24.0	24.0	67.1	67.2	4.7	4.7	37.7		6		82				<0.2		1.7	
						5.7	0.5	219	27.2		8.0		24.0		67.2		4.7		37.8		5		82				<0.2		1.6	
IM6	Fine	Moderate	12:04	6.6	Surface	1.0	0.5	214	28.8	28.8	8.3	8.3	18.1	18.1	119.9	119.8	8.4	7.2	7.0	13.3	7	7	79	81	821084	805852	<0.2	<0.2	1.5	1.5
						1.0	0.5	231	28.8		8.3		18.1		119.6		8.4		7.0		6		80				<0.2		1.5	
					Middle	3.3	0.5	204	27.8	27.8	8.2	8.2	20.1	20.1	84.6	84.5	5.9		12.3		6		81				<0.2		1.5	
						3.3	0.5	205	27.8		8.2		20.1		84.4		5.9		12.6		7		81				<0.2		1.4	
					Bottom	5.6	0.5	221	27.4	27.4	8.1	8.1	23.4	23.4	92.6	93.0	6.4	6.5	20.5		8		82				<0.2		1.6	
						5.6	0.5	231	27.4		8.1		23.4		93.3		6.5		20.5		8		82				<0.2		1.6	
IM7	Fine	Moderate	12:15	7.3	Surface	1.0	0.6	215	28.2	28.2	8.2	8.2	19.5	19.5	97.0	96.8	6.8	5.9	7.3	9.4	6	7	80	81	821374	806824	<0.2	<0.2	1.1	1.4
						1.0	0.6	217	28.2		8.2		19.5		96.5		6.8		7.4		6		80				<0.2		1.3	
					Middle	3.7	0.7	221	27.4	27.4	8.0	8.0	22.7	22.7	69.8	69.8	4.9		8.8		7		80				<0.2		1.6	
						3.7	0.7	231	27.4		8.0		22.7		69.8		4.9		8.8		7		80				<0.2		1.5	
					Bottom	6.3	0.6	214	27.1	27.1	8.0	8.0	24.0	24.0	63.2	63.5	4.4	4.4	11.9		8		82				<0.2		1.9	
						6.3	0.6	217	27.1		8.0		24.1		63.7		4.4		12.1		8		82				<0.2		1.2	
IM8	Fine	Moderate	11:21	7.9	Surface	1.0	0.1	154	28.7	28.7	8.3	8.3	17.2	17.2	100.3	100.3	7.1	5.9	8.2	12.6	7	6	80	82	821851	808139	<0.2	<0.2	1.4	1.5
						1.0	0.1	164	28.7		8.3		17.2		100.3		7.1		8.2		6		80				<0.2		1.3	
					Middle	4.0	0.2	162	27.3	27.3	8.0	8.0	23.9	23.9	66.6	66.6	4.6		12.4		6		83				<0.2		1.4	
						4.0	0.2	176	27.3		8.0		23.9		66.6		4.6		12.4		6		83				<0.2		1.2	
					Bottom	6.9	0.2	186	27.1	27.1	8.0	8.0	24.4	24.4	70.4	70.4	4.9	4.9	17.2		6		84				<0.2		1.8	
						6.9	0.2	200	27.1		8.0		24.4		70.4		4.9		17.2		7		84				<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 10 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	11:12	7.4	Surface	1.0	0.3	132	28.8	28.8	8.2	8.2	17.0	17.0	101.6	101.6	7.1	6.1	9.6	12.7	8	7	80	81	822083	808784	<0.2	<0.2	1.7	1.5
						1.0	0.3	135	28.8		8.2		17.0		101.6		7.1		9.6		8		80				<0.2		1.8	
					Middle	3.7	0.1	86	27.6	27.6	8.1	8.1	22.1	22.1	72.6	72.6	5.1		14.0		8		82				<0.2		1.5	
						3.7	0.1	87	27.6		8.1		22.1		72.6		5.1		14.0		7		80				<0.2		1.3	
					Bottom	6.4	0.2	160	27.1	27.1	8.0	8.0	24.9	24.9	67.1	67.1	4.7	4.7	14.6		7		83				<0.2		1.5	
						6.4	0.2	173	27.1		8.0		24.9		67.1		4.7		14.6		6		83				<0.2		1.3	
IM10	Cloudy	Moderate	11:03	7.8	Surface	1.0	0.3	133	28.6	28.6	8.2	8.2	17.9	17.9	100.7	100.7	7.1	6.1	10.0	17.5	10	10	80	81	822393	809793	<0.2	<0.2	1.2	1.5
						1.0	0.3	143	28.6		8.2		17.9		100.7		7.1		10.0		10		80				<0.2		1.5	
					Middle	3.9	0.3	115	27.6	27.6	8.1	8.1	22.0	22.0	73.4	73.4	5.1		16.8		9		81				<0.2		1.7	
						3.9	0.3	116	27.6		8.1		22.0		73.4		5.1		16.8		10		81				<0.2		1.8	
					Bottom	6.8	0.2	126	27.0	27.0	8.0	8.0	24.9	24.9	70.3	70.3	4.9	4.9	25.7		11		82				<0.2		1.3	
						6.8	0.2	132	27.0		8.0		24.9		70.3		4.9		25.7		12		82				<0.2		1.5	
IM11	Cloudy	Moderate	10:51	8.2	Surface	1.0	0.4	117	28.4	28.4	8.2	8.2	19.1	19.1	93.0	93.0	6.5	5.6	9.6	13.9	11	12	79	81	822083	811488	<0.2	<0.2	1.4	1.4
						1.0	0.4	120	28.4		8.2		19.1		93.0		6.5		9.6		12		79				<0.2		1.5	
					Middle	4.1	0.2	89	27.2	27.2	8.0	8.0	23.7	23.7	66.0	66.0	4.6		14.1		12		81				<0.2		1.3	
						4.1	0.2	93	27.2		8.0		23.7		66.0		4.6		14.1		12		81				<0.2		1.3	
					Bottom	7.2	0.2	162	26.8	26.8	8.0	8.0	25.8	25.8	63.6	63.6	4.4	4.4	17.9		13		82				<0.2		1.4	
						7.2	0.2	163	26.8		8.0		25.8		63.6		4.4		17.9		12		83				<0.2		1.6	
IM12	Cloudy	Moderate	10:44	8.1	Surface	1.0	0.3	96	28.4	28.4	8.2	8.2	18.5	18.5	102.2	102.2	7.2	6.4	8.3	10.7	11	11	78	81	821444	812046	<0.2	<0.2	1.6	1.5
						1.0	0.3	100	28.4		8.2		18.5		102.2		7.2		8.3		10		79				<0.2		1.2	
					Middle	4.1	0.3	116	27.8	27.8	8.1	8.1	20.9	20.9	78.4	78.4	5.5		10.5		10		80				<0.2		1.6	
						4.1	0.3	116	27.8		8.1		20.9		78.4		5.5		10.5		10		80				<0.2		1.6	
					Bottom	7.1	0.1	137	26.8	26.8	8.0	8.0	26.1	26.1	71.9	71.9	5.0	5.0	13.4		11		83				<0.2		1.4	
						7.1	0.1	145	26.8		8.0		26.1		71.9		5.0		13.4		11		83				<0.2		1.6	
SR2	Cloudy	Moderate	10:11	4.6	Surface	1.0	0.2	77	27.8	27.8	8.1	8.1	20.8	20.8	81.3	81.2	5.7	5.7	11.7	12.7	8	7	79	79	821462	814159	<0.2	<0.2	1.6	1.5
						1.0	0.3	79	27.8		8.1		20.8		81.0		5.7		11.7		7		78				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	82	27.1	27.1	8.0	8.0	24.6	24.6	73.8	73.9	5.1	5.1	13.6		7		80				<0.2		1.6	
						3.6	0.3	86	27.1		8.0		24.6		74.0		5.1		13.7		7		80				<0.2		1.4	
SR3	Fine	Moderate	11:28	9.0	Surface	1.0	0.2	190	28.8	28.8	8.3	8.3	18.4	18.4	103.9	103.9	7.3	6.4	10.0	15.2	4	5	-	-	822120	807598	-	-	-	-
						1.0	0.2	205	28.8		8.3		18.4		103.9		7.3		10.0		5		-				-		-	
					Middle	4.5	0.3	182	27.5	27.5	8.1	8.1	22.9	22.9	77.5	77.5	5.4		15.1		4		-				-		-	
						4.5	0.3	194	27.5		8.1		22.9		77.5		5.4		15.1		6		-				-		-	
					Bottom	8.0	0.2	227	27.4	27.4	8.1	8.1	23.8	23.8	77.4	77.4	5.4	5.4	20.6		5		-				-		-	
						8.0	0.2	242	27.4		8.1		23.8		77.4		5.4		20.6		7		-				-		-	
SR4A	Cloudy	Calm	10:35	8.4	Surface	1.0	0.1	5	27.8	27.8	8.1	8.1	20.8	20.8	80.5	80.3	5.6	5.2	10.4	14.9	6	7	-	-	817182	807818	-	-	-	-
						1.0	0.1	5	27.8		8.1		20.8		80.1		5.6		10.5		6		-				-		-	
					Middle	4.2	0.2	51	27.0	27.0	8.0	8.0	25.0	25.0	67.1	67.4	4.7		15.7		8		-				-		-	
						4.2	0.3	56	27.0		8.0		25.0		67.6		4.7		15.9		7		-				-		-	
					Bottom	7.4	0.2	75	26.9	26.9	8.0	8.0	25.5	25.5	76.7	77.0	5.3	5.4	18.3		7		-				-		-	
						7.4	0.2	82	26.9		8.0		25.5		77.2		5.4		18.3		6		-				-		-	
SR5A	Cloudy	Calm	10:18	3.8	Surface	1.0	0.1	28	28.6	28.6	8.3	8.3	19.9	19.9	116.3	116.2	8.1	8.1	10.5	11.8	5	6	-	-	816574	810689	-	-	-	-
						1.0	0.1	29	28.6		8.3		19.9		116.1		8.1		10.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	35	28.5	28.5	8.3	8.3	20.3	20.3	114.7	114.9	8.0	8.0	13.0		5		-				-		-	
						2.8	0.0	36	28.5		8.3		20.3		115.0		8.0		13.1		6		-				-		-	
SR6	Cloudy	Calm	09:47	4.6	Surface	1.0	0.1	64	28.2	28.2	8.2	8.2	21.7	21.7	105.9	105.6	7.3	7.3	9.4	13.2	6	7	-	-	817927	814663	-	-	-	-
						1.0	0.1	66	28.2		8.2		21.7		105.3		7.3		9.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	93	27.1	27.1	7.9	7.9	24.6	24.6	72.1	72.3	5.0	5.0	17.0		7		-				-		-	
						3.6	0.0	94	27.1		7.9		24.6		72.4		5.0		16.9		7		-				-		-	
SR7	Cloudy	Calm	09:00	19.1	Surface	1.0	0.3	113	28.2	28.2	8.2	8.2	21.7	21.7	117.3	117.2	8.1	6.9	5.4	7.4	6	8	-	-	823610	823733	-	-	-	-
						1.0	0.3	114	28.2		8.2		21.7		117.1		8.1		5.4		6		-				-		-	
					Middle	9.6	0.2	142	27.4	27.4	8.0	8.0	23.8	23.8	80.3	80.2	5.6		7.6		9		-				-		-	
						9.6	0.3	149	27.4		8.0		23.8		80.1		5.6		7.7		7		-				-		-	
					Bottom	18.1	0.1	41	27.1	27.1	7.9	7.9	24.7	24.7	67.9	68.1	4.7	4.7	9.1		10		-				-		-	
						18.1	0.1	43	27.1		7.9		24.7		68.3		4.7		9.3		11		-				-		-	
SR8	Cloudy	Calm	10:22	4.7	Surface	1.0	-	-	27.7	27.7	8.1	8.1	21.3	21.3	77.2	77.1	5.4	5.4	11.6	12.5	5	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	27.7		8.1		21.3		76.9		5.4		11.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	27.0	27.0	8.0	8.0	24.9	24.9	74.5	74.7	5.2	5.2	13.4		4		-				-		-	
						3.7	-	-	27.1		8.0		24.9		74.9		5.2		13.3		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 10 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Sunny	Moderate	16:49	8.4	Surface	1.0	0.2	43	29.1	29.1	8.6	8.6	19.6	19.6	148.5	148.1	10.2	8.5	8.6	16.5	9	10	80	82	815631	804256	<0.2	<0.2	1.3	1.4
						1.0	0.2	47	29.1		8.6		19.6		147.7		10.2		8.6		9		80				<0.2		1.4	
					Middle	4.2	0.2	50	28.0	28.0	8.3	8.3	21.5	21.5	97.3	97.1	6.8		14.1		9		83				<0.2		1.5	
						4.2	0.3	54	28.0		8.3		21.5		96.9		6.7		14.4		11		83				<0.2		1.3	
					Bottom	7.4	0.4	53	27.1	27.1	8.1	8.1	24.1	24.1	84.1	84.5	5.8	5.9	26.6		11		83				<0.2		1.3	
						7.4	0.4	56	27.1		8.1		24.1		84.8		5.9		26.6		10		83				<0.2		1.5	
C2	Sunny	Moderate	15:46	11.5	Surface	1.0	0.1	90	28.4	28.4	8.0	8.0	17.9	17.9	91.6	91.6	6.4	6.3	10.6	14.1	5	6	78	80	825706	806948	<0.2	<0.2	1.2	1.3
						1.0	0.1	92	28.4		8.0		17.9		91.6		6.4		10.6		5		78				<0.2		1.2	
					Middle	5.8	0.1	336	28.0	28.0	8.0	8.0	19.7	19.7	87.7	87.7	6.2		14.3		7		80				<0.2		1.3	
						5.8	0.1	341	28.0		8.0		19.7		87.7		6.2		14.3		7		80				<0.2		1.2	
					Bottom	10.5	0.1	353	27.9	27.9	8.0	8.0	20.1	20.1	86.9	86.9	6.1	6.1	17.5		7		82				<0.2		1.4	
						10.5	0.1	325	27.9		8.0		20.1		86.9		6.1		17.5		7		83				<0.2		1.2	
C3	Fine	Moderate	17:40	12.0	Surface	1.0	0.3	242	29.1	29.1	8.2	8.2	21.6	21.6	120.1	119.7	8.2	7.4	17.3	22.3	11	11	80	83	822125	817829	<0.2	<0.2	1.3	1.4
						1.0	0.3	264	29.1		8.2		21.6		119.3		8.1		17.4		10		80				<0.2		1.3	
					Middle	6.0	0.2	249	28.5	28.5	8.2	8.2	22.1	22.1	98.2	98.2	6.7		21.2		11		83				<0.2		1.4	
						6.0	0.2	269	28.5		8.2		22.1		98.2		6.7		21.2		10		83				<0.2		1.2	
					Bottom	11.0	0.2	272	27.8	27.8	8.1	8.1	23.2	23.2	93.4	93.4	6.5	6.5	28.4		11		85				<0.2		1.4	
						11.0	0.2	294	27.8		8.1		23.2		93.4		6.5		28.4		12		85				<0.2		1.5	
IM1	Sunny	Moderate	16:30	5.2	Surface	1.0	0.3	48	28.8	28.8	8.3	8.3	21.2	21.2	107.6	107.3	7.4	7.4	10.4	12.6	10	10	77	78	817948	807146	<0.2	<0.2	1.2	1.6
						1.0	0.4	50	28.8		8.3		21.2		107.0		7.4		10.5		10		77				<0.2		1.5	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	348	27.6	27.5	8.1	8.1	22.3	22.3	85.0	85.0	5.9	5.9	14.9		9		78				<0.2		1.8	
						4.2	0.1	354	27.5		8.1		22.4		85.0		5.9		14.7		10		78				<0.2		2.0	
IM2	Sunny	Rough	16:22	6.6	Surface	1.0	0.2	41	28.7	28.7	8.4	8.4	20.3	20.3	127.0	126.9	8.8	8.3	13.2	17.1	10	11	79	81	818141	806144	<0.2	<0.2	1.4	1.5
						1.0	0.2	42	28.7		8.4		20.3		126.7		8.8		13.2		10		79				<0.2		1.3	
					Middle	3.3	0.3	0	28.1	28.1	8.3	8.3	22.2	22.2	111.0	110.9	7.7		13.8		11		80				<0.2		1.3	
						3.3	0.3	0	28.1		8.3		22.2		110.8		7.7		13.7		11		81				<0.2		1.8	
					Bottom	5.6	0.1	315	27.8	27.8	8.2	8.2	22.5	22.5	100.2	100.2	6.9	6.9	24.2		12		82				<0.2		1.6	
						5.6	0.2	322	27.8		8.2		22.5		100.2		6.9		24.3		10		82				<0.2		1.8	
IM3	Sunny	Moderate	16:15	7.6	Surface	1.0	0.3	66	28.6	28.6	8.4	8.4	19.8	19.8	120.5	120.2	8.4	7.0	14.2	16.5	8	9	77	80	818804	805576	<0.2	<0.2	1.3	1.4
						1.0	0.4	71	28.6		8.4		19.8		119.9		8.3		14.2		7		78				<0.2		1.6	
					Middle	3.8	0.3	49	27.6	27.6	8.1	8.1	22.5	22.5	79.9	79.9	5.6		13.1		10		80				<0.2		1.4	
						3.8	0.3	51	27.6		8.1		22.5		79.8		5.6		13.2		9		80				<0.2		1.4	
					Bottom	6.6	0.3	312	27.2	27.2	8.1	8.1	24.1	24.1	74.0	74.1	5.1	5.2	22.2		10		82				<0.2		1.5	
						6.6	0.3	321	27.2		8.1		24.1		74.2		5.2		21.9		9		83				<0.2		1.3	
IM4	Sunny	Moderate	16:07	7.0	Surface	1.0	0.2	86	28.6	28.6	8.2	8.2	19.0	19.0	115.5	115.5	8.1	7.6	14.8	15.6	7	8	80	82	819698	804618	<0.2	<0.2	1.8	1.6
						1.0	0.3	86	28.6		8.3		19.0		115.4		8.0		14.7		8		80				<0.2		1.7	
					Middle	3.5	0.1	241	28.2	28.2	8.2	8.2	20.5	20.5	101.9	101.8	7.1		15.7		10		82				<0.2		1.6	
						3.5	0.1	245	28.2		8.2		20.5		101.7		7.1		15.7		8		82				<0.2		1.6	
					Bottom	6.0	0.2	332	27.9	27.9	8.1	8.1	21.4	21.4	95.9	96.1	6.7	6.7	16.3		8		83				<0.2		1.6	
						6.0	0.2	335	27.9		8.1		21.4		96.2		6.7		16.3		8		84				<0.2		1.4	
IM5	Sunny	Moderate	15:58	6.4	Surface	1.0	0.2	22	28.4	28.4	8.1	8.1	18.4	18.4	104.8	105.0	7.4	6.5	12.7	17.1	6	7	81	82	820731	804895	<0.2	<0.2	1.3	1.3
						1.0	0.2	23	28.4		8.1		18.4		105.2		7.4		12.8		5		81				<0.2		1.3	
					Middle	3.2	0.2	337	27.9	27.9	8.0	8.0	20.2	20.1	80.1	80.1	5.6		20.1		9		82				<0.2		1.4	
						3.2	0.2	358	27.9		8.0		20.1		80.0		5.6		20.1		7		82				<0.2		1.4	
					Bottom	5.4	0.1	13	27.6	27.6	8.0	8.0	21.9	21.9	79.3	79.4	5.5	5.6	18.6		9		83				<0.2		1.2	
						5.4	0.1	14	27.6		8.0		21.9		79.5		5.6		18.5		7		83				<0.2		1.3	
IM6	Sunny	Moderate	15:51	6.2	Surface	1.0	0.4	344	28.6	28.6	8.1	8.1	17.8	17.7	103.5	103.4	7.3	6.7	11.0	19.2	5	6	80	80	821069	805854	<0.2	<0.2	1.2	1.2
						1.0	0.4	316	28.6		8.1		17.7		103.3		7.3		11.0		6		80				<0.2		1.2	
					Middle	3.1	0.4	331	28.0	28.0	8.0	8.0	19.8	19.8	87.2	87.2	6.1		19.0		6		78				<0.2		1.2	
						3.1	0.4	356	28.0		8.0		19.8		87.2		6.1		19.0		6		78				<0.2		1.3	
					Bottom	5.2	0.4	318	28.0	28.0	8.0	8.0	19.9	19.9	89.7	89.8	6.3	6.3	27.3		7		82				<0.2		1.2	
						5.2	0.4	338	28.0		8.0		19.9		89.9		6.3		27.7		7		83				<0.2		1.3	
IM7	Sunny	Moderate	15:45	7.2	Surface	1.0	0.2	14	29.0	28.7	8.1	8.1	16.1	16.5	95.5	94.2	6.7	6.5	9.3	11.2	5	6	77	80	821349	806849	<0.2	<0.2	1.2	1.3
						1.0	0.2	14	28.5		8.1		16.8		92.9		6.6		9.6		4		77				<0.2		1.3	
					Middle	3.6	0.1	29	28.0	28.0	8.0	8.0	19.5	19.5	89.5	89.5	6.3		11.6		6		81				<0.2		1.3	
						3.6	0.2	31	28.0		8.0		19.5		89.5		6.3		11.6		6		81				<0.2		1.5	
					Bottom	6.2	0.0	146	28.0	28.0	8.0	8.0	19.6	19.6	89.9	90.0	6.3	6.3	12.5		6		82				<0.2		1.3	
						6.2	0.0	150	28.0		8.0		19.6		90.0		6.3		12.5		6		83				<0.2		1.3	
IM8	Sunny	Moderate	16:11	7.5	Surface	1.0	0.1	282	28.3	28.3	8.1	8.0	18.5	18.6	93.8	93.8	6.6	6.1	14.3	17.2	5	6	80	82	821811	808169	<0.2	<0.2	1.3	1.3
						1.0	0.1	308	28.3		8.0		18.6		93.7		6.6		14.4		6		80				<0.2		1.2	
					Middle	3.8	0.1	90	27.9	27.8	8.0	8.0	20.5	20.5	78.1	78.1	5.5		19.2		4		82				<0.2		1.2	
						3.8	0.1	93	27.8		8.0		20.5		78.1		5.5		19.2		5		83				<0.2		1.3	
					Bottom	6.5	0.1	43	27.5	27.5	7.9	7.9	22.2	22.3	80.7	81.0	5.6	5.7	18.0		6		84				<0.2		1.3	
						6.5	0.1	46	27.5		7.9		22.3		81.2		5.7		18.0		7		85				<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 10 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	16:27	7.3	Surface	1.0	0.1	261	28.5	28.5	8.2	8.2	19.4	19.4	110.3	110.3	7.7	7.6	16.8	16.6	5	5	80	82	822075	808797	<0.2	<0.2	1.3	1.2
						1.0	0.1	270	28.5		8.2		19.4		110.3		7.7		16.8		3		81				<0.2		1.3	
					Middle	3.7	0.0	53	28.3	28.3	8.2	8.2	20.6	20.6	106.4	106.4	7.4		16.3		5		82				<0.2		1.2	
						3.7	0.0	53	28.3		8.2		20.6		106.3		7.4		16.4		5		83				<0.2		1.2	
					Bottom	6.3	0.2	86	28.0	28.0	8.1	8.1	21.2	21.2	97.7	97.7	6.8	6.8	16.6		6		84				<0.2		1.0	
						6.3	0.2	92	28.0		8.1		21.2		97.7		6.8		16.6		8		84				<0.2		1.3	
IM10	Sunny	Moderate	16:36	7.0	Surface	1.0	0.1	165	28.4	28.4	8.2	8.2	20.4	20.4	104.4	104.4	7.3	6.6	14.6	15.9	4	4	80	83	822372	809797	<0.2	<0.2	1.3	1.3
						1.0	0.1	175	28.4		8.2		20.4		104.4		7.3		14.6		5		81				<0.2		1.4	
					Middle	3.5	0.1	358	27.8	27.8	8.1	8.1	22.1	22.1	83.1	83.0	5.8		14.6		4		83				<0.2		1.1	
						3.5	0.1	339	27.8		8.1		22.1		82.8		5.8		14.7		4		83				<0.2		1.2	
					Bottom	6.0	0.3	335	27.4	27.4	8.1	8.1	23.3	23.3	77.8	77.8	5.4	5.4	18.4		3		84				<0.2		1.6	
						6.0	0.4	350	27.4		8.1		23.3		77.8		5.4		18.4		4		84				<0.2		1.4	
IM11	Sunny	Moderate	16:42	9.2	Surface	1.0	0.2	325	28.6	28.6	8.2	8.2	20.7	20.7	119.5	119.5	8.3	7.6	15.6	21.4	5	4	80	82	822068	811447	<0.2	<0.2	1.3	1.4
						1.0	0.2	345	28.6		8.2		20.7		119.5		8.3		15.6		4		80				<0.2		1.4	
					Middle	4.6	0.4	299	27.9	27.9	8.2	8.2	22.5	22.5	99.3	99.2	6.9		20.7		3		82				<0.2		1.4	
						4.6	0.4	325	27.9		8.2		22.5		99.1		6.9		20.8		4		83				<0.2		1.4	
					Bottom	8.2	0.2	326	27.7	27.7	8.1	8.1	23.0	23.0	94.3	94.3	6.5	6.5	27.8		4		84				<0.2		1.2	
						8.2	0.3	330	27.7		8.1		23.0		94.3		6.5		27.8		4		85				<0.2		1.4	
IM12	Sunny	Moderate	16:52	8.8	Surface	1.0	0.2	243	28.7	28.7	8.3	8.3	20.8	20.8	130.3	130.3	9.0	8.6	14.3	19.1	4	4	81	83	821482	812043	<0.2	<0.2	1.2	1.3
						1.0	0.3	244	28.7		8.3		20.8		130.3		9.0		14.3		5		81				<0.2		1.4	
					Middle	4.4	0.5	278	28.6	28.6	8.2	8.2	21.5	21.5	119.3	119.3	8.2		16.0		4		82				<0.2		1.3	
						4.4	0.6	299	28.6		8.2		21.5		119.3		8.2		16.0		4		83				<0.2		1.3	
					Bottom	7.8	0.2	313	27.7	27.7	8.1	8.1	23.0	23.0	99.9	99.9	6.9	6.9	27.1		4		84				<0.2		1.2	
						7.8	0.2	337	27.7		8.1		23.0		99.9		6.9		27.1		4		84				<0.2		1.3	
SR2	Sunny	Moderate	17:16	3.2	Surface	1.0	0.3	183	29.2	29.2	8.1	8.1	19.9	19.9	171.7	171.6	11.8	11.8	8.3	8.5	6	7	80	81	821441	814189	<0.2	<0.2	1.7	1.5
						1.0	0.3	186	29.2		8.1		19.9		171.5		11.8		8.4		6		80				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	155	28.8	28.8	8.1	8.1	20.2	20.2	162.5	162.5	11.2	11.2	8.6		7		82				<0.2		1.5	
						2.2	0.1	166	28.8		8.1		20.2		162.5		11.2		8.6		7		83				<0.2		1.5	
SR3	Sunny	Moderate	16:05	8.9	Surface	1.0	0.2	255	28.5	28.5	8.1	8.1	17.9	17.9	98.5	98.5	6.9	6.6	11.7	14.7	4	6	-	-	822145	807569	-	-	-	-
						1.0	0.2	266	28.5		8.1		17.9		98.5		6.9		11.7		5		-				-		-	
					Middle	4.5	0.1	87	28.1	28.1	8.0	8.0	19.7	19.7	88.3	88.3	6.2		15.1		6		-				-		-	
						4.5	0.1	88	28.1		8.0		19.7		88.3		6.2		15.1		6		-				-		-	
					Bottom	7.9	0.1	314	27.9	27.9	8.0	8.0	20.0	20.0	88.6	88.6	6.2	6.2	17.2		5		-				-		-	
						7.9	0.1	337	27.9		8.0		20.0		88.6		6.2		17.2		7		-				-		-	
SR4A	Fine	Moderate	17:11	8.9	Surface	1.0	0.1	109	29.2	29.2	8.4	8.4	21.0	21.0	135.1	135.0	9.2	8.2	15.0	18.5	9	10	-	-	817189	807831	-	-	-	-
						1.0	0.1	110	29.2		8.4		21.0		134.9		9.2		15.0		10		-				-		-	
					Middle	4.5	0.2	246	28.5	28.5	8.3	8.3	21.6	21.6	103.4	103.2	7.1		18.6		10		-				-		-	
						4.5	0.2	265	28.5		8.3		21.6		102.9		7.1		18.7		10		-				-		-	
					Bottom	7.9	0.3	254	27.8	27.7	8.1	8.1	22.7	22.7	95.0	95.2	6.6	6.6	21.8		10		-				-		-	
						7.9	0.3	265	27.7		8.1		22.7		95.4		6.6		21.8		10		-				-		-	
SR5A	Fine	Calm	17:28	4.9	Surface	1.0	0.2	275	29.5	29.4	8.5	8.5	20.7	20.7	161.7	161.6	11.0	11.0	10.5	12.0	9	10	-	-	816613	810672	-	-	-	-
						1.0	0.2	280	29.4		8.5		20.7		161.4		11.0		10.5		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.2	325	28.3	28.3	8.3	8.3	21.9	21.9	134.8	135.1	9.3	9.3	13.5		10		-				-		-	
						3.9	0.3	339	28.4		8.3		21.9		135.3		9.3		13.4		10		-				-		-	
SR6	Fine	Calm	17:54	5.1	Surface	1.0	0.1	243	27.9	27.9	8.2	8.2	21.2	21.2	103.3	103.3	7.2	7.2	17.9	21.2	10	11	-	-	817875	814669	-	-	-	-
						1.0	0.1	252	27.9		8.2		21.2		103.2		7.2		18.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.0	221	27.6	27.6	8.2	8.2	22.3	22.3	101.2	101.3	7.0	7.1	25.0		10		-				-		-	
						4.1	0.0	238	27.6		8.2		22.3		101.3		7.1		23.8		12		-				-		-	
SR7	Fine	Moderate	18:19	19.6	Surface	1.0	0.1	253	27.7	27.7	8.1	8.1	22.6	22.6	110.9	110.6	7.7	6.2	10.8	21.3	10	11	-	-	823616	823750	-	-	-	-
						1.0	0.1	270	27.7		8.1		22.6		110.3		7.6		10.9		11		-				-		-	
					Middle	9.8	0.1	161	26.0	26.0	8.0	8.0	27.2	27.1	66.8	66.9	4.7		24.1		12		-				-		-	
						9.8	0.2	171	26.0		8.0		27.1		66.9		4.7		24.3		11		-				-		-	
					Bottom	18.6	0.2	80	25.8	25.8	8.0	8.0	27.8	27.8	70.9	71.1	4.9	5.0	29.0		12		-				-		-	
						18.6	0.2	81	25.8		8.0		27.8		71.2		5.0		28.5		10		-				-		-	
SR8	Sunny	Calm	17:05	3.5	Surface	1.0	-	-	29.1	29.1	8.2	8.2	20.0	20.0	155.7	155.7	10.7	10.7	8.3	8.8	7	9	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.1		8.2		20.0		155.7		10.7		8.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	28.6	28.6	8.1	8.1	20.5	20.5	142.8	142.7	9.9	9.9	9.3		11		-				-		-	
						2.5	-	-	28.6		8.1		20.5		142.5		9.9		9.3		12		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:27	8.0	Surface	1.0	0.7	219	28.8	28.8	8.3	8.3	20.2	20.2	105.8	105.8	7.3	5.8	11.5	17.3	5	6	72	74	815608	804243	<0.2	<0.2	1.3	1.2
						1.0	0.7	233	28.8		8.3		20.2		105.8		7.3		11.5		5		72				<0.2		0.8	
					Middle	4.0	0.8	214	27.3	27.3	8.1	8.1	23.1	23.1	59.9	59.9	4.2		17.7		5		74				<0.2		1.0	
						4.0	0.8	231	27.3		8.1		23.1		59.9		4.2		17.7		5		74				<0.2		1.3	
					Bottom	7.0	0.5	221	26.3	26.3	7.9	7.9	28.1	28.1	55.6	55.6	3.8	3.8	22.7		7		76				<0.2		1.4	
						7.0	0.5	226	26.3		7.9		28.1		55.6		3.8		22.7		8		77				<0.2		1.3	
C2	Cloudy	Rough	13:00	12.2	Surface	1.0	0.2	205	29.2	29.2	8.2	8.2	17.1	17.1	108.8	108.8	7.6	6.8	11.6	17.0	7	8	72	75	825689	806957	<0.2	<0.2	1.0	0.9
						1.0	0.2	222	29.2		8.2		17.1		108.8		7.6		11.6		8		73				<0.2		1.1	
					Middle	6.1	0.1	192	28.1	28.1	8.1	8.1	20.5	20.5	86.0	86.0	6.0		18.6		7		74				<0.2		0.9	
						6.1	0.1	203	28.1		8.1		20.5		86.0		6.0		18.6		8		75				<0.2		0.8	
					Bottom	11.2	0.2	165	27.9	27.9	8.1	8.1	21.8	21.8	85.2	85.2	5.9	5.9	20.9		8		76				<0.2		0.8	
						11.2	0.2	167	27.9		8.1		21.8		85.2		5.9		20.9		8		77				<0.2		0.9	
C3	Cloudy	Moderate	11:10	11.6	Surface	1.0	0.1	118	29.8	29.8	8.4	8.4	17.4	17.4	105.1	105.1	7.3	6.0	9.8	14.6	6	7	75	76	822085	817805	<0.2	<0.2	0.7	1.0
						1.0	0.1	121	29.8		8.4		17.4		105.1		7.3		9.8		5		75				<0.2		0.6	
					Middle	5.8	0.2	326	27.8	27.8	8.2	8.2	22.2	22.2	68.2	68.2	4.7		15.4		8		76				<0.2		1.3	
						5.8	0.2	333	27.8		8.2		22.2		68.2		4.7		15.4		8		77				<0.2		1.1	
					Bottom	10.6	0.2	139	26.4	26.4	8.0	8.0	27.6	27.6	70.2	70.2	4.8	4.8	18.6		7		77				<0.2		1.2	
						10.6	0.2	140	26.4		8.0		27.6		70.2		4.8		18.6		8		77				<0.2		1.1	
IM1	Cloudy	Moderate	12:55	4.8	Surface	1.0	0.1	248	27.4	27.4	8.0	8.0	24.2	24.2	61.2	61.2	6.2	6.2	18.7	19.5	5	6	72	73	817967	807129	<0.2	<0.2	1.2	1.2
						1.0	0.1	248	27.4		8.0		24.2		61.2		6.2		18.7		4		73				<0.2		1.3	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	211	26.8	26.8	7.9	7.9	26.6	26.6	58.0	58.0	4.0	4.0	20.2		7		74				<0.2		1.1	
						3.8	0.1	219	26.8		7.9		26.6		58.0		4.0		20.2		7		74				<0.2		1.0	
IM2	Cloudy	Moderate	13:02	6.6	Surface	1.0	0.9	219	28.3	28.3	8.2	8.2	20.9	20.9	80.1	80.1	5.6	5.0	14.5	16.8	5	6	72	74	818136	806193	<0.2	<0.2	1.0	1.0
						1.0	0.9	228	28.3		8.2		20.9		80.1		5.6		14.5		6		73				<0.2		1.3	
					Middle	3.3	0.7	216	27.0	27.0	8.0	8.0	24.7	24.7	63.8	63.8	4.4		17.4		5		74				<0.2		0.6	
						3.3	0.7	231	27.0		8.0		24.7		63.8		4.4		17.4		5		75				<0.2		0.8	
					Bottom	5.6	0.3	248	26.6	26.6	8.0	8.0	27.1	27.1	74.8	74.8	5.2	5.2	18.5		6		76				<0.2		1.0	
						5.6	0.3	260	26.6		8.0		27.1		74.8		5.2		18.5		6		75				<0.2		1.1	
IM3	Cloudy	Moderate	13:10	6.9	Surface	1.0	0.5	239	29.2	29.2	8.3	8.3	19.5	19.5	120.5	120.4	8.3	7.2	11.0	17.2	10	10	72	74	818793	805574	<0.2	<0.2	1.2	1.2
						1.0	0.5	240	29.2		8.3		19.5		120.3		8.3		11.1		9		72				<0.2		1.4	
					Middle	3.5	0.5	235	28.1	28.1	8.2	8.2	21.7	21.7	87.3	87.3	6.1		16.9		9		74				<0.2		1.0	
						3.5	0.5	245	28.1		8.2		21.7		87.3		6.1		16.9		10		75				<0.2		1.0	
					Bottom	5.9	0.3	227	27.4	27.4	8.0	8.0	24.1	24.1	70.7	70.7	4.9	4.9	23.5		11		76				<0.2		1.2	
						5.9	0.3	234	27.4		8.0		24.1		70.7		4.9		23.5		11		76				<0.2		1.2	
IM4	Cloudy	Moderate	13:20	7.3	Surface	1.0	1.1	185	29.3	29.3	8.3	8.3	17.9	17.9	112.3	112.3	7.8	7.0	15.6	19.0	5	7	72	75	819706	804580	<0.2	<0.2	1.2	1.3
						1.0	1.1	188	29.3		8.3		17.9		112.3		7.8		15.6		6		72				<0.2		1.2	
					Middle	3.7	1.0	188	27.8	27.8	8.1	8.1	22.1	22.1	88.2	88.2	6.1		20.8		8		75				<0.2		1.6	
						3.7	1.1	201	27.8		8.1		22.1		88.2		6.1		20.8		7		75				<0.2		1.4	
					Bottom	6.3	0.6	182	27.4	27.4	8.1	8.1	24.0	24.0	85.9	85.9	6.0	6.0	20.5		7		77				<0.2		1.2	
						6.3	0.6	198	27.4		8.1		24.0		85.9		6.0		20.5		8		76				<0.2		1.3	
IM5	Cloudy	Moderate	13:30	6.5	Surface	1.0	1.0	218	28.5	28.5	8.2	8.2	19.2	19.3	99.9	99.3	7.0	6.7	19.5	20.4	6	5	71	73	820711	804854	<0.2	<0.2	1.2	1.2
						1.0	1.0	230	28.5		8.2		19.3		98.7		6.9		20.4		5		71				<0.2		1.4	
					Middle	3.3	0.8	220	28.1	28.1	8.1	8.1	21.2	21.2	94.0	94.0	6.5		21.5		5		73				<0.2		1.3	
						3.3	0.8	229	28.1		8.1		21.2		94.0		6.5		21.5		5		73				<0.2		0.8	
					Bottom	5.5	0.6	216	28.2	28.2	8.1	8.1	21.3	21.3	100.7	100.7	7.0	7.0	19.6		6		75				<0.2		1.1	
						5.5	0.7	216	28.2		8.1		21.3		100.7		7.0		19.6		5		75				<0.2		1.1	
IM6	Cloudy	Moderate	13:39	6.9	Surface	1.0	0.7	242	28.2	28.2	8.1	8.1	21.2	21.2	89.2	89.2	6.2	6.0	14.3	20.6	7	7	72	74	821055	805815	<0.2	<0.2	1.0	1.2
						1.0	0.8	248	28.2		8.1		21.2		89.2		6.2		14.3		6		72				<0.2		1.1	
					Middle	3.5	0.7	239	27.8	27.8	8.1	8.1	22.2	22.2	83.4	83.4	5.8		24.0		8		74				<0.2		0.9	
						3.5	0.8	259	27.8		8.1		22.2		83.4		5.8		24.0		6		74				<0.2		1.1	
					Bottom	5.9	0.6	244	27.8	27.8	8.1	8.1	22.3	22.3	89.7	89.7	6.2	6.2	23.6		8		76				<0.2		1.6	
						5.9	0.6	250	27.8		8.1		22.3		89.7		6.2		23.6		7		75				<0.2		1.3	
IM7	Cloudy	Moderate	13:49	7.3	Surface	1.0	1.2	200	29.1	29.1	8.2	8.2	17.2	17.2	97.3	97.3	6.8	6.4	15.2	20.1	7	9	72	74	821367	806863	<0.2	<0.2	1.4	1.2
						1.0	1.3	215	29.1		8.2		17.2		97.3		6.8		15.2		6		73				<0.2		1.6	
					Middle	3.7	1.0	211	28.1	28.1	8.1	8.1	21.2	21.2	85.5	85.5	5.9		23.1		9		74				<0.2		0.9	
						3.7	1.1	222	28.1		8.1		21.2		85.5		5.9		23.1		9		74				<0.2		1.0	
					Bottom	6.3	0.7	219	27.9	27.9	8.1	8.1	21.9	21.9	84.5	84.5	5.9	5.9	22.1		9		76				<0.2		1.2	
						6.3	0.7	227	27.9		8.1		21.9		84.5		5.9		22.1		11		76				<0.2		1.3	
IM8	Cloudy	Moderate	12:25	8.1	Surface	1.0	0.1	150	28.6	28.6	8.2	8.2	18.8	18.8	100.5	100.5	7.0	6.8	20.3	18.1	6	7	72	74	821811	808117	<0.2	<0.2	1.5	1.2
						1.0	0.1	159	28.6		8.2		18.8		100.5		7.0		20.3		6		73				<0.2		1.5	
					Middle	4.1	0.2	183	28.1	28.1	8.1	8.1	20.9	20.9	95.0	95.0	6.6		16.4		6		74				<0.2		1.2	
						4.1	0.2	186	28.1		8.1		20.9		95.0		6.6		16.4		6		75				<0.2		1.2	
					Bottom	7.1	0.2	187	28.1	28.1	8.1	8.1	21.1	21.1	101.9	101.9	7.1	7.1	17.6		8		76				<0.2		0.9	
						7.1	0.3	189	28.1		8.1		21.1		101.9		7.1		17.6		8		76				<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**
Note: The ebb and flood tide monitoring sessions on 14 July 2018 were cancelled due to adverse weather.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:17	7.2	Surface	1.0	0.3	137	29.3	29.3	8.3	8.3	17.6	17.6	118.7	118.5	8.2	7.3	12.9	17.6	7	8	72	74	822073	808832	<0.2	<0.2	1.2	1.0
						1.0	0.3	139	29.3		8.3		17.6		118.2		8.2		13.1		7		72				<0.2		0.8	
					Middle	3.6	0.1	85	27.9	27.9	8.2	8.2	21.5	21.5	90.3	90.3	6.3		19.4		7		74				<0.2		0.8	
						3.6	0.1	86	27.9		8.2		21.5		90.3		6.3		19.4		6		74				<0.2		0.9	
					Bottom	6.2	0.2	160	27.4	27.4	8.1	8.1	23.7	23.7	86.7	86.9	6.0	6.0	20.3		10		76				<0.2		1.2	
						6.2	0.2	163	27.4		8.1		23.7		87.0		6.0		20.3		9		77				<0.2		1.0	
IM10	Cloudy	Moderate	12:10	6.8	Surface	1.0	0.3	139	29.3	29.2	8.4	8.4	19.2	19.2	125.0	124.6	8.6	7.7	9.3	15.0	9	11	72	75	822381	809805	<0.2	<0.2	0.9	0.9
						1.0	0.3	145	29.2		8.4		19.3		124.1		8.6		9.5		10		73				<0.2		1.2	
					Middle	3.4	0.3	112	28.3	28.3	8.3	8.3	20.7	20.7	97.8	97.8	6.8		15.3		11		74				<0.2		0.7	
						3.4	0.3	116	28.3		8.3		20.7		97.8		6.8		15.3		12		75				<0.2		0.6	
					Bottom	5.8	0.2	120	27.4	27.4	8.1	8.1	23.7	23.7	72.3	72.3	5.0	5.0	20.3		11		77				<0.2		1.2	
						5.8	0.2	125	27.4		8.1		23.7		72.3		5.0		20.3		12		76				<0.2		0.9	
IM11	Cloudy	Moderate	11:58	7.7	Surface	1.0	0.4	110	28.5	28.5	8.3	8.3	20.7	20.7	95.7	95.7	6.6	5.6	13.2	15.5	12	12	72	74	822046	811456	<0.2	<0.2	1.2	1.1
						1.0	0.4	114	28.5		8.3		20.7		95.7		6.6		13.2		11		72				<0.2		1.0	
					Middle	3.9	0.2	102	27.3	27.3	8.1	8.1	23.9	24.0	66.4	66.3	4.6		15.1		12		75				<0.2		1.0	
						3.9	0.2	102	27.3		8.1		24.0		66.2		4.6		15.1		11		74				<0.2		1.0	
					Bottom	6.7	0.2	183	26.5	26.5	8.0	8.0	27.3	27.3	74.4	74.4	5.1	5.1	18.2		12		75				<0.2		1.1	
						6.7	0.2	200	26.5		8.0		27.3		74.4		5.1		18.2		11		75				<0.2		1.5	
IM12	Cloudy	Moderate	11:49	7.6	Surface	1.0	0.3	96	27.6	27.6	8.1	8.1	23.5	23.5	70.6	70.6	4.9	5.0	15.2	13.4	8	9	72	75	821454	812032	<0.2	<0.2	1.2	1.3
						1.0	0.3	99	27.6		8.1		23.5		70.6		4.9		15.2		8		73				<0.2		1.4	
					Middle	3.8	0.3	110	26.9	26.9	8.0	8.0	26.0	26.0	74.4	74.4	5.1		15.9		9		75				<0.2		1.4	
						3.8	0.3	111	26.9		8.0		26.0		74.4		5.1		15.9		10		74				<0.2		1.6	
					Bottom	6.6	0.1	157	29.0	29.0	8.3	8.3	19.0	19.0	117.8	117.8	8.2	8.2	9.2		10		77				<0.2		1.0	
						6.6	0.1	169	29.0		8.3		19.0		117.8		8.2		9.2		9		76				<0.2		0.9	
SR2	Cloudy	Moderate	11:25	4.3	Surface	1.0	0.3	76	27.1	27.1	8.1	8.1	22.9	22.9	57.0	57.0	4.7	4.7	14.7	15.8	7	8	73	74	821480	814139	<0.2	<0.2	0.7	0.8
						1.0	0.3	79	27.1		8.1		22.9		57.0		4.7		14.7		8		72				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	80	26.4	26.4	8.0	8.0	27.5	27.5	62.1	62.1	4.3	4.3	16.9		8		74				<0.2		0.9	
						3.3	0.3	87	26.4		8.0		27.5		62.1		4.3		16.9		7		75				<0.2		0.8	
SR3	Cloudy	Rough	12:31	8.6	Surface	1.0	0.2	190	28.2	28.2	8.1	8.1	21.1	21.1	88.2	88.2	6.1	6.0	14.6	21.7	7	7	-	-	822171	807560	-	-	-	-
						1.0	0.3	208	28.2		8.1		21.1		88.2		6.1		14.6		8		-				-		-	
					Middle	4.3	0.3	197	27.8	27.8	8.1	8.1	22.0	22.0	83.9	83.9	5.8		25.1		7		-				-		-	
						4.3	0.3	206	27.8		8.1		22.0		83.9		5.8		25.1		7		-				-		-	
					Bottom	7.6	0.2	221	27.8	27.8	8.1	8.1	22.1	22.1	90.5	90.5	6.3	6.3	25.3		7		-				-		-	
						7.6	0.2	224	27.8		8.1		22.1		90.5		6.3		25.3		6		-				-		-	
SR4A	Cloudy	Calm	12:08	8.7	Surface	1.0	0.1	63	28.7	28.7	8.2	8.2	21.4	21.4	89.3	89.3	6.1	5.0	14.4	20.1	12	12	-	-	817169	807819	-	-	-	-
						1.0	0.1	63	28.7		8.2		21.4		89.3		6.1		14.4		12		-				-		-	
					Middle	4.4	0.2	49	26.7	26.7	8.0	8.0	26.9	26.9	57.1	57.1	3.9		20.8		12		-				-		-	
						4.4	0.2	49	26.7		8.0		26.9		57.1		3.9		20.8		12		-				-		-	
					Bottom	7.7	0.2	46	26.6	26.6	8.0	8.0	27.2	27.2	63.0	63.0	4.3	4.3	25.0		11		-				-		-	
						7.7	0.2	47	26.6		8.0		27.2		63.0		4.3		25.0		11		-				-		-	
SR5A	Cloudy	Calm	11:51	4.9	Surface	1.0	0.1	343	29.2	29.2	8.3	8.3	19.7	19.7	116.3	116.3	8.0	8.0	11.4	13.8	8	8	-	-	816592	810705	-	-	-	-
						1.0	0.1	316	29.2		8.3		19.7		116.3		8.0		11.4		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	321	28.8	28.8	8.2	8.2	21.5	21.5	109.3	109.3	7.5	7.5	16.1		7		-				-		-	
						3.9	0.1	352	28.8		8.2		21.5		109.3		7.5		16.1		8		-				-		-	
SR6	Cloudy	Calm	11:23	5.0	Surface	1.0	0.1	77	29.1	29.1	8.3	8.3	20.9	20.9	124.8	124.8	8.6	8.6	11.5	13.4	8	10	-	-	817920	814690	-	-	-	-
						1.0	0.1	77	29.1		8.3		20.9		124.8		8.6		11.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	82	28.3	28.3	8.1	8.1	21.9	21.9	105.8	105.8	7.3	7.3	15.2		10		-				-		-	
						4.0	0.1	89	28.3		8.1		21.9		105.8		7.3		15.2		12		-				-		-	
SR7	Cloudy	Moderate	10:35	15.8	Surface	1.0	0.3	112	28.9	28.9	8.2	8.2	19.7	19.7	85.8	85.8	5.9	5.5	12.7	16.2	8	8	-	-	823610	823714	-	-	-	-
						1.0	0.3	121	28.9		8.2		19.7		85.8		5.9		12.7		8		-				-		-	
					Middle	7.9	0.2	133	27.7	27.7	8.1	8.1	26.3	26.3	74.8	74.8	5.1		14.2		9		-				-		-	
						7.9	0.2	137	27.7		8.1		26.3		74.8		5.1		14.2		8		-				-		-	
					Bottom	14.8	0.1	45	26.7	26.7	7.9	7.9	27.3	27.3	66.2	66.2	4.6	4.6	21.6		8		-				-		-	
						14.8	0.1	46	26.7		7.9		27.3		66.2		4.6		21.6		8		-				-		-	
SR8	Cloudy	Moderate	11:40	4.2	Surface	1.0	-	-	28.8	28.8	8.3	8.3	21.9	21.9	118.8	118.8	8.1	8.1	9.4	9.4	11	11	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.8		8.3		21.9		118.8		8.1		9.4		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	29.4	29.4	8.3	8.3	19.4	19.4	116.6	116.6	8.0	8.0	9.3		11		-				-		-	
						3.2	-	-	29.4		8.3		19.4		116.6		8.0		9.3		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**
Note: The ebb and flood tide monitoring sessions on 14 July 2018 were cancelled due to adverse weather.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	18:47	8.4	Surface	1.0	0.5	20	28.7	28.7	8.2	8.2	19.2	19.2	101.3	101.3	7.0	6.8	18.1	21.7	12	14	72	74	815642	804241	<0.2	<0.2	1.2	1.2
						1.0	0.5	21	28.7		8.2		19.2		101.3		7.0		18.1		13		72				<0.2		0.8	
					Middle	4.2	0.5	20	28.3	28.3	8.2	8.2	21.3	21.3	94.4	94.4	6.5		22.4		14		75				<0.2		1.5	
						4.2	0.5	20	28.3		8.2		21.3		94.4		6.5		22.4		13		74				<0.2		1.3	
					Bottom	7.4	0.5	28	28.2	28.2	8.2	8.2	21.4	21.4	95.0	95.0	6.6	6.6	24.5		16		76				<0.2		1.2	
						7.4	0.5	30	28.2		8.2		21.4		95.0		6.6		24.5		16		76				<0.2		1.1	
C2	Cloudy	Rough	17:42	11.6	Surface	1.0	0.1	107	28.7	28.7	7.9	7.9	16.0	16.0	72.8	72.8	5.2	5.2	18.8	20.5	10	11	72	75	825673	806955	<0.2	<0.2	1.0	1.2
						1.0	0.1	108	28.7		7.9		16.0		72.8		5.2		18.8		11		73				<0.2		1.1	
					Middle	5.8	0.1	316	28.6	28.6	7.9	7.9	16.5	16.5	74.1	74.1	5.2		20.1		11		74				<0.2		1.2	
						5.8	0.1	342	28.6		7.9		16.5		74.1		5.2		20.1		10		75				<0.2		1.3	
					Bottom	10.6	0.1	358	28.6	28.6	7.9	7.9	16.6	16.6	77.7	77.7	5.5	5.5	22.5		12		77				<0.2		1.4	
						10.6	0.1	329	28.6		7.9		16.6		77.7		5.5		22.5		12		76				<0.2		1.3	
C3	Cloudy	Moderate	19:22	12.1	Surface	1.0	0.3	243	29.1	29.1	8.3	8.3	21.3	21.3	122.1	122.1	8.3	8.3	19.1	20.7	13	14	75	76	822131	817791	<0.2	<0.2	1.3	1.3
						1.0	0.3	254	29.1		8.3		21.3		122.1		8.3		19.1		14		74				<0.2		1.4	
					Middle	6.1	0.2	256	29.1	29.1	8.3	8.3	21.3	21.3	120.5	120.5	8.2		18.8		14		76				<0.2		1.3	
						6.1	0.2	280	29.1		8.3		21.3		120.5		8.2		18.8		14		75				<0.2		1.3	
					Bottom	11.1	0.2	277	29.1	29.1	8.3	8.3	21.3	21.3	119.8	119.8	8.2	8.2	24.1		14		77				<0.2		1.1	
						11.1	0.2	304	29.1		8.3		21.3		119.8		8.2		24.1		14		77				<0.2		1.3	
IM1	Rainy	Moderate	18:26	4.8	Surface	1.0	0.2	63	28.6	28.6	8.3	8.3	21.1	21.1	111.3	111.3	7.7	7.7	21.5	22.0	15	14	72	74	817931	807154	<0.2	<0.2	1.1	1.1
						1.0	0.3	64	28.6		8.3		21.1		111.3		7.7		21.5		14		73				<0.2		1.2	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	57	28.6	28.6	8.3	8.3	21.2	21.2	109.5	109.5	7.6	7.6	22.5		14		74				<0.2		1.2	
						3.8	0.4	60	28.6		8.3		21.2		109.5		7.6		22.5		13		75				<0.2		0.9	
IM2	Cloudy	Moderate	18:19	6.6	Surface	1.0	0.2	42	29.0	29.0	8.2	8.2	17.7	17.7	105.0	105.0	7.3	7.4	23.0	20.4	13	14	72	74	818185	806185	<0.2	<0.2	1.4	1.3
						1.0	0.2	45	29.0		8.2		17.7		105.0		7.3		23.0		13		72				<0.2		1.4	
					Middle	3.3	0.3	52	28.6	28.6	8.3	8.3	21.1	21.1	108.4	108.4	7.5		16.3		15		74				<0.2		1.3	
						3.3	0.3	54	28.6		8.3		21.1		108.4		7.5		16.3		15		73				<0.2		1.4	
					Bottom	5.6	0.3	34	28.8	28.8	8.3	8.3	21.7	21.7	111.2	111.2	7.6	7.6	21.8		15		75				<0.2		1.1	
						5.6	0.3	36	28.8		8.3		21.7		111.2		7.6		21.8		15		75				<0.2		1.3	
IM3	Cloudy	Moderate	18:12	6.9	Surface	1.0	0.1	348	29.1	29.1	8.1	8.1	16.7	16.7	95.0	95.0	6.7	6.4	20.4	20.1	13	14	72	74	818802	805586	<0.2	<0.2	1.4	1.3
						1.0	0.1	320	29.1		8.1		16.7		95.0		6.7		20.4		12		72				<0.2		1.2	
					Middle	3.5	0.2	36	28.5	28.5	8.1	8.1	18.6	18.6	85.8	85.8	6.0		18.8		13		75				<0.2		1.4	
						3.5	0.2	38	28.5		8.1		18.6		85.8		6.0		18.8		14		74				<0.2		1.3	
					Bottom	5.9	0.5	39	28.2	28.2	8.1	8.1	22.1	22.1	88.8	88.8	6.1	6.1	21.0		14		76				<0.2		1.2	
						5.9	0.5	39	28.2		8.1		22.1		88.8		6.1		21.0		15		75				<0.2		1.1	
IM4	Cloudy	Moderate	18:02	6.9	Surface	1.0	0.3	319	28.9	28.9	8.1	8.1	16.9	16.9	93.7	93.7	6.6	6.6	16.1	17.9	16	16	72	74	819746	804592	<0.2	<0.2	1.3	1.4
						1.0	0.3	323	28.9		8.1		16.9		93.7		6.6		16.1		16		72				<0.2		1.4	
					Middle	3.5	0.3	314	28.8	28.8	8.1	8.1	17.6	17.6	93.5	93.5	6.5		19.0		17		74				<0.2		1.4	
						3.5	0.3	327	28.8		8.1		17.6		93.5		6.5		19.0		15		75				<0.2		1.4	
					Bottom	5.9	0.2	350	28.8	28.8	8.1	8.1	18.0	18.0	97.2	97.2	6.8	6.8	18.7		17		76				<0.2		1.5	
						5.9	0.2	322	28.8		8.1		18.0		97.2		6.8		18.7		17		76				<0.2		1.4	
IM5	Cloudy	Moderate	17:55	6.5	Surface	1.0	0.6	306	28.8	28.8	7.9	7.9	15.9	15.9	82.1	82.1	5.8	5.8	20.1	21.3	12	13	72	74	820711	804894	<0.2	<0.2	1.2	1.2
						1.0	0.6	315	28.8		7.9		15.9		82.1		5.8		20.1		12		72				<0.2		1.2	
					Middle	3.3	0.5	293	28.8	28.8	7.9	7.9	16.0	16.0	82.6	82.6	5.8		22.5		12		74				<0.2		1.1	
						3.3	0.5	296	28.8		7.9		16.0		82.6		5.8		22.5		12		75				<0.2		1.3	
					Bottom	5.5	0.4	309	28.8	28.8	8.0	8.0	16.0	16.0	94.0	94.0	6.6	6.6	21.4		13		75				<0.2		1.3	
						5.5	0.5	318	28.8		8.0		16.0		94.0		6.6		21.4		14		75				<0.2		1.3	
IM6	Cloudy	Moderate	17:49	6.1	Surface	1.0	0.7	310	28.9	28.9	7.9	7.9	15.3	15.3	78.6	78.6	5.6	5.6	17.2	20.9	12	12	72	74	821035	805837	<0.2	<0.2	1.4	1.2
						1.0	0.8	336	28.9		7.9		15.3		78.6		5.6		17.2		12		72				<0.2		1.3	
					Middle	3.1	0.7	288	28.8	28.8	7.9	7.9	15.9	15.9	79.3	79.3	5.6		22.4		13		74				<0.2		1.3	
						3.1	0.7	306	28.8		7.9		15.9		79.3		5.6		22.4		12		73				<0.2		1.0	
					Bottom	5.1	0.6	282	28.8	28.8	7.9	7.9	15.9	15.9	81.0	81.0	5.7	5.7	23.1		11		75				<0.2		1.3	
						5.1	0.7	303	28.8		7.9		15.9		81.0		5.7		23.1		12		76				<0.2		1.1	
IM7	Cloudy	Moderate	17:41	7.5	Surface	1.0	0.8	271	28.8	28.8	7.9	7.9	15.0	15.0	75.6	75.6	5.4	5.4	16.7	17.0	12	13	71	73	821369	806819	<0.2	<0.2	1.1	1.3
						1.0	0.8	297	28.8		7.9		15.0		75.6		5.4		16.7		13		71				<0.2		1.2	
					Middle	3.8	0.6	259	28.6	28.6	7.9	7.9	16.2	16.2	74.4	74.4	5.3		15.3		13		73				<0.2		1.3	
						3.8	0.6	261	28.6		7.9		16.2		74.4		5.3		15.3		12		74				<0.2		1.3	
					Bottom	6.5	0.5	276	28.6	28.6	7.9	7.9	16.4	16.4	77.0	77.0	5.5	5.5	19.1		12		75				<0.2		1.4	
						6.5	0.5	300	28.6		7.9		16.4		77.0		5.5		19.1		13		74				<0.2		1.3	
IM8	Cloudy	Moderate	18:07	8.3	Surface	1.0	0.1	284	28.8	28.8	7.9	7.9	16.2	16.2	81.3	81.3	5.7	5.8	18.4	20.1	15	16	73	75	821803	808111	<0.2	<0.2	1.2	1.2
						1.0	0.1	287	28.8		7.9		16.2		81.3		5.7		18.4		15		73				<0.2		1.3	
					Middle	4.2	0.1	92	28.8	28.8	7.9	7.9	16.2	16.2	81.6	81.6	5.8		21.1		16		74				<0.2		1.4	
						4.2	0.1	100	28.8		7.9		16.2		81.6		5.8		21.1		16		75				<0.2		1.2	
					Bottom	7.3	0.1	44	28.8	28.8	7.9	7.9	16.2	16.2	85.3	85.3	6.0	6.0	20.9		17		76				<0.2		1.3	
						7.3	0.1	45	28.8		7.9		16.2		85.3		6.0		20.9		18		76				<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**
Note: The ebb and flood tide monitoring sessions on 14 July 2018 were cancelled due to adverse weather.

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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	18:13	7.1	Surface	1.0	0.1	269	28.9	28.9	8.0	8.0	17.2	17.2	92.5	92.5	6.5	6.5	16.3	18.7	14	15	72	75	822068	808803	<0.2	<0.2	1.5	1.4
						1.0	0.1	292	28.9		8.0		17.2		92.5		6.5		16.3		15		73				<0.2		1.2	
					Middle	3.6	0.0	55	28.8	28.8	8.0	8.0	18.0	18.0	91.4	91.4	6.4		19.8		15		74				<0.2		1.4	
						3.6	0.0	60	28.8		8.0		18.0		91.4		6.4		19.8		14		75				<0.2		1.4	
					Bottom	6.1	0.2	98	28.7	28.7	8.0	8.0	18.4	18.4	92.5	92.6	6.5	6.5	20.2		14		76				<0.2		1.3	
						6.1	0.2	104	28.7		8.0		18.4		92.6		6.5		20.0		15		77				<0.2		1.3	
IM10	Cloudy	Moderate	18:19	6.8	Surface	1.0	0.1	165	29.0	29.0	8.1	8.1	17.3	17.3	89.8	89.8	6.3	6.1	20.9	20.7	12	13	73	75	822359	809768	<0.2	<0.2	1.4	1.4
						1.0	0.1	178	29.0		8.1		17.3		89.8		6.3		20.9		12		72				<0.2		1.4	
					Middle	3.4	0.1	348	28.6	28.6	8.1	8.1	19.0	19.0	82.9	82.9	5.8		17.8		13		75				<0.2		1.4	
						3.4	0.1	320	28.6		8.1		19.0		82.8		5.8		17.8		14		75				<0.2		1.5	
					Bottom	5.8	0.3	339	27.8	27.8	8.1	8.1	22.6	22.6	78.3	78.3	5.4	5.4	23.5		13		76				<0.2		1.4	
						5.8	0.4	355	27.8		8.1		22.6		78.3		5.4		23.5		13		77				<0.2		1.4	
IM11	Cloudy	Moderate	18:27	7.3	Surface	1.0	0.1	322	28.9	28.9	8.2	8.2	18.3	18.3	102.0	102.0	7.1	7.1	16.6	20.4	12	13	73	75	822043	811448	<0.2	<0.2	1.5	1.4
						1.0	0.1	329	28.9		8.2		18.3		102.0		7.1		16.6		12		73				<0.2		1.5	
					Middle	3.7	0.4	271	28.4	28.4	8.2	8.2	21.1	21.1	102.9	102.9	7.1		18.4		12		75				<0.2		1.4	
						3.7	0.5	277	28.4		8.2		21.1		102.9		7.1		18.4		12		75				<0.2		1.3	
					Bottom	6.3	0.2	347	28.8	28.8	8.2	8.2	22.0	22.0	108.2	108.2	7.4	7.4	26.1		16		77				<0.2		1.4	
						6.3	0.2	354	28.8		8.2		22.0		108.2		7.4		26.1		16		77				<0.2		1.4	
IM12	Cloudy	Moderate	18:36	7.5	Surface	1.0	0.3	265	28.7	28.7	8.3	8.3	21.4	21.4	108.4	108.4	7.5	7.4	20.8	20.5	13	15	73	75	821442	812071	<0.2	<0.2	1.4	1.3
						1.0	0.3	285	28.7		8.3		21.4		108.4		7.5		20.8		13		72				<0.2		1.4	
					Middle	3.8	0.6	270	28.6	28.6	8.2	8.2	21.6	21.6	106.2	106.2	7.3		19.0		17		75				<0.2		1.4	
						3.8	0.6	283	28.6		8.2		21.6		106.2		7.3		19.0		17		75				<0.2		1.4	
					Bottom	6.5	0.2	311	28.1	28.1	8.1	8.1	24.1	24.1	102.8	102.8	7.0	7.0	21.6		16		76				<0.2		1.2	
						6.5	0.2	320	28.1		8.1		24.1		102.8		7.0		21.6		16		77				<0.2		1.2	
SR2	Cloudy	Moderate	18:58	4.7	Surface	1.0	0.3	187	28.6	28.6	8.1	8.1	19.6	19.6	96.9	96.9	6.7	6.7	16.8	18.8	14	15	73	74	821466	814141	<0.2	<0.2	1.4	1.4
						1.0	0.3	201	28.6		8.1		19.6		96.9		6.7		16.8		15		73				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	161	28.3	28.3	8.1	8.1	21.6	21.6	97.4	97.4	6.7	6.7	20.8		16		75				<0.2		1.3	
						3.7	0.1	167	28.3		8.1		21.6		97.4		6.7		20.8		16		75				<0.2		1.2	
SR3	Cloudy	Rough	18:03	8.5	Surface	1.0	0.2	271	28.8	28.8	7.9	7.9	15.6	15.6	77.2	77.2	5.5	5.5	19.1	21.4	11	12	-	-	822165	807590	-	-	-	-
						1.0	0.2	292	28.8		7.9		15.6		77.2		5.5		19.1		11		-				-		-	
					Middle	4.3	0.1	86	28.8	28.8	7.9	7.9	16.1	16.1	77.8	77.8	5.5		20.9		11		-				-		-	
						4.3	0.1	93	28.8		7.9		16.1		77.8		5.5		20.9		13		-				-		-	
					Bottom	7.5	0.1	315	28.8	28.8	7.9	7.9	16.2	16.2	79.8	79.8	5.6	5.6	24.2		12		-				-		-	
						7.5	0.1	328	28.8		7.9		16.2		79.8		5.6		24.2		12		-				-		-	
SR4A	Rainy	Calm	19:08	8.8	Surface	1.0	0.0	253	29.1	29.1	8.3	8.3	21.0	21.0	123.4	123.4	8.4	8.4	21.1	20.3	22	24	-	-	817218	807795	-	-	-	-
						1.0	0.0	269	29.1		8.3		21.0		123.4		8.4		21.1		20		-				-		-	
					Middle	4.4	0.0	88	29.1	29.1	8.3	8.3	21.0	21.0	122.0	122.0	8.4		18.8		24		-				-		-	
						4.4	0.0	94	29.1		8.3		21.0		122.0		8.4		18.8		24		-				-		-	
					Bottom	7.8	0.0	95	29.1	29.1	8.3	8.3	21.0	21.0	116.6	116.6	8.0	8.0	20.9		25		-				-		-	
						7.8	0.0	97	29.1		8.3		21.0		116.6		8.0		20.9		26		-				-		-	
SR5A	Rainy	Calm	19:27	3.5	Surface	1.0	0.2	293	29.3	29.3	8.4	8.4	20.8	20.8	133.7	133.7	9.1	9.1	20.6	20.2	13	12	-	-	816585	810681	-	-	-	-
						1.0	0.2	296	29.3		8.4		20.8		133.7		9.1		20.6		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	300	29.3	29.3	8.4	8.4	20.8	20.8	132.7	132.7	9.1	9.1	19.7		12		-				-		-	
						2.5	0.2	312	29.3		8.4		20.8		132.7		9.1		19.7		11		-				-		-	
SR6	Rainy	Calm	19:53	4.5	Surface	1.0	0.0	177	28.9	28.9	8.3	8.3	19.2	19.2	130.5	130.5	9.0	9.0	13.8	16.4	12	11	-	-	817923	814685	-	-	-	-
						1.0	0.0	186	28.9		8.3		19.2		130.5		9.0		13.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	61	28.9	28.9	8.4	8.4	20.1	20.1	117.4	117.4	8.1	8.1	18.9		11		-				-		-	
						3.5	0.1	63	28.9		8.4		20.1		117.4		8.1		18.9		11		-				-		-	
SR7	Cloudy	Moderate	19:54	16.2	Surface	1.0	0.1	232	29.1	29.1	8.3	8.3	21.3	21.3	122.6	122.6	8.4	8.4	18.2	20.3	10	10	-	-	823651	823728	-	-	-	-
						1.0	0.1	239	29.1		8.3		21.3		122.6		8.4		18.2		10		-				-		-	
					Middle	8.1	0.1	144	29.1	29.1	8.3	8.3	21.3	21.3	121.9	121.9	8.3		20.7		10		-				-		-	
						8.1	0.1	146	29.1		8.3		21.3		121.9		8.3		20.7		10		-				-		-	
					Bottom	15.2	0.2	80	29.1	29.1	8.3	8.3	21.3	21.3	121.9	121.9	8.3	8.3	22.1		12		-				-		-	
						15.2	0.2	87	29.1		8.3		21.3		121.9		8.3		22.1		10		-				-		-	
SR8	Cloudy	Moderate	18:42	4.6	Surface	1.0	-	-	28.6	28.6	8.2	8.2	19.7	19.7	97.7	97.7	6.8	6.8	19.9	21.3	17	19	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.6		8.2		19.7		97.7		6.8		19.9		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.3	28.3	8.2	8.2	21.6	21.6	99.1	99.1	6.9	6.9	22.6		21		-				-		-	
						3.6	-	-	28.3		8.2		21.6		99.1		6.9		22.6		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**
Note: The ebb and flood tide monitoring sessions on 14 July 2018 were cancelled due to adverse weather.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 17 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	15:46	9.3	Surface	1.0	0.1	212	28.3	28.3	8.0	8.0	22.7	22.7	84.3	84.4	5.8	5.7	8.6	11.0	6	7	72	74	815645	804261	<0.2	<0.2	0.5	0.8
						1.0	0.1	223	28.3		8.0		22.8		84.4		5.8		8.7		6		72				<0.2		0.6	
					Middle	4.7	0.2	197	27.2	27.2	8.1	8.1	28.5	28.5	82.0	81.9	5.6		11.3		5		75				<0.2		0.7	
						4.7	0.2	201	27.2		8.1		28.5		81.8		5.5		11.3		6		74				<0.2		0.8	
					Bottom	8.3	0.0	199	27.1	27.1	8.1	8.1	28.9	28.9	82.1	82.2	5.6	5.6	13.0		8		77				<0.2		1.1	
						8.3	0.0	214	27.1		8.1		28.9		82.2		5.6		13.0		10		76				<0.2		1.2	
C2	Sunny	Moderate	14:41	12.6	Surface	1.0	0.1	56	27.9	27.9	7.9	7.9	20.8	20.8	75.8	75.8	5.3	5.2	13.7	25.5	6	7	71	73	825699	806950	<0.2	<0.2	1.9	1.6
						1.0	0.1	58	27.9		7.9		20.8		75.8		5.3		13.7		5		71				<0.2		1.6	
					Middle	6.3	0.3	84	27.5	27.5	8.0	8.0	23.1	23.1	73.2	73.2	5.1		24.3		6		73				<0.2		1.6	
						6.3	0.3	86	27.5		8.0		23.1		73.2		5.1		24.3		5		73				<0.2		1.9	
					Bottom	11.6	0.4	149	27.3	27.3	7.9	7.9	24.7	24.7	75.7	75.7	5.2	5.2	38.5		9		75				<0.2		1.3	
						11.6	0.4	163	27.3		7.9		24.7		75.7		5.2		38.5		10		75				<0.2		1.5	
C3	Sunny	Moderate	16:20	12.4	Surface	1.0	0.2	94	28.2	28.2	8.0	8.0	22.8	22.8	80.1	80.1	5.5	5.3	6.9	7.9	5	5	72	75	822105	817800	<0.2	<0.2	1.5	1.6
						1.0	0.2	95	28.2		8.0		22.8		80.1		5.5		6.9		5		73				<0.2		1.7	
					Middle	6.2	0.2	99	27.6	27.6	8.0	8.0	24.3	24.3	73.7	73.7	5.1		8.2		5		75				<0.2		1.8	
						6.2	0.3	105	27.6		8.0		24.3		73.7		5.1		8.2		6		75				<0.2		1.7	
					Bottom	11.4	0.2	52	27.1	27.1	8.0	8.0	26.1	26.1	74.8	74.8	5.1	5.1	8.6		5		77				<0.2		1.5	
						11.4	0.2	53	27.1		8.0		26.1		74.8		5.1		8.6		4		76				<0.2		1.4	
IM1	Fine	Moderate	15:29	5.3	Surface	1.0	0.1	218	27.5	27.5	8.0	8.0	25.5	25.5	76.0	76.1	5.2	5.2	17.5	26.3	16	25	72	74	817945	807156	<0.2	<0.2	0.8	1.0
						1.0	0.1	226	27.5		8.0		25.5		76.1		5.2		17.6		15		73				<0.2		0.9	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	151	27.1	27.1	8.0	8.0	27.2	27.2	77.4	77.6	5.3	5.3	35.0		35		76				<0.2		1.1	
						4.3	0.1	159	27.1		8.0		27.2		77.8		5.3		34.9		32		76				<0.2		1.0	
IM2	Fine	Moderate	15:22	7.6	Surface	1.0	0.1	85	27.9	27.9	8.0	8.0	24.5	24.5	83.4	83.5	5.7	5.6	9.1	11.1	6	5	71	73	818137	806182	<0.2	<0.2	1.4	1.2
						1.0	0.1	88	27.9		8.0		24.5		83.5		5.7		9.1		5		71				<0.2		1.4	
					Middle	3.8	0.1	125	27.3	27.3	8.1	8.1	27.1	27.1	80.8	80.8	5.5		10.4		5		72				<0.2		1.1	
						3.8	0.1	134	27.3		8.1		27.1		80.8		5.5		10.4		5		72				<0.2		1.3	
					Bottom	6.6	0.0	26	27.1	27.1	8.1	8.1	28.0	28.0	80.6	80.8	5.5	5.5	14.2		5		74				<0.2		1.1	
						6.6	0.0	27	27.1		8.1		28.0		80.9		5.5		13.4		5		75				<0.2		1.1	
IM3	Fine	Moderate	15:15	7.7	Surface	1.0	0.2	44	28.1	28.1	8.0	8.0	23.0	23.0	84.5	84.5	5.8	5.6	8.8	12.8	5	9	71	73	818805	805612	<0.2	<0.2	1.4	1.1
						1.0	0.2	44	28.1		8.0		23.0		84.4		5.8		8.8		6		71				<0.2		1.4	
					Middle	3.9	0.1	87	27.1	27.1	8.1	8.1	27.7	27.7	78.7	78.7	5.4		14.3		10		72				<0.2		0.9	
						3.9	0.1	90	27.1		8.1		27.7		78.7		5.4		14.4		10		73				<0.2		1.0	
					Bottom	6.7	0.1	93	27.1	27.1	8.1	8.1	28.0	28.0	80.1	80.2	5.5	5.5	15.4		13		74				<0.2		0.8	
						6.7	0.1	100	27.1		8.1		28.0		80.2		5.5		15.1		10		75				<0.2		1.0	
IM4	Fine	Moderate	15:06	7.7	Surface	1.0	0.3	4	28.1	28.1	8.0	8.0	23.3	23.3	82.2	82.1	5.7	5.5	9.9	13.7	9	10	72	74	819714	804583	<0.2	<0.2	1.2	1.0
						1.0	0.3	4	28.1		8.0		23.3		81.9		5.6		10.3		9		71				<0.2		1.6	
					Middle	3.9	0.1	84	27.1	27.1	8.1	8.1	27.7	27.7	78.1	78.1	5.3		16.2		10		74				<0.2		0.8	
						3.9	0.1	87	27.1		8.1		27.7		78.1		5.3		16.2		11		74				<0.2		0.8	
					Bottom	6.7	0.2	91	27.1	27.1	8.1	8.1	28.1	28.1	80.7	80.8	5.5	5.5	14.9		10		75				<0.2		0.7	
						6.7	0.2	98	27.1		8.1		28.1		80.8		5.5		14.9		10		75				<0.2		0.8	
IM5	Fine	Moderate	14:58	7.3	Surface	1.0	1.0	99	27.7	27.7	8.0	8.0	25.1	25.1	80.3	80.3	5.5	5.4	14.4	21.5	9	21	71	73	820721	804892	<0.2	<0.2	1.2	1.0
						1.0	1.1	107	27.8		8.0		25.1		80.2		5.5		14.4		8		72				<0.2		1.4	
					Middle	3.7	0.7	80	27.2	27.2	8.0	8.0	27.0	27.0	77.4	77.4	5.3		24.2		23		73				<0.2		1.0	
						3.7	0.7	86	27.2		8.0		27.0		77.4		5.3		24.2		23		72				<0.2		1.1	
					Bottom	6.3	0.6	104	27.2	27.2	8.0	8.0	27.2	27.2	79.3	79.4	5.4	5.4	25.8		29		75				<0.2		0.7	
						6.3	0.6	113	27.2		8.0		27.2		79.5		5.4		25.7		31		74				<0.2		0.6	
IM6	Fine	Moderate	14:51	7.1	Surface	1.0	0.7	86	28.0	28.0	8.0	8.0	23.6	23.6	82.9	83.0	5.7	5.5	11.0	20.6	3	10	70	73	821088	805815	<0.2	<0.2	1.4	1.1
						1.0	0.7	90	28.0		8.0		23.6		83.0		5.7		11.1		3		71				<0.2		1.3	
					Middle	3.6	0.7	92	27.2	27.2	8.0	8.0	26.7	26.7	77.5	77.5	5.3		22.2		4		73				<0.2		1.2	
						3.6	0.7	93	27.2		8.0		26.7		77.4		5.3		22.4		2		73				<0.2		1.2	
					Bottom	6.1	0.5	50	27.2	27.2	8.0	8.0	27.1	27.1	78.9	79.0	5.4	5.4	28.5		23		74				<0.2		0.7	
						6.1	0.6	51	27.2		8.0		27.1		79.0		5.4		28.4		23		74				<0.2		0.8	
IM7	Fine	Moderate	14:41	8.1	Surface	1.0	1.1	70	28.1	28.1	8.0	8.0	23.4	23.4	84.3	84.3	5.8	5.5	8.9	19.0	11	11	71	72	821376	806822	<0.2	<0.2	1.1	1.2
						1.0	1.2	72	28.1		8.0		23.4		84.2		5.8		8.8		11		71				<0.2		1.2	
					Middle	4.1	1.0	96	27.3	27.3	8.0	8.0	26.0	26.0	74.7	74.8	5.1		23.7		10		72				<0.2		1.1	
						4.1	1.1	97	27.3		8.0		26.0		74.8		5.1		23.5		12		73				<0.2		1.1	
					Bottom	7.1	0.6	83	27.3	27.3	8.0	8.0	26.1	26.1	74.7	74.8	5.1	5.1	24.6		12		73				<0.2		1.1	
						7.1	0.7	89	27.3		8.0		26.1		74.8		5.1		24.6		10		73				<0.2		1.3	
IM8	Sunny	Moderate	15:05	9.3	Surface	1.0	0.3	132	28.5	28.5	8.0	8.0	20.6	20.6	81.3	81.3	5.6	5.6	9.6	14.3	6	7	71	73	821821	808142	<0.2	<0.2	1.7	1.8
						1.0	0.3	142	28.5		8.0		20.6		81.3		5.6		9.6		6		71				<0.2		1.5	
					Middle	4.7	0.2	80	27.7	27.7	8.0	8.0	24.0	24.0	80.2	80.2	5.5		13.9		6		73				<0.2		2.0	
						4.7	0.2	80	27.7		8.0		24.0		80.2		5.5		13.9		7		72				<0.2		2.4	
					Bottom	8.3	0.4	71	27.4	27.4	8.0	8.0	25.5	25.5	81.6	81.6	5.6	5.6	19.3		7		74				<0.2		1.4	
						8.3	0.4	71	27.4		8.0		25.5		81.6		5.6		19.3		7		75				<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 17 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:11	8.4	Surface	1.0	0.4	105	28.6	28.6	8.0	8.0	20.9	20.9	82.9	82.9	5.7	5.7	8.1	12.8	5	5	71	73	822091	808833	<0.2	<0.2	1.6	1.7
						1.0	0.4	105	28.6		8.0		20.9		82.9		5.7		8.1		4		71				<0.2		1.6	
					Middle	4.2	0.3	93	27.7	27.7	8.0	8.0	23.2	23.2	80.4	80.4	5.6		18.6		4		72				<0.2		1.9	
						4.2	0.3	101	27.7		8.0		23.2		80.4		5.6		18.6		4		73				<0.2		1.5	
					Bottom	7.4	0.4	65	27.9	27.9	8.0	8.0	24.6	24.6	83.1	83.1	5.7	5.7	11.6		6		75				<0.2		1.9	
						7.4	0.5	70	27.9		8.0		24.6		83.1		5.7		11.6		4		75				<0.2		1.6	
IM10	Sunny	Moderate	15:19	8.0	Surface	1.0	0.5	106	28.2	28.2	8.0	8.0	21.8	21.8	81.0	81.0	5.6	5.6	11.3	21.1	6	17	71	73	822364	809767	<0.2	<0.2	1.3	1.7
						1.0	0.5	113	28.2		8.0		21.8		81.0		5.6		11.3		5		72				<0.2		1.2	
					Middle	4.0	0.4	92	27.9	27.9	8.0	8.0	22.9	22.9	79.7	79.7	5.5		17.4		6		73				<0.2		1.2	
						4.0	0.4	99	27.9		8.0		22.9		79.7		5.5		17.4		7		74				<0.2		1.3	
					Bottom	7.0	0.2	88	27.4	27.4	8.0	8.0	24.6	24.6	78.9	78.9	5.4	5.4	34.5		39		75				<0.2		2.2	
						7.0	0.3	92	27.4		8.0		24.6		78.9		5.4		34.5		39		75				<0.2		2.8	
IM11	Sunny	Moderate	15:29	9.0	Surface	1.0	0.4	111	27.8	27.8	8.0	8.0	22.2	22.2	76.0	76.0	5.3	5.2	8.7	18.2	9	14	72	75	822067	811468	<0.2	<0.2	1.7	1.4
						1.0	0.5	118	27.8		8.0		22.2		76.0		5.3		8.7		9		73				<0.2		1.5	
					Middle	4.5	0.5	108	27.3	27.3	8.0	8.0	23.5	23.5	71.3	71.3	5.0		17.8		10		75				<0.2		1.5	
						4.5	0.5	114	27.3		8.0		23.5		71.3		5.0		17.8		10		75				<0.2		1.4	
					Bottom	8.0	0.4	105	27.2	27.2	8.0	8.0	24.2	24.2	72.4	72.4	5.0	5.0	28.2		23		77				<0.2		1.2	
						8.0	0.4	112	27.2		8.0		24.2		72.4		5.0		28.2		24		77				<0.2		1.2	
IM12	Sunny	Moderate	15:36	9.6	Surface	1.0	0.5	92	28.0	28.0	8.0	8.0	21.7	21.7	74.4	74.4	5.2	5.1	12.5	17.0	6	6	72	75	821469	812075	<0.2	<0.2	1.5	1.6
						1.0	0.5	99	28.0		8.0		21.7		74.4		5.2		12.5		6		73				<0.2		1.5	
					Middle	4.8	0.4	100	27.4	27.4	8.0	8.0	23.4	23.4	71.7	71.7	5.0		18.0		6		75				<0.2		1.5	
						4.8	0.4	105	27.4		8.0		23.4		71.7		5.0		18.0		7		75				<0.2		1.5	
					Bottom	8.6	0.3	90	27.2	27.2	8.0	8.0	24.1	24.1	73.7	73.7	5.1	5.1	20.6		5		77				<0.2		1.6	
						8.6	0.3	94	27.2		8.0		24.1		73.7		5.1		20.6		6		76				<0.2		1.7	
SR2	Sunny	Moderate	15:59	5.5	Surface	1.0	0.6	97	27.9	27.9	8.0	8.0	22.0	22.0	77.5	77.5	5.4	5.4	8.7	9.2	6	6	73	74	821451	814164	<0.2	<0.2	1.5	1.4
						1.0	0.6	103	27.9		8.0		22.0		77.5		5.4		8.7		6		74				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.4	94	27.4	27.4	8.0	8.0	23.4	23.4	77.6	77.6	5.4	5.4	9.6		6		75				<0.2		1.6	
						4.5	0.4	99	27.4		8.0		23.4		77.6		5.4		9.6		6		75				<0.2		1.2	
SR3	Sunny	Moderate	15:00	9.5	Surface	1.0	0.3	110	28.1	28.1	8.0	8.0	22.5	22.5	81.8	81.8	5.6	5.6	9.3	14.7	6	6	-	-	822168	807558	-	-	-	-
						1.0	0.3	111	28.1		8.0		22.5		81.8		5.6		9.3		5		-				-		-	
					Middle	4.8	0.3	59	27.6	27.6	8.0	8.0	24.9	24.9	80.0	80.0	5.5		12.2		6		-				-		-	
						4.8	0.3	63	27.6		8.0		24.9		80.0		5.5		12.2		6		-				-		-	
					Bottom	8.5	0.3	71	27.3	27.3	8.0	8.0	25.7	25.7	79.1	79.1	5.4	5.4	22.7		6		-				-		-	
						8.5	0.3	77	27.3		8.0		25.7		79.1		5.4		22.7		5		-				-		-	
SR4A	Fine	Calm	16:11	9.1	Surface	1.0	0.3	81	27.8	27.8	8.0	8.0	25.4	25.4	80.1	80.2	5.5	5.4	12.6	19.0	6	14	-	-	817205	807809	-	-	-	-
						1.0	0.3	85	27.8		8.0		25.4		80.2		5.5		12.7		6		-				-		-	
					Middle	4.6	0.4	72	27.3	27.3	8.0	8.0	26.9	26.9	77.7	77.7	5.3		19.3		12		-				-		-	
						4.6	0.4	77	27.3		8.0		26.9		77.7		5.3		19.4		11		-				-		-	
					Bottom	8.1	0.3	64	27.1	27.1	8.1	8.1	27.6	27.6	77.9	78.0	5.3	5.3	25.3		24		-				-		-	
						8.1	0.3	67	27.1		8.1		27.6		78.0		5.3		24.6		24		-				-		-	
SR5A	Fine	Calm	16:27	4.4	Surface	1.0	0.1	336	28.1	28.1	8.0	8.0	22.6	22.6	78.7	78.7	5.4	5.4	13.5	14.9	10	13	-	-	816568	810704	-	-	-	-
						1.0	0.1	351	28.1		8.0		22.7		78.6		5.4		13.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	344	27.7	27.7	8.0	8.0	24.4	24.4	77.8	77.8	5.3	5.3	16.3		16		-				-		-	
						3.4	0.0	346	27.7		8.0		24.4		77.8		5.3		16.3		16		-				-		-	
SR6	Fine	Calm	16:50	4.0	Surface	1.0	0.1	57	28.0	28.0	8.0	8.0	21.7	21.7	80.7	80.7	5.6	5.6	11.4	12.6	6	9	-	-	817912	814687	-	-	-	-
						1.0	0.1	57	28.0		8.0		21.7		80.7		5.6		11.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	63	27.6	27.6	7.9	7.9	22.3	22.3	80.6	80.7	5.6	5.6	13.7		11		-				-		-	
						3.0	0.1	68	27.6		7.9		22.3		80.8		5.6		13.7		12		-				-		-	
SR7	Sunny	Moderate	16:47	16.5	Surface	1.0	0.6	61	27.6	27.6	8.0	8.0	25.1	25.1	75.4	75.4	5.2	5.1	6.8	7.3	5	6	-	-	823626	823741	-	-	-	-
						1.0	0.6	62	27.6		8.0		25.1		75.4		5.2		6.8		6		-				-		-	
					Middle	8.3	0.3	26	27.2	27.2	8.0	8.0	26.3	26.3	71.9	71.9	4.9		7.4		4		-				-		-	
						8.3	0.3	26	27.2		8.0		26.3		71.9		4.9		7.4		6		-				-		-	
					Bottom	15.5	0.2	24	27.1	27.1	8.0	8.0	26.7	26.7	71.8	71.8	4.9	4.9	7.6		6		-				-		-	
						15.5	0.2	25	27.1		8.0		26.7		71.8		4.9		7.6		6		-				-		-	
SR8	Sunny	Moderate	15:46	4.5	Surface	1.0	-	-	28.2	28.2	8.2	8.2	21.6	21.6	81.8	81.8	5.7	5.7	9.5	10.1	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.2		8.2		21.6		81.8		5.7		9.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.0	28.0	8.1	8.1	22.7	22.7	83.8	83.8	5.8	5.8	10.7		7		-				-		-	
						3.5	-	-	28.0		8.1		22.7		83.8		5.8		10.7		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 17 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	09:37	8.8	Surface	1.0	0.6	38	27.5	27.5	8.0	8.0	22.6	22.6	79.7	79.7	5.5	5.4	10.2	39.4	6	31	71	73	815617	804218	<0.2	<0.2	1.5	1.2
						1.0	0.7	39	27.5		8.0		22.6		79.6		5.5		10.2		6		72				<0.2		1.6	
					Middle	4.4	0.5	39	27.2	27.2	8.0	8.0	26.2	26.2	76.4	76.4	5.2		13.7		11		72				<0.2		0.8	
						4.4	0.6	39	27.2		8.0		26.2		76.4		5.2		13.8		11		73				<0.2		0.9	
					Bottom	7.8	0.6	32	27.1	27.1	8.0	8.0	27.7	27.7	77.1	77.1	5.3	5.3	91.8		78		74				<0.2		1.2	
						7.8	0.6	32	27.1		8.0		27.7		77.0		5.3		96.4		72		75				<0.2		1.1	
C2	Sunny	Moderate	09:57	12.6	Surface	1.0	0.2	348	28.0	28.0	7.9	7.9	18.2	18.2	74.4	74.4	5.3	5.2	9.3	15.2	5	4	71	73	825692	806949	<0.2	<0.2	1.6	2.2
						1.0	0.2	320	28.0		7.9		18.2		74.4		5.3		9.3		4		70				<0.2		1.4	
					Middle	6.3	0.6	336	27.6	27.6	7.9	7.9	21.4	21.4	72.4	72.4	5.1		15.4		4		73				<0.2		2.6	
						6.3	0.6	338	27.6		7.9		21.4		72.4		5.1		15.4		4		73				<0.2		2.7	
					Bottom	11.6	0.5	333	27.5	27.5	7.9	7.9	22.7	22.7	72.4	72.4	5.0	5.0	20.9		4		74				<0.2		2.6	
						11.6	0.5	340	27.5		7.9		22.7		72.4		5.0		20.9		5		75				<0.2		2.2	
C3	Sunny	Moderate	08:16	12.2	Surface	1.0	0.5	265	27.4	27.4	8.0	8.0	22.2	22.2	79.3	79.3	5.5	5.5	8.4	10.3	5	4	73	75	822133	817781	<0.2	<0.2	1.5	1.4
						1.0	0.5	275	27.4		8.0		22.2		79.3		5.5		8.4		3		73				<0.2		1.4	
					Middle	6.1	0.5	271	27.2	27.2	8.0	8.0	23.3	23.3	77.9	77.9	5.4		10.1		3		75				<0.2		1.4	
						6.1	0.5	284	27.2		8.0		23.3		77.9		5.4		10.1		4		74				<0.2		1.4	
					Bottom	11.2	0.6	276	27.0	27.0	8.0	8.0	25.6	25.6	82.1	82.1	5.7	5.7	12.4		5		76				<0.2		1.3	
						11.2	0.6	282	27.0		8.0		25.6		82.1		5.7		12.4		4		77				<0.2		1.3	
IM1	Fine	Moderate	09:59	5.8	Surface	1.0	0.3	-	27.4	27.4	8.0	8.0	24.4	24.4	76.0	76.0	5.2	5.2	17.3	28.0	18	25	71	73	817930	807129	<0.2	<0.2	1.1	1.1
						1.0	0.3	-	27.4		8.0		24.4		76.0		5.2		17.3		17		72				<0.2		1.1	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.2	11	27.3	27.3	8.0	8.0	25.4	25.4	75.8	75.9	5.2	5.2	39.3		32		75				<0.2		1.0	
						4.8	0.2	11	27.3		8.0		25.4		75.9		5.2		37.9		33		75				<0.2		1.1	
IM2	Fine	Moderate	10:07	8.3	Surface	1.0	0.5	13	27.6	27.6	8.0	8.0	22.5	22.5	79.9	79.9	5.6	5.4	10.8	33.0	3	26	72	74	818142	806150	<0.2	<0.2	1.0	1.0
						1.0	0.5	14	27.6		8.0		22.5		79.9		5.6		10.9		4		72				<0.2		1.2	
					Middle	4.2	0.5	18	27.3	27.3	8.0	8.0	25.5	25.5	75.7	75.8	5.2		28.4		34		75				<0.2		0.9	
						4.2	0.5	18	27.3		8.0		25.5		75.8		5.2		29.2		35		74				<0.2		0.9	
					Bottom	7.3	0.5	9	27.3	27.3	8.0	8.0	25.5	25.5	75.7	75.8	5.2	5.2	59.0		40		77				<0.2		0.8	
						7.3	0.5	9	27.3		8.0		25.5		75.9		5.2		59.7		37		76				<0.2		0.9	
IM3	Fine	Moderate	10:16	8.4	Surface	1.0	0.5	11	27.6	27.6	8.0	8.0	22.4	22.4	79.9	79.9	5.6	5.4	14.9	33.4	4	29	71	73	818765	805605	<0.2	<0.2	1.1	0.9
						1.0	0.6	11	27.6		8.0		22.4		79.9		5.6		15.2		2		71				<0.2		0.9	
					Middle	4.2	0.5	14	27.2	27.2	8.0	8.0	26.3	26.3	75.6	75.6	5.2		27.1		18		73				<0.2		1.0	
						4.2	0.5	14	27.2		8.0		26.3		75.6		5.2		27.1		16		73				<0.2		0.9	
					Bottom	7.4	0.4	16	27.2	27.2	8.0	8.0	26.4	26.4	76.0	76.4	5.2	5.3	58.0		68		75				<0.2		0.8	
						7.4	0.4	17	27.2		8.0		26.4		76.8		5.3		58.0		64		75				<0.2		0.7	
IM4	Fine	Moderate	10:24	8.6	Surface	1.0	0.6	14	28.1	28.1	8.0	8.0	21.6	21.6	81.0	81.0	5.6	5.5	12.8	37.8	4	28	71	73	819727	804583	<0.2	<0.2	1.3	1.1
						1.0	0.6	15	28.1		8.0		21.6		81.0		5.6		13.1		2		71				<0.2		1.2	
					Middle	4.3	0.6	14	27.2	27.2	8.0	8.0	26.4	26.4	76.6	76.6	5.3		36.8		12		73				<0.2		1.1	
						4.3	0.6	14	27.2		8.0		26.4		76.6		5.3		36.9		11		73				<0.2		1.3	
					Bottom	7.6	0.4	11	27.2	27.2	8.0	8.0	26.6	26.6	78.2	78.2	5.4	5.4	64.6		70		74				<0.2		0.8	
						7.6	0.4	11	27.2		8.0		26.6		78.2		5.4		62.8		71		75				<0.2		0.8	
IM5	Fine	Moderate	10:32	7.8	Surface	1.0	0.5	25	27.8	27.8	8.0	8.0	22.4	22.4	80.4	80.4	5.6	5.5	11.1	38.9	7	29	72	74	820745	804881	<0.2	<0.2	0.8	1.0
						1.0	0.5	26	27.8		8.0		22.4		80.4		5.6		11.2		5		73				<0.2		0.9	
					Middle	3.9	0.5	20	27.2	27.2	8.0	8.0	26.1	26.1	76.9	76.9	5.3		43.0		41		73				<0.2		1.1	
						3.9	0.5	21	27.2		8.0		26.1		76.9		5.3		42.6		39		73				<0.2		1.1	
					Bottom	6.8	0.4	13	27.2	27.2	8.0	8.0	26.4	26.4	78.4	78.5	5.4	5.4	63.0		42		75				<0.2		1.2	
						6.8	0.5	13	27.2		8.0		26.4		78.5		5.4		62.3		40		75				<0.2		1.1	
IM6	Fine	Moderate	10:39	8.0	Surface	1.0	0.7	17	27.6	27.6	8.0	8.0	23.7	23.7	78.3	78.3	5.4	5.4	11.7	17.1	9	10	71	73	821053	805840	<0.2	<0.2	1.1	1.0
						1.0	0.8	17	27.6		8.0		23.7		78.3		5.4		11.8		9		71				<0.2		1.1	
					Middle	4.0	0.7	10	27.4	27.4	8.0	8.0	24.4	24.4	76.7	76.7	5.3		16.5		10		72				<0.2		1.1	
						4.0	0.7	10	27.4		8.0		24.4		76.7		5.3		16.6		10		73				<0.2		0.9	
					Bottom	7.0	0.6	19	27.3	27.3	8.0	8.0	25.4	25.4	77.7	77.8	5.4	5.4	23.0		12		74				<0.2		1.0	
						7.0	0.6	19	27.3		8.0		25.4		77.9		5.4		22.9		12		75				<0.2		0.9	
IM7	Fine	Moderate	10:47	9.4	Surface	1.0	0.7	21	27.6	27.6	8.0	8.0	24.3	24.3	78.8	78.8	5.4	5.4	16.6	19.1	18	19	70	72	821338	806847	<0.2	<0.2	1.0	1.0
						1.0	0.8	22	27.6		8.0		24.3		78.8		5.4		16.5		18		71				<0.2		1.0	
					Middle	4.7	0.5	12	27.5	27.5	8.0	8.0	24.3	24.3	78.4	78.5	5.4		17.3		18		72				<0.2		1.0	
						4.7	0.5	12	27.5		8.0		24.3		78.5		5.4		17.3		18		72				<0.2		1.0	
					Bottom	8.4	0.4	18	27.4	27.4	8.0	8.0	24.6	24.5	79.1	79.2	5.5	5.5	23.7		20		74				<0.2		0.9	
						8.4	0.4	18	27.4		8.0		24.5		79.2		5.5		22.9		19		73				<0.2		1.2	
IM8	Sunny	Moderate	09:31	8.3	Surface	1.0	0.1	320	28.1	28.1	7.9	7.9	18.9	18.9	75.1	75.1	5.3	5.3	8.0	8.2	3	3	71	73	821841	808122	<0.2	<0.2	1.2	1.7
						1.0	0.1	332	28.1		7.9		18.9		75.1		5.3		8.0		2		71				<0.2		1.8	
					Middle	4.2	0.1	1	27.8	27.8	7.9	7.9	19.3	19.3	74.9	74.9	5.3		8.3		3		73				<0.2		1.9	
						4.2	0.1	1	27.8		7.9		19.3		74.9		5.3		8.3		4		72				<0.2		1.6	
					Bottom	7.3	0.1	52	27.8	27.8	7.9	7.9	19.4	19.4	80.4	80.4	5.7	5.7	8.3		4		74				<0.2		2.0	
						7.3	0.1	56	27.8		7.9		19.4		80.4		5.7		8.3		4		75				<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 17 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	09:24	8.4	Surface	1.0	0.2	296	27.9	27.9	7.9	7.9	19.4	19.4	74.4	74.4	5.2	5.2	15.5	21.6	5	4	71	73	822079	808819	<0.2	<0.2	2.0	1.8
						1.0	0.2	320	27.9		7.9		19.4		74.4		5.2		15.5		4		71				<0.2		1.6	
					Middle	4.2	0.2	307	27.9	27.9	7.9	7.9	19.6	19.6	74.3	74.3	5.2		20.1		4		73				<0.2		1.8	
						4.2	0.2	334	27.9		7.9		19.6		74.3		5.2		20.1		4		73				<0.2		1.7	
					Bottom	7.4	0.2	301	27.8	27.8	7.9	7.9	19.6	19.6	75.6	75.6	5.3	5.3	29.1		4		74				<0.2		1.7	
						7.4	0.2	317	27.8		7.9		19.6		75.6		5.3		29.1		5		75				<0.2		1.8	
IM10	Sunny	Moderate	09:18	8.1	Surface	1.0	0.3	326	27.9	27.9	7.9	7.9	19.8	19.8	75.2	75.2	5.3	5.3	15.4	20.6	5	5	71	74	822395	809806	<0.2	<0.2	1.5	1.7
						1.0	0.4	353	27.9		7.9		19.8		75.2		5.3		15.4		4		71				<0.2		1.7	
					Middle	4.1	0.3	327	27.8	27.8	7.9	7.9	20.0	20.0	75.2	75.2	5.3		21.2		6		74				<0.2		1.6	
						4.1	0.3	354	27.8		7.9		20.0		75.2		5.3		21.2		5		73				<0.2		1.8	
					Bottom	7.1	0.2	288	27.8	27.8	7.9	7.9	20.3	20.3	78.2	78.2	5.5	5.5	25.2		5		77				<0.2		1.7	
						7.1	0.2	294	27.8		7.9		20.3		78.2		5.5		25.2		5		76				<0.2		1.6	
IM11	Sunny	Moderate	09:11	8.5	Surface	1.0	0.6	297	28.0	28.0	7.9	7.9	20.1	20.1	76.5	76.5	5.4	5.4	10.6	21.7	3	4	72	75	822066	811460	<0.2	<0.2	1.7	1.7
						1.0	0.6	313	28.0		7.9		20.1		76.5		5.4		10.6		4		73				<0.2		1.7	
					Middle	4.3	0.5	295	27.6	27.6	8.0	8.0	20.9	20.9	75.2	75.2	5.3		21.5		3		75				<0.2		1.7	
						4.3	0.6	307	27.6		8.0		20.9		75.2		5.3		21.5		3		74				<0.2		1.6	
					Bottom	7.5	0.3	301	27.6	27.6	8.0	8.0	21.1	21.1	76.1	76.1	5.3	5.3	33.0		4		77				<0.2		1.6	
						7.5	0.3	326	27.6		8.0		21.1		76.1		5.3		33.0		4		76				<0.2		1.6	
IM12	Sunny	Moderate	08:58	9.1	Surface	1.0	0.6	281	27.7	27.7	7.9	7.9	20.2	20.2	74.3	74.3	5.2	5.1	14.4	22.4	2	4	73	75	821430	812030	<0.2	<0.2	1.7	1.8
						1.0	0.6	299	27.7		7.9		20.2		74.3		5.2		14.4		4		72				<0.2		1.6	
					Middle	4.6	0.7	278	27.3	27.3	8.0	8.0	22.6	22.6	70.9	70.9	5.0		24.4		5		74				<0.2		1.8	
						4.6	0.8	301	27.3		8.0		22.6		70.9		5.0		24.4		5		75				<0.2		2.1	
					Bottom	8.1	0.6	270	27.1	27.1	8.0	8.0	24.2	24.2	71.6	71.6	5.0	5.0	28.3		3		76				<0.2		1.7	
						8.1	0.6	295	27.1		8.0		24.2		71.6		5.0		28.3		4		77				<0.2		1.6	
SR2	Sunny	Moderate	08:37	4.9	Surface	1.0	0.2	346	27.5	27.5	7.9	7.9	21.8	21.8	75.5	75.5	5.3	5.3	16.8	18.1	5	5	73	74	821454	814174	<0.2	<0.2	1.5	1.5
						1.0	0.3	318	27.5		7.9		21.8		75.5		5.3		16.8		4		72				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	342	27.3	27.3	7.9	7.9	22.6	22.6	78.2	78.2	5.5	5.5	19.4		4		76				<0.2		1.4	
						3.9	0.1	356	27.3		7.9		22.6		78.2		5.5		19.4		5		76				<0.2		1.4	
SR3	Sunny	Moderate	09:36	8.9	Surface	1.0	0.2	3	28.1	28.1	7.9	7.9	18.7	18.7	74.9	74.9	5.3	5.3	7.9	8.1	4	4	-	-	822151	807585	-	-	-	-
						1.0	0.3	3	28.1		7.9		18.7		74.8		5.3		7.9		3		-				-		-	
					Middle	4.5	0.2	322	27.9	27.9	7.9	7.9	19.3	19.3	73.8	73.8	5.2		7.9		3		-				-		-	
						4.5	0.2	353	27.9		7.9		19.3		73.8		5.2		7.9		4		-				-		-	
					Bottom	7.9	0.1	23	27.7	27.7	7.9	7.9	19.7	19.7	75.2	75.8	5.3	5.4	8.6		5		-				-		-	
						7.9	0.1	23	27.7		7.9		19.7		76.3		5.4		8.5		5		-				-		-	
SR4A	Fine	Calm	09:14	9.5	Surface	1.0	0.4	260	27.4	27.4	7.9	7.9	22.8	22.8	75.5	75.5	5.3	5.3	10.3	13.2	4	5	-	-	817205	807787	-	-	-	-
						1.0	0.4	279	27.4		7.9		22.8		75.5		5.3		10.3		4		-				-		-	
					Middle	4.8	0.3	251	27.4	27.4	8.0	8.0	23.3	23.2	74.0	74.1	5.2		12.0		4		-				-		-	
						4.8	0.3	257	27.4		8.0		23.2		74.1		5.2		12.0		4		-				-		-	
					Bottom	8.5	0.2	243	27.4	27.4	8.0	8.0	24.2	24.2	74.6	74.8	5.2	5.2	17.4		7		-				-		-	
						8.5	0.2	254	27.4		8.0		24.2		74.9		5.2		17.4		9		-				-		-	
SR5A	Fine	Calm	08:59	4.3	Surface	1.0	0.3	294	27.4	27.4	7.9	7.9	22.4	22.4	77.3	77.3	5.4	5.4	12.6	13.3	5	7	-	-	816613	810694	-	-	-	-
						1.0	0.3	297	27.4		7.9		22.4		77.2		5.4		12.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	309	27.4	27.4	7.9	7.9	22.5	22.5	77.2	77.4	5.4	5.4	14.0		9		-				-		-	
						3.3	0.2	309	27.4		7.9		22.5		77.6		5.4		13.9		8		-				-		-	
SR6	Fine	Calm	08:36	4.6	Surface	1.0	0.2	252	27.5	27.5	7.9	7.9	22.0	22.0	74.0	74.0	5.2	5.2	10.4	11.9	6	6	-	-	817891	814640	-	-	-	-
						1.0	0.2	256	27.5		7.9		22.0		73.9		5.2		10.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	262	27.4	27.4	7.9	7.9	22.6	22.6	71.7	71.9	5.0	5.0	13.7		6		-				-		-	
						3.6	0.1	276	27.4		7.9		22.6		72.1		5.0		13.1		5		-				-		-	
SR7	Sunny	Moderate	07:45	16.5	Surface	1.0	0.2	230	27.2	27.2	7.9	7.9	22.9	22.9	78.3	78.3	5.5	5.4	7.9	8.0	4	5	-	-	823629	823735	-	-	-	-
						1.0	0.2	251	27.2		7.9		22.9		78.3		5.5		7.9		5		-				-		-	
					Middle	8.3	0.2	215	27.1	27.1	7.9	7.9	24.0	24.0	75.9	75.9	5.3		8.0		5		-				-		-	
						8.3	0.2	230	27.1		7.9		24.0		75.9		5.3		8.0		5		-				-		-	
					Bottom	15.5	0.2	203	26.9	26.9	7.9	7.9	25.4	25.4	76.2	76.2	5.3	5.3	8.2		4		-				-		-	
						15.5	0.2	205	26.9		7.9		25.4		76.2		5.3		8.2		4		-				-		-	
SR8	Sunny	Moderate	08:48	4.6	Surface	1.0	-	-	27.8	27.8	7.9	7.9	19.7	19.7	78.2	78.2	5.5	5.5	7.8	8.9	4	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	27.8		7.9		19.7		78.2		5.5		7.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	27.5	27.5	8.0	8.0	21.3	21.3	79.5	79.5	5.6	5.6	9.9		6		-				-		-	
						3.6	-	-	27.5		8.0		21.3		79.5		5.6		9.9		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 19 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	17:36	9.2	Surface	1.0	0.1	15	27.8	27.8	8.1	8.1	27.4	27.4	93.0	93.0	6.3	6.1	7.4	11.2	4	7	78	80	815644	804241	<0.2	<0.2	1.8	1.7
						1.0	0.1	16	27.8		8.1		27.4		92.9		6.3		7.4		6		78							
					Middle	4.6	0.1	96	27.5	27.5	8.1	8.1	28.6	28.6	88.3	88.3	5.9		11.1		6		80							
						4.6	0.1	101	27.5		8.1		28.6		88.3		5.9		11.2		8		80							
					Bottom	8.2	0.1	13	27.5	27.5	8.1	8.1	29.0	29.0	88.8	88.9	6.0	6.0	15.1		8		83							
						8.2	0.1	13	27.5		8.1		29.0		88.9		6.0		15.1		7		83							
C2	Cloudy	Moderate	16:24	12.1	Surface	1.0	0.1	69	28.3	28.3	8.0	8.0	21.8	21.8	90.6	90.7	6.3	6.2	8.6	9.5	5	6	80	81	825672	806973	<0.2	<0.2	1.6	1.7
						1.0	0.1	72	28.3		8.0		21.8		90.7		6.3		8.7		5		80						1.6	
					Middle	6.1	0.3	94	28.0	28.0	8.1	8.1	25.2	25.2	89.4	89.4	6.1		9.1		5		81						1.8	
						6.1	0.3	97	28.0		8.1		25.2		89.4		6.1		9.0		6		81						1.6	
					Bottom	11.1	0.4	151	27.8	27.8	8.1	8.1	26.1	26.1	90.9	91.1	6.2	6.2	10.8		7		83						1.8	
						11.1	0.4	159	27.8		8.1		26.1		91.2		6.2		10.8		6		83						1.6	
C3	Rainy	Moderate	18:12	11.6	Surface	1.0	0.2	105	27.8	27.8	8.1	8.1	27.6	27.6	92.4	92.1	6.2	6.0	8.8	13.5	7	8	78	81	822114	817791	<0.2	<0.2	1.7	1.7
						1.0	0.2	107	27.8		8.1		27.6		91.8		6.2		9.0		6		78						1.7	
					Middle	5.8	0.3	95	27.5	27.5	8.1	8.1	29.0	29.0	86.6	86.7	5.8		12.2		8		82						1.8	
						5.8	0.3	102	27.5		8.1		29.0		86.8		5.8		12.6		8		83						1.7	
					Bottom	10.6	0.2	66	27.5	27.5	8.1	8.1	29.3	29.3	88.6	88.7	5.9	6.0	19.1		9		83						1.6	
						10.6	0.2	67	27.5		8.1		29.3		88.7		6.0		19.3		8		83						1.7	
IM1	Rainy	Moderate	17:17	5.1	Surface	1.0	0.1	320	27.6	27.6	8.1	8.1	27.3	27.3	85.6	85.6	5.8	5.8	20.6	22.0	14	15	78	80	817940	807106	<0.2	<0.2	1.7	1.7
						1.0	0.1	328	27.6		8.1		27.3		85.6		5.8		20.7		12		78				<0.2		1.7	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	124	27.5	27.5	8.1	8.1	27.7	27.7	87.0	87.6	5.9	6.0	23.2		16		81				<0.2		1.6	
						4.1	0.1	132	27.5		8.1		27.6		88.1		6.0		23.4		17		82				<0.2		1.7	
IM2	Cloudy	Moderate	17:09	8.0	Surface	1.0	0.2	308	27.9	27.9	8.1	8.1	26.6	26.6	91.8	91.7	6.2	6.1	9.2	15.4	8	9	79	81	818146	806153	<0.2	<0.2	1.7	1.6
						1.0	0.2	325	27.9		8.1		26.6		91.5		6.2		9.4		9		79				<0.2		1.5	
					Middle	4.0	0.1	69	27.7	27.7	8.1	8.1	27.6	27.5	88.7	88.7	6.0		13.6		8		81				<0.2		1.8	
						4.0	0.2	72	27.7		8.1		27.5		88.7		6.0		13.6		10		81				<0.2		1.6	
					Bottom	7.0	0.1	80	27.5	27.5	8.1	8.1	28.1	28.1	88.5	88.8	6.0	6.0	23.4		10		82				<0.2		1.6	
						7.0	0.1	82	27.5		8.1		28.1		89.1		6.0		22.9		9		82				<0.2		1.5	
IM3	Cloudy	Moderate	17:00	8.3	Surface	1.0	0.3	298	28.0	28.0	8.1	8.1	25.8	25.8	94.6	94.6	6.4	6.3	7.1	9.8	5	6	78	81	818784	805587	<0.2	<0.2	1.7	1.7
						1.0	0.3	299	28.0		8.1		25.8		94.5		6.4		7.1		5		79				<0.2		1.6	
					Middle	4.2	0.2	77	27.9	27.9	8.1	8.1	26.3	26.3	91.0	90.9	6.2		8.9		5		80				<0.2		1.7	
						4.2	0.2	82	27.9		8.1		26.3		90.8		6.2		9.1		5		81				<0.2		1.7	
					Bottom	7.3	0.2	44	27.5	27.5	8.1	8.1	28.0	28.0	88.9	88.9	6.0	6.0	13.2		7		82				<0.2		1.7	
						7.3	0.2	44	27.5		8.1		28.0		88.9		6.0		13.3		6		83				<0.2		1.6	
IM4	Cloudy	Moderate	16:49	8.0	Surface	1.0	0.2	281	28.0	28.0	8.1	8.1	24.2	24.2	94.7	94.6	6.5	6.3	6.8	10.0	5	6	78	80	819708	804602	<0.2	<0.2	1.7	1.7
						1.0	0.2	305	28.0		8.1		24.2		94.4		6.5		7.0		5		79				<0.2		1.7	
					Middle	4.0	0.2	40	27.7	27.7	8.1	8.1	25.9	25.9	89.6	89.5	6.1		9.7		5		80				<0.2		1.6	
						4.0	0.2	42	27.7		8.1		26.0		89.4		6.1		9.9		6		80				<0.2		1.6	
					Bottom	7.0	0.1	39	27.5	27.5	8.1	8.1	28.0	28.0	90.0	90.1	6.1	6.1	13.3		6		82				<0.2		1.6	
						7.0	0.2	42	27.5		8.1		28.0		90.2		6.1		13.3		7		83				<0.2		1.8	
IM5	Cloudy	Moderate	16:39	7.7	Surface	1.0	0.1	36	27.8	27.8	8.1	8.1	26.7	26.7	86.8	86.8	5.9	5.9	15.3	21.3	6	7	78	81	820761	804846	<0.2	<0.2	1.6	1.7
						1.0	0.1	39	27.8		8.1		26.8		86.8		5.9		15.4		6		79				<0.2		1.7	
					Middle	3.9	0.1	16	27.5	27.5	8.1	8.1	27.6	27.6	85.8	85.8	5.8		22.8		7		81				<0.2		1.7	
						3.9	0.1	16	27.5		8.1		27.6		85.8		5.8		22.9		6		81				<0.2		1.7	
					Bottom	6.7	0.2	74	27.5	27.5	8.1	8.1	27.7	27.7	88.5	88.6	6.0	6.0	25.7		8		83				<0.2		1.7	
						6.7	0.2	81	27.5		8.1		27.7		88.7		6.0		25.8		9		83				<0.2		1.7	
IM6	Cloudy	Moderate	16:31	7.5	Surface	1.0	0.1	355	27.9	27.9	8.1	8.1	24.6	24.6	87.3	87.2	6.0	5.9	12.9	17.8	9	9	78	81	821081	805813	<0.2	<0.2	1.6	1.7
						1.0	0.1	359	27.9		8.1		24.6		87.1		6.0		13.1		7		79				<0.2		1.8	
					Middle	3.8	0.1	62	27.6	27.6	8.1	8.1	26.2	26.2	84.5	84.5	5.8		17.5		9		81				<0.2		1.7	
						3.8	0.1	64	27.6		8.1		26.2		84.5		5.8		17.8		9		81				<0.2		1.8	
					Bottom	6.5	0.2	84	27.5	27.5	8.1	8.1	27.2	27.2	85.9	86.0	5.8	5.8	22.9		9		82				<0.2		1.8	
						6.5	0.2	88	27.5		8.1		27.2		86.0		5.8		22.8		10		82				<0.2		1.7	
IM7	Cloudy	Moderate	16:23	8.8	Surface	1.0	0.1	300	28.3	28.3	8.0	8.0	21.2	21.2	90.9	90.9	6.3	6.2	7.2	8.0	5	5	79	81	821346	806858	<0.2	<0.2	1.8	1.8
						1.0	0.1	317	28.3		8.0		21.2		90.9		6.3		7.3		4		78				<0.2		1.8	
					Middle	4.4	0.2	20	27.8	27.8	8.1	8.1	25.6	25.6	89.0	89.0	6.1		8.4		5		80				<0.2		1.8	
						4.4	0.2	21	27.8		8.1		25.6		88.9		6.1		8.4		4		80				<0.2		1.7	
					Bottom	7.8	0.3	34	27.8	27.8	8.1	8.1	26.0	26.0	89.3	89.4	6.1	6.1	8.4		4		83				<0.2		1.8	
						7.8	0.3	34	27.8		8.1		26.0		89.4		6.1		8.3		6		83				<0.2		1.7	
IM8	Cloudy	Moderate	16:53	8.6	Surface	1.0	0.3	144	28.0	28.0	8.1	8.1	23.9	23.9	88.2	88.1	6.0	5.9	13.6	21.3	3	4	79	81	821833	808163	<0.2	<0.2	1.7	1.8
						1.0	0.3	144	28.0		8.1		23.9		87.9		6.0		13.9		3		80				<0.2		1.8	
					Middle	4.3	0.2	75	27.5	27.5	8.1	8.1	27.8	27.8	84.5	84.5	5.7		23.2		3		80				<0.2		1.7	
						4.3	0.2	79	27.5		8.1		27.8		84.5		5.7		23.3		4		80				<0.2		1.8	
					Bottom	7.6	0.4	83	27.5	27.5	8.1	8.1	28.0	28.0	86.3	86.4	5.8	5.8	27.1		5		82				<0.2		1.7	
						7.6	0.4	87	27.5		8.1		28.0		86.4		5.8		26.9		3		83				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 19 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	16:59	7.5	Surface	1.0	0.4	119	28.0	28.0	8.1	8.1	24.4	24.4	92.6	92.4	6.3	6.1	9.2	14.3	2	3	80	82	822095	808815	<0.2	<0.2	1.8	1.8
						1.0	0.4	129	28.0		8.1		24.4		92.1		6.3		9.5		2		80				<0.2		1.7	
					Middle	3.8	0.3	94	27.6	27.5	8.1	8.1	27.0	27.0	85.1	85.1	5.8		15.3		3		83				<0.2		1.7	
						3.8	0.3	99	27.5		8.1		27.0		85.0		5.8		15.5		3		81				<0.2		1.8	
					Bottom	6.5	0.4	72	27.5	27.5	8.1	8.1	28.2	28.2	85.7	85.8	5.8	5.8	18.1		4		82				<0.2		1.8	
						6.5	0.5	78	27.5		8.1		28.2		85.8		5.8		17.9		5		83				<0.2		1.7	
IM10	Cloudy	Moderate	17:08	7.3	Surface	1.0	0.5	115	28.0	28.0	8.2	8.2	26.0	26.0	93.7	93.6	6.3	6.1	8.8	11.6	3	6	80	81	822382	809806	<0.2	<0.2	1.7	1.7
						1.0	0.5	122	28.0		8.2		26.0		93.4		6.3		8.8		5		79				<0.2		1.7	
					Middle	3.7	0.4	104	27.8	27.8	8.2	8.2	27.4	27.5	88.2	88.2	6.0		11.9		6		81				<0.2		1.6	
						3.7	0.4	110	27.8		8.2		27.5		88.1		5.9		11.8		7		81				<0.2		1.7	
					Bottom	6.3	0.3	90	27.5	27.5	8.1	8.1	28.1	28.1	87.7	87.8	5.9	5.9	14.1		7		82				<0.2		1.6	
						6.3	0.3	96	27.5		8.1		28.1		87.8		5.9		14.0		8		82				<0.2		1.7	
IM11	Rainy	Moderate	17:23	8.1	Surface	1.0	0.4	124	28.0	28.0	8.2	8.2	26.0	26.0	94.7	94.7	6.4	6.2	8.7	13.0	6	7	80	82	822078	811484	<0.2	<0.2	1.8	1.7
						1.0	0.5	130	28.0		8.2		26.0		94.6		6.4		8.8		6		80				<0.2		1.6	
					Middle	4.1	0.5	112	27.9	27.9	8.1	8.1	26.7	26.6	88.8	88.6	6.0		12.4		7		82				<0.2		1.8	
						4.1	0.5	117	27.9		8.1		26.5		88.3		6.0		13.0		6		83				<0.2		1.7	
					Bottom	7.1	0.4	118	27.5	27.5	8.1	8.1	28.2	28.2	87.8	87.9	5.9	5.9	17.7		7		83				<0.2		1.6	
						7.1	0.4	118	27.5		8.1		28.2		88.0		5.9		17.5		8		83				<0.2		1.7	
IM12	Rainy	Moderate	17:31	8.7	Surface	1.0	0.5	108	27.9	27.9	8.1	8.1	26.8	26.8	92.0	92.0	6.2	6.1	10.2	14.4	9	11	81	82	821479	812032	<0.2	<0.2	1.7	1.6
						1.0	0.5	116	27.9		8.1		26.8		91.9		6.2		9.9		10		80				<0.2		1.6	
					Middle	4.4	0.4	101	27.8	27.8	8.1	8.1	27.3	27.3	89.4	89.4	6.0		12.2		12		81				<0.2		1.6	
						4.4	0.4	107	27.8		8.1		27.3		89.4		6.0		12.3		11		81				<0.2		1.6	
					Bottom	7.7	0.3	88	27.5	27.5	8.1	8.1	28.4	28.4	88.1	88.2	5.9	6.0	21.0		11		83				<0.2		1.6	
						7.7	0.3	93	27.5		8.1		28.4		88.2		6.0		20.9		12		84				<0.2		1.6	
SR2	Rainy	Moderate	17:57	4.4	Surface	1.0	0.6	101	27.7	27.7	8.1	8.1	27.2	27.2	85.4	85.3	5.8	5.8	16.3	17.3	11	11	80	82	821484	814188	<0.2	<0.2	1.7	1.7
						1.0	0.6	108	27.7		8.1		27.3		85.1		5.8		16.5		11		80				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	109	27.5	27.5	8.1	8.1	27.7	27.7	85.2	85.3	5.8	5.8	18.3		12		83				<0.2		1.7	
						3.4	0.4	110	27.5		8.1		27.7		85.3		5.8		18.2		11		83				<0.2		1.7	
SR3	Cloudy	Moderate	16:47	9.5	Surface	1.0	0.3	124	27.9	27.9	8.1	8.1	24.8	24.8	88.0	88.0	6.0	5.9	11.6	15.0	12	12	-	-	822139	807568	-	-	-	-
						1.0	0.3	125	27.9		8.1		24.8		87.9		6.0		11.6		10		-				-		-	
					Middle	4.8	0.3	67	27.6	27.6	8.1	8.1	26.5	26.5	84.7	84.7	5.8		13.8		11		-				-		-	
						4.8	0.3	70	27.6		8.1		26.5		84.7		5.8		13.8		12		-				-		-	
					Bottom	8.5	0.3	82	27.5	27.5	8.1	8.1	27.4	27.4	82.9	83.0	5.6	5.6	19.4		12		-				-		-	
						8.5	0.3	84	27.5		8.1		27.4		83.0		5.6		19.5		14		-				-		-	
SR4A	Rainy	Calm	17:56	8.6	Surface	1.0	0.2	60	28.2	28.2	8.1	8.1	25.3	25.3	89.1	89.0	6.0	5.9	17.8	22.5	11	11	-	-	817212	807792	-	-	-	-
						1.0	0.2	62	28.2		8.1		25.3		88.8		6.0		18.3		10		-				-		-	
					Middle	4.3	0.3	64	27.6	27.6	8.1	8.1	27.1	27.1	84.6	84.6	5.7		22.4		11		-				-		-	
						4.3	0.3	66	27.6		8.1		27.1		84.6		5.7		22.7		11		-				-		-	
					Bottom	7.6	0.1	51	27.6	27.6	8.1	8.1	27.2	27.2	86.9	87.3	5.9	5.9	27.3		11		-				-		-	
						7.6	0.1	53	27.6		8.1		27.2		87.6		5.9		26.5		12		-				-		-	
SR5A	Rainy	Moderate	18:15	5.6	Surface	1.0	0.0	74	28.2	28.2	8.0	8.0	23.5	23.5	94.8	94.8	6.5	6.5	9.1	9.5	9	10	-	-	816607	810712	-	-	-	-
						1.0	0.0	75	28.2		8.0		23.5		94.7		6.5		9.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	95	28.1	28.1	8.0	8.0	24.0	24.0	95.4	95.5	6.5	6.5	9.8		11		-				-		-	
						4.6	0.1	99	28.1		8.0		24.0		95.5		6.5		9.8		10		-				-		-	
SR6	Rainy	Calm	19:02	4.3	Surface	1.0	0.0	56	28.1	28.1	8.0	8.0	22.6	22.6	89.6	89.6	6.2	6.2	9.8	10.7	13	15	-	-	817902	814664	-	-	-	-
						1.0	0.0	58	28.1		8.0		22.7		89.5		6.2		9.9		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	62	28.0	28.0	8.0	8.0	22.9	22.9	90.4	91.0	6.2	6.3	11.4		16		-				-		-	
						3.3	0.0	67	28.0		8.0		22.9		91.6		6.3		11.5		14		-				-		-	
SR7	Rainy	Moderate	18:41	18.7	Surface	1.0	0.6	77	28.0	28.0	8.1	8.1	26.3	26.2	89.2	89.1	6.0	5.9	13.3	20.8	7	7	-	-	823632	823731	-	-	-	-
						1.0	0.6	79	28.0		8.1		26.2		89.0		6.0		13.4		6		-				-		-	
					Middle	9.4	0.3	35	27.6	27.6	8.1	8.1	27.4	27.4	83.7	83.7	5.7		22.1		8		-				-		-	
						9.4	0.3	35	27.6		8.1		27.4		83.7		5.7		22.4		6		-				-		-	
					Bottom	17.7	0.2	29	27.5	27.5	8.1	8.1	27.5	27.5	85.0	85.1	5.8	5.8	26.7		8		-				-		-	
						17.7	0.2	29	27.5		8.1		27.5		85.2		5.8		26.7		7		-				-		-	
SR8	Rainy	Moderate	17:38	4.1	Surface	1.0	-	-	27.7	27.7	8.1	8.1	27.2	27.2	86.7	86.7	5.9	5.9	16.3	18.2	6	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	27.7		8.1		27.2		86.7		5.9		16.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	27.5	27.5	8.1	8.1	27.8	27.8	88.4	88.5	6.0	6.0	20.1		7		-				-		-	
						3.1	-	-	27.5		8.1		27.8		88.6		6.0		20.1		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 19 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	11:33	8.9	Surface	1.0	0.2	43	27.7	27.7	8.1	8.1	25.5	25.5	91.4	91.1	6.2	6.0	8.2	14.4	6	6	78	80	815600	804241	<0.2	<0.2	1.9	1.8
						1.0	0.2	43	27.7		8.1		25.5		90.8		6.2		8.8		5		78				<0.2		1.8	
					Middle	4.5	0.4	48	27.5	27.5	8.1	8.1	27.9	27.9	84.6	84.8	5.7		14.3		6		80				<0.2		1.8	
						4.5	0.4	49	27.5		8.1		27.9		84.9		5.7		14.5		5		80				<0.2		1.7	
					Bottom	7.9	0.4	54	27.5	27.5	8.1	8.1	28.0	28.0	85.9	86.6	5.8	5.9	20.2		6		82				<0.2		1.7	
						7.9	0.5	56	27.5		8.1		28.0		87.2		5.9		20.6		7		83				<0.2		1.6	
C2	Cloudy	Moderate	12:43	11.6	Surface	1.0	0.2	356	27.9	27.9	8.0	8.0	13.4	13.4	84.9	84.9	5.8	5.7	5.5	7.5	5	6	80	82	825706	806918	<0.2	<0.2	1.7	1.9
						1.0	0.2	328	27.9		8.0		13.4		84.8		5.8		5.8		6		81				<0.2		1.6	
					Middle	5.8	0.6	340	27.5	27.5	8.1	8.1	17.6	17.6	81.7	81.7	5.5		6.2		6		82				<0.2		1.9	
						5.8	0.6	354	27.5		8.1		17.6		81.7		5.5		6.4		7		83				<0.2		1.9	
					Bottom	10.6	0.5	338	27.5	27.5	8.1	8.1	25.6	25.6	83.5	83.5	5.7	5.7	10.8		7		83				<0.2		1.9	
						10.6	0.5	311	27.5		8.1		25.6		83.5		5.7		10.3		7		83				<0.2		2.1	
C3	Cloudy	Moderate	10:37	11.2	Surface	1.0	0.5	255	27.8	27.8	8.0	8.0	23.9	23.9	84.7	84.7	5.8	5.9	12.3	13.5	6	7	78	80	822116	817825	<0.2	<0.2	1.6	1.9
						1.0	0.5	277	27.8		8.0		23.9		84.7		5.8		12.2		7		78				<0.2		2.0	
					Middle	5.6	0.5	283	27.8	27.8	8.0	8.0	23.9	23.9	85.1	85.1	5.9		13.3		8		80				<0.2		2.0	
						5.6	0.6	308	27.8		8.0		23.9		85.1		5.9		13.4		7		80				<0.2		2.2	
					Bottom	10.2	0.5	277	27.7	27.7	8.0	8.0	24.0	24.0	85.9	86.0	5.9	5.9	15.0		7		83				<0.2		2.0	
						10.2	0.6	279	27.7		8.0		24.0		86.1		5.9		15.0		9		82				<0.2		1.8	
IM1	Cloudy	Moderate	11:55	5.6	Surface	1.0	0.2	2	27.7	27.7	8.1	8.1	26.6	26.6	86.0	86.0	5.8	5.8	15.7	19.2	6	7	78	79	817944	807116	<0.2	<0.2	2.1	2.1
						1.0	0.2	2	27.7		8.1		26.6		86.0		5.8		15.8		7		78				<0.2		2.1	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	7	27.5	27.5	8.0	8.0	27.4	27.4	87.3	87.4	5.9	5.9	22.5		8		80				<0.2		1.9	
						4.6	0.1	7	27.5		8.0		27.4		87.4		5.9		22.6		6		81				<0.2		2.2	
IM2	Cloudy	Moderate	12:01	8.0	Surface	1.0	0.4	11	27.8	27.8	8.1	8.1	25.1	25.1	87.4	87.4	6.0	5.9	8.3	13.3	4	4	79	81	818179	806145	<0.2	<0.2	2.0	2.2
						1.0	0.4	11	27.8		8.1		25.1		87.3		6.0		8.4		4		80				<0.2		2.5	
					Middle	4.0	0.4	0	27.6	27.6	8.1	8.1	26.4	26.4	84.5	84.5	5.8		14.1		4		81				<0.2		2.0	
						4.0	0.4	0	27.6		8.1		26.4		84.5		5.8		14.3		4		81				<0.2		2.3	
					Bottom	7.0	0.4	349	27.5	27.5	8.1	8.1	27.5	27.5	86.9	87.0	5.9	5.9	17.1		5		82				<0.2		2.3	
						7.0	0.4	321	27.5		8.1		27.5		87.0		5.9		17.7		5		82				<0.2		2.1	
IM3	Cloudy	Moderate	12:07	8.2	Surface	1.0	0.3	2	27.8	27.8	8.1	8.1	24.2	24.2	87.1	87.1	6.0	5.9	9.5	16.2	2	4	79	81	818772	805619	<0.2	<0.2	2.0	2.1
						1.0	0.3	2	27.8		8.1		24.2		87.1		6.0		9.6		3		79				<0.2		2.1	
					Middle	4.1	0.5	15	27.5	27.5	8.1	8.1	26.8	26.7	83.9	84.0	5.7		18.6		4		80				<0.2		2.2	
						4.1	0.5	15	27.5		8.1		26.7		84.0		5.7		18.5		4		80				<0.2		2.0	
					Bottom	7.2	0.3	2	27.5	27.5	8.1	8.1	27.6	27.6	84.6	84.7	5.7	5.7	20.5		4		83				<0.2		2.3	
						7.2	0.3	2	27.5		8.1		27.6		84.7		5.7		20.7		4		83				<0.2		2.0	
IM4	Cloudy	Moderate	12:18	7.9	Surface	1.0	0.3	334	27.9	27.9	8.1	8.1	23.3	23.3	88.7	88.7	6.1	6.1	8.8	16.2	6	5	78	80	819695	804581	<0.2	<0.2	1.9	1.9
						1.0	0.3	337	27.9		8.1		23.3		88.6		6.1		8.9		4		78				<0.2		2.0	
					Middle	4.0	0.4	6	27.8	27.8	8.1	8.1	23.6	23.6	86.5	86.5	6.0		20.4		4		80				<0.2		2.0	
						4.0	0.4	6	27.8		8.1		23.6		86.4		6.0		20.8		6		80				<0.2		1.9	
					Bottom	6.9	0.3	7	27.5	27.5	8.1	8.1	27.5	27.5	85.8	86.1	5.8	5.9	18.9		6		82				<0.2		1.8	
						6.9	0.3	7	27.5		8.1		27.5		86.4		5.9		19.5		6		82				<0.2		1.8	
IM5	Cloudy	Moderate	12:26	7.1	Surface	1.0	0.4	31	27.9	27.9	8.1	8.1	23.2	23.2	86.9	86.9	6.0	5.8	11.6	14.9	4	5	78	80	820752	804882	<0.2	<0.2	2.0	2.0
						1.0	0.4	32	27.9		8.1		23.2		86.8		6.0		11.8		4		79				<0.2		1.8	
					Middle	3.6	0.3	38	27.5	27.5	8.1	8.1	27.3	27.3	82.6	82.6	5.6		14.4		4		80				<0.2		1.8	
						3.6	0.3	39	27.5		8.1		27.3		82.6		5.6		14.6		6		80				<0.2		2.0	
					Bottom	6.1	0.3	23	27.5	27.5	8.1	8.1	27.4	27.4	83.5	83.5	5.7	5.7	18.3		4		82				<0.2		2.2	
						6.1	0.3	24	27.5		8.1		27.4		83.5		5.7		18.4		6		83				<0.2		2.1	
IM6	Cloudy	Moderate	12:36	7.5	Surface	1.0	0.3	358	27.9	27.9	8.1	8.1	24.1	24.1	85.9	85.8	5.9	5.8	11.8	15.9	5	5	78	80	821061	805805	<0.2	<0.2	1.7	1.7
						1.0	0.3	329	27.9		8.1		24.2		85.6		5.9		11.2		4		79				<0.2		1.3	
					Middle	3.8	0.3	359	27.7	27.7	8.1	8.1	24.8	24.8	82.7	82.6	5.7		15.9		5		80				<0.2		1.9	
						3.8	0.3	330	27.7		8.1		24.8		82.4		5.7		15.9		6		81				<0.2		1.6	
					Bottom	6.5	0.3	6	27.6	27.6	8.0	8.0	25.7	25.7	82.1	82.2	5.6	5.6	20.3		6		82				<0.2		1.8	
						6.5	0.3	6	27.6		8.0		25.7		82.2		5.6		20.4		6		82				<0.2		1.9	
IM7	Rainy	Moderate	12:43	8.9	Surface	1.0	0.2	49	28.2	28.2	8.0	8.0	20.9	20.9	88.2	88.2	6.1	6.1	7.8	15.5	4	6	79	81	821367	806830	<0.2	<0.2	1.7	1.7
						1.0	0.2	51	28.2		8.0		20.9		88.2		6.1		7.9		6		79				<0.2		1.8	
					Middle	4.5	0.3	43	27.9	27.9	8.1	8.1	24.3	24.3	87.1	87.1	6.0		12.1		6		80				<0.2		1.8	
						4.5	0.3	46	27.9		8.1		24.3		87.0		6.0		12.3		5		80				<0.2		1.7	
					Bottom	7.9	0.3	53	27.6	27.6	8.1	8.1	26.4	26.4	85.4	85.5	5.8	5.8	26.4		8		82				<0.2		1.7	
						7.9	0.3	55	27.6		8.1		26.4		85.6		5.8		26.4		6		83				<0.2		1.6	
IM8	Cloudy	Moderate	12:10	8.3	Surface	1.0	0.2	317	27.8	27.8	8.1	8.1	24.4	24.4	86.7	86.7	6.0	5.9	10.4	13.6	6	6	79	82	821808	808112	<0.2	<0.2	1.8	1.8
						1.0	0.2	321	27.8		8.1		24.4		86.7		6.0		10.5		4		80				<0.2		1.9	
					Middle	4.2	0.1	10	27.6	27.6	8.1	8.1	25.1	25.1	84.3	84.3	5.8		12.3		5		82				<0.2		1.8	
						4.2	0.1	10	27.6		8.1		25.1		84.2		5.8		12.5		6		83				<0.2		1.7	
					Bottom	7.3	0.1	65	27.5	27.5	8.1	8.1	27.6	27.6	83.5	83.5	5.7	5.7	17.9		7		83				<0.2		1.9	
						7.3	0.1	65	27.5		8.1		27.6		83.5		5.7		17.7		6		83				<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 19 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	11:59	7.2	Surface	1.0	0.2	287	27.8	27.8	8.0	8.0	24.4	24.4	87.8	87.8	6.0	6.0	9.1	11.3	6	6	78	81	822075	808781	<0.2	<0.2	1.6	1.8
						1.0	0.2	301	27.8		8.0		24.4		87.8		6.0		9.1		4		78				<0.2		1.6	
					Middle	3.6	0.2	314	27.7	27.7	8.0	8.0	24.6	24.6	86.0	85.9	5.9		11.8		5		80				<0.2		1.9	
						3.6	0.2	342	27.7		8.0		24.6		85.8		5.9		11.4		6		81				<0.2		1.9	
					Bottom	6.2	0.2	319	27.5	27.5	8.1	8.1	27.7	27.7	84.3	84.4	5.7	5.7	13.2		6		83				<0.2		1.9	
						6.2	0.2	328	27.5		8.1		27.7		84.4		5.7		13.3		7		83				<0.2		1.8	
IM10	Cloudy	Moderate	11:50	7.3	Surface	1.0	0.3	332	27.7	27.7	8.2	8.2	25.6	25.6	89.2	89.1	6.1	5.9	10.3	16.9	4	5	80	81	822376	809815	<0.2	<0.2	1.7	1.7
						1.0	0.4	345	27.7		8.2		25.6		89.0		6.1		10.8		5		80				<0.2		1.7	
					Middle	3.7	0.3	325	27.5	27.5	8.2	8.2	27.9	27.9	84.6	84.6	5.7		19.6		6		81				<0.2		1.6	
						3.7	0.3	336	27.5		8.2		27.9		84.6		5.7		19.7		4		80				<0.2		1.7	
					Bottom	6.3	0.2	295	27.5	27.5	8.1	8.1	28.1	28.1	86.9	87.1	5.9	5.9	20.3		6		82				<0.2		1.6	
						6.3	0.2	319	27.5		8.1		28.1		87.2		5.9		20.8		5		83				<0.2		1.8	
IM11	Cloudy	Moderate	11:38	8.3	Surface	1.0	0.6	284	27.7	27.7	8.2	8.2	25.6	25.6	89.6	89.6	6.1	5.9	10.9	12.9	8	8	80	81	822060	811464	<0.2	<0.2	1.8	1.7
						1.0	0.6	294	27.7		8.2		25.6		89.5		6.1		11.0		7		80				<0.2		1.9	
					Middle	4.2	0.5	280	27.5	27.5	8.1	8.1	28.1	28.1	84.3	84.4	5.7		13.2		7		80				<0.2		1.8	
						4.2	0.5	299	27.5		8.1		28.1		84.4		5.7		13.2		8		81				<0.2		1.6	
					Bottom	7.3	0.3	314	27.5	27.5	8.1	8.1	28.1	28.1	85.6	85.7	5.8	5.8	14.6		7		82				<0.2		1.2	
						7.3	0.3	335	27.5		8.1		28.1		85.7		5.8		14.6		9		82				<0.2		1.6	
IM12	Rainy	Moderate	11:30	9.1	Surface	1.0	0.6	276	27.8	27.8	8.0	8.0	24.2	24.2	84.7	84.7	5.8	5.8	10.3	10.9	4	4	77	80	821432	812041	<0.2	<0.2	1.8	1.7
						1.0	0.6	299	27.8		8.0		24.2		84.7		5.8		10.4		4		78				<0.2		1.8	
					Middle	4.6	0.7	281	27.7	27.7	8.0	8.0	24.9	24.8	83.2	83.2	5.7		10.7		4		81				<0.2		1.6	
						4.6	0.8	307	27.7		8.0		24.8		83.1		5.7		10.6		4		81				<0.2		1.7	
					Bottom	8.1	0.6	289	27.5	27.5	8.0	8.0	27.1	27.1	83.3	83.4	5.7	5.7	11.6		5		82				<0.2		1.6	
						8.1	0.6	299	27.5		8.0		27.1		83.4		5.7		11.5		5		82				<0.2		1.9	
SR2	Rainy	Moderate	11:01	3.7	Surface	1.0	0.2	353	27.8	27.8	8.0	8.0	24.2	24.2	86.7	86.7	6.0	6.0	9.8	10.2	5	6	81	82	821470	814167	<0.2	<0.2	1.7	1.7
						1.0	0.2	325	27.8		8.0		24.2		86.6		5.9		9.8		5		80				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	360	27.7	27.7	8.0	8.0	24.6	24.6	86.7	87.2	6.0	6.0	10.4		6		83				<0.2		1.8	
						2.7	0.1	331	27.7		8.0		24.6		87.7		6.0		10.9		6		82				<0.2		1.5	
SR3	Cloudy	Moderate	12:16	9.0	Surface	1.0	0.3	11	27.9	27.9	8.1	8.1	23.5	23.5	87.5	87.5	6.0	6.0	10.1	13.8	3	4	-	-	822120	807585	-	-	-	-
						1.0	0.3	11	27.9		8.1		23.5		87.5		6.0		10.1		4		-				-		-	
					Middle	4.5	0.2	337	27.8	27.8	8.0	8.0	23.8	23.8	86.2	86.2	5.9		14.4		4		-				-		-	
						4.5	0.2	346	27.8		8.0		23.8		86.2		5.9		14.5		4		-				-		-	
					Bottom	8.0	0.1	34	27.5	27.5	8.1	8.1	27.7	27.7	85.8	85.9	5.8	5.8	16.8		6		-				-		-	
						8.0	0.1	36	27.5		8.1		27.7		85.9		5.8		16.8		5		-				-		-	
SR4A	Rainy	Moderate	11:11	8.2	Surface	1.0	0.5	275	27.8	27.8	8.0	8.0	24.0	24.0	86.5	86.4	5.9	5.8	8.9	10.5	5	6	-	-	817188	807839	-	-	-	-
						1.0	0.6	290	27.8		8.0		24.0		86.2		5.9		9.0		6		-				-		-	
					Middle	4.1	0.4	281	27.6	27.6	8.0	8.0	25.2	25.2	83.6	83.6	5.7		10.5		6		-				-		-	
						4.1	0.4	281	27.6		8.0		25.2		83.6		5.7		10.6		5		-				-		-	
					Bottom	7.2	0.2	287	27.5	27.5	8.0	8.0	27.3	27.3	83.7	84.0	5.7	5.7	12.0		7		-				-		-	
						7.2	0.2	299	27.5		8.0		27.3		84.2		5.7		12.1		8		-				-		-	
SR5A	Rainy	Moderate	10:56	4.6	Surface	1.0	0.3	317	27.8	27.8	8.0	8.0	23.8	23.8	86.5	86.5	6.0	6.0	11.4	12.0	10	12	-	-	816583	810672	-	-	-	-
						1.0	0.4	338	27.8		8.0		23.8		86.5		6.0		11.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	325	27.7	27.7	8.0	8.0	23.9	23.9	87.8	87.9	6.0	6.1	12.5		12		-				-		-	
						3.6	0.3	326	27.7		8.0		23.9		87.9		6.1		12.6		13		-				-		-	
SR6	Fine	Moderate	10:31	4.5	Surface	1.0	0.2	256	27.8	27.8	8.0	8.0	23.4	23.4	86.7	86.7	6.0	6.0	9.8	10.3	5	6	-	-	817914	814644	-	-	-	-
						1.0	0.2	272	27.8		8.0		23.4		86.7		6.0		9.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	254	27.7	27.7	8.0	8.0	23.6	23.6	88.7	88.8	6.1	6.1	10.8		6		-				-		-	
						3.5	0.1	265	27.7		8.0		23.6		88.8		6.1		10.8		7		-				-		-	
SR7	Cloudy	Moderate	10:00	18.9	Surface	1.0	0.2	244	27.8	27.8	7.9	7.9	23.3	23.3	84.5	84.5	5.8	5.7	5.2	7.8	7	7	-	-	823636	823763	-	-	-	-
						1.0	0.2	250	27.8		7.9		23.3		84.5		5.8		5.2		6		-				-		-	
					Middle	9.5	0.2	221	27.7	27.7	7.9	7.9	23.8	23.8	79.8	79.8	5.5		7.8		8		-				-		-	
						9.5	0.2	230	27.7		7.9		23.8		79.8		5.5		7.9		6		-				-		-	
					Bottom	17.9	0.2	201	27.6	27.6	7.9	7.9	27.2	27.2	80.2	80.3	5.5	5.5	10.5		8		-				-		-	
						17.9	0.2	219	27.6		7.9		27.2		80.3		5.5		10.4		6		-				-		-	
SR8	Rainy	Calm	11:23	4.0	Surface	1.0	-	-	27.8	27.8	8.0	8.0	24.2	24.2	85.7	85.7	5.9	5.9	9.8	10.1	7	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	27.8		8.0		24.2		85.6		5.9		9.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	27.6	27.6	8.0	8.0	25.2	25.2	84.5	84.6	5.8	5.8	10.4		8		-				-		-	
						3.0	-	-	27.6		8.0		25.2		84.6		5.8		10.4		9		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:44	8.8	Surface	1.0	0.5	205	28.6	28.6	8.2	8.2	24.2	24.2	99.0	99.0	6.7	6.3	6.4	11.4	3	3	72	75	815646	804269	<0.2	<0.2	1.7	1.6
						1.0	0.5	222	28.6		8.2		24.2		99.0		6.7		6.4		3		73				<0.2		1.5	
					Middle	4.4	0.4	219	27.8	27.8	8.1	8.1	27.9	27.9	87.4	87.4	5.9		11.2		3		75				<0.2		1.6	
						4.4	0.4	234	27.8		8.1		27.9		87.4		5.9		11.2		3		75				<0.2		1.6	
					Bottom	7.8	0.2	227	27.7	27.7	8.1	8.1	28.2	28.2	87.6	87.6	5.9	5.9	16.6		3		76				<0.2		1.7	
						7.8	0.2	244	27.7		8.1		28.2		87.6		5.9		16.6		3		77				<0.2		1.6	
C2	Fine	Moderate	21:16	12.2	Surface	1.0	0.3	186	28.6	28.6	8.0	8.0	22.3	22.3	85.6	85.6	5.9	5.9	6.9	7.1	<2	2	70	73	825710	806935	<0.2	<0.2	2.1	2.0
						1.0	0.3	188	28.6		8.0		22.3		85.6		5.9		6.9		<2		71				<0.2		2.1	
					Middle	6.1	0.1	192	28.2	28.2	8.0	8.0	23.5	23.5	84.3	84.3	5.8		7.4		2		72				<0.2		2.0	
						6.1	0.1	194	28.2		8.0		23.5		84.3		5.8		7.4		<2		73				<0.2		1.8	
					Bottom	11.2	0.2	140	28.3	28.3	8.0	8.0	25.6	25.6	87.0	87.0	5.9	5.9	7.0		3		75				<0.2		2.0	
						11.2	0.2	141	28.3		8.0		25.6		87.0		5.9		7.0		2		75				<0.2		2.1	
C3	Fine	Moderate	19:08	12.3	Surface	1.0	0.1	119	28.3	28.3	8.1	8.1	24.8	24.8	90.6	90.6	6.2	6.3	8.8	8.5	<2	2	73	75	822126	817824	<0.2	<0.2	2.6	2.6
						1.0	0.1	119	28.3		8.1		24.8		90.6		6.2		8.8		2		73				<0.2		2.9	
					Middle	6.2	0.2	340	28.2	28.2	8.1	8.1	25.2	25.2	93.7	93.7	6.4		9.3		2		75				<0.2		2.8	
						6.2	0.2	344	28.2		8.1		25.2		93.7		6.4		9.3		2		75				<0.2		2.5	
					Bottom	11.3	0.2	132	28.5	28.5	8.1	8.1	24.8	24.8	93.8	93.8	6.4	6.4	7.4		2		76				<0.2		2.4	
						11.3	0.2	139	28.5		8.1		24.8		93.8		6.4		7.4		3		77				<0.2		2.5	
IM1	Fine	Moderate	20:06	5.4	Surface	1.0	0.1	226	28.0	28.0	8.1	8.1	26.0	26.0	88.0	88.0	6.0	6.0	12.0	15.3	<2	2	72	74	817941	807134	<0.2	<0.2	1.5	1.6
						1.0	0.1	242	28.0		8.1		26.0		88.0		6.0		12.3		<2		73				<0.2		1.9	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.0	305	27.9	27.9	8.1	8.1	27.3	27.3	89.4	89.4	6.0	6.0	18.4		<2		74				<0.2		1.3	
						4.4	0.0	327	27.9		8.1		27.3		89.4		6.0		18.4		2		75				<0.2		1.7	
IM2	Fine	Moderate	20:15	7.1	Surface	1.0	0.3	196	28.3	28.3	8.1	8.1	24.3	24.3	92.1	92.1	6.3	6.2	6.3	9.1	<2	3	72	74	818160	806147	<0.2	<0.2	1.4	1.4
						1.0	0.3	215	28.3		8.1		24.3		92.1		6.3		6.3		2		73				<0.2		1.4	
					Middle	3.6	0.2	180	27.9	27.9	8.1	8.1	26.8	26.8	88.2	88.2	6.0		9.3		2		73				<0.2		1.4	
						3.6	0.2	189	27.9		8.1		26.8		88.2		6.0		9.3		3		73				<0.2		1.4	
					Bottom	6.1	0.1	175	27.8	27.8	8.1	8.1	27.1	27.1	90.0	90.0	6.1	6.1	11.7		3		75				<0.2		1.4	
						6.1	0.2	186	27.8		8.1		27.1		90.0		6.1		11.7		3		75				<0.2		1.3	
IM3	Fine	Moderate	20:22	7.3	Surface	1.0	0.4	216	28.4	28.4	8.1	8.1	23.4	23.4	91.9	91.9	6.3	6.2	9.7	11.3	<2	4	71	73	818771	805619	<0.2	<0.2	1.4	1.5
						1.0	0.5	235	28.4		8.1		23.4		91.9		6.3		9.7		3		71				<0.2		1.5	
					Middle	3.7	0.4	207	28.1	28.1	8.1	8.1	25.0	25.0	89.6	89.6	6.1		13.5		4		73				<0.2		1.5	
						3.7	0.4	217	28.1		8.1		25.0		89.6		6.1		13.5		4		72				<0.2		1.4	
					Bottom	6.3	0.2	192	28.1	28.1	8.1	8.1	27.0	27.0	93.1	93.1	6.3	6.3	10.6		5		74				<0.2		1.5	
						6.3	0.2	208	28.1		8.1		27.0		93.1		6.3		10.6		4		75				<0.2		1.4	
IM4	Fine	Moderate	20:34	7.4	Surface	1.0	0.6	204	28.7	28.7	8.1	8.1	19.9	19.9	89.8	89.8	6.2	6.1	7.9	9.6	<2	2	71	73	819751	804584	<0.2	<0.2	1.5	2.1
						1.0	0.7	222	28.7		8.1		19.9		89.8		6.2		7.9		<2		71				<0.2		2.3	
					Middle	3.7	0.6	207	28.0	28.0	8.1	8.1	24.9	24.9	87.4	87.4	6.0		11.1		2		72				<0.2		2.2	
						3.7	0.6	223	28.0		8.1		24.9		87.4		6.0		11.1		<2		73				<0.2		2.3	
					Bottom	6.4	0.2	201	28.1	28.1	8.1	8.1	26.7	26.7	92.9	92.9	6.3	6.3	9.9		3		74				<0.2		2.3	
						6.4	0.3	206	28.1		8.1		26.7		92.9		6.3		9.9		2		75				<0.2		2.1	
IM5	Fine	Moderate	20:43	7.0	Surface	1.0	0.6	203	28.8	28.8	8.1	8.1	17.6	17.6	93.2	93.2	6.5	6.4	8.2	10.3	4	4	71	73	820751	804869	<0.2	<0.2	2.3	2.3
						1.0	0.7	216	28.8		8.1		17.6		93.2		6.5		8.2		4		70				<0.2		2.4	
					Middle	3.5	0.4	222	28.2	28.2	8.1	8.1	22.5	22.5	90.0	90.0	6.2		13.3		4		73				<0.2		2.2	
						3.5	0.5	226	28.2		8.1		22.5		90.0		6.2		13.3		4		72				<0.2		2.1	
					Bottom	6.0	0.3	233	28.5	28.5	8.0	8.0	25.1	25.1	94.7	94.7	6.4	6.4	9.3		4		75				<0.2		2.3	
						6.0	0.3	255	28.5		8.0		25.1		94.7		6.4		9.3		4		75				<0.2		2.2	
IM6	Fine	Moderate	20:52	6.8	Surface	1.0	0.4	223	29.1	29.1	8.1	8.1	17.7	17.7	92.5	92.5	6.4	6.3	6.5	9.5	3	4	70	73	821069	805800	<0.2	<0.2	2.6	2.3
						1.0	0.5	236	29.1		8.1		17.7		92.5		6.4		6.5		4		71				<0.2		2.3	
					Middle	3.4	0.5	256	28.4	28.4	8.0	8.0	23.2	23.2	89.2	89.2	6.1		9.0		3		73				<0.2		2.0	
						3.4	0.5	272	28.4		8.0		23.2		89.2		6.1		9.0		5		72				<0.2		2.3	
					Bottom	5.8	0.3	252	28.4	28.4	8.0	8.0	25.1	25.1	92.9	93.1	6.3	6.3	13.0		5		75				<0.2		2.4	
						5.8	0.3	269	28.4		8.0		25.1		93.2		6.3		13.0		4		75				<0.2		2.1	
IM7	Fine	Moderate	21:00	7.2	Surface	1.0	0.5	245	29.2	29.2	8.0	8.0	20.8	20.8	92.6	92.6	6.3	6.1	6.0	7.2	4	5	71	73	821332	806864	<0.2	<0.2	2.2	2.2
						1.0	0.5	266	29.2		8.0		20.8		92.6		6.3		6.0		6		71				<0.2		2.3	
					Middle	3.6	0.5	254	28.2	28.2	8.0	8.0	23.5	23.5	85.6	85.6	5.9		7.9		4		72				<0.2		2.3	
						3.6	0.5	267	28.2		8.0		23.5		85.6		5.9		7.9		6		73				<0.2		2.1	
					Bottom	6.2	0.3	261	28.1	28.1	8.0	8.0	26.2	26.2	89.5	89.5	6.1	6.1	7.8		5		75				<0.2		2.3	
						6.2	0.3	263	28.1		8.0		26.2		89.5		6.1		7.8		7		74				<0.2		1.9	
IM8	Fine	Moderate	20:44	7.6	Surface	1.0	0.1	159	28.7	28.7	8.1	8.1	18.2	18.2	93.5	93.5	6.5	6.4	7.8	11.4	4	5	72	73	821835	808143	<0.2	<0.2	2.1	2.1
						1.0	0.1	169	28.7		8.1		18.2		93.5		6.5		7.8		5		71				<0.2		1.9	
					Middle	3.8	0.2	189	28.5	28.5	8.0	8.0	22.4	22.4	89.9	89.9	6.2		12.6		6		73				<0.2		2.2	
						3.8	0.2	194	28.5		8.0		22.4		89.9		6.2		12.6		5		73				<0.2		2.1	
					Bottom	6.6	0.2	172	28.3	28.3	8.0	8.0	25.5	25.5	92.9	92.9	6.3	6.3	13.9		6		75				<0.2		2.1	
						6.6	0.3	177	28.3		8.0		25.5		92.9		6.3		13.9		6		74				<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 21 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	20:34	7.0	Surface	1.0	0.3	139	29.1	29.1	8.0	8.0	19.0	19.0	92.3	92.3	6.4	6.3	6.0	7.1	3	4	71	73	822110	808832	<0.2	<0.2	2.6	2.3
						1.0	0.3	150	29.1		8.0		19.0		92.3		6.4		6.0		3		71				<0.2		2.3	
					Middle	3.5	0.1	81	28.4	28.4	8.1	8.1	22.6	22.6	88.8	88.8	6.1		7.1		4		73				<0.2		2.1	
						3.5	0.1	84	28.4		8.1		22.6		88.8		6.1		7.1		4		72				<0.2		2.2	
					Bottom	6.0	0.2	168	28.1	28.1	8.1	8.1	26.7	26.7	89.2	89.2	6.0	6.0	8.3		4		75				<0.2		2.2	
						6.0	0.2	180	28.1		8.1		26.7		89.2		6.0		8.3		4		75				<0.2		2.3	
IM10	Fine	Moderate	20:23	7.4	Surface	1.0	0.3	132	28.6	28.6	8.1	8.1	23.0	23.0	93.0	93.0	6.4	6.3	8.0	9.0	3	4	71	73	822405	809783	<0.2	<0.2	2.4	2.4
						1.0	0.3	144	28.6		8.1		23.0		93.0		6.4		8.0		4		70				<0.2		2.4	
					Middle	3.7	0.3	110	28.2	28.2	8.1	8.1	24.1	24.1	91.2	91.2	6.2		9.2		5		73				<0.2		2.4	
						3.7	0.3	114	28.2		8.1		24.1		91.2		6.2		9.2		4		72				<0.2		2.4	
					Bottom	6.4	0.2	126	28.2	28.2	8.1	8.1	26.8	26.8	91.8	91.8	6.2	6.2	9.7		5		75				<0.2		2.3	
						6.4	0.2	135	28.2		8.1		26.8		91.8		6.2		9.7		5		74				<0.2		2.3	
IM11	Fine	Moderate	20:16	7.5	Surface	1.0	0.4	112	28.1	28.1	8.1	8.1	25.2	25.2	91.9	91.9	6.2	6.1	6.5	7.0	3	4	70	73	822083	811483	<0.2	<0.2	2.4	2.4
						1.0	0.4	113	28.1		8.1		25.2		91.9		6.2		6.5		4		71				<0.2		2.2	
					Middle	3.8	0.2	107	27.9	27.9	8.1	8.1	26.7	26.7	89.2	89.2	6.0		7.8		4		73				<0.2		2.3	
						3.8	0.2	111	27.9		8.1		26.7		89.2		6.0		7.8		4		73				<0.2		2.3	
					Bottom	6.5	0.2	163	27.9	27.9	8.1	8.1	26.8	26.8	91.9	91.9	6.2	6.2	6.6		4		75				<0.2		2.5	
						6.5	0.2	169	27.9		8.1		26.8		91.9		6.2		6.6		4		74				<0.2		2.4	
IM12	Fine	Moderate	20:07	7.6	Surface	1.0	0.3	90	28.2	28.2	8.1	8.1	25.1	25.1	87.9	87.9	6.0	5.9	10.2	14.0	2	3	70	73	821434	812018	<0.2	<0.2	2.3	2.5
						1.0	0.3	95	28.2		8.1		25.1		87.9		6.0		10.2		4		71				<0.2		2.6	
					Middle	3.8	0.3	118	27.8	27.8	8.1	8.1	27.3	27.3	86.2	86.2	5.8		16.9		3		73				<0.2		2.5	
						3.8	0.3	118	27.8		8.1		27.3		86.2		5.8		16.9		4		73				<0.2		2.6	
					Bottom	6.6	0.1	135	27.9	27.9	8.1	8.1	27.3	27.3	87.9	87.9	5.9	5.9	14.8		3		76				<0.2		2.3	
						6.6	0.1	146	27.9		8.1		27.3		87.9		5.9		14.8		4		75				<0.2		2.4	
SR2	Fine	Moderate	19:30	4.1	Surface	1.0	0.3	76	28.3	28.3	8.1	8.1	25.7	25.7	90.1	90.1	6.1	6.1	7.9	9.0	3	3	72	74	821459	814175	<0.2	<0.2	2.4	2.4
						1.0	0.3	81	28.3		8.1		25.7		90.1		6.1		7.9		<2		73				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	82	27.9	27.9	8.1	8.1	27.3	27.3	89.0	89.0	6.0	6.0	10.1		3		75				<0.2		2.3	
						3.1	0.3	89	27.9		8.1		27.3		89.0		6.0		10.1		<2		75				<0.2		2.4	
SR3	Fine	Moderate	20:53	8.3	Surface	1.0	0.3	174	29.0	29.0	8.1	8.1	18.5	18.5	90.9	90.9	6.3	6.2	7.2	8.5	2	2	-	-	822161	807579	-	-	-	-
						1.0	0.3	188	29.0		8.1		18.5		90.9		6.3		7.2		<2		-				-		-	
					Middle	4.2	0.3	170	28.2	28.2	8.0	8.0	23.5	23.5	88.3	88.3	6.1		11.1		2		-				-		-	
						4.2	0.3	177	28.2		8.0		23.5		88.3		6.1		11.1		2		-				-		-	
					Bottom	7.3	0.2	225	28.5	28.5	8.0	8.0	25.0	25.0	91.6	91.6	6.2	6.2	7.2		2		-				-		-	
						7.3	0.2	234	28.5		8.0		25.0		91.6		6.2		7.2		3		-				-		-	
SR4A	Fine	Moderate	19:25	9.8	Surface	1.0	0.1	249	28.2	28.2	8.1	8.1	25.8	25.8	88.8	88.8	6.0	6.0	9.4	11.4	3	4	-	-	817201	807837	-	-	-	-
						1.0	0.1	255	28.2		8.1		25.8		88.8		6.0		9.4		4		-				-		-	
					Middle	4.9	0.1	279	27.8	27.8	8.1	8.1	27.5	27.5	87.4	87.4	5.9		12.5		4		-				-		-	
						4.9	0.1	303	27.8		8.1		27.5		87.4		5.9		12.5		3		-				-		-	
					Bottom	8.8	0.1	248	27.8	27.8	8.1	8.1	27.9	27.9	90.2	90.2	6.1	6.1	12.4		5		-				-		-	
						8.8	0.1	262	27.8		8.1		27.9		90.2		6.1		12.4		6		-				-		-	
SR5A	Fine	Moderate	19:07	4.4	Surface	1.0	0.1	304	28.3	28.3	8.0	8.0	24.9	24.9	89.7	89.7	6.1	6.1	11.7	11.5	10	11	-	-	816600	810679	-	-	-	-
						1.0	0.1	332	28.3		8.0		24.9		89.7		6.1		11.8		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	298	28.2	28.2	8.0	8.0	25.2	25.2	90.7	90.7	6.2	6.2	11.3		11		-				-		-	
						3.4	0.1	302	28.2		8.0		25.2		90.7		6.2		11.3		10		-				-		-	
SR6	Fine	Moderate	18:42	4.1	Surface	1.0	0.1	46	28.5	28.5	8.1	8.1	24.1	24.1	93.4	93.4	6.3	6.3	7.3	8.3	5	6	-	-	817878	814633	-	-	-	-
						1.0	0.1	50	28.5		8.1		24.1		93.4		6.3		7.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	46	28.0	28.0	8.0	8.0	24.6	24.6	92.6	92.6	6.3	6.3	9.2		6		-				-		-	
						3.1	0.0	49	28.0		8.0		24.6		92.6		6.3		9.2		5		-				-		-	
SR7	Fine	Moderate	18:39	16.2	Surface	1.0	0.3	114	28.4	28.4	8.1	8.1	23.6	23.6	94.1	94.1	6.4	6.5	7.4	8.0	4	5	-	-	823637	823731	-	-	-	-
						1.0	0.3	124	28.4		8.1		23.6		94.1		6.4		7.4		4		-				-		-	
					Middle	8.1	0.2	133	28.4	28.4	8.0	8.0	24.2	24.2	96.7	96.7	6.6		7.6		6		-				-		-	
						8.1	0.3	141	28.4		8.0		24.2		96.7		6.6		7.6		4		-				-		-	
					Bottom	15.2	0.1	49	28.6	28.6	8.0	8.0	23.5	23.5	97.1	97.4	6.6	6.7	8.7		6		-				-		-	
						15.2	0.1	52	28.6		8.0		23.5		97.7		6.7		9.0		6		-				-		-	
SR8	Fine	Moderate	19:45	4.8	Surface	1.0	-	-	28.7	28.6	8.2	8.2	24.0	24.0	106.8	106.7	7.2	7.2	4.9	5.2	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.6		8.2		24.0		106.5		7.2		4.9		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.4	28.4	8.2	8.2	26.4	26.4	103.2	103.2	6.9	6.9	5.5		5		-				-		-	
						3.8	-	-	28.4		8.2		26.4		103.2		6.9		5.5		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 21 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:07	8.4	Surface	1.0	0.1	91	29.2	29.2	8.2	8.2	19.0	19.0	115.8	115.8	8.0	7.3	6.7	10.7	4	5	73	75	815634	804273	<0.2	<0.2	1.3	1.4
						1.0	0.2	100	29.2		8.2		19.0		115.8		8.0		6.7		5		73				<0.2		1.3	
					Middle	4.2	0.3	35	28.5	28.5	8.2	8.2	24.4	24.4	97.5	97.5	6.6		10.0		4		76				<0.2		1.5	
						4.2	0.3	35	28.5		8.2		24.4		97.5		6.6		10.0		5		75				<0.2		1.4	
					Bottom	7.4	0.2	56	27.8	27.8	8.1	8.1	27.9	27.9	88.7	88.7	6.0	6.0	15.5		6		76				<0.2		1.3	
						7.4	0.2	60	27.8		8.1		27.9		88.7		6.0		15.5		6		77				<0.2		1.6	
C2	Fine	Moderate	12:52	12.2	Surface	1.0	0.1	99	28.8	28.8	8.0	8.0	17.1	17.1	89.7	89.7	6.3	6.2	7.4	8.1	<2	4	71	73	825654	806970	<0.2	<0.2	1.2	1.2
						1.0	0.1	100	28.8		8.0		17.1		89.7		6.3		7.4		<2		71				<0.2		1.2	
					Middle	6.1	0.1	316	28.4	28.4	8.0	8.0	21.6	21.6	86.3	86.3	6.0		8.9		4		73				<0.2		1.2	
						6.1	0.1	330	28.4		8.0		21.6		86.3		6.0		8.9		5		73				<0.2		1.2	
					Bottom	11.2	0.1	357	28.3	28.3	8.0	8.0	25.8	25.8	88.8	88.8	6.0	6.0	7.9		5		75				<0.2		1.2	
						11.2	0.1	328	28.3		8.0		25.8		88.8		6.0		7.9		5		74				<0.2		1.1	
C3	Fine	Moderate	14:29	11.8	Surface	1.0	0.3	243	28.9	28.9	8.1	8.1	25.1	25.1	97.8	97.8	6.6	6.4	10.7	12.9	4	4	70	73	822131	817792	<0.2	<0.2	1.3	1.2
						1.0	0.3	251	28.9		8.1		25.1		97.8		6.6		10.7		<2		71				<0.2		1.4	
					Middle	5.9	0.2	259	28.1	28.1	8.1	8.1	25.8	25.8	89.6	89.6	6.1		13.8		4		73				<0.2		1.1	
						5.9	0.2	265	28.1		8.1		25.8		89.6		6.1		13.8		4		74				<0.2		1.1	
					Bottom	10.8	0.2	277	27.9	27.9	8.1	8.1	27.2	27.2	93.5	93.5	6.3	6.3	14.3		4		75				<0.2		1.2	
						10.8	0.2	300	27.9		8.1		27.2		93.5		6.3		14.3		4		75				<0.2		1.1	
IM1	Fine	Moderate	13:49	4.6	Surface	1.0	0.1	322	28.7	28.7	8.2	8.2	24.9	24.9	99.4	99.4	6.7	6.7	8.2	10.3	7	9	72	74	817958	807125	<0.2	<0.2	1.9	1.9
						1.0	0.2	327	28.7		8.2		24.9		99.4		6.7		8.2		9		73				<0.2		1.9	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	342	28.1	28.1	8.1	8.1	26.8	26.8	93.8	93.8	6.3	6.3	12.3		9		75				<0.2		2.0	
						3.6	0.2	315	28.1		8.1		26.8		93.8		6.3		12.3		10		75				<0.2		1.9	
IM2	Fine	Moderate	13:42	7.3	Surface	1.0	0.2	354	27.8	27.8	8.1	8.1	27.8	27.8	93.9	93.9	6.3	6.3	18.5	15.8	5	5	73	74	818176	806175	<0.2	<0.2	1.8	1.8
						1.0	0.2	326	27.8		8.1		27.8		93.9		6.3		18.5		4		72				<0.2		2.0	
					Middle	3.7	0.1	310	28.4	28.4	8.1	8.1	26.3	26.3	94.3	94.3	6.3		13.0		5		75				<0.2		1.9	
						3.7	0.1	323	28.4		8.1		26.3		94.3		6.3		13.0		5		74				<0.2		1.8	
					Bottom	6.3	0.2	233	27.9	27.9	8.1	8.1	27.7	27.7	96.8	96.8	6.5	6.5	16.0		6		75				<0.2		1.4	
						6.3	0.2	254	27.9		8.1		27.7		96.8		6.5		16.0		6		77				<0.2		1.9	
IM3	Fine	Moderate	13:30	7.3	Surface	1.0	0.2	223	29.5	29.5	8.1	8.1	21.3	21.3	103.1	103.1	7.0	6.6	8.2	10.4	2	4	72	74	818771	805595	<0.2	<0.2	1.3	1.4
						1.0	0.2	228	29.5		8.1		21.3		103.1		7.0		8.2		2		73				<0.2		1.3	
					Middle	3.7	0.1	323	28.1	28.1	8.1	8.1	24.7	24.7	90.0	90.0	6.1		9.6		4		75				<0.2		1.4	
						3.7	0.1	338	28.1		8.1		24.7		90.0		6.1		9.6		5		75				<0.2		1.3	
					Bottom	6.3	0.3	2	27.8	27.8	8.1	8.1	27.5	27.5	88.9	88.9	6.0	6.0	13.3		4		75				<0.2		1.2	
						6.3	0.3	2	27.8		8.1		27.5		88.9		6.0		13.3		5		75				<0.2		1.9	
IM4	Fine	Moderate	13:22	7.6	Surface	1.0	0.2	271	29.7	29.7	8.1	8.1	17.3	17.3	99.1	99.1	6.9	6.6	7.7	9.2	3	4	70	73	819736	804586	<0.2	<0.2	1.5	1.8
						1.0	0.3	287	29.7		8.1		17.3		99.1		6.9		7.7		4		71				<0.2		2.0	
					Middle	3.8	0.3	311	28.2	28.2	8.1	8.1	24.5	24.5	92.5	92.5	6.3		10.2		4		72				<0.2		1.9	
						3.8	0.3	321	28.2		8.1		24.5		92.5		6.3		10.2		4		73				<0.2		1.9	
					Bottom	6.6	0.2	13	28.4	28.4	8.1	8.1	27.1	27.1	98.2	98.2	6.6	6.6	9.6		5		75				<0.2		1.7	
						6.6	0.2	13	28.4		8.1		27.1		98.2		6.6		9.6		6		75				<0.2		1.8	
IM5	Fine	Moderate	13:12	7.4	Surface	1.0	0.2	281	29.3	29.3	8.1	8.1	17.0	17.0	97.9	97.9	6.8	6.5	7.2	8.3	2	3	70	73	820729	804876	<0.2	<0.2	1.3	1.3
						1.0	0.3	295	29.3		8.1		17.0		97.9		6.8		7.2		3		71				<0.2		1.2	
					Middle	3.7	0.2	338	28.5	28.5	8.1	8.1	22.8	22.8	91.3	91.3	6.2		9.0		3		72				<0.2		1.2	
						3.7	0.3	343	28.5		8.1		22.8		91.3		6.2		9.0		2		73				<0.2		1.2	
					Bottom	6.4	0.1	20	28.2	28.2	8.0	8.0	26.2	26.2	92.2	92.2	6.2	6.2	8.8		3		74				<0.2		1.3	
						6.4	0.1	21	28.2		8.0		26.2		92.2		6.2		8.8		3		75				<0.2		1.3	
IM6	Fine	Moderate	13:05	6.5	Surface	1.0	0.3	279	29.7	29.7	8.1	8.1	16.2	16.2	99.6	99.6	6.9	6.7	6.6	7.1	2	3	71	73	821040	805836	<0.2	<0.2	1.3	1.2
						1.0	0.4	294	29.7		8.1		16.2		99.6		6.9		6.6		<2		71				<0.2		1.1	
					Middle	3.3	0.4	284	28.6	28.6	8.0	8.0	20.7	20.7	93.2	93.2	6.4		8.0		3		73				<0.2		1.2	
						3.3	0.4	295	28.6		8.0		20.7		93.2		6.4		8.0		3		73				<0.2		1.2	
					Bottom	5.5	0.2	324	29.0	29.0	8.0	8.0	22.8	22.8	97.7	97.7	6.6	6.6	6.7		2		75				<0.2		1.2	
						5.5	0.2	350	29.0		8.0		22.8		97.7		6.6		6.7		3		74				<0.2		1.4	
IM7	Fine	Moderate	12:56	7.7	Surface	1.0	0.3	266	28.7	28.7	8.0	8.0	20.1	20.1	89.2	89.2	6.2	6.1	6.7	8.8	3	4	71	73	821376	806848	<0.2	<0.2	1.3	1.3
						1.0	0.3	266	28.7		8.0		20.1		89.2		6.2		6.7		2		71				<0.2		1.5	
					Middle	3.9	0.3	280	28.4	28.4	8.0	8.0	21.5	21.5	85.7	85.7	5.9		7.4		3		72				<0.2		1.3	
						3.9	0.4	303	28.4		8.0		21.5		85.7		5.9		7.4		4		73				<0.2		1.3	
					Bottom	6.7	0.0	203	28.1	28.1	8.0	8.0	24.4	24.4	84.9	84.9	5.8	5.8	12.4		6		75				<0.2		1.2	
						6.7	0.0	210	28.1		8.0		24.4		84.9		5.8		12.4		4		74				<0.2		1.3	
IM8	Fine	Moderate	13:13	7.4	Surface	1.0	0.1	283	29.4	29.4	8.1	8.1	16.6	16.6	98.1	98.1	6.8	6.6	7.5	8.1	2	3	71	73	821827	808157	<0.2	<0.2	1.0	1.0
						1.0	0.1	296	29.4		8.1		16.6		98.1		6.8		7.5		2		71				<0.2		1.0	
					Middle	3.7	0.1	78	28.5	28.5	8.1	8.1	22.8	22.8	92.6	92.6	6.3		9.4		2		72				<0.2		1.0	
						3.7	0.1	80	28.5		8.1		22.8		92.6		6.3		9.4		3		73				<0.2		1.0	
					Bottom	6.4	0.1	41	28.7	28.7	8.0	8.0	24.8	24.8	97.7	97.7	6.6	6.6	7.5		2		75				<0.2		0.9	
						6.4	0.1	41	28.7		8.0		24.8		97.7		6.6		7.5		4		75				<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 21 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:18	7.7	Surface	1.0	0.1	265	29.0	29.0	8.1	8.1	17.8	17.8	96.0	96.0	6.7	6.5	10.0	14.1	3	3	71	74	822115	808803	<0.2	<0.2	1.0	1.0
						1.0	0.1	290	29.0		8.1		17.8		96.0		6.7		10.0		<2		72				<0.2		1.0	
					Middle	3.9	0.0	59	28.3	28.3	8.1	8.1	24.4	24.4	91.0	91.0	6.2		14.3		<2		75				<0.2		1.0	
						3.9	0.0	62	28.3		8.1		24.4		91.0		6.2		14.3		3		74				<0.2		0.9	
					Bottom	6.7	0.2	102	28.0	28.0	8.1	8.1	27.3	27.3	94.6	94.6	6.4	6.4	17.9		4		76				<0.2		1.0	
						6.7	0.2	104	28.0		8.1		27.3		94.6		6.4		17.9		3		75				<0.2		0.9	
IM10	Fine	Moderate	13:25	7.0	Surface	1.0	0.1	165	29.3	29.3	8.1	8.1	21.4	21.4	95.2	95.2	6.5	6.4	8.3	8.6	<2	3	73	74	822395	809766	<0.2	<0.2	1.8	1.2
						1.0	0.1	180	29.3		8.1		21.4		95.2		6.5		8.3		3		73				<0.2		1.2	
					Middle	3.5	0.1	341	28.1	28.1	8.1	8.1	26.0	26.0	92.4	92.4	6.3		9.5		4		75				<0.2		0.9	
						3.5	0.1	342	28.1		8.1		26.0		92.4		6.3		9.5		3		75				<0.2		1.0	
					Bottom	6.0	0.3	338	28.5	28.5	8.1	8.1	26.8	26.8	102.0	102.0	6.8	6.8	7.9		3		75				<0.2		1.0	
						6.0	0.4	311	28.5		8.1		26.8		102.0		6.8		7.9		4		75				<0.2		1.0	
IM11	Fine	Moderate	13:35	7.9	Surface	1.0	0.1	322	28.6	28.6	8.2	8.2	24.5	24.5	101.4	101.4	6.9	6.7	7.6	9.8	2	4	72	74	822061	811448	<0.2	<0.2	1.8	1.9
						1.0	0.2	352	28.6		8.2		24.5		101.4		6.9		7.6		3		72				<0.2		1.9	
					Middle	4.0	0.4	274	28.0	28.0	8.1	8.1	26.8	26.8	95.1	95.1	6.4		11.6		4		74				<0.2		1.9	
						4.0	0.4	296	28.0		8.1		26.8		95.1		6.4		11.6		3		75				<0.2		2.0	
					Bottom	6.9	0.3	323	28.1	28.1	8.1	8.1	27.7	27.7	100.3	100.3	6.7	6.7	10.2		5		76				<0.2		1.9	
						6.9	0.3	328	28.1		8.1		27.7		100.3		6.7		10.2		4		77				<0.2		1.9	
IM12	Fine	Moderate	13:46	7.7	Surface	1.0	0.2	264	28.5	28.5	8.2	8.2	25.3	25.3	98.2	98.2	6.6	6.5	8.3	10.4	3	3	72	74	821483	812025	<0.2	<0.2	2.0	2.0
						1.0	0.2	270	28.5		8.2		25.3		98.2		6.6		8.3		3		73				<0.2		2.0	
					Middle	3.9	0.6	270	28.0	28.0	8.1	8.1	26.8	26.8	95.4	95.4	6.4		10.7		3		74				<0.2		2.0	
						3.9	0.6	272	28.0		8.1		26.8		95.4		6.4		10.7		3		75				<0.2		2.0	
					Bottom	6.7	0.2	311	28.0	28.0	8.1	8.1	27.7	27.7	99.6	99.6	6.7	6.7	12.1		4		75				<0.2		2.0	
						6.7	0.2	328	28.0		8.1		27.7		99.6		6.7		12.1		4		74				<0.2		1.9	
SR2	Fine	Moderate	14:09	4.4	Surface	1.0	0.3	186	29.2	29.2	8.2	8.2	18.9	18.9	127.4	127.4	8.8	8.8	5.2	5.2	4	5	73	74	821461	814151	<0.2	<0.2	1.9	1.9
						1.0	0.3	195	29.2		8.2		18.9		127.4		8.8		5.2		5		73				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	161	29.0	29.0	8.2	8.2	22.9	22.9	126.1	126.1	8.6	8.6	5.2		5		76				<0.2		1.8	
						3.4	0.1	167	29.0		8.2		22.9		126.1		8.6		5.2		5		75				<0.2		1.8	
SR3	Fine	Moderate	13:04	8.2	Surface	1.0	0.2	251	29.8	29.8	8.1	8.1	15.9	15.9	99.2	99.2	6.9	6.6	6.6	7.5	4	3	-	-	822152	807561	-	-	-	-
						1.0	0.2	264	29.8		8.1		15.9		99.2		6.9		6.6		2		-				-		-	
					Middle	4.1	0.1	80	28.6	28.6	8.0	8.0	20.6	20.6	91.1	91.1	6.3		7.7		4		-				-		-	
						4.1	0.1	83	28.6		8.0		20.6		91.1		6.3		7.7		3		-				-		-	
					Bottom	7.2	0.1	312	28.3	28.3	8.0	8.0	24.5	24.5	92.9	92.9	6.3	6.3	8.1		4		-				-		-	
						7.2	0.1	325	28.3		8.0		24.5		92.9		6.3		8.1		3		-				-		-	
SR4A	Fine	Calm	14:28	8.9	Surface	1.0	0.2	240	29.0	29.0	8.2	8.2	25.0	25.0	101.6	101.5	6.8	6.5	9.6	12.4	5	6	-	-	817193	807808	-	-	-	-
						1.0	0.2	241	29.0		8.2		25.0		101.3		6.8		9.7		5		-				-		-	
					Middle	4.5	0.2	240	28.4	28.3	8.1	8.1	25.5	25.5	90.7	90.2	6.1		12.0		6		-				-		-	
						4.5	0.2	247	28.3		8.1		25.6		89.6		6.1		12.6		6		-				-		-	
					Bottom	7.9	0.1	67	27.9	27.9	8.1	8.1	27.1	27.1	90.4	90.4	6.1	6.1	15.3		6		-				-		-	
						7.9	0.2	71	27.9		8.1		27.1		90.4		6.1		15.3		7		-				-		-	
SR5A	Fine	Calm	14:47	5.0	Surface	1.0	0.1	301	28.5	28.5	8.1	8.1	24.9	24.9	98.2	98.2	6.6	6.6	10.4	10.7	4	5	-	-	816613	810684	-	-	-	-
						1.0	0.1	319	28.5		8.1		24.9		98.1		6.6		10.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	305	28.5	28.5	8.1	8.1	24.9	24.9	100.4	100.4	6.8	6.8	11.0		4		-				-		-	
						4.0	0.1	313	28.5		8.1		24.9		100.4		6.8		11.0		6		-				-		-	
SR6	Fine	Calm	15:11	4.9	Surface	1.0	0.1	240	28.7	28.7	8.2	8.2	23.9	23.9	101.8	101.8	6.9	6.9	14.6	14.5	4	5	-	-	817895	814667	-	-	-	-
						1.0	0.1	245	28.7		8.2		23.9		101.8		6.9		14.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	38	28.5	28.5	8.1	8.1	24.4	24.4	102.0	102.0	6.9	6.9	14.4		6		-				-		-	
						3.9	0.0	39	28.5		8.1		24.4		102.0		6.9		14.4		6		-				-		-	
SR7	Fine	Moderate	15:11	15.6	Surface	1.0	0.1	232	29.0	29.0	8.2	8.2	23.8	23.8	114.2	114.2	7.7	7.7	10.2	10.4	2	4	-	-	823613	823759	-	-	-	-
						1.0	0.1	245	29.0		8.2		23.8		114.2		7.7		10.2		4		-				-		-	
					Middle	7.8	0.1	141	29.1	29.1	8.2	8.2	23.8	23.8	114.8	114.8	7.7		11.7		5		-				-		-	
						7.8	0.2	143	29.1		8.2		23.8		114.8		7.7		11.7		4		-				-		-	
					Bottom	14.6	0.2	86	29.1	29.1	8.3	8.3	23.7	23.7	112.1	112.1	7.6	7.6	9.4		6		-				-		-	
						14.6	0.2	86	29.1		8.3		23.7		112.1		7.6		9.4		4		-				-		-	
SR8	Fine	Moderate	14:03	4.8	Surface	1.0	-	-	29.3	29.3	8.2	8.2	19.1	19.1	126.7	126.7	8.7	8.7	5.3	5.6	3	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.3		8.2		19.1		126.7		8.7		5.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.8	28.8	8.2	8.2	24.0	24.0	119.1	119.1	8.1	8.1	5.9		7		-				-		-	
						3.8	-	-	28.8		8.2		24.0		119.1		8.1		5.9		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 24 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Rough	11:17	8.6	Surface	1.0	0.5	203	28.8	28.8	8.4	8.4	20.7	20.7	121.3	121.3	8.4	8.2	7.0	11.4	7	7	78	80	815592	804233	<0.2	<0.2	1.7	1.6
						1.0	0.6	214	28.8		8.4		20.7		121.2		8.3		7.0		5		79				<0.2		1.9	
					Middle	4.3	0.6	204	28.7	28.7	8.4	8.4	20.8	20.8	115.3	115.2	8.0		8.1		6		79				<0.2		1.4	
						4.3	0.6	213	28.7		8.4		20.8		115.1		7.9		8.1		7		80				<0.2		1.9	
					Bottom	7.6	0.5	198	28.6	28.6	8.2	8.2	24.6	24.6	92.7	92.8	6.3	6.3	19.2		8		82				<0.2		1.5	
						7.6	0.6	202	28.6		8.2		24.6		92.8		6.3		18.8		8		83				<0.2		1.3	
C2	Cloudy	Moderate	12:49	11.5	Surface	1.0	0.5	180	29.0	29.0	8.3	8.3	19.5	19.5	118.2	118.2	8.2	7.6	9.5	13.2	22	22	77	80	825688	806932	<0.2	<0.2	1.6	1.3
						1.0	0.6	180	29.0		8.3		19.5		118.1		8.2		9.6		21		77				<0.2		1.3	
					Middle	5.8	0.9	144	28.9	28.9	8.3	8.3	19.6	19.6	102.2	102.0	7.1		12.2		21		80				<0.2		1.4	
						5.8	0.9	151	28.9		8.3		19.6		101.7		7.0		12.2		23		80				<0.2		1.2	
					Bottom	10.5	0.6	101	28.7	28.7	8.1	8.1	23.2	23.2	88.7	88.7	6.0	6.0	17.9		23		82				<0.2		1.2	
						10.5	0.6	101	28.7		8.1		23.2		88.7		6.0		18.0		21		82				<0.2		1.3	
C3	Cloudy	Moderate	10:36	12.7	Surface	1.0	0.5	121	29.0	29.0	8.4	8.4	20.3	20.3	113.8	113.8	7.8	7.7	10.1	10.7	22	22	78	80	822135	817774	<0.2	<0.2	1.1	1.2
						1.0	0.5	125	29.0		8.4		20.3		113.7		7.8		10.1		21		78				<0.2		1.0	
					Middle	6.4	0.2	84	29.0	29.0	8.4	8.4	20.5	20.5	109.5	109.6	7.5		10.6		22		80				<0.2		1.2	
						6.4	0.2	85	29.0		8.4		20.5		109.6		7.5		10.6		22		80				<0.2		1.2	
					Bottom	11.7	0.5	49	28.9	28.9	8.3	8.3	21.3	21.3	102.5	102.5	7.0	7.0	11.3		22		82				<0.2		1.3	
						11.7	0.5	51	28.9		8.3		21.3		102.4		7.0		11.3		21		82				<0.2		1.2	
IM1	Cloudy	Moderate	11:41	5.2	Surface	1.0	0.1	58	28.8	28.8	8.5	8.5	19.9	19.9	125.9	125.8	8.7	8.7	9.5	9.9	7	9	77	79	817925	807111	<0.2	<0.2	1.6	1.6
						1.0	0.1	61	28.8		8.5		19.9		125.6		8.7		9.7		9		78				<0.2		1.6	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	45	28.7	28.7	8.4	8.4	20.5	20.5	120.6	120.5	8.3	8.3	10.2		9		80				<0.2		1.5	
						4.2	0.1	45	28.7		8.4		20.4		120.4		8.3		10.2		9		80				<0.2		1.6	
IM2	Cloudy	Moderate	11:50	7.5	Surface	1.0	0.6	179	28.9	28.9	8.5	8.5	19.3	19.3	126.9	126.8	8.8	8.4	9.8	13.2	9	9	78	81	818142	806164	<0.2	<0.2	1.9	1.6
						1.0	0.7	186	28.9		8.5		19.3		126.7		8.8		9.7		8		79				<0.2		1.6	
					Middle	3.8	0.6	182	28.7	28.7	8.4	8.4	20.0	20.0	115.2	115.1	8.0		12.2		9		80				<0.2		1.4	
						3.8	0.7	188	28.7		8.4		20.0		114.9		8.0		12.3		9		80				<0.2		1.5	
					Bottom	6.5	0.5	180	28.5	28.5	8.2	8.2	24.3	24.3	94.8	95.0	6.4	6.5	17.6		9		83				<0.2		1.4	
						6.5	0.6	182	28.5		8.2		24.3		95.1		6.5		17.5		10		83				<0.2		1.6	
IM3	Cloudy	Moderate	12:01	7.5	Surface	1.0	0.4	239	28.8	28.8	8.4	8.4	19.7	19.7	120.5	120.4	8.3	7.8	11.7	18.0	9	10	78	80	818805	805595	<0.2	<0.2	1.4	1.4
						1.0	0.4	243	28.8		8.4		19.7		120.3		8.3		11.8		10		78				<0.2		1.6	
					Middle	3.8	0.5	225	28.7	28.7	8.3	8.3	20.6	20.6	104.0	104.0	7.2		18.6		10		80				<0.2		1.5	
						3.8	0.5	228	28.7		8.3		20.6		103.9		7.2		18.8		9		81				<0.2		1.3	
					Bottom	6.5	0.4	231	28.7	28.7	8.2	8.2	21.3	21.3	101.3	101.4	7.0	7.0	23.8		9		82				<0.2		1.3	
						6.5	0.4	234	28.7		8.2		21.3		101.4		7.0		23.0		11		83				<0.2		1.5	
IM4	Cloudy	Moderate	12:11	7.6	Surface	1.0	0.8	176	29.1	29.1	8.5	8.5	18.1	18.1	127.3	127.3	8.9	7.9	10.3	17.2	6	7	78	80	819743	804605	<0.2	<0.2	1.4	1.4
						1.0	0.8	192	29.1		8.5		18.1		127.3		8.9		10.4		6		78				<0.2		1.3	
					Middle	3.8	0.7	183	28.8	28.8	8.3	8.3	19.7	19.7	99.4	99.3	6.9		17.2		6		80				<0.2		1.3	
						3.8	0.8	192	28.8		8.3		19.7		99.2		6.9		16.8		8		80				<0.2		1.6	
					Bottom	6.6	0.5	178	28.6	28.6	8.2	8.2	22.0	22.0	93.6	93.7	6.4	6.4	24.2		7		82				<0.2		1.5	
						6.6	0.5	190	28.6		8.2		22.0		93.8		6.4		24.5		9		83				<0.2		1.3	
IM5	Cloudy	Moderate	12:23	6.5	Surface	1.0	0.8	216	29.0	29.0	8.5	8.5	17.4	17.4	126.9	126.7	8.9	7.8	11.0	15.6	7	8	79	81	820762	804854	<0.2	<0.2	1.5	1.7
						1.0	0.8	236	29.0		8.5		17.4		126.5		8.8		11.2		7		79				<0.2		1.7	
					Middle	3.3	0.7	230	28.7	28.7	8.2	8.2	20.3	20.3	96.4	96.4	6.7		15.1		7		80				<0.2		1.7	
						3.3	0.7	234	28.7		8.2		20.2		96.4		6.7		15.1		8		81				<0.2		1.6	
					Bottom	5.5	0.6	246	28.7	28.7	8.1	8.1	21.3	21.3	95.4	95.5	6.6	6.6	20.2		8		82				<0.2		1.7	
						5.5	0.6	260	28.7		8.1		21.3		95.6		6.6		20.9		9		82				<0.2		1.8	
IM6	Cloudy	Moderate	12:36	6.4	Surface	1.0	0.7	216	29.0	29.0	8.4	8.4	18.3	18.3	120.7	120.6	8.4	7.8	12.3	16.3	6	9	78	80	821072	805812	<0.2	<0.2	1.5	1.6
						1.0	0.7	231	29.0		8.4		18.3		120.4		8.4		12.4		8		78				<0.2		1.6	
					Middle	3.2	0.7	233	28.9	28.9	8.3	8.3	20.1	20.1	104.9	104.8	7.2		15.2		8		80				<0.2		1.5	
						3.2	0.7	248	28.9		8.3		20.1		104.6		7.2		15.5		9		80				<0.2		1.6	
					Bottom	5.4	0.6	230	28.7	28.7	8.1	8.1	22.8	22.8	89.3	89.4	6.1	6.1	21.1		10		82				<0.2		1.6	
						5.4	0.6	239	28.7		8.1		22.8		89.4		6.1		21.2		10		83				<0.2		1.6	
IM7	Cloudy	Moderate	12:47	8.0	Surface	1.0	0.8	211	29.0	29.0	8.4	8.4	19.3	19.3	116.1	116.1	8.0	7.4	8.6	14.1	6	7	78	80	821334	806839	<0.2	<0.2	1.8	1.7
						1.0	0.8	230	29.0		8.4		19.3		116.1		8.0		8.5		5		79				<0.2		1.7	
					Middle	4.0	0.8	203	28.9	28.9	8.2	8.2	20.1	20.1	97.6	97.6	6.7		12.2		8		80				<0.2		1.6	
						4.0	0.9	221	28.9		8.2		20.1		97.5		6.7		12.3		8		81				<0.2		1.4	
					Bottom	7.0	0.5	219	28.7	28.7	8.1	8.1	23.6	23.6	88.9	88.9	6.0	6.0	21.3		8		82				<0.2		1.8	
						7.0	0.6	222	28.7		8.1		23.6		88.9		6.0		21.5		8		82				<0.2		1.6	
IM8	Cloudy	Moderate	12:20	8.2	Surface	1.0	0.3	169	29.0	29.0	8.4	8.4	17.6	17.6	115.6	115.2	8.1	7.3	15.3	18.8	17	19	78	80	821846	808160	<0.2	<0.2	1.3	1.3
						1.0	0.3	181	29.0		8.4		17.6		114.7		8.0		15.6		16		78				<0.2		1.1	
					Middle	4.1	0.3	131	28.7	28.7	8.2	8.2	20.1	20.1	95.8	95.8	6.6		18.4		18		80				<0.2		1.3	
						4.1	0.3	141	28.7		8.2		20.2		95.8		6.6		18.7		20		80				<0.2		1.5	
					Bottom	7.2	0.3	127	28.7	28.7	8.1	8.1	21.5	21.5	90.0	90.0	6.2	6.2	22.4		22		83				<0.2		1.3	
						7.2	0.4	130	28.7		8.1		21.5		89.9		6.2		22.4		21		83				<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 24 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:11	7.8	Surface	1.0	0.3	154	29.1	29.0	8.4	8.4	18.3	18.3	125.1	124.9	8.7	8.1	11.5	17.2	11	16	78	80	822070	808785	<0.2	<0.2	1.1	1.2
						1.0	0.3	159	29.0		8.4		18.3		124.7		8.7		11.6		10		78				<0.2		1.2	
					Middle	3.9	0.3	149	28.9	28.9	8.3	8.3	18.8	18.8	107.7	107.7	7.5		18.9		15		80				<0.2		1.3	
						3.9	0.4	149	28.9		8.3		18.8		107.7		7.5		19.0		17		80				<0.2		1.4	
					Bottom	6.8	0.4	112	28.6	28.6	8.2	8.2	22.1	22.1	94.2	94.3	6.5	6.5	21.2		19		82				<0.2		1.3	
						6.8	0.4	113	28.6		8.2		22.1		94.4		6.5		21.2		21		82				<0.2		1.1	
IM10	Cloudy	Moderate	12:06	7.5	Surface	1.0	0.6	173	28.8	28.8	8.4	8.4	19.8	19.8	115.3	115.3	8.0	7.6	12.1	16.0	24	18	78	80	822384	809812	<0.2	<0.2	1.1	1.2
						1.0	0.6	189	28.8		8.4		19.8		115.2		8.0		12.2		23		78				<0.2		1.3	
					Middle	3.8	0.5	153	28.7	28.7	8.3	8.3	20.5	20.5	104.2	104.2	7.2		16.3		16		80				<0.2		1.2	
						3.8	0.6	164	28.7		8.3		20.5		104.2		7.2		16.4		14		80				<0.2		1.2	
					Bottom	6.5	0.4	109	28.7	28.7	8.2	8.2	21.4	21.4	105.5	105.7	7.2	7.3	19.4		14		82				<0.2		1.2	
						6.5	0.4	114	28.7		8.2		21.4		105.8		7.3		19.5		17		83				<0.2		1.1	
IM11	Cloudy	Moderate	11:58	7.8	Surface	1.0	0.7	116	28.9	28.9	8.4	8.4	19.5	19.5	122.1	122.0	8.5	8.0	10.5	15.3	16	16	78	80	822074	811469	<0.2	<0.2	1.2	1.2
						1.0	0.7	117	28.9		8.4		19.5		121.8		8.4		10.6		14		78				<0.2		1.1	
					Middle	3.9	0.7	128	28.7	28.7	8.4	8.4	20.1	20.1	110.5	110.2	7.6		12.7		18		80				<0.2		1.3	
						3.9	0.7	131	28.7		8.4		20.1		109.9		7.6		12.8		16		80				<0.2		1.2	
					Bottom	6.8	0.4	119	28.4	28.4	8.2	8.2	24.8	24.8	92.2	92.4	6.2	6.3	22.6		18		82				<0.2		1.2	
						6.8	0.4	120	28.4		8.2		24.8		92.6		6.3		22.4		16		82				<0.2		1.2	
IM12	Cloudy	Moderate	11:48	8.8	Surface	1.0	0.6	154	28.8	28.8	8.4	8.4	20.0	20.0	130.2	130.3	9.0	8.9	9.1	9.5	14	14	78	80	821469	812043	<0.2	<0.2	1.4	1.4
						1.0	0.6	162	28.8		8.4		20.0		130.3		9.0		9.1		13		78				<0.2		1.3	
					Middle	4.4	0.6	141	28.8	28.8	8.4	8.4	20.0	20.0	126.7	126.7	8.8		9.4		14		80				<0.2		1.6	
						4.4	0.7	148	28.8		8.4		20.0		126.6		8.8		9.4		15		80				<0.2		1.2	
					Bottom	7.8	0.6	112	28.7	28.7	8.4	8.4	20.4	20.4	121.5	121.5	8.4	8.4	9.9		15		83				<0.2		1.4	
						7.8	0.6	114	28.7		8.4		20.4		121.5		8.4		9.9		15		82				<0.2		1.3	
SR2	Cloudy	Moderate	11:04	4.8	Surface	1.0	0.5	87	28.7	28.7	8.4	8.4	20.5	20.5	115.1	115.0	8.0	8.0	10.4	10.5	22	22	78	79	821455	814180	<0.2	<0.2	1.1	1.2
						1.0	0.5	89	28.7		8.4		20.5		114.9		7.9		10.4		21		78				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	66	28.6	28.6	8.3	8.3	20.6	20.6	110.8	110.7	7.7	7.7	10.5		22		80				<0.2		1.2	
						3.8	0.2	66	28.6		8.3		20.6		110.6		7.6		10.5		21		80				<0.2		1.2	
SR3	Cloudy	Moderate	12:29	9.7	Surface	1.0	0.4	183	29.2	29.2	8.5	8.5	17.4	17.4	133.2	133.1	9.3	8.3	11.2	17.1	23	23	-	-	822157	807592	-	-	-	-
						1.0	0.4	191	29.2		8.5		17.4		133.0		9.3		11.3		22		-				-		-	
					Middle	4.9	0.2	126	28.9	28.9	8.4	8.3	18.6	18.6	104.5	104.2	7.3		17.1		22		-				-		-	
						4.9	0.2	131	28.9		8.3		18.6		103.9		7.2		17.4		23		-				-		-	
					Bottom	8.7	0.3	96	28.7	28.7	8.1	8.1	23.2	23.2	92.4	92.6	6.3	6.3	22.8		24		-				-		-	
						8.7	0.4	101	28.7		8.1		23.2		92.8		6.3		22.8		22		-				-		-	
SR4A	Cloudy	Moderate	10:56	9.6	Surface	1.0	0.1	2	28.7	28.7	8.4	8.4	20.4	20.4	110.6	110.5	7.6	6.9	10.8	15.0	11	12	-	-	817193	807817	-	-	-	-
						1.0	0.1	2	28.7		8.4		20.4		110.3		7.6		10.8		12		-				-		-	
					Middle	4.8	0.0	281	28.6	28.6	8.3	8.3	20.9	20.9	88.7	88.4	6.1		14.1		12		-				-		-	
						4.8	0.0	293	28.6		8.3		20.9		88.1		6.1		14.1		12		-				-		-	
					Bottom	8.6	0.1	42	28.3	28.3	8.0	8.0	27.8	27.8	73.0	73.1	4.9	4.9	20.1		13		-				-		-	
						8.6	0.1	45	28.3		8.0		27.8		73.2		4.9		20.0		13		-				-		-	
SR5A	Cloudy	Moderate	10:38	5.4	Surface	1.0	0.0	56	29.0	29.0	8.5	8.5	20.3	20.3	112.3	112.2	7.7	7.7	9.3	10.2	9	9	-	-	816605	810708	-	-	-	-
						1.0	0.0	61	29.0		8.5		20.3		112.1		7.7		9.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	344	28.9	28.9	8.4	8.4	21.2	21.2	104.3	104.3	7.2	7.2	11.1		9		-				-		-	
						4.4	0.1	316	28.9		8.4		21.2		104.2		7.1		11.1		9		-				-		-	
SR6	Cloudy	Moderate	10:08	4.6	Surface	1.0	0.0	17	28.9	28.8	8.2	8.2	22.0	22.1	92.3	91.8	6.3	6.3	13.8	15.3	10	10	-	-	817884	814640	-	-	-	-
						1.0	0.0	17	28.8		8.2		22.1		91.3		6.2		14.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	163	28.7	28.7	8.0	8.0	23.3	23.3	82.0	82.0	5.6	5.6	16.5		10		-				-		-	
						3.6	0.0	172	28.7		8.0		23.3		82.0		5.6		16.6		10		-				-		-	
SR7	Cloudy	Moderate	10:00	18.8	Surface	1.0	0.5	98	28.9	28.9	8.2	8.2	21.9	21.9	98.6	98.7	6.7	6.7	10.3	11.6	19	20	-	-	823610	823760	-	-	-	-
						1.0	0.5	105	28.9		8.2		21.9		98.7		6.7		10.3		20		-				-		-	
					Middle	9.4	0.4	90	28.8	28.8	8.2	8.2	22.6	22.6	96.4	96.5	6.6		9.5		20		-				-		-	
						9.4	0.4	98	28.8		8.2		22.6		96.5		6.6		9.5		19		-				-		-	
					Bottom	17.8	0.3	75	28.7	28.7	8.0	8.0	23.2	23.2	83.7	83.7	5.7	5.7	14.9		20		-				-		-	
						17.8	0.4	75	28.7		8.0		23.2		83.7		5.7		14.9		21		-				-		-	
SR8	Cloudy	Moderate	11:17	4.0	Surface	1.0	-	-	28.8	28.8	8.4	8.4	20.8	20.8	119.9	119.9	8.3	8.3	8.0	8.1	20	20	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.8		8.4		20.8		119.8		8.3		8.0		20		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	28.7	28.7	8.3	8.3	20.8	20.8	115.0	114.9	7.9	7.9	8.2		21		-				-		-	
						3.0	-	-	28.7		8.3		20.8		114.7		7.9		8.2		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 24 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:59	7.6	Surface	1.0	0.1	122	29.4	29.4	8.6	8.6	18.6	18.6	142.7	142.5	9.8	8.6	12.0	17.5	11	13	78	81	815649	804219	<0.2	<0.2	1.6	1.6
						1.0	0.1	129	29.4		8.6		18.6		142.2		9.8		12.0		11		79				<0.2		1.5	
					Middle	3.8	0.1	178	28.9	28.9	8.4	8.4	21.0	21.0	106.6	106.6	7.3		18.1		12		81				<0.2		1.4	
						3.8	0.1	182	28.9		8.4		21.0		106.6		7.3		18.2		14		81				<0.2		1.7	
					Bottom	6.6	0.1	357	28.7	28.7	8.2	8.2	21.9	21.9	98.5	98.6	6.8	6.8	22.4		14		83				<0.2		1.6	
						6.6	0.1	328	28.7		8.2		21.9		98.6		6.8		22.4		15		83				<0.2		1.8	
C2	Cloudy	Moderate	16:42	12.7	Surface	1.0	0.5	219	29.1	29.1	8.1	8.1	18.6	18.6	93.3	93.4	6.5	6.5	15.8	18.1	12	12	79	81	825684	806934	<0.2	<0.2	1.5	1.4
						1.0	0.6	237	29.1		8.1		18.7		93.4		6.5		15.9		10		79				<0.2		1.3	
					Middle	6.4	0.6	185	29.0	29.0	8.1	8.1	19.5	19.4	93.1	93.2	6.4		18.0		12		81				<0.2		1.5	
						6.4	0.6	197	29.0		8.1		19.4		93.2		6.4		18.1		12		81				<0.2		1.3	
					Bottom	11.7	0.1	293	28.9	28.9	8.1	8.1	19.9	19.9	94.0	94.1	6.5	6.5	20.3		13		83				<0.2		1.4	
						11.7	0.1	312	28.9		8.1		19.9		94.1		6.5		20.4		13		83				<0.2		1.5	
C3	Cloudy	Moderate	18:21	12.4	Surface	1.0	0.3	232	29.1	29.1	8.3	8.3	21.9	21.9	105.7	105.6	7.2	7.1	14.6	16.4	11	14	78	80	822081	817831	<0.2	<0.2	1.4	1.4
						1.0	0.3	242	29.1		8.3		21.9		105.5		7.2		14.6		12		78				<0.2		1.3	
					Middle	6.2	0.5	251	29.0	29.0	8.3	8.3	22.2	22.2	101.0	101.0	6.9		16.4		14		80				<0.2		1.5	
						6.2	0.5	254	29.0		8.3		22.2		101.0		6.9		16.4		14		80				<0.2		1.4	
					Bottom	11.4	0.3	280	28.9	28.9	8.2	8.2	23.4	23.4	97.4	97.5	6.6	6.6	18.1		17		82				<0.2		1.4	
						11.4	0.3	292	28.9		8.2		23.4		97.6		6.6		18.1		15		83				<0.2		1.5	
IM1	Cloudy	Moderate	17:34	4.4	Surface	1.0	0.1	87	28.8	28.8	8.4	8.4	21.2	21.2	110.6	110.5	7.6	7.6	13.9	13.2	17	18	79	80	817938	807106	<0.2	<0.2	1.8	1.6
						1.0	0.1	94	28.8		8.4		21.2		110.3		7.6		13.8		15		79				<0.2		1.5	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	21	28.7	28.7	8.3	8.3	22.0	22.0	106.4	106.5	7.3	7.3	12.6		19		80				<0.2		1.6	
						3.4	0.1	22	28.7		8.3		22.0		106.5		7.3		12.6		21		81				<0.2		1.6	
IM2	Cloudy	Moderate	17:26	6.6	Surface	1.0	0.2	207	29.1	29.1	8.4	8.4	19.5	19.5	131.9	131.9	9.1	9.0	11.7	11.9	18	21	76	80	818163	806177	<0.2	<0.2	2.0	1.9
						1.0	0.3	224	29.1		8.4		19.5		131.9		9.1		11.8		20		76				<0.2		1.7	
					Middle	3.3	0.1	223	29.0	29.0	8.5	8.5	20.2	20.2	130.0	129.9	9.0		12.4		19		80				<0.2		1.8	
						3.3	0.2	237	29.0		8.5		20.2		129.8		8.9		12.5		22		80				<0.2		1.8	
					Bottom	5.6	0.1	245	28.9	28.9	8.5	8.5	20.8	20.7	125.5	125.4	8.6	8.6	11.6		20		83				<0.2		1.9	
						5.6	0.1	247	28.9		8.5		20.7		125.3		8.6		11.6		24		83				<0.2		2.0	
IM3	Cloudy	Moderate	17:17	6.8	Surface	1.0	0.3	236	29.0	29.0	8.3	8.3	18.7	18.7	115.0	115.0	8.0	8.0	14.6	16.9	22	23	78	80	818789	805587	<0.2	<0.2	2.3	2.2
						1.0	0.3	237	29.0		8.3		18.7		115.0		8.0		14.5		21		78				<0.2		2.0	
					Middle	3.4	0.3	255	29.0	29.0	8.3	8.3	19.5	19.5	115.0	115.0	8.0		16.9		24		80				<0.2		2.3	
						3.4	0.3	275	29.0		8.3		19.5		114.9		7.9		17.1		23		81				<0.2		2.0	
					Bottom	5.8	0.2	272	28.9	28.9	8.3	8.3	20.3	20.3	111.9	111.9	7.7	7.7	19.0		24		82				<0.2		2.0	
						5.8	0.2	287	28.9		8.3		20.3		111.8		7.7		19.1		23		82				<0.2		2.4	
IM4	Cloudy	Moderate	17:05	6.7	Surface	1.0	0.4	265	29.1	29.1	8.2	8.2	19.1	19.1	101.8	101.8	7.0	7.0	17.1	20.0	24	24	78	81	819750	804585	<0.2	<0.2	2.1	2.1
						1.0	0.4	274	29.1		8.2		19.1		101.8		7.0		17.1		24		79				<0.2		2.4	
					Middle	3.4	0.4	253	29.0	29.0	8.2	8.2	19.3	19.3	99.0	99.0	6.9		20.3		26		81				<0.2		2.1	
						3.4	0.4	255	29.0		8.2		19.3		99.0		6.9		20.4		23		81				<0.2		2.0	
					Bottom	5.7	0.4	238	28.9	28.9	8.1	8.1	20.1	20.1	97.9	98.0	6.8	6.8	22.5		23		82				<0.2		1.9	
						5.7	0.4	242	28.9		8.1		20.1		98.0		6.8		22.6		25		83				<0.2		1.8	
IM5	Cloudy	Moderate	16:55	6.2	Surface	1.0	0.6	254	29.1	29.1	8.2	8.2	19.2	19.2	98.2	98.2	6.8	6.6	16.2	19.5	22	22	77	80	820751	804877	<0.2	<0.2	1.6	1.6
						1.0	0.6	266	29.1		8.2		19.2		98.2		6.8		16.3		21		77				<0.2		1.6	
					Middle	3.1	0.5	254	28.8	28.8	8.1	8.1	20.7	20.7	92.0	92.0	6.3		19.3		21		80				<0.2		1.8	
						3.1	0.6	267	28.8		8.1		20.7		92.0		6.3		19.4		22		80				<0.2		1.6	
					Bottom	5.2	0.4	235	28.8	28.8	8.1	8.1	21.0	21.0	92.7	92.8	6.4	6.4	22.7		22		82				<0.2		1.4	
						5.2	0.4	250	28.8		8.1		21.0		92.8		6.4		22.9		23		82				<0.2		1.5	
IM6	Cloudy	Moderate	16:47	6.1	Surface	1.0	0.7	257	29.1	29.1	8.1	8.1	18.9	18.9	95.6	95.6	6.6	6.6	13.1	16.9	18	20	76	78	821065	805852	<0.2	<0.2	1.6	1.9
						1.0	0.8	258	29.1		8.1		18.9		95.5		6.6		13.3		17		76				<0.2		1.7	
					Middle	3.1	0.6	256	28.9	28.9	8.1	8.1	19.7	19.7	93.4	93.4	6.5		17.2		21		78				<0.2		1.9	
						3.1	0.6	269	28.9		8.1		19.7		93.4		6.5		17.3		19		78				<0.2		2.0	
					Bottom	5.1	0.5	257	28.9	28.9	8.1	8.1	19.8	19.8	95.0	95.1	6.6	6.6	20.3		22		80				<0.2		2.2	
						5.1	0.5	258	28.9		8.1		19.8		95.1		6.6		20.3		22		80				<0.2		2.1	
IM7	Cloudy	Moderate	16:40	7.5	Surface	1.0	0.9	241	29.0	29.0	8.1	8.1	18.6	18.6	94.5	94.6	6.6	6.6	15.2	18.0	17	18	78	80	821342	806818	<0.2	<0.2	2.0	2.1
						1.0	0.9	255	29.0		8.1		18.6		94.6		6.6		15.2		15		78				<0.2		2.1	
					Middle	3.8	0.7	246	29.0	29.0	8.1	8.1	19.0	19.0	94.5	94.5	6.5		16.6		20		80				<0.2		1.9	
						3.8	0.7	251	29.0		8.1		19.0		94.5		6.6		16.5		18		80				<0.2		2.0	
					Bottom	6.5	0.7	251	28.9	28.9	8.1	8.1	19.7	19.7	95.1	95.1	6.6	6.6	22.1		18		82				<0.2		2.2	
						6.5	0.7	261	28.9		8.1		19.7		95.1		6.6		22.1		20		82				<0.2		2.2	
IM8	Cloudy	Moderate	17:04	8.0	Surface	1.0	0.3	246	29.1	29.1	8.1	8.1	19.5	19.5	96.0	96.1	6.6	6.4	17.0	20.1	14	14	79	81	821831	808140	<0.2	<0.2	2.0	2.1
						1.0	0.4	260	29.1		8.1		19.5		96.1		6.6		17.1		12		79				<0.2		2.1	
					Middle	4.0	0.3	272	28.8	28.8	8.1	8.1	21.1	21.0	90.8	90.9	6.2		20.6		14		81				<0.2		2.2	
						4.0	0.3	274	28.8		8.1		21.0		91.0		6.3		20.9		13		81				<0.2		2.0	
					Bottom	7.0	0.1	59	28.8	28.8	8.1	8.1	21.3	21.3	90.6	90.7	6.2	6.2	22.4		15		83				<0.2		2.1	
						7.0	0.1	63	28.8		8.1		21.3		90.7		6.2		22.6		13		83				<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 24 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	17:11	7.9	Surface	1.0	0.2	229	29.1	29.1	8.2	8.2	19.3	19.3	100.2	100.2	6.9	6.8	16.6	18.9	13	13	79	81	822102	808836	<0.2	<0.2	1.9	2.1
						1.0	0.2	246	29.1		8.2		19.3		100.2		6.9		16.6		12		78				<0.2		2.1	
					Middle	4.0	0.2	243	29.0	29.0	8.1	8.1	19.4	19.4	97.5	97.5	6.7		19.3		12		81				<0.2		2.1	
						4.0	0.2	267	29.0		8.1		19.4		97.5		6.7		19.6		13		80				<0.2		2.2	
					Bottom	6.9	0.1	281	29.0	29.0	8.1	8.1	19.9	19.9	97.4	97.4	6.7	6.7	20.6		15		83				<0.2		2.3	
						6.9	0.1	297	29.0		8.1		19.9		97.4		6.7		20.6		13		83				<0.2		1.9	
IM10	Cloudy	Moderate	17:19	8.1	Surface	1.0	0.3	310	29.0	29.0	8.3	8.3	19.0	19.0	111.3	111.3	7.7	7.7	14.5	18.1	14	15	78	81	822385	809776	<0.2	<0.2	2.0	2.0
						1.0	0.3	322	29.0		8.3		19.0		111.2		7.7		14.6		14		79				<0.2		1.9	
					Middle	4.1	0.3	345	29.0	29.0	8.3	8.3	19.3	19.2	109.7	109.7	7.6		18.2		16		80				<0.2		2.1	
						4.1	0.3	317	29.0		8.3		19.2		109.6		7.6		18.4		15		81				<0.2		2.1	
					Bottom	7.1	0.1	358	28.9	28.9	8.3	8.3	20.6	20.6	107.6	107.5	7.4	7.4	21.2		15		83				<0.2		2.0	
						7.1	0.1	329	28.9		8.3		20.6		107.4		7.4		21.4		16		83				<0.2		1.8	
IM11	Cloudy	Moderate	17:31	8.2	Surface	1.0	0.4	309	29.0	29.0	8.4	8.4	19.8	19.8	129.8	129.8	8.9	8.9	12.3	12.5	13	17	79	81	822074	811446	<0.2	<0.2	2.2	2.2
						1.0	0.4	330	29.0		8.4		19.9		129.9		9.0		12.3		15		79				<0.2		2.4	
					Middle	4.1	0.4	285	29.0	29.0	8.5	8.5	20.5	20.5	130.1	130.1	8.9		12.6		17		81				<0.2		2.3	
						4.1	0.4	287	29.0		8.5		20.5		130.0		8.9		12.7		18		81				<0.2		2.3	
					Bottom	7.2	0.3	292	28.9	28.9	8.5	8.5	20.9	20.8	121.5	121.4	8.3	8.3	12.5		18		83				<0.2		2.0	
						7.2	0.3	307	28.9		8.5		20.8		121.2		8.3		12.5		18		83				<0.2		1.8	
IM12	Cloudy	Moderate	17:40	8.5	Surface	1.0	0.5	277	28.9	28.9	8.4	8.4	21.3	21.3	116.9	116.9	8.0	7.8	13.2	13.9	15	15	79	81	821442	812063	<0.2	<0.2	2.0	1.9
						1.0	0.5	280	28.9		8.4		21.3		116.8		8.0		13.2		15		79				<0.2		1.9	
					Middle	4.3	0.6	293	28.8	28.8	8.4	8.4	21.6	21.6	108.8	108.8	7.5		13.7		14		81				<0.2		1.8	
						4.3	0.6	294	28.8		8.4		21.6		108.8		7.5		13.7		15		81				<0.2		1.9	
					Bottom	7.5	0.3	280	28.7	28.7	8.4	8.4	22.1	22.0	108.6	108.6	7.4	7.4	14.6		15		83				<0.2		1.9	
						7.5	0.3	288	28.7		8.4		22.0		108.5		7.4		14.7		16		83				<0.2		1.9	
SR2	Cloudy	Moderate	17:59	5.3	Surface	1.0	0.0	336	29.2	29.2	8.3	8.3	21.7	21.7	111.0	111.0	7.6	7.6	14.7	14.7	16	16	79	80	821479	814186	<0.2	<0.2	2.2	2.1
						1.0	0.0	336	29.2		8.3		21.7		110.9		7.5		14.7		16		78				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	337	29.1	29.1	8.3	8.3	21.9	21.9	106.9	106.8	7.3	7.3	14.7		15		81				<0.2		2.1	
						4.3	0.1	343	29.1		8.3		21.9		106.6		7.3		14.6		16		81				<0.2		2.0	
SR3	Cloudy	Moderate	16:57	9.1	Surface	1.0	0.4	228	29.2	29.2	8.1	8.1	18.8	18.7	97.6	97.5	6.8	6.5	16.1	20.0	11	12	-	-	822169	807571	-	-	-	-
						1.0	0.4	238	29.2		8.1		18.7		97.4		6.7		16.2		11		-				-		-	
					Middle	4.6	0.3	232	28.9	28.9	8.1	8.1	20.0	20.0	91.8	91.8	6.3		20.0		12		-				-		-	
						4.6	0.4	242	28.9		8.1		20.0		91.7		6.3		20.3		13		-				-		-	
					Bottom	8.1	0.3	284	28.9	28.9	8.1	8.1	20.1	20.1	93.2	93.2	6.4	6.4	23.6		13		-				-		-	
						8.1	0.3	287	28.9		8.1		20.1		93.2		6.4		23.5		12		-				-		-	
SR4A	Cloudy	Moderate	18:20	8.5	Surface	1.0	0.3	243	29.2	29.2	8.4	8.4	21.4	21.4	111.4	111.4	7.6	7.3	14.8	18.3	11	11	-	-	817190	807827	-	-	-	-
						1.0	0.3	249	29.2		8.4		21.4		111.3		7.6		14.8		10		-				-		-	
					Middle	4.3	0.4	237	29.0	29.0	8.3	8.3	22.0	22.0	103.6	103.5	7.1		18.0		12		-				-		-	
						4.3	0.4	257	29.0		8.3		22.0		103.4		7.0		18.0		11		-				-		-	
					Bottom	7.5	0.3	234	28.8	28.8	8.2	8.2	23.4	23.4	92.9	93.0	6.3	6.3	22.1		12		-				-		-	
						7.5	0.3	239	28.8		8.2		23.4		93.0		6.3		22.3		12		-				-		-	
SR5A	Cloudy	Moderate	18:40	4.8	Surface	1.0	0.3	286	29.2	29.2	8.4	8.4	20.8	20.8	117.2	117.1	8.0	8.0	10.9	14.1	14	14	-	-	816604	810669	-	-	-	-
						1.0	0.3	291	29.2		8.4		20.8		117.0		8.0		10.9		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	300	28.9	28.9	8.2	8.2	23.0	23.0	97.1	97.2	6.6	6.6	17.2		14		-				-		-	
						3.8	0.2	319	28.9		8.2		23.0		97.2		6.6		17.3		15		-				-		-	
SR6	Cloudy	Moderate	19:11	3.7	Surface	1.0	0.2	279	29.0	29.0	8.4	8.4	20.6	20.6	124.8	124.7	8.6	8.6	14.5	16.6	11	11	-	-	817887	814637	-	-	-	-
						1.0	0.2	280	29.0		8.4		20.6		124.5		8.5		14.6		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	297	28.9	28.9	8.2	8.2	22.7	22.7	106.1	106.1	7.2	7.2	18.6		11		-				-		-	
						2.7	0.1	309	28.9		8.2		22.7		106.1		7.2		18.6		12		-				-		-	
SR7	Cloudy	Moderate	18:55	18.4	Surface	1.0	0.1	309	29.0	29.0	8.4	8.4	21.2	21.2	124.6	124.6	8.5	8.3	16.5	18.1	12	12	-	-	823643	823761	-	-	-	-
						1.0	0.1	336	29.0		8.4		21.2		124.5		8.5		16.5		12		-				-		-	
					Middle	9.2	0.1	48	29.0	29.0	8.3	8.3	21.7	21.7	116.7	116.6	8.0		18.1		12		-				-		-	
						9.2	0.1	52	29.0		8.3		21.7		116.5		8.0		18.1		12		-				-		-	
					Bottom	17.4	0.1	67	28.9	28.9	8.2	8.2	22.3	22.3	102.4	102.4	7.0	7.0	19.6		12		-				-		-	
						17.4	0.1	73	28.9		8.2		22.3		102.3		7.0		19.7		13		-				-		-	
SR8	Cloudy	Moderate	17:46	3.7	Surface	1.0	-	-	29.4	29.4	8.5	8.5	19.1	19.1	145.4	145.2	10.0	10.0	11.7	12.4	12	13	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.4		8.5		19.1		145.0		10.0		11.7		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	29.0	29.0	8.4	8.4	21.2	21.2	120.3	120.3	8.2	8.2	13.0		14		-				-		-	
						2.7	-	-	29.0		8.4		21.2		120.3		8.2		13.1		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 26 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:41	8.3	Surface	1.0	0.7	214	30.0	30.0	8.2	8.2	17.2	17.2	105.6	105.6	7.3	7.0	7.3	11.7	3	4	78	80	815643	804268	<0.2	<0.2	1.6	1.5
						1.0	0.7	231	30.0		8.2		17.2		105.6		7.3		7.3		4		78				<0.2		1.5	
					Middle	4.2	0.7	225	29.3	29.3	8.3	8.3	22.4	22.4	98.4	98.3	6.7		12.0		4		80				<0.2		1.5	
						4.2	0.7	237	29.3		8.3		22.4		98.2		6.7		12.2		4		80				<0.2		1.4	
					Bottom	7.3	0.5	228	28.8	28.8	8.2	8.2	26.1	26.1	84.2	84.3	5.6	5.6	15.9		4		82				<0.2		1.5	
						7.3	0.5	249	28.8		8.2		26.1		84.3		5.6		15.2		4		82				<0.2		1.4	
C2	Fine	Moderate	13:38	10.8	Surface	1.0	1.3	177	30.1	30.1	8.1	8.1	17.8	17.8	94.1	94.1	6.4	6.1	10.4	15.3	3	4	77	80	825655	806959	<0.2	<0.2	2.1	2.1
						1.0	1.3	181	30.1		8.1		17.8		94.0		6.4		10.6		4		77				<0.2		2.1	
					Middle	5.4	1.1	151	29.2	29.2	8.1	8.1	21.8	21.8	83.1	83.2	5.7		16.8		4		80				<0.2		2.1	
						5.4	1.2	162	29.2		8.1		21.8		83.2		5.7		16.4		4		80				<0.2		2.0	
					Bottom	9.8	0.5	170	29.1	29.1	8.1	8.1	22.1	22.1	85.6	85.8	5.8	5.8	18.8		5		82				<0.2		2.1	
						9.8	0.5	181	29.1		8.1		22.1		85.9		5.8		18.7		5		82				<0.2		1.9	
C3	Fine	Moderate	11:46	12.3	Surface	1.0	0.5	116	29.8	29.8	8.3	8.3	20.3	20.3	106.3	106.2	7.2	7.1	10.3	11.2	9	11	78	80	822111	817808	<0.2	<0.2	1.4	1.4
						1.0	0.6	116	29.8		8.3		20.3		106.1		7.2		10.4		10		78				<0.2		1.4	
					Middle	6.2	0.2	109	29.6	29.6	8.3	8.3	20.6	20.6	101.3	101.2	6.9		11.5		11		80				<0.2		1.3	
						6.2	0.2	110	29.6		8.3		20.6		101.1		6.9		11.5		9		80				<0.2		1.4	
					Bottom	11.3	0.4	46	29.5	29.5	8.2	8.2	20.7	20.7	99.4	99.4	6.8	6.8	11.6		13		83				<0.2		1.4	
						11.3	0.4	46	29.5		8.2		20.7		99.4		6.8		11.6		11		83				<0.2		1.6	
IM1	Fine	Moderate	13:08	4.8	Surface	1.0	0.1	158	29.8	29.8	8.3	8.3	20.6	20.6	93.3	93.0	6.3	6.3	10.1	12.8	7	8	77	79	817934	807143	<0.2	<0.2	1.3	1.4
						1.0	0.1	163	29.8		8.3		20.6		92.7		6.3		10.2		8		78				<0.2		1.5	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	208	28.9	28.9	8.2	8.2	24.9	24.9	84.4	84.6	5.7	5.7	15.5		8		80				<0.2		1.3	
						3.8	0.1	211	28.9		8.2		24.9		84.7		5.7		15.5		8		80				<0.2		1.3	
IM2	Fine	Moderate	13:16	6.9	Surface	1.0	0.7	200	30.2	30.2	8.2	8.2	17.5	17.5	101.0	101.0	6.9	6.4	7.6	13.0	5	5	78	80	818164	806170	<0.2	<0.2	2.0	1.9
						1.0	0.7	200	30.2		8.2		17.5		100.9		6.9		7.6		4		77				<0.2		2.0	
					Middle	3.5	0.5	207	29.0	29.0	8.2	8.2	23.6	23.6	87.6	87.7	5.9		13.0		5		79				<0.2		1.9	
						3.5	0.5	225	29.0		8.2		23.6		87.7		5.9		13.0		5		80				<0.2		1.8	
					Bottom	5.9	0.3	201	28.9	28.9	8.2	8.2	24.1	24.1	86.9	87.0	5.9	5.9	18.5		5		82				<0.2		1.9	
						5.9	0.3	208	28.9		8.2		24.1		87.1		5.9		18.3		6		82				<0.2		2.0	
IM3	Fine	Moderate	13:26	7.2	Surface	1.0	0.7	216	29.9	29.9	8.2	8.2	17.2	17.2	98.0	97.9	6.8	6.4	10.1	15.0	4	4	77	80	818757	805616	<0.2	<0.2	1.9	2.0
						1.0	0.7	225	29.9		8.2		17.2		97.8		6.7		10.3		4		77				<0.2		2.1	
					Middle	3.6	0.7	225	29.2	29.2	8.2	8.2	21.1	21.1	89.5	89.5	6.1		15.2		5		80				<0.2		2.0	
						3.6	0.7	234	29.2		8.2		21.1		89.5		6.1		15.4		4		80				<0.2		2.0	
					Bottom	6.2	0.5	223	29.0	29.0	8.2	8.2	23.0	23.0	87.7	87.7	5.9	5.9	19.5		4		82				<0.2		1.9	
						6.2	0.5	226	29.0		8.2		23.0		87.7		5.9		19.7		5		82				<0.2		2.3	
IM4	Fine	Moderate	13:38	7.1	Surface	1.0	1.0	186	30.2	30.1	8.2	8.2	15.4	15.4	97.1	97.0	6.7	6.4	9.7	13.0	5	5	77	80	819696	804621	<0.2	<0.2	2.2	2.1
						1.0	1.0	196	30.1		8.2		15.4		96.9		6.7		9.8		4		78				<0.2		2.1	
					Middle	3.6	0.9	194	29.3	29.3	8.2	8.2	20.2	20.2	89.2	89.2	6.1		12.8		5		80				<0.2		1.9	
						3.6	1.0	202	29.3		8.2		20.2		89.1		6.1		13.0		4		80				<0.2		2.1	
					Bottom	6.1	0.7	187	28.9	28.9	8.1	8.1	22.8	22.8	86.2	86.3	5.9	5.9	16.6		5		82				<0.2		1.9	
						6.1	0.7	198	28.9		8.1		22.8		86.3		5.9		16.3		5		82				<0.2		2.1	
IM5	Fine	Moderate	13:50	6.8	Surface	1.0	0.9	205	29.9	29.9	8.2	8.2	16.8	16.8	95.7	95.6	6.6	6.5	13.3	15.3	3	4	77	80	820738	804852	<0.2	<0.2	2.0	2.0
						1.0	1.0	217	29.9		8.2		16.8		95.5		6.6		13.5		4		77				<0.2		2.0	
					Middle	3.4	0.8	212	29.3	29.3	8.2	8.2	19.7	19.7	91.7	91.7	6.3		14.1		5		80				<0.2		1.9	
						3.4	0.8	225	29.3		8.2		19.7		91.7		6.3		14.2		4		80				<0.2		1.9	
					Bottom	5.8	0.6	212	29.1	29.1	8.1	8.1	21.4	21.4	88.7	88.8	6.1	6.1	18.3		4		83				<0.2		2.0	
						5.8	0.6	230	29.1		8.1		21.4		88.8		6.1		18.5		5		83				<0.2		1.9	
IM6	Fine	Moderate	14:00	6.6	Surface	1.0	0.6	221	30.1	30.1	8.2	8.2	17.7	17.7	97.2	97.1	6.7	6.3	8.0	10.7	4	4	77	80	821055	805829	<0.2	<0.2	1.7	1.8
						1.0	0.6	222	30.1		8.2		17.7		97.0		6.6		8.1		4		77				<0.2		1.8	
					Middle	3.3	0.8	265	29.3	29.3	8.1	8.1	21.1	21.1	87.1	87.1	5.9		10.4		5		80				<0.2		1.7	
						3.3	0.8	284	29.3		8.1		21.1		87.1		5.9		10.5		4		80				<0.2		1.9	
					Bottom	5.6	0.6	277	29.1	29.1	8.1	8.1	22.1	22.1	84.3	84.4	5.7	5.7	13.7		5		82				<0.2		1.8	
						5.6	0.6	278	29.1		8.1		22.1		84.4		5.7		13.5		4		82				<0.2		1.8	
IM7	Fine	Moderate	14:05	7.8	Surface	1.0	0.8	239	30.1	30.1	8.2	8.2	17.7	17.7	97.0	96.9	6.6	6.2	8.7	11.5	5	6	77	79	821337	806808	<0.2	<0.2	1.7	1.7
						1.0	0.8	250	30.1		8.2		17.7		96.8		6.6		8.7		6		77				<0.2		1.7	
					Middle	3.9	0.6	253	29.2	29.2	8.1	8.1	21.6	21.6	84.2	84.2	5.7		11.3		6		79				<0.2		1.7	
						3.9	0.6	274	29.2		8.1		21.6		84.2		5.7		11.8		5		79				<0.2		1.8	
					Bottom	6.8	0.5	270	29.1	29.1	8.1	8.1	22.1	22.1	84.1	84.1	5.7	5.7	14.2		6		82				<0.2		1.7	
						6.8	0.5	280	29.1		8.1		22.1		84.1		5.7		14.1		5		82				<0.2		1.7	
IM8	Fine	Moderate	13:20	7.0	Surface	1.0	0.5	190	29.8	29.8	8.1	8.1	17.5	17.5	93.5	93.4	6.4	6.2	16.9	18.9	3	4	78	80	821810	808159	<0.2	<0.2	1.9	3.0
						1.0	0.6	197	29.8		8.1		17.5		93.3		6.4		17.3		4		78				<0.2		3.3	
					Middle	3.5	0.4	172	29.3	29.3	8.1	8.1	20.9	20.9	87.6	87.6	6.0		19.3		4		80				<0.2		3.2	
						3.5	0.4	184	29.3		8.1		20.9		87.6		6.0		19.2		3		80				<0.2		3.4	
					Bottom	6.0	0.4	221	29.2	29.2	8.1	8.1	21.3	21.3	89.1	89.3	6.1	6.1	20.3		4		83				<0.2		3.2	
						6.0	0.4	235	29.2		8.1		21.3		89.4		6.1		20.6		5		83				<0.2		3.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:08	6.6	Surface	1.0	0.4	167	30.1	30.1	8.1	8.1	15.4	15.4	94.0	93.7	6.5	6.3	10.9	15.3	4	5	78	80	822121	808839	<0.2	<0.2	2.8	2.9
						1.0	0.5	169	30.1		8.1		15.4		93.4		6.5		11.0		5		78				<0.2		2.9	
					Middle	3.3	0.4	141	29.3	29.3	8.1	8.1	18.7	18.7	87.0	86.9	6.0		16.0		4		80				<0.2		2.9	
						3.3	0.4	146	29.3		8.1		18.8		86.7		6.0		16.3		5		80				<0.2		3.0	
					Bottom	5.6	0.2	158	29.0	29.0	8.1	8.1	22.6	22.6	87.0	87.1	5.9	5.9	18.5		4		82				<0.2		2.8	
						5.6	0.2	166	29.0		8.1		22.7		87.2		5.9		18.9		5		83				<0.2		2.7	
IM10	Fine	Moderate	13:01	7.3	Surface	1.0	0.7	142	29.8	29.8	8.2	8.2	17.4	17.4	92.5	92.4	6.4	6.2	13.6	16.8	6	6	78	80	822380	809780	<0.2	<0.2	2.8	2.6
						1.0	0.7	151	29.8		8.2		17.4		92.3		6.4		13.8		5		78				<0.2		2.5	
					Middle	3.7	0.5	138	29.1	29.1	8.2	8.2	22.0	22.0	87.3	87.4	5.9		16.0		6		80				<0.2		2.6	
						3.7	0.5	148	29.1		8.2		22.0		87.4		5.9		16.1		7		80				<0.2		2.8	
					Bottom	6.3	0.5	126	29.0	29.0	8.2	8.2	23.2	23.2	89.2	89.3	6.0	6.0	20.7		7		83				<0.2		2.5	
						6.3	0.5	135	29.0		8.2		23.2		89.3		6.0		20.8		7		83				<0.2		2.6	
IM11	Fine	Moderate	12:51	7.4	Surface	1.0	0.8	125	30.0	30.0	8.2	8.2	17.8	17.8	94.4	94.3	6.5	6.0	11.5	15.6	4	5	78	80	822057	811488	<0.2	<0.2	2.8	2.6
						1.0	0.8	134	30.0		8.2		17.8		94.1		6.5		11.6		4		78				<0.2		3.3	
					Middle	3.7	0.7	119	28.9	28.9	8.2	8.2	24.1	24.1	81.8	81.8	5.5		15.4		4		80				<0.2		2.8	
						3.7	0.7	128	28.9		8.2		24.1		81.7		5.5		15.6		5		80				<0.2		2.5	
					Bottom	6.4	0.6	112	28.9	28.9	8.1	8.1	24.2	24.2	83.5	83.6	5.6	5.6	19.4		5		83				<0.2		2.1	
						6.4	0.6	116	28.9		8.1		24.2		83.6		5.6		19.8		5		83				<0.2		2.1	
IM12	Fine	Moderate	12:40	7.6	Surface	1.0	0.4	116	29.5	29.5	8.2	8.2	21.9	22.1	89.9	89.9	6.1	5.9	10.7	13.1	5	6	78	80	821467	812039	<0.2	<0.2	2.1	2.1
						1.0	0.5	122	29.5		8.2		22.2		89.8		6.1		10.7		4		78				<0.2		1.9	
					Middle	3.8	0.6	102	29.1	29.1	8.2	8.2	23.6	23.6	82.7	82.7	5.6		12.8		6		80				<0.2		2.0	
						3.8	0.6	106	29.1		8.2		23.6		82.6		5.6		12.9		6		80				<0.2		2.3	
					Bottom	6.6	0.5	106	28.9	28.9	8.1	8.1	25.0	25.0	82.5	82.7	5.5	5.6	15.6		6		83				<0.2		2.0	
						6.6	0.5	114	28.9		8.1		25.0		82.8		5.6		15.6		7		82				<0.2		2.1	
SR2	Fine	Moderate	12:15	4.1	Surface	1.0	0.5	105	29.6	29.6	8.2	8.2	21.3	21.3	87.7	87.5	5.9	5.9	12.2	13.5	8	8	78	79	821457	814156	<0.2	<0.2	4.6	2.7
						1.0	0.6	108	29.6		8.2		21.3		87.3		5.9		12.3		7		78				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.5	109	28.9	28.9	8.1	8.1	24.9	24.9	85.0	85.2	5.7	5.7	14.9		7		80				<0.2		2.2	
						3.1	0.5	118	28.9		8.1		24.9		85.3		5.7		14.7		8		80				<0.2		2.0	
SR3	Fine	Moderate	13:28	8.5	Surface	1.0	0.8	193	30.3	30.3	8.1	8.1	17.6	17.6	94.2	94.1	6.4	6.1	10.1	13.6	5	6	-	-	822123	807551	-	-	-	-
						1.0	0.8	198	30.3		8.1		17.6		93.9		6.4		10.1		6		-				-		-	
					Middle	4.3	0.7	176	29.2	29.2	8.1	8.1	21.5	21.5	83.6	83.6	5.7		13.0		6		-				-		-	
						4.3	0.7	193	29.2		8.1		21.5		83.6		5.7		13.1		6		-				-		-	
					Bottom	7.5	0.5	180	29.1	29.1	8.1	8.1	22.1	22.1	85.2	85.3	5.8	5.8	17.6		6		-				-		-	
						7.5	0.5	195	29.1		8.1		22.1		85.4		5.8		17.6		6		-				-		-	
SR4A	Fine	Moderate	12:21	9.2	Surface	1.0	0.0	229	29.6	29.6	8.2	8.2	21.2	21.2	88.0	87.8	6.0	5.7	11.9	15.1	3	6	-	-	817172	807792	-	-	-	-
						1.0	0.0	232	29.6		8.2		21.2		87.6		5.9		12.1		4		-				-		-	
					Middle	4.6	0.1	52	28.8	28.8	8.2	8.2	25.1	25.1	80.7	80.7	5.4		15.0		6		-				-		-	
						4.6	0.1	57	28.8		8.2		25.1		80.7		5.4		14.9		6		-				-		-	
					Bottom	8.2	0.1	66	28.8	28.8	8.2	8.2	25.5	25.5	81.1	81.2	5.4	5.4	18.4		8		-				-		-	
						8.2	0.1	66	28.8		8.2		25.5		81.2		5.4		18.4		10		-				-		-	
SR5A	Fine	Moderate	12:04	5.0	Surface	1.0	0.1	10	29.8	29.8	8.3	8.3	20.2	20.2	105.4	105.4	7.2	7.2	9.7	10.5	9	9	-	-	816567	810695	-	-	-	-
						1.0	0.1	10	29.8		8.3		20.2		105.4		7.2		9.8		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	30	29.5	29.5	8.2	8.2	20.7	20.7	98.4	98.4	6.7	6.7	11.1		9		-				-		-	
						4.0	0.0	32	29.5		8.2		20.7		98.3		6.7		11.2		10		-				-		-	
SR6	Fine	Moderate	11:38	4.9	Surface	1.0	0.1	88	29.6	29.6	8.3	8.3	19.6	19.6	110.8	110.8	7.6	7.6	10.9	12.9	10	11	-	-	817969	814679	-	-	-	-
						1.0	0.1	88	29.6		8.3		19.6		110.8		7.6		11.0		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	92	29.4	29.4	8.2	8.2	20.6	20.6	100.4	100.4	6.9	6.9	14.8		11		-				-		-	
						3.9	0.1	98	29.4		8.2		20.6		100.4		6.9		14.7		12		-				-		-	
SR7	Fine	Moderate	11:10	20.2	Surface	1.0	0.8	87	29.6	29.6	8.3	8.3	19.6	19.6	109.4	109.3	7.5	7.1	11.6	14.2	10	11	-	-	823649	823766	-	-	-	-
						1.0	0.8	87	29.6		8.3		19.6		109.2		7.5		11.7		10		-				-		-	
					Middle	10.1	0.5	90	29.4	29.4	8.2	8.2	20.4	20.4	98.8	98.8	6.8		15.9		11		-				-		-	
						10.1	0.5	98	29.4		8.2		20.4		98.8		6.7		15.9		11		-				-		-	
					Bottom	19.2	0.2	82	29.4	29.4	8.2	8.2	20.7	20.7	99.4	99.5	6.8	6.8	15.1		11		-				-		-	
						19.2	0.3	88	29.4		8.2		20.7		99.5		6.8		15.1		13		-				-		-	
SR8	Fine	Moderate	12:28	3.8	Surface	1.0	-	-	30.2	30.2	8.2	8.2	16.5	16.5	105.6	105.8	7.3	7.3	7.8	7.9	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.2		8.2		16.5		105.9		7.3		7.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	29.6	29.6	8.3	8.3	20.2	20.2	109.2	109.1	7.4	7.4	7.9		7		-				-		-	
						2.8	-	-	29.6		8.3		20.2		109.0		7.4		7.9		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**
Note: Access to SR6 was blocked by barge. The monitoring at SR6 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 26 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:07	7.8	Surface	1.0	0.0	35	29.9	29.9	8.2	8.2	18.4	18.4	93.5	93.4	6.4	6.2	11.0	14.0	7	7	78	80	815610	804222	<0.2	<0.2	2.3	2.0
						1.0	0.0	36	29.9		8.2		18.4		93.3		6.4		11.0		6		78				<0.2		2.2	
					Middle	3.9	0.1	7	29.2	29.2	8.2	8.2	21.4	21.4	87.7	87.7	6.0		13.5		8		80				<0.2		2.1	
						3.9	0.1	7	29.2		8.2		21.4		87.6		6.0		13.6		7		80				<0.2		2.0	
					Bottom	6.8	0.1	11	29.0	29.0	8.2	8.2	23.4	23.4	86.8	86.9	5.9	5.9	17.2		8		83				<0.2		1.7	
						6.8	0.1	11	29.0		8.2		23.4		87.0		5.9		17.4		7		82				<0.2		1.5	
C2	Fine	Moderate	17:51	10.2	Surface	1.0	0.5	77	29.8	29.8	8.0	8.0	17.1	17.0	86.9	86.9	6.0	6.0	10.9	12.2	5	5	78	81	825677	806961	<0.2	<0.2	2.1	2.1
						1.0	0.5	83	29.8		8.0		17.0		86.9		6.0		10.9		4		79				<0.2		2.0	
					Middle	5.1	0.3	182	29.8	29.8	8.0	8.0	17.5	17.5	87.3	87.3	6.0		12.1		6		80				<0.2		2.2	
						5.1	0.3	186	29.8		8.0		17.5		87.3		6.0		12.2		4		81				<0.2		2.0	
					Bottom	9.2	0.8	119	29.7	29.7	8.0	8.0	17.8	17.8	88.3	88.4	6.1	6.1	13.2		6		83				<0.2		2.1	
						9.2	0.9	122	29.7		8.0		17.8		88.4		6.1		13.7		7		83				<0.2		2.1	
C3	Cloudy	Moderate	19:35	11.8	Surface	1.0	0.5	256	30.0	30.0	8.3	8.3	20.7	20.7	111.7	111.7	7.5	7.5	14.8	15.9	26	28	78	80	822105	817778	<0.2	<0.2	2.0	2.1
						1.0	0.5	272	30.0		8.3		20.7		111.7		7.5		14.8		27		78				<0.2		2.2	
					Middle	5.9	0.6	278	30.0	30.0	8.3	8.3	20.8	20.8	109.5	109.5	7.4		16.2		28		80				<0.2		2.0	
						5.9	0.6	297	30.0		8.3		20.8		109.4		7.4		16.2		26		80				<0.2		2.0	
					Bottom	10.8	0.4	292	30.0	30.0	8.3	8.3	20.8	20.8	105.4	105.3	7.1	7.1	16.8		28		83				<0.2		2.1	
						10.8	0.5	306	30.0		8.3		20.8		105.2		7.1		16.6		30		83				<0.2		2.1	
IM1	Fine	Moderate	18:47	4.0	Surface	1.0	0.1	91	29.8	29.8	8.3	8.3	20.2	20.2	102.5	102.5	7.0	7.0	9.7	10.0	7	7	78	79	817974	807136	<0.2	<0.2	1.6	1.5
						1.0	0.1	91	29.8		8.3		20.2		102.4		7.0		9.7		6		78				<0.2		1.5	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	82	29.8	29.8	8.3	8.3	20.5	20.5	99.9	99.9	6.8	6.8	10.2		7		80				<0.2		1.5	
						3.0	0.2	84	29.8		8.3		20.5		99.8		6.8		10.2		6		80				<0.2		1.4	
IM2	Fine	Moderate	18:39	6.5	Surface	1.0	0.3	235	30.0	30.0	8.2	8.2	18.1	18.1	96.5	96.5	6.6	6.5	12.9	14.9	8	13	78	80	818173	806140	<0.2	<0.2	1.5	1.5
						1.0	0.3	235	30.0		8.2		18.1		96.5		6.6		13.0		8		78				<0.2		1.5	
					Middle	3.3	0.1	290	29.5	29.5	8.3	8.3	20.4	20.4	92.7	92.7	6.3		16.1		12		80				<0.2		1.4	
						3.3	0.1	296	29.5		8.3		20.4		92.7		6.3		16.1		14		80				<0.2		1.6	
					Bottom	5.5	0.1	359	29.3	29.3	8.3	8.3	21.4	21.4	90.2	90.3	6.1	6.1	15.6		16		83				<0.2		1.5	
						5.5	0.1	330	29.3		8.3		21.4		90.3		6.1		15.5		18		83				<0.2		1.6	
IM3	Fine	Moderate	18:31	6.7	Surface	1.0	0.4	223	30.0	30.0	8.2	8.2	16.8	16.8	91.9	92.0	6.3	6.4	14.9	18.3	10	12	78	80	818794	805576	<0.2	<0.2	1.6	1.4
						1.0	0.4	243	30.0		8.2		16.8		92.0		6.3		15.0		11		78				<0.2		1.4	
					Middle	3.4	0.2	239	29.9	29.9	8.3	8.3	18.5	18.5	93.0	93.0	6.4		18.4		10		80				<0.2		1.3	
						3.4	0.3	240	29.9		8.3		18.5		92.9		6.4		18.5		11		80				<0.2		1.5	
					Bottom	5.7	0.1	253	29.2	29.2	8.2	8.2	22.5	22.5	84.7	84.8	5.7	5.7	21.4		15		83				<0.2		1.4	
						5.7	0.1	261	29.2		8.2		22.5		84.8		5.7		21.4		14		83				<0.2		1.4	
IM4	Fine	Moderate	18:20	6.8	Surface	1.0	0.4	217	29.8	29.8	8.1	8.1	17.7	17.7	89.1	89.1	6.1	6.1	20.6	21.8	17	19	78	80	819701	804585	<0.2	<0.2	1.5	1.5
						1.0	0.5	228	29.8		8.1		17.7		89.1		6.1		20.8		18		78				<0.2		1.5	
					Middle	3.4	0.4	215	29.8	29.8	8.1	8.1	17.8	17.8	88.6	88.6	6.1		21.8		18		80				<0.2		1.6	
						3.4	0.4	235	29.8		8.1		17.8		88.6		6.1		21.7		20		80				<0.2		1.5	
					Bottom	5.8	0.4	218	29.7	29.7	8.1	8.1	18.4	18.4	87.4	87.4	6.0	6.0	23.0		20		83				<0.2		1.4	
						5.8	0.4	227	29.7		8.1		18.4		87.4		6.0		22.9		19		83				<0.2		1.5	
IM5	Fine	Moderate	18:11	6.1	Surface	1.0	0.6	232	29.6	29.6	8.1	8.1	19.2	19.2	85.8	85.8	5.9	5.9	20.2	21.1	16	16	78	80	820720	804848	<0.2	<0.2	1.4	1.5
						1.0	0.6	234	29.6		8.1		19.2		85.8		5.9		20.4		15		78				<0.2		1.5	
					Middle	3.1	0.4	221	29.5	29.5	8.1	8.1	19.6	19.6	85.0	85.0	5.8		21.0		16		80				<0.2		1.5	
						3.1	0.4	234	29.5		8.1		19.6		85.0		5.8		20.9		16		80				<0.2		1.4	
					Bottom	5.1	0.4	221	29.4	29.4	8.1	8.1	20.0	19.9	86.0	86.1	5.9	5.9	22.1		17		83				<0.2		1.4	
						5.1	0.4	238	29.4		8.1		19.9		86.1		5.9		22.0		17		83				<0.2		1.6	
IM6	Fine	Moderate	18:04	6.0	Surface	1.0	0.6	242	29.6	29.6	8.1	8.1	18.3	18.3	87.9	87.9	6.1	6.1	18.6	20.6	10	11	78	80	821084	805832	<0.2	<0.2	1.5	1.5
						1.0	0.7	257	29.6		8.1		18.3		87.9		6.1		18.7		11		78				<0.2		1.5	
					Middle	3.0	0.6	240	29.6	29.6	8.1	8.1	18.4	18.4	88.5	88.5	6.1		20.3		11		80				<0.2		1.5	
						3.0	0.6	258	29.6		8.1		18.4		88.5		6.1		20.4		11		80				<0.2		1.5	
					Bottom	5.0	0.6	238	29.6	29.6	8.1	8.1	18.5	18.5	90.9	91.0	6.3	6.3	22.8		12		83				<0.2		1.4	
						5.0	0.6	253	29.6		8.1		18.5		91.0		6.3		22.9		12		83				<0.2		1.4	
IM7	Fine	Moderate	17:57	6.8	Surface	1.0	0.9	259	29.9	29.9	8.0	8.0	16.3	16.3	88.7	88.7	6.1	6.1	10.0	11.7	5	5	78	80	821350	806853	<0.2	<0.2	1.4	1.5
						1.0	0.9	268	29.9		8.0		16.3		88.7		6.1		10.1		4		78				<0.2		1.3	
					Middle	3.4	0.8	261	29.8	29.8	8.1	8.1	17.2	17.2	88.8	88.8	6.1		11.6		6		80				<0.2		1.5	
						3.4	0.8	272	29.8		8.1		17.2		88.8		6.1		11.4		5		80				<0.2		1.6	
					Bottom	5.8	0.7	267	29.7	29.7	8.1	8.1	17.4	17.4	88.8	88.8	6.1	6.1	13.5		6		83				<0.2		1.5	
						5.8	0.8	285	29.7		8.1		17.4		88.8		6.1		13.5		6		83				<0.2		1.4	
IM8	Fine	Moderate	18:15	6.5	Surface	1.0	0.2	192	29.5	29.5	8.0	8.0	19.4	19.4	83.3	83.3	5.7	5.7	19.8	21.2	20	23	78	81	821859	808126	<0.2	<0.2	2.1	2.0
						1.0	0.2	192	29.5		8.0		19.4		83.3		5.7		20.0		18		78				<0.2		2.0	
					Middle	3.3	0.0	186	29.5	29.5	8.0	8.0	19.8	19.8	82.9	82.9	5.7		21.3		25		81				<0.2		1.9	
						3.3	0.0	189	29.5		8.0		19.8		82.9		5.7		21.6		25		81				<0.2		1.9	
					Bottom	5.5	0.1	131	29.4	29.4	8.0	8.0	19.9	19.9	83.5	83.5	5.7	5.7	22.3		26		83				<0.2		1.9	
						5.5	0.1	140	29.4		8.0		19.9		83.4		5.7		22.3		26		83				<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 26 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	18:23	6.2	Surface	1.0	0.1	133	29.8	29.8	8.0	8.0	17.9	17.9	86.8	86.9	6.0	6.0	19.6	21.1	21	21	78	81	822080	808837	<0.2	<0.2	1.9	1.8
						1.0	0.1	146	29.8		8.0		17.9		86.9		6.0		19.6		21		78				<0.2		1.7	
					Middle	3.1	0.0	309	29.8	29.8	8.0	8.0	17.9	17.9	86.2	86.2	5.9		20.7		21		81				<0.2		1.9	
						3.1	0.0	313	29.8		8.0		17.9		86.2		5.9		21.0		21		81				<0.2		1.8	
					Bottom	5.2	0.1	66	29.5	29.5	8.0	8.0	19.3	19.3	85.0	85.1	5.8	5.8	22.9		22		83				<0.2		1.8	
						5.2	0.1	72	29.5		8.1		19.3		85.1		5.8		22.9		21		83				<0.2		1.9	
IM10	Fine	Moderate	18:32	6.8	Surface	1.0	0.2	349	30.0	30.0	8.1	8.1	17.0	17.0	90.6	90.7	6.2	6.2	16.6	19.1	13	14	78	81	822410	809779	<0.2	<0.2	1.9	1.9
						1.0	0.2	358	30.0		8.1		17.0		90.7		6.2		16.7		12		78				<0.2		2.0	
					Middle	3.4	0.3	21	29.8	29.8	8.2	8.2	18.8	18.8	90.1	90.0	6.2		18.6		13		80				<0.2		1.8	
						3.4	0.3	22	29.8		8.2		18.8		89.9		6.2		18.7		13		81				<0.2		1.9	
					Bottom	5.8	0.3	320	29.3	29.3	8.2	8.2	21.8	21.8	87.6	87.7	5.9	6.0	21.9		16		83				<0.2		2.0	
						5.8	0.3	330	29.3		8.2		21.7		87.7		6.0		21.9		17		83				<0.2		1.7	
IM11	Fine	Moderate	18:45	8.2	Surface	1.0	0.5	311	29.9	29.9	8.2	8.2	18.0	18.0	94.2	94.2	6.5	6.4	13.4	14.4	11	11	78	80	822074	811456	<0.2	<0.2	1.4	1.5
						1.0	0.6	312	29.9		8.2		18.0		94.1		6.5		13.5		11		79				<0.2		1.8	
					Middle	4.1	0.6	319	29.6	29.6	8.3	8.3	20.2	20.2	92.4	92.4	6.3		14.9		11		81				<0.2		1.9	
						4.1	0.6	347	29.6		8.3		20.2		92.4		6.3		14.9		12		81				<0.2		1.3	
					Bottom	7.2	0.4	287	29.4	29.4	8.2	8.2	21.1	21.1	90.6	90.7	6.2	6.2	14.8		11		81				<0.2		1.3	
						7.2	0.4	300	29.4		8.2		21.1		90.7		6.2		14.8		12		81				<0.2		1.4	
IM12	Fine	Moderate	18:54	8.5	Surface	1.0	0.5	276	29.8	29.8	8.3	8.3	20.4	20.4	100.2	100.2	6.8	6.8	14.8	15.3	7	9	78	81	821469	812026	<0.2	<0.2	1.3	1.4
						1.0	0.5	300	29.8		8.3		20.4		100.1		6.8		14.8		8		79				<0.2		1.3	
					Middle	4.3	0.6	282	29.8	29.8	8.3	8.3	20.5	20.5	98.9	99.0	6.7		14.9		8		81				<0.2		1.3	
						4.3	0.6	287	29.8		8.3		20.5		99.0		6.7		14.6		10		81				<0.2		1.3	
					Bottom	7.5	0.3	299	29.8	29.8	8.2	8.2	20.6	20.6	96.9	96.9	6.6	6.6	16.2		10		83				<0.2		1.4	
						7.5	0.4	327	29.8		8.2		20.6		96.8		6.6		16.2		8		83				<0.2		1.5	
SR2	Cloudy	Moderate	19:13	3.9	Surface	1.0	0.1	280	29.9	29.9	8.3	8.3	20.9	20.9	107.9	107.9	7.3	7.3	20.6	21.0	14	18	78	79	821464	814136	<0.2	<0.2	1.3	1.4
						1.0	0.2	290	29.9		8.3		20.9		107.8		7.3		20.8		15		78				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.2	331	29.9	29.9	8.3	8.3	20.9	20.9	103.3	103.2	7.0	7.0	21.0		20		81				<0.2		1.5	
						2.9	0.2	337	29.9		8.3		20.9		103.0		7.0		21.4		22		80				<0.2		1.4	
SR3	Fine	Moderate	18:06	8.1	Surface	1.0	0.5	187	29.6	29.6	8.0	8.0	18.4	18.4	85.9	86.0	5.9	5.9	18.3	19.6	8	11	-	-	822162	807594	-	-	-	-
						1.0	0.5	198	29.6		8.0		18.4		86.0		5.9		18.4		10		-				-		-	
					Middle	4.1	0.3	232	29.6	29.6	8.0	8.0	18.5	18.5	86.2	86.2	5.9		19.6		12		-				-		-	
						4.1	0.3	243	29.6		8.0		18.5		86.2		5.9		19.8		10		-				-		-	
					Bottom	7.1	0.2	270	29.6	29.6	8.0	8.0	18.7	18.7	87.0	87.5	6.0	6.0	21.2		12		-				-		-	
						7.1	0.2	296	29.6		8.0		18.7		87.9		6.0		20.2		12		-				-		-	
SR4A	Cloudy	Moderate	19:31	8.0	Surface	1.0	0.4	274	29.9	29.9	8.3	8.3	20.7	20.7	111.6	111.6	7.6	7.5	20.7	21.7	15	20	-	-	817213	807816	-	-	-	-
						1.0	0.5	281	29.9		8.3		20.7		111.6		7.6		20.9		17		-				-		-	
					Middle	4.0	0.4	267	29.9	29.9	8.3	8.3	20.7	20.7	109.4	109.4	7.4		21.2		20		-				-		-	
						4.0	0.4	291	29.9		8.3		20.7		109.4		7.4		21.3		21		-				-		-	
					Bottom	7.0	0.3	265	29.9	29.9	8.3	8.3	20.7	20.7	107.6	107.5	7.3	7.3	22.9		23		-				-		-	
						7.0	0.4	266	29.9		8.3		20.7		107.4		7.3		22.9		24		-				-		-	
SR5A	Cloudy	Moderate	19:51	4.6	Surface	1.0	0.3	284	30.0	30.0	8.3	8.3	20.4	20.4	114.8	114.9	7.8	7.8	15.2	15.6	12	12	-	-	816597	810718	-	-	-	-
						1.0	0.4	299	30.0		8.3		20.4		114.9		7.8		15.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	292	30.0	30.0	8.3	8.3	20.5	20.5	112.1	112.1	7.6	7.6	15.8		12		-				-		-	
						3.6	0.3	296	30.0		8.3		20.5		112.0		7.6		15.9		13		-				-		-	
SR6	Cloudy	Moderate	20:18	3.8	Surface	1.0	0.2	258	29.9	29.9	8.3	8.3	19.2	19.2	114.7	114.7	7.8	7.8	20.3	21.2	24	24	-	-	817972	814612	-	-	-	-
						1.0	0.2	258	29.9		8.3		19.2		114.7		7.8		20.1		23		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	260	29.9	29.9	8.3	8.3	19.8	19.8	107.5	107.3	7.3	7.3	22.1		24		-				-		-	
						2.8	0.2	265	29.9		8.3		19.8		107.1		7.3		22.1		25		-				-		-	
SR7	Cloudy	Moderate	20:10	18.9	Surface	1.0	0.1	255	29.9	29.9	8.3	8.3	19.5	19.5	113.3	113.3	7.7	7.7	12.6	16.3	12	13	-	-	823659	823740	-	-	-	-
						1.0	0.2	261	29.9		8.3		19.5		113.3		7.7		12.5		12		-				-		-	
					Middle	9.5	0.1	212	30.0	30.0	8.3	8.3	19.7	19.7	112.4	112.3	7.6		16.0		13		-				-		-	
						9.5	0.1	227	30.0		8.3		19.7		112.2		7.6		16.1		14		-				-		-	
					Bottom	17.9	0.1	273	29.9	29.9	8.3	8.3	20.4	20.3	105.8	105.7	7.2	7.2	20.5		13		-				-		-	
						17.9	0.1	298	29.9		8.3		20.3		105.6		7.2		20.2		13		-				-		-	
SR8	Fine	Moderate	19:01	3.6	Surface	1.0	-	-	29.8	29.8	8.2	8.2	19.3	19.2	92.6	92.5	6.3	6.3	11.1	11.5	15	17	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.8		8.2		19.2		92.4		6.3		11.1		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	29.4	29.4	8.1	8.1	20.4	20.4	89.9	90.0	6.1	6.1	11.8		17		-				-		-	
						2.6	-	-	29.4		8.1		20.4		90.0		6.1		11.8		18		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Access to SR6 was blocked by barge. The monitoring at SR6 was slightly shifted to the closest safe and accessible location temporarily.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:58	8.9	Surface	1.0	0.6	226	30.0	30.0	8.3	8.3	21.4	21.4	98.5	98.4	6.6	5.7	8.0	12.4	2	2	76	79	815599	804250	<0.2	<0.2	1.3	1.3
						1.0	0.6	229	30.0		8.3		21.4		98.2		6.6		8.1		2		76				<0.2		1.4	
					Middle	4.5	0.5	204	29.1	29.1	8.1	8.1	25.9	25.9	70.5	70.5	4.7		12.8		2		79				<0.2		1.1	
						4.5	0.5	217	29.1		8.1		25.9		70.5		4.7		13.1		<2		79				<0.2		1.1	
					Bottom	7.9	0.4	208	29.0	29.0	8.1	8.1	26.2	26.2	72.9	73.0	4.9	4.9	16.0		<2		81				<0.2		1.3	
						7.9	0.5	208	29.0		8.1		26.2		73.1		4.9		16.2		2		81				<0.2		1.4	
C2	Fine	Moderate	11:47	10.5	Surface	1.0	1.3	176	29.8	29.8	8.1	8.1	19.7	19.7	80.8	80.6	5.5	5.3	8.8	11.0	2	2	77	80	825701	806952	<0.2	<0.2	1.3	1.2
						1.0	1.4	191	29.8		8.1		19.7		80.3		5.5		8.9		2		77				<0.2		1.1	
					Middle	5.3	1.1	180	29.4	29.4	8.1	8.1	22.7	22.7	73.7	73.7	5.0		10.9		<2		80				<0.2		1.2	
						5.3	1.2	186	29.4		8.1		22.7		73.7		5.0		11.0		2		80				<0.2		1.2	
					Bottom	9.5	0.5	172	29.1	29.1	8.1	8.1	24.7	24.7	75.4	75.6	5.1	5.1	13.1		2		82				<0.2		1.2	
						9.5	0.5	172	29.1		8.1		24.7		75.8		5.1		13.1		3		82				<0.2		1.2	
C3	Fine	Moderate	13:22	12.3	Surface	1.0	0.5	117	30.5	30.5	8.2	8.2	20.7	20.7	97.8	97.8	6.6	6.3	9.1	10.6	3	3	78	80	822130	817824	<0.2	<0.2	1.3	1.3
						1.0	0.5	124	30.5		8.2		20.7		97.7		6.5		9.1		3		78				<0.2		1.3	
					Middle	6.2	0.2	104	30.1	30.1	8.2	8.2	21.0	21.0	91.2	91.1	6.1		10.3		3		80				<0.2		1.3	
						6.2	0.3	113	30.1		8.2		21.0		91.0		6.1		10.2		3		80				<0.2		1.3	
					Bottom	11.3	0.4	54	29.8	29.8	8.1	8.1	21.6	21.6	88.9	89.0	6.0	6.0	12.3		4		82				<0.2		1.2	
						11.3	0.4	55	29.8		8.1		21.6		89.1		6.0		12.4		4		82				<0.2		1.2	
IM1	Fine	Moderate	12:37	5.7	Surface	1.0	0.2	208	30.5	30.5	8.2	8.2	20.3	20.3	94.4	94.2	6.3	6.3	11.0	12.4	2	3	77	78	817941	807102	<0.2	<0.2	1.2	1.1
						1.0	0.2	225	30.5		8.2		20.3		94.0		6.3		11.2		3		77				<0.2		1.1	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.2	178	29.3	29.3	8.1	8.1	24.2	24.2	74.6	74.7	5.0	5.0	13.6		4		78				<0.2		1.0	
						4.7	0.2	185	29.3		8.1		24.2		74.7		5.0		13.7		3		79				<0.2		1.0	
IM2	Fine	Moderate	12:29	8.0	Surface	1.0	0.4	202	29.6	29.6	8.2	8.2	22.5	22.5	80.5	80.4	5.4	5.3	7.9	10.8	2	2	76	79	818143	806183	<0.2	<0.2	1.0	0.9
						1.0	0.4	209	29.6		8.2		22.5		80.3		5.4		7.9		2		76				<0.2		0.7	
					Middle	4.0	0.3	189	29.3	29.3	8.1	8.1	24.2	24.2	75.7	75.7	5.1		9.6		3		79				<0.2		0.8	
						4.0	0.3	207	29.3		8.1		24.2		75.7		5.1		9.6		<2		79				<0.2		1.0	
					Bottom	7.0	0.2	171	29.1	29.1	8.1	8.1	25.5	25.5	74.0	74.1	4.9	4.9	14.9		2		81				<0.2		0.8	
						7.0	0.2	178	29.1		8.1		25.5		74.1		4.9		14.9		3		81				<0.2		0.9	
IM3	Fine	Moderate	12:21	8.1	Surface	1.0	0.3	200	29.5	29.5	8.2	8.2	22.1	22.1	86.9	86.8	5.9	5.6	7.2	11.5	2	3	76	79	818808	805581	<0.2	<0.2	1.0	0.9
						1.0	0.3	217	29.5		8.2		22.1		86.7		5.9		7.2		3		77				<0.2		0.9	
					Middle	4.1	0.3	175	29.3	29.3	8.2	8.2	23.7	23.7	77.0	77.0	5.2		9.6		3		79				<0.2		0.9	
						4.1	0.3	177	29.3		8.2		23.7		77.0		5.2		9.7		<2		79				<0.2		0.9	
					Bottom	7.1	0.2	162	29.0	29.0	8.1	8.1	25.4	25.4	72.9	73.0	4.9	4.9	17.6		3		81				<0.2		0.8	
						7.1	0.2	166	29.0		8.1		25.4		73.1		4.9		17.5		2		81				<0.2		1.0	
IM4	Fine	Moderate	12:12	8.2	Surface	1.0	1.0	210	30.0	30.0	8.1	8.1	19.4	19.4	81.6	81.5	5.6	5.1	8.5	15.1	<2	2	76	79	819754	804632	<0.2	<0.2	1.3	1.2
						1.0	1.0	226	30.0		8.1		19.4		81.4		5.5		8.5		2		76				<0.2		1.2	
					Middle	4.1	0.9	223	29.1	29.1	8.1	8.1	25.2	25.2	68.5	68.5	4.6		16.3		2		79				<0.2		1.3	
						4.1	0.9	226	29.1		8.1		25.2		68.4		4.6		16.4		2		79				<0.2		1.2	
					Bottom	7.2	0.6	216	29.0	29.0	8.1	8.1	25.7	25.7	68.3	68.4	4.6	4.6	20.4		2		81				<0.2		1.1	
						7.2	0.6	219	29.0		8.1		25.7		68.4		4.6		20.4		3		81				<0.2		1.3	
IM5	Fine	Moderate	12:03	7.8	Surface	1.0	0.3	200	29.6	29.6	8.1	8.1	18.9	18.8	80.9	80.8	5.5	5.4	7.8	11.1	3	3	76	79	820742	804851	<0.2	<0.2	1.2	1.2
						1.0	0.3	218	29.6		8.1		18.8		80.6		5.5		7.8		3		76				<0.2		1.1	
					Middle	3.9	0.3	186	29.3	29.3	8.1	8.1	23.7	23.7	77.4	77.5	5.2		9.2		4		79				<0.2		1.3	
						3.9	0.3	188	29.3		8.1		23.7		77.5		5.2		9.2		3		79				<0.2		1.2	
					Bottom	6.8	0.3	181	29.0	29.0	8.1	8.1	25.4	25.4	72.4	72.5	4.8	4.9	16.1		3		81				<0.2		1.2	
						6.8	0.3	185	29.0		8.1		25.4		72.6		4.9		16.2		4		81				<0.2		1.3	
IM6	Fine	Moderate	11:54	7.7	Surface	1.0	0.3	169	29.6	29.6	8.1	8.1	19.7	19.7	83.1	83.0	5.7	5.5	6.7	11.2	3	3	76	79	821073	805823	<0.2	<0.2	1.0	1.2
						1.0	0.3	183	29.6		8.1		19.7		82.9		5.7		6.7		3		76				<0.2		1.4	
					Middle	3.9	0.1	143	29.3	29.3	8.1	8.1	22.9	22.9	78.1	78.1	5.3		7.6		3		79				<0.2		1.2	
						3.9	0.2	143	29.3		8.1		22.9		78.0		5.3		7.7		4		79				<0.2		1.3	
					Bottom	6.7	0.3	156	29.0	29.0	8.1	8.1	25.1	25.1	71.0	71.1	4.8	4.8	19.4		3		81				<0.2		1.1	
						6.7	0.3	165	29.0		8.1		25.1		71.2		4.8		19.2		4		81				<0.2		1.2	
IM7	Fine	Moderate	11:47	9.1	Surface	1.0	0.3	153	30.0	30.0	8.1	8.1	18.9	18.9	89.7	89.6	6.1	5.5	6.8	12.7	2	3	76	79	821363	806832	<0.2	<0.2	1.2	1.1
						1.0	0.3	158	30.0		8.1		18.9		89.5		6.1		6.8		2		76				<0.2		1.0	
					Middle	4.6	0.2	106	29.3	29.3	8.1	8.1	23.1	23.0	72.5	72.5	4.9		12.0		3		79				<0.2		1.0	
						4.6	0.2	109	29.3		8.1		23.0		72.4		4.9		12.2		3		78				<0.2		1.2	
					Bottom	8.1	0.3	87	29.1	29.1	8.1	8.1	24.5	24.5	72.5	72.6	4.9	4.9	19.1		4		81				<0.2		1.2	
						8.1	0.3	88	29.1		8.1		24.5		72.7		4.9		19.1		2		81				<0.2		1.0	
IM8	Fine	Moderate	12:05	6.8	Surface	1.0	0.5	170	29.7	29.7	8.1	8.1	18.5	18.5	82.4	82.3	5.7	5.2	8.5	12.2	2	3	78	79	821820	808112	<0.2	<0.2	1.1	1.0
						1.0	0.6	179	29.7		8.1		18.5		82.1		5.6		8.5		2		73				<0.2		0.9	
					Middle	3.4	0.4	177	29.2	29.2	8.1	8.1	24.0	24.0	71.1	71.1	4.8		12.3		3		80				<0.2		1.0	
						3.4	0.4	191	29.2		8.1		24.0		71.0		4.8		12.4		2		80				<0.2		1.0	
					Bottom	5.8	0.3	225	29.0	29.0	8.1	8.1	25.7	25.7	71.6	71.8	4.8	4.8	15.7		4		82				<0.2		0.8	
						5.8	0.4	239	29.0		8.1		25.7		71.9		4.8		15.8		3		82				<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 28 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	12:10	6.6	Surface	1.0	0.4	144	29.9	29.9	8.1	8.1	19.3	19.3	75.8	75.6	5.2	4.9	10.5	14.1	3	3	78	80	822099	808791	<0.2	<0.2	0.9	0.9
						1.0	0.4	144	29.8		8.1		19.3		75.4		5.1		10.5		2		78				<0.2		1.1	
					Middle	3.3	0.3	167	29.1	29.1	8.1	8.1	25.1	25.1	68.9	68.9	4.6		14.5		3		80				<0.2		1.0	
						3.3	0.3	172	29.1		8.1		25.1		68.9		4.6		14.7		3		80				<0.2		0.8	
					Bottom	5.6	0.2	150	29.0	29.0	8.1	8.1	25.9	25.9	71.2	71.3	4.8	4.8	17.2		4		82				<0.2		0.9	
						5.6	0.3	154	29.0		8.1		25.9		71.4		4.8		17.3		3		82				<0.2		0.9	
IM10	Fine	Moderate	12:18	7.3	Surface	1.0	0.7	143	29.5	29.5	8.2	8.2	22.4	22.4	82.2	82.0	5.5	5.1	8.9	13.8	2	3	78	80	822367	809802	<0.2	<0.2	1.0	1.0
						1.0	0.7	154	29.5		8.2		22.4		81.8		5.5		8.9		2		78				<0.2		1.0	
					Middle	3.7	0.5	139	29.1	29.1	8.1	8.1	25.2	25.2	69.7	69.7	4.7		14.6		2		80				<0.2		0.9	
						3.7	0.5	150	29.1		8.1		25.3		69.7		4.7		14.9		3		80				<0.2		0.8	
					Bottom	6.3	0.4	120	29.0	29.0	8.1	8.1	25.8	25.8	72.7	72.8	4.8	4.9	17.6		4		82				<0.2		1.1	
						6.3	0.5	126	29.0		8.1		25.8		72.9		4.9		17.7		5		82				<0.2		0.9	
IM11	Fine	Moderate	12:30	8.5	Surface	1.0	0.8	125	29.5	29.5	8.1	8.1	22.7	22.7	77.4	77.3	5.2	5.1	9.5	12.7	3	6	78	80	822076	811441	<0.2	<0.2	1.0	0.9
						1.0	0.8	135	29.5		8.1		22.8		77.2		5.2		9.5		4		78				<0.2		0.8	
					Middle	4.3	0.7	110	29.2	29.2	8.1	8.1	24.5	24.5	73.8	73.7	4.9		11.1		7		80				<0.2		0.9	
						4.3	0.7	118	29.2		8.1		24.5		73.6		4.9		11.1		6		80				<0.2		1.0	
					Bottom	7.5	0.6	117	29.1	29.1	8.1	8.1	25.7	25.7	72.8	72.9	4.9	4.9	17.4		7		82				<0.2		1.0	
						7.5	0.6	121	29.1		8.1		25.7		73.0		4.9		17.4		7		82				<0.2		0.9	
IM12	Fine	Moderate	12:38	8.9	Surface	1.0	0.5	114	30.4	30.4	8.2	8.2	20.4	20.4	96.5	96.4	6.5	5.9	8.8	13.1	3	3	78	80	821469	812055	<0.2	<0.2	1.1	1.0
						1.0	0.5	114	30.4		8.2		20.4		96.3		6.5		8.9		2		78				<0.2		1.0	
					Middle	4.5	0.6	103	29.6	29.6	8.2	8.2	22.0	22.0	79.1	78.9	5.3		12.5		3		80				<0.2		1.0	
						4.5	0.6	108	29.6		8.2		22.0		78.7		5.3		12.8		3		80				<0.2		0.9	
					Bottom	7.9	0.5	101	29.3	29.3	8.1	8.1	24.4	24.4	76.3	76.4	5.1	5.1	17.8		4		82				<0.2		0.9	
						7.9	0.5	107	29.3		8.1		24.5		76.5		5.1		17.8		3		82				<0.2		1.0	
SR2	Fine	Moderate	13:00	4.5	Surface	1.0	0.5	104	30.0	30.0	8.2	8.2	21.9	21.9	84.5	84.5	5.7	5.7	12.3	14.8	6	5	78	79	821479	814141	<0.2	<0.2	1.0	0.9
						1.0	0.6	107	30.0		8.2		21.9		84.4		5.7		11.9		4		77				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.5	108	29.5	29.5	8.1	8.1	23.2	23.2	76.4	76.4	5.1	5.1	17.3		6		80				<0.2		0.9	
						3.5	0.5	112	29.5		8.1		23.2		76.3		5.1		17.5		5		80				<0.2		0.8	
SR3	Fine	Moderate	11:59	8.6	Surface	1.0	0.8	190	29.9	29.9	8.1	8.1	18.8	18.8	83.6	83.6	5.7	5.4	8.5	11.8	2	3	-	-	822172	807591	-	-	-	-
						1.0	0.8	205	29.9		8.1		18.8		83.6		5.7		8.5		3		-				-		-	
					Middle	4.3	0.7	193	29.4	29.4	8.1	8.1	21.6	21.6	74.6	74.5	5.1		11.1		3		-				-		-	
						4.3	0.7	201	29.4		8.1		21.6		74.3		5.0		11.2		3		-				-		-	
					Bottom	7.6	0.5	183	29.0	29.0	8.1	8.1	25.4	25.4	72.9	73.0	4.9	4.9	15.8		3		-				-		-	
						7.6	0.5	194	29.0		8.1		25.4		73.0		4.9		15.7		3		-				-		-	
SR4A	Fine	Moderate	13:44	9.0	Surface	1.0	0.1	323	29.8	29.8	8.2	8.2	22.3	22.3	79.1	79.2	5.3	5.1	14.0	18.0	2	4	-	-	817191	807798	-	-	-	-
						1.0	0.1	337	29.8		8.2		22.3		79.2		5.3		14.2		3		-				-		-	
					Middle	4.5	0.2	72	29.3	29.3	8.1	8.1	23.9	23.9	71.7	71.7	4.8		18.2		5		-				-		-	
						4.5	0.2	75	29.3		8.1		24.0		71.7		4.8		18.4		4		-				-		-	
					Bottom	8.0	0.2	68	29.3	29.3	8.1	8.1	24.4	24.4	73.3	73.4	4.9	4.9	21.5		4		-				-		-	
						8.0	0.2	68	29.3		8.1		24.4		73.4		4.9		21.7		5		-				-		-	
SR5A	Fine	Moderate	14:01	5.4	Surface	1.0	0.0	268	30.4	30.4	8.2	8.2	20.7	20.7	95.5	95.4	6.4	6.4	8.8	9.3	4	5	-	-	816574	810694	-	-	-	-
						1.0	0.0	287	30.4		8.2		20.7		95.3		6.4		8.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	261	29.9	29.9	8.2	8.2	21.2	21.2	91.7	91.8	6.2	6.2	9.7		5		-				-		-	
						4.4	0.1	263	29.9		8.2		21.2		91.8		6.2		9.7		6		-				-		-	
SR6	Fine	Moderate	14:26	3.9	Surface	1.0	0.1	83	30.6	30.6	8.2	8.2	19.8	19.8	107.7	107.7	7.2	7.2	12.1	13.8	8	9	-	-	817887	814678	-	-	-	-
						1.0	0.1	88	30.6		8.2		19.8		107.7		7.2		12.2		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	81	30.1	30.1	8.2	8.2	20.6	20.6	101.8	101.9	6.9	6.9	15.4		10		-				-		-	
						2.9	0.1	88	30.1		8.2		20.6		101.9		6.9		15.4		10		-				-		-	
SR7	Fine	Moderate	13:58	19.2	Surface	1.0	0.8	80	30.5	30.5	8.2	8.2	20.2	20.2	103.5	103.5	7.0	6.9	12.4	14.2	6	9	-	-	823645	823744	-	-	-	-
						1.0	0.8	87	30.5		8.2		20.2		103.4		6.9		12.3		8		-				-		-	
					Middle	9.6	0.4	98	30.3	30.3	8.2	8.2	20.5	20.5	100.4	100.3	6.8		13.5		8		-				-		-	
						9.6	0.5	101	30.3		8.2		20.5		100.2		6.7		13.6		9		-				-		-	
					Bottom	18.2	0.2	70	30.1	30.1	8.2	8.2	20.7	20.7	98.9	99.0	6.7	6.7	16.7		11		-				-		-	
						18.2	0.2	76	30.1		8.2		20.7		99.1		6.7		16.7		11		-				-		-	
SR8	Fine	Moderate	12:47	4.2	Surface	1.0	-	-	30.1	30.1	8.2	8.2	21.4	21.4	100.9	100.8	6.8	6.8	7.4	8.5	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.1		8.2		21.4		100.7		6.8		7.4		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	29.4	29.4	8.2	8.2	24.4	24.4	85.3	85.4	5.7	5.7	9.5		4		-				-		-	
						3.2	-	-	29.4		8.2		24.4		85.4		5.7		9.6		3		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	20:07	9.4	Surface	1.0	0.3	51	29.6	29.6	8.2	8.2	22.0	22.1	75.8	75.6	5.1	4.7	10.6	15.3	4	4	78	80	815606	804225	<0.2	<0.2	0.7	0.7
						1.0	0.3	51	29.6		8.2		22.1		75.3		5.1		10.6		3		78				<0.2		0.6	
					Middle	4.7	0.4	44	28.9	28.9	8.1	8.1	27.0	27.0	63.7	63.7	4.2		14.8		5		80				<0.2		0.7	
						4.7	0.4	44	28.9		8.1		27.0		63.6		4.2		15.0		4		80				<0.2		0.5	
					Bottom	8.4	0.4	42	28.8	28.8	8.1	8.1	27.6	27.6	63.4	63.4	4.2	4.2	20.4		5		83				<0.2		0.7	
						8.4	0.4	45	28.8		8.1		27.6		63.4		4.2		20.6		5		82				<0.2		0.7	
C2	Cloudy	Moderate	21:17	11.5	Surface	1.0	0.5	77	29.7	29.7	8.1	8.1	19.7	19.7	80.5	80.4	5.5	5.2	9.3	12.1	4	4	78	80	825684	806926	<0.2	<0.2	0.7	1.1
						1.0	0.5	77	29.7		8.1		19.7		80.2		5.5		9.3		3		78				<0.2		0.5	
					Middle	5.8	0.2	182	29.4	29.3	8.1	8.1	22.1	22.1	71.8	71.7	4.9		12.1		4		80				<0.2		1.4	
						5.8	0.2	182	29.3		8.1		22.1		71.6		4.9		12.0		5		80				<0.2		1.1	
					Bottom	10.5	0.8	116	29.1	29.1	8.1	8.1	24.6	24.6	72.0	72.2	4.8	4.9	14.8		4		82				<0.2		1.5	
						10.5	0.8	123	29.1		8.1		24.6		72.3		4.9		14.8		6		82				<0.2		1.5	
C3	Cloudy	Moderate	19:28	12.6	Surface	1.0	0.5	232	30.0	30.0	8.1	8.1	20.6	20.6	93.4	93.4	6.3	6.3	9.6	12.8	4	5	78	80	822128	817830	<0.2	<0.2	1.3	1.3
						1.0	0.5	254	30.0		8.1		20.6		93.3		6.3		9.7		5		77				<0.2		1.4	
					Middle	6.3	0.6	278	29.9	29.9	8.1	8.1	20.7	20.7	93.7	93.7	6.3		11.3		5		80				<0.2		1.2	
						6.3	0.6	289	29.9		8.1		20.7		93.7		6.3		11.5		4		80				<0.2		1.2	
					Bottom	11.6	0.4	299	29.9	29.9	8.1	8.1	20.7	20.7	93.2	93.2	6.3	6.3	17.3		6		82				<0.2		1.3	
						11.6	0.5	308	29.9		8.1		20.7		93.1		6.3		17.5		6		82				<0.2		1.2	
IM1	Cloudy	Moderate	20:27	5.7	Surface	1.0	0.1	7	29.6	29.6	8.2	8.2	20.2	20.2	88.3	88.2	6.0	6.0	8.9	10.3	6	6	78	80	817929	807111	<0.2	<0.2	1.9	1.7
						1.0	0.1	7	29.6		8.2		20.2		88.1		6.0		9.0		4		78				<0.2		1.7	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.0	310	29.5	29.5	8.1	8.1	22.3	22.3	80.9	81.0	5.5	5.5	11.6		7		81				<0.2		1.6	
						4.7	0.0	337	29.5		8.1		22.3		81.0		5.5		11.6		6		81				<0.2		1.7	
IM2	Cloudy	Moderate	20:35	8.6	Surface	1.0	0.2	45	29.5	29.5	8.2	8.2	20.0	20.0	86.0	86.0	5.9	5.7	7.3	11.1	4	4	78	81	818141	806167	<0.2	<0.2	1.8	1.7
						1.0	0.2	45	29.5		8.2		20.0		85.9		5.9		7.3		4		78				<0.2		1.8	
					Middle	4.3	0.2	18	29.4	29.4	8.1	8.1	21.7	21.7	81.8	81.8	5.5		8.6		5		81				<0.2		1.6	
						4.3	0.3	19	29.4		8.1		21.7		81.7		5.5		8.7		3		81				<0.2		1.8	
					Bottom	7.6	0.2	21	29.3	29.3	8.1	8.1	24.0	24.0	76.8	76.9	5.2	5.2	17.2		4		83				<0.2		1.6	
						7.6	0.2	21	29.3		8.1		24.0		76.9		5.2		17.2		5		83				<0.2		1.7	
IM3	Cloudy	Moderate	20:43	8.6	Surface	1.0	0.3	44	29.6	29.6	8.2	8.2	18.9	18.9	87.8	87.8	6.0	5.6	7.1	11.3	4	4	78	81	818767	805579	<0.2	<0.2	1.8	1.7
						1.0	0.3	46	29.6		8.2		18.9		87.7		6.0		7.1		3		78				<0.2		1.7	
					Middle	4.3	0.3	29	29.3	29.3	8.2	8.2	23.1	23.1	76.7	76.7	5.2		9.0		4		81				<0.2		1.8	
						4.3	0.3	30	29.3		8.2		23.1		76.6		5.2		9.1		5		81				<0.2		1.6	
					Bottom	7.6	0.2	14	29.1	29.1	8.1	8.1	25.4	25.4	73.0	73.1	4.9	4.9	17.7		5		83				<0.2		1.6	
						7.6	0.2	14	29.1		8.1		25.4		73.1		4.9		17.7		5		83				<0.2		1.8	
IM4	Cloudy	Moderate	20:54	8.7	Surface	1.0	0.2	24	29.5	29.5	8.1	8.1	18.7	18.7	79.5	79.4	5.5	5.1	8.5	12.9	3	3	78	81	819736	804610	<0.2	<0.2	2.0	2.0
						1.0	0.2	26	29.5		8.1		18.7		79.2		5.5		8.6		3		78				<0.2		1.9	
					Middle	4.4	0.1	54	29.0	29.0	8.1	8.1	25.7	25.7	68.9	68.9	4.6		13.9		3		81				<0.2		1.9	
						4.4	0.1	58	29.0		8.1		25.7		68.9		4.6		13.9		3		81				<0.2		2.0	
					Bottom	7.7	0.1	95	29.0	29.0	8.1	8.1	25.7	25.7	72.1	72.2	4.8	4.8	16.3		3		83				<0.2		2.0	
						7.7	0.1	95	29.0		8.1		25.7		72.3		4.8		16.4		3		83				<0.2		2.0	
IM5	Cloudy	Moderate	21:04	8.1	Surface	1.0	0.2	33	29.5	29.5	8.1	8.1	19.4	19.4	78.6	78.5	5.4	5.0	8.0	13.2	2	3	77	81	820764	804855	<0.2	<0.2	1.9	2.0
						1.0	0.2	33	29.5		8.1		19.4		78.4		5.4		8.1		2		78				<0.2		1.9	
					Middle	4.1	0.1	57	29.1	29.1	8.1	8.1	24.9	24.9	69.2	69.2	4.6		13.5		3		81				<0.2		2.0	
						4.1	0.1	59	29.1		8.1		24.9		69.2		4.6		13.6		3		81				<0.2		2.0	
					Bottom	7.1	0.1	69	29.0	29.0	8.1	8.1	25.3	25.3	69.1	69.2	4.6	4.6	18.0		4		83				<0.2		2.0	
						7.1	0.1	74	29.0		8.1		25.3		69.2		4.6		18.1		4		83				<0.2		2.0	
IM6	Cloudy	Moderate	21:13	7.9	Surface	1.0	0.2	40	29.5	29.5	8.2	8.2	20.7	20.8	82.2	82.0	5.6	5.2	8.1	13.9	2	3	78	81	821042	805852	<0.2	<0.2	1.6	1.7
						1.0	0.2	40	29.5		8.2		20.9		81.8		5.6		8.2		2		78				<0.2		1.7	
					Middle	4.0	0.2	63	29.2	29.2	8.1	8.1	24.1	24.1	71.1	71.1	4.8		13.4		3		80				<0.2		1.8	
						4.0	0.2	63	29.2		8.1		24.1		71.1		4.8		13.4		3		81				<0.2		1.6	
					Bottom	6.9	0.2	107	29.0	29.0	8.1	8.1	24.8	24.8	70.0	70.1	4.7	4.7	20.1		4		83				<0.2		1.6	
						6.9	0.2	116	29.0		8.1		24.8		70.1		4.7		20.2		3		83				<0.2		1.7	
IM7	Cloudy	Moderate	21:22	9.3	Surface	1.0	0.2	25	29.7	29.7	8.1	8.1	19.6	19.6	83.6	83.5	5.7	5.3	8.1	13.3	3	4	78	81	821333	806859	<0.2	<0.2	1.6	1.6
						1.0	0.2	25	29.7		8.1		19.6		83.4		5.7		8.1		3		78				<0.2		1.7	
					Middle	4.7	0.2	67	29.3	29.3	8.1	8.1	23.0	23.0	72.9	72.9	4.9		13.2		4		81				<0.2		1.6	
						4.7	0.2	69	29.3		8.1		23.0		72.8		4.9		13.4		4		81				<0.2		1.6	
					Bottom	8.3	0.3	114	29.1	29.1	8.1	8.1	24.4	24.4	72.1	72.2	4.8	4.9	18.4		4		83				<0.2		1.6	
						8.3	0.3	114	29.1		8.1		24.4		72.2		4.9		18.5		4		83				<0.2		1.6	
IM8	Cloudy	Moderate	20:52	7.4	Surface	1.0	0.2	199	29.5	29.5	8.1	8.1	19.4	19.4	75.8	75.7	5.2	5.0	10.0	13.2	<2	**<u><2</u>**	78	80	821850	808160	<0.2	<0.2	1.3	1.4
						1.0	0.2	210	29.5		8.1		19.4		75.6		5.2		10.1		<2		78				<0.2		1.4	
					Middle	3.7	0.0	180	29.1	29.1	8.1	8.1	25.0	25.0	69.7	69.7	4.7		14.3		<2		80				<0.2		1.4	
						3.7	0.0	185	29.1		8.1		25.0		69.6		4.7		14.2		<2		80				<0.2		1.3	
					Bottom	6.4	0.1	112	29.0	29.0	8.1	8.1	25.5	25.5	73.4	73.5	4.9	4.9	15.4		<2		82				<0.2		1.5	
						6.4	0.1	114	29.0		8.1		25.5		73.6		4.9		15.2		<2		82				<0.2		1.4	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 28 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	20:44	6.9	Surface	1.0	0.1	133	29.5	29.5	8.1	8.1	19.6	19.6	80.0	79.8	5.5	5.0	8.9	12.9	<2	2	78	80	822075	808815	<0.2	<0.2	1.2	1.3
						1.0	0.1	144	29.5		8.1		19.6		79.6		5.5		9.0		<2		78				<0.2		1.3	
					Middle	3.5	0.0	320	29.0	29.0	8.1	8.1	26.0	26.0	67.7	67.8	4.5		13.4		<2		80				<0.2		1.3	
						3.5	0.0	346	29.0		8.1		26.0		67.8		4.5		13.4		<2		80				<0.2		1.3	
					Bottom	5.9	0.2	60	29.0	29.0	8.1	8.1	26.0	26.0	69.6	69.7	4.6	4.7	16.4		3		82				<0.2		1.3	
						5.9	0.2	60	29.0		8.1		26.0		69.8		4.7		16.4		<2		82				<0.2		1.3	
IM10	Cloudy	Moderate	20:38	7.6	Surface	1.0	0.1	349	29.6	29.6	8.1	8.1	19.1	19.1	87.0	86.9	6.0	5.7	8.9	11.6	2	3	78	80	822393	809765	<0.2	<0.2	1.4	1.4
						1.0	0.2	321	29.6		8.1		19.1		86.8		6.0		9.0		<2		78				<0.2		1.3	
					Middle	3.8	0.3	30	29.4	29.4	8.1	8.1	22.0	22.0	80.2	80.1	5.4		8.8		3		80				<0.2		1.5	
						3.8	0.4	30	29.4		8.1		22.0		80.0		5.4		8.8		<2		80				<0.2		1.3	
					Bottom	6.6	0.3	321	29.1	29.1	8.1	8.1	25.5	25.5	76.6	76.8	5.1	5.1	17.1		3		82				<0.2		1.5	
						6.6	0.3	331	29.1		8.1		25.5		76.9		5.1		17.1		3		82				<0.2		1.3	
IM11	Cloudy	Moderate	20:32	7.7	Surface	1.0	0.5	311	29.6	29.6	8.1	8.1	19.8	19.8	86.3	86.3	5.9	5.7	8.0	8.8	<2	2	78	80	822048	811448	<0.2	<0.2	1.5	1.4
						1.0	0.5	329	29.6		8.1		19.8		86.2		5.9		8.0		2		78				<0.2		1.3	
					Middle	3.9	0.6	319	29.4	29.4	8.1	8.1	21.8	21.8	81.3	81.3	5.5		8.6		<2		80				<0.2		1.5	
						3.9	0.6	332	29.4		8.1		21.8		81.2		5.5		8.6		<2		80				<0.2		1.4	
					Bottom	6.7	0.4	283	29.3	29.3	8.1	8.1	23.7	23.7	81.7	81.9	5.5	5.5	9.8		2		82				<0.2		1.4	
						6.7	0.4	304	29.3		8.1		23.7		82.0		5.5		9.8		2		82				<0.2		1.4	
IM12	Cloudy	Moderate	20:23	8.0	Surface	1.0	0.5	265	29.6	29.6	8.1	8.1	20.5	20.5	80.8	80.6	5.5	5.4	12.2	14.9	<2	2	78	80	821477	812061	<0.2	<0.2	1.4	1.4
						1.0	0.6	283	29.6		8.1		20.5		80.4		5.5		12.4		<2		78				<0.2		1.4	
					Middle	4.0	0.6	290	29.5	29.5	8.1	8.1	22.3	22.3	76.6	76.6	5.2		15.1		<2		80				<0.2		1.4	
						4.0	0.6	301	29.5		8.1		22.4		76.6		5.2		15.3		2		80				<0.2		1.6	
					Bottom	7.0	0.3	287	29.4	29.4	8.1	8.1	23.6	23.6	78.6	78.9	5.3	5.3	17.4		<2		83				<0.2		1.4	
						7.0	0.4	295	29.4		8.1		23.6		79.1		5.3		17.1		2		82				<0.2		1.4	
SR2	Cloudy	Moderate	19:58	4.4	Surface	1.0	0.1	287	29.6	29.6	8.1	8.1	20.5	20.5	87.4	87.4	5.9	6.0	10.3	10.6	3	4	78	79	821487	814153	<0.2	<0.2	1.3	1.3
						1.0	0.1	313	29.6		8.1		20.5		87.4		6.0		10.4		3		78				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	331	29.6	29.6	8.1	8.1	21.1	21.1	88.6	88.7	6.0	6.0	10.9		4		80				<0.2		1.2	
						3.4	0.2	352	29.6		8.1		21.1		88.8		6.0		10.9		4		80				<0.2		1.2	
SR3	Cloudy	Moderate	21:01	8.9	Surface	1.0	0.5	169	29.4	29.4	8.1	8.1	21.8	21.8	75.4	75.4	5.1	4.9	10.3	13.7	3	3	-	-	822162	807590	-	-	-	-
						1.0	0.5	169	29.4		8.1		21.8		75.3		5.1		10.4		3		-				-		-	
					Middle	4.5	0.3	231	29.2	29.2	8.1	8.1	23.8	23.8	68.9	68.9	4.6		14.3		3		-				-		-	
						4.5	0.3	244	29.2		8.1		23.8		68.9		4.6		14.4		3		-				-		-	
					Bottom	7.9	0.2	275	29.1	29.1	8.1	8.1	25.0	25.0	69.7	69.7	4.7	4.7	16.5		3		-				-		-	
						7.9	0.3	288	29.1		8.1		25.0		69.7		4.7		16.5		5		-				-		-	
SR4A	Cloudy	Moderate	19:41	9.8	Surface	1.0	0.4	70	29.6	29.6	8.2	8.2	20.2	20.2	90.0	90.0	6.1	6.1	8.6	12.4	4	4	-	-	817213	807802	-	-	-	-
						1.0	0.5	74	29.6		8.2		20.2		89.9		6.1		8.6		4		-				-		-	
					Middle	4.9	0.4	67	29.5	29.5	8.2	8.2	20.5	20.5	87.9	87.9	6.0		11.1		5		-				-		-	
						4.9	0.5	71	29.5		8.2		20.5		87.8		6.0		11.2		3		-				-		-	
					Bottom	8.8	0.3	67	29.5	29.5	8.1	8.1	21.4	21.4	87.9	88.0	6.0	6.0	17.5		4		-				-		-	
						8.8	0.4	70	29.5		8.1		21.4		88.1		6.0		17.5		5		-				-		-	
SR5A	Cloudy	Moderate	19:21	5.9	Surface	1.0	0.1	89	30.0	30.0	8.2	8.2	20.4	20.4	95.1	95.1	6.4	6.4	8.6	10.0	3	4	-	-	816577	810689	-	-	-	-
						1.0	0.1	89	30.0		8.2		20.4		95.1		6.4		8.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.1	52	29.9	29.9	8.2	8.2	20.7	20.7	94.3	94.4	6.4	6.4	11.4		4		-				-		-	
						4.9	0.1	52	29.9		8.2		20.7		94.4		6.4		11.3		3		-				-		-	
SR6	Cloudy	Moderate	18:53	5.3	Surface	1.0	0.1	262	29.7	29.7	8.0	8.0	18.7	18.7	86.4	86.4	5.9	5.9	8.1	9.2	3	3	-	-	817892	814681	-	-	-	-
						1.0	0.1	278	29.7		8.0		18.7		86.4		5.9		8.1		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	54	29.6	29.6	8.0	8.0	20.1	20.1	85.6	85.6	5.8	5.8	10.3		3		-				-		-	
						4.3	0.1	54	29.6		8.0		20.1		85.6		5.8		10.3		4		-				-		-	
SR7	Cloudy	Moderate	18:53	21.3	Surface	1.0	0.1	254	29.7	29.7	8.0	8.0	18.8	18.8	82.1	82.1	5.6	5.5	13.0	15.6	3	4	-	-	823612	823761	-	-	-	-
						1.0	0.1	266	29.7		8.0		18.8		82.0		5.6		13.2		3		-				-		-	
					Middle	10.7	0.1	211	29.6	29.6	8.0	8.0	19.8	19.8	79.3	79.3	5.4		15.4		4		-				-		-	
						10.7	0.2	222	29.6		8.0		19.8		79.3		5.4		15.5		3		-				-		-	
					Bottom	20.3	0.1	276	29.6	29.6	8.0	8.0	21.1	21.1	78.2	78.2	5.3	5.3	18.1		4		-				-		-	
						20.3	0.1	276	29.6		8.0		21.1		78.2		5.3		18.2		4		-				-		-	
SR8	Cloudy	Moderate	20:15	4.1	Surface	1.0	-	-	29.5	29.5	8.1	8.1	22.5	22.5	82.1	82.1	5.5	5.5	9.1	9.1	2	2	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.5		8.1		22.5		82.0		5.5		9.1		<2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	29.3	29.3	8.1	8.1	24.3	24.3	83.6	83.6	5.6	5.6	9.1		2		-				-		-	
						3.1	-	-	29.3		8.1		24.2		83.5		5.6		9.1		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 31 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	15:14	9.0	Surface	1.0	0.5	224	30.5	30.5	8.3	8.3	16.6	16.6	112.2	112.2	7.7	6.8	7.6	11.0	4	4	86	92	815600	804210	<0.2	<0.2	1.7	1.6
						1.0	0.5	230	30.5		8.3		16.6		112.1		7.7		7.6		3		87				<0.2		1.5	
					Middle	4.5	0.8	210	29.7	29.7	8.2	8.2	23.0	23.1	86.3	86.3	5.8		8.8		3		92				<0.2		1.6	
						4.5	0.9	213	29.7		8.2		23.1		86.2		5.8		8.9		5		92				<0.2		1.7	
					Bottom	8.0	0.4	209	29.4	29.4	8.1	8.1	26.0	25.7	71.9	72.0	4.8	4.8	16.5		4		96				<0.2		1.7	
						8.0	0.4	214	29.4		8.1		25.5		72.0		4.8		16.5		5		96				<0.2		1.5	
C2	Fine	Moderate	13:23	12.4	Surface	1.0	0.3	141	30.7	30.7	8.0	8.0	17.8	17.8	89.1	89.1	6.0	5.5	10.2	26.8	4	5	87	89	825708	806935	<0.2	<0.2	1.9	1.9
						1.0	0.4	150	30.7		8.0		17.8		89.0		6.0		10.2		4		87				<0.2		1.9	
					Middle	6.2	0.3	166	30.2	30.2	8.0	8.0	20.4	20.4	74.5	74.5	5.0		14.3		4		89				<0.2		2.0	
						6.2	0.3	170	30.2		8.0		20.4		74.4		5.0		14.5		6		90				<0.2		1.8	
					Bottom	11.4	0.5	150	29.2	29.2	8.0	8.0	26.0	26.0	66.9	67.0	4.4	4.5	55.7		5		91				<0.2		2.0	
						11.4	0.5	153	29.2		8.0		26.0		67.0		4.5		55.8		6		91				<0.2		1.9	
C3	Fine	Moderate	14:53	12.0	Surface	1.0	0.4	115	30.1	30.1	8.1	8.1	22.2	22.2	90.5	90.5	6.0	6.0	10.5	11.3	6	6	90	93	822096	817790	<0.2	<0.2	1.7	1.6
						1.0	0.4	125	30.1		8.1		22.2		90.4		6.0		10.5		4		90				<0.2		1.6	
					Middle	6.0	0.2	73	30.1	30.1	8.1	8.1	22.7	22.7	87.8	87.8	5.9		10.9		7		93				<0.2		1.6	
						6.0	0.3	77	30.1		8.1		22.7		87.7		5.9		10.9		6		93				<0.2		1.7	
					Bottom	11.0	0.4	27	29.8	29.8	8.0	8.0	23.5	23.5	81.7	81.7	5.5	5.5	12.5		8		95				<0.2		1.6	
						11.0	0.5	29	29.7		8.0		23.6		81.7		5.5		12.7		6		95				<0.2		1.6	
IM1	Fine	Moderate	14:50	5.1	Surface	1.0	0.2	164	30.8	30.8	8.3	8.3	15.6	15.6	108.2	108.2	7.4	7.4	8.2	10.9	6	6	87	90	817952	807142	<0.2	<0.2	1.7	1.6
						1.0	0.2	172	30.8		8.3		15.6		108.1		7.4		8.2		4		87				<0.2		1.8	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	208	29.9	29.9	8.1	8.1	22.1	22.1	80.8	80.9	5.4	5.4	13.6		6		93				<0.2		1.4	
						4.1	0.2	226	29.9		8.1		22.0		80.9		5.4		13.7		7		93				<0.2		1.3	
IM2	Fine	Moderate	14:43	7.6	Surface	1.0	0.5	189	30.5	30.5	8.2	8.2	18.3	18.3	101.6	101.5	6.9	6.4	8.6	15.5	7	8	86	92	818183	806185	<0.2	<0.2	1.5	1.5
						1.0	0.5	205	30.5		8.2		18.3		101.4		6.9		8.6		8		87				<0.2		1.5	
					Middle	3.8	0.6	202	30.1	30.1	8.2	8.2	20.8	20.8	86.8	86.7	5.8		11.5		8		93				<0.2		1.5	
						3.8	0.6	208	30.1		8.2		20.8		86.5		5.8		11.6		8		93				<0.2		1.5	
					Bottom	6.6	0.1	164	29.1	29.1	8.1	8.1	26.9	26.9	66.0	66.1	4.4	4.4	26.1		10		96				<0.2		1.3	
						6.6	0.1	171	29.1		8.1		26.9		66.1		4.4		26.3		8		96				<0.2		1.4	
IM3	Fine	Moderate	14:35	7.9	Surface	1.0	0.4	152	31.0	31.0	8.3	8.3	16.8	16.8	108.9	108.9	7.4	6.5	8.5	13.9	9	10	86	92	818787	805557	<0.2	<0.2	1.4	1.5
						1.0	0.4	159	31.0		8.3		16.8		108.8		7.4		8.5		7		87				<0.2		1.6	
					Middle	4.0	0.3	210	29.8	29.8	8.1	8.1	22.2	22.2	81.4	81.4	5.5		11.6		10		93				<0.2		1.4	
						4.0	0.3	223	29.8		8.1		22.2		81.4		5.5		11.6		10		93				<0.2		1.6	
					Bottom	6.9	0.3	179	29.4	29.4	8.1	8.1	25.4	25.4	69.8	69.9	4.6	4.6	21.7		12		97				<0.2		1.5	
						6.9	0.3	185	29.4		8.1		25.3		69.9		4.6		21.5		11		96				<0.2		1.5	
IM4	Fine	Moderate	14:26	8.0	Surface	1.0	0.5	186	30.9	30.9	8.2	8.2	16.3	16.3	104.7	104.7	7.1	6.7	7.8	22.2	6	7	87	92	819723	804639	<0.2	<0.2	1.5	1.5
						1.0	0.5	199	31.0		8.2		16.3		104.6		7.1		7.8		6		86				<0.2		1.6	
					Middle	4.0	0.4	180	30.0	30.1	8.2	8.2	21.2	21.2	93.5	93.6	6.3		10.7		7		93				<0.2		1.6	
						4.0	0.4	192	30.1		8.2		21.1		93.6		6.3		10.7		7		93				<0.2		1.2	
					Bottom	7.0	0.4	168	29.3	29.3	8.1	8.1	25.6	25.6	68.1	68.2	4.5	4.5	48.3		7		96				<0.2		1.7	
						7.0	0.4	172	29.3		8.1		25.6		68.2		4.5		48.0		8		96				<0.2		1.4	
IM5	Fine	Moderate	14:16	7.6	Surface	1.0	0.3	165	30.9	30.9	8.2	8.2	16.0	16.0	103.2	103.2	7.0	6.1	7.8	16.7	5	5	86	92	820703	804889	<0.2	<0.2	1.6	1.5
						1.0	0.3	167	30.9		8.2		16.0		103.1		7.0		7.8		4		87				<0.2		1.6	
					Middle	3.8	0.4	189	29.7	29.7	8.1	8.1	23.2	23.2	77.2	77.3	5.2		14.0		5		93				<0.2		1.6	
						3.8	0.4	199	29.7		8.1		23.2		77.3		5.2		14.1		6		93				<0.2		1.7	
					Bottom	6.6	0.2	177	29.4	29.4	8.1	8.1	25.3	25.3	67.8	67.9	4.5	4.5	28.3		5		96				<0.2		1.3	
						6.6	0.2	192	29.4		8.1		25.3		68.0		4.5		28.4		7		96				<0.2		1.4	
IM6	Fine	Moderate	14:06	7.4	Surface	1.0	0.3	177	30.9	30.9	8.1	8.1	14.9	14.9	98.8	98.8	6.8	6.3	8.0	14.1	3	5	87	93	821059	805838	<0.2	<0.2	1.7	1.7
						1.0	0.3	180	30.9		8.1		14.9		98.7		6.8		8.0		4		87				<0.2		1.9	
					Middle	3.7	0.1	190	29.8	29.8	8.2	8.2	21.5	21.6	84.0	84.0	5.7		9.9		5		93				<0.2		1.7	
						3.7	0.2	194	29.8		8.2		21.8		83.9		5.7		10.0		6		93				<0.2		1.6	
					Bottom	6.4	0.3	162	29.4	29.4	8.1	8.1	24.8	24.8	71.2	71.3	4.7	4.8	24.3		6		97				<0.2		1.7	
						6.4	0.3	174	29.4		8.1		24.8		71.4		4.8		24.3		7		98				<0.2		1.5	
IM7	Fine	Moderate	13:57	9.0	Surface	1.0	0.2	181	31.1	31.1	8.2	8.2	14.0	14.0	101.6	101.6	7.0	6.6	7.7	10.3	5	5	86	92	821359	806848	<0.2	<0.2	1.8	1.6
						1.0	0.2	193	31.1		8.2		14.0		101.6		7.0		7.7		5		86				<0.2		1.7	
					Middle	4.5	0.2	209	30.1	30.1	8.2	8.2	19.9	19.9	90.0	90.0	6.1		9.2		5		93				<0.2		1.7	
						4.5	0.2	215	30.1		8.2		19.9		89.9		6.1		9.2		5		93				<0.2		1.6	
					Bottom	8.0	0.1	123	29.6	29.6	8.1	8.1	23.9	23.9	73.3	73.3	4.9	4.9	13.9		6		97				<0.2		1.6	
						8.0	0.2	129	29.6		8.1		23.9		73.3		4.9		13.9		6		97				<0.2		1.4	
IM8	Fine	Moderate	13:50	8.3	Surface	1.0	0.3	154	30.8	30.8	8.0	8.0	17.3	17.3	89.5	89.5	6.1	5.7	9.7	12.0	4	5	87	89	821856	808159	<0.2	<0.2	1.9	1.8
						1.0	0.3	168	30.8		8.0		17.3		89.5		6.1		9.7		5		87				<0.2		1.8	
					Middle	4.2	0.2	149	30.1	30.1	8.0	8.0	20.4	20.4	77.0	77.0	5.2		13.6		6		89				<0.2		1.8	
						4.2	0.3	154	30.1		8.0		20.4		77.0		5.2		13.7		5		89				<0.2		1.8	
					Bottom	7.3	0.2	79	30.0	30.0	8.0	8.0	21.2	21.2	78.7	78.8	5.3	5.3	12.7		6		92				<0.2		1.7	
						7.3	0.2	82	30.0		8.0		21.2		78.8		5.3		12.7		5		92				<0.2		1.8	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 July 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	13:56	7.9	Surface	1.0	0.4	127	30.7	30.7	8.1	8.1	17.2	17.2	94.3	94.3	6.4	5.8	9.4	13.3	5	5	87	89	822118	808788	<0.2	<0.2	1.8	1.8
						1.0	0.5	130	30.7		8.1		17.2		94.2		6.4		9.4		5		87				<0.2		1.7	
					Middle	4.0	0.4	125	30.1	30.1	8.0	8.0	20.4	20.4	76.9	76.9	5.2		14.3		5		89				<0.2		1.7	
						4.0	0.5	133	30.1		8.0		20.4		76.8		5.2		14.3		5		89				<0.2		1.8	
					Bottom	6.9	0.3	88	29.9	29.9	8.0	8.0	21.7	21.7	78.1	78.2	5.3	5.3	16.2		6		92				<0.2		1.8	
						6.9	0.3	88	29.9		8.0		21.6		78.2		5.3		16.2		6		92				<0.2		1.8	
IM10	Fine	Moderate	14:04	7.4	Surface	1.0	0.7	110	30.8	30.8	8.1	8.1	16.0	16.0	96.4	96.4	6.6	6.1	9.1	16.9	3	5	87	90	822413	809806	<0.2	<0.2	2.0	1.9
						1.0	0.8	113	30.8		8.1		16.0		96.3		6.6		9.1		4		87				<0.2		1.9	
					Middle	3.7	0.7	112	30.4	30.4	8.0	8.0	18.9	18.9	81.8	81.7	5.5		14.6		4		89				<0.2		1.9	
						3.7	0.7	115	30.4		8.0		18.9		81.5		5.5		15.7		6		89				<0.2		1.8	
					Bottom	6.4	0.3	105	30.2	30.2	8.0	8.0	20.0	20.0	79.5	79.5	5.4	5.4	26.3		5		93				<0.2		1.9	
						6.4	0.4	114	30.2		8.0		20.0		79.5		5.4		26.7		6		93				<0.2		2.0	
IM11	Fine	Moderate	14:14	9.4	Surface	1.0	0.9	110	31.0	31.0	8.1	8.1	16.2	16.2	99.6	99.4	6.8	6.6	8.8	12.8	3	4	89	93	822030	811455	<0.2	<0.2	2.0	2.1
						1.0	1.0	110	31.0		8.1		16.2		99.2		6.8		8.9		4		90				<0.2		2.0	
					Middle	4.7	0.7	98	30.6	30.6	8.1	8.1	18.1	18.1	92.4	92.4	6.3		11.1		4		91				<0.2		2.0	
						4.7	0.7	107	30.6		8.1		18.1		92.4		6.3		11.1		4		91				<0.2		2.1	
					Bottom	8.4	0.4	100	30.3	30.3	8.0	8.0	19.7	19.7	86.0	86.0	5.8	5.8	18.4		6		94				<0.2		2.0	
						8.4	0.4	108	30.3		8.0		19.7		85.9		5.8		18.5		4		100				<0.2		2.2	
IM12	Fine	Moderate	14:20	10.7	Surface	1.0	0.7	94	30.9	30.9	8.1	8.1	17.3	17.3	97.2	97.2	6.6	6.6	9.4	15.6	2	3	89	91	821452	812020	<0.2	<0.2	1.9	1.9
						1.0	0.7	96	30.9		8.1		17.3		97.2		6.6		9.5		2		89				<0.2		1.9	
					Middle	5.4	0.8	89	30.5	30.5	8.0	8.0	20.3	20.3	96.6	96.6	6.5		15.4		4		91				<0.2		1.8	
						5.4	0.8	91	30.5		8.0		20.3		96.6		6.5		15.4		3		92				<0.2		2.0	
					Bottom	9.7	0.4	88	30.2	30.2	8.0	8.0	20.4	20.4	84.3	84.4	5.7	5.7	21.9		3		93				<0.2		1.9	
						9.7	0.4	94	30.2		8.0		20.4		84.4		5.7		21.7		4		94				<0.2		1.9	
SR2	Fine	Moderate	14:36	4.1	Surface	1.0	0.6	90	31.0	31.0	8.1	8.1	17.5	17.5	98.4	98.3	6.6	6.6	9.7	10.9	3	4	87	88	821488	814195	<0.2	<0.2	2.0	2.0
						1.0	0.6	91	31.0		8.1		17.5		98.1		6.6		9.8		4		87				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	82	30.3	30.3	8.0	8.0	19.8	19.8	89.9	90.0	6.1	6.1	12.2		4		89				<0.2		2.0	
						3.1	0.4	85	30.3		8.0		19.8		90.1		6.1		11.9		5		90				<0.2		1.8	
SR3	Fine	Moderate	13:43	9.5	Surface	1.0	0.2	172	30.4	30.4	8.0	8.0	18.8	18.8	84.1	84.1	5.7	5.5	11.2	14.1	6	6	-	-	822139	807551	-	-	-	-
						1.0	0.2	172	30.4		8.0		18.8		84.1		5.7		11.1		6		-				-		-	
					Middle	4.8	0.2	201	30.1	30.1	8.0	8.0	20.9	20.9	76.7	76.8	5.2		14.6		7		-				-		-	
						4.8	0.2	217	30.1		8.0		20.9		76.9		5.2		14.7		5		-				-		-	
					Bottom	8.5	0.0	84	30.0	30.0	8.0	8.0	21.2	21.2	77.6	77.6	5.2	5.2	16.5		6		-				-		-	
						8.5	0.0	88	30.0		8.0		21.2		77.6		5.2		16.5		7		-				-		-	
SR4A	Fine	Moderate	15:43	8.8	Surface	1.0	0.0	231	30.4	30.4	8.2	8.2	18.0	18.0	87.8	87.6	6.0	5.2	11.5	17.5	6	6	-	-	817183	807803	-	-	-	-
						1.0	0.0	250	30.4		8.2		17.9		87.4		6.0		11.5		4		-				-		-	
					Middle	4.4	0.1	81	29.3	29.3	8.1	8.1	26.4	26.4	64.2	64.2	4.3		19.5		6		-				-		-	
						4.4	0.1	84	29.3		8.1		26.4		64.2		4.3		19.5		6		-				-		-	
					Bottom	7.8	0.1	59	29.2	29.2	8.1	8.1	26.8	26.8	65.5	65.6	4.3	4.3	21.5		7		-				-		-	
						7.8	0.1	64	29.2		8.1		26.8		65.6		4.3		21.5		6		-				-		-	
SR5A	Fine	Moderate	16:00	4.6	Surface	1.0	0.1	153	31.2	31.2	8.3	8.3	19.1	19.1	122.7	122.7	8.2	8.2	9.0	10.0	7	7	-	-	816635	810680	-	-	-	-
						1.0	0.1	163	31.2		8.3		19.1		122.6		8.2		9.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	4	30.9	30.9	8.2	8.2	20.2	20.2	103.9	104.0	6.9	6.9	11.0		7		-				-		-	
						3.6	0.0	4	30.9		8.2		20.2		104.0		6.9		11.0		7		-				-		-	
SR6	Fine	Moderate	16:26	4.0	Surface	1.0	0.1	47	31.1	31.1	8.3	8.3	19.8	19.8	126.3	126.1	8.4	8.4	11.6	11.7	10	10	-	-	817925	814625	-	-	-	-
						1.0	0.1	50	31.1		8.3		19.8		125.9		8.4		11.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	34	30.8	30.8	8.2	8.2	20.3	20.3	116.4	116.7	7.8	7.8	11.7		11		-				-		-	
						3.0	0.0	36	30.8		8.2		20.3		116.9		7.8		11.7		10		-				-		-	
SR7	Fine	Moderate	15:16	20.6	Surface	1.0	0.8	88	31.2	31.2	8.3	8.3	19.7	19.7	121.8	121.8	8.1	6.5	8.4	9.1	6	6	-	-	823663	823749	-	-	-	-
						1.0	0.8	90	31.2		8.3		19.7		121.8		8.1		8.4		5		-				-		-	
					Middle	10.3	0.5	97	29.1	29.1	8.0	8.0	25.9	25.9	72.8	72.8	4.8		9.7		6		-				-		-	
						10.3	0.5	104	29.1		8.0		25.9		72.8		4.8		9.7		6		-				-		-	
					Bottom	19.6	0.2	74	29.0	29.0	8.0	8.0	26.4	26.4	72.0	72.0	4.8	4.8	9.1		7		-				-		-	
						19.6	0.2	75	29.0		8.0		26.4		72.0		4.8		9.1		6		-				-		-	
SR8	Fine	Moderate	14:28	3.7	Surface	1.0	-	-	30.9	30.9	8.1	8.1	17.2	17.2	99.9	99.9	6.8	6.8	9.7	10.4	6	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.9		8.1		17.2		99.9		6.8		9.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	30.6	30.6	8.1	8.1	18.0	18.0	96.7	96.8	6.6	6.6	11.1		5		-				-		-	
						2.7	-	-	30.6		8.1		18.0		96.8		6.6		11.2		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 31 July 18 during Mid-Flood Tide

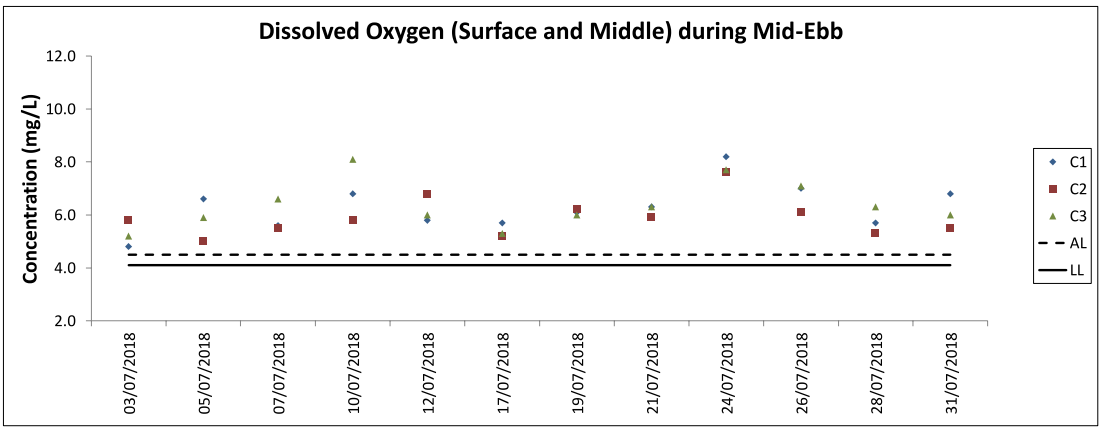
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	08:49	9.3	Surface	1.0	0.3	15	29.7	29.7	8.1	8.1	15.6	15.6	83.6	83.5	5.8	5.3	10.7	17.2	5	7	90	96	815604	804267	<0.2	<0.2	1.4	1.4
						1.0	0.3	15	29.7		8.1		15.6		83.4		5.8		10.7		4		90				<0.2		1.2	
					Middle	4.7	0.3	1	29.4	29.4	8.1	8.1	25.2	25.2	70.3	70.3	4.7		16.6		8		96				<0.2		1.4	
						4.7	0.3	1	29.4		8.1		25.2		70.3		4.7		16.6		8		96				<0.2		1.1	
					Bottom	8.3	0.3	3	29.1	29.1	8.1	8.1	27.4	27.4	64.9	65.0	4.3	4.3	24.2		9		101				<0.2		1.6	
						8.3	0.3	3	29.1		8.1		27.4		65.0		4.3		24.5		9		100				<0.2		1.4	
C2	Fine	Moderate	09:30	12.8	Surface	1.0	0.4	3	30.4	30.4	8.0	8.0	16.9	16.9	80.6	80.5	5.5	5.3	9.4	15.9	4	5	87	90	825672	806928	<0.2	<0.2	2.3	2.3
						1.0	0.5	3	30.4		8.0		16.9		80.4		5.5		9.5		5		88				<0.2		2.1	
					Middle	6.4	0.5	341	30.4	30.4	8.0	8.0	20.2	20.2	74.7	74.6	5.0		12.9		5		89				<0.2		2.4	
						6.4	0.5	346	30.4		8.0		20.2		74.4		5.0		13.1		5		89				<0.2		2.3	
					Bottom	11.8	0.4	333	29.9	29.9	8.0	8.0	22.7	22.6	69.6	70.1	4.7	4.7	25.3		5		93				<0.2		2.1	
						11.8	0.4	337	29.9		8.0		22.6		70.5		4.7		25.2		6		93				<0.2		2.4	
C3	Cloudy	Moderate	07:30	11.5	Surface	1.0	0.5	271	30.3	30.3	8.0	8.0	19.1	19.0	82.3	82.2	5.6	5.4	8.9	10.0	4	6	87	91	822127	817810	<0.2	<0.2	2.2	2.0
						1.0	0.5	284	30.3		8.0		19.0		82.1		5.6		8.9		6		87				<0.2		2.0	
					Middle	5.8	0.4	253	29.9	29.9	8.0	8.0	22.4	22.4	77.7	77.7	5.2		9.6		6		91				<0.2		2.0	
						5.8	0.4	272	29.9		8.0		22.4		77.7		5.2		9.7		6		91				<0.2		2.0	
					Bottom	10.5	0.4	268	29.3	29.3	8.0	8.0	25.5	25.5	76.1	76.2	5.1	5.1	11.3		7		94				<0.2		2.0	
						10.5	0.4	275	29.3		8.0		25.5		76.2		5.1		11.4		6		94				<0.2		2.0	
IM1	Sunny	Moderate	08:23	5.7	Surface	1.0	0.4	26	29.8	29.8	8.1	8.1	17.9	17.9	93.2	93.2	6.4	6.4	7.6	8.2	8	9	86	88	817964	807115	<0.2	<0.2	1.8	1.6
						1.0	0.4	27	29.8		8.1		17.9		93.1		6.4		7.7		9		86				<0.2		1.6	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.4	357	30.0	30.0	8.1	8.1	21.4	21.3	88.3	88.3	5.9	6.0	8.7		10		90				<0.2		1.5	
						4.7	0.4	328	30.0		8.1		21.1		88.3		6.0		8.7		10		89				<0.2		1.4	
IM2	Sunny	Moderate	08:16	7.9	Surface	1.0	0.4	26	29.8	29.8	8.1	8.1	18.5	18.5	89.9	89.9	6.2	6.0	7.7	14.8	11	12	89	92	818156	806146	<0.2	<0.2	1.7	1.7
						1.0	0.5	28	29.8		8.1		18.5		89.8		6.2		7.8		10		89				<0.2		1.8	
					Middle	4.0	0.3	12	30.2	30.2	8.1	8.1	19.9	19.9	84.9	84.8	5.7		10.3		11		92				<0.2		1.6	
						4.0	0.3	12	30.2		8.1		19.9		84.7		5.7		10.4		12		92				<0.2		1.7	
					Bottom	6.9	0.4	354	29.8	29.8	8.1	8.1	23.1	23.1	77.4	77.5	5.2	5.2	26.2		13		96				<0.2		1.6	
						6.9	0.4	326	29.8		8.1		23.1		77.5		5.2		26.3		15		96				<0.2		1.6	
IM3	Sunny	Moderate	08:09	8.1	Surface	1.0	0.5	4	29.7	29.7	8.1	8.1	17.4	17.4	88.8	88.8	6.1	5.9	7.1	8.9	13	14	90	94	818800	805605	<0.2	<0.2	2.0	1.8
						1.0	0.5	4	29.7		8.1		17.4		88.7		6.1		7.1		13		90				<0.2		1.9	
					Middle	4.1	0.4	348	30.1	30.1	8.1	8.1	19.3	19.3	83.1	83.1	5.6		8.4		13		96				<0.2		1.7	
						4.1	0.4	320	30.1		8.1		19.3		83.0		5.6		8.4		14		96				<0.2		1.7	
					Bottom	7.1	0.3	305	29.9	29.9	8.1	8.1	21.6	21.7	75.4	75.4	5.1	5.1	11.1		14		97				<0.2		1.7	
						7.1	0.3	312	29.9		8.1		21.7		75.4		5.1		11.3		15		97				<0.2		1.7	
IM4	Sunny	Moderate	08:00	8.0	Surface	1.0	0.6	40	29.7	29.7	8.0	8.0	15.9	15.9	85.2	85.2	5.9	5.7	8.3	13.4	4	5	90	95	819736	804621	<0.2	<0.2	2.2	1.8
						1.0	0.7	41	29.7		8.0		15.9		85.1		5.9		8.3		5		90				<0.2		2.1	
					Middle	4.0	0.8	38	29.9	29.9	8.1	8.1	18.6	18.6	80.9	80.9	5.5		10.3		5		95				<0.2		1.8	
						4.0	0.8	40	29.9		8.1		18.6		80.8		5.5		10.4		5		96				<0.2		1.7	
					Bottom	7.0	0.4	30	29.2	29.2	8.0	8.0	25.6	25.6	64.0	64.1	4.3	4.3	21.6		6		98				<0.2		1.5	
						7.0	0.4	30	29.2		8.0		25.5		64.1		4.3		21.4		7		98				<0.2		1.6	
IM5	Sunny	Moderate	07:50	7.4	Surface	1.0	0.0	149	29.8	29.8	8.0	8.0	16.6	16.6	84.7	84.7	5.9	5.6	7.7	11.8	5	6	90	93	820758	804846	<0.2	<0.2	2.1	1.7
						1.0	0.0	155	29.8		8.0		16.6		84.6		5.9		7.7		5		90				<0.2		2.0	
					Middle	3.7	0.1	243	30.0	30.0	8.1	8.1	20.3	20.3	78.2	78.2	5.3		9.0		6		91				<0.2		1.6	
						3.7	0.1	250	30.0		8.1		20.3		78.2		5.3		9.1		7		92				<0.2		1.6	
					Bottom	6.4	0.1	255	29.6	29.6	8.0	8.0	23.0	23.0	71.1	71.2	4.8	4.8	18.6		6		97				<0.2		1.4	
						6.4	0.1	269	29.6		8.0		23.1		71.2		4.8		18.6		7		96				<0.2		1.5	
IM6	Sunny	Moderate	07:42	7.3	Surface	1.0	0.0	305	30.2	30.2	8.1	8.1	17.8	17.8	84.1	84.1	5.8	5.7	8.6	12.9	4	6	89	94	821051	805823	<0.2	<0.2	2.2	1.9
						1.0	0.0	323	30.2		8.1		17.8		84.1		5.8		8.6		5		90				<0.2		2.1	
					Middle	3.7	0.1	294	30.2	30.2	8.1	8.1	18.6	18.6	80.6	80.6	5.5		10.9		7		96				<0.2		1.9	
						3.7	0.1	310	30.2		8.1		18.6		80.6		5.5		11.0		6		95				<0.2		2.0	
					Bottom	6.3	0.1	299	30.0	30.0	8.1	8.1	20.8	20.9	77.3	77.4	5.2	5.2	19.1		7		98				<0.2		1.8	
						6.3	0.1	322	30.0		8.1		21.0		77.4		5.2		19.2		6		98				<0.2		1.6	
IM7	Sunny	Moderate	07:35	8.2	Surface	1.0	0.1	298	30.3	30.3	8.0	8.0	16.6	16.6	82.7	82.7	5.7	5.6	8.4	13.3	5	5	89	95	821361	806821	<0.2	<0.2	2.2	2.3
						1.0	0.1	327	30.3		8.0		16.6		82.6		5.7		8.4		4		89				<0.2		2.2	
					Middle	4.1	0.0	317	30.3	30.3	8.0	8.0	17.6	17.6	79.1	79.1	5.4		10.9		4		95				<0.2		2.4	
						4.1	0.0	319	30.3		8.0		17.6		79.1		5.4		11.1		6		95				<0.2		2.3	
					Bottom	7.2	0.0	142	30.3	30.3	8.0	8.0	18.1	18.1	81.4	81.4	5.6	5.6	20.7		6		102				<0.2		2.3	
						7.2	0.0	149	30.3		8.0		18.1		81.4		5.6		20.5		6		101				<0.2		2.4	
IM8	Fine	Moderate	09:02	8.4	Surface	1.0	0.3	288	30.4	30.4	8.0	8.0	17.4	17.4	82.6	82.5	5.6	5.5	10.9	14.6	5	5	88	91	821809	808126	<0.2	<0.2	2.1	2.1
						1.0	0.3	314	30.4		8.0		17.4		82.4		5.6		11.1		5		88				<0.2		2.1	
					Middle	4.2	0.2	291	30.3	30.3	8.0	8.0	18.1	18.1	79.2	79.2	5.4		17.6		6		91				<0.2		2.1	
						4.2	0.2	317	30.3		8.0		18.1		79.2		5.4		17.5		5		91				<0.2		2.0	
					Bottom	7.4	0.1	255	30.3	30.3	8.0	8.0	18.4	18.4	78.3	78.3	5.3	5.3	15.4		6		94				<0.2		2.2	
						7.4	0.1	255	30.3		8.0		18.4		78.3		5.3		15.3		5		94				<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 31 July 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	08:50	8.1	Surface	1.0	0.4	310	30.5	30.5	8.0	8.0	17.5	17.5	80.3	80.3	5.5	5.4	11.7	19.9	4	5	87	90	822077	808797	<0.2	<0.2	2.2	2.2
						1.0	0.4	334	30.5		8.0		17.5		80.2		5.5		11.8		3		88				<0.2		2.3	
					Middle	4.1	0.4	301	30.3	30.3	8.0	8.0	19.0	19.0	76.8	76.7	5.2		21.1		5		89				<0.2		2.1	
						4.1	0.4	320	30.3		8.0		19.0		76.6		5.2		21.1		4		89				<0.2		2.2	
					Bottom	7.1	0.2	289	30.3	30.3	8.0	8.0	19.0	19.0	77.1	77.2	5.2	5.2	27.0		5		94				<0.2		2.3	
						7.1	0.3	303	30.3		8.0		19.0		77.3		5.2		26.9		6		94				<0.2		2.1	
IM10	Fine	Moderate	08:40	8.5	Surface	1.0	0.5	302	30.3	30.3	8.0	8.0	17.3	17.3	81.7	81.7	5.6	5.5	9.4	19.4	5	5	91	95	822402	809776	<0.2	<0.2	2.1	2.1
						1.0	0.6	306	30.3		8.0		17.3		81.6		5.6		9.5		4		91				<0.2		2.0	
					Middle	4.3	0.5	306	30.3	30.3	8.0	8.0	17.8	17.8	79.0	79.0	5.4		13.0		5		95				<0.2		2.1	
						4.3	0.6	307	30.3		8.0		17.8		79.0		5.4		13.1		5		96				<0.2		2.2	
					Bottom	7.5	0.4	307	30.1	30.1	8.0	8.0	20.8	20.8	83.0	83.2	5.6	5.6	35.7		5		97				<0.2		2.1	
						7.5	0.4	315	30.1		8.0		20.8		83.4		5.6		35.7		6		97				<0.2		2.2	
IM11	Fine	Moderate	08:31	9.5	Surface	1.0	0.4	310	30.2	30.2	8.0	8.0	17.6	17.6	80.2	80.3	5.5	5.3	9.4	12.6	5	6	88	93	822027	811436	<0.2	<0.2	2.2	2.2
						1.0	0.4	321	30.2		8.0		17.6		80.3		5.5		9.4		5		89				<0.2		2.2	
					Middle	4.8	0.5	308	30.1	30.1	8.0	8.0	20.6	20.6	75.8	75.8	5.1		12.1		6		93				<0.2		2.3	
						4.8	0.5	316	30.1		8.0		20.6		75.7		5.1		12.2		6		94				<0.2		2.1	
					Bottom	8.5	0.1	314	29.7	29.7	8.0	8.0	23.7	23.7	73.9	74.0	4.9	4.9	16.3		6		96				<0.2		2.1	
						8.5	0.1	325	29.7		8.0		23.7		74.1		4.9		16.2		6		96				<0.2		2.2	
IM12	Fine	Moderate	08:21	8.5	Surface	1.0	0.7	280	30.4	30.4	8.0	8.0	18.5	18.4	83.5	83.5	5.7	5.6	11.8	18.1	5	5	87	90	821462	812033	<0.2	<0.2	2.1	2.0
						1.0	0.7	294	30.4		8.0		18.4		83.5		5.7		12.3		5		88				<0.2		1.9	
					Middle	4.3	0.7	277	30.2	30.2	8.1	8.1	21.2	21.2	82.0	82.1	5.5		18.3		5		90				<0.2		2.0	
						4.3	0.7	277	30.2		8.1		21.1		82.1		5.5		18.0		5		90				<0.2		2.0	
					Bottom	7.5	0.3	261	29.8	29.8	8.0	8.0	23.1	23.1	75.4	75.6	5.0	5.1	24.1		6		94				<0.2		1.8	
						7.5	0.3	273	29.8		8.0		23.1		75.7		5.1		24.0		6		93				<0.2		2.0	
SR2	Fine	Calm	07:51	4.8	Surface	1.0	0.1	347	30.1	30.1	8.0	8.0	19.7	19.8	79.3	79.3	5.4	5.4	13.5	14.0	9	8	85	87	821453	814137	<0.2	<0.2	1.7	1.9
						1.0	0.1	319	30.1		8.0		19.8		79.3		5.4		13.6		7		85				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	7	30.1	30.1	8.0	8.0	20.8	20.8	81.2	81.3	5.5	5.5	14.5		9		88				<0.2		1.9	
						3.8	0.1	7	30.1		8.0		20.8		81.3		5.5		14.5		8		88				<0.2		1.9	
SR3	Fine	Moderate	09:12	9.7	Surface	1.0	0.2	344	30.4	30.4	8.0	8.0	17.3	17.3	79.4	79.4	5.4	5.4	9.6	11.3	6	6	-	-	822157	807572	-	-	-	-
						1.0	0.3	345	30.4		8.0		17.3		79.4		5.4		9.6		5		-				-		-	
					Middle	4.9	0.2	8	30.3	30.3	8.0	8.0	18.2	18.2	77.8	77.8	5.3		10.7		5		-				-		-	
						4.9	0.3	8	30.3		8.0		18.2		77.8		5.3		10.8		6		-				-		-	
					Bottom	8.7	0.2	37	30.3	30.3	8.0	8.0	18.7	18.7	77.8	77.8	5.3	5.3	13.5		6		-				-		-	
						8.7	0.2	40	30.3		8.0		18.7		77.8		5.3		13.5		6		-				-		-	
SR4A	Sunny	Moderate	09:08	9.8	Surface	1.0	0.4	10	30.2	30.2	8.1	8.1	18.4	18.4	91.1	91.1	6.2	5.9	8.2	9.9	6	7	-	-	817164	807834	-	-	-	-
						1.0	0.4	10	30.2		8.1		18.4		91.0		6.2		8.2		5		-				-		-	
					Middle	4.9	0.5	-	30.2	30.2	8.1	8.1	20.4	20.4	82.2	82.2	5.5		10.5		8		-				-		-	
						4.9	0.5	-	30.2		8.1		20.4		82.1		5.5		10.6		6		-				-		-	
					Bottom	8.8	0.4	24	29.8	29.8	8.1	8.1	23.6	23.6	78.7	78.9	5.2	5.3	10.8		8		-				-		-	
						8.8	0.4	25	29.8		8.1		23.6		79.0		5.3		10.8		7		-				-		-	
SR5A	Sunny	Moderate	09:24	4.1	Surface	1.0	0.3	336	30.6	30.6	8.2	8.2	20.3	20.3	97.6	97.6	6.5	6.5	10.0	10.6	6	7	-	-	816607	810670	-	-	-	-
						1.0	0.3	343	30.6		8.2		20.3		97.6		6.5		10.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	7	30.5	30.5	8.2	8.2	20.3	20.3	96.6	96.6	6.5	6.5	11.1		7		-				-		-	
						3.1	0.3	7	30.5		8.2		20.3		96.6		6.5		11.1		8		-				-		-	
SR6	Sunny	Moderate	09:49	5.2	Surface	1.0	0.1	271	30.5	30.5	8.1	8.1	18.5	18.5	90.5	90.5	6.1	6.1	9.1	9.4	4	5	-	-	817922	814636	-	-	-	-
						1.0	0.1	295	30.5		8.1		18.5		90.4		6.1		9.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	23	30.3	30.3	8.1	8.1	19.6	19.6	87.8	87.8	5.9	5.9	9.6		5		-				-		-	
						4.2	0.3	23	30.3		8.1		19.6		87.8		5.9		9.6		5		-				-		-	
SR7	Cloudy	Moderate	06:53	18.9	Surface	1.0	0.1	149	30.3	30.3	8.0	8.0	19.9	19.9	85.6	85.6	5.8	5.3	7.7	8.2	4	3	-	-	823641	823721	-	-	-	-
						1.0	0.1	152	30.3		8.0		19.9		85.5		5.8		7.7		3		-				-		-	
					Middle	9.5	0.2	190	29.3	29.3	8.0	8.0	25.7	25.7	72.2	72.2	4.8		8.2		3		-				-		-	
						9.5	0.2	193	29.3		8.0		25.7		72.2		4.8		8.2		3		-				-		-	
					Bottom	17.9	0.1	151	28.7	28.7	8.0	8.0	28.0	28.0	68.9	69.0	4.6	4.6	8.6		3		-				-		-	
						17.9	0.1	162	28.7		8.0		28.0		69.0		4.6		8.6		4		-				-		-	
SR8	Fine	Calm	08:07	4.6	Surface	1.0	-	-	30.3	30.3	8.1	8.1	18.6	18.6	85.5	85.6	5.8	5.8	10.1	10.8	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.3		8.1		18.6		85.7		5.8		10.1		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	30.3	30.3	8.1	8.1	19.9	19.9	88.1	88.2	6.0	6.0	11.4		4		-				-		-	
						3.6	-	-	30.3		8.1		19.9		88.3		6.0		11.4		4		-				-		-	

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


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
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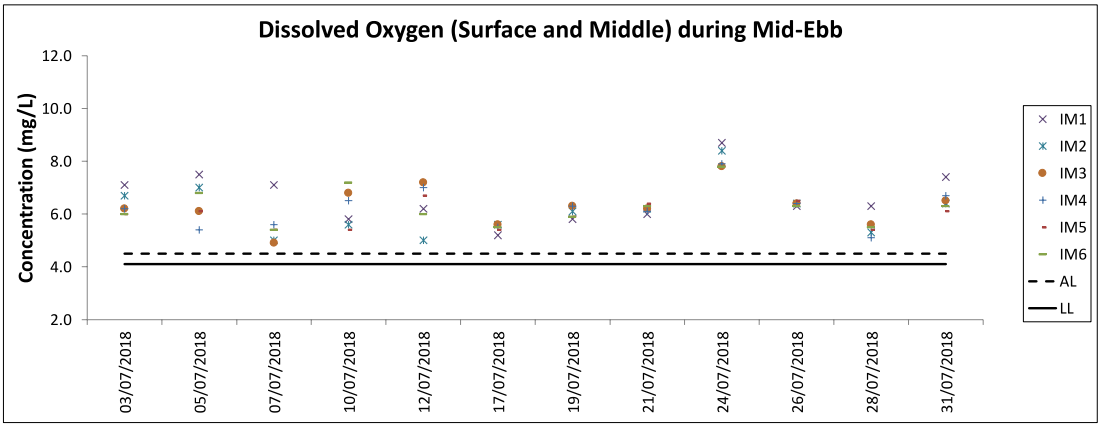
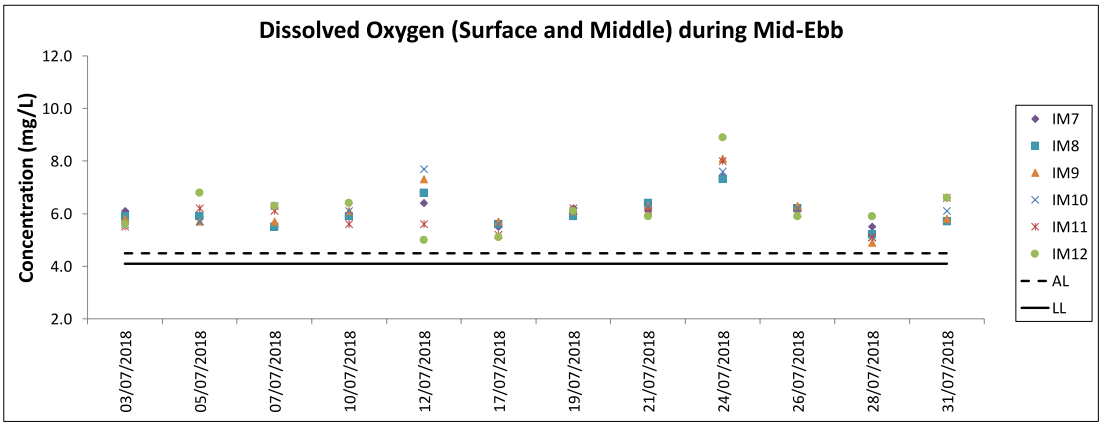
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
24/07/2018
26/07/2018
28/07/2018
31/07/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
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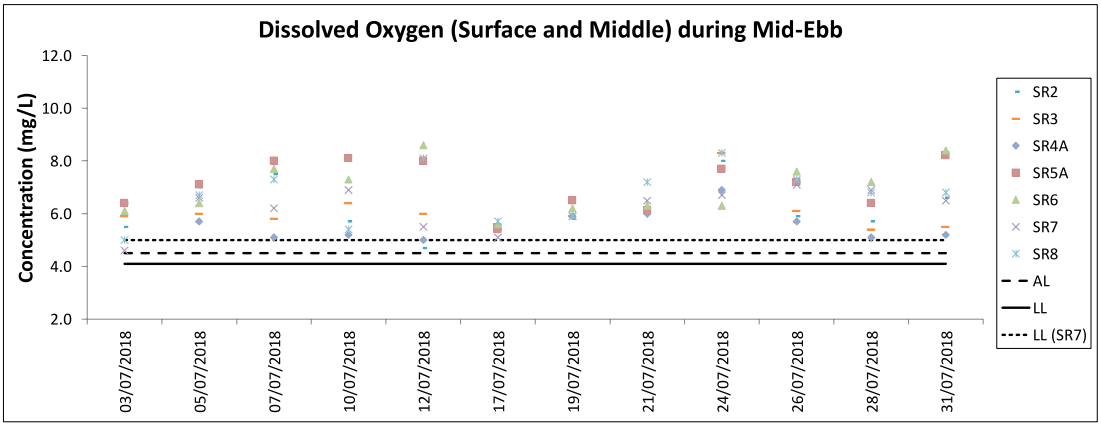
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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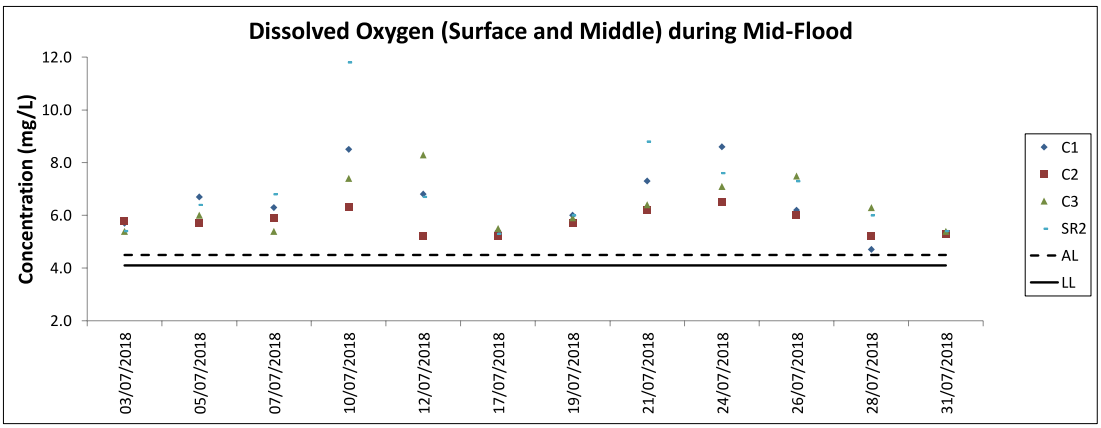
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
24/07/2018
26/07/2018
28/07/2018
31/07/2018
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
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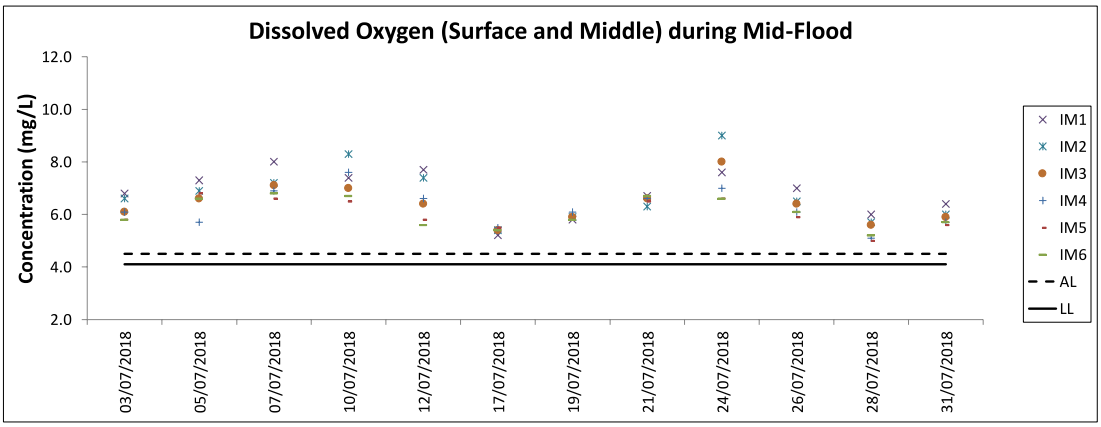
24/07/2018
26/07/2018
28/07/2018
31/07/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
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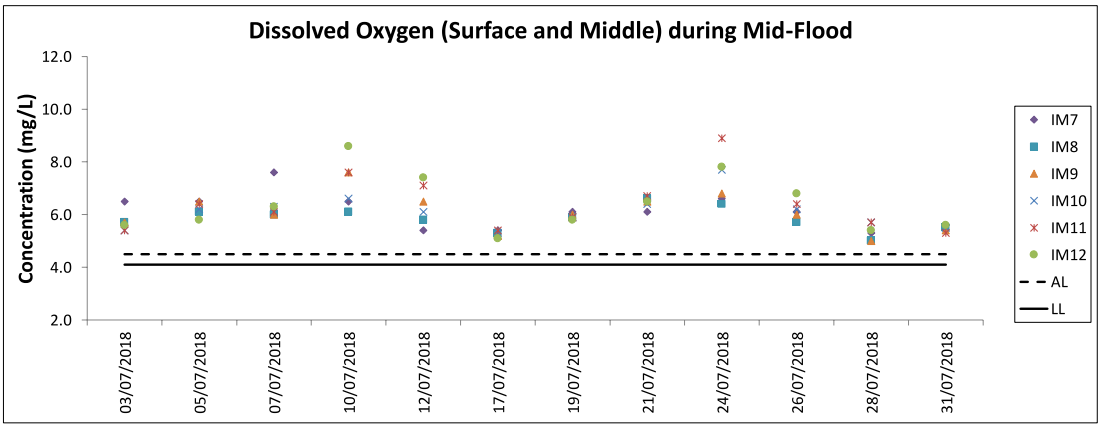
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
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21/07/2018
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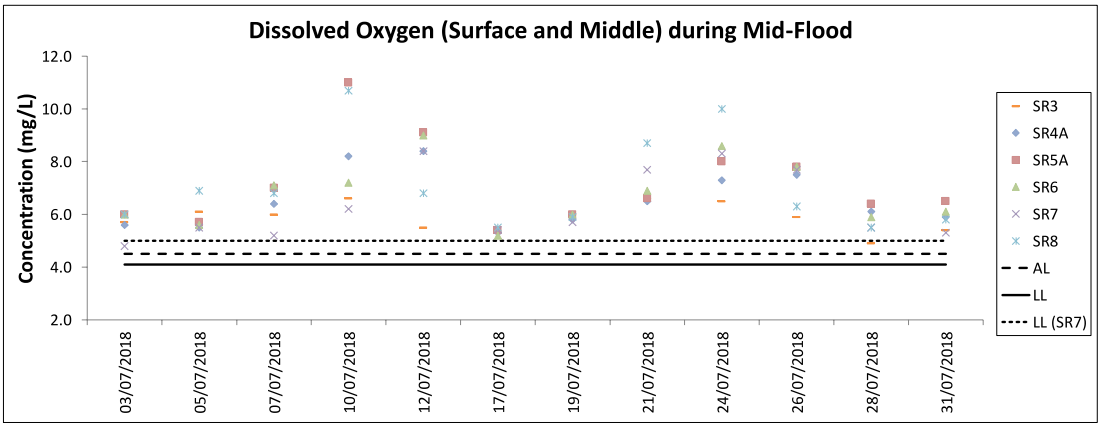
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
24/07/2018
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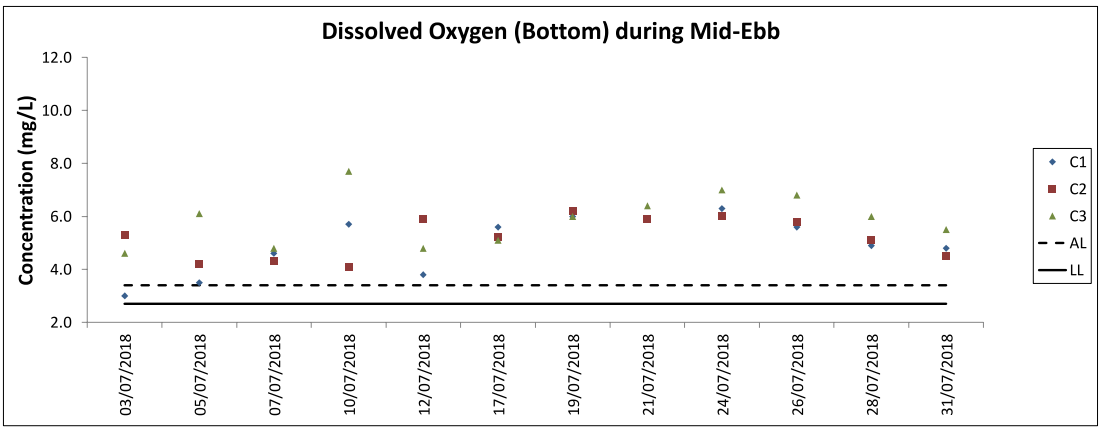
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
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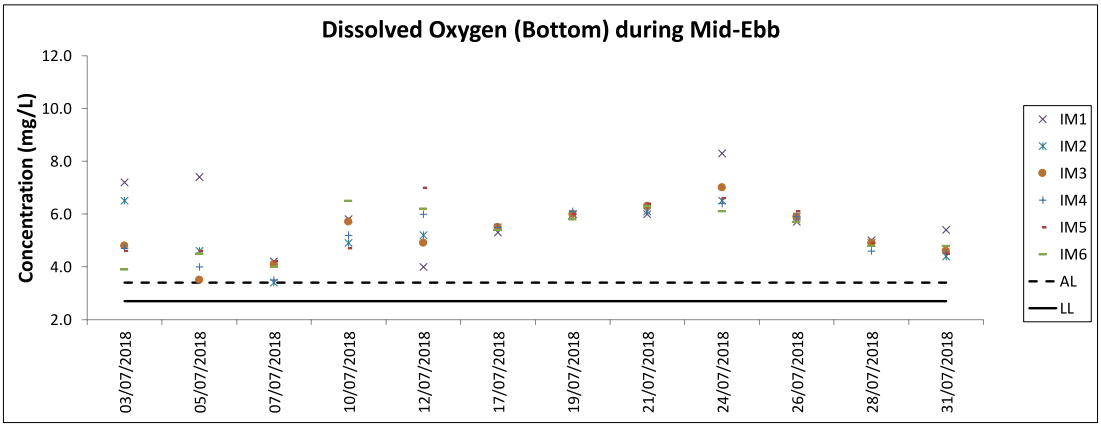
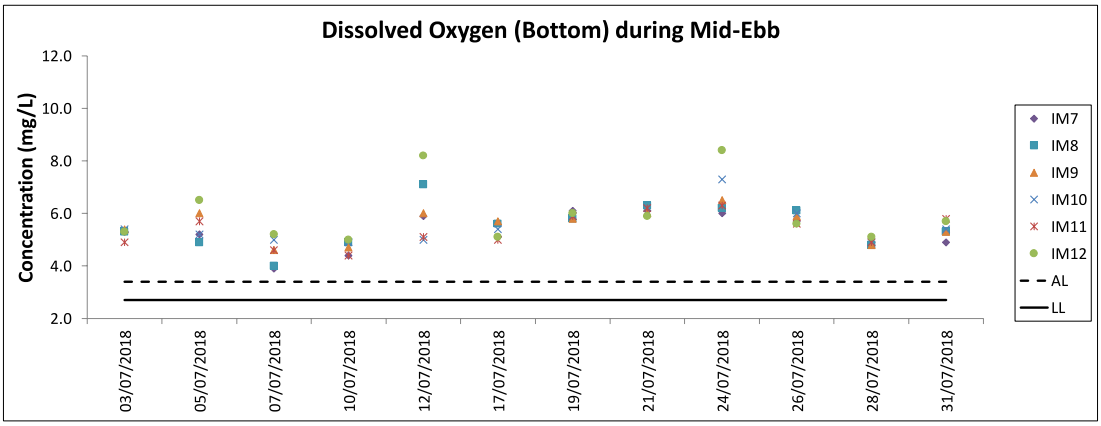
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
24/07/2018
26/07/2018
28/07/2018
31/07/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
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28/07/2018
31/07/2018
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IM8
IM9
IM10
IM11
IM12
AL
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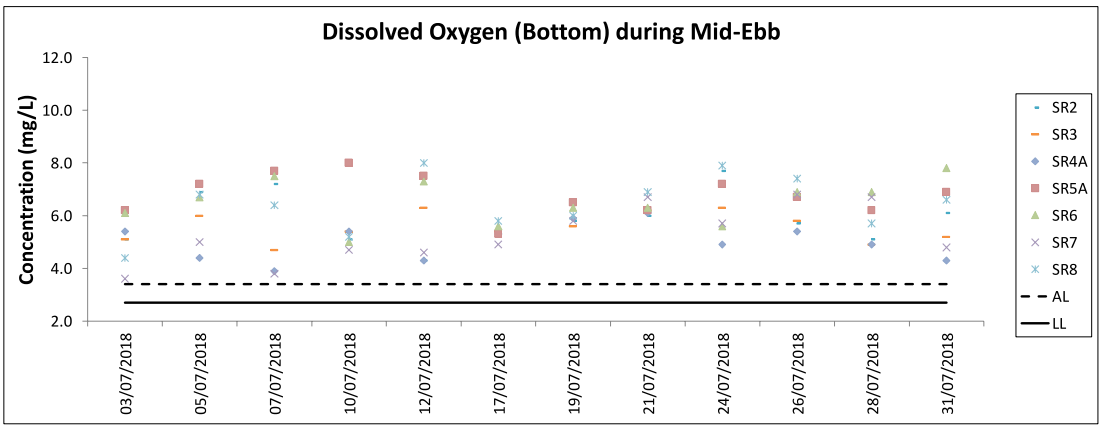
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12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
24/07/2018
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SR7
SR8
AL
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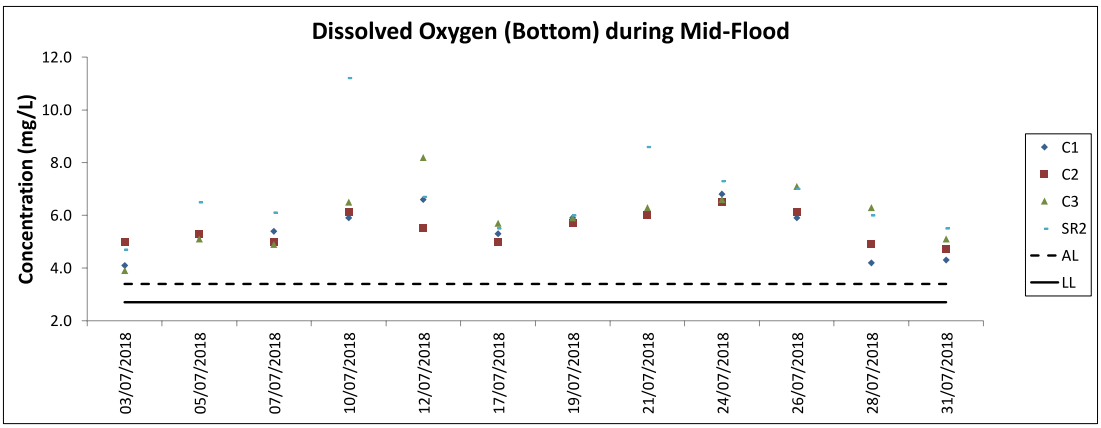
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
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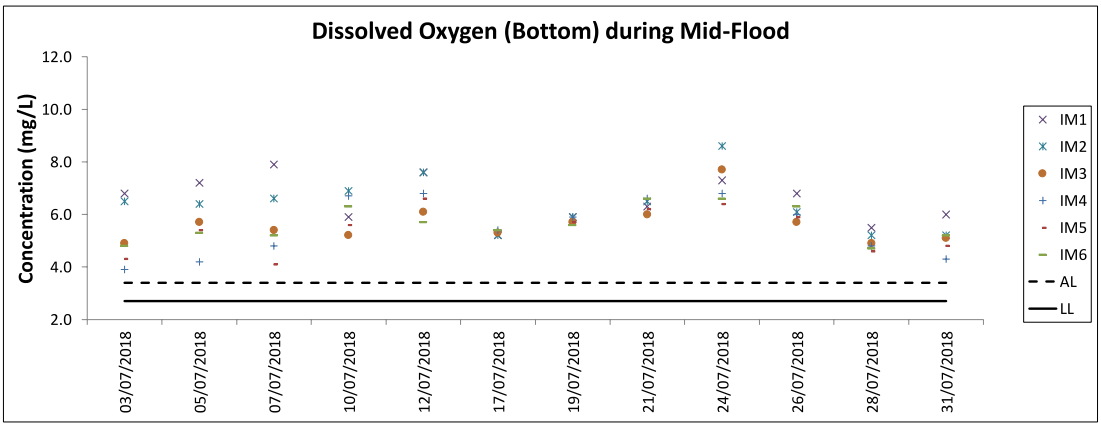
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
07/07/2018
10/07/2018
12/07/2018
17/07/2018
19/07/2018
21/07/2018
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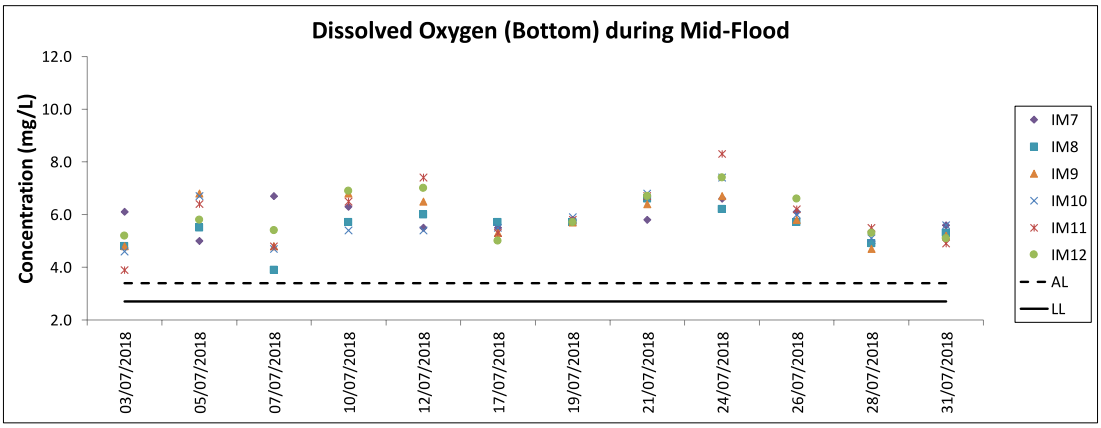
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
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10.0
8.0
6.0
4.0
2.0
03/07/2018
05/07/2018
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AL
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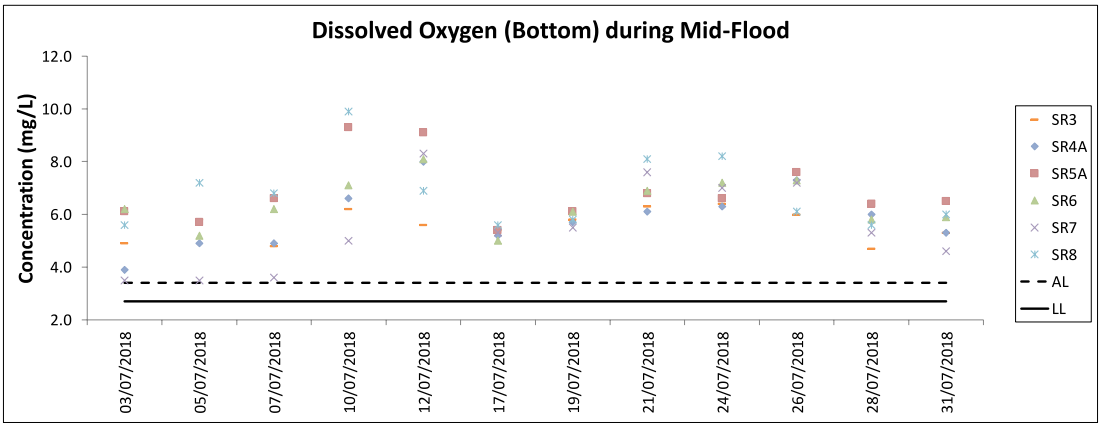
Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
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03/07/2018
05/07/2018
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21/07/2018
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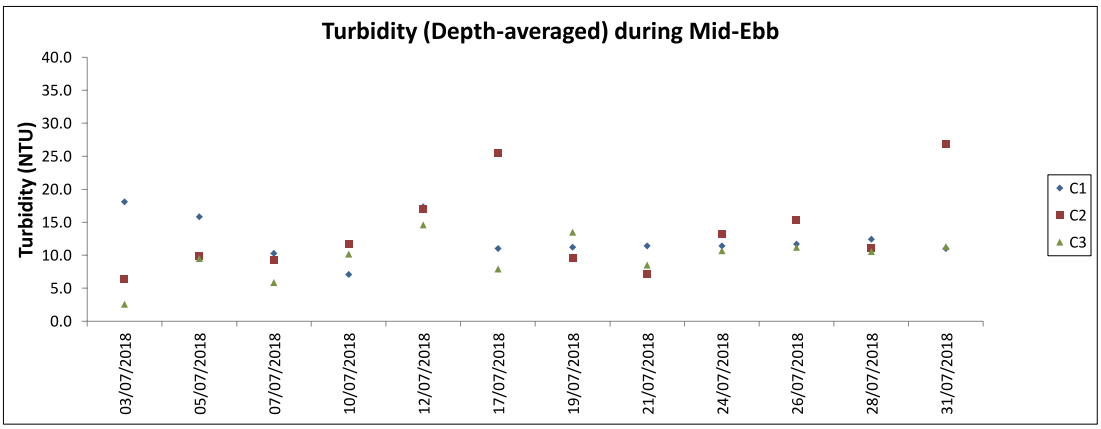
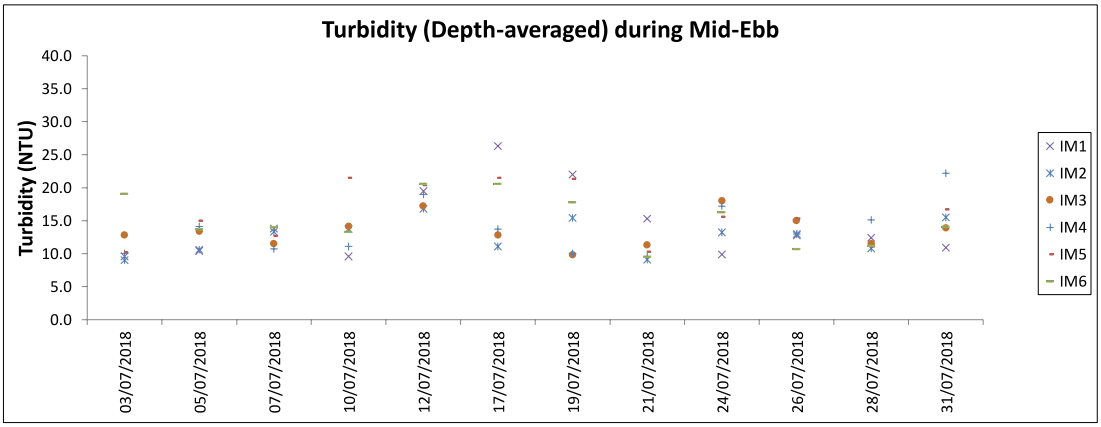
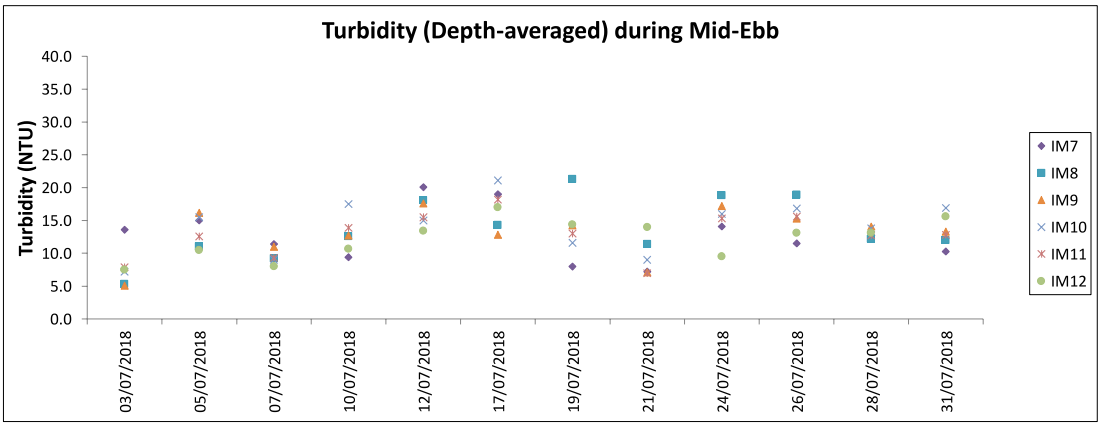
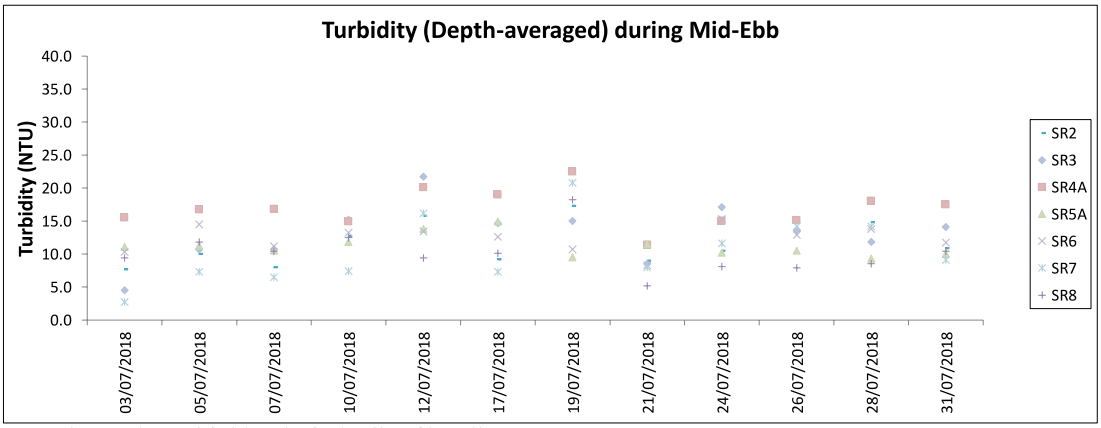
SR7
SR8
AL
LL

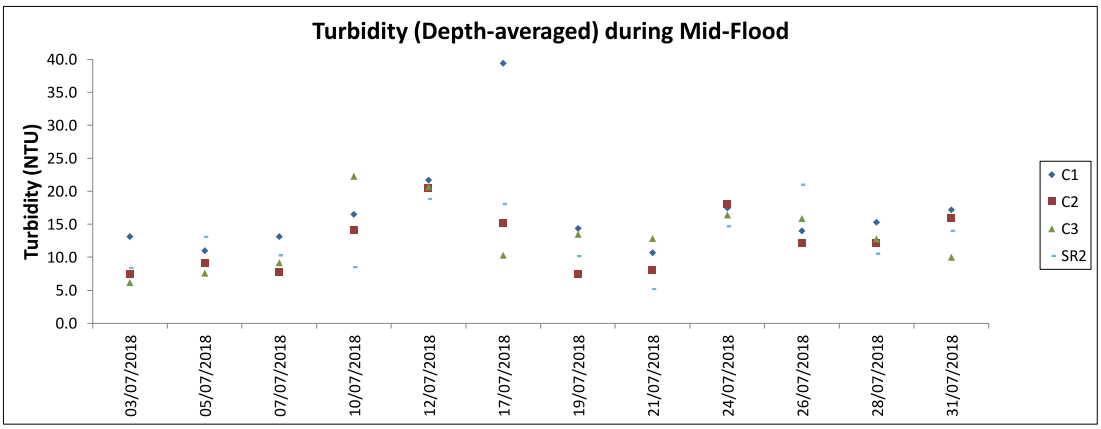


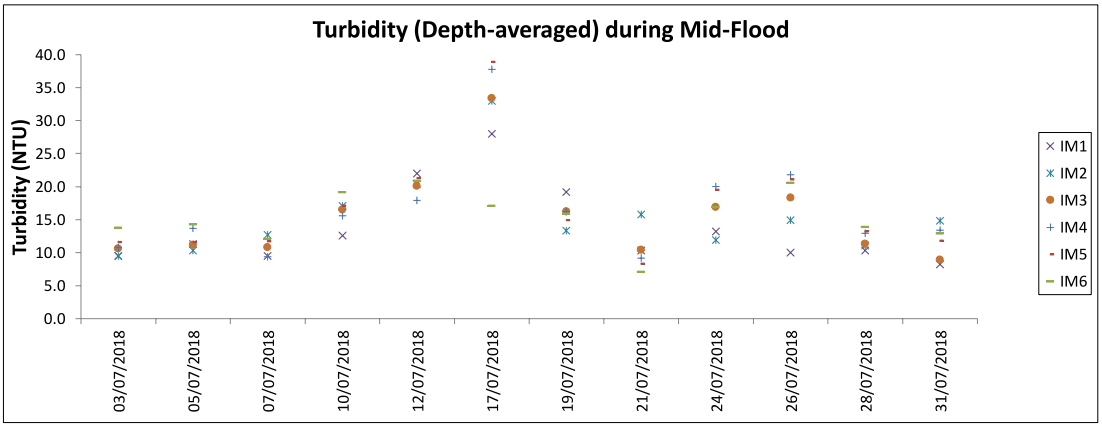


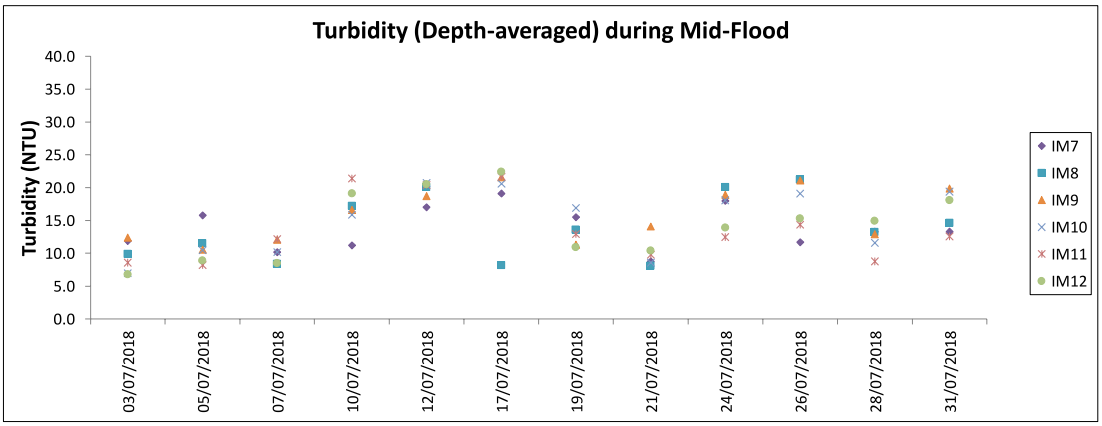


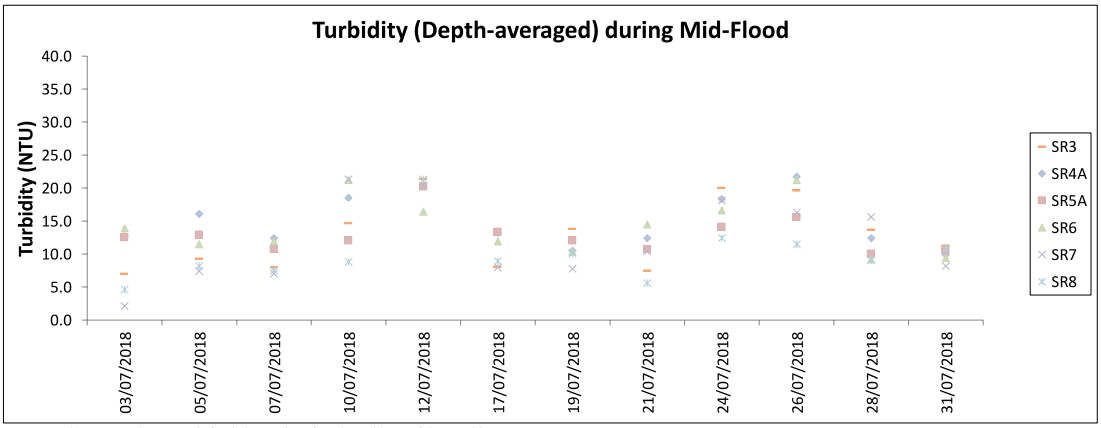


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

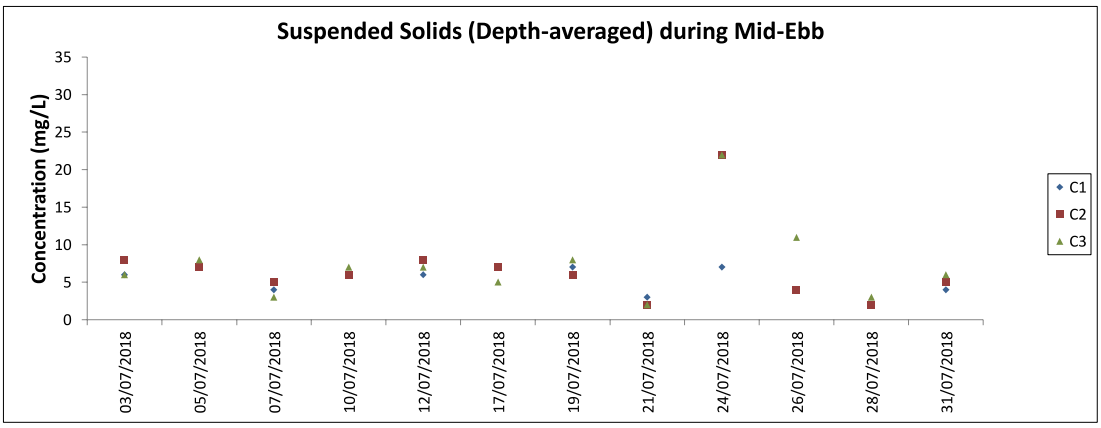


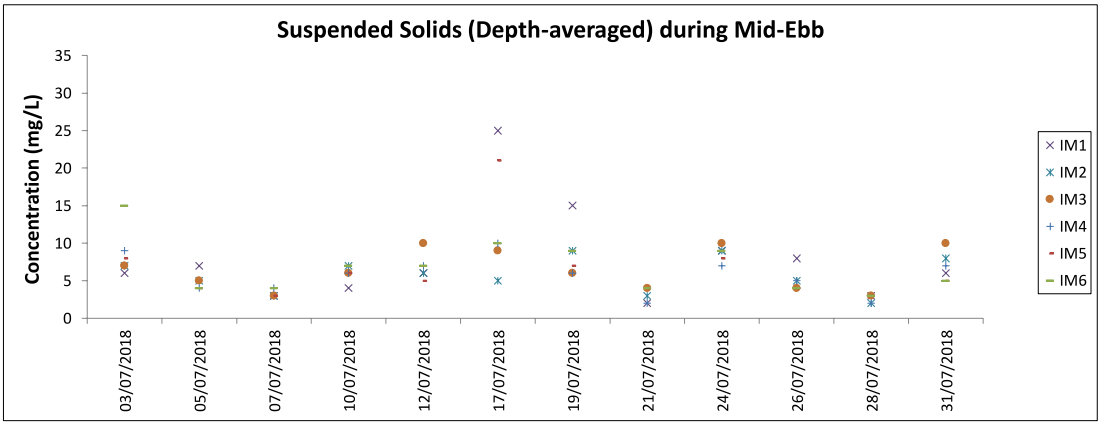


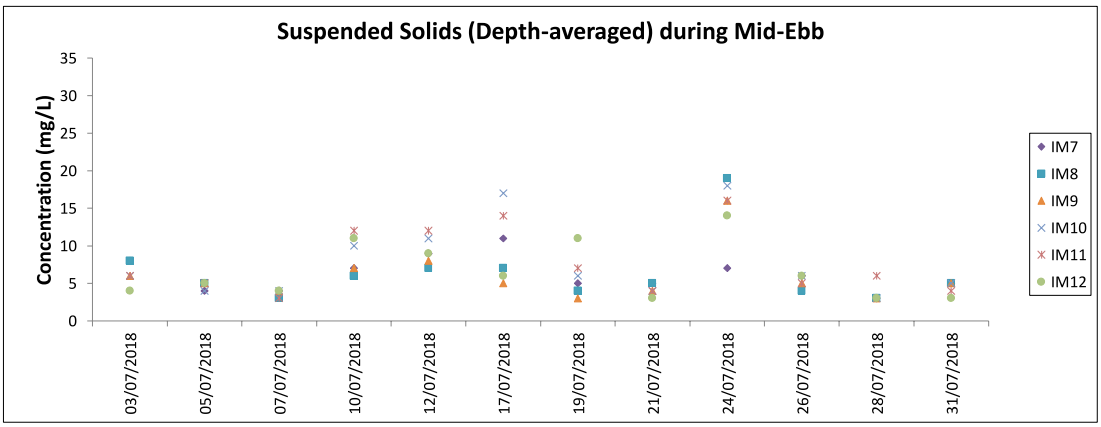


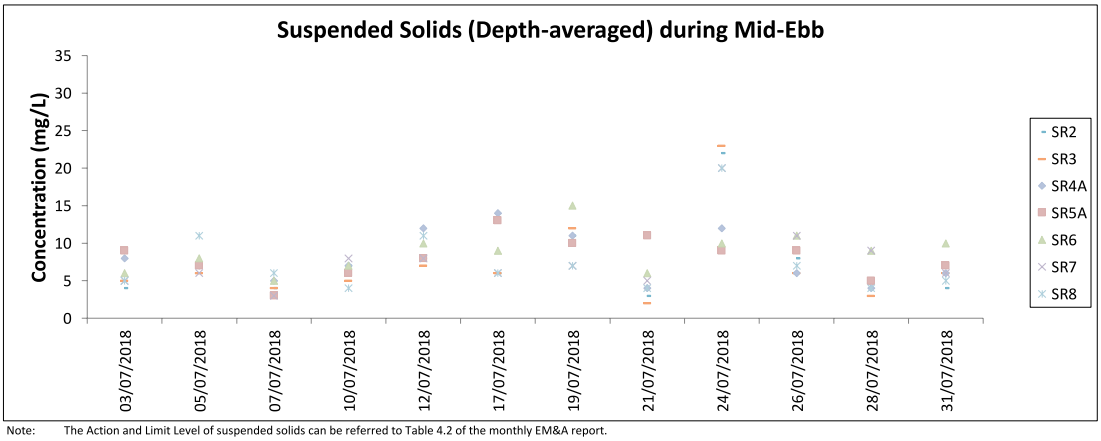


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

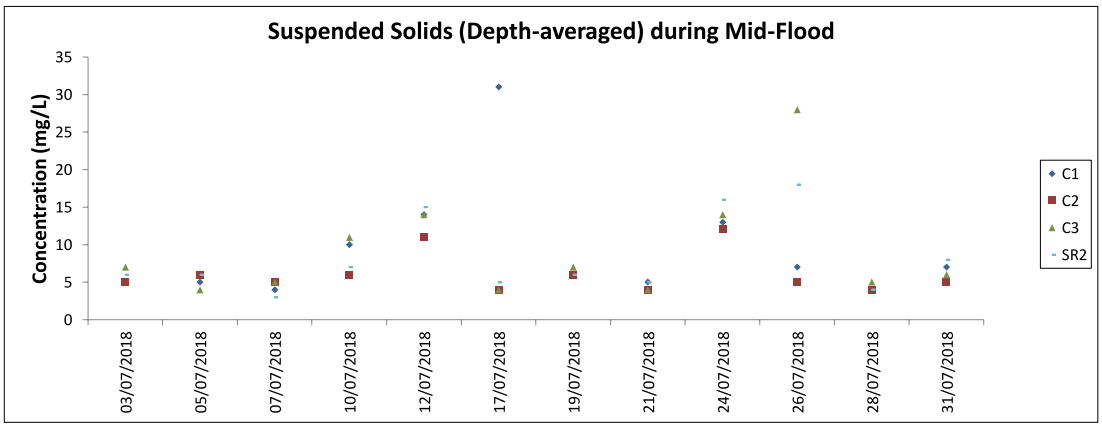


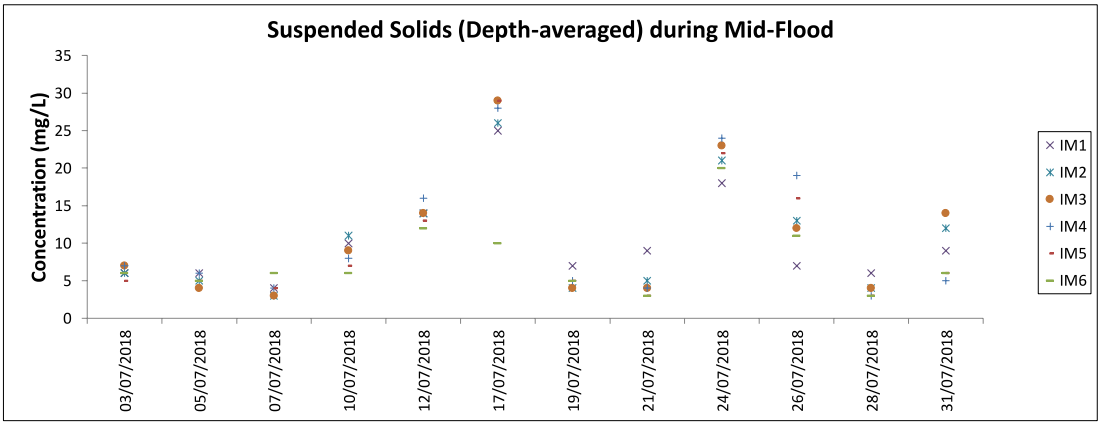


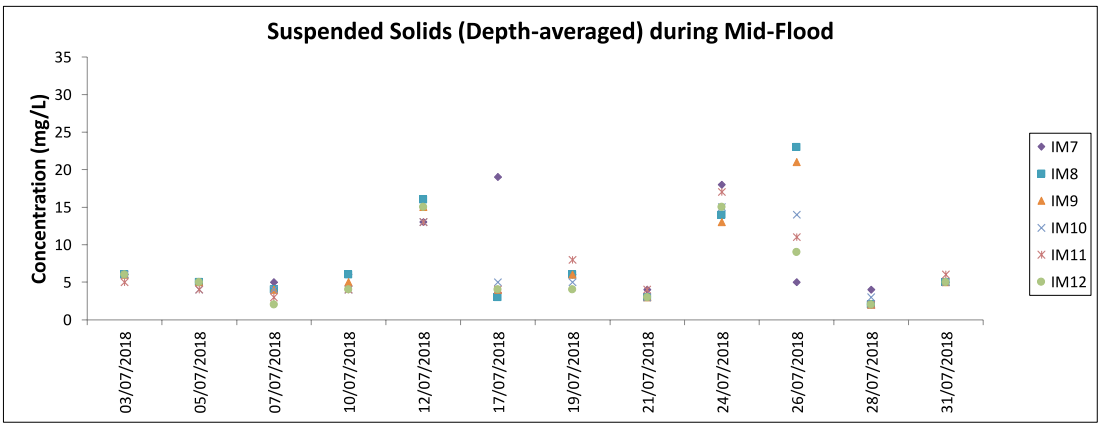


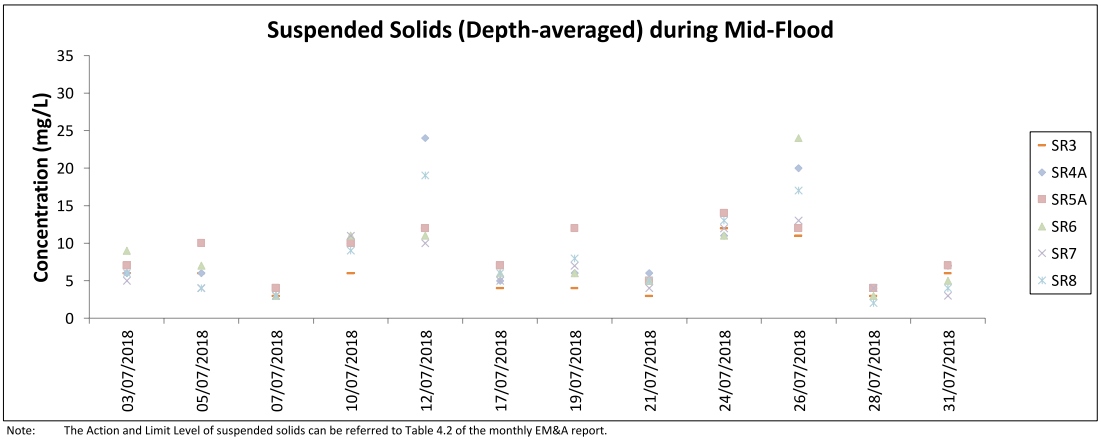


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

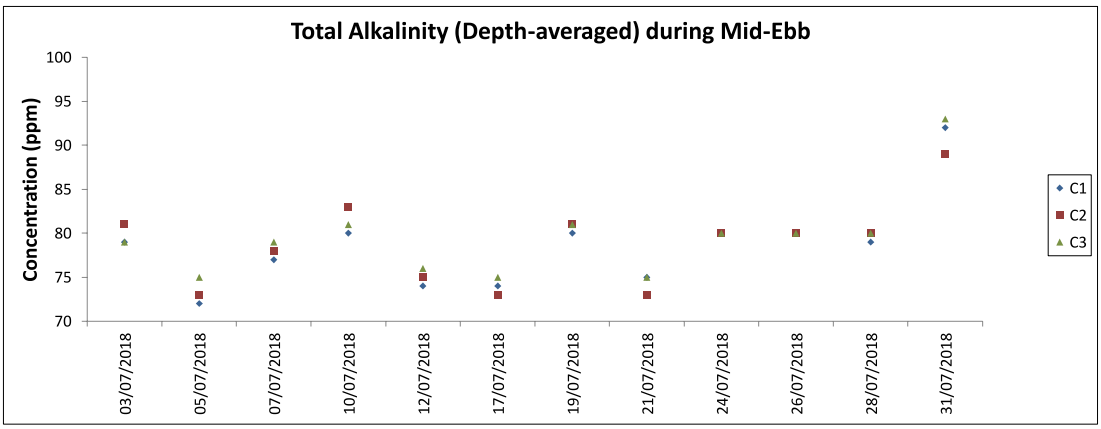


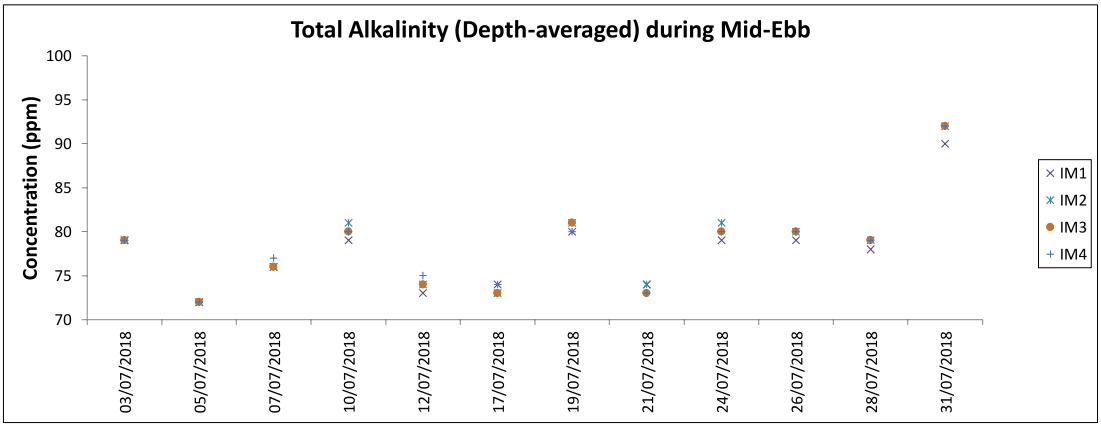


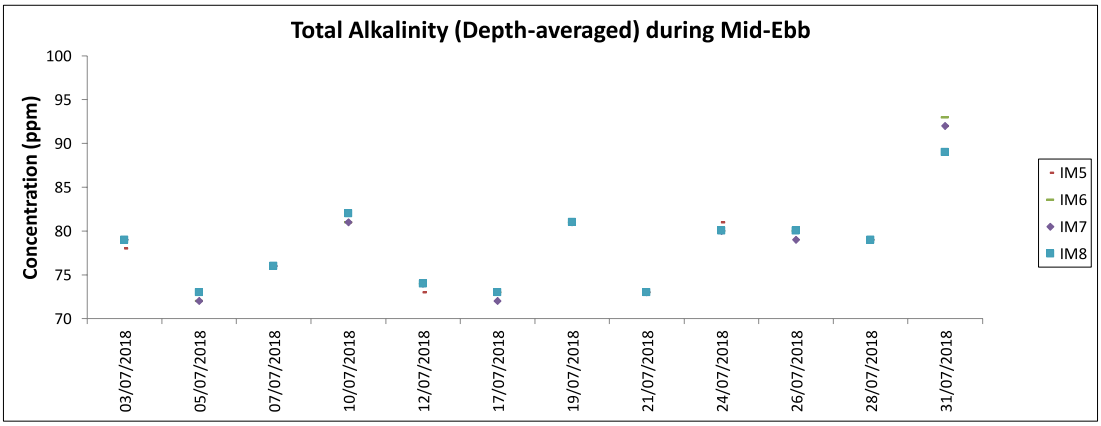


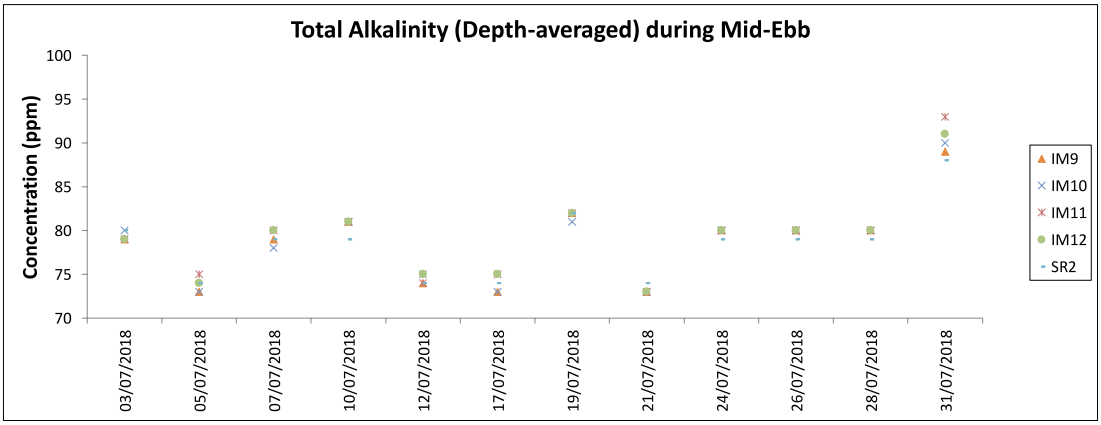


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

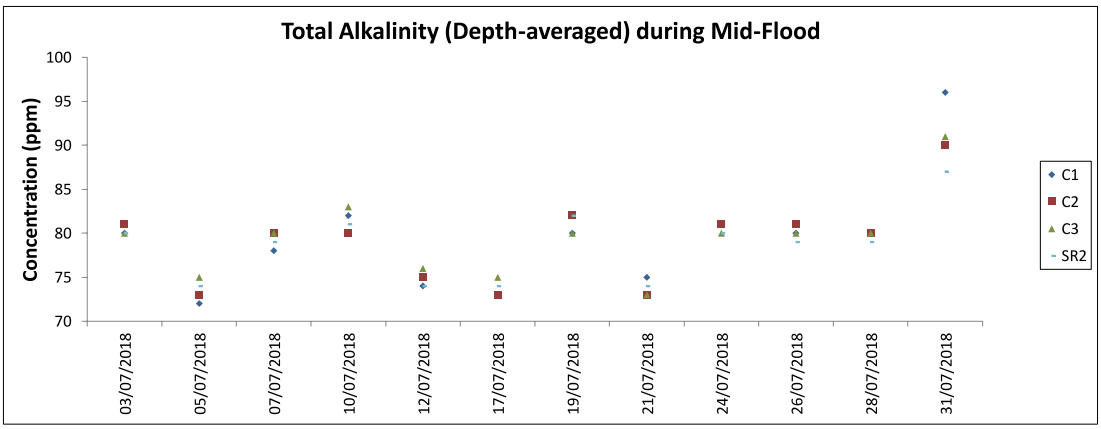


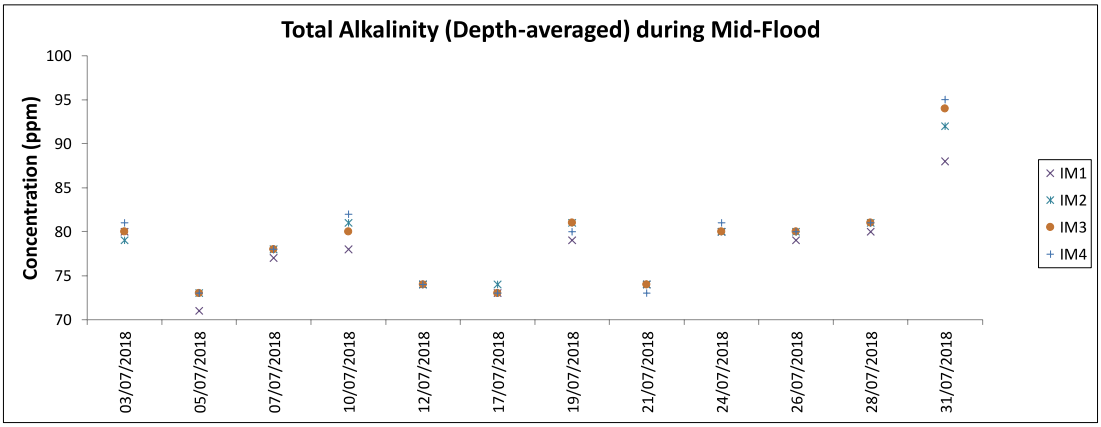


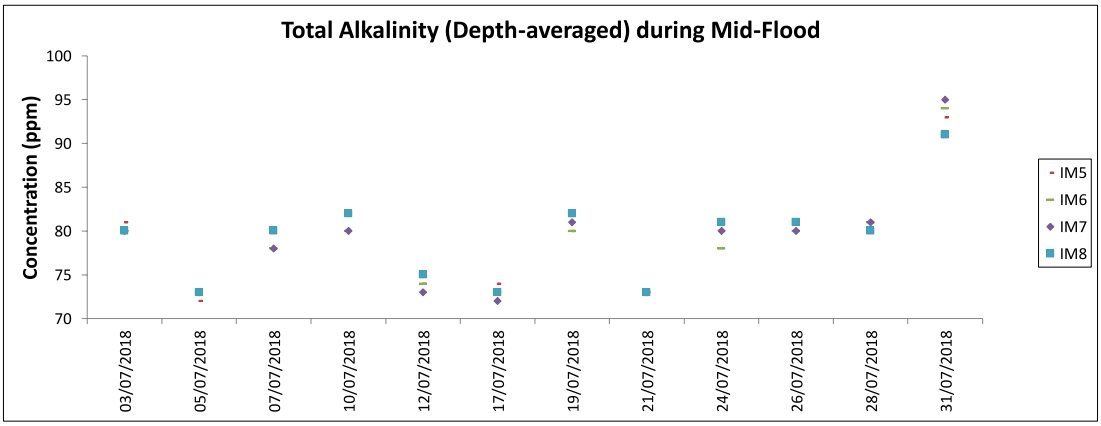


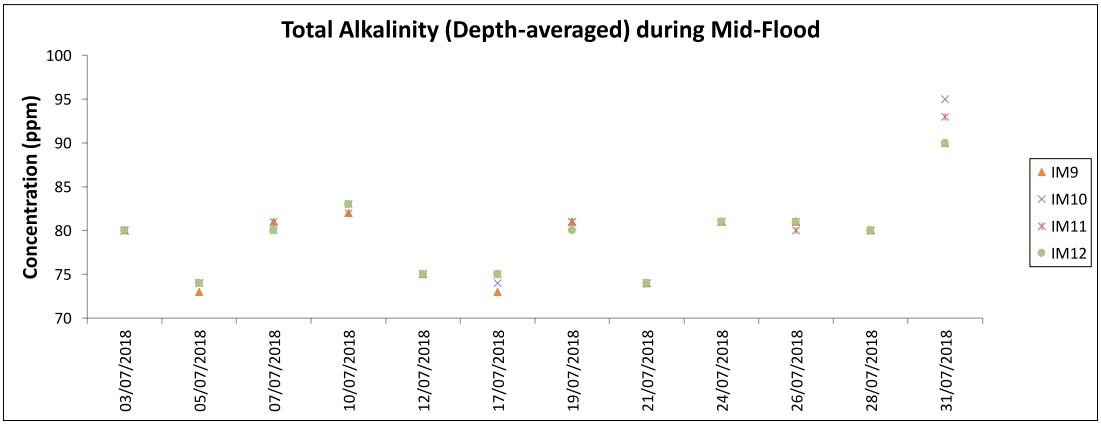


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

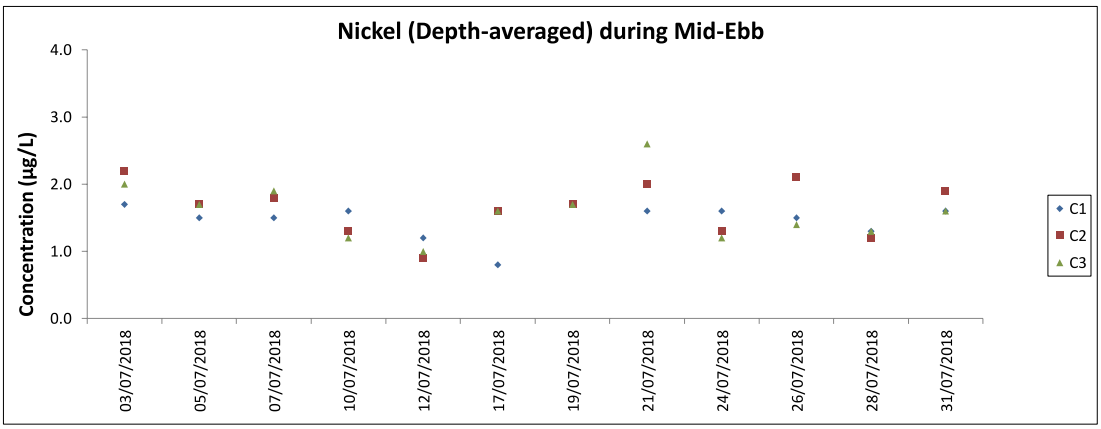


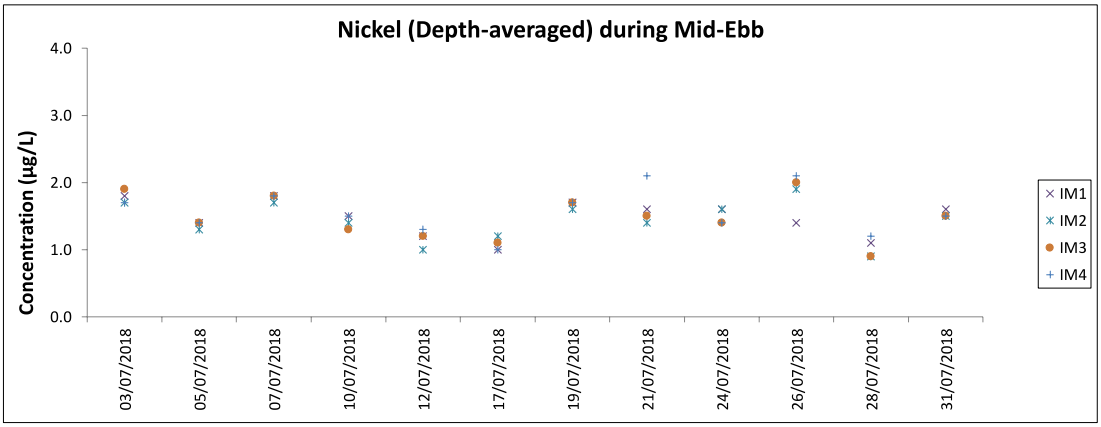


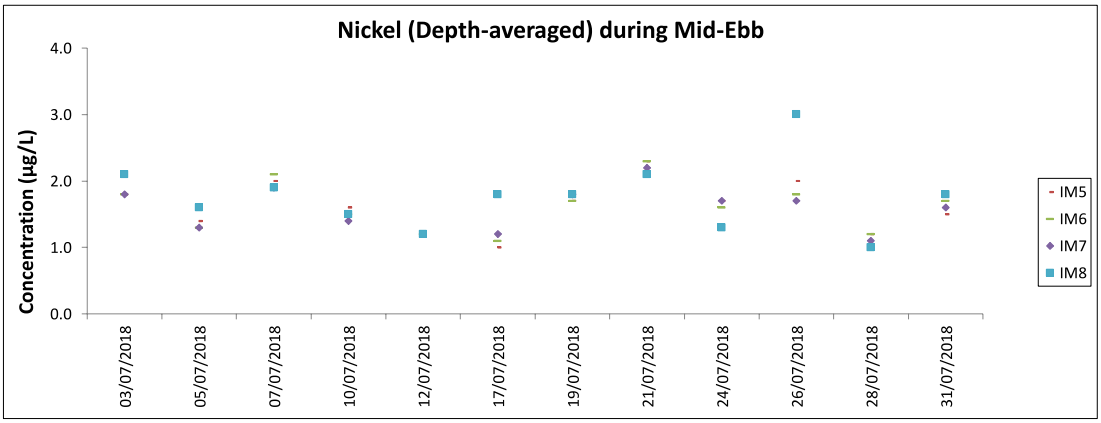


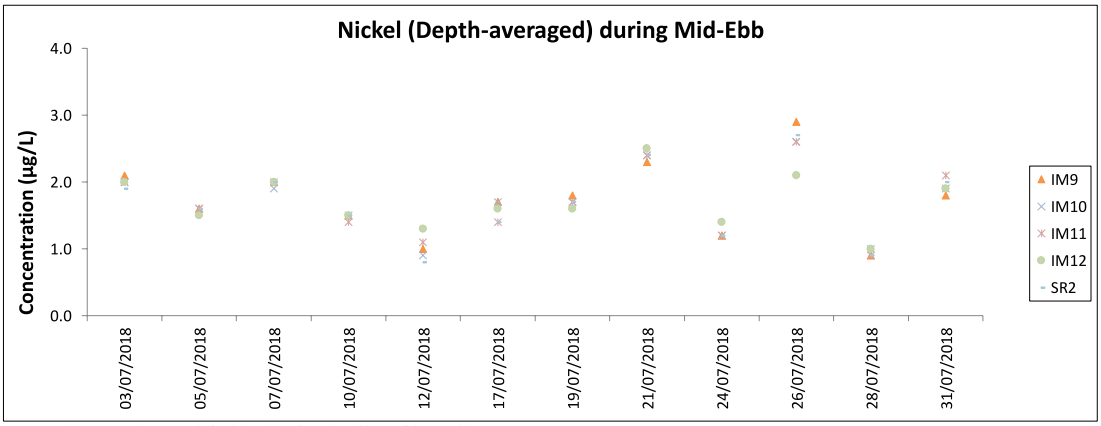


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

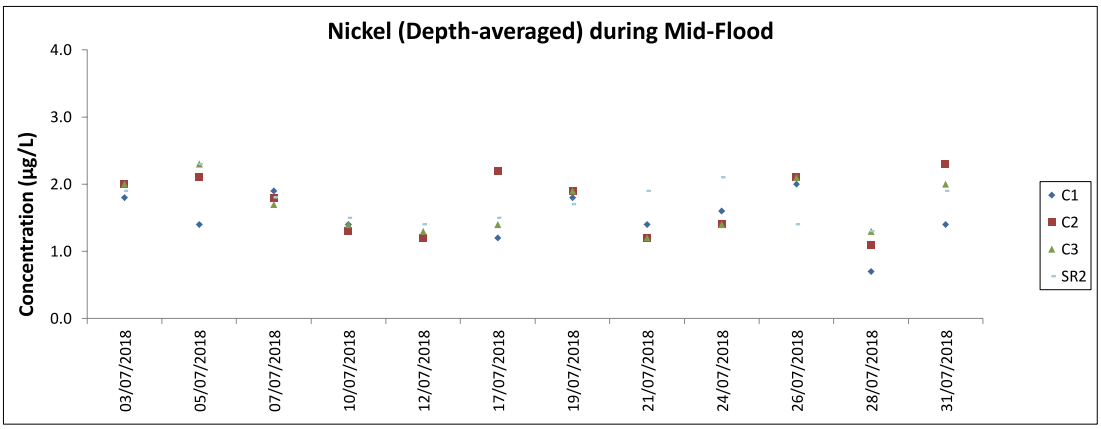


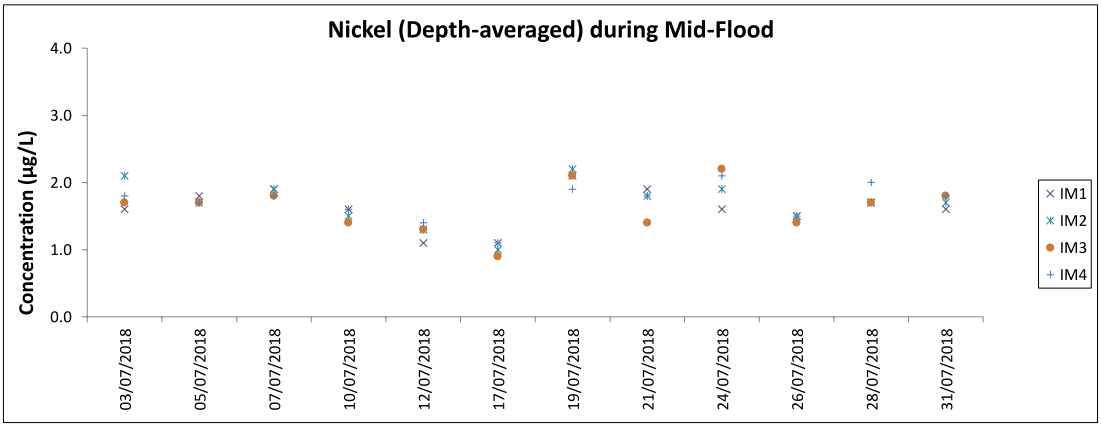


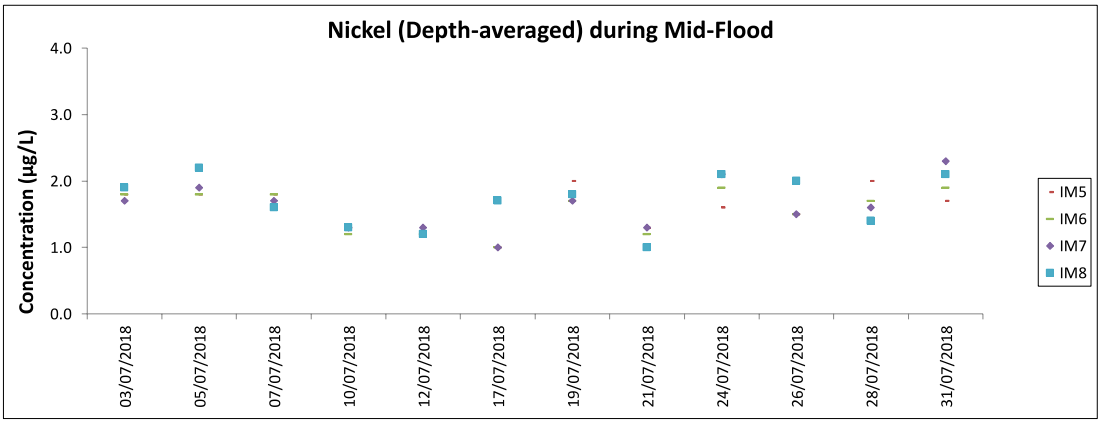


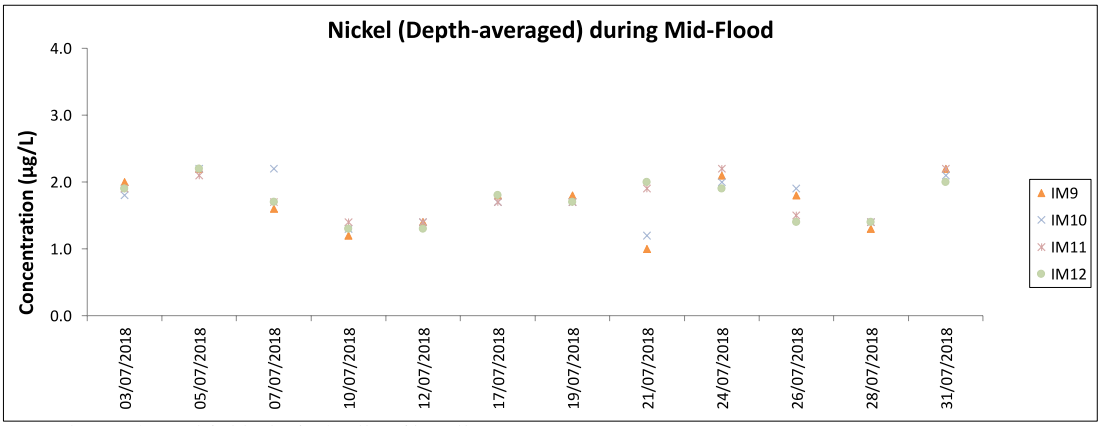


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









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.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
03-May-18	NWL	2	38.810	SPRING	32166	3RS ET	N/A
03-May-18	NWL	3	34.290	SPRING	32166	3RS ET	N/A
03-May-18	NWL	4	2.300	SPRING	32166	3RS ET	N/A
08-May-18	NWL	2	56.994	SPRING	32166	3RS ET	N/A
08-May-18	NWL	3	18.306	SPRING	32166	3RS ET	N/A
09-May-18	AW	3	0.851	SPRING	32166	3RS ET	N/A
09-May-18	AW	4	3.879	SPRING	32166	3RS ET	N/A
09-May-18	WL	2	4.840	SPRING	32166	3RS ET	N/A
09-May-18	WL	3	4.940	SPRING	32166	3RS ET	N/A
09-May-18	WL	4	14.440	SPRING	32166	3RS ET	N/A
09-May-18	WL	5	7.080	SPRING	32166	3RS ET	N/A
14-May-18	SWL	2	30.850	SPRING	32166	3RS ET	N/A
14-May-18	SWL	3	38.892	SPRING	32166	3RS ET	N/A
14-May-18	SWL	4	1.550	SPRING	32166	3RS ET	N/A
16-May-18	AW	2	1.060	SPRING	32166	3RS ET	N/A
16-May-18	AW	3	3.640	SPRING	32166	3RS ET	N/A
16-May-18	WL	2	2.390	SPRING	32166	3RS ET	N/A
16-May-18	WL	3	21.580	SPRING	32166	3RS ET	N/A
16-May-18	WL	4	7.180	SPRING	32166	3RS ET	N/A
23-May-18	SWL	2	37.660	SPRING	32166	3RS ET	N/A
23-May-18	SWL	3	32.490	SPRING	32166	3RS ET	N/A
24-May-18	NEL	2	31.200	SPRING	32166	3RS ET	N/A
24-May-18	NEL	3	15.800	SPRING	32166	3RS ET	N/A
25-May-18	NEL	2	27.700	SPRING	32166	3RS ET	N/A
25-May-18	NEL	3	18.900	SPRING	32166	3RS ET	N/A
25-May-18	NEL	4	1.000	SPRING	32166	3RS ET	N/A
04-Jun-18	NEL	3	25.370	SUMMER	32166	3RS ET	P
04-Jun-18	NEL	4	12.140	SUMMER	32166	3RS ET	P
04-Jun-18	NEL	3	6.690	SUMMER	32166	3RS ET	S
04-Jun-18	NEL	4	3.400	SUMMER	32166	3RS ET	S
19-Jun-18	NWL	3	26.640	SUMMER	32166	3RS ET	P
19-Jun-18	NWL	4	36.150	SUMMER	32166	3RS ET	P
19-Jun-18	NWL	3	8.580	SUMMER	32166	3RS ET	S
19-Jun-18	NWL	4	4.130	SUMMER	32166	3RS ET	S
20-Jun-18	NEL	2	26.500	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	3	9.030	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	4	2.130	SUMMER	32166	3RS ET	P
20-Jun-18	NEL	2	9.000	SUMMER	32166	3RS ET	S
20-Jun-18	NEL	3	0.940	SUMMER	32166	3RS ET	S
21-Jun-18	SWL	2	7.120	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	3	44.051	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	4	3.720	SUMMER	32166	3RS ET	P
21-Jun-18	SWL	2	2.200	SUMMER	32166	3RS ET	S
21-Jun-18	SWL	3	13.730	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	2	13.400	SUMMER	32166	3RS ET	P
22-Jun-18	NWL	3	44.550	SUMMER	32166	3RS ET	P
22-Jun-18	NWL	4	5.060	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
22-Jun-18	NWL	2	5.400	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	3	3.960	SUMMER	32166	3RS ET	S
22-Jun-18	NWL	4	2.790	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	2	7.272	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	3	27.789	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	4	14.840	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	5	5.230	SUMMER	32166	3RS ET	P
25-Jun-18	SWL	2	5.402	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	3	3.810	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	4	4.030	SUMMER	32166	3RS ET	S
25-Jun-18	SWL	5	1.210	SUMMER	32166	3RS ET	S
26-Jun-18	WL	2	4.210	SUMMER	32166	3RS ET	P
26-Jun-18	WL	3	15.962	SUMMER	32166	3RS ET	P
26-Jun-18	WL	3	11.178	SUMMER	32166	3RS ET	S
26-Jun-18	AW	2	2.940	SUMMER	32166	3RS ET	P
26-Jun-18	AW	3	1.900	SUMMER	32166	3RS ET	P
27-Jun-18	AW	2	4.720	SUMMER	32166	3RS ET	P
27-Jun-18	WL	2	4.010	SUMMER	32166	3RS ET	P
27-Jun-18	WL	3	12.576	SUMMER	32166	3RS ET	P
27-Jun-18	WL	4	2.970	SUMMER	32166	3RS ET	P
27-Jun-18	WL	3	8.257	SUMMER	32166	3RS ET	S
27-Jun-18	WL	4	1.967	SUMMER	32166	3RS ET	S
05-Jul-18	NWL	2	4.400	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	3	20.570	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	4	37.860	SUMMER	32166	3RS ET	P
05-Jul-18	NWL	2	1.900	SUMMER	32166	3RS ET	S
05-Jul-18	NWL	3	4.170	SUMMER	32166	3RS ET	S
05-Jul-18	NWL	4	5.600	SUMMER	32166	3RS ET	S
09-Jul-18	NEL	2	7.900	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	3	21.800	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	4	7.500	SUMMER	32166	3RS ET	P
09-Jul-18	NEL	2	2.400	SUMMER	32166	3RS ET	S
09-Jul-18	NEL	3	7.700	SUMMER	32166	3RS ET	S
11-Jul-18	AW	1	2.230	SUMMER	32166	3RS ET	P
11-Jul-18	AW	2	2.610	SUMMER	32166	3RS ET	P
11-Jul-18	WL	1	0.935	SUMMER	32166	3RS ET	P
11-Jul-18	WL	2	5.562	SUMMER	32166	3RS ET	P
11-Jul-18	WL	3	9.521	SUMMER	32166	3RS ET	P
11-Jul-18	WL	4	2.406	SUMMER	32166	3RS ET	P
11-Jul-18	WL	2	3.839	SUMMER	32166	3RS ET	S
11-Jul-18	WL	3	4.997	SUMMER	32166	3RS ET	S
11-Jul-18	WL	4	1.230	SUMMER	32166	3RS ET	S
17-Jul-18	AW	2	4.530	SUMMER	32166	3RS ET	P
17-Jul-18	WL	1	1.730	SUMMER	32166	3RS ET	P
17-Jul-18	WL	2	9.190	SUMMER	32166	3RS ET	P
17-Jul-18	WL	3	6.564	SUMMER	32166	3RS ET	P
17-Jul-18	WL	4	0.430	SUMMER	32166	3RS ET	P
17-Jul-18	WL	1	1.070	SUMMER	32166	3RS ET	S
17-Jul-18	WL	2	5.640	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
17-Jul-18	WL	3	4.746	SUMMER	32166	3RS ET	S
19-Jul-18	NEL	2	20.870	SUMMER	32166	3RS ET	P
19-Jul-18	NEL	3	16.680	SUMMER	32166	3RS ET	P
19-Jul-18	NEL	2	8.630	SUMMER	32166	3RS ET	S
19-Jul-18	NEL	3	1.050	SUMMER	32166	3RS ET	S
20-Jul-18	NWL	1	9.440	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	2	19.567	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	3	33.930	SUMMER	32166	3RS ET	P
20-Jul-18	NWL	2	3.400	SUMMER	32166	3RS ET	S
20-Jul-18	NWL	3	8.660	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	2	32.460	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	3	22.153	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	4	0.487	SUMMER	32166	3RS ET	P
26-Jul-18	SWL	2	8.040	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	3	6.770	SUMMER	32166	3RS ET	S
26-Jul-18	SWL	4	0.580	SUMMER	32166	3RS ET	S
30-Jul-18	SWL	2	37.816	SUMMER	32166	3RS ET	P
30-Jul-18	SWL	3	17.730	SUMMER	32166	3RS ET	P
30-Jul-18	SWL	2	12.124	SUMMER	32166	3RS ET	S
30-Jul-18	SWL	3	3.490	SUMMER	32166	3RS ET	S

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

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
03-May-18	1	1131	CWD	2	NWL	3	35	ON	3RS ET	22.3558	113.8781	SPRING	NONE	N/A
14-May-18	1	1057	CWD	2	SWL	2	151	ON	3RS ET	22.1972	113.8588	SPRING	NONE	N/A
14-May-18	2	1115	CWD	5	SWL	2	121	ON	3RS ET	22.1994	113.8690	SPRING	NONE	N/A
14-May-18	3	1139	CWD	1	SWL	2	4	ON	3RS ET	22.1953	113.8689	SPRING	NONE	N/A
14-May-18	4	1250	CWD	1	SWL	3	191	ON	3RS ET	22.1881	113.8882	SPRING	NONE	N/A
14-May-18	5	1537	FP	6	SWL	3	21	ON	3RS ET	22.1652	113.9273	SPRING	NONE	N/A
14-May-18	6	1602	FP	3	SWL	3	116	ON	3RS ET	22.1439	113.9274	SPRING	NONE	N/A
14-May-18	7	1610	FP	1	SWL	3	16	ON	3RS ET	22.1462	113.9327	SPRING	NONE	N/A
14-May-18	8	1622	FP	3	SWL	3	509	ON	3RS ET	22.1633	113.9366	SPRING	NONE	N/A
16-May-18	1	1036	CWD	1	WL	3	225	ON	3RS ET	22.2655	113.8581	SPRING	NONE	N/A
16-May-18	2	1059	CWD	2	WL	3	122	ON	3RS ET	22.2573	113.8370	SPRING	NONE	N/A
23-May-18	1	1039	FP	2	SWL	3	15	ON	3RS ET	22.1684	113.9365	SPRING	NONE	N/A
23-May-18	2	1046	FP	2	SWL	3	37	ON	3RS ET	22.1651	113.9361	SPRING	NONE	N/A
23-May-18	3	1110	FP	3	SWL	3	182	ON	3RS ET	22.1618	113.9279	SPRING	NONE	N/A
23-May-18	4	1138	CWD	5	SWL	2	1155	ON	3RS ET	22.1989	113.9180	SPRING	NONE	N/A
23-May-18	5	1238	FP	4	SWL	3	17	ON	3RS ET	22.1411	113.9136	SPRING	NONE	N/A
21-Jun-18	1	1054	CWD	1	SWL	3	51	ON	3RS ET	22.1914	113.8491	SUMMER	NONE	P
21-Jun-18	2	1219	CWD	3	SWL	3	21	ON	3RS ET	22.2040	113.8781	SUMMER	NONE	P
21-Jun-18	3	1331	CWD	6	SWL	3	11	ON	3RS ET	22.1907	113.8973	SUMMER	NONE	P
21-Jun-18	4	1606	FP	3	SWL	3	24	ON	3RS ET	22.1653	113.9368	SUMMER	NONE	P
25-Jun-18	1	1059	CWD	1	SWL	4	138	ON	3RS ET	22.1822	113.8686	SUMMER	NONE	P
25-Jun-18	2	1308	CWD	4	SWL	3	119	ON	3RS ET	22.1934	113.9080	SUMMER	NONE	P
25-Jun-18	3	1332	CWD	8	SWL	3	32	ON	3RS ET	22.1945	113.9083	SUMMER	NONE	P
25-Jun-18	4	1356	CWD	1	SWL	3	129	ON	3RS ET	22.1780	113.9054	SUMMER	NONE	S
25-Jun-18	5	1456	CWD	4	SWL	2	6	ON	3RS ET	22.1805	113.9218	SUMMER	NONE	S
25-Jun-18	6	1519	CWD	7	SWL	2	29	ON	3RS ET	22.1867	113.9181	SUMMER	NONE	P
26-Jun-18	1	1137	CWD	1	WL	3	33	ON	3RS ET	22.2154	113.8192	SUMMER	NONE	P
27-Jun-18	1	1049	CWD	2	WL	3	51	ON	3RS ET	22.2524	113.8341	SUMMER	NONE	S
27-Jun-18	2	1106	CWD	3	WL	3	188	ON	3RS ET	22.2497	113.8406	SUMMER	NONE	P
27-Jun-18	3	1141	CWD	2	WL	3	27	ON	3RS ET	22.2331	113.8236	SUMMER	NONE	S
27-Jun-18	4	1200	CWD	5	WL	3	30	ON	3RS ET	22.2318	113.8390	SUMMER	NONE	P
27-Jun-18	5	1226	CWD	1	WL	3	122	ON	3RS ET	22.2237	113.8249	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
27-Jun-18	6	1234	CWD	12	WL	3	38	ON	3RS ET	22.2166	113.8199	SUMMER	NONE	S
27-Jun-18	7	1309	CWD	2	WL	3	145	ON	3RS ET	22.2141	113.8319	SUMMER	NONE	P
27-Jun-18	8	1341	CWD	2	WL	4	165	ON	3RS ET	22.1938	113.8425	SUMMER	NONE	S
11-Jul-18	1	1007	CWD	2	WL	2	569	ON	3RS ET	22.2873	113.8608	SUMMER	NONE	P
11-Jul-18	2	1027	CWD	1	WL	2	151	ON	3RS ET	22.2731	113.8471	SUMMER	NONE	S
11-Jul-18	3	1045	CWD	1	WL	2	247	ON	3RS ET	22.2692	113.8602	SUMMER	NONE	P
11-Jul-18	4	1108	CWD	1	WL	3	470	ON	3RS ET	22.2601	113.8498	SUMMER	NONE	P
11-Jul-18	5	1212	CWD	1	WL	3	303	ON	3RS ET	22.2232	113.8315	SUMMER	NONE	P
11-Jul-18	6	1237	CWD	3	WL	3	201	ON	3RS ET	22.2132	113.8211	SUMMER	NONE	P
11-Jul-18	7	1308	CWD	12	WL	3	159	ON	3RS ET	22.2050	113.8345	SUMMER	NONE	P
11-Jul-18	8	1403	CWD	10	WL	3	163	ON	3RS ET	22.1950	113.8422	SUMMER	NONE	S
17-Jul-18	1	1033	CWD	3	WL	2	696	ON	3RS ET	22.2607	113.8455	SUMMER	NONE	P
17-Jul-18	2	1100	CWD	1	WL	2	83	ON	3RS ET	22.2504	113.8371	SUMMER	NONE	P
17-Jul-18	3	1122	CWD	3	WL	3	501	ON	3RS ET	22.2415	113.8447	SUMMER	NONE	P
17-Jul-18	4	1201	CWD	1	WL	3	90	ON	3RS ET	22.2148	113.8195	SUMMER	NONE	S
17-Jul-18	5	1232	CWD	3	WL	3	46	ON	3RS ET	22.2009	113.8247	SUMMER	NONE	S
20-Jul-18	1	1040	CWD	1	NWL	3	680	ON	3RS ET	22.2720	113.8702	SUMMER	NONE	P
20-Jul-18	2	1233	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3495	113.8832	SUMMER	NONE	P
20-Jul-18	3	1251	CWD	2	NWL	2	N/A	OFF	3RS ET	22.3446	113.8860	SUMMER	NONE	P
26-Jul-18	1	1152	CWD	2	SWL	2	30	ON	3RS ET	22.1924	113.8878	SUMMER	NONE	P
26-Jul-18	2	1255	CWD	1	SWL	2	28	ON	3RS ET	22.1821	113.8982	SUMMER	NONE	P
26-Jul-18	3	1412	FP	2	SWL	3	52	ON	3RS ET	22.1540	113.9177	SUMMER	NONE	P
30-Jul-18	1	1244	CWD	1	SWL	3	252	ON	3RS ET	22.1949	113.8973	SUMMER	NONE	P
30-Jul-18	2	1317	CWD	2	SWL	2	85	ON	3RS ET	22.1986	113.9080	SUMMER	NONE	P
30-Jul-18	3	1345	CWD	3	SWL	3	401	ON	3RS ET	22.1717	113.9079	SUMMER	NONE	P
30-Jul-18	4	1611	CWD	3	SWL	2	219	ON	3RS ET	22.2085	113.9363	SUMMER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Dolphin 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. May and June 2018) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report.

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

Calculation of the July 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 396.814 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 20 on-effort sightings and total number of 55 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in July 2018 are shown as below:

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

$$STG = \frac{20}{396.814}\ x\ 100 = 5.04$$

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

$$ANI = \frac{55}{396.814}\ x\ 100 = 13.86$$

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

A total of 1175.194 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 44 on-effort sightings and total number of 136 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)

$$STG = \frac{44}{1175.194}\ x\ 100 = 3.74$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{136}{1175.194}\ x\ 100 = 11.57$$

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

NLMM016_20180711_2_2	WLMM081_20180711_3_4
WLMM051_20180711_4_2	WLMM071_20180711_6_15
WLMM075_20180711_6_3	NLMM023_20180711_7_4
NLMM043_20180711_7_1	SLMM003_20180711_7_11

SLMM064_20180711_7_1	WLMM004_20180711_7_2
WLMM020_20180711_7_1	WLMM048_20180711_7_2
WLMM063_20180711_7_4	WLMM085_20180711_7_1
WLMM107_20180711_7_4	WLMM116_20180711_7_8

WLMM117_20180711_7_2_Lower	WLMM001_20180711_8_2
WLMM005_20180711_8_6	WLMM048_20180711_8_1
WLMM060_20180711_8_1	WLMM062_20180711_8_1
WLMM071_20180711_8_3	WLMM116_20180711_8_1

WLMM053_20180717_1_17	WLMM103_20180717_1_6
WLMM006_20180717_3_8	WLMM009_20180717_3_8
SLMM027_20180717_5_3_Lower	WLMM118_20180717_5_9
WLMM115_20180720_1_7	NLMM006_20180720_2_1

NLMM013_20180720_2_3	NLMM006_20180720_3_3
NLMM013_20180720_3_1_Top	SLMM066_20180726_1_12
WLMM027_20180730_2_10	WLMM116_20180730_2_5
SLMM019_20180730_3_17	SLMM028_20180730_3_2

NLMM059_20180730_4_2	WLMM027_20180730_4_1
WLMM116_20180730_4_3	

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/Jul/18	Lung Kwu Chau	8:51	14:51	6:00	2	2-3	2	1-3
12/Jul/18	Lung Kwu Chau	8:50	14:50	6:00	2-3	2	3	2-3
19/Jul/18	Sha Chau	8:55	14:55	6:00	2-4	2	0	N/A
20/Jul/18	Lung Kwu Chau	8:45	14:45	6:00	2-3	2-3	6	1-2
26/Jul/18	Sha Chau	8:34	14:34	6:00	2-3	2	0	N/A

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

Appendix E. Calibration Certificates

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C183438
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC18-1201) Date of Receipt / 收件日期 : 12 June 2018

Description / 儀器名稱 : Acoustical Calibrator
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 4231
Serial No. / 編號 : 3003246
Supplied By / 委託者 : Atkins China Limited
13/F., Wharf T&T Centre, Harbour City,
Tsim Sha Tsui, Kowloon, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 23 June 2018

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 29 June 2018

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 — 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
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輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C183438
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C173864
CL281	Multifunction Acoustic Calibrator	PA160023
TST150A	Measuring Amplifier	C181288

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.0	± 0.2	± 0.2
114 dB, 1 kHz	114.0		

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

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

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH070142
Date of Issue : 26 July 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Jul 25, 2018
Date of Calibration	:	Jul 25, 2018 to Jul 25, 2018
Date of Next Calibration[(a)]	:	Oct 25, 2018

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	4.02	0.02	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.04	0.03	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	0.1	Satisfactory
25.6	25.5	-0.1	Satisfactory
39.0	38.9	-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 the acceptance criteria applicable for similar equipment used by QPT or quoted form relevant international standards.*

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

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QUALITY PRO TEST-CONSULT LIMITED
Unit 10, 14/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
Email: info@qualityprotest.com; Website: www.qualityprotest.com
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH070142
Date of Issue : 26 July 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.06	0.06	Satisfactory
4.99	4.92	-0.07	Satisfactory
6.40	6.38	-0.02	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	156.6	6.6	Satisfactory
0.01	1412	1381	-2.2	Satisfactory
0.1	12890	12411	-3.7	Satisfactory
0.5	58670	54019	-7.9	Satisfactory
1.0	111900	104782	-6.4	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.61	-3.9	Satisfactory
20	19.82	-0.9	Satisfactory
30	30.48	1.6	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.08	--	--
10	10.4	4.0	Satisfactory
20	20.82	4.1	Satisfactory
100	97.02	-3.0	Satisfactory
800	762.8	-4.7	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH060170
Date of Issue : 28 June 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Jun 27, 2018
Date of Calibration	:	Jun 27, 2018 to Jun 27, 2018
Date of Next Calibration[a]	:	Sep 27, 2018

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	3.97	-0.03	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.00	-0.01	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
12.6	12.3	-0.3	Satisfactory
37.4	37.5	0.1	Satisfactory
62.7	61.4	-1.3	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH060170
Date of Issue : 28 June 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.02	0.02	Satisfactory
4.37	4.41	0.04	Satisfactory
5.96	6.12	0.16	Satisfactory
7.34	7.41	0.07	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	148.0	0.7	Satisfactory
0.01	1412	1438	1.8	Satisfactory
0.1	12890	12696	-1.5	Satisfactory
0.5	58670	57876	-1.4	Satisfactory
1.0	111900	111059	-0.8	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.99	-0.1	Satisfactory
20	20.09	0.4	Satisfactory
30	30.22	0.7	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	--
10	10.14	1.4	Satisfactory
20	20.30	1.5	Satisfactory
100	101.67	1.7	Satisfactory
800	818.83	2.4	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.

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH070141
Date of Issue : 26 July 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17H105557
Date of Received	:	Jul 25, 2018
Date of Calibration	:	Jul 25, 2018 to Jul 26, 2018
Date of Next Calibration[(a)]	:	Oct 25, 2018

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	4.04	0.04	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.00	-0.01	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.2	0.2	Satisfactory
25.6	25.7	0.1	Satisfactory
39.0	39.2	0.2	Satisfactory

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

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Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH070141
Date of Issue : 26 July 2018

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.08	0.08	Satisfactory
4.99	5.01	0.02	Satisfactory
6.40	6.43	0.03	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	152.8	4.0	Satisfactory
0.01	1412	1340	-5.1	Satisfactory
0.1	12890	12456	-3.4	Satisfactory
0.5	58670	54401	-7.3	Satisfactory
1.0	111900	104586	-6.5	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.63	-3.7	Satisfactory
20	19.76	-1.2	Satisfactory
30	30.56	1.9	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.07	--	--
10	9.36	-6.4	Satisfactory
20	20.97	4.8	Satisfactory
100	96.48	-3.5	Satisfactory
800	748.6	-6.4	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.

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH060169
Date of Issue : 28 June 2018

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104233
Date of Received	:	Jun 27, 2018
Date of Calibration	:	Jun 27, 2018 to Jun 27, 2018
Date of Next Calibration[a]	:	Sep 27, 2018

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	3.96	-0.04	Satisfactory
7.42	7.44	0.02	Satisfactory
10.01	10.11	0.10	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
12.6	12.5	-0.1	Satisfactory
37.4	37.5	0.1	Satisfactory
62.7	61.5	-1.2	Satisfactory

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

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Remark(s): -

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

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.00	0.03	0.03	Satisfactory
4.37	4.46	0.09	Satisfactory
5.96	6.10	0.14	Satisfactory
7.34	7.36	0.02	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	150.0	2.1	Satisfactory
0.01	1412	1398	-1.0	Satisfactory
0.1	12890	12724	-1.3	Satisfactory
0.5	58670	58012	-1.1	Satisfactory
1.0	111900	110847	-0.9	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.97	-0.3	Satisfactory
20	20.14	0.7	Satisfactory
30	30.28	0.9	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.1	--	--
10	10.16	1.6	Satisfactory
20	20.19	1.0	Satisfactory
100	98.84	-1.2	Satisfactory
800	793.16	-0.9	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

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CALIBRATION REPORT

Test Report No. : AG070188
Date of Issue : Jun 27, 2018

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Rm 811, Hin Pui House,
Hin Keng Estate, Tai Wai
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette bottletop burette, 50ml
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N65665
Equipment Number	:	--
Date of Received	:	Jun 16, 2018
Date of Calibration	:	Jun 19, 2018
Date of Next Calibration[a]	:	Sep 19, 2018

PART C – CALIBRATION REQUESTED

Parameter	Reference Method
Accuracy Test	In-house Method (Gravimetric Method)

~ Continued On Next Page ~

Remark(s): -

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

APPROVED SIGNATORY :

CHAN Mei-wah Amy
Assistant Lab. Manager

專業化驗有限公司
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CALIBRATION REPORT

Test Report No. : AG070188
Date of Issue : Jun 27, 2018

PART D – RESULT[b],[c]

Water temperature: 23.5 ℃
Relative humidity: 58%
z-Factor: 1.0036

Trial	Nominal volume (mL) at interval				
	3	3	3	3	3
	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9845	2.9774	2.9779	2.9887	2.9797
2	2.9891	2.9842	2.9859	2.9826	2.9866
3	2.9894	2.9745	2.9876	2.9882	2.9808
4	2.9872	2.9882	2.9838	2.9819	2.9702
5	2.9839	2.9825	2.9858	2.9875	2.9892
6	2.9828	2.9886	2.9823	2.9898	2.9805
7	2.9802	2.9845	2.9821	2.9906	2.9776
8	2.9863	2.9833	2.9814	2.9841	2.9793
9	2.9815	2.9909	2.9849	2.9811	2.9825
10	2.9849	2.9808	2.9848	2.9898	2.9807
Average	2.9850	2.9835	2.9837	2.9864	2.9807
Standard deviation	0.0031	0.0051	0.0028	0.0036	0.0051
Calculated volume (mL)	2.9957	2.9942	2.9944	2.9972	2.9914
Error (%)	-0.1425	-0.1923	-0.1870	-0.0940	-0.2853
RSD (%)	0.1022	0.1692	0.0935	0.1211	0.1702

Acceptance Criteria [d]

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

~ END OF REPORT ~

Remark(s): -
[b] *The results relate only to the tested sample as received*
[c] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[d] *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted 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	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-RS0326-18	Valid until 23 Oct 2018
		Stockpiling Area	GW-RS0043-18	Valid until 13 Aug 2018
	Discharge License under WPCO	Launching Site	WT00024249-2016	Valid from to 25 Apr 2016 to 30 Apr 2021
		Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Launching Site	WPN 5213-951-L2902-01	Registration was updated on 29 Sep 2017
		Sheung Sha Chau	WPN 5111-434-L2902-03	Registration was updated on 6 Oct 2017
		Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
3201	Notification of Construction Work under APCO	Works area of 3201	406004	Receipt acknowledged by EPD on 10 Aug 2016
	Construction Noise Permit (General Works)	Works area of 3201	GW-RS0428-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	407624	Receipt acknowledged by EPD on 15 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3202	GW-RS0429-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0430-18	Superseded by GW-RS0575-18 on 9 Jul 2018
		Works area of 3203	GW-RS0575-18	Valid until 4 Jan 2019
	Registration as Chemical Waste Producer	Works area of 3203	WPN 5213-951-S3954-01	Registration was updated on 12 Dec 2016
	Discharge License under WPCO	Works area of 3203	WT00028251-2017	Valid from 9 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025846	Approval granted from EPD on 9 Sep 2016
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	Construction Noise Permit (General Works)	Works Area of 3204	GW-RS0431-18	Valid until 24 Nov 2018
	Registration as Chemical Waste Producer	Works Area of 3204	WPN 5213-951-C4102-01	Completion of Registration on 15 Sep 2016
		Site Office of 3204	WPN 5213-951-C4102-02	Completion of Registration on 17 Mar 2017
	Discharge License under WPCO	Works area of 3204	WT00028245-2017	Valid from 5 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025969	Approval granted from EPD on 21 Sep 2016
3205	Notification of Construction Work under APCO	Works area of 3205	409041	Receipt acknowledged by EPD on 19 Oct 2016
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0432-18	Superseded by GW-RS0576-18 on 9 Jul 2018
		Works Area of 3205	GW-RS0576-18	Valid until 4 Jan 2019
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016

Contract No.	Description	Location	Permit/ Reference No.	Status
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0521-18	Superseded by GW-RS0577-18 on 9 Jul 2018
		Works Area of 3206	GW-RS0577-18	Valid until 4 Jan 2019
		Works Area of 3206	GW-RS0596-18	Valid until 10 Jan 2019
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0270-18	Valid until 5 Oct 2018
		Works area of 3301	GW-RS0288-17	Valid until 5 Oct 2018
3501	Notification of Construction Work under APCO	Works area of 3501	417903	Receipt acknowledged by EPD on 13 Jun 2017
			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
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0541-18	Valid until 31 Oct 2018
3502	Notification of Construction Work under APCO	Works area of 3502	417511	Receipt acknowledged by EPD on 2 Jun 2017
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0193-18	Valid until 10 Sep 2018
3503	Notification of Construction Work under APCO	Works area of 3503	424591	Receipt acknowledged by EPD on 8 Dec 2017
			435180	Receipt acknowledged by EPD on 29 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0536-18	Superseded by GW-RS0629-18 on 25 Jul 2018
			GW-RS0629-18	Valid until 22 Jan 2019
		Stockpiling area of 3503	GW-RS0384-18	Valid until 13 Nov 2018
3505	Bill Account for disposal	Works area of 3505	A/C 7030321	Approval granted from EPD on 16 Mar 2018
	Construction Noise Permit (General Works)	Works area of 3505	GW-RS0497-18	Valid until 31 Oct 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
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 acknowledge by EPD on 16 Jul 2018
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-51	Completion of Registration on 4 Aug 2017
	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-RS0340-18	Valid until 26 Oct 2018
		Works area of 3801	GW-RS0343-18	Superseded by GW-RS0552-18 on 1 Jul 2018
			GW-RS0552-18	Valid until 31 Aug 2018
		Works area of 3801	GW-RS0399-18	Valid until 22 Jul 2018

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	1	0	0
From 28 December 2015 to end of the reporting period	13	1	1

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

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

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Jul	08:16	3A061	YFT	Arrival	12.8	-	-
01-Jul	08:21	8S210	XZM	Arrival	11.9	-	-
01-Jul	09:55	3A062	YFT	Arrival	11.3	-	-
01-Jul	10:25	3A163	YFT	Departure	12.5	-	-
01-Jul	10:38	8S212	XZM	Arrival	10.7	-	-
01-Jul	10:39	3A081	ZUI	Arrival	12.4	-	-
01-Jul	11:14	8S121	XZM	Departure	12.6	-	-
01-Jul	11:21	3A063	YFT	Arrival	11.9	-	-
01-Jul	12:31	3A168	YFT	Departure	11.7	-	-
01-Jul	12:33	3A181	ZUI	Departure	12.9	-	-
01-Jul	12:51	8S215	XZM	Arrival	11.6	-	-
01-Jul	12:55	3A064	YFT	Arrival	12.2	-	-
01-Jul	13:27	8S123	XZM	Departure	12.1	-	-
01-Jul	13:43	3A082	ZUI	Arrival	12.4	-	-
01-Jul	14:17	3A164	YFT	Departure	12.2	-	-
01-Jul	14:19	3A182	ZUI	Departure	13.5	-	-
01-Jul	14:52	3A065	YFT	Arrival	12.5	-	-
01-Jul	16:25	3A167	YFT	Departure	12.9	-	-
01-Jul	16:35	8S218	XZM	Arrival	12.1	-	-
01-Jul	16:41	3A083	ZUI	Arrival	12.3	-	-
01-Jul	16:59	3A067	YFT	Arrival	12.2	-	-
01-Jul	17:01	3A183	ZUI	Departure	12.9	-	-
01-Jul	17:10	8S126	XZM	Departure	11.7	-	-
01-Jul	19:21	3A166	YFT	Departure	12.8	-	-
01-Jul	19:45	3A084	ZUI	Arrival	11.1	-	-
01-Jul	20:20	3A185	ZUI	Departure	11.9	-	-
01-Jul	20:49	8S2113	XZM	Arrival	11.5	-	-
01-Jul	21:02	3A169	YFT	Departure	12.2	-	-
01-Jul	22:08	8S522	XZM	Departure	12.6	-	-
02-Jul	08:14	3A061	YFT	Arrival	12	-	-
02-Jul	08:29	8S210	XZM	Arrival	11	-	-
02-Jul	09:59	3A062	YFT	Arrival	12.1	-	-
02-Jul	10:23	3A163	YFT	Departure	12.5	-	-
02-Jul	10:37	8S212	XZM	Arrival	10.6	-	-
02-Jul	10:45	3A081	ZUI	Arrival	11.5	-	-
02-Jul	11:05	8S121	XZM	Departure	12.4	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
02-Jul	11:16	3A063	YFT	Arrival	11.6	-	-
02-Jul	12:32	3A181	ZUI	Departure	12.9	-	-
02-Jul	12:34	3A168	YFT	Departure	12.7	-	-
02-Jul	12:56	3A064	YFT	Arrival	12.2	-	-
02-Jul	13:04	8S215	XZM	Arrival	12	-	-
02-Jul	13:30	8S123	XZM	Departure	12.7	-	-
02-Jul	13:45	3A082	ZUI	Arrival	12.5	-	-
02-Jul	14:19	3A164	YFT	Departure	12.5	-	-
02-Jul	14:23	3A182	ZUI	Departure	12.4	-	-
02-Jul	15:05	3A065	YFT	Arrival	12.9	-	-
02-Jul	16:27	3A167	YFT	Departure	13.4	-	-
02-Jul	16:48	3A083	ZUI	Arrival	12.1	-	-
02-Jul	16:49	8S218	XZM	Arrival	12.6	-	-
02-Jul	17:00	3A067	YFT	Arrival	12	-	-
02-Jul	17:13	3A183	ZUI	Departure	12.6	-	-
02-Jul	17:14	8S126	XZM	Departure	12.3	-	-
02-Jul	19:09	3A166	YFT	Departure	12.3	-	-
02-Jul	19:36	3A084	ZUI	Arrival	12.1	-	-
02-Jul	20:14	3A185	ZUI	Departure	12.6	-	-
02-Jul	21:04	8S2113	XZM	Arrival	12.1	-	-
02-Jul	21:05	3A169	YFT	Departure	12	-	-
02-Jul	22:13	8S522	XZM	Departure	12.6	-	-
03-Jul	08:20	3A061	YFT	Arrival	12	-	-
03-Jul	08:23	8S210	XZM	Arrival	11.9	-	-
03-Jul	09:59	3A062	YFT	Arrival	11.8	-	-
03-Jul	10:18	3A163	YFT	Departure	11.6	-	-
03-Jul	10:34	8S212	XZM	Arrival	12	-	-
03-Jul	10:47	3A081	ZUI	Arrival	11.6	-	-
03-Jul	11:02	8S121	XZM	Departure	12	-	-
03-Jul	11:19	3A063	YFT	Arrival	11.4	-	-
03-Jul	12:24	3A168	YFT	Departure	11.9	-	-
03-Jul	12:25	3A181	ZUI	Departure	12	-	-
03-Jul	12:47	8S215	XZM	Arrival	11.7	-	-
03-Jul	12:55	3A064	YFT	Arrival	12.2	-	-
03-Jul	13:19	8S123	XZM	Departure	11.4	-	-
03-Jul	13:40	3A082	ZUI	Arrival	13.2	-	-
03-Jul	14:15	3A164	YFT	Departure	11.5	-	-
03-Jul	14:15	3A182	ZUI	Departure	11.8	-	-
03-Jul	14:57	3A065	YFT	Arrival	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Jul	16:15	3A167	YFT	Departure	11.4	-	-
03-Jul	16:35	3A083	ZUI	Arrival	12.7	-	-
03-Jul	16:41	8S218	XZM	Arrival	12.5	-	-
03-Jul	16:59	3A067	YFT	Arrival	12.2	-	-
03-Jul	17:07	8S126	XZM	Departure	12.4	-	-
03-Jul	17:09	3A183	ZUI	Departure	12.5	-	-
03-Jul	19:05	3A166	YFT	Departure	12.3	-	-
03-Jul	19:33	3A084	ZUI	Arrival	12.1	-	-
03-Jul	20:07	3A185	ZUI	Departure	12.9	-	-
03-Jul	20:58	8S2113	XZM	Arrival	11.6	-	-
03-Jul	21:15	3A169	YFT	Departure	13.4	-	-
03-Jul	21:58	8S522	XZM	Departure	11.6	-	-
04-Jul	08:12	3A061	YFT	Arrival	12.1	-	-
04-Jul	08:23	8S210	XZM	Arrival	11.6	-	-
04-Jul	09:47	3A062	YFT	Arrival	12.3	-	-
04-Jul	10:19	3A163	YFT	Departure	12.5	-	-
04-Jul	10:33	3A081	ZUI	Arrival	12.7	-	-
04-Jul	10:39	8S212	XZM	Arrival	11.6	-	-
04-Jul	11:02	8S121	XZM	Departure	12	-	-
04-Jul	11:15	3A063	YFT	Arrival	12.6	-	-
04-Jul	12:23	3A168	YFT	Departure	13.2	-	-
04-Jul	12:24	3A181	ZUI	Departure	12.3	-	-
04-Jul	12:50	8S215	XZM	Arrival	12.3	-	-
04-Jul	12:56	3A064	YFT	Arrival	12.6	-	-
04-Jul	13:22	8S123	XZM	Departure	13.1	-	-
04-Jul	13:41	3A082	ZUI	Arrival	12.4	-	-
04-Jul	14:22	3A164	YFT	Departure	12.9	-	-
04-Jul	14:28	3A182	ZUI	Departure	11.9	-	-
04-Jul	15:00	3A065	YFT	Arrival	13.5	-	-
04-Jul	16:18	3A167	YFT	Departure	13.6	-	-
04-Jul	16:48	3A083	ZUI	Arrival	11.2	-	-
04-Jul	16:49	8S218	XZM	Arrival	12.5	-	-
04-Jul	16:57	3A067	YFT	Arrival	12.3	-	-
04-Jul	17:21	3A183	ZUI	Departure	12.5	-	-
04-Jul	17:22	8S126	XZM	Departure	12.8	-	-
04-Jul	19:14	3A166	YFT	Departure	12.2	-	-
04-Jul	19:35	3A084	ZUI	Arrival	13	-	-
04-Jul	20:18	3A185	ZUI	Departure	12	-	-
04-Jul	21:02	8S2113	XZM	Arrival	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Jul	21:04	3A169	YFT	Departure	13.5	-	-
04-Jul	22:01	8S522	XZM	Departure	12.5	-	-
05-Jul	08:10	3A061	YFT	Arrival	12.7	-	-
05-Jul	08:32	8S210	XZM	Arrival	12.9	-	-
05-Jul	09:59	3A062	YFT	Arrival	11.6	-	-
05-Jul	10:15	3A163	YFT	Departure	13	-	-
05-Jul	10:30	3A081	ZUI	Arrival	11.5	-	-
05-Jul	10:37	8S212	XZM	Arrival	11.5	-	-
05-Jul	11:05	8S121	XZM	Departure	12.3	-	-
05-Jul	11:14	3A063	YFT	Arrival	12.1	-	-
05-Jul	12:14	3A181	ZUI	Departure	12.2	-	-
05-Jul	12:19	3A168	YFT	Departure	13.2	-	-
05-Jul	12:34	8S215	XZM	Arrival	10.7	-	-
05-Jul	12:54	3A064	YFT	Arrival	12.5	-	-
05-Jul	13:25	8S123	XZM	Departure	12.5	-	-
05-Jul	13:40	3A082	ZUI	Arrival	13	-	-
05-Jul	14:17	3A164	YFT	Departure	13.4	-	-
05-Jul	14:19	3A182	ZUI	Departure	13.2	-	-
05-Jul	14:58	3A065	YFT	Arrival	12.5	-	-
05-Jul	16:26	3A167	YFT	Departure	13.1	-	-
05-Jul	16:45	8S218	XZM	Arrival	12	-	-
05-Jul	16:45	3A083	ZUI	Arrival	12.1	-	-
05-Jul	16:54	3A067	YFT	Arrival	12.8	-	-
05-Jul	17:09	3A183	ZUI	Departure	11.7	-	-
05-Jul	17:16	8S126	XZM	Departure	12.5	-	-
05-Jul	19:04	3A166	YFT	Departure	12.2	-	-
05-Jul	19:38	3A084	ZUI	Arrival	11.5	-	-
05-Jul	20:18	3A185	ZUI	Departure	12.5	-	-
05-Jul	20:49	8S2113	XZM	Arrival	12.6	-	-
05-Jul	21:03	3A169	YFT	Departure	12.1	-	-
05-Jul	22:03	8S522	XZM	Departure	13.1	-	-
06-Jul	08:18	3A061	YFT	Arrival	12.4	-	-
06-Jul	08:27	8S210	XZM	Arrival	12.6	-	-
06-Jul	09:47	3A062	YFT	Arrival	12.6	-	-
06-Jul	10:18	3A163	YFT	Departure	12.8	-	-
06-Jul	10:44	3A081	ZUI	Arrival	12.5	-	-
06-Jul	10:49	8S212	XZM	Arrival	11.9	-	-
06-Jul	11:09	8S121	XZM	Departure	12.5	-	-
06-Jul	11:20	3A063	YFT	Arrival	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Jul	12:19	3A168	YFT	Departure	11.9	-	-
06-Jul	12:22	3A181	ZUI	Departure	11.8	-	-
06-Jul	12:47	8S215	XZM	Arrival	12.5	-	-
06-Jul	12:52	3A064	YFT	Arrival	12.3	<= 5	< 1min
06-Jul	13:25	8S123	XZM	Departure	13.1	-	-
06-Jul	13:41	3A082	ZUI	Arrival	12.1	-	-
06-Jul	14:16	3A164	YFT	Departure	13	-	-
06-Jul	14:20	3A182	ZUI	Departure	12.7	-	-
06-Jul	14:58	3A065	YFT	Arrival	12.5	-	-
06-Jul	16:22	3A167	YFT	Departure	12.6	-	-
06-Jul	16:40	8S218	XZM	Arrival	12.3	-	-
06-Jul	16:43	3A083	ZUI	Arrival	12.5	-	-
06-Jul	16:51	3A067	YFT	Arrival	13.1	-	-
06-Jul	17:00	8S126	XZM	Departure	13	-	-
06-Jul	17:01	3A183	ZUI	Departure	13.1	-	-
06-Jul	19:17	3A166	YFT	Departure	12	-	-
06-Jul	19:42	3A084	ZUI	Arrival	12.7	-	-
06-Jul	20:24	3A185	ZUI	Departure	12.7	-	-
06-Jul	20:58	8S2113	XZM	Arrival	11.5	-	-
06-Jul	21:05	3A169	YFT	Departure	12	-	-
06-Jul	22:01	8S522	XZM	Departure	11.9	-	-
07-Jul	08:15	3A061	YFT	Arrival	12.2	-	-
07-Jul	08:19	8S210	XZM	Arrival	12.1	-	-
07-Jul	09:53	3A062	YFT	Arrival	12.1	-	-
07-Jul	10:13	3A163	YFT	Departure	10.7	-	-
07-Jul	10:39	8S212	XZM	Arrival	11.4	-	-
07-Jul	10:46	3A081	ZUI	Arrival	12	-	-
07-Jul	11:06	8S121	XZM	Departure	11.1	-	-
07-Jul	11:19	3A063	YFT	Arrival	11.9	-	-
07-Jul	12:12	3A168	YFT	Departure	12.2	-	-
07-Jul	12:19	3A181	ZUI	Departure	12.2	-	-
07-Jul	12:43	8S215	XZM	Arrival	12.3	-	-
07-Jul	12:50	3A064	YFT	Arrival	11.2	-	-
07-Jul	13:30	8S123	XZM	Departure	11.9	-	-
07-Jul	13:37	3A082	ZUI	Arrival	12.7	-	-
07-Jul	14:19	3A164	YFT	Departure	12.3	-	-
07-Jul	14:22	3A182	ZUI	Departure	12.1	-	-
07-Jul	14:58	3A065	YFT	Arrival	11.9	-	-
07-Jul	16:25	3A167	YFT	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Jul	16:40	8S218	XZM	Arrival	11.7	-	-
07-Jul	16:56	3A083	ZUI	Arrival	11.5	-	-
07-Jul	16:59	3A067	YFT	Arrival	11.8	-	-
07-Jul	17:14	8S126	XZM	Departure	12	-	-
07-Jul	17:17	3A183	ZUI	Departure	12.4	-	-
07-Jul	19:18	3A166	YFT	Departure	11.3	-	-
07-Jul	19:38	3A084	ZUI	Arrival	12	-	-
07-Jul	20:24	3A185	ZUI	Departure	12.4	-	-
07-Jul	21:01	8S2113	XZM	Arrival	12.5	-	-
07-Jul	21:04	3A169	YFT	Departure	12.1	-	-
07-Jul	22:20	8S522	XZM	Departure	13.2	-	-
08-Jul	08:17	3A061	YFT	Arrival	11.1	-	-
08-Jul	08:24	8S210	XZM	Arrival	12.3	-	-
08-Jul	10:16	3A062	YFT	Arrival	12.7	-	-
08-Jul	10:32	3A081	ZUI	Arrival	13	-	-
08-Jul	10:34	3A163	YFT	Departure	13.4	-	-
08-Jul	10:44	8S212	XZM	Arrival	11.2	-	-
08-Jul	11:14	8S121	XZM	Departure	12.7	-	-
08-Jul	11:17	3A063	YFT	Arrival	12.3	-	-
08-Jul	12:24	3A168	YFT	Departure	12.5	-	-
08-Jul	12:25	3A181	ZUI	Departure	12.8	-	-
08-Jul	12:53	8S215	XZM	Arrival	12.3	-	-
08-Jul	12:58	3A064	YFT	Arrival	12.5	-	-
08-Jul	13:28	8S123	XZM	Departure	12.6	-	-
08-Jul	13:53	3A082	ZUI	Arrival	12.3	-	-
08-Jul	14:33	3A164	YFT	Departure	13	-	-
08-Jul	14:36	3A182	ZUI	Departure	12.9	-	-
08-Jul	14:54	3A065	YFT	Arrival	12.3	-	-
08-Jul	16:19	3A167	YFT	Departure	12.4	-	-
08-Jul	16:55	3A067	YFT	Arrival	12.5	-	-
08-Jul	16:57	3A083	ZUI	Arrival	12.8	-	-
08-Jul	16:59	8S218	XZM	Arrival	10.5	-	-
08-Jul	17:17	8S126	XZM	Departure	12.8	-	-
08-Jul	17:23	3A183	ZUI	Departure	12.6	-	-
08-Jul	19:17	3A166	YFT	Departure	12.9	-	-
08-Jul	19:37	3A084	ZUI	Arrival	13.3	-	-
08-Jul	20:18	3A185	ZUI	Departure	12.1	-	-
08-Jul	20:51	8S2113	XZM	Arrival	12.2	-	-
08-Jul	21:14	3A169	YFT	Departure	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
08-Jul	22:06	8S522	XZM	Departure	11.7	-	-
09-Jul	08:17	3A061	YFT	Arrival	12	-	-
09-Jul	08:20	8S210	XZM	Arrival	11.9	-	-
09-Jul	10:00	3A062	YFT	Arrival	12.2	-	-
09-Jul	10:20	3A163	YFT	Departure	12.9	-	-
09-Jul	10:36	8S212	XZM	Arrival	13.2	-	-
09-Jul	10:43	3A081	ZUI	Arrival	12.5	-	-
09-Jul	11:11	8S121	XZM	Departure	13.2	-	-
09-Jul	11:20	3A063	YFT	Arrival	11.8	-	-
09-Jul	12:35	3A181	ZUI	Departure	12.7	-	-
09-Jul	12:37	3A168	YFT	Departure	12	-	-
09-Jul	12:51	8S215	XZM	Arrival	12.1	-	-
09-Jul	12:57	3A064	YFT	Arrival	12.3	-	-
09-Jul	13:32	8S123	XZM	Departure	12.7	-	-
09-Jul	13:43	3A082	ZUI	Arrival	12.1	-	-
09-Jul	14:20	3A164	YFT	Departure	12.8	-	-
09-Jul	14:23	3A182	ZUI	Departure	10.9	-	-
09-Jul	15:04	3A065	YFT	Arrival	10.9	-	-
09-Jul	16:32	3A167	YFT	Departure	12.3	-	-
09-Jul	16:48	3A083	ZUI	Arrival	10.1	-	-
09-Jul	16:49	8S218	XZM	Arrival	10.3	-	-
09-Jul	17:10	3A067	YFT	Arrival	12.2	-	-
09-Jul	17:32	8S126	XZM	Departure	12.3	-	-
09-Jul	17:34	3A183	ZUI	Departure	12.9	-	-
09-Jul	19:22	3A166	YFT	Departure	12.6	-	-
09-Jul	19:35	3A084	ZUI	Arrival	13.1	-	-
09-Jul	20:23	3A185	ZUI	Departure	13.3	-	-
09-Jul	20:57	8S2113	XZM	Arrival	11.4	-	-
09-Jul	21:10	3A169	YFT	Departure	12	-	-
10-Jul	08:17	3A061	YFT	Arrival	12	-	-
10-Jul	08:31	8S210	XZM	Arrival	11.9	-	-
10-Jul	10:14	3A062	YFT	Arrival	12.3	-	-
10-Jul	10:31	3A081	ZUI	Arrival	12.3	-	-
10-Jul	10:33	3A163	YFT	Departure	12.3	-	-
10-Jul	10:42	8S212	XZM	Arrival	12.6	-	-
10-Jul	11:06	8S121	XZM	Departure	12.6	-	-
10-Jul	11:21	3A063	YFT	Arrival	12.9	-	-
10-Jul	12:48	3A181	ZUI	Departure	11.4	-	-
10-Jul	12:52	3A168	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)
10-Jul	13:01	8S215	XZM	Arrival	12.2	-	-
10-Jul	13:11	3A064	YFT	Arrival	12.2	-	-
10-Jul	13:26	8S123	XZM	Departure	12.5	> 15	< 1min
10-Jul	13:49	3A082	ZUI	Arrival	12.4	-	-
10-Jul	14:24	3A164	YFT	Departure	13	-	-
10-Jul	14:25	3A182	ZUI	Departure	12.6	-	-
10-Jul	14:52	3A065	YFT	Arrival	11.9	-	-
10-Jul	16:45	3A167	YFT	Departure	11.9	-	-
10-Jul	16:58	8S218	XZM	Arrival	11.4	-	-
10-Jul	17:15	3A083	ZUI	Arrival	12.1	-	-
10-Jul	17:17	3A067	YFT	Arrival	11.5	-	-
10-Jul	17:34	3A183	ZUI	Departure	12	-	-
10-Jul	17:42	8S126	XZM	Departure	10.9	-	-
10-Jul	19:20	3A166	YFT	Departure	13.8	-	-
10-Jul	19:50	3A084	ZUI	Arrival	12.3	-	-
10-Jul	20:12	3A185	ZUI	Departure	13.6	-	-
10-Jul	20:49	8S2113	XZM	Arrival	12.1	-	-
10-Jul	21:04	3A169	YFT	Departure	12.8	-	-
11-Jul	08:15	3A061	YFT	Arrival	13	-	-
11-Jul	08:22	8S210	XZM	Arrival	12.6	-	-
11-Jul	09:55	3A062	YFT	Arrival	12.3	-	-
11-Jul	10:21	3A163	YFT	Departure	11.6	-	-
11-Jul	10:36	3A081	ZUI	Arrival	12.8	-	-
11-Jul	10:40	8S212	XZM	Arrival	12.9	-	-
11-Jul	10:57	8S121	XZM	Departure	12.4	-	-
11-Jul	11:08	3A063	YFT	Arrival	12.9	-	-
11-Jul	12:27	3A168	YFT	Departure	12.4	-	-
11-Jul	12:32	3A181	ZUI	Departure	11.8	-	-
11-Jul	12:48	8S215	XZM	Arrival	11.7	-	-
11-Jul	12:56	3A064	YFT	Arrival	12.5	-	-
11-Jul	13:17	8S123	XZM	Departure	12	-	-
11-Jul	13:58	3A082	ZUI	Arrival	13.4	-	-
11-Jul	14:21	3A164	YFT	Departure	11.6	-	-
11-Jul	14:34	3A182	ZUI	Departure	11.9	-	-
11-Jul	14:52	3A065	YFT	Arrival	12.1	-	-
11-Jul	16:19	3A167	YFT	Departure	12.5	-	-
11-Jul	16:39	8S218	XZM	Arrival	11.3	-	-
11-Jul	16:42	3A083	ZUI	Arrival	11.9	-	-
11-Jul	16:59	3A067	YFT	Arrival	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Jul	17:27	8S126	XZM	Departure	13	-	-
11-Jul	17:29	3A183	ZUI	Departure	13.2	-	-
11-Jul	19:05	3A166	YFT	Departure	12.7	-	-
11-Jul	19:32	3A084	ZUI	Arrival	11.9	-	-
11-Jul	20:23	3A185	ZUI	Departure	12.3	-	-
11-Jul	20:54	8S2113	XZM	Arrival	12.1	-	-
11-Jul	21:12	3A169	YFT	Departure	12.5	-	-
12-Jul	08:13	3A061	YFT	Arrival	12.5	-	-
12-Jul	08:20	8S210	XZM	Arrival	11.2	-	-
12-Jul	09:54	3A062	YFT	Arrival	11.8	-	-
12-Jul	10:24	3A163	YFT	Departure	12	-	-
12-Jul	10:34	8S212	XZM	Arrival	11.4	-	-
12-Jul	10:48	3A081	ZUI	Arrival	13.2	-	-
12-Jul	11:15	8S121	XZM	Departure	13.2	-	-
12-Jul	11:20	3A063	YFT	Arrival	11.4	-	-
12-Jul	12:32	3A181	ZUI	Departure	12.5	-	-
12-Jul	12:34	3A168	YFT	Departure	12.3	-	-
12-Jul	12:50	8S215	XZM	Arrival	12.2	-	-
12-Jul	13:05	3A064	YFT	Arrival	12.3	-	-
12-Jul	13:20	8S123	XZM	Departure	11.9	-	-
12-Jul	13:43	3A082	ZUI	Arrival	12.3	-	-
12-Jul	14:27	3A164	YFT	Departure	11.9	-	-
12-Jul	14:32	3A182	ZUI	Departure	12.1	-	-
12-Jul	15:01	3A065	YFT	Arrival	12.3	-	-
12-Jul	16:22	3A167	YFT	Departure	13	-	-
12-Jul	17:00	3A083	ZUI	Arrival	12.4	-	-
12-Jul	17:02	8S218	XZM	Arrival	12.3	-	-
12-Jul	17:13	3A067	YFT	Arrival	11.4	-	-
12-Jul	17:36	8S126	XZM	Departure	12.7	-	-
12-Jul	17:37	3A183	ZUI	Departure	13.6	-	-
12-Jul	19:16	3A166	YFT	Departure	13.3	-	-
12-Jul	19:43	3A084	ZUI	Arrival	11.5	-	-
12-Jul	20:14	3A185	ZUI	Departure	12.4	-	-
12-Jul	21:03	8S2113	XZM	Arrival	11.3	-	-
12-Jul	21:15	3A169	YFT	Departure	12.1	-	-
13-Jul	08:15	3A061	YFT	Arrival	12.5	-	-
13-Jul	08:16	8S210	XZM	Arrival	11.9	-	-
13-Jul	09:49	3A062	YFT	Arrival	10.4	-	-
13-Jul	10:29	3A163	YFT	Departure	11.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Jul	10:37	8S212	XZM	Arrival	11	-	-
13-Jul	10:43	3A081	ZUI	Arrival	11.7	-	-
13-Jul	11:00	8S121	XZM	Departure	12.2	-	-
13-Jul	11:13	3A063	YFT	Arrival	13.1	-	-
13-Jul	12:16	3A168	YFT	Departure	12	-	-
13-Jul	12:18	3A181	ZUI	Departure	13.5	-	-
13-Jul	12:45	8S215	XZM	Arrival	12.3	-	-
13-Jul	13:02	3A064	YFT	Arrival	11.6	-	-
13-Jul	13:23	8S123	XZM	Departure	12.4	-	-
13-Jul	13:42	3A082	ZUI	Arrival	13	-	-
13-Jul	14:17	3A164	YFT	Departure	11.4	-	-
13-Jul	14:22	3A182	ZUI	Departure	13.1	-	-
13-Jul	14:55	3A065	YFT	Arrival	12.9	-	-
13-Jul	16:29	3A167	YFT	Departure	12.9	-	-
13-Jul	16:42	8S218	XZM	Arrival	11.3	-	-
13-Jul	16:43	3A083	ZUI	Arrival	11.9	-	-
13-Jul	17:04	3A067	YFT	Arrival	12.1	-	-
13-Jul	17:14	8S126	XZM	Departure	12	-	-
13-Jul	17:20	3A183	ZUI	Departure	11.7	-	-
13-Jul	19:10	3A166	YFT	Departure	12.7	-	-
13-Jul	19:40	3A084	ZUI	Arrival	11.7	-	-
13-Jul	20:10	3A185	ZUI	Departure	12.6	-	-
13-Jul	20:55	8S2113	XZM	Arrival	11.6	-	-
13-Jul	21:04	3A169	YFT	Departure	12.7	-	-
13-Jul	22:19	8S522	XZM	Departure	12.7	-	-
14-Jul	08:18	3A061	YFT	Arrival	12.2	-	-
14-Jul	08:22	8S210	XZM	Arrival	11.4	-	-
14-Jul	09:56	3A062	YFT	Arrival	13.5	-	-
14-Jul	10:21	3A163	YFT	Departure	13.7	-	-
14-Jul	10:39	8S212	XZM	Arrival	10.7	-	-
14-Jul	10:46	3A081	ZUI	Arrival	12.4	-	-
14-Jul	11:11	8S121	XZM	Departure	10.6	-	-
14-Jul	11:23	3A063	YFT	Arrival	12.2	-	-
14-Jul	12:18	3A168	YFT	Departure	12.9	-	-
14-Jul	12:20	3A181	ZUI	Departure	12.8	-	-
14-Jul	12:46	8S215	XZM	Arrival	13.4	-	-
14-Jul	12:56	3A064	YFT	Arrival	13.4	-	-
14-Jul	13:22	8S123	XZM	Departure	13.1	-	-
14-Jul	13:59	3A082	ZUI	Arrival	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
14-Jul	14:27	3A164	YFT	Departure	13.6	-	-
14-Jul	14:34	3A182	ZUI	Departure	11.3	-	-
14-Jul	14:58	3A065	YFT	Arrival	11.7	-	-
14-Jul	16:30	3A167	YFT	Departure	12.3	-	-
14-Jul	16:45	8S218	XZM	Arrival	12.8	-	-
14-Jul	16:48	3A083	ZUI	Arrival	12	-	-
14-Jul	17:02	3A067	YFT	Arrival	12.8	<= 5	< 1min
14-Jul	17:11	8S126	XZM	Departure	12.7	-	-
14-Jul	17:13	3A183	ZUI	Departure	12.1	-	-
14-Jul	19:09	3A166	YFT	Departure	11.4	-	-
14-Jul	19:56	3A084	ZUI	Arrival	12	-	-
14-Jul	20:19	3A185	ZUI	Departure	12	-	-
14-Jul	21:03	3A169	YFT	Departure	12.6	-	-
14-Jul	21:03	8S2113	XZM	Arrival	11.2	-	-
15-Jul	08:23	8S210	XZM	Arrival	12.4	-	-
15-Jul	08:34	3A061	YFT	Arrival	11	-	-
15-Jul	10:08	3A062	YFT	Arrival	13.1	-	-
15-Jul	10:23	3A163	YFT	Departure	13.4	-	-
15-Jul	10:37	3A081	ZUI	Arrival	11.7	-	-
15-Jul	10:38	8S212	XZM	Arrival	11.7	-	-
15-Jul	11:18	8S121	XZM	Departure	11.1	<= 5	< 1min
15-Jul	11:22	3A063	YFT	Arrival	12.6	-	-
15-Jul	12:19	3A181	ZUI	Departure	13	-	-
15-Jul	12:21	3A168	YFT	Departure	12.9	-	-
15-Jul	12:42	8S215	XZM	Arrival	11.9	-	-
15-Jul	12:56	3A064	YFT	Arrival	11.8	-	-
15-Jul	13:19	8S123	XZM	Departure	12.8	-	-
15-Jul	14:00	3A082	ZUI	Arrival	13.1	-	-
15-Jul	14:31	3A164	YFT	Departure	11.9	-	-
15-Jul	14:44	3A182	ZUI	Departure	11.7	-	-
15-Jul	14:55	3A065	YFT	Arrival	12.6	-	-
15-Jul	16:24	3A167	YFT	Departure	12.8	-	-
15-Jul	16:57	3A083	ZUI	Arrival	11.8	-	-
15-Jul	16:58	8S218	XZM	Arrival	12.6	-	-
15-Jul	17:11	3A067	YFT	Arrival	12.2	-	-
15-Jul	17:28	3A183	ZUI	Departure	12.1	-	-
15-Jul	17:31	8S126	XZM	Departure	12.5	-	-
15-Jul	19:10	3A166	YFT	Departure	13.2	<= 10	< 1min
15-Jul	19:56	3A084	ZUI	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Jul	20:19	3A185	ZUI	Departure	12.8	-	-
15-Jul	20:54	8S2113	XZM	Arrival	11.7	-	-
15-Jul	21:17	3A169	YFT	Departure	12.6	-	-
15-Jul	22:08	8S522	XZM	Departure	12.9	-	-
16-Jul	08:18	3A061	YFT	Arrival	11.6	-	-
16-Jul	08:22	8S210	XZM	Arrival	11.4	-	-
16-Jul	09:51	3A062	YFT	Arrival	12.7	-	-
16-Jul	10:14	3A163	YFT	Departure	12.6	-	-
16-Jul	10:31	8S212	XZM	Arrival	12.3	-	-
16-Jul	10:37	3A081	ZUI	Arrival	11	-	-
16-Jul	11:11	8S121	XZM	Departure	12.4	-	-
16-Jul	11:14	3A063	YFT	Arrival	11.1	-	-
16-Jul	12:22	3A181	ZUI	Departure	12.6	-	-
16-Jul	12:28	3A168	YFT	Departure	12	-	-
16-Jul	12:55	8S215	XZM	Arrival	11.7	-	-
16-Jul	12:57	3A064	YFT	Arrival	12.3	-	-
16-Jul	13:18	8S123	XZM	Departure	12.1	-	-
16-Jul	13:45	3A082	ZUI	Arrival	13.9	-	-
16-Jul	14:15	3A182	ZUI	Departure	12.7	-	-
16-Jul	14:21	3A164	YFT	Departure	13.3	-	-
16-Jul	14:55	3A065	YFT	Arrival	11.8	-	-
16-Jul	16:18	3A167	YFT	Departure	12.4	-	-
16-Jul	16:39	8S218	XZM	Arrival	11.8	-	-
16-Jul	16:54	3A083	ZUI	Arrival	13	<= 5	< 1min
16-Jul	17:00	3A067	YFT	Arrival	12.7	<= 5	< 1min
16-Jul	17:07	8S126	XZM	Departure	11.2	-	-
16-Jul	17:12	3A183	ZUI	Departure	11.6	-	-
16-Jul	19:06	3A166	YFT	Departure	11.1	-	-
16-Jul	20:05	3A084	ZUI	Arrival	12.8	-	-
16-Jul	20:31	3A185	ZUI	Departure	12.4	-	-
16-Jul	20:57	8S2113	XZM	Arrival	11.6	-	-
16-Jul	21:05	3A169	YFT	Departure	12.1	-	-
16-Jul	22:06	8S522	XZM	Departure	13.2	-	-
17-Jul	08:21	8S210	XZM	Arrival	12.1	-	-
17-Jul	08:23	3A061	YFT	Arrival	11.6	-	-
17-Jul	09:56	3A062	YFT	Arrival	11.5	-	-
17-Jul	10:11	3A163	YFT	Departure	12.7	-	-
17-Jul	10:40	8S212	XZM	Arrival	11.8	-	-
17-Jul	10:42	3A081	ZUI	Arrival	11.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Jul	11:01	8S121	XZM	Departure	12.4	-	-
17-Jul	11:16	3A063	YFT	Arrival	12.1	-	-
17-Jul	12:28	3A168	YFT	Departure	12.3	-	-
17-Jul	12:34	3A181	ZUI	Departure	11.9	-	-
17-Jul	12:45	8S215	XZM	Arrival	11.5	-	-
17-Jul	12:54	3A064	YFT	Arrival	12.6	-	-
17-Jul	13:09	8S123	XZM	Departure	11.7	-	-
17-Jul	13:41	3A082	ZUI	Arrival	13.4	-	-
17-Jul	14:20	3A164	YFT	Departure	12.2	-	-
17-Jul	14:26	3A182	ZUI	Departure	12.4	-	-
17-Jul	15:01	3A065	YFT	Arrival	12	-	-
17-Jul	16:21	3A167	YFT	Departure	12.7	-	-
17-Jul	16:36	3A083	ZUI	Arrival	10	-	-
17-Jul	16:39	8S218	XZM	Arrival	11	-	-
17-Jul	16:58	3A067	YFT	Arrival	12.7	-	-
17-Jul	17:19	8S126	XZM	Departure	12	-	-
17-Jul	17:20	3A183	ZUI	Departure	12.5	-	-
17-Jul	19:03	3A166	YFT	Departure	13.2	-	-
17-Jul	19:37	3A084	ZUI	Arrival	12.9	-	-
17-Jul	20:17	3A185	ZUI	Departure	12.4	-	-
17-Jul	20:58	8S2113	XZM	Arrival	11.9	-	-
17-Jul	21:00	3A169	YFT	Departure	13.2	-	-
18-Jul	08:13	3A061	YFT	Arrival	12.1	-	-
18-Jul	08:21	8S210	XZM	Arrival	12.4	-	-
18-Jul	09:59	3A062	YFT	Arrival	11.9	-	-
18-Jul	10:17	3A163	YFT	Departure	11.9	-	-
18-Jul	10:32	8S212	XZM	Arrival	12.5	-	-
18-Jul	10:43	3A081	ZUI	Arrival	12.1	-	-
18-Jul	11:12	8S121	XZM	Departure	11.7	-	-
18-Jul	11:19	3A063	YFT	Arrival	11.7	-	-
18-Jul	12:14	3A168	YFT	Departure	11.3	-	-
18-Jul	12:21	3A181	ZUI	Departure	12.4	-	-
18-Jul	12:41	8S215	XZM	Arrival	12.8	-	-
18-Jul	12:56	3A064	YFT	Arrival	12.2	-	-
18-Jul	13:16	8S123	XZM	Departure	12.9	-	-
18-Jul	13:54	3A082	ZUI	Arrival	13.3	-	-
18-Jul	14:34	3A164	YFT	Departure	11.9	-	-
18-Jul	14:41	3A182	ZUI	Departure	13.6	-	-
18-Jul	14:59	3A065	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)
18-Jul	16:26	3A167	YFT	Departure	11.5	-	-
18-Jul	16:44	3A083	ZUI	Arrival	12.1	-	-
18-Jul	16:47	8S218	XZM	Arrival	12.8	-	-
18-Jul	16:59	3A067	YFT	Arrival	12.8	-	-
18-Jul	17:03	3A183	ZUI	Departure	12.6	-	-
18-Jul	17:10	8S126	XZM	Departure	11.5	-	-
18-Jul	19:08	3A166	YFT	Departure	13.9	-	-
18-Jul	19:55	3A084	ZUI	Arrival	11.6	-	-
18-Jul	20:23	3A185	ZUI	Departure	11.9	-	-
18-Jul	20:56	8S2113	XZM	Arrival	12	-	-
18-Jul	21:03	3A169	YFT	Departure	13.1	-	-
18-Jul	21:59	8S522	XZM	Departure	12.2	-	-
19-Jul	08:21	8S210	XZM	Arrival	13.1	-	-
19-Jul	08:23	3A061	YFT	Arrival	10.3	-	-
19-Jul	09:52	3A062	YFT	Arrival	11.5	-	-
19-Jul	10:16	3A163	YFT	Departure	12.4	-	-
19-Jul	10:36	8S212	XZM	Arrival	11	-	-
19-Jul	10:52	3A081	ZUI	Arrival	12.4	-	-
19-Jul	10:59	8S121	XZM	Departure	12.1	-	-
19-Jul	11:19	3A063	YFT	Arrival	13.1	-	-
19-Jul	12:09	3A168	YFT	Departure	13.6	-	-
19-Jul	12:13	3A181	ZUI	Departure	13	-	-
19-Jul	12:50	8S215	XZM	Arrival	11.8	-	-
19-Jul	12:58	3A064	YFT	Arrival	11.5	-	-
19-Jul	13:27	8S123	XZM	Departure	12.7	-	-
19-Jul	13:48	3A082	ZUI	Arrival	10.7	-	-
19-Jul	14:20	3A164	YFT	Departure	12.4	-	-
19-Jul	14:23	3A182	ZUI	Departure	12.3	-	-
19-Jul	14:55	3A065	YFT	Arrival	13.3	-	-
19-Jul	16:11	3A167	YFT	Departure	13.5	-	-
19-Jul	16:38	8S218	XZM	Arrival	10.3	-	-
19-Jul	16:49	3A083	ZUI	Arrival	10.8	-	-
19-Jul	16:57	3A067	YFT	Arrival	12.7	-	-
19-Jul	17:08	8S126	XZM	Departure	13.1	-	-
19-Jul	17:08	3A183	ZUI	Departure	13.5	<= 10	< 1min
19-Jul	19:09	3A166	YFT	Departure	11.9	-	-
19-Jul	20:01	3A084	ZUI	Arrival	10.8	-	-
19-Jul	20:18	3A185	ZUI	Departure	11.9	-	-
19-Jul	20:58	8S2113	XZM	Arrival	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Jul	21:02	3A169	YFT	Departure	11.6	-	-
19-Jul	21:57	8S522	XZM	Departure	12.8	-	-
20-Jul	08:15	3A061	YFT	Arrival	12.6	-	-
20-Jul	08:17	8S210	XZM	Arrival	12.6	-	-
20-Jul	10:04	3A062	YFT	Arrival	12.5	-	-
20-Jul	10:19	3A163	YFT	Departure	12.8	-	-
20-Jul	10:42	8S212	XZM	Arrival	11.9	-	-
20-Jul	10:54	3A081	ZUI	Arrival	12.5	-	-
20-Jul	11:07	8S121	XZM	Departure	13.1	-	-
20-Jul	11:16	3A063	YFT	Arrival	11.9	-	-
20-Jul	12:30	3A181	ZUI	Departure	11.2	-	-
20-Jul	12:36	3A168	YFT	Departure	13.1	-	-
20-Jul	12:43	8S215	XZM	Arrival	12.6	-	-
20-Jul	13:06	3A064	YFT	Arrival	12.3	-	-
20-Jul	13:11	8S123	XZM	Departure	12.7	-	-
20-Jul	13:45	3A082	ZUI	Arrival	12.7	-	-
20-Jul	14:27	3A164	YFT	Departure	13.3	-	-
20-Jul	14:32	3A182	ZUI	Departure	12.8	-	-
20-Jul	14:57	3A065	YFT	Arrival	11.6	-	-
20-Jul	16:25	3A167	YFT	Departure	13.2	-	-
20-Jul	16:30	8S218	XZM	Arrival	12.2	-	-
20-Jul	16:50	3A083	ZUI	Arrival	11.2	-	-
20-Jul	17:01	3A067	YFT	Arrival	12.6	-	-
20-Jul	17:05	8S126	XZM	Departure	13.4	-	-
20-Jul	17:10	3A183	ZUI	Departure	12.7	-	-
20-Jul	19:06	3A166	YFT	Departure	12.9	-	-
20-Jul	19:57	3A084	ZUI	Arrival	12.2	-	-
20-Jul	20:12	3A185	ZUI	Departure	12.8	-	-
20-Jul	21:01	3A169	YFT	Departure	11.8	<= 5	< 1min
20-Jul	21:16	8S2113	XZM	Arrival	12.8	-	-
20-Jul	21:56	8S522	XZM	Departure	12.2	-	-
21-Jul	08:14	3A061	YFT	Arrival	13.2	-	-
21-Jul	08:21	8S210	XZM	Arrival	12.2	-	-
21-Jul	09:55	3A062	YFT	Arrival	12.7	-	-
21-Jul	10:14	3A163	YFT	Departure	13.1	-	-
21-Jul	10:36	8S212	XZM	Arrival	12.2	-	-
21-Jul	10:43	3A081	ZUI	Arrival	12.8	-	-
21-Jul	11:04	8S121	XZM	Departure	12.3	-	-
21-Jul	11:20	3A063	YFT	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
21-Jul	12:17	3A168	YFT	Departure	12.9	-	-
21-Jul	12:21	3A181	ZUI	Departure	11.1	-	-
21-Jul	12:41	8S215	XZM	Arrival	12.2	-	-
21-Jul	12:58	3A064	YFT	Arrival	12.4	-	-
21-Jul	13:22	8S123	XZM	Departure	12.1	-	-
21-Jul	13:56	3A082	ZUI	Arrival	12	-	-
21-Jul	14:29	3A164	YFT	Departure	13.2	-	-
21-Jul	14:32	3A182	ZUI	Departure	11.2	-	-
21-Jul	15:03	3A065	YFT	Arrival	12.3	-	-
21-Jul	16:19	3A167	YFT	Departure	13.3	-	-
21-Jul	16:43	3A083	ZUI	Arrival	12.4	-	-
21-Jul	16:45	8S218	XZM	Arrival	11.9	-	-
21-Jul	17:04	3A067	YFT	Arrival	12.7	-	-
21-Jul	17:07	3A183	ZUI	Departure	11.7	-	-
21-Jul	17:19	8S126	XZM	Departure	11.8	-	-
21-Jul	19:04	3A166	YFT	Departure	12.3	-	-
21-Jul	19:48	3A084	ZUI	Arrival	12.9	-	-
21-Jul	20:20	3A185	ZUI	Departure	10.7	-	-
21-Jul	21:00	3A169	YFT	Departure	10.9	-	-
21-Jul	21:08	8S2113	XZM	Arrival	11.7	-	-
21-Jul	22:12	8S522	XZM	Departure	11.5	-	-
22-Jul	08:13	3A061	YFT	Arrival	12.7	-	-
22-Jul	08:19	8S210	XZM	Arrival	12.8	-	-
22-Jul	09:57	3A062	YFT	Arrival	12.2	-	-
22-Jul	10:34	3A163	YFT	Departure	12.6	-	-
22-Jul	10:49	8S212	XZM	Arrival	13	-	-
22-Jul	10:50	3A081	ZUI	Arrival	12.5	-	-
22-Jul	11:15	8S121	XZM	Departure	12.8	-	-
22-Jul	11:19	3A063	YFT	Arrival	12.1	-	-
22-Jul	12:30	3A168	YFT	Departure	12.7	-	-
22-Jul	12:31	3A181	ZUI	Departure	12.5	-	-
22-Jul	12:58	8S215	XZM	Arrival	10.9	-	-
22-Jul	13:00	3A064	YFT	Arrival	12	-	-
22-Jul	13:23	8S123	XZM	Departure	11.2	-	-
22-Jul	13:51	3A082	ZUI	Arrival	11.7	-	-
22-Jul	14:29	3A164	YFT	Departure	12.5	-	-
22-Jul	14:30	3A182	ZUI	Departure	13.2	-	-
22-Jul	14:54	3A065	YFT	Arrival	12.2	-	-
22-Jul	16:27	3A167	YFT	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)
22-Jul	16:42	8S218	XZM	Arrival	11	-	-
22-Jul	16:48	3A083	ZUI	Arrival	11.8	-	-
22-Jul	17:07	3A067	YFT	Arrival	12.3	-	-
22-Jul	17:18	8S126	XZM	Departure	12.5	-	-
22-Jul	17:19	3A183	ZUI	Departure	13.6	-	-
22-Jul	19:08	3A166	YFT	Departure	11.9	-	-
22-Jul	20:09	3A084	ZUI	Arrival	11.8	-	-
22-Jul	20:36	3A185	ZUI	Departure	12.8	-	-
22-Jul	20:56	8S2113	XZM	Arrival	12.5	-	-
22-Jul	20:58	3A169	YFT	Departure	12.1	-	-
22-Jul	22:06	8S522	XZM	Departure	12.2	-	-
23-Jul	08:13	3A061	YFT	Arrival	11.7	-	-
23-Jul	08:26	8S210	XZM	Arrival	11.8	-	-
23-Jul	10:06	3A062	YFT	Arrival	12.4	-	-
23-Jul	10:20	3A163	YFT	Departure	12.8	-	-
23-Jul	10:34	8S212	XZM	Arrival	13	-	-
23-Jul	10:48	3A081	ZUI	Arrival	13.3	-	-
23-Jul	11:11	8S121	XZM	Departure	13.5	-	-
23-Jul	11:14	3A063	YFT	Arrival	12.2	-	-
23-Jul	12:21	3A168	YFT	Departure	12.3	-	-
23-Jul	12:25	3A181	ZUI	Departure	12	-	-
23-Jul	12:49	8S215	XZM	Arrival	11.9	-	-
23-Jul	12:55	3A064	YFT	Arrival	12.4	-	-
23-Jul	13:30	8S123	XZM	Departure	13	-	-
23-Jul	13:44	3A082	ZUI	Arrival	12.1	-	-
23-Jul	14:28	3A164	YFT	Departure	12.7	-	-
23-Jul	14:33	3A182	ZUI	Departure	11.2	-	-
23-Jul	15:05	3A065	YFT	Arrival	11.5	-	-
23-Jul	16:38	3A167	YFT	Departure	12.3	-	-
23-Jul	16:49	8S218	XZM	Arrival	11.3	-	-
23-Jul	16:59	3A083	ZUI	Arrival	12	-	-
23-Jul	17:09	3A067	YFT	Arrival	12	-	-
23-Jul	17:12	8S126	XZM	Departure	13.4	-	-
23-Jul	17:16	3A183	ZUI	Departure	13	-	-
23-Jul	19:16	3A166	YFT	Departure	13.3	-	-
23-Jul	20:09	3A084	ZUI	Arrival	12.4	-	-
23-Jul	20:29	3A185	ZUI	Departure	12.5	-	-
23-Jul	21:02	8S2113	XZM	Arrival	12.4	-	-
23-Jul	21:04	3A169	YFT	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)
24-Jul	08:19	8S210	XZM	Arrival	12.5	-	-
24-Jul	08:24	3A061	YFT	Arrival	11.9	-	-
24-Jul	10:03	3A062	YFT	Arrival	13.1	-	-
24-Jul	10:21	3A163	YFT	Departure	13.1	-	-
24-Jul	10:38	8S212	XZM	Arrival	12.6	-	-
24-Jul	10:49	3A081	ZUI	Arrival	13.6	-	-
24-Jul	11:17	3A063	YFT	Arrival	11.9	-	-
24-Jul	11:47	8S121	XZM	Departure	13.2	-	-
24-Jul	12:20	3A181	ZUI	Departure	11.7	-	-
24-Jul	12:22	3A168	YFT	Departure	12	-	-
24-Jul	12:41	8S215	XZM	Arrival	12.3	-	-
24-Jul	12:54	3A064	YFT	Arrival	12.9	-	-
24-Jul	13:25	8S123	XZM	Departure	12.4	-	-
24-Jul	13:46	3A082	ZUI	Arrival	12.8	<= 5	< 1min
24-Jul	14:16	3A164	YFT	Departure	13	-	-
24-Jul	14:18	3A182	ZUI	Departure	12.1	-	-
24-Jul	14:52	3A065	YFT	Arrival	12.2	-	-
24-Jul	16:28	3A167	YFT	Departure	0.0 **	-	-
24-Jul	16:44	8S218	XZM	Arrival	12	-	-
24-Jul	16:45	3A083	ZUI	Arrival	12.4	-	-
24-Jul	16:58	3A067	YFT	Arrival	10.3	-	-
24-Jul	17:07	3A183	ZUI	Departure	12.4	-	-
24-Jul	17:15	8S126	XZM	Departure	12.8	-	-
24-Jul	19:17	3A166	YFT	Departure	12.6	-	-
24-Jul	19:57	3A084	ZUI	Arrival	12.7	-	-
24-Jul	20:26	3A185	ZUI	Departure	12.3	-	-
24-Jul	21:01	8S2113	XZM	Arrival	10.9	-	-
24-Jul	21:05	3A169	YFT	Departure	12.3	-	-
24-Jul	22:15	8S522	XZM	Departure	10.7	-	-
25-Jul	08:17	3A061	YFT	Arrival	11.7	-	-
25-Jul	08:22	8S210	XZM	Arrival	12.3	-	-
25-Jul	09:44	3A062	YFT	Arrival	12.5	-	-
25-Jul	10:25	3A163	YFT	Departure	12.4	-	-
25-Jul	10:37	3A081	ZUI	Arrival	12.6	-	-
25-Jul	10:51	8S212	XZM	Arrival	11.7	-	-
25-Jul	11:10	8S121	XZM	Departure	11.3	-	-
25-Jul	11:19	3A063	YFT	Arrival	12.5	-	-
25-Jul	12:25	3A181	ZUI	Departure	12.7	-	-
25-Jul	12:29	3A168	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)
25-Jul	12:42	8S215	XZM	Arrival	11.6	-	-
25-Jul	12:53	3A064	YFT	Arrival	12.4	-	-
25-Jul	13:18	8S123	XZM	Departure	11.5	-	-
25-Jul	13:42	3A082	ZUI	Arrival	13.4	-	-
25-Jul	14:18	3A164	YFT	Departure	12.4	-	-
25-Jul	14:23	3A182	ZUI	Departure	12.4	-	-
25-Jul	15:06	3A065	YFT	Arrival	12.7	-	-
25-Jul	16:22	3A167	YFT	Departure	13.4	-	-
25-Jul	16:42	8S218	XZM	Arrival	10.9	-	-
25-Jul	16:47	3A083	ZUI	Arrival	12.7	-	-
25-Jul	17:08	3A067	YFT	Arrival	12.1	-	-
25-Jul	17:15	8S126	XZM	Departure	11.3	-	-
25-Jul	17:17	3A183	ZUI	Departure	13.2	-	-
25-Jul	19:14	3A166	YFT	Departure	11.9	-	-
25-Jul	20:00	3A084	ZUI	Arrival	12.6	-	-
25-Jul	20:22	3A185	ZUI	Departure	12.9	-	-
25-Jul	21:04	3A169	YFT	Departure	13.2	-	-
25-Jul	21:06	8S2113	XZM	Arrival	12.4	-	-
26-Jul	08:17	3A061	YFT	Arrival	13.5	-	-
26-Jul	08:26	8S210	XZM	Arrival	11	-	-
26-Jul	09:53	3A062	YFT	Arrival	10.1	-	-
26-Jul	10:18	3A163	YFT	Departure	12.8	-	-
26-Jul	10:36	8S212	XZM	Arrival	11.7	-	-
26-Jul	10:46	3A081	ZUI	Arrival	13.6	-	-
26-Jul	11:16	8S121	XZM	Departure	13	-	-
26-Jul	11:21	3A063	YFT	Arrival	12.8	-	-
26-Jul	12:24	3A168	YFT	Departure	12.5	-	-
26-Jul	12:27	3A181	ZUI	Departure	12.3	-	-
26-Jul	12:45	8S215	XZM	Arrival	12.5	-	-
26-Jul	12:54	3A064	YFT	Arrival	11.6	-	-
26-Jul	13:26	8S123	XZM	Departure	12.8	-	-
26-Jul	13:48	3A082	ZUI	Arrival	12.5	<= 5	< 1min
26-Jul	14:24	3A164	YFT	Departure	12.7	-	-
26-Jul	14:27	3A182	ZUI	Departure	13	-	-
26-Jul	14:57	3A065	YFT	Arrival	12.5	-	-
26-Jul	16:18	3A167	YFT	Departure	12.9	-	-
26-Jul	16:36	8S218	XZM	Arrival	11.2	-	-
26-Jul	16:56	3A067	YFT	Arrival	11.4	-	-
26-Jul	16:56	3A083	ZUI	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)
26-Jul	17:18	8S126	XZM	Departure	12.9	-	-
26-Jul	17:21	3A183	ZUI	Departure	12.4	-	-
26-Jul	19:22	3A166	YFT	Departure	11.9	-	-
26-Jul	20:12	3A084	ZUI	Arrival	11.8	-	-
26-Jul	20:27	3A185	ZUI	Departure	12.4	-	-
26-Jul	21:04	8S2113	XZM	Arrival	11.7	-	-
26-Jul	21:09	3A169	YFT	Departure	12.2	-	-
26-Jul	22:01	8S522	XZM	Departure	12.7	-	-
27-Jul	08:16	3A061	YFT	Arrival	12	-	-
27-Jul	08:18	8S210	XZM	Arrival	13	-	-
27-Jul	10:04	3A062	YFT	Arrival	11.9	-	-
27-Jul	10:19	3A163	YFT	Departure	12.5	-	-
27-Jul	10:40	8S212	XZM	Arrival	12	-	-
27-Jul	10:47	3A081	ZUI	Arrival	13.3	-	-
27-Jul	11:10	8S121	XZM	Departure	11.5	-	-
27-Jul	11:19	3A063	YFT	Arrival	13.6	-	-
27-Jul	12:25	3A181	ZUI	Departure	12.3	-	-
27-Jul	12:27	3A168	YFT	Departure	13.4	-	-
27-Jul	12:44	8S215	XZM	Arrival	0.0 **	-	-
27-Jul	12:57	3A064	YFT	Arrival	12.4	-	-
27-Jul	13:22	8S123	XZM	Departure	12.4	-	-
27-Jul	13:43	3A082	ZUI	Arrival	12.9	-	-
27-Jul	14:27	3A164	YFT	Departure	12	-	-
27-Jul	14:29	3A182	ZUI	Departure	11.2	-	-
27-Jul	15:00	3A065	YFT	Arrival	12.9	-	-
27-Jul	16:21	3A167	YFT	Departure	13.6	-	-
27-Jul	16:47	3A083	ZUI	Arrival	12.6	-	-
27-Jul	16:51	8S218	XZM	Arrival	12.8	-	-
27-Jul	17:06	3A183	ZUI	Departure	12.1	-	-
27-Jul	17:12	3A067	YFT	Arrival	11.5	-	-
27-Jul	17:23	8S126	XZM	Departure	13.1	<=5	<1min
27-Jul	19:14	3A166	YFT	Departure	12.3	-	-
27-Jul	19:54	3A084	ZUI	Arrival	12.2	-	-
27-Jul	20:25	3A185	ZUI	Departure	12.4	-	-
27-Jul	20:55	8S2113	XZM	Arrival	12.3	-	-
27-Jul	20:59	3A169	YFT	Departure	11.7	-	-
28-Jul	08:14	3A061	YFT	Arrival	12.1	-	-
28-Jul	08:27	8S210	XZM	Arrival	10.6	-	-
28-Jul	09:58	3A062	YFT	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Jul	10:19	3A163	YFT	Departure	11.3	-	-
28-Jul	10:35	8S212	XZM	Arrival	11.9	-	-
28-Jul	10:47	3A081	ZUI	Arrival	13	-	-
28-Jul	11:08	8S121	XZM	Departure	12	-	-
28-Jul	11:18	3A063	YFT	Arrival	12.7	-	-
28-Jul	12:27	3A168	YFT	Departure	13.1	-	-
28-Jul	12:28	3A181	ZUI	Departure	12.2	-	-
28-Jul	12:48	8S215	XZM	Arrival	11.1	-	-
28-Jul	13:00	3A064	YFT	Arrival	12.1	-	-
28-Jul	13:14	8S123	XZM	Departure	11	-	-
28-Jul	13:47	3A082	ZUI	Arrival	12.5	-	-
28-Jul	14:34	3A164	YFT	Departure	10.9	-	-
28-Jul	14:35	3A182	ZUI	Departure	12.4	-	-
28-Jul	14:58	3A065	YFT	Arrival	12.8	-	-
28-Jul	16:28	3A167	YFT	Departure	12.7	-	-
28-Jul	16:53	3A083	ZUI	Arrival	13.1	-	-
28-Jul	16:57	8S218	XZM	Arrival	11.3	-	-
28-Jul	17:09	3A067	YFT	Arrival	11.4	-	-
28-Jul	17:12	3A183	ZUI	Departure	12	-	-
28-Jul	17:29	8S126	XZM	Departure	12.6	-	-
28-Jul	19:25	3A166	YFT	Departure	12.7	-	-
28-Jul	19:58	3A084	ZUI	Arrival	12.3	-	-
28-Jul	20:18	3A185	ZUI	Departure	13.2	-	-
28-Jul	21:00	8S2113	XZM	Arrival	12.4	-	-
28-Jul	21:16	3A169	YFT	Departure	12.3	-	-
28-Jul	22:17	8S522	XZM	Departure	12.3	-	-
29-Jul	08:14	3A061	YFT	Arrival	11.8	-	-
29-Jul	08:27	8S210	XZM	Arrival	11.4	-	-
29-Jul	10:08	3A062	YFT	Arrival	13.3	-	-
29-Jul	10:26	3A163	YFT	Departure	13.6	-	-
29-Jul	10:39	8S212	XZM	Arrival	12.7	-	-
29-Jul	10:50	3A081	ZUI	Arrival	13.5	-	-
29-Jul	11:06	8S121	XZM	Departure	12.1	-	-
29-Jul	11:14	3A063	YFT	Arrival	13.4	-	-
29-Jul	12:31	3A168	YFT	Departure	12.7	-	-
29-Jul	12:34	3A181	ZUI	Departure	12.8	-	-
29-Jul	12:54	8S215	XZM	Arrival	11.8	-	-
29-Jul	12:55	3A064	YFT	Arrival	13.8	-	-
29-Jul	13:31	8S123	XZM	Departure	11.1	-	-

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)
29-Jul	13:51	3A082	ZUI	Arrival	12.9	-	-
29-Jul	14:33	3A182	ZUI	Departure	12.6	-	-
29-Jul	14:38	3A164	YFT	Departure	13.8	-	-
29-Jul	14:55	3A065	YFT	Arrival	13.3	-	-
29-Jul	16:30	3A167	YFT	Departure	13.4	-	-
29-Jul	17:09	3A083	ZUI	Arrival	13.5	-	-
29-Jul	17:11	8S218	XZM	Arrival	13	-	-
29-Jul	17:18	3A067	YFT	Arrival	13	<= 5	< 1min
29-Jul	17:25	3A183	ZUI	Departure	12.3	-	-
29-Jul	17:43	8S126	XZM	Departure	12.4	-	-
29-Jul	19:33	3A166	YFT	Departure	12.6	-	-
29-Jul	20:07	3A084	ZUI	Arrival	12.9	-	-
29-Jul	20:22	3A185	ZUI	Departure	13.2	-	-
29-Jul	21:08	8S2113	XZM	Arrival	12.3	-	-
29-Jul	21:19	3A169	YFT	Departure	12.1	-	-
29-Jul	22:06	8S522	XZM	Departure	11.9	-	-
30-Jul	08:16	3A061	YFT	Arrival	11.5	-	-
30-Jul	08:20	8S210	XZM	Arrival	12.2	-	-
30-Jul	10:09	3A062	YFT	Arrival	12.1	-	-
30-Jul	10:24	3A163	YFT	Departure	12.7	-	-
30-Jul	10:42	8S212	XZM	Arrival	10.2	-	-
30-Jul	10:54	3A081	ZUI	Arrival	13	-	-
30-Jul	11:07	8S121	XZM	Departure	11.7	-	-
30-Jul	11:18	3A063	YFT	Arrival	12.4	-	-
30-Jul	12:26	3A168	YFT	Departure	12.5	-	-
30-Jul	12:43	8S215	XZM	Arrival	12.2	-	-
30-Jul	12:55	3A064	YFT	Arrival	12.5	-	-
30-Jul	13:21	8S123	XZM	Departure	12.4	-	-
30-Jul	13:44	3A082	ZUI	Arrival	12.6	-	-
30-Jul	14:23	3A182	ZUI	Departure	12.2	-	-
30-Jul	14:30	3A164	YFT	Departure	12.8	-	-
30-Jul	14:53	3A065	YFT	Arrival	13	-	-
30-Jul	16:27	3A167	YFT	Departure	12.5	-	-
30-Jul	16:43	3A083	ZUI	Arrival	13.2	-	-
30-Jul	17:01	8S218	XZM	Arrival	10.8	-	-
30-Jul	17:05	3A067	YFT	Arrival	12	-	-
30-Jul	17:28	3A183	ZUI	Departure	11	-	-
30-Jul	17:35	8S126	XZM	Departure	12.3	-	-
30-Jul	19:17	3A166	YFT	Departure	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Jul	19:39	3A084	ZUI	Arrival	12.5	-	-
30-Jul	20:38	3A185	ZUI	Departure	11.8	-	-
30-Jul	21:09	8S2113	XZM	Arrival	11.5	-	-
30-Jul	21:38	3A169	YFT	Departure	12.3	-	-
31-Jul	08:14	3A061	YFT	Arrival	12.4	-	-
31-Jul	08:23	8S210	XZM	Arrival	12.6	-	-
31-Jul	09:54	3A062	YFT	Arrival	9	-	-
31-Jul	10:21	3A163	YFT	Departure	12.7	-	-
31-Jul	10:30	8S212	XZM	Arrival	12.6	-	-
31-Jul	10:49	3A081	ZUI	Arrival	12.7	-	-
31-Jul	11:09	8S121	XZM	Departure	10.9	-	-
31-Jul	11:17	3A063	YFT	Arrival	12	-	-
31-Jul	12:25	3A181	ZUI	Departure	12.4	-	-
31-Jul	12:26	3A168	YFT	Departure	12.2	-	-
31-Jul	12:50	8S215	XZM	Arrival	12.4	-	-
31-Jul	12:56	3A064	YFT	Arrival	11.9	-	-
31-Jul	13:30	8S123	XZM	Departure	12.4	-	-
31-Jul	13:48	3A082	ZUI	Arrival	11.6	-	-
31-Jul	14:29	3A164	YFT	Departure	13.1	-	-
31-Jul	14:30	3A182	ZUI	Departure	11.4	-	-
31-Jul	14:57	3A065	YFT	Arrival	12.2	-	-
31-Jul	16:23	3A167	YFT	Departure	12.5	-	-
31-Jul	16:48	8S218	XZM	Arrival	12.4	-	-
31-Jul	16:51	3A083	ZUI	Arrival	13.5	-	-
31-Jul	16:55	3A067	YFT	Arrival	12.4	-	-
31-Jul	17:10	8S126	XZM	Departure	12.4	-	-
31-Jul	17:17	3A183	ZUI	Departure	12	-	-
31-Jul	19:30	3A166	YFT	Departure	12.8	-	-
31-Jul	20:04	3A084	ZUI	Arrival	12.7	-	-
31-Jul	20:42	3A185	ZUI	Departure	13.8	<= 10	< 2min
31-Jul	21:06	8S2113	XZM	Arrival	12.5	-	-
31-Jul	21:33	3A169	YFT	Departure	12.3	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in July 2018, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 14 HSF movements of which the durations of all instantaneous speeding cases were less than one minute. The AIS data and ferry operators' responses showed the cases were due to local strong water currents, and residual speed. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

Two HSFs with no transmission of AIS data was received in July 2018. One HSF with insufficient transmission of AIS data was received in July 2018. Vessel captain was requested to provide the AIS plots to indicate the vessel entered the SCZ though the gate access points with no speeding in the SCZ.