MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.30 (For June 2018)

July 2018

Airport Authority Hong Kong

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This Monthly EM&A Report No. 30 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

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

Date 13 July 2018

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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

13 July 2018

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 30 (June 2018)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 30 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 13 July 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

Contents

Tables

Figures

Appendices

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 30th Construction Phase Monthly EM&A Report for the Project which summarizes the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 30 June 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	30
Noise monitoring	20
Water quality monitoring	11
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 Toolbox Training Conducted by Contractor	Air Quality Monitoring Conducted by ET	Land-Based Theodolite Tracking Survey for CWD at Lung Kwu Chau

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 were within the corresponding Action and Limit Levels in the reporting period.

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

Summary of Upcoming Key Issues

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Pipeline testing and commissioning; 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; and
- Marine filling.

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
- Builders works of antenna farm.

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

- Site clearance;
- Brick laying;
- Fitting out of Electrical and mechanical (E&M) works;
- Steel platform erection; and
- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, and road work; and
- Piling works

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

- Erection of hoarding;
- Diversion of underground utilities;
- Piling 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

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received		√	No construction activities-related complaint was received. Regarding the case received on 28 May 2018, ET's investigations concluded that no oil mixture was discharged due to a malfunction level sensor of a seawater tank on a DCM barge, pipe connections of water quality monitoring systems on concerned DCM barges were normal and mal-practice of DEZ implementation was not valid.	Nil
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A	Nil

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

1 Introduction

1.1 Background

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

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

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The 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 of the Construction Phase Monthly EM&A Report No. 25.

1.2 Scope of this Report

This is the 30th Construction Phase Monthly EM&A Report for the Project which summarizes the key findings of the EM&A programme during the reporting period from 1 to 30 June 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	Keith Chau	2972 1721
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:

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 (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

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 DCM works, marine filling, seawall construction, laying of sand blanket, and PVD installation. Land-side works involved mainly foundation and substructure work for T2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

The locations of 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.
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 and approved by EPD pursuant to EP condition 2.20.

Parameters	Status
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: 22 June 2018
- Two skipper trainings provided by ET: 13 and 27 June 2018
- Eight environmental management meetings for EM&A review with works contracts: 5, 15, 20, 22, 27, 28 and 29 June 2018

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-001 (Serial No. 934393)	11 Oct 2017	Monthly EM&A Report No. 22, Appendix E
	SIBATA LD-3B-002 (Serial No. 974350)	11 Sep 2017	
	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 B**.

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (µg/m^3)	Action Level (µg/m^3)	Limit Level (µg/m^3)
AR1A	8 – 33	306	500
AR2	1 – 45	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	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.

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	**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. 3004068)	17 Jul 2017	Monthly EM&A Report No. 19, 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 B**.

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	67 – 73	75
NM3A	57 – 61	75
NM4(1)	60 – 66	70(2)
NM5(1)	59 – 61	75
NM6(1)	66 – 73	75

Notes:

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

(2) Reduced to 65 dB(A) during school examination periods at NM4. School examination took place from 4 to 8 June 2018 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 NM3A and NM4, and aircraft and helicopter noise at 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. 15M100005)	30 Apr 2018	Monthly EM&A Report No. 29, Appendix D
	YSI ProDSS (Serial No. 16H104234)	30 Apr 2018	
	YSI ProDSS (Serial No. 17H105557)	30 Apr 2018	
	YSI 6920 V2 (Serial No. 0001C6A7)	23 May 2018	**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. 10N60623)	30 Apr 2018	Monthly EM&A Report No. 29, Appendix D

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

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

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

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

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix B**. Monitoring sessions on 7 and 23 June 2018 were cancelled due to tropical cyclone and adverse weather respectively. It should be noted that Tropical Storm Ewiniar hit Hong Kong during the reporting period. The water quality monitoring results might be affected by this weather event.

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

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

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

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
02/06/2018												
05/06/2018												
09/06/2018								D	D	D		
12/06/2018					D	D	D		D			
14/06/2018							D	D	D			
16/06/2018												
19/06/2018												
21/06/2018												
26/06/2018					D	D	D	D	D	D		
28/06/2018								D	D	D		
30/06/2018												
No. of result triggereing Action or Limit Level	1	1	3	3	2	2	3	4	5	3	1	0

Note: Detailed results are presented in **Appendix C**.	
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
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	Monitoring result triggered the Limit Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Limit Level at monitoring station located downstream of the Project based on dominant tidal flow

	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring results triggered the corresponding Action and Limit Levels on five monitoring days. Some of the cases occurred at monitoring stations located upstream of the Project during flood tide, that would unlikely be affected by the Project. Therefore, investigations focusing on cases that occurred at monitoring stations located downstream of the Project were carried out.

As part of the investigation on the downstream events, details of the Project's marine construction activities on the concerned monitoring days were collected, as well as any observations during the monitoring. The findings are summarized in **Table 4.8**.

Table 4.8: Summary of Findings from Investigation of Nickel Monitoring Results (Mid-Flood Tide)

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
09/06/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
12/06/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
14/06/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
26/06/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No
28/06/2018	DCM works and sand blanket laying	Around 500m	Silt curtain deployed	No	No	No

According to the investigation findings, it was confirmed that both DCM and sand blanket laying activities were operating normally with silt curtains deployed. The silt curtains were maintained properly.

For the exceedances that occurred on 9 June 2018, the investigation found that nickel concentrations at the upstream impact stations (IM3 and IM4) as well as at the upstream control stations (C1 and SR2) were higher than their respective baseline levels obtained during baseline monitoring. For 12 June 2018, nickel concentrations at IM3 and IM4 remained higher than their maximum baseline levels . As these stations are located upstream of the Project during flood tide, this suggests that there were external factors affecting ambient nickel concentrations in the vicinity of the Project area during this period, which might have affected some of the downstream station results. Overall, the results across all impact stations on 9, 12 and 14 June 2018 showed a trend of decreasing nickel concentrations over time, suggesting that the exceedances events were linked and likely affected by the same external factor.

Notwithstanding the above, the investigations for 9, 12 and 14 June 2018 found no SS exceedance at any of the monitoring stations, which indicates that no silt plume and associated water quality impacts occurred during active DCM works. Site observations similarly confirmed no silt plumes or observable issues during DCM works, and all mitigation measures were carried out properly. Therefore, the investigations concluded that these cases were considered not due to the Project.

For the exceedances that occurred on 26 June 2018, it was noted that this occurred over a large area covering the west and north of the Project, including IM1 to IM4 which are located upstream of the Project during flood tide. This suggests that there were external factors affecting ambient nickel concentrations in the vicinity of the Project area during this period, which might have affected the downstream station results. A similar situation is noted on 28 June 2018, though the affected area was shifted and confined to the north east stations, including IM11 which is located upstream of the Project during flood tide. Findings from the investigations showed no SS exceedances that would indicate silt plume and associated water quality impacts from active DCM works. There was also no observations of silt plumes or other issues during DCM works, and all mitigation measures were carried out properly. Therefore, the investigations concluded that these cases were considered not due to the Project.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while only a minor number of results triggered 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)
May 2018(3)	3,649	1,150	-	-	-	-	-
June 2018(4)	277	500	0	12,506	640	41,980	224

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 June 2018, data from 1 April 2018 to 30 June 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 May 2018 (calculated by data from March 2018 to May 2018) and the running quarterly encounter rates of this month (calculated by data from April 2018 to June 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 conducted 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 4, 19, 20, 21, 22, 25, 26 and 27 June 2018, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

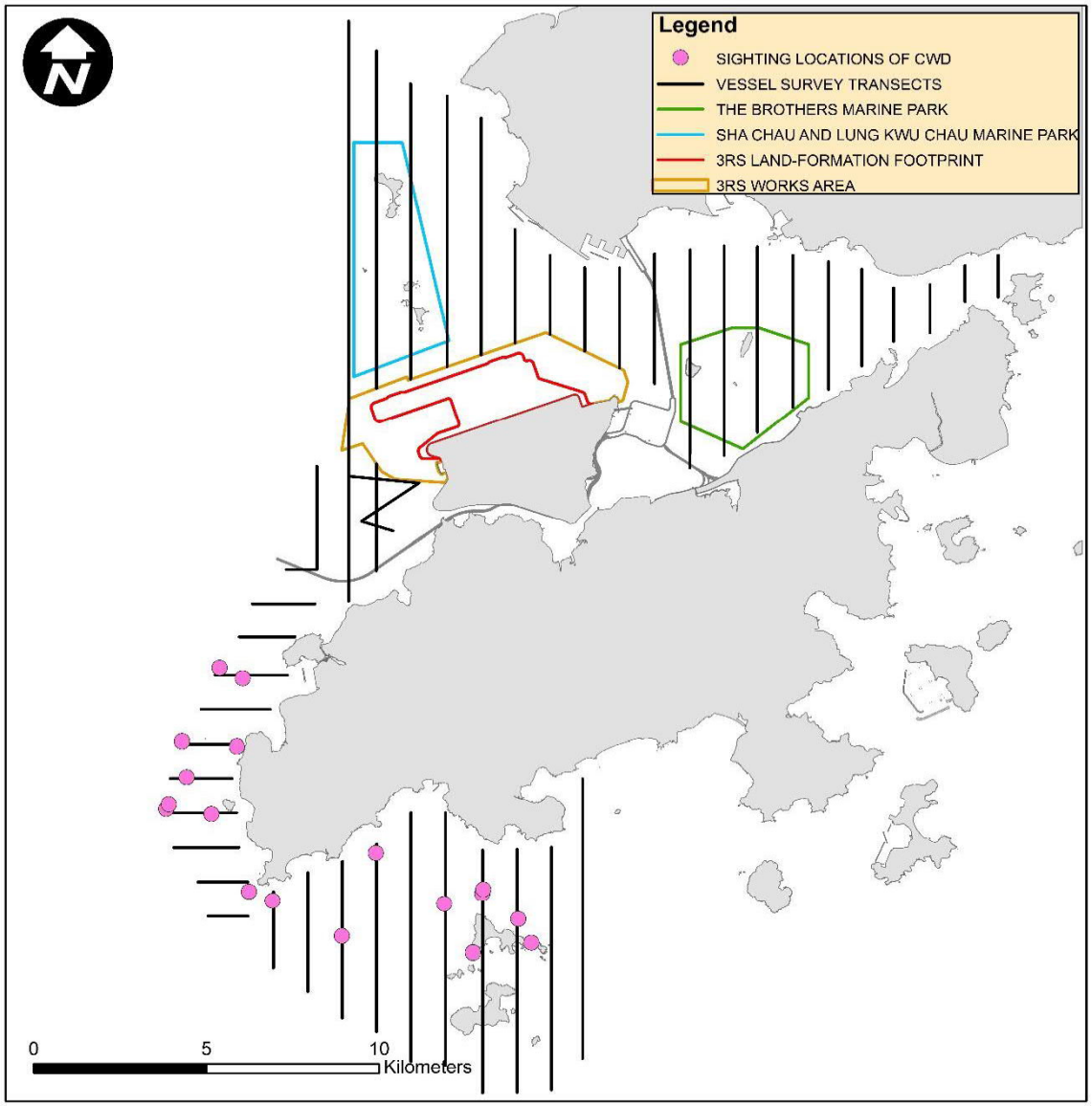
A total of around 456.95 km of survey effort was collected from these surveys, with around 78.17% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix C**.

Sighting Distribution

In June 2018, 18 sightings with 65 dolphins were sighted. Details of cetacean sightings are presented in **Appendix C**.

Distribution of all CWD sightings recorded in June 2018 is illustrated in **Figure 6.3**. In WL, CWD sightings were recorded from Tai O to Fan Lau. In SWL, the majority of CWD sightings were recorded at the northern and central parts of Soko Islands. No sightings of CWDs were recorded in NWL and NEL survey areas.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: Please note that there are 18 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. Those sightings with very similar localities that appearing overlapped on the distribution map are located on the transect off Peaked Hill and at the north of Soko Islands.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from June 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 June 2018, a total of around 357.19 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 16 on-effort sightings with 62 dolphins were sighted under such condition. Calculation of the encounter rates in June 2018 are shown in **Appendix C**.

For the running quarter of the reporting period (i.e., from April to June 2018), a total of around 1221.76 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 39 on-effort sightings and a total number of 131 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix C**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of June 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)
June 2018	4.48	17.36
Running Quarter from April 2018 to June 2018(1)	3.19	10.72
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 April to June 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 June 2018, 18 groups with 65 dolphins were sighted, and the average group size of CWDs was 3.61 dolphins per group. Number of sightings with small group size (i.e. 1-2 dolphins) and medium group size (i.e. 3-9 dolphins) were similar. One sighting with large group size (i.e. 10 or more dolphins) was recorded in WL.

Activities and Association with Fishing Boats

Four out of 18 sightings of CWDs were recorded engaging in feeding activities in June 2018. No association with operating fishing boats was observed in this reporting month.

Mother-calf Pair

In June 2018, three pairs of mother-and-unspotted juvenile were observed. All of them were encountered in WL.

6.4.2 Photo Identification

In June 2018, a total number of 29 different CWD individuals were identified for totally 32 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix C**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM011	27-Jun-18	4	WL	SLMM023	21-Jun-18	3	SWL
NLMM018	27-Jun-18	2	WL	SLMM029	25-Jun-18	6	SWL
		4	WL	SLMM031	25-Jun-18	4	SWL
NLMM028	27-Jun-18	6	WL	SLMM035	27-Jun-18	6	WL
NLMM040	27-Jun-18	4	WL	SLMM052	25-Jun-18	3	SWL
NLMM041	27-Jun-18	4	WL			6	SWL
NLMM052	27-Jun-18	6	WL	SLMM053	25-Jun-18	5	SWL
NLMM063	27-Jun-18	2	WL	WLMM004	25-Jun-18	6	SWL
		4	WL	WLMM047	25-Jun-18	3	SWL
NLMM064	27-Jun-18	6	WL	WLMM054	27-Jun-18	6	WL
SLMM002	25-Jun-18	2	SWL	WLMM063	25-Jun-18	6	SWL
SLMM003	25-Jun-18	3	SWL	WLMM078	25-Jun-18	6	SWL
SLMM007	25-Jun-18	3	SWL	WLMM080	21-Jun-18	3	SWL
SLMM009	27-Jun-18	6	WL	WLMM085	25-Jun-18	3	SWL
SLMM010	25-Jun-18	3	SWL	WLMM092	27-Jun-18	8	WL
SLMM012	25-Jun-18	3	SWL	WLMM114	25-Jun-18	5	SWL

6.4.3 Land-based Theodolite Tracking Survey

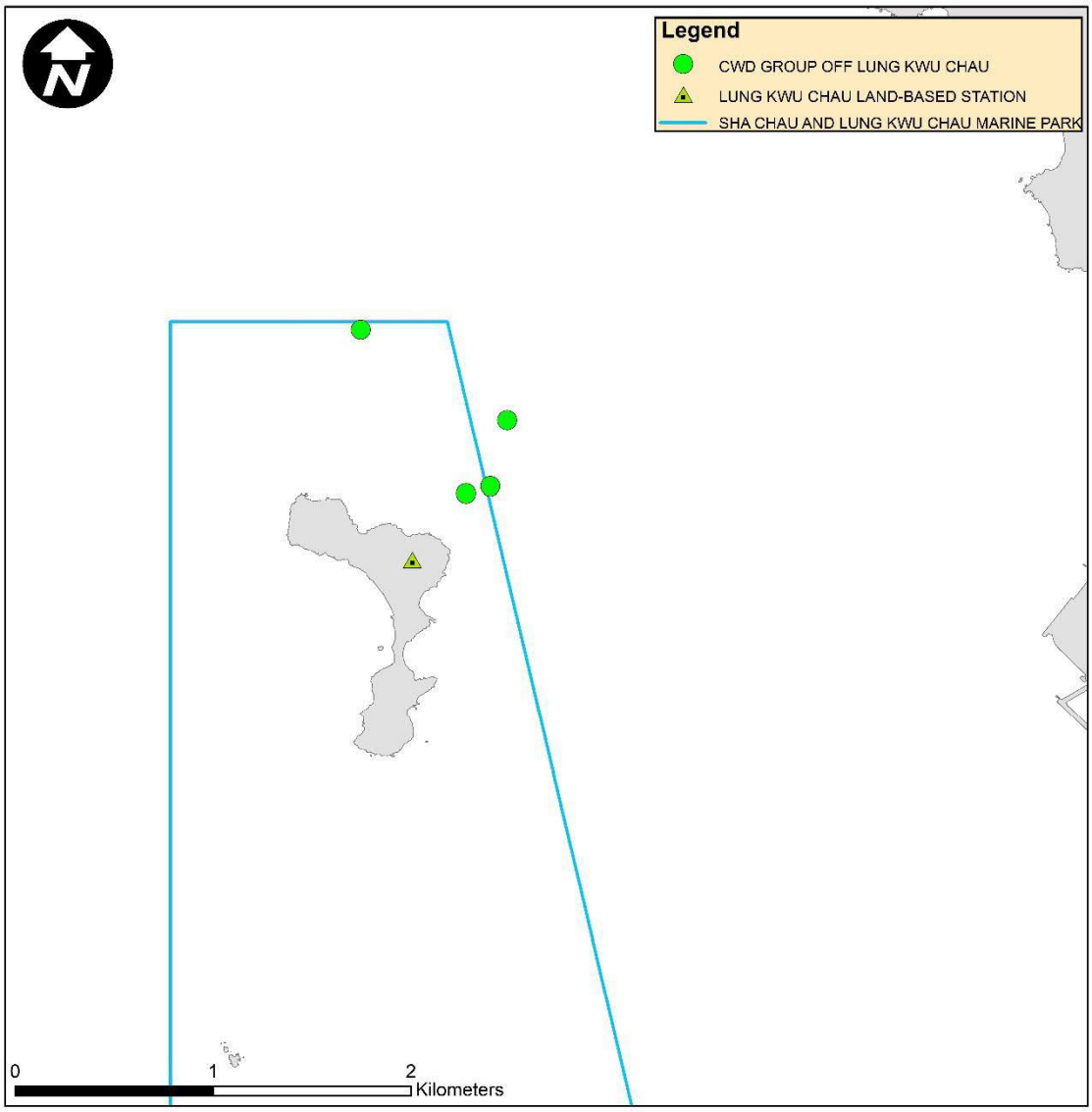
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 19, 20 and 26 June 2018 and at SC on 11 and 25 June 2018, with a total of five days of land-based theodolite tracking survey effort accomplished in this reporting period. A total number of 4 CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix C**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in June 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	4	0.22
Sha Chau	2	12:00	0	0
TOTAL	**5**	**30:00**	**4**	**0.13**

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) has been remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 4-6 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 14 to 24 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

Weekly site inspections of construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix B**. Bi-weekly site inspections were also conducted by the IEC. Observations have been recorded in the site inspection checklists and provided to the contractors together with the appropriate follow-up actions where necessary.

The key observations from site inspection and associated recommendations were related to display of appropriate permits; provision and maintenance of drip trays and spill kits; proper segregation and disposal of waste; proper implementation of dust suppression, wastewater treatment, dark smoke prevention, and runoff prevention measures; as well as proper implementation of DEZ monitoring.

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

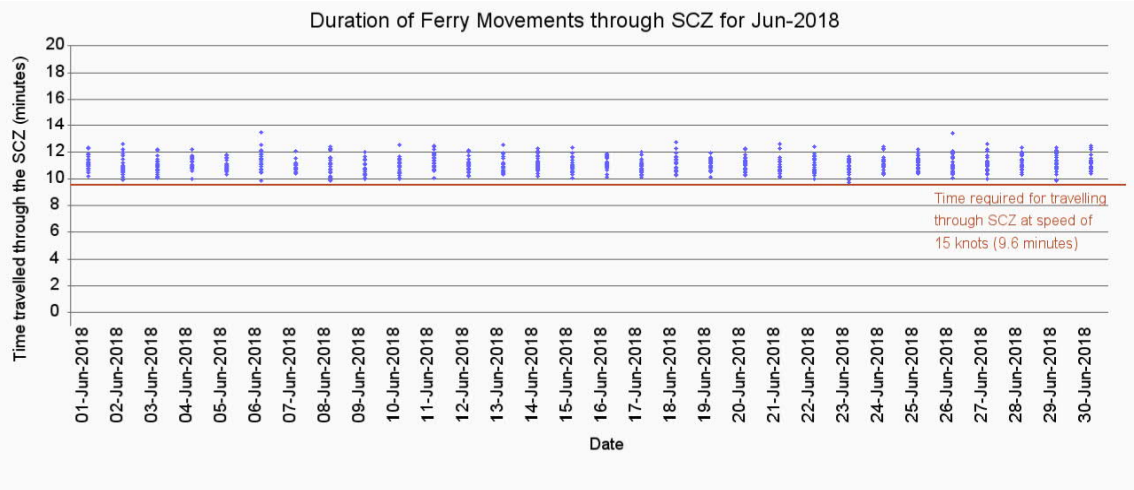
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 87 to 91 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, 865 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in June 2018 and the data are presented in **Appendix G**. The time spent by the SkyPier HSFs travelling through the SCZ in June 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 June 2018



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

One ferry was recorded with minor deviation from the diverted route on 13 June 2018. Notice was sent to the ferry operators and the case is under investigation by ET. The investigation result will be presented in the next monthly EM&A report.

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

Requirements in the SkyPier Plan	1 June to 30 June 2018
Total number of ferry movements recorded and audited	865
Use diverted route and enter / leave SCZ through Gate Access Points	1 deviation.
Speed control in speed control zone	The average speeds taken within the SCZ by all HSFs were within 15 knots (10.1 knots to 14.0 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)	87 to 91 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.

- Ten 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, twenty two skippers were trained by ET and fifteen skippers were trained by contractor's Environmental Officer. In total, 1004 skippers were trained from August 2016 to June 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	

EP Condition	Submission	Status
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.19	Waste Management Plan	
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.7 Compliance with Other Statutory Environmental Requirements

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

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

7.8.1 Complaints

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

For the complaint received on 28 May 2018 covering issues related to water quality and DEZ monitoring for DCM works, investigation was conducted by the ET in accordance with the Manual and the Complaint Management Plan of the Project.

On the water quality issue, based on ET's inspection on 21 May 2018, overflow of seawater was observed from a DCM barge due to malfunction of a level sensor of a seawater storage tank. No oil mixture on the open water around the barge was observed. The contractor stopped the overflow and fixed the level sensor on the same day upon ET's request. No abnormal discharge was observed in subsequent site inspections. On the issue concerning the piping of the water quality monitoring system on DCM barges, ET has carried out checking on the concerned barges. It should be noted that this part of monitoring is not a statutory requirement according to the EP and EM&A Manual, but an additional contract requirement AA set for the DCM contractors. After investigation, nonetheless, no abnormal pipe connection of the monitoring systems was observed.

On the point related to DEZ monitoring issue, it is considered not valid after investigation. Based on contractor's site log, no DCM works was carried out on the concerned barge during the concerned period. Hence, implementation of DEZ monitoring by dolphin observer was not required at the mentioned time in the complaint.

7.8.2 Notifications of Summons or Status of Prosecution

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

7.8.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Pipeline testing and commissioning; and
- Stockpiling of excavated materials from previous HDD operation.

DCM Works:

Contract 3201 to 3205 DCM Works

- DCM works; and

Reclamation Works:

Contract 3206 Main Reclamation Works

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

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
- 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;
- Steel platform erection; and

- Cable tray installation.

Contract 3503 Terminal 2 Foundation and Substructure Works

- Site establishment;
- Drainage, and road work; and
- Piling works

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

- Erection of hoarding;
- Diversion of underground utilities;
- Piling 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;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-side works. Reclamation works included DCM works, marine filling, seawall construction, laying of sand blanket, and PVD installation. Land-side works involved mainly foundation and substructure work for T2 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 DO, turbidity, total alkalinity, SS 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 nickel, some of the testing results triggered the relevant Action and Limit Levels, and the corresponding investigations were conducted accordingly. The investigation findings concluded that the cases were not related to the Project. To conclude, the construction activities during the reporting period did not introduce adverse impact to all water quality sensitive receivers.

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

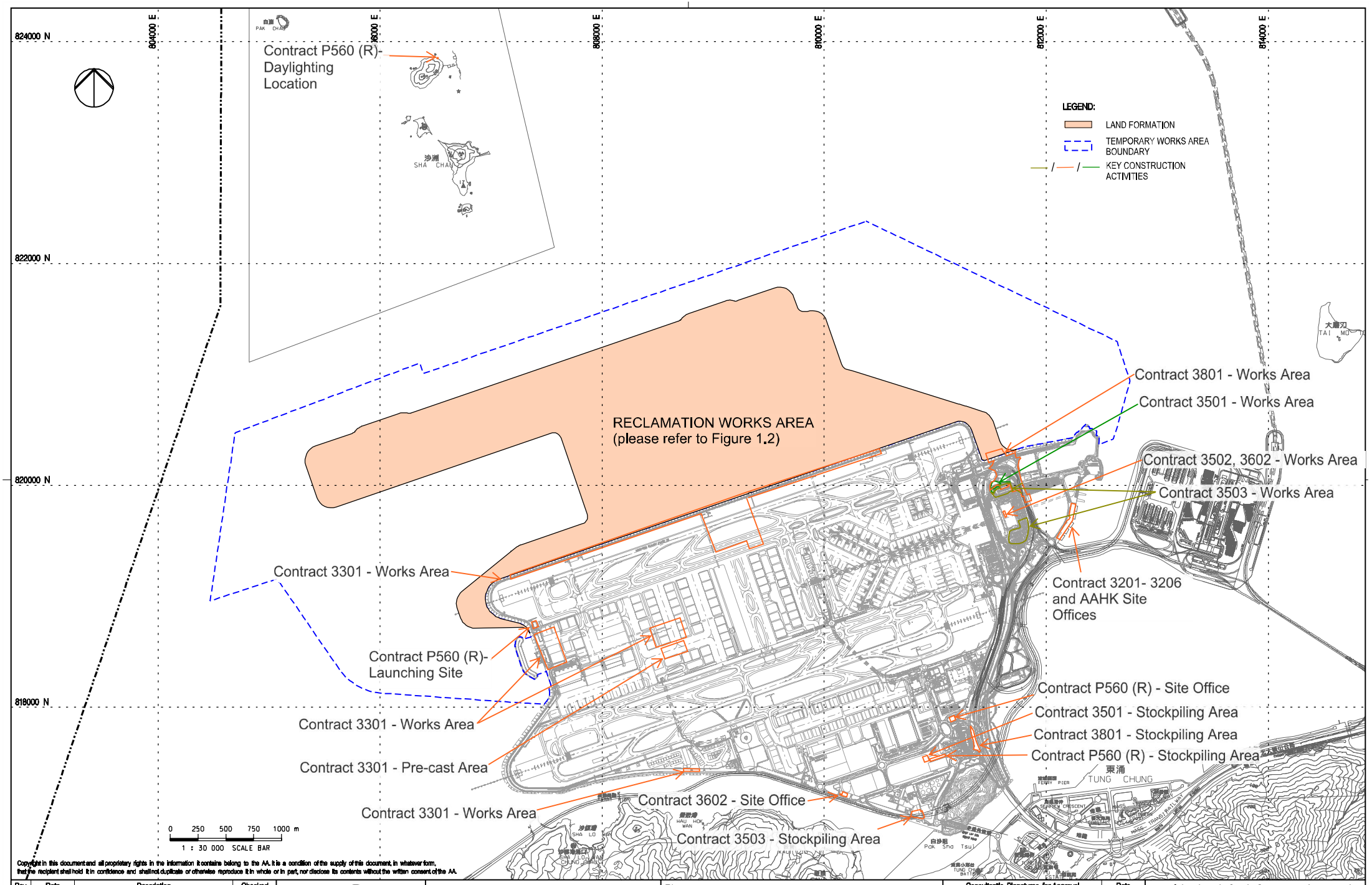
On the implementation of MMWP, dolphin observers were deployed by the contractors laying of enhanced silt curtain and laying of silt curtains for sand blanket works in accordance with the MMWP. On the implementation of DEZ Plan, dolphin observers at 17 to 24 dolphin observation stations were deployed 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 June 2018 were in the range of 87 to 91 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 865 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 (10.1 to 14.0 knots), which were in compliance with the SkyPier Plan. One

deviation from the diverted route in June 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



Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

HONG KONG INTERNATIONAL AIRPORT

Mott MacDonald

Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

Rev. A

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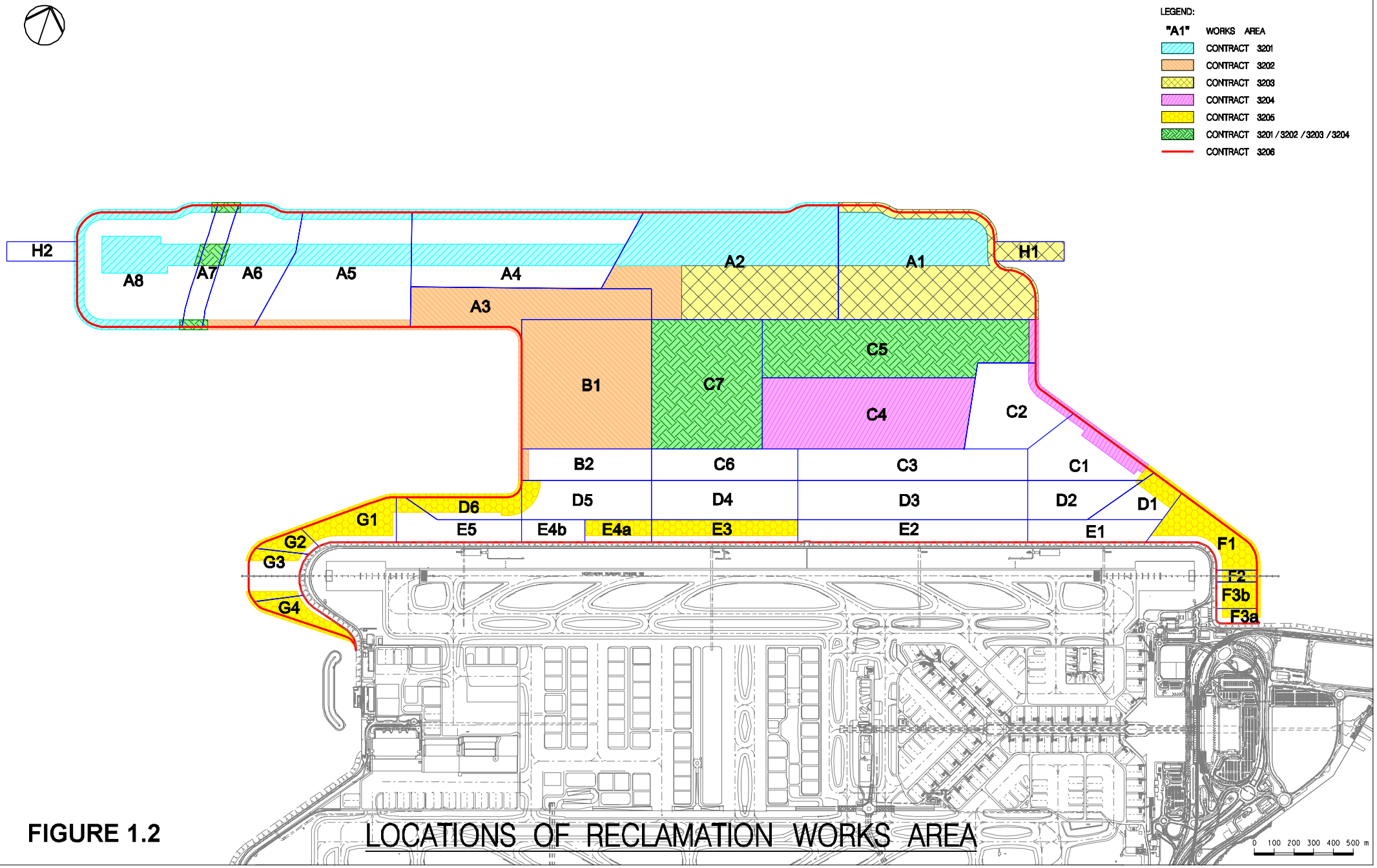
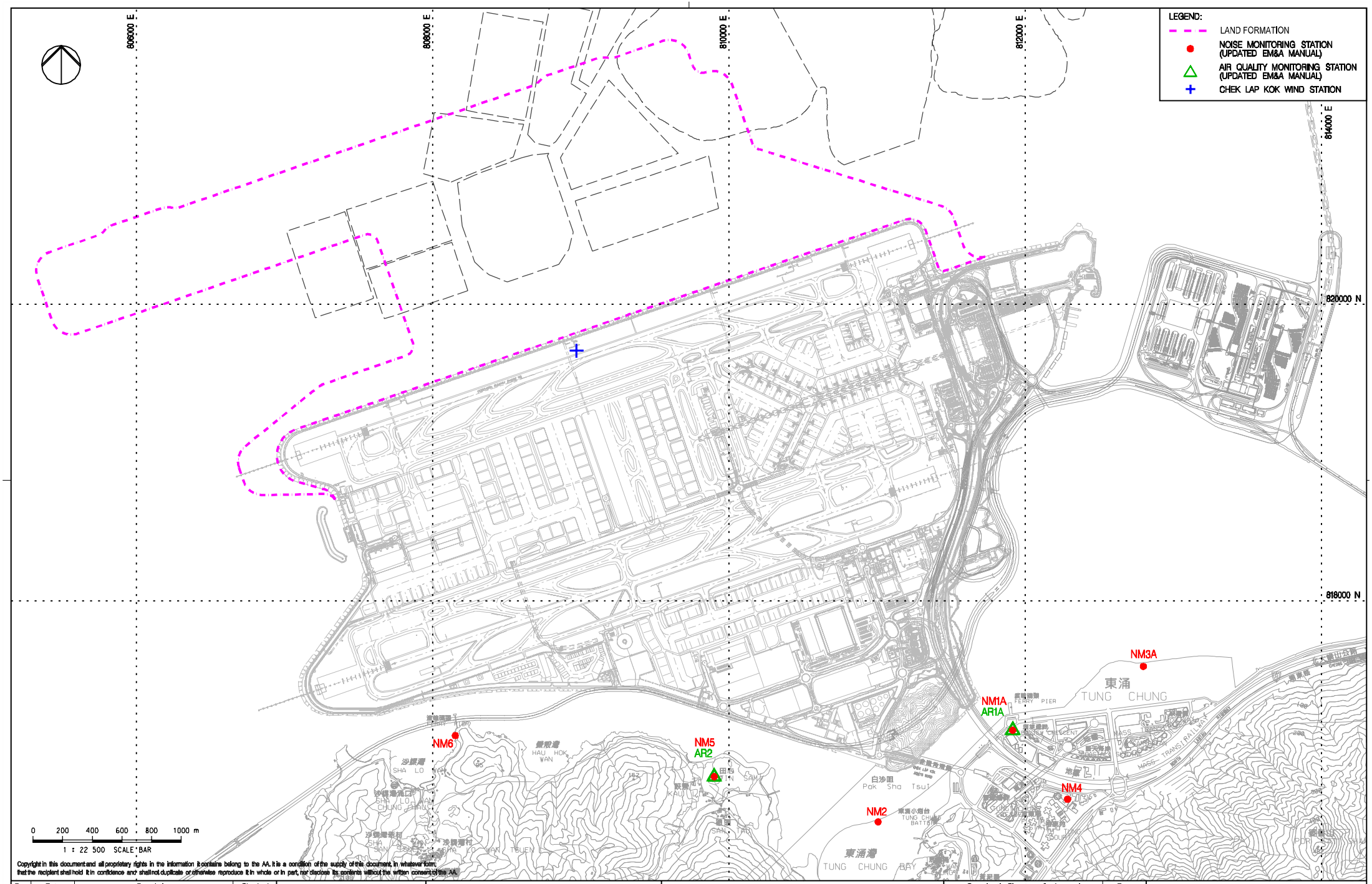


FIGURE 1.2

LOCATIONS OF RECLAMATION WORKS AREA



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

Mott MacDonald

Title

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

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

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

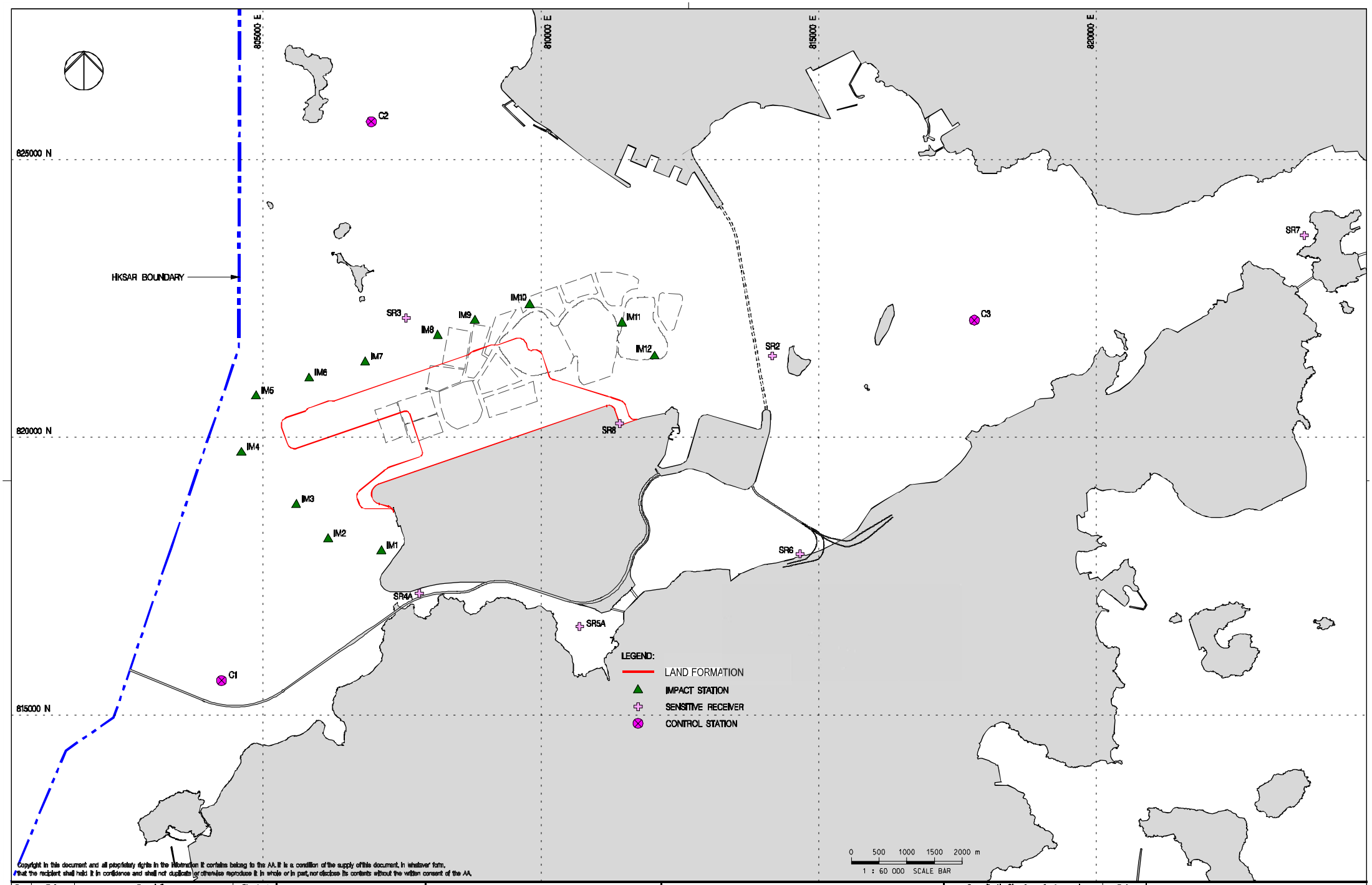
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. C

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



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A	25MAY17	FIRST ISSUE	HY
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HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

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

Drawing No.

FIGURE 3.1

Scale at A3 1 : 60000

Rev. C

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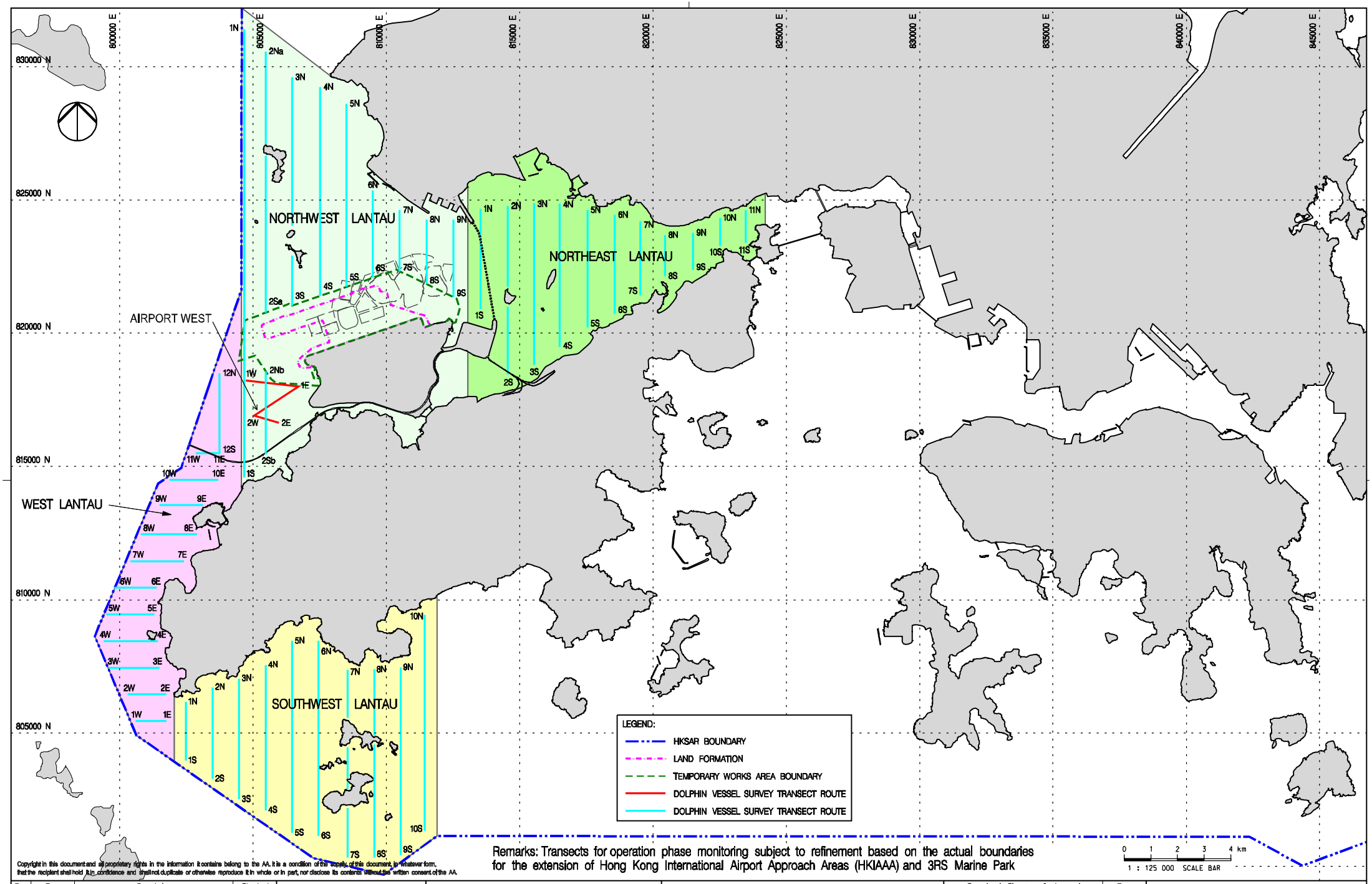

Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park

Rev.	Date	Description	Checked
A	02DEC15	FIRST ISSUE	JC
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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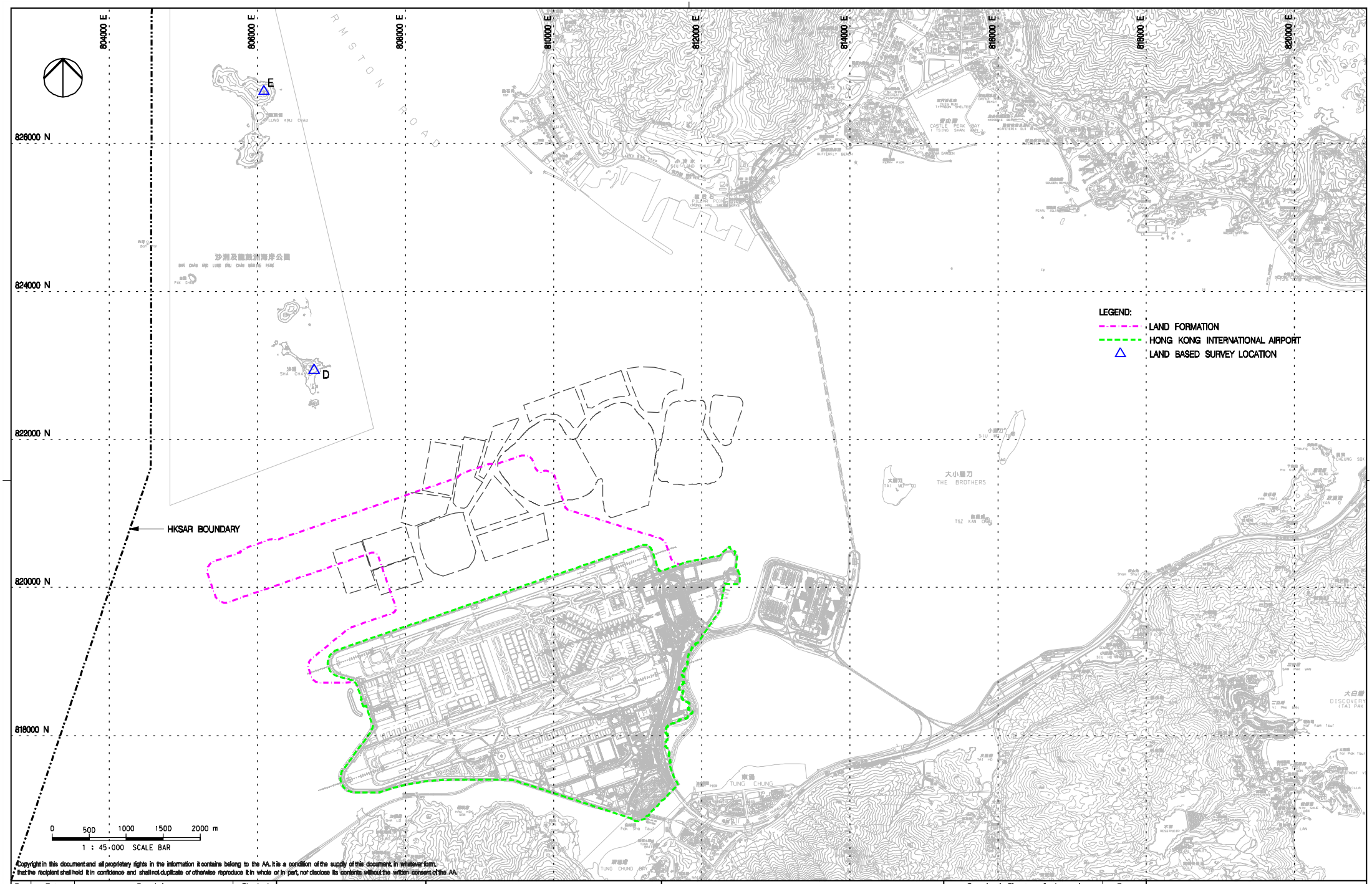
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

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



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HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

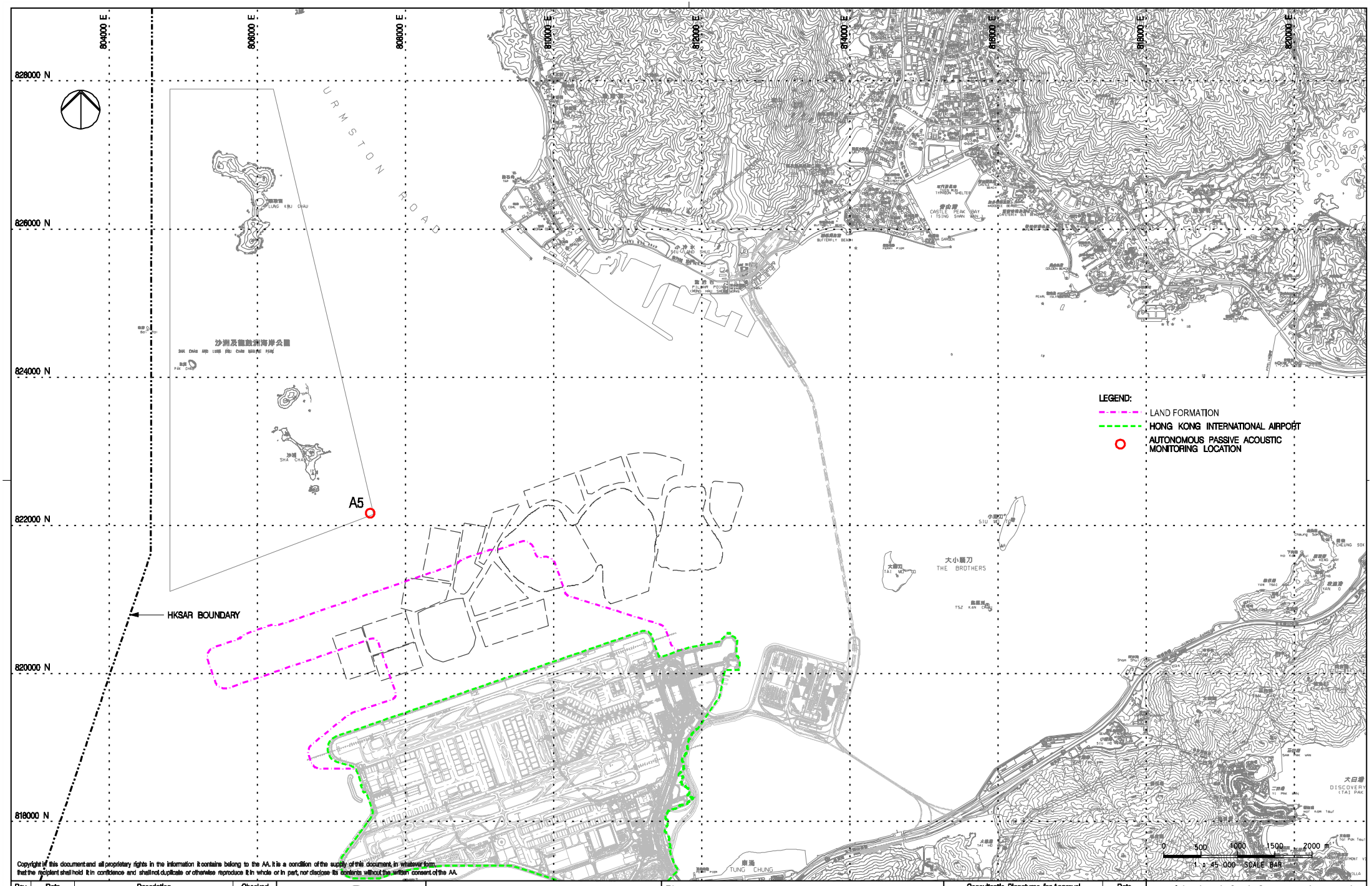
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. B

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



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HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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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\EN\IEMA\170802\FIG 6.5.dgn

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

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

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

Monitoring Schedule of This Reporting Period

Jun-18

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Site Inspection	**2** WQ General & Regular DCM mid-ebb: 15:17 mid-flood: 08:18
3	**4** CWD Survey (Vessel) NM6	**5** Site Inspection WQ General & Regular DCM mid-ebb: 17:19 mid-flood: 10:11	**6** Site Inspection AR1A, AR2 NM1A, NM4, NM5	**7** Site Inspection WQ General & Regular DCM* mid-ebb: 19:15 mid-flood: 12:56	**8** Site Inspection NM3A	**9** WQ General & Regular DCM mid-ebb: 10:00 mid-flood: 15:33
10	**11** AR1A, AR2 NM1A, NM3A, NM4, NM5	**12** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 11:53 mid-flood: 18:32	**13** Site Inspection CWD Survey (Vessel) NM6	**14** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:19 mid-flood: 20:23	**15** Site Inspection CWD Survey (Land-based) AR1A, AR2	**16** WQ General & Regular DCM mid-ebb: 14:53 mid-flood: 07:51
17	**18**	**19** Site Inspection CWD Survey (Vessel, Land-based) NM6 WQ General & Regular DCM mid-ebb: 17:33 mid-flood: 10:34	**20** Site Inspection CWD Survey (Vessel, Land-based)	**21** Site Inspection CWD Survey (Vessel, Land-based) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 19:50 mid-flood: 13:31	**22** Site Inspection	**23** WQ General & Regular DCM* mid-ebb: 10:00 mid-flood: 16:12
24	**25** CWD Survey (Vessel) NM6	**26** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:04 mid-flood: 19:05	**27** Site Inspection AR1A, AR2 NM1A, NM3A, NM4, NM5	**28** Site Inspection WQ General & Regular DCM mid-ebb: 13:16 mid-flood: 20:25	**29** Site Inspection	**30** WQ General & Regular DCM mid-ebb: 14:24 mid-flood: 07:24

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

* WQ monitoring sessions on 7 and 23 June 2018 were cancelled due to adverse weather.

Tentative Monitoring Schedule of Next 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 (Land-based) NM6 WQ General & Regular DCM mid-ebb: 17:32 mid-flood: 11:00	6 Site Inspection CWD Survey (Vessel) 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 CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:44 mid-flood: 17:29	11 Site Inspection CWD Survey (Land-based)	12 Site Inspection 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 CWD Survey (Vessel) NM6	17 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:21 mid-flood: 9:29	18 CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5	19 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 18:07 mid-flood: 11:41	20 Site Inspection CWD Survey (Land-based)	21 WQ General & Regular DCM mid-ebb: 20:23 mid-flood: 14:36
22	23 CWD Survey (Vessel, Land-based)	24 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM3A, NM4, NM5 WQ General & Regular DCM mid-ebb: 11:07 mid-flood: 18:19	25 Site Inspection	26 Site Inspection 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 AR1A, AR2 NM1A, NM3A, NM4, NM5	31 Site Inspection WQ General & Regular DCM mid-ebb: 15:08 mid-flood: 8:26				

Notes:

Site Inspection
CWD - Chinese White Dolphin
Air quality and Noise Monitoring Station
WQ - Water Quality
DCM - Deep Cemenet 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 C. Monitoring Results

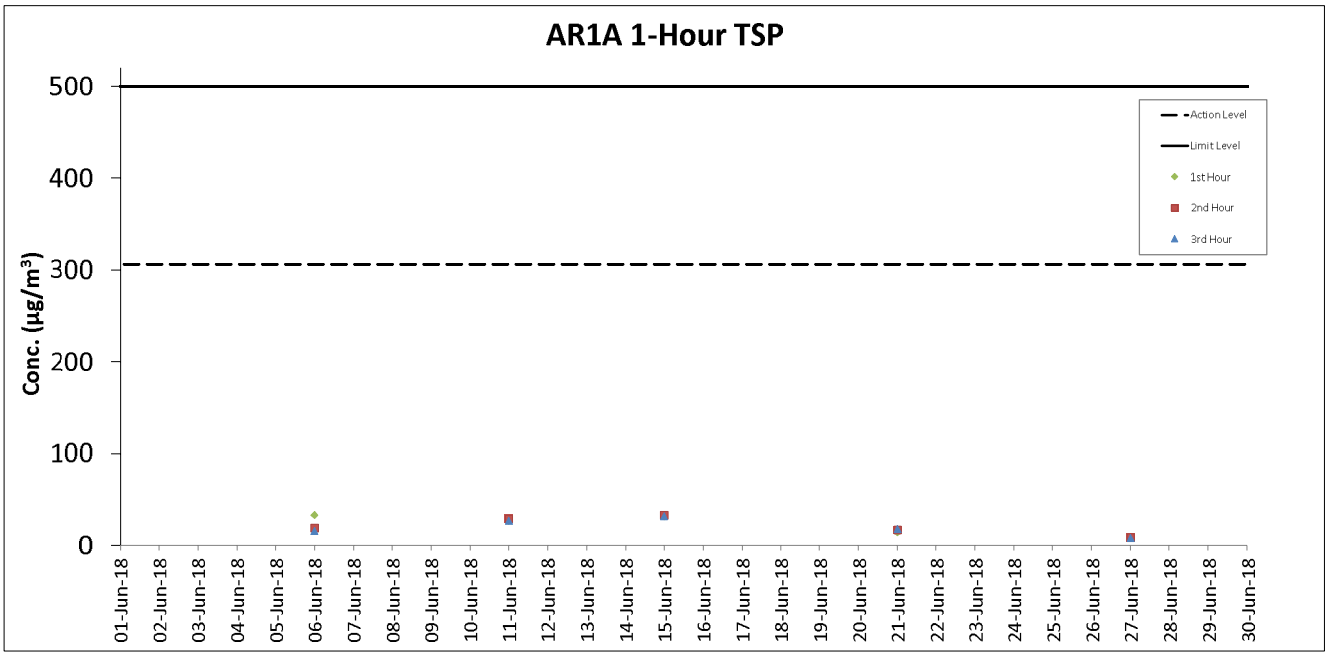
Air Quality Monitoring Results

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

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP ($\mu g/m^3$)	Action Level ($\mu g/m^3$)	Limit Level ($\mu g/m^3$)
06-Jun-18	13:25	Cloudy	1.3	195	33	306	500
06-Jun-18	14:25	Cloudy	4.1	206	19	306	500
06-Jun-18	15:25	Cloudy	4.9	68	16	306	500
11-Jun-18	13:20	Sunny	3.6	195	27	306	500
11-Jun-18	14:20	Sunny	2.9	206	29	306	500
11-Jun-18	15:20	Sunny	2.9	294	27	306	500
15-Jun-18	13:00	Cloudy	2.7	195	32	306	500
15-Jun-18	14:00	Cloudy	3.7	206	33	306	500
15-Jun-18	15:00	Cloudy	3.0	338	32	306	500
21-Jun-18	13:00	Sunny	7.1	195	14	306	500
21-Jun-18	14:00	Sunny	6.9	206	17	306	500
21-Jun-18	15:00	Sunny	6.2	228	18	306	500
27-Jun-18	13:00	Sunny	6.4	195	8	306	500
27-Jun-18	14:00	Sunny	3.3	206	9	306	500
27-Jun-18	15:00	Sunny	6.0	242	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 ($\mu g/m^3$)
06-Jun-18	09:00	Rainy	1.9	195	45	298	500
06-Jun-18	10:00	Rainy	2.5	206	7	298	500
06-Jun-18	11:00	Rainy	3.7	46	2	298	500
11-Jun-18	09:00	Sunny	2.3	195	27	298	500
11-Jun-18	10:00	Sunny	2.5	206	23	298	500
11-Jun-18	11:00	Sunny	2.0	4	19	298	500
15-Jun-18	09:00	Sunny	4.1	195	12	298	500
15-Jun-18	10:00	Sunny	2.3	206	10	298	500
15-Jun-18	11:00	Sunny	3.6	343	17	298	500
21-Jun-18	09:00	Sunny	5.7	195	9	298	500
21-Jun-18	10:00	Sunny	5.8	206	10	298	500
21-Jun-18	11:00	Sunny	5.9	232	11	298	500
27-Jun-18	09:00	Sunny	1.4	195	1	298	500
27-Jun-18	10:00	Sunny	2.6	206	2	298	500
27-Jun-18	11:00	Sunny	3.6	267	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-Jun-18
02-Jun-18
03-Jun-18
04-Jun-18
05-Jun-18
06-Jun-18
07-Jun-18
08-Jun-18
09-Jun-18
10-Jun-18
11-Jun-18
12-Jun-18
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14-Jun-18
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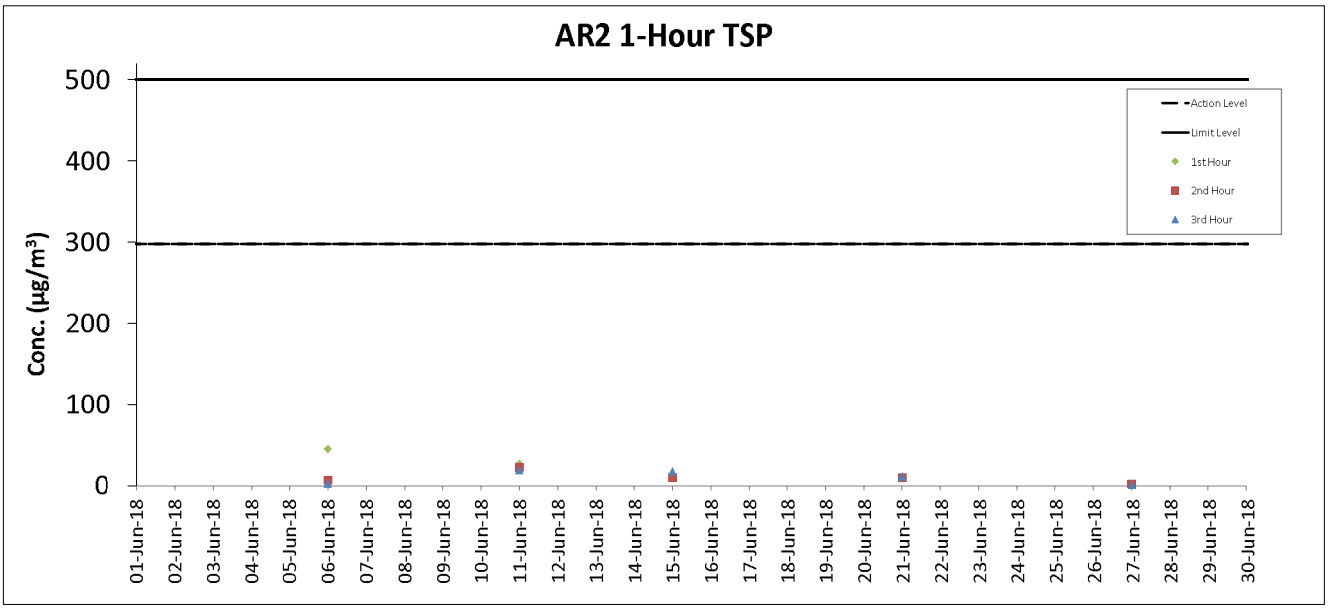
AR2 1-Hour TSP
Conc. (µg/m³)
500
400
300
200
100
0
Action Level
Limit Level
1st Hour
2nd Hour
3rd Hour
01-Jun-18
02-Jun-18
03-Jun-18
04-Jun-18
05-Jun-18
06-Jun-18
07-Jun-18
08-Jun-18
09-Jun-18
10-Jun-18
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26-Jun-18
27-Jun-18
28-Jun-18
29-Jun-18
30-Jun-18

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)
06-Jun-18	Cloudy	16:04	73.5	60.0	67
06-Jun-18	Cloudy	16:09	73.5	60.0	
06-Jun-18	Cloudy	16:14	73.0	61.0	
06-Jun-18	Cloudy	16:19	73.0	60.5	
06-Jun-18	Cloudy	16:24	74.0	60.5	
06-Jun-18	Cloudy	16:29	73.5	60.5	
11-Jun-18	Sunny	13:45	73.0	65.0	67
11-Jun-18	Sunny	13:50	72.5	65.5	
11-Jun-18	Sunny	13:55	73.5	64.5	
11-Jun-18	Sunny	14:00	73.0	65.0	
11-Jun-18	Sunny	14:05	72.5	64.5	
11-Jun-18	Sunny	14:10	73.5	66.0	
21-Jun-18	Sunny	13:15	74.0	64.5	73
21-Jun-18	Sunny	13:20	72.0	61.5	
21-Jun-18	Sunny	13:25	73.0	58.0	
21-Jun-18	Sunny	13:30	74.5	57.0	
21-Jun-18	Sunny	13:35	73.0	58.0	
21-Jun-18	Sunny	13:40	73.0	57.5	
27-Jun-18	Sunny	13:15	73.5	58.5	73
27-Jun-18	Sunny	13:20	70.5	56.0	
27-Jun-18	Sunny	13:25	73.5	61.0	
27-Jun-18	Sunny	13:30	74.0	61.5	
27-Jun-18	Sunny	13:35	72.5	58.0	
27-Jun-18	Sunny	13:40	72.5	60.0	

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)
08-Jun-18	Cloudy	15:20	67.5	60.5	57
08-Jun-18	Cloudy	15:25	67.5	60.5	
08-Jun-18	Cloudy	15:30	66.5	60.5	
08-Jun-18	Cloudy	15:35	69.5	60.5	
08-Jun-18	Cloudy	15:40	67.5	60.5	
08-Jun-18	Cloudy	15:45	68.5	61.0	
11-Jun-18	Sunny	09:25	69.0	60.5	61
11-Jun-18	Sunny	09:30	68.5	60.5	
11-Jun-18	Sunny	09:35	66.0	61.0	
11-Jun-18	Sunny	09:40	68.5	61.0	
11-Jun-18	Sunny	09:45	69.5	60.5	
11-Jun-18	Sunny	09:50	69.0	60.5	
21-Jun-18	Sunny	09:20	65.0	64.0	61
21-Jun-18	Sunny	09:25	65.5	63.5	
21-Jun-18	Sunny	09:30	64.5	63.0	
21-Jun-18	Sunny	09:35	68.0	64.0	
21-Jun-18	Sunny	09:40	66.5	64.0	
21-Jun-18	Sunny	09:45	63.5	62.5	
27-Jun-18	Sunny	09:30	64.5	63.0	57
27-Jun-18	Sunny	09:35	64.0	62.5	
27-Jun-18	Sunny	09:40	64.5	62.5	
27-Jun-18	Sunny	09:45	64.0	62.5	
27-Jun-18	Sunny	09:50	64.0	62.5	
27-Jun-18	Sunny	09:55	64.0	62.5	

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)
06-Jun-18	Cloudy	15:04	63.5	60.5	66
06-Jun-18	Cloudy	15:09	64.5	60.5	
06-Jun-18	Cloudy	15:14	64.0	61.0	
06-Jun-18	Cloudy	15:19	65.0	61.5	
06-Jun-18	Cloudy	15:24	64.0	60.5	
06-Jun-18	Cloudy	15:29	64.0	61.0	
11-Jun-18	Sunny	14:18	66.0	62.0	66
11-Jun-18	Sunny	14:23	64.0	60.5	
11-Jun-18	Sunny	14:28	64.5	60.5	
11-Jun-18	Sunny	14:33	63.5	60.5	
11-Jun-18	Sunny	14:38	65.0	61.0	
11-Jun-18	Sunny	14:43	63.5	61.0	
21-Jun-18	Sunny	14:09	63.5	60.0	60
21-Jun-18	Sunny	14:14	64.5	60.5	
21-Jun-18	Sunny	14:19	65.5	61.5	
21-Jun-18	Sunny	14:24	66.0	62.5	
21-Jun-18	Sunny	14:29	65.0	62.0	
21-Jun-18	Sunny	14:34	65.0	62.0	
27-Jun-18	Sunny	13:56	63.5	61.0	66
27-Jun-18	Sunny	14:01	63.5	61.0	
27-Jun-18	Sunny	14:06	64.0	60.0	
27-Jun-18	Sunny	14:11	64.5	60.5	
27-Jun-18	Sunny	14:16	64.5	61.0	
27-Jun-18	Sunny	14:21	64.5	61.5	

Remarks:

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

Limit Level at NM4 was reduced to 65 dB(A) during school examination period from 4 to 8 Jun 2018. Impact noise monitoring at NM4 on 6 Jun 2018 was conducted after the end of school examination that day (8:30 am to 12:00 pm). The corresponding Limit Level for the monitoring session was 70 dB(A).

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)
06-Jun-18	Sunny	11:09	61.0	48.5	59
06-Jun-18	Sunny	11:14	57.5	50.0	
06-Jun-18	Sunny	11:19	57.5	49.0	
06-Jun-18	Sunny	11:24	60.0	49.0	
06-Jun-18	Sunny	11:29	68.5	54.5	
06-Jun-18	Sunny	11:34	60.5	49.5	
11-Jun-18	Sunny	08:57	66.5	57.5	61
11-Jun-18	Sunny	09:02	62.0	54.0	
11-Jun-18	Sunny	09:07	58.5	53.5	
11-Jun-18	Sunny	09:12	57.5	51.0	
11-Jun-18	Sunny	09:17	66.5	52.0	
11-Jun-18	Sunny	09:22	58.5	51.0	
21-Jun-18	Sunny	09:00	56.0	45.5	59
21-Jun-18	Sunny	09:05	51.5	47.5	
21-Jun-18	Sunny	09:10	63.5	47.0	
21-Jun-18	Sunny	09:15	60.0	47.0	
21-Jun-18	Sunny	09:20	52.5	47.0	
21-Jun-18	Sunny	09:25	52.0	45.5	
27-Jun-18	Sunny	09:30	56.0	47.5	59
27-Jun-18	Sunny	09:35	52.5	47.5	
27-Jun-18	Sunny	09:40	54.0	47.5	
27-Jun-18	Sunny	09:45	54.0	47.0	
27-Jun-18	Sunny	09:50	67.5	51.5	
27-Jun-18	Sunny	09:55	60.0	47.5	

Remarks:

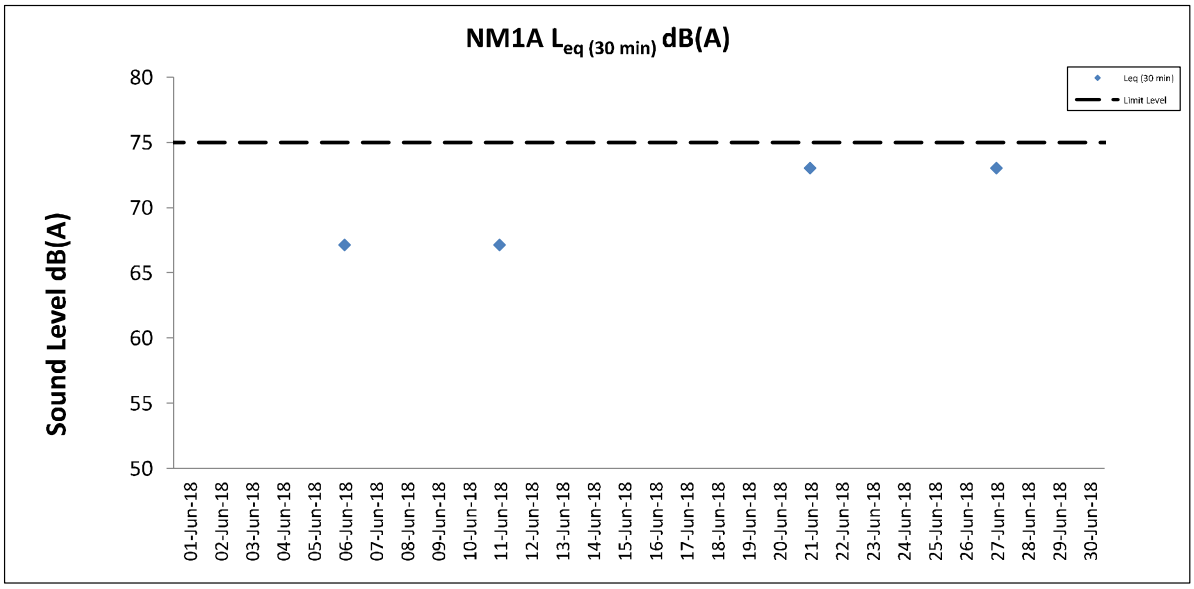
+3dB (A) correction was applied to free-field measurement.

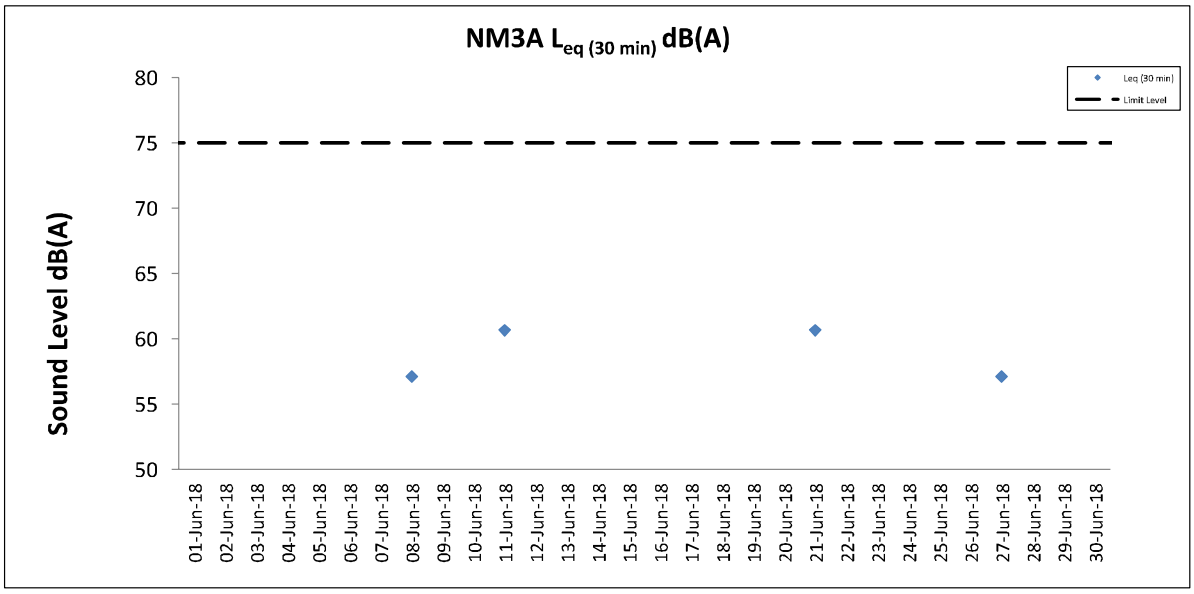
Noise Measurement Results

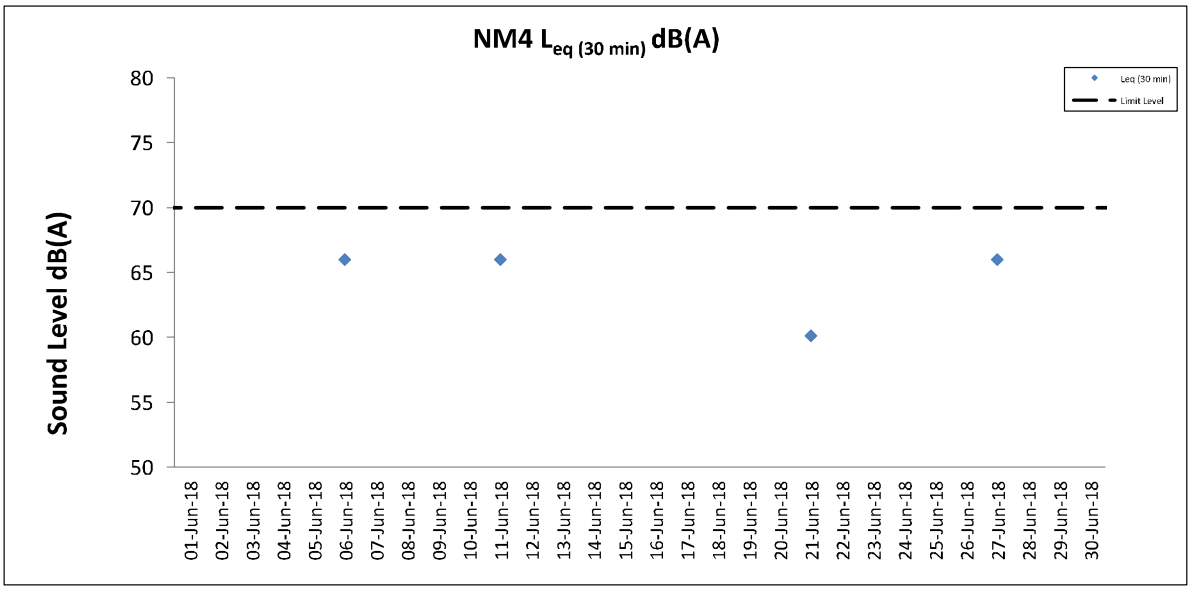
Station: NM6- House No.1 Sha Lo Wan

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
04-Jun-18	Sunny	09:39	69.0	60.5	68
04-Jun-18	Sunny	09:44	70.0	53.0	
04-Jun-18	Sunny	09:49	64.5	53.0	
04-Jun-18	Sunny	09:54	67.0	53.0	
04-Jun-18	Sunny	09:59	67.0	53.0	
04-Jun-18	Sunny	10:04	62.0	50.0	
13-Jun-18	Cloudy	09:40	79.0	60.0	73
13-Jun-18	Cloudy	09:45	76.5	56.0	
13-Jun-18	Cloudy	09:50	75.0	56.0	
13-Jun-18	Cloudy	09:55	76.0	56.5	
13-Jun-18	Cloudy	10:00	73.5	55.0	
13-Jun-18	Cloudy	10:05	70.0	52.5	
19-Jun-18	Cloudy	09:41	74.5	52.0	71
19-Jun-18	Cloudy	09:46	74.0	52.5	
19-Jun-18	Cloudy	09:51	69.0	55.0	
19-Jun-18	Cloudy	09:56	76.5	54.0	
19-Jun-18	Cloudy	10:01	76.0	52.5	
19-Jun-18	Cloudy	10:06	74.0	53.5	
25-Jun-18	Fine	09:38	65.5	53.5	66
25-Jun-18	Fine	09:43	67.5	52.5	
25-Jun-18	Fine	09:48	72.0	61.5	
25-Jun-18	Fine	09:53	75.0	58.5	
25-Jun-18	Fine	09:58	66.5	52.0	
25-Jun-18	Fine	10:03	65.0	52.5	

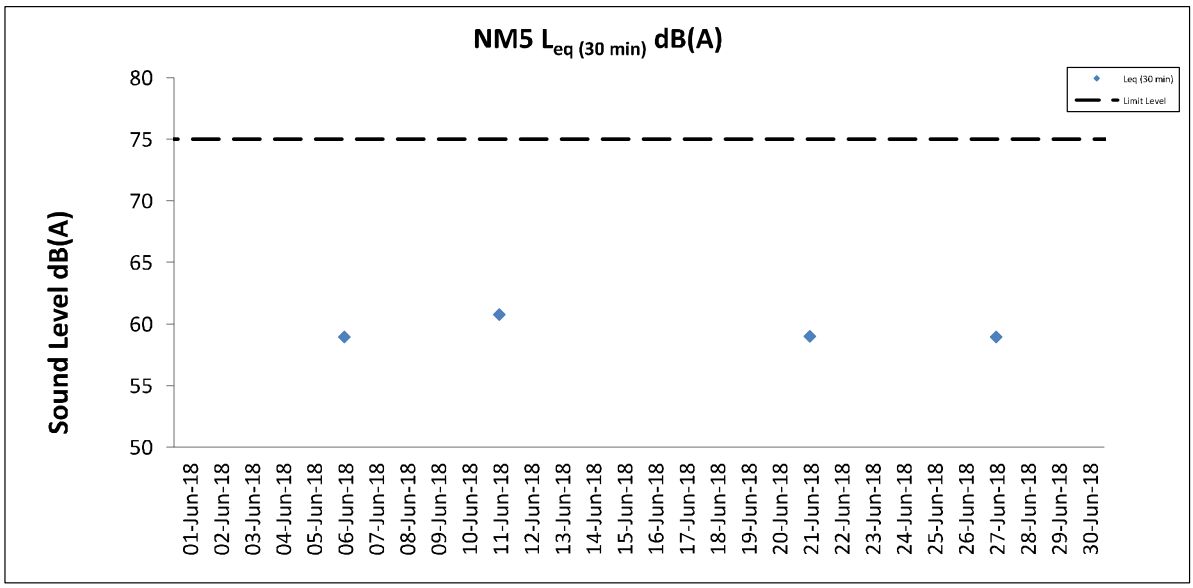
Remarks:
+3dB (A) correction was applied to free-field measurement.







Remark: Limit Level at NM4 was reduced to 65 dB(A) during school examination period from 4 to 8 Jun 2018. Impact noise monitoring at NM4 on 6 Jun 2018 was conducted after the end of school examination that day (8:30 am to 12:00 pm). The corresponding Limit Level for the monitoring session was 70 dB(A).


NM5 Leq (30 min) dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Jun-18
02-Jun-18
03-Jun-18
04-Jun-18
05-Jun-18
06-Jun-18
07-Jun-18
08-Jun-18
09-Jun-18
10-Jun-18
11-Jun-18
12-Jun-18
13-Jun-18
14-Jun-18
15-Jun-18
16-Jun-18
17-Jun-18
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23-Jun-18
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25-Jun-18
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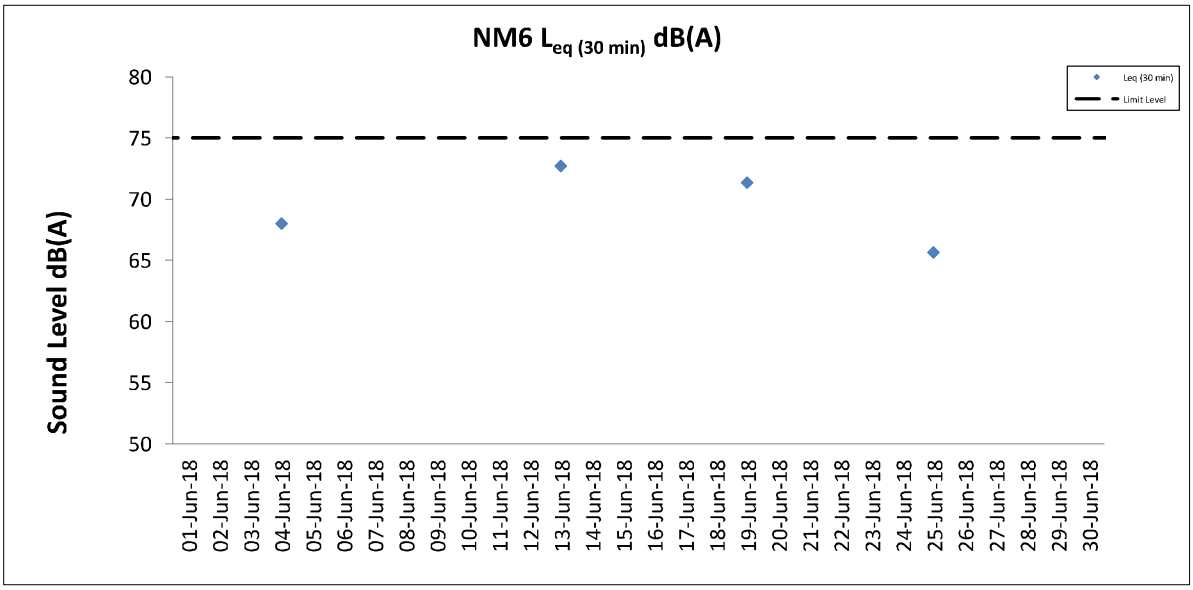
27-Jun-18
28-Jun-18
29-Jun-18
30-Jun-18


NM6 Leq (30 min) dB(A)
Sound Level dB(A)
Leq (30 min)
Limit Level
80
75
70
65
60
55
50
01-Jun-18
02-Jun-18
03-Jun-18
04-Jun-18
05-Jun-18
06-Jun-18
07-Jun-18
08-Jun-18
09-Jun-18
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20-Jun-18
21-Jun-18
22-Jun-18
23-Jun-18
24-Jun-18
25-Jun-18
26-Jun-18
27-Jun-18
28-Jun-18
29-Jun-18
30-Jun-18

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 June 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	14:40	8.7	Surface	1.0	0.4	184	28.4	28.4	8.0	8.0	26.9	26.9	103.6	103.6	6.9	6.7	4.1	8.2	6	6	83	86	815599	804268	<0.2	<0.2	1.8	1.3
						1.0	0.4	186	28.4		8.0		26.9		103.5		6.9		4.1		4		84				<0.2		1.4	
					Middle	4.4	0.3	149	28.2	28.2	7.9	7.9	27.2	27.2	95.9	95.8	6.4		8.0		5		85				<0.2		1.2	
						4.4	0.4	157	28.2		7.9		27.2		95.7		6.4		8.0		6		86				<0.2		1.1	
					Bottom	7.7	0.3	128	28.2	28.2	7.9	7.9	27.3	27.3	94.6	94.5	6.3	6.3	12.3		6		88				<0.2		1.1	
						7.7	0.3	135	28.2		7.9		27.3		94.4		6.3		12.4		8		88				<0.2		1.2	
C2	Fine	Moderate	13:33	12.2	Surface	1.0	0.3	163	29.6	29.6	7.9	7.9	22.4	22.4	102.8	102.7	6.9	6.1	6.5	11.0	5	5	80	83	825678	806922	<0.2	<0.2	1.9	2.0
						1.0	0.3	170	29.6		7.9		22.4		102.6		6.9		6.5		4		81				<0.2		2.1	
					Middle	6.1	0.5	156	28.5	28.5	7.8	7.8	25.1	25.1	78.4	78.4	5.3		9.4		4		84				<0.2		1.9	
						6.1	0.5	169	28.5		7.8		25.1		78.4		5.3		9.5		5		84				<0.2		1.9	
					Bottom	11.2	0.3	120	27.8	27.8	7.8	7.8	27.9	27.9	75.7	75.8	5.1	5.1	16.9		5		85				<0.2		2.1	
						11.2	0.3	124	27.8		7.9		27.9		75.9		5.1		17.0		6		86				<0.2		2.0	
C3	Cloudy	Moderate	15:08	11.4	Surface	1.0	0.3	133	28.5	28.5	8.0	8.0	26.8	26.8	104.1	104.1	7.0	6.7	3.2	5.0	5	7	81	84	822088	817777	<0.2	<0.2	1.4	1.5
						1.0	0.4	140	28.4		8.0		26.8		104.0		7.0		3.1		7		81				<0.2		1.5	
					Middle	5.7	0.3	130	28.2	28.2	7.9	7.9	27.2	27.2	94.7	94.5	6.4		5.9		6		83				<0.2		1.4	
						5.7	0.3	135	28.2		7.9		27.2		94.3		6.3		5.9		6		84				<0.2		1.6	
					Bottom	10.4	0.3	96	27.2	27.2	7.9	7.9	29.4	29.4	78.0	78.2	5.3	5.3	6.1		9		86				<0.2		1.6	
						10.4	0.4	101	27.2		7.9		29.5		78.3		5.3		6.1		7		86				<0.2		1.5	
IM1	Cloudy	Moderate	14:21	5.3	Surface	1.0	0.2	214	29.3	29.3	8.0	8.0	24.6	24.6	113.6	113.6	7.6	7.6	5.1	6.2	5	6	81	83	817929	807130	<0.2	<0.2	1.7	1.6
						1.0	0.3	229	29.3		8.0		24.6		113.5		7.6		5.2		6		82				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	169	29.3	29.3	8.0	8.0	24.6	24.6	113.5	113.6	7.6	7.6	7.2		6		85				<0.2		1.6	
						4.3	0.2	178	29.3		8.0		24.6		113.6		7.6		7.2		7		85				<0.2		1.5	
IM2	Cloudy	Moderate	14:15	7.6	Surface	1.0	0.4	178	29.3	29.3	8.0	8.0	24.1	24.1	108.6	108.5	7.3	7.0	4.6	8.4	4	5	82	84	818144	806139	<0.2	<0.2	2.0	2.0
						1.0	0.5	187	29.3		8.0		24.1		108.4		7.3		4.8		3		83				<0.2		2.0	
					Middle	3.8	0.4	162	28.9	28.9	7.9	7.9	24.6	24.6	97.8	97.7	6.6		6.6		5		83				<0.2		2.0	
						3.8	0.4	169	28.9		7.9		24.6		97.5		6.6		6.5		4		84				<0.2		1.8	
					Bottom	6.6	0.2	158	27.9	27.9	7.9	7.9	27.3	27.3	82.6	82.7	5.6	5.6	13.7		6		85				<0.2		2.0	
						6.6	0.2	167	27.9		7.9		27.3		82.8		5.6		14.0		5		86				<0.2		1.9	
IM3	Fine	Moderate	14:08	7.5	Surface	1.0	0.4	166	29.3	29.3	7.9	7.9	23.8	23.8	103.0	102.9	6.9	6.6	6.7	8.3	4	4	82	85	818769	805590	<0.2	<0.2	1.9	1.9
						1.0	0.5	176	29.3		7.9		23.8		102.7		6.9		6.6		2		82				<0.2		1.9	
					Middle	3.8	0.3	139	28.6	28.6	7.9	7.9	25.0	25.0	91.5	91.6	6.2		7.7		4		83				<0.2		1.9	
						3.8	0.4	141	28.6		7.9		25.0		91.7		6.2		7.7		5		84				<0.2		1.9	
					Bottom	6.5	0.3	113	27.8	27.8	7.9	7.9	27.6	27.6	89.0	89.2	6.0	6.0	10.5		4		88				<0.2		1.9	
						6.5	0.3	113	27.8		7.9		27.6		89.3		6.0		10.9		6		88				<0.2		1.8	
IM4	Fine	Moderate	14:00	8.0	Surface	1.0	0.5	190	29.3	29.3	8.0	8.0	23.6	23.6	109.6	109.6	7.4	7.1	5.6	7.2	4	5	81	83	819753	804605	<0.2	<0.2	2.1	2.0
						1.0	0.5	191	29.2		8.0		23.7		109.5		7.4		5.7		5		81				<0.2		2.0	
					Middle	4.0	0.4	176	28.5	28.5	7.9	7.9	25.9	25.9	100.1	100.1	6.7		6.3		4		83				<0.2		1.9	
						4.0	0.4	188	28.5		8.0		25.9		100.0		6.7		6.4		6		84				<0.2		2.1	
					Bottom	7.0	0.4	159	27.6	27.6	7.9	7.9	28.0	28.0	93.8	93.1	6.3	6.3	9.6		7		85				<0.2		1.9	
						7.0	0.4	169	27.6		7.9		28.1		92.3		6.2		9.6		6		85				<0.2		1.9	
IM5	Fine	Moderate	13:51	6.4	Surface	1.0	0.3	183	29.3	29.3	8.0	8.0	23.4	23.4	108.4	108.5	7.3	7.3	4.4	6.1	2	2	81	84	820764	804887	<0.2	<0.2	1.9	1.9
						1.0	0.4	195	29.3		8.0		23.5		108.6		7.3		4.4		2		81				<0.2		1.8	
					Middle	3.2	0.3	149	28.8	28.8	8.0	8.0	25.4	25.3	107.4	107.3	7.2		6.4		2		84				<0.2		1.9	
						3.2	0.3	160	28.8		8.0		25.3		107.1		7.2		6.4		2		84				<0.2		1.9	
					Bottom	5.4	0.3	125	27.3	27.3	7.8	7.8	28.5	28.5	76.3	76.3	5.2	5.2	7.6		3		85				<0.2		1.9	
						5.4	0.3	137	27.3		7.8		28.5		76.3		5.2		7.7		3		86				<0.2		2.0	
IM6	Fine	Moderate	13:42	7.2	Surface	1.0	0.4	142	29.2	29.2	7.9	7.9	23.3	23.3	98.8	99.1	6.7	6.9	6.3	8.3	2	3	83	85	821087	805816	<0.2	<0.2	2.4	2.3
						1.0	0.4	147	29.1		7.9		23.3		99.3		6.7		6.3		3		83				<0.2		2.6	
					Middle	3.6	0.4	128	28.5	28.5	7.9	7.9	26.3	26.4	104.2	104.3	7.0		8.2		3		85				<0.2		2.3	
						3.6	0.4	139	28.5		7.9		26.4		104.4		7.0		8.2		3		85				<0.2		2.3	
					Bottom	6.2	0.3	110	27.9	27.9	7.9	7.9	27.7	27.7	94.8	94.9	6.4	6.4	10.4		3		87				<0.2		2.2	
						6.2	0.3	114	27.9		7.9		27.7		95.0		6.4		10.5		5		87				<0.2		2.2	
IM7	Fine	Moderate	13:35	7.3	Surface	1.0	0.3	139	29.7	29.7	7.9	7.9	22.4	22.4	105.1	105.0	7.1	6.8	4.6	6.9	4	5	81	84	821328	806820	<0.2	<0.2	2.1	2.0
						1.0	0.3	141	29.7		7.9		22.4		104.9		7.1		4.6		3		81				<0.2		2.1	
					Middle	3.7	0.2	104	29.2	29.2	7.9	7.9	23.2	23.2	94.8	94.7	6.4		7.1		5		84				<0.2		2.2	
						3.7	0.2	110	29.2		7.9		23.2		94.5		6.4		7.1		4		84				<0.2		1.8	
					Bottom	6.3	0.2	92	28.6	28.6	7.8	7.8	25.0	25.0	82.5	82.6	5.6	5.6	9.1		6		85				<0.2		1.9	
						6.3	0.2	92	28.6		7.8		25.0		82.6		5.6		9.0		5		86				<0.2		1.9	
IM8	Fine	Moderate	14:00	8.4	Surface	1.0	0.2	146	29.4	29.4	8.0	8.0	23.4	23.4	110.2	110.3	7.4	7.3	4.2	6.2	5	5	80	83	821841	808111	<0.2	<0.2	1.9	1.7
						1.0	0.2	146	29.4		8.0		23.4		110.3		7.4		4.3		4		81				<0.2		1.8	
					Middle	4.2	0.2	68	28.7	28.7	8.0	8.0	25.3	25.3	107.2	107.1	7.2		6.5		5		83				<0.2		1.7	
						4.2	0.2	72	28.7		8.0		25.3		106.9		7.2		6.5		6		84				<0.2		1.8	
					Bottom	7.4	0.3	57	27.2	27.2	7.9	7.9	28.7	28.7	76.2	76.5	5.2	5.2	8.0		7		85				<0.2		1.6	
						7.4	0.3	62	27.2		7.9		28.7		76.7		5.2		7.9		5		85				<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 02 June 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	14:08	7.9	Surface	1.0	0.4	168	29.4	29.4	8.0	8.0	23.6	23.6	109.1	108.9	7.3	7.1	4.4	6.0	3	4	81	84	822110	808805	<0.2	<0.2	2.4	1.9
						1.0	0.4	172	29.4		8.0		23.6		108.7		7.3		4.5		2		81				<0.2		1.9	
					Middle	4.0	0.5	113	28.3	28.3	7.9	7.9	26.6	26.6	102.3	102.2	6.9		5.1		4		84				<0.2		1.8	
						4.0	0.5	113	28.3		7.9		26.6		102.0		6.9		5.1		3		84				<0.2		1.6	
					Bottom	6.9	0.2	82	27.3	27.3	7.9	7.9	28.5	28.5	77.2	77.3	5.2	5.2	8.4		4		85				<0.2		1.8	
						6.9	0.2	83	27.3		7.9		28.5		77.3		5.2		8.4		5		86				<0.2		1.6	
IM10	Fine	Moderate	14:17	8.3	Surface	1.0	0.5	163	29.3	29.3	7.9	7.9	23.8	23.8	102.1	102.0	6.9	6.4	6.6	7.8	3	4	83	85	822358	809765	<0.2	<0.2	1.8	2.1
						1.0	0.5	175	29.3		7.9		23.8		101.9		6.8		6.6		2		83				<0.2		1.9	
					Middle	4.2	0.6	145	28.4	28.4	7.9	7.9	25.8	25.7	89.5	89.5	6.0		7.5		4		85				<0.2		2.0	
						4.2	0.6	154	28.4		7.9		25.7		89.5		6.0		7.4		5		85				<0.2		2.4	
					Bottom	7.3	0.4	124	27.7	27.7	7.9	7.9	27.6	27.6	83.4	83.2	5.6	5.6	9.5		5		88				<0.2		2.0	
						7.3	0.4	136	27.7		7.9		27.7		83.0		5.6		9.6		6		88				<0.2		2.3	
IM11	Fine	Moderate	14:27	8.2	Surface	1.0	0.6	89	29.3	29.3	8.0	8.0	24.1	24.1	107.8	107.5	7.2	6.8	5.5	10.3	4	4	83	86	822066	811483	<0.2	<0.2	2.0	1.8
						1.0	0.7	96	29.3		8.0		24.2		107.2		7.2		5.6		2		84				<0.2		1.8	
					Middle	4.1	0.6	84	28.5	28.5	7.9	7.9	25.7	25.7	94.0	94.0	6.3		9.7		5		85				<0.2		1.7	
						4.1	0.6	88	28.5		7.9		25.7		93.9		6.3		9.6		4		86				<0.2		1.8	
					Bottom	7.2	0.4	68	27.9	27.9	7.9	7.9	27.3	27.3	79.4	79.5	5.4	5.4	15.5		4		88				<0.2		1.6	
						7.2	0.4	70	27.9		7.9		27.3		79.5		5.4		15.5		6		89				<0.2		1.7	
IM12	Cloudy	Moderate	14:33	8.4	Surface	1.0	0.6	89	29.0	29.0	8.0	8.0	24.8	24.8	107.8	107.7	7.2	6.9	7.1	11.3	3	4	82	85	821435	812043	<0.2	<0.2	1.8	1.9
						1.0	0.6	91	29.0		8.0		24.8		107.5		7.2		7.2		3		83				<0.2		1.8	
					Middle	4.2	0.6	84	28.7	28.7	7.9	7.9	25.2	25.3	97.7	97.4	6.6		10.7		4		86				<0.2		1.7	
						4.2	0.6	90	28.6		7.9		25.5		97.1		6.5		10.7		3		86				<0.2		2.0	
					Bottom	7.4	0.6	72	27.8	27.8	7.9	7.9	27.3	27.3	73.5	73.6	5.0	5.0	16.1		4		87				<0.2		2.0	
						7.4	0.6	72	27.8		7.9		27.3		73.7		5.0		16.2		4		87				<0.2		2.0	
SR2	Cloudy	Calm	14:50	4.6	Surface	1.0	0.4	78	29.0	29.0	8.0	8.0	25.3	25.3	112.5	112.2	7.5	7.5	3.7	4.5	3	4	83	85	821475	814141	<0.2	<0.2	1.8	1.9
						1.0	0.4	85	28.9		8.0		25.4		111.9		7.5		3.7		4		84				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	73	28.7	28.7	8.0	8.0	25.9	25.9	100.4	100.5	6.7	6.7	5.3		5		85				<0.2		1.8	
						3.6	0.3	80	28.7		8.0		25.9		100.5		6.7		5.3		5		86				<0.2		1.8	
SR3	Fine	Moderate	13:52	9.9	Surface	1.0	0.3	203	29.5	29.5	7.9	7.9	22.8	22.8	103.4	103.3	7.0	6.8	6.1	7.7	4	5	-	-	822128	807581	-	-	-	-
						1.0	0.3	214	29.5		7.9		22.8		103.2		7.0		6.2		4		-				-		-	
					Middle	5.0	0.2	98	28.4	28.4	7.9	7.9	26.2	26.2	97.8	97.7	6.6		7.5		4		-				-		-	
						5.0	0.2	99	28.3		7.9		26.3		97.6		6.6		7.6		5		-				-		-	
					Bottom	8.9	0.4	93	27.8	27.8	7.9	7.9	27.7	27.7	92.4	92.4	6.2	6.2	9.5		6		-				-		-	
						8.9	0.4	100	27.8		7.9		27.8		92.4		6.2		9.5		7		-				-		-	
SR4A	Cloudy	Calm	15:00	8.5	Surface	1.0	0.4	173	28.5	28.5	8.0	8.0	26.9	26.9	104.5	104.4	7.0	6.8	5.9	7.1	4	6	-	-	817213	807785	-	-	-	-
						1.0	0.4	188	28.5		8.0		26.9		104.3		7.0		5.9		6		-				-		-	
					Middle	4.3	0.3	151	28.2	28.2	7.9	7.9	27.1	27.1	99.2	99.1	6.7		6.1		6		-				-		-	
						4.3	0.4	152	28.2		7.9		27.1		99.0		6.6		6.1		5		-				-		-	
					Bottom	7.5	0.3	129	28.2	28.2	7.9	7.9	27.3	27.3	96.7	96.8	6.5	6.5	9.5		7		-				-		-	
						7.5	0.3	141	28.2		7.9		27.3		96.8		6.5		9.3		6		-				-		-	
SR5A	Cloudy	Calm	15:16	4.5	Surface	1.0	0.2	132	28.5	28.5	8.0	8.0	26.7	26.7	106.3	106.3	7.1	7.1	3.4	4.3	3	4	-	-	816595	810696	-	-	-	-
						1.0	0.2	134	28.5		8.0		26.7		106.2		7.1		3.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	101	28.5	28.5	8.0	8.0	26.7	26.8	105.4	105.3	7.1	7.1	5.2		3		-				-		-	
						3.5	0.2	105	28.4		8.0		26.8		105.2		7.1		5.2		4		-				-		-	
SR6	Cloudy	Calm	15:38	4.8	Surface	1.0	0.3	114	28.6	28.6	8.0	8.0	26.5	26.5	108.7	108.5	7.3	7.3	3.4	4.9	4	4	-	-	817905	814679	-	-	-	-
						1.0	0.3	124	28.6		8.0		26.5		108.3		7.3		3.4		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	81	28.5	28.5	8.0	8.0	26.6	26.6	107.0	107.0	7.2	7.2	6.4		4		-				-		-	
						3.8	0.2	83	28.5		8.0		26.7		107.0		7.2		6.4		5		-				-		-	
SR7	Cloudy	Moderate	15:36	21.7	Surface	1.0	0.6	59	28.5	28.5	8.0	8.0	26.7	26.7	105.1	105.1	7.0	6.8	3.4	4.0	3	5	-	-	823662	823770	-	-	-	-
						1.0	0.6	64	28.5		8.0		26.7		105.0		7.0		3.4		5		-				-		-	
					Middle	10.9	0.4	34	28.1	28.1	7.9	7.9	27.7	27.7	97.1	97.1	6.5		4.0		3		-				-		-	
						10.9	0.4	36	28.1		7.9		27.7		97.1		6.5		4.0		5		-				-		-	
					Bottom	20.7	0.4	30	28.1	28.1	7.9	7.9	27.7	27.7	96.9	97.0	6.5	6.5	4.7		5		-				-		-	
						20.7	0.4	31	28.1		7.9		27.7		97.0		6.5		4.7		7		-				-		-	
SR8	Cloudy	Calm	14:39	3.8	Surface	1.0	-	-	29.4	29.4	8.0	8.0	24.5	24.5	113.7	113.7	7.6	7.6	6.2	8.3	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.4		8.0		24.5		113.6		7.6		6.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	29.3	29.3	8.0	8.0	24.6	24.6	112.2	112.2	7.5	7.5	10.3		7		-				-		-	
						2.8	-	-	29.3		8.0		24.6		112.1		7.5		10.3		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 02 June 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	08:43	8.9	Surface	1.0	0.7	29	28.5	28.5	7.9	7.9	24.7	24.7	94.6	94.5	6.4	6.1	4.2	6.7	5	6	81	83	815591	804242	<0.2	<0.2	1.6	1.6
						1.0	0.7	30	28.4		7.9		24.7		94.4		6.4		4.3		4		81				<0.2		1.6	
					Middle	4.5	0.6	27	27.9	27.9	7.9	7.9	27.0	27.0	86.6	86.6	5.8		6.5		5		83				<0.2		1.6	
						4.5	0.7	27	27.9		7.9		27.0		86.6		5.8		6.5		5		84				<0.2		1.6	
					Bottom	7.9	0.4	19	27.7	27.8	7.9	7.9	28.4	28.3	82.8	82.9	5.6	5.6	9.4		6		85				<0.2		1.6	
						7.9	0.4	20	27.8		7.9		28.3		83.0		5.6		9.3		8		85				<0.2		1.8	
C2	Fine	Moderate	09:00	12.2	Surface	1.0	0.5	344	29.5	29.5	7.9	7.9	20.5	20.5	95.7	95.6	6.5	5.8	7.6	9.7	5	5	81	83	825676	806960	<0.2	<0.2	3.1	3.0
						1.0	0.5	350	29.5		7.9		20.5		95.5		6.5		7.6		3		82				<0.2		3.0	
					Middle	6.1	0.5	19	28.7	28.7	7.9	7.9	24.9	24.9	74.5	74.6	5.0		9.5		3		83				<0.2		3.3	
						6.1	0.5	20	28.7		7.9		24.9		74.6		5.0		9.3		5		84				<0.2		3.1	
					Bottom	11.2	0.4	22	28.6	28.6	7.9	7.9	25.3	25.3	75.0	75.0	5.1	5.1	12.1		5		85				<0.2		2.8	
						11.2	0.4	23	28.6		7.9		25.4		75.0		5.1		12.1		6		85				<0.2		2.9	
C3	Fine	Moderate	07:12	12.0	Surface	1.0	0.5	289	28.6	28.6	8.0	8.0	24.6	24.6	94.8	94.8	6.4	6.1	3.1	4.1	3	4	83	85	822113	817828	<0.2	<0.2	2.5	2.4
						1.0	0.5	315	28.6		8.0		24.6		94.7		6.4		3.1		4		83				<0.2		2.1	
					Middle	6.0	0.4	289	27.8	27.8	7.9	7.9	27.1	27.2	84.8	84.7	5.7		4.2		3		85				<0.2		2.3	
						6.0	0.5	304	27.7		7.9		27.2		84.6		5.7		4.1		4		86				<0.2		2.6	
					Bottom	11.0	0.3	307	27.0	27.1	7.9	7.9	29.9	29.9	74.7	74.8	5.0	5.0	5.1		4		87				<0.2		2.8	
						11.0	0.3	317	27.1		7.9		29.9		74.8		5.0		5.3		5		87				<0.2		2.2	
IM1	Fine	Moderate	09:00	5.2	Surface	1.0	0.5	344	29.0	29.0	8.0	8.0	23.5	23.5	100.8	100.8	6.8	6.8	5.2	6.0	4	6	81	82	817972	807154	<0.2	<0.2	1.8	1.8
						1.0	0.5	355	29.0		8.0		23.6		100.7		6.8		5.3		6		81				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	283	28.9	28.9	8.0	8.0	24.0	23.9	93.4	93.5	6.3	6.3	6.8		8		83				<0.2		1.9	
						4.2	0.3	299	28.9		8.0		23.9		93.5		6.3		6.6		6		84				<0.2		1.6	
IM2	Fine	Moderate	09:04	7.8	Surface	1.0	0.5	284	29.1	29.1	8.0	8.0	23.8	23.8	87.6	87.5	5.9	5.4	5.4	7.0	7	7	81	84	818156	806175	<0.2	<0.2	1.7	1.7
						1.0	0.5	304	29.0		8.0		23.9		87.4		5.9		5.4		6		81				<0.2		1.7	
					Middle	3.9	0.7	265	28.5	28.6	7.9	7.9	25.7	25.7	72.4	72.5	4.9		6.8		8		83				<0.2		1.6	
						3.9	0.8	289	28.6		7.9		25.6		72.6		4.9		6.8		6		84				<0.2		1.6	
					Bottom	6.8	0.5	259	28.5	28.6	7.8	7.8	26.9	26.9	69.7	70.1	4.7	4.7	8.8		9		86				<0.2		1.6	
						6.8	0.5	275	28.6		7.8		26.9		70.4		4.7		8.9		8		86				<0.2		1.7	
IM3	Fine	Moderate	09:11	7.6	Surface	1.0	0.4	214	29.1	29.1	7.9	7.9	23.0	23.0	93.7	93.6	6.3	5.8	4.1	6.1	4	5	81	84	818781	805608	<0.2	<0.2	1.5	1.6
						1.0	0.4	232	29.1		7.9		23.0		93.5		6.3		4.1		4		81				<0.2		1.6	
					Middle	3.8	0.4	243	28.4	28.4	7.9	7.9	26.2	26.3	80.0	78.1	5.4		6.4		6		84				<0.2		1.6	
						3.8	0.5	255	28.3		7.9		26.4		76.2		5.1		6.3		5		84				<0.2		1.7	
					Bottom	6.6	0.4	227	28.2	28.3	7.9	7.9	26.8	26.7	76.9	77.1	5.2	5.2	7.9		5		86				<0.2		1.6	
						6.6	0.4	249	28.3		7.9		26.7		77.3		5.2		7.9		7		86				<0.2		1.6	
IM4	Fine	Moderate	09:19	8.3	Surface	1.0	0.8	309	29.1	29.1	7.9	7.9	22.5	22.5	93.6	93.6	6.3	6.0	5.4	7.5	3	5	82	84	819747	804611	<0.2	<0.2	1.7	1.8
						1.0	0.8	339	29.1		7.9		22.5		93.5		6.3		5.4		5		83				<0.2		1.8	
					Middle	4.2	0.7	316	29.0	29.0	7.9	7.9	23.6	23.7	83.7	83.6	5.7		7.3		6		83				<0.2		1.8	
						4.2	0.8	334	29.0		7.9		23.8		83.5		5.6		6.9		5		83				<0.2		1.9	
					Bottom	7.3	0.7	311	28.6	28.6	7.9	7.9	25.3	25.3	78.2	78.3	5.3	5.3	10.0		6		85				<0.2		1.8	
						7.3	0.7	337	28.6		7.9		25.3		78.4		5.3		9.9		6		86				<0.2		1.8	
IM5	Fine	Moderate	09:31	6.3	Surface	1.0	0.6	326	29.1	29.1	8.0	8.0	22.8	22.8	93.0	92.9	6.3	6.3	4.2	5.7	3	4	83	85	820759	804886	<0.2	<0.2	1.9	1.9
						1.0	0.7	340	29.1		8.0		22.8		92.8		6.3		4.2		2		83				<0.2		2.0	
					Middle	3.2	0.7	315	29.1	29.1	8.0	8.0	22.8	22.8	91.9	91.9	6.2		5.4		4		86				<0.2		1.9	
						3.2	0.7	325	29.1		8.0		22.8		91.8		6.2		5.5		3		86				<0.2		2.0	
					Bottom	5.3	0.5	309	29.1	29.1	8.0	8.0	23.0	23.1	88.6	88.6	6.0	6.0	7.3		5		87				<0.2		1.9	
						5.3	0.5	334	29.1		8.0		23.1		88.5		6.0		7.2		6		87				<0.2		1.9	
IM6	Fine	Moderate	09:39	7.1	Surface	1.0	0.4	261	29.1	29.1	7.9	7.9	22.0	22.0	93.4	93.3	6.4	6.3	3.9	5.2	6	6	81	84	821075	805817	<0.2	<0.2	2.0	1.9
						1.0	0.4	285	29.1		7.9		22.0		93.2		6.3		4.0		4		82				<0.2		2.1	
					Middle	3.6	0.4	232	29.1	29.1	7.9	7.9	22.5	22.5	91.3	91.3	6.2		5.5		6		84				<0.2		2.0	
						3.6	0.4	253	29.0		7.9		22.5		91.2		6.2		5.7		6		84				<0.2		1.8	
					Bottom	6.1	0.3	241	28.9	28.9	7.9	7.9	23.1	23.1	86.1	86.0	5.8	5.8	6.2		7		85				<0.2		1.8	
						6.1	0.3	257	28.9		7.9		23.1		85.9		5.8		6.2		6		86				<0.2		1.8	
IM7	Fine	Moderate	09:46	7.4	Surface	1.0	0.8	264	29.3	29.3	7.9	7.9	21.6	21.6	91.7	91.5	6.2	6.1	3.3	5.1	6	6	81	84	821319	806840	<0.2	<0.2	1.9	1.9
						1.0	0.8	270	29.3		7.9		21.7		91.2		6.2		3.3		5		81				<0.2		2.0	
					Middle	3.7	0.6	278	29.1	29.1	7.9	7.9	22.3	22.3	88.5	88.4	6.0		4.5		6		84				<0.2		1.8	
						3.7	0.6	303	29.1		7.9		22.3		88.3		6.0		4.5		5		84				<0.2		1.9	
					Bottom	6.4	0.4	259	28.7	28.7	7.9	7.9	23.8	23.9	83.7	83.7	5.7	5.7	7.6		8		86				<0.2		1.8	
						6.4	0.4	278	28.7		7.9		23.9		83.7		5.7		7.4		7		86				<0.2		1.8	
IM8	Fine	Moderate	08:35	8.2	Surface	1.0	0.3	277	29.1	29.1	7.9	7.9	22.0	22.0	93.1	93.0	6.3	6.2	2.9	3.5	3	4	83	85	821846	808137	<0.2	<0.2	2.3	2.1
						1.0	0.3	294	29.1		7.9		22.0		92.9		6.3		3.0		4		84				<0.2		1.9	
					Middle	4.1	0.3	302	29.0	29.0	7.9	7.9	22.5	22.5	89.5	89.4	6.1		3.3		2		85				<0.2		2.0	
						4.1	0.3	318	29.0		7.9		22.5		89.3		6.1		3.2		4		86				<0.2		2.1	
					Bottom	7.2	0.0	316	28.6	28.6	7.9	7.9	24.4	24.5	76.8	76.6	5.2	5.2	4.3		4		87				<0.2		2.2	
						7.2	0.0	332	28.6		7.9		24.5		76.4		5.2		4.2		4		87				<0.2		2.1	

DA: Depth-Averaged

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

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

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Water Quality Monitoring

Water Quality Monitoring Results on 02 June 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	08:29	7.6	Surface	1.0	0.3	305	29.1	29.1	8.0	8.0	22.8	22.8	92.8	92.7	6.3	6.2	3.3	5.2	3	4	84	86	822098	808814	<0.2	<0.2	2.2	2.2
						1.0	0.3	316	29.1		8.0		22.8		92.5		6.3		3.3		3		84				<0.2		2.0	
					Middle	3.8	0.3	300	29.1	29.1	7.9	7.9	22.9	22.9	90.9	90.9	6.2		5.3		3		86				<0.2		2.1	
						3.8	0.3	326	29.1		7.9		22.9		90.8		6.1		5.4		4		86				<0.2		2.2	
					Bottom	6.6	0.2	308	29.0	29.0	7.9	7.9	23.2	23.2	86.7	86.8	5.9	5.9	6.9		6		87				<0.2		2.5	
						6.6	0.2	330	29.0		7.9		23.3		86.8		5.9		6.9		6		88				<0.2		2.2	
IM10	Fine	Moderate	08:21	8.4	Surface	1.0	0.5	323	29.1	29.1	7.9	7.9	22.6	22.6	94.0	94.0	6.4	6.0	4.5	6.2	3	3	83	85	822403	809779	<0.2	<0.2	2.3	2.3
						1.0	0.5	335	29.1		7.9		22.6		93.9		6.4		4.5		3		84				<0.2		2.2	
					Middle	4.2	0.5	331	28.9	28.9	7.9	7.9	24.0	24.0	80.9	81.0	5.5		5.0		3		85				<0.2		2.4	
						4.2	0.6	305	28.8		7.9		24.0		81.1		5.5		5.1		4		85				<0.2		2.4	
					Bottom	7.4	0.3	314	28.6	28.6	7.9	7.9	25.5	25.5	77.8	78.0	5.2	5.3	9.1		3		87				<0.2		2.2	
						7.4	0.4	339	28.6		7.9		25.5		78.1		5.3		9.1		2		87				<0.2		2.3	
IM11	Fine	Moderate	08:11	8.3	Surface	1.0	0.4	313	29.0	29.0	7.9	7.9	23.1	23.1	90.9	90.7	6.2	5.6	4.6	6.5	4	4	82	84	822080	811471	<0.2	<0.2	2.0	2.1
						1.0	0.5	323	28.9		7.9		23.1		90.5		6.1		4.8		4		82				<0.2		2.0	
					Middle	4.2	0.4	319	28.2	28.2	7.9	7.9	26.6	26.6	74.7	74.7	5.0		6.4		3		84				<0.2		2.1	
						4.2	0.4	329	28.2		7.9		26.6		74.7		5.0		6.3		4		84				<0.2		2.0	
					Bottom	7.3	0.3	320	28.1	28.1	7.9	7.9	26.9	26.9	76.0	76.1	5.1	5.1	8.6		4		86				<0.2		2.5	
						7.3	0.3	320	28.1		7.9		26.9		76.2		5.1		8.6		4		86				<0.2		2.0	
IM12	Fine	Moderate	08:03	8.7	Surface	1.0	0.4	310	29.1	29.1	8.0	8.0	22.8	22.8	94.5	94.4	6.4	6.0	6.9	9.5	2	3	81	84	821473	812071	<0.2	<0.2	2.0	2.3
						1.0	0.4	312	29.1		8.0		22.8		94.3		6.4		7.0		2		82				<0.2		2.2	
					Middle	4.4	0.3	288	29.0	29.0	7.9	7.9	24.6	24.6	82.7	82.7	5.6		8.5		3		84				<0.2		2.0	
						4.4	0.3	302	29.0		7.9		24.6		82.6		5.6		8.5		2		84				<0.2		2.4	
					Bottom	7.7	0.3	293	27.9	27.9	7.9	7.9	27.5	27.5	68.1	68.3	4.6	4.6	13.2		4		85				<0.2		2.3	
						7.7	0.3	298	27.9		7.9		27.6		68.5		4.6		13.2		3		86				<0.2		3.0	
SR2	Fine	Moderate	07:46	3.7	Surface	1.0	0.2	29	29.0	29.0	8.0	8.0	23.2	23.3	100.7	100.6	6.8	6.8	2.1	3.6	3	3	83	84	821458	814171	<0.2	<0.2	2.1	2.2
						1.0	0.3	29	29.0		8.0		23.4		100.5		6.8		2.3		2		83				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	25	28.8	28.8	8.0	8.0	24.1	24.1	94.3	94.5	6.4	6.4	4.9		3		85				<0.2		2.2	
						2.7	0.1	27	28.8		8.0		24.0		94.7		6.4		4.9		5		86				<0.2		2.5	
SR3	Fine	Moderate	08:40	9.6	Surface	1.0	0.2	305	29.3	29.3	7.9	7.9	21.5	21.5	93.4	93.4	6.3	6.0	6.0	7.3	4	4	-	-	822165	807554	-	-	-	-
						1.0	0.2	320	29.3		7.9		21.5		93.3		6.3		6.0		4		-				-		-	
					Middle	4.8	0.2	345	29.0	29.0	7.9	7.9	22.8	22.8	84.6	84.5	5.7		6.8		5		-				-		-	
						4.8	0.2	317	29.0		7.9		22.8		84.4		5.7		6.9		3		-				-		-	
					Bottom	8.6	0.3	67	28.1	28.1	7.9	7.9	26.2	26.2	69.4	69.5	4.7	4.7	9.0		4		-				-		-	
						8.6	0.3	67	28.1		7.9		26.2		69.6		4.7		8.9		4		-				-		-	
SR4A	Fine	Calm	08:21	8.7	Surface	1.0	0.4	251	28.6	28.6	8.0	8.0	24.6	24.6	95.1	95.0	6.4	6.3	4.1	6.3	4	4	-	-	817189	807813	-	-	-	-
						1.0	0.4	271	28.6		8.0		24.6		94.9		6.4		4.1		3		-				-		-	
					Middle	4.4	0.3	222	28.1	28.1	7.9	7.9	25.4	25.4	89.8	89.6	6.1		6.3		4		-				-		-	
						4.4	0.3	240	28.0		7.9		25.4		89.4		6.1		6.3		3		-				-		-	
					Bottom	7.7	0.1	56	27.6	27.6	7.9	7.9	28.3	28.3	81.7	81.8	5.5	5.5	8.5		6		-				-		-	
						7.7	0.1	58	27.6		7.9		28.3		81.8		5.5		8.5		5		-				-		-	
SR5A	Fine	Calm	08:06	4.4	Surface	1.0	0.3	215	27.7	27.8	7.9	7.9	27.2	27.1	88.7	88.7	6.0	6.0	4.3	4.9	2	3	-	-	816586	810672	-	-	-	-
						1.0	0.3	233	27.8		7.9		27.1		88.6		6.0		4.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	206	27.7	27.7	7.9	7.9	27.6	27.6	87.5	87.7	5.9	5.9	5.6		4		-				-		-	
						3.4	0.2	219	27.7		7.9		27.6		87.8		5.9		5.5		3		-				-		-	
SR6	Fine	Calm	07:50	4.6	Surface	1.0	0.4	223	27.8	27.8	7.9	7.9	27.0	27.0	89.4	89.4	6.1	6.1	3.2	4.0	2	3	-	-	817899	814670	-	-	-	-
						1.0	0.4	232	27.8		7.9		27.0		89.3		6.0		3.2		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	212	27.7	27.7	7.9	7.9	27.8	27.8	86.3	86.3	5.8	5.8	4.7		4		-				-		-	
						3.6	0.2	226	27.7		7.9		27.8		86.3		5.8		4.7		3		-				-		-	
SR7	Fine	Moderate	06:39	16.7	Surface	1.0	0.0	153	27.8	27.8	7.9	7.9	26.8	26.8	88.7	88.6	6.0	5.5	3.2	4.2	3	4	-	-	823613	823752	-	-	-	-
						1.0	0.0	163	27.8		7.9		26.8		88.5		6.0		3.2		4		-				-		-	
					Middle	8.4	0.1	255	27.3	27.3	7.8	7.8	29.0	29.0	74.3	74.3	5.0		3.4		4		-				-		-	
						8.4	0.1	275	27.3		7.8		29.0		74.3		5.0		3.4		4		-				-		-	
					Bottom	15.7	0.1	215	26.3	26.3	7.8	7.8	31.3	31.3	69.4	69.5	4.7	4.7	5.8		5		-				-		-	
						15.7	0.1	230	26.3		7.8		31.3		69.5		4.7		6.1		4		-				-		-	
SR8	Fine	Calm	07:56	3.6	Surface	1.0	-	-	29.1	29.1	8.0	8.0	22.4	22.4	101.1	101.1	6.9	6.9	3.5	4.0	2	3	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.1		8.0		22.5		101.1		6.9		3.5		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	-	-	29.0	29.0	8.0	8.0	23.5	23.6	95.6	95.4	6.5	6.5	4.6		4		-				-		-	
						2.6	-	-	29.0		8.0		23.7		95.2		6.4		4.6		4		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 June 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	16:30	9.1	Surface	1.0	0.4	164	28.3	28.3	8.2	8.2	27.7	27.7	103.1	103.1	6.9	6.7	6.9	7.5	<2	3	81	83	815600	804274	<0.2	<0.2	1.3	1.5
						1.0	0.4	180	28.3		8.2		27.7		103.1		6.9		6.9		2		81				<0.2		1.2	
					Middle	4.6	0.4	128	28.1	28.1	8.2	8.2	28.8	28.8	96.5	96.5	6.4		8.1		3		83				<0.2		1.2	
						4.6	0.4	137	28.1		8.2		28.8		96.5		6.4		8.1		3		84				<0.2		1.8	
					Bottom	8.1	0.2	111	28.0	28.0	8.2	8.2	29.3	29.3	103.0	103.0	6.9	6.9	7.4		5		85				<0.2		1.8	
						8.1	0.2	118	28.0		8.2		29.3		103.0		6.9		7.4		3		84				<0.2		1.6	
C2	Cloudy	Moderate	15:35	11.4	Surface	1.0	0.2	181	29.0	29.0	8.0	8.0	22.8	22.8	105.4	105.3	7.2	6.4	5.6	10.7	2	3	80	82	825679	806954	<0.2	<0.2	2.3	2.2
						1.0	0.2	190	29.0		8.0		22.8		105.2		7.1		5.7		2		80				<0.2		2.1	
					Middle	5.7	0.4	173	28.3	28.3	7.9	7.9	25.4	25.4	82.3	82.3	5.6		9.6		2		82				<0.2		2.1	
						5.7	0.5	182	28.3		7.9		25.4		82.2		5.6		9.8		3		82				<0.2		2.2	
					Bottom	10.4	0.3	161	27.5	27.5	7.9	7.9	27.9	27.9	69.5	69.6	4.7	4.7	16.8		3		84				<0.2		2.0	
						10.4	0.3	163	27.5		7.9		27.9		69.6		4.7		16.6		3		84				<0.2		2.2	
C3	Cloudy	Moderate	17:25	12.6	Surface	1.0	0.5	107	28.5	28.5	8.1	8.1	24.8	24.8	97.9	97.9	6.6	6.4	5.9	9.1	3	3	80	82	822137	817781	<0.2	<0.2	1.7	1.6
						1.0	0.5	116	28.5		8.1		24.8		97.8		6.6		5.9		3		80				<0.2		1.6	
					Middle	6.3	0.2	63	28.1	28.1	8.0	8.0	26.2	26.2	91.5	91.6	6.2		6.6		3		82				<0.2		1.4	
						6.3	0.2	66	28.1		8.0		26.2		91.6		6.2		6.6		4		83				<0.2		1.4	
					Bottom	11.6	0.2	67	27.5	27.5	8.0	8.0	27.8	27.8	85.9	86.1	5.8	5.8	14.9		3		85				<0.2		1.7	
						11.6	0.3	69	27.5		8.0		27.8		86.3		5.8		14.5		4		84				<0.2		1.6	
IM1	Rainy	Moderate	16:13	5.4	Surface	1.0	0.2	204	28.3	28.3	8.2	8.2	27.8	27.8	95.8	95.8	6.4	6.4	8.5	10.4	2	3	81	82	817948	807116	<0.2	<0.2	1.6	1.6
						1.0	0.2	212	28.3		8.2		27.8		95.8		6.4		8.5		3		81				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	155	28.0	28.0	8.2	8.2	28.4	28.4	93.0	93.0	6.2	6.2	12.2		3		83				<0.2		1.6	
						4.4	0.2	160	28.0		8.2		28.4		93.0		6.2		12.2		2		84				<0.2		1.5	
IM2	Rainy	Moderate	16:07	7.8	Surface	1.0	0.4	187	28.4	28.4	8.3	8.3	27.3	27.3	105.9	105.9	7.1	6.8	6.6	8.3	2	3	81	83	818135	806156	<0.2	<0.2	1.9	1.8
						1.0	0.4	200	28.4		8.3		27.3		105.9		7.1		6.6		3		81				<0.2		1.8	
					Middle	3.9	0.4	160	28.2	28.2	8.2	8.2	28.0	28.0	97.1	97.1	6.5		6.7		2		83				<0.2		1.8	
						3.9	0.4	169	28.2		8.2		28.0		97.1		6.5		6.7		4		84				<0.2		1.9	
					Bottom	6.8	0.2	129	27.9	27.9	8.1	8.1	29.1	29.1	96.0	96.0	6.4	6.4	11.5		4		85				<0.2		1.8	
						6.8	0.3	141	27.9		8.1		29.1		96.0		6.4		11.5		2		85				<0.2		1.8	
IM3	Rainy	Moderate	16:02	8.1	Surface	1.0	0.5	176	28.4	28.4	8.3	8.3	27.2	27.2	104.5	104.5	7.0	6.9	6.5	6.8	3	3	81	83	818754	805566	<0.2	<0.2	1.7	1.8
						1.0	0.5	193	28.4		8.3		27.2		104.5		7.0		6.5		2		80				<0.2		1.9	
					Middle	4.1	0.4	124	28.1	28.1	8.2	8.2	28.0	28.0	99.9	99.9	6.7		6.8		3		84				<0.2		1.9	
						4.1	0.5	128	28.1		8.2		28.0		99.9		6.7		6.8		3		84				<0.2		1.9	
					Bottom	7.1	0.3	109	28.1	28.1	8.2	8.2	29.0	29.0	107.8	107.8	7.2	7.2	7.2		4		85				<0.2		1.8	
						7.1	0.4	112	28.1		8.2		29.0		107.8		7.2		7.2		3		84				<0.2		1.8	
IM4	Rainy	Moderate	15:54	8.4	Surface	1.0	0.4	136	28.5	28.5	8.3	8.3	26.8	26.8	104.3	104.3	7.0	6.6	6.8	9.0	3	3	81	83	819714	804589	<0.2	<0.2	2.2	2.2
						1.0	0.4	137	28.5		8.3		26.8		104.3		7.0		6.8		2		81				<0.2		2.2	
					Middle	4.2	0.4	122	28.2	28.2	8.2	8.2	27.1	27.1	92.2	92.2	6.2		7.8		2		84				<0.2		2.2	
						4.2	0.4	123	28.2		8.2		27.1		92.2		6.2		7.8		4		83				<0.2		2.3	
					Bottom	7.4	0.3	106	27.9	27.9	8.1	8.1	29.0	29.0	92.6	92.6	6.2	6.2	12.4		2		84				<0.2		2.2	
						7.4	0.3	114	27.9		8.1		29.0		92.6		6.2		12.4		4		85				<0.2		2.2	
IM5	Cloudy	Moderate	15:47	7.6	Surface	1.0	0.4	179	28.5	28.5	8.2	8.2	26.7	26.7	111.0	111.0	7.4	7.0	6.5	8.9	3	3	79	82	820763	804851	<0.2	<0.2	2.1	2.1
						1.0	0.4	187	28.5		8.2		26.7		111.0		7.4		6.5		2		80				<0.2		2.1	
					Middle	3.8	0.3	141	28.3	28.3	8.2	8.2	27.3	27.3	98.9	98.9	6.6		8.3		3		81				<0.2		2.0	
						3.8	0.4	149	28.3		8.2		27.3		98.9		6.6		8.3		4		82				<0.2		2.2	
					Bottom	6.6	0.2	117	27.9	27.9	8.1	8.1	28.5	28.5	85.8	85.8	5.7	5.7	12.0		3		83				<0.2		2.0	
						6.6	0.2	123	27.9		8.1		28.5		85.8		5.7		12.0		4		84				<0.2		2.1	
IM6	Cloudy	Moderate	15:41	8.0	Surface	1.0	0.3	155	28.4	28.4	8.2	8.2	26.9	26.9	98.1	98.1	6.6	6.3	6.8	8.0	<2	2	80	82	821042	805849	<0.2	<0.2	2.6	2.7
						1.0	0.4	163	28.4		8.2		26.9		98.1		6.6		6.8		2		80				<0.2		2.6	
					Middle	4.0	0.3	147	28.1	28.1	8.1	8.1	27.9	27.9	89.5	89.5	6.0		7.5		2		81				<0.2		2.6	
						4.0	0.3	157	28.1		8.1		27.9		89.5		6.0		7.5		2		82				<0.2		2.7	
					Bottom	7.0	0.3	113	28.0	28.0	8.1	8.1	28.5	28.5	94.4	94.4	6.3	6.3	9.6		2		83				<0.2		2.6	
						7.0	0.3	122	28.0		8.1		28.5		94.4		6.3		9.6		2		83				<0.2		2.9	
IM7	Cloudy	Moderate	15:34	9.4	Surface	1.0	0.3	181	28.7	28.6	8.2	8.2	25.6	25.6	110.5	109.8	7.4	7.0	6.5	6.9	4	4	79	81	821346	806816	<0.2	<0.2	1.8	2.3
						1.0	0.3	182	28.6		8.2		25.7		109.1		7.3		6.6		3		79				<0.2		1.8	
					Middle	4.7	0.2	165	28.3	28.3	8.2	8.2	27.6	27.6	99.6	99.6	6.7		7.0		3		81				<0.2		2.0	
						4.7	0.2	166	28.3		8.2		27.6		99.6		6.7		7.0		5		82				<0.2		2.4	
					Bottom	8.4	0.2	121	28.2	28.2	8.2	8.2	27.9	27.9	102.1	102.1	6.8	6.8	7.1		5		83				<0.2		2.6	
						8.4	0.2	121	28.2		8.2		27.9		102.1		6.8		7.1		3		84				<0.2		2.9	
IM8	Cloudy	Moderate	16:01	8.2	Surface	1.0	0.3	177	28.7	28.7	8.1	8.1	24.1	24.1	105.8	105.8	7.2	7.0	5.2	6.2	<2	3	80	83	821849	808157	<0.2	<0.2	1.7	1.6
						1.0	0.3	190	28.7		8.1		24.1		105.7		7.2		5.3		2		80				<0.2		1.8	
					Middle	4.1	0.2	95	28.4	28.4	8.1	8.1	25.8	25.8	100.4	100.3	6.8		5.8		3		83				<0.2		1.6	
						4.1	0.2	96	28.4		8.1		25.8		100.2		6.8		5.8		3		83				<0.2		1.5	
					Bottom	7.2	0.2	77	28.2	28.2	8.0	8.0	26.6	26.6	93.2	93.3	6.3	6.3	7.5		2		85				<0.2		1.4	
						7.2	0.2	81	28.2		8.0		26.6		93.3		6.3		7.6		3		85				<0.2		1.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 June 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	16:08	7.7	Surface	1.0	0.2	167	28.7	28.7	8.1	8.1	24.3	24.3	106.3	106.3	7.2	6.9	5.2	6.2	<2	2	81	83	822074	808803	<0.2	<0.2	1.8	1.7
						1.0	0.2	174	28.7		8.1		24.3		106.2		7.2		5.2		2		80				<0.2		1.7	
					Middle	3.9	0.2	162	28.5	28.5	8.1	8.1	25.2	25.2	98.2	98.2	6.6		5.9		2		83				<0.2		1.7	
						3.9	0.2	175	28.5		8.1		25.2		98.2		6.6		5.9		3		83				<0.2		1.8	
					Bottom	6.7	0.2	77	28.3	28.3	8.1	8.1	26.4	26.3	97.9	97.9	6.6	6.6	7.6		2		85				<0.2		1.7	
						6.7	0.2	77	28.3		8.1		26.3		97.9		6.6		7.6		3		85				<0.2		1.6	
IM10	Cloudy	Moderate	16:16	7.4	Surface	1.0	0.4	129	28.8	28.8	8.1	8.1	23.9	23.9	105.3	105.3	7.1	6.8	5.1	6.9	2	3	81	83	822380	809817	<0.2	<0.2	1.8	1.6
						1.0	0.4	141	28.8		8.1		23.9		105.2		7.1		5.1		2		80				<0.2		1.9	
					Middle	3.7	0.3	120	28.4	28.4	8.1	8.1	25.6	25.6	94.5	94.5	6.4		6.4		2		82				<0.2		1.7	
						3.7	0.4	121	28.4		8.1		25.6		94.5		6.4		6.4		3		83				<0.2		1.7	
					Bottom	6.4	0.2	102	28.3	28.3	8.0	8.0	26.1	26.1	92.5	92.5	6.2	6.2	9.2		3		85				<0.2		1.3	
						6.4	0.2	102	28.3		8.0		26.1		92.5		6.2		9.3		4		85				<0.2		1.4	
IM11	Cloudy	Moderate	16:27	7.8	Surface	1.0	0.6	108	28.7	28.7	8.1	8.1	24.2	24.2	103.6	103.6	7.0	6.9	5.5	7.5	2	3	81	83	822044	811434	<0.2	<0.2	1.8	1.7
						1.0	0.6	108	28.7		8.1		24.2		103.6		7.0		5.6		3		80				<0.2		1.7	
					Middle	3.9	0.4	110	28.6	28.6	8.1	8.1	24.8	24.8	99.2	99.2	6.7		6.0		3		83				<0.2		1.7	
						3.9	0.4	111	28.6		8.1		24.8		99.1		6.7		6.0		4		83				<0.2		1.8	
					Bottom	6.8	0.3	107	28.4	28.4	8.0	8.0	25.8	25.8	93.1	93.2	6.3	6.3	10.8		4		85				<0.2		1.7	
						6.8	0.3	113	28.4		8.0		25.9		93.2		6.3		10.9		4		85				<0.2		1.7	
IM12	Cloudy	Moderate	16:34	8.7	Surface	1.0	0.6	107	28.7	28.7	8.1	8.1	24.2	24.2	104.2	104.2	7.1	6.8	6.5	10.5	3	5	80	83	821484	812063	<0.2	<0.2	2.0	1.8
						1.0	0.6	113	28.7		8.1		24.2		104.1		7.0		6.5		4		81				<0.2		2.2	
					Middle	4.4	0.4	106	28.5	28.5	8.1	8.1	25.3	25.3	95.8	95.8	6.5		10.2		6		83				<0.2		1.8	
						4.4	0.5	112	28.5		8.1		25.3		95.8		6.5		10.2		5		82				<0.2		1.6	
					Bottom	7.7	0.3	98	28.4	28.4	8.0	8.0	25.8	25.8	91.4	91.5	6.2	6.2	14.8		6		85				<0.2		1.7	
						7.7	0.3	98	28.4		8.0		25.8		91.6		6.2		14.7		6		85				<0.2		1.7	
SR2	Cloudy	Moderate	17:04	4.8	Surface	1.0	0.4	86	28.7	28.7	8.1	8.1	24.1	24.1	102.6	102.6	6.9	6.9	6.9	8.6	3	5	80	82	821440	814139	<0.2	<0.2	1.8	1.8
						1.0	0.5	89	28.7		8.1		24.1		102.6		6.9		7.0		4		81				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	86	28.6	28.5	8.0	8.0	24.7	24.7	98.4	98.4	6.7	6.7	10.2		6		83				<0.2		1.7	
						3.8	0.3	87	28.5		8.0		24.7		98.4		6.7		10.3		6		82				<0.2		1.7	
SR3	Cloudy	Moderate	15:54	9.7	Surface	1.0	0.3	205	28.8	28.8	8.1	8.1	23.6	23.6	106.4	106.4	7.2	6.9	5.2	5.6	3	3	-	-	822147	807549	-	-	-	-
						1.0	0.3	215	28.8		8.1		23.6		106.4		7.2		5.2		2		-				-		-	
					Middle	4.9	0.2	193	28.4	28.4	8.0	8.0	25.3	25.3	98.3	98.3	6.6		5.5		4		-				-		-	
						4.9	0.2	211	28.4		8.0		25.3		98.3		6.6		5.5		3		-				-		-	
					Bottom	8.7	0.1	43	28.3	28.3	8.1	8.1	26.3	26.3	103.9	103.9	7.0	7.0	6.0		4		-				-		-	
						8.7	0.1	45	28.3		8.1		26.3		103.9		7.0		6.0		2		-				-		-	
SR4A	Rainy	Moderate	16:52	8.6	Surface	1.0	0.3	159	28.2	28.2	8.2	8.2	28.0	28.0	91.9	91.9	6.1	6.0	8.0	9.4	3	4	-	-	817213	807821	-	-	-	-
						1.0	0.4	166	28.2		8.2		28.0		91.9		6.1		8.0		3		-				-		-	
					Middle	4.3	0.3	128	28.0	28.0	8.1	8.1	28.5	28.5	86.4	86.4	5.8		9.6		4		-				-		-	
						4.3	0.3	131	28.0		8.1		28.5		86.4		5.8		9.6		5		-				-		-	
					Bottom	7.6	0.3	81	28.0	28.0	8.1	8.1	28.7	28.7	91.7	91.7	6.1	6.1	10.7		4		-				-		-	
						7.6	0.3	84	28.0		8.1		28.7		91.7		6.1		10.7		6		-				-		-	
SR5A	Rainy	Moderate	17:08	5.0	Surface	1.0	0.3	128	28.5	28.5	8.2	8.2	26.3	26.3	98.7	98.7	6.6	6.6	8.3	8.8	4	5	-	-	816566	810700	-	-	-	-
						1.0	0.3	137	28.5		8.2		26.3		98.7		6.6		8.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	95	28.4	28.4	8.1	8.1	27.1	27.1	96.6	96.6	6.5	6.5	9.3		4		-				-		-	
						4.0	0.2	102	28.4		8.1		27.1		96.6		6.5		9.3		5		-				-		-	
SR6	Rainy	Moderate	17:29	4.3	Surface	1.0	0.2	106	28.7	28.7	8.2	8.2	25.8	25.8	107.0	107.0	7.2	7.2	12.5	12.2	8	8	-	-	817922	814666	-	-	-	-
						1.0	0.2	107	28.7		8.2		25.8		107.0		7.2		12.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	72	28.6	28.6	8.2	8.2	25.9	25.9	106.0	106.0	7.1	7.1	11.9		8		-				-		-	
						3.3	0.2	77	28.6		8.2		25.9		106.0		7.1		11.9		8		-				-		-	
SR7	Cloudy	Moderate	17:50	18.6	Surface	1.0	0.5	66	28.5	28.5	8.1	8.1	24.7	24.7	98.4	98.4	6.7	6.5	5.8	8.3	3	4	-	-	823612	823768	-	-	-	-
						1.0	0.6	70	28.5		8.1		24.7		98.3		6.7		5.8		4		-				-		-	
					Middle	9.3	0.5	51	28.1	28.1	8.1	8.1	26.4	26.4	91.7	91.7	6.2		6.9		3		-				-		-	
						9.3	0.5	51	28.1		8.1		26.4		91.6		6.2		7.0		5		-				-		-	
					Bottom	17.6	0.4	39	27.6	27.6	8.0	8.0	27.7	27.7	87.1	87.1	5.9	5.9	12.0		4		-				-		-	
						17.6	0.4	42	27.6		8.0		27.7		87.1		5.9		12.0		4		-				-		-	
SR8	Cloudy	Moderate	16:51	3.9	Surface	1.0	-	-	28.6	28.6	8.2	8.2	24.9	24.9	105.4	105.4	7.1	7.1	10.1	11.8	4	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.6		8.2		24.9		105.4		7.1		10.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	28.6	28.6	8.2	8.2	25.0	25.0	105.0	105.0	7.1	7.1	13.3		5		-				-		-	
						2.9	-	-	28.6		8.2		25.0		105.0		7.1		13.4		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 June 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Cloudy	Moderate	10:46	8.8	Surface	1.0	0.7	33	28.2	28.2	8.1	8.1	27.7	27.7	90.1	90.1	6.0	5.8	8.5	10.3	4	4	80	83	815632	804257	<0.2	<0.2	1.6	1.6
						1.0	0.8	33	28.2		8.1		27.7		90.1		6.0		8.5		4		81				<0.2		1.8	
					Middle	4.4	0.7	30	27.8	27.8	8.1	8.1	29.2	29.2	83.7	83.7	5.6		9.8		4		83				<0.2		1.8	
						4.4	0.7	32	27.8		8.1		29.2		83.7		5.6		9.7		5		83				<0.2		1.4	
					Bottom	7.8	0.6	22	27.7	27.7	8.1	8.1	29.8	29.8	88.5	88.5	5.9	5.9	12.6		4		84				<0.2		1.5	
						7.8	0.7	22	27.7		8.1		29.8		88.5		5.9		12.6		5		84				<0.2		1.3	
C2	Cloudy	Moderate	11:17	12.7	Surface	1.0	0.2	337	29.1	29.1	7.8	7.8	21.8	21.8	99.3	99.3	6.8	6.1	5.8	10.2	3	4	81	83	825678	806973	<0.2	<0.2	2.6	2.1
						1.0	0.2	343	29.1		7.8		21.8		99.2		6.8		5.8		4		81				<0.2		2.4	
					Middle	6.4	0.4	8	28.6	28.6	7.8	7.8	24.7	24.6	80.3	80.3	5.4		8.9		4		83				<0.2		1.9	
						6.4	0.4	8	28.6		7.8		24.6		80.3		5.4		8.9		4		83				<0.2		1.8	
					Bottom	11.7	0.4	353	28.1	28.1	7.8	7.8	26.6	26.6	78.1	78.1	5.3	5.3	15.7		4		85				<0.2		1.8	
						11.7	0.4	325	28.1		7.8		26.6		78.1		5.3		15.9		5		85				<0.2		1.8	
C3	Cloudy	Moderate	09:28	12.4	Surface	1.0	0.1	219	28.6	28.6	7.9	7.9	24.4	24.4	99.6	99.6	6.7	6.4	5.6	5.6	4	5	80	83	822135	817790	<0.2	<0.2	1.6	1.6
						1.0	0.2	226	28.6		7.9		24.4		99.5		6.7		5.6		5		81				<0.2		1.6	
					Middle	6.2	0.2	246	28.3	28.3	7.8	7.8	25.6	25.6	90.5	90.5	6.1		4.9		5		83				<0.2		2.0	
						6.2	0.2	268	28.3		7.8		25.6		90.5		6.1		4.9		4		83				<0.2		1.4	
					Bottom	11.4	0.2	301	27.1	27.1	7.8	7.8	28.9	28.9	79.6	79.7	5.4	5.4	6.3		7		84				<0.2		1.4	
						11.4	0.2	309	27.1		7.8		28.9		79.8		5.4		6.3		6		85				<0.2		1.4	
IM1	Cloudy	Moderate	11:03	5.5	Surface	1.0	0.5	338	28.2	28.2	8.1	8.1	27.4	27.4	89.3	89.3	6.0	6.0	8.0	7.5	4	4	80	82	817958	807138	<0.2	<0.2	1.4	1.4
						1.0	0.5	346	28.2		8.1		27.4		89.3		6.0		8.0		3		80				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	276	28.2	28.2	8.1	8.1	27.6	27.6	93.1	93.1	6.2	6.2	6.9		4		83				<0.2		1.4	
						4.5	0.2	287	28.2		8.1		27.6		93.1		6.2		6.9		4		84				<0.2		1.4	
IM2	Cloudy	Moderate	11:09	8.0	Surface	1.0	0.5	278	28.3	28.3	8.1	8.1	26.9	26.9	93.7	93.7	6.3	6.2	7.2	7.3	3	4	81	82	818152	806150	<0.2	<0.2	1.4	1.5
						1.0	0.5	304	28.3		8.1		26.9		93.7		6.3		7.2		2		80				<0.2		1.4	
					Middle	4.0	0.4	267	28.1	28.1	8.1	8.1	28.0	28.0	89.2	89.3	6.0		8.1		4		83				<0.2		1.6	
						4.0	0.5	271	28.1		8.1		28.0		89.3		6.0		8.1		3		83				<0.2		1.4	
					Bottom	7.0	0.3	243	28.1	28.1	8.1	8.1	28.3	28.3	97.2	97.2	6.5	6.5	6.5		5		84				<0.2		1.4	
						7.0	0.3	246	28.1		8.1		28.3		97.2		6.5		6.5		4		83				<0.2		1.5	
IM3	Cloudy	Moderate	11:14	8.1	Surface	1.0	0.3	226	28.3	28.3	8.2	8.2	26.6	26.6	96.9	96.9	6.5	6.2	6.8	9.1	4	4	80	82	818789	805616	<0.2	<0.2	1.4	1.4
						1.0	0.3	238	28.3		8.2		26.6		96.9		6.5		6.8		3		81				<0.2		1.5	
					Middle	4.1	0.3	214	28.1	28.1	8.1	8.1	27.5	27.5	86.7	86.7	5.8		8.5		4		82				<0.2		1.4	
						4.1	0.3	233	28.1		8.1		27.5		86.7		5.8		8.5		3		83				<0.2		1.4	
					Bottom	7.1	0.2	179	27.9	27.9	8.1	8.1	29.1	29.1	91.6	91.6	6.1	6.1	11.9		4		84				<0.2		1.4	
						7.1	0.2	180	27.9		8.1		29.1		91.6		6.1		11.9		5		83				<0.2		1.4	
IM4	Cloudy	Moderate	11:21	8.2	Surface	1.0	0.7	312	28.3	28.3	8.2	8.2	26.4	26.4	101.6	101.6	6.8	6.4	6.6	7.5	3	4	80	82	819742	804631	<0.2	<0.2	1.4	1.4
						1.0	0.7	328	28.3		8.2		26.4		101.6		6.8		6.6		4		79				<0.2		1.4	
					Middle	4.1	0.6	300	28.2	28.2	8.2	8.2	26.5	26.5	88.0	88.0	5.9		7.8		3		82				<0.2		1.3	
						4.1	0.6	322	28.2		8.2		26.5		88.0		5.9		7.8		4		82				<0.2		1.3	
					Bottom	7.2	0.5	251	27.9	27.9	8.1	8.1	28.5	28.5	89.4	89.5	6.0	6.0	8.1		5		83				<0.2		1.4	
						7.2	0.5	251	28.0		8.1		28.5		89.6		6.0		8.0		3		83				<0.2		1.4	
IM5	Cloudy	Moderate	11:27	7.4	Surface	1.0	0.6	345	28.3	28.3	8.2	8.2	26.0	26.0	97.0	97.0	6.5	6.3	7.6	9.8	3	3	81	82	820749	804874	<0.2	<0.2	1.4	1.4
						1.0	0.6	317	28.3		8.2		26.0		97.0		6.5		7.6		2		80				<0.2		1.3	
					Middle	3.7	0.5	318	28.1	28.1	8.2	8.2	27.1	27.1	90.2	90.2	6.1		9.4		3		83				<0.2		1.4	
						3.7	0.6	336	28.1		8.2		27.1		90.2		6.1		9.4		2		82				<0.2		1.4	
					Bottom	6.4	0.4	242	27.9	27.9	8.1	8.1	28.6	28.6	93.4	93.4	6.3	6.3	12.3		3		84				<0.2		1.4	
						6.4	0.5	262	27.9		8.1		28.6		93.4		6.3		12.3		4		83				<0.2		1.3	
IM6	Cloudy	Moderate	11:33	7.6	Surface	1.0	0.4	276	28.3	28.3	8.2	8.2	26.4	26.4	94.3	94.3	6.3	6.3	8.1	8.4	4	5	80	82	821067	805857	<0.2	<0.2	1.4	1.4
						1.0	0.4	297	28.3		8.2		26.4		94.3		6.3		8.1		4		79				<0.2		1.3	
					Middle	3.8	0.3	249	28.2	28.2	8.1	8.1	27.1	27.1	92.9	92.9	6.2		8.0		5		83				<0.2		1.3	
						3.8	0.3	259	28.2		8.1		27.1		92.9		6.2		8.0		5		83				<0.2		1.5	
					Bottom	6.6	0.2	206	28.2	28.2	8.2	8.2	27.2	27.2	101.2	101.2	6.8	6.8	9.0		5		83				<0.2		1.4	
						6.6	0.2	210	28.2		8.2		27.2		101.2		6.8		9.0		4		84				<0.2		1.4	
IM7	Rainy	Moderate	11:39	9.0	Surface	1.0	0.7	237	28.4	28.4	8.2	8.2	26.6	26.6	92.8	92.8	6.2	6.2	7.7	8.1	5	5	79	81	821334	806838	<0.2	<0.2	1.3	1.4
						1.0	0.7	241	28.4		8.2		26.6		92.8		6.2		7.7		4		79				<0.2		1.4	
					Middle	4.5	0.6	204	28.3	28.3	8.2	8.2	27.1	27.1	91.1	91.1	6.1		8.2		5		81				<0.2		1.4	
						4.5	0.7	209	28.3		8.2		27.1		91.1		6.1		8.2		4		81				<0.2		1.4	
					Bottom	8.0	0.5	142	28.3	28.3	8.1	8.1	27.2	27.2	96.0	96.0	6.4	6.4	8.3		5		83				<0.2		1.4	
						8.0	0.6	148	28.3		8.1		27.2		96.0		6.4		8.3		6		83				<0.2		1.3	
IM8	Cloudy	Moderate	10:52	8.0	Surface	1.0	0.2	280	28.9	28.9	7.8	7.8	22.9	22.9	98.7	98.7	6.7	6.5	6.1	6.7	4	5	81	83	821854	808141	<0.2	<0.2	1.9	1.7
						1.0	0.3	292	28.9		7.8		22.9		98.6		6.7		6.1		3		81				<0.2		1.9	
					Middle	4.0	0.1	283	28.6	28.6	7.9	7.9	24.0	24.0	92.7	92.7	6.3		6.4		5		83				<0.2		1.6	
						4.0	0.1	296	28.6		7.9		24.0		92.6		6.3		6.4		6		83				<0.2		1.6	
					Bottom	7.0	0.1	32	28.4	28.4	7.9	7.9	25.6	25.6	90.6	90.7	6.1	6.1	7.6		5		85				<0.2		1.7	
						7.0	0.1	34	28.4		7.9		25.6		90.8		6.1		7.6		6		85				<0.2		1.7	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 05 June 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:46	7.9	Surface	1.0	0.2	286	29.0	29.0	7.8	7.8	22.6	22.6	98.1	98.0	6.7	6.4	6.1	6.4	2	3	81	83	822091	808824	<0.2	<0.2	2.0	1.9
						1.0	0.2	307	29.0		7.8		22.6		97.9		6.6		6.1		3		81				<0.2		1.9	
					Middle	4.0	0.2	288	28.8	28.8	7.8	7.8	23.7	23.7	90.8	90.8	6.2		6.6		3		84				<0.2		2.0	
						4.0	0.2	307	28.8		7.8		23.7		90.8		6.2		6.7		3		83				<0.2		2.0	
					Bottom	6.9	0.1	7	28.6	28.6	7.8	7.8	24.5	24.5	90.2	90.2	6.1	6.1	6.5		2		85				<0.2		1.9	
						6.9	0.1	7	28.6		7.8		24.5		90.2		6.1		6.5		4		86				<0.2		1.7	
IM10	Cloudy	Moderate	10:39	8.1	Surface	1.0	0.3	311	29.0	29.0	7.8	7.8	23.1	23.1	96.1	96.1	6.5	6.3	5.8	7.0	3	3	81	83	822396	809822	<0.2	<0.2	1.8	1.8
						1.0	0.3	329	29.0		7.8		23.1		96.0		6.5		5.8		2		81				<0.2		1.8	
					Middle	4.1	0.2	298	28.7	28.7	7.8	7.8	24.2	24.2	88.0	88.0	6.0		7.2		3		84				<0.2		1.8	
						4.1	0.2	319	28.7		7.8		24.2		88.0		6.0		7.0		3		83				<0.2		1.8	
					Bottom	7.1	0.1	307	28.7	28.7	7.8	7.8	24.3	24.3	88.8	88.9	6.0	6.0	8.0		4		85				<0.2		1.8	
						7.1	0.1	335	28.7		7.8		24.3		88.9		6.0		8.0		3		85				<0.2		1.8	
IM11	Cloudy	Moderate	10:28	8.2	Surface	1.0	0.2	302	28.9	28.9	7.8	7.8	23.6	23.6	93.0	93.0	6.3	6.1	6.0	9.2	3	3	81	83	822082	811441	<0.2	<0.2	1.7	1.7
						1.0	0.2	305	28.9		7.8		23.6		92.9		6.3		6.0		3		81				<0.2		1.7	
					Middle	4.1	0.3	292	28.7	28.7	7.8	7.8	24.1	24.1	87.9	87.9	5.9		7.9		3		83				<0.2		1.8	
						4.1	0.3	304	28.7		7.8		24.1		87.8		5.9		8.0		3		83				<0.2		1.7	
					Bottom	7.2	0.2	277	28.3	28.3	7.8	7.8	25.7	25.7	83.7	83.8	5.7	5.7	13.6		4		86				<0.2		1.5	
						7.2	0.3	293	28.3		7.8		25.7		83.8		5.7		13.6		3		85				<0.2		1.6	
IM12	Cloudy	Moderate	10:21	8.5	Surface	1.0	0.3	291	29.0	29.0	7.9	7.9	22.8	22.8	100.0	100.0	6.8	6.4	5.8	9.5	4	4	81	83	821450	812018	<0.2	<0.2	1.8	1.9
						1.0	0.3	299	29.0		7.9		22.8		99.9		6.8		5.9		3		81				<0.2		1.9	
					Middle	4.3	0.3	311	28.6	28.6	7.9	7.9	23.9	23.9	87.3	87.2	5.9		9.1		3		83				<0.2		1.9	
						4.3	0.4	317	28.6		7.9		23.9		87.1		5.9		9.2		5		83				<0.2		1.9	
					Bottom	7.5	0.3	308	28.0	28.0	7.7	7.7	26.9	26.9	73.9	74.0	5.0	5.0	13.2		5		85				<0.2		1.9	
						7.5	0.3	321	28.0		7.7		26.9		74.1		5.0		13.6		4		85				<0.2		1.8	
SR2	Cloudy	Moderate	09:50	5.3	Surface	1.0	0.1	243	28.8	28.8	7.9	7.9	23.2	23.2	97.4	97.4	6.6	6.6	6.4	7.8	2	3	81	82	821450	814189	<0.2	<0.2	1.8	1.8
						1.0	0.1	252	28.8		7.9		23.2		97.3		6.6		6.4		2		81				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	292	28.7	28.7	7.8	7.8	24.0	24.0	93.2	93.3	6.3	6.3	9.2		3		83				<0.2		1.7	
						4.3	0.2	318	28.7		7.8		24.0		93.3		6.3		9.3		4		83				<0.2		1.7	
SR3	Cloudy	Moderate	10:58	9.1	Surface	1.0	0.1	310	28.9	28.9	7.8	7.8	22.7	22.7	100.9	100.9	6.9	6.7	5.1	6.7	2	3	-	-	822139	807576	-	-	-	-
						1.0	0.1	316	28.9		7.8		22.7		100.9		6.9		5.2		2		-				-		-	
					Middle	4.6	0.3	17	28.5	28.5	7.9	7.9	24.5	24.5	95.5	95.5	6.5		6.4		2		-				-		-	
						4.6	0.3	17	28.5		7.9		24.5		95.4		6.5		6.4		3		-				-		-	
					Bottom	8.1	0.3	56	28.3	28.3	7.8	7.8	25.9	25.9	87.6	87.7	5.9	5.9	8.4		4		-				-		-	
						8.1	0.3	57	28.3		7.8		25.9		87.8		5.9		8.4		3		-				-		-	
SR4A	Cloudy	Moderate	10:25	8.5	Surface	1.0	0.3	232	28.3	28.3	8.1	8.1	26.3	26.3	92.1	92.1	6.2	6.2	8.7	9.8	4	6	-	-	817187	807785	-	-	-	-
						1.0	0.4	234	28.3		8.1		26.3		92.1		6.2		8.7		5		-				-		-	
					Middle	4.3	0.3	205	28.2	28.2	8.1	8.1	27.0	27.0	90.4	90.4	6.1		10.6		5		-				-		-	
						4.3	0.3	209	28.2		8.1		27.0		90.4		6.1		10.6		6		-				-		-	
					Bottom	7.5	0.3	77	28.3	28.3	8.1	8.1	27.0	27.0	97.6	97.6	6.5	6.5	10.0		6		-				-		-	
						7.5	0.3	84	28.3		8.1		27.0		97.6		6.5		10.0		7		-				-		-	
SR5A	Cloudy	Moderate	10:09	5.2	Surface	1.0	0.3	205	28.5	28.5	8.1	8.1	26.1	26.1	100.4	100.4	6.7	6.7	6.8	6.9	5	6	-	-	816570	810669	-	-	-	-
						1.0	0.3	224	28.5		8.1		26.1		100.4		6.7		6.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	176	28.5	28.5	8.1	8.1	26.1	26.1	102.9	102.9	6.9	6.9	6.9		5		-				-		-	
						4.2	0.2	183	28.5		8.1		26.1		102.9		6.9		6.9		7		-				-		-	
SR6	Cloudy	Moderate	09:43	4.5	Surface	1.0	0.4	233	28.5	28.5	8.1	8.1	25.6	25.6	99.4	99.4	6.7	6.7	7.5	8.2	7	7	-	-	817870	814692	-	-	-	-
						1.0	0.4	237	28.5		8.1		25.6		99.4		6.7		7.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	202	28.6	28.6	8.0	8.0	26.1	26.1	96.0	96.0	6.4	6.4	8.9		7		-				-		-	
						3.5	0.2	212	28.6		8.0		26.1		96.0		6.4		8.9		9		-				-		-	
SR7	Rainy	Moderate	08:57	18.4	Surface	1.0	0.1	162	28.1	28.1	7.9	7.9	25.7	25.7	95.9	95.8	6.5	5.9	4.8	5.3	4	5	-	-	823639	823713	-	-	-	-
						1.0	0.1	173	28.1		7.9		25.7		95.7		6.5		4.8		5		-				-		-	
					Middle	9.2	0.1	192	27.6	27.6	7.8	7.8	27.9	27.9	79.0	79.0	5.3		4.9		5		-				-		-	
						9.2	0.1	205	27.6		7.8		27.9		78.9		5.3		4.9		5		-				-		-	
					Bottom	17.4	0.1	229	26.7	26.7	7.7	7.7	29.7	29.7	74.1	74.2	5.0	5.0	6.3		7		-				-		-	
						17.4	0.1	248	26.7		7.7		29.7		74.3		5.0		6.3		6		-				-		-	
SR8	Cloudy	Moderate	10:10	3.7	Surface	1.0	-	-	28.9	28.9	7.9	7.9	22.9	22.9	100.2	100.2	6.8	6.8	6.0	5.9	5	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.9		7.9		22.9		100.2		6.8		6.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	28.8	28.8	7.9	7.9	23.1	23.1	100.1	100.1	6.8	6.8	5.8		5		-				-		-	
						2.7	-	-	28.8		7.9		23.2		100.1		6.8		5.8		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 09 June 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)			Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Average	DA	Value	DA
C1	Fine	Moderate	10:15	8.8	Surface	1.0	0.3	143	28.6	28.6	8.0	8.0	14.4	14.4	98.0	98.0	7.0	7.0	7.5	8.4	4	3	77	81	815619	804259	<0.2	<0.2	<0.2	3.3	3.2
						1.0	0.3	146	28.6		8.0		14.4		98.0		7.0		7.5		2		76				<0.2			3.2	
					Middle	4.4	0.3	137	28.4	28.4	8.0	8.0	15.2	15.2	95.9	95.9	6.9		8.1		4		81				<0.2	<0.2		3.4	
						4.4	0.3	149	28.4		8.0		15.2		95.9		6.9		8.1		3		82				<0.2			3.1	
					Bottom	7.8	0.2	105	28.1	28.1	8.0	8.0	23.6	23.6	97.0	97.0	6.7	6.7	9.7		3		83				<0.2	<0.2		3.0	
						7.8	0.2	113	28.1		8.0		23.6		97.0		6.7		9.7		4		84				<0.2			3.2	
C2	Cloudy	Moderate	10:54	11.8	Surface	1.0	1.0	167	28.8	28.8	7.7	7.7	10.6	10.6	79.4	79.3	5.8	5.5	13.0	10.3	3	4	75	78	825656	806958	<0.2	<0.2	<0.2	3.8	3.7
						1.0	1.1	170	28.8		7.7		10.6		79.2		5.8		13.1		4		75				<0.2			4.0	
					Middle	5.9	0.6	160	28.3	28.3	7.8	7.8	20.8	20.8	75.3	75.4	5.2		8.7		3		77				<0.2	<0.2		3.8	
						5.9	0.6	169	28.3		7.8		20.8		75.4		5.2		8.6		5		77				<0.2			3.6	
					Bottom	10.8	0.4	152	28.1	28.1	7.9	7.9	23.3	23.3	77.0	77.0	5.3	5.3	9.1		5		81				<0.2	<0.2		3.4	
						10.8	0.4	159	28.1		7.9		23.3		77.0		5.3		9.2		5		81				<0.2			3.5	
C3	Cloudy	Moderate	08:51	12.5	Surface	1.0	0.1	59	28.3	28.3	7.8	7.8	16.2	16.2	88.6	88.6	6.3	6.2	5.6	5.6	<2	2	72	78	822104	817788	<0.2	<0.2	<0.2	3.1	3.0
						1.0	0.1	61	28.3		7.8		16.2		88.6		6.3		5.6		<2		72				<0.2			3.0	
					Middle	6.3	0.3	332	28.2	28.2	7.9	7.9	20.4	20.4	86.8	86.8	6.1		5.2		<2		78				<0.2	<0.2		3.3	
						6.3	0.3	359	28.2		7.9		20.4		86.7		6.0		5.2		<2		78				<0.2			2.8	
					Bottom	11.5	0.2	99	27.6	27.6	7.9	7.9	25.7	25.7	81.5	81.5	5.6	5.6	5.9		2		83				<0.2	<0.2		2.8	
						11.5	0.2	108	27.6		7.9		25.7		81.5		5.6		5.9		<2		83				<0.2			3.0	
IM1	Cloudy	Moderate	10:36	5.2	Surface	1.0	0.3	212	28.5	28.5	8.0	8.0	14.6	14.6	96.0	96.0	6.9	6.9	7.0	6.7	6	10	77	79	817968	807156	<0.2	<0.2	<0.2	3.4	2.5
						1.0	0.3	216	28.5		8.0		14.6		96.0		6.9		7.0		5		76				<0.2			3.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.2	0.2	166	28.2	28.2	8.0	8.0	18.7	18.7	98.2	98.2	6.9	6.9	6.4		15		81				<0.2	<0.2		1.7	
						4.2	0.2	168	28.2		8.0		18.7		98.2		6.9		6.4		15		82				<0.2			1.8	
IM2	Cloudy	Moderate	10:43	7.2	Surface	1.0	0.4	162	28.8	28.8	8.0	8.0	12.5	12.5	89.7	89.7	6.5	6.3	7.4	8.1	<2	<2	76	79	818174	806159	<0.2	<0.2	<0.2	3.5	3.4
						1.0	0.5	164	28.8		8.0		12.5		89.7		6.5		7.4		<2		77				<0.2			3.4	
					Middle	3.6	0.3	154	28.4	28.4	7.9	7.9	17.7	17.7	84.9	84.9	6.0		7.7		<2		80				<0.2	<0.2		3.1	
						3.6	0.3	165	28.4		7.9		17.7		84.9		6.0		7.7		<2		79				<0.2			3.4	
					Bottom	6.2	0.3	117	28.0	28.0	8.0	8.0	20.7	20.7	89.0	89.0	6.2	6.2	9.2		<2		81				<0.2	<0.2		3.4	
						6.2	0.3	122	28.0		8.0		20.7		89.0		6.2		9.2		<2		82				<0.2			3.4	
IM3	Cloudy	Moderate	10:51	7.0	Surface	1.0	0.4	160	28.6	28.6	8.0	8.0	12.4	12.4	85.4	85.4	6.2	6.0	8.8	12.6	<2	<2	78	80	818769	805597	<0.2	<0.2	<0.2	3.4	3.3
						1.0	0.5	168	28.6		8.0		12.4		85.4		6.2		8.8		<2		77				<0.2			3.5	
					Middle	3.5	0.4	141	28.6	28.6	7.9	7.9	14.6	14.6	81.2	81.2	5.8		11.0		<2		79				<0.2	<0.2		3.3	
						3.5	0.4	150	28.6		7.9		14.6		81.2		5.8		11.0		<2		80				<0.2			3.3	
					Bottom	6.0	0.3	102	28.3	28.3	7.9	7.9	18.5	18.5	81.4	81.4	5.7	5.7	18.0		<2		83				<0.2	<0.2		3.3	
						6.0	0.3	105	28.3		7.9		18.5		81.4		5.7		18.0		<2		83				<0.2			3.2	
IM4	Cloudy	Moderate	11:03	7.4	Surface	1.0	0.4	155	29.0	29.0	8.0	8.0	8.7	8.7	90.0	90.0	6.6	6.3	13.8	14.9	3	4	75	79	819723	804591	<0.2	<0.2	<0.2	3.1	3.2
						1.0	0.4	167	29.0		8.0		8.7		90.0		6.6		13.8		2		75				<0.2			3.2	
					Middle	3.7	0.4	129	28.5	28.5	7.9	7.9	14.6	14.6	82.6	82.6	5.9		15.0		4		80				<0.2	<0.2		3.3	
						3.7	0.4	138	28.5		7.9		14.6		82.6		5.9		15.0		3		80				<0.2			3.4	
					Bottom	6.4	0.3	110	28.3	28.3	7.9	7.9	19.2	19.2	83.8	83.8	5.9	5.9	15.8		4		81				<0.2	<0.2		2.9	
						6.4	0.3	111	28.3		7.9		19.2		83.8		5.9		15.8		5		81				<0.2			3.2	
IM5	Cloudy	Moderate	11:15	6.8	Surface	1.0	0.3	182	28.8	28.8	8.0	8.0	9.1	9.1	87.2	87.2	6.4	5.8	11.8	13.7	4	6	73	77	820716	804859	<0.2	<0.2	<0.2	2.8	2.7
						1.0	0.3	187	28.8		8.0		9.1		87.2		6.4		11.8		6		72				<0.2			2.7	
					Middle	3.4	0.3	170	28.6	28.6	7.8	7.8	15.6	15.6	73.2	73.2	5.2		12.2		6	6	77				<0.2	<0.2		2.8	
						3.4	0.3	182	28.6		7.8		15.6		73.2		5.2		12.2		6		77				<0.2			2.7	
					Bottom	5.8	0.2	129	28.4	28.4	7.8	7.8	19.8	19.8	71.1	71.1	5.0	5.0	17.1		7		82				<0.2	<0.2		2.6	
						5.8	0.3	133	28.4		7.8		19.8		71.1		5.0		17.1		8		82				<0.2			2.6	
IM6	Cloudy	Moderate	11:22	6.6	Surface	1.0	0.3	169	28.8	28.8	8.0	8.0	10.3	10.3	92.5	92.5	6.8	6.5	9.5	12.7	5	12	74	78	821048	805827	<0.2	<0.2	<0.2	3.0	2.6
						1.0	0.3	171	28.8		8.0		10.3		92.5		6.8		9.5		5		74				<0.2			2.8	
					Middle	3.3	0.2	140	28.6	28.6	7.9	7.9	13.5	13.5	84.7	84.7	6.1		11.9		12		77				<0.2	<0.2		2.9	
						3.3	0.2	142	28.6		7.9		13.5		84.7		6.1		11.9		12		77				<0.2			2.3	
					Bottom	5.6	0.2	104	28.3	28.3	7.9	7.9	21.1	21.1	77.4	77.4	5.4	5.4	16.6		18		81				<0.2	<0.2		2.4	
						5.6	0.2	107	28.3		7.9		21.1		77.4		5.4		16.6		18		82				<0.2			2.4	
IM7	Cloudy	Moderate	11:30	6.8	Surface	1.0	0.2	147	28.8	28.8	7.9	7.9	12.7	12.7	85.8	85.8	6.2	6.2	8.3	10.6	4	3	74	78	821376	806817	<0.2	<0.2	<0.2	3.1	3.2
						1.0	0.2	151	28.8		7.9		12.7		85.7		6.2		8.3		2		75				<0.2			3.2	
					Middle	3.4	0.2	126	28.7	28.7	7.9	7.9	14.2	14.2	84.6	84.6	6.1		9.6		3		78				<0.2	<0.2		3.2	
						3.4	0.2	133	28.7		7.9		14.2		84.6		6.1		9.6		2		78				<0.2			3.3	
					Bottom	5.8	0.1	89	28.6	28.6	7.9	7.9	16.3	16.3	95.4	95.4	6.8	6.8	14.0		3		82				<0.2	<0.2		3.3	
						5.8	0.1	94	28.6		7.9		16.3		95.4		6.8		14.0		3		80				<0.2			3.2	
IM8	Cloudy	Moderate	10:25	8.5	Surface	1.0	0.3	172	28.7	28.7	7.8	7.8	11.6	11.6	88.5	88.2	6.4	6.1	7.2	8.2	2	3	75	79	821831	808162	<0.2	<0.2	<0.2	3.4	3.5
						1.0	0.3	172	28.7		7.8		11.6		87.8		6.4		7.3		3		75				<0.2			3.5	
					Middle	4.3	0.3	158	28.6	28.6	7.7	7.7	13.9	13.8	79.6	79.6	5.7		8.7		2	3	77				<0.2	<0.2		3.5	
						4.3	0.3	158	28.6		7.7		13.8		79.6		5.7		8.7		3		81				<0.2			3.6	
					Bottom	7.5	0.1	222	28.4	28.4	7.8	7.8	18.9	18.8	83.4	83.6	5.8	5.9	8.7		3		83				<0.2	<0.2		3.4	
						7.5	0.1	229	28.4		7.8		18.7		83.7		5.9		8.5		3		83				<0.2			3.4	

DA: Depth-Averaged

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

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

Note: Monitoring session on 7 June 2018 was cancelled due to typhoon.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 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	10:18	7.5	Surface	1.0	0.4	142	28.8	28.8	7.8	7.8	11.3	11.3	89.6	89.5	6.5	6.4	8.2	13.7	<2	2	77	79	822084	808788	<0.2	<0.2	<0.2	3.5	3.7
						1.0	0.5	148	28.8		7.8		11.3		89.4		6.5		8.1		<2		77				<0.2			3.6	
					Middle	3.8	0.4	125	28.6	28.6	7.8	7.8	11.5	11.5	87.1	87.1	6.3		9.3		<2		78				<0.2	<0.2		3.8	
						3.8	0.4	128	28.6		7.8		11.5		87.1		6.3		9.4		2		79				<0.2			3.8	
					Bottom	6.5	0.2	84	28.5	28.5	7.8	7.8	16.2	16.3	83.0	83.1	5.9	5.9	23.3		<2		81				<0.2	<0.2		3.6	
						6.5	0.2	89	28.5		7.8		16.4		83.1		5.9		23.7		2		81				<0.2			3.6	
IM10	Cloudy	Moderate	10:10	8.8	Surface	1.0	0.5	137	28.8	28.8	7.8	7.8	10.5	10.5	89.1	89.1	6.5	6.3	8.2	13.9	<2	2	76	78	822362	809768	<0.2	<0.2	<0.2	3.7	3.7
						1.0	0.5	143	28.8		7.8		10.5		89.1		6.5		8.2		<2		76				<0.2			3.7	
					Middle	4.4	0.4	120	28.5	28.5	7.8	7.8	12.8	12.8	84.2	84.2	6.1		8.3		<2		78				<0.2	<0.2		3.7	
						4.4	0.4	121	28.5		7.8		12.8		84.2		6.1		8.4		<2		79				<0.2			3.7	
					Bottom	7.8	0.3	94	28.2	28.2	7.8	7.8	20.1	20.1	77.2	77.3	5.4	5.4	25.0		2		80				<0.2	<0.2		3.8	
						7.8	0.4	98	28.2		7.8		20.1		77.3		5.4		25.3		2		80				<0.2			3.7	
IM11	Cloudy	Moderate	09:56	8.4	Surface	1.0	0.7	103	28.7	28.7	7.8	7.8	12.0	12.0	82.6	82.3	6.0	5.7	8.3	13.2	<2	2	74	79	822080	811472	<0.2	<0.2	<0.2	3.7	3.8
						1.0	0.7	105	28.7		7.8		12.1		82.0		5.9		8.4		<2		75				<0.2			3.6	
					Middle	4.2	0.6	93	28.5	28.5	7.8	7.8	16.4	16.4	76.7	76.7	5.4		11.0		<2		79				<0.2	<0.2		3.8	
						4.2	0.6	99	28.5		7.8		16.4		76.7		5.4		11.1		<2		79				<0.2			3.6	
					Bottom	7.4	0.2	56	28.2	28.2	7.8	7.8	20.6	20.6	76.9	76.9	5.4	5.4	20.2		<2		83				<0.2	<0.2		4.0	
						7.4	0.2	59	28.2		7.8		20.6		76.9		5.4		20.0		2		83				<0.2			3.9	
IM12	Cloudy	Moderate	09:48	9.3	Surface	1.0	0.4	95	28.6	28.6	7.7	7.7	13.7	13.6	81.0	80.9	5.8	5.6	9.1	17.6	2	2	75	78	821481	812038	<0.2	<0.2	<0.2	3.9	3.8
						1.0	0.4	103	28.6		7.7		13.6		80.7		5.8		9.1		<2		75				<0.2			3.7	
					Middle	4.7	0.5	95	28.5	28.5	7.7	7.7	15.7	15.7	76.1	76.2	5.4		17.3		2		79				<0.2	<0.2		3.7	
						4.7	0.5	101	28.5		7.7		15.7		76.2		5.4		17.7		<2		79				<0.2			3.7	
					Bottom	8.3	0.4	90	28.2	28.2	7.8	7.8	20.2	20.2	78.8	79.1	5.5	5.5	27.5		2		81				<0.2	<0.2		3.7	
						8.3	0.4	98	28.2		7.8		20.2		79.4		5.5		24.8		3		81				<0.2			3.8	
SR2	Cloudy	Moderate	09:16	5.0	Surface	1.0	0.5	72	28.7	28.7	7.8	7.8	11.2	11.2	87.6	87.6	6.4	6.4	8.5	8.9	<2	<2	76	80	821454	814140	<0.2	<0.2	<0.2	4.4	4.4
						1.0	0.5	75	28.7		7.8		11.2		87.5		6.4		8.5		<2		76				<0.2			4.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.0	0.3	51	28.4	28.4	7.8	7.8	14.8	14.8	89.0	89.1	6.4	6.4	9.2		<2		83				<0.2	<0.2		4.4	
						4.0	0.3	53	28.4		7.8		14.8		89.2		6.4		9.3		<2		84				<0.2			4.3	
SR3	Cloudy	Moderate	10:31	9.4	Surface	1.0	0.5	184	28.6	28.6	7.8	7.8	12.3	12.3	84.2	84.2	6.1	5.8	7.5	8.0	<2	<2	-	-	822143	807582	-	-	-	-	-
						1.0	0.5	193	28.6		7.8		12.3		84.1		6.1		7.6		<2		-				-			-	
					Middle	4.7	0.3	168	28.5	28.5	7.8	7.8	17.2	17.2	78.4	78.5	5.5		6.8		<2		-				-	-		-	
						4.7	0.3	169	28.5		7.8		17.2		78.5		5.5		6.8		<2		-				-			-	
					Bottom	8.4	0.1	249	28.2	28.2	7.8	7.8	21.5	21.5	82.6	82.8	5.7	5.7	9.5		<2		-				-	-		-	
						8.4	0.1	263	28.2		7.8		21.5		82.9		5.7		9.5		<2		-				-			-	
SR4A	Fine	Calm	09:56	9.2	Surface	1.0	0.4	145	28.3	28.3	8.0	8.0	14.6	14.6	91.9	91.9	6.6	6.3	7.6	9.6	3	4	-	-	817207	807814	-	-	-	-	-
						1.0	0.4	154	28.3		8.0		14.6		91.9		6.6		7.6		3		-				-			-	
					Middle	4.6	0.3	137	27.9	27.9	8.0	8.0	21.9	21.9	86.3	86.3	6.0		8.9		3		-				-	-		-	
						4.6	0.4	142	27.9		8.0		21.9		86.3		6.0		8.9		3		-				-			-	
					Bottom	8.2	0.3	91	27.8	27.8	8.0	8.0	24.2	24.2	85.2	85.2	5.9	5.9	12.3		4		-				-	-		-	
						8.2	0.3	93	27.8		8.0		24.2		85.2		5.9		12.3		5		-				-			-	
SR5A	Fine	Calm	09:31	5.1	Surface	1.0	0.2	114	28.0	28.0	8.0	8.0	17.9	18.1	95.8	95.8	6.8	6.8	6.6	7.6	2	2	-	-	816575	810714	-	-	-	-	-
						1.0	0.2	114	28.0		8.0		18.2		95.8		6.8		6.6		2		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	4.1	0.2	88	27.7	27.7	8.0	8.0	22.2	22.2	97.9	97.9	6.8	6.8	8.6		3		-				-	-		-	
						4.1	0.2	90	27.7		8.0		22.2		97.9		6.8		8.6		2		-				-			-	
SR6	Fine	Calm	09:04	4.3	Surface	1.0	0.2	101	28.2	28.2	7.9	7.9	18.8	18.8	83.4	83.4	5.9	5.9	8.1	10.4	8	12	-	-	817897	814650	-	-	-	-	-
						1.0	0.2	109	28.2		7.9		18.8		83.4		5.9		8.1		9		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.3	0.1	75	28.0	28.0	7.9	7.9	22.1	22.1	73.2	73.2	5.1	5.1	12.6		15		-				-	-		-	
						3.3	0.2	75	28.0		7.9		22.1		73.2		5.1		12.6		14		-				-			-	
SR7	Cloudy	Moderate	08:18	20.4	Surface	1.0	0.5	77	28.2	28.2	7.9	7.9	18.9	18.9	89.9	89.8	6.3	5.7	4.8	5.4	<2	<2	-	-	823610	823717	-	-	-	-	-
						1.0	0.5	80	28.2		7.9		18.9		89.7		6.3		4.8		<2		-				-			-	
					Middle	10.2	0.1	113	27.4	27.4	7.9	7.9	27.0	27.1	73.7	73.7	5.0		5.5		<2		-				-	-		-	
						10.2	0.1	123	27.4		7.9		27.1		73.7		5.0		5.4		<2		-				-			-	
					Bottom	19.4	0.2	68	27.3	27.3	7.9	7.9	27.8	27.8	73.8	73.9	5.0	5.0	5.9		<2		-				-	-		-	
						19.4	0.2	73	27.3		7.9		27.8		73.9		5.0		5.9		<2		-				-			-	
SR8	Cloudy	Calm	09:32	4.6	Surface	1.0	-	-	28.6	28.6	7.8	7.8	12.8	12.8	87.4	87.5	6.3	6.3	9.4	8.9	<2	<2	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	28.6		7.8		12.8		87.5		6.3		9.3		<2		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.6	-	-	28.6	28.6	7.8	7.8	12.8	12.8	90.3	90.4	6.5	6.5	8.3		<2		-				-	-		-	
						3.6	-	-	28.6		7.8		12.8		90.4		6.5		8.4		<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**
Note: Monitoring session on 7 June 2018 was cancelled due to typhoon.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 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	14:57	8.5	Surface	1.0	0.7	49	29.2	29.2	8.0	8.0	9.9	9.9	94.8	94.8	6.9	6.7	9.4	12.5	<2	3	77	81	815610	804276	<0.2	<0.2	<0.2	3.4	3.4
						1.0	0.7	50	29.2		8.0		9.9		94.8		6.9		9.4		<2		76				<0.2			3.5	
					Middle	4.3	0.7	35	28.8	28.8	8.1	8.1	12.3	12.3	90.6	90.6	6.5		13.6		<2		82				<0.2	<0.2		3.2	
						4.3	0.7	37	28.8		8.1		12.3		90.6		6.5		13.6		<2		81				<0.2			3.4	
					Bottom	7.5	0.6	20	27.9	27.9	8.1	8.1	27.4	27.4	79.3	79.3	5.3	5.3	14.4		4		84				<0.2	<0.2		3.5	
						7.5	0.6	21	27.9		8.1		27.4		79.3		5.3		14.4		5		83				<0.2			3.5	
C2	Cloudy	Moderate	13:51	11.9	Surface	1.0	0.7	170	29.1	29.1	7.7	7.7	5.5	5.5	82.7	82.7	6.2	5.9	16.5	9.1	4	5	71	77	825679	806951	<0.2	<0.2	<0.2	5.5	5.2
						1.0	0.7	173	29.1		7.7		5.5		82.7		6.2		16.4		5		71				<0.2			5.5	
					Middle	6.0	0.1	245	28.2	28.2	7.8	7.8	21.5	21.5	78.9	79.0	5.5		5.4		5		79				<0.2	<0.2		5.6	
						6.0	0.1	254	28.2		7.8		21.5		79.0		5.5		5.4		4		79				<0.2			5.4	
					Bottom	10.9	0.3	323	28.2	28.2	7.8	7.8	22.2	22.2	79.8	79.9	5.5	5.5	5.3		4		81				<0.2	<0.2		4.5	
						10.9	0.3	337	28.2		7.8		22.2		79.9		5.5		5.3		5		81				<0.2			4.5	
C3	Cloudy	Moderate	15:39	12.7	Surface	1.0	0.3	226	28.8	28.8	7.9	7.9	14.7	14.7	93.0	92.9	6.6	6.0	4.9	7.7	<2	<2	78	81	822115	817821	<0.2	<0.2	<0.2	3.6	3.8
						1.0	0.3	235	28.8		7.9		14.7		92.8		6.6		4.9		<2		78				<0.2			3.5	
					Middle	6.4	0.2	244	27.9	27.9	7.9	7.9	22.7	22.7	78.9	78.9	5.5		6.8		<2		81				<0.2	<0.2		3.8	
						6.4	0.2	251	27.9		7.9		22.7		78.8		5.4		6.9		<2		81				<0.2			3.7	
					Bottom	11.7	0.4	297	27.3	27.3	7.9	7.9	27.4	27.4	78.2	78.3	5.3	5.3	11.3		<2		84				<0.2	<0.2		4.8	
						11.7	0.4	322	27.3		7.9		27.4		78.4		5.3		11.3		<2		84				<0.2			3.5	
IM1	Cloudy	Moderate	14:37	4.8	Surface	1.0	0.5	315	29.0	29.0	8.1	8.1	13.1	13.1	100.7	100.7	7.2	7.2	7.6	7.9	14	8	77	80	817969	807105	<0.2	<0.2	<0.2	3.7	3.7
						1.0	0.5	331	29.0		8.1		13.1		100.7		7.2		7.6		12		77				<0.2			3.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.8	0.2	253	28.6	28.6	8.1	8.1	16.0	16.0	98.9	98.9	7.0	7.0	8.1		<2		83				<0.2	<0.2		3.5	
						3.8	0.2	270	28.6		8.1		16.0		98.9		7.0		8.1		<2		83				<0.2			3.6	
IM2	Cloudy	Moderate	14:27	7.4	Surface	1.0	0.4	251	29.0	29.0	8.1	8.1	14.1	14.1	100.1	100.1	7.1	7.1	6.6	7.0	<2	16	76	80	818188	806158	<0.2	<0.2	<0.2	3.6	3.5
						1.0	0.5	254	29.0		8.1		14.1		100.1		7.1		6.6		<2		77				<0.2			3.3	
					Middle	3.7	0.4	239	28.5	28.5	8.1	8.1	14.3	14.3	97.5	97.5	7.0		7.2		3		81				<0.2	<0.2		3.5	
						3.7	0.4	247	28.5		8.1		14.3		97.5		7.0		7.2		3		81				<0.2			3.4	
					Bottom	6.4	0.3	209	28.3	28.3	8.1	8.1	21.9	21.9	99.7	99.7	6.9	6.9	7.1		40		83				<0.2	<0.2		3.7	
						6.4	0.3	220	28.3		8.1		21.9		99.7		6.9		7.1		44		83				<0.2			3.6	
IM3	Cloudy	Moderate	14:21	7.2	Surface	1.0	0.5	219	29.0	29.0	8.0	8.0	14.1	14.1	89.8	89.8	6.4	6.3	8.5	7.8	4	4	76	79	818756	805602	<0.2	<0.2	<0.2	3.8	**5.5**
						1.0	0.5	237	29.0		8.0		14.1		89.8		6.4		8.5		3		77				<0.2			3.6	
					Middle	3.6	0.4	188	28.6	28.6	8.0	8.0	16.1	16.1	88.0	88.0	6.2		7.7		4		80				<0.2	<0.2		3.9	
						3.6	0.4	195	28.6		8.0		16.1		88.0		6.2		7.7		5		80				<0.2			5.4	
					Bottom	6.2	0.3	134	28.1	28.1	8.0	8.0	21.6	21.6	88.7	88.7	6.2	6.2	7.2		6		82				<0.2	<0.2		8.6	
						6.2	0.3	142	28.1		8.0		21.6		88.7		6.2		7.2		4		81				<0.2			7.4	
IM4	Cloudy	Moderate	14:12	7.2	Surface	1.0	0.3	309	29.2	29.2	7.9	7.9	9.8	9.6	85.5	85.5	6.2	6.1	9.3	9.5	4	5	75	79	819731	804605	<0.2	<0.2	<0.2	6.0	4.2
						1.0	0.4	313	29.2		7.9		9.5		85.5		6.2		9.4		3		75				<0.2			4.4	
					Middle	3.6	0.3	281	28.7	28.7	7.9	7.9	13.9	13.9	82.2	82.2	5.9		8.9		4		79				<0.2	<0.2		4.3	
						3.6	0.3	306	28.7		7.9		13.9		82.2		5.9		8.9		4		80				<0.2			4.3	
					Bottom	6.2	0.3	223	28.3	28.3	7.9	7.9	20.6	20.6	83.2	83.2	5.8	5.8	10.3		6		81				<0.2	<0.2		3.1	
						6.2	0.3	230	28.3		7.9		20.6		83.2		5.8		10.3		6		82				<0.2			3.2	
IM5	Cloudy	Moderate	14:05	6.8	Surface	1.0	0.4	328	29.3	29.3	7.9	7.9	8.9	8.9	88.1	88.1	6.4	6.2	10.1	10.5	2	2	74	79	820729	804896	<0.2	<0.2	<0.2	4.5	4.1
						1.0	0.4	348	29.3		7.9		8.9		88.1		6.4		10.1		2		75				<0.2			4.3	
					Middle	3.4	0.4	311	28.8	28.8	7.9	7.9	14.4	14.4	84.4	84.4	6.0		9.8		3		80				<0.2	<0.2		4.0	
						3.4	0.4	324	28.8		7.9		14.4		84.4		6.0		9.8		2		80				<0.2			4.3	
					Bottom	5.8	0.3	243	28.6	28.6	7.9	7.9	18.3	18.3	89.5	89.5	6.3	6.3	11.5		3		81				<0.2	<0.2		3.8	
						5.8	0.3	256	28.6		7.9		18.3		89.5		6.3		11.5		2		82				<0.2			3.8	
IM6	Cloudy	Moderate	13:56	6.5	Surface	1.0	0.3	252	29.2	29.2	7.9	7.9	10.4	10.4	87.1	87.1	6.3	6.2	8.8	11.9	3	3	74	79	821056	805811	<0.2	<0.2	<0.2	3.9	4.1
						1.0	0.3	271	29.2		7.9		10.4		87.1		6.3		8.8		3		75				<0.2			4.4	
					Middle	3.3	0.3	224	28.9	28.9	7.9	7.9	11.7	11.7	84.3	84.3	6.1		9.8		4		80				<0.2	<0.2		3.9	
						3.3	0.3	238	28.9		7.9		11.7		84.3		6.1		9.8		2		79				<0.2			4.2	
					Bottom	5.5	0.2	183	28.6	28.6	7.9	7.9	15.0	15.0	84.7	84.7	6.0	6.0	17.1		4		83				<0.2	<0.2		4.4	
						5.5	0.2	192	28.6		7.9		15.0		84.7		6.0		17.1		4		83				<0.2			4.0	
IM7	Cloudy	Moderate	13:48	7.2	Surface	1.0	0.2	209	29.0	29.0	7.9	7.9	9.0	9.0	84.3	84.3	6.2	6.0	9.3	8.1	3	4	75	79	821324	806827	<0.2	<0.2	<0.2	4.5	4.3
						1.0	0.2	221	29.0		7.9		9.0		84.3		6.2		9.3		3		75				<0.2			4.5	
					Middle	3.6	0.2	173	28.7	28.7	7.9	7.9	12.6	12.6	78.9	78.9	5.7		8.0		4		80				<0.2	<0.2		4.0	
						3.6	0.2	176	28.7		7.9		12.6		78.9		5.7		8.0		3		80				<0.2			4.0	
					Bottom	6.2	0.2	129	28.4	28.4	7.9	7.9	18.3	18.3	77.4	77.4	5.4	5.4	7.0		4		81				<0.2	<0.2		4.4	
						6.2	0.2	132	28.4		7.9		18.3		77.4		5.4		7.0		4		80				<0.2			4.5	
IM8	Cloudy	Moderate	14:12	7.5	Surface	1.0	0.3	196	29.0	29.0	7.7	7.7	7.4	7.4	85.9	85.9	6.4	6.2	12.1	14.4	5	5	74	78	821814	808118	<0.2	<0.2	<0.2	5.2	4.7
						1.0	0.3	211	29.0		7.7		7.4		85.9		6.3		12.1		5		75				<0.2			5.2	
					Middle	3.8	0.2	218	28.8	28.8	7.7	7.7	10.5	10.5	82.8	82.8	6.0		11.5		5		77				<0.2	<0.2		4.6	
						3.8	0.2	238	28.8		7.7		10.5		82.8		6.0		11.5		5		77				<0.2			4.5	
					Bottom	6.5	0.1	274	28.7	28.7	7.7	7.7	11.6	11.6	81.9	82.0	5.9	6.0	19.4		6		83				<0.2	<0.2		4.3	
						6.5	0.1	292	28.7		7.7		11.7		82.1		6.0		19.9		4		83				<0.2			4.6	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Monitoring session on 7 June 2018 was cancelled due to typhoon.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 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	7.3	Surface	1.0	0.2	180	29.4	29.4	7.8	7.8	6.8	6.8	88.2	88.2	6.5	6.3	13.0	12.8	5	6	75	78	822076	808811	<0.2	<0.2	<0.2	4.9	4.6
						1.0	0.2	193	29.4		7.8		6.8		88.1		6.5		13.0		6		75				<0.2			5.0	
					Middle	3.7	0.1	242	28.9	28.9	7.7	7.7	10.2	10.2	83.8	83.8	6.1		11.7		6		77				<0.2	<0.2		4.6	
						3.7	0.1	252	28.9		7.7		10.2		83.8		6.1		11.8		5		77				<0.2			4.7	
					Bottom	6.3	0.1	315	28.7	28.7	7.7	7.7	11.4	11.5	82.5	82.7	6.0	6.0	13.5		6		83				<0.2	<0.2		4.3	
						6.3	0.1	334	28.7		7.7		11.7		82.8		6.0		13.9		5		83				<0.2			4.3	
IM10	Cloudy	Moderate	14:26	6.6	Surface	1.0	0.0	231	29.1	29.1	7.7	7.7	9.7	9.7	88.0	88.0	6.4	6.3	10.3	9.3	4	4	78	81	822410	809769	<0.2	<0.2	<0.2	5.1	**5.0**
						1.0	0.0	233	29.2		7.7		9.7		87.9		6.4		10.2		4		78				<0.2			5.2	
					Middle	3.3	0.2	319	28.8	28.8	7.7	7.7	12.1	12.1	85.7	85.8	6.2		8.8		4		82				<0.2	<0.2		5.1	
						3.3	0.2	338	28.8		7.7		12.1		85.8		6.2		8.8		4		82				<0.2			5.1	
					Bottom	5.6	0.2	320	28.6	28.6	7.7	7.7	14.2	14.2	88.8	88.9	6.4	6.4	8.9		5		82				<0.2	<0.2		4.8	
						5.6	0.2	322	28.6		7.7		14.2		89.0		6.4		8.8		4		83				<0.2			4.5	
IM11	Cloudy	Moderate	14:39	8.7	Surface	1.0	0.3	351	29.0	29.0	7.8	7.8	12.0	11.9	86.1	86.1	6.2	6.0	8.5	11.6	3	3	76	80	822060	811435	<0.2	<0.2	<0.2	4.2	4.1
						1.0	0.3	359	29.0		7.8		11.9		86.0		6.2		8.6		3		77				<0.2			4.2	
					Middle	4.4	0.3	318	28.6	28.6	7.8	7.8	14.2	14.2	81.6	81.6	5.8		9.9		4		81				<0.2	<0.2		4.2	
						4.4	0.3	340	28.6		7.8		14.2		81.5		5.8		10.0		2		82				<0.2			4.0	
					Bottom	7.7	0.3	289	28.2	28.2	7.8	7.8	22.1	22.1	81.8	82.0	5.7	5.7	16.1		4		82				<0.2	<0.2		4.2	
						7.7	0.3	301	28.2		7.8		22.1		82.1		5.7		16.3		3		82				<0.2			3.9	
IM12	Cloudy	Moderate	14:45	9.5	Surface	1.0	0.2	328	29.1	29.1	7.8	7.8	11.8	11.9	90.2	90.0	6.5	6.0	7.3	10.3	<2	2	76	79	821487	812030	<0.2	<0.2	<0.2	3.8	3.8
						1.0	0.3	355	29.1		7.8		11.9		89.7		6.5		7.3		<2		77				<0.2			3.9	
					Middle	4.8	0.4	287	28.2	28.1	7.9	7.9	18.9	19.1	78.6	78.4	5.5		10.6		<2		79				<0.2	<0.2		3.8	
						4.8	0.4	299	28.1		7.9		19.2		78.1		5.5		11.1		<2		79				<0.2			3.9	
					Bottom	8.5	0.2	240	28.0	28.0	7.8	7.8	23.3	23.3	80.7	80.8	5.6	5.6	12.8		<2		81				<0.2	<0.2		3.7	
						8.5	0.2	260	28.0		7.8		23.3		80.9		5.6		12.5		2		82				<0.2			3.6	
SR2	Cloudy	Moderate	15:16	4.9	Surface	1.0	0.2	179	29.1	29.1	7.9	7.9	12.0	12.0	96.1	96.1	6.9	6.9	5.9	5.8	<2	<2	76	78	821478	814137	<0.2	<0.2	<0.2	3.7	3.7
						1.0	0.2	181	29.1		7.9		12.0		96.1		6.9		5.9		<2		77				<0.2			3.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.9	0.0	323	28.9	28.9	7.9	7.9	13.9	13.9	96.0	96.0	6.9	6.9	5.6		<2		79				<0.2	<0.2		3.6	
						3.9	0.0	345	28.9		7.9		13.9		96.0		6.9		5.6		<2		79				<0.2			3.7	
SR3	Cloudy	Moderate	14:07	9.1	Surface	1.0	0.4	184	28.9	28.9	7.7	7.7	9.1	9.1	81.4	81.4	6.0	5.8	11.4	10.0	3	3	-	-	822160	807575	-	-	-	-	-
						1.0	0.5	189	28.9		7.7		9.1		81.4		6.0		11.5		4		-				-			-	
					Middle	4.6	0.2	218	28.7	28.7	7.7	7.7	12.8	12.8	78.2	78.2	5.6		9.1		4		-				-	-		-	
						4.6	0.2	222	28.7		7.7		12.8		78.2		5.6		9.1		2		-				-			-	
					Bottom	8.1	0.2	243	28.6	28.6	7.7	7.7	14.5	14.5	76.9	77.0	5.5	5.5	9.5		4		-				-	-		-	
						8.1	0.3	256	28.6		7.7		14.5		77.0		5.5		9.5		3		-				-			-	
SR4A	Cloudy	Calm	15:16	8.3	Surface	1.0	0.3	212	28.8	28.8	8.1	8.1	14.7	14.7	105.6	105.6	7.5	7.3	7.2	8.9	<2	3	-	-	817213	807795	-	-	-	-	-
						1.0	0.3	213	28.8		8.1		14.7		105.6		7.5		7.2		<2		-				-			-	
					Middle	4.2	0.3	195	28.5	28.5	8.1	8.1	18.1	18.1	99.9	99.9	7.0		7.7		2		-				-	-		-	
						4.2	0.3	201	28.5		8.1		18.1		99.9		7.0		7.7		3		-				-			-	
					Bottom	7.3	0.2	97	27.8	27.8	8.0	8.0	23.1	23.1	89.7	89.7	6.2	6.2	11.7		3		-				-	-		-	
						7.3	0.2	98	27.8		8.0		23.1		89.7		6.2		11.7		3		-				-			-	
SR5A	Cloudy	Calm	15:33	4.1	Surface	1.0	0.3	205	28.5	28.5	8.1	8.1	19.8	19.8	109.1	109.1	7.6	7.6	7.8	8.5	3	4	-	-	816606	810680	-	-	-	-	-
						1.0	0.3	207	28.5		8.1		19.8		109.1		7.6		7.8		4		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.1	0.2	143	28.3	28.3	8.1	8.1	20.6	20.6	102.6	102.6	7.1	7.1	9.1		4		-				-	-		-	
						3.1	0.2	154	28.3		8.1		20.6		102.6		7.1		9.1		5		-				-			-	
SR6	Cloudy	Calm	16:07	4.4	Surface	1.0	0.3	213	28.9	28.9	8.0	8.0	14.4	14.4	93.4	93.4	6.7	6.7	8.2	8.2	4	6	-	-	817905	814683	-	-	-	-	-
						1.0	0.3	227	28.9		8.0		14.4		93.4		6.7		8.2		5		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.4	0.2	161	28.5	28.5	8.0	8.0	17.7	17.7	92.7	92.7	6.5	6.5	8.1		6		-				-	-		-	
						3.4	0.2	168	28.5		8.0		17.7		92.7		6.5		8.1		7		-				-			-	
SR7	Cloudy	Moderate	16:12	20.7	Surface	1.0	0.0	51	28.4	28.4	7.9	7.9	18.1	18.1	90.8	90.6	6.4	5.7	4.7	6.8	2	2	-	-	823628	823742	-	-	-	-	-
						1.0	0.0	52	28.4		7.9		18.1		90.4		6.4		4.7		2		-				-			-	
					Middle	10.4	0.0	273	27.4	27.4	7.9	7.9	26.5	26.5	72.5	72.5	4.9		6.7		2		-				-	-		-	
						10.4	0.0	289	27.4		7.9		26.5		72.4		4.9		6.7		3		-				-			-	
					Bottom	19.7	0.1	90	27.1	27.1	8.0	8.0	28.6	28.6	70.7	70.8	4.8	4.8	9.1		3		-				-	-		-	
						19.7	0.1	92	27.1		8.0		28.6		70.8		4.8		9.1		2		-				-			-	
SR8	Cloudy	Calm	15:02	4.4	Surface	1.0	-	-	29.4	29.4	7.8	7.8	11.0	11.0	94.7	94.8	6.8	6.8	7.0	6.5	3	3	-	-	820246	811418	-	-	-	-	-
						1.0	-	-	29.4		7.8		11.0		94.8		6.8		7.0		3		-				-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-			-	
					Bottom	3.4	-	-	28.9	28.9	7.8	7.8	12.6	12.6	94.6	94.6	6.8	6.8	6.0		3		-				-	-		-	
						3.4	-	-	28.9		7.8		12.6		94.6		6.8		6.0		4		-				-			-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: Monitoring session on 7 June 2018 was cancelled due to typhoon.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 June 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	12:30	8.3	Surface	1.0	0.9	188	28.9	28.9	8.2	8.2	16.3	16.3	98.0	98.0	6.9	6.4	7.9	12.0	4	5	80	81	815599	804257	<0.2	<0.2	4.2	3.7
						1.0	0.9	199	28.9		8.2		16.3		98.0		6.9		7.9		2		79				<0.2		3.9	
					Middle	4.2	0.8	203	28.7	28.7	8.2	8.2	21.7	21.7	84.3	84.3	5.8		13.7		3		81				<0.2		3.8	
						4.2	0.9	222	28.7		8.2		21.7		84.3		5.8		13.7		5		81				<0.2		3.4	
					Bottom	7.3	0.6	231	28.3	28.3	8.2	8.2	28.5	28.5	80.9	80.9	5.4	5.4	14.3		7		83				<0.2		3.6	
						7.3	0.6	241	28.3		8.2		28.5		80.9		5.4		14.3		8		84				<0.2		3.4	
C2	Cloudy	Moderate	13:15	11.4	Surface	1.0	1.3	143	28.5	28.5	7.7	7.7	10.7	10.7	72.4	72.4	5.3	5.0	12.9	16.3	5	7	79	81	825687	806971	<0.2	<0.2	4.7	4.8
						1.0	1.3	157	28.5		7.7		10.7		72.4		5.3		12.9		5		78				<0.2		4.9	
					Middle	5.7	0.7	137	28.5	28.5	7.9	7.9	18.7	18.9	67.4	67.4	4.7		15.7		4		81				<0.2		4.5	
						5.7	0.7	147	28.5		7.9		19.1		67.4		4.7		15.8		4		81				<0.2		4.7	
					Bottom	10.4	0.3	109	28.3	28.3	8.0	8.0	23.2	23.2	74.8	74.8	5.1	5.1	20.1		10		83				<0.2		5.0	
						10.4	0.3	113	28.3		8.0		23.2		74.8		5.1		20.2		12		83				<0.2		4.8	
C3	Cloudy	Moderate	10:48	12.2	Surface	1.0	0.3	66	28.5	28.5	8.1	8.1	22.0	22.0	91.5	91.5	6.3	6.1	5.6	5.7	4	4	78	80	822115	817806	<0.2	<0.2	2.4	2.1
						1.0	0.3	72	28.5		8.1		22.0		91.5		6.3		5.7		2		78				<0.2		2.4	
					Middle	6.1	0.3	309	28.3	28.3	8.1	8.1	24.5	24.5	87.0	87.0	5.9		5.7		5		80				<0.2		2.3	
						6.1	0.3	311	28.3		8.1		24.5		87.0		5.9		5.7		3		81				<0.2		2.2	
					Bottom	11.2	0.2	113	28.3	28.3	8.1	8.1	25.4	25.4	88.2	88.3	6.0	6.0	5.6		4		83				<0.2		1.8	
						11.2	0.2	113	28.3		8.1		25.4		88.3		6.0		5.6		3		82				<0.2		1.5	
IM1	Cloudy	Moderate	12:52	4.1	Surface	1.0	0.1	139	28.5	28.5	8.2	8.2	24.0	24.0	83.5	83.5	5.7	5.7	11.5	12.8	2	3	80	80	817931	807116	<0.2	<0.2	3.1	3.0
						1.0	0.1	140	28.5		8.2		24.0		83.5		5.7		11.5		3		79				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	169	28.4	28.4	8.2	8.2	27.5	27.5	86.5	86.5	5.8	5.8	14.0		3		81				<0.2		2.9	
						3.1	0.1	172	28.4		8.2		27.5		86.5		5.8		14.0		4		81				<0.2		3.0	
IM2	Cloudy	Moderate	13:00	6.8	Surface	1.0	0.7	210	28.7	28.7	8.2	8.2	23.5	23.5	81.6	81.6	5.5	5.4	12.1	16.5	3	4	77	79	818167	806161	<0.2	<0.2	2.9	3.0
						1.0	0.7	229	28.7		8.2		23.5		81.6		5.5		12.1		4		77				<0.2		3.0	
					Middle	3.4	0.5	207	28.5	28.5	8.2	8.2	25.6	25.6	78.9	78.9	5.3		17.9		3		79				<0.2		2.9	
						3.4	0.5	207	28.5		8.2		25.6		78.9		5.3		17.9		3		80				<0.2		2.9	
					Bottom	5.8	0.3	186	28.4	28.4	8.2	8.2	26.5	26.5	79.8	79.8	5.4	5.4	19.4		4		82				<0.2		3.0	
						5.8	0.3	200	28.4		8.2		26.5		79.8		5.4		19.4		4		81				<0.2		3.0	
IM3	Rainy	Moderate	13:08	7.2	Surface	1.0	0.9	214	28.7	28.7	8.2	8.2	17.5	17.5	85.3	85.3	6.0	5.9	16.6	19.6	<2	3	78	81	818756	805613	<0.2	<0.2	3.0	3.0
						1.0	0.9	232	28.7		8.2		17.5		85.3		6.0		16.6		<2		77				<0.2		2.9	
					Middle	3.6	0.7	207	28.5	28.5	8.1	8.1	23.6	23.6	85.9	85.9	5.8		19.8		3		81				<0.2		3.1	
						3.6	0.8	209	28.5		8.1		23.6		85.9		5.8		19.8		3		82				<0.2		2.9	
					Bottom	6.2	0.4	189	28.6	28.6	8.1	8.1	25.6	25.6	100.0	100.0	6.7	6.7	22.3		4		82				<0.2		3.0	
						6.2	0.5	205	28.6		8.1		25.6		100.0		6.7		22.3		3		84				<0.2		3.0	
IM4	Rainy	Moderate	13:21	7.6	Surface	1.0	1.0	197	28.8	28.8	8.0	8.0	14.8	14.8	83.9	83.9	6.0	5.9	11.6	16.1	<2	2	79	81	819753	804627	<0.2	<0.2	5.1	5.0
						1.0	1.1	215	28.8		8.0		14.8		83.9		6.0		11.6		<2		80				<0.2		4.8	
					Middle	3.8	0.8	195	28.6	28.6	8.1	8.1	21.9	21.9	83.5	83.5	5.7		17.8		2		80				<0.2		4.8	
						3.8	0.8	198	28.6		8.1		21.9		83.5		5.7		17.8		2		82				<0.2		5.0	
					Bottom	6.6	0.6	198	28.6	28.6	8.0	8.0	25.1	25.1	93.0	93.0	6.3	6.3	18.8		3		84				<0.2		5.0	
						6.6	0.6	209	28.6		8.0		25.1		93.0		6.3		18.8		3		83				<0.2		5.1	
IM5	Rainy	Moderate	13:32	6.3	Surface	1.0	0.4	189	28.7	28.7	8.0	8.0	18.9	18.9	81.5	81.5	5.7	5.7	18.8	20.5	3	3	77	79	820709	804867	<0.2	<0.2	4.8	4.7
						1.0	0.4	192	28.7		8.0		18.9		81.5		5.7		18.8		2		77				<0.2		4.7	
					Middle	3.2	0.4	172	28.7	28.7	8.1	8.1	20.8	20.8	81.9	81.9	5.6		19.5		3		79				<0.2		4.9	
						3.2	0.4	185	28.7		8.1		20.8		81.9		5.6		19.5		3		80				<0.2		4.8	
					Bottom	5.3	0.2	139	28.7	28.7	8.0	8.0	21.0	21.0	85.8	85.8	5.9	5.9	23.3		3		81				<0.2		4.5	
						5.3	0.3	143	28.7		8.0		21.0		85.8		5.9		23.3		3		82				<0.2		4.6	
IM6	Cloudy	Moderate	12:38	8.1	Surface	1.0	0.3	176	28.7	28.7	8.0	8.0	18.4	18.4	80.0	80.0	5.6	5.5	7.7	10.0	4	5	78	81	821075	805844	<0.2	<0.2	4.6	4.7
						1.0	0.4	190	28.7		8.0		18.4		79.9		5.6		7.7		5		78				<0.2		4.7	
					Middle	4.1	0.3	152	28.7	28.7	8.0	8.0	20.3	20.3	77.6	77.6	5.4		9.0		4		81				<0.2		4.8	
						4.1	0.3	155	28.7		8.0		20.4		77.6		5.4		9.1		4		81				<0.2		4.6	
					Bottom	7.1	0.2	101	28.5	28.5	8.1	8.1	24.1	24.1	78.5	78.6	5.3	5.3	13.3		5		83				<0.2		4.7	
						7.1	0.2	105	28.5		8.1		24.1		78.6		5.3		13.3		5		84				<0.2		4.6	
IM7	Cloudy	Moderate	12:44	8.2	Surface	1.0	0.2	154	28.8	28.8	8.0	8.0	16.2	16.2	88.3	88.2	6.2	6.0	8.4	12.0	6	5	79	81	821356	806841	<0.2	<0.2	4.7	4.8
						1.0	0.3	163	28.8		8.0		16.2		88.1		6.2		8.4		5		79				<0.2		4.5	
					Middle	4.1	0.2	131	28.7	28.7	8.0	8.0	20.8	20.8	83.3	83.4	5.7		11.1		4		82				<0.2		4.8	
						4.1	0.2	132	28.7		8.0		20.8		83.4		5.8		11.2		4		81				<0.2		5.3	
					Bottom	7.2	0.1	93	28.5	28.5	8.0	8.0	23.5	23.5	80.9	81.1	5.5	5.5	16.5		6		83				<0.2		4.8	
						7.2	0.1	96	28.5		8.0		23.5		81.2		5.5		16.2		6		82				<0.2		4.7	
IM8	Cloudy	Moderate	12:24	8.0	Surface	1.0	0.3	181	28.7	28.7	7.9	7.9	18.3	18.3	79.6	79.7	5.6	5.4	9.0	12.4	2	4	78	81	821822	808124	<0.2	<0.2	4.0	3.4
						1.0	0.3	185	28.8		7.9		18.4		79.7		5.6		8.6		3		78				<0.2		4.1	
					Middle	4.0	0.3	161	28.6	28.6	8.0	8.0	20.9	20.9	74.9	74.9	5.2		12.6		4		81				<0.2		2.8	
						4.0	0.3	165	28.6		8.0		20.9		74.9		5.2		12.5		3		80				<0.2		3.3	
					Bottom	7.0	0.2	119	28.6	28.6	8.0	8.0	21.5	21.5	75.5	75.5	5.2	5.2	16.0		6		83				<0.2		3.3	
						7.0	0.2	119	28.6		8.0		21.5		75.5		5.2		15.6		6		83				<0.2		2.6	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 12 June 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	12:16	6.9	Surface	1.0	0.5	168	28.8	28.8	7.9	7.9	14.8	14.8	85.0	84.9	6.0	5.6	7.8	13.5	4	4	78	81	822123	808834	<0.2	<0.2	3.9	3.4
						1.0	0.5	174	28.8		7.9		14.7		84.8		6.0		7.9		3		78				<0.2		3.9	
					Middle	3.5	0.4	133	28.6	28.6	8.0	8.0	21.8	21.8	73.8	73.8	5.1		14.8		4		81				<0.2		4.2	
						3.5	0.5	139	28.6		8.0		21.8		73.8		5.1		14.8		3		81				<0.2		3.8	
					Bottom	5.9	0.3	103	28.6	28.6	8.0	8.0	22.3	22.3	74.8	74.8	5.1	5.1	17.8		6		83				<0.2		2.3	
						5.9	0.3	108	28.6		8.0		22.3		74.8		5.1		17.8		6		83				<0.2		2.3	
IM10	Cloudy	Moderate	12:09	7.5	Surface	1.0	0.5	144	28.8	28.8	7.9	7.9	16.2	16.1	78.6	78.6	5.6	5.3	9.4	14.7	3	3	79	81	822363	809822	<0.2	<0.2	3.7	3.7
						1.0	0.6	157	28.8		7.9		16.1		78.6		5.6		9.5		4		78				<0.2		3.9	
					Middle	3.8	0.5	139	28.5	28.5	8.0	8.0	22.1	22.1	73.5	73.5	5.0		14.3		3		81				<0.2		4.1	
						3.8	0.5	140	28.5		8.0		22.0		73.5		5.0		14.2		2		81				<0.2		3.9	
					Bottom	6.5	0.3	92	28.5	28.5	8.0	8.0	22.5	22.5	75.0	75.1	5.1	5.1	20.3		4		83				<0.2		3.0	
						6.5	0.3	92	28.5		8.0		22.5		75.1		5.1		20.2		4		82				<0.2		3.3	
IM11	Cloudy	Moderate	11:55	7.4	Surface	1.0	0.6	116	28.8	28.8	7.9	7.9	16.1	16.1	81.7	81.7	5.8	5.5	8.0	14.1	3	3	79	81	822065	811433	<0.2	<0.2	3.9	3.7
						1.0	0.6	118	28.8		7.9		16.2		81.7		5.8		8.1		3		78				<0.2		4.0	
					Middle	3.7	0.5	96	28.6	28.6	8.0	8.0	21.6	21.6	75.5	75.5	5.2		16.2		3		81				<0.2		3.9	
						3.7	0.5	98	28.6		8.0		21.6		75.5		5.2		16.2		3		81				<0.2		3.9	
					Bottom	6.4	0.2	60	28.6	28.6	8.0	8.0	22.0	22.0	76.3	76.4	5.2	5.2	18.0		3		83				<0.2		3.0	
						6.4	0.3	63	28.6		8.0		22.0		76.4		5.2		18.2		4		83				<0.2		3.2	
IM12	Cloudy	Moderate	11:45	8.7	Surface	1.0	0.5	88	28.7	28.7	7.9	7.9	14.3	14.3	89.7	89.7	6.4	5.9	7.8	12.6	4	4	79	81	821468	812034	<0.2	<0.2	4.0	4.3
						1.0	0.5	94	28.7		7.9		14.3		89.6		6.4		7.9		3		78				<0.2		4.2	
					Middle	4.4	0.4	80	28.7	28.7	8.0	8.0	20.4	20.5	77.7	77.8	5.4		11.5		2		81				<0.2		4.3	
						4.4	0.5	81	28.7		8.0		20.6		77.8		5.4		11.2		4		81				<0.2		4.4	
					Bottom	7.7	0.4	75	28.7	28.7	8.0	8.0	21.5	21.5	77.9	77.9	5.4	5.4	18.7		4		83				<0.2		4.2	
						7.7	0.4	76	28.7		8.0		21.5		77.9		5.4		18.7		4		83				<0.2		4.6	
SR2	Cloudy	Moderate	11:16	4.4	Surface	1.0	0.4	86	28.8	28.8	8.0	8.0	17.7	17.7	84.0	84.0	5.9	5.9	8.7	10.1	3	4	79	80	821463	814187	<0.2	<0.2	3.6	3.7
						1.0	0.5	89	28.8		8.0		17.8		84.0		5.9		8.7		4		78				<0.2		3.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	66	28.6	28.6	8.0	8.0	20.0	20.0	81.5	81.6	5.7	5.7	11.5		4		81				<0.2		4.1	
						3.4	0.3	66	28.6		8.0		20.0		81.7		5.7		11.6		3		81				<0.2		3.8	
SR3	Cloudy	Moderate	12:30	8.8	Surface	1.0	0.6	176	28.9	28.9	7.9	7.9	15.6	15.5	84.0	83.9	5.9	5.6	6.5	11.5	4	3	-	-	822123	807574	-	-	-	-
						1.0	0.6	180	28.9		7.9		15.5		83.8		5.9		6.5		3		-				-		-	
					Middle	4.4	0.3	151	28.6	28.6	8.0	8.0	21.2	21.1	75.3	75.4	5.2		10.7		4		-				-		-	
						4.4	0.3	160	28.6		8.0		21.1		75.4		5.2		10.7		2		-				-		-	
					Bottom	7.8	0.2	218	28.5	28.5	8.1	8.1	23.5	23.5	76.9	76.9	5.2	5.2	16.9		3		-				-		-	
						7.8	0.2	238	28.5		8.1		23.6		76.9		5.2		17.4		4		-				-		-	
SR4A	Cloudy	Calm	12:11	9.4	Surface	1.0	0.1	100	28.8	28.8	8.2	8.2	20.5	20.5	85.1	85.1	5.9	5.6	9.6	13.5	3	3	-	-	817212	807814	-	-	-	-
						1.0	0.1	105	28.8		8.2		20.5		85.1		5.9		9.6		2		-				-		-	
					Middle	4.7	0.1	44	28.3	28.3	8.2	8.2	27.9	27.9	77.5	77.5	5.2		13.3		4		-				-		-	
						4.7	0.2	44	28.3		8.2		27.9		77.5		5.2		13.3		3		-				-		-	
					Bottom	8.4	0.1	72	28.3	28.3	8.2	8.2	28.1	28.1	77.5	77.5	5.2	5.2	17.7		4		-				-		-	
						8.4	0.1	78	28.3		8.2		28.1		77.5		5.2		17.7		4		-				-		-	
SR5A	Cloudy	Calm	11:54	3.9	Surface	1.0	0.1	344	29.1	29.1	8.1	8.1	19.3	19.3	94.7	94.7	6.5	6.5	7.7	7.8	4	5	-	-	816617	810721	-	-	-	-
						1.0	0.1	316	29.1		8.1		19.3		94.7		6.5		7.7		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	113	29.1	29.1	8.1	8.1	20.7	20.7	97.4	97.4	6.7	6.7	7.9		5		-				-		-	
						2.9	0.0	115	29.1		8.1		20.7		97.4		6.7		7.9		6		-				-		-	
SR6	Cloudy	Calm	11:26	4.5	Surface	1.0	0.1	37	29.1	29.1	8.2	8.2	18.9	18.9	104.5	104.5	7.2	7.2	7.8	9.2	4	5	-	-	817882	814685	-	-	-	-
						1.0	0.1	39	29.1		8.2		18.9		104.5		7.2		7.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	59	28.7	28.7	7.9	7.9	21.6	21.5	73.1	74.6	5.0	5.1	10.6		5		-				-		-	
						3.5	0.1	60	28.7		7.9		21.4		76.1		5.2		10.4		6		-				-		-	
SR7	Cloudy	Moderate	10:11	18.7	Surface	1.0	0.4	86	28.3	28.3	8.1	8.1	24.9	24.9	87.4	87.4	5.9	5.8	5.1	6.0	3	3	-	-	823637	823728	-	-	-	-
						1.0	0.5	94	28.3		8.1		24.9		87.4		5.9		5.1		2		-				-		-	
					Middle	9.4	0.3	77	28.1	28.1	8.1	8.1	27.9	27.9	85.0	85.0	5.7		5.8		2		-				-		-	
						9.4	0.3	83	28.1		8.1		27.9		85.0		5.7		5.8		3		-				-		-	
					Bottom	17.7	0.3	51	28.0	28.0	8.1	8.1	29.0	29.0	84.6	84.6	5.6	5.6	7.0		3		-				-		-	
						17.7	0.3	51	28.0		8.1		29.0		84.6		5.6		7.0		3		-				-		-	
SR8	Cloudy	Moderate	11:34	4.1	Surface	1.0	-	-	28.7	28.7	8.1	8.1	17.9	17.9	88.0	88.0	6.2	6.2	7.8	8.6	2	3	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.7		8.1		17.9		88.0		6.2		7.9		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	28.7	28.7	8.1	8.1	19.6	19.6	87.8	87.9	6.1	6.1	9.2		5		-				-		-	
						3.1	-	-	28.7		8.1		19.6		87.9		6.1		9.3		3		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 June 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	17:55	8.6	Surface	1.0	0.5	14	28.6	28.6	8.1	8.1	18.3	18.3	87.6	87.6	6.1	5.7	10.9	15.9	5	6	78	81	815618	804220	<0.2	<0.2	3.0	3.1
						1.0	0.6	14	28.6		8.1		18.3		87.6		6.1		10.9		5		79				<0.2		3.0	
					Middle	4.3	0.5	18	28.5	28.5	8.2	8.2	24.4	24.4	78.8	78.8	5.3		15.9		6		82				<0.2		3.2	
						4.3	0.6	18	28.5		8.2		24.4		78.8		5.3		15.9		6		82				<0.2		3.2	
					Bottom	7.6	0.4	19	28.5	28.5	8.2	8.2	25.3	25.3	86.6	86.6	5.8	5.8	21.0		5		83				<0.2		3.0	
						7.6	0.4	19	28.5		8.2		25.3		86.6		5.8		21.0		6		83				<0.2		2.9	
C2	Rainy	Moderate	16:48	11.1	Surface	1.0	0.7	182	28.5	28.5	7.7	7.7	11.9	11.9	62.4	63.0	4.5	4.6	13.1	17.4	4	8	79	81	825679	806967	<0.2	<0.2	5.2	4.3
						1.0	0.7	194	28.5		7.7		11.8		63.5		4.6		13.4		6		79				<0.2		5.1	
					Middle	5.6	0.1	237	28.4	28.4	7.9	7.9	21.5	21.5	66.0	65.6	4.6		17.2		6		81				<0.2		4.8	
						5.6	0.1	246	28.4		7.9		21.5		65.1		4.5		17.6		6		81				<0.2		4.9	
					Bottom	10.1	0.3	305	28.3	28.3	7.9	7.9	22.2	22.2	64.8	64.8	4.5	4.5	21.4		12		83				<0.2		2.8	
						10.1	0.3	315	28.3		7.9		22.2		64.8		4.5		21.4		11		83				<0.2		2.8	
C3	Rainy	Moderate	18:36	11.8	Surface	1.0	0.3	233	28.5	28.5	8.0	8.0	21.2	21.2	81.6	81.4	5.6	5.6	7.3	10.1	4	4	79	81	822104	817817	<0.2	<0.2	2.5	2.3
						1.0	0.3	245	28.5		8.0		21.2		81.2		5.6		7.5		4		79				<0.2		2.7	
					Middle	5.9	0.2	251	28.3	28.3	8.1	8.1	24.1	24.1	80.2	80.2	5.5		8.5		4		81				<0.2		2.6	
						5.9	0.2	271	28.3		8.1		24.1		80.1		5.5		9.1		3		81				<0.2		2.4	
					Bottom	10.8	0.4	288	28.2	28.2	8.1	8.1	26.3	26.3	79.4	79.4	5.4	5.4	14.0		4		83				<0.2		2.0	
						10.8	0.4	300	28.2		8.1		26.3		79.4		5.4		14.1		5		83				<0.2		1.7	
IM1	Cloudy	Moderate	17:33	4.7	Surface	1.0	0.4	25	28.7	28.7	8.2	8.2	21.1	21.1	97.6	97.6	6.7	6.7	16.9	18.4	8	8	78	81	817925	807156	<0.2	<0.2	2.6	2.6
						1.0	0.5	25	28.7		8.2		21.1		97.6		6.7		16.9		7		79				<0.2		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	32	28.7	28.7	8.2	8.2	22.5	22.5	105.6	105.6	7.2	7.2	19.8		8		83				<0.2		2.5	
						3.7	0.3	34	28.7		8.2		22.5		105.6		7.2		19.8		8		83				<0.2		2.6	
IM2	Cloudy	Moderate	17:26	6.8	Surface	1.0	0.1	334	28.6	28.6	8.2	8.2	19.5	19.5	92.9	92.9	6.5	6.2	11.4	15.9	7	7	78	81	818161	806159	<0.2	<0.2	2.5	2.6
						1.0	0.1	339	28.6		8.2		19.5		92.9		6.5		11.4		8		79				<0.2		2.6	
					Middle	3.4	0.2	0	28.6	28.6	8.2	8.2	21.4	21.4	84.9	84.9	5.8		16.6		7		82				<0.2		2.6	
						3.4	0.2	0	28.6		8.2		21.4		84.9		5.8		16.6		8		81				<0.2		2.7	
					Bottom	5.8	0.3	1	28.5	28.5	8.2	8.2	26.3	26.3	83.2	83.2	5.6	5.6	19.6		7		83				<0.2		2.7	
						5.8	0.3	1	28.5		8.2		26.3		83.2		5.6		19.6		6		83				<0.2		2.6	
IM3	Cloudy	Moderate	17:19	7.0	Surface	1.0	0.3	341	28.6	28.6	8.1	8.1	17.3	17.3	81.5	81.5	5.7	5.6	10.7	12.9	7	8	78	81	818771	805566	<0.2	<0.2	4.0	4.0
						1.0	0.3	348	28.6		8.1		17.3		81.5		5.7		10.7		7		79				<0.2		4.0	
					Middle	3.5	0.4	8	28.6	28.6	8.2	8.2	20.8	20.8	80.2	80.2	5.5		11.3		8		81				<0.2		3.9	4.0
						3.5	0.4	8	28.6		8.2		20.8		80.2		5.5		11.3		7		82				<0.2		4.0	
					Bottom	6.0	0.4	48	28.6	28.6	8.1	8.1	25.1	25.1	82.6	82.6	5.6	5.6	16.6		10		84				<0.2		4.3	
						6.0	0.4	51	28.6		8.1		25.1		82.6		5.6		16.6		11		84				<0.2		3.9	
IM4	Cloudy	Moderate	17:09	7.1	Surface	1.0	0.5	307	28.6	28.6	7.9	7.9	14.6	14.6	76.3	76.3	5.5	5.5	19.0	20.1	6	6	78	81	819720	804603	<0.2	<0.2	3.9	3.8
						1.0	0.5	335	28.6		7.9		14.6		76.3		5.5		19.0		5		79				<0.2		3.9	
					Middle	3.6	0.3	1	28.6	28.6	8.0	8.0	18.0	18.0	77.4	77.4	5.4		19.2		5		81				<0.2		3.8	3.8
						3.6	0.3	1	28.6		8.0		18.0		77.4		5.4		19.2		5		82				<0.2		3.7	
					Bottom	6.1	0.2	354	28.6	28.6	8.0	8.0	20.7	20.7	87.3	87.3	6.0	6.0	22.0		6		84				<0.2		3.6	
						6.1	0.2	326	28.6		8.0		20.7		87.3		6.0		22.0		6		83				<0.2		3.8	
IM5	Cloudy	Moderate	17:01	6.1	Surface	1.0	0.7	303	28.6	28.6	7.8	7.8	13.5	13.5	77.6	77.6	5.6	5.5	12.0	16.1	4	4	77	81	820720	804840	<0.2	<0.2	3.8	3.8
						1.0	0.7	322	28.6		7.8		13.5		77.6		5.6		12.0		5		77				<0.2		3.8	
					Middle	3.1	0.5	318	28.6	28.6	7.8	7.8	14.1	14.1	74.9	74.9	5.4		16.8		4		81				<0.2		4.4	3.8
						3.1	0.5	324	28.6		7.8		14.1		74.9		5.4		16.8		4		82				<0.2		3.6	
					Bottom	5.1	0.3	323	28.6	28.6	7.9	7.9	17.9	17.9	79.7	79.7	5.6	5.6	19.4		4		84				<0.2		3.8	
						5.1	0.3	331	28.6		7.9		17.9		79.7		5.6		19.4		4		84				<0.2		3.6	
IM6	Cloudy	Moderate	16:56	6.1	Surface	1.0	0.9	286	28.6	28.6	7.8	7.8	12.4	12.4	79.2	79.2	5.7	5.5	9.9	13.5	5	6	78	81	821078	805815	<0.2	<0.2	4.2	**4.3**
						1.0	0.9	295	28.6		7.8		12.4		79.2		5.7		9.9		5		77				<0.2		4.3	
					Middle	3.1	0.6	299	28.6	28.6	7.9	7.9	15.9	15.9	72.8	72.8	5.2		14.2		5		82				<0.2		4.5	
						3.1	0.6	319	28.6		7.9		15.9		72.8		5.2		14.2		5		81				<0.2		4.3	
					Bottom	5.1	0.4	294	28.6	28.6	7.9	7.9	16.9	16.9	74.8	74.8	5.3	5.3	16.5		7		83				<0.2		4.5	
						5.1	0.5	299	28.6		7.9		16.9		74.8		5.3		16.5		6		83				<0.2		4.2	
IM7	Cloudy	Moderate	16:48	7.2	Surface	1.0	0.9	265	28.7	28.7	7.9	7.9	12.8	12.8	79.1	79.1	5.7	5.3	9.4	10.4	6	6	77	80	821330	806861	<0.2	<0.2	4.2	**4.3**
						1.0	0.9	268	28.7		7.9		12.8		79.1		5.7		9.4		6		77				<0.2		4.3	
					Middle	3.6	0.6	275	28.6	28.6	7.9	7.9	16.7	16.7	69.4	69.4	4.9		9.7		4		81				<0.2		4.3	
						3.6	0.6	287	28.6		7.9		16.7		69.4		4.9		9.7		5		80				<0.2		4.5	
					Bottom	6.2	0.5	288	28.6	28.6	7.9	7.9	17.9	17.9	72.1	72.2	5.1	5.1	12.0		5		83				<0.2		4.3	
						6.2	0.5	294	28.6		7.9		17.9		72.2		5.1		12.0		7		84				<0.2		4.4	
IM8	Cloudy	Moderate	17:11	7.9	Surface	1.0	0.3	179	28.7	28.7	7.8	7.8	12.4	12.4	84.0	83.9	6.1	5.5	10.4	15.5	4	6	79	81	821837	808136	<0.2	<0.2	3.8	3.7
						1.0	0.3	194	28.7		7.8		12.4		83.7		6.0		10.5		5		79				<0.2		3.7	
					Middle	4.0	0.2	201	28.6	28.6	7.8	7.8	17.2	17.2	71.1	71.1	5.0		16.8		5		81				<0.2		3.6	
						4.0	0.2	213	28.6		7.8		17.2		71.1		5.0		16.4		5		81				<0.2		3.7	
					Bottom	6.9	0.1	266	28.6	28.6	7.8	7.8	18.3	18.2	71.6	71.7	5.0	5.0	19.3		8		83				<0.2		3.6	
						6.9	0.1	292	28.6		7.8		18.2		71.7		5.0		19.6		8		84				<0.2		3.9	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 12 June 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	17:18	6.8	Surface	1.0	0.2	194	28.7	28.7	7.8	7.8	13.1	13.0	81.8	78.8	5.9	5.4	9.5	9.9	5	5	79	81	822068	808805	<0.2	<0.2	3.6	3.6
						1.0	0.2	198	28.8		7.8		13.0		75.7		5.4		9.3		6		79				<0.2		3.6	
					Middle	3.4	0.1	208	28.7	28.7	7.8	7.8	15.8	16.6	73.1	73.0	5.2		9.3		4		81				<0.2		3.8	
						3.4	0.1	217	28.8		7.8		17.5		72.9		5.1		9.9		6		81				<0.2		3.7	
					Bottom	5.8	0.1	311	28.7	28.7	7.8	7.8	18.0	18.0	72.9	76.9	5.1	5.4	11.3		6		83				<0.2		3.5	
						5.8	0.1	316	28.7		7.8		18.0		80.9		5.7		10.0		5		83				<0.2		3.4	
IM10	Cloudy	Moderate	17:27	7.0	Surface	1.0	0.2	246	28.7	28.7	7.9	7.9	15.9	15.9	83.6	83.6	5.9	5.5	8.2	14.6	3	4	79	81	822402	809787	<0.2	<0.2	3.2	3.1
						1.0	0.2	253	28.7		7.9		15.9		83.5		5.9		8.3		4		79				<0.2		3.3	
					Middle	3.5	0.1	303	28.7	28.7	7.9	7.9	18.1	17.8	73.4	72.7	5.1		14.8		3		81				<0.2		3.3	
						3.5	0.2	304	28.7		7.9		17.5		71.9		5.1		16.1		3		81				<0.2		3.1	
					Bottom	6.0	0.1	318	28.6	28.6	7.8	7.8	18.9	18.9	71.1	71.1	5.0	5.0	20.1		6		83				<0.2		3.0	
						6.0	0.1	334	28.6		7.8		18.9		71.1		5.0		20.1		4		83				<0.2		2.9	
IM11	Cloudy	Moderate	17:40	7.6	Surface	1.0	0.3	336	28.5	28.5	7.9	7.9	16.9	16.9	78.2	78.1	5.5	5.4	9.4	12.2	6	7	79	81	822047	811438	<0.2	<0.2	2.8	2.6
						1.0	0.3	334	28.5		7.9		16.9		78.0		5.5		9.5		4		79				<0.2		2.8	
					Middle	3.8	0.3	322	28.6	28.6	7.9	7.9	20.2	20.2	75.7	75.7	5.2		12.4		8		81				<0.2		2.9	
						3.8	0.3	348	28.6		7.9		20.2		75.7		5.2		12.6		6		81				<0.2		2.8	
					Bottom	6.6	0.2	227	28.4	28.4	8.0	8.0	22.3	22.3	72.9	72.9	5.0	5.0	14.7		11		84				<0.2		2.3	
						6.6	0.3	235	28.4		8.0		22.3		72.9		5.0		14.8		9		83				<0.2		2.2	
IM12	Cloudy	Moderate	17:50	8.5	Surface	1.0	0.3	314	28.7	28.7	8.1	8.1	19.5	19.5	100.9	100.9	7.0	6.5	10.8	13.8	12	13	79	81	821439	812069	<0.2	<0.2	2.2	2.1
						1.0	0.3	332	28.7		8.1		19.5		100.8		7.0		10.4		10		79				<0.2		2.1	
					Middle	4.3	0.4	265	28.6	28.5	8.0	8.0	21.0	21.0	85.7	85.7	5.9		13.2		14		81				<0.2		2.3	
						4.3	0.4	271	28.5		8.0		21.0		85.6		5.9		13.6		14		81				<0.2		2.1	
					Bottom	7.5	0.2	238	28.5	28.5	8.0	8.0	21.6	21.6	85.6	85.6	5.9	5.9	17.3		12		83				<0.2		2.0	
						7.5	0.2	260	28.5		8.0		21.6		85.6		5.9		17.5		13		83				<0.2		2.0	
SR2	Rainy	Moderate	18:11	4.5	Surface	1.0	0.1	166	28.5	28.5	8.0	8.0	20.3	20.3	78.3	78.3	5.4	5.4	12.1	17.1	7	7	79	80	821471	814139	<0.2	<0.2	2.3	2.4
						1.0	0.1	168	28.5		8.0		20.3		78.2		5.4		12.1		6		79				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	316	28.4	28.4	8.0	8.0	22.0	22.1	77.4	77.7	5.3	5.4	22.2		8		81				<0.2		2.4	
						3.5	0.1	316	28.4		8.0		22.2		78.0		5.4		22.1		8		81				<0.2		2.4	
SR3	Cloudy	Moderate	17:04	8.8	Surface	1.0	0.5	177	28.7	28.7	7.8	7.8	12.7	12.7	75.5	75.4	5.4	5.4	10.8	12.6	4	6	-	-	822158	807562	-	-	-	-
						1.0	0.5	184	28.7		7.8		12.7		75.2		5.4		10.8		6		-				-		-	
					Middle	4.4	0.2	203	28.7	28.7	7.7	7.7	14.2	14.2	75.0	75.1	5.4		11.7		5		-				-		-	
						4.4	0.2	217	28.7		7.7		14.1		75.1		5.4		11.6		6		-				-		-	
					Bottom	7.8	0.3	248	28.5	28.5	7.8	7.8	18.5	18.6	65.9	66.1	4.6	4.6	15.2		7		-				-		-	
						7.8	0.3	250	28.5		7.8		18.6		66.2		4.6		15.4		8		-				-		-	
SR4A	Rainy	Moderate	18:15	8.0	Surface	1.0	0.2	235	28.9	28.9	8.2	8.2	21.1	21.1	92.0	92.0	6.3	6.2	11.9	13.2	6	7	-	-	817206	807830	-	-	-	-
						1.0	0.2	243	28.9		8.2		21.1		92.0		6.3		11.9		5		-				-		-	
					Middle	4.0	0.1	241	28.9	28.9	8.2	8.2	21.4	21.4	87.8	87.8	6.0		12.8		6		-				-		-	
						4.0	0.1	262	28.9		8.2		21.4		87.8		6.0		12.8		7		-				-		-	
					Bottom	7.0	0.1	99	28.8	28.8	8.1	8.1	23.3	23.3	84.8	84.8	5.8	5.8	14.8		7		-				-		-	
						7.0	0.1	104	28.8		8.1		23.3		84.8		5.8		14.8		9		-				-		-	
SR5A	Rainy	Calm	18:32	4.8	Surface	1.0	0.3	261	28.8	28.8	8.2	8.2	20.9	20.9	96.4	96.4	6.6	6.6	11.1	11.4	5	5	-	-	816583	810710	-	-	-	-
						1.0	0.3	265	28.8		8.2		20.9		96.4		6.6		11.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	293	28.8	28.8	8.1	8.1	21.8	21.8	101.5	101.5	7.0	7.0	11.7		5		-				-		-	
						3.8	0.2	305	28.8		8.1		21.8		101.5		7.0		11.7		6		-				-		-	
SR6	Rainy	Calm	18:58	3.6	Surface	1.0	0.1	171	28.6	28.6	8.1	8.1	19.7	19.7	84.4	84.4	5.9	5.9	10.8	12.1	3	3	-	-	817869	814674	-	-	-	-
						1.0	0.1	176	28.6		8.1		19.7		84.4		5.9		10.8		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	242	28.6	28.6	8.1	8.1	20.4	20.4	83.8	83.8	5.8	5.8	13.1		4		-				-		-	
						2.6	0.1	252	28.6		8.1		20.4		83.8		5.8		13.5		3		-				-		-	
SR7	Rainy	Moderate	19:10	18.5	Surface	1.0	0.2	62	28.3	28.3	8.1	8.1	24.8	24.8	81.5	81.5	5.5	5.4	8.9	13.3	4	3	-	-	823656	823743	-	-	-	-
						1.0	0.2	65	28.3		8.1		24.8		81.4		5.5		8.9		2		-				-		-	
					Middle	9.3	0.2	248	28.2	28.2	8.1	8.1	26.7	26.7	79.0	79.1	5.3		13.4		3		-				-		-	
						9.3	0.2	259	28.2		8.1		26.6		79.1		5.3		13.4		3		-				-		-	
					Bottom	17.5	0.1	93	28.1	28.1	8.1	8.1	26.9	27.2	81.1	81.2	5.5	5.5	17.4		4		-				-		-	
						17.5	0.1	99	28.1		8.1		27.6		81.3		5.5		17.6		4		-				-		-	
SR8	Cloudy	Moderate	17:56	3.9	Surface	1.0	-	-	28.7	28.7	8.1	8.1	18.4	18.4	99.9	99.9	7.0	7.0	8.2	8.7	4	4	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.7		8.1		18.4		99.8		7.0		8.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	28.7	28.7	8.1	8.1	19.3	19.3	98.9	99.0	6.9	6.9	9.1		3		-				-		-	
						2.9	-	-	28.7		8.1		19.3		99.0		6.9		9.1		4		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 June 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	Calm	13:35	8.8	Surface	1.0	0.8	215	28.3	28.3	8.0	8.0	21.5	21.5	84.9	84.9	5.9	5.5	1.2	9.3	3	4	79	81	815644	804220	<0.2	<0.2	1.9	1.7
						1.0	0.8	231	28.3		8.0		21.5		84.8		5.9		1.3		3		79				<0.2		1.9	
					Middle	4.4	0.8	217	28.0	28.0	8.0	8.0	27.6	27.6	75.3	75.3	5.1		6.4		5		80				<0.2		1.5	
						4.4	0.8	226	28.0		8.0		27.6		75.2		5.1		6.1		3		80				<0.2		1.3	
					Bottom	7.8	0.6	222	28.0	28.0	8.0	8.0	28.2	28.2	75.4	75.5	5.1	5.1	20.6		4		83				<0.2		1.8	
						7.8	0.6	235	28.0		8.0		28.2		75.6		5.1		20.4		4		83				<0.2		1.8	
C2	Cloudy	Moderate	14:33	11.5	Surface	1.0	1.2	163	28.5	28.5	7.9	7.9	16.2	16.2	76.8	76.8	5.5	5.3	10.3	14.7	7	6	78	80	825681	806931	<0.2	<0.2	3.0	3.1
						1.0	1.3	173	28.5		7.9		16.2		76.8		5.5		10.3		6		78				<0.2		3.2	
					Middle	5.8	0.6	143	28.3	28.3	8.1	8.1	21.1	21.1	73.5	73.5	5.1		15.2		6		80				<0.2		3.9	
						5.8	0.7	146	28.3		8.1		21.1		73.5		5.1		15.3		5		80				<0.2		3.4	
					Bottom	10.5	0.4	112	28.3	28.3	8.1	8.1	22.9	22.9	73.8	73.8	5.1	5.1	18.4		7		82				<0.2		2.6	
						10.5	0.4	121	28.3		8.1		22.9		73.8		5.1		18.8		7		83				<0.2		2.4	
C3	Cloudy	Moderate	12:17	12.7	Surface	1.0	0.4	79	28.3	28.3	8.1	8.1	23.7	23.7	80.3	80.3	5.5	5.4	8.9	9.3	10	9	79	81	822128	817823	<0.2	<0.2	2.0	1.7
						1.0	0.4	82	28.3		8.1		23.7		80.3		5.5		8.8		9		79				<0.2		1.7	
					Middle	6.4	0.2	271	28.2	28.2	8.1	8.1	25.7	25.7	77.5	77.5	5.2		9.4		10		81				<0.2		1.4	
						6.4	0.3	279	28.2		8.1		25.7		77.5		5.2		9.4		10		81				<0.2		1.6	
					Bottom	11.7	0.2	102	28.2	28.2	8.1	8.1	26.0	26.0	77.9	78.1	5.3	5.3	9.6		9		83				<0.2		1.7	
						11.7	0.2	110	28.2		8.2		26.1		78.2		5.3		9.6		8		83				<0.2		1.5	
IM1	Cloudy	Moderate	13:59	4.9	Surface	1.0	0.1	187	28.2	28.2	8.0	8.0	25.4	25.4	72.2	72.2	4.9	4.9	3.4	8.1	4	6	78	80	817970	807142	<0.2	<0.2	1.7	1.9
						1.0	0.1	193	28.2		8.0		25.4		72.2		4.9		3.4		5		78				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	177	28.1	28.1	8.0	8.0	27.6	27.6	73.4	73.6	4.9	4.9	12.8		7		81				<0.2		1.9	
						3.9	0.1	179	28.1		8.0		27.5		73.8		4.9		12.8		9		82				<0.2		2.0	
IM2	Cloudy	Moderate	14:07	7.3	Surface	1.0	0.9	198	28.3	28.3	8.0	8.0	21.8	21.8	79.4	79.4	5.5	5.2	2.6	7.2	5	6	79	81	818151	806184	<0.2	<0.2	1.9	1.7
						1.0	0.9	200	28.3		8.0		21.8		79.3		5.5		2.7		6		79				<0.2		1.6	
					Middle	3.7	0.8	193	28.1	28.1	8.0	8.0	26.0	26.0	73.0	73.0	4.9		4.2		5		81				<0.2		1.9	
						3.7	0.9	200	28.1		8.0		26.0		73.0		4.9		4.3		5		81				<0.2		1.9	
					Bottom	6.3	0.6	196	28.0	28.0	8.0	8.0	26.8	26.8	71.9	72.0	4.9	4.9	14.7		7		83				<0.2		1.2	
						6.3	0.6	214	28.0		8.0		26.8		72.0		4.9		14.8		7		83				<0.2		1.7	
IM3	Cloudy	Moderate	14:15	7.2	Surface	1.0	0.8	216	28.5	28.5	7.9	7.9	19.6	19.6	79.8	79.7	5.6	5.4	4.2	8.8	6	7	79	81	818811	805567	<0.2	<0.2	1.9	1.7
						1.0	0.9	217	28.5		7.9		19.6		79.6		5.5		4.2		5		79				<0.2		1.6	
					Middle	3.6	0.7	212	28.1	28.1	8.0	8.0	23.9	23.8	75.4	75.4	5.2		4.0		7		81				<0.2		1.7	
						3.6	0.8	220	28.1		8.0		23.7		75.3		5.2		3.9		7		81				<0.2		2.1	
					Bottom	6.2	0.6	214	28.1	28.1	8.0	8.0	26.9	26.9	75.3	75.5	5.1	5.1	18.3		7		83				<0.2		1.0	
						6.2	0.6	235	28.1		8.0		26.9		75.6		5.1		18.3		7		83				<0.2		1.6	
IM4	Cloudy	Moderate	14:26	7.3	Surface	1.0	1.2	210	28.4	28.4	7.9	7.9	17.6	17.6	83.7	83.7	5.9	5.7	3.1	8.6	5	4	79	81	819743	804626	<0.2	<0.2	2.1	1.9
						1.0	1.3	222	28.4		7.9		17.6		83.6		5.9		3.1		5		80				<0.2		2.0	
					Middle	3.7	1.1	212	28.3	28.3	7.9	7.9	19.3	19.3	78.1	78.1	5.5		3.4		4		81				<0.2		2.2	
						3.7	1.1	220	28.3		7.9		19.3		78.1		5.5		3.4		4		81				<0.2		1.4	
					Bottom	6.3	0.7	208	28.2	28.2	7.9	7.9	22.4	22.4	79.2	79.5	5.5	5.5	19.2		4		83				<0.2		1.9	
						6.3	0.8	210	28.2		7.9		22.3		79.7		5.5		19.1		4		83				<0.2		1.6	
IM5	Cloudy	Moderate	14:37	6.2	Surface	1.0	1.3	207	28.3	28.3	7.9	7.9	18.9	19.0	73.0	72.9	5.1	5.1	6.6	12.6	5	5	78	81	820706	804839	<0.2	<0.2	2.0	2.1
						1.0	1.4	212	28.3		7.9		19.0		72.8		5.1		6.6		4		79				<0.2		2.0	
					Middle	3.1	1.0	215	28.1	28.1	7.9	7.9	22.9	22.9	72.1	72.2	5.0		14.7		4		81				<0.2		2.0	
						3.1	1.0	234	28.1		7.9		22.8		72.2		5.0		14.5		6		81				<0.2		2.1	
					Bottom	5.2	0.8	215	28.1	28.1	7.9	7.9	23.8	23.8	73.9	74.0	5.1	5.1	16.7		6		83				<0.2		1.9	
						5.2	0.8	225	28.1		7.9		23.8		74.0		5.1		16.3		5		83				<0.2		2.3	
IM6	Cloudy	Moderate	14:47	6.3	Surface	1.0	0.8	222	28.4	28.4	7.9	7.9	20.2	20.3	74.1	74.0	5.2	5.0	4.8	10.8	3	6	79	81	821042	805822	<0.2	<0.2	2.1	2.3
						1.0	0.8	232	28.4		7.9		20.3		73.9		5.1		4.9		5		79				<0.2		2.2	
					Middle	3.2	0.8	229	28.2	28.2	7.9	7.9	21.7	21.7	70.8	70.9	4.9		6.9		6		81				<0.2		2.4	
						3.2	0.9	242	28.2		7.9		21.7		70.9		4.9		6.9		7		81				<0.2		2.2	
					Bottom	5.3	0.7	235	28.1	28.1	7.9	7.9	22.9	22.9	71.8	71.9	4.9	5.0	20.8		6		83				<0.2		2.4	
						5.3	0.7	241	28.1		7.9		23.0		72.0		5.0		20.7		8		84				<0.2		2.2	
IM7	Cloudy	Moderate	14:56	7.8	Surface	1.0	1.0	231	28.4	28.4	7.8	7.8	19.2	19.2	72.3	72.3	5.1	5.1	6.4	14.2	6	7	79	81	821348	806859	<0.2	<0.2	2.6	2.5
						1.0	1.1	237	28.4		7.8		19.2		72.3		5.1		6.7		7		79				<0.2		2.3	
					Middle	3.9	1.0	234	28.3	28.3	7.8	7.8	20.1	20.1	72.0	72.1	5.0		12.6		7		81				<0.2		2.4	
						3.9	1.1	243	28.3		7.8		20.1		72.1		5.0		12.8		6		82				<0.2		2.5	
					Bottom	6.8	0.8	244	28.3	28.3	7.8	7.8	20.1	20.1	74.3	74.4	5.2	5.2	23.3		7		83				<0.2		2.6	
						6.8	0.9	257	28.3		7.8		20.1		74.4		5.2		23.6		6		83				<0.2		2.3	
IM8	Cloudy	Moderate	13:58	8.2	Surface	1.0	0.4	169	28.5	28.5	8.0	8.0	19.6	19.6	76.0	76.0	5.3	5.3	10.6	11.5	4	5	79	81	821802	808163	<0.2	<0.2	2.4	2.2
						1.0	0.4	178	28.5		8.0		19.6		76.0		5.3		10.7		4		78				<0.2		2.0	
					Middle	4.1	0.3	142	28.3	28.3	8.1	8.1	20.6	20.6	75.2	75.1	5.2		11.5		5		81				<0.2		2.4	
						4.1	0.4	152	28.3		8.1		20.7		75.0		5.2		11.5		5		81				<0.2		2.2	
					Bottom	7.2	0.2	105	28.2	28.2	8.1	8.1	21.7	21.7	75.5	75.6	5.2	5.2	12.4		5		83				<0.2		1.9	
						7.2	0.2	106	28.2		8.1		21.7		75.6		5.2		12.4		4		83				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 June 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	13:49	7.8	Surface	1.0	0.5	175	28.3	28.3	8.0	8.0	19.2	19.1	73.7	73.7	5.2	5.2	11.4	12.7	4	5	78	81	822117	808787	<0.2	<0.2	2.6	2.4
						1.0	0.5	180	28.3		8.0		19.1		73.7		5.2		11.3		4		79				<0.2		1.9	
					Middle	3.9	0.4	154	28.2	28.2	8.1	8.1	21.3	21.4	74.8	74.8	5.2		12.7		5		81				<0.2		1.6	
						3.9	0.4	155	28.2		8.1		21.5		74.7		5.2		13.0		4		81				<0.2		2.1	
					Bottom	6.8	0.3	127	28.2	28.2	8.1	8.1	22.7	22.7	74.7	74.8	5.1	5.1	13.8		5		83				<0.2		3.0	
						6.8	0.3	127	28.2		8.1		22.8		74.8		5.1		14.0		5		83				<0.2		3.0	
IM10	Cloudy	Moderate	13:44	7.5	Surface	1.0	0.5	155	28.3	28.3	8.0	8.0	19.1	19.1	74.0	74.0	5.2	5.2	11.3	14.2	6	5	79	81	822403	809765	<0.2	<0.2	2.6	2.6
						1.0	0.6	162	28.3		8.0		19.1		74.0		5.2		11.3		4		78				<0.2		2.9	
					Middle	3.8	0.5	141	28.2	28.2	8.1	8.1	21.4	21.4	74.7	74.8	5.2		12.6		5		81				<0.2		2.8	
						3.8	0.5	141	28.2		8.1		21.5		74.8		5.2		12.6		5		81				<0.2		2.5	
					Bottom	6.5	0.3	98	28.2	28.2	8.1	8.1	22.6	22.5	77.3	77.8	5.3	5.4	18.7		4		83				<0.2		2.5	
						6.5	0.3	100	28.2		8.1		22.4		78.2		5.4		18.9		4		83				<0.2		2.2	
IM11	Cloudy	Moderate	13:35	7.8	Surface	1.0	0.5	126	28.3	28.3	8.0	8.0	19.2	19.0	74.1	74.4	5.2	5.2	11.4	14.7	4	5	78	81	822036	811454	<0.2	<0.2	2.4	2.4
						1.0	0.5	134	28.3		8.0		18.9		74.6		5.2		11.5		5		79				<0.2		2.2	
					Middle	3.9	0.5	102	28.2	28.2	8.1	8.1	21.3	21.3	75.0	75.0	5.2		12.8		5		81				<0.2		2.4	
						3.9	0.5	104	28.2		8.1		21.3		75.0		5.2		13.1		4		81				<0.2		2.2	
					Bottom	6.8	0.3	66	28.2	28.2	8.1	8.1	22.4	22.4	80.3	80.4	5.5	5.5	19.6		5		83				<0.2		2.4	
						6.8	0.3	68	28.2		8.1		22.5		80.5		5.5		19.7		5		83				<0.2		2.7	
IM12	Cloudy	Moderate	13:26	8.8	Surface	1.0	0.4	92	28.3	28.3	8.0	8.0	18.9	18.9	89.9	91.0	6.3	5.9	12.3	14.3	5	5	79	81	821452	812048	<0.2	<0.2	2.6	2.4
						1.0	0.4	98	28.3		8.0		18.9		92.0		6.5		12.2		5		79				<0.2		2.3	
					Middle	4.4	0.4	77	28.2	28.2	8.1	8.1	21.7	21.7	76.2	76.2	5.3		14.2		5		81				<0.2		2.0	
						4.4	0.4	84	28.2		8.1		21.6		76.2		5.3		14.4		4		81				<0.2		2.0	
					Bottom	7.8	0.4	65	28.1	28.1	8.1	8.1	22.9	22.9	73.2	73.2	5.0	5.0	16.4		6		83				<0.2		2.6	
						7.8	0.4	69	28.1		8.1		22.9		73.2		5.0		16.3		6		83				<0.2		2.6	
SR2	Cloudy	Moderate	12:44	4.8	Surface	1.0	0.4	90	28.2	28.2	8.1	8.1	19.0	19.0	83.2	82.2	5.8	5.8	9.0	14.2	3	4	79	80	821451	814169	<0.2	<0.2	2.2	2.1
						1.0	0.4	95	28.2		8.1		19.0		81.1		5.7		10.3		3		79				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	63	28.2	28.2	8.1	8.1	21.4	21.5	77.4	77.4	5.4	5.4	18.6		6		81				<0.2		2.0	
						3.8	0.3	68	28.2		8.1		21.6		77.4		5.4		19.0		4		81				<0.2		1.9	
SR3	Cloudy	Moderate	14:06	9.7	Surface	1.0	0.7	162	28.6	28.6	8.0	8.0	17.8	17.8	78.8	78.6	5.5	5.4	9.4	13.2	4	5	-	-	822169	807581	-	-	-	-
						1.0	0.7	170	28.7		8.0		17.8		78.4		5.5		10.0		5		-				-		-	
					Middle	4.9	0.2	144	28.3	28.2	8.1	8.1	21.3	21.5	75.5	75.4	5.2		13.8		4		-				-		-	
						4.9	0.3	157	28.2		8.1		21.6		75.2		5.2		13.6		5		-				-		-	
					Bottom	8.7	0.2	205	28.2	28.2	8.1	8.1	23.6	23.6	75.3	75.4	5.2	5.2	16.4		7		-				-		-	
						8.7	0.2	210	28.2		8.1		23.6		75.4		5.2		16.0		6		-				-		-	
SR4A	Cloudy	Calm	13:16	9.5	Surface	1.0	0.1	69	28.3	28.3	7.9	7.9	23.2	23.2	73.1	73.1	5.0	4.8	3.1	10.5	6	6	-	-	817188	807821	-	-	-	-
						1.0	0.1	71	28.3		7.9		23.2		73.1		5.0		3.1		6		-				-		-	
					Middle	4.8	0.3	75	28.0	28.0	7.9	7.9	27.6	27.6	67.3	67.3	4.5		13.5		6		-				-		-	
						4.8	0.3	75	28.0		7.9		27.6		67.3		4.5		14.0		6		-				-		-	
					Bottom	8.5	0.2	59	28.0	28.0	7.9	7.9	27.7	27.7	68.9	69.0	4.6	4.6	14.9		6		-				-		-	
						8.5	0.2	64	28.0		7.9		27.7		69.0		4.6		14.6		5		-				-		-	
SR5A	Cloudy	Calm	12:59	5.0	Surface	1.0	0.1	13	28.2	28.2	7.8	7.8	19.2	19.1	74.0	74.1	5.2	5.2	4.7	6.6	5	5	-	-	816573	810722	-	-	-	-
						1.0	0.1	13	28.2		7.8		19.1		74.1		5.2		4.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	34	28.0	28.0	7.9	7.9	23.1	23.1	71.1	71.2	4.9	4.9	8.3		6		-				-		-	
						4.0	0.1	35	28.0		7.9		23.2		71.3		4.9		8.5		5		-				-		-	
SR6	Cloudy	Calm	12:34	5.1	Surface	1.0	0.2	75	28.1	28.1	7.8	7.8	18.8	18.9	77.6	77.6	5.5	5.5	4.0	5.3	4	5	-	-	817925	814687	-	-	-	-
						1.0	0.2	77	28.1		7.8		18.9		77.5		5.5		4.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	50	28.1	28.1	7.8	7.8	19.1	19.1	72.2	72.2	5.1	5.1	6.3		5		-				-		-	
						4.1	0.1	54	28.1		7.8		19.1		72.1		5.1		6.8		4		-				-		-	
SR7	Cloudy	Moderate	11:40	18.8	Surface	1.0	0.4	80	28.2	28.2	8.1	8.1	23.0	23.3	81.3	81.3	5.6	5.5	7.7	8.0	4	4	-	-	823620	823749	-	-	-	-
						1.0	0.4	84	28.2		8.1		23.6		81.2		5.6		7.7		4		-				-		-	
					Middle	9.4	0.3	71	28.1	28.1	8.2	8.2	28.0	28.0	79.7	79.7	5.3		7.9		4		-				-		-	
						9.4	0.4	74	28.1		8.2		28.0		79.7		5.3		7.9		5		-				-		-	
					Bottom	17.8	0.2	55	28.1	28.1	8.2	8.2	28.4	28.4	79.5	79.5	5.3	5.3	8.4		4		-				-		-	
						17.8	0.2	58	28.1		8.2		28.4		79.5		5.3		8.4		3		-				-		-	
SR8	Cloudy	Moderate	12:56	4.0	Surface	1.0	-	-	28.3	28.3	8.1	8.1	19.1	19.1	82.8	82.9	5.8	5.8	9.9	10.6	5	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.3		8.1		19.1		82.9		5.8		9.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	28.3	28.3	8.1	8.1	19.6	19.5	84.5	85.0	5.9	6.0	11.0		9		-				-		-	
						3.0	-	-	28.3		8.1		19.5		85.5		6.0		11.4		8		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 June 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	19:42	8.0	Surface	1.0	0.3	51	28.3	28.3	7.9	7.9	20.6	20.6	71.7	71.7	5.0	5.0	10.9	14.1	14	14	79	81	815648	804221	<0.2	<0.2	2.2	2.4
						1.0	0.3	51	28.3		7.9		20.6		71.7		5.0		11.0		14		79				<0.2		2.1	
					Middle	4.0	0.4	39	28.3	28.3	7.9	7.9	22.6	22.6	73.2	73.2	5.0		12.6		14		81				<0.2		2.2	
						4.0	0.4	40	28.3		7.9		22.6		73.2		5.0		12.7		13		82				<0.2		2.3	
					Bottom	7.0	0.4	47	28.2	28.2	7.9	7.9	24.5	24.5	74.0	74.1	5.0	5.1	18.6		13		83				<0.2		2.8	
						7.0	0.4	51	28.2		7.9		24.5		74.2		5.1		18.9		13		84				<0.2		2.9	
C2	Cloudy	Moderate	18:38	12.7	Surface	1.0	0.6	194	28.4	28.4	7.8	7.8	14.7	14.7	64.2	64.2	4.6	4.7	16.8	21.1	9	9	80	82	825688	806971	<0.2	<0.2	3.2	3.6
						1.0	0.7	211	28.4		7.8		14.7		64.2		4.6		16.9		8		79				<0.2		3.2	
					Middle	6.4	0.2	211	28.3	28.3	8.0	8.0	21.4	21.4	69.8	69.8	4.8		21.7		9		81				<0.2		3.8	
						6.4	0.2	225	28.3		8.0		21.4		69.8		4.8		21.7		7		82				<0.2		3.9	
					Bottom	11.7	0.2	290	28.3	28.3	8.0	8.0	22.0	22.0	70.5	70.6	4.9	4.9	24.5		11		83				<0.2		3.7	
						11.7	0.2	298	28.3		8.0		22.0		70.6		4.9		24.7		12		84				<0.2		3.8	
C3	Cloudy	Moderate	20:12	12.4	Surface	1.0	0.2	221	28.3	28.3	8.1	8.1	22.7	22.7	76.5	76.5	5.3	5.3	11.0	17.6	6	6	79	81	822101	817812	<0.2	<0.2	2.0	2.0
						1.0	0.3	242	28.3		8.1		22.7		76.5		5.3		11.0		5		79				<0.2		1.9	
					Middle	6.2	0.2	243	28.2	28.2	8.1	8.1	26.0	26.0	76.4	76.5	5.2		14.1		6		81				<0.2		1.9	
						6.2	0.3	249	28.2		8.1		26.0		76.5		5.2		14.2		5		81				<0.2		2.1	
					Bottom	11.4	0.4	280	28.2	28.2	8.1	8.1	26.5	26.5	76.6	76.6	5.2	5.2	27.6		5		83				<0.2		2.0	
						11.4	0.4	284	28.2		8.1		26.5		76.6		5.2		27.9		7		83				<0.2		1.9	
IM1	Cloudy	Moderate	19:22	4.7	Surface	1.0	0.3	15	28.3	28.3	7.9	7.9	22.1	22.1	73.8	73.9	5.1	5.1	13.6	15.1	12	13	80	81	817937	807158	<0.2	<0.2	2.4	2.7
						1.0	0.3	15	28.3		7.9		22.2		73.9		5.1		13.9		13		79				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	13	28.3	28.3	7.9	7.9	22.4	22.4	74.8	74.9	5.2	5.2	16.4		14		81				<0.2		2.5	
						3.7	0.4	13	28.3		7.9		22.4		75.0		5.2		16.3		13		82				<0.2		2.8	
IM2	Cloudy	Moderate	19:15	6.9	Surface	1.0	0.2	98	28.4	28.4	7.9	7.9	19.0	19.0	72.1	72.1	5.0	5.1	10.5	11.8	13	14	79	81	818146	806136	<0.2	<0.2	2.7	2.8
						1.0	0.2	106	28.4		7.9		19.0		72.1		5.1		10.6		14		79				<0.2		2.9	
					Middle	3.5	0.2	13	28.3	28.3	7.9	7.9	21.0	21.0	73.5	73.6	5.1		11.5		13		81				<0.2		2.7	
						3.5	0.2	13	28.3		7.9		21.0		73.6		5.1		11.7		14		82				<0.2		2.9	
					Bottom	5.9	0.3	341	28.3	28.3	7.9	7.9	22.1	22.1	75.3	75.4	5.2	5.2	13.6		13		83				<0.2		2.5	
						5.9	0.3	314	28.3		7.9		22.1		75.5		5.2		13.2		14		83				<0.2		2.8	
IM3	Cloudy	Moderate	19:08	7.0	Surface	1.0	0.2	6	28.4	28.4	7.9	7.9	18.0	18.0	70.4	70.5	5.0	5.0	11.2	13.0	9	9	77	79	818756	805565	<0.2	<0.2	3.1	3.1
						1.0	0.2	6	28.4		7.9		18.0		70.5		5.0		11.3		9		77				<0.2		2.9	
					Middle	3.5	0.3	3	28.4	28.4	7.9	7.9	20.1	20.1	70.9	71.0	4.9		11.9		7		79				<0.2		3.1	
						3.5	0.3	3	28.4		7.9		20.1		71.0		4.9		12.1		8		79				<0.2		3.1	
					Bottom	6.0	0.5	13	28.3	28.3	7.9	7.9	20.7	20.7	72.8	72.9	5.1	5.1	15.6		10		81				<0.2		3.2	
						6.0	0.5	13	28.3		7.9		20.8		73.0		5.1		16.0		9		81				<0.2		3.0	
IM4	Cloudy	Moderate	18:58	6.7	Surface	1.0	0.4	333	28.4	28.4	7.7	7.7	17.6	17.6	69.6	69.6	4.9	5.0	11.1	11.7	12	13	78	81	819735	804587	<0.2	<0.2	2.5	2.8
						1.0	0.4	334	28.4		7.7		17.7		69.6		4.9		11.3		13		79				<0.2		2.1	
					Middle	3.4	0.4	337	28.4	28.4	7.7	7.7	17.9	17.9	70.4	70.5	5.0		12.5		13		81				<0.2		3.1	
						3.4	0.4	350	28.4		7.7		17.9		70.5		5.0		12.5		14		81				<0.2		3.0	
					Bottom	5.7	0.3	5	28.3	28.3	7.7	7.7	18.3	18.3	72.7	73.0	5.1	5.2	11.3		14		83				<0.2		3.0	
						5.7	0.3	5	28.2		7.7		18.3		73.2		5.2		11.6		13		83				<0.2		3.0	
IM5	Cloudy	Moderate	18:50	6.2	Surface	1.0	0.5	302	28.3	28.3	7.7	7.7	16.4	16.4	67.3	67.4	4.8	4.9	11.7	11.5	15	14	76	80	820727	804850	<0.2	<0.2	3.2	3.1
						1.0	0.5	329	28.3		7.7		16.4		67.4		4.8		11.7		15		76				<0.2		3.1	
					Middle	3.1	0.4	306	28.3	28.3	7.7	7.7	16.4	16.4	68.9	69.0	4.9		10.3		13		80				<0.2		3.0	
						3.1	0.4	313	28.3		7.7		16.4		69.0		4.9		10.2		14		80				<0.2		2.6	
					Bottom	5.2	0.4	307	28.2	28.2	7.7	7.7	16.4	16.5	70.3	70.5	5.0	5.0	12.3		14		84				<0.2		3.1	
						5.2	0.4	312	28.2		7.7		16.5		70.6		5.0		12.7		15		84				<0.2		3.3	
IM6	Cloudy	Moderate	18:42	6.0	Surface	1.0	0.5	284	28.3	28.3	7.6	7.6	16.1	16.1	64.3	64.4	4.6	4.7	10.8	13.1	11	12	78	81	821047	805810	<0.2	<0.2	3.0	3.1
						1.0	0.6	288	28.3		7.6		16.1		64.4		4.6		10.9		11		78				<0.2		2.9	
					Middle	3.0	0.5	282	28.3	28.3	7.6	7.6	16.2	16.2	65.7	65.9	4.7		13.3		11		81				<0.2		3.0	
						3.0	0.5	308	28.3		7.6		16.2		66.0		4.7		13.5		13		81				<0.2		3.1	
					Bottom	5.0	0.5	290	28.3	28.3	7.7	7.7	16.3	16.3	67.3	67.4	4.8	4.8	15.6		13		83				<0.2		3.2	
						5.0	0.5	298	28.3		7.7		16.3		67.5		4.8		14.7		13		83				<0.2		3.3	
IM7	Cloudy	Moderate	18:38	7.3	Surface	1.0	0.4	236	27.9	27.9	7.6	7.6	16.0	16.0	67.5	68.0	4.8	4.7	8.7	10.1	10	10	78	81	821372	806815	<0.2	<0.2	3.3	3.3
						1.0	0.5	254	27.9		7.6		16.0		68.4		4.9		8.6		10		78				<0.2		3.2	
					Middle	3.7	0.5	239	28.2	28.2	7.6	7.6	16.0	16.0	63.4	63.5	4.5		10.7		9		80				<0.2		3.4	
						3.7	0.5	256	28.2		7.6		16.0		63.6		4.5		10.7		9		81				<0.2		3.3	
					Bottom	6.3	0.3	227	28.3	28.3	7.6	7.6	16.1	16.1	65.4	65.5	4.7	4.7	10.9		11		83				<0.2		3.2	
						6.3	0.3	236	28.3		7.6		16.1		65.5		4.7		10.9		12		83				<0.2		3.1	
IM8	Cloudy	Moderate	19:00	8.0	Surface	1.0	0.3	184	28.4	28.4	7.9	7.9	15.7	15.7	71.5	71.6	5.1	5.1	15.7	17.6	7	9	79	82	821859	808118	<0.2	<0.2	2.9	3.4
						1.0	0.3	190	28.4		7.9		15.7		71.6		5.1		15.7		8		79				<0.2		3.0	
					Middle	4.0	0.3	205	28.5	28.5	7.9	7.9	15.9	15.9	72.2	72.2	5.1		18.0		8		81				<0.2		3.6	
						4.0	0.3	220	28.5		7.9		15.9		72.2		5.1		18.1		9		82				<0.2		3.8	
					Bottom	7.0	0.2	247	28.5	28.5	7.9	7.9	16.3	16.3	73.6	73.6	5.2	5.2	19.0		12		84				<0.2		3.4	
						7.0	0.2	252	28.5		7.9		16.3		73.6		5.2		19.2		12		84				<0.2		3.5	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 14 June 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	19:06	7.9	Surface	1.0	0.2	199	28.5	28.5	7.8	7.8	14.9	14.9	70.3	70.4	5.0	5.1	13.9	17.8	7	8	80	82	822082	808783	<0.2	<0.2	3.4	3.6
						1.0	0.2	218	28.5		7.8		14.9		70.4		5.0		14.1		7		79				<0.2		3.4	
					Middle	4.0	0.1	202	28.5	28.5	7.8	7.8	15.8	15.8	71.7	71.7	5.1		18.7		7		81				<0.2		3.6	
						4.0	0.1	214	28.5		7.8		15.8		71.7		5.1		18.8		8		82				<0.2		3.6	
					Bottom	6.9	0.1	309	28.5	28.5	7.9	7.9	16.1	16.0	72.1	72.1	5.1	5.1	20.6		8		84				<0.2		3.6	
						6.9	0.1	332	28.5		7.9		16.0		72.1		5.1		20.8		9		84				<0.2		3.7	
IM10	Cloudy	Moderate	19:13	8.1	Surface	1.0	0.2	255	28.5	28.5	7.8	7.8	16.0	16.0	72.7	72.8	5.2	5.2	13.7	20.8	7	9	80	82	822414	809792	<0.2	<0.2	3.1	3.0
						1.0	0.2	275	28.5		7.8		16.0		72.8		5.2		13.9		7		79				<0.2		3.0	
					Middle	4.1	0.1	303	28.5	28.5	7.9	7.9	17.2	17.2	71.9	71.9	5.1		22.3		9		82				<0.2		3.1	
						4.1	0.2	321	28.5		7.9		17.2		71.9		5.1		22.4		10		81				<0.2		2.6	
					Bottom	7.1	0.1	297	28.5	28.5	7.9	7.9	17.4	17.4	72.3	72.4	5.1	5.1	26.3		8		84				<0.2		3.2	
						7.1	0.1	322	28.5		7.9		17.4		72.4		5.1		26.4		10		84				<0.2		3.1	
IM11	Cloudy	Moderate	19:24	8.2	Surface	1.0	0.3	342	28.5	28.5	8.0	8.0	18.4	18.4	76.7	76.7	5.4	5.2	13.5	20.1	8	10	80	82	822086	811473	<0.2	<0.2	2.7	2.4
						1.0	0.3	315	28.5		8.0		18.4		76.6		5.4		13.8		9		79				<0.2		2.4	
					Middle	4.1	0.3	320	28.4	28.4	8.0	8.0	21.1	21.1	72.4	72.5	5.0		21.4		11		82				<0.2		2.0	
						4.1	0.3	324	28.4		8.0		21.0		72.5		5.0		21.4		11		81				<0.2		1.9	
					Bottom	7.2	0.2	211	28.3	28.3	8.0	8.0	23.3	23.3	71.6	71.6	4.9	4.9	25.2		9		84				<0.2		2.6	
						7.2	0.2	221	28.3		8.0		23.3		71.6		4.9		25.1		10		84				<0.2		2.7	
IM12	Cloudy	Moderate	19:33	8.5	Surface	1.0	0.3	306	28.4	28.4	8.0	8.0	18.2	18.2	79.7	79.7	5.6	5.6	11.0	17.3	8	7	80	82	821481	812050	<0.2	<0.2	2.7	2.3
						1.0	0.3	309	28.4		8.0		18.2		79.7		5.6		11.0		7		79				<0.2		2.8	
					Middle	4.3	0.4	252	28.4	28.4	8.0	8.0	20.1	20.1	79.9	79.9	5.6		13.2		7		82				<0.2		2.8	
						4.3	0.4	262	28.4		8.0		20.2		79.9		5.6		13.3		6		82				<0.2		2.2	
					Bottom	7.5	0.2	227	28.3	28.3	8.0	8.0	21.1	21.1	78.5	78.6	5.4	5.4	27.5		6		84				<0.2		1.6	
						7.5	0.2	237	28.3		8.0		21.1		78.6		5.4		27.5		8		84				<0.2		1.6	
SR2	Cloudy	Moderate	19:51	5.3	Surface	1.0	0.1	152	28.3	28.3	8.0	8.0	20.9	20.9	76.2	76.2	5.3	5.3	11.2	19.7	6	7	79	81	821489	814136	<0.2	<0.2	1.6	1.9
						1.0	0.2	152	28.3		8.0		20.9		76.1		5.3		11.3		6		79				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	304	28.3	28.2	8.1	8.1	24.1	23.1	78.1	79.0	5.3	5.4	28.1		7		82				<0.2		1.9	
						4.3	0.1	330	28.2		8.1		22.0		79.8		5.5		28.3		7		82				<0.2		1.9	
SR3	Cloudy	Moderate	18:53	9.1	Surface	1.0	0.4	163	28.4	28.4	7.8	7.8	15.0	15.1	65.1	65.3	4.7	4.8	12.9	16.1	8	8	-	-	822174	807590	-	-	-	-
						1.0	0.5	175	28.4		7.8		15.2		65.5		4.7		13.1		9		-				-		-	
					Middle	4.6	0.2	216	28.3	28.3	7.9	7.9	17.6	17.6	67.3	67.3	4.8		15.4		9		-				-		-	
						4.6	0.3	227	28.3		7.9		17.6		67.3		4.8		15.4		8		-				-		-	
					Bottom	8.1	0.2	233	28.4	28.4	7.9	7.9	18.2	18.2	69.6	69.7	4.9	4.9	19.7		8		-				-		-	
						8.1	0.2	254	28.4		7.9		18.2		69.7		4.9		20.3		7		-				-		-	
SR4A	Cloudy	Calm	20:02	8.9	Surface	1.0	0.0	311	28.3	28.3	7.9	7.9	21.2	21.2	73.4	73.4	5.1	5.1	10.5	11.7	10	12	-	-	817167	807819	-	-	-	-
						1.0	0.0	311	28.3		7.9		21.2		73.3		5.1		10.6		11		-				-		-	
					Middle	4.5	0.1	224	28.3	28.3	7.8	7.8	21.2	21.2	73.3	73.3	5.1		11.4		11		-				-		-	
						4.5	0.1	228	28.3		7.8		21.2		73.3		5.1		11.6		11		-				-		-	
					Bottom	7.9	0.0	238	28.3	28.3	7.8	7.8	21.3	21.3	75.7	76.0	5.2	5.3	12.9		13		-				-		-	
						7.9	0.0	261	28.3		7.8		21.3		76.2		5.3		13.0		14		-				-		-	
SR5A	Cloudy	Calm	20:20	5.2	Surface	1.0	0.3	314	28.3	28.3	7.9	7.9	20.1	20.1	77.0	77.0	5.4	5.4	7.3	7.7	8	9	-	-	816604	810682	-	-	-	-
						1.0	0.3	333	28.3		7.9		20.1		76.9		5.4		7.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	302	28.3	28.3	7.9	7.9	20.4	20.4	78.4	78.6	5.5	5.5	8.2		10		-				-		-	
						4.2	0.2	315	28.3		7.9		20.4		78.8		5.5		8.1		11		-				-		-	
SR6	Cloudy	Calm	20:45	4.2	Surface	1.0	0.1	245	28.2	28.2	7.8	7.8	19.9	19.9	74.5	74.6	5.2	5.2	6.1	6.9	8	9	-	-	817916	814661	-	-	-	-
						1.0	0.1	246	28.2		7.8		19.9		74.6		5.2		6.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	254	28.3	28.3	7.9	7.8	20.1	20.1	77.0	77.2	5.4	5.4	7.8		9		-				-		-	
						3.2	0.1	258	28.3		7.8		20.1		77.3		5.4		7.7		9		-				-		-	
SR7	Cloudy	Moderate	20:45	18.4	Surface	1.0	0.2	76	28.2	28.2	8.1	8.1	25.4	25.4	77.1	77.1	5.2	5.2	12.1	15.2	7	8	-	-	823652	823745	-	-	-	-
						1.0	0.2	77	28.2		8.1		25.4		77.1		5.2		12.2		7		-				-		-	
					Middle	9.2	0.2	233	28.1	28.1	8.2	8.2	27.2	27.2	76.1	76.1	5.1		14.3		8		-				-		-	
						9.2	0.2	252	28.1		8.2		27.2		76.0		5.1		14.4		7		-				-		-	
					Bottom	17.4	0.1	101	28.1	28.1	8.2	8.2	28.2	28.2	77.4	77.4	5.2	5.2	19.0		8		-				-		-	
						17.4	0.1	109	28.1		8.2		28.2		77.4		5.2		18.9		8		-				-		-	
SR8	Cloudy	Moderate	19:39	3.7	Surface	1.0	-	-	28.3	28.3	8.1	8.1	20.8	20.8	79.4	79.4	5.5	5.5	18.8	21.1	16	17	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.3		8.1		20.8		79.4		5.5		18.9		16		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	28.4	28.4	8.1	8.1	21.4	21.4	78.9	78.9	5.5	5.5	23.3		16		-				-		-	
						2.7	-	-	28.4		8.1		21.4		78.9		5.5		23.4		18		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 June 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:06	9.1	Surface	1.0	0.8	235	28.5	28.5	8.1	8.1	23.3	23.3	81.6	81.6	5.6	5.5	12.2	17.1	7	7	82	83	815621	804238	<0.2	<0.2	1.8	1.9
						1.0	0.8	236	28.5		8.1		23.4		81.6		5.6		12.2		8		81				<0.2		1.8	
					Middle	4.6	0.7	226	28.5	28.5	8.1	8.1	23.7	23.6	79.6	79.6	5.4		16.2		7		83				<0.2		2.1	
						4.6	0.8	245	28.5		8.1		23.6		79.6		5.4		16.2		6		84				<0.2		1.9	
					Bottom	8.1	0.0	211	28.2	28.2	8.1	8.1	25.0	25.0	75.5	75.6	5.1	5.1	22.9		8		85				<0.2		2.0	
						8.1	0.0	231	28.2		8.1		25.0		75.6		5.1		22.6		8		85				<0.2		1.9	
C2	Fine	Moderate	13:12	11.8	Surface	1.0	0.2	175	28.6	28.6	8.0	8.0	20.9	20.9	78.6	78.6	5.4	5.3	10.0	14.3	7	7	81	83	825689	806973	<0.2	<0.2	2.6	2.8
						1.0	0.2	180	28.6		8.0		20.9		78.6		5.4		10.1		6		81				<0.2		3.3	
					Middle	5.9	0.4	160	28.3	28.3	8.1	8.1	23.2	23.2	74.3	74.3	5.1		16.5		7		83				<0.2		2.9	
						5.9	0.5	165	28.3		8.1		23.2		74.2		5.1		16.5		7		83				<0.2		2.7	
					Bottom	10.8	0.3	147	28.2	28.2	8.1	8.1	25.7	25.7	74.3	74.3	5.0	5.0	16.3		8		85				<0.2		2.5	
						10.8	0.3	161	28.2		8.1		25.7		74.3		5.0		16.3		9		85				<0.2		2.6	
C3	Fine	Moderate	14:49	11.8	Surface	1.0	0.4	69	28.5	28.5	8.1	8.1	24.6	24.6	81.9	81.9	5.5	5.4	10.7	15.1	3	12	81	84	822093	817773	<0.2	<0.2	2.0	1.8
						1.0	0.5	72	28.5		8.1		24.6		81.8		5.5		10.7		4		81				<0.2		2.1	
					Middle	5.9	0.4	80	28.4	28.4	8.1	8.1	25.4	25.4	79.2	79.2	5.4		14.4		12		84				<0.2		2.0	
						5.9	0.4	86	28.4		8.1		25.4		79.1		5.3		14.4		13		84				<0.2		2.1	
					Bottom	10.8	0.4	54	28.1	28.1	8.1	8.1	26.6	26.6	78.1	78.2	5.3	5.3	20.0		18		86				<0.2		1.3	
						10.8	0.4	54	28.1		8.1		26.6		78.2		5.3		20.2		19		85				<0.2		1.2	
IM1	Fine	Moderate	13:48	5.4	Surface	1.0	0.1	199	28.6	28.6	8.1	8.1	23.1	23.1	83.3	83.3	5.7	5.7	10.8	13.8	4	5	82	83	817941	807161	<0.2	<0.2	1.8	1.9
						1.0	0.1	203	28.6		8.1		23.1		83.2		5.7		10.9		5		81				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	152	28.4	28.4	8.1	8.1	24.8	24.8	79.8	79.8	5.4	5.4	16.6		4		83				<0.2		1.8	
						4.4	0.1	155	28.4		8.1		24.8		79.8		5.4		16.7		5		84				<0.2		2.0	
IM2	Fine	Moderate	13:43	7.8	Surface	1.0	0.8	186	28.6	28.6	8.1	8.1	23.3	23.3	84.2	84.2	5.7	5.7	10.7	15.0	6	6	81	83	818144	806171	<0.2	<0.2	1.9	1.8
						1.0	0.9	196	28.6		8.1		23.3		84.2		5.7		10.7		5		81				<0.2		1.8	
					Middle	3.9	0.8	172	28.5	28.5	8.1	8.1	23.5	23.5	82.2	82.2	5.6		13.3		5		83				<0.2		2.0	
						3.9	0.8	173	28.5		8.1		23.5		82.2		5.6		13.4		4		84				<0.2		1.7	
					Bottom	6.8	0.6	149	28.3	28.3	8.1	8.1	25.0	25.0	81.3	81.3	5.5	5.5	20.9		6		85				<0.2		1.8	
						6.8	0.6	153	28.3		8.1		25.0		81.3		5.5		20.7		8		85				<0.2		1.7	
IM3	Fine	Moderate	13:37	8.1	Surface	1.0	0.8	234	28.6	28.6	8.1	8.1	22.8	22.8	81.6	81.6	5.6	5.6	11.9	16.2	4	5	81	83	818799	805577	<0.2	<0.2	1.8	1.9
						1.0	0.8	249	28.6		8.1		22.8		81.6		5.6		11.9		5		81				<0.2		2.0	
					Middle	4.1	0.7	218	28.5	28.5	8.1	8.1	23.6	23.6	81.0	81.0	5.5		13.7		4		84				<0.2		1.9	
						4.1	0.8	233	28.5		8.1		23.6		81.0		5.5		13.8		5		84				<0.2		1.8	
					Bottom	7.1	0.6	202	28.2	28.2	8.2	8.2	26.1	26.1	80.7	80.7	5.4	5.4	22.7		5		85				<0.2		2.0	
						7.1	0.6	206	28.2		8.2		26.1		80.7		5.4		23.0		7		84				<0.2		2.1	
IM4	Fine	Moderate	13:30	8.4	Surface	1.0	1.2	221	28.7	28.7	8.1	8.1	22.5	22.5	83.8	83.7	5.7	5.6	10.1	15.9	3	4	81	83	819736	804631	<0.2	<0.2	2.4	2.5
						1.0	1.2	242	28.7		8.1		22.5		83.6		5.7		10.2		3		82				<0.2		2.5	
					Middle	4.2	1.1	211	28.4	28.4	8.1	8.1	24.2	24.2	81.0	81.0	5.5		12.8		4		84				<0.2		2.4	
						4.2	1.2	229	28.4		8.1		24.2		80.9		5.5		12.9		3		83				<0.2		2.5	
					Bottom	7.4	0.7	205	28.2	28.2	8.2	8.2	27.3	27.3	80.3	80.4	5.4	5.4	24.6		4		85				<0.2		2.7	
						7.4	0.7	225	28.2		8.2		27.3		80.4		5.4		24.7		5		85				<0.2		2.4	
IM5	Fine	Moderate	13:20	7.6	Surface	1.0	1.3	212	28.7	28.7	8.1	8.1	22.5	22.5	83.9	83.9	5.7	5.6	10.4	14.8	4	5	79	82	820737	804890	<0.2	<0.2	2.4	2.1
						1.0	1.4	232	28.7		8.1		22.5		83.8		5.7		10.4		5		80				<0.2		2.1	
					Middle	3.8	1.0	204	28.4	28.4	8.1	8.1	24.2	24.2	81.4	81.4	5.5		12.8		5		81				<0.2		2.1	
						3.8	1.0	212	28.4		8.1		24.2		81.4		5.5		12.9		6		82				<0.2		2.0	
					Bottom	6.6	0.7	201	28.2	28.2	8.2	8.2	26.9	26.9	81.7	81.8	5.5	5.5	20.9		6		83				<0.2		2.1	
						6.6	0.7	204	28.2		8.2		27.0		81.8		5.5		21.1		6		84				<0.2		2.0	
IM6	Fine	Moderate	13:12	8.0	Surface	1.0	0.8	249	28.7	28.7	8.1	8.1	22.1	22.1	84.9	84.9	5.8	5.7	9.9	10.5	5	5	80	82	821055	805816	<0.2	<0.2	1.9	2.1
						1.0	0.8	255	28.7		8.1		22.1		84.8		5.8		9.9		5		80				<0.2		2.0	
					Middle	4.0	0.8	216	28.4	28.4	8.1	8.1	24.0	24.0	82.5	82.5	5.6		10.4		5		81				<0.2		2.2	
						4.0	0.8	225	28.4		8.1		24.0		82.5		5.6		10.4		5		82				<0.2		1.9	
					Bottom	7.0	0.6	229	28.3	28.3	8.2	8.2	27.3	27.3	82.8	82.9	5.5	5.6	11.3		5		83				<0.2		2.2	
						7.0	0.6	244	28.3		8.2		27.3		83.0		5.6		11.2		5		83				<0.2		2.2	
IM7	Fine	Moderate	13:09	9.4	Surface	1.0	1.3	244	28.7	28.7	8.1	8.1	22.1	22.1	84.8	84.8	5.8	5.8	10.0	10.3	4	5	79	82	821365	806829	<0.2	<0.2	2.1	2.2
						1.0	1.3	254	28.7		8.1		22.1		84.7		5.8		10.0		4		80				<0.2		2.0	
					Middle	4.7	1.0	239	28.4	28.4	8.1	8.1	24.2	24.2	83.2	83.3	5.7		10.2		6		81				<0.2		2.0	
						4.7	1.1	261	28.4		8.1		24.2		83.3		5.7		10.3		6		82				<0.2		2.0	
					Bottom	8.4	0.8	252	28.3	28.3	8.2	8.2	27.2	27.2	83.8	83.9	5.6	5.6	10.7		5		83				<0.2		2.4	
						8.4	0.9	264	28.3		8.2		27.3		83.9		5.6		10.7		6		84				<0.2		2.5	
IM8	Fine	Moderate	13:33	8.9	Surface	1.0	0.2	151	28.7	28.7	8.1	8.1	22.2	22.2	85.7	85.7	5.9	5.8	9.9	12.2	6	7	82	84	821803	808122	<0.2	<0.2	2.7	2.4
						1.0	0.2	156	28.7		8.1		22.2		85.7		5.9		10.0		6		81				<0.2		2.1	
					Middle	4.5	0.3	57	28.4	28.4	8.2	8.2	25.6	25.6	83.4	83.4	5.6		11.3		7		84				<0.2		2.2	
						4.5	0.3	58	28.4		8.2		25.6		83.4		5.6		11.4		7		84				<0.2		2.3	
					Bottom	7.9	0.3	54	28.3	28.3	8.2	8.2	27.5	27.5	83.0	83.0	5.6	5.6	15.1		7		86				<0.2		2.6	
						7.9	0.3	57	28.3		8.2		27.5		83.0		5.6		15.2		7		86				<0.2		2.7	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 16 June 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	13:41	8.3	Surface	1.0	0.2	183	28.6	28.6	8.1	8.1	22.5	22.5	84.4	84.4	5.8	5.7	10.2	14.5	5	5	82	84	822074	808803	<0.2	<0.2	2.3	2.3
						1.0	0.2	194	28.6		8.1		22.5		84.4		5.8		10.3		5		82				<0.2		2.2	
					Middle	4.2	0.3	128	28.4	28.4	8.2	8.2	24.6	24.6	82.4	82.4	5.6		12.6		4		84				<0.2		2.3	
						4.2	0.4	136	28.4		8.2		24.6		82.4		5.6		12.7		5		84				<0.2		2.3	
					Bottom	7.3	0.4	83	28.2	28.2	8.2	8.2	27.3	27.3	82.9	83.0	5.6	5.6	20.5		7		86				<0.2		2.1	
						7.3	0.4	85	28.2		8.2		27.3		83.0		5.6		20.6		5		86				<0.2		2.3	
IM10	Fine	Moderate	13:52	8.4	Surface	1.0	0.6	152	28.5	28.5	8.1	8.1	23.1	23.1	81.5	81.5	5.6	5.6	11.8	16.0	7	10	82	84	822398	809809	<0.2	<0.2	2.7	2.2
						1.0	0.6	152	28.5		8.1		23.1		81.5		5.6		11.8		10		81				<0.2		2.4	
					Middle	4.2	0.6	149	28.4	28.4	8.1	8.1	24.0	24.0	81.8	81.8	5.6		14.0		10		84				<0.2		2.2	
						4.2	0.6	155	28.4		8.1		24.0		81.8		5.6		14.1		11		84				<0.2		2.1	
					Bottom	7.4	0.4	113	28.2	28.2	8.2	8.2	26.3	26.3	83.1	83.2	5.6	5.6	22.1		10		86				<0.2		2.0	
						7.4	0.4	122	28.2		8.2		26.3		83.2		5.6		22.2		12		86				<0.2		2.0	
IM11	Fine	Moderate	14:02	9.1	Surface	1.0	0.6	143	28.6	28.6	8.1	8.1	23.3	23.3	83.9	83.9	5.7	5.7	11.2	17.3	7	8	82	84	822055	811439	<0.2	<0.2	2.0	1.8
						1.0	0.6	153	28.6		8.1		23.3		83.9		5.7		11.2		6		81				<0.2		1.6	
					Middle	4.6	0.6	142	28.4	28.4	8.1	8.1	24.0	24.0	82.1	82.1	5.6		14.9		8		84				<0.2		1.8	
						4.6	0.6	152	28.4		8.1		24.0		82.0		5.6		15.0		10		84				<0.2		1.8	
					Bottom	8.1	0.4	125	28.3	28.3	8.1	8.1	25.3	25.3	82.8	82.9	5.6	5.6	25.6		9		86				<0.2		1.9	
						8.1	0.5	125	28.3		8.1		25.3		82.9		5.6		25.7		9		86				<0.2		1.9	
IM12	Fine	Moderate	14:10	8.4	Surface	1.0	0.6	134	28.6	28.6	8.1	8.1	23.2	23.2	82.9	82.9	5.7	5.5	12.1	17.1	5	17	81	84	821459	812054	<0.2	<0.2	2.0	2.1
						1.0	0.6	144	28.6		8.1		23.2		82.8		5.6		12.2		5		82				<0.2		2.0	
					Middle	4.2	0.6	127	28.4	28.4	8.2	8.2	25.0	25.0	79.3	79.3	5.4		16.4		22		84				<0.2		2.3	
						4.2	0.7	136	28.4		8.2		25.0		79.3		5.4		16.4		22		84				<0.2		2.2	
					Bottom	7.4	0.6	121	28.4	28.4	8.2	8.2	25.8	25.8	79.8	79.8	5.4	5.4	23.0		24		86				<0.2		2.1	
						7.4	0.6	131	28.4		8.2		25.8		79.8		5.4		22.5		24		86				<0.2		1.7	
SR2	Fine	Moderate	14:28	5.6	Surface	1.0	0.4	112	28.6	28.6	8.1	8.1	23.3	23.3	81.6	81.6	5.6	5.6	13.8	18.1	9	9	81	83	821477	814149	<0.2	<0.2	1.6	1.9
						1.0	0.4	117	28.6		8.1		23.3		81.5		5.6		13.9		9		82				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.4	126	28.2	28.2	8.1	8.1	25.0	25.0	75.6	75.7	5.1	5.1	22.4		8		84				<0.2		2.0	
						4.6	0.4	130	28.2		8.1		25.0		75.7		5.1		22.2		9		84				<0.2		1.8	
SR3	Fine	Moderate	13:26	10.0	Surface	1.0	0.3	169	28.7	28.7	8.1	8.1	21.7	21.7	83.1	83.1	5.7	5.6	10.5	12.0	7	8	-	-	822172	807586	-	-	-	-
						1.0	0.3	169	28.7		8.1		21.7		83.1		5.7		10.5		7		-				-		-	
					Middle	5.0	0.1	90	28.4	28.4	8.1	8.1	24.4	24.4	81.0	81.1	5.5		12.3		7		-				-		-	
						5.0	0.1	93	28.4		8.1		24.4		81.1		5.5		12.2		9		-				-		-	
					Bottom	9.0	0.3	52	28.4	28.4	8.2	8.2	26.9	26.9	83.4	83.5	5.6	5.6	13.2		8		-				-		-	
						9.0	0.4	55	28.4		8.2		27.0		83.5		5.6		13.3		9		-				-		-	
SR4A	Fine	Calm	14:29	8.6	Surface	1.0	0.2	77	28.5	28.5	8.1	8.1	23.4	23.4	82.3	82.3	5.6	5.6	11.7	16.2	8	8	-	-	817204	807791	-	-	-	-
						1.0	0.2	79	28.6		8.1		23.4		82.2		5.6		11.7		8		-				-		-	
					Middle	4.3	0.2	70	28.5	28.5	8.1	8.1	23.4	23.4	80.1	80.1	5.5		15.2		8		-				-		-	
						4.3	0.3	74	28.5		8.1		23.4		80.0		5.5		15.4		9		-				-		-	
					Bottom	7.6	0.2	48	28.2	28.2	8.1	8.1	24.9	24.9	77.8	77.9	5.3	5.3	21.7		8		-				-		-	
						7.6	0.2	52	28.2		8.1		24.9		78.0		5.3		21.2		7		-				-		-	
SR5A	Fine	Calm	14:45	5.0	Surface	1.0	0.1	29	28.5	28.5	8.1	8.1	24.8	24.8	82.3	82.3	5.6	5.6	10.3	10.4	7	7	-	-	816565	810720	-	-	-	-
						1.0	0.1	31	28.5		8.1		24.8		82.3		5.6		10.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	47	28.5	28.5	8.1	8.1	24.7	24.7	82.2	82.3	5.6	5.6	10.4		8		-				-		-	
						4.0	0.1	47	28.5		8.1		24.7		82.3		5.6		10.4		6		-				-		-	
SR6	Fine	Calm	15:08	4.3	Surface	1.0	0.2	81	28.5	28.5	8.1	8.1	24.8	24.8	82.0	82.1	5.6	5.6	10.3	10.4	6	6	-	-	817875	814681	-	-	-	-
						1.0	0.2	88	28.5		8.1		24.8		82.1		5.6		10.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	55	28.5	28.5	8.1	8.1	25.0	24.9	82.0	82.0	5.5	5.5	10.5		7		-				-		-	
						3.3	0.2	58	28.5		8.1		24.9		82.0		5.5		10.5		6		-				-		-	
SR7	Fine	Moderate	15:15	18.0	Surface	1.0	0.9	47	28.5	28.5	8.1	8.1	24.1	24.1	82.9	82.9	5.6	5.5	9.2	9.5	5	5	-	-	823623	823757	-	-	-	-
						1.0	0.9	47	28.5		8.1		24.1		82.9		5.6		9.2		4		-				-		-	
					Middle	9.0	0.6	41	28.2	28.2	8.1	8.1	26.3	26.3	79.6	79.7	5.4		9.8		5		-				-		-	
						9.0	0.6	43	28.2		8.1		26.3		79.7		5.4		9.8		5		-				-		-	
					Bottom	17.0	0.5	16	28.2	28.2	8.1	8.1	26.1	26.1	81.4	81.5	5.5	5.5	9.6		6		-				-		-	
						17.0	0.5	16	28.2		8.1		26.1		81.5		5.5		9.6		5		-				-		-	
SR8	Fine	Moderate	14:18	4.3	Surface	1.0	-	-	28.7	28.7	8.2	8.2	23.0	23.0	87.8	87.8	6.0	6.0	10.2	10.5	5	5	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.7		8.2		23.0		87.8		6.0		10.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.7	28.7	8.2	8.2	23.0	23.0	90.3	90.3	6.2	6.2	10.8		6		-				-		-	
						3.3	-	-	28.7		8.2		23.0		90.3		6.2		10.8		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 16 June 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	07:59	8.8	Surface	1.0	0.4	55	28.2	28.2	8.1	8.1	22.9	22.9	76.7	76.7	5.3	5.2	10.0	12.0	5	6	81	83	815648	804276	<0.2	<0.2	2.4	2.4
						1.0	0.4	57	28.2		8.1		22.9		76.7		5.3		10.0		6		82				<0.2		2.3	
					Middle	4.4	0.4	40	28.1	28.1	8.1	8.1	25.4	25.4	75.3	75.3	5.1		11.0		4		84				<0.2		2.4	
						4.4	0.4	40	28.1		8.1		25.4		75.3		5.1		11.1		6		83				<0.2		2.4	
					Bottom	7.8	0.4	44	28.1	28.1	8.1	8.1	27.7	27.7	74.7	74.7	5.0	5.0	15.0		6		85				<0.2		2.5	
						7.8	0.4	45	28.1		8.1		27.7		74.7		5.0		15.1		6		84				<0.2		2.6	
C2	Cloudy	Moderate	09:15	13.3	Surface	1.0	0.5	342	28.2	28.2	8.0	8.0	19.4	19.4	74.7	74.8	5.2	5.1	10.1	16.4	4	5	82	84	825658	806942	<0.2	<0.2	2.7	2.3
						1.0	0.5	355	28.2		8.0		19.4		74.8		5.2		10.1		4		81				<0.2		2.6	
					Middle	6.7	0.5	1	28.3	28.3	8.0	8.0	22.0	22.0	71.9	71.9	5.0		17.5		5		84				<0.2		2.4	
						6.7	0.5	1	28.3		8.0		22.0		71.9		5.0		17.4		5		84				<0.2		2.6	
					Bottom	12.3	0.3	33	28.3	28.3	8.1	8.1	22.8	22.8	72.3	72.4	5.0	5.0	21.6		4		86				<0.2		1.5	
						12.3	0.3	35	28.3		8.1		22.8		72.4		5.0		21.7		5		86				<0.2		1.7	
C3	Cloudy	Moderate	07:33	12.2	Surface	1.0	0.5	272	28.2	28.2	8.1	8.1	22.9	22.9	76.3	76.3	5.3	5.2	9.9	13.1	3	4	81	83	822087	817823	<0.2	<0.2	1.7	1.6
						1.0	0.6	274	28.2		8.1		22.9		76.3		5.2		9.9		5		81				<0.2		1.6	
					Middle	6.1	0.8	269	28.1	28.1	8.2	8.2	27.1	27.1	75.2	75.2	5.1		10.9		4		83				<0.2		1.7	
						6.1	0.8	293	28.1		8.2		27.1		75.2		5.1		10.9		4		84				<0.2		1.6	
					Bottom	11.2	0.6	283	28.1	28.1	8.2	8.2	27.7	27.7	77.6	77.7	5.2	5.2	18.5		4		85				<0.2		1.6	
						11.2	0.6	303	28.1		8.2		27.7		77.7		5.2		18.5		5		85				<0.2		1.6	
IM1	Cloudy	Moderate	08:15	5.5	Surface	1.0	0.4	23	28.1	28.1	8.1	8.1	22.5	22.5	76.2	76.2	5.3	5.3	14.6	15.1	9	9	81	83	817967	807145	<0.2	<0.2	2.3	2.4
						1.0	0.4	23	28.1		8.1		22.5		76.1		5.3		14.7		9		81				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.3	15	28.1	28.1	8.1	8.1	22.9	22.9	76.1	76.1	5.2	5.2	15.5		8		84				<0.2		2.4	
						4.5	0.3	16	28.1		8.1		22.9		76.0		5.2		15.5		8		84				<0.2		2.5	
IM2	Cloudy	Moderate	08:22	8.0	Surface	1.0	0.2	109	28.1	28.1	8.1	8.1	22.9	22.9	75.8	75.8	5.2	5.2	18.2	19.6	11	13	81	83	818143	806177	<0.2	<0.2	2.4	2.4
						1.0	0.2	110	28.1		8.1		22.9		75.8		5.2		18.3		13		81				<0.2		2.4	
					Middle	4.0	0.2	20	28.1	28.1	8.1	8.1	23.1	23.1	75.4	75.5	5.2		20.2		14		83				<0.2		2.4	
						4.0	0.2	20	28.1		8.1		23.1		75.5		5.2		20.3		12		84				<0.2		2.3	
					Bottom	7.0	0.2	319	28.2	28.2	8.1	8.1	23.7	23.7	77.9	78.0	5.3	5.3	20.3		14		85				<0.2		2.3	
						7.0	0.3	347	28.2		8.1		23.7		78.1		5.3		20.2		14		84				<0.2		2.6	
IM3	Cloudy	Moderate	08:29	8.1	Surface	1.0	0.2	9	28.2	28.2	8.1	8.1	22.9	22.9	75.1	75.1	5.2	5.2	15.6	20.2	7	10	81	83	818758	805573	<0.2	<0.2	2.5	2.4
						1.0	0.2	9	28.2		8.1		22.9		75.1		5.2		15.7		7		82				<0.2		2.4	
					Middle	4.1	0.4	5	28.1	28.1	8.1	8.1	23.8	23.8	74.8	74.8	5.1		22.7		11		83				<0.2		2.4	
						4.1	0.4	5	28.1		8.1		23.8		74.8		5.1		22.8		10		84				<0.2		2.3	
					Bottom	7.1	0.4	26	28.2	28.2	8.1	8.1	24.2	24.2	76.0	76.1	5.2	5.2	22.3		11		85				<0.2		2.3	
						7.1	0.4	26	28.2		8.1		24.2		76.1		5.2		22.1		11		84				<0.2		2.5	
IM4	Cloudy	Moderate	08:36	8.2	Surface	1.0	0.3	312	28.2	28.2	8.1	8.1	23.0	23.0	75.2	75.2	5.2	5.1	18.0	19.6	9	11	81	82	819702	804584	<0.2	<0.2	2.3	2.4
						1.0	0.4	317	28.2		8.1		23.0		75.2		5.2		18.1		9		80				<0.2		2.3	
					Middle	4.1	0.3	300	28.2	28.2	8.1	8.1	23.8	23.8	73.5	73.6	5.0		20.7		11		82				<0.2		2.5	
						4.1	0.3	319	28.2		8.1		23.8		73.6		5.0		20.8		11		83				<0.2		2.4	
					Bottom	7.2	0.3	11	28.2	28.2	8.1	8.1	24.0	24.0	74.1	74.2	5.1	5.1	20.0		13		84				<0.2		2.4	
						7.2	0.3	11	28.2		8.1		24.0		74.2		5.1		19.8		14		84				<0.2		2.5	
IM5	Cloudy	Moderate	08:43	7.4	Surface	1.0	0.4	334	28.1	28.1	8.0	8.0	20.8	20.8	77.2	77.2	5.4	5.3	11.9	18.7	7	7	81	83	820762	804892	<0.2	<0.2	2.4	2.3
						1.0	0.4	334	28.1		8.0		20.8		77.1		5.4		11.9		7		81				<0.2		2.5	
					Middle	3.7	0.4	313	28.1	28.1	8.1	8.1	22.7	22.7	75.8	75.8	5.2		18.2		6		84				<0.2		2.3	
						3.7	0.4	343	28.1		8.1		22.7		75.8		5.2		18.3		7		83				<0.2		2.2	
					Bottom	6.4	0.4	275	28.2	28.2	8.1	8.1	23.7	23.7	74.4	74.5	5.1	5.1	26.0		6		84				<0.2		2.3	
						6.4	0.4	299	28.2		8.1		23.7		74.5		5.1		26.1		6		84				<0.2		2.3	
IM6	Cloudy	Moderate	08:49	7.6	Surface	1.0	0.6	298	28.1	28.1	8.1	8.1	20.9	20.9	77.7	77.7	5.4	5.4	11.8	13.2	7	10	81	83	821039	805813	<0.2	<0.2	2.2	2.3
						1.0	0.6	305	28.1		8.1		20.9		77.7		5.4		11.8		7		80				<0.2		2.3	
					Middle	3.8	0.5	280	28.1	28.1	8.1	8.1	20.9	20.9	76.9	76.9	5.4		13.2		9		84				<0.2		2.0	
						3.8	0.5	290	28.1		8.1		20.9		76.9		5.4		13.2		10		84				<0.2		2.3	
					Bottom	6.6	0.4	255	28.2	28.2	8.1	8.1	21.8	21.8	76.5	76.5	5.3	5.3	14.6		13		84				<0.2		2.4	
						6.6	0.5	258	28.2		8.1		21.8		76.5		5.3		14.4		11		85				<0.2		2.4	
IM7	Cloudy	Moderate	08:57	9.0	Surface	1.0	0.4	241	28.2	28.2	8.0	8.0	19.4	19.4	74.6	74.7	5.2	5.2	13.1	18.3	6	7	80	82	821344	806844	<0.2	<0.2	2.7	2.8
						1.0	0.5	261	28.2		8.0		19.4		74.7		5.2		13.2		6		80				<0.2		2.7	
					Middle	4.5	0.4	230	28.2	28.2	8.1	8.1	20.9	20.9	74.1	74.1	5.2		18.5		6		81				<0.2		2.7	
						4.5	0.4	242	28.2		8.1		20.9		74.1		5.2		18.5		7		82				<0.2		2.8	
					Bottom	8.0	0.3	203	28.2	28.2	8.1	8.1	22.7	22.7	74.7	74.7	5.1	5.1	23.3		9		84				<0.2		2.9	
						8.0	0.3	220	28.2		8.1		22.7		74.7		5.1		22.9		10		84				<0.2		2.8	
IM8	Cloudy	Moderate	08:52	8.8	Surface	1.0	0.1	294	28.2	28.2	8.0	8.0	19.6	19.6	75.1	75.1	5.3	5.3	13.8	18.1	11	12	82	84	821827	808124	<0.2	<0.2	2.3	2.1
						1.0	0.1	301	28.2		8.0		19.6		75.1		5.3		14.0		11		82				<0.2		2.3	
					Middle	4.4	0.1	156	28.2	28.2	8.1	8.1	20.8	20.8	75.8	75.8	5.3		18.7		12		84				<0.2		2.0	
						4.4	0.1	167	28.2		8.1		20.8		75.8		5.3		18.8		10		84				<0.2		2.2	
					Bottom	7.8	0.3	76	28.2	28.2	8.1	8.1	21.7	21.7	79.9	80.1	5.5	5.5	21.7		13		86				<0.2		2.1	
						7.8	0.3	81	28.2		8.1		21.7		80.2		5.5		21.6		14		86				<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 16 June 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	08:44	8.5	Surface	1.0	0.4	318	28.1	28.1	8.1	8.1	21.1	21.1	77.4	77.4	5.4	5.4	13.2	17.2	11	10	82	84	822123	808814	<0.2	<0.2	1.9	2.0
						1.0	0.4	326	28.1		8.1		21.1		77.4		5.4		13.2		11		82				<0.2		2.0	
					Middle	4.3	0.4	316	28.1	28.1	8.1	8.1	21.4	21.4	76.7	76.7	5.3		15.6		9		84				<0.2		2.1	
						4.3	0.4	316	28.1		8.1		21.4		76.6		5.3		15.6		10		84				<0.2		2.1	
					Bottom	7.5	0.4	314	28.2	28.2	8.1	8.1	22.2	22.2	76.9	77.0	5.3	5.3	22.7		10		86				<0.2		1.9	
						7.5	0.4	315	28.2		8.1		22.2		77.0		5.3		22.9		10		86				<0.2		2.0	
IM10	Cloudy	Moderate	08:36	9.3	Surface	1.0	0.7	290	28.1	28.1	8.0	8.0	20.6	20.6	77.3	77.3	5.4	5.3	13.0	20.1	5	6	82	84	822366	809765	<0.2	<0.2	1.9	1.9
						1.0	0.7	291	28.1		8.0		20.6		77.3		5.4		13.1		4		82				<0.2		1.8	
					Middle	4.7	0.5	298	28.1	28.1	8.1	8.1	23.2	23.2	75.2	75.2	5.2		20.1		6		84				<0.2		1.9	
						4.7	0.5	324	28.1		8.1		23.1		75.2		5.2		20.4		5		84				<0.2		2.0	
					Bottom	8.3	0.4	302	28.2	28.2	8.1	8.1	23.8	23.8	78.0	78.1	5.3	5.4	27.1		8		86				<0.2		2.0	
						8.3	0.4	305	28.2		8.1		23.8		78.2		5.4		26.9		8		86				<0.2		2.0	
IM11	Cloudy	Moderate	08:24	7.8	Surface	1.0	0.6	301	28.1	28.1	8.1	8.1	22.9	22.9	82.8	83.0	5.7	5.4	14.6	20.1	9	10	82	84	822058	811433	<0.2	<0.2	2.1	2.0
						1.0	0.6	308	28.1		8.1		22.9		83.1		5.7		14.6		8		82				<0.2		1.9	
					Middle	3.9	0.5	302	28.1	28.1	8.1	8.1	23.7	23.7	74.7	74.8	5.1		19.4		9		84				<0.2		2.0	
						3.9	0.6	329	28.1		8.1		23.7		74.8		5.1		19.4		9		84				<0.2		2.1	
					Bottom	6.8	0.4	299	28.2	28.2	8.1	8.1	24.8	24.8	76.4	76.4	5.2	5.2	26.1		11		87				<0.2		1.9	
						6.8	0.4	309	28.2		8.1		24.8		76.4		5.2		26.4		11		86				<0.2		1.9	
IM12	Cloudy	Moderate	08:15	9.2	Surface	1.0	0.7	285	28.1	28.1	8.1	8.1	22.4	22.4	76.3	76.3	5.3	5.2	14.3	20.9	4	6	82	84	821442	812054	<0.2	<0.2	1.9	1.8
						1.0	0.7	285	28.1		8.1		22.4		76.2		5.3		14.4		4		82				<0.2		2.0	
					Middle	4.6	0.6	283	28.1	28.1	8.1	8.1	23.0	23.0	74.7	74.7	5.1		19.5		6		84				<0.2		1.8	
						4.6	0.7	283	28.1		8.1		23.0		74.7		5.1		19.6		7		84				<0.2		1.8	
					Bottom	8.2	0.4	281	28.2	28.2	8.1	8.1	24.3	24.3	73.6	73.7	5.0	5.0	28.6		9		86				<0.2		1.8	
						8.2	0.4	289	28.2		8.1		24.3		73.7		5.0		28.8		8		86				<0.2		1.3	
SR2	Cloudy	Moderate	07:56	5.2	Surface	1.0	0.2	44	28.1	28.1	8.1	8.1	23.1	23.1	75.6	75.6	5.2	5.2	14.3	19.7	12	14	82	83	821434	814187	<0.2	<0.2	1.9	1.8
						1.0	0.2	44	28.1		8.1		23.1		75.5		5.2		14.3		14		82				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	34	28.2	28.2	8.1	8.1	24.2	24.2	75.3	75.4	5.1	5.2	25.1		15		84				<0.2		1.9	
						4.2	0.2	36	28.2		8.1		24.2		75.4		5.2		25.1		16		84				<0.2		1.8	
SR3	Cloudy	Moderate	08:57	9.1	Surface	1.0	0.4	158	28.3	28.3	8.0	8.0	19.5	19.5	74.0	74.0	5.2	5.1	10.7	17.1	5	6	-	-	822120	807595	-	-	-	-
						1.0	0.5	165	28.3		8.0		19.5		74.0		5.2		10.7		5		-				-		-	
					Middle	4.6	0.2	209	28.3	28.3	8.0	8.0	20.8	20.8	72.5	72.6	5.0		14.9		4		-				-		-	
						4.6	0.2	228	28.3		8.0		20.8		72.6		5.0		14.9		6		-				-		-	
					Bottom	8.1	0.2	221	28.3	28.3	8.1	8.1	22.3	22.3	74.2	74.2	5.1	5.1	25.6		9		-				-		-	
						8.1	0.2	238	28.3		8.1		22.3		74.2		5.1		25.5		7		-				-		-	
SR4A	Cloudy	Calm	07:36	8.5	Surface	1.0	0.0	325	28.2	28.2	8.1	8.1	23.4	23.4	76.3	76.3	5.2	5.2	10.1	10.6	6	7	-	-	817200	807833	-	-	-	-
						1.0	0.0	338	28.2		8.1		23.4		76.2		5.2		10.1		6		-				-		-	
					Middle	4.3	0.1	241	28.1	28.1	8.1	8.1	25.8	25.8	75.2	75.2	5.1		10.1		6		-				-		-	
						4.3	0.1	257	28.1		8.1		25.8		75.2		5.1		10.2		8		-				-		-	
					Bottom	7.5	0.0	215	28.1	28.1	8.2	8.2	27.5	27.5	75.1	75.1	5.0	5.0	11.4		8		-				-		-	
						7.5	0.0	216	28.1		8.2		27.5		75.0		5.0		11.4		7		-				-		-	
SR5A	Cloudy	Calm	07:26	5.2	Surface	1.0	0.3	309	28.0	28.0	8.1	8.1	24.4	24.4	78.6	78.6	5.4	5.4	9.4	11.8	5	5	-	-	816584	810667	-	-	-	-
						1.0	0.3	331	28.0		8.1		24.5		78.6		5.4		9.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	275	28.0	28.0	8.1	8.1	25.0	25.0	78.5	78.5	5.3	5.4	14.2		5		-				-		-	
						4.2	0.2	293	28.0		8.1		25.0		78.5		5.4		14.3		6		-				-		-	
SR6	Cloudy	Calm	06:55	4.5	Surface	1.0	0.1	253	28.0	28.0	8.1	8.1	24.3	24.3	78.5	78.5	5.4	5.4	13.0	14.6	6	6	-	-	817876	814636	-	-	-	-
						1.0	0.1	275	28.0		8.1		24.3		78.5		5.4		12.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	233	28.0	28.0	8.1	8.1	25.0	25.0	78.3	78.4	5.3	5.3	16.2		6		-				-		-	
						3.5	0.1	255	28.0		8.1		25.0		78.4		5.3		16.3		5		-				-		-	
SR7	Cloudy	Moderate	07:06	18.2	Surface	1.0	0.1	233	28.0	28.0	8.1	8.1	24.2	24.2	78.2	78.2	5.4	5.3	9.5	11.3	4	6	-	-	823638	823746	-	-	-	-
						1.0	0.1	253	28.0		8.1		24.2		78.2		5.4		9.5		3		-				-		-	
					Middle	9.1	0.1	33	28.1	28.1	8.1	8.1	26.8	26.8	76.1	76.1	5.1		11.1		5		-				-		-	
						9.1	0.1	35	28.1		8.1		26.8		76.1		5.1		11.2		5		-				-		-	
					Bottom	17.2	0.2	41	28.1	28.1	8.1	8.1	27.7	27.7	77.3	77.4	5.2	5.2	13.3		9		-				-		-	
						17.2	0.2	43	28.1		8.1		27.7		77.4		5.2		13.3		8		-				-		-	
SR8	Cloudy	Moderate	08:08	3.7	Surface	1.0	-	-	28.1	28.1	8.1	8.1	22.9	22.9	74.5	74.5	5.1	5.1	15.7	18.1	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.1		8.1		22.9		74.5		5.1		15.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	28.2	28.2	8.1	8.1	23.9	23.9	76.2	76.3	5.2	5.2	20.5		6		-				-		-	
						2.7	-	-	28.2		8.1		23.9		76.3		5.2		20.5		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 June 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	17:00	8.9	Surface	1.0	0.4	225	29.1	29.1	8.2	8.2	19.8	19.8	108.4	108.3	7.5	7.4	10.2	17.0	8	9	77	79	815600	804226	<0.2	<0.2	2.0	2.1
						1.0	0.4	244	29.1		8.2		19.8		108.2		7.4		10.3		9		77				<0.2		2.1	
					Middle	4.5	0.3	203	29.1	29.1	8.2	8.2	19.9	19.9	105.4	105.2	7.3		11.1		10		79				<0.2		2.1	
						4.5	0.4	215	29.1		8.2		19.9		105.0		7.2		11.2		9		79				<0.2		2.1	
					Bottom	7.9	0.3	208	28.6	28.6	8.2	8.2	26.9	26.9	94.3	94.5	6.3	6.3	29.4		9		81				<0.2		2.1	
						7.9	0.3	215	28.6		8.2		26.9		94.6		6.3		29.5		11		81				<0.2		2.0	
C2	Cloudy	Rough	16:28	12.5	Surface	1.0	0.3	188	28.8	28.8	7.7	7.7	17.7	17.7	81.1	81.1	5.7	5.5	5.0	4.6	11	12	77	80	825700	806953	<0.2	<0.2	2.7	2.8
						1.0	0.3	191	28.8		7.7		17.7		81.1		5.7		5.0		11		77				<0.2		3.0	
					Middle	6.3	0.4	162	28.9	28.9	7.7	7.7	19.6	19.6	76.8	76.8	5.3		3.6		11		80				<0.2		2.8	
						6.3	0.5	168	28.9		7.7		19.6		76.7		5.3		3.5		10		80				<0.2		2.9	
					Bottom	11.5	0.3	139	28.7	28.7	7.8	7.8	21.9	22.0	71.0	71.2	4.9	4.9	5.3		14		82				<0.2		2.8	
						11.5	0.3	146	28.7		7.8		22.2		71.3		4.9		5.2		15		82				<0.2		2.6	
C3	Cloudy	Moderate	18:02	11.7	Surface	1.0	0.4	78	28.9	28.9	7.9	7.9	20.7	20.7	82.4	82.4	5.7	5.6	5.4	7.6	14	15	78	80	822083	817782	<0.2	<0.2	2.0	2.1
						1.0	0.4	84	28.9		7.9		20.7		82.4		5.7		5.4		12		78				<0.2		1.9	
					Middle	5.9	0.4	92	28.9	28.9	7.9	7.9	21.8	21.8	78.8	78.9	5.4		6.3		14		80				<0.2		2.2	
						5.9	0.4	97	28.9		7.9		21.8		78.9		5.4		6.3		14		80				<0.2		2.3	
					Bottom	10.7	0.4	68	28.6	28.6	7.9	7.9	24.8	24.8	72.8	72.9	4.9	4.9	10.9		17		82				<0.2		2.0	
						10.7	0.4	74	28.6		7.9		24.8		73.0		4.9		11.0		18		82				<0.2		1.9	
IM1	Cloudy	Rough	16:40	5.9	Surface	1.0	0.2	150	29.2	29.2	8.2	8.2	18.6	18.6	110.6	110.6	7.6	7.6	10.7	16.5	7	8	77	79	817943	807143	<0.2	<0.2	2.0	2.1
						1.0	0.2	153	29.2		8.2		18.6		110.5		7.6		10.9		7		78				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.9	0.3	165	29.2	29.2	8.2	8.2	19.8	19.8	105.1	105.2	7.2	7.2	22.1		8		80				<0.2		1.9	
						4.9	0.3	178	29.2		8.2		19.8		105.2		7.2		22.2		8		81				<0.2		2.1	
IM2	Cloudy	Moderate	16:33	7.7	Surface	1.0	0.2	157	29.1	29.1	8.2	8.2	19.4	19.4	106.4	106.4	7.3	7.2	9.4	9.8	4	5	76	79	818190	806164	<0.2	<0.2	2.3	2.2
						1.0	0.2	157	29.1		8.2		19.4		106.4		7.3		9.4		4		77				<0.2		2.2	
					Middle	3.9	0.3	161	29.1	29.1	8.2	8.2	19.4	19.4	103.6	103.5	7.1		9.7		6		78				<0.2		2.2	
						3.9	0.3	175	29.1		8.2		19.4		103.3		7.1		9.7		6		79				<0.2		2.3	
					Bottom	6.7	0.3	183	29.1	29.1	8.2	8.2	20.0	20.0	100.7	100.8	6.9	6.9	10.4		5		80				<0.2		2.2	
						6.7	0.3	191	29.1		8.2		20.0		100.9		6.9		10.4		5		81				<0.2		2.2	
IM3	Cloudy	Rough	16:27	7.9	Surface	1.0	0.2	188	29.1	29.1	8.2	8.2	19.3	19.3	105.8	105.8	7.3	7.2	9.4	9.9	5	6	76	78	818775	805585	<0.2	<0.2	2.0	2.2
						1.0	0.2	203	29.1		8.2		19.3		105.8		7.3		9.3		4		77				<0.2		2.2	
					Middle	4.0	0.2	170	29.1	29.1	8.2	8.2	19.3	19.3	102.0	101.9	7.0		9.9		5		78				<0.2		2.2	
						4.0	0.2	180	29.1		8.2		19.3		101.8		7.0		9.9		6		79				<0.2		2.2	
					Bottom	6.9	0.3	197	29.0	29.0	8.2	8.2	19.6	19.6	97.2	97.1	6.7	6.7	10.4		7		80				<0.2		2.2	
						6.9	0.3	211	29.0		8.2		19.6		97.0		6.7		10.3		7		80				<0.2		2.2	
IM4	Cloudy	Rough	16:17	7.8	Surface	1.0	0.3	134	29.0	29.0	8.2	8.2	19.0	19.0	103.5	103.5	7.2	7.1	9.8	10.3	5	5	76	79	819722	804590	<0.2	<0.2	2.2	2.4
						1.0	0.3	137	29.0		8.2		19.0		103.4		7.2		9.9		5		76				<0.2		2.3	
					Middle	3.9	0.4	171	29.0	29.0	8.2	8.2	19.0	19.0	101.7	101.7	7.0		10.2		5		79				<0.2		2.7	
						3.9	0.4	187	29.0		8.2		19.0		101.6		7.0		10.3		6		79				<0.2		2.5	
					Bottom	6.8	0.3	200	29.0	29.0	8.2	8.2	19.3	19.3	99.7	99.7	6.9	6.9	10.7		5		81				<0.2		2.3	
						6.8	0.3	213	29.0		8.2		19.3		99.6		6.9		10.9		6		81				<0.2		2.4	
IM5	Cloudy	Rough	16:08	7.6	Surface	1.0	0.2	139	29.0	29.0	8.2	8.1	18.7	18.7	99.7	99.7	6.9	6.9	10.7	12.6	4	5	76	78	820731	804863	<0.2	<0.2	2.2	2.3
						1.0	0.3	140	29.0		8.1		18.7		99.7		6.9		10.7		5		77				<0.2		2.3	
					Middle	3.8	0.1	246	29.0	29.0	8.1	8.1	18.9	18.9	98.8	98.8	6.9		11.7		4		78				<0.2		2.3	
						3.8	0.1	257	29.0		8.1		18.9		98.7		6.8		11.7		5		78				<0.2		2.3	
					Bottom	6.6	0.3	223	28.9	28.9	8.1	8.1	20.1	20.2	96.8	97.0	6.7	6.7	15.1		6		80				<0.2		2.3	
						6.6	0.3	240	28.9		8.1		20.3		97.2		6.7		15.8		6		81				<0.2		2.2	
IM6	Cloudy	Rough	16:01	7.3	Surface	1.0	0.2	94	29.1	29.1	8.2	8.2	18.8	18.8	103.9	103.9	7.2	7.2	10.7	11.8	6	6	76	78	821063	805812	<0.2	<0.2	2.2	2.2
						1.0	0.2	100	29.1		8.2		18.8		103.9		7.2		10.7		5		76				<0.2		2.2	
					Middle	3.7	0.2	124	29.0	29.0	8.2	8.2	18.9	18.9	102.2	102.1	7.1		12.5		5		78				<0.2		2.3	
						3.7	0.2	130	29.0		8.2		18.9		102.0		7.1		12.4		6		79				<0.2		2.1	
					Bottom	6.3	0.2	76	29.0	29.0	8.2	8.2	19.2	19.2	101.3	101.3	7.0	7.0	12.3		6		80				<0.2		2.3	
						6.3	0.2	79	29.0		8.2		19.2		101.3		7.0		12.2		7		81				<0.2		2.1	
IM7	Cloudy	Rough	15:51	9.0	Surface	1.0	0.2	141	29.2	29.2	8.2	8.2	18.6	18.6	106.2	106.1	7.4	7.2	9.4	10.2	6	6	77	79	821337	806814	<0.2	<0.2	2.1	2.1
						1.0	0.2	153	29.2		8.2		18.6		106.0		7.3		9.5		6		76				<0.2		2.2	
					Middle	4.5	0.2	166	29.2	29.2	8.2	8.2	18.9	18.9	102.9	102.8	7.1		10.2		6		78				<0.2		2.0	
						4.5	0.2	170	29.2		8.2		18.9		102.6		7.1		10.2		6		79				<0.2		2.2	
					Bottom	8.0	0.1	62	29.1	29.1	8.2	8.2	19.6	19.6	100.0	100.0	6.9	6.9	10.9		7		81				<0.2		2.1	
						8.0	0.1	63	29.1		8.2		19.6		100.0		6.9		10.9		7		80				<0.2		2.0	
IM8	Cloudy	Moderate	16:54	8.0	Surface	1.0	0.3	176	29.0	29.0	7.9	7.9	18.7	18.7	92.0	92.0	6.4	6.3	4.9	7.6	5	6	78	80	821810	808114	<0.2	<0.2	2.8	2.8
						1.0	0.3	179	29.0		7.9		18.7		91.9		6.4		4.9		5		78				<0.2		2.5	
					Middle	4.0	0.3	79	29.0	29.0	7.9	7.9	18.7	18.7	88.4	88.3	6.1		5.4		6		80				<0.2		2.4	
						4.0	0.3	82	29.0		7.9		18.7		88.1		6.1		5.4		6		80				<0.2		2.6	
					Bottom	7.0	0.3	84	28.7	28.7	7.8	7.8	20.0	20.0	74.4	74.5	5.2	5.2	12.3		7		82				<0.2		3.2	
						7.0	0.3	89	28.7		7.8		20.0		74.6		5.2		12.6		6		82				<0.2		3.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 June 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	17:00	7.5	Surface	1.0	0.2	161	28.9	28.9	7.8	7.8	18.7	18.7	84.1	84.1	5.9	5.8	5.6	8.3	7	7	78	80	822113	808834	<0.2	<0.2	2.5	2.5
						1.0	0.2	167	28.9		7.8		18.7		84.0		5.8		5.6				78				<0.2		2.5	
					Middle	3.8	0.4	124	28.8	28.8	7.8	7.8	18.7	18.7	83.3	83.3	5.8		5.9		7		80				<0.2		2.3	
						3.8	0.4	132	28.8		7.8		18.7		83.3		5.8		6.0		7		80				<0.2		2.6	
					Bottom	6.5	0.4	98	28.8	28.8	7.8	7.8	19.2	19.2	79.4	79.4	5.5	5.5	13.4		8		83				<0.2		2.5	
						6.5	0.4	101	28.8		7.8		19.2		79.4		5.5		13.6		7		82				<0.2		2.5	
IM10	Cloudy	Moderate	17:07	7.6	Surface	1.0	0.5	169	28.8	28.8	7.8	7.8	18.1	18.1	84.7	84.7	5.9	5.8	5.3	11.1	5	7	78	80	822380	809816	<0.2	<0.2	2.5	2.5
						1.0	0.6	176	28.8		7.8		18.1		84.6		5.9		5.3		6		78				<0.2		2.2	
					Middle	3.8	0.5	144	28.8	28.8	7.8	7.8	18.4	18.4	81.9	82.0	5.7		5.2		8		80				<0.2		2.6	
						3.8	0.6	156	28.8		7.8		18.4		82.1		5.7		5.3		7		80				<0.2		2.4	
					Bottom	6.6	0.4	105	28.8	28.8	7.8	7.8	19.1	19.1	78.9	79.0	5.5	5.5	22.9		6		82				<0.2		2.7	
						6.6	0.4	108	28.8		7.8		19.1		79.0		5.5		22.9		8		82				<0.2		2.4	
IM11	Cloudy	Moderate	17:16	6.8	Surface	1.0	0.6	153	28.8	28.8	7.9	7.9	18.3	18.3	85.8	85.8	6.0	6.0	4.9	8.0	6	6	78	80	822042	811454	<0.2	<0.2	2.2	2.2
						1.0	0.6	154	28.8		7.9		18.3		85.8		6.0		5.0		6		78				<0.2		2.1	
					Middle	3.4	0.6	147	28.8	28.8	7.9	7.9	18.5	18.5	84.9	84.9	5.9		5.5		4		80				<0.2		2.1	
						3.4	0.6	148	28.8		7.9		18.5		84.8		5.9		5.5		5		80				<0.2		2.2	
					Bottom	5.8	0.5	116	28.8	28.8	7.9	7.9	18.7	18.7	83.2	83.2	5.8	5.8	13.7		7		82				<0.2		2.2	
						5.8	0.5	117	28.8		7.9		18.7		83.2		5.8		13.6		7		82				<0.2		2.2	
IM12	Cloudy	Moderate	17:22	9.8	Surface	1.0	0.6	149	28.9	28.9	7.9	7.9	18.5	18.5	86.8	86.8	6.0	6.1	5.1	8.9	6	7	78	80	821473	812056	<0.2	<0.2	2.2	2.3
						1.0	0.7	159	28.9		7.9		18.5		86.7		6.0		5.1		6		78				<0.2		2.3	
					Middle	4.9	0.6	136	28.9	28.9	7.9	7.9	19.1	19.1	87.3	87.3	6.1		10.0		8		80				<0.2		2.2	
						4.9	0.7	144	28.9		7.9		19.1		87.3		6.1		10.0		7		80				<0.2		2.4	
					Bottom	8.8	0.6	125	28.9	28.9	7.9	7.9	19.2	19.2	87.4	87.4	6.1	6.1	11.4		7		83				<0.2		2.5	
						8.8	0.6	133	28.9		7.9		19.3		87.3		6.0		11.6		7		83				<0.2		2.4	
SR2	Cloudy	Moderate	17:43	4.2	Surface	1.0	0.4	128	28.9	28.9	7.9	7.9	18.3	18.3	86.1	86.1	6.0	6.0	4.9	6.6	6	6	78	79	821462	814154	<0.2	<0.2	2.3	2.4
						1.0	0.4	137	28.9		7.9		18.3		86.1		6.0		4.8		6		78				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	114	28.9	28.9	7.9	7.9	19.0	19.0	84.7	84.7	5.9	5.9	8.3		8		80				<0.2		2.4	
						3.2	0.4	123	28.9		7.9		19.0		84.6		5.9		8.4		6		80				<0.2		2.5	
SR3	Cloudy	Moderate	16:48	9.3	Surface	1.0	0.3	172	29.0	29.0	7.9	7.9	18.7	18.7	93.2	93.1	6.5	6.3	4.8	6.7	5	6	-	-	822146	807594	-	-	-	-
						1.0	0.3	179	29.0		7.9		18.7		93.0		6.5		5.0		7		-				-		-	
					Middle	4.7	0.2	91	28.9	28.9	7.9	7.9	18.8	18.8	87.5	87.5	6.1		5.4		7		-				-		-	
						4.7	0.2	93	28.9		7.9		18.8		87.5		6.1		5.3		6		-				-		-	
					Bottom	8.3	0.3	65	28.7	28.7	7.8	7.8	20.4	20.6	72.3	72.0	5.0	5.0	9.5		5		-				-		-	
						8.3	0.3	66	28.7		7.8		20.8		71.7		4.9		10.3		7		-				-		-	
SR4A	Cloudy	Moderate	17:23	9.2	Surface	1.0	0.1	69	29.1	29.1	8.2	8.2	19.4	19.4	101.4	101.3	7.0	6.7	14.2	16.7	9	10	-	-	817163	807787	-	-	-	-
						1.0	0.1	75	29.1		8.2		19.4		101.2		7.0		14.2		10		-				-		-	
					Middle	4.6	0.1	37	29.0	29.0	8.1	8.1	20.2	20.2	93.3	93.1	6.4		15.5		11		-				-		-	
						4.6	0.1	40	29.0		8.1		20.1		92.9		6.4		15.6		10		-				-		-	
					Bottom	8.2	0.0	239	28.8	28.8	8.1	8.1	22.2	22.3	82.4	82.4	5.6	5.6	20.3		10		-				-		-	
						8.2	0.0	245	28.8		8.1		22.3		82.4		5.6		20.6		10		-				-		-	
SR5A	Cloudy	Calm	17:39	4.7	Surface	1.0	0.0	16	29.3	29.3	8.2	8.2	21.0	21.0	103.6	103.6	7.1	7.1	11.7	12.0	8	8	-	-	816586	810708	-	-	-	-
						1.0	0.0	16	29.3		8.2		21.0		103.5		7.1		11.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	65	29.3	29.3	8.1	8.1	21.1	21.1	102.5	102.5	7.0	7.0	12.3		7		-				-		-	
						3.7	0.0	70	29.3		8.1		21.1		102.5		7.0		12.4		8		-				-		-	
SR6	Cloudy	Calm	18:02	4.6	Surface	1.0	0.1	3	29.4	29.4	8.1	8.1	20.0	20.0	97.3	97.1	6.7	6.7	12.4	13.1	12	12	-	-	817921	814644	-	-	-	-
						1.0	0.1	3	29.4		8.1		20.0		96.8		6.6		12.3		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	63	29.2	29.2	8.1	8.1	20.1	20.1	90.5	90.5	6.2	6.2	13.9		13		-				-		-	
						3.6	0.1	69	29.2		8.1		20.1		90.4		6.2		13.9		12		-				-		-	
SR7	Cloudy	Moderate	18:04	18.8	Surface	1.0	0.9	55	28.9	28.9	7.9	7.9	20.4	20.4	82.1	82.0	5.7	5.3	5.0	9.1	11	11	-	-	823619	823749	-	-	-	-
						1.0	0.9	56	28.9		7.9		20.4		81.9		5.6		5.0		12		-				-		-	
					Middle	9.4	0.6	43	28.7	28.7	7.9	7.9	23.5	23.5	72.8	72.8	4.9		10.8		12		-				-		-	
						9.4	0.6	44	28.7		7.9		23.5		72.8		4.9		10.9		11		-				-		-	
					Bottom	17.8	0.5	28	28.6	28.6	7.9	7.9	24.7	24.7	71.8	71.8	4.9	4.9	11.6		10		-				-		-	
						17.8	0.5	30	28.6		7.9		24.7		71.8		4.9		11.4		11		-				-		-	
SR8	Cloudy	Moderate	17:31	3.9	Surface	1.0	-	-	29.0	29.0	8.0	8.0	19.1	19.1	96.0	96.0	6.6	6.6	5.9	6.1	12	12	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.0		8.0		19.1		96.0		6.6		5.9		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	-	-	29.0	29.0	8.0	8.0	19.1	19.1	96.3	96.3	6.7	6.7	6.3		12		-				-		-	
						2.9	-	-	29.0		8.0		19.1		96.3		6.7		6.2		11		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 19 June 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	Calm	11:04	8.9	Surface	1.0	0.4	46	28.8	28.8	8.1	8.1	20.0	20.0	94.2	94.2	6.5	6.4	10.3	10.7	7	6	78	80	815638	804251	<0.2	<0.2	2.4	2.3
						1.0	0.5	46	28.8		8.1		20.0		94.1		6.5		10.3		6		78				<0.2		2.2	
					Middle	4.5	0.4	44	28.8	28.8	8.1	8.1	20.2	20.2	91.7	91.7	6.3		10.5		6		80				<0.2		2.4	
						4.5	0.4	44	28.8		8.1		20.2		91.6		6.3		10.5		7		80				<0.2		2.5	
					Bottom	7.9	0.3	25	28.8	28.8	8.1	8.1	22.3	22.5	91.7	91.9	6.3	6.3	11.1		5		82				<0.2		2.2	
						7.9	0.3	25	28.8		8.2		22.6		92.1		6.3		11.3		6		82				<0.2		2.1	
C2	Cloudy	Moderate	12:15	12.7	Surface	1.0	0.5	304	29.1	29.1	7.8	7.8	17.9	17.9	79.9	79.9	5.6	5.5	4.4	4.4	4	6	78	80	825689	806961	<0.2	<0.2	2.7	2.5
						1.0	0.6	328	29.1		7.8		17.9		79.8		5.6		4.4		5		78				<0.2		2.6	
					Middle	6.4	0.5	38	28.9	28.9	7.8	7.8	19.1	19.1	76.7	76.7	5.3		4.9		5		80				<0.2		2.6	
						6.4	0.5	39	28.9		7.8		19.1		76.7		5.3		4.9		7		80				<0.2		2.3	
					Bottom	11.7	0.3	53	28.8	28.8	7.9	7.9	20.9	20.8	77.8	77.8	5.4	5.4	3.9		7		82				<0.2		2.4	
						11.7	0.3	53	28.8		7.9		20.8		77.8		5.4		3.9		6		82				<0.2		2.3	
C3	Cloudy	Moderate	09:54	12.1	Surface	1.0	0.6	288	28.9	28.9	7.8	7.8	18.7	18.7	80.4	80.4	5.6	5.4	3.8	4.1	4	5	77	80	822121	817776	<0.2	<0.2	2.4	2.3
						1.0	0.6	299	28.9		7.8		18.7		80.3		5.6		3.8		5		78				<0.2		2.5	
					Middle	6.1	0.7	274	28.7	28.7	7.8	7.8	22.3	22.3	75.7	75.7	5.2		3.9		5		80				<0.2		2.3	
						6.1	0.8	280	28.7		7.8		22.3		75.7		5.2		3.9		6		80				<0.2		2.3	
					Bottom	11.1	0.7	290	28.6	28.6	7.9	7.9	24.2	24.2	75.4	75.4	5.1	5.1	4.4		5		82				<0.2		2.3	
						11.1	0.7	291	28.6		7.9		24.2		75.3		5.1		4.6		5		82				<0.2		2.2	
IM1	Cloudy	Moderate	11:22	5.6	Surface	1.0	0.4	37	29.0	29.0	8.1	8.1	18.3	18.3	101.5	101.4	7.1	7.1	9.5	9.7	6	6	78	81	817926	807125	<0.2	<0.2	2.8	2.4
						1.0	0.4	37	29.0		8.1		18.3		101.3		7.0		9.5		6		79				<0.2		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	25	28.8	28.8	8.1	8.1	18.4	18.4	100.5	100.6	7.0	7.0	9.8		7		84				<0.2		2.1	
						4.6	0.2	25	28.8		8.1		18.4		100.6		7.0		9.8		6		83				<0.2		2.2	
IM2	Cloudy	Moderate	11:29	7.9	Surface	1.0	0.4	13	29.0	29.0	8.1	8.1	18.6	18.6	97.3	97.2	6.8	6.6	9.8	11.5	5	4	78	81	818175	806174	<0.2	<0.2	2.6	2.4
						1.0	0.5	13	29.0		8.1		18.6		97.1		6.7		9.9		4		79				<0.2		2.3	
					Middle	4.0	0.5	0	28.8	28.8	8.1	8.1	18.8	18.8	93.5	93.5	6.5		10.7		3		81				<0.2		2.5	
						4.0	0.5	0	28.8		8.1		18.8		93.4		6.5		10.7		5		81				<0.2		2.4	
					Bottom	6.9	0.4	358	28.8	28.8	8.1	8.1	22.6	22.7	92.7	92.8	6.3	6.3	13.9		4		83				<0.2		2.2	
						6.9	0.4	329	28.8		8.1		22.7		92.9		6.3		13.9		5		83				<0.2		2.5	
IM3	Cloudy	Moderate	11:36	8.0	Surface	1.0	0.5	17	29.0	29.0	8.1	8.1	19.0	19.0	98.9	98.9	6.9	6.7	10.5	11.8	5	5	77	79	818811	805586	<0.2	<0.2	2.1	2.2
						1.0	0.6	17	29.0		8.1		19.0		98.8		6.8		10.6		5		77				<0.2		2.3	
					Middle	4.0	0.5	19	28.8	28.8	8.1	8.1	19.1	19.1	93.9	93.7	6.5		10.4		5		79				<0.2		2.4	
						4.0	0.5	19	28.8		8.1		19.1		93.5		6.5		10.6		6		80				<0.2		2.1	
					Bottom	7.0	0.5	10	28.8	28.8	8.1	8.1	22.1	22.4	90.8	90.9	6.2	6.2	14.2		5		81				<0.2		2.2	
						7.0	0.5	10	28.8		8.1		22.8		90.9		6.2		14.2		4		82				<0.2		2.2	
IM4	Cloudy	Moderate	11:46	8.3	Surface	1.0	0.8	23	28.9	28.9	8.1	8.1	19.0	19.0	99.0	99.0	6.9	6.8	9.3	13.0	4	5	77	80	819730	804635	<0.2	<0.2	2.1	2.2
						1.0	0.8	23	28.9		8.1		19.0		99.0		6.9		9.4		4		78				<0.2		2.0	
					Middle	4.2	0.6	24	28.9	28.9	8.1	8.1	19.3	19.3	97.2	97.2	6.7		10.2		4		80				<0.2		2.3	
						4.2	0.7	24	28.9		8.1		19.3		97.1		6.7		10.3		4		80				<0.2		2.0	
					Bottom	7.3	0.4	5	28.7	28.7	8.2	8.2	22.7	22.7	89.1	89.3	6.1	6.1	19.2		5		83				<0.2		2.0	
						7.3	0.4	5	28.7		8.2		22.7		89.5		6.1		19.7		6		82				<0.2		2.5	
IM5	Cloudy	Moderate	11:53	7.3	Surface	1.0	0.5	27	28.8	28.8	8.1	8.1	17.8	17.8	94.1	94.1	6.6	6.6	9.5	11.4	4	4	76	78	820726	804890	<0.2	<0.2	2.4	2.3
						1.0	0.5	28	28.8		8.1		17.8		94.0		6.6		9.6		5		76				<0.2		2.1	
					Middle	3.7	0.5	15	28.8	28.8	8.1	8.1	18.8	18.8	93.0	93.0	6.5		10.5		4		78				<0.2		2.4	
						3.7	0.6	15	28.8		8.1		18.8		93.0		6.5		10.7		4		78				<0.2		2.3	
					Bottom	6.3	0.3	11	28.7	28.7	8.1	8.1	20.7	20.7	91.9	92.0	6.3	6.3	14.1		4		80				<0.2		2.2	
						6.3	0.4	12	28.7		8.1		20.7		92.0		6.3		13.9		5		80				<0.2		2.2	
IM6	Cloudy	Moderate	11:59	7.4	Surface	1.0	0.6	36	29.0	29.0	8.1	8.1	18.4	18.4	95.6	95.6	6.6	6.5	11.1	14.2	6	6	76	78	821064	805850	<0.2	<0.2	2.4	2.2
						1.0	0.7	38	29.0		8.1		18.4		95.5		6.6		11.2		6		76				<0.2		2.2	
					Middle	3.7	0.5	44	28.9	28.9	8.1	8.1	18.8	18.8	92.3	92.3	6.4		14.9		7		78				<0.2		2.2	
						3.7	0.5	44	28.9		8.1		18.8		92.2		6.4		15.1		7		78				<0.2		2.2	
					Bottom	6.4	0.3	32	28.8	28.8	8.1	8.1	19.8	19.8	91.2	91.3	6.3	6.3	16.4		6		80				<0.2		2.2	
						6.4	0.3	32	28.8		8.1		19.8		91.3		6.3		16.4		5		80				<0.2		2.2	
IM7	Cloudy	Moderate	12:06	8.8	Surface	1.0	0.6	32	29.1	29.1	8.1	8.1	19.1	19.1	94.1	94.0	6.5	6.4	10.6	13.0	6	6	77	78	821346	806857	<0.2	<0.2	2.3	2.3
						1.0	0.6	34	29.1		8.1		19.1		93.9		6.5		10.7		6		77				<0.2		2.3	
					Middle	4.4	0.6	33	28.9	28.9	8.2	8.2	19.8	19.8	90.9	90.9	6.3		12.3		5		78				<0.2		2.3	
						4.4	0.6	33	28.9		8.2		19.8		90.9		6.3		12.4		6		78				<0.2		2.3	
					Bottom	7.8	0.4	24	28.8	28.8	8.1	8.1	20.3	20.3	89.1	89.1	6.2	6.2	15.8		5		80				<0.2		2.1	
						7.8	0.4	24	28.8		8.1		20.3		89.1		6.1		16.1		6		80				<0.2		2.2	
IM8	Cloudy	Moderate	11:49	8.1	Surface	1.0	0.1	275	29.1	29.1	7.8	7.8	17.9	17.9	81.0	81.1	5.6	5.5	4.4	7.4	8	8	78	80	821844	808132	<0.2	<0.2	2.4	2.5
						1.0	0.1	296	29.1		7.8		17.9		81.1		5.6		4.4		8		78				<0.2		2.3	
					Middle	4.1	0.1	143	28.8	28.8	7.8	7.8	18.9	18.9	76.1	76.1	5.3		6.3		7		80				<0.2		2.7	
						4.1	0.1	148	28.8		7.8		18.9		76.1		5.3		6.3		8		80				<0.2		2.5	
					Bottom	7.1	0.3	83	28.8	28.8	7.9	7.9	20.6	20.6	76.2	76.2	5.3	5.3	11.6		6		82				<0.2		2.6	
						7.1	0.3	88	28.8		7.9		20.6		76.2		5.3		11.6		8		82				<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 19 June 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	11:40	7.8	Surface	1.0	0.4	327	29.1	29.1	7.8	7.8	17.9	17.9	80.4	80.4	5.6	5.4	4.4	8.3	7	7	78	80	822098	808814	<0.2	<0.2	2.4	2.5
						1.0	0.5	334	29.1		7.8		17.9		80.4		5.6		4.4		7		78				<0.2		2.6	
					Middle	3.9	0.4	320	28.7	28.7	7.9	7.9	19.2	19.2	75.5	75.5	5.2		7.3		6		80				<0.2		2.6	
						3.9	0.5	327	28.7		7.9		19.2		75.5		5.2		7.4		6		80				<0.2		2.4	
					Bottom	6.8	0.4	311	28.8	28.8	7.9	7.9	20.6	20.6	76.7	76.7	5.3	5.3	13.1		7		83				<0.2		2.5	
						6.8	0.4	315	28.8		7.9		20.6		76.7		5.3		13.0		7		82				<0.2		2.4	
IM10	Cloudy	Moderate	10:53	8.0	Surface	1.0	0.7	288	28.9	28.9	7.8	7.8	18.1	18.1	77.9	77.9	5.4	5.3	5.3	11.1	8	8	78	80	822390	809775	<0.2	<0.2	2.4	2.3
						1.0	0.8	297	28.9		7.8		18.1		77.8		5.4		5.3		8		78				<0.2		2.3	
					Middle	4.0	0.5	293	28.8	28.8	7.8	7.8	18.7	18.7	75.3	75.3	5.3		6.8		8		80				<0.2		2.2	
						4.0	0.5	301	28.8		7.8		18.7		75.2		5.2		6.8		8		80				<0.2		2.2	
					Bottom	7.0	0.4	274	28.7	28.7	7.8	7.8	20.7	20.7	70.7	70.8	4.9	4.9	21.1		7		82				<0.2		2.2	
						7.0	0.4	293	28.7		7.8		20.7		70.8		4.9		21.4		9		82				<0.2		2.2	
IM11	Cloudy	Moderate	10:42	7.3	Surface	1.0	0.6	318	28.9	28.9	7.8	7.8	17.8	17.8	81.9	81.9	5.7	5.6	4.5	8.3	6	7	78	80	822051	811456	<0.2	<0.2	2.3	2.3
						1.0	0.6	347	28.9		7.8		17.8		81.9		5.7		4.5		7		78				<0.2		2.4	
					Middle	3.7	0.5	309	28.7	28.7	7.9	7.9	19.6	19.6	77.2	77.3	5.4		5.6		6		80				<0.2		2.4	
						3.7	0.6	330	28.7		7.9		19.6		77.3		5.4		5.6		6		80				<0.2		2.3	
					Bottom	6.3	0.4	279	28.7	28.7	7.8	7.8	22.9	22.9	69.7	69.8	4.8	4.8	14.7		8		82				<0.2		2.3	
						6.3	0.4	305	28.7		7.8		23.0		69.8		4.8		15.0		8		82				<0.2		2.2	
IM12	Cloudy	Moderate	10:37	9.3	Surface	1.0	0.7	275	28.9	28.9	7.9	7.9	17.8	17.8	81.1	81.0	5.7	5.3	4.1	13.5	6	6	78	80	821456	812030	<0.2	<0.2	2.2	2.5
						1.0	0.7	288	28.9		7.9		17.8		80.9		5.7		4.1		6		78				<0.2		2.4	
					Middle	4.7	0.6	263	28.7	28.7	7.9	7.9	21.5	21.5	69.7	69.6	4.8		16.5		4		80				<0.2		2.5	
						4.7	0.6	284	28.7		7.9		21.6		69.4		4.8		16.6		5		80				<0.2		2.4	
					Bottom	8.3	0.3	249	28.6	28.6	7.9	7.9	23.7	23.8	66.5	66.5	4.5	4.5	20.0		8		82				<0.2		2.6	
						8.3	0.3	253	28.6		7.9		23.8		66.5		4.5		19.7		9		82				<0.2		2.6	
SR2	Cloudy	Moderate	10:14	4.1	Surface	1.0	0.2	56	28.8	28.8	7.8	7.8	18.3	18.4	76.0	76.1	5.3	5.3	4.9	6.6	6	6	78	79	821486	814174	<0.2	<0.2	3.4	2.8
						1.0	0.2	56	28.8		7.8		18.4		76.1		5.3		4.8		6		78				<0.2		3.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.3	42	28.7	28.8	7.8	7.8	21.1	21.1	76.2	76.4	5.2	5.3	8.4		7		80				<0.2		2.3	
						3.1	0.3	44	28.8		7.8		21.1		76.5		5.3		8.4		6		80				<0.2		2.4	
SR3	Cloudy	Moderate	11:55	9.5	Surface	1.0	0.4	175	29.1	29.1	7.8	7.8	17.9	17.9	79.8	79.8	5.6	5.4	4.4	4.6	5	6	-	-	822117	807570	-	-	-	-
						1.0	0.5	187	29.1		7.8		17.9		79.7		5.5		4.4		5		-				-		-	
					Middle	4.8	0.3	212	28.8	28.8	7.8	7.8	19.0	19.1	76.1	76.1	5.3		5.3		6		-				-		-	
						4.8	0.3	214	28.8		7.8		19.1		76.1		5.3		5.2		6		-				-		-	
					Bottom	8.5	0.2	204	28.8	28.8	7.9	7.9	20.5	20.5	76.4	76.4	5.3	5.3	4.3		5		-				-		-	
						8.5	0.2	218	28.8		7.9		20.5		76.3		5.3		4.3		6		-				-		-	
SR4A	Cloudy	Calm	10:41	9.3	Surface	1.0	0.2	244	28.9	28.9	8.1	8.1	19.0	19.0	96.6	96.5	6.7	6.3	9.8	13.9	7	7	-	-	817208	807826	-	-	-	-
						1.0	0.2	251	28.9		8.1		19.0		96.4		6.7		9.8		6		-				-		-	
					Middle	4.7	0.3	251	28.7	28.7	8.1	8.1	22.2	22.2	84.8	84.7	5.8		13.8		8		-				-		-	
						4.7	0.3	273	28.7		8.1		22.2		84.6		5.8		14.1		7		-				-		-	
					Bottom	8.3	0.2	251	28.8	28.8	8.0	8.0	23.3	23.3	85.9	86.0	5.8	5.8	18.0		6		-				-		-	
						8.3	0.3	259	28.8		8.0		23.3		86.0		5.8		17.9		7		-				-		-	
SR5A	Cloudy	Calm	10:26	5.3	Surface	1.0	0.4	309	28.8	28.8	8.1	8.1	21.3	21.3	92.9	92.7	6.4	6.4	10.1	12.6	6	6	-	-	816564	810716	-	-	-	-
						1.0	0.4	309	28.8		8.1		21.3		92.5		6.4		10.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.3	316	28.8	28.8	8.1	8.1	22.9	22.9	86.2	86.2	5.9	5.9	15.1		6		-				-		-	
						4.3	0.3	335	28.8		8.1		22.9		86.2		5.9		15.0		7		-				-		-	
SR6	Cloudy	Calm	10:05	4.5	Surface	1.0	0.3	263	28.9	28.9	8.0	8.0	19.0	19.0	86.2	86.2	6.0	6.0	16.9	20.0	11	12	-	-	817920	814648	-	-	-	-
						1.0	0.3	277	28.9		8.0		19.0		86.2		6.0		17.0		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.3	274	28.9	28.9	8.0	8.0	20.0	20.0	86.6	86.7	6.0	6.0	23.1		11		-				-		-	
						3.5	0.3	279	28.9		8.0		20.0		86.7		6.0		23.1		13		-				-		-	
SR7	Cloudy	Moderate	09:22	18.6	Surface	1.0	0.1	222	28.9	28.9	7.8	7.8	18.8	18.8	83.6	83.6	5.8	5.4	3.4	3.2	4	5	-	-	823637	823730	-	-	-	-
						1.0	0.1	235	28.9		7.8		18.8		83.5		5.8		3.4		5		-				-		-	
					Middle	9.3	0.1	43	28.6	28.6	7.8	7.8	23.9	23.9	73.9	73.9	5.0		3.0		3		-				-		-	
						9.3	0.1	46	28.6		7.8		23.9		73.9		5.0		3.0		5		-				-		-	
					Bottom	17.6	0.3	52	28.4	28.4	7.8	7.8	27.4	27.4	74.0	73.9	4.9	4.9	3.1		5		-				-		-	
						17.6	0.3	55	28.4		7.8		27.4		73.8		4.9		3.2		5		-				-		-	
SR8	Cloudy	Moderate	10:27	3.7	Surface	1.0	-	-	28.8	28.8	7.8	7.8	17.8	17.8	82.6	82.6	5.8	5.8	4.2	4.8	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	28.8		7.8		17.8		82.6		5.8		4.2		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	-	-	28.7	28.7	7.9	7.9	18.9	19.0	81.3	81.3	5.7	5.7	5.4		6		-				-		-	
						2.7	-	-	28.7		7.9		19.0		81.3		5.7		5.6		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 21 June 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	19:10	8.4	Surface	1.0	0.2	239	29.8	29.8	8.3	8.3	16.7	16.7	116.1	115.9	8.0	7.3	9.5	13.6	5	6	78	81	815637	804271	<0.2	<0.2	2.0	2.0
						1.0	0.2	249	29.8		8.3		16.7		115.7		8.0		9.5		6		78				<0.2		2.0	
					Middle	4.2	0.3	231	29.3	29.3	8.2	8.2	20.6	20.6	97.1	97.1	6.6		12.8		6		81				<0.2		1.9	
						4.2	0.3	244	29.3		8.2		20.6		97.1		6.6		12.8		6		81				<0.2		2.0	
					Bottom	7.4	0.2	234	28.4	28.4	8.2	8.2	29.2	29.2	87.7	87.8	5.8	5.8	18.6		6		82				<0.2		2.0	
						7.4	0.2	245	28.4		8.2		29.2		87.8		5.8		18.6		6		83				<0.2		2.0	
C2	Cloudy	Moderate	18:05	12.6	Surface	1.0	0.3	180	29.6	29.6	7.7	7.7	15.1	15.1	94.1	94.1	6.6	5.9	4.5	7.0	5	6	76	79	825681	806973	<0.2	<0.2	2.8	2.5
						1.0	0.3	188	29.6		7.7		15.1		94.1		6.6		4.5		6		77				<0.2		2.4	
					Middle	6.3	0.4	173	29.1	29.1	7.7	7.7	20.4	20.4	76.0	76.0	5.2		4.7		7		79				<0.2		2.6	
						6.3	0.5	178	29.1		7.7		20.4		76.0		5.2		4.6		7		80				<0.2		2.2	
					Bottom	11.6	0.3	121	28.7	28.7	7.7	7.7	25.3	25.3	70.1	70.2	4.7	4.7	11.8		7		81				<0.2		2.4	
						11.6	0.3	122	28.7		7.7		25.3		70.3		4.7		12.1		6		81				<0.2		2.7	
C3	Cloudy	Moderate	19:57	11.8	Surface	1.0	0.4	80	29.4	29.4	7.8	7.8	17.8	17.8	89.7	89.7	6.2	6.0	3.7	5.6	6	7	80	81	822108	817822	<0.2	<0.2	2.3	2.3
						1.0	0.5	84	29.4		7.8		17.8		89.7		6.2		3.7		6		79				<0.2		2.4	
					Middle	5.9	0.4	97	29.2	29.2	7.8	7.8	19.5	19.5	82.7	82.7	5.7		3.1		6		81				<0.2		2.3	
						5.9	0.4	100	29.2		7.8		19.5		82.7		5.7		3.1		7		80				<0.2		2.3	
					Bottom	10.8	0.4	72	28.8	28.8	7.8	7.8	24.2	24.2	74.7	74.8	5.1	5.1	9.9		7		83				<0.2		2.4	
						10.8	0.4	76	28.8		7.8		24.2		74.8		5.1		10.0		8		83				<0.2		2.1	
IM1	Cloudy	Moderate	18:51	5.3	Surface	1.0	0.2	196	29.8	29.8	8.2	8.2	16.6	16.6	113.3	113.3	7.8	7.8	10.5	13.1	5	6	77	79	817929	807114	<0.2	<0.2	2.2	2.2
						1.0	0.2	215	29.8		8.2		16.6		113.2		7.8		10.5		6		77				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	176	28.8	28.8	8.2	8.2	25.0	25.0	89.0	89.1	6.0	6.0	15.7		6		80				<0.2		2.1	
						4.3	0.1	187	28.8		8.2		25.0		89.1		6.0		15.7		5		80				<0.2		2.3	
IM2	Cloudy	Moderate	18:43	7.4	Surface	1.0	0.3	201	29.7	29.7	8.2	8.2	17.2	17.2	108.0	107.9	7.5	7.0	10.3	16.7	4	5	77	79	818169	806163	<0.2	<0.2	2.3	2.4
						1.0	0.3	201	29.7		8.2		17.2		107.8		7.5		10.3		4		77				<0.2		2.4	
					Middle	3.7	0.4	219	29.4	29.4	8.2	8.2	19.2	19.0	93.6	93.5	6.4		14.0		5		78				<0.2		2.6	
						3.7	0.4	233	29.4		8.2		18.8		93.4		6.4		14.1		5		79				<0.2		2.3	
					Bottom	6.4	0.2	128	28.7	28.7	8.2	8.2	26.2	26.2	86.5	86.6	5.8	5.8	26.5		6		80				<0.2		2.4	
						6.4	0.2	136	28.7		8.2		26.2		86.6		5.8		25.0		6		81				<0.2		2.2	
IM3	Cloudy	Moderate	18:36	7.5	Surface	1.0	0.3	211	29.7	29.7	8.2	8.2	16.7	16.7	113.5	113.6	7.9	7.4	9.6	10.8	6	5	77	79	818755	805620	<0.2	<0.2	2.3	2.4
						1.0	0.3	223	29.7		8.2		16.7		113.6		7.9		9.6		5		77				<0.2		2.4	
					Middle	3.8	0.3	228	29.6	29.6	8.2	8.2	17.9	17.9	100.7	100.7	7.0		10.5		4		79				<0.2		2.4	
						3.8	0.4	238	29.6		8.2		17.9		100.6		6.9		10.6		5		79				<0.2		2.5	
					Bottom	6.5	0.2	154	28.8	28.8	8.2	8.2	24.1	24.1	89.4	89.5	6.0	6.0	12.3		4		81				<0.2		2.4	
						6.5	0.2	158	28.8		8.2		24.1		89.5		6.0		12.3		4		81				<0.2		2.6	
IM4	Cloudy	Moderate	18:28	7.6	Surface	1.0	0.2	195	29.6	29.6	8.2	8.2	16.4	16.4	104.1	104.1	7.3	6.7	10.5	13.3	6	6	78	79	819700	804588	<0.2	<0.2	2.2	2.3
						1.0	0.2	201	29.6		8.2		16.4		104.1		7.2		10.5		6		78				<0.2		2.3	
					Middle	3.8	0.2	205	29.0	29.0	8.2	8.2	21.4	21.3	89.4	89.3	6.1		15.1		6		78				<0.2		2.3	
						3.8	0.2	224	29.0		8.2		21.3		89.1		6.1		15.0		6		78				<0.2		2.4	
					Bottom	6.6	0.2	158	28.7	28.7	8.2	8.2	25.8	25.8	86.2	86.3	5.8	5.8	14.4		5		81				<0.2		2.4	
						6.6	0.3	170	28.7		8.2		25.8		86.3		5.8		14.3		6		81				<0.2		2.3	
IM5	Cloudy	Moderate	18:21	7.2	Surface	1.0	0.2	226	29.7	29.7	8.2	8.2	16.1	16.1	106.9	106.9	7.4	7.1	13.0	18.5	6	6	79	81	820735	804895	<0.2	<0.2	2.4	2.4
						1.0	0.2	248	29.7		8.2		16.1		106.9		7.4		13.0		6		79				<0.2		2.4	
					Middle	3.6	0.3	217	29.5	29.5	8.2	8.2	18.1	18.1	98.7	98.6	6.8		15.7		5		81				<0.2		2.4	
						3.6	0.3	233	29.5		8.2		18.1		98.5		6.8		15.8		5		81				<0.2		2.4	
					Bottom	6.2	0.2	201	29.0	29.0	8.2	8.2	22.2	22.2	92.0	92.1	6.3	6.3	26.9		6		83				<0.2		2.6	
						6.2	0.2	213	29.0		8.2		22.2		92.2		6.3		26.8		5		83				<0.2		2.4	
IM6	Cloudy	Moderate	18:13	6.8	Surface	1.0	0.3	188	29.9	29.9	8.2	8.2	15.0	15.0	111.4	111.4	7.8	7.6	11.5	17.8	5	5	78	81	821038	805844	<0.2	<0.2	2.5	2.4
						1.0	0.3	205	29.9		8.2		15.0		111.3		7.8		11.5		5		78				<0.2		2.5	
					Middle	3.4	0.3	202	29.8	29.8	8.2	8.2	16.7	16.7	106.2	106.2	7.4		16.5		5		81				<0.2		2.4	
						3.4	0.3	215	29.8		8.2		16.7		106.1		7.4		16.5		5		81				<0.2		2.4	
					Bottom	5.8	0.0	206	29.5	29.5	8.2	8.2	18.2	18.2	102.4	102.5	7.1	7.1	25.3		6		82				<0.2		2.4	
						5.8	0.0	217	29.5		8.2		18.2		102.5		7.1		25.3		5		83				<0.2		2.4	
IM7	Cloudy	Moderate	18:05	8.9	Surface	1.0	0.1	118	29.9	29.9	8.2	8.2	16.2	16.2	110.1	110.1	7.6	7.2	11.3	15.8	6	7	78	81	821355	806807	<0.2	<0.2	2.5	2.5
						1.0	0.1	128	29.9		8.2		16.2		110.0		7.6		11.3		7		78				<0.2		2.5	
					Middle	4.5	0.1	217	29.5	29.5	8.2	8.2	19.1	19.1	97.3	97.3	6.7		15.5		7		81				<0.2		2.4	
						4.5	0.1	225	29.5		8.2		19.1		97.2		6.7		15.5		8		81				<0.2		2.3	
					Bottom	7.9	0.2	188	29.2	29.2	8.2	8.2	21.2	21.1	94.3	94.4	6.4	6.4	20.5		8		82				<0.2		2.7	
						7.9	0.2	200	29.2		8.2		21.1		94.4		6.4		20.4		7		83				<0.2		2.8	
IM8	Cloudy	Moderate	18:37	7.5	Surface	1.0	0.2	169	29.6	29.6	7.7	7.7	15.3	15.3	95.8	95.8	6.7	6.2	3.8	5.0	7	7	76	79	821855	808159	<0.2	<0.2	2.4	2.6
						1.0	0.2	180	29.6		7.7		15.3		95.7		6.7		3.8		6		77				<0.2		2.6	
					Middle	3.8	0.3	82	29.2	29.2	7.7	7.7	16.9	16.9	81.6	81.6	5.7		4.7		7		79				<0.2		2.6	
						3.8	0.3	89	29.2		7.7		16.9		81.6		5.7		4.6		6		80				<0.2		2.7	
					Bottom	6.5	0.3	79	29.1	29.1	7.7	7.7	18.7	18.7	76.3	76.3	5.3	5.3	6.7		6		81				<0.2		2.4	
						6.5	0.3	80	29.1		7.7		18.7		76.2		5.3		6.6		7		81				<0.2		2.6	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 June 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	18:49	7.3	Surface	1.0	0.3	155	29.4	29.4	7.7	7.7	16.3	16.3	87.4	87.4	6.1	5.9	4.5	7.5	7	7	77	79	822068	808810	<0.2	<0.2	2.6	2.5
						1.0	0.3	165	29.4		7.7		16.3		87.4		6.1		4.6		8		78				<0.2		2.5	
					Middle	3.7	0.4	129	29.3	29.3	7.7	7.7	17.2	17.2	82.5	82.5	5.7		5.0		7		79				<0.2		2.6	
						3.7	0.4	141	29.3		7.7		17.2		82.5		5.7		5.0		6		80				<0.2		2.6	
					Bottom	6.3	0.4	101	29.1	29.1	7.6	7.6	18.8	18.8	74.0	74.0	5.1	5.1	12.8		5		80				<0.2		2.5	
						6.3	0.4	108	29.1		7.6		18.8		74.0		5.1		13.5		6		81				<0.2		2.4	
IM10	Cloudy	Moderate	19:00	7.4	Surface	1.0	0.5	173	29.6	29.6	7.7	7.7	15.2	15.2	94.4	94.4	6.6	6.0	3.7	10.6	6	7	77	79	822412	809795	<0.2	<0.2	2.6	2.5
						1.0	0.6	178	29.6		7.7		15.2		94.3		6.6		3.8		7		77				<0.2		2.6	
					Middle	3.7	0.5	132	29.1	29.1	7.6	7.6	18.1	18.1	76.5	76.5	5.3		9.1		7		80				<0.2		2.4	
						3.7	0.5	135	29.1		7.6		18.1		76.5		5.3		9.2		7		79				<0.2		2.3	
					Bottom	6.4	0.4	109	29.1	29.1	7.7	7.7	19.1	19.1	73.3	73.4	5.1	5.1	18.8		7		82				<0.2		2.4	
						6.4	0.4	113	29.1		7.7		19.1		73.4		5.1		18.8		6		80				<0.2		2.5	
IM11	Cloudy	Moderate	19:12	7.6	Surface	1.0	0.5	162	29.4	29.4	7.7	7.7	16.1	16.1	89.7	89.7	6.3	6.2	4.0	6.8	5	5	77	79	822067	811461	<0.2	<0.2	2.6	2.6
						1.0	0.6	170	29.4		7.7		16.1		89.6		6.3		4.0		5		76				<0.2		2.6	
					Middle	3.8	0.5	155	29.4	29.4	7.7	7.7	16.8	16.8	85.4	85.4	6.0		5.0		6		79				<0.2		2.5	
						3.8	0.5	163	29.4		7.7		16.8		85.3		6.0		4.9		5		79				<0.2		2.5	
					Bottom	6.6	0.5	113	29.1	29.1	7.7	7.7	20.0	20.0	75.9	75.9	5.2	5.2	11.5		4		81				<0.2		2.5	
						6.6	0.5	119	29.1		7.7		20.0		75.9		5.2		11.2		5		81				<0.2		2.6	
IM12	Cloudy	Moderate	19:18	7.2	Surface	1.0	0.6	137	29.3	29.3	7.7	7.7	18.4	18.4	83.5	83.4	5.8	6.1	6.7	5.6	6	6	77	80	821454	812037	<0.2	<0.2	2.4	2.5
						1.0	0.7	142	29.3		7.7		18.4		83.3		5.8		6.9		7		78				<0.2		2.5	
					Middle	3.6	0.6	120	29.4	29.4	7.7	7.7	16.2	16.2	90.1	90.1	6.3		4.4		5		79				<0.2		2.4	
						3.6	0.6	130	29.4		7.7		16.2		90.1		6.3		4.4		5		80				<0.2		2.5	
					Bottom	6.2	0.6	104	29.4	29.4	7.7	7.7	16.9	16.9	87.0	87.1	6.1	6.1	5.5		6		81				<0.2		2.5	
						6.2	0.6	110	29.4		7.7		16.9		87.1		6.1		5.6		7		82				<0.2		2.5	
SR2	Cloudy	Moderate	19:38	4.2	Surface	1.0	0.4	139	29.5	29.5	7.7	7.7	16.4	16.4	91.0	91.1	6.3	6.4	4.5	5.1	6	6	79	80	821452	814167	<0.2	<0.2	2.4	2.4
						1.0	0.4	146	29.5		7.7		16.3		91.1		6.4		4.4		6		78				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.3	107	29.4	29.4	7.7	7.7	17.5	17.5	87.4	87.4	6.1	6.1	5.8		7		82				<0.2		2.5	
						3.2	0.3	113	29.4		7.7		17.5		87.4		6.1		5.7		6		82				<0.2		2.5	
SR3	Cloudy	Moderate	18:26	8.4	Surface	1.0	0.4	184	29.5	29.5	7.7	7.7	15.7	15.6	92.6	92.8	6.5	5.9	4.1	5.6	5	5	-	-	822175	807590	-	-	-	-
						1.0	0.4	195	29.5		7.7		15.6		93.0		6.5		4.1		5		-				-		-	
					Middle	4.2	0.2	102	29.2	29.2	7.6	7.6	18.2	18.2	76.0	76.0	5.3		3.7		5		-				-		-	
						4.2	0.2	104	29.2		7.6		18.2		76.0		5.3		3.7		5		-				-		-	
					Bottom	7.4	0.3	72	29.0	29.0	7.6	7.6	20.1	20.1	71.5	71.6	4.9	4.9	9.0		5		-				-		-	
						7.4	0.3	74	29.0		7.6		20.1		71.6		4.9		9.1		5		-				-		-	
SR4A	Cloudy	Calm	19:31	9.0	Surface	1.0	0.1	276	29.9	29.9	8.2	8.2	17.2	17.2	103.5	103.5	7.1	6.6	12.1	18.0	6	6	-	-	817179	807814	-	-	-	-
						1.0	0.1	289	29.9		8.2		17.2		103.4		7.1		12.1		6		-				-		-	
					Middle	4.5	0.2	69	29.1	29.1	8.2	8.2	22.3	22.3	89.9	90.0	6.1		16.0		6		-				-		-	
						4.5	0.2	73	29.1		8.2		22.3		90.0		6.1		16.0		6		-				-		-	
					Bottom	8.0	0.2	73	28.8	28.8	8.2	8.2	25.5	25.5	86.6	86.7	5.8	5.8	25.7		6		-				-		-	
						8.0	0.2	75	28.8		8.2		25.5		86.8		5.8		25.8		6		-				-		-	
SR5A	Cloudy	Calm	19:48	5.4	Surface	1.0	0.1	149	29.9	29.9	8.1	8.1	19.0	19.0	105.5	105.5	7.2	7.2	11.1	11.1	6	6	-	-	816615	810687	-	-	-	-
						1.0	0.1	149	29.9		8.1		19.0		105.5		7.2		11.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	69	29.9	29.9	8.1	8.1	19.2	19.2	105.5	105.4	7.2	7.2	11.1		7		-				-		-	
						4.4	0.1	70	29.9		8.1		19.2		105.3		7.2		11.1		6		-				-		-	
SR6	Cloudy	Calm	20:13	4.2	Surface	1.0	0.1	330	30.0	30.0	8.2	8.2	18.4	18.4	104.0	103.9	7.1	7.1	13.5	16.1	7	6	-	-	817890	814679	-	-	-	-
						1.0	0.1	330	30.0		8.2		18.4		103.7		7.1		13.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	291	29.3	29.3	8.0	8.0	19.5	19.5	86.6	87.0	5.9	6.0	18.6		6		-				-		-	
						3.2	0.0	317	29.4		8.0		19.5		87.4		6.0		18.6		5		-				-		-	
SR7	Cloudy	Moderate	20:24	16.3	Surface	1.0	0.8	68	29.6	29.6	7.8	7.8	17.7	17.7	94.7	94.7	6.5	6.4	3.0	4.4	4	4	-	-	823623	823748	-	-	-	-
						1.0	0.9	74	29.6		7.8		17.7		94.6		6.5		3.1		3		-				-		-	
					Middle	8.2	0.6	50	29.6	29.6	7.8	7.8	18.5	18.5	91.1	91.1	6.3		3.1		4		-				-		-	
						8.2	0.6	53	29.6		7.8		18.5		91.1		6.3		3.1		4		-				-		-	
					Bottom	15.3	0.5	33	28.7	28.7	7.8	7.8	25.5	25.5	75.5	75.5	5.1	5.1	7.2		4		-				-		-	
						15.3	0.5	33	28.7		7.8		25.5		75.5		5.1		7.1		4		-				-		-	
SR8	Cloudy	Moderate	19:27	4.3	Surface	1.0	-	-	29.4	29.5	7.8	7.8	16.5	16.5	90.8	90.8	6.3	6.3	5.0	5.2	7	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.5		7.8		16.5		90.8		6.3		5.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	29.5	29.5	7.8	7.8	16.7	16.7	90.7	90.7	6.3	6.3	5.4		7		-				-		-	
						3.3	-	-	29.5		7.8		16.7		90.7		6.3		5.4		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 June 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	14:06	8.7	Surface	1.0	0.5	37	29.7	29.7	8.2	8.2	17.9	17.9	110.6	110.7	7.6	7.3	11.7	16.0	7	8	77	79	815620	804268	<0.2	<0.2	2.2	2.1
						1.0	0.5	39	29.7		8.2		17.9		110.7		7.6		11.7		7		77				<0.2		2.0	
					Middle	4.4	0.3	28	29.4	29.4	8.2	8.2	20.0	19.9	101.8	101.9	7.0		13.2		7		78				<0.2		2.1	
						4.4	0.4	30	29.4		8.2		19.9		101.9		7.0		13.3		8		79				<0.2		2.2	
					Bottom	7.7	0.2	19	28.6	28.6	8.2	8.2	26.7	26.7	86.4	86.5	5.8	5.8	23.1		8		81				<0.2		2.1	
						7.7	0.3	19	28.6		8.2		26.7		86.5		5.8		23.1		8		81				<0.2		2.1	
C2	Cloudy	Moderate	14:45	12.2	Surface	1.0	0.6	316	29.9	29.9	7.8	7.8	13.2	13.2	96.9	96.8	6.8	6.0	4.6	6.7	5	5	75	78	825699	806956	<0.2	<0.2	2.7	2.8
						1.0	0.6	321	29.9		7.8		13.2		96.6		6.8		4.6		5		76				<0.2		2.7	
					Middle	6.1	0.5	44	29.1	29.1	7.7	7.7	20.1	20.1	73.8	73.8	5.1		3.8		4		80				<0.2		2.9	
						6.1	0.5	47	29.1		7.7		20.1		73.8		5.1		3.8		4		78				<0.2		2.9	
					Bottom	11.2	0.3	50	28.9	28.9	7.7	7.7	22.5	22.5	67.6	67.6	4.6	4.6	11.5		5		80				<0.2		2.9	
						11.2	0.4	53	28.9		7.7		22.6		67.6		4.6		11.5		5		81				<0.2		2.8	
C3	Cloudy	Moderate	12:38	11.6	Surface	1.0	0.5	297	29.2	29.2	7.7	7.7	17.6	17.6	86.1	86.1	6.0	5.8	4.2	5.2	5	5	77	80	822117	817827	<0.2	<0.2	2.7	2.5
						1.0	0.5	305	29.2		7.7		17.6		86.1		6.0		4.3		6		77				<0.2		2.4	
					Middle	5.8	0.7	272	29.0	29.0	7.7	7.7	20.4	20.4	79.4	79.5	5.5		4.5		6		80				<0.2		2.5	
						5.8	0.7	286	29.0		7.7		20.4		79.5		5.5		4.4		5		79				<0.2		2.5	
					Bottom	10.6	0.7	288	28.9	28.9	7.8	7.8	23.3	23.3	80.1	80.2	5.4	5.4	6.9		5		82				<0.2		2.4	
						10.6	0.7	296	28.9		7.8		23.3		80.3		5.4		7.0		5		82				<0.2		2.4	
IM1	Cloudy	Calm	14:25	5.6	Surface	1.0	0.2	15	29.9	29.9	8.2	8.2	16.3	16.3	108.6	108.6	7.5	7.5	11.1	11.2	6	6	79	80	817934	807153	<0.2	<0.2	2.5	2.3
						1.0	0.2	16	29.9		8.2		16.3		108.6		7.5		11.0		6		79				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	339	29.8	29.8	8.2	8.2	17.1	17.1	107.4	107.4	7.4	7.4	11.4		6		80				<0.2		2.2	
						4.6	0.1	312	29.8		8.2		17.1		107.4		7.4		11.4		6		81				<0.2		2.1	
IM2	Cloudy	Moderate	14:31	7.5	Surface	1.0	0.3	21	29.7	29.7	8.2	8.2	16.4	16.4	108.0	108.0	7.5	7.3	10.5	11.4	6	6	78	81	818191	806147	<0.2	<0.2	2.5	2.6
						1.0	0.3	22	29.7		8.2		16.4		107.9		7.5		10.5		6		79				<0.2		2.8	
					Middle	3.8	0.3	3	29.6	29.6	8.2	8.2	17.8	17.8	103.0	103.0	7.1		11.2		6		81				<0.2		2.4	
						3.8	0.3	3	29.6		8.2		17.8		103.0		7.1		11.3		6		81				<0.2		3.0	
					Bottom	6.5	0.3	335	29.6	29.6	8.2	8.2	18.3	18.3	102.9	103.0	7.1	7.1	12.3		6		82				<0.2		2.9	
						6.5	0.3	336	29.6		8.2		18.3		103.0		7.1		12.4		6		83				<0.2		2.2	
IM3	Cloudy	Moderate	14:39	7.7	Surface	1.0	0.4	27	29.7	29.7	8.1	8.1	15.6	15.6	104.7	104.7	7.3	7.0	11.4	12.8	7	7	78	81	818786	805589	<0.2	<0.2	2.8	2.6
						1.0	0.4	29	29.7		8.1		15.6		104.7		7.3		11.4		7		79				<0.2		2.6	
					Middle	3.9	0.3	359	29.3	29.3	8.1	8.1	17.7	17.7	95.9	95.9	6.7		11.6		7		81				<0.2		2.6	
						3.9	0.3	330	29.3		8.1		17.7		95.9		6.7		11.7		6		81				<0.2		2.6	
					Bottom	6.7	0.3	3	29.0	29.0	8.2	8.2	20.8	20.9	93.1	93.1	6.4	6.4	15.4		7		83				<0.2		2.7	
						6.7	0.3	3	29.0		8.2		21.0		93.1		6.4		15.5		8		83				<0.2		2.5	
IM4	Cloudy	Moderate	14:49	7.8	Surface	1.0	0.4	31	29.9	29.9	8.2	8.2	14.9	14.9	109.7	109.7	7.7	7.1	11.3	12.1	6	7	78	81	819715	804625	<0.2	<0.2	2.6	2.7
						1.0	0.4	32	29.9		8.2		14.9		109.6		7.7		11.3		6		79				<0.2		2.8	
					Middle	3.9	0.5	354	29.2	29.2	8.2	8.2	18.9	18.8	92.8	92.8	6.4		11.2		6		81				<0.2		2.8	
						3.9	0.6	326	29.2		8.2		18.8		92.7		6.4		11.2		6		81				<0.2		2.6	
					Bottom	6.8	0.4	4	28.8	28.8	8.2	8.2	22.6	22.3	89.1	89.2	6.1	6.1	13.9		8		83				<0.2		2.8	
						6.8	0.5	4	28.8		8.2		21.9		89.2		6.1		13.9		7		84				<0.2		2.6	
IM5	Cloudy	Moderate	14:56	7.2	Surface	1.0	0.2	20	29.9	29.9	8.2	8.2	16.5	16.5	107.2	107.1	7.4	6.9	10.9	13.2	7	6	79	82	820714	804853	<0.2	<0.2	2.6	2.6
						1.0	0.2	20	29.9		8.2		16.5		107.0		7.4		11.0		6		79				<0.2		2.7	
					Middle	3.6	0.4	10	29.2	29.2	8.2	8.2	20.7	20.7	93.9	93.9	6.4		11.7		5		81				<0.2		2.5	
						3.6	0.4	10	29.2		8.2		20.7		93.9		6.4		11.8		5		82				<0.2		2.5	
					Bottom	6.2	0.3	9	28.8	28.8	8.2	8.2	24.3	24.3	88.3	88.3	6.0	6.0	16.7		5		84				<0.2		2.7	
						6.2	0.4	9	28.8		8.2		24.3		88.3		6.0		16.8		6		84				<0.2		2.5	
IM6	Cloudy	Moderate	14:17	6.7	Surface	1.0	0.2	38	29.5	29.5	7.9	7.9	17.5	17.5	89.8	89.8	6.2	6.2	9.9	13.4	5	6	78	81	821042	805829	<0.2	<0.2	2.6	2.6
						1.0	0.2	38	29.5		7.9		17.5		89.8		6.2		10.3		6		79				<0.2		2.6	
					Middle	3.4	0.2	1	29.5	29.5	7.9	7.9	17.7	17.7	89.4	89.4	6.2		12.7		6		81				<0.2		2.6	
						3.4	0.2	1	29.4		7.9		17.7		89.3		6.2		13.5		6		82				<0.2		2.5	
					Bottom	5.7	0.3	26	28.8	28.8	7.9	7.9	23.0	23.0	82.8	82.9	5.6	5.6	17.2		7		83				<0.2		2.4	
						5.7	0.4	27	28.8		7.9		23.0		83.0		5.6		17.2		6		83				<0.2		2.8	
IM7	Cloudy	Moderate	14:10	8.2	Surface	1.0	0.2	20	29.6	29.6	7.8	7.8	17.0	17.0	87.9	87.9	6.1	5.9	8.8	9.8	4	5	78	79	821331	806855	<0.2	<0.2	2.6	2.5
						1.0	0.2	21	29.6		7.8		17.0		87.8		6.1		8.9		4		78				<0.2		2.4	
					Middle	4.1	0.3	22	29.2	29.2	7.7	7.7	17.3	17.3	81.9	82.0	5.7		9.4		5		79				<0.2		2.6	
						4.1	0.3	22	29.2		7.7		17.3		82.0		5.7		9.5		5		79				<0.2		2.3	
					Bottom	7.2	0.4	25	29.1	29.1	7.7	7.7	18.6	18.6	79.4	79.5	5.5	5.5	11.1		5		81				<0.2		2.7	
						7.2	0.4	26	29.1		7.7		18.6		79.6		5.5		11.1		6		81				<0.2		2.6	
IM8	Cloudy	Moderate	14:02	7.6	Surface	1.0	0.2	253	29.6	29.6	7.7	7.7	15.5	15.5	92.5	92.4	6.5	6.3	4.4	7.1	6	6	76	79	821808	808138	<0.2	<0.2	2.6	2.6
						1.0	0.2	272	29.6		7.7		15.5		92.3		6.5		4.3		6		77				<0.2		2.7	
					Middle	3.8	0.1	132	29.5	29.5	7.7	7.7	15.9	15.9	87.9	87.9	6.1		5.8		6		79				<0.2		2.6	
						3.8	0.1	132	29.5		7.7		15.9		87.9		6.1		6.0		5		78				<0.2		2.5	
					Bottom	6.6	0.2	95	29.2	29.2	7.6	7.6	17.4	17.4	81.5	81.6	5.7	5.7	11.2		5		81				<0.2		2.6	
						6.6	0.3	103	29.2		7.6		17.5		81.7		5.7		11.2		6		81				<0.2		2.4	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 21 June 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	13:56	7.2	Surface	1.0	0.5	313	29.6	29.6	7.8	7.8	15.8	15.8	90.0	90.1	6.3	6.0	5.4	10.1	6	15	76	78	822114	808837	<0.2	<0.2	2.5	2.5
						1.0	0.5	332	29.6		7.8		15.8		90.1		6.3		5.3		5		76				<0.2		2.6	
					Middle	3.6	0.4	305	29.1	29.1	7.7	7.7	17.0	16.9	81.4	81.5	5.7		11.1		18		79				<0.2		2.7	
						3.6	0.4	335	29.1		7.7		16.9		81.5		5.7		10.8		20		78				<0.2		2.4	
					Bottom	6.2	0.4	319	29.1	29.1	7.7	7.7	17.1	17.1	80.6	80.6	5.6	5.6	14.0		21		80				<0.2		2.5	
						6.2	0.4	329	29.1		7.7		17.1		80.6		5.6		14.0		21		81				<0.2		2.5	
IM10	Cloudy	Moderate	13:49	7.5	Surface	1.0	0.7	280	29.4	29.4	7.7	7.7	16.4	16.4	87.8	87.8	6.1	6.0	4.8	7.7	8	8	77	79	822400	809774	<0.2	<0.2	2.5	2.5
						1.0	0.7	305	29.4		7.7		16.4		87.7		6.1		4.8		8		77				<0.2		2.4	
					Middle	3.8	0.5	291	29.2	29.2	7.7	7.7	16.9	16.9	84.2	84.2	5.9		5.3		8		79				<0.2		2.5	
						3.8	0.5	295	29.2		7.7		16.9		84.2		5.9		5.3		7		79				<0.2		2.5	
					Bottom	6.5	0.4	262	29.0	29.0	7.7	7.7	19.5	19.5	76.7	76.8	5.3	5.3	13.0		8		82				<0.2		2.4	
						6.5	0.5	281	29.0		7.7		19.5		76.8		5.3		13.0		7		81				<0.2		2.5	
IM11	Cloudy	Moderate	13:38	7.4	Surface	1.0	0.6	322	29.4	29.4	7.8	7.8	16.4	16.4	91.2	91.2	6.4	6.3	4.8	6.5	7	6	78	79	822086	811437	<0.2	<0.2	2.4	2.4
						1.0	0.6	327	29.4		7.8		16.4		91.1		6.4		4.7		6		77				<0.2		2.2	
					Middle	3.7	0.6	316	29.3	29.3	7.8	7.8	16.6	16.6	88.5	88.5	6.2		4.7		6		79				<0.2		2.2	
						3.7	0.6	333	29.3		7.8		16.6		88.4		6.2		4.7		6		79				<0.2		2.4	
					Bottom	6.4	0.4	283	29.1	29.1	7.8	7.8	19.6	19.6	81.5	81.5	5.6	5.6	10.1		6		81				<0.2		2.5	
						6.4	0.5	286	29.1		7.8		19.6		81.5		5.6		10.1		7		82				<0.2		2.5	
IM12	Cloudy	Moderate	13:16	8.8	Surface	1.0	0.7	280	29.6	29.6	7.7	7.7	16.3	16.3	94.9	94.9	6.6	6.4	4.5	9.5	8	8	77	79	821461	812059	<0.2	<0.2	2.5	2.4
						1.0	0.7	289	29.6		7.7		16.3		94.9		6.6		4.7		8		78				<0.2		2.4	
					Middle	4.4	0.6	273	29.3	29.3	7.7	7.7	18.5	18.5	89.9	90.0	6.2		5.4		7		79				<0.2		2.5	
						4.4	0.7	278	29.3		7.7		18.4		90.0		6.2		5.3		7		78				<0.2		2.6	
					Bottom	7.8	0.3	233	28.8	28.8	7.7	7.7	23.0	23.0	71.4	71.5	4.9	4.9	18.5		8		81				<0.2		2.3	
						7.8	0.4	241	28.8		7.7		23.0		71.6		4.9		18.6		8		81				<0.2		2.3	
SR2	Cloudy	Moderate	12:59	4.7	Surface	1.0	0.2	69	29.7	29.7	7.7	7.7	16.5	16.5	92.4	92.4	6.4	6.4	3.9	5.3	6	6	79	80	821488	814182	<0.2	<0.2	2.5	2.5
						1.0	0.2	74	29.7		7.7		16.5		92.3		6.4		4.0		6		78				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	44	29.3	29.3	7.8	7.8	18.7	18.8	84.3	84.3	5.8	5.8	6.6		6		82				<0.2		2.7	
						3.7	0.3	47	29.3		7.8		18.8		84.2		5.8		6.7		5		82				<0.2		2.7	
SR3	Cloudy	Moderate	14:28	8.6	Surface	1.0	0.5	183	29.6	29.6	7.7	7.7	15.5	15.5	93.2	93.2	6.5	6.3	4.4	6.9	7	9	-	-	822121	807569	-	-	-	-
						1.0	0.5	190	29.6		7.7		15.5		93.2		6.5		4.4		6		-				-		-	
					Middle	4.3	0.2	209	29.4	29.4	7.7	7.7	16.3	16.3	86.1	86.1	6.0		7.6		10		-				-		-	
						4.3	0.2	228	29.4		7.7		16.3		86.0		6.0		7.3		10		-				-		-	
					Bottom	7.6	0.2	216	29.2	29.2	7.7	7.7	18.7	18.7	77.7	77.9	5.4	5.4	8.8		11		-				-		-	
						7.6	0.2	232	29.2		7.7		18.7		78.0		5.4		9.1		12		-				-		-	
SR4A	Cloudy	Calm	13:44	8.9	Surface	1.0	0.2	255	29.7	29.7	8.1	8.1	19.2	19.2	101.2	101.2	6.9	6.7	12.3	15.0	12	11	-	-	817190	807812	-	-	-	-
						1.0	0.2	270	29.7		8.1		19.2		101.2		6.9		12.3		10		-				-		-	
					Middle	4.5	0.2	258	29.6	29.6	8.1	8.1	19.7	19.7	95.8	95.8	6.6		13.1		10		-				-		-	
						4.5	0.2	267	29.6		8.1		19.7		95.8		6.5		13.1		11		-				-		-	
					Bottom	7.9	0.1	252	28.8	28.8	8.2	8.2	25.3	25.3	86.2	86.2	5.8	5.8	19.4		12		-				-		-	
						7.9	0.2	273	28.8		8.2		25.3		86.2		5.8		19.5		11		-				-		-	
SR5A	Cloudy	Calm	13:28	5.0	Surface	1.0	0.1	279	29.5	29.5	8.1	8.1	19.6	19.6	98.6	98.7	6.8	6.8	12.2	13.2	10	11	-	-	816617	810724	-	-	-	-
						1.0	0.1	282	29.5		8.1		19.6		98.8		6.8		12.2		11		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	325	29.5	29.5	8.1	8.1	19.7	19.7	96.1	96.2	6.6	6.6	14.2		11		-				-		-	
						4.0	0.2	341	29.5		8.1		19.7		96.2		6.6		14.2		12		-				-		-	
SR6	Cloudy	Calm	13:02	4.1	Surface	1.0	0.2	260	29.6	29.6	8.1	8.1	17.4	17.4	98.5	98.5	6.8	6.8	11.2	12.2	8	7	-	-	817871	814642	-	-	-	-
						1.0	0.2	276	29.6		8.1		17.4		98.4		6.8		11.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	310	29.3	29.3	8.0	8.0	19.3	19.3	84.8	84.8	5.8	5.8	13.2		6		-				-		-	
						3.1	0.1	325	29.3		8.0		19.3		84.7		5.8		13.1		7		-				-		-	
SR7	Cloudy	Moderate	12:09	16.4	Surface	1.0	0.2	214	29.5	29.5	7.7	7.7	18.1	18.1	89.2	89.2	6.2	5.8	3.0	6.3	7	6	-	-	823628	823716	-	-	-	-
						1.0	0.2	217	29.5		7.7		18.1		89.2		6.2		3.1		7		-				-		-	
					Middle	8.2	0.1	55	28.9	28.9	7.7	7.7	21.6	21.6	77.3	77.2	5.3		3.9		6		-				-		-	
						8.2	0.1	57	28.9		7.7		21.7		77.1		5.3		4.1		6		-				-		-	
					Bottom	15.4	0.3	67	28.7	28.7	7.6	7.6	25.8	25.8	75.0	75.1	5.0	5.0	11.6		6		-				-		-	
						15.4	0.3	68	28.7		7.6		25.8		75.1		5.0		11.8		6		-				-		-	
SR8	Cloudy	Moderate	13:11	4.8	Surface	1.0	-	-	29.2	29.2	7.7	7.7	17.0	17.0	88.9	88.9	6.2	6.2	4.6	4.6	8	8	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.2		7.7		17.0		88.9		6.2		4.7		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.3	29.3	7.8	7.8	17.5	17.5	89.6	89.5	6.2	6.2	4.5		9		-				-		-	
						3.8	-	-	29.3		7.8		17.5		89.4		6.2		4.5		7		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 26 June 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	12:34	8.5	Surface	1.0	0.7	210	29.6	29.6	8.2	8.2	13.3	13.3	97.4	97.2	6.9	6.2	14.2	18.0	6	7	77	80	815610	804227	<0.2	<0.2	2.4	2.5
						1.0	0.8	212	29.6		8.2		13.3		96.9		6.9		14.3		7		77				<0.2		2.5	
					Middle	4.3	0.8	215	28.7	28.7	8.1	8.1	21.3	21.3	78.2	78.2	5.4		19.3		5		80				<0.2		2.5	
						4.3	0.8	236	28.7		8.1		21.3		78.2		5.4		19.4		7		80				<0.2		2.4	
					Bottom	7.5	0.7	224	28.2	28.2	8.1	8.1	26.1	26.1	71.2	71.2	4.8	4.8	20.2		8		81				<0.2		2.5	
						7.5	0.7	229	28.2		8.1		26.1		71.2		4.8		20.6		8		82				<0.2		2.5	
C2	Fine	Moderate	13:39	11.0	Surface	1.0	0.5	174	29.5	29.5	8.0	8.0	14.4	14.5	83.5	83.5	5.9	5.5	11.4	15.9	5	5	78	80	825675	806932	<0.2	<0.2	3.5	3.3
						1.0	0.6	186	29.5		8.0		14.6		83.5		5.9		11.4		5		78				<0.2		3.1	
					Middle	5.5	0.9	139	28.8	28.8	8.1	8.1	22.0	22.0	75.1	75.2	5.1		16.1		5		80				<0.2		3.2	
						5.5	0.9	140	28.8		8.1		22.0		75.2		5.1		16.1		6		80				<0.2		3.4	
					Bottom	10.0	0.6	99	28.8	28.8	8.1	8.1	23.0	23.0	75.2	75.3	5.1	5.1	20.0		6		82				<0.2		3.2	
						10.0	0.6	108	28.8		8.1		23.0		75.3		5.1		20.1		5		82				<0.2		3.2	
C3	Cloudy	Moderate	11:26	12.1	Surface	1.0	0.5	117	28.7	28.7	8.1	8.1	21.3	21.3	84.6	84.6	5.8	5.7	10.8	11.1	7	7	78	80	822090	817817	<0.2	<0.2	1.6	1.7
						1.0	0.6	125	28.7		8.1		21.3		84.6		5.8		10.8		8		78				<0.2		1.7	
					Middle	6.1	0.2	73	28.6	28.6	8.1	8.1	22.9	22.9	81.9	81.9	5.6		11.1		7		80				<0.2		1.7	
						6.1	0.2	73	28.6		8.1		22.9		81.8		5.6		11.1		7		80				<0.2		1.7	
					Bottom	11.1	0.5	38	28.5	28.5	8.1	8.1	23.5	23.5	80.5	80.5	5.5	5.5	11.3		7		82				<0.2		1.8	
						11.1	0.5	38	28.5		8.1		23.5		80.5		5.5		11.3		6		82				<0.2		1.8	
IM1	Rainy	Moderate	13:00	4.4	Surface	1.0	0.2	313	29.5	29.5	8.1	8.1	17.0	17.0	97.6	97.5	6.8	6.8	12.2	15.2	6	6	77	79	817923	807102	<0.2	<0.2	2.3	2.4
						1.0	0.2	342	29.5		8.1		17.0		97.4		6.8		12.2		5		77				<0.2		2.2	
					Middle	2.2	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	
						2.2	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	339	28.3	28.3	8.0	8.0	24.9	25.0	73.1	74.4	5.0	5.1	18.2		6		80				<0.2		2.4	
						3.4	0.1	352	28.4		8.0		25.1		75.7		5.1		18.2		5		80				<0.2		2.5	
IM2	Rainy	Moderate	13:08	6.8	Surface	1.0	0.9	188	29.1	29.1	8.2	8.2	16.7	16.7	91.6	91.5	6.4	5.8	18.8	19.7	10	11	77	80	818147	806180	<0.2	<0.2	2.3	2.3
						1.0	1.0	190	29.1		8.2		16.7		91.3		6.4		18.7		10		77				<0.2		2.3	
					Middle	3.4	0.7	183	28.7	28.7	8.1	8.1	19.6	19.6	75.2	75.2	5.2		19.9		10		80				<0.2		2.4	
						3.4	0.7	191	28.7		8.1		19.6		75.1		5.2		19.9		11		80				<0.2		2.2	
					Bottom	5.8	0.4	188	28.2	28.2	8.1	8.1	25.8	25.8	71.7	71.8	4.8	4.9	20.4		11		82				<0.2		2.3	
						5.8	0.5	199	28.2		8.1		25.8		71.8		4.9		20.4		11		82				<0.2		2.4	
IM3	Cloudy	Moderate	13:17	6.9	Surface	1.0	0.6	229	29.4	29.4	8.1	8.1	15.3	15.3	95.3	95.3	6.7	6.5	15.1	18.0	6	6	78	80	818797	805584	<0.2	<0.2	2.4	2.4
						1.0	0.7	235	29.4		8.1		15.3		95.2		6.7		15.1		5		77				<0.2		2.4	
					Middle	3.5	0.7	233	29.2	29.2	8.1	8.1	16.4	16.4	90.0	90.0	6.3		19.1		6		80				<0.2		2.4	
						3.5	0.8	234	29.2		8.1		16.4		90.0		6.3		19.3		5		80				<0.2		2.5	
					Bottom	5.9	0.6	230	28.8	28.8	8.0	8.0	19.9	19.9	81.2	81.8	5.6	5.7	19.5		6		82				<0.2		2.4	
						5.9	0.7	236	28.8		8.0		19.9		82.4		5.7		19.7		6		82				<0.2		2.4	
IM4	Cloudy	Moderate	13:25	7.0	Surface	1.0	1.1	216	29.5	29.5	8.1	8.1	11.6	11.6	101.1	101.1	7.2	6.9	13.4	14.5	6	6	77	80	819695	804593	<0.2	<0.2	2.5	2.4
						1.0	1.2	218	29.5		8.1		11.6		101.1		7.2		13.4		5		77				<0.2		2.4	
					Middle	3.5	1.0	216	29.4	29.4	8.0	8.0	14.7	14.4	93.6	93.6	6.6		14.7		6		80				<0.2		2.4	
						3.5	1.0	230	29.4		8.0		14.2		93.5		6.6		14.8		5		80				<0.2		2.4	
					Bottom	6.0	0.8	219	29.0	29.0	8.0	8.0	18.0	17.9	83.1	83.4	5.8	5.8	15.3		6		82				<0.2		2.5	
						6.0	0.8	239	29.0		8.0		17.8		83.7		5.8		15.1		6		82				<0.2		2.3	
IM5	Cloudy	Moderate	13:35	6.2	Surface	1.0	0.9	222	29.4	29.4	8.0	8.0	12.5	12.5	94.0	94.0	6.7	6.3	16.6	17.6	5	7	77	80	820739	804856	<0.2	<0.2	2.2	2.6
						1.0	1.0	241	29.4		8.0		12.5		94.0		6.7		16.7		6		77				<0.2		2.6	
					Middle	3.1	0.7	233	29.1	29.1	8.0	8.0	17.7	17.8	83.8	83.8	5.8		16.3		8		80				<0.2		2.5	
						3.1	0.7	248	29.1		8.0		17.8		83.8		5.8		16.9		8		80				<0.2		2.6	
					Bottom	5.2	0.5	235	29.0	29.0	8.0	8.0	18.4	18.4	81.4	81.5	5.7	5.7	19.2		6		82				<0.2		2.9	
						5.2	0.5	256	29.0		8.0		18.4		81.5		5.7		19.9		7		82				<0.2		3.0	
IM6	Cloudy	Moderate	13:41	6.0	Surface	1.0	0.6	208	29.7	29.7	8.0	8.0	12.2	12.2	97.3	97.3	6.9	6.7	14.5	16.8	7	6	78	80	821086	805821	<0.2	<0.2	2.6	2.7
						1.0	0.6	219	29.7		8.0		12.2		97.3		6.9		14.5		7		77				<0.2		2.8	
					Middle	3.0	0.8	231	29.4	29.4	8.0	8.0	13.0	13.0	91.5	91.4	6.5		17.2		6		80				<0.2		2.5	
						3.0	0.8	244	29.4		8.0		13.0		91.3		6.5		17.3		6		80				<0.2		2.6	
					Bottom	5.0	0.7	233	28.9	28.9	8.0	8.0	20.3	20.2	78.3	78.5	5.4	5.4	18.5		6		82				<0.2		2.7	
						5.0	0.7	253	28.9		8.0		20.2		78.6		5.4		18.5		6		82				<0.2		2.7	
IM7	Cloudy	Moderate	13:47	7.5	Surface	1.0	1.1	214	29.7	29.7	7.9	7.9	12.5	12.5	86.1	86.1	6.1	5.9	13.6	15.0	5	6	77	80	821360	806846	<0.2	<0.2	2.4	2.7
						1.0	1.1	232	29.7		7.9		12.5		86.0		6.1		13.6		5		77				<0.2		2.9	
					Middle	3.8	1.0	221	29.1	29.1	7.9	7.9	15.3	15.3	79.7	79.7	5.6		15.1		6		80				<0.2		2.7	
						3.8	1.0	227	29.1		7.9		15.3		79.7		5.6		15.0		6		80				<0.2		2.8	
					Bottom	6.5	0.9	233	29.0	29.0	7.9	7.9	15.8	15.8	79.5	79.5	5.6	5.6	16.1		6		81				<0.2		2.7	
						6.5	0.9	245	29.0		7.9		15.8		79.5		5.6		16.3		5		82				<0.2		2.8	
IM8	Fine	Moderate	13:02	6.9	Surface	1.0	0.3	152	30.0	30.0	8.0	8.0	11.6	11.6	87.2	87.1	6.2	5.7	11.1	14.4	5	4	79	80	821840	808126	<0.2	<0.2	3.1	3.4
						1.0	0.3	164	30.0		8.0		11.6		87.0		6.2		11.1		3		78				<0.2		3.1	
					Middle	3.5	0.3	126	28.8	28.8	8.1	8.1	21.9	21.9	76.4	76.4	5.2		15.5		4		80				<0.2		3.4	
						3.5	0.3	138	28.8		8.1		21.9		76.3		5.2		15.7		4		80				<0.2		3.4	
					Bottom	5.9	0.3	103	28.8	28.8	8.1	8.1	22.6	22.6	76.9	77.0	5.2	5.3	16.6		4		82				<0.2		4.0	
						5.9	0.3	110	28.8		8.1		22.7		77.1		5.3		16.5		6		82				<0.2		3.2	

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**

Note: Monitoring session on 23 June 2018 was cancelled due to bad weather.

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

Water Quality Monitoring

Water Quality Monitoring Results on 26 June 18 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	12:58	6.5	Surface	1.0	0.3	146	29.9	29.9	8.0	8.0	12.3	12.6	89.5	89.4	6.3	5.8	10.8	14.8	5	5	78	80	822100	808800	<0.2	<0.2	3.2	3.3
						1.0	0.3	159	29.9		8.0		12.9		89.3		6.3		10.9		4		79				<0.2		3.4	
					Middle	3.3	0.3	137	28.8	28.8	8.1	8.1	22.3	22.3	76.7	76.7	5.2		16.8		5		80				<0.2		3.8	
						3.3	0.4	142	28.8		8.1		22.3		76.7		5.2		16.9		6		81				<0.2		3.1	
					Bottom	5.5	0.4	108	28.8	28.8	8.1	8.1	22.9	22.9	78.4	78.5	5.3	5.4	16.8		4		82				<0.2		3.1	
						5.5	0.4	115	28.8		8.1		22.9		78.6		5.4		16.6		5		82				<0.2		3.0	
IM10	Fine	Moderate	12:52	7.3	Surface	1.0	0.5	166	29.9	29.9	8.1	8.1	11.5	11.5	86.5	86.4	6.2	5.8	12.4	15.2	5	5	78	80	822409	809768	<0.2	<0.2	2.8	3.3
						1.0	0.6	177	29.9		8.1		11.5		86.2		6.1		12.5		6		79				<0.2		3.0	
					Middle	3.7	0.5	149	28.9	28.9	8.1	8.1	19.0	19.0	79.6	79.6	5.5		16.9		4		80				<0.2		3.1	
						3.7	0.5	149	28.9		8.1		19.0		79.6		5.5		16.9		4		80				<0.2		3.7	
					Bottom	6.3	0.4	112	28.8	28.8	8.1	8.1	21.8	21.9	81.4	81.5	5.6	5.6	16.3		4		82				<0.2		3.3	
						6.3	0.4	122	28.8		8.1		21.9		81.6		5.6		16.3		4		82				<0.2		3.6	
IM11	Cloudy	Moderate	12:40	7.2	Surface	1.0	0.7	107	29.2	29.2	8.1	8.1	14.6	14.6	92.0	92.0	6.5	6.2	10.3	13.4	4	5	79	81	822042	811449	<0.2	<0.2	2.6	3.1
						1.0	0.8	108	29.2		8.1		14.6		91.9		6.5		10.3		5		79				<0.2		2.8	
					Middle	3.6	0.7	111	28.9	28.9	8.0	8.0	17.1	17.1	83.6	83.6	5.9		13.6		5		80				<0.2		4.0	
						3.6	0.7	115	28.9		8.0		17.1		83.6		5.9		13.7		4		81				<0.2		3.4	
					Bottom	6.2	0.4	100	28.9	28.9	8.1	8.0	19.7	19.6	84.4	84.6	5.8	5.9	16.4		4		82				<0.2		2.8	
						6.2	0.5	101	28.9		8.0		19.6		84.8		5.9		16.0		6		82				<0.2		3.1	
IM12	Cloudy	Moderate	12:31	7.8	Surface	1.0	0.6	141	29.3	29.3	8.1	8.1	13.7	13.7	98.9	98.9	7.0	6.8	10.3	17.0	6	6	78	80	821465	812044	<0.2	<0.2	3.6	3.0
						1.0	0.6	153	29.3		8.1		13.7		98.8		7.0		10.3		6		78				<0.2		3.6	
					Middle	3.9	0.6	135	29.1	29.1	8.1	8.1	14.9	14.9	91.9	91.8	6.5		13.7		5		80				<0.2		2.7	
						3.9	0.6	138	29.1		8.1		14.9		91.7		6.5		13.8		6		81				<0.2		2.7	
					Bottom	6.8	0.6	106	28.9	28.9	8.1	8.1	18.3	18.3	85.4	85.5	6.0	6.0	26.8		6		82				<0.2		2.7	
						6.8	0.6	106	28.9		8.1		18.3		85.5		6.0		27.0		5		82				<0.2		2.9	
SR2	Cloudy	Moderate	11:57	3.6	Surface	1.0	0.5	90	29.0	29.0	8.1	8.1	16.1	16.1	91.0	91.0	6.4	6.4	12.0	12.9	5	6	79	80	821455	814184	<0.2	<0.2	2.4	2.4
						1.0	0.5	95	29.0		8.1		16.1		91.0		6.4		12.0		5		79				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.2	73	28.9	28.9	8.1	8.1	17.5	17.5	91.5	91.6	6.4	6.4	13.8		7		80				<0.2		2.5	
						2.6	0.2	77	28.9		8.1		17.5		91.6		6.4		13.8		7		80				<0.2		2.3	
SR3	Fine	Moderate	13:07	8.4	Surface	1.0	0.4	170	29.9	29.9	8.0	8.0	11.7	11.7	88.0	87.8	6.3	5.7	10.8	13.8	5	5	-	-	822173	807597	-	-	-	-
						1.0	0.4	175	29.9		8.0		11.7		87.6		6.2		10.8		5		-				-		-	
					Middle	4.2	0.2	113	28.8	28.8	8.1	8.1	21.6	21.6	76.4	76.4	5.2		15.1		6		-				-		-	
						4.2	0.2	122	28.8		8.1		21.6		76.4		5.2		15.1		5		-				-		-	
					Bottom	7.4	0.3	91	28.8	28.8	8.0	8.0	23.1	23.1	79.4	79.5	5.4	5.4	15.7		4		-				-		-	
						7.4	0.4	95	28.8		8.0		23.1		79.6		5.4		15.5		5		-				-		-	
SR4A	Cloudy	Moderate	12:15	8.8	Surface	1.0	0.1	255	28.9	28.9	8.1	8.1	16.2	16.2	83.9	83.7	5.9	5.5	15.2	19.3	5	6	-	-	817162	807837	-	-	-	-
						1.0	0.1	278	28.9		8.1		16.2		83.4		5.9		15.4		6		-				-		-	
					Middle	4.4	0.1	79	28.4	28.4	8.1	8.1	23.6	23.6	73.4	73.4	5.0		21.0		5		-				-		-	
						4.4	0.1	84	28.4		8.1		23.5		73.3		5.0		21.1		6		-				-		-	
					Bottom	7.8	0.2	58	28.2	28.2	8.1	8.1	25.7	25.7	71.9	72.2	4.9	4.9	21.5		5		-				-		-	
						7.8	0.2	58	28.2		8.1		25.7		72.4		4.9		21.6		6		-				-		-	
SR5A	Cloudy	Moderate	11:57	5.0	Surface	1.0	0.1	64	29.5	29.5	8.1	8.1	17.1	17.1	103.0	103.0	7.2	7.2	10.9	14.1	4	4	-	-	816604	810693	-	-	-	-
						1.0	0.1	64	29.5		8.1		17.1		102.9		7.2		10.9		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	193	28.9	28.9	8.0	8.0	19.4	19.4	81.7	81.7	5.7	5.7	17.2		5		-				-		-	
						4.0	0.0	208	28.9		8.0		19.4		81.7		5.7		17.2		4		-				-		-	
SR6	Cloudy	Moderate	11:26	4.7	Surface	1.0	0.2	70	29.2	29.2	8.0	8.0	18.6	18.6	91.4	91.4	6.3	6.3	12.5	14.6	8	7	-	-	817913	814689	-	-	-	-
						1.0	0.2	71	29.2		8.0		18.6		91.3		6.3		12.6		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.2	79	28.9	28.9	8.0	8.0	19.7	19.7	87.2	87.5	6.0	6.1	17.3		7		-				-		-	
						3.7	0.2	83	28.9		8.0		19.7		87.8		6.1		15.8		6		-				-		-	
SR7	Cloudy	Moderate	10:39	20.5	Surface	1.0	0.5	81	28.7	28.7	8.1	8.1	22.5	22.5	90.5	90.5	6.2	5.7	7.6	8.7	5	5	-	-	823652	823754	-	-	-	-
						1.0	0.5	88	28.7		8.1		22.4		90.4		6.2		7.6		6		-				-		-	
					Middle	10.3	0.4	81	28.1	28.1	8.1	8.1	26.0	26.0	76.8	76.8	5.2		9.4		6		-				-		-	
						10.3	0.4	88	28.1		8.1		26.0		76.8		5.2		9.4		6		-				-		-	
					Bottom	19.5	0.4	83	28.1	28.1	8.1	8.1	26.6	26.6	76.7	76.8	5.2	5.2	9.0		4		-				-		-	
						19.5	0.4	89	28.1		8.1		26.6		76.8		5.2		9.0		5		-				-		-	
SR8	Cloudy	Calm	12:19	3.4	Surface	1.0	-	-	29.4	29.4	8.2	8.2	15.3	15.3	102.0	102.0	7.2	7.2	11.6	11.9	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.4		8.2		15.3		102.0		7.2		11.6		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.4	-	-	29.4	29.4	8.2	8.2	16.0	16.0	101.8	101.8	7.1	7.1	12.2		6		-				-		-	
						2.4	-	-	29.4		8.2		16.0		101.8		7.1		12.1		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**

Note: Monitoring session on 23 June 2018 was cancelled due to bad weather.

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

Water Quality Monitoring

Water Quality Monitoring Results on 26 June 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	18:31	8.4	Surface	1.0	0.6	40	29.7	29.7	8.1	8.1	14.5	14.5	97.5	97.3	6.8	6.4	15.8	18.9	5	6	78	80	815646	804249	<0.2	<0.2	2.5	2.5
						1.0	0.6	42	29.7		8.1		14.5		97.0		6.8		16.0		6		78				<0.2		2.5	
					Middle	4.2	0.3	51	29.4	29.3	8.0	8.0	15.4	15.4	85.3	85.0	6.0		19.6		7		80				<0.2		2.4	
						4.2	0.4	54	29.3		8.0		15.4		84.6		6.0		19.2		6		81				<0.2		2.5	
					Bottom	7.4	0.3	34	28.6	28.6	8.0	8.0	21.9	21.9	72.9	73.1	5.0	5.0	21.8		6		82				<0.2		2.6	
						7.4	0.3	35	28.6		8.0		21.9		73.2		5.0		21.0		6		82				<0.2		2.5	
C2	Fine	Rough	17:20	10.4	Surface	1.0	0.5	201	29.4	29.4	7.9	7.9	10.4	10.4	81.3	81.3	5.9	5.6	13.5	15.8	8	8	75	76	825656	806915	<0.2	<0.2	3.7	3.5
						1.0	0.6	201	29.4		7.9		10.4		81.2		5.9		13.5		8		75				<0.2		3.6	
					Middle	5.2	0.5	196	29.1	29.1	8.0	8.0	16.9	16.8	73.6	73.7	5.2		15.4		8		76				<0.2		3.5	
						5.2	0.5	213	29.1		8.0		16.8		73.7		5.2		15.3		8		76				<0.2		3.5	
					Bottom	9.4	0.1	284	28.9	28.9	8.0	8.0	19.8	19.8	72.7	72.8	5.0	5.0	18.5		9		78				<0.2		3.4	
						9.4	0.1	312	28.9		8.0		19.9		72.8		5.0		18.6		7		78				<0.2		3.4	
C3	Fine	Moderate	19:23	12.5	Surface	1.0	0.3	244	28.8	28.8	8.1	8.1	21.1	21.1	83.3	83.3	5.7	5.5	10.0	13.6	4	5	79	81	822124	817781	<0.2	<0.2	1.8	1.9
						1.0	0.3	252	28.8		8.1		21.1		83.2		5.7		10.1		5		79				<0.2		2.1	
					Middle	6.3	0.5	242	28.5	28.5	8.1	8.1	23.6	23.6	77.4	77.3	5.3		12.1		6		81				<0.2		1.9	
						6.3	0.5	261	28.5		8.1		23.6		77.2		5.3		12.2		5		81				<0.2		1.8	
					Bottom	11.5	0.3	295	28.0	28.0	8.1	8.1	26.8	26.8	75.0	75.1	5.1	5.1	18.4		5		82				<0.2		1.8	
						11.5	0.3	310	28.0		8.1		26.8		75.2		5.1		18.5		7		82				<0.2		1.9	
IM1	Sunny	Moderate	18:10	4.5	Surface	1.0	0.2	13	29.5	29.5	8.2	8.2	17.7	17.7	98.4	98.4	6.8	6.8	18.2	20.0	10	11	78	80	817956	807110	<0.2	<0.2	3.4	3.3
						1.0	0.2	13	29.5		8.2		17.7		98.3		6.8		18.6		10		78				<0.2		3.2	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	26	29.3	29.3	8.1	8.1	19.5	19.5	90.9	90.9	6.3	6.3	21.5		11		81				<0.2		3.2	
						3.5	0.2	26	29.3		8.1		19.5		90.8		6.2		21.8		13		81				<0.2		3.3	
IM2	Sunny	Moderate	18:02	6.8	Surface	1.0	0.2	325	29.5	29.5	8.1	8.1	15.4	15.4	98.2	98.2	6.9	6.8	16.3	18.3	8	10	78	81	818172	806155	<0.2	<0.2	3.4	3.4
						1.0	0.2	351	29.5		8.1		15.4		98.2		6.9		16.3		8		78				<0.2		3.4	
					Middle	3.4	0.4	332	29.4	29.4	8.2	8.2	18.6	18.6	97.5	97.5	6.7		19.1		9		81				<0.2		3.4	
						3.4	0.4	305	29.4		8.2		18.6		97.5		6.7		19.3		11		81				<0.2		3.4	
					Bottom	5.8	0.4	330	29.0	29.0	8.1	8.1	20.1	20.1	91.1	91.1	6.3	6.3	19.2		11		82				<0.2		3.4	
						5.8	0.5	355	29.0		8.1		20.1		91.1		6.3		19.5		10		83				<0.2		3.5	
IM3	Sunny	Moderate	17:55	6.9	Surface	1.0	0.2	295	29.6	29.6	8.0	8.0	13.1	13.1	90.5	90.5	6.4	6.3	18.5	19.5	7	7	78	81	818762	805595	<0.2	<0.2	3.6	3.5
						1.0	0.2	322	29.6		8.0		13.1		90.5		6.4		18.5		7		78				<0.2		3.6	
					Middle	3.5	0.3	7	29.1	29.1	8.1	8.1	16.5	16.5	86.5	86.5	6.1		19.7		7		81				<0.2		3.6	
						3.5	0.3	7	29.1		8.1		16.5		86.5		6.1		19.5		8		81				<0.2		3.4	
					Bottom	5.9	0.4	10	29.1	29.1	8.1	8.1	19.0	19.0	85.3	85.4	5.9	5.9	20.1		8		82				<0.2		3.4	
						5.9	0.4	10	29.1		8.1		19.1		85.4		5.9		20.8		7		83				<0.2		3.4	
IM4	Sunny	Moderate	17:44	7.0	Surface	1.0	0.3	289	29.6	29.6	7.9	7.9	12.4	12.4	89.5	89.5	6.4	6.2	17.8	19.3	10	10	78	81	819705	804589	<0.2	<0.2	3.6	3.7
						1.0	0.3	304	29.6		7.9		12.4		89.5		6.4		17.8		9		79				<0.2		3.6	
					Middle	3.5	0.3	319	29.4	29.4	7.9	7.9	14.9	14.9	85.4	85.4	6.0		19.6		10		81				<0.2		3.6	
						3.5	0.3	326	29.4		7.9		14.9		85.4		6.0		19.7		11		81				<0.2		3.8	
					Bottom	6.0	0.2	324	29.1	29.1	7.9	7.9	16.7	16.7	81.7	81.8	5.7	5.7	20.7		11		83				<0.2		3.6	
						6.0	0.2	336	29.1		7.9		16.7		81.8		5.7		20.2		11		83				<0.2		3.9	
IM5	Sunny	Moderate	17:35	6.2	Surface	1.0	0.6	310	29.7	29.7	7.9	7.9	10.8	10.8	90.9	90.9	6.5	6.4	16.8	19.1	7	8	78	81	820725	804844	<0.2	<0.2	3.6	3.6
						1.0	0.6	329	29.7		7.9		10.8		90.8		6.5		16.8		6		78				<0.2		3.8	
					Middle	3.1	0.5	308	29.6	29.6	7.9	7.9	12.3	12.3	86.9	86.9	6.2		20.5		9		81				<0.2		3.6	
						3.1	0.5	327	29.6		7.9		12.3		86.8		6.2		20.5		10		81				<0.2		3.6	
					Bottom	5.2	0.5	315	29.3	29.3	7.9	7.9	15.0	15.0	81.4	81.4	5.7	5.7	20.1		8		83				<0.2		3.7	
						5.2	0.5	338	29.3		7.9		15.0		81.4		5.7		20.1		9		83				<0.2		3.5	
IM6	Sunny	Moderate	17:28	6.0	Surface	1.0	0.6	257	29.6	29.6	7.9	7.9	11.7	11.7	86.7	86.7	6.2	6.2	19.6	20.1	8	10	78	81	821031	805828	<0.2	<0.2	3.6	3.7
						1.0	0.7	270	29.6		7.9		11.7		86.7		6.2		19.7		8		79				<0.2		3.6	
					Middle	3.0	0.5	253	29.5	29.5	7.9	7.9	12.5	12.5	85.0	85.0	6.1		19.8		11		81				<0.2		3.7	
						3.0	0.5	276	29.5		7.9		12.5		85.0		6.1		19.8		10		81				<0.2		3.6	
					Bottom	5.0	0.4	256	29.5	29.5	7.9	7.8	12.8	12.8	83.1	83.0	5.9	5.9	21.1		12		83				<0.2		3.7	
						5.0	0.4	266	29.5		7.8		12.8		82.9		5.9		20.7		12		83				<0.2		3.8	
IM7	Sunny	Moderate	17:22	7.8	Surface	1.0	0.7	225	29.6	29.6	7.9	7.9	10.2	10.2	86.2	86.2	6.2	6.1	18.0	20.2	6	6	78	81	821352	806851	<0.2	<0.2	4.2	4.0
						1.0	0.8	241	29.6		7.9		10.2		86.2		6.2		18.1		6		78				<0.2		4.2	
					Middle	3.9	0.7	237	29.4	29.4	7.9	7.9	12.4	12.4	83.4	83.4	6.0		20.0		6		81				<0.2		4.1	
						3.9	0.7	245	29.4		7.9		12.4		83.4		6.0		20.0		6		81				<0.2		3.8	
					Bottom	6.8	0.5	250	29.4	29.4	7.9	7.9	12.5	12.5	84.0	84.5	6.0	6.1	22.1		7		83				<0.2		4.0	
						6.8	0.6	261	29.4		7.9		12.5		84.9		6.1		22.8		7		83				<0.2		3.9	
IM8	Fine	Rough	17:46	6.8	Surface	1.0	0.3	236	30.0	30.0	8.0	8.0	9.3	8.9	96.1	96.2	6.9	6.7	12.0	12.6	8	9	74	76	821848	808141	<0.2	<0.2	3.5	3.4
						1.0	0.3	243	30.0		8.0		8.6		96.2		6.9		12.0		10		75				<0.2		3.1	
					Middle	3.4	0.3	268	29.9	29.9	8.0	8.0	11.2	11.2	91.8	91.8	6.5		12.8		9		76				<0.2		3.5	
						3.4	0.3	287	29.9		8.0		11.2		91.7		6.5		12.8		9		76				<0.2		3.2	
					Bottom	5.8	0.1	42	29.5	29.5	8.0	8.0	14.4	14.4	92.7	93.1	6.5	6.6	13.1		10		77				<0.2		3.3	
						5.8	0.1	42	29.5		8.0		14.4		93.5		6.6		12.9		8		78				<0.2		3.5	

DA: Depth-Averaged

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

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

Note: Monitoring session on 23 June 2018 was cancelled due to bad weather.

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

Water Quality Monitoring

Water Quality Monitoring Results on 26 June 18 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	17:54	6.4	Surface	1.0	0.2	213	30.1	30.1	8.1	8.1	9.1	9.1	99.6	99.6	7.2	7.0	11.6	11.9	6	6	72	74	822111	808824	<0.2	<0.2	3.2	3.5
						1.0	0.2	222	30.1		8.1		9.1		99.5		7.2		11.6		7		72				<0.2		3.1	
					Middle	3.2	0.2	235	30.0	30.0	8.0	8.0	11.1	11.1	94.3	94.3	6.7		11.9		7		74				<0.2		3.8	
						3.2	0.2	256	30.0		8.0		11.1		94.2		6.7		11.9		5		74				<0.2		3.3	
					Bottom	5.4	0.1	296	29.8	29.8	8.0	8.0	12.4	12.4	93.5	93.6	6.6	6.6	12.1		6		76				<0.2		3.8	
						5.4	0.1	319	29.8		8.0		12.4		93.6		6.6		12.1		6		76				<0.2		3.7	
IM10	Fine	Moderate	18:03	7.1	Surface	1.0	0.2	329	30.2	30.2	8.0	8.0	10.2	10.2	97.2	97.2	6.9	6.4	12.2	16.1	5	5	74	76	822398	809808	<0.2	<0.2	3.6	3.6
						1.0	0.3	346	30.2		8.0		10.2		97.1		6.9		12.2		4		74				<0.2		3.7	
					Middle	3.6	0.3	332	29.5	29.5	8.0	8.0	14.7	14.7	83.0	83.0	5.8		16.4		5		76				<0.2		3.5	
						3.6	0.4	344	29.5		8.0		14.7		82.9		5.8		16.4		5		76				<0.2		3.8	
					Bottom	6.1	0.1	349	29.4	29.4	8.0	8.0	15.6	15.6	81.5	81.5	5.7	5.7	19.6		6		78				<0.2		3.8	
						6.1	0.1	321	29.4		8.0		15.6		81.5		5.7		19.7		6		78				<0.2		3.4	
IM11	Fine	Moderate	18:18	8.1	Surface	1.0	0.4	315	29.9	29.9	8.1	8.1	12.6	12.6	92.2	91.8	6.5	6.2	10.4	17.1	5	6	76	78	822051	811445	<0.2	<0.2	2.8	3.1
						1.0	0.5	332	29.9		8.1		12.5		91.3		6.5		10.4		5		76				<0.2		2.9	
					Middle	4.1	0.4	299	29.1	29.2	8.0	8.0	18.7	18.7	83.4	83.4	5.8		18.0		6		78				<0.2		3.4	
						4.1	0.4	325	29.2		8.0		18.7		83.4		5.8		18.0		6		78				<0.2		3.1	
					Bottom	7.1	0.3	295	28.8	28.8	8.1	8.1	21.5	21.5	77.6	77.7	5.3	5.3	22.8		6		80				<0.2		3.3	
						7.1	0.3	312	28.8		8.1		21.5		77.7		5.3		22.8		7		80				<0.2		3.1	
IM12	Fine	Moderate	18:25	8.6	Surface	1.0	0.4	287	29.7	29.7	8.1	8.1	15.2	15.1	96.9	96.9	6.8	6.7	10.1	12.3	6	6	77	78	821465	812064	<0.2	<0.2	2.8	2.8
						1.0	0.5	310	29.7		8.1		15.0		96.8		6.8		9.9		5		77				<0.2		2.8	
					Middle	4.3	0.6	280	29.3	29.3	8.1	8.1	18.9	18.9	94.3	94.3	6.5		12.1		6		78				<0.2		3.2	
						4.3	0.6	299	29.3		8.1		18.9		94.2		6.5		12.9		7		77				<0.2		2.8	
					Bottom	7.6	0.3	272	29.2	29.2	8.1	8.1	19.2	19.2	91.5	91.5	6.3	6.3	14.4		7		80				<0.2		2.7	
						7.6	0.3	289	29.2		8.1		19.2		91.5		6.3		14.4		7		81				<0.2		2.7	
SR2	Fine	Moderate	18:59	3.3	Surface	1.0	0.0	345	29.4	29.4	8.1	8.1	16.2	16.2	95.9	95.9	6.7	6.7	10.6	10.9	7	7	76	77	821480	814170	<0.2	<0.2	2.7	2.7
						1.0	0.0	317	29.4		8.1		16.2		95.9		6.7		10.6		6		76				<0.2		2.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	322	29.4	29.3	8.1	8.1	16.2	16.2	96.8	97.0	6.8	6.8	11.1		8		78				<0.2		2.5	
						2.3	0.1	337	29.3		8.1		16.2		97.2		6.8		11.2		6		79				<0.2		2.6	
SR3	Fine	Moderate	17:40	8.2	Surface	1.0	0.4	216	29.9	29.9	8.0	8.0	8.8	8.8	89.4	89.3	6.5	6.0	12.2	13.2	5	6	-	-	822166	807569	-	-	-	-
						1.0	0.5	228	29.9		8.0		8.8		89.2		6.4		12.2		6		-				-		-	
					Middle	4.1	0.3	225	29.2	29.2	7.9	7.9	14.7	14.7	78.9	78.9	5.6		13.3		6		-				-		-	
						4.1	0.3	245	29.2		7.9		14.7		78.9		5.6		13.3		6		-				-		-	
					Bottom	7.2	0.3	275	29.2	29.2	7.9	7.9	15.6	15.6	79.5	79.5	5.6	5.6	14.2		7		-				-		-	
						7.2	0.3	296	29.2		7.9		15.6		79.5		5.6		14.2		7		-				-		-	
SR4A	Cloudy	Moderate	18:51	8.7	Surface	1.0	0.1	246	29.5	29.5	8.1	8.1	19.0	19.0	98.9	98.9	6.8	6.7	18.6	19.7	13	14	-	-	817174	807813	-	-	-	-
						1.0	0.1	250	29.5		8.1		19.0		98.8		6.8		18.4		13		-				-		-	
					Middle	4.4	0.1	224	29.5	29.5	8.1	8.1	19.1	19.1	95.5	95.5	6.6		19.1		15		-				-		-	
						4.4	0.1	242	29.5		8.1		19.1		95.5		6.6		19.6		14		-				-		-	
					Bottom	7.7	0.1	241	29.4	29.4	8.1	8.1	19.3	19.3	91.4	91.4	6.3	6.3	21.3		15		-				-		-	
						7.7	0.1	264	29.4		8.1		19.3		91.3		6.3		21.0		14		-				-		-	
SR5A	Cloudy	Moderate	19:10	4.8	Surface	1.0	0.1	259	29.7	29.7	8.2	8.2	18.7	18.7	108.5	108.5	7.4	7.4	20.4	21.0	11	13	-	-	816616	810705	-	-	-	-
						1.0	0.1	261	29.7		8.2		18.7		108.4		7.4		20.6		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	281	29.4	29.5	8.1	8.1	19.3	19.2	99.1	99.3	6.8	6.8	21.4		13		-				-		-	
						3.8	0.1	292	29.5		8.1		19.1		99.4		6.8		21.5		14		-				-		-	
SR6	Cloudy	Moderate	19:35	4.4	Surface	1.0	0.1	223	29.5	29.5	8.1	8.1	16.1	16.1	100.1	100.1	7.0	7.0	14.1	17.1	7	7	-	-	817896	814633	-	-	-	-
						1.0	0.1	239	29.5		8.1		16.1		100.0		7.0		14.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	14	29.4	29.4	8.1	8.1	17.3	17.3	94.3	93.9	6.5	6.5	20.0		5		-				-		-	
						3.4	0.0	14	29.4		8.1		17.3		93.5		6.5		20.0		7		-				-		-	
SR7	Fine	Moderate	19:58	18.8	Surface	1.0	0.1	304	28.7	28.7	8.2	8.2	23.2	23.2	83.5	83.5	5.7	5.3	10.7	13.4	9	9	-	-	823625	823738	-	-	-	-
						1.0	0.1	327	28.7		8.2		23.2		83.4		5.7		10.8		8		-				-		-	
					Middle	9.4	0.1	34	27.7	27.7	8.1	8.1	27.4	27.4	70.6	70.7	4.8		14.2		8		-				-		-	
						9.4	0.1	35	27.7		8.1		27.4		70.7		4.8		14.3		9		-				-		-	
					Bottom	17.8	0.1	59	27.4	27.4	8.1	8.1	28.5	28.5	70.9	70.9	4.8	4.8	15.2		9		-				-		-	
						17.8	0.1	61	27.4		8.1		28.5		70.9		4.8		15.2		9		-				-		-	
SR8	Fine	Moderate	18:42	3.5	Surface	1.0	-	-	29.9	29.9	8.1	8.1	13.1	13.1	101.4	101.5	7.2	7.2	11.4	11.9	5	7	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.9		8.1		13.1		101.5		7.2		11.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	-	-	29.6	29.6	8.2	8.2	16.7	16.6	102.7	102.7	7.1	7.1	12.4		8		-				-		-	
						2.5	-	-	29.6		8.2		16.6		102.7		7.1		12.3		9		-				-		-	

DA: Depth-Averaged

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

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

Note: Monitoring session on 23 June 2018 was cancelled due to bad weather.

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 June 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	Calm	13:27	8.7	Surface	1.0	0.8	203	30.4	30.4	8.1	8.1	11.2	11.2	99.1	99.0	7.0	6.4	8.6	14.8	4	4	77	79	815620	804251	<0.2	<0.2	2.3	2.5
						1.0	0.8	207	30.4		8.1		11.2		98.8		7.0		8.6		5		77				<0.2		2.2	
					Middle	4.4	0.7	232	29.2	29.2	8.1	8.1	20.0	20.0	84.9	84.8	5.8		9.6		4		78				<0.2		2.7	
						4.4	0.7	244	29.2		8.1		20.0		84.7		5.8		9.7		4		79				<0.2		2.5	
					Bottom	7.7	0.6	223	28.1	28.1	8.0	8.0	26.8	26.8	74.4	74.7	5.0	5.1	26.0		3		81				<0.2		2.5	
						7.7	0.6	231	28.1		8.0		26.8		75.0		5.1		26.2		4		80				<0.2		2.6	
C2	Sunny	Moderate	14:17	10.9	Surface	1.0	1.3	165	29.7	29.7	7.9	7.9	13.7	13.4	77.8	77.9	5.5	5.3	12.4	15.2	4	6	76	79	825665	806923	<0.2	<0.2	2.8	2.8
						1.0	1.4	180	29.7		7.9		13.2		77.9		5.5		12.5		4		76				<0.2		3.0	
					Middle	5.5	1.2	163	29.1	29.1	8.0	8.0	18.3	18.3	74.1	74.1	5.1		14.7		6		78				<0.2		2.8	
						5.5	1.2	175	29.1		8.0		18.2		74.0		5.1		14.8		6		78				<0.2		2.8	
					Bottom	9.9	0.5	161	28.7	28.7	8.0	8.0	21.8	21.8	74.6	74.7	5.1	5.1	18.2		8		82				<0.2		2.7	
						9.9	0.5	164	28.7		8.0		21.8		74.8		5.1		18.3		7		81				<0.2		2.8	
C3	Sunny	Moderate	12:17	11.9	Surface	1.0	0.5	104	29.1	29.1	8.1	8.1	19.6	19.6	85.9	85.9	5.9	5.7	12.1	13.7	9	9	80	81	822115	817809	<0.2	<0.2	2.5	2.3
						1.0	0.5	112	29.1		8.1		19.6		85.8		5.9		12.1		8		80				<0.2		2.4	
					Middle	6.0	0.2	90	28.6	28.6	8.1	8.1	21.4	21.4	79.3	79.3	5.5		12.4		9		81				<0.2		2.4	
						6.0	0.2	94	28.6		8.1		21.4		79.2		5.5		12.5		9		81				<0.2		2.2	
					Bottom	10.9	0.4	30	28.0	28.0	8.1	8.1	24.0	24.0	76.3	76.4	5.2	5.2	16.5		9		83				<0.2		2.2	
						10.9	0.4	32	28.0		8.1		24.0		76.4		5.2		16.5		10		82				<0.2		2.1	
IM1	Fine	Calm	13:51	4.7	Surface	1.0	0.0	290	29.5	29.5	8.1	8.1	21.3	21.2	84.8	84.9	5.8	5.8	10.3	12.5	4	5	76	77	817942	807154	<0.2	<0.2	2.4	2.3
						1.0	0.0	306	29.6		8.1		21.2		84.9		5.8		10.3		5		76				<0.2		2.4	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	260	28.3	28.3	8.0	8.0	25.8	25.8	66.1	66.1	4.5	4.5	14.6		4		78				<0.2		2.2	
						3.7	0.1	273	28.3		8.0		25.8		66.1		4.5		14.6		5		79				<0.2		2.2	
IM2	Fine	Moderate	13:58	6.9	Surface	1.0	0.9	182	30.5	30.5	8.2	8.2	15.3	15.3	102.0	102.0	7.0	5.8	8.4	14.6	5	7	76	78	818182	806192	<0.2	<0.2	2.6	2.4
						1.0	0.9	195	30.5		8.2		15.3		101.9		7.0		8.4		6		76				<0.2		2.5	
					Middle	3.5	0.6	175	28.4	28.4	8.0	8.0	24.6	24.6	66.0	66.0	4.5		17.4		4		78				<0.2		2.3	
						3.5	0.6	184	28.4		8.0		24.6		66.0		4.5		17.4		6		78				<0.2		2.4	
					Bottom	5.9	0.2	189	28.1	28.1	8.0	8.0	26.5	26.5	71.4	71.7	4.8	4.9	18.1		8		81				<0.2		2.3	
						5.9	0.2	199	28.1		8.0		26.6		71.9		4.9		18.0		10		81				<0.2		2.4	
IM3	Fine	Moderate	14:06	7.2	Surface	1.0	0.9	225	30.3	30.3	8.1	8.1	13.4	13.4	95.8	95.8	6.7	6.0	10.3	18.7	4	9	76	78	818763	805580	<0.2	<0.2	2.4	2.5
						1.0	0.9	234	30.3		8.1		13.4		95.7		6.7		10.4		5		76				<0.2		2.4	
					Middle	3.6	0.7	221	28.9	28.9	8.0	8.0	22.9	22.9	77.9	78.1	5.3		20.8		8		79				<0.2		2.7	
						3.6	0.8	228	28.9		8.0		22.9		78.2		5.3		20.3		8		79				<0.2		2.6	
					Bottom	6.2	0.5	200	28.6	28.6	8.0	8.0	23.5	23.5	78.0	78.3	5.3	5.3	25.4		14		80				<0.2		2.4	
						6.2	0.5	218	28.6		8.0		23.4		78.5		5.3		24.7		14		80				<0.2		2.4	
IM4	Fine	Moderate	14:18	7.3	Surface	1.0	1.0	214	30.7	30.7	8.0	8.0	11.4	11.4	94.0	93.9	6.6	5.8	13.3	18.3	7	8	76	79	819720	804601	<0.2	<0.2	2.8	2.8
						1.0	1.1	234	30.7		8.0		11.4		93.8		6.6		13.5		7		76				<0.2		2.6	
					Middle	3.7	0.9	219	28.9	28.9	8.0	8.0	20.8	20.8	72.3	72.3	5.0		20.4		8		78				<0.2		2.9	
						3.7	0.9	233	28.9		8.0		20.8		72.3		5.0		20.8		8		79				<0.2		2.8	
					Bottom	6.3	0.6	208	28.7	28.7	8.0	8.0	22.9	22.9	75.3	75.4	5.1	5.2	21.1		9		81				<0.2		2.8	
						6.3	0.6	218	28.7		8.0		22.9		75.5		5.2		20.5		9		81				<0.2		3.1	
IM5	Fine	Moderate	14:29	6.5	Surface	1.0	0.9	215	30.5	30.5	8.0	8.0	11.8	11.8	96.0	96.0	6.8	6.1	10.4	18.8	7	7	76	79	820756	804844	<0.2	<0.2	2.6	2.6
						1.0	0.9	223	30.5		8.0		11.8		95.9		6.7		10.4		7		76				<0.2		2.6	
					Middle	3.3	0.7	224	29.2	29.2	8.0	8.0	19.1	19.0	77.9	77.9	5.4		19.1		7		79				<0.2		2.5	
						3.3	0.7	235	29.2		8.0		19.0		77.9		5.4		19.1		6		79				<0.2		2.5	
					Bottom	5.5	0.5	219	29.0	29.0	8.0	8.0	20.0	20.0	78.0	78.2	5.4	5.4	26.9		6		81				<0.2		2.6	
						5.5	0.6	232	29.0		8.0		20.0		78.3		5.4		26.8		6		81				<0.2		2.6	
IM6	Fine	Moderate	14:39	6.3	Surface	1.0	0.6	239	30.6	30.6	8.0	8.0	13.3	13.3	92.8	92.8	6.5	5.9	9.5	16.8	4	5	75	77	821040	805822	<0.2	<0.2	2.6	2.6
						1.0	0.7	260	30.6		8.0		13.3		92.7		6.5		9.5		5		76				<0.2		2.5	
					Middle	3.2	0.8	258	29.4	29.4	8.0	8.0	18.9	18.9	77.4	77.4	5.3		15.4		5		77				<0.2		2.5	
						3.2	0.9	263	29.4		8.0		18.9		77.4		5.3		15.4		5		77				<0.2		2.6	
					Bottom	5.3	0.6	268	28.9	28.9	8.0	8.0	20.9	20.9	77.7	78.0	5.3	5.4	25.3		6		78				<0.2		2.6	
						5.3	0.6	273	28.9		8.0		20.9		78.3		5.4		25.4		5		79				<0.2		2.6	
IM7	Fine	Moderate	14:49	7.8	Surface	1.0	1.0	219	29.7	29.7	7.9	7.9	16.9	16.8	83.1	83.1	5.8	5.5	11.1	20.1	4	5	76	79	821319	806809	<0.2	<0.2	2.5	2.6
						1.0	1.0	222	29.7		7.9		16.8		83.0		5.8		11.2		6		76				<0.2		2.5	
					Middle	3.9	0.8	229	29.0	29.0	8.0	8.0	20.0	20.0	75.3	75.3	5.2		20.9		5		79				<0.2		2.5	
						3.9	0.9	236	29.0		8.0		20.0		75.3		5.2		20.9		5		79				<0.2		2.6	
					Bottom	6.8	0.6	235	29.0	29.0	7.9	7.9	20.2	20.2	81.4	81.6	5.6	5.6	28.2		6		81				<0.2		2.8	
						6.8	0.6	238	29.0		7.9		20.2		81.8		5.6		28.3		4		81				<0.2		2.7	
IM8	Sunny	Moderate	13:44	7.5	Surface	1.0	0.6	183	29.6	29.6	8.0	8.0	15.7	15.7	79.2	78.9	5.5	5.3	10.2	13.3	5	5	78	80	821856	808139	<0.2	<0.2	2.8	2.7
						1.0	0.6	191	29.6		8.0		15.8		78.6		5.5		10.4		5		78				<0.2		2.8	
					Middle	3.8	0.4	182	29.0	29.0	8.0	8.0	20.0	20.0	72.9	73.1	5.0		15.1		6		80				<0.2		2.8	
						3.8	0.4	187	29.0		8.0		20.0		73.2		5.0		15.2		5		81				<0.2		2.8	
					Bottom	6.5	0.4	213	28.9	28.9	8.0	8.0	20.6	20.6	77.3	77.5	5.3	5.3	14.6		5		82				<0.2		2.7	
						6.5	0.4	223	29.0		8.0		20.6		77.7		5.3		14.4		5		82				<0.2		2.5	

DA: Depth-Averaged

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

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

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Water Quality Monitoring

Water Quality Monitoring Results on 28 June 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	13:38	7.4	Surface	1.0	0.4	158	29.7	29.7	8.0	8.0	14.4	14.4	77.6	77.4	5.5	5.2	13.1	16.7	3	4	80	82	822104	808784	<0.2	<0.2	2.9	2.9
						1.0	0.5	160	29.7		8.0		14.4		77.2		5.4		13.3		3		80				<0.2		3.0	
					Middle	3.7	0.3	150	28.9	28.9	8.0	8.0	20.8	20.8	71.8	71.9	4.9		19.0		5		81				<0.2		2.9	
						3.7	0.3	152	28.9		8.0		20.8		72.0		4.9		19.0		3		81				<0.2		2.9	
					Bottom	6.4	0.2	145	28.9	28.9	8.0	8.0	21.0	21.0	77.1	77.3	5.3	5.3	17.9		4		84				<0.2		3.0	
						6.4	0.2	147	28.9		8.0		21.0		77.4		5.3		17.7		6		83				<0.2		2.6	
IM10	Sunny	Moderate	13:29	6.8	Surface	1.0	0.7	134	29.5	29.5	8.0	8.0	15.3	15.3	78.9	78.5	5.5	5.2	14.1	17.3	4	5	78	80	822380	809812	<0.2	<0.2	2.8	2.8
						1.0	0.8	145	29.5		8.0		15.3		78.0		5.5		14.9		5		78				<0.2		2.9	
					Middle	3.4	0.5	121	28.9	28.9	8.0	8.0	20.7	20.7	70.3	70.3	4.8		19.0		5		80				<0.2		2.7	
						3.4	0.5	127	28.9		8.0		20.6		70.3		4.8		19.2		6		81				<0.2		2.9	
					Bottom	5.8	0.5	117	28.9	28.9	8.0	8.0	20.9	20.9	73.4	73.6	5.0	5.1	18.2		4		82				<0.2		2.8	
						5.8	0.5	121	28.9		8.0		20.9		73.7		5.1		18.3		4		82				<0.2		2.8	
IM11	Sunny	Moderate	13:16	8.2	Surface	1.0	0.8	113	29.9	29.9	8.0	8.0	14.1	14.1	83.8	83.7	5.9	5.6	12.4	14.8	6	6	80	81	822065	811430	<0.2	<0.2	2.8	2.9
						1.0	0.9	119	29.9		8.0		14.1		83.5		5.9		12.5		5		80				<0.2		2.9	
					Middle	4.1	0.7	106	29.2	29.2	8.0	8.0	18.4	18.4	75.5	75.5	5.2		15.1		6		81				<0.2		3.0	
						4.1	0.7	106	29.2		8.0		18.4		75.5		5.2		15.1		7		81				<0.2		2.9	
					Bottom	7.2	0.6	101	29.2	29.2	8.0	8.0	18.9	18.9	80.4	80.6	5.6	5.6	16.8		6		82				<0.2		2.8	
						7.2	0.6	102	29.2		8.0		18.9		80.8		5.6		16.7		8		82				<0.2		2.9	
IM12	Sunny	Moderate	13:08	9.5	Surface	1.0	0.4	109	30.2	30.2	8.1	8.1	14.0	14.0	92.0	91.6	6.4	5.8	11.3	13.3	6	5	77	81	821437	812073	<0.2	<0.2	2.9	2.7
						1.0	0.5	110	30.2		8.1		14.1		91.2		6.4		11.7		5		77				<0.2		2.7	
					Middle	4.8	0.5	90	29.2	29.2	8.0	8.0	18.5	18.5	75.5	75.6	5.2		13.8		6		82				<0.2		2.8	
						4.8	0.5	94	29.2		8.0		18.5		75.6		5.2		13.1		6		81				<0.2		2.7	
					Bottom	8.5	0.5	93	29.2	29.2	8.0	8.0	18.5	18.5	76.4	76.5	5.3	5.3	15.0		4		84				<0.2		2.7	
						8.5	0.5	94	29.2		8.0		18.5		76.5		5.3		15.1		5		84				<0.2		2.6	
SR2	Sunny	Moderate	12:48	4.7	Surface	1.0	0.6	91	29.6	29.6	8.1	8.1	15.3	15.3	84.8	84.7	5.9	5.9	13.6	15.2	5	5	81	83	821434	814173	<0.2	<0.2	2.7	2.6
						1.0	0.6	97	29.6		8.1		15.3		84.5		5.9		13.8		4		82				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.5	91	29.2	29.2	8.0	8.0	17.5	17.5	83.9	84.0	5.8	5.8	16.6		5		83				<0.2		2.6	
						3.7	0.5	97	29.2		8.0		17.5		84.0		5.8		16.8		5		84				<0.2		2.5	
SR3	Sunny	Moderate	13:50	9.1	Surface	1.0	0.8	188	29.4	29.4	8.0	8.0	16.6	16.6	74.2	73.8	5.2	5.0	13.8	17.6	5	4	-	-	822129	807590	-	-	-	-
						1.0	0.8	191	29.4		8.0		16.6		73.4		5.1		14.5		3		-				-		-	
					Middle	4.6	0.7	183	28.9	28.9	8.0	8.0	21.0	21.0	70.5	70.6	4.8		19.4		4		-				-		-	
						4.6	0.7	185	28.9		8.0		21.0		70.6		4.8		19.5		4		-				-		-	
					Bottom	8.1	0.5	199	28.8	28.8	8.0	8.0	21.6	21.6	75.6	75.8	5.2	5.2	19.3		5		-				-		-	
						8.1	0.5	200	28.8		8.0		21.6		75.9		5.2		19.0		4		-				-		-	
SR4A	Fine	Calm	13:06	8.9	Surface	1.0	0.0	56	29.9	29.9	8.0	8.0	16.9	16.9	82.5	82.5	5.7	5.3	11.0	17.8	7	10	-	-	817173	807801	-	-	-	-
						1.0	0.0	56	29.9		8.0		16.9		82.4		5.7		11.1		7		-				-		-	
					Middle	4.5	0.0	77	28.3	28.3	8.0	8.0	26.0	26.0	73.2	73.5	4.9		17.8		7		-				-		-	
						4.5	0.0	80	28.4		8.0		26.0		73.7		5.0		17.5		7		-				-		-	
					Bottom	7.9	0.0	83	28.1	28.1	8.0	8.0	26.6	26.6	61.0	61.1	4.1	4.1	24.7		16		-				-		-	
						7.9	0.0	88	28.1		8.0		26.6		61.1		4.1		24.7		17		-				-		-	
SR5A	Fine	Calm	12:47	4.4	Surface	1.0	0.2	324	30.2	30.2	8.2	8.2	16.0	16.0	108.0	107.9	7.5	7.5	10.2	10.8	6	7	-	-	816606	810701	-	-	-	-
						1.0	0.2	329	30.2		8.2		16.0		107.8		7.4		10.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	346	29.7	29.7	8.1	8.1	17.2	17.2	101.1	101.1	7.0	7.0	11.4		6		-				-		-	
						3.4	0.0	358	29.7		8.1		17.2		101.1		7.0		11.4		7		-				-		-	
SR6	Sunny	Moderate	12:20	4.6	Surface	1.0	0.2	25	30.2	30.2	8.2	8.2	16.1	16.1	113.0	113.0	7.8	7.8	8.4	10.5	5	6	-	-	817928	814679	-	-	-	-
						1.0	0.2	25	30.2		8.2		16.1		112.9		7.8		8.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	19	29.6	29.6	8.0	8.0	16.9	16.9	95.2	95.3	6.6	6.6	12.5		7		-				-		-	
						3.6	0.1	19	29.6		8.0		16.9		95.3		6.6		12.5		7		-				-		-	
SR7	Sunny	Moderate	11:34	20.3	Surface	1.0	0.8	74	29.3	29.3	8.1	8.1	18.8	18.8	92.2	92.1	6.4	6.0	8.1	8.5	5	4	-	-	823636	823729	-	-	-	-
						1.0	0.8	79	29.3		8.1		18.8		91.9		6.3		8.2		4		-				-		-	
					Middle	10.2	0.5	83	28.5	28.5	8.1	8.1	21.8	21.9	82.2	82.0	5.7		8.4		4		-				-		-	
						10.2	0.5	85	28.6		8.1		22.0		81.7		5.6		8.5		4		-				-		-	
					Bottom	19.3	0.3	72	28.2	28.2	8.1	8.1	22.8	22.9	74.9	74.8	5.2	5.2	8.9		4		-				-		-	
						19.3	0.3	73	28.1		8.1		22.9		74.6		5.1		8.9		5		-				-		-	
SR8	Sunny	Moderate	13:01	4.1	Surface	1.0	-	-	30.0	30.0	8.1	8.1	14.4	14.4	94.5	94.5	6.6	6.6	11.8	12.7	6	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.0		8.1		14.4		94.4		6.6		11.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	29.8	29.8	8.1	8.1	15.3	15.3	92.5	92.6	6.5	6.5	13.6		7		-				-		-	
						3.1	-	-	29.8		8.1		15.3		92.6		6.5		13.7		6		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 June 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	19:48	7.8	Surface	1.0	0.5	33	30.2	30.2	8.0	8.0	14.8	14.8	87.1	87.0	6.1	5.5	13.9	23.1	11	10	76	78	815645	804270	<0.2	<0.2	2.1	2.2
						1.0	0.6	34	30.2		8.0		14.8		86.8		6.0		13.9		11		76				<0.2		2.1	
					Middle	3.9	0.4	22	29.5	29.5	8.0	8.0	17.0	17.0	71.3	71.1	5.0		21.7		10		78				<0.2		2.3	
						3.9	0.4	23	29.5		8.0		17.0		70.9		4.9		22.2		11		79				<0.2		2.3	
					Bottom	6.8	0.5	29	28.6	28.6	8.0	8.0	23.3	23.3	67.5	67.6	4.6	4.6	33.3		8		80				<0.2		2.2	
						6.8	0.5	29	28.6		8.0		23.3		67.7		4.6		33.4		9		81				<0.2		2.3	
C2	Fine	Rough	18:40	11.8	Surface	1.0	0.5	65	29.9	29.9	8.0	8.0	9.1	8.9	78.4	77.9	5.7	5.3	15.2	17.1	7	8	77	80	825709	806925	<0.2	<0.2	3.5	3.7
						1.0	0.6	67	29.8		8.0		8.7		77.3		5.6		15.4		7		77				<0.2		3.5	
					Middle	5.9	0.2	174	29.1	29.1	8.0	8.0	16.2	16.4	69.9	69.9	4.9		18.1		7		80				<0.2		3.5	
						5.9	0.3	191	29.1		8.0		16.6		69.8		4.9		18.1		8		79				<0.2		3.9	
					Bottom	10.8	0.8	106	28.8	28.8	8.0	8.0	20.5	20.5	72.8	73.0	5.0	5.0	17.8		9		82				<0.2		3.7	
						10.8	0.8	109	28.8		8.0		20.5		73.1		5.0		17.7		9		82				<0.2		3.8	
C3	Fine	Moderate	20:18	11.8	Surface	1.0	0.5	242	29.6	29.6	8.1	8.1	17.2	17.2	80.8	80.7	5.6	5.1	10.3	14.5	6	6	78	80	822135	817829	<0.2	<0.2	2.7	2.7
						1.0	0.5	242	29.6		8.1		17.2		80.5		5.6		10.3		4		77				<0.2		2.8	
					Middle	5.9	0.6	260	27.7	27.7	8.0	8.0	24.2	24.2	65.8	65.9	4.5		14.9		5		79				<0.2		2.8	
						5.9	0.6	272	27.7		8.0		24.2		65.9		4.5		15.1		6		79				<0.2		2.7	
					Bottom	10.8	0.4	283	27.4	27.4	8.0	8.0	26.6	26.5	70.3	71.6	4.8	4.9	18.6		7		82				<0.2		2.7	
						10.8	0.5	307	27.5		8.0		26.4		72.8		5.0		18.0		7		82				<0.2		2.6	
IM1	Fine	Moderate	19:26	4.6	Surface	1.0	0.1	350	30.0	30.0	8.1	8.1	16.5	16.5	98.4	98.4	6.8	6.8	15.8	19.5	9	10	75	76	817975	807119	<0.2	<0.2	2.3	2.7
						1.0	0.1	322	30.0		8.1		16.5		98.4		6.8		15.9		11		75				<0.2		2.8	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	2	29.7	29.7	8.1	8.1	19.3	19.3	96.8	96.9	6.6	6.6	23.1		9		76				<0.2		2.8	
						3.6	0.2	2	29.7		8.1		19.4		96.9		6.6		23.1		10		77				<0.2		2.8	
IM2	Fine	Moderate	19:19	6.6	Surface	1.0	0.1	312	30.2	30.2	8.0	8.0	11.5	11.5	96.9	96.9	6.9	6.7	16.6	19.3	10	11	75	77	818144	806139	<0.2	<0.2	2.2	2.4
						1.0	0.1	327	30.2		8.0		11.5		96.8		6.8		16.8		11		75				<0.2		2.3	
					Middle	3.3	0.3	343	29.9	30.0	8.1	8.1	19.6	19.6	96.2	96.3	6.5		20.8		10		77				<0.2		2.2	
						3.3	0.3	316	30.0		8.1		19.6		96.4		6.6		20.6		11		77				<0.2		2.2	
					Bottom	5.6	0.3	15	29.5	29.5	8.1	8.1	20.4	20.4	91.3	91.4	6.2	6.2	20.5		12		79				<0.2		2.7	
						5.6	0.3	16	29.5		8.1		20.4		91.4		6.2		20.2		11		79				<0.2		2.7	
IM3	Fine	Moderate	19:12	6.7	Surface	1.0	0.2	323	30.2	30.2	8.0	8.0	13.5	13.4	94.3	94.3	6.6	6.4	15.9	17.8	13	13	78	80	818795	805600	<0.2	<0.2	2.9	2.5
						1.0	0.3	336	30.2		8.0		13.3		94.3		6.6		16.0		13		78				<0.2		2.4	
					Middle	3.4	0.3	342	29.9	29.9	8.1	8.1	17.5	17.5	89.0	88.9	6.1		18.0		13		81				<0.2		2.5	
						3.4	0.3	348	29.9		8.1		17.5		88.8		6.1		17.9		13		81				<0.2		2.4	
					Bottom	5.7	0.4	20	29.5	29.5	8.1	8.1	19.3	19.3	85.6	85.6	5.9	5.9	19.3		12		82				<0.2		2.4	
						5.7	0.5	20	29.6		8.1		19.3		85.6		5.9		19.4		13		82				<0.2		2.4	
IM4	Fine	Moderate	19:03	6.8	Surface	1.0	0.4	332	30.1	30.1	8.0	8.0	11.4	11.4	93.2	93.2	6.6	6.5	19.9	20.8	11	11	78	80	819708	804589	<0.2	<0.2	2.2	2.2
						1.0	0.4	336	30.1		8.0		11.4		93.1		6.6		20.0		11		78				<0.2		2.2	
					Middle	3.4	0.3	314	30.1	30.1	7.9	7.9	12.8	12.8	90.9	90.9	6.4		22.0		11		80				<0.2		2.2	
						3.4	0.3	332	30.1		7.9		12.8		90.8		6.4		21.8		10		80				<0.2		2.1	
					Bottom	5.8	0.4	349	29.6	29.6	7.9	7.9	15.2	15.2	83.6	83.6	5.9	5.9	20.3		12		81				<0.2		2.2	
						5.8	0.4	321	29.6		7.9		15.2		83.6		5.9		20.5		12		82				<0.2		2.3	
IM5	Fine	Rough	18:54	6.2	Surface	1.0	0.4	292	29.9	29.9	7.9	7.9	12.3	12.3	93.2	93.2	6.6	6.5	14.2	18.6	10	11	78	79	820762	804857	<0.2	<0.2	2.4	2.4
						1.0	0.4	311	29.9		7.9		12.3		93.2		6.6		14.3		10		78				<0.2		2.9	
					Middle	3.1	0.5	288	29.8	29.8	7.9	7.9	12.9	12.9	89.1	89.1	6.3		18.6		11		79				<0.2		2.5	
						3.1	0.5	315	29.8		7.9		12.9		89.1		6.3		18.6		11		80				<0.2		2.4	
					Bottom	5.2	0.3	311	29.6	29.6	7.9	7.9	13.9	13.9	87.9	88.0	6.2	6.2	22.8		12		80				<0.2		2.2	
						5.2	0.3	314	29.6		7.9		13.9		88.1		6.2		22.9		12		80				<0.2		2.2	
IM6	Fine	Rough	18:48	6.0	Surface	1.0	0.7	281	29.7	29.7	7.9	7.9	12.6	12.6	86.7	86.7	6.2	6.1	16.0	17.3	8	10	76	79	821054	805848	<0.2	<0.2	2.3	2.4
						1.0	0.7	293	29.7		7.9		12.6		86.6		6.1		16.0		9		76				<0.2		2.4	
					Middle	3.0	0.6	285	29.6	29.6	7.9	7.9	13.4	13.4	84.7	84.7	6.0		18.0		10		78				<0.2		2.4	
						3.0	0.6	285	29.6		7.9		13.4		84.7		6.0		17.9		11		79				<0.2		2.4	
					Bottom	5.0	0.4	282	29.6	29.6	7.8	7.8	13.5	13.5	86.3	86.4	6.1	6.1	17.9		9		81				<0.2		2.5	
						5.0	0.4	290	29.6		7.8		13.5		86.4		6.1		17.7		10		81				<0.2		2.3	
IM7	Fine	Rough	18:41	7.2	Surface	1.0	0.5	252	29.8	29.8	7.9	7.9	10.7	10.5	85.6	85.6	6.1	6.1	13.4	16.4	8	8	74	76	821365	806856	<0.2	<0.2	2.2	2.3
						1.0	0.5	258	29.8		7.9		10.2		85.6		6.1		13.5		8		74				<0.2		3.0	
					Middle	3.6	0.5	252	29.7	29.7	7.9	7.9	13.2	13.2	85.1	85.2	6.0		15.6		8		76				<0.2		2.1	
						3.6	0.5	259	29.7		7.9		13.2		85.2		6.0		15.7		8		76				<0.2		2.2	
					Bottom	6.2	0.4	258	29.7	29.7	7.9	7.9	13.8	13.8	86.4	86.5	6.1	6.1	20.2		8		78				<0.2		2.2	
						6.2	0.4	266	29.7		7.9		13.8		86.5		6.1		20.2		8		79				<0.2		2.3	
IM8	Fine	Rough	19:05	7.0	Surface	1.0	0.2	181	29.9	29.9	8.0	8.0	10.4	10.4	88.4	88.5	6.3	6.3	15.7	16.5	10	10	78	79	821818	808165	<0.2	<0.2	3.9	3.8
						1.0	0.2	188	29.9		8.0		10.4		88.5		6.3		15.8		10		77				<0.2		4.0	
					Middle	3.5	0.0	194	30.1	30.1	8.0	8.0	12.1	12.1	88.6	88.6	6.3		16.5		11		79				<0.2		3.7	
						3.5	0.0	197	30.1		8.0		12.1		88.6		6.3		16.7		10		79				<0.2		3.7	
					Bottom	6.0	0.1	125	30.1	30.1	7.9	7.9	12.4	12.4	87.9	87.9	6.2	6.2	17.3		10		81				<0.2		3.9	
						6.0	0.1	136	30.1		7.9		12.4		87.9		6.2		17.2		10		82				<0.2		3.8	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 28 June 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	Rough	19:11	6.6	Surface	1.0	0.1	129	30.3	30.3	8.0	8.0	10.0	10.0	92.5	92.5	6.6	6.5	15.9	16.7	11	12	77	80	822121	808797	<0.2	<0.2	3.8	3.9
						1.0	0.1	140	30.3		8.0		10.0		92.5		6.6		15.9		11		77				<0.2		4.0	
					Middle	3.3	0.0	313	30.4	30.4	8.0	8.0	11.8	11.7	90.8	90.8	6.4		15.8		11		80				<0.2		3.8	
						3.3	0.0	335	30.4		8.0		11.7		90.8		6.4		16.0		12		79				<0.2		3.9	
					Bottom	5.6	0.1	51	30.4	30.4	8.0	8.0	12.1	12.1	90.2	90.1	6.3	6.3	18.1		14		82				<0.2		4.1	
						5.6	0.2	54	30.4		8.0		12.1		90.0		6.3		18.2		13		82				<0.2		3.7	
IM10	Fine	Rough	19:18	6.8	Surface	1.0	0.2	358	30.5	30.5	8.0	8.0	10.7	10.7	95.5	95.3	6.8	6.6	12.4	12.3	7	8	77	79	822382	809778	<0.2	<0.2	3.9	**4.0**
						1.0	0.2	329	30.5		8.0		10.7		95.0		6.7		12.5		6		77				<0.2		4.2	
					Middle	3.4	0.3	13	30.5	30.5	8.0	8.0	11.6	11.6	92.8	92.7	6.5		12.7		8		78				<0.2		3.8	
						3.4	0.4	13	30.5		8.0		11.6		92.6		6.5		12.7		8		79				<0.2		4.0	
					Bottom	5.8	0.3	335	30.1	30.1	8.0	8.0	13.6	13.7	90.6	90.6	6.3	6.3	11.7		9		81				<0.2		4.1	
						5.8	0.3	347	30.1		8.0		13.7		90.6		6.3		11.6		9		82				<0.2		4.0	
IM11	Fine	Rough	19:30	7.3	Surface	1.0	0.5	309	30.2	30.2	8.1	8.1	13.7	13.7	86.5	86.3	6.0	5.8	18.5	20.0	6	6	78	79	822077	811454	<0.2	<0.2	3.9	3.8
						1.0	0.5	312	30.2		8.1		13.6		86.0		6.0		18.8		6		77				<0.2		3.8	
					Middle	3.7	0.6	305	29.5	29.5	8.0	8.0	17.2	17.1	80.2	80.2	5.6		19.2		6		79				<0.2		3.7	**3.8**
						3.7	0.6	324	29.5		8.0		17.1		80.1		5.6		19.2		6		79				<0.2		3.8	
					Bottom	6.3	0.4	294	29.4	29.4	8.0	8.0	17.8	17.8	78.6	78.9	5.5	5.5	22.2		6		81				<0.2		3.9	
						6.3	0.4	307	29.4		8.0		17.7		79.1		5.5		22.2		5		82				<0.2		3.9	
IM12	Fine	Rough	19:37	8.5	Surface	1.0	0.5	284	30.5	30.5	8.1	8.1	13.2	13.2	102.4	102.6	7.1	6.3	14.7	17.6	6	7	77	80	821456	812068	<0.2	<0.2	3.3	3.2
						1.0	0.5	294	30.5		8.1		13.2		102.7		7.2		14.9		6		78				<0.2		3.1	
					Middle	4.3	0.6	273	29.7	29.6	8.2	8.1	17.4	17.4	79.8	78.2	5.5		17.9		6		80				<0.2		3.2	
						4.3	0.6	279	29.5		8.1		17.4		76.6		5.3		17.5		6		80				<0.2		3.1	
					Bottom	7.5	0.3	281	28.7	28.7	8.0	8.0	21.1	21.0	72.0	72.1	5.0	5.0	20.5		7		81				<0.2		3.5	
						7.5	0.4	305	28.7		8.0		21.0		72.2		5.0		20.0		8		82				<0.2		3.0	
SR2	Fine	Moderate	19:55	4.4	Surface	1.0	0.1	295	29.7	29.7	8.1	8.1	16.8	16.8	86.1	85.9	6.0	6.0	20.6	20.7	10	11	79	80	821435	814167	<0.2	<0.2	3.0	3.0
						1.0	0.2	303	29.7		8.1		16.9		85.6		5.9		21.1		11		79				<0.2		3.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	322	28.9	28.9	8.0	8.0	20.5	20.6	80.1	80.5	5.5	5.6	20.5		11		82				<0.2		3.1	
						3.4	0.2	332	28.9		8.0		20.6		80.9		5.6		20.7		10		81				<0.2		3.0	
SR3	Fine	Rough	19:00	8.0	Surface	1.0	0.5	172	30.0	30.0	8.0	8.0	9.0	9.0	89.0	88.7	6.4	6.1	14.5	14.8	10	11	-	-	822156	807546	-	-	-	-
						1.0	0.5	185	30.0		8.0		9.0		88.3		6.4		14.5		9		-				-		-	
					Middle	4.0	0.3	226	29.9	29.9	7.9	7.9	13.8	13.8	81.4	81.4	5.7		14.1		10		-				-		-	
						4.0	0.3	246	29.9		7.9		13.8		81.3		5.7		14.3		10		-				-		-	
					Bottom	7.0	0.2	261	29.7	29.7	7.9	7.9	14.5	14.5	81.2	81.3	5.7	5.7	15.6		12		-				-		-	
						7.0	0.2	262	29.7		7.9		14.5		81.3		5.7		15.6		12		-				-		-	
SR4A	Fine	Calm	20:07	8.2	Surface	1.0	0.2	252	30.0	30.0	8.2	8.2	17.7	17.7	110.1	110.1	7.6	7.5	18.5	20.8	12	13	-	-	817178	807821	-	-	-	-
						1.0	0.2	267	30.0		8.2		17.7		110.0		7.6		18.6		13		-				-		-	
					Middle	4.1	0.1	232	29.9	29.9	8.2	8.2	18.0	18.0	106.3	106.3	7.3		21.5		13		-				-		-	
						4.1	0.1	232	29.9		8.2		18.0		106.2		7.3		21.5		13		-				-		-	
					Bottom	7.2	0.0	197	29.8	29.8	8.1	8.1	18.6	18.5	105.0	105.1	7.2	7.2	22.2		13		-				-		-	
						7.2	0.0	205	29.8		8.1		18.5		105.1		7.2		22.3		13		-				-		-	
SR5A	Fine	Calm	20:25	5.0	Surface	1.0	0.2	273	30.2	30.2	8.3	8.3	17.2	17.2	127.0	126.9	8.7	8.7	14.0	15.4	9	12	-	-	816593	810668	-	-	-	-
						1.0	0.2	289	30.2		8.3		17.2		126.7		8.7		14.0		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	296	30.1	30.1	8.2	8.2	17.6	17.6	113.6	113.4	7.8	7.8	16.5		14		-				-		-	
						4.0	0.2	309	30.1		8.2		17.6		113.2		7.8		17.0		14		-				-		-	
SR6	Fine	Calm	20:55	3.7	Surface	1.0	0.1	241	30.2	30.2	8.1	8.1	15.4	15.4	110.9	110.9	7.7	7.7	10.9	11.7	9	10	-	-	817892	814676	-	-	-	-
						1.0	0.1	264	30.2		8.1		15.4		110.9		7.7		11.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	222	30.1	30.1	8.1	8.1	16.0	16.0	108.5	108.5	7.5	7.5	12.4		11		-				-		-	
						2.7	0.1	225	30.1		8.1		16.0		108.5		7.5		12.5		11		-				-		-	
SR7	Fine	Moderate	21:55	20.0	Surface	1.0	0.1	240	29.5	29.5	8.1	8.1	17.6	17.6	80.0	79.4	5.5	5.0	11.2	14.7	4	5	-	-	823628	823745	-	-	-	-
						1.0	0.2	257	29.5		8.1		17.6		78.7		5.4		11.6		5		-				-		-	
					Middle	10.0	0.1	207	27.3	27.2	8.0	8.0	26.4	26.5	66.1	66.1	4.5		15.0		4		-				-		-	
						10.0	0.1	215	27.2		8.0		26.5		66.0		4.5		15.8		6		-				-		-	
					Bottom	19.0	0.1	292	27.2	27.2	8.0	8.0	26.7	26.7	63.5	63.7	4.3	4.4	17.4		6		-				-		-	
						19.0	0.1	300	27.2		8.0		26.7		63.8		4.4		17.4		5		-				-		-	
SR8	Fine	Moderate	19:44	4.1	Surface	1.0	-	-	30.5	30.5	8.1	8.1	13.1	13.1	103.7	103.8	7.2	7.3	10.1	10.2	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	30.5		8.1		13.1		103.9		7.3		10.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	30.4	30.4	8.1	8.1	14.1	14.1	99.6	99.5	6.9	6.9	10.2		6		-				-		-	
						3.1	-	-	30.4		8.1		14.1		99.3		6.9		10.2		5		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 June 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	Sunny	Rough	13:57	8.5	Surface	1.0	0.5	217	30.1	30.1	8.1	8.1	14.6	14.6	96.3	96.3	6.7	5.8	9.4	15.9	4	5	73	73	815631	804239	<0.2	<0.2	1.5	1.7
						1.0	0.5	228	30.1		8.1		14.6		96.3		6.7		9.4		5		72				<0.2		1.6	
					Middle	4.3	0.7	200	28.7	28.7	8.0	8.0	21.7	21.7	70.1	70.1	4.8		16.6		4		73				<0.2		1.8	
						4.3	0.8	205	28.7		8.0		21.7		70.1		4.8		16.6		4		73				<0.2		1.8	
					Bottom	7.5	0.4	214	27.6	27.6	8.0	8.0	27.9	27.9	73.9	73.9	5.0	5.0	21.7		8		74				<0.2		1.8	
						7.5	0.4	226	27.6		8.0		27.9		73.9		5.0		21.7		7		75				<0.2		1.8	
C2	Sunny	Moderate	12:41	12.1	Surface	1.0	1.3	170	29.9	29.9	7.9	7.9	14.2	14.2	89.9	89.9	6.3	6.1	10.7	10.9	7	8	73	75	825655	806952	<0.2	<0.2	2.5	2.4
						1.0	1.4	183	29.9		7.9		14.2		89.8		6.3		10.7		7		73				<0.2		2.5	
					Middle	6.1	1.2	165	29.6	29.6	7.9	7.9	14.5	14.5	82.8	82.8	5.8		10.5		8		75				<0.2		2.5	
						6.1	1.2	175	29.6		7.9		14.5		82.7		5.8		10.6		7		75				<0.2		2.3	
					Bottom	11.1	0.5	151	29.1	29.1	7.9	7.9	18.8	18.8	80.5	80.6	5.6	5.6	11.3		10		76				<0.2		2.4	
						11.1	0.5	154	29.2		7.9		18.8		80.7		5.6		11.3		9		76				<0.2		2.4	
C3	Sunny	Moderate	14:01	12.0	Surface	1.0	0.5	113	29.0	29.0	8.0	8.0	19.3	19.3	87.5	87.5	6.1	6.1	11.9	11.7	6	7	73	75	822097	817796	<0.2	<0.2	1.5	1.6
						1.0	0.6	120	29.0		8.0		19.3		87.5		6.1		11.9		6		73				<0.2		1.6	
					Middle	6.0	0.2	101	29.0	29.0	8.0	8.0	19.8	19.8	87.5	87.5	6.0		11.5		8		75				<0.2		1.6	
						6.0	0.3	107	29.0		8.0		19.8		87.5		6.0		11.5		8		75				<0.2		1.7	
					Bottom	11.0	0.4	57	29.0	29.0	8.0	8.0	19.9	19.9	88.0	88.0	6.1	6.1	11.8		9		77				<0.2		1.7	
						11.0	0.4	58	29.0		8.0		19.9		88.0		6.1		11.7		7		77				<0.2		1.6	
IM1	Sunny	Rough	13:37	5.6	Surface	1.0	0.1	-	30.3	30.3	8.2	8.2	15.2	15.2	102.9	102.9	7.1	7.1	9.7	14.4	6	6	72	74	817950	807132	<0.2	<0.2	1.7	1.7
						1.0	0.1	-	30.3		8.2		15.2		102.9		7.1		9.7		6		73				<0.2		1.7	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	127	28.2	28.2	8.0	8.0	24.7	24.7	68.4	68.4	4.7	4.7	19.1		6		74				<0.2		1.8	
						4.6	0.1	135	28.2		8.0		24.7		68.4		4.7		19.1		5		75				<0.2		1.7	
IM2	Sunny	Rough	13:29	7.8	Surface	1.0	0.5	182	29.9	29.9	8.1	8.1	15.1	15.1	89.5	89.5	6.2	5.4	10.8	15.5	8	8	70	72	818180	806142	<0.2	<0.2	1.6	1.7
						1.0	0.5	198	29.9		8.1		15.1		89.5		6.2		10.8		7		71				<0.2		1.6	
					Middle	3.9	0.6	187	28.6	28.6	8.0	8.0	18.9	18.9	64.0	64.0	4.5		16.9		7		72				<0.2		1.8	
						3.9	0.6	191	28.6		8.0		18.9		64.0		4.5		16.9		8		73				<0.2		1.6	
					Bottom	6.8	0.3	119	27.6	27.6	8.0	8.0	27.9	27.9	69.6	69.6	4.7	4.7	18.8		8		74				<0.2		1.8	
						6.8	0.3	126	27.6		8.0		27.9		69.6		4.7		18.8		8		74				<0.2		1.7	
IM3	Sunny	Rough	13:23	8.1	Surface	1.0	0.6	207	29.9	29.9	8.1	8.1	14.8	14.8	88.0	88.0	6.1	5.4	11.9	16.5	5	5	71	73	818760	805622	<0.2	<0.2	1.6	1.6
						1.0	0.6	208	29.9		8.1		14.8		88.0		6.1		11.9		4		71				<0.2		1.5	
					Middle	4.1	0.6	210	29.1	29.1	8.0	8.0	19.5	19.5	66.7	66.7	4.6		19.5		5		73				<0.2		1.6	
						4.1	0.7	227	29.1		8.0		19.5		66.7		4.6		19.5		6		72				<0.2		1.6	
					Bottom	7.1	0.3	181	27.6	27.6	7.9	7.9	28.0	28.0	62.7	62.7	4.2	4.2	18.2		6		75				<0.2		1.7	
						7.1	0.3	191	27.6		7.9		28.0		62.7		4.2		18.2		5		74				<0.2		1.5	
IM4	Sunny	Rough	13:13	8.1	Surface	1.0	0.3	187	30.0	30.0	8.1	8.1	14.6	14.6	97.3	97.3	6.8	6.6	10.1	13.7	6	6	70	72	819739	804625	<0.2	<0.2	1.6	1.6
						1.0	0.3	198	30.0		8.1		14.6		97.3		6.8		10.1		7		71				<0.2		1.7	
					Middle	4.1	0.5	192	29.9	29.9	8.1	8.1	14.7	14.7	90.6	90.6	6.3		12.5		6		72				<0.2		1.7	
						4.1	0.6	192	29.9		8.1		14.7		90.6		6.3		12.5		5		72				<0.2		1.5	
					Bottom	7.1	0.5	176	28.5	28.5	7.9	7.9	25.6	25.6	76.3	76.3	5.1	5.1	18.5		6		73				<0.2		1.5	
						7.1	0.5	177	28.5		7.9		25.6		76.3		5.1		18.5		6		74				<0.2		1.7	
IM5	Sunny	Moderate	13:04	7.1	Surface	1.0	0.3	182	29.8	29.8	8.1	8.1	14.3	14.3	89.5	89.5	6.3	6.1	9.9	15.3	6	5	71	73	820738	804884	<0.2	<0.2	1.7	1.7
						1.0	0.4	195	29.8		8.1		14.3		89.5		6.3		9.9		6		70				<0.2		1.7	
					Middle	3.6	0.5	199	29.3	29.3	8.0	8.0	19.6	19.6	84.4	84.4	5.8		12.4		5		73				<0.2		1.8	
						3.6	0.5	207	29.3		8.0		19.6		84.4		5.8		12.4		4		73				<0.2		1.5	
					Bottom	6.1	0.2	144	28.1	28.1	7.9	7.9	25.4	25.4	66.1	66.1	4.5	4.5	23.7		5		74				<0.2		1.7	
						6.1	0.2	147	28.1		7.9		25.4		66.1		4.5		23.7		6		74				<0.2		1.6	
IM6	Sunny	Moderate	12:55	7.6	Surface	1.0	0.2	135	30.0	30.0	8.1	8.1	14.1	14.1	93.8	93.8	6.6	6.1	8.9	12.6	6	6	70	72	821048	805857	<0.2	<0.2	1.8	1.8
						1.0	0.2	140	30.0		8.1		14.1		93.8		6.6		8.9		6		71				<0.2		1.6	
					Middle	3.8	0.3	154	29.2	29.2	8.0	8.0	17.5	17.5	80.9	80.9	5.6		12.1		6		73				<0.2		1.7	
						3.8	0.3	156	29.2		8.0		17.5		80.9		5.6		12.1		5		72				<0.2		2.0	
					Bottom	6.6	0.2	156	28.8	28.8	7.9	7.9	22.2	22.2	83.2	83.2	5.7	5.7	16.9		7		74				<0.2		1.7	
						6.6	0.2	161	28.8		7.9		22.2		83.2		5.7		16.9		5		74				<0.2		1.8	
IM7	Sunny	Moderate	12:45	8.8	Surface	1.0	0.3	144	29.9	29.9	8.1	8.1	14.0	14.0	96.8	96.8	6.8	6.3	9.1	14.2	6	7	71	72	821375	806825	<0.2	<0.2	1.5	1.6
						1.0	0.3	149	29.9		8.1		14.0		96.8		6.8		9.1		8		70				<0.2		1.6	
					Middle	4.4	0.2	220	29.4	29.4	7.9	7.9	16.2	16.2	81.5	81.5	5.7		14.3		7		72				<0.2		1.5	
						4.4	0.2	231	29.4		7.9		16.2		81.5		5.7		14.3		8		72				<0.2		1.7	
					Bottom	7.8	0.2	80	28.8	28.8	7.9	7.9	21.7	21.7	81.3	81.3	5.6	5.6	19.3		6		73				<0.2		1.6	
						7.8	0.2	84	28.8		7.9		21.7		81.3		5.6		19.3		6		73				<0.2		1.5	
IM8	Sunny	Moderate	13:06	8.7	Surface	1.0	0.6	177	29.8	29.8	8.0	8.0	14.8	14.8	92.3	92.2	6.5	6.1	11.1	13.6	6	6	73	75	821813	808110	<0.2	<0.2	1.7	1.8
						1.0	0.6	178	29.8		8.0		14.8		92.1		6.4		11.2		5		73				<0.2		1.8	
					Middle	4.4	0.4	162	29.4	29.4	8.0	8.0	16.3	16.3	82.2	82.2	5.7		14.3		6		75				<0.2		1.7	
						4.4	0.4	163	29.4		8.0		16.3		82.1		5.7		14.3		5		75				<0.2		1.7	
					Bottom	7.7	0.4	208	29.2	29.2	8.0	8.0	17.5	17.5	82.9	83.0	5.8	5.8	15.4		5		77				<0.2		1.8	
						7.7	0.4	222	29.3		8.0		17.5		83.0		5.8		15.4		6		77				<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 30 June 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	13:11	7.3	Surface	1.0	0.4	166	29.8	29.8	8.0	8.0	15.1	15.1	90.1	90.1	6.3	6.2	11.7	13.3	7	8	73	75	822068	808815	<0.2	<0.2	1.9	2.0
						1.0	0.5	166	29.8		8.0		15.1		90.1		6.3		11.8		7		73				<0.2		1.9	
					Middle	3.7	0.3	141	29.5	29.5	8.0	8.0	15.6	15.6	85.7	85.6	6.0		13.2		8		75				<0.2		2.0	
						3.7	0.4	147	29.5		8.0		15.6		85.5		6.0		13.2		7		75				<0.2		2.0	
					Bottom	6.3	0.2	138	29.3	29.3	8.0	8.0	16.6	16.5	83.4	83.5	5.8	5.8	15.0		8		77				<0.2		2.1	
						6.3	0.2	148	29.3		8.0		16.5		83.5		5.8		15.0		10		77				<0.2		2.1	
IM10	Sunny	Moderate	13:17	7.7	Surface	1.0	0.7	145	29.7	29.7	8.0	8.0	15.2	15.2	90.2	90.1	6.3	6.2	12.0	16.0	8	8	73	75	822364	809798	<0.2	<0.2	1.9	1.9
						1.0	0.7	151	29.7		8.0		15.2		90.0		6.3		12.0		8		73				<0.2		2.0	
					Middle	3.9	0.5	111	29.5	29.5	8.0	8.0	15.6	15.6	86.6	86.6	6.1		14.2		8		75				<0.2		1.9	
						3.9	0.5	118	29.5		8.0		15.6		86.6		6.1		14.2		8		75				<0.2		1.9	
					Bottom	6.7	0.4	109	29.3	29.3	8.0	8.0	16.8	16.8	85.2	85.3	5.9	6.0	21.8		8		77				<0.2		1.9	
						6.7	0.5	110	29.3		8.0		16.8		85.3		6.0		21.6		9		77				<0.2		1.9	
IM11	Sunny	Moderate	13:26	6.5	Surface	1.0	0.8	124	29.9	29.9	8.0	8.0	14.6	14.6	93.4	93.4	6.5	6.4	10.9	15.1	6	8	73	75	822082	811443	<0.2	<0.2	2.0	2.0
						1.0	0.9	127	29.9		8.0		14.6		93.4		6.5		10.9		8		73				<0.2		2.0	
					Middle	3.3	0.7	110	29.5	29.5	8.0	8.0	15.4	15.4	87.9	87.9	6.2		13.7		8		75				<0.2		2.2	
						3.3	0.7	110	29.5		8.0		15.4		87.8		6.2		13.7		8		75				<0.2		2.0	
					Bottom	5.5	0.5	94	29.2	29.2	8.0	8.0	17.3	17.3	85.9	85.9	6.0	6.0	20.9		8		77				<0.2		2.0	
						5.5	0.6	99	29.2		8.0		17.3		85.9		6.0		20.6		8		77				<0.2		1.9	
IM12	Sunny	Moderate	13:31	8.9	Surface	1.0	0.5	115	30.0	30.0	8.0	8.0	14.7	14.7	97.7	97.7	6.8	6.7	10.2	14.9	6	6	73	75	821480	812039	<0.2	<0.2	2.0	2.0
						1.0	0.5	121	30.0		8.0		14.7		97.6		6.8		10.2		6		73				<0.2		2.0	
					Middle	4.5	0.5	103	29.7	29.7	8.0	8.0	15.0	15.0	93.8	93.8	6.6		12.1		6		75				<0.2		1.9	
						4.5	0.5	110	29.7		8.0		15.0		93.7		6.6		12.2		6		75				<0.2		2.0	
					Bottom	7.9	0.5	90	29.5	29.5	8.0	8.0	16.2	16.2	89.1	89.2	6.2	6.2	22.2		6		77				<0.2		2.1	
						7.9	0.5	96	29.5		8.0		16.2		89.2		6.2		22.3		6		77				<0.2		2.1	
SR2	Sunny	Moderate	13:45	4.6	Surface	1.0	0.5	87	30.1	30.1	8.0	8.0	14.4	14.4	98.8	98.8	6.9	6.9	10.2	10.6	7	7	73	74	821464	814150	<0.2	<0.2	2.1	2.2
						1.0	0.6	93	30.1		8.0		14.4		98.7		6.9		10.2		6		73				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.5	80	29.8	29.8	8.0	8.0	15.7	15.6	97.3	97.4	6.8	6.8	10.9		7		75				<0.2		2.3	
						3.6	0.5	81	29.8		8.0		15.6		97.5		6.8		10.9		6		75				<0.2		2.2	
SR3	Sunny	Moderate	13:01	9.2	Surface	1.0	0.8	193	29.9	29.9	8.0	8.0	14.6	14.6	92.7	92.6	6.5	6.1	11.5	15.5	7	7	-	-	822133	807580	-	-	-	-
						1.0	0.8	207	29.9		8.0		14.6		92.5		6.5		11.5		7		-				-		-	
					Middle	4.6	0.7	171	29.2	29.2	7.9	7.9	17.1	17.1	80.6	80.7	5.6		16.6		6		-				-		-	
						4.6	0.7	187	29.2		7.9		17.1		80.7		5.6		16.7		8		-				-		-	
					Bottom	8.2	0.5	183	29.3	29.3	7.9	7.9	17.3	17.3	82.9	83.0	5.8	5.8	18.5		6		-				-		-	
						8.2	0.5	191	29.3		7.9		17.3		83.1		5.8		18.4		8		-				-		-	
SR4A	Sunny	Calm	14:20	9.0	Surface	1.0	0.2	96	30.3	30.3	8.2	8.2	14.8	14.8	92.5	92.5	6.4	5.4	11.5	17.6	6	6	-	-	817202	807825	-	-	-	-
						1.0	0.2	99	30.3		8.2		14.8		92.5		6.4		11.5		7		-				-		-	
					Middle	4.5	0.1	95	28.9	28.9	8.0	8.0	21.6	21.6	65.0	65.0	4.4		18.9		6		-				-		-	
						4.5	0.1	102	28.9		8.0		21.6		65.0		4.4		18.9		5		-				-		-	
					Bottom	8.0	0.1	83	27.6	27.6	8.0	8.0	27.4	27.4	63.1	63.1	4.3	4.3	22.3		8		-				-		-	
						8.0	0.1	83	27.6		8.0		27.4		63.1		4.3		22.3		6		-				-		-	
SR5A	Sunny	Calm	14:37	4.6	Surface	1.0	0.1	26	30.5	30.5	8.4	8.4	16.6	16.6	140.3	140.3	9.6	9.6	10.6	11.1	8	11	-	-	816575	810688	-	-	-	-
						1.0	0.1	28	30.5		8.4		16.6		140.3		9.6		10.6		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	133	30.4	30.4	8.3	8.3	16.7	16.7	126.2	126.2	8.7	8.7	11.6		12		-				-		-	
						3.6	0.1	142	30.4		8.3		16.7		126.2		8.7		11.6		12		-				-		-	
SR6	Sunny	Calm	15:02	4.1	Surface	1.0	0.1	333	30.7	30.7	8.5	8.5	16.0	16.0	158.4	158.4	10.8	10.8	11.4	13.9	12	12	-	-	817891	814643	-	-	-	-
						1.0	0.1	357	30.7		8.5		16.0		158.4		10.8		11.4		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	111	29.9	29.9	8.2	8.2	16.7	16.7	116.4	116.4	8.0	8.0	16.3		13		-				-		-	
						3.1	0.0	111	29.9		8.2		16.7		116.4		8.0		16.3		12		-				-		-	
SR7	Sunny	Moderate	14:26	18.6	Surface	1.0	0.8	88	30.1	30.0	8.1	8.1	16.6	16.6	104.6	104.6	7.2	7.1	9.3	10.1	6	6	-	-	823606	823752	-	-	-	-
						1.0	0.8	93	30.0		8.1		16.6		104.5		7.2		9.2		6		-				-		-	
					Middle	9.3	0.5	73	29.8	29.8	8.1	8.1	17.3	17.3	101.8	101.8	7.0		11.3		6		-				-		-	
						9.3	0.5	75	29.8		8.1		17.3		101.7		7.0		11.4		6		-				-		-	
					Bottom	17.6	0.2	55	29.8	29.8	8.1	8.1	17.4	17.4	101.7	101.8	7.0	7.0	9.6		6		-				-		-	
						17.6	0.2	55	29.8		8.1		17.4		101.8		7.0		9.6		5		-				-		-	
SR8	Sunny	Moderate	13:36	3.8	Surface	1.0	-	-	29.9	29.9	8.1	8.1	14.9	14.9	99.1	99.2	6.9	6.9	11.8	12.0	10	10	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.9		8.1		14.9		99.2		6.9		11.8		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	-	-	29.9	29.9	8.1	8.1	15.0	15.0	98.9	98.9	6.9	6.9	12.2		10		-				-		-	
						2.8	-	-	29.9		8.1		15.0		98.8		6.9		12.2		10		-				-		-	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 30 June 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	07:27	8.8	Surface	1.0	0.5	46	29.3	29.3	8.0	8.0	13.9	13.9	74.0	74.0	5.3	4.6	15.7	18.1	5	9	72	73	815605	804253	<0.2	<0.2	1.8	1.6
						1.0	0.5	49	29.3		8.0		13.9		74.0		5.3		15.7		6		73				<0.2		1.7	
					Middle	4.4	0.5	32	27.7	27.7	8.0	8.0	27.0	27.0	57.6	57.6	3.9		17.7		9		73				<0.2		1.6	
						4.4	0.5	35	27.7		8.0		27.0		57.6		3.9		17.7		10		73				<0.2		1.7	
					Bottom	7.8	0.5	20	27.5	27.5	7.9	7.9	28.4	28.4	74.8	74.8	5.0	5.0	20.8		11		74				<0.2		1.5	
						7.8	0.5	20	27.5		7.9		28.4		74.8		5.0		20.8		11		74				<0.2		1.5	
C2	Sunny	Moderate	08:57	13.1	Surface	1.0	0.7	22	29.5	29.5	8.0	8.0	12.2	12.2	91.9	91.9	6.6	6.3	12.2	11.4	5	6	73	75	825673	806916	<0.2	<0.2	2.5	2.4
						1.0	0.7	22	29.5		8.0		12.2		91.8		6.6		12.2		4		73				<0.2		2.7	
					Middle	6.6	0.5	346	29.6	29.6	7.9	7.9	15.4	15.4	84.8	84.8	5.9		11.1		7		75				<0.2		2.2	
						6.6	0.5	318	29.6		7.9		15.4		84.8		5.9		11.1		6		75				<0.2		2.2	
					Bottom	12.1	0.3	337	29.4	29.4	7.9	7.9	17.2	17.2	81.8	82.0	5.7	5.7	10.9		7		77				<0.2		2.6	
						12.1	0.3	347	29.4		7.9		17.2		82.1		5.7		10.9		8		77				<0.2		2.4	
C3	Sunny	Moderate	07:06	12.2	Surface	1.0	0.4	266	29.5	29.5	8.1	8.1	15.7	15.7	86.9	86.9	6.1	5.7	9.6	9.8	7	6	73	75	822094	817826	<0.2	<0.2	2.5	2.4
						1.0	0.5	274	29.5		8.1		15.7		86.9		6.1		9.6		6		73				<0.2		2.5	
					Middle	6.1	0.6	253	29.3	29.2	8.1	8.1	18.0	18.0	74.5	74.4	5.2		9.6		6		75				<0.2		2.4	
						6.1	0.6	269	29.2		8.1		18.0		74.2		5.2		9.7		6		75				<0.2		2.3	
					Bottom	11.2	0.4	273	27.5	27.5	8.0	8.0	26.2	26.1	71.8	72.0	4.9	4.9	10.2		6		76				<0.2		2.2	
						11.2	0.4	285	27.6		8.0		26.1		72.1		4.9		10.1		6		77				<0.2		2.2	
IM1	Sunny	Moderate	07:43	5.7	Surface	1.0	0.1	356	29.5	29.5	8.0	8.0	14.8	14.8	93.8	93.8	6.6	6.6	12.4	14.7	5	5	72	73	817943	807131	<0.2	<0.2	1.8	1.8
						1.0	0.2	336	29.5		8.0		14.8		93.8		6.6		12.4		4		73				<0.2		1.7	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.2	10	29.4	29.4	8.0	8.0	15.9	15.9	93.1	93.1	6.5	6.5	16.9		5		74				<0.2		1.8	
						4.7	0.2	10	29.4		8.0		15.9		93.1		6.5		16.9		4		73				<0.2		1.8	
IM2	Sunny	Moderate	07:50	7.8	Surface	1.0	0.1	321	29.3	29.3	8.0	8.0	14.1	14.1	95.1	95.1	6.7	6.7	9.0	9.3	4	5	71	73	818133	806168	<0.2	<0.2	1.6	1.5
						1.0	0.2	332	29.3		8.0		14.1		95.1		6.7		9.0		5		70				<0.2		1.6	
					Middle	3.9	0.3	358	29.3	29.3	8.0	8.0	14.5	14.5	94.7	94.7	6.7		9.2		5		73				<0.2		1.5	
						3.9	0.3	329	29.3		8.0		14.5		94.7		6.7		9.2		4		72				<0.2		1.4	
					Bottom	6.8	0.3	29	29.4	29.4	8.0	8.0	15.2	15.2	96.6	96.6	6.8	6.8	9.6		5		75				<0.2		1.5	
						6.8	0.3	29	29.4		8.0		15.2		96.6		6.8		9.6		4		75				<0.2		1.4	
IM3	Sunny	Moderate	07:56	8.3	Surface	1.0	0.2	332	29.3	29.3	8.0	8.0	13.4	13.4	91.0	91.0	6.5	6.3	11.6	13.9	5	6	71	73	818784	805570	<0.2	<0.2	1.4	1.4
						1.0	0.3	332	29.3		8.0		13.4		91.0		6.5		11.6		4		71				<0.2		1.4	
					Middle	4.2	0.3	317	29.3	29.3	8.0	8.0	16.0	16.0	86.6	86.6	6.1		15.4		5		72				<0.2		1.3	
						4.2	0.3	332	29.3		8.0		16.0		86.6		6.1		15.4		6		73				<0.2		1.4	
					Bottom	7.3	0.4	33	29.3	29.3	8.0	8.0	17.8	17.8	89.8	89.8	6.2	6.2	14.7		6		74				<0.2		1.3	
						7.3	0.5	33	29.3		8.0		17.8		89.8		6.2		14.7		7		74				<0.2		1.4	
IM4	Sunny	Moderate	08:04	7.1	Surface	1.0	0.4	356	29.4	29.4	8.0	8.0	14.1	14.1	91.0	91.0	6.4	6.1	11.0	17.8	7	6	70	72	819713	804606	<0.2	<0.2	1.4	1.5
						1.0	0.4	328	29.4		8.0		14.1		91.0		6.4		11.0		6		71				<0.2		1.5	
					Middle	3.6	0.3	328	29.3	29.3	8.0	8.0	15.2	15.2	81.1	81.1	5.7		18.6		6		72				<0.2		1.6	
						3.6	0.3	334	29.3		8.0		15.2		81.1		5.7		18.6		6		72				<0.2		1.4	
					Bottom	6.1	0.4	338	28.6	28.6	8.0	8.0	23.0	23.0	79.1	79.1	5.4	5.4	23.7		6		74				<0.2		1.5	
						6.1	0.4	359	28.6		8.0		23.0		79.1		5.4		23.7		7		74				<0.2		1.4	
IM5	Sunny	Moderate	08:10	8.1	Surface	1.0	0.4	286	29.3	29.3	8.0	8.0	14.5	14.5	92.5	92.5	6.5	6.3	9.0	11.6	4	6	70	73	820761	804875	<0.2	<0.2	1.5	1.5
						1.0	0.4	293	29.3		8.0		14.5		92.5		6.5		9.0		5		71				<0.2		1.5	
					Middle	4.1	0.5	271	29.3	29.3	8.0	8.0	15.3	15.3	85.9	85.9	6.0		10.3		7		73				<0.2		1.5	
						4.1	0.5	290	29.3		8.0		15.3		85.9		6.0		10.3		6		73				<0.2		1.6	
					Bottom	7.1	0.3	308	28.8	28.8	8.0	8.0	21.2	21.2	77.2	77.2	5.3	5.3	15.6		5		74				<0.2		1.4	
						7.1	0.3	315	28.8		8.0		21.2		77.2		5.3		15.6		7		75				<0.2		1.5	
IM6	Sunny	Moderate	08:17	7.4	Surface	1.0	0.6	270	29.4	29.4	8.0	8.0	14.6	14.6	92.6	92.6	6.5	6.4	10.4	12.0	7	7	70	72	821042	805804	<0.2	<0.2	1.5	1.5
						1.0	0.7	277	29.4		8.0		14.6		92.6		6.5		10.4		6		70				<0.2		1.5	
					Middle	3.7	0.6	264	29.3	29.3	8.0	8.0	14.9	14.9	88.2	88.2	6.2		11.7		6		72				<0.2		1.5	
						3.7	0.6	274	29.3		8.0		14.9		88.2		6.2		11.7		6		73				<0.2		1.5	
					Bottom	6.4	0.4	275	29.0	29.0	8.0	8.0	19.3	19.3	83.4	83.4	5.8	5.8	14.0		9		74				<0.2		1.5	
						6.4	0.4	297	29.0		8.0		19.3		83.4		5.8		14.0		7		75				<0.2		1.5	
IM7	Sunny	Moderate	08:23	7.3	Surface	1.0	0.5	244	29.4	29.4	8.1	8.1	14.7	14.7	90.9	90.9	6.4	6.4	13.3	13.6	8	8	70	72	821349	806839	<0.2	<0.2	1.5	1.6
						1.0	0.6	267	29.4		8.1		14.7		90.9		6.4		13.3		8		70				<0.2		1.6	
					Middle	3.7	0.5	240	29.3	29.3	8.0	8.0	15.2	15.2	88.9	88.9	6.3		13.8		8		72				<0.2		1.5	
						3.7	0.5	247	29.3		8.0		15.2		88.9		6.3		13.8		8		72				<0.2		1.6	
					Bottom	6.3	0.3	231	29.3	29.3	8.0	8.0	16.4	16.4	89.0	89.0	6.2	6.2	13.8		9		74				<0.2		1.5	
						6.3	0.4	246	29.3		8.0		16.4		89.0		6.2		13.8		9		74				<0.2		1.6	
IM8	Sunny	Moderate	08:33	9.7	Surface	1.0	0.2	130	29.5	29.5	8.0	8.0	14.9	14.9	88.5	88.5	6.2	6.3	12.6	18.3	6	6	73	75	821840	808122	<0.2	<0.2	1.8	2.1
						1.0	0.2	131	29.5		8.0		14.9		88.5		6.2		12.6		6		73				<0.2		2.1	
					Middle	4.9	0.2	102	29.5	29.5	8.0	8.0	15.0	15.0	89.3	89.3	6.3		18.9		6		75				<0.2		2.2	
						4.9	0.2	104	29.5		8.0		15.0		89.3		6.3		19.0		6		76				<0.2		2.1	
					Bottom	8.7	0.3	58	29.5	29.5	8.1	8.1	15.4	15.4	90.7	90.7	6.4	6.4	23.3		6		77				<0.2		2.1	
						8.7	0.3	63	29.5		8.1		15.4		90.7		6.4		23.3		5		77				<0.2		2.1	

DA: Depth-Averaged

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

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

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

Water Quality Monitoring

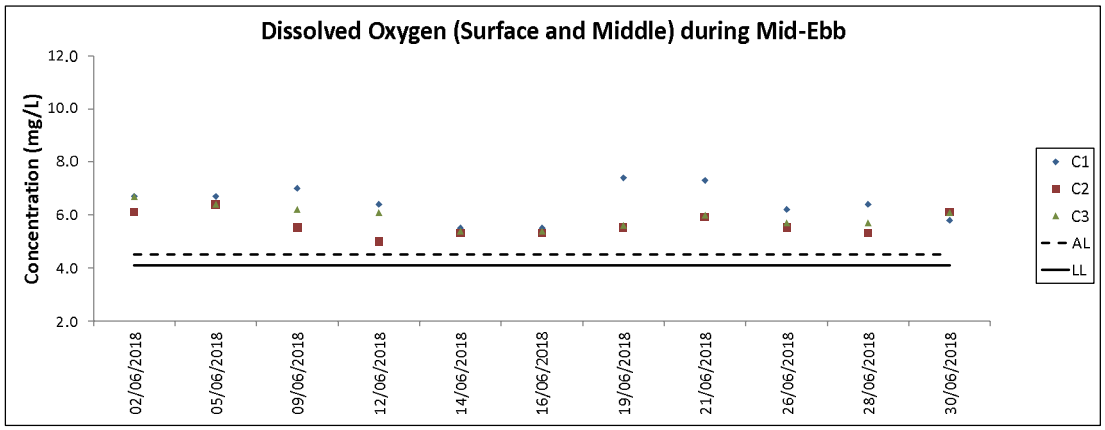
Water Quality Monitoring Results on 30 June 18 during Mid-Flood Tide

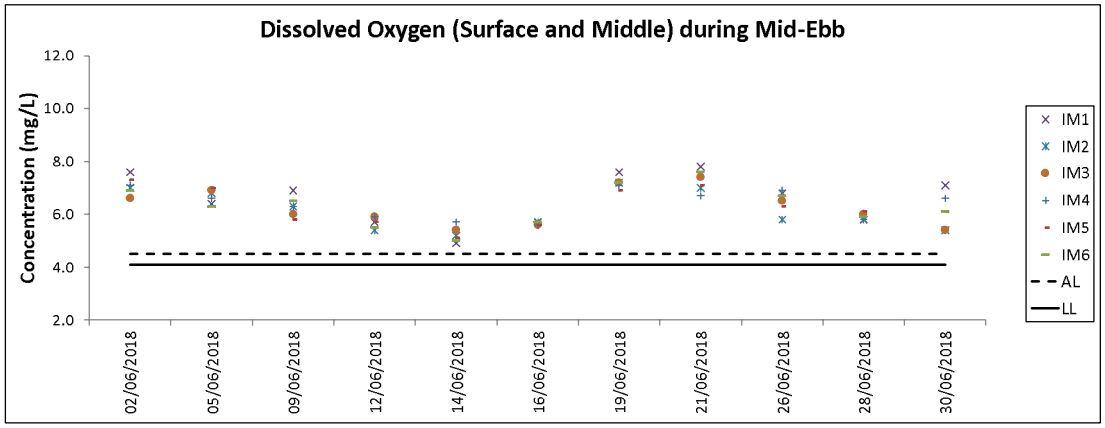
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (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	08:25	8.3	Surface	1.0	0.3	3	29.6	29.6	8.0	8.0	14.8	14.8	89.5	89.5	6.3	6.3	14.9	17.8	8	8	73	75	822068	808822	<0.2	<0.2	2.1	2.0
						1.0	0.3	3	29.6		8.0		14.8		89.4		6.3		14.8		8		73				<0.2		2.0	
					Middle	4.2	0.3	331	29.5	29.5	8.0	8.0	14.9	14.9	88.6	88.6	6.2		16.9		7		76				<0.2		2.0	
						4.2	0.3	357	29.5		8.0		14.9		88.5		6.2		16.9		9		75				<0.2		2.1	
					Bottom	7.3	0.3	320	29.5	29.5	8.1	8.1	15.9	15.9	89.4	89.5	6.3	6.3	21.6		9		77				<0.2		2.0	
						7.3	0.3	339	29.5		8.1		15.9		89.6		6.3		21.4		9		77				<0.2		2.0	
IM10	Sunny	Moderate	08:17	9.5	Surface	1.0	0.4	330	29.6	29.6	8.1	8.1	15.0	15.0	90.7	90.7	6.4	6.4	10.9	11.8	5	5	73	75	822368	809812	<0.2	<0.2	2.1	2.0
						1.0	0.4	352	29.6		8.1		15.0		90.6		6.4		10.8		4		73				<0.2		2.0	
					Middle	4.8	0.4	321	29.5	29.5	8.1	8.1	15.3	15.3	89.5	89.5	6.3		11.2		4		76				<0.2		1.9	
						4.8	0.5	337	29.5		8.1		15.3		89.4		6.3		11.3		4		75				<0.2		2.0	
					Bottom	8.5	0.4	327	29.2	29.2	8.1	8.1	17.6	17.6	87.3	87.4	6.1	6.1	13.4		6		77				<0.2		2.0	
						8.5	0.5	338	29.2		8.1		17.6		87.4		6.1		13.4		6		77				<0.2		2.0	
IM11	Sunny	Moderate	08:06	9.5	Surface	1.0	0.6	283	29.3	29.3	8.1	8.1	16.9	16.9	84.7	84.7	5.9	5.6	17.1	20.2	15	15	74	75	822057	811472	<0.2	<0.2	1.8	1.9
						1.0	0.6	284	29.3		8.1		16.9		84.6		5.9		17.1		16		73				<0.2		1.9	
					Middle	4.8	0.5	286	28.8	28.8	8.0	8.0	19.6	19.6	75.3	75.3	5.2		20.9		14		75				<0.2		1.8	
						4.8	0.5	293	28.8		8.0		19.6		75.3		5.2		20.9		16		75				<0.2		1.9	
					Bottom	8.5	0.2	282	28.7	28.7	8.0	8.0	20.4	20.4	79.1	79.3	5.5	5.5	22.8		15		78				<0.2		1.9	
						8.5	0.3	297	28.7		8.0		20.4		79.5		5.5		22.6		14		77				<0.2		1.8	
IM12	Sunny	Moderate	08:00	9.6	Surface	1.0	0.5	257	29.1	29.1	8.1	8.1	18.4	18.4	78.1	78.1	5.4	5.3	9.9	15.6	14	14	73	75	821447	812057	<0.2	<0.2	1.9	2.0
						1.0	0.5	276	29.1		8.1		18.4		78.1		5.4		10.0		7		73				<0.2		2.1	
					Middle	4.8	0.2	258	28.9	28.9	8.1	8.1	19.2	19.2	75.2	75.2	5.2		13.7		14		76				<0.2		1.9	
						4.8	0.3	261	28.9		8.1		19.2		75.1		5.2		13.7		16		75				<0.2		2.0	
					Bottom	8.6	0.4	284	28.7	28.7	8.0	8.0	20.0	20.0	74.5	74.6	5.2	5.2	23.1		20		77				<0.2		2.0	
						8.6	0.4	301	28.7		8.0		20.0		74.6		5.2		23.2		21		77				<0.2		2.1	
SR2	Sunny	Moderate	07:30	5.3	Surface	1.0	0.2	9	29.6	29.6	8.1	8.1	14.7	14.7	87.4	87.5	6.1	6.2	11.5	15.4	4	5	73	75	821454	814160	<0.2	<0.2	2.2	2.2
						1.0	0.2	9	29.6		8.1		14.7		87.5		6.2		11.6		6		74				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	283	28.8	28.8	8.1	8.1	18.8	18.7	80.6	80.6	5.6	5.6	19.3		4		76				<0.2		2.2	
						4.3	0.1	307	28.8		8.1		18.7		80.6		5.6		19.2		5		75				<0.2		2.2	
SR3	Sunny	Moderate	08:39	10.0	Surface	1.0	0.5	43	29.4	29.4	8.0	8.0	14.9	14.9	92.1	92.1	6.5	6.4	12.7	15.2	7	8	-	-	822170	807557	-	-	-	-
						1.0	0.5	43	29.4		8.0		14.9		92.1		6.5		12.7		8		-				-		-	
					Middle	5.0	0.4	28	29.4	29.4	8.1	8.1	15.7	15.7	89.6	89.7	6.3		15.1		9		-				-		-	
						5.0	0.4	29	29.4		8.1		15.7		89.7		6.3		15.1		8		-				-		-	
					Bottom	9.0	0.3	18	29.4	29.4	8.1	8.1	16.0	16.0	89.6	89.7	6.3	6.3	17.8		8		-				-		-	
						9.0	0.4	18	29.4		8.1		16.0		89.7		6.3		17.8		8		-				-		-	
SR4A	Cloudy	Calm	07:02	9.2	Surface	1.0	0.3	275	29.4	29.4	8.1	8.1	15.2	15.2	96.2	96.2	6.8	6.5	9.6	12.4	6	6	-	-	817202	807838	-	-	-	-
						1.0	0.3	296	29.4		8.1		15.2		96.2		6.8		9.6		5		-				-		-	
					Middle	4.6	0.1	251	29.5	29.5	8.1	8.1	16.9	16.9	87.2	87.2	6.1		13.2		5		-				-		-	
						4.6	0.1	275	29.5		8.1		16.9		87.2		6.1		13.2		6		-				-		-	
					Bottom	8.2	0.0	186	29.1	29.1	8.0	8.0	21.1	21.1	87.5	87.5	6.0	6.0	14.5		6		-				-		-	
						8.2	0.0	196	29.1		8.0		21.1		87.5		6.0		14.5		6		-				-		-	
SR5A	Cloudy	Calm	06:50	4.5	Surface	1.0	0.2	288	29.7	29.7	8.1	8.1	17.3	17.3	102.9	102.9	7.1	7.1	12.9	13.6	7	7	-	-	816607	810691	-	-	-	-
						1.0	0.2	298	29.7		8.1		17.3		102.9		7.1		12.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	299	29.7	29.7	8.1	8.1	18.0	18.0	103.7	103.7	7.1	7.1	14.3		9		-				-		-	
						3.5	0.2	309	29.7		8.1		18.0		103.7		7.1		14.3		7		-				-		-	
SR6	Cloudy	Calm	06:39	4.7	Surface	1.0	0.1	255	29.6	29.6	8.0	8.0	14.9	14.9	94.6	94.6	6.6	6.6	10.7	10.8	7	6	-	-	817917	814659	-	-	-	-
						1.0	0.1	257	29.6		8.0		14.9		94.6		6.6		10.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	216	29.6	29.6	8.0	8.0	16.2	16.2	97.7	97.7	6.8	6.8	10.9		5		-				-		-	
						3.7	0.1	233	29.6		8.0		16.2		97.7		6.8		10.9		6		-				-		-	
SR7	Sunny	Moderate	06:41	18.8	Surface	1.0	0.2	235	29.6	29.6	8.1	8.1	15.7	15.7	86.0	85.9	6.0	5.5	10.1	11.9	2	3	-	-	823636	823735	-	-	-	-
						1.0	0.2	240	29.6		8.1		15.7		85.8		6.0		10.1		2		-				-		-	
					Middle	9.4	0.1	215	29.2	29.2	8.1	8.1	17.7	17.7	72.7	72.5	5.1		10.5		4		-				-		-	
						9.4	0.1	217	29.2		8.1		17.8		72.3		5.0		10.6		3		-				-		-	
					Bottom	17.8	0.1	275	26.8	26.8	8.0	8.0	27.6	27.6	60.4	60.4	4.1	4.1	14.9		3		-				-		-	
						17.8	0.1	297	26.8		8.0		27.6		60.4		4.1		15.0		3		-				-		-	
SR8	Sunny	Moderate	07:50	4.2	Surface	1.0	-	-	29.6	29.6	8.1	8.1	15.5	15.5	92.5	92.5	6.5	6.5	11.5	12.7	5	6	-	-	820246	811418	-	-	-	-
						1.0	-	-	29.6		8.1		15.5		92.4		6.5		11.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	29.3	29.3	8.1	8.1	16.8	16.8	91.5	91.6	6.4	6.4	13.9		6		-				-		-	
						3.2	-	-	29.3		8.1		16.8		91.7		6.4		13.9		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**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
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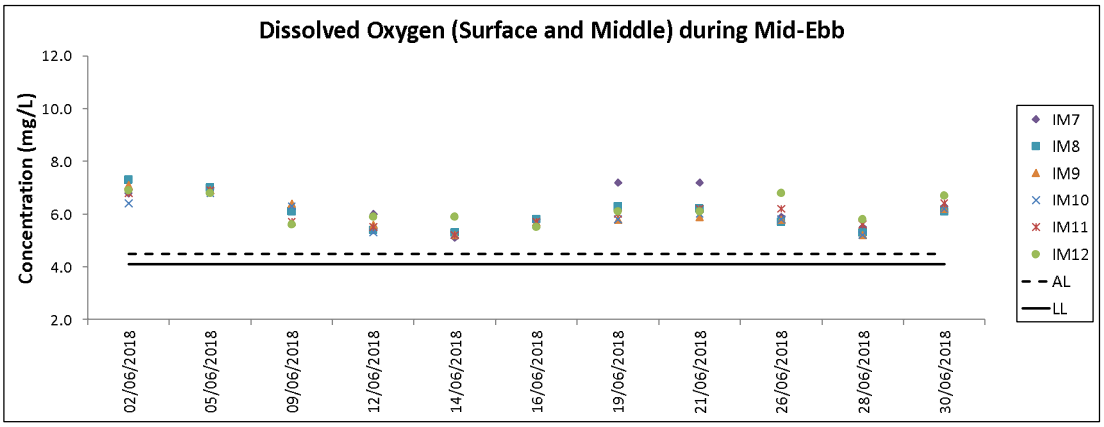
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
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16/06/2018
19/06/2018
21/06/2018
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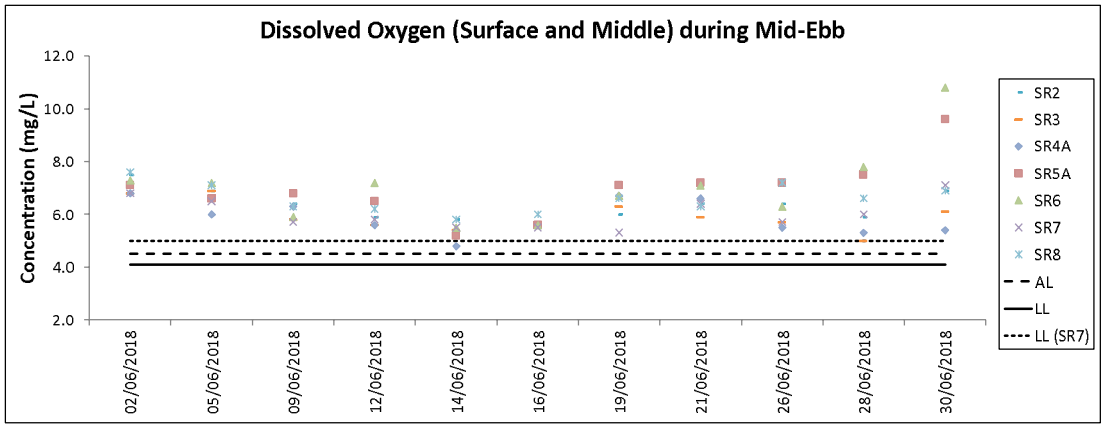
30/06/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


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
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05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
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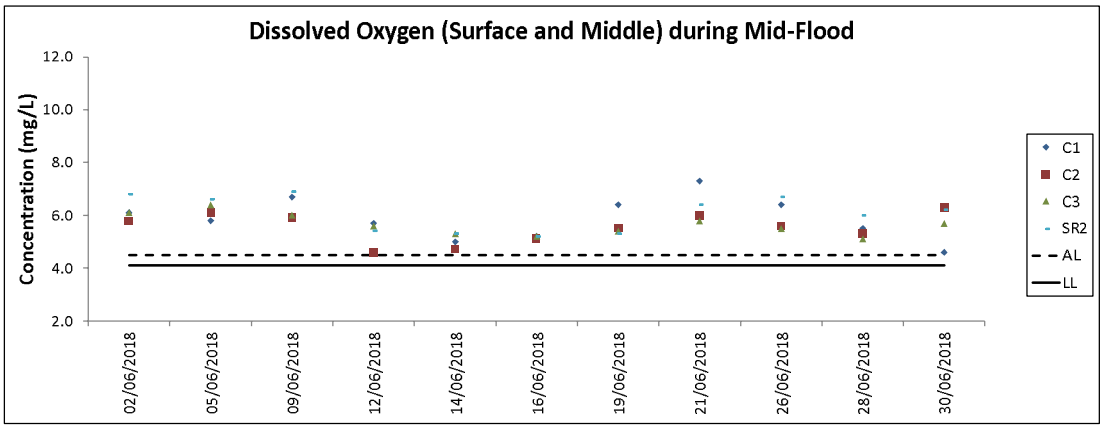
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
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05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
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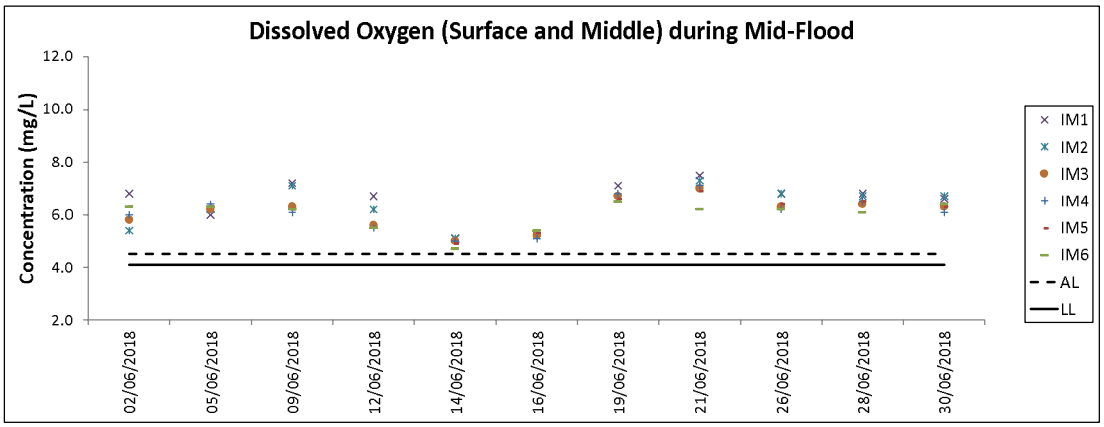
30/06/2018
C1
C2
C3
SR2
AL
LL


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
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
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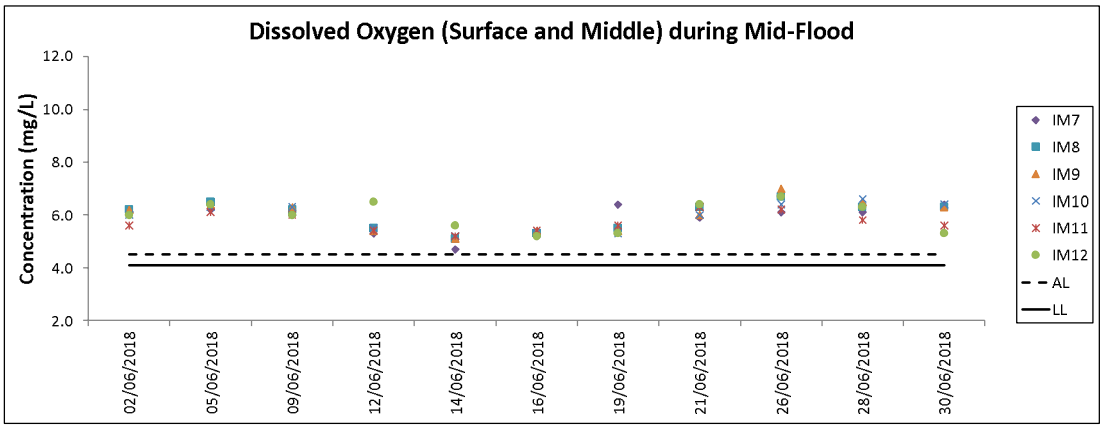
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


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
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05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
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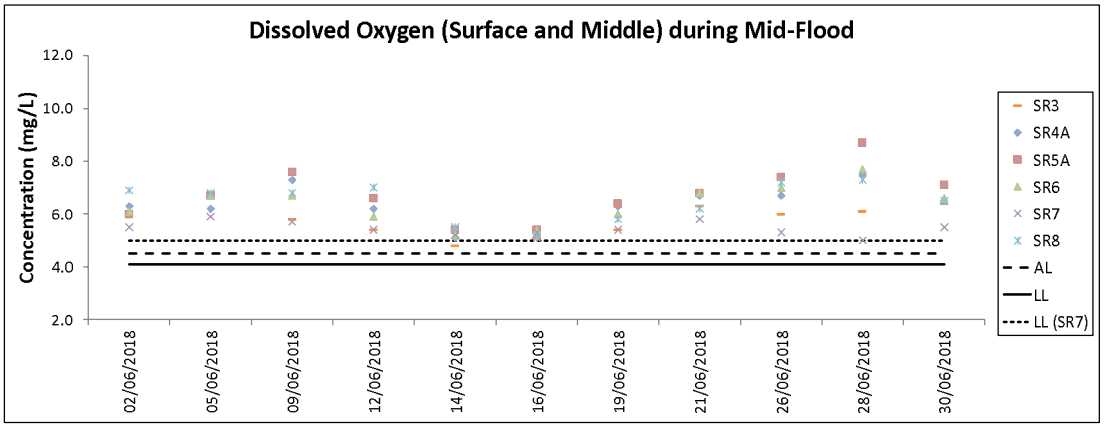
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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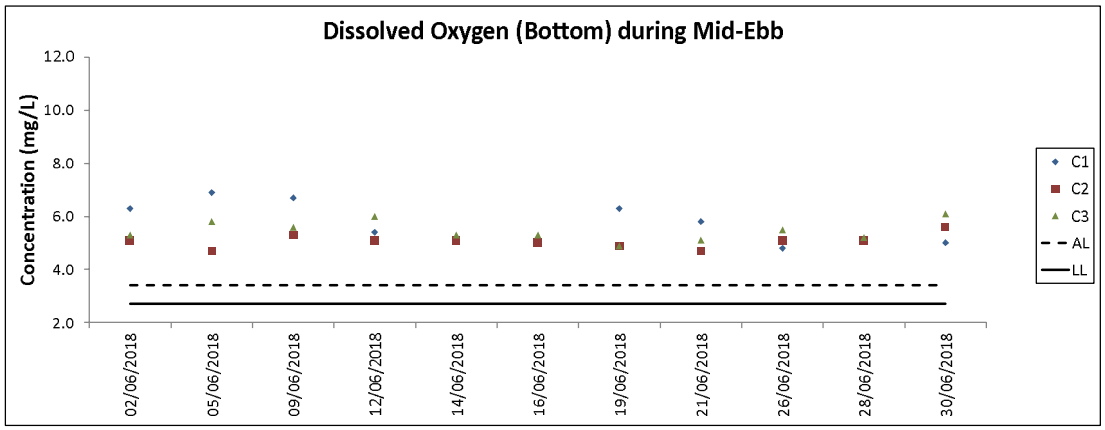
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
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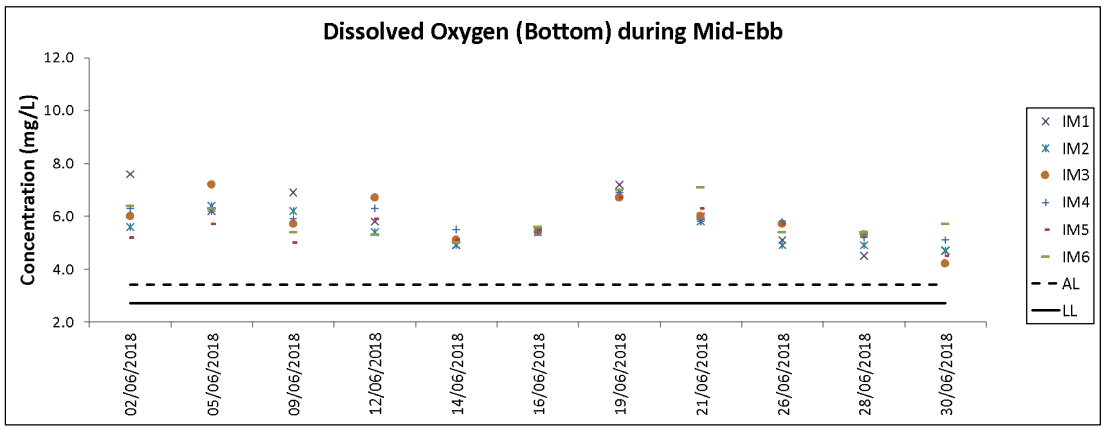
21/06/2018
26/06/2018
28/06/2018
30/06/2018
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
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19/06/2018
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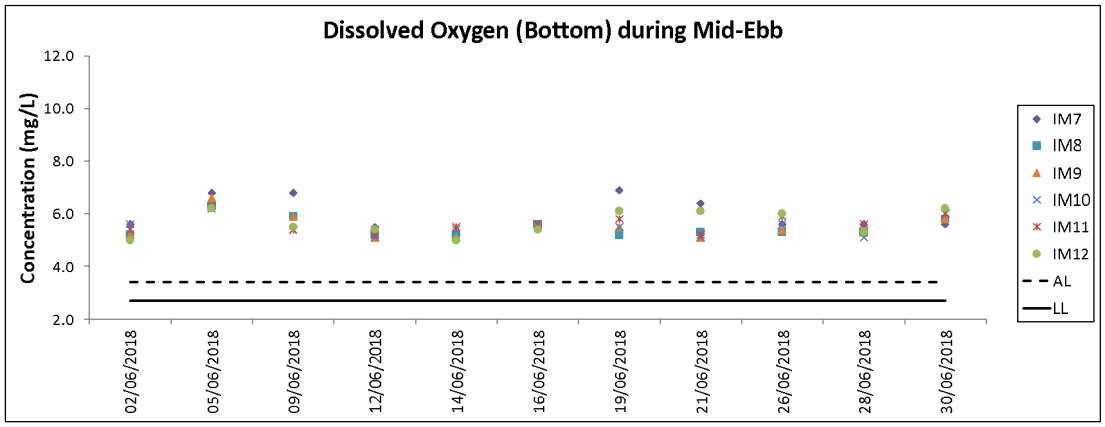
28/06/2018
30/06/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
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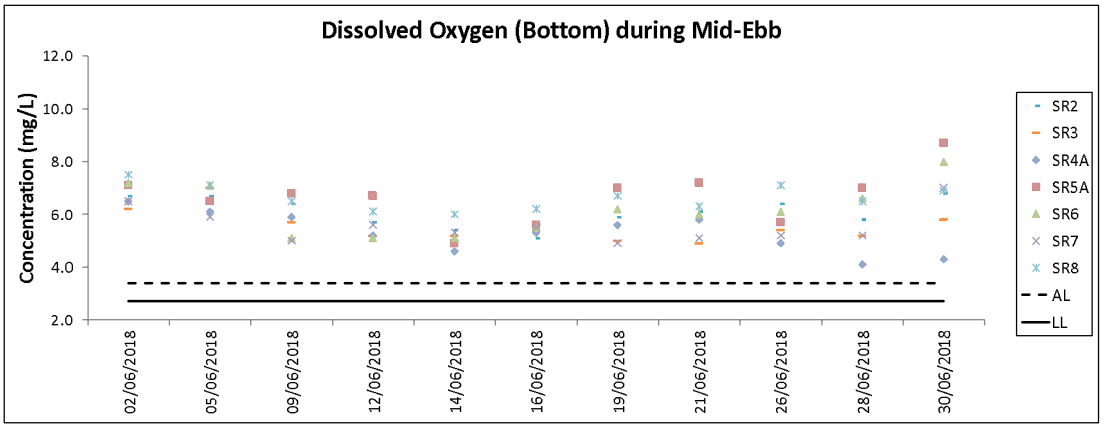
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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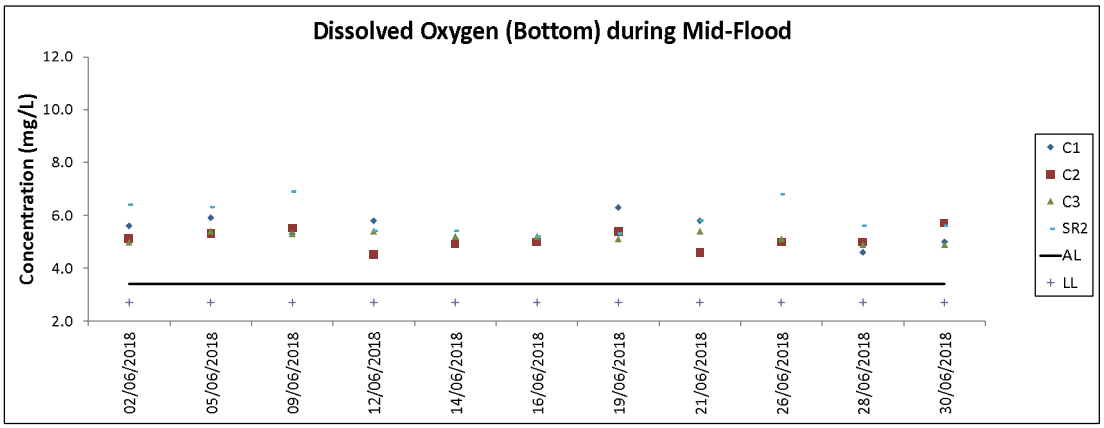
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
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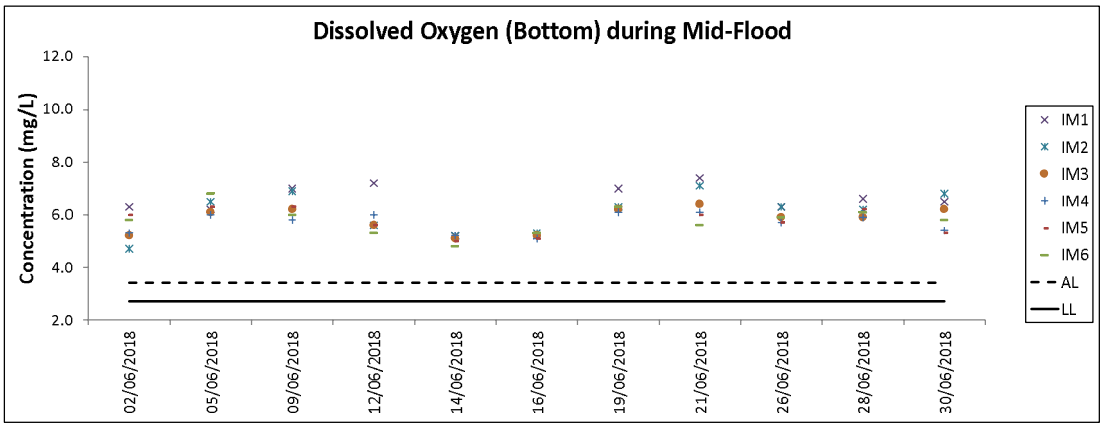
30/06/2018
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
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10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
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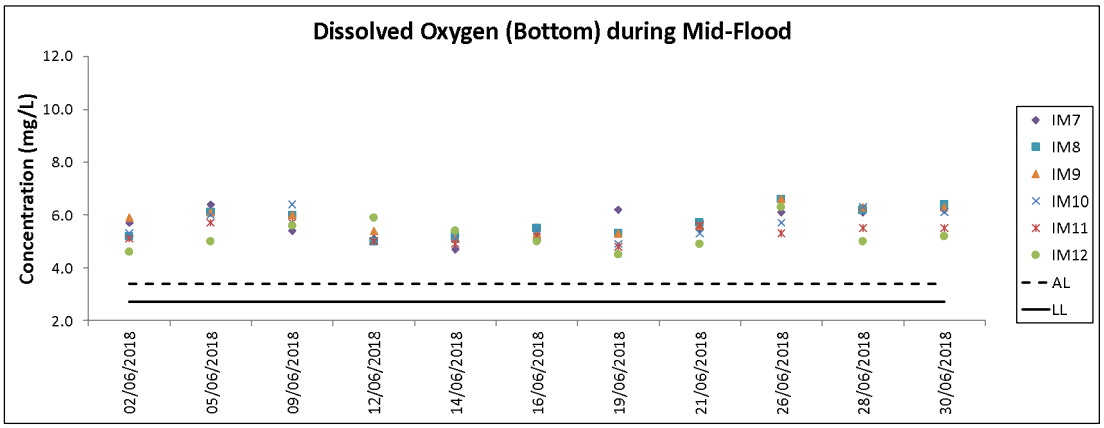
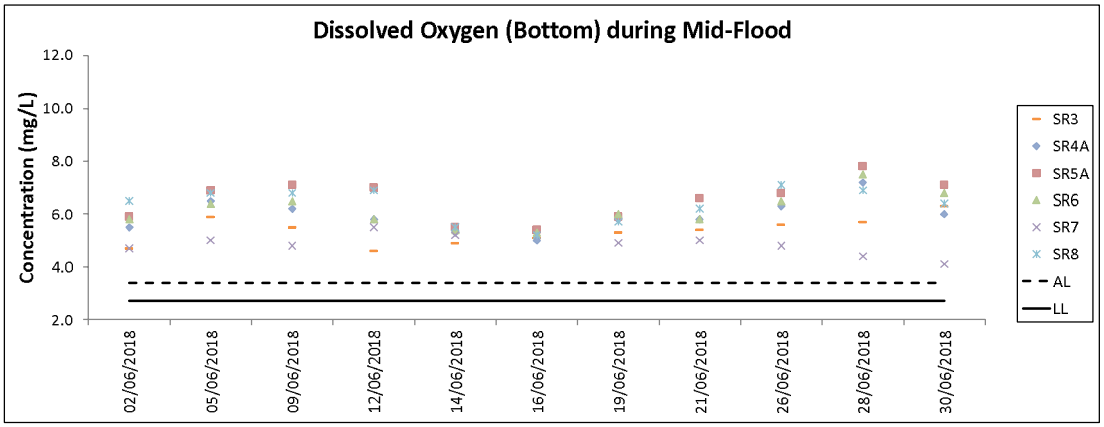
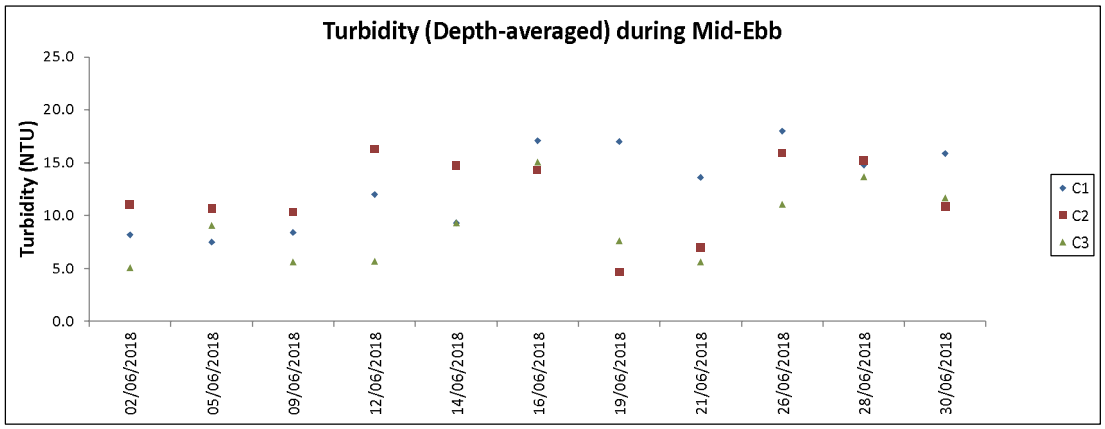
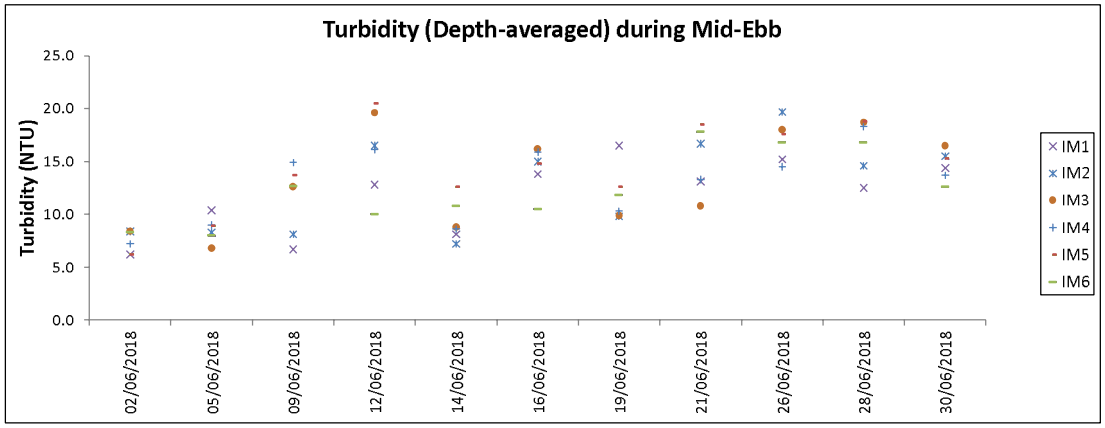
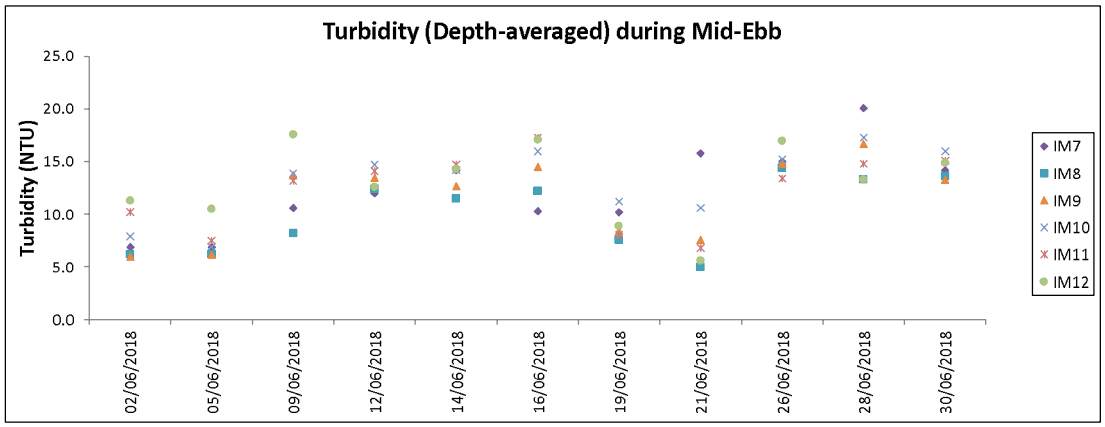
26/06/2018
28/06/2018
30/06/2018
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

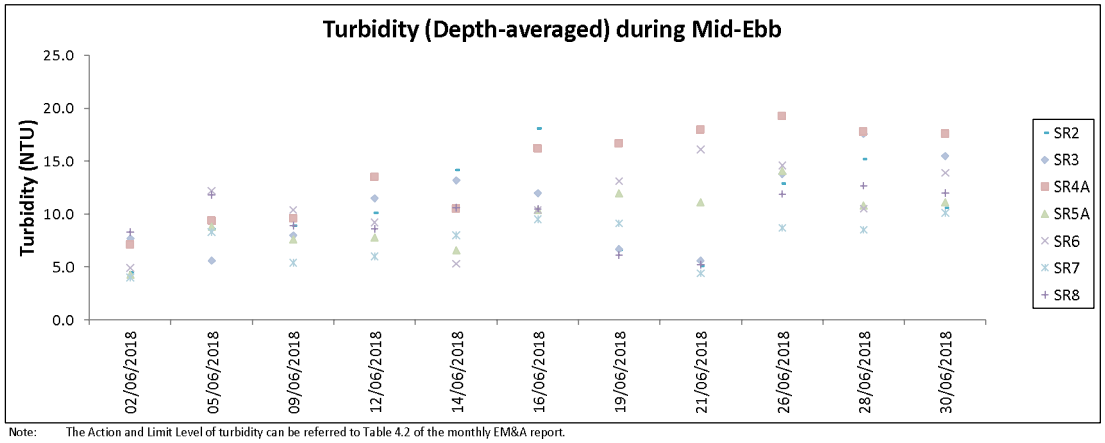

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
12.0
10.0
8.0
6.0
4.0
2.0
02/06/2018
05/06/2018
09/06/2018
12/06/2018
14/06/2018
16/06/2018
19/06/2018
21/06/2018
26/06/2018
28/06/2018
30/06/2018
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

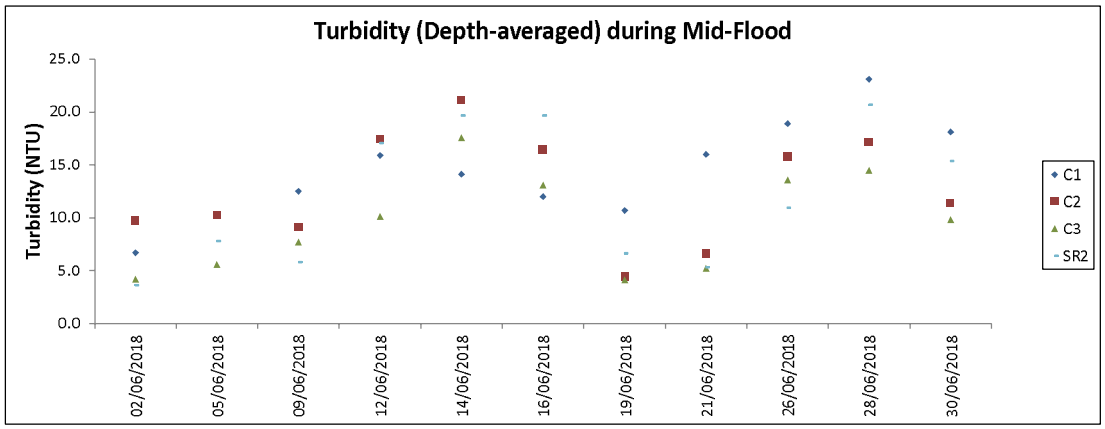


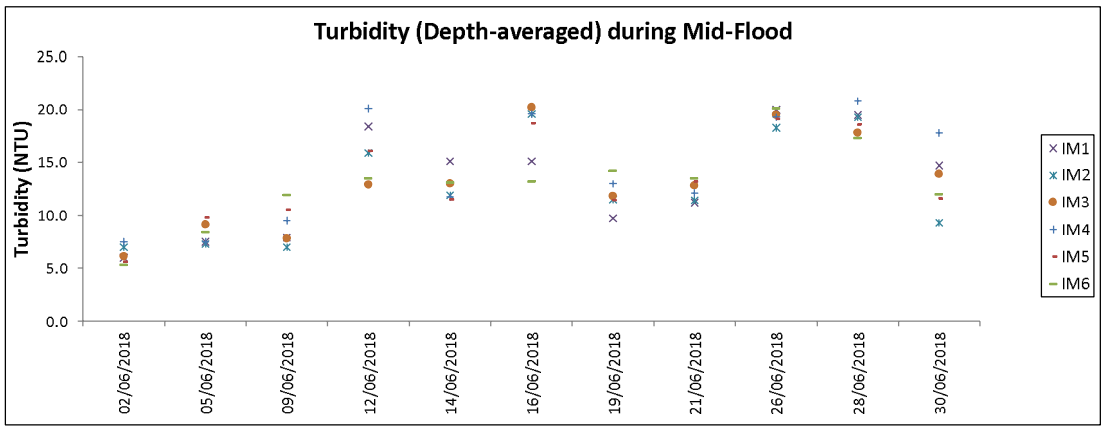


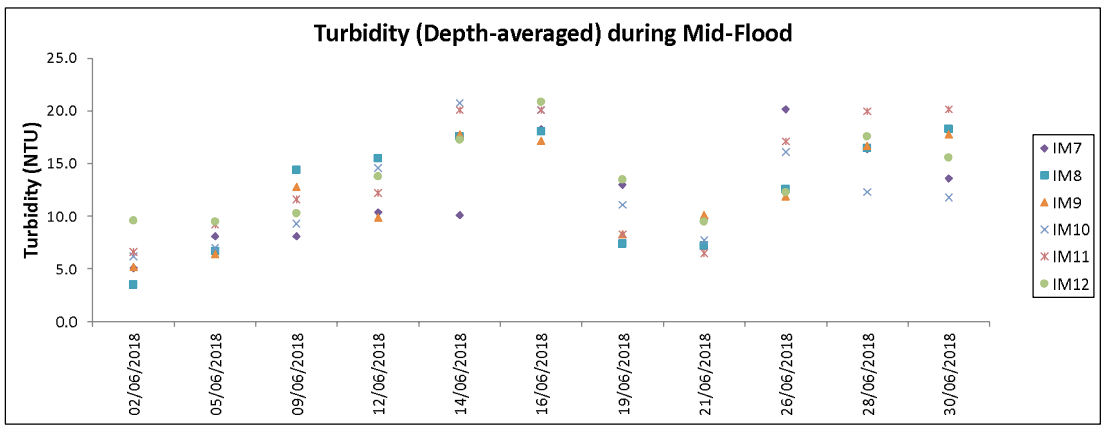


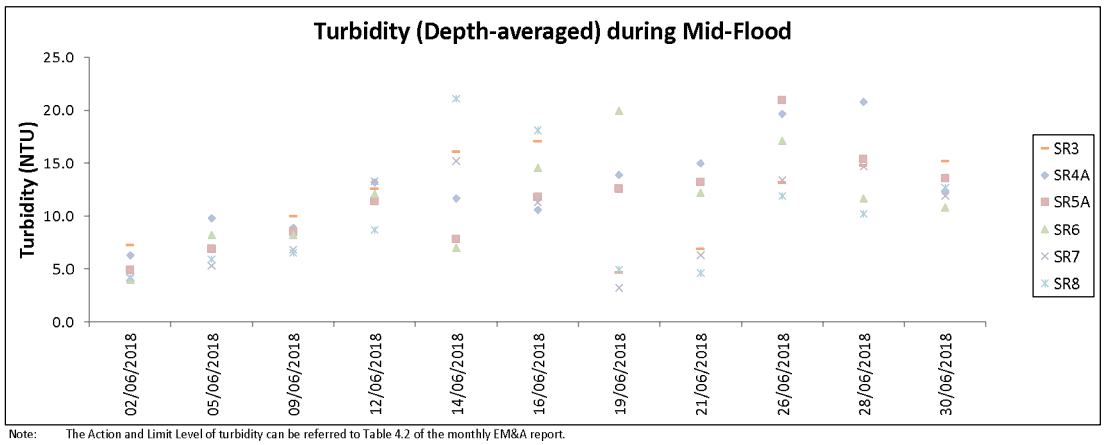


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

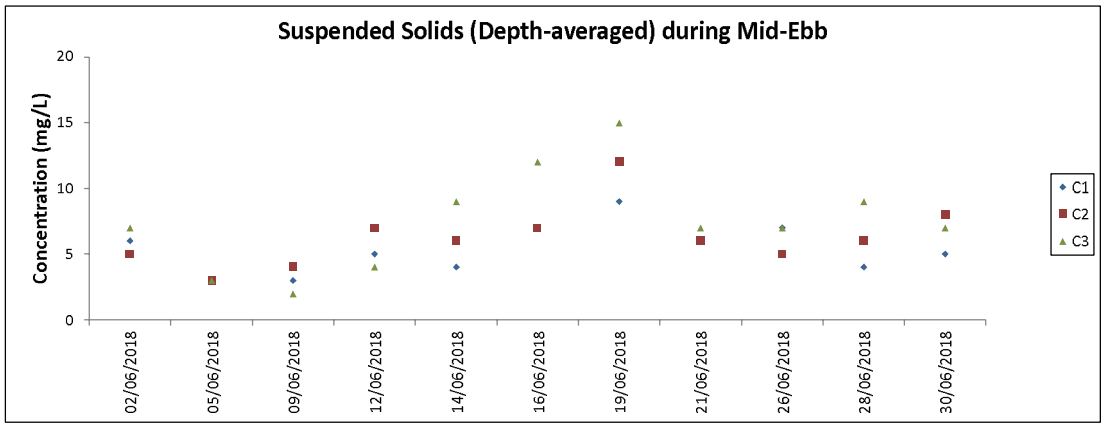


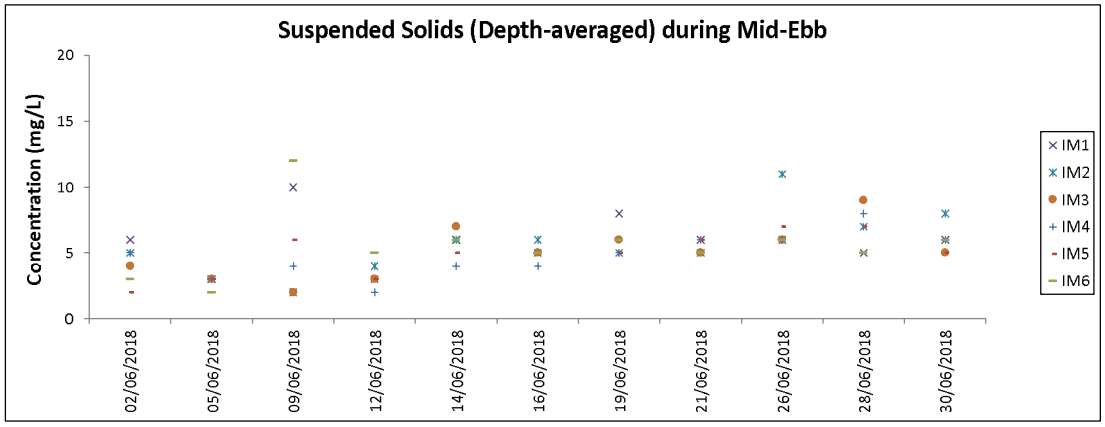


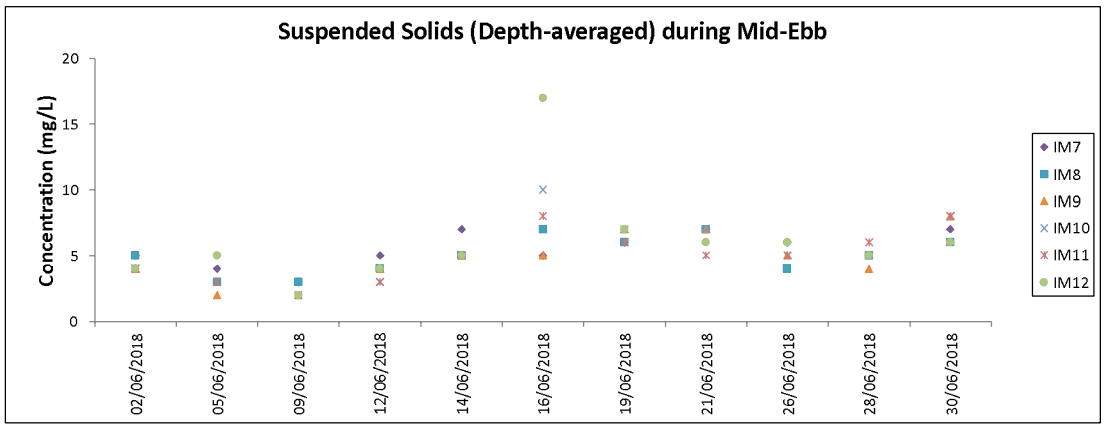


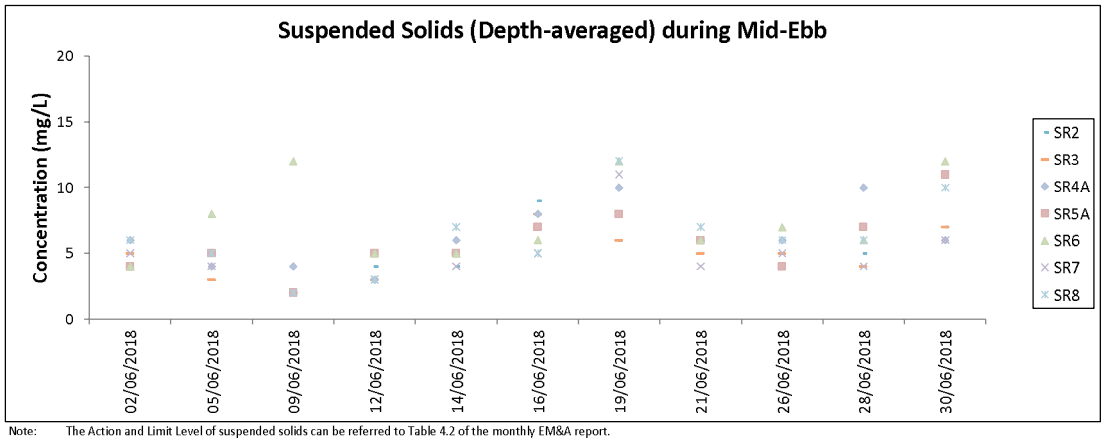


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

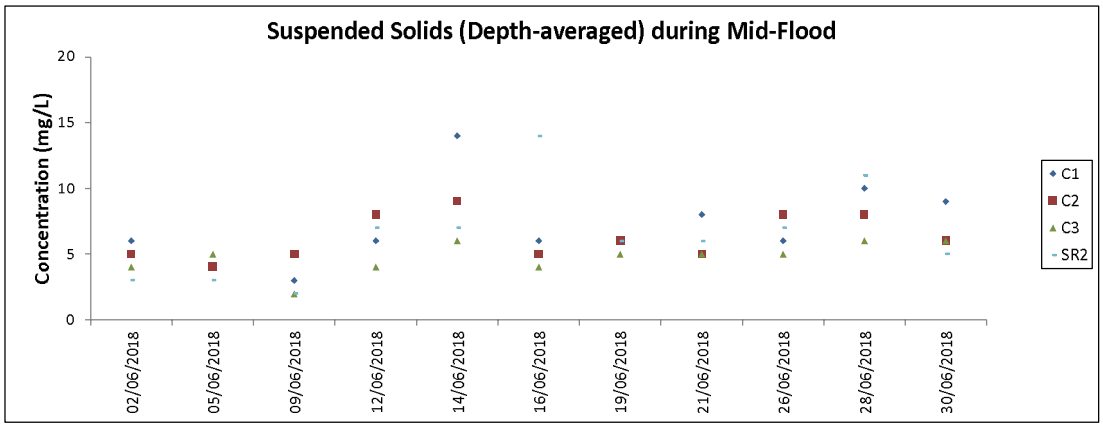


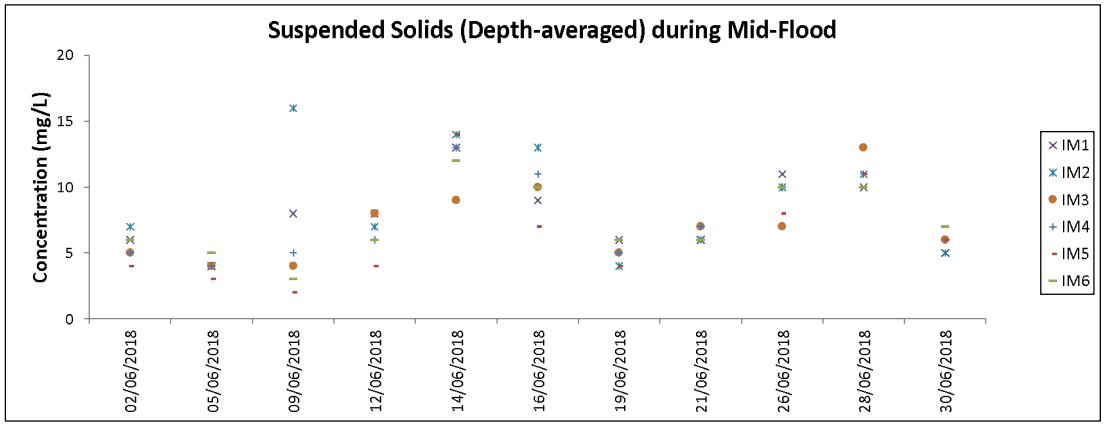


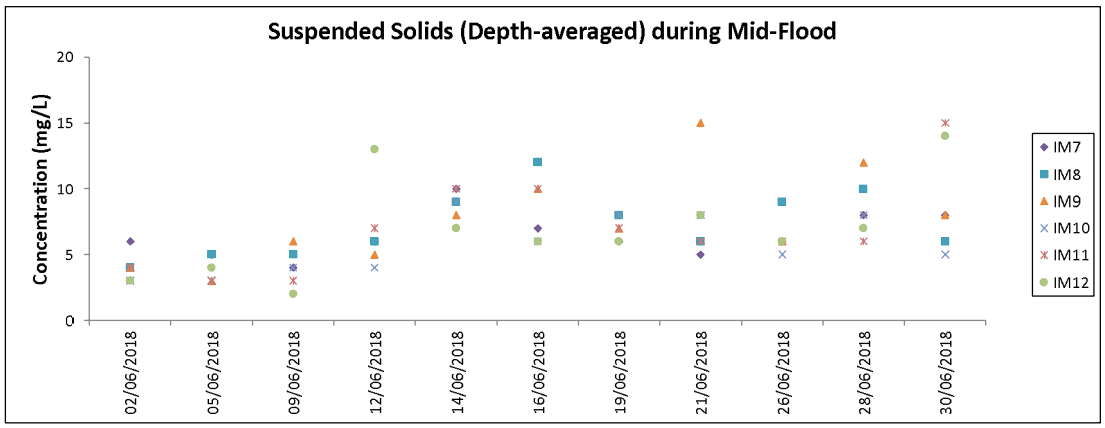


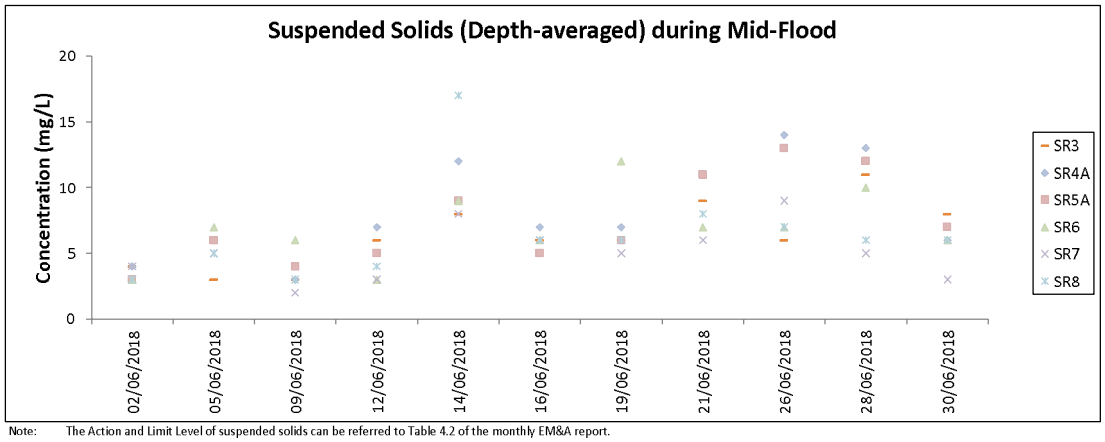


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

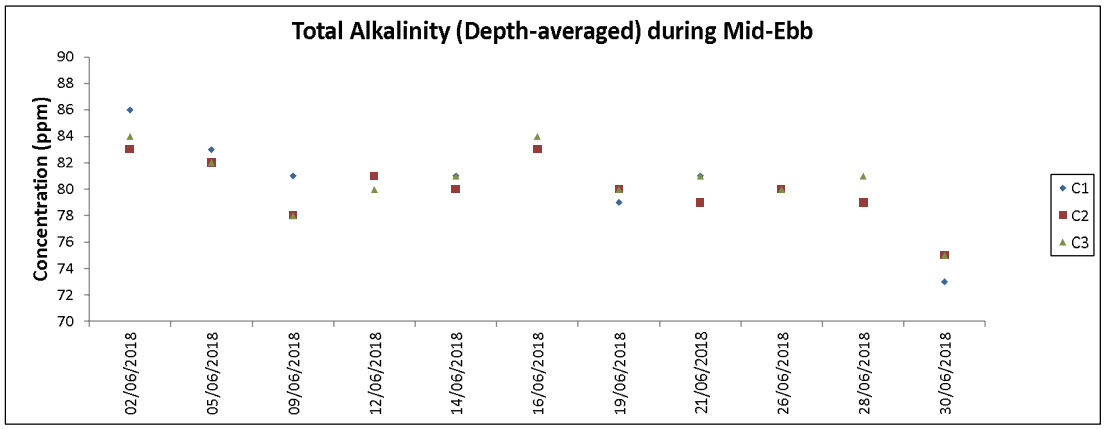


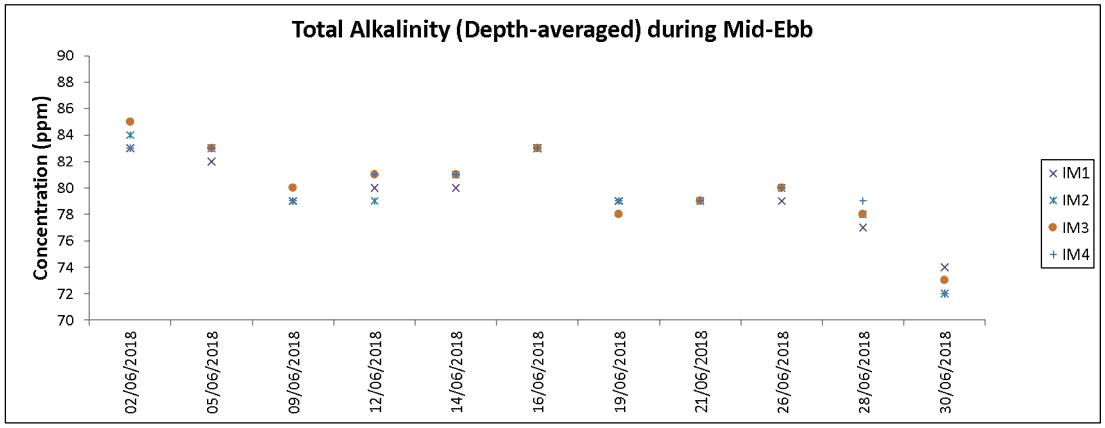


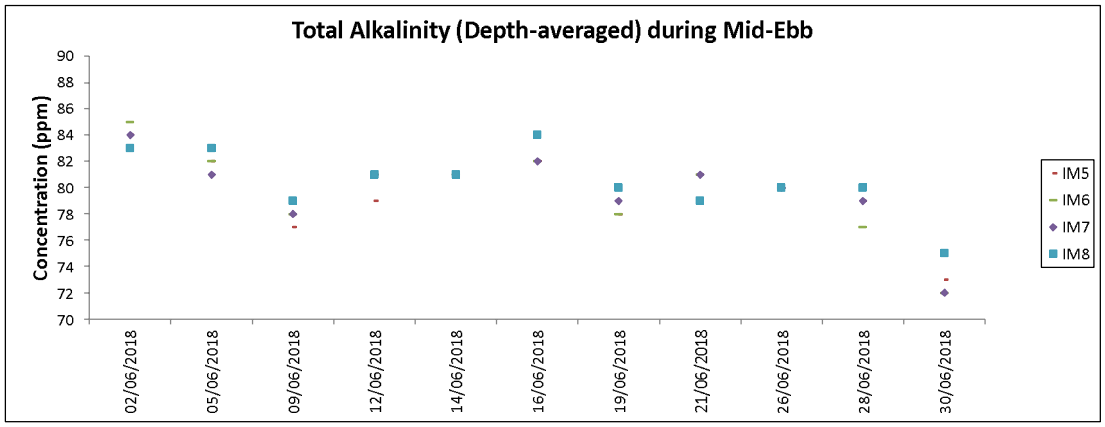


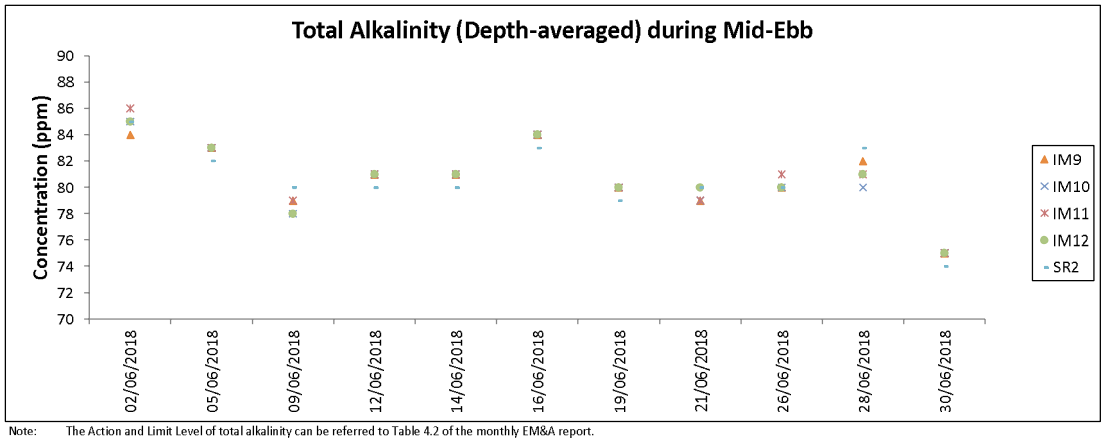


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

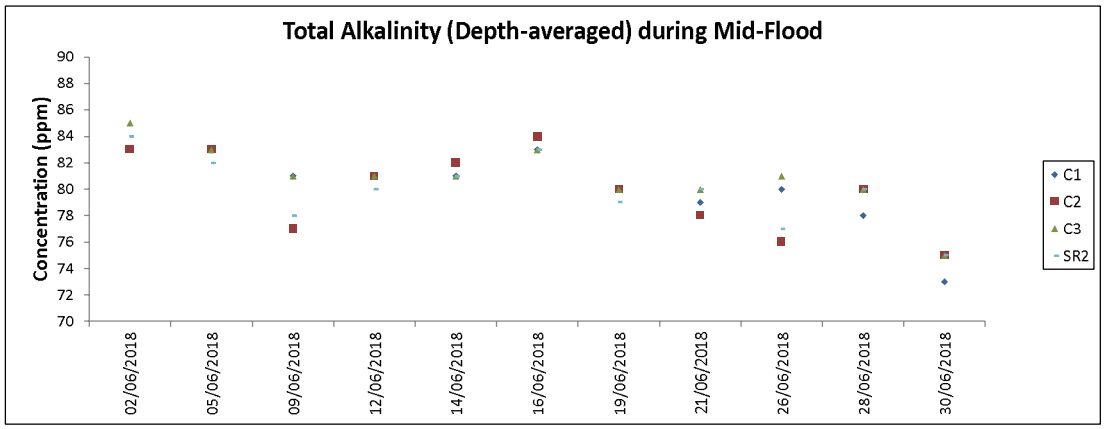


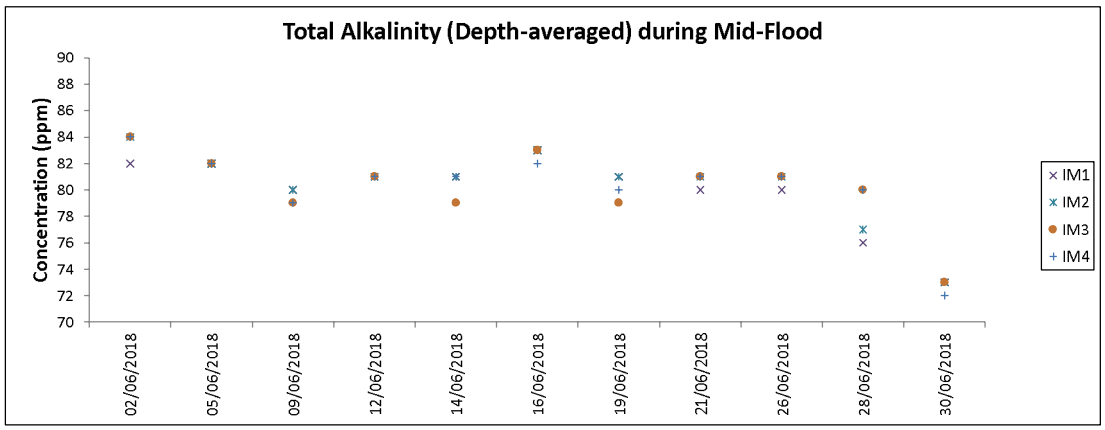


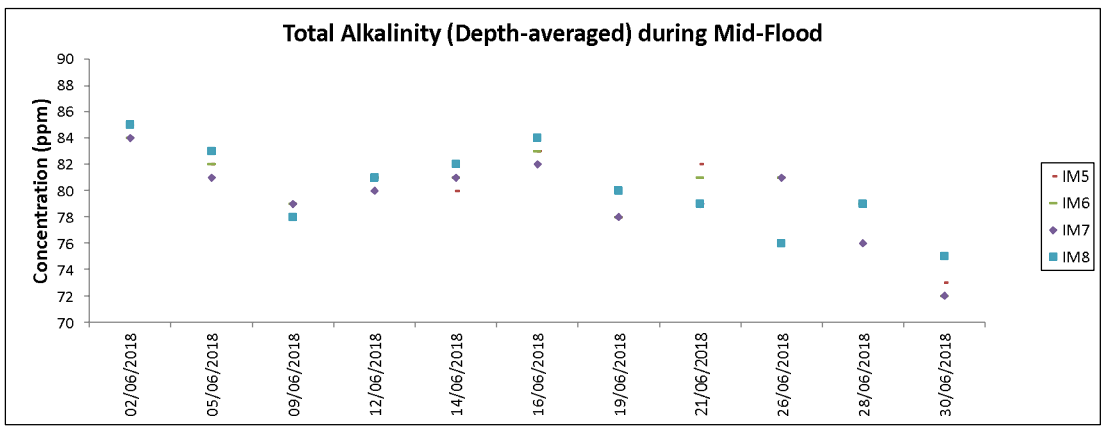


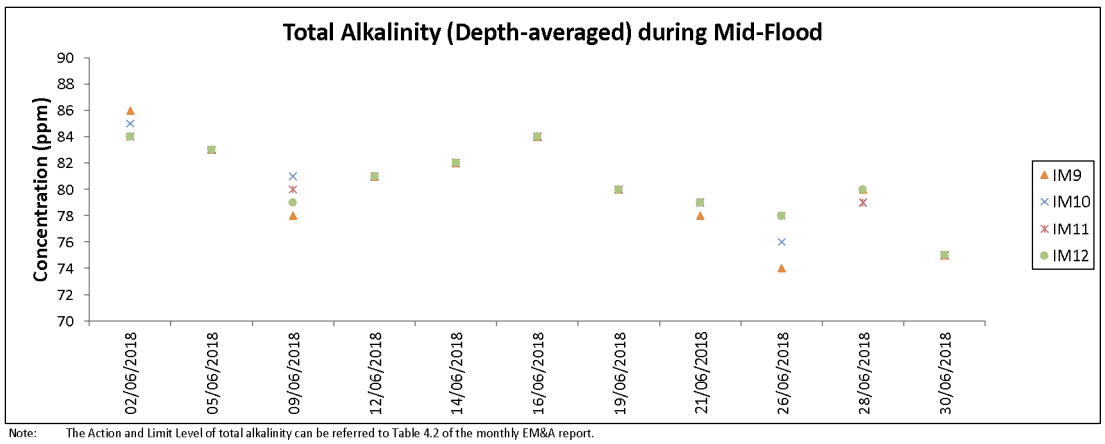


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

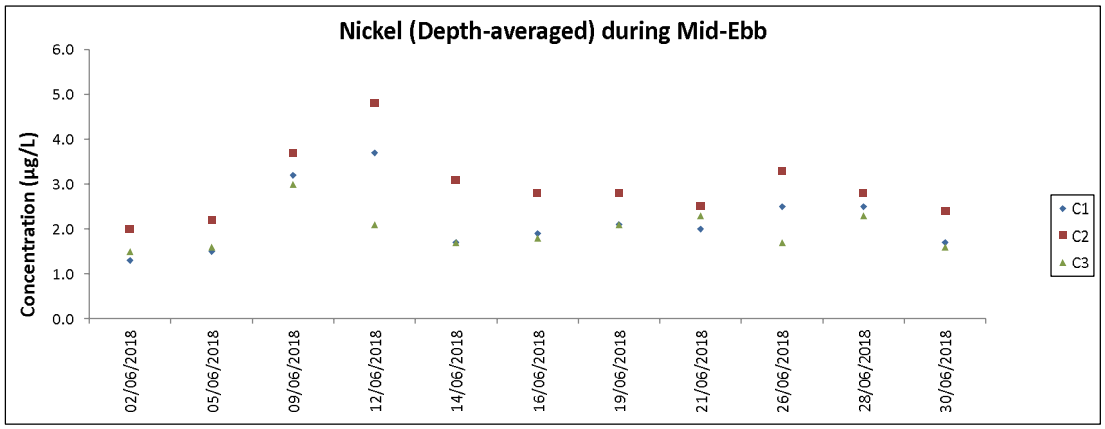


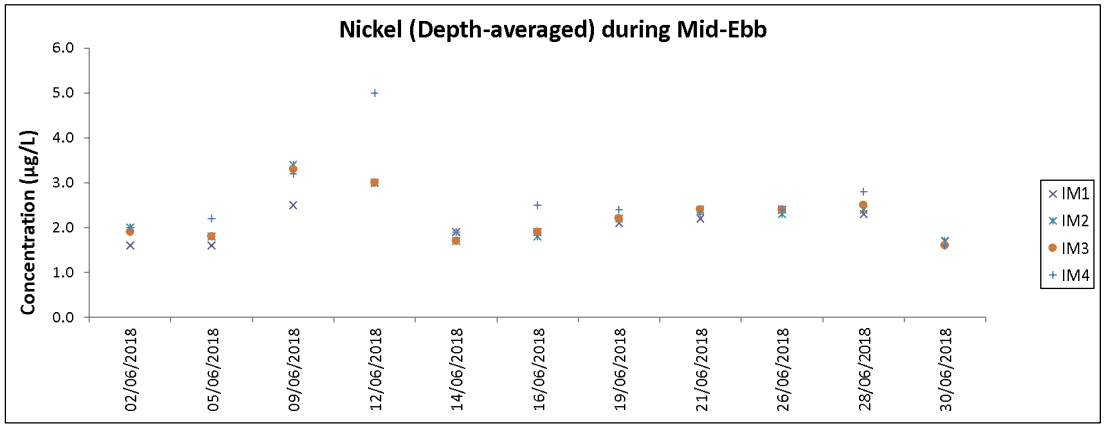


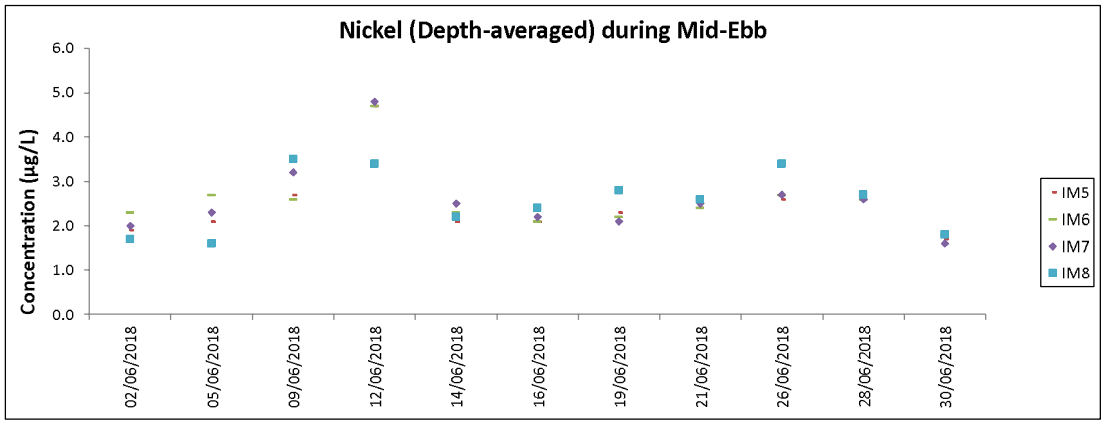


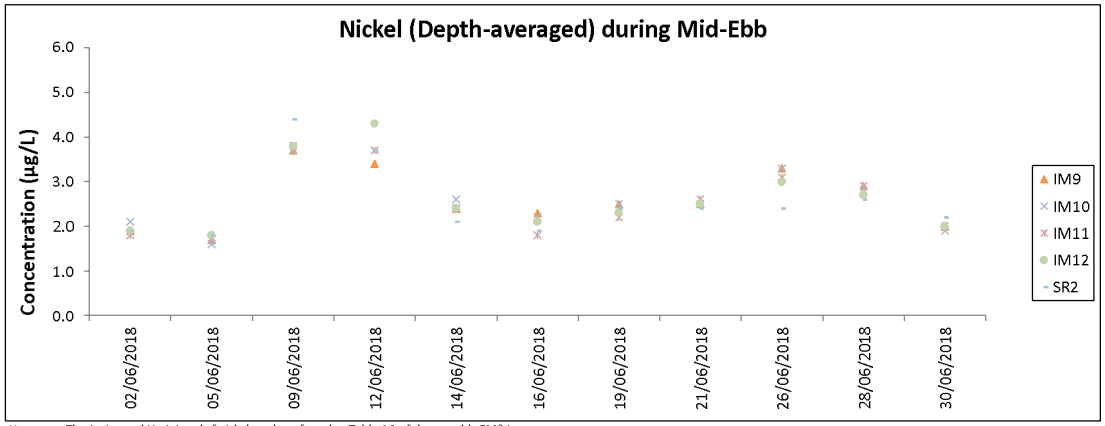


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

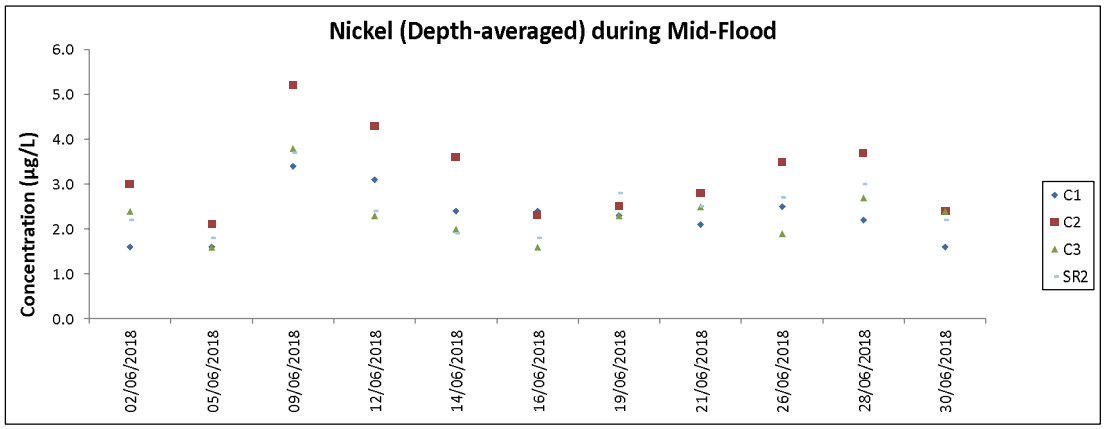


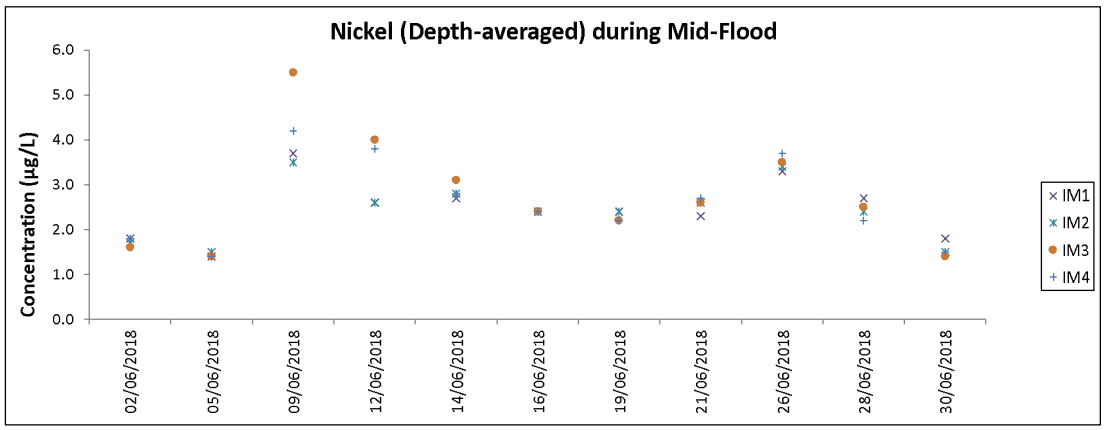


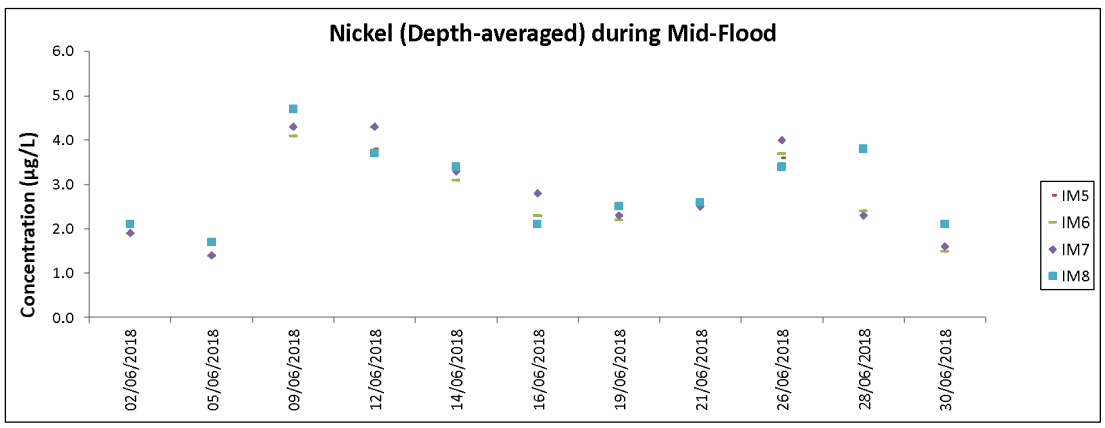


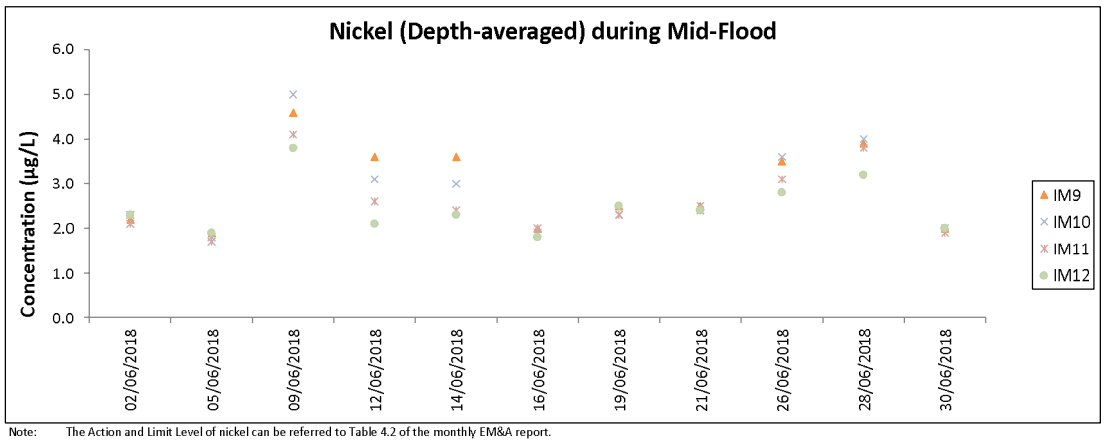


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period were below the reporting limit 0.2 µg/L.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
03-Apr-18	SWL	1	14.910	SPRING	32166	3RS ET	N/A
03-Apr-18	SWL	2	45.610	SPRING	32166	3RS ET	N/A
03-Apr-18	SWL	3	2.000	SPRING	32166	3RS ET	N/A
04-Apr-18	SWL	1	31.340	SPRING	32166	3RS ET	N/A
04-Apr-18	SWL	2	28.140	SPRING	32166	3RS ET	N/A
04-Apr-18	SWL	3	2.610	SPRING	32166	3RS ET	N/A
11-Apr-18	AW	2	4.770	SPRING	32166	3RS ET	N/A
11-Apr-18	WL	2	14.970	SPRING	32166	3RS ET	N/A
11-Apr-18	WL	3	16.070	SPRING	32166	3RS ET	N/A
11-Apr-18	SWL	2	2.140	SPRING	32166	3RS ET	N/A
11-Apr-18	SWL	3	4.680	SPRING	32166	3RS ET	N/A
12-Apr-18	AW	2	3.530	SPRING	32166	3RS ET	N/A
12-Apr-18	AW	3	1.280	SPRING	32166	3RS ET	N/A
12-Apr-18	WL	2	12.481	SPRING	32166	3RS ET	N/A
12-Apr-18	WL	3	18.889	SPRING	32166	3RS ET	N/A
12-Apr-18	SWL	2	6.735	SPRING	32166	3RS ET	N/A
18-Apr-18	NEL	2	30.140	SPRING	32166	3RS ET	N/A
18-Apr-18	NEL	3	17.060	SPRING	32166	3RS ET	N/A
19-Apr-18	NWL	2	15.530	SPRING	32166	3RS ET	N/A
19-Apr-18	NWL	3	53.430	SPRING	32166	3RS ET	N/A
19-Apr-18	NWL	4	6.030	SPRING	32166	3RS ET	N/A
23-Apr-18	NWL	2	39.210	SPRING	32166	3RS ET	N/A
23-Apr-18	NWL	3	31.250	SPRING	32166	3RS ET	N/A
23-Apr-18	NWL	4	4.500	SPRING	32166	3RS ET	N/A
27-Apr-18	NEL	1	22.760	SPRING	32166	3RS ET	N/A
27-Apr-18	NEL	2	23.840	SPRING	32166	3RS ET	N/A
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

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
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
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

Notes: CWD monitoring survey data of the two preceding survey months (i.e. April and May 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-Apr-18	1	1048	FP	1	SWL	1	1489	ON	3RS ET	22.1788	113.9360	SPRING	NONE	N/A
03-Apr-18	2	1056	FP	2	SWL	1	192	ON	3RS ET	22.1652	113.9359	SPRING	NONE	N/A
04-Apr-18	1	1058	FP	3	SWL	1	23	ON	3RS ET	22.1556	113.9361	SPRING	NONE	N/A
04-Apr-18	2	1208	FP	2	SWL	1	116	ON	3RS ET	22.1499	113.9178	SPRING	NONE	N/A
04-Apr-18	3	1216	FP	1	SWL	1	85	ON	3RS ET	22.1415	113.9128	SPRING	NONE	N/A
04-Apr-18	4	1335	FP	5	SWL	2	176	ON	3RS ET	22.1487	113.8963	SPRING	NONE	N/A
04-Apr-18	5	1405	CWD	2	SWL	2	78	ON	3RS ET	22.2025	113.8879	SPRING	NONE	N/A
11-Apr-18	1	1034	CWD	2	WL	2	444	ON	3RS ET	22.2666	113.8595	SPRING	PURSE SEINER	N/A
11-Apr-18	2	1108	CWD	1	WL	3	117	ON	3RS ET	22.2500	113.8442	SPRING	NONE	N/A
11-Apr-18	3	1129	CWD	3	WL	3	511	ON	3RS ET	22.2414	113.8365	SPRING	SHRIMP TRAWLER	N/A
11-Apr-18	4	1226	CWD	3	WL	3	119	ON	3RS ET	22.2145	113.8315	SPRING	NONE	N/A
12-Apr-18	1	1029	CWD	2	WL	2	N/A	OFF	3RS ET	22.2601	113.8489	SPRING	NONE	N/A
12-Apr-18	2	1054	CWD	6	WL	3	285	ON	3RS ET	22.2507	113.8431	SPRING	NONE	N/A
12-Apr-18	3	1130	CWD	8	WL	2	18	ON	3RS ET	22.2416	113.8367	SPRING	NONE	N/A
12-Apr-18	4	1201	CWD	3	WL	3	136	ON	3RS ET	22.2321	113.8322	SPRING	NONE	N/A
12-Apr-18	5	1242	CWD	5	WL	3	119	ON	3RS ET	22.2145	113.8317	SPRING	NONE	N/A
12-Apr-18	6	1345	CWD	1	WL	3	N/A	OFF	3RS ET	22.1919	113.8428	SPRING	NONE	N/A
12-Apr-18	7	1352	CWD	3	SWL	2	320	ON	3RS ET	22.1928	113.8491	SPRING	NONE	N/A
12-Apr-18	8	1421	CWD	1	SWL	2	21	ON	3RS ET	22.1684	113.8577	SPRING	NONE	N/A
19-Apr-18	1	0953	CWD	1	NWL	3	114	ON	3RS ET	22.3730	113.8693	SPRING	NONE	N/A
19-Apr-18	2	1207	CWD	1	NWL	2	15	ON	3RS ET	22.3832	113.8769	SPRING	NONE	N/A
19-Apr-18	3	1235	CWD	5	NWL	2	410	ON	3RS ET	22.4063	113.8775	SPRING	NONE	N/A
19-Apr-18	4	1316	CWD	5	NWL	2	N/A	OFF	3RS ET	22.4033	113.8881	SPRING	NONE	N/A
23-Apr-18	1	0946	CWD	6	NWL	2	413	ON	3RS ET	22.3930	113.8703	SPRING	NONE	N/A
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

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

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. April and May 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 June 2018 encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 357.187 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 16 on-effort sightings and total number of 62 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in June 2018 are shown as below:

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

$$STG = \frac{16}{357.187}\ x\ 100 = 4.48$$

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

$$ANI = \frac{62}{357.187}\ x\ 100 = 17.36$$

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

A total of 1221.755 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 39 on-effort sightings and total number of 131 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

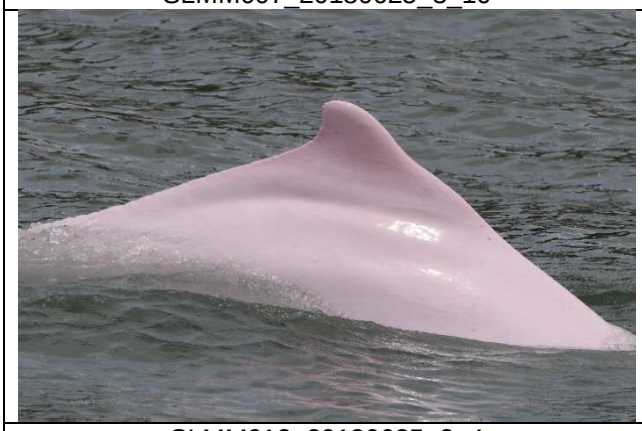
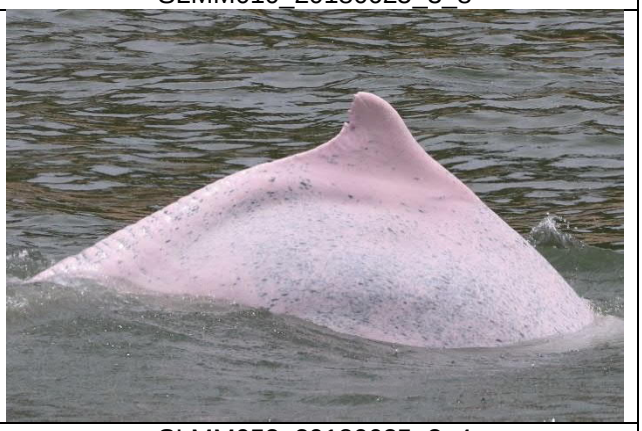
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

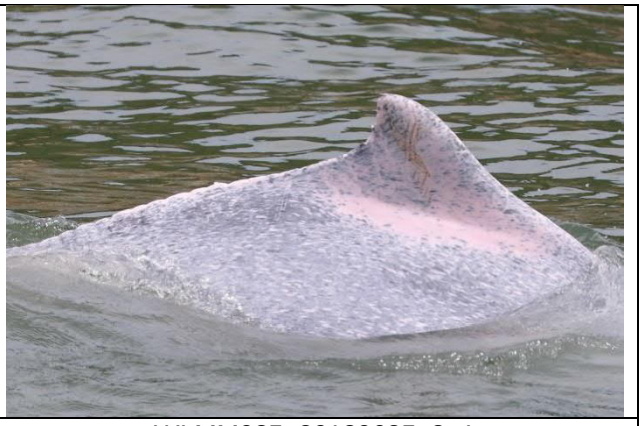
$$STG = \frac{39}{1221.755}\ x\ 100 = 3.19$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{131}{1221.755}\ x\ 100 = 10.72$$

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

	
SLMM023_20180621_3_4	WLMM080_20180621_3_5
	
SLMM002_20180625_2_4	SLMM003_20180625_3_9
	
SLMM007_20180625_3_10	SLMM010_20180625_3_8
	
SLMM012_20180625_3_4	SLMM052_20180625_3_4

	
WLMM047_20180625_3_5	WLMM085_20180625_3_1
	
SLMM031_20180625_4_8	SLMM053_20180625_5_2
	
WLMM114_20180625_5_1	SLMM029_20180625_6_3
	
SLMM052_20180625_6_3	WLMM004_20180625_6_4

	
WLMM063_20180625_6_2	WLMM078_20180625_6_2
	
NLMM018_20180627_2_6	NLMM063_20180627_2_6
	
NLMM011_20180627_4_5	NLMM018_20180627_4_4
	
NLMM040_20180627_4_6	NLMM041_20180627_4_9

	
NLMM063_20180627_4_5	NLMM028_20180627_6_8
	
NLMM052_20180627_6_5	NLMM064_20180627_6_4
	
SLMM009_20180627_6_4	SLMM035_20180627_6_5
	
WLMM054_20180627_6_3	WLMM092_20180627_8_1

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
11/Jun/18	Sha Chau	8:37	14:37	6:00	2	2	0	N/A
19/Jun/18	Lung Kwu Chau	8:54	13:54	5:00	2-3	3	0	N/A
20/Jun/18	Lung Kwu Chau	8:45	15:15	6:30	2-3	3	0	N/A
25/Jun/18	Sha Chau	9:00	15:00	6:00	2-3	2-3	0	N/A
26/Jun/18	Lung Kwu Chau	9:05	15:35	6:30	2	2	4	1-2

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

Appendix D. 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. : C182424
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC18-0873) Date of Receipt / 收件日期 : 27 April 2018

Description / 儀器名稱 : Integrating Sound Level Meter
Manufacturer / 製造商 : Brüel & Kjær
Model No. / 型號 : 2238
Serial No. / 編號 : 2381580
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 : 10 May 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 : 10 May 2018

Certificate of Calibration
校正證書

Certificate No. : C182424
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration using the B & K Acoustic Calibrator 4231, S/N : 3018753 was performed before the test.

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

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C180024
CL281	Multifunction Acoustic Calibrator	PA160023

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level :

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Parameter	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
50 - 130	L_{AFP}	A	F	94.00	1	94.1	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Parameter	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
50 - 130	L_{AFP}	A	F	94.00	1	94.1 (Ref.)
				104.00		104.1
				114.00		114.0

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Parameter	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
50 - 130	L_{AFP}	A	F	94.00	1	94.1	Ref.
	L_{ASP}		S			94.1	+ 0.3

Certificate of Calibration
校正證書

Certificate No. : C182424
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Parameter	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
50 - 130	L_{AFP}	A	F	94.00	63 Hz	68.0	-26.2 ± 1.5
					125 Hz	77.9	-16.1 ± 1.5
					250 Hz	85.4	-8.6 ± 1.4
					500 Hz	90.9	-3.2 ± 1.4
					1 kHz	94.1	Ref.
					2 kHz	95.3	+1.2 ± 1.6
					4 kHz	95.1	+1.0 ± 1.6
					8 kHz	93.0	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.9	-4.3 (+3.0 ; -6.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Parameter	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
50 - 130	L_{CFP}	C	F	94.00	63 Hz	93.4	-0.8 ± 1.5
					125 Hz	93.9	-0.2 ± 1.5
					250 Hz	94.1	0.0 ± 1.4
					500 Hz	94.1	0.0 ± 1.4
					1 kHz	94.1	Ref.
					2 kHz	93.9	-0.2 ± 1.6
					4 kHz	93.3	-0.8 ± 1.6
					8 kHz	91.1	-3.0 (+2.1 ; -3.1)
					12.5 kHz	88.0	-6.2 (+3.0 ; -6.0)

Certificate of Calibration
校正證書

Certificate No. : C182424
證書編號

Remarks : - UUT Microphone Model No. : 4188 & S/N : 2379759

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value :

94 dB	: 63 Hz - 125 Hz	: ± 0.35 dB
	250 Hz - 500 Hz	: ± 0.30 dB
	1 kHz	: ± 0.20 dB
	2 kHz - 4 kHz	: ± 0.35 dB
	8 kHz	: ± 0.45 dB
	12.5 kHz	: ± 0.70 dB
104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)

- 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.

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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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. : AH060001
Date of Issue : 01 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 6920 v2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	0001C6A7
Date of Received	:	May 23, 2018
Date of Calibration	:	May 23, 2018 to May 23, 2018
Date of Next Calibration[a]	:	Aug 23, 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	4.08	0.08	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.06	0.05	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
19.5	19.7	0.2	Satisfactory
26.4	26.3	-0.1	Satisfactory
38.5	38.6	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

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

This report supersedes the previous report no. AH050186 dated 30 May 2018.

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

Report No. : AH060001
Date of Issue : 01 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	0.11	0.11	Satisfactory
2.98	3.02	0.04	Satisfactory
5.04	5.15	0.11	Satisfactory
6.78	6.85	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	142.8	-2.8	Satisfactory
0.01	1412	1380	-2.3	Satisfactory
0.1	12890	12293	-4.6	Satisfactory
0.5	58670	57462	-2.1	Satisfactory
1.0	111900	109408	-2.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.79	-2.1	Satisfactory
20	19.68	-1.6	Satisfactory
30	29.67	-1.1	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	10.6	6.0	Satisfactory
20	20.7	3.5	Satisfactory
100	98.4	-1.6	Satisfactory
800	789.1	-1.4	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.

This report supersedes the previous report no. AH050186 dated 30 May 2018.

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

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AH060002
Date of Issue : 01 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 6920 v2 (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	000109DF
Date of Received	:	May 23, 2018
Date of Calibration	:	May 23, 2018 to May 23, 2018
Date of Next Calibration[a]	:	Aug 23, 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	4.06	0.06	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.07	0.06	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
19.5	19.8	0.3	Satisfactory
26.4	26.2	-0.2	Satisfactory
38.5	38.8	0.3	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

This report supersedes the previous report no. AH050185 dated 30 May 2018.

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

Report No. : AH060002
Date of Issue : 01 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	0.13	0.13	Satisfactory
2.98	3.06	0.08	Satisfactory
5.04	5.10	0.06	Satisfactory
6.78	6.83	0.05	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	142.5	-3.0	Satisfactory
0.01	1412	1384	-2.0	Satisfactory
0.1	12890	12116	-6.0	Satisfactory
0.5	58670	57188	-2.5	Satisfactory
1.0	111900	106439	-4.9	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.84	-1.6	Satisfactory
20	19.79	-1.1	Satisfactory
30	29.72	-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	10.7	7.0	Satisfactory
20	20.5	2.5	Satisfactory
100	98.6	-1.4	Satisfactory
800	788.6	-1.4	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.

This report supersedes the previous report no. AH050185 dated 30 May 2018.

Appendix E. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Launching Site	423880	Receipt acknowledged by EPD on 1 Dec 2017
		Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
		Sheung Sha Chau	405860	Receipt acknowledged by EPD on 5 Aug 2016
	Construction Noise Permit (General Works)	Launching Site	GW-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

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	Discharge License under WPCO	Works area of 3202	WT00028293-2017	Valid from 12 Jun 2017 to 30 Jun 2022
	Bill Account for disposal		A/C 7025739	Approval granted from EPD on 31 August 2016
3203	Notification of Construction Work under APCO	Works area of 3203	407053	Receipt acknowledged by EPD on 2 Sep 2016
	Construction Noise Permit (General Works)	Works area of 3203	GW-RS0430-18	Valid until 24 Nov 2018
	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	Valid until 24 Nov 2018
	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-RS0320-18	Superseded by GW-RS0521-18 on 20 Jun 2018
		Works Area of 3206	GW-RS0521-18	Valid until 15 Dec 2018
	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
	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-RS0299-18	Superseded by GW-RS0541-18 on 22 Jun 2018
			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
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0536-18	Valid until 18 Dec 2018
		Stockpiling area of 3503	GW-RS0384-18	Valid until 13 Nov 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
		Works area of 3801	430372	Receipt acknowledged by EPD on 2 Feb 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	Valid until 29 Jun 2018
		Works area of 3801	GW-RS0399-18	Valid until 22 Jul 2018

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	12	1	1

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

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 June 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-Jun	08:11	3A061	YFT	Arrival	13	-	-
01-Jun	08:18	8S210	XZM	Arrival	11.6	-	-
01-Jun	10:08	3A062	YFT	Arrival	11.1	-	-
01-Jun	10:25	3A163	YFT	Departure	11.8	-	-
01-Jun	10:37	8S212	XZM	Arrival	13	-	-
01-Jun	10:49	3A081	ZUI	Arrival	12.3	-	-
01-Jun	11:04	8S121	XZM	Departure	12.4	-	-
01-Jun	11:23	3A063	YFT	Arrival	12.4	-	-
01-Jun	12:20	3A181	ZUI	Departure	12.2	-	-
01-Jun	12:21	3A168	YFT	Departure	12.8	-	-
01-Jun	12:43	8S215	XZM	Arrival	12.1	<= 5	< 1min
01-Jun	13:05	3A064	YFT	Arrival	11.5	-	-
01-Jun	13:17	8S123	XZM	Departure	12.1	-	-
01-Jun	13:40	3A082	ZUI	Arrival	12.2	-	-
01-Jun	14:16	3A164	YFT	Departure	11.1	-	-
01-Jun	14:24	3A182	ZUI	Departure	12.9	-	-
01-Jun	14:58	3A065	YFT	Arrival	12.3	-	-
01-Jun	16:14	3A167	YFT	Departure	12.4	-	-
01-Jun	16:36	8S218	XZM	Arrival	12.7	-	-
01-Jun	16:44	3A083	ZUI	Arrival	12.6	-	-
01-Jun	17:04	8S126	XZM	Departure	12.6	-	-
01-Jun	17:05	3A067	YFT	Arrival	11.5	-	-
01-Jun	17:07	3A183	ZUI	Departure	11.9	-	-
01-Jun	19:12	3A166	YFT	Departure	12.8	-	-
01-Jun	20:00	3A084	ZUI	Arrival	12.1	-	-
01-Jun	20:24	3A185	ZUI	Departure	13.3	-	-
01-Jun	20:53	8S2113	XZM	Arrival	12.1	-	-
01-Jun	20:58	3A169	YFT	Departure	11.5	-	-
01-Jun	21:53	8S522	XZM	Departure	13.3	-	-
02-Jun	08:13	3A061	YFT	Arrival	11.2	-	-
02-Jun	08:20	8S210	XZM	Arrival	12.5	-	-
02-Jun	09:54	3A062	YFT	Arrival	12.4	-	-
02-Jun	10:14	3A163	YFT	Departure	12.5	-	-
02-Jun	10:34	8S212	XZM	Arrival	12.3	-	-
02-Jun	10:56	3A081	ZUI	Arrival	11.3	-	-
02-Jun	11:11	8S121	XZM	Departure	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)
02-Jun	11:19	3A063	YFT	Arrival	12.6	-	-
02-Jun	12:19	3A168	YFT	Departure	12.9	<= 5	< 1min
02-Jun	12:20	3A181	ZUI	Departure	13.7	-	-
02-Jun	12:46	8S215	XZM	Arrival	12.8	-	-
02-Jun	12:55	3A064	YFT	Arrival	11.9	-	-
02-Jun	13:17	8S123	XZM	Departure	13	-	-
02-Jun	13:52	3A082	ZUI	Arrival	12.5	-	-
02-Jun	14:16	3A164	YFT	Departure	12.7	-	-
02-Jun	14:17	3A182	ZUI	Departure	12.6	-	-
02-Jun	14:59	3A065	YFT	Arrival	12.4	-	-
02-Jun	16:11	3A167	YFT	Departure	12.7	-	-
02-Jun	16:35	8S218	XZM	Arrival	12.9	-	-
02-Jun	16:38	3A083	ZUI	Arrival	13.4	-	-
02-Jun	16:58	3A067	YFT	Arrival	12.1	-	-
02-Jun	17:02	3A183	ZUI	Departure	12.8	-	-
02-Jun	17:05	8S126	XZM	Departure	12.6	-	-
02-Jun	19:08	3A166	YFT	Departure	13.2	-	-
02-Jun	19:48	3A084	ZUI	Arrival	13.2	-	-
02-Jun	20:09	3A185	ZUI	Departure	12.9	-	-
02-Jun	21:01	3A169	YFT	Departure	11.4	-	-
02-Jun	21:09	8S2113	XZM	Arrival	10.8	-	-
02-Jun	22:03	8S522	XZM	Departure	11.6	-	-
03-Jun	08:18	3A061	YFT	Arrival	11.6	-	-
03-Jun	08:21	8S210	XZM	Arrival	12	-	-
03-Jun	10:11	3A062	YFT	Arrival	12	-	-
03-Jun	10:25	3A163	YFT	Departure	12.3	-	-
03-Jun	10:35	8S212	XZM	Arrival	12.5	-	-
03-Jun	10:53	3A081	ZUI	Arrival	13.4	-	-
03-Jun	11:07	8S121	XZM	Departure	12.3	-	-
03-Jun	11:16	3A063	YFT	Arrival	11.9	-	-
03-Jun	12:18	3A181	ZUI	Departure	13.4	-	-
03-Jun	12:18	3A168	YFT	Departure	12.5	-	-
03-Jun	12:41	8S215	XZM	Arrival	12.5	-	-
03-Jun	12:56	3A064	YFT	Arrival	12.2	-	-
03-Jun	13:15	8S123	XZM	Departure	13	-	-
03-Jun	13:42	3A082	ZUI	Arrival	12	-	-
03-Jun	14:22	3A164	YFT	Departure	12.4	<= 5	< 1min
03-Jun	14:22	3A182	ZUI	Departure	12.8	-	-
03-Jun	14:52	3A065	YFT	Arrival	12.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
03-Jun	16:17	3A167	YFT	Departure	12.7	-	-
03-Jun	16:41	8S218	XZM	Arrival	12.5	-	-
03-Jun	16:47	3A083	ZUI	Arrival	13.5	-	-
03-Jun	17:03	3A067	YFT	Arrival	12	-	-
03-Jun	17:04	8S126	XZM	Departure	13.4	-	-
03-Jun	17:12	3A183	ZUI	Departure	12.7	-	-
03-Jun	19:03	3A166	YFT	Departure	12.7	-	-
03-Jun	19:56	3A084	ZUI	Arrival	13.2	-	-
03-Jun	20:13	3A185	ZUI	Departure	12.7	-	-
03-Jun	20:55	8S2113	XZM	Arrival	11.2	-	-
03-Jun	20:59	3A169	YFT	Departure	11.2	-	-
03-Jun	21:58	8S522	XZM	Departure	12.5	-	-
04-Jun	08:15	3A061	YFT	Arrival	12.4	-	-
04-Jun	08:23	8S210	XZM	Arrival	12.4	-	-
04-Jun	10:06	3A062	YFT	Arrival	12.3	-	-
04-Jun	10:21	3A163	YFT	Departure	12.5	-	-
04-Jun	10:33	8S212	XZM	Arrival	11.1	-	-
04-Jun	10:42	3A081	ZUI	Arrival	11.8	-	-
04-Jun	11:12	8S121	XZM	Departure	12	-	-
04-Jun	11:19	3A063	YFT	Arrival	12.6	-	-
04-Jun	12:11	3A168	YFT	Departure	12.6	-	-
04-Jun	12:21	3A181	ZUI	Departure	12.3	-	-
04-Jun	12:42	8S215	XZM	Arrival	11.8	-	-
04-Jun	12:56	3A064	YFT	Arrival	12.4	-	-
04-Jun	13:16	8S123	XZM	Departure	12.7	-	-
04-Jun	13:40	3A082	ZUI	Arrival	12.9	-	-
04-Jun	14:16	3A182	ZUI	Departure	13.6	-	-
04-Jun	14:17	3A164	YFT	Departure	12.3	-	-
04-Jun	14:56	3A065	YFT	Arrival	12.4	-	-
04-Jun	16:22	3A167	YFT	Departure	12.6	-	-
04-Jun	16:55	8S218	XZM	Arrival	11.8	-	-
04-Jun	16:58	3A083	ZUI	Arrival	12.1	-	-
04-Jun	17:00	3A067	YFT	Arrival	12.3	-	-
04-Jun	17:12	8S126	XZM	Departure	12.7	-	-
04-Jun	17:24	3A183	ZUI	Departure	11.6	-	-
04-Jun	19:07	3A166	YFT	Departure	12.9	-	-
04-Jun	19:43	3A084	ZUI	Arrival	11.6	-	-
04-Jun	20:20	3A185	ZUI	Departure	11.8	-	-
04-Jun	20:53	8S2113	XZM	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
04-Jun	20:58	3A169	YFT	Departure	12.3	-	-
04-Jun	21:56	8S522	XZM	Departure	12.9	-	-
05-Jun	08:12	3A061	YFT	Arrival	11.7	-	-
05-Jun	08:17	8S210	XZM	Arrival	12.8	-	-
05-Jun	10:05	3A062	YFT	Arrival	12.4	-	-
05-Jun	10:20	3A163	YFT	Departure	12.5	-	-
05-Jun	10:36	8S212	XZM	Arrival	0.0 **	-	-
05-Jun	10:41	3A081	ZUI	Arrival	11.8	-	-
05-Jun	11:16	8S121	XZM	Departure	12.5	-	-
05-Jun	11:21	3A063	YFT	Arrival	11.5	-	-
05-Jun	12:17	3A168	YFT	Departure	12.5	-	-
05-Jun	12:22	3A181	ZUI	Departure	13.2	-	-
05-Jun	12:52	8S215	XZM	Arrival	12.2	-	-
05-Jun	12:57	3A064	YFT	Arrival	12.7	-	-
05-Jun	13:16	8S123	XZM	Departure	12.4	-	-
05-Jun	13:39	3A082	ZUI	Arrival	11.7	-	-
05-Jun	14:22	3A182	ZUI	Departure	12.9	-	-
05-Jun	14:22	3A164	YFT	Departure	12.7	-	-
05-Jun	15:01	3A065	YFT	Arrival	11.6	-	-
05-Jun	16:20	3A167	YFT	Departure	11.9	-	-
05-Jun	16:37	3A083	ZUI	Arrival	12.3	-	-
05-Jun	16:42	8S218	XZM	Arrival	12.7	-	-
05-Jun	17:03	3A067	YFT	Arrival	12.6	-	-
05-Jun	17:08	8S126	XZM	Departure	12.4	-	-
05-Jun	17:15	3A183	ZUI	Departure	12.5	-	-
05-Jun	19:13	3A166	YFT	Departure	12.9	-	-
05-Jun	19:44	3A084	ZUI	Arrival	12.4	-	-
05-Jun	20:08	3A185	ZUI	Departure	12.2	-	-
05-Jun	20:51	8S2113	XZM	Arrival	12.2	-	-
05-Jun	21:08	3A169	YFT	Departure	12.5	-	-
05-Jun	21:58	8S522	XZM	Departure	12	-	-
06-Jun	08:17	3A061	YFT	Arrival	10.8	-	-
06-Jun	08:22	8S210	XZM	Arrival	11.2	-	-
06-Jun	10:04	3A062	YFT	Arrival	12.4	-	-
06-Jun	10:24	3A163	YFT	Departure	12.3	-	-
06-Jun	10:52	3A081	ZUI	Arrival	11.5	-	-
06-Jun	11:13	8S212	XZM	Arrival	11.9	-	-
06-Jun	11:19	3A063	YFT	Arrival	12.1	-	-
06-Jun	11:41	8S121	XZM	Departure	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
06-Jun	12:26	3A168	YFT	Departure	12.7	-	-
06-Jun	12:28	3A181	ZUI	Departure	11.7	-	-
06-Jun	12:56	8S215	XZM	Arrival	12.7	-	-
06-Jun	13:05	3A064	YFT	Arrival	12.2	-	-
06-Jun	13:23	8S123	XZM	Departure	12.7	-	-
06-Jun	13:53	3A082	ZUI	Arrival	12.7	-	-
06-Jun	14:27	3A164	YFT	Departure	12.5	-	-
06-Jun	14:28	3A182	ZUI	Departure	13	-	-
06-Jun	15:00	3A065	YFT	Arrival	10.1	-	-
06-Jun	16:20	3A167	YFT	Departure	13.7	-	-
06-Jun	16:27	3A083	ZUI	Arrival	12.1	-	-
06-Jun	16:43	8S218	XZM	Arrival	11.3	-	-
06-Jun	17:10	3A067	YFT	Arrival	11.8	-	-
06-Jun	17:23	8S126	XZM	Departure	11.9	-	-
06-Jun	17:26	3A183	ZUI	Departure	13	-	-
06-Jun	19:14	3A166	YFT	Departure	11.9	-	-
06-Jun	19:46	3A084	ZUI	Arrival	11.4	-	-
06-Jun	20:26	3A185	ZUI	Departure	12.9	-	-
06-Jun	20:55	8S2113	XZM	Arrival	12	-	-
06-Jun	21:06	3A169	YFT	Departure	12.8	-	-
07-Jun	08:17	3A061	YFT	Arrival	12.6	-	-
07-Jun	08:21	8S210	XZM	Arrival	13	-	-
07-Jun	10:02	3A062	YFT	Arrival	12.2	-	-
07-Jun	10:33	3A163	YFT	Departure	12.7	-	-
07-Jun	10:43	3A081	ZUI	Arrival	12.1	-	-
07-Jun	10:52	8S212	XZM	Arrival	12.1	-	-
07-Jun	11:12	8S121	XZM	Departure	12.3	-	-
07-Jun	11:18	3A063	YFT	Arrival	12.6	-	-
07-Jun	12:19	3A168	YFT	Departure	12.4	-	-
07-Jun	12:20	3A181	ZUI	Departure	12.5	-	-
07-Jun	13:03	8S215	XZM	Arrival	12.2	-	-
07-Jun	13:06	3A064	YFT	Arrival	12.6	-	-
07-Jun	13:23	8S123	XZM	Departure	12.6	-	-
07-Jun	13:42	3A082	ZUI	Arrival	12.5	-	-
07-Jun	14:19	3A182	ZUI	Departure	13	-	-
07-Jun	14:25	3A164	YFT	Departure	12.5	-	-
07-Jun	14:52	3A065	YFT	Arrival	12.2	-	-
07-Jun	16:22	3A167	YFT	Departure	12.3	-	-
07-Jun	16:40	3A083	ZUI	Arrival	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
07-Jun	16:42	8S218	XZM	Arrival	12.1	-	-
07-Jun	17:00	3A067	YFT	Arrival	12.5	-	-
07-Jun	17:03	3A183	ZUI	Departure	11.8	-	-
07-Jun	17:06	8S126	XZM	Departure	12.7	-	-
07-Jun	19:10	3A166	YFT	Departure	11.3	-	-
07-Jun	19:42	3A084	ZUI	Arrival	12.6	-	-
07-Jun	20:30	3A185	ZUI	Departure	13.1	-	-
07-Jun	20:54	8S2113	XZM	Arrival	12.5	-	-
07-Jun	21:00	3A169	YFT	Departure	12.9	-	-
08-Jun	08:22	8S210	XZM	Arrival	12.8	-	-
08-Jun	08:29	3A061	YFT	Arrival	11.7	-	-
08-Jun	10:08	3A062	YFT	Arrival	11.8	-	-
08-Jun	10:36	3A163	YFT	Departure	11.9	-	-
08-Jun	10:49	8S212	XZM	Arrival	11.9	-	-
08-Jun	11:00	3A081	ZUI	Arrival	12	-	-
08-Jun	11:11	8S121	XZM	Departure	11	-	-
08-Jun	11:15	3A063	YFT	Arrival	12.7	-	-
08-Jun	12:23	3A181	ZUI	Departure	13.7	-	-
08-Jun	12:27	3A168	YFT	Departure	12.9	-	-
08-Jun	12:50	8S215	XZM	Arrival	11.1	-	-
08-Jun	12:58	3A064	YFT	Arrival	11.7	-	-
08-Jun	13:16	8S123	XZM	Departure	13.3	-	-
08-Jun	13:51	3A082	ZUI	Arrival	12.6	-	-
08-Jun	14:16	3A182	ZUI	Departure	13	-	-
08-Jun	14:18	3A164	YFT	Departure	13	-	-
08-Jun	14:56	3A065	YFT	Arrival	12.1	-	-
08-Jun	16:09	3A167	YFT	Departure	13.4	-	-
08-Jun	16:44	8S218	XZM	Arrival	11.1	-	-
08-Jun	16:50	3A083	ZUI	Arrival	12.3	-	-
08-Jun	16:53	3A067	YFT	Arrival	12.2	-	-
08-Jun	17:11	8S126	XZM	Departure	13.4	-	-
08-Jun	17:17	3A183	ZUI	Departure	13.8	-	-
08-Jun	19:06	3A166	YFT	Departure	12.5	-	-
08-Jun	19:53	3A084	ZUI	Arrival	11.9	-	-
08-Jun	20:13	3A185	ZUI	Departure	13.5	-	-
08-Jun	20:56	8S2113	XZM	Arrival	12.4	-	-
08-Jun	21:06	3A169	YFT	Departure	12.4	-	-
08-Jun	22:07	8S522	XZM	Departure	11.2	-	-
09-Jun	08:21	8S210	XZM	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)
09-Jun	08:24	3A061	YFT	Arrival	11.8	-	-
09-Jun	09:58	3A062	YFT	Arrival	11.9	-	-
09-Jun	10:18	3A163	YFT	Departure	11.9	-	-
09-Jun	10:36	8S212	XZM	Arrival	12.9	-	-
09-Jun	10:43	3A081	ZUI	Arrival	12.7	-	-
09-Jun	11:00	8S121	XZM	Departure	11.3	-	-
09-Jun	11:17	3A063	YFT	Arrival	12.3	-	-
09-Jun	12:22	3A168	YFT	Departure	11.8	-	-
09-Jun	12:23	3A181	ZUI	Departure	13.1	-	-
09-Jun	12:45	8S215	XZM	Arrival	12.7	-	-
09-Jun	12:59	3A064	YFT	Arrival	13.5	<= 5	< 1min
09-Jun	13:25	8S123	XZM	Departure	12.6	-	-
09-Jun	13:38	3A082	ZUI	Arrival	12.6	-	-
09-Jun	14:17	3A164	YFT	Departure	13.1	-	-
09-Jun	14:18	3A182	ZUI	Departure	12.6	-	-
09-Jun	14:56	3A065	YFT	Arrival	12.3	-	-
09-Jun	16:15	3A167	YFT	Departure	12.6	-	-
09-Jun	16:39	8S218	XZM	Arrival	12.7	-	-
09-Jun	16:54	3A083	ZUI	Arrival	12.8	-	-
09-Jun	17:03	3A067	YFT	Arrival	11.9	-	-
09-Jun	17:13	8S126	XZM	Departure	13.6	-	-
09-Jun	17:31	3A183	ZUI	Departure	13.5	-	-
09-Jun	19:05	3A166	YFT	Departure	12.6	-	-
09-Jun	19:55	3A084	ZUI	Arrival	13	-	-
09-Jun	20:16	3A185	ZUI	Departure	13.1	-	-
09-Jun	20:57	8S2113	XZM	Arrival	12.2	-	-
09-Jun	21:03	3A169	YFT	Departure	13.2	-	-
09-Jun	21:59	8S522	XZM	Departure	11.7	-	-
10-Jun	08:19	3A061	YFT	Arrival	10.9	-	-
10-Jun	08:21	8S210	XZM	Arrival	11.9	-	-
10-Jun	10:06	3A062	YFT	Arrival	11.7	-	-
10-Jun	10:24	3A163	YFT	Departure	12.4	-	-
10-Jun	10:32	8S212	XZM	Arrival	12.4	-	-
10-Jun	10:51	3A081	ZUI	Arrival	13.3	-	-
10-Jun	11:08	8S121	XZM	Departure	12.1	-	-
10-Jun	11:15	3A063	YFT	Arrival	13.2	-	-
10-Jun	12:21	3A168	YFT	Departure	13.6	<= 5	< 1min
10-Jun	12:26	3A181	ZUI	Departure	12.1	-	-
10-Jun	12:49	8S215	XZM	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Jun	12:55	3A064	YFT	Arrival	12.2	-	-
10-Jun	13:22	8S123	XZM	Departure	12.2	-	-
10-Jun	14:14	3A082	ZUI	Arrival	12.2	-	-
10-Jun	14:21	3A164	YFT	Departure	12.8	-	-
10-Jun	14:30	3A182	ZUI	Departure	13.6	-	-
10-Jun	14:54	3A065	YFT	Arrival	13	-	-
10-Jun	16:30	3A167	YFT	Departure	13	-	-
10-Jun	16:58	8S218	XZM	Arrival	12.4	-	-
10-Jun	17:03	3A083	ZUI	Arrival	12.1	-	-
10-Jun	17:11	3A067	YFT	Arrival	12.1	-	-
10-Jun	17:27	8S126	XZM	Departure	12.8	-	-
10-Jun	17:29	3A183	ZUI	Departure	12.2	-	-
10-Jun	19:34	3A084	ZUI	Arrival	11.8	-	-
10-Jun	19:35	3A166	YFT	Departure	11.7	-	-
10-Jun	20:34	3A185	ZUI	Departure	12.6	-	-
10-Jun	21:07	8S2113	XZM	Arrival	11.9	-	-
10-Jun	21:14	3A169	YFT	Departure	12.7	-	-
10-Jun	22:08	8S522	XZM	Departure	12.9	-	-
11-Jun	08:12	3A061	YFT	Arrival	12.4	-	-
11-Jun	08:25	8S210	XZM	Arrival	11	-	-
11-Jun	10:01	3A062	YFT	Arrival	11.1	-	-
11-Jun	10:27	3A163	YFT	Departure	11.9	-	-
11-Jun	10:38	8S212	XZM	Arrival	12.3	-	-
11-Jun	10:48	3A081	ZUI	Arrival	12.7	-	-
11-Jun	11:06	8S121	XZM	Departure	12.8	-	-
11-Jun	11:17	3A063	YFT	Arrival	12.5	-	-
11-Jun	12:23	3A181	ZUI	Departure	12.7	-	-
11-Jun	12:28	3A168	YFT	Departure	10.9	-	-
11-Jun	12:43	8S215	XZM	Arrival	12	-	-
11-Jun	12:56	3A064	YFT	Arrival	11.5	-	-
11-Jun	13:19	8S123	XZM	Departure	12	-	-
11-Jun	13:43	3A082	ZUI	Arrival	11.6	-	-
11-Jun	14:19	3A164	YFT	Departure	11.4	-	-
11-Jun	14:26	3A182	ZUI	Departure	12.5	-	-
11-Jun	15:02	3A065	YFT	Arrival	12.5	-	-
11-Jun	16:28	3A167	YFT	Departure	11.7	-	-
11-Jun	16:52	8S218	XZM	Arrival	11.8	-	-
11-Jun	16:56	3A083	ZUI	Arrival	12.2	-	-
11-Jun	16:58	3A067	YFT	Arrival	11.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
11-Jun	17:22	8S126	XZM	Departure	12.9	-	-
11-Jun	17:24	3A183	ZUI	Departure	13.5	-	-
11-Jun	19:06	3A166	YFT	Departure	12.4	-	-
11-Jun	19:43	3A084	ZUI	Arrival	12.5	-	-
11-Jun	20:19	3A185	ZUI	Departure	12.5	-	-
11-Jun	20:52	8S2113	XZM	Arrival	12.5	-	-
11-Jun	21:10	3A169	YFT	Departure	12.2	-	-
11-Jun	22:11	8S522	XZM	Departure	12.8	-	-
12-Jun	08:11	3A061	YFT	Arrival	12.6	-	-
12-Jun	08:18	8S210	XZM	Arrival	12.6	-	-
12-Jun	09:57	3A062	YFT	Arrival	12.1	-	-
12-Jun	10:26	3A163	YFT	Departure	12.2	-	-
12-Jun	10:41	8S212	XZM	Arrival	11.2	-	-
12-Jun	10:45	3A081	ZUI	Arrival	12.6	-	-
12-Jun	11:15	8S121	XZM	Departure	11.3	-	-
12-Jun	11:20	3A063	YFT	Arrival	12.5	-	-
12-Jun	12:19	3A181	ZUI	Departure	12.6	-	-
12-Jun	12:22	3A168	YFT	Departure	12.4	-	-
12-Jun	12:41	8S215	XZM	Arrival	12.9	-	-
12-Jun	13:01	3A064	YFT	Arrival	12.4	-	-
12-Jun	13:12	8S123	XZM	Departure	12.2	-	-
12-Jun	13:37	3A082	ZUI	Arrival	11.9	-	-
12-Jun	14:14	3A182	ZUI	Departure	12.4	-	-
12-Jun	14:18	3A164	YFT	Departure	12.2	-	-
12-Jun	14:58	3A065	YFT	Arrival	12.1	-	-
12-Jun	16:29	3A167	YFT	Departure	12.8	-	-
12-Jun	16:53	8S218	XZM	Arrival	11.2	-	-
12-Jun	16:57	3A083	ZUI	Arrival	12.6	-	-
12-Jun	17:10	3A067	YFT	Arrival	11.3	-	-
12-Jun	17:21	8S126	XZM	Departure	12.1	-	-
12-Jun	17:25	3A183	ZUI	Departure	13.2	-	-
12-Jun	19:19	3A166	YFT	Departure	13	-	-
12-Jun	20:03	3A084	ZUI	Arrival	12.7	-	-
12-Jun	20:32	3A185	ZUI	Departure	13.4	-	-
12-Jun	20:56	8S2113	XZM	Arrival	11.4	-	-
12-Jun	21:10	3A169	YFT	Departure	12.3	-	-
12-Jun	22:18	8S522	XZM	Departure	11.6	-	-
13-Jun	08:16	3A061	YFT	Arrival	12.1	-	-
13-Jun	08:19	8S210	XZM	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
13-Jun	09:54	3A062	YFT	Arrival	10.8	-	-
13-Jun	10:31	3A163	YFT	Departure	11.7	-	-
13-Jun	10:36	8S212	XZM	Arrival	13.2	-	-
13-Jun	10:45	3A081	ZUI	Arrival	12.9	-	-
13-Jun	11:14	8S121	XZM	Departure	12.3	-	-
13-Jun	11:21	3A063	YFT	Arrival	12.9	-	-
13-Jun	12:35	3A181	ZUI	Departure	12.2	-	-
13-Jun	12:42	3A168	YFT	Departure	12.6	-	-
13-Jun	12:55	8S215	XZM	Arrival	12.4	-	-
13-Jun	13:14	3A064	YFT	Arrival	11.8	-	-
13-Jun	13:25	8S123	XZM	Departure	11.8	-	-
13-Jun	13:42	3A082	ZUI	Arrival	12.5	-	-
13-Jun	14:26	3A182	ZUI	Departure	12.5	-	-
13-Jun	14:27	3A164	YFT	Departure	11.5	-	-
13-Jun	15:13	3A065	YFT	Arrival	12.5	-	-
13-Jun	16:24	3A167	YFT	Departure	13.2	-	-
13-Jun	16:48	8S218	XZM	Arrival	12.5	-	-
13-Jun	16:51	3A083	ZUI	Arrival	12.3	-	-
13-Jun	17:07	8S126	XZM	Departure	13	-	-
13-Jun	17:09	3A183	ZUI	Departure	12.8	-	-
13-Jun	17:28	3A067	YFT	Arrival	11.4	-	-
13-Jun	18:57	3A166	YFT	Departure	12.9	-	-
13-Jun	19:51	3A084	ZUI	Arrival	12.2	-	-
13-Jun	20:17	3A185	ZUI	Departure	13	-	-
13-Jun	21:00	8S2113	XZM	Arrival	12.6	-	-
13-Jun	21:05	3A169	YFT	Departure	12.8	-	-
13-Jun	22:02	8S522	XZM	Departure	13.1	-	-
14-Jun	08:16	3A061	YFT	Arrival	11.6	-	-
14-Jun	08:20	8S210	XZM	Arrival	11.4	-	-
14-Jun	10:00	3A062	YFT	Arrival	12.3	-	-
14-Jun	10:24	3A163	YFT	Departure	12.4	-	-
14-Jun	10:40	8S212	XZM	Arrival	11.1	-	-
14-Jun	10:44	3A081	ZUI	Arrival	13.3	-	-
14-Jun	11:07	8S121	XZM	Departure	11.6	-	-
14-Jun	11:20	3A063	YFT	Arrival	11.1	-	-
14-Jun	12:17	3A181	ZUI	Departure	12.8	-	-
14-Jun	12:23	3A168	YFT	Departure	12.8	-	-
14-Jun	12:51	8S215	XZM	Arrival	12	-	-
14-Jun	13:00	3A064	YFT	Arrival	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)
14-Jun	13:16	8S123	XZM	Departure	12.4	-	-
14-Jun	13:40	3A082	ZUI	Arrival	12.3	-	-
14-Jun	14:23	3A164	YFT	Departure	12	-	-
14-Jun	14:27	3A182	ZUI	Departure	12.6	-	-
14-Jun	14:59	3A065	YFT	Arrival	11.3	-	-
14-Jun	16:20	3A167	YFT	Departure	12.3	-	-
14-Jun	16:33	8S218	XZM	Arrival	12.2	-	-
14-Jun	16:38	3A083	ZUI	Arrival	12.7	<= 5	< 1min
14-Jun	16:59	3A067	YFT	Arrival	11.8	-	-
14-Jun	17:08	8S126	XZM	Departure	12.3	-	-
14-Jun	17:11	3A183	ZUI	Departure	13.1	-	-
14-Jun	19:27	3A166	YFT	Departure	12.4	-	-
14-Jun	19:51	3A084	ZUI	Arrival	12.5	-	-
14-Jun	20:22	3A185	ZUI	Departure	12.5	-	-
14-Jun	21:10	8S2113	XZM	Arrival	11.8	-	-
14-Jun	21:25	3A169	YFT	Departure	12.5	-	-
14-Jun	22:05	8S522	XZM	Departure	12.6	-	-
15-Jun	08:17	3A061	YFT	Arrival	13.2	-	-
15-Jun	08:18	8S210	XZM	Arrival	12.4	-	-
15-Jun	10:10	3A062	YFT	Arrival	12.3	-	-
15-Jun	10:25	3A163	YFT	Departure	12.4	-	-
15-Jun	10:38	8S212	XZM	Arrival	11.6	-	-
15-Jun	10:51	3A081	ZUI	Arrival	13.5	-	-
15-Jun	11:18	8S121	XZM	Departure	12.7	-	-
15-Jun	11:23	3A063	YFT	Arrival	12.5	-	-
15-Jun	12:13	3A168	YFT	Departure	12.8	-	-
15-Jun	12:17	3A181	ZUI	Departure	12.6	-	-
15-Jun	12:44	8S215	XZM	Arrival	12.2	-	-
15-Jun	13:00	3A064	YFT	Arrival	12.5	-	-
15-Jun	13:23	8S123	XZM	Departure	11.4	-	-
15-Jun	13:39	3A082	ZUI	Arrival	12.1	-	-
15-Jun	14:17	3A164	YFT	Departure	12.5	-	-
15-Jun	14:18	3A182	ZUI	Departure	13	-	-
15-Jun	14:55	3A065	YFT	Arrival	12.8	-	-
15-Jun	16:27	3A167	YFT	Departure	12.4	-	-
15-Jun	16:52	8S218	XZM	Arrival	11.7	-	-
15-Jun	16:57	3A083	ZUI	Arrival	13.2	-	-
15-Jun	17:04	3A067	YFT	Arrival	12.5	-	-
15-Jun	17:13	8S126	XZM	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Jun	17:15	3A183	ZUI	Departure	12.5	-	-
15-Jun	19:07	3A166	YFT	Departure	11.7	-	-
15-Jun	19:53	3A084	ZUI	Arrival	12.3	-	-
15-Jun	20:28	3A185	ZUI	Departure	12.9	-	-
15-Jun	21:02	8S2113	XZM	Arrival	11	-	-
15-Jun	21:04	3A169	YFT	Departure	11.9	-	-
15-Jun	22:12	8S522	XZM	Departure	11.6	-	-
16-Jun	08:13	3A061	YFT	Arrival	11.6	-	-
16-Jun	08:29	8S210	XZM	Arrival	11.8	-	-
16-Jun	10:06	3A062	YFT	Arrival	11.4	-	-
16-Jun	10:26	3A163	YFT	Departure	11.4	-	-
16-Jun	10:33	8S212	XZM	Arrival	12.6	-	-
16-Jun	10:43	3A081	ZUI	Arrival	12.7	-	-
16-Jun	11:08	8S121	XZM	Departure	12.3	-	-
16-Jun	11:18	3A063	YFT	Arrival	12.3	-	-
16-Jun	12:23	3A168	YFT	Departure	11.8	-	-
16-Jun	12:30	3A181	ZUI	Departure	12.5	-	-
16-Jun	12:49	8S215	XZM	Arrival	12.6	-	-
16-Jun	13:08	3A064	YFT	Arrival	11.7	-	-
16-Jun	13:24	8S123	XZM	Departure	12.6	-	-
16-Jun	13:49	3A082	ZUI	Arrival	12.3	-	-
16-Jun	14:18	3A182	ZUI	Departure	13.5	-	-
16-Jun	14:19	3A164	YFT	Departure	12.1	-	-
16-Jun	15:07	3A065	YFT	Arrival	12.1	-	-
16-Jun	16:29	3A167	YFT	Departure	12.2	-	-
16-Jun	16:44	8S218	XZM	Arrival	12.2	-	-
16-Jun	16:52	3A083	ZUI	Arrival	12.1	-	-
16-Jun	17:01	3A067	YFT	Arrival	11.6	-	-
16-Jun	17:14	8S126	XZM	Departure	11.5	-	-
16-Jun	17:15	3A183	ZUI	Departure	12.4	-	-
16-Jun	19:10	3A166	YFT	Departure	13.5	-	-
16-Jun	19:56	3A084	ZUI	Arrival	12.6	-	-
16-Jun	20:31	3A185	ZUI	Departure	13.2	-	-
16-Jun	20:55	8S2113	XZM	Arrival	12.1	-	-
16-Jun	21:25	3A169	YFT	Departure	12.2	-	-
16-Jun	22:07	8S522	XZM	Departure	12.6	-	-
17-Jun	08:17	8S210	XZM	Arrival	12.8	-	-
17-Jun	08:17	3A061	YFT	Arrival	12.3	-	-
17-Jun	09:53	3A062	YFT	Arrival	11.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Jun	10:15	3A163	YFT	Departure	12.4	-	-
17-Jun	10:35	8S212	XZM	Arrival	12.2	-	-
17-Jun	10:43	3A081	ZUI	Arrival	13	-	-
17-Jun	10:59	8S121	XZM	Departure	12.6	-	-
17-Jun	11:20	3A063	YFT	Arrival	12.2	-	-
17-Jun	12:13	3A181	ZUI	Departure	12.7	-	-
17-Jun	12:21	3A168	YFT	Departure	13	-	-
17-Jun	12:38	8S215	XZM	Arrival	12.4	-	-
17-Jun	12:56	3A064	YFT	Arrival	12.9	-	-
17-Jun	13:21	8S123	XZM	Departure	12	-	-
17-Jun	13:40	3A082	ZUI	Arrival	12.2	-	-
17-Jun	14:13	3A182	ZUI	Departure	13.2	-	-
17-Jun	14:15	3A164	YFT	Departure	12.6	-	-
17-Jun	14:58	3A065	YFT	Arrival	12.2	-	-
17-Jun	16:16	3A167	YFT	Departure	12.5	-	-
17-Jun	16:37	8S218	XZM	Arrival	12.8	-	-
17-Jun	16:41	3A083	ZUI	Arrival	12.9	-	-
17-Jun	17:08	3A067	YFT	Arrival	12.4	-	-
17-Jun	17:13	8S126	XZM	Departure	12.7	-	-
17-Jun	17:14	3A183	ZUI	Departure	12	-	-
17-Jun	19:15	3A166	YFT	Departure	11.4	-	-
17-Jun	19:50	3A084	ZUI	Arrival	12.9	-	-
17-Jun	20:28	3A185	ZUI	Departure	12.5	-	-
17-Jun	21:02	8S2113	XZM	Arrival	11.9	-	-
17-Jun	21:19	3A169	YFT	Departure	13.4	-	-
17-Jun	22:04	8S522	XZM	Departure	13.2	-	-
18-Jun	08:17	3A061	YFT	Arrival	12.8	-	-
18-Jun	08:25	8S210	XZM	Arrival	12.2	-	-
18-Jun	10:07	3A062	YFT	Arrival	11.7	-	-
18-Jun	10:25	3A163	YFT	Departure	11.7	-	-
18-Jun	10:37	8S212	XZM	Arrival	10.7	-	-
18-Jun	10:44	3A081	ZUI	Arrival	11.9	-	-
18-Jun	11:06	8S121	XZM	Departure	11.4	-	-
18-Jun	11:19	3A063	YFT	Arrival	11.7	-	-
18-Jun	12:31	3A181	ZUI	Departure	12.2	-	-
18-Jun	12:32	3A168	YFT	Departure	11.7	-	-
18-Jun	12:53	8S215	XZM	Arrival	11.9	-	-
18-Jun	12:56	3A064	YFT	Arrival	12.8	-	-
18-Jun	13:24	8S123	XZM	Departure	12.1	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
18-Jun	13:56	3A082	ZUI	Arrival	11.9	-	-
18-Jun	14:18	3A182	ZUI	Departure	12.6	-	-
18-Jun	14:18	3A164	YFT	Departure	12.5	-	-
18-Jun	15:15	3A065	YFT	Arrival	11.1	-	-
18-Jun	16:22	3A167	YFT	Departure	10.7	-	-
18-Jun	16:52	8S218	XZM	Arrival	12.5	-	-
18-Jun	16:56	3A083	ZUI	Arrival	13.2	-	-
18-Jun	17:04	3A067	YFT	Arrival	12.9	-	-
18-Jun	17:12	3A183	ZUI	Departure	13.2	-	-
18-Jun	17:15	8S126	XZM	Departure	11.9	-	-
18-Jun	19:05	3A166	YFT	Departure	11.9	-	-
18-Jun	19:55	3A084	ZUI	Arrival	12.9	-	-
18-Jun	20:23	3A185	ZUI	Departure	13.3	-	-
18-Jun	20:59	8S2113	XZM	Arrival	12.1	-	-
18-Jun	21:28	3A169	YFT	Departure	13.3	-	-
19-Jun	08:18	3A061	YFT	Arrival	11.9	-	-
19-Jun	08:24	8S210	XZM	Arrival	11.4	-	-
19-Jun	10:04	3A062	YFT	Arrival	11.8	-	-
19-Jun	10:21	3A163	YFT	Departure	12	-	-
19-Jun	10:34	8S212	XZM	Arrival	12	-	-
19-Jun	10:44	3A081	ZUI	Arrival	12.5	-	-
19-Jun	11:05	8S121	XZM	Departure	13.4	-	-
19-Jun	11:16	3A063	YFT	Arrival	12.1	-	-
19-Jun	12:24	3A168	YFT	Departure	12.6	-	-
19-Jun	12:26	3A181	ZUI	Departure	12.8	-	-
19-Jun	12:44	8S215	XZM	Arrival	11.7	-	-
19-Jun	13:01	3A064	YFT	Arrival	12.1	-	-
19-Jun	13:18	8S123	XZM	Departure	11.9	-	-
19-Jun	13:46	3A082	ZUI	Arrival	12.1	<= 5	< 1min
19-Jun	14:20	3A164	YFT	Departure	12	-	-
19-Jun	14:24	3A182	ZUI	Departure	12.8	-	-
19-Jun	14:55	3A065	YFT	Arrival	12.4	-	-
19-Jun	16:28	3A167	YFT	Departure	12.1	-	-
19-Jun	16:50	8S218	XZM	Arrival	12.4	-	-
19-Jun	16:51	3A083	ZUI	Arrival	11.9	-	-
19-Jun	17:00	3A067	YFT	Arrival	12.8	-	-
19-Jun	17:05	3A183	ZUI	Departure	12.6	-	-
19-Jun	17:06	8S126	XZM	Departure	12.6	-	-
19-Jun	19:08	3A166	YFT	Departure	12	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Jun	20:04	3A084	ZUI	Arrival	12.9	-	-
19-Jun	20:24	3A185	ZUI	Departure	12.3	-	-
19-Jun	21:01	8S2113	XZM	Arrival	12.2	-	-
19-Jun	21:16	3A169	YFT	Departure	12.4	-	-
19-Jun	22:03	8S522	XZM	Departure	12.5	-	-
20-Jun	08:10	3A061	YFT	Arrival	11.7	-	-
20-Jun	08:19	8S210	XZM	Arrival	12	-	-
20-Jun	10:08	3A062	YFT	Arrival	12.1	-	-
20-Jun	10:32	3A163	YFT	Departure	12.3	-	-
20-Jun	10:40	8S212	XZM	Arrival	12.2	-	-
20-Jun	10:47	3A081	ZUI	Arrival	11.8	-	-
20-Jun	11:17	8S121	XZM	Departure	12.9	-	-
20-Jun	11:21	3A063	YFT	Arrival	12.8	-	-
20-Jun	12:22	3A168	YFT	Departure	12.8	-	-
20-Jun	12:24	3A181	ZUI	Departure	12.7	-	-
20-Jun	12:44	8S215	XZM	Arrival	12	-	-
20-Jun	13:03	3A064	YFT	Arrival	12.6	-	-
20-Jun	13:19	8S123	XZM	Departure	12.1	-	-
20-Jun	13:49	3A082	ZUI	Arrival	11.5	-	-
20-Jun	14:24	3A182	ZUI	Departure	12.3	-	-
20-Jun	14:26	3A164	YFT	Departure	12.7	-	-
20-Jun	15:06	3A065	YFT	Arrival	13	-	-
20-Jun	16:28	3A167	YFT	Departure	13.2	-	-
20-Jun	16:47	8S218	XZM	Arrival	11.7	-	-
20-Jun	16:48	3A083	ZUI	Arrival	12	-	-
20-Jun	17:02	3A067	YFT	Arrival	12.7	-	-
20-Jun	17:09	3A183	ZUI	Departure	13.1	-	-
20-Jun	17:10	8S126	XZM	Departure	12.4	-	-
20-Jun	19:08	3A166	YFT	Departure	11.8	-	-
20-Jun	19:43	3A084	ZUI	Arrival	11.9	-	-
20-Jun	20:08	3A185	ZUI	Departure	12.9	-	-
20-Jun	21:00	8S2113	XZM	Arrival	12.1	-	-
20-Jun	21:09	3A169	YFT	Departure	11.1	-	-
20-Jun	22:05	8S522	XZM	Departure	11.1	-	-
21-Jun	08:15	3A061	YFT	Arrival	11.1	-	-
21-Jun	08:24	8S210	XZM	Arrival	12.5	-	-
21-Jun	10:07	3A062	YFT	Arrival	12.5	-	-
21-Jun	10:26	3A163	YFT	Departure	12.3	-	-
21-Jun	10:39	8S212	XZM	Arrival	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)
21-Jun	10:55	3A081	ZUI	Arrival	13.1	-	-
21-Jun	11:20	3A063	YFT	Arrival	11.7	-	-
21-Jun	11:30	8S121	XZM	Departure	12	-	-
21-Jun	12:24	3A168	YFT	Departure	12.1	-	-
21-Jun	12:32	3A181	ZUI	Departure	13.5	-	-
21-Jun	12:48	8S215	XZM	Arrival	12	-	-
21-Jun	13:01	3A064	YFT	Arrival	11.8	-	-
21-Jun	13:23	8S123	XZM	Departure	12.3	-	-
21-Jun	13:40	3A082	ZUI	Arrival	12.9	-	-
21-Jun	14:22	3A164	YFT	Departure	11.9	-	-
21-Jun	14:26	3A182	ZUI	Departure	12.7	-	-
21-Jun	15:08	3A065	YFT	Arrival	10.8	-	-
21-Jun	16:34	3A167	YFT	Departure	12.7	-	-
21-Jun	16:38	8S218	XZM	Arrival	10.8	-	-
21-Jun	17:07	3A083	ZUI	Arrival	11.8	-	-
21-Jun	17:15	3A067	YFT	Arrival	12.5	-	-
21-Jun	17:22	8S126	XZM	Departure	13	-	-
21-Jun	17:24	3A183	ZUI	Departure	12.8	-	-
21-Jun	19:17	3A166	YFT	Departure	12	-	-
21-Jun	19:50	3A084	ZUI	Arrival	13.1	-	-
21-Jun	20:23	3A185	ZUI	Departure	12.5	-	-
21-Jun	20:56	8S2113	XZM	Arrival	12.1	-	-
21-Jun	21:06	3A169	YFT	Departure	13.3	-	-
21-Jun	22:14	8S522	XZM	Departure	12	-	-
22-Jun	08:15	3A061	YFT	Arrival	12.3	-	-
22-Jun	08:22	8S210	XZM	Arrival	11.4	-	-
22-Jun	10:07	3A062	YFT	Arrival	12	-	-
22-Jun	10:24	3A163	YFT	Departure	11.6	-	-
22-Jun	10:43	3A081	ZUI	Arrival	11.9	-	-
22-Jun	10:47	8S212	XZM	Arrival	11.7	-	-
22-Jun	11:10	8S121	XZM	Departure	12.5	-	-
22-Jun	11:16	3A063	YFT	Arrival	12.2	-	-
22-Jun	12:26	3A181	ZUI	Departure	12.9	-	-
22-Jun	12:39	3A168	YFT	Departure	12.8	-	-
22-Jun	12:56	8S215	XZM	Arrival	12.2	-	-
22-Jun	13:05	3A064	YFT	Arrival	11.9	-	-
22-Jun	13:43	3A082	ZUI	Arrival	13.1	-	-
22-Jun	13:45	8S123	XZM	Departure	13	-	-
22-Jun	14:21	3A164	YFT	Departure	11	-	-

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-Jun	14:24	3A182	ZUI	Departure	12.9	-	-
22-Jun	15:03	3A065	YFT	Arrival	11.8	-	-
22-Jun	16:24	3A167	YFT	Departure	12.5	-	-
22-Jun	16:41	8S218	XZM	Arrival	11.5	<= 5	< 1min
22-Jun	16:45	3A083	ZUI	Arrival	12.7	-	-
22-Jun	17:01	3A067	YFT	Arrival	11.6	-	-
22-Jun	17:11	8S126	XZM	Departure	11.8	-	-
22-Jun	17:16	3A183	ZUI	Departure	13.6	-	-
22-Jun	19:21	3A166	YFT	Departure	13.2	-	-
22-Jun	19:46	3A084	ZUI	Arrival	12.8	-	-
22-Jun	20:21	3A185	ZUI	Departure	13	-	-
22-Jun	21:04	8S2113	XZM	Arrival	12.3	-	-
22-Jun	21:16	3A169	YFT	Departure	11.6	-	-
22-Jun	21:56	8S522	XZM	Departure	12.6	-	-
23-Jun	08:12	3A061	YFT	Arrival	12.9	-	-
23-Jun	08:22	8S210	XZM	Arrival	12.8	-	-
23-Jun	09:57	3A062	YFT	Arrival	12.2	-	-
23-Jun	10:17	3A163	YFT	Departure	12.6	-	-
23-Jun	10:41	8S212	XZM	Arrival	11.9	-	-
23-Jun	10:51	3A081	ZUI	Arrival	11.7	-	-
23-Jun	11:04	8S121	XZM	Departure	12.3	-	-
23-Jun	11:20	3A063	YFT	Arrival	12.9	-	-
23-Jun	12:16	3A168	YFT	Departure	12.4	-	-
23-Jun	12:20	3A181	ZUI	Departure	12.4	-	-
23-Jun	12:46	8S215	XZM	Arrival	11.9	-	-
23-Jun	12:57	3A064	YFT	Arrival	11.8	-	-
23-Jun	13:16	8S123	XZM	Departure	12.6	-	-
23-Jun	13:40	3A082	ZUI	Arrival	13.2	-	-
23-Jun	14:12	3A164	YFT	Departure	12.4	-	-
23-Jun	14:16	3A182	ZUI	Departure	13	-	-
23-Jun	14:56	3A065	YFT	Arrival	12.1	-	-
23-Jun	16:17	3A167	YFT	Departure	13.5	-	-
23-Jun	16:35	8S218	XZM	Arrival	11.9	-	-
23-Jun	16:54	3A083	ZUI	Arrival	11.9	-	-
23-Jun	16:57	3A067	YFT	Arrival	12	-	-
23-Jun	17:10	8S126	XZM	Departure	14	-	-
23-Jun	17:10	3A183	ZUI	Departure	12.9	-	-
23-Jun	19:25	3A166	YFT	Departure	13.7	-	-
23-Jun	19:45	3A084	ZUI	Arrival	12.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Jun	20:27	3A185	ZUI	Departure	12.7	-	-
23-Jun	21:10	8S2113	XZM	Arrival	12.4	-	-
23-Jun	21:20	3A169	YFT	Departure	12.3	-	-
23-Jun	22:12	8S522	XZM	Departure	13	-	-
24-Jun	08:19	3A061	YFT	Arrival	12.3	-	-
24-Jun	08:22	8S210	XZM	Arrival	11.2	-	-
24-Jun	09:56	3A062	YFT	Arrival	11.1	-	-
24-Jun	10:21	3A163	YFT	Departure	13.2	-	-
24-Jun	10:38	8S212	XZM	Arrival	12.5	-	-
24-Jun	10:48	3A081	ZUI	Arrival	11.9	-	-
24-Jun	11:09	8S121	XZM	Departure	12.3	-	-
24-Jun	11:18	3A063	YFT	Arrival	12.2	-	-
24-Jun	12:36	3A168	YFT	Departure	12	-	-
24-Jun	12:41	3A181	ZUI	Departure	12.2	-	-
24-Jun	12:57	8S215	XZM	Arrival	12.1	-	-
24-Jun	13:00	3A064	YFT	Arrival	11	-	-
24-Jun	13:32	8S123	XZM	Departure	12.4	-	-
24-Jun	13:51	3A082	ZUI	Arrival	13.3	-	-
24-Jun	14:18	3A164	YFT	Departure	13	-	-
24-Jun	14:23	3A182	ZUI	Departure	13	-	-
24-Jun	14:57	3A065	YFT	Arrival	11.7	-	-
24-Jun	16:26	3A167	YFT	Departure	13.1	-	-
24-Jun	17:00	8S218	XZM	Arrival	11.7	-	-
24-Jun	17:01	3A083	ZUI	Arrival	12.3	-	-
24-Jun	17:13	3A067	YFT	Arrival	11.9	-	-
24-Jun	17:19	8S126	XZM	Departure	12.5	-	-
24-Jun	17:21	3A183	ZUI	Departure	12.6	-	-
24-Jun	19:18	3A166	YFT	Departure	12.8	-	-
24-Jun	19:57	3A084	ZUI	Arrival	12.8	-	-
24-Jun	20:17	3A185	ZUI	Departure	12.8	-	-
24-Jun	20:49	8S2113	XZM	Arrival	12.4	-	-
24-Jun	21:03	3A169	YFT	Departure	12.5	-	-
24-Jun	21:57	8S522	XZM	Departure	13	-	-
25-Jun	08:17	8S210	XZM	Arrival	11.5	-	-
25-Jun	08:21	3A061	YFT	Arrival	11.1	-	-
25-Jun	09:58	3A062	YFT	Arrival	12.3	-	-
25-Jun	10:34	3A163	YFT	Departure	12.7	-	-
25-Jun	10:39	3A081	ZUI	Arrival	12.7	-	-
25-Jun	10:43	8S212	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)
25-Jun	11:13	8S121	XZM	Departure	12.8	-	-
25-Jun	11:19	3A063	YFT	Arrival	12.6	-	-
25-Jun	12:38	3A168	YFT	Departure	13	-	-
25-Jun	12:44	3A181	ZUI	Departure	12.8	-	-
25-Jun	12:53	8S215	XZM	Arrival	11.8	-	-
25-Jun	13:06	3A064	YFT	Arrival	12.3	-	-
25-Jun	13:19	8S123	XZM	Departure	11.4	-	-
25-Jun	13:41	3A082	ZUI	Arrival	13	-	-
25-Jun	14:24	3A182	ZUI	Departure	12.8	-	-
25-Jun	14:27	3A164	YFT	Departure	12.4	-	-
25-Jun	15:04	3A065	YFT	Arrival	12.5	<= 5	< 1min
25-Jun	16:33	3A167	YFT	Departure	12.3	-	-
25-Jun	16:53	8S218	XZM	Arrival	11.8	-	-
25-Jun	16:57	3A083	ZUI	Arrival	12	-	-
25-Jun	17:11	3A067	YFT	Arrival	12	-	-
25-Jun	17:20	3A183	ZUI	Departure	12.1	-	-
25-Jun	17:32	8S126	XZM	Departure	12.1	-	-
25-Jun	19:12	3A166	YFT	Departure	12.7	-	-
25-Jun	19:49	3A084	ZUI	Arrival	12.7	-	-
25-Jun	20:28	3A185	ZUI	Departure	12.9	-	-
25-Jun	21:22	8S2113	XZM	Arrival	11.8	-	-
25-Jun	21:41	3A169	YFT	Departure	12.6	-	-
25-Jun	22:25	8S522	XZM	Departure	11.6	-	-
26-Jun	08:14	3A061	YFT	Arrival	12.4	-	-
26-Jun	08:18	8S210	XZM	Arrival	13.1	-	-
26-Jun	10:00	3A062	YFT	Arrival	11.8	-	-
26-Jun	10:18	3A163	YFT	Departure	11.3	-	-
26-Jun	10:28	3A081	ZUI	Arrival	13.2	-	-
26-Jun	10:38	8S212	XZM	Arrival	12.6	-	-
26-Jun	11:12	8S121	XZM	Departure	11.5	-	-
26-Jun	11:19	3A063	YFT	Arrival	12.3	-	-
26-Jun	12:16	3A168	YFT	Departure	12.3	-	-
26-Jun	12:19	3A181	ZUI	Departure	13.1	-	-
26-Jun	12:43	8S215	XZM	Arrival	12.1	-	-
26-Jun	12:59	3A064	YFT	Arrival	11.4	-	-
26-Jun	13:16	8S123	XZM	Departure	12.5	-	-
26-Jun	13:50	3A082	ZUI	Arrival	12.3	-	-
26-Jun	14:23	3A164	YFT	Departure	11.4	-	-
26-Jun	14:24	3A182	ZUI	Departure	12.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Jun	15:01	3A065	YFT	Arrival	12.4	-	-
26-Jun	16:20	3A167	YFT	Departure	12.8	-	-
26-Jun	16:41	8S218	XZM	Arrival	10.2	-	-
26-Jun	16:43	3A083	ZUI	Arrival	13	-	-
26-Jun	16:57	3A067	YFT	Arrival	11.3	-	-
26-Jun	16:59	8S126	XZM	Departure	12.7	-	-
26-Jun	17:04	3A183	ZUI	Departure	13.5	-	-
26-Jun	19:08	3A166	YFT	Departure	11.7	-	-
26-Jun	19:34	3A084	ZUI	Arrival	12.8	-	-
26-Jun	20:25	3A185	ZUI	Departure	12.9	-	-
26-Jun	20:53	8S2113	XZM	Arrival	11.8	-	-
26-Jun	21:16	3A169	YFT	Departure	12.7	-	-
27-Jun	08:16	3A061	YFT	Arrival	13.1	-	-
27-Jun	08:20	8S210	XZM	Arrival	12.7	-	-
27-Jun	10:04	3A062	YFT	Arrival	12.4	-	-
27-Jun	10:22	3A163	YFT	Departure	12.2	-	-
27-Jun	10:35	8S212	XZM	Arrival	11.2	-	-
27-Jun	10:51	3A081	ZUI	Arrival	11.4	-	-
27-Jun	11:13	8S121	XZM	Departure	10.8	-	-
27-Jun	11:20	3A063	YFT	Arrival	12.4	-	-
27-Jun	12:21	3A168	YFT	Departure	12.2	-	-
27-Jun	12:25	3A181	ZUI	Departure	12.7	-	-
27-Jun	12:48	8S215	XZM	Arrival	11.7	-	-
27-Jun	12:55	3A064	YFT	Arrival	12.4	-	-
27-Jun	13:22	8S123	XZM	Departure	12.3	-	-
27-Jun	13:46	3A082	ZUI	Arrival	12.8	-	-
27-Jun	14:23	3A164	YFT	Departure	12	-	-
27-Jun	14:24	3A182	ZUI	Departure	12.1	-	-
27-Jun	15:02	3A065	YFT	Arrival	12.2	-	-
27-Jun	16:23	3A167	YFT	Departure	12.9	-	-
27-Jun	16:53	8S218	XZM	Arrival	11.3	-	-
27-Jun	16:59	3A083	ZUI	Arrival	12	-	-
27-Jun	17:05	3A067	YFT	Arrival	12	-	-
27-Jun	17:11	8S126	XZM	Departure	12.8	-	-
27-Jun	17:15	3A183	ZUI	Departure	12.4	-	-
27-Jun	19:18	3A166	YFT	Departure	13.2	-	-
27-Jun	19:43	3A084	ZUI	Arrival	11.3	-	-
27-Jun	20:17	3A185	ZUI	Departure	13.6	-	-
27-Jun	21:09	8S2113	XZM	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)
27-Jun	21:37	3A169	YFT	Departure	12.6	-	-
28-Jun	08:17	3A061	YFT	Arrival	11.8	-	-
28-Jun	08:25	8S210	XZM	Arrival	11.4	-	-
28-Jun	10:01	3A062	YFT	Arrival	12	-	-
28-Jun	10:19	3A163	YFT	Departure	11.5	-	-
28-Jun	10:35	8S212	XZM	Arrival	11.9	-	-
28-Jun	10:41	3A081	ZUI	Arrival	12.2	-	-
28-Jun	11:06	8S121	XZM	Departure	13.1	-	-
28-Jun	11:13	3A063	YFT	Arrival	12.4	-	-
28-Jun	12:11	3A181	ZUI	Departure	12.5	-	-
28-Jun	12:25	3A168	YFT	Departure	11.3	-	-
28-Jun	12:40	8S215	XZM	Arrival	12.3	-	-
28-Jun	12:53	3A064	YFT	Arrival	11.9	-	-
28-Jun	13:21	8S123	XZM	Departure	12	-	-
28-Jun	13:40	3A082	ZUI	Arrival	12.7	-	-
28-Jun	14:24	3A164	YFT	Departure	11.5	-	-
28-Jun	14:26	3A182	ZUI	Departure	12.7	-	-
28-Jun	14:54	3A065	YFT	Arrival	12.4	-	-
28-Jun	16:23	3A167	YFT	Departure	12.5	-	-
28-Jun	16:38	8S218	XZM	Arrival	12.1	-	-
28-Jun	16:40	3A083	ZUI	Arrival	13.1	-	-
28-Jun	17:04	3A067	YFT	Arrival	11.4	-	-
28-Jun	17:04	8S126	XZM	Departure	12.5	-	-
28-Jun	17:04	3A183	ZUI	Departure	11.9	-	-
28-Jun	19:06	3A166	YFT	Departure	12.6	-	-
28-Jun	19:48	3A084	ZUI	Arrival	12.6	-	-
28-Jun	20:12	3A185	ZUI	Departure	11.8	-	-
28-Jun	20:54	8S2113	XZM	Arrival	11	-	-
28-Jun	21:21	3A169	YFT	Departure	13	-	-
28-Jun	22:00	8S522	XZM	Departure	11.6	-	-
29-Jun	08:17	3A061	YFT	Arrival	11.3	-	-
29-Jun	08:23	8S210	XZM	Arrival	12	-	-
29-Jun	09:49	3A062	YFT	Arrival	12.5	-	-
29-Jun	10:27	3A163	YFT	Departure	12.4	-	-
29-Jun	10:31	3A081	ZUI	Arrival	12.6	-	-
29-Jun	10:40	8S212	XZM	Arrival	12	-	-
29-Jun	11:07	8S121	XZM	Departure	12.3	-	-
29-Jun	11:17	3A063	YFT	Arrival	11.7	-	-
29-Jun	12:25	3A181	ZUI	Departure	13.2	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
29-Jun	12:26	3A168	YFT	Departure	11.4	-	-
29-Jun	12:40	8S215	XZM	Arrival	11.4	-	-
29-Jun	12:52	3A064	YFT	Arrival	12.4	-	-
29-Jun	13:13	8S123	XZM	Departure	11.7	-	-
29-Jun	13:36	3A082	ZUI	Arrival	13.8	-	-
29-Jun	14:22	3A164	YFT	Departure	12.2	-	-
29-Jun	14:28	3A182	ZUI	Departure	12	-	-
29-Jun	15:03	3A065	YFT	Arrival	11.7	-	-
29-Jun	16:20	3A167	YFT	Departure	11.2	-	-
29-Jun	16:33	3A083	ZUI	Arrival	12.2	-	-
29-Jun	16:50	8S218	XZM	Arrival	11	-	-
29-Jun	16:55	3A067	YFT	Arrival	12.1	-	-
29-Jun	17:10	3A183	ZUI	Departure	12.9	-	-
29-Jun	17:24	8S126	XZM	Departure	12	-	-
29-Jun	19:26	3A166	YFT	Departure	13.7	-	-
29-Jun	19:37	3A084	ZUI	Arrival	11.6	-	-
29-Jun	20:27	3A185	ZUI	Departure	12.6	-	-
29-Jun	21:07	8S2113	XZM	Arrival	12.5	-	-
29-Jun	21:24	3A169	YFT	Departure	12.9	-	-
29-Jun	22:00	8S522	XZM	Departure	12.5	-	-
30-Jun	08:13	3A061	YFT	Arrival	11.5	-	-
30-Jun	08:21	8S210	XZM	Arrival	12	-	-
30-Jun	09:56	3A062	YFT	Arrival	12.9	-	-
30-Jun	10:30	3A163	YFT	Departure	12.9	-	-
30-Jun	10:30	3A081	ZUI	Arrival	12.4	-	-
30-Jun	10:44	8S212	XZM	Arrival	11.1	-	-
30-Jun	11:12	8S121	XZM	Departure	11	-	-
30-Jun	11:20	3A063	YFT	Arrival	12.1	-	-
30-Jun	12:25	3A168	YFT	Departure	11.5	-	-
30-Jun	12:27	3A181	ZUI	Departure	12.5	-	-
30-Jun	12:43	8S215	XZM	Arrival	12.5	-	-
30-Jun	12:53	3A064	YFT	Arrival	13.1	-	-
30-Jun	13:19	8S123	XZM	Departure	12.9	-	-
30-Jun	14:00	3A082	ZUI	Arrival	12.5	-	-
30-Jun	14:23	3A164	YFT	Departure	12.7	-	-
30-Jun	14:24	3A182	ZUI	Departure	12	-	-
30-Jun	14:52	3A065	YFT	Arrival	12.2	-	-
30-Jun	16:19	3A167	YFT	Departure	12.6	-	-
30-Jun	16:44	3A083	ZUI	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)
30-Jun	16:45	8S218	XZM	Arrival	11.1	-	-
30-Jun	17:01	3A067	YFT	Arrival	12.9	-	-
30-Jun	17:17	8S126	XZM	Departure	12.5	-	-
30-Jun	17:19	3A183	ZUI	Departure	11.8	-	-
30-Jun	19:10	3A166	YFT	Departure	12.7	-	-
30-Jun	19:36	3A084	ZUI	Arrival	11.8	-	-
30-Jun	20:26	3A185	ZUI	Departure	12.7	-	-
30-Jun	21:12	8S2113	XZM	Arrival	10.9	-	-
30-Jun	21:31	3A169	YFT	Departure	11.9	-	-
30-Jun	22:06	8S522	XZM	Departure	10.9	-	-

** Insufficient or no AIS data for speed calculation.

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in June 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 9 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 avoiding debris. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.

One HSF with no transmission of AIS data was received in June 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.