MOTT MACDONALD

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

Construction Phase Monthly EM&A Report No.42 (For June 2019)

July 2019

Airport Authority Hong Kong

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This Monthly EM&A Report No. 42 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 12 July 2019

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By Email

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

Attn: Mr. Lawrence Tsui, Principal Manager

12 July 2019

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 42 (June 2019)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 42 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 12 July 2019.

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

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

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

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

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

Executive Summary

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

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

This is the 42nd 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 2019.

Key Activities in the Reporting Period

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

EM&A Activities Conducted in the Reporting Period

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

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	30
Noise monitoring	16
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	3

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on information including ET's observations, records of 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

		
Training and QA/QC Check of Surveyors by CWD Experts	Land-Based Theodolite Tracking Survey for CWD at Lung Kwu Chau	Cleaning Along the Seawall Conducted by Contractor

Results of Impact Monitoring

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

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

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

Summary of Upcoming Key Issues

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

DCM Works:

Contract 3201 and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works;
- Subgrade compaction and paving works;

- Drainage construction works;
- Operation of aggregate mixing facility; and
- Precast of duct bank and fabrication of steel works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Site survey and cable laying; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Site establishment;
- Installation of sheet and pipe piles; and
- Manhole and pipe construction works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

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

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

- Site clearance; and
- Painting and fitting out works.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

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

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

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

Summary Table

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

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

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

1 Introduction

1.1 Background

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

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

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

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

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

1.2 Scope of this Report

This is the 42nd 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 2019.

1.3 Project Organisation

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

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

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Advanced Works:

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

Deep Cement Mixing (DCM) Works:

Party	Position	Name	Telephone
Contract 3201 DCM (Package 1) (Penta-Ocean-China State-Dong-Ah Joint Venture)	Project Director	Tsugunari Suzuki	9178 9689
	Environmental Officer	Hiu Yeung Tang	6329 3513
Contract 3202 DCM (Package 2) (Samsung-BuildKing Joint Venture)	Project Manager	Ilkwon Nam	9643 3117
Contract 3203 DCM (Package 3) (Sambo E&C Co., Ltd)	Project Manager	Eric Kan	9014 6758
Contract 3204 DCM (Package 4) (CRBC-SAMBO Joint Venture)	Project Manager	Kyung-Sik Yoo	9683 8697
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	Lawrence Chan	5107 5961

Reclamation Works:

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

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Nelson Tam	9721 3942
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Wan Cheung Lee	6100 6075
	Environmental Officer	Wilmer Ng	3919 9421
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Pan Fong	9436 9435

Third Runway Concourse and Integrated Airport Centres Works:

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

Terminal 2 (T2) Expansion Works:

Party	Position	Name	Telephone
Contract 3501 Antenna Farm and Sewage Pumping Station (Build King Construction Ltd.)	Project Manager	Vincent Kwan	9833 1313
	Environmental Officer	Edward Tam	9287 8270
Contract 3502 Terminal 2 APM Depot Modification Works (Build King Construction Ltd.)	Project Manager	David Ng	9010 7871
	Environmental Officer	Chun Pong Chan	9187 7118

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Stephen Tsang	5508 6361

Automated People Mover (APM) Works:

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

Baggage Handling System (BHS) Works:

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

Airport Support Infrastructure and Logistic Works:

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

1.4 Summary of Construction Works

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

The locations of key construction activities are presented in **Figure 1.1**. Latest layout of the enhanced silt curtain deployed is presented in **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 to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going

Parameters	Status
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:

- Nine environmental management meetings for EM&A review with works contracts: 6, 12, 21, 25, 26, 27, and 28 June 2019

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

2 Air Quality Monitoring

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

Table 2.1: Locations of Impact Air Quality Monitoring Stations

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

2.1 Action and Limit Levels

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

Table 2.2: Action and Limit Levels of Air Quality Monitoring

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

2.2 Monitoring Equipment

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

Table 2.3: Air Quality Monitoring Equipment

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

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

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

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

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

2.3.2 Maintenance and Calibration

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

2.4 Summary of Monitoring Results

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

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

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	9 – 41	306	500
AR2	10 – 39	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 four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

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

Note:

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

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

3.1 Action and Limit Levels

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

Table 3.2: Action and Limit Levels for Noise Monitoring

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

Note:

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

3.2 Monitoring Equipment

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

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	NTi XL2-M2211 (Microphone Serial No.7681; Capsule Serial No.72079)	28 Aug 2018	Monthly EM&A Report No. 36, Appendix E
	Rion NL-52 (Serial No. 01287679)	6 Feb 2019	Monthly EM&A Report No. 39, Appendix D
Acoustic Calibrator	Castle GA607 (Serial No. 040162)	7 Aug 2018	Monthly EM&A Report No. 35, Appendix D
	Casella CEL-120/1 (Serial No. 2383737)	17 Oct 2018	

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

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

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

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

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

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

3.4 Summary of Monitoring Results

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

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

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30\ mins)}$	Limit Level, dB(A) $L_{eq\ (30\ mins)}$
NM1A(1)	72 – 73	75
NM4(1)	63 – 64	70(2)
NM5(1)	53 – 62	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 and Territory-wide System Assessment (TSA) took place from 1 to 6 June and from 11 to 12 June in this reporting period respectively.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A, school activities near NM4, aircraft and helicopter noise near NM5 and NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

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

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

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

Monitoring Station	Description	Coordinates		Parameters
SR5A	San Tau Beach SSSI	810696	816593	
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)	811623	820390	

Notes:

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

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

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

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

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

4.1 Action and Limit Levels

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

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

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

Notes:

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

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

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

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

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

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

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2(1)	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, 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. 00019CB2)	27 Mar 2019 (1)	Monthly EM&A Report No. 39, Appendix D
	YSI ProDSS (Serial No. 17H105557)	30 Apr 2019	Monthly EM&A Report No. 41, Appendix D
	YSI ProDSS (Serial No. 16H104233)	30 Apr 2019	
	YSI ProDSS (Serial No. 16H104234)	30 Apr 2019	
	YSI ProDSS (Serial No. 17E100747)	25 Jun 2019	**Appendix E**
	YSI ProDSS (Serial No. 15M100005)	25 Jun 2019	
Digital Titrator (measurement of total alkalinity)	Titrette Digital Burette 50ml Class A (Serial No. 10N65665)	20 May 2019	Monthly EM&A Report No. 41, Appendix D

Note:

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

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

Table 4.5: Other Monitoring Equipment

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

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

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

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

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

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

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

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

4.3.3 Laboratory Measurement / Analysis

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

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

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

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**. Due to adverse weather and thunderstorm warning in force, the general water quality monitoring and regular DCM monitoring session during mid-ebb tide on 13 June 2019 was cancelled.

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

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

Table 4.7 to **Table 4.10** present summaries of the DO compliance status at IM and SR stations during mid-ebb and mid-flood tide for the reporting period.

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

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/06/2019																		
04/06/2019																		
06/06/2019																		
08/06/2019																		
11/06/2019																		
15/06/2019											D	D						D
18/06/2019																		
20/06/2019																		
22/06/2019																		
25/06/2019																		
27/06/2019		D																
29/06/2019																		
No. of result triggering Action or Limit Level	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1

Table 4.8: Summary of DO (Bottom) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/06/2019																		
04/06/2019																		
06/06/2019																		
08/06/2019																		
11/06/2019																		
15/06/2019																		
18/06/2019																		
20/06/2019																		
22/06/2019																		
25/06/2019																		
27/06/2019			D	D							D	D			D	D		D
29/06/2019											D	D						D
No. of result triggering Action or Limit Level	0	0	1	1	0	1	0	0	0	0	2	2	0	2	1	1	0	2

Table 4.9: Summary of DO (Surface and Middle) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/06/2019																		
04/06/2019																		
06/06/2019																		
08/06/2019																		
11/06/2019																		
13/06/2019																		
15/06/2019																		
18/06/2019																		
20/06/2019																		
22/06/2019																		
25/06/2019																		
27/06/2019																		
29/06/2019																		
No. of result triggering Action or Limit Level	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Table 4.10: Summary of DO (Bottom) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6	SR7
01/06/2019																		
04/06/2019																		
06/06/2019																		
08/06/2019																		
11/06/2019																		
13/06/2019																		
15/06/2019																		
18/06/2019																		
20/06/2019																		
22/06/2019																		
25/06/2019					D	D												
27/06/2019																		
29/06/2019																		
No. of result triggering Action or Limit Level	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0

Note: Detailed results are presented in **Appendix D**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	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 four monitoring days. Repeat measurement were conducted on 16, 25, 28, and 30 June 2019 respectively according to the Manual. Some cases occurred at monitoring stations upstream of the Project during respective tide and would unlikely be affected by the Project. Investigation was therefore focused on cases that occurred at monitoring station located downstream of the Project. Details of the Project's marine construction activities and site observations on the concerned monitoring days were collected. The findings are summarized in **Table 4.11**.

Table 4.11: Summary of Findings from Investigation of DO Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
15/06/2019	Marine filling and DCM works	Around 2 km	Localised and enhanced silt curtain deployed	No	No	No
25/06/2019	Marine filling and DCM works	Around 500m	Localised and enhanced silt curtain deployed	No	No	No
27/06/2019	Marine filling and DCM works	Around 500m	Localised and enhanced silt curtain deployed	No	No	No
29/06/2019	Marine filling and DCM works	Around 2 km	Localised and enhanced silt curtain deployed	No	No	No

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

On 15 June 2019, it was noted that the DO concentration recorded at control station C2 was lower than that at the downstream impact and sensitive receiver stations IM11, IM12, and SR7. This suggested the presence of external sources that may affect DO concentrations around the Project area.

On 25 June 2019, it was found that DO exceedances were also recorded at upstream impact stations IM2, IM3, and IM4, which were unlikely to be affected by Project activities. IM5 and IM6 were located downstream of these stations and were potentially influenced by these external sources. With no silt plume observed at the monitoring stations and mitigation measures implemented properly, the cases recorded at these impact stations were considered not caused by the Project.

On 27 and 29 June 2019, it was found that the DO concentration at some of the impact and sensitive receiver stations (namely IM3, IM4, IM11, IM12, SR5A, and SR7) were higher than that recorded at their respective control station C1 or C2. The DO concentration at IM2, IM3, IM4, SR4A, and SR7 were also within their corresponding baseline ranges during baseline monitoring of the Project. With no silt plume observed at the monitoring stations and mitigation measures implemented properly, the cases recorded at these impact and sensitive receiver stations were considered not caused by the Project.

Table 4.12 presents a summary of the Nickel compliance status at IM stations during mid-ebb tide for the reporting period

Table 4.12: Summary of Nickel Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/06/2019												
04/06/2019												
06/06/2019												
08/06/2019												
11/06/2019											D	
15/06/2019												
18/06/2019												
20/06/2019												
22/06/2019												
25/06/2019												
27/06/2019												
29/06/2019												
No. of result triggering Action or Limit Level	0	0	0	0	0	0	0	0	0	0	1	0

Table 4.13 presents a summary of the Nickel compliance status at IM stations during mid-flood tide for the reporting period

Table 4.13: Summary of Nickel Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12
01/06/2019												
04/06/2019												
06/06/2019												
08/06/2019												
11/06/2019								D				
13/06/2019												
15/06/2019												
18/06/2019												
20/06/2019												
22/06/2019												
25/06/2019												
27/06/2019												
29/06/2019												
No. of result triggereing Action or Limit Level	0	0	0	0	0	0	0	1	0	0	0	0

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

Nickel monitoring results triggered the corresponding Action and Limit Level on 11 June 2019. Details of the Project's marine construction activities on the concerned monitoring day was collected and findings are summarized in **Table 4.14**.

Table 4.14: Summary of Findings from Investigation of Nickel Monitoring Results

Date	Marine construction works nearby	Approximate distance between nearest marine construction works and concerned monitoring stations	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
11/6/2019	Marine filling and DCM works	Around 1 km	Localised and enhanced silt curtain deployed	No	No	No

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

Nickel is a representative heavy metal that indicates the potential for release of contaminants from contaminated mud pits due to the disturbance of marine sediment within it by DCM activities. Elevated nickel concentration due to these activities should be associated with similar elevated SS levels. The SS results at IM8 and IM11 were within the Action and Limit Levels and they were located 1.5km and 2km away from the closest active DCM barge respectively. These indicate that active DCM works had limited influence on water quality when monitoring were conducted at these monitoring stations. The nickel concentration recorded at IM8 was also within the baseline range during baseline monitoring of the Project. Considering that no silt plume was observed at the monitoring stations and mitigation measures were implemented properly, the cases recorded at these impact stations were considered not caused by the Project.

4.5 Conclusion

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

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

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

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

5 Waste Management

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

5.1 Action and Limit Levels

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

Table 5.1: Action and Limit Levels for Construction Waste

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

5.2 Waste Management Status

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

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

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

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

Table 5.2: Construction Waste Statistics

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (L)	General Refuse (tonne)
May 2019[2][3]	13,616	*10,284	0	5,617	230	18,000	242
June 2019[3]	9,690	4,166	0	5,570	150	15,400	354

Notes:

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

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

(3) Metals, paper and/or plastics 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 should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual. Supplemental theodolite tracking survey of one additional day has also been conducted at LKC, i.e. in total twice per month at the LKC station.

6.1 Action and Limit Levels

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

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

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

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

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

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

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

Waypoint	Easting	Northing	Waypoint	Easting	Northing
		NEL			
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NWL			
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
		AW			
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		WL			
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
		SWL			
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462

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

6.2.2 Land-based Theodolite Tracking Survey

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

Table 6.3: Land-based Theodolite Survey Station Details

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

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

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

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

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

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

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

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

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

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

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

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

6.3.2 Photo Identification

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

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

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

6.3.3 Land-based Theodolite Tracking Survey

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

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3 km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the

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

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

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 4, 6, 11, 17, 18, 19, 26 and 27 June 2019, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

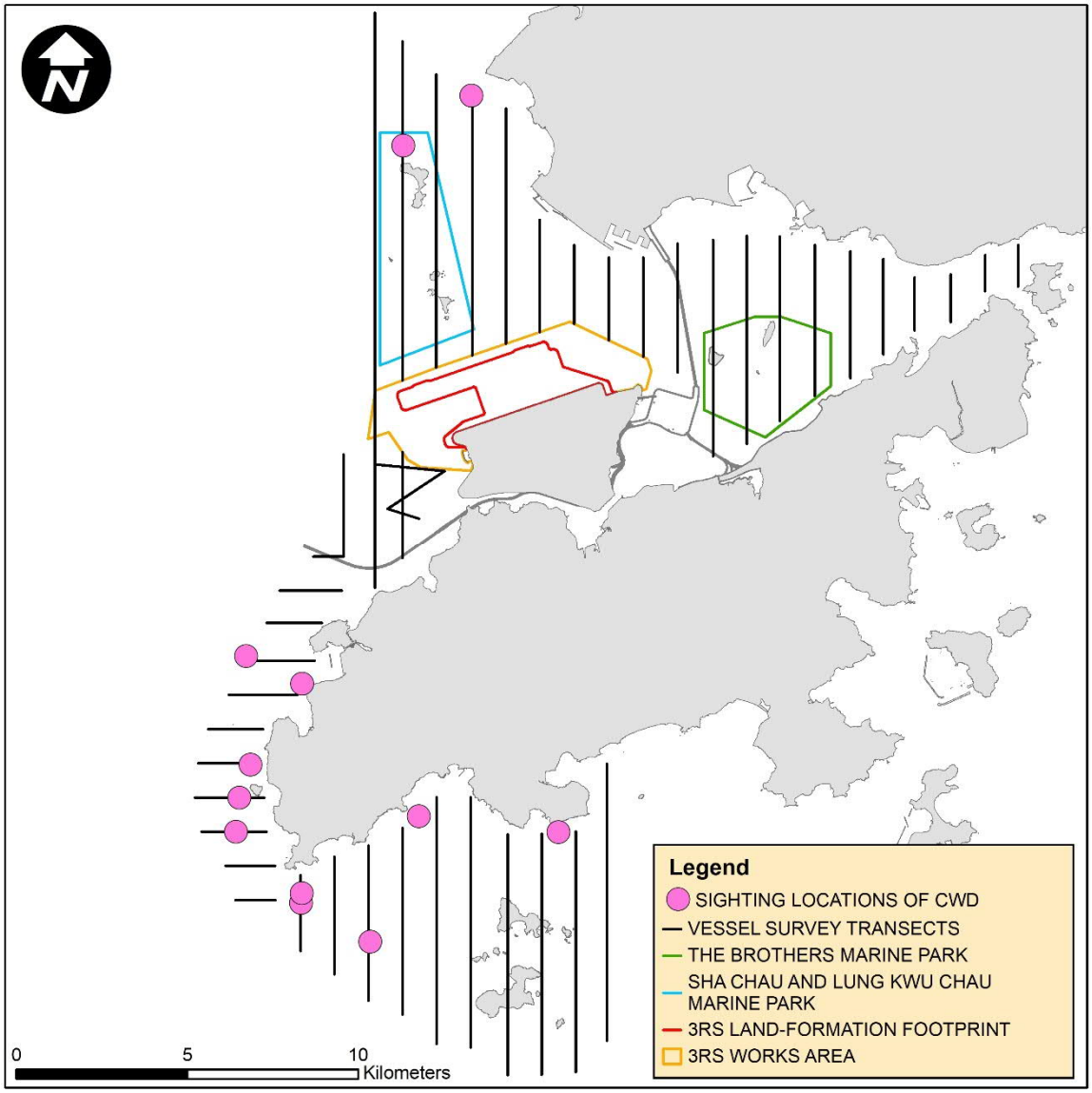
A total of around 457.38 km of survey effort was collected from these surveys, with around 86.9% of the total survey effort being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In June 2019, 12 sightings with 40 dolphins were sighted. Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in June 2019 is illustrated in **Figure 6.3**. In NWL, CWD sightings were recorded near Black Point and at the northern waters of Lung Kwu Chau respectively. In WL, CWD sightings were recorded from Tai O to Peaked Hill. In SWL, CWD sightings was scattered from the coastal water near Fan Lau to the coastal water near Lo Kei Wan. No sightings of CWD were recorded in NEL or in close vicinity to 3RS Works Area.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from June 2019. 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 2019, a total of around 397.40 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 12 on-effort sightings with 40 dolphins were sighted under such condition. Calculation of the encounter rates in June 2019 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from April 2019 to June 2019), a total of around 1281.10 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 35 on-effort sightings and a total number of 135 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of June 2019 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI did not trigger Action Level.

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

	Encounter Rate (STG)	Encounter Rate (ANI)
June 2019	3.02	10.07
Running Quarter from April 2019 to June 2019(1)	2.73	10.54
Action Level	Running quarterly(1) STG < 1.86 & ANI < 9.35	

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

Group Size

In June 2019, 12 groups with 40 dolphins were sighted, and the average group size of CWDs was 3.3 dolphins per group. The number of sightings with medium group size (i.e. 3.-9 dolphins) is slightly higher than that with small group size (i.e. 1-2 dolphins). No CWD sightings with large group size (i.e. 10 or more dolphins) were recorded in June 2019.

Activities and Association with Fishing Boats

Six sightings of CWDs were recorded engaging in feeding activities in June 2019 in NWL, WL and SWL survey areas. One CWD sighting was observed in association with operating purse seiner in SWL.

Mother-calf Pair

In June 2019, there were three sightings of CWD with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In June 2019, a total number of 20 different CWD individuals were identified for totally 21 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM019	19-Jun-19	1	NWL
NLMM021	19-Jun-19	1	NWL
NLMM027	19-Jun-19	1	NWL
NLMM034	26-Jun-19	1	WL
NLMM046	26-Jun-19	1	WL
NLMM070	26-Jun-19	1	WL
SLMM011	18-Jun-19	2	SWL
SLMM025	26-Jun-19	2	WL
SLMM028	18-Jun-19	1	SWL
WLMM027	18-Jun-19	2	SWL
WLMM043	6-Jun-19	2	WL
	26-Jun-19	1	WL
WLMM052	26-Jun-19	1	WL
WLMM068	6-Jun-19	1	WL
WLMM073	26-Jun-19	2	WL
WLMM078	18-Jun-19	2	SWL
WLMM079	18-Jun-19	3	SWL
WLMM083	6-Jun-19	2	WL
WLMM122	26-Jun-19	1	WL
WLMM131	6-Jun-19	3	WL
WLMM138	6-Jun-19	2	WL

6.4.3 Land-based Theodolite Tracking Survey

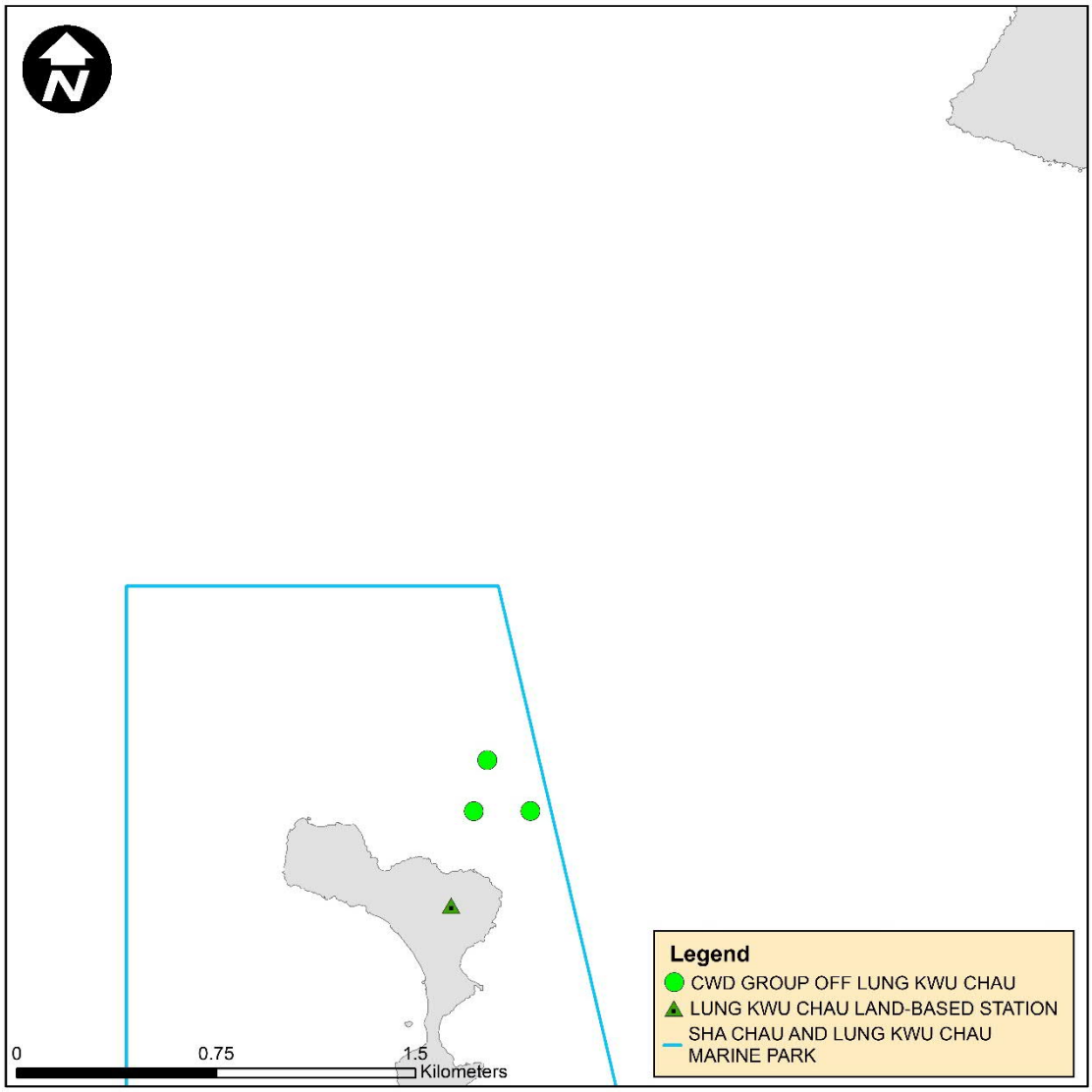
Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 5 and 21 June 2019 and at SC on 18 June 2019, with a total of three days of land-based theodolite tracking survey effort accomplished in this reporting period. Three CWD groups were tracked at LKC station during the surveys. Information of survey effort and CWD groups sighted during these land-based theodolite tracking surveys are presented in **Table 6.6**. Details of the survey effort and CWD groups tracked are presented in **Appendix D**. The first sighting locations of CWD groups tracked at LKC station during land-based theodolite tracking surveys in June 2019 were depicted in **Figure 6.4**. No CWD group was sighted from SC station in this reporting month.

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

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	2	12:00	3	0.25
Sha Chau	1	6:00	0	0
TOTAL	**3**	**18:00**	**3**	**0.17**

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



6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was remained underwater and positioned at south of Sha Chau Island inside the SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialized team of acousticians) involved manually browsing through every acoustic recording and logging the occurrence of dolphin signals. All data will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 4 to 14 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM works, 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 677 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection. Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

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

6.8 Summary of CWD Monitoring

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

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

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

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

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

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

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

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

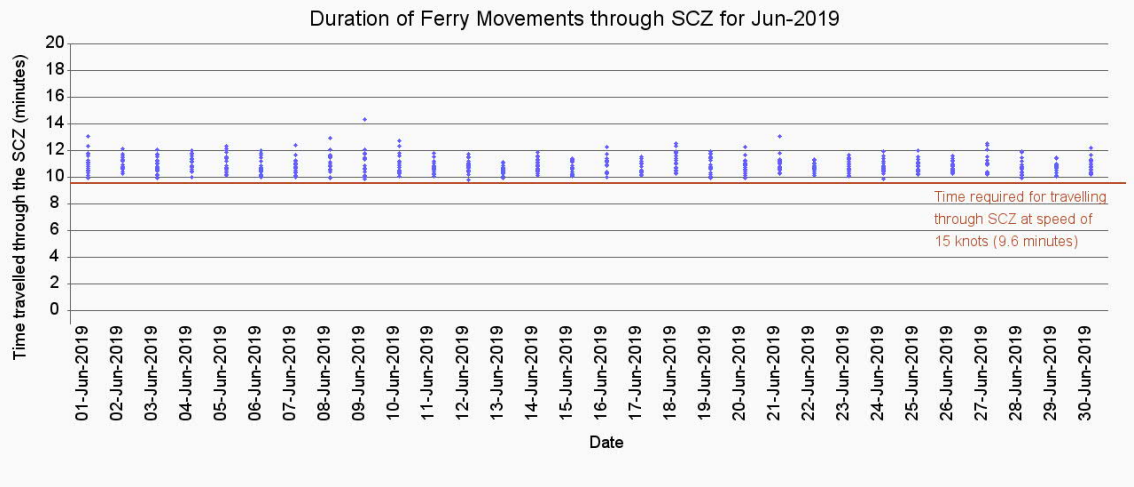
7.2 Audit of SkyPier High Speed Ferries

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

Key audit findings for the SkyPier HSFs travelling to/from Zhuhai and Macau against the requirements of the SkyPier Plan during the reporting period are summarized in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 82 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, 630 ferry movements between HKIA SkyPier and Zhuhai / Macau were recorded in June 2019 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in June 2019 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

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



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

A total of two ferries were recorded with minor route deviations on 10 and 17 June 2019. Notices were sent to the ferry operators and the cases are under investigation by ET.

As reported in the Construction Phase Monthly EM&A Report No. 41, two ferries were recorded with minor route deviation cases on 11 and 20 May 2019. ET's investigation found that all the deviations were due to giving way to vessels in order to avoid collision.

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

Requirements in the SkyPier Plan	1 to 30 June 2019
Total number of ferry movements recorded and audited	630
Use diverted route and enter / leave SCZ through Gate Access Points	2 deviations
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 9.5 to 13.9 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	82 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:

- Skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Three skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET.
- In this reporting period, no skippers were trained by ET and four skippers were trained by contractors' Environmental Officers. In total, 1155 skippers were trained from August 2016 to June 2019.
- The Marine Surveillance System (MSS) automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

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

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

7.5 Status of Submissions under Environmental Permits

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

Table 7.2: Status of Submissions under Environmental Permit

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

7.6 Compliance with Other Statutory Environmental Requirements

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

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

7.7.1 Complaints

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

7.7.2 Notifications of Summons or Status of Prosecution

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

7.7.3 Cumulative Statistics

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

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

8.1 Construction Programme for the Coming Reporting Period

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

Advanced Works:

Contract P560 (R) Aviation Fuel Pipeline Diversion Works

- Stockpiling of compressed materials

DCM Works:

Contract 3201 and 3205 DCM Works

- DCM works

Reclamation Works:

Contract 3206 Main Reclamation Works

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

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

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

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Site survey and cable laying; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Site establishment.

Third Runway Concourse and Integrated Airport Centres Works:

Contract 3402 New Integrated Airport Centres Enabling Works

- Site establishment;
- Installation of sheet and pipe piles; and
- Manhole and pipe construction works.

Terminal 2 Expansion Works:

Contract 3501 Antenna Farm and Sewage Pumping Station

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

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

- Site clearance; and
- Painting and fitting out works.

Contract 3503 Terminal 2 Foundation and Substructure Works

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

Automated People Mover (APM) Works:

Contract 3602 Existing APM System Modification Works

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

Airport Support Infrastructure & Logistic Works:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

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

8.2 Key Environmental Issues for the Coming Reporting Period

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

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

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

8.3 Monitoring Schedule for the Coming Reporting Period

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

8.4 Review of the Key Assumptions Adopted in the EIA Report

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

9 Conclusion and Recommendation

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

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

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

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

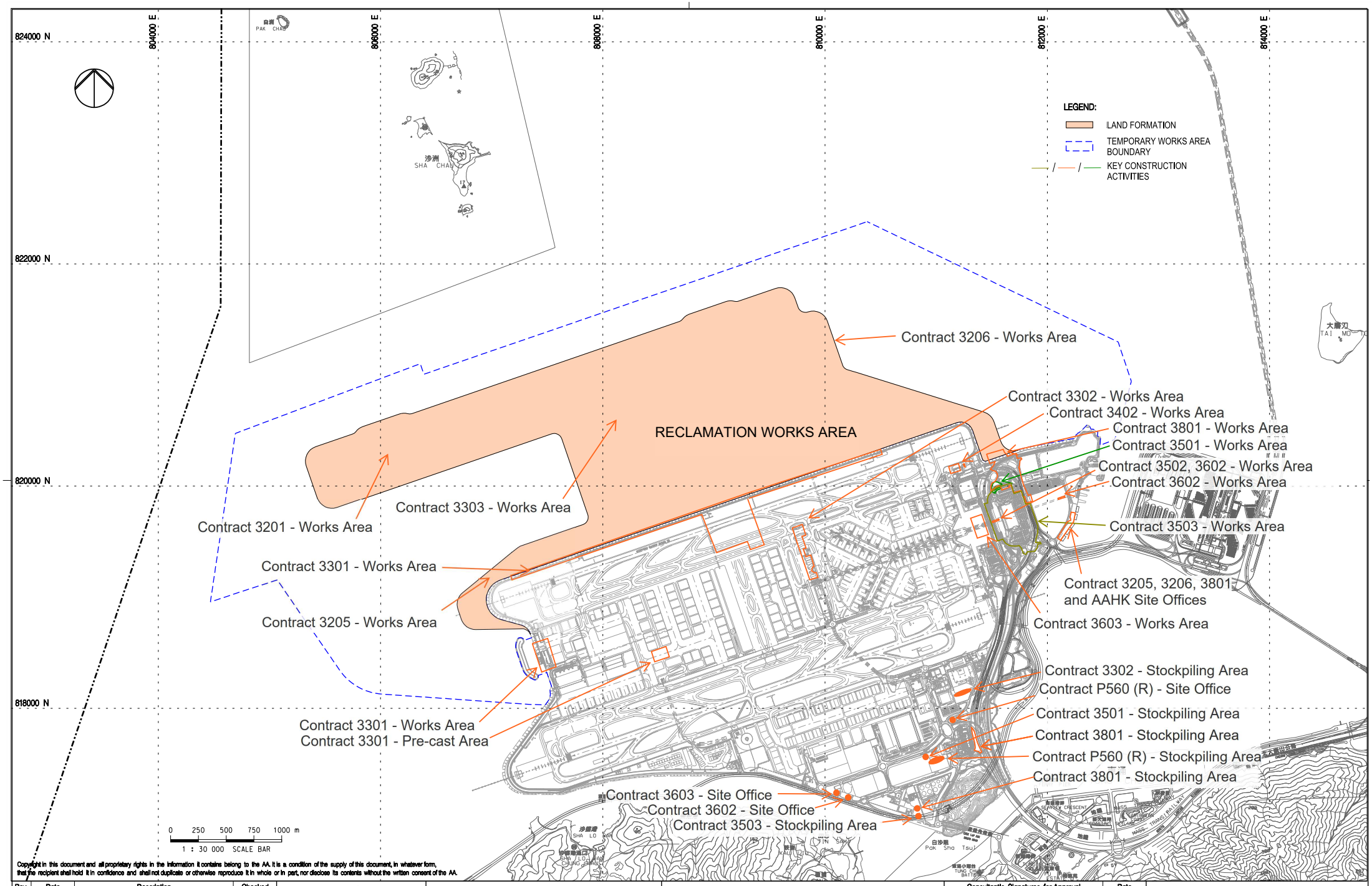
Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection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

On the implementation of the SkyPier Plan, the daily movements of all SkyPier HSFs in June 2019 were in the range of 82 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 630 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 9.5 to 13.9 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. Two deviations from the diverted route in June 2019 were recorded in the HSF monitoring and are under investigation by the ET. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

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

Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures



Rev.	Date	Description	Checked
A	31AUG15	FIRST ISSUE	DC

HONG KONG INTERNATIONAL AIRPORT

Mott MacDonald

Title: LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

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

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

Drawing No. FIGURE 1.1

Scale at A3 1 : 30000

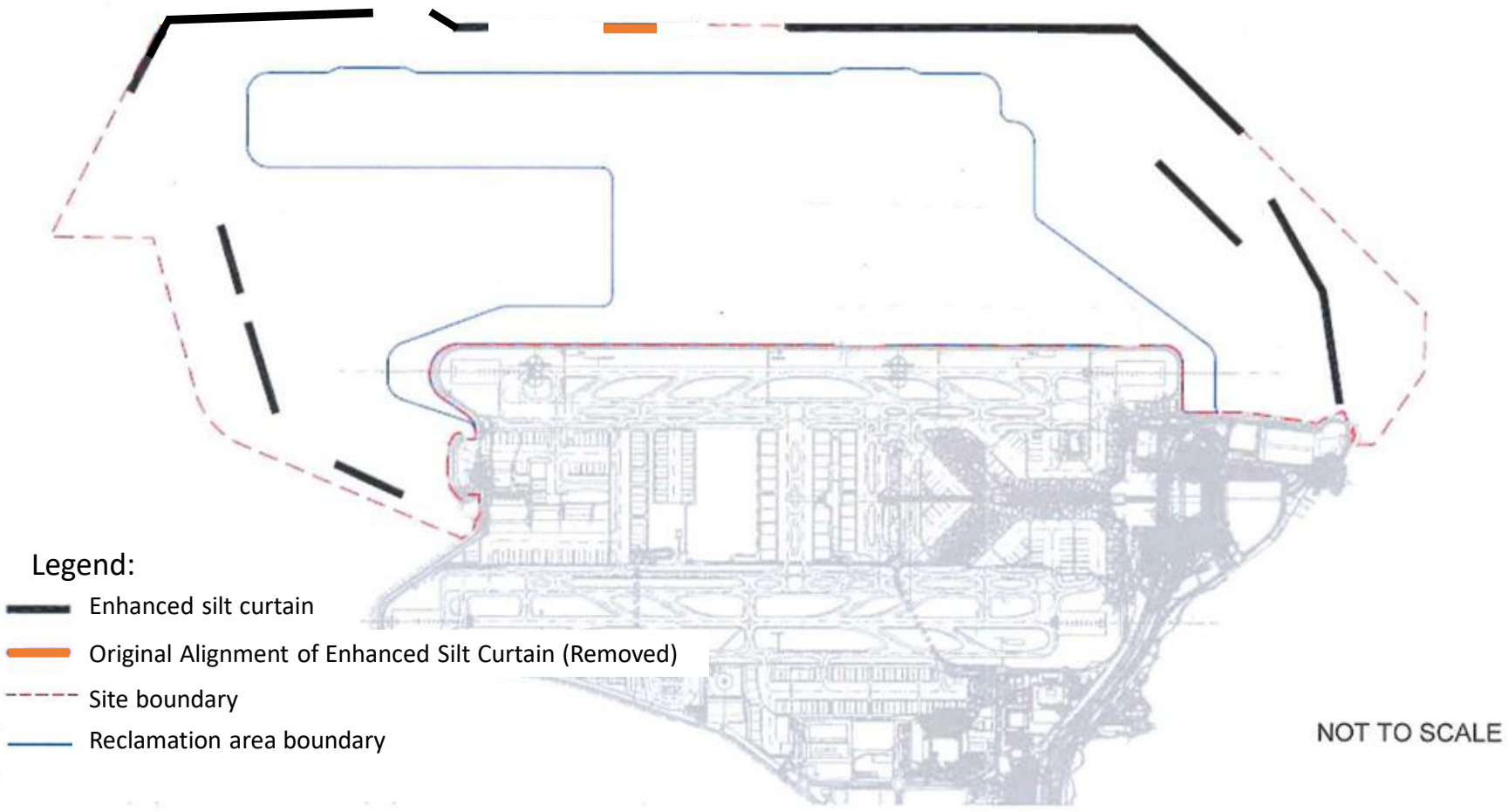
Rev. A

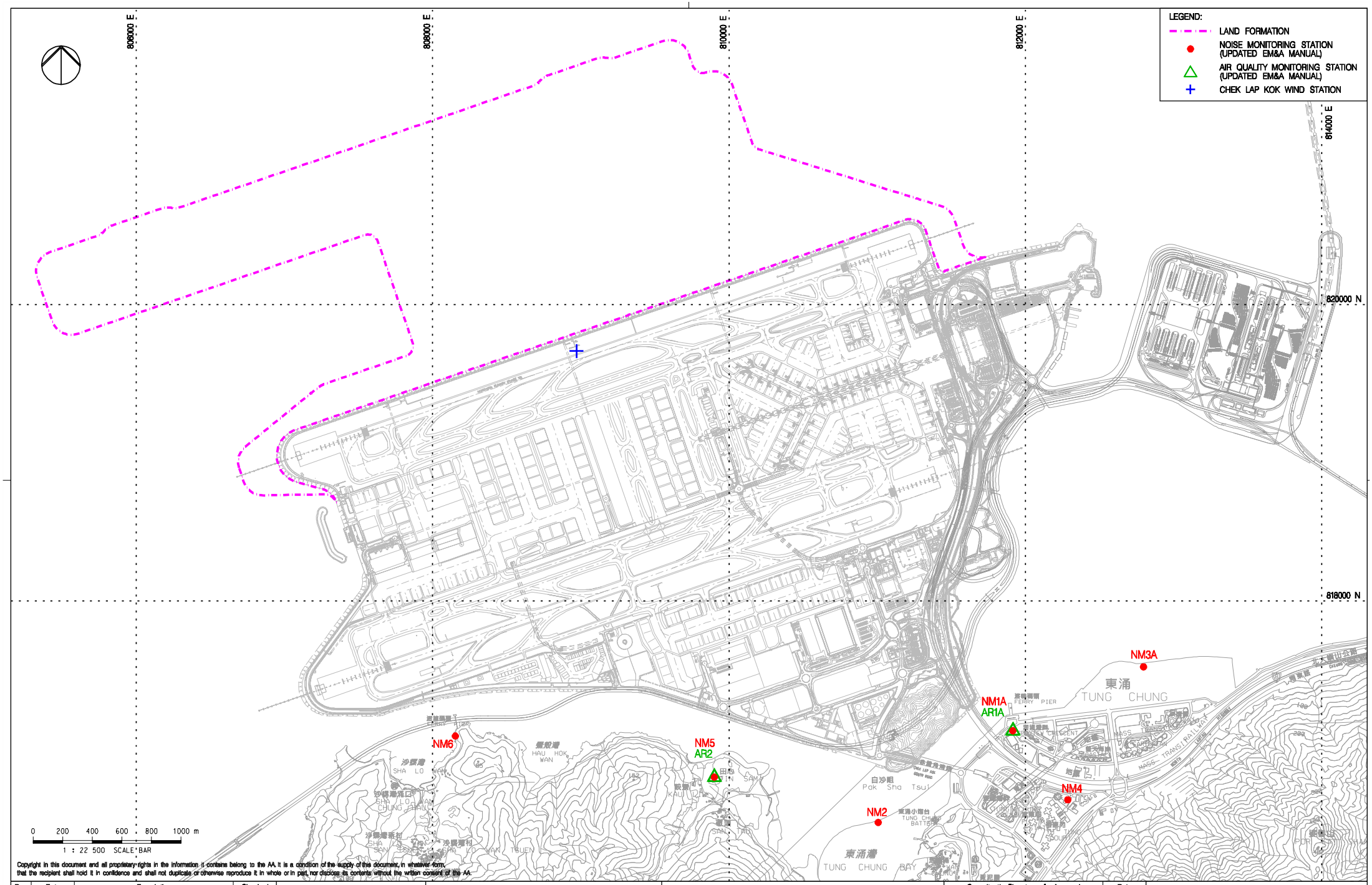
Filename: J:\355482\REPORT\ENV\CWSLP\FIG 1.dgn

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

Figure 1.2

Latest Layout of the Enhanced Silt Curtain





Rev.	Date	Description	Checked
A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
C	11FEB16	GENERAL REVISION	RO
D	29OCT18	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

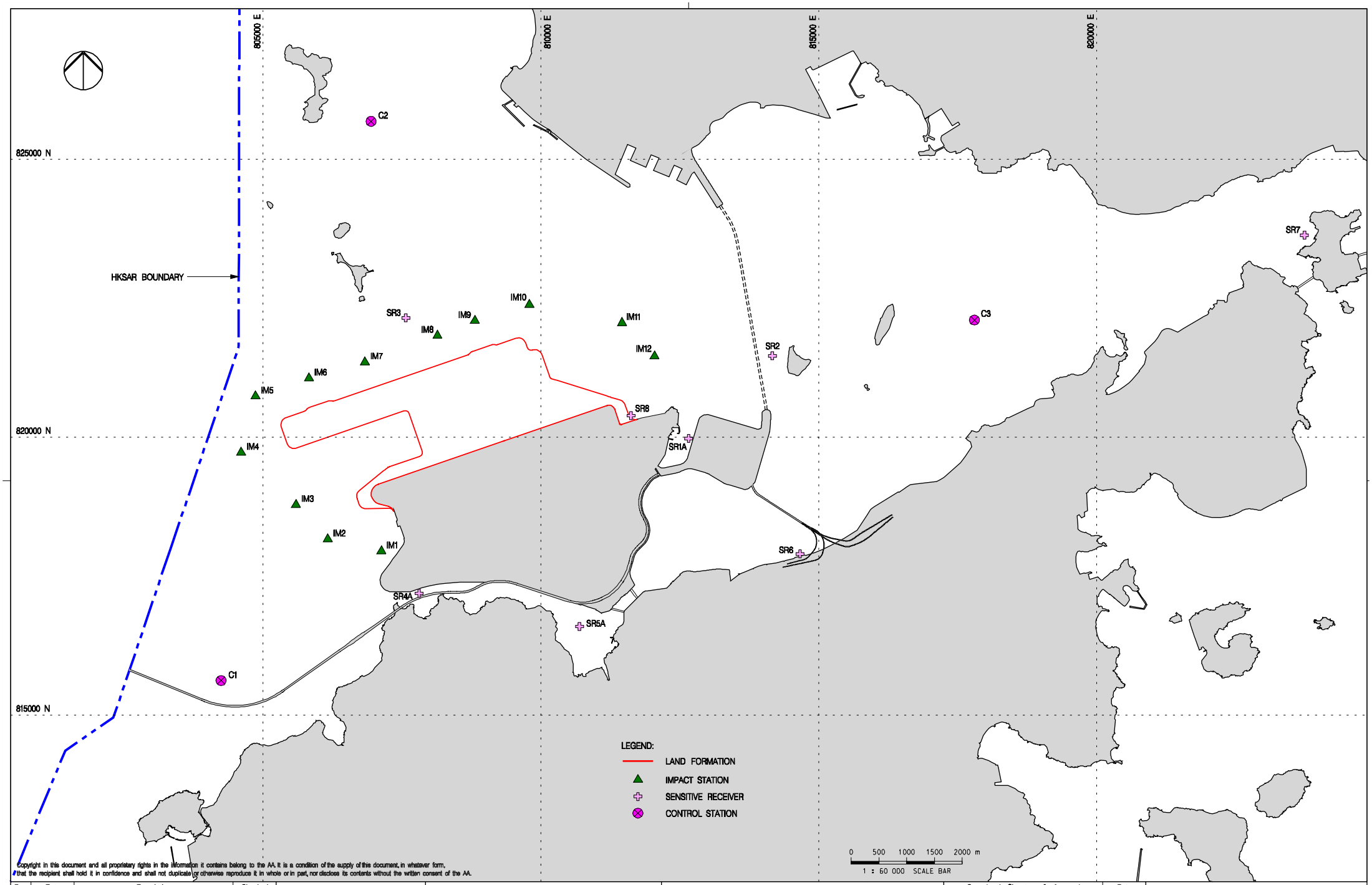
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

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



Rev.	Date	Description	Checked
A	25MAY17	FIRST ISSUE	HY
B	07AUG17	GENERAL REVISION	JL
C	25MAY18	GENERAL REVISION	SH
D	29OCT18	GENERAL REVISION	SH
E	23JAN19	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

WATER QUALITY MONITORING STATIONS

Consultant's Signatures for Approval		Date
Design	DC	23JAN19
Checkers	DC / TK	23JAN19
Approver	EC	23JAN19

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

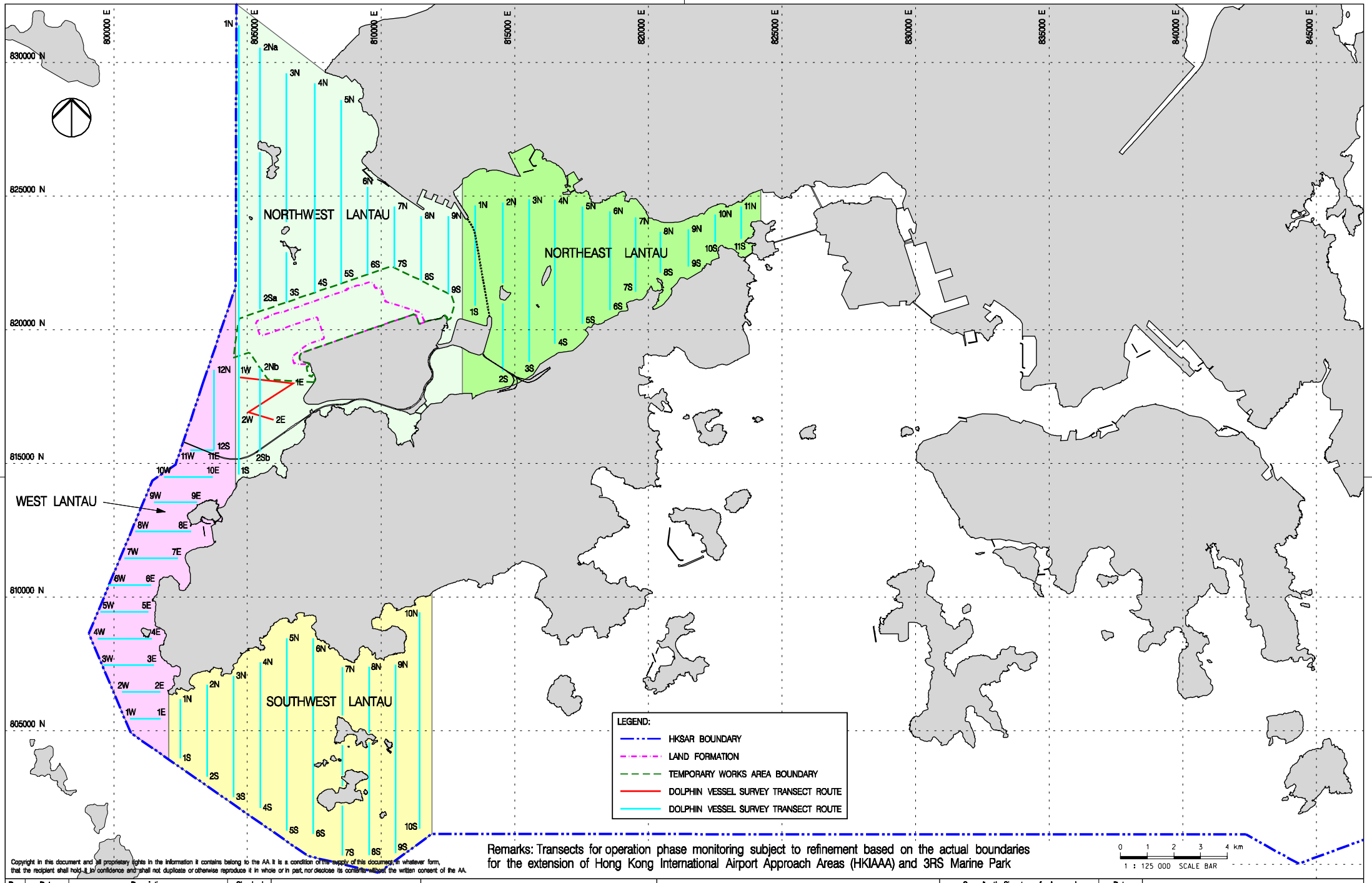
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. E

Filename: J:\355482\REPORT\ENV\EMA\190123\FIG 2.2.dgn



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

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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

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

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

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

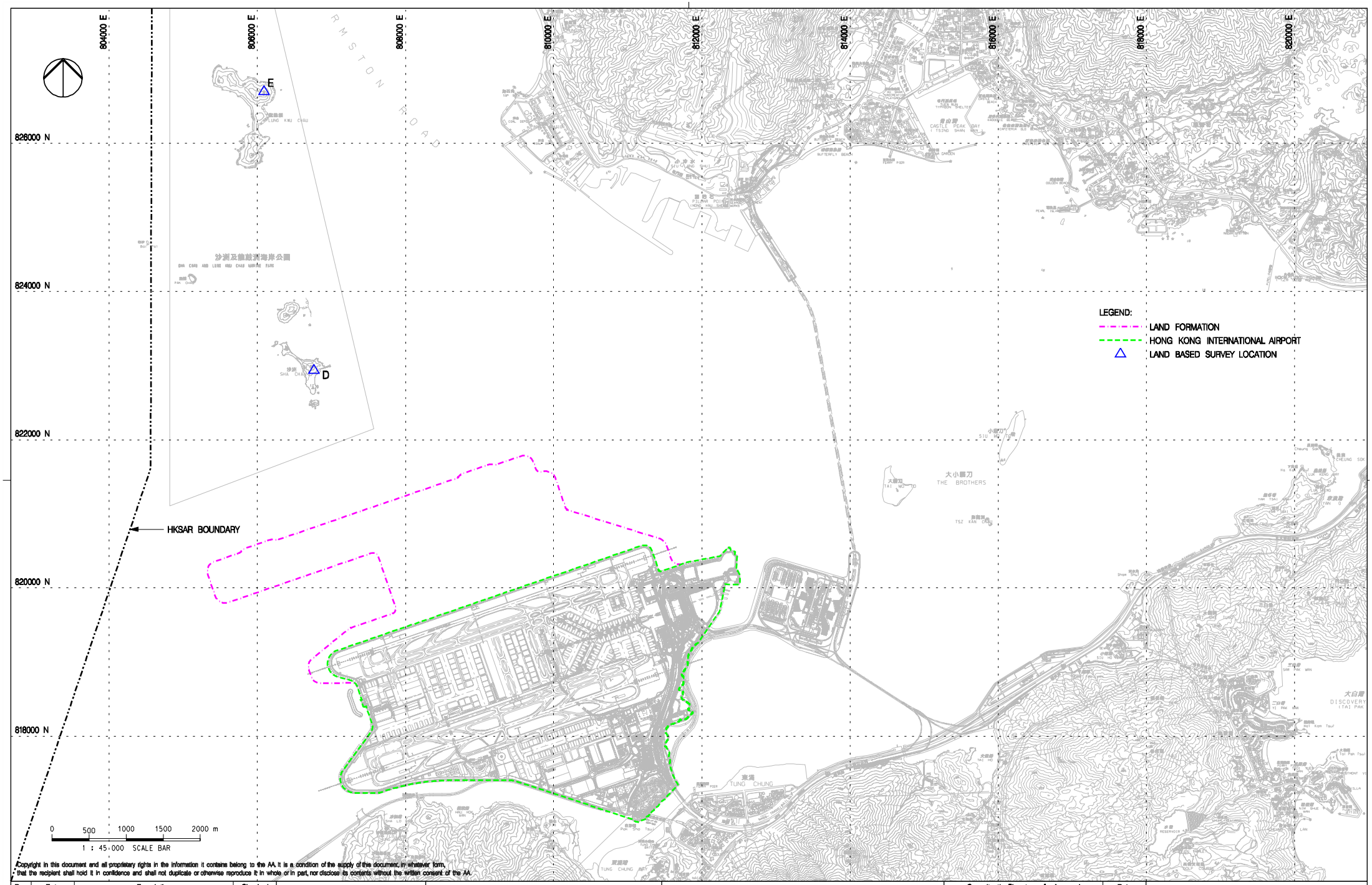
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

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



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

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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

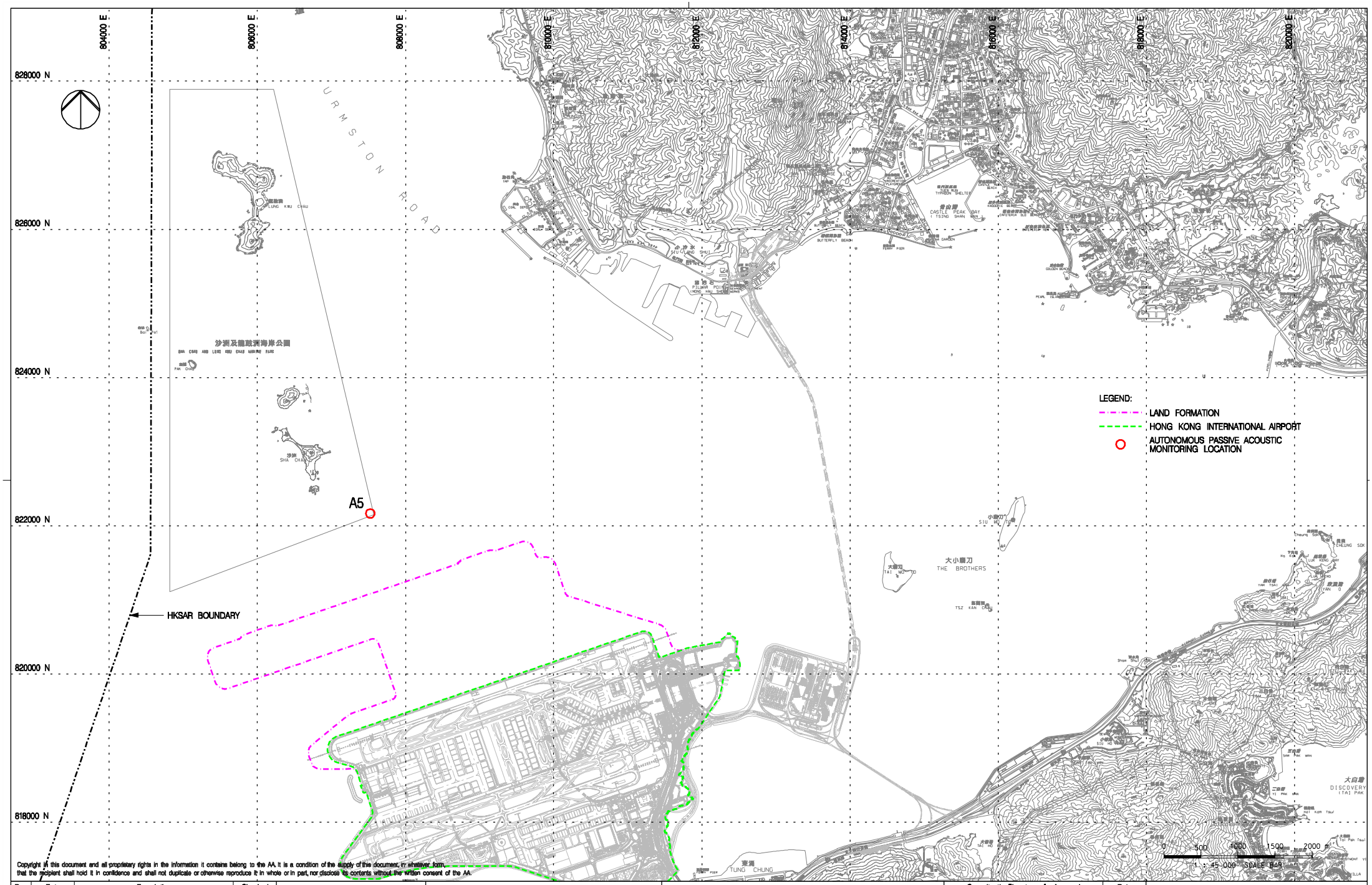
EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No. FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

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



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B	10OCT17	GENERAL REVISION	PL
C	29OCT18	GENERAL REVISION	SH

香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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

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

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

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

Appendix A. Contract Description

Contract Description

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

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

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

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

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

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Notes:

I= implemented where applicable;

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

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

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jun-19

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 WQ General & Regular DCM mid-ebb: 11:53 mid-flood: 18:15
2	**3** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**4** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:38 mid-flood: 06:45	**5** Site Inspection CWD Survey (Land-based)	**6** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:04 mid-flood: 07:59	**7**	**8** AR1A, AR2 WQ General & Regular DCM mid-ebb: 16:43 mid-flood: 09:31
9	**10**	**11** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 08:19 mid-flood: 13:43	**12** Site Inspection NM4, NM6	**13** Site Inspection WQ General & Regular DCM* mid-ebb: 10:16 mid-flood: 16:22	**14** Site Inspection AR1A, AR2 NM1A, NM5	**15** WQ General & Regular DCM mid-ebb: 11:43 mid-flood: 18:33
16	**17** CWD Survey (Vessel)	**18** Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 13:42 mid-flood: 06:43	**19** Site Inspection CWD Survey (Vessel) NM4, NM6	**20** Site Inspection AR1A, AR2 NM1A, NM5 WQ General & Regular DCM mid-ebb: 14:59 mid-flood: 07:54	**21** Site Inspection CWD Survey (Land-based)	**22** WQ General & Regular DCM mid-ebb: 16:13 mid-flood: 09:09
23	**24**	**25** Site Inspection NM4, NM6 WQ General & Regular DCM mid-ebb: 18:25 mid-flood: 12:02	**26** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A,NM5	**27** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 09:24 mid-flood: 14:48	**28** Site Inspection	**29** WQ General & Regular DCM mid-ebb: 10:44 mid-flood: 17:09
30		**Notes:** CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan *Mid-ebb tide session cancelled due to adverse weather and thunderstorm warning in force.				

Tentative Monitoring Schedule of Next Reporting Period

Jul-19

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 12:41 mid-flood: 05:39	3 Site Inspection	4 Site Inspection WQ General & Regular DCM mid-ebb: 14:09 mid-flood: 07:05	5 Site Inspection	6 WQ General & Regular DCM mid-ebb: 15:44 mid-flood: 08:41
7	8 CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	9 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 18:31 mid-flood: 12:01	10 Site Inspection CWD Survey (Vessel)	11 Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 08:47 mid-flood: 15:01	12 Site Inspection CWD Survey (Land-based)	13 AR1A, AR2 WQ General & Regular DCM mid-ebb: 10:42 mid-flood: 17:45
14	15 CWD Survey (Land-based)	16 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 12:48 mid-flood: 05:45	17 Site Inspection CWD Survey (Vessel)	18 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 14:04 mid-flood: 07:01	19 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	20 WQ General & Regular DCM mid-ebb: 15:12 mid-flood: 08:17
21	22 CWD Survey (Vessel)	23 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 16:53 mid-flood: 10:26	24 Site Inspection	25 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 18:30 mid-flood: 12:41	26 Site Inspection	27 WQ General & Regular DCM mid-ebb: 09:08 mid-flood: 15:45
28	29	30 Site Inspection WQ General & Regular DCM mid-ebb: 11:37 mid-flood: 18:49	31 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6			

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

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

WQ - Water Quality
DCM - Deep Cement Mixing

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

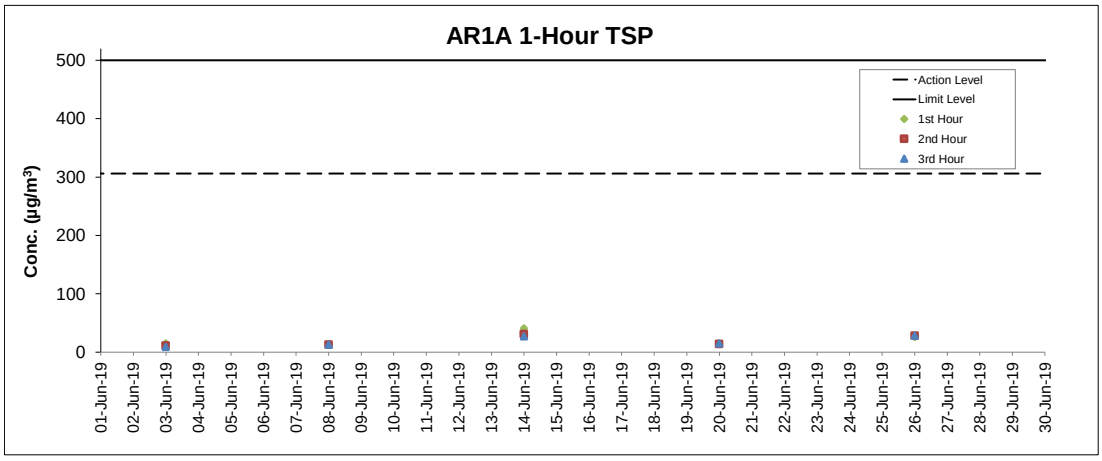
Station: AR1A- Man Tung Road Park

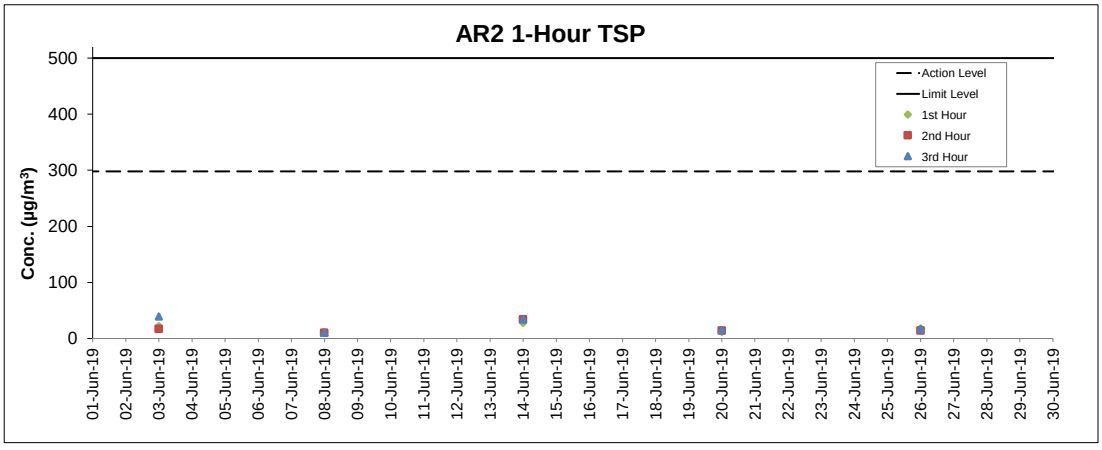
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
03-Jun-19	14:28	Sunny	7.7	224	15	306	500
03-Jun-19	15:28	Sunny	7.4	230	11	306	500
03-Jun-19	16:28	Sunny	6.8	232	9	306	500
08-Jun-19	14:54	Sunny	7.5	226	14	306	500
08-Jun-19	15:54	Sunny	7.1	227	13	306	500
08-Jun-19	16:54	Sunny	7.5	230	13	306	500
14-Jun-19	14:15	Sunny	4.2	275	41	306	500
14-Jun-19	15:15	Sunny	4.5	286	31	306	500
14-Jun-19	16:15	Sunny	4.8	323	27	306	500
20-Jun-19	14:11	Sunny	7.0	238	14	306	500
20-Jun-19	15:11	Sunny	6.8	229	14	306	500
20-Jun-19	16:11	Sunny	6.3	198	15	306	500
26-Jun-19	14:12	Cloudy	3.8	248	26	306	500
26-Jun-19	15:12	Cloudy	4.5	222	28	306	500
26-Jun-19	16:12	Cloudy	3.6	45	28	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
03-Jun-19	9:24	Sunny	6.3	210	22	298	500
03-Jun-19	10:24	Sunny	5.3	216	17	298	500
03-Jun-19	11:24	Sunny	5.4	226	39	298	500
08-Jun-19	9:09	Sunny	4.6	203	11	298	500
08-Jun-19	10:09	Sunny	6.8	225	10	298	500
08-Jun-19	11:09	Sunny	7.6	224	10	298	500
14-Jun-19	9:31	Sunny	2.6	343	28	298	500
14-Jun-19	10:31	Sunny	4.6	335	34	298	500
14-Jun-19	11:31	Sunny	3.3	320	34	298	500
20-Jun-19	9:19	Sunny	4.3	199	12	298	500
20-Jun-19	10:19	Sunny	5.4	238	14	298	500
20-Jun-19	11:19	Sunny	5.0	236	15	298	500
26-Jun-19	9:27	Cloudy	2.3	289	18	298	500
26-Jun-19	10:27	Cloudy	3.1	280	14	298	500
26-Jun-19	11:27	Cloudy	4.5	238	17	298	500





Notes

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

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jun-19	Sunny	14:39	71.9	59.3	73
03-Jun-19	Sunny	14:44	74.4	62.5	
03-Jun-19	Sunny	14:49	73.1	59.9	
03-Jun-19	Sunny	14:54	74.0	61.1	
03-Jun-19	Sunny	14:59	73.5	63.1	
03-Jun-19	Sunny	15:04	72.8	61.4	
14-Jun-19	Sunny	14:34	73.2	59.6	73
14-Jun-19	Sunny	14:39	73.6	61.4	
14-Jun-19	Sunny	14:44	72.8	59.1	
14-Jun-19	Sunny	14:49	73.2	58.4	
14-Jun-19	Sunny	14:54	71.2	57.3	
14-Jun-19	Sunny	14:59	72.2	58.0	
20-Jun-19	Sunny	16:23	73.3	55.4	72
20-Jun-19	Sunny	16:28	70.3	54.6	
20-Jun-19	Sunny	16:33	72.5	55.4	
20-Jun-19	Sunny	16:38	73.4	54.6	
20-Jun-19	Sunny	16:43	73.7	54.5	
20-Jun-19	Sunny	16:48	71.4	54.4	
26-Jun-19	Cloudy	15:28	72.1	54.6	72
26-Jun-19	Cloudy	15:33	73.1	55.9	
26-Jun-19	Cloudy	15:38	72.6	55.4	
26-Jun-19	Cloudy	15:43	72.9	54.7	
26-Jun-19	Cloudy	15:48	72.1	55.3	
26-Jun-19	Cloudy	15:53	72.5	55.4	

Remarks:

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

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jun-19	Sunny	15:48	62.2	58.8	64
03-Jun-19	Sunny	15:53	61.6	58.6	
03-Jun-19	Sunny	15:58	61.8	59.5	
03-Jun-19	Sunny	16:03	61.7	59.1	
03-Jun-19	Sunny	16:08	61.4	59.1	
03-Jun-19	Sunny	16:13	63.6	59.3	
12-Jun-19	Cloudy	16:55	61.1	56.7	63
12-Jun-19	Cloudy	17:00	61.1	57.4	
12-Jun-19	Cloudy	17:05	60.0	56.9	
12-Jun-19	Cloudy	17:10	60.5	57.0	
12-Jun-19	Cloudy	17:15	62.6	58.0	
12-Jun-19	Cloudy	17:20	62.8	58.7	
19-Jun-19	Sunny	11:06	61.9	59.0	63
19-Jun-19	Sunny	11:11	61.4	58.3	
19-Jun-19	Sunny	11:16	61.4	58.6	
19-Jun-19	Sunny	11:21	62.4	58.4	
19-Jun-19	Sunny	11:26	61.1	58.1	
19-Jun-19	Sunny	11:31	61.4	58.0	
25-Jun-19	Cloudy	11:01	67.0	61.9	64
25-Jun-19	Cloudy	11:06	67.2	63.5	
25-Jun-19	Cloudy	11:11	67.2	63.5	
25-Jun-19	Cloudy	11:16	66.8	62.9	
25-Jun-19	Cloudy	11:21	66.8	63.6	
25-Jun-19	Cloudy	11:26	67.4	64.6	

Remarks:

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

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jun-19	Sunny	09:29	53.1	46.5	61
03-Jun-19	Sunny	09:34	54.8	46.2	
03-Jun-19	Sunny	09:39	63.3	47.5	
03-Jun-19	Sunny	09:44	59.4	52.9	
03-Jun-19	Sunny	09:49	63.1	58.9	
03-Jun-19	Sunny	09:54	61.7	58.8	
14-Jun-19	Sunny	09:37	55.2	48.2	62
14-Jun-19	Sunny	09:42	59.6	48.5	
14-Jun-19	Sunny	09:47	56.3	48.8	
14-Jun-19	Sunny	09:52	56.7	48.3	
14-Jun-19	Sunny	09:57	67.9	50.2	
14-Jun-19	Sunny	10:02	60.7	51.4	
20-Jun-19	Sunny	09:34	51.5	45.4	59
20-Jun-19	Sunny	09:39	49.9	43.7	
20-Jun-19	Sunny	09:44	64.8	44.0	
20-Jun-19	Sunny	09:49	56.6	46.1	
20-Jun-19	Sunny	09:54	58.0	56.1	
20-Jun-19	Sunny	09:59	57.1	54.4	
26-Jun-19	Cloudy	09:29	58.3	56.0	53
26-Jun-19	Cloudy	09:34	57.2	54.4	
26-Jun-19	Cloudy	09:39	57.2	50.9	
26-Jun-19	Cloudy	09:44	55.8	50.0	
26-Jun-19	Cloudy	09:49	61.1	50.6	
26-Jun-19	Cloudy	09:54	51.3	47.5	

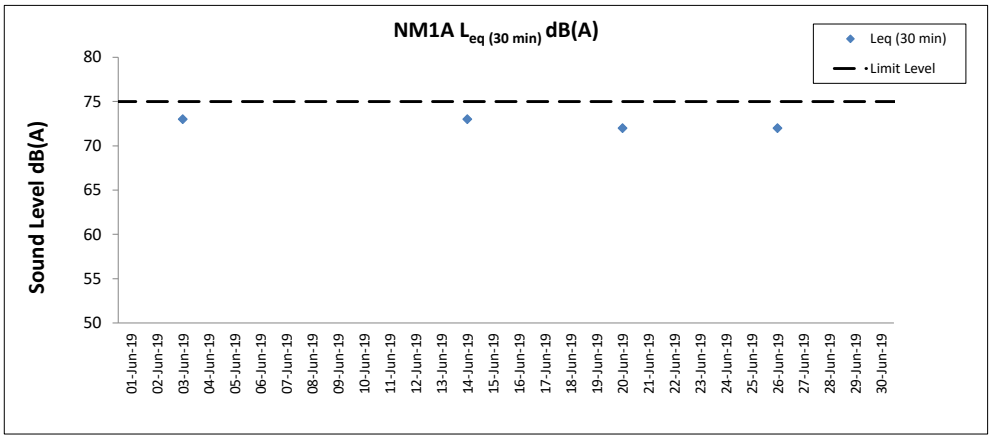
Remarks:
+3dB (A) correction was applied to free-field measurement.

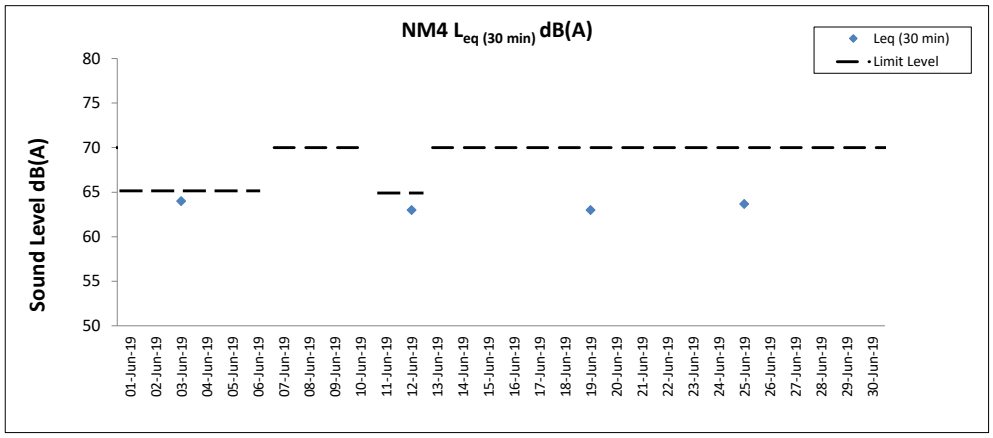
Noise Measurement Results

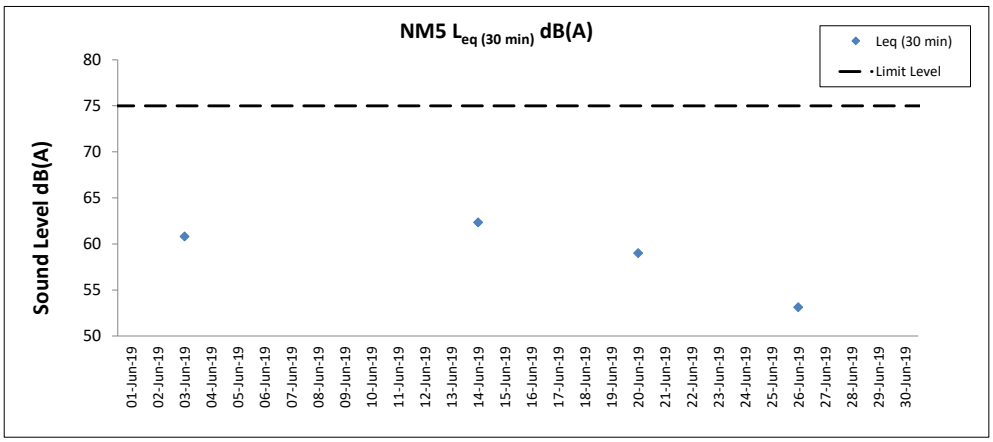
Station: NM6- House No.1 Sha Lo Wan

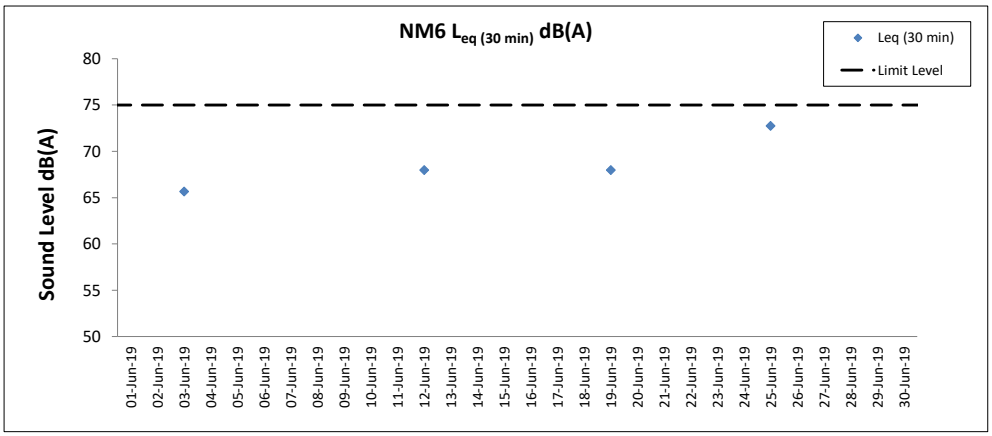
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
03-Jun-19	Cloudy	13:40	71.8	52.3	66
03-Jun-19	Cloudy	13:45	71.7	51.6	
03-Jun-19	Cloudy	13:50	69.5	52.9	
03-Jun-19	Cloudy	13:55	71.3	51.2	
03-Jun-19	Cloudy	14:00	75.1	52.3	
03-Jun-19	Cloudy	14:05	63.8	49.6	
12-Jun-19	Cloudy	15:41	69.4	48.5	68
12-Jun-19	Cloudy	15:46	71.3	47.7	
12-Jun-19	Cloudy	15:51	73.7	59.4	
12-Jun-19	Cloudy	15:56	73.3	49.8	
12-Jun-19	Cloudy	16:01	69.5	46.1	
12-Jun-19	Cloudy	16:06	70.4	49.9	
19-Jun-19	Sunny	09:45	75.4	49.9	68
19-Jun-19	Sunny	09:50	71.2	49.5	
19-Jun-19	Sunny	09:55	74.5	49.6	
19-Jun-19	Sunny	10:00	72.0	48.6	
19-Jun-19	Sunny	10:05	75.9	48.4	
19-Jun-19	Sunny	10:10	62.2	50.1	
25-Jun-19	Cloudy	09:41	76.2	60.5	73
25-Jun-19	Cloudy	09:46	78.8	62.6	
25-Jun-19	Cloudy	09:51	72.2	59.9	
25-Jun-19	Cloudy	09:56	75.4	60.7	
25-Jun-19	Cloudy	10:01	75.8	62.4	
25-Jun-19	Cloudy	10:06	73.0	63.2	

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









Notes

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

Water Quality Monitoring Results

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

Water Quality Monitoring

Water Quality Monitoring Results on 01 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:35	8.3	Surface	1.0	0.1	246	26.8	26.8	8.0	8.0	19.6	19.6	94.1	94.2	6.8	6.8	7.2	6.7	5	6	87	90	815603	804251	<0.2	<0.2	2.2	2.2
						1.0	0.1	246	26.8		8.0		19.5		94.3		6.8		7.2		5		87				<0.2		2.1	
					Middle	4.2	0.1	33	26.9	26.9	8.0	8.0	19.2	19.2	95.2	95.4	6.8		6.2		5		90				<0.2		2.2	
						4.2	0.1	35	26.9		8.0		19.2		95.5		6.9		6.4		6		90				<0.2		2.2	
					Bottom	7.3	0.1	104	26.7	26.7	7.9	7.9	25.1	25.0	92.8	92.9	6.5	6.5	6.9		6		91				<0.2		2.2	
						7.3	0.1	105	26.7		7.9		25.0		92.9		6.5		6.5		7		93				<0.2		2.2	
C2	Fine	Moderate	12:40	11.8	Surface	1.0	0.6	177	25.7	25.7	7.9	7.9	26.6	26.6	84.2	84.2	5.9	5.9	2.3	2.7	2	3	84	88	825675	806954	<0.2	<0.2	3.0	3.1
						1.0	0.7	186	25.7		7.9		26.6		84.1		5.9		2.3		2		84				<0.2		3.1	
					Middle	5.9	0.4	160	25.7	25.7	7.8	7.8	26.5	26.5	83.9	83.9	5.9		2.5		3		88				<0.2		3.2	
						5.9	0.4	173	25.7		7.8		26.5		83.9		5.9		2.5		3		88				<0.2		3.1	
					Bottom	10.8	0.5	141	25.7	25.7	7.8	7.8	27.2	27.2	83.4	83.4	5.8	5.8	3.1		3		91				<0.2		3.1	
						10.8	0.5	150	25.7		7.8		27.2		83.4		5.8		3.2		3		91				<0.2		3.2	
C3	Fine	Moderate	10:41	12.1	Surface	1.0	0.3	99	27.0	27.0	7.9	7.9	17.7	17.7	88.5	88.6	6.4	6.4	3.8	4.3	4	4	86	89	822113	817782	<0.2	<0.2	1.7	1.6
						1.0	0.3	105	27.0		7.9		17.7		88.6		6.4		3.8		4		85				<0.2		1.6	
					Middle	6.1	0.2	22	26.7	26.7	8.0	8.0	17.5	17.5	88.5	88.5	6.4		4.1		4		89				<0.2		1.6	
						6.1	0.2	22	26.7		8.0		17.5		88.5		6.4		4.1		4		90				<0.2		1.6	
					Bottom	11.1	0.3	117	26.7	26.7	7.9	7.9	18.7	18.7	88.0	88.1	6.4	6.4	5.0		4		93				<0.2		1.6	
						11.1	0.3	119	26.6		7.9		18.7		88.1		6.4		5.2		4		93				<0.2		1.6	
IM1	Fine	Moderate	11:51	5.3	Surface	1.0	0.4	214	27.1	27.1	8.0	8.0	20.5	20.5	92.9	92.9	6.6	6.6	4.8	4.2	4	4	87	89	817941	807120	<0.2	<0.2	2.3	2.3
						1.0	0.4	233	27.1		8.0		20.5		92.8		6.6		4.7		5		87				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	180	27.0	27.0	8.0	8.0	20.2	20.1	92.4	92.5	6.6	6.6	3.5		4		90				<0.2		2.3	
						4.3	0.3	182	27.0		8.0		20.1		92.5		6.6		3.6		4		91				<0.2		2.2	
IM2	Fine	Moderate	11:58	7.6	Surface	1.0	0.2	212	26.9	26.9	8.0	8.0	18.0	18.0	95.4	95.6	6.9	6.7	9.7	7.7	4	6	86	89	818181	806179	<0.2	<0.2	2.4	2.5
						1.0	0.2	227	26.9		8.0		18.0		95.8		6.9		9.7		5		86				<0.2		2.4	
					Middle	3.8	0.1	170	26.6	26.6	8.0	8.0	22.9	22.9	91.0	91.0	6.4		4.9		5		90				<0.2		2.6	
						3.8	0.1	172	26.6		8.0		22.9		91.0		6.4		4.9		6		90				<0.2		2.5	
					Bottom	6.6	0.1	195	26.7	26.7	7.9	7.9	22.3	22.3	91.6	91.7	6.5	6.5	8.2		7		92				<0.2		2.5	
						6.6	0.1	202	26.7		7.9		22.3		91.8		6.5		8.7		8		92				<0.2		2.5	
IM3	Fine	Moderate	12:05	7.7	Surface	1.0	0.3	194	27.2	27.2	8.0	8.0	17.7	17.7	92.5	92.4	6.7	6.6	6.6	5.2	4	5	86	90	818771	805572	<0.2	<0.2	2.4	2.3
						1.0	0.3	197	27.1		8.0		17.7		92.3		6.6		6.5		4		87				<0.2		2.4	
					Middle	3.9	0.2	142	27.0	27.0	7.9	7.9	19.2	19.2	91.5	91.5	6.6		4.5		5		90				<0.2		2.3	
						3.9	0.2	150	26.9		7.9		19.2		91.5		6.6		4.7		5		91				<0.2		2.3	
					Bottom	6.7	0.2	147	26.8	26.8	7.9	7.9	22.9	22.9	91.6	91.7	6.4	6.5	4.7		7		92				<0.2		2.2	
						6.7	0.2	154	26.8		7.9		22.9		91.7		6.5		4.5		6		92				<0.2		2.2	
IM4	Fine	Moderate	12:12	7.8	Surface	1.0	0.2	195	27.0	27.0	8.0	8.0	16.5	16.5	91.7	91.9	6.7	6.6	5.3	7.8	4	6	86	89	819728	804612	<0.2	<0.2	2.2	2.4
						1.0	0.2	210	27.0		8.0		16.5		92.0		6.7		5.3		4		87				<0.2		2.2	
					Middle	3.9	0.2	130	26.7	26.7	8.0	8.0	21.1	21.1	89.5	89.5	6.4		9.6		6		90				<0.2		2.5	
						3.9	0.2	134	26.7		8.0		21.1		89.5		6.4		9.6		5		90				<0.2		2.3	
					Bottom	6.8	0.3	151	26.7	26.7	8.0	8.0	22.7	22.7	88.9	88.9	6.3	6.3	8.4		8		91				<0.2		2.6	
						6.8	0.3	156	26.7		8.0		22.7		88.9		6.3		8.8		7		92				<0.2		2.6	
IM5	Fine	Moderate	12:20	7.8	Surface	1.0	0.7	196	26.6	26.6	7.9	7.9	20.1	20.1	92.6	92.8	6.6	6.6	9.0	6.2	4	5	85	89	820729	804890	<0.2	<0.2	2.2	2.3
						1.0	0.8	200	26.6		7.9		20.1		92.9		6.7		9.0		5		88				<0.2		2.4	
					Middle	3.9	0.7	175	26.6	26.6	7.9	7.9	20.1	20.1	90.4	90.5	6.5		5.4		4		89				<0.2		2.2	
						3.9	0.7	178	26.6		7.9		20.1		90.5		6.5		5.4		5		88				<0.2		2.2	
					Bottom	6.8	0.4	179	26.6	26.6	8.0	8.0	20.1	20.1	90.1	90.2	6.5	6.5	4.2		6		92				<0.2		2.2	
						6.8	0.5	179	26.6		8.0		20.1		90.3		6.5		4.3		5		93				<0.2		2.4	
IM6	Fine	Moderate	12:30	8.2	Surface	1.0	0.6	218	26.7	26.7	7.9	7.9	20.1	20.1	91.7	91.9	6.6	6.6	7.3	6.3	6	6	85	88	821055	805827	<0.2	<0.2	2.3	2.1
						1.0	0.6	239	26.6		7.9		20.1		92.0		6.6		7.9		6		86				<0.2		2.5	
					Middle	4.1	0.7	195	26.6	26.6	7.9	7.9	21.1	21.1	92.4	92.6	6.6		5.8		6		87				<0.2		2.0	
						4.1	0.7	204	26.6		7.9		21.1		92.7		6.6		5.8		7		88				<0.2		2.0	
					Bottom	7.2	0.1	136	26.6	26.6	7.9	7.9	21.4	21.4	89.0	89.1	6.3	6.3	5.2		6		90				<0.2		1.8	
						7.2	0.1	145	26.6		7.9		21.5		89.2		6.3		5.9		7		92				<0.2		1.8	
IM7	Fine	Moderate	12:35	7.5	Surface	1.0	0.7	211	26.8	26.8	7.9	7.9	19.8	19.8	90.3	90.3	6.5	6.5	7.9	6.2	6	7	85	87	821336	806830	<0.2	<0.2	1.8	2.1
						1.0	0.8	226	26.8		7.9		19.8		90.3		6.5		7.9		6		86				<0.2		1.8	
					Middle	3.8	0.6	220	26.6	26.7	7.9	7.9	20.8	20.8	89.4	89.6	6.4		6.8		7		86				<0.2		2.1	
						3.8	0.7	240	26.7		7.9		20.8		89.8		6.4		6.0		6		87				<0.2		2.2	
					Bottom	6.5	0.3	236	26.9	26.9	7.9	7.9	18.6	18.6	88.3	88.3	6.4	6.4	4.2		7		89				<0.2		2.3	
						6.5	0.4	251	26.9		7.9		18.6		88.3		6.4		4.4		7		90				<0.2		2.2	
IM8	Fine	Moderate	12:02	8.2	Surface	1.0	0.0	133	26.4	26.4	8.0	8.0	17.1	17.1	86.0	86.1	6.3	6.4	3.1	3.1	5	7	86	90	821815	808118	<0.2	<0.2	1.5	1.6
						1.0	0.0	134	26.4		8.0		17.1		86.1		6.3		3.1		5		86				<0.2		1.5	
					Middle	4.1	0.1	138	26.4	26.4	8.0	8.0	16.6	16.6	88.6	88.6	6.5		3.3		7		90				<0.2		1.6	
						4.1	0.1	144	26.4		8.0		16.6		88.6		6.5		3.2		8		90				<0.2		1.6	
					Bottom	7.2	0.1	161	26.4	26.4	8.0	8.0	17.1	17.1	85.8	85.8	6.3	6.3	2.9		9		93				<0.2		1.6	
						7.2	0.1	176	26.4		8.0		17.1		85.8		6.3		3.1		8		94				<0.2		1.5	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	11:55	7.8	Surface	1.0	0.4	110	26.4	26.4	8.0	8.0	17.6	17.6	86.2	86.2	6.3	6.3	3.4	3.4	4	4	86	90	822101	808817	<0.2	<0.2	1.7	1.7
						1.0	0.4	117	26.4		8.0		17.6		86.2		6.3		3.4		4		86				<0.2		1.8	
					Middle	3.9	0.5	115	26.4	26.4	8.0	8.0	17.1	17.1	85.8	85.8	6.3		2.9		4		91				<0.2		1.8	
						3.9	0.5	124	26.4		8.0		17.1		85.8		6.3		3.2		3		90				<0.2		1.7	
					Bottom	6.8	0.3	95	26.3	26.3	8.0	8.0	17.6	17.6	85.4	85.5	6.2	6.2	3.7		3		94				<0.2		1.6	
						6.8	0.3	101	26.3		8.0		17.6		85.5		6.2		3.8		3		94				<0.2		1.5	
IM10	Fine	Moderate	11:47	7.7	Surface	1.0	0.7	111	26.6	26.6	8.0	8.0	13.5	13.5	88.7	88.7	6.6	6.7	4.3	4.8	3	4	86	90	822364	809789	<0.2	<0.2	1.8	1.7
						1.0	0.8	113	26.6		8.0		13.5		88.7		6.6		4.3		3		86				<0.2		1.7	
					Middle	3.9	0.7	110	26.6	26.6	8.1	8.1	14.3	14.3	89.8	89.9	6.7		4.9		5		91				<0.2		1.8	
						3.9	0.7	119	26.6		8.1		14.3		89.9		6.7		4.9		4		90				<0.2		1.7	
					Bottom	6.7	0.5	99	26.7	26.7	8.1	8.1	15.1	15.1	90.5	90.6	6.7	6.7	5.1		4		94				<0.2		1.7	
						6.7	0.5	104	26.7		8.1		15.1		90.6		6.7		5.1		4		94				<0.2		1.6	
IM11	Fine	Moderate	11:37	8.4	Surface	1.0	0.8	108	26.7	26.7	8.0	8.0	11.8	11.8	90.6	90.6	6.8	6.7	3.7	3.9	3	4	87	90	822053	811471	<0.2	<0.2	1.9	1.8
						1.0	0.8	108	26.7		8.0		11.8		90.6		6.8		3.7		4		86				<0.2		1.8	
					Middle	4.2	0.6	101	26.6	26.6	8.0	8.0	14.1	14.1	87.1	87.1	6.5		3.7		3		90				<0.2		1.7	
						4.2	0.6	108	26.6		8.0		14.1		87.1		6.5		3.7		4		90				<0.2		1.8	
					Bottom	7.4	0.2	124	26.5	26.5	7.9	7.9	16.5	16.5	85.6	85.6	6.3	6.3	4.1		3		94				<0.2		1.7	
						7.4	0.3	136	26.5		7.9		16.5		85.6		6.3		4.2		4		94				<0.2		1.7	
IM12	Fine	Moderate	11:31	8.8	Surface	1.0	0.6	111	26.7	26.7	8.0	8.0	12.1	12.1	90.4	90.4	6.8	6.7	3.7	3.8	4	4	86	90	821444	812056	<0.2	<0.2	1.9	1.8
						1.0	0.7	119	26.7		8.0		12.1		90.4		6.8		3.7		3		86				<0.2		1.8	
					Middle	4.4	0.7	106	26.5	26.5	7.9	7.9	15.1	15.1	88.2	88.2	6.5		3.7		4		90				<0.2		1.8	
						4.4	0.7	115	26.5		7.9		15.1		88.2		6.5		3.7		4		90				<0.2		1.8	
					Bottom	7.8	0.4	97	26.6	26.6	8.0	8.0	14.9	14.9	88.3	88.4	6.5	6.5	4.0		4		94				<0.2		1.8	
						7.8	0.4	98	26.6		8.0		14.9		88.5		6.5		4.0		5		93				<0.2		1.8	
SR1A	Fine	Moderate	11:15	5.3	Surface	1.0	-	-	26.5	26.5	7.9	7.9	17.2	17.2	86.6	86.6	6.3	6.3	4.0	3.8	5	5	-	-	819973	812661	-	-	-	-
						1.0	-	-	26.5		7.9		17.2		86.6		6.3		4.0		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	26.6	26.6	7.9	7.9	16.2	16.2	88.2	88.2	6.5	6.5	3.7		4		-				-		-	
						4.3	-	-	26.6		7.9		16.2		88.1		6.5		3.6		5		-				-		-	
SR2	Fine	Moderate	11:03	5.2	Surface	1.0	0.7	98	26.4	26.4	7.9	7.9	18.0	18.0	87.1	87.2	6.3	6.4	4.7	4.4	4	4	86	88	821441	814150	<0.2	<0.2	1.8	2.0
						1.0	0.7	107	26.4		7.9		18.0		87.2		6.4		4.5		4		87				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.4	116	26.5	26.5	7.9	7.9	18.0	18.0	86.6	86.7	6.3	6.3	4.1		3		90				<0.2		2.0	
						4.2	0.4	119	26.5		7.9		18.0		86.7		6.3		4.2		3		90				<0.2		2.1	
SR3	Fine	Moderate	12:09	8.6	Surface	1.0	0.1	181	25.9	25.9	8.0	8.0	25.3	25.3	88.2	88.3	6.2	6.3	2.1	2.3	3	3	-	-	822155	807585	-	-	-	-
						1.0	0.1	187	25.9		8.0		25.3		88.3		6.2		2.1		2		-				-		-	
					Middle	4.3	0.2	130	25.9	25.9	8.0	8.0	24.4	24.4	88.9	88.9	6.3		2.2		4		-				-		-	
						4.3	0.2	133	25.9		8.0		24.4		88.9		6.3		2.3		3		-				-		-	
					Bottom	7.6	0.1	206	25.9	25.9	8.0	8.0	25.8	25.8	88.0	88.0	6.2	6.2	2.6		4		-				-		-	
						7.6	0.1	225	25.9		8.0		25.8		88.0		6.2		2.6		4		-				-		-	
SR4A	Fine	Moderate	11:15	8.8	Surface	1.0	0.1	167	27.2	27.2	7.9	7.9	19.7	19.7	95.9	96.1	6.8	7.0	5.3	8.0	4	4	-	-	817168	807819	-	-	-	-
						1.0	0.1	167	27.2		7.9		19.7		96.2		6.8		5.7		4		-				-		-	
					Middle	4.4	0.0	170	27.3	27.3	8.0	8.0	15.2	15.2	97.5	97.7	7.1		7.9		4		-				-		-	
						4.4	0.0	170	27.3		8.0		15.2		97.8		7.1		8.5		4		-				-		-	
					Bottom	7.8	0.0	194	27.2	27.2	8.0	8.0	16.1	16.1	96.0	96.0	7.0	7.0	10.2		4		-				-		-	
						7.8	0.0	202	27.2		8.0		16.1		96.0		7.0		10.1		4		-				-		-	
SR5A	Fine	Moderate	10:57	4.6	Surface	1.0	0.1	93	27.0	27.0	7.9	7.9	17.3	17.3	95.3	95.4	6.9	6.9	3.7	4.5	4	5	-	-	816615	810702	-	-	-	-
						1.0	0.1	94	27.0		7.9		17.3		95.4		6.9		3.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	101	27.1	27.1	7.9	7.9	17.6	17.6	95.9	95.9	6.9	6.9	4.9		5		-				-		-	
						3.6	0.3	103	27.1		7.9		17.6		95.9		6.9		5.4		6		-				-		-	
SR6	Fine	Moderate	10:30	4.3	Surface	1.0	0.2	79	27.5	27.6	7.9	7.9	20.1	20.0	91.3	91.3	6.4	6.4	6.7	7.6	4	4	-	-	817915	814679	-	-	-	-
						1.0	0.2	81	27.6		7.9		20.0		91.3		6.4		6.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	47	27.3	27.3	7.9	7.9	20.9	20.9	89.2	89.2	6.3	6.3	8.8		5		-				-		-	
						3.3	0.0	50	27.3		7.9		20.9		89.1		6.3		8.5		4		-				-		-	
SR7	Fine	Moderate	10:12	14.7	Surface	1.0	1.2	78	27.4	27.4	8.0	8.0	11.9	11.9	93.9	93.9	7.0	6.8	3.6	3.5	4	4	-	-	823653	823726	-	-	-	-
						1.0	1.3	83	27.4		8.0		11.9		93.8		6.9		3.7		4		-				-		-	
					Middle	7.4	0.3	119	27.1	27.1	7.9	7.9	14.0	14.0	90.4	90.4	6.7		3.5		4		-				-		-	
						7.4	0.4	130	27.1		7.9		14.0		90.4		6.7		3.4		4		-				-		-	
					Bottom	13.7	0.1	359	27.3	27.3	7.9	7.9	13.4	13.4	90.8	90.9	6.7	6.7	3.4		4		-				-		-	
						13.7	0.1	330	27.3		7.9		13.4		90.9		6.7		3.4		4		-				-		-	
SR8	Fine	Moderate	11:25	4.4	Surface	1.0	-	-	26.6	26.6	7.9	7.9	14.5	14.5	89.2	89.2	6.6	6.6	3.6	3.6	5	4	-	-	820379	811646	-	-	-	-
						1.0	-	-	26.6		7.9		14.5		89.2		6.6		3.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	26.5	26.5	7.9	7.9	16.6	16.6	87.6	87.5	6.4	6.4	3.7		3		-				-		-	
						3.4	-	-	26.5		7.9		16.6		87.3		6.4		3.7		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 01 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	17:42	8.3	Surface	1.0	0.3	49	26.6	26.6	8.0	8.0	13.4	13.4	95.4	95.4	7.1	7.1	6.2	5.3	4	4	87	90	815611	804227	<0.2	<0.2	1.4	1.5
						1.0	0.3	52	26.6		8.0		13.4		95.4		7.1		6.2		4		88				<0.2		1.4	
					Middle	4.2	0.2	37	26.7	26.7	8.1	8.1	12.7	12.7	94.4	94.4	7.1		4.1		3		90				<0.2		1.5	
						4.2	0.3	39	26.7		8.1		12.7		94.4		7.1		4.1		3		90				<0.2		1.6	
					Bottom	7.3	0.2	19	26.7	26.7	8.0	8.0	18.1	18.1	94.1	94.2	6.8	6.8	5.4		5		91				<0.2		1.6	
						7.3	0.2	21	26.7		8.0		18.1		94.2		6.8		5.5		4		92				<0.2		1.6	
C2	Fine	Moderate	16:31	8.5	Surface	1.0	0.6	16	26.9	26.9	8.0	8.0	18.7	18.7	90.6	90.6	6.5	6.5	3.7	3.8	3	3	85	89	825667	806936	<0.2	<0.2	2.5	1.5
						1.0	0.6	17	26.9		8.0		18.7		90.6		6.5		3.7		3		85				<0.2		2.4	
					Middle	4.3	0.4	16	26.6	26.6	8.0	8.0	19.2	19.2	89.3	89.3	6.4		3.9		2		89				<0.2		1.2	
						4.3	0.4	18	26.6		8.0		19.2		89.3		6.4		3.9		3		89				<0.2		1.1	
					Bottom	7.5	0.5	14	26.6	26.6	8.0	8.0	20.5	20.5	88.8	88.8	6.4	6.4	3.8		3		92				<0.2		1.0	
						7.5	0.5	15	26.6		8.0		20.5		88.8		6.4		3.8		3		92				<0.2		1.0	
C3	Fine	Moderate	18:36	10.8	Surface	1.0	0.1	238	27.5	27.5	8.0	8.0	11.8	11.8	95.9	95.9	7.1	6.9	3.3	3.3	2	3	83	87	822127	817781	<0.2	<0.2	1.0	1.0
						1.0	0.1	240	27.5		8.0		11.8		95.8		7.1		3.3		2		83				<0.2		1.1	
					Middle	5.4	0.2	268	27.2	27.2	7.9	7.9	14.4	14.4	90.7	90.7	6.6		3.3		4		87				<0.2		1.0	
						5.4	0.2	280	27.2		7.9		14.4		90.7		6.6		3.3		3		87				<0.2		1.1	
					Bottom	9.8	0.1	219	27.3	27.3	7.9	7.9	14.8	14.8	90.4	90.4	6.6	6.6	3.4		3		90				<0.2		1.0	
						9.8	0.1	225	27.3		7.9		14.8		90.4		6.6		3.4		2		90				<0.2		1.0	
IM1	Fine	Moderate	17:21	5.6	Surface	1.0	0.1	24	27.6	27.6	7.8	7.8	15.1	15.1	95.4	95.4	6.9	6.9	6.6	5.1	4	4	86	89	817963	807119	<0.2	<0.2	2.1	1.9
						1.0	0.1	25	27.5		7.8		15.1		95.3		6.9		6.5		4		87				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	54	27.4	27.4	7.7	7.7	15.4	15.4	95.1	95.1	6.9	6.9	3.5		4		90				<0.2		1.9	
						4.6	0.1	58	27.4		7.7		15.5		95.1		6.9		3.7		3		91				<0.2		1.9	
IM2	Fine	Moderate	17:14	7.2	Surface	1.0	0.2	28	26.8	26.8	7.9	7.9	17.1	17.1	93.9	93.9	6.8	6.9	4.4	3.6	2	3	86	89	818159	806170	<0.2	<0.2	1.6	1.6
						1.0	0.2	27	26.8		7.9		17.1		93.9		6.8		4.7		3		86				<0.2		1.7	
					Middle	3.6	0.2	16	26.9	27.0	7.9	7.9	13.9	13.9	94.0	94.1	6.9		3.1		3		90				<0.2		1.6	
						3.6	0.3	15	27.0		7.9		13.9		94.1		6.9		3.2		3		90				<0.2		1.6	
					Bottom	6.2	0.2	12	27.2	27.2	7.9	7.9	14.8	14.8	94.7	94.7	6.9	6.9	3.2		3		91				<0.2		1.4	
						6.2	0.2	13	27.2		7.9		14.8		94.7		6.9		3.2		3		91				<0.2		1.6	
IM3	Fine	Moderate	17:07	7.4	Surface	1.0	0.4	21	26.7	26.7	8.0	8.0	17.3	17.3	93.3	93.4	6.8	6.8	5.3	7.5	3	3	87	90	818781	805611	<0.2	<0.2	1.6	1.7
						1.0	0.4	22	26.7		8.0		17.3		93.5		6.8		5.3		3		88				<0.2		1.7	
					Middle	3.7	0.5	16	26.8	26.8	8.0	8.0	18.1	18.1	92.8	92.8	6.7		9.5		3		90				<0.2		1.7	
						3.7	0.5	18	26.8		8.0		18.1		92.8		6.7		9.5		3		91				<0.2		1.6	
					Bottom	6.4	0.3	16	26.8	26.8	7.9	7.9	22.0	22.0	91.7	91.7	6.5	6.5	7.8		4		92				<0.2		1.6	
						6.4	0.3	16	26.8		7.9		22.0		91.7		6.5		7.8		4		93				<0.2		1.7	
IM4	Fine	Moderate	16:58	7.7	Surface	1.0	0.4	22	26.9	27.0	8.0	8.0	14.0	13.9	94.3	94.3	7.0	6.9	7.3	6.4	2	4	85	89	819719	804610	<0.2	<0.2	2.2	2.2
						1.0	0.4	23	27.0		8.0		13.9		94.2		7.0		7.3		3		86				<0.2		2.3	
					Middle	3.9	0.4	20	27.1	27.2	8.0	8.0	16.0	16.0	92.4	92.4	6.7		6.4		4		90				<0.2		2.1	
						3.9	0.4	21	27.2		8.0		15.9		92.4		6.7		6.5		4		91				<0.2		2.0	
					Bottom	6.7	0.3	16	27.3	27.3	7.9	7.9	21.7	21.6	90.4	90.5	6.4	6.4	5.5		4		92				<0.2		2.4	
						6.7	0.3	16	27.3		7.9		21.6		90.6		6.4		5.4		5		92				<0.2		2.2	
IM5	Fine	Moderate	16:50	7.5	Surface	1.0	0.4	24	27.1	27.1	8.0	8.0	14.7	14.7	94.1	94.4	6.9	6.7	6.9	7.7	4	5	85	87	820734	804854	<0.2	<0.2	2.4	2.6
						1.0	0.4	25	27.0		8.0		14.7		94.7		7.0		6.1		3		86				<0.2		2.4	
					Middle	3.8	0.3	21	26.8	26.8	8.0	8.0	19.0	18.9	90.0	90.0	6.5		7.2		3		87				<0.2		2.3	
						3.8	0.4	22	26.8		8.0		18.9		89.9		6.5		7.2		4		87				<0.2		2.4	
					Bottom	6.5	0.2	17	27.0	27.0	7.9	7.9	25.9	25.9	88.9	88.9	6.1	6.1	9.5		7		89				<0.2		3.1	
						6.5	0.2	18	27.0		7.9		25.9		88.8		6.1		9.5		7		89				<0.2		3.0	
IM6	Fine	Moderate	16:44	7.3	Surface	1.0	0.2	25	27.1	27.1	7.9	7.9	15.9	15.9	91.1	91.2	6.6	6.6	8.6	7.9	4	6	85	88	821083	805809	<0.2	<0.2	3.6	2.7
						1.0	0.2	26	27.0		7.9		15.9		91.2		6.6		8.8		4		84				<0.2		3.4	
					Middle	3.7	0.2	14	27.0	27.0	7.9	7.9	19.5	19.5	91.4	91.4	6.5		8.7		5		87				<0.2		2.4	
						3.7	0.2	14	27.0		7.9		19.5		91.4		6.5		8.8		6		88				<0.2		2.2	
					Bottom	6.3	0.1	12	27.0	27.0	7.8	7.8	24.7	24.7	89.0	89.2	6.2	6.2	6.2		8		91				<0.2		2.3	
						6.3	0.1	12	27.0		7.8		24.7		89.3		6.2		6.1		8		90				<0.2		2.3	
IM7	Fine	Moderate	16:36	8.1	Surface	1.0	0.5	26	27.7	27.8	7.9	7.9	17.3	17.3	90.5	90.7	6.5	6.5	6.7	6.7	3	5	85	88	821346	806834	<0.2	<0.2	1.9	2.0
						1.0	0.5	27	27.8		7.9		17.3		90.9		6.5		7.1		4		85				<0.2		1.8	
					Middle	4.1	0.4	22	27.3	27.3	7.9	7.9	17.9	17.9	90.6	90.6	6.5		7.9		4		88				<0.2		2.1	
						4.1	0.5	23	27.3		7.9		17.9		90.6		6.5		7.8		5		89				<0.2		2.0	
					Bottom	7.1	0.2	22	27.0	27.0	7.9	7.9	21.8	21.8	89.7	89.8	6.3	6.3	5.5		7		91				<0.2		1.9	
						7.1	0.2	23	27.0		7.9		21.8		89.9		6.3		5.1		8		92				<0.2		2.0	
IM8	Fine	Moderate	17:19	7.9	Surface	1.0	0.1	352	26.7	26.7	8.0	8.0	16.0	16.0	91.4	91.5	6.7	6.8	4.5	3.8	2	3	85	89	821838	808155	<0.2	<0.2	1.8	1.8
						1.0	0.1	324	26.7		8.0		16.0		91.6		6.7		4.5		2		85				<0.2		1.7	
					Middle	4.0	0.2	347	27.2	27.2	8.0	8.0	13.8	13.8	94.0	94.0	6.9		3.4		3		89				<0.2		1.8	
						4.0	0.2	348	27.2		8.0		13.8		94.0		6.9		3.4		3		89				<0.2		1.8	
					Bottom	6.9	0.1	320	27.4	27.4	8.0	8.0	14.1	14.1	94.5	94.6	6.9	6.9	3.4		4		93				<0.2		1.8	
						6.9	0.1	323	27.4		8.0		14.1		94.6		6.9		3.4		3		92				<0.2		1.8	

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

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

Water Quality Monitoring

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) 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	17:33	7.3	Surface	1.0	0.2	303	26.9	26.9	8.0	8.0	13.7	13.7	94.2	94.2	7.0	7.0	4.0	4.3	3	3	86	89	822076	808797	<0.2	<0.2	1.8	1.8
						1.0	0.2	300	26.9		8.0		13.7		94.2		7.0		4.0		3		85				<0.2		1.8	
					Middle	3.7	0.4	296	27.0	27.0	8.0	8.0	14.4	14.4	93.7	93.7	6.9		5.0		3		89				<0.2		1.9	
						3.7	0.4	295	27.0		8.0		14.4		93.7		6.9		5.0		4		89				<0.2		1.8	
					Bottom	6.3	0.3	294	26.7	26.7	8.0	8.0	15.3	15.3	90.9	90.9	6.7	6.7	3.8		3		93				<0.2		1.8	
						6.3	0.3	296	26.7		8.0		15.3		90.9		6.7		3.8		3		93				<0.2		1.9	
IM10	Fine	Moderate	17:55	7.5	Surface	1.0	0.5	285	26.9	26.9	8.0	8.0	15.5	15.5	92.1	92.1	6.7	6.7	3.8	4.2	3	3	85	89	822365	809806	<0.2	<0.2	2.2	2.1
						1.0	0.5	290	26.9		8.0		15.5		92.1		6.7		3.8		2		85				<0.2		2.2	
					Middle	3.8	0.6	281	26.8	26.8	8.0	8.0	15.7	15.7	91.5	91.5	6.7		4.1		2		89				<0.2		2.1	
						3.8	0.7	285	26.8		8.0		15.7		91.5		6.7		4.1		3		89				<0.2		2.1	
					Bottom	6.5	0.5	267	26.9	26.9	8.0	8.0	16.6	16.6	89.8	89.9	6.5	6.5	4.8		2		92				<0.2		1.9	
						6.5	0.5	268	26.9		8.0		16.6		89.9		6.5		4.9		3		93				<0.2		2.1	
IM11	Fine	Moderate	18:02	8.3	Surface	1.0	0.9	267	27.0	27.0	8.0	8.0	15.8	15.8	91.4	91.5	6.7	6.7	3.8	3.8	<2	3	85	89	822044	811462	<0.2	<0.2	2.1	2.2
						1.0	1.0	259	27.0		8.0		15.8		91.5		6.7		3.8		<2		85				<0.2		2.0	
					Middle	4.2	0.6	228	26.8	26.8	8.0	8.0	15.8	15.8	91.8	91.8	6.7		3.6		3		89				<0.2		2.0	
						4.2	0.6	250	26.8		8.0		15.8		91.8		6.7		3.6		4		89				<0.2		2.1	
					Bottom	7.3	0.2	276	26.9	26.9	8.0	8.0	16.3	16.3	90.8	90.9	6.6	6.6	3.8		3		93				<0.2		2.4	
						7.3	0.2	279	26.9		8.0		16.3		90.9		6.6		3.8		3		93				<0.2		2.4	
IM12	Fine	Moderate	18:14	7.8	Surface	1.0	0.6	256	26.7	26.7	8.0	8.0	17.3	17.3	90.5	90.5	6.6	6.6	4.1	4.2	4	5	85	89	821468	812028	<0.2	<0.2	2.4	2.3
						1.0	0.6	251	26.7		8.0		17.3		90.5		6.6		4.1		4		85				<0.2		2.2	
					Middle	3.9	0.7	261	26.7	26.7	8.0	8.0	17.3	17.3	90.1	90.1	6.5		4.0		5		89				<0.2		2.2	
						3.9	0.7	266	26.7		8.0		17.3		90.1		6.5		4.0		5		89				<0.2		2.3	
					Bottom	6.8	0.3	246	26.9	26.9	8.0	8.0	17.5	17.5	89.5	89.6	6.5	6.5	4.4		6		93				<0.2		2.2	
						6.8	0.4	244	26.9		8.0		17.5		89.6		6.5		4.5		5		93				<0.2		2.3	
SR1A	Fine	Moderate	18:23	5.6	Surface	1.0	-	-	26.5	26.5	8.0	8.0	20.1	20.1	88.3	88.3	6.3	6.3	8.4	6.4	2	3	-	-	819977	812659	-	-	-	-
						1.0	-	-	26.5		8.0		20.1		88.3		6.3		8.3		2		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	26.8	26.8	8.0	8.0	18.6	18.6	89.6	89.6	6.5	6.5	4.4		3		-				-		-	
						4.6	-	-	26.8		8.0		18.6		89.6		6.5		4.5		3		-				-		-	
SR2	Fine	Moderate	18:29	5.0	Surface	1.0	0.4	269	26.8	26.8	8.0	8.0	18.3	18.3	88.8	88.8	6.4	6.4	4.0	4.8	<2	3	85	87	821463	814147	<0.2	<0.2	2.2	2.6
						1.0	0.4	254	26.8		8.0		18.3		88.8		6.4		4.0		<2		85				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	243	26.5	26.5	8.0	8.0	19.8	19.8	87.9	87.9	6.3	6.3	5.6		2		89				<0.2		2.9	
						4.0	0.2	253	26.5		8.0		19.8		87.9		6.3		5.5		4		89				<0.2		2.8	
SR3	Fine	Moderate	16:59	8.8	Surface	1.0	0.1	357	27.0	27.0	8.1	8.1	14.3	14.3	89.8	89.9	6.7	6.6	4.9	4.8	4	4	-	-	822128	807553	-	-	-	-
						1.0	0.1	328	27.0		8.1		14.3		89.9		6.7		4.9		3		-				-		-	
					Middle	4.4	0.2	49	27.0	27.0	8.0	8.0	19.2	19.2	90.5	90.5	6.5		4.4		4		-				-		-	
						4.4	0.2	48	27.0		8.0		19.2		90.5		6.5		4.4		4		-				-		-	
					Bottom	7.8	0.1	55	26.7	26.7	8.0	8.0	19.9	19.9	90.7	90.8	6.5	6.5	5.0		4		-				-		-	
						7.8	0.1	59	26.7		8.0		19.9		90.8		6.5		5.0		4		-				-		-	
SR4A	Fine	Moderate	18:00	8.8	Surface	1.0	0.2	214	26.6	26.7	7.9	7.9	14.7	14.7	92.9	92.9	6.9	6.9	6.6	6.2	4	8	-	-	817179	807827	-	-	-	-
						1.0	0.2	220	26.7		7.9		14.7		92.9		6.9		6.8		4		-				-		-	
					Middle	4.4	0.1	209	26.8	26.8	8.0	8.0	17.2	17.2	93.0	93.1	6.8		3.6		5		-				-		-	
						4.4	0.1	215	26.7		8.0		17.2		93.1		6.8		3.5		5		-				-		-	
					Bottom	7.8	0.1	201	26.3	26.3	7.7	7.7	26.8	26.8	88.0	88.1	6.1	6.1	8.4		16		-				-		-	
						7.8	0.1	207	26.3		7.7		26.8		88.1		6.1		8.4		16		-				-		-	
SR5A	Fine	Moderate	18:16	4.8	Surface	1.0	0.3	272	26.5	26.5	7.9	7.9	18.0	18.0	91.2	91.4	6.6	6.7	4.2	4.7	3	4	-	-	816587	810672	-	-	-	-
						1.0	0.4	278	26.5		7.9		18.0		91.5		6.7		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	271	26.4	26.4	7.8	7.8	19.8	19.8	89.7	89.9	6.5	6.5	4.8		5		-				-		-	
						3.8	0.3	277	26.4		7.8		19.8		90.0		6.5		5.2		5		-				-		-	
SR6	Fine	Moderate	18:45	4.3	Surface	1.0	0.0	260	26.3	26.3	7.8	7.7	19.5	19.5	87.5	87.6	6.3	6.3	3.2	3.5	2	4	-	-	817885	814672	-	-	-	-
						1.0	0.0	265	26.3		7.7		19.5		87.6		6.3		3.4		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	227	26.3	26.3	7.7	7.7	20.5	20.5	88.2	88.3	6.4	6.4	3.7		6		-				-		-	
						3.3	0.0	228	26.3		7.7		20.5		88.4		6.4		3.8		6		-				-		-	
SR7	Fine	Moderate	18:55	14.4	Surface	1.0	0.1	211	27.0	27.0	7.9	7.9	11.8	11.8	93.0	93.0	6.9	6.8	3.5	3.4	2	2	-	-	823630	823738	-	-	-	-
						1.0	0.1	220	27.0		7.9		11.8		92.9		6.9		3.5		2		-				-		-	
					Middle	7.2	0.1	274	26.9	26.9	7.9	7.9	13.0	13.0	89.4	89.4	6.6		3.4		2		-				-		-	
						7.2	0.1	285	26.9		7.9		13.0		89.4		6.6		3.4		2		-				-		-	
					Bottom	13.4	0.1	262	26.7	26.7	7.9	7.9	15.2	15.2	87.9	88.0	6.5	6.5	3.2		3		-				-		-	
						13.4	0.1	272	26.7		7.9		15.2		88.0		6.5		3.3		3		-				-		-	
SR8	Fine	Moderate	18:22	4.4	Surface	1.0	-	-	26.8	26.8	8.0	8.0	18.5	18.5	88.6	88.7	6.4	6.4	4.1	4.3	3	4	-	-	820386	811607	-	-	-	-
						1.0	-	-	26.8		8.0		18.5		88.7		6.4		4.1		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	26.7	26.7	8.0	8.0	18.6	18.6	89.3	89.3	6.4	6.4	4.5		4		-				-		-	
						3.4	-	-	26.7		8.0		18.6		89.3		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 04 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:46	8.0	Surface	1.0	0.4	245	28.5	28.5	8.1	8.1	15.4	15.4	96.8	96.9	6.9	6.9	5.5	4.1	5	5	88	92	815611	804257	<0.2	<0.2	1.6	1.4
						1.0	0.4	257	28.5		8.1		15.4		96.9		6.9		5.2		4		89				<0.2		1.6	
					Middle	4.0	0.3	234	28.2	28.2	8.2	8.2	15.5	15.5	96.7	96.6	6.9		3.5		4	5	93				<0.2		1.3	
						4.0	0.3	247	28.1		8.2		15.5		96.5		6.9		3.5		5		94				<0.2		1.4	
					Bottom	7.0	0.2	251	27.9	27.9	8.2	8.2	19.2	19.2	96.5	96.6	6.8	6.8	3.4		6		95				<0.2		1.4	
						7.0	0.2	261	27.9		8.2		19.2		96.6		6.8		3.6		6		95				<0.2		1.2	
C2	Fine	Moderate	11:59	11.4	Surface	1.0	0.6	171	29.6	29.6	8.0	8.0	12.3	12.3	95.6	95.6	6.8	6.9	3.9	6.7	18	9	84	88	825677	806931	<0.2	<0.2	1.2	1.4
						1.0	0.6	173	29.6		8.0		12.3		95.6		6.8		3.9		17		84				<0.2		1.4	
					Middle	5.7	0.4	146	29.0	29.0	8.1	8.1	11.5	11.5	95.7	95.6	6.9		3.5		4		88				<0.2		1.8	
						5.7	0.4	156	29.0		8.1		11.5		95.5		6.9		3.6		5		87				<0.2		1.8	
					Bottom	10.4	0.3	131	27.3	27.3	8.0	8.0	17.6	17.6	87.0	87.0	6.3	6.3	12.5		3		92				<0.2		1.3	
						10.4	0.3	142	27.3		8.0		17.6		87.0		6.3		12.5		5		92				<0.2		1.1	
C3	Fine	Moderate	13:38	10.2	Surface	1.0	0.3	95	28.0	28.0	8.0	8.0	17.8	17.8	92.9	93.0	6.6	6.6	5.4	6.2	7	8	84	88	822105	817800	<0.2	<0.2	1.2	1.2
						1.0	0.4	100	28.0		8.0		17.8		93.0		6.6		5.4		8		85				<0.2		1.0	
					Middle	5.1	0.3	93	27.2	27.2	8.0	8.0	18.8	18.8	91.4	91.4	6.5		6.5		8	8	88	88			<0.2		1.5	
						5.1	0.3	98	27.2		8.1		18.8		91.3		6.5		6.5		8		88				<0.2		1.4	
					Bottom	9.2	0.2	88	27.6	27.6	8.1	8.1	19.1	19.1	91.5	91.6	6.5	6.5	6.6		8		92				<0.2		1.0	
						9.2	0.2	91	27.6		8.1		19.1		91.6		6.5		6.8		7		92				<0.2		0.9	
IM1	Fine	Moderate	12:32	5.5	Surface	1.0	0.1	229	28.3	28.3	8.1	8.1	14.1	14.1	98.4	98.5	7.1	7.1	3.6	3.5	4	5	89	91	817959	807120	<0.2	<0.2	1.5	1.5
						1.0	0.1	247	28.3		8.1		14.1		98.5		7.1		3.6		5		90				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	183	28.3	28.3	8.1	8.1	14.1	14.1	99.2	99.3	7.2	7.2	3.5		5		93				<0.2		1.7	
						4.5	0.2	195	28.2		8.1		14.1		99.3		7.2		3.3		5		93				<0.2		1.6	
IM2	Fine	Moderate	12:25	7.6	Surface	1.0	0.3	198	27.3	27.4	8.1	8.1	19.4	19.4	90.5	90.5	6.4	6.5	6.3	7.2	8	9	88	92	818159	806163	<0.2	<0.2	1.7	1.6
						1.0	0.3	216	27.4		8.1		19.4		90.5		6.4		6.2		8		89				<0.2		1.7	
					Middle	3.8	0.3	170	27.3	27.3	8.1	8.1	18.8	18.8	90.9	90.9	6.5		6.5		9		92				<0.2		1.7	
						3.8	0.3	173	27.3		8.1		18.8		90.9		6.5		6.9		8		93				<0.2		1.7	
					Bottom	6.6	0.2	160	27.2	27.2	8.1	8.1	19.6	19.6	91.1	91.2	6.5	6.5	8.5		9		94				<0.2		1.4	
						6.6	0.2	170	27.2		8.1		19.6		91.2		6.5		8.5		9		94				<0.2		1.5	
IM3	Fine	Moderate	12:20	8.2	Surface	1.0	0.3	215	27.7	27.7	8.1	8.1	18.5	18.5	91.7	91.8	6.5	6.6	7.7	6.9	7	7	89	92	818797	805570	<0.2	<0.2	1.7	1.6
						1.0	0.3	229	27.7		8.1		18.5		91.8		6.5		7.6		7		89				<0.2		1.7	
					Middle	4.1	0.5	171	27.8	27.8	8.1	8.1	18.0	18.0	92.6	92.8	6.6		5.4		6		92				<0.2		1.3	
						4.1	0.5	178	27.8		8.1		18.0		92.9		6.6		5.5		7		93				<0.2		1.5	
					Bottom	7.2	0.4	172	27.2	27.2	8.1	8.1	20.6	20.6	92.9	92.9	6.6	6.6	7.6		7		95				<0.2		1.6	
						7.2	0.4	185	27.2		8.1		20.6		92.9		6.6		7.6		7		95				<0.2		1.5	
IM4	Fine	Moderate	12:11	8.3	Surface	1.0	0.5	202	27.4	27.4	8.1	8.1	19.3	19.3	89.5	89.6	6.4	6.5	5.4	6.1	8	9	89	92	819727	804607	<0.2	<0.2	1.6	1.5
						1.0	0.6	206	27.4		8.1		19.3		89.7		6.4		5.3		7		89				<0.2		1.6	
					Middle	4.2	0.5	203	27.6	27.6	8.1	8.1	18.2	18.3	90.6	90.5	6.5		5.6		9		92				<0.2		1.6	
						4.2	0.5	208	27.5		8.1		18.3		90.4		6.5		5.9		8		93				<0.2		1.6	
					Bottom	7.3	0.4	190	27.3	27.3	8.1	8.1	22.0	22.0	89.9	90.0	6.3	6.3	7.1		10		94				<0.2		1.3	
						7.3	0.5	204	27.3		8.1		22.0		90.0		6.3		7.2		11		94				<0.2		1.5	
IM5	Fine	Moderate	12:05	8.0	Surface	1.0	0.7	247	27.8	27.8	8.0	8.0	16.5	16.5	90.4	90.5	6.5	6.5	5.2	6.1	5	7	88	92	820734	804850	<0.2	<0.2	1.6	1.7
						1.0	0.7	259	27.8		8.0		16.5		90.5		6.5		5.4		6		89				<0.2		1.5	
					Middle	4.0	0.5	205	27.8	27.8	8.0	8.0	16.7	16.7	90.7	90.7	6.5		5.6		8		92				<0.2		1.9	
						4.0	0.5	213	27.7		8.0		16.7		90.7		6.5		5.9		8		93				<0.2		1.8	
					Bottom	7.0	0.3	190	27.2	27.2	8.0	8.0	20.7	20.7	90.0	90.0	6.4	6.4	7.2		8		94				<0.2		1.6	
						7.0	0.3	195	27.2		8.0		20.7		90.0		6.4		7.2		9		95				<0.2		1.8	
IM6	Cloudy	Moderate	11:59	7.7	Surface	1.0	0.4	247	27.5	27.5	8.0	8.0	17.4	17.4	89.3	89.3	6.4	6.4	4.9	6.1	9	10	89	92	821062	805841	<0.2	<0.2	2.0	1.7
						1.0	0.4	263	27.5		8.0		17.4		89.2		6.4		5.0		8		89				<0.2		1.8	
					Middle	3.9	0.5	249	27.4	27.4	8.0	8.0	17.4	17.4	88.4	88.4	6.3		5.5		10		92				<0.2		1.5	
						3.9	0.5	255	27.4		8.0		17.4		88.3		6.3		5.7		10		93				<0.2		1.3	
					Bottom	6.7	0.5	259	27.3	27.4	8.0	8.0	19.7	19.7	88.2	88.3	6.3	6.3	7.5		10		95				<0.2		1.8	
						6.7	0.6	281	27.4		8.0		19.7		88.3		6.3		7.9		11		95				<0.2		1.6	
IM7	Cloudy	Moderate	11:53	8.4	Surface	1.0	0.3	252	27.6	27.6	8.0	8.0	16.2	16.2	87.8	87.8	6.3	6.4	5.3	5.3	7	8	88	92	821340	806832	<0.2	<0.2	1.6	1.9
						1.0	0.3	258	27.6		8.0		16.2		87.8		6.3		5.3		8		88				<0.2		1.5	
					Middle	4.2	0.1	233	27.7	27.7	8.0	8.0	16.1	16.1	88.2	88.3	6.4		4.9		8	8	93				<0.2		1.9	
						4.2	0.1	244	27.7		8.0		16.2		88.3		6.4		5.0		9		93				<0.2		2.0	
					Bottom	7.4	0.1	120	27.6	27.6	8.0	8.0	17.6	17.6	88.5	88.5	6.3	6.3	5.6		8		95				<0.2		2.1	
						7.4	0.1	126	27.6		8.0		17.6		88.5		6.3		5.7		8		95				<0.2		2.0	
IM8	Fine	Moderate	12:20	8.2	Surface	1.0	0.1	228	28.0	28.0	8.0	8.0	15.8	15.8	89.4	89.4	6.4	6.5	5.3	5.5	5	6	85	88	821816	808160	<0.2	<0.2	2.0	2.0
						1.0	0.1	231	28.0		8.0		15.8		89.4		6.4		5.3		5		84				<0.2		2.0	
					Middle	4.1	0.2	189	28.4	28.4	8.0	8.0	14.7	14.7	90.1	90.2	6.5		4.2		5		88				<0.2		2.1	
						4.1	0.2	207	28.4		8.0		14.7		90.2		6.5		4.1		6		89				<0.2		2.0	
					Bottom	7.2	0.1	89	27.6	27.6	8.0	8.0	17.1	17.1	87.8	87.9	6.3	6.3	6.8		7		92				<0.2		2.0	
						7.2	0.1	96	27.6		8.0		17.1		88.0		6.3		7.2		8		92				<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 04 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	12:27	7.5	Surface	1.0	0.3	84	28.3	28.3	8.0	8.0	14.5	14.5	92.5	92.5	6.7	6.6	3.9	5.4	4	6	85	88	822104	808809	<0.2	<0.2	1.9	2.1
						1.0	0.3	90	28.3		8.0		14.5		92.5		6.7		3.9		5		84				<0.2		2.0	
					Middle	3.8	0.3	110	28.2	28.2	8.0	8.0	14.6	14.6	89.8	89.8	6.5		4.2		4		88				<0.2		2.0	
						3.8	0.3	117	28.2		8.0		14.6		89.8		6.5		4.1		5		88				<0.2		2.1	
					Bottom	6.5	0.2	110	27.5	27.5	8.0	8.0	17.6	17.6	87.4	87.4	6.3	6.3	8.2		9		92				<0.2		2.2	
						6.5	0.2	116	27.5		8.0		17.6		87.4		6.3		8.3		9		92				<0.2		2.2	
IM10	Fine	Moderate	12:35	7.3	Surface	1.0	0.8	105	28.4	28.4	8.0	8.0	14.3	14.3	94.0	94.0	6.8	6.8	3.4	3.9	2	4	85	89	822403	809811	<0.2	<0.2	2.0	2.1
						1.0	0.9	110	28.4		8.0		14.3		94.0		6.8		3.5		2		84				<0.2		2.0	
					Middle	3.7	0.9	109	28.4	28.4	8.0	8.0	14.3	14.3	93.6	93.7	6.7		3.5		5		89				<0.2		2.1	
						3.7	0.9	109	28.4		8.0		14.3		93.7		6.7		3.5		4		89				<0.2		2.1	
					Bottom	6.3	0.5	108	27.8	27.8	8.1	8.1	15.4	15.4	91.9	91.9	6.6	6.6	4.8		4		92				<0.2		2.1	
						6.3	0.5	115	27.8		8.1		15.4		91.9		6.6		4.8		5		92				<0.2		2.0	
IM11	Fine	Moderate	12:43	8.9	Surface	1.0	1.1	117	29.0	29.0	8.0	8.0	13.5	13.5	97.8	97.8	7.0	7.0	3.1	4.3	5	4	85	89	822056	811461	<0.2	<0.2	2.3	2.3
						1.0	1.2	117	29.0		8.0		13.5		97.8		7.0		3.1		4		84				<0.2		2.3	
					Middle	4.5	0.8	111	29.0	29.0	8.1	8.1	13.6	13.6	96.9	96.9	6.9		3.3		3		88				<0.2		2.3	
						4.5	0.8	116	29.0		8.1		13.6		96.8		6.9		3.3		3		89				<0.2		2.3	
					Bottom	7.9	0.6	115	27.3	27.3	8.1	8.1	16.7	16.7	90.9	90.9	6.6	6.6	6.7		3		92				<0.2		2.4	
						7.9	0.6	124	27.3		8.1		16.7		90.9		6.6		6.7		3		93				<0.2		2.2	
IM12	Fine	Moderate	12:50	8.7	Surface	1.0	0.9	119	28.4	28.4	8.0	8.0	13.3	13.3	97.4	97.4	7.0	7.1	3.4	5.1	2	4	84	88	821448	812054	<0.2	<0.2	2.1	2.0
						1.0	1.0	120	28.4		8.0		13.3		97.4		7.0		3.3		3		84				<0.2		2.0	
					Middle	4.4	0.5	112	28.2	28.2	8.1	8.1	13.3	13.3	97.5	97.5	7.1		5.5		4		87				<0.2		2.0	
						4.4	0.5	121	28.2		8.1		13.3		97.5		7.1		5.9		3		88				<0.2		2.0	
					Bottom	7.7	0.4	79	27.5	27.5	8.1	8.1	15.4	15.4	93.8	93.9	6.8	6.8	6.3		5		91				<0.2		1.8	
						7.7	0.4	84	27.5		8.1		15.4		93.9		6.8		6.4		6		92				<0.2		2.0	
SR1A	Fine	Moderate	13:07	5.6	Surface	1.0	-	-	28.4	28.4	8.0	8.0	14.4	14.4	93.4	93.4	6.7	6.7	3.8	4.3	4	5	-	-	819983	812657	-	-	-	-
						1.0	-	-	28.4		8.0		14.4		93.4		6.7		3.8		5		-				-		-	
					Middle	2.8	-	-	-	-		-		-		-	-	-		-		-		-				-		-	
						2.8	-	-	-		-				-		-		-		-		-						-	
					Bottom	4.6	-	-	27.9	27.9	8.0	8.0	15.7	15.7	91.3	91.3	6.6	6.6	4.7		4		-				-		-	
						4.6	-	-	27.9		8.0		15.7		91.3		6.6		4.8		5		-				-		-	
SR2	Fine	Moderate	13:18	4.8	Surface	1.0	0.6	103	28.1	28.1	8.0	8.0	14.4	14.4	96.4	96.4	7.0	7.0	4.1	5.9	6	8	84	86	821452	814162	<0.2	<0.2	2.3	2.3
						1.0	0.6	108	28.1		8.0		14.4		96.4		7.0		4.1		7		85				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	121	27.6	27.6	8.0	8.0	15.6	15.6	92.2	92.2	6.7	6.7	7.6		8		88				<0.2		2.3	
						3.8	0.3	124	27.6		8.0		15.6		92.1		6.7		8.0		9		88				<0.2		2.2	
SR3	Fine	Moderate	12:14	9.0	Surface	1.0	0.2	203	28.7	28.7	8.0	8.0	13.9	13.9	90.4	90.5	6.5	6.5	3.7	5.2	3	5	-	-	822151	807562	-	-	-	-
						1.0	0.2	210	28.7		8.0		13.9		90.6		6.5		3.6		4		-				-		-	
					Middle	4.5	0.1	169	28.0	28.0	8.0	8.0	15.2	15.2	90.2	90.2	6.5		4.3		5		-				-		-	
						4.5	0.1	170	28.0		8.0		15.2		90.1		6.5		4.3		4		-				-		-	
					Bottom	8.0	0.1	160	27.7	27.7	8.1	8.1	17.1	17.1	87.4	87.5	6.3	6.3	7.7		6		-				-		-	
						8.0	0.1	171	27.7		8.1		17.1		87.6		6.3		7.7		7		-				-		-	
SR4A	Cloudy	Calm	13:05	9.6	Surface	1.0	0.0	234	28.2	28.2	8.1	8.1	15.4	15.4	96.1	96.2	6.9	6.9	4.5	4.6	6	6	-	-	817207	807828	-	-	-	-
						1.0	0.0	252	28.2		8.1		15.4		96.2		6.9		4.5		5		-				-		-	
					Middle	4.8	0.0	19	28.2	28.2	8.1	8.1	15.5	15.5	96.3	96.4	6.9		4.2		6		-				-		-	
						4.8	0.0	20	28.2		8.1		15.5		96.4		6.9		4.3		5		-				-		-	
					Bottom	8.6	0.2	148	28.0	28.0	8.2	8.2	17.0	17.0	97.5	97.7	6.9	7.0	5.2		5		-				-		-	
						8.6	0.2	149	28.0		8.2		17.0		97.9		7.0		4.9		6		-				-		-	
SR5A	Cloudy	Calm	13:20	4.4	Surface	1.0	0.1	340	28.2	28.2	8.1	8.1	15.5	15.5	96.5	96.5	6.9	6.9	4.1	4.1	4	4	-	-	816610	810680	-	-	-	-
						1.0	0.1	313	28.2		8.1		15.5		96.4		6.9		4.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	335	28.1	28.1	8.1	8.1	16.0	16.0	96.9	97.2	6.9	7.0	4.1		4		-				-		-	
						3.4	0.0	308	28.1		8.1		16.0		97.4		7.0		4.1		5		-				-		-	
SR6	Cloudy	Calm	13:54	4.2	Surface	1.0	0.1	107	28.1	28.1	8.1	8.1	15.7	15.7	93.3	93.3	6.7	6.7	4.8	4.9	7	7	-	-	817894	814651	-	-	-	-
						1.0	0.1	113	28.1		8.1		15.7		93.3		6.7		4.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	289	28.2	28.2	8.1	8.1	15.6	15.6	93.2	93.2	6.7	6.7	5.0		7		-				-		-	
						3.2	0.1	312	28.2		8.1		15.6		93.1		6.7		5.0		6		-				-		-	
SR7	Fine	Moderate	14:05	14.4	Surface	1.0	0.9	69	27.6	27.6	8.0	8.0	16.0	16.0	92.9	92.9	6.7	6.7	3.6	3.9	5	5	-	-	823658	823754	-	-	-	-
						1.0	1.0	71	27.6		8.0		16.0		92.9		6.7		3.7		5		-				-		-	
					Middle	7.2	0.4	28	27.6	27.6	8.0	8.0	16.1	16.1	92.6	92.7	6.7		3.9		5		-				-		-	
						7.2	0.5	28	27.6		8.0		16.1		92.7		6.7		4.0		4		-				-		-	
					Bottom	13.4	0.2	53	27.5	27.5	8.1	8.1	17.7	17.7	92.2	92.3	6.6	6.6	4.0		5		-				-		-	
						13.4	0.2	54	27.5		8.1		17.7		92.3		6.6		4.0		5		-				-		-	
SR8	Fine	Moderate	12:58	4.1	Surface	1.0	-	-	28.5	28.5	8.0	8.0	14.2	14.2	94.7	94.7	6.8	6.8	4.0	4.6	4	5	-	-	820398	811646	-	-	-	-
						1.0	-	-	28.5		8.0		14.2		94.7		6.8		4.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	28.1	28.1	8.0	8.0	14.8	14.8	92.4	92.5	6.7	6.7	5.2		7		-				-		-	
						3.1	-	-	28.1		8.1		14.8		92.5		6.7		5.2		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 04 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	06:33	8.6	Surface	1.0	0.3	69	27.6	27.6	8.0	8.0	16.6	16.6	92.9	92.9	6.7	6.7	5.0	5.5	6	7	89	93	815633	804223	<0.2	<0.2	2.3	2.1
						1.0	0.4	73	27.5		8.0		16.6		92.8		6.7		5.0		7		90				<0.2		2.2	
					Middle	4.3	0.4	62	27.2	27.2	8.0	8.0	17.2	17.2	92.3	92.3	6.7		5.9		6		93				<0.2		2.1	
						4.3	0.4	66	27.1		8.0		17.3		92.3		6.7		5.9		7		93				<0.2		1.9	
					Bottom	7.6	0.2	28	27.0	27.0	8.0	8.0	19.3	19.3	92.3	92.4	6.6	6.6	5.6		7		95				<0.2		2.0	
						7.6	0.2	31	27.0		8.0		19.3		92.5		6.6		5.6		8		96				<0.2		1.9	
C2	Cloudy	Moderate	07:38	11.3	Surface	1.0	0.6	42	28.5	28.5	7.9	7.9	13.0	13.0	91.9	91.9	6.6	6.7	4.4	5.7	4	7	87	91	825702	806955	<0.2	<0.2	2.6	2.3
						1.0	0.7	44	28.5		7.9		13.0		91.9		6.6		4.4		5		87				<0.2		2.6	
					Middle	5.7	0.3	50	28.3	28.3	8.0	8.0	13.2	13.2	92.8	92.8	6.7		4.2		7		91				<0.2		2.1	
						5.7	0.3	51	28.3		8.0		13.2		92.8		6.7		4.2		8		91				<0.2		2.2	
					Bottom	10.3	0.3	33	27.9	27.9	8.0	8.0	16.5	16.5	90.3	90.3	6.5	6.5	8.7		10		96				<0.2		2.0	
						10.3	0.3	32	27.9		8.0		16.5		90.3		6.5		8.6		9		95				<0.2		2.2	
C3	Rainy	Moderate	05:42	10.4	Surface	1.0	0.5	229	27.1	27.1	8.0	8.0	23.5	23.5	91.5	91.5	6.4	6.4	2.4	3.6	3	4	86	90	822108	817781	<0.2	<0.2	1.3	1.3
						1.0	0.5	246	27.1		8.0		23.5		91.5		6.4		2.4		3		86				<0.2		1.3	
					Middle	5.2	0.5	244	26.9	26.9	8.0	8.0	23.4	23.4	90.4	90.4	6.3		4.4		4		90				<0.2		1.3	
						5.2	0.5	257	26.9		8.0		23.4		90.4		6.3		4.6		4		90				<0.2		1.2	
					Bottom	9.4	0.2	262	26.7	26.7	8.0	8.0	25.7	25.7	87.8	88.0	6.1	6.1	3.8		6		94				<0.2		1.3	
						9.4	0.2	266	26.7		8.0		25.7		88.1		6.1		3.8		5		94				<0.2		1.4	
IM1	Rainy	Moderate	06:51	5.2	Surface	1.0	0.2	63	28.4	28.5	8.1	8.1	16.3	16.3	94.9	95.1	6.7	6.8	4.6	4.0	7	6	88	91	817937	807120	<0.2	<0.2	2.2	2.2
						1.0	0.2	65	28.5		8.1		16.3		95.3		6.8		4.4		7		89				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	68	28.6	28.6	8.1	8.1	14.6	14.6	96.0	96.0	6.9	6.9	3.6		5		94				<0.2		2.1	
						4.2	0.2	73	28.6		8.1		14.6		96.0		6.9		3.6		4		93				<0.2		2.3	
IM2	Rainy	Moderate	06:58	8.0	Surface	1.0	0.2	52	27.4	27.4	8.0	8.0	16.3	16.3	92.1	92.1	6.7	6.6	5.0	4.7	5	6	89	92	818169	806148	<0.2	<0.2	2.1	2.0
						1.0	0.2	60	27.4		8.0		16.3		92.0		6.6		5.1		6		90				<0.2		2.0	
					Middle	4.0	0.2	11	27.5	27.5	8.0	8.0	17.5	17.5	92.0	92.0	6.6		4.7		5		92				<0.2		2.1	
						4.0	0.2	12	27.5		8.0		17.5		92.0		6.6		4.7		6		93				<0.2		1.9	
					Bottom	7.0	0.2	13	27.5	27.5	8.0	8.0	19.3	19.3	92.2	92.3	6.6	6.6	4.4		5		95				<0.2		2.0	
						7.0	0.2	13	27.5		8.0		19.3		92.3		6.6		4.4		6		95				<0.2		1.9	
IM3	Rainy	Moderate	07:04	8.3	Surface	1.0	0.2	58	27.6	27.6	8.0	8.0	15.7	15.7	93.5	93.5	6.8	6.8	4.0	4.8	5	5	90	92	818778	805611	<0.2	<0.2	2.2	2.1
						1.0	0.2	62	27.6		8.0		15.7		93.4		6.8		4.0		5		90				<0.2		2.2	
					Middle	4.2	0.2	50	27.6	27.6	8.0	8.0	16.4	16.4	93.1	93.0	6.7		4.1		5		92				<0.2		2.2	
						4.2	0.2	52	27.6		8.0		16.4		92.9		6.7		4.4		5		93				<0.2		2.1	
					Bottom	7.3	0.2	55	27.5	27.5	8.0	8.0	18.2	18.2	92.3	92.3	6.6	6.6	6.1		6		94				<0.2		2.1	
						7.3	0.2	57	27.5		8.0		18.2		92.3		6.6		6.1		5		94				<0.2		2.0	
IM4	Rainy	Moderate	07:12	8.1	Surface	1.0	0.3	57	28.0	28.0	8.0	8.0	14.8	14.8	94.9	94.9	6.8	6.8	3.2	3.7	3	4	89	93	819734	804630	<0.2	<0.2	2.0	2.0
						1.0	0.3	53	28.0		8.0		14.8		94.9		6.8		3.2		3		89				<0.2		1.9	
					Middle	4.1	0.3	56	27.8	27.8	8.0	8.0	15.3	15.4	93.6	93.4	6.8		3.7		4		94				<0.2		2.0	
						4.1	0.4	60	27.7		8.0		15.4		93.2		6.7		3.9		4		94				<0.2		2.0	
					Bottom	7.1	0.4	54	27.5	27.6	8.0	8.0	18.5	18.5	92.1	92.1	6.6	6.6	4.3		6		95				<0.2		1.9	
						7.1	0.4	63	27.7		8.0		18.4		92.1		6.5		4.0		6		95				<0.2		2.0	
IM5	Rainy	Moderate	07:19	7.8	Surface	1.0	0.4	43	27.8	27.8	8.0	8.0	15.7	15.7	91.8	91.8	6.6	6.6	4.0	4.7	5	5	89	92	820719	804855	<0.2	<0.2	1.9	2.0
						1.0	0.5	42	27.8		8.0		15.7		91.8		6.6		3.9		4		90				<0.2		1.9	
					Middle	3.9	0.4	53	27.8	27.8	8.0	8.0	15.5	15.5	91.8	91.7	6.6		4.3		5		92				<0.2		1.9	
						3.9	0.4	52	27.7		8.0		15.5		91.5		6.6		4.7		4		93				<0.2		2.0	
					Bottom	6.8	0.3	55	27.4	27.4	8.0	8.0	19.5	19.5	91.4	91.5	6.5	6.5	6.0		6		94				<0.2		2.1	
						6.8	0.3	57	27.4		8.0		19.5		91.6		6.5		5.5		7		94				<0.2		1.9	
IM6	Rainy	Moderate	07:27	8.1	Surface	1.0	0.4	38	27.9	27.9	8.0	8.0	15.6	15.6	90.2	90.3	6.5	6.5	4.0	4.8	5	7	89	92	821041	805837	<0.2	<0.2	2.0	2.0
						1.0	0.4	39	27.9		8.0		15.6		90.3		6.5		4.1		5		90				<0.2		2.0	
					Middle	4.1	0.3	46	27.9	27.9	8.0	8.0	15.8	15.8	90.4	90.4	6.5		4.2		6		93				<0.2		1.9	
						4.1	0.3	48	27.9		8.0		15.8		90.4		6.5		4.2		6		93				<0.2		2.0	
					Bottom	7.1	0.2	48	27.6	27.6	8.0	8.0	19.1	19.1	91.3	91.4	6.5	6.5	6.4		9		94				<0.2		2.0	
						7.1	0.2	54	27.6		8.0		19.1		91.5		6.5		6.1		8		94				<0.2		1.9	
IM7	Rainy	Moderate	07:35	8.6	Surface	1.0	0.3	26	27.6	27.7	8.0	8.0	16.4	16.3	88.7	88.8	6.4	6.4	5.4	5.3	5	6	89	93	821325	806852	<0.2	<0.2	2.0	2.0
						1.0	0.3	26	27.7		8.0		16.3		88.9		6.4		5.2		6		94				<0.2		2.1	
					Middle	4.3	0.1	23	27.8	27.8	8.0	8.0	16.2	16.2	89.7	89.7	6.4		5.1		5		92				<0.2		2.0	
						4.3	0.1	25	27.8		8.0		16.2		89.7		6.4		5.2		6		92				<0.2		2.0	
					Bottom	7.6	0.1	22	27.6	27.6	8.0	8.0	17.5	17.5	90.4	90.6	6.5	6.5	5.7		6		94				<0.2		2.1	
						7.6	0.1	22	27.6		8.0		17.5		90.7		6.5		5.6		7		94				<0.2		2.0	
IM8	Cloudy	Moderate	07:07	7.9	Surface	1.0	0.3	134	28.2	28.2	7.9	7.9	13.2	13.2	90.0	90.0	6.5	6.6	3.8	5.0	6	6	86	91	821832	808118	<0.2	<0.2	2.3	2.3
						1.0	0.3	147	28.2		7.9		13.2		90.0		6.5		3.8		7		87				<0.2		2.3	
					Middle	4.0	0.2	111	28.1	28.1	7.9	7.9	13.4	13.4	91.4	91.4	6.6		3.8		6		91				<0.2		2.2	
						4.0	0.2	113	28.1		7.9		13.4		91.3		6.6		3.7		6		91				<0.2		2.3	
					Bottom	6.9	0.3	78	27.7	27.7	8.0	8.0	15.8	15.8	87.6	87.6	6.3	6.3	7.4		5		95				<0.2		2.3	
						6.9	0.3	81	27.7		8.0		15.8		87.6		6.3		7.4		5		95				<0.2		2.2	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	06:58	7.6	Surface	1.0	0.6	102	28.6	28.6	7.9	7.9	11.7	11.7	93.3	93.3	6.8	6.8	3.3	5.3	9	7	87	91	822116	808791	<0.2	<0.2	2.3	2.3
						1.0	0.6	109	28.6		7.9		11.7		93.3		6.8		3.3		12		87				<0.2		2.3	
					Middle	3.8	0.6	90	28.6	28.6	8.0	8.0	11.7	11.7	92.3	92.3	6.7		3.3		12		91				<0.2		2.4	
						3.8	0.6	95	28.6		8.0		11.7		92.3		6.7		3.3		4		90				<0.2		2.2	
					Bottom	6.6	0.5	65	27.9	27.9	8.0	8.0	15.7	15.7	89.0	89.0	6.4	6.4	9.2		3		95				<0.2		2.2	
						6.6	0.5	67	27.9		8.0		15.7		89.0		6.4		9.2		3		95				<0.2		2.3	
IM10	Cloudy	Moderate	06:47	8.1	Surface	1.0	0.7	117	28.6	28.6	7.9	7.9	12.9	12.9	92.7	92.7	6.7	6.7	3.9	4.6	9	5	87	91	822401	809804	<0.2	<0.2	2.0	2.2
						1.0	0.7	117	28.6		7.9		12.9		92.7		6.7		3.8		8		87				<0.2		2.0	
					Middle	4.1	0.8	90	28.9	28.9	8.0	8.0	12.2	12.2	93.7	93.7	6.7		3.8		3		91				<0.2		2.3	
						4.1	0.8	97	28.9		8.0		12.2		93.7		6.7		3.9		3		90				<0.2		2.2	
					Bottom	7.1	0.5	82	28.0	28.0	8.0	8.0	15.2	15.2	90.5	90.5	6.5	6.5	6.1		3		94				<0.2		2.4	
						7.1	0.5	89	28.0		8.0		15.2		90.5		6.5		6.1		5		95				<0.2		2.3	
IM11	Cloudy	Moderate	06:32	7.7	Surface	1.0	0.6	96	27.8	27.8	8.0	8.0	15.2	15.2	90.6	90.6	6.5	6.5	4.6	4.9	5	5	87	91	822075	811480	<0.2	<0.2	2.1	2.0
						1.0	0.7	97	27.8		8.0		15.2		90.6		6.5		4.5		4		87				<0.2		1.9	
					Middle	3.9	0.4	113	27.7	27.7	8.0	8.0	15.0	15.0	90.3	90.3	6.5		5.3		4		90				<0.2		2.1	
						3.9	0.4	117	27.7		8.0		15.0		90.3		6.5		5.3		5		91				<0.2		2.0	
					Bottom	6.7	0.3	97	27.7	27.7	8.0	8.0	16.2	16.2	89.5	89.5	6.4	6.4	4.7		5		94				<0.2		1.8	
						6.7	0.3	98	27.7		8.0		16.2		89.5		6.4		4.9		6		94				<0.2		1.9	
IM12	Cloudy	Moderate	06:23	8.8	Surface	1.0	0.6	117	27.9	27.9	8.0	8.0	16.3	16.3	92.0	92.0	6.6	6.6	3.9	4.3	6	5	87	91	821436	812043	<0.2	<0.2	2.0	2.0
						1.0	0.6	122	27.9		8.0		16.3		92.0		6.6		3.9		5		86				<0.2		2.0	
					Middle	4.4	0.3	87	27.9	27.9	8.0	8.0	16.6	16.6	92.3	92.3	6.6		3.6		5		91				<0.2		2.0	
						4.4	0.3	93	27.9		8.0		16.6		92.3		6.6		3.6		6		91				<0.2		1.9	
					Bottom	7.8	0.1	50	27.5	27.5	8.0	8.0	17.6	17.6	88.1	88.1	6.3	6.3	5.5		5		96				<0.2		2.0	
						7.8	0.1	50	27.5		8.0		17.6		88.1		6.3		5.5		5		95				<0.2		2.0	
SR1A	Rainy	Moderate	06:08	5.5	Surface	1.0	-	-	27.7	27.7	8.0	8.0	14.2	14.2	92.0	92.0	6.7	6.7	3.6	3.8	5	5	-	-	819980	812653	-	-	-	-
						1.0	-	-	27.7		8.0		14.2		92.0		6.7		3.6		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	27.3	27.3	8.0	8.0	18.1	18.1	90.9	90.9	6.5	6.5	4.1		5		-				-		-	
						4.5	-	-	27.3		8.0		18.1		90.9		6.5		4.1		5		-				-		-	
SR2	Rainy	Moderate	06:07	4.8	Surface	1.0	0.4	46	27.5	27.5	8.0	8.0	19.4	19.4	91.5	91.5	6.5	6.5	3.3	4.0	5	6	86	89	821448	814184	<0.2	<0.2	1.8	1.8
						1.0	0.4	48	27.5		8.0		19.4		91.5		6.5		3.3		6		87				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	22	27.1	27.1	8.0	8.0	17.1	17.1	89.5	89.6	6.5	6.5	4.8		6		91				<0.2		1.7	
						3.8	0.3	23	27.1		8.0		17.1		89.6		6.5		4.8		6		91				<0.2		1.7	
SR3	Cloudy	Moderate	07:15	8.2	Surface	1.0	0.2	55	29.1	29.1	7.9	7.9	11.4	11.4	94.5	94.5	6.8	6.8	3.1	5.1	3	6	-	-	822135	807589	-	-	-	-
						1.0	0.3	57	29.1		7.9		11.4		94.5		6.8		3.1		3		-				-		-	
					Middle	4.1	0.2	63	29.1	29.1	8.0	8.0	11.5	11.5	93.9	93.9	6.8		3.2		5		-				-		-	
						4.1	0.2	65	29.1		8.0		11.5		93.9		6.8		3.2		6		-				-		-	
					Bottom	7.2	0.0	53	27.6	27.6	8.0	8.0	16.7	16.7	87.3	87.3	6.3	6.3	8.9		10		-				-		-	
						7.2	0.0	55	27.6		8.0		16.7		87.3		6.3		8.9		11		-				-		-	
SR4A	Cloudy	Calm	06:15	9.5	Surface	1.0	0.4	224	27.7	27.7	8.0	8.0	15.1	15.1	92.8	92.8	6.7	6.7	4.8	5.9	5	7	-	-	817173	807827	-	-	-	-
						1.0	0.4	220	27.7		8.0		15.1		92.8		6.7		4.7		6		-				-		-	
					Middle	4.8	0.3	273	27.7	27.7	8.0	8.0	15.0	15.0	92.6	92.6	6.7		4.5		6		-				-		-	
						4.8	0.3	276	27.7		8.0		15.0		92.4		6.7		5.0		5		-				-		-	
					Bottom	8.5	0.4	253	27.4	27.4	8.0	8.0	16.8	16.8	90.8	91.0	6.5	6.6	8.3		11		-				-		-	
						8.5	0.4	257	27.4		8.0		16.8		91.1		6.6		8.3		11		-				-		-	
SR5A	Cloudy	Calm	05:56	4.7	Surface	1.0	0.2	251	27.9	27.9	7.9	7.9	16.2	16.2	91.2	91.2	6.5	6.5	4.3	3.9	6	6	-	-	816588	810702	-	-	-	-
						1.0	0.2	222	27.9		7.9		16.2		91.2		6.5		4.1		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	253	28.0	28.0	7.9	7.9	16.1	16.1	91.5	91.6	6.6	6.6	3.5		5		-				-		-	
						3.7	0.1	224	28.0		7.9		16.1		91.6		6.6		3.5		6		-				-		-	
SR6	Cloudy	Calm	05:30	5.0	Surface	1.0	0.0	260	27.7	27.7	7.7	7.7	14.3	14.3	90.6	90.6	6.6	6.6	3.0	3.1	4	4	-	-	817908	814666	-	-	-	-
						1.0	0.0	262	27.7		7.7		14.3		90.6		6.6		3.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	252	27.7	27.7	7.7	7.7	14.3	14.3	90.4	90.7	6.6	6.6	3.0		5		-				-		-	
						4.0	0.0	223	27.7		7.7		14.3		91.0		6.6		3.3		4		-				-		-	
SR7	Rainy	Moderate	05:11	14.6	Surface	1.0	0.1	338	26.5	26.5	8.0	8.0	24.3	24.3	84.3	84.3	5.9	6.0	3.4	3.2	4	5	-	-	823654	823728	-	-	-	-
						1.0	0.1	356	26.5		8.0		24.3		84.3		5.9		3.3		3		-				-		-	
					Middle	7.3	0.2	247	26.8	26.8	8.0	8.0	22.5	22.5	84.8	84.9	6.0		2.4		5		-				-		-	
						7.3	0.2	255	26.8		8.0		22.5		84.9		6.0		2.4		6		-				-		-	
					Bottom	13.6	0.2	298	26.6	26.6	8.0	8.0	24.0	24.0	86.5	86.5	6.1	6.1	3.8		6		-				-		-	
						13.6	0.2	274	26.6		8.0		24.0		86.5		6.1		3.9		6		-				-		-	
SR8	Rainy	Moderate	06:09	4.8	Surface	1.0	-	-	27.5	27.5	8.0	8.0	18.0	18.0	91.5	91.5	6.5	6.5	4.2	3.7	2	2	-	-	820376	811641	-	-	-	-
						1.0	-	-	27.5		8.0		18.0		91.5		6.5		4.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.5	27.5	8.0	8.0	19.3	19.3	91.9	91.9	6.5	6.5	3.3		2		-				-		-	
						3.8	-	-	27.5		8.0		19.3		91.9		6.5		3.2		2		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 06 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:14	7.6	Surface	1.0	0.3	132	28.6	28.6	8.1	8.1	14.0	14.0	96.2	96.2	6.9	6.8	3.8	4.9	3	5	81	85	815621	804251	<0.2	<0.2	1.4	1.4
						1.0	0.3	133	28.5		8.1		14.1		96.2		6.9		3.7		3		82				<0.2		1.2	
					Middle	3.8	0.3	148	27.9	27.9	8.1	8.1	18.8	18.8	93.1	93.0	6.6		4.1		6		85				<0.2		1.2	
						3.8	0.3	150	27.9		8.1		18.8		92.9		6.6		4.3		5		84				<0.2		1.2	
					Bottom	6.6	0.2	139	28.2	28.2	8.1	8.1	18.9	18.9	92.6	92.7	6.5	6.5	6.7		7		88				<0.2		1.7	
						6.6	0.2	140	28.2		8.1		18.9		92.8		6.5		7.1		6		87				<0.2		1.5	
C2	Fine	Moderate	13:24	11.2	Surface	1.0	0.6	177	27.9	27.9	7.9	7.9	12.8	12.8	92.6	92.4	6.8	6.7	6.0	5.6	5	5	84	87	825695	806932	<0.2	<0.2	2.3	1.9
						1.0	0.6	184	27.9		7.9		12.8		92.1		7.0		6.1		4		85				<0.2		2.2	
					Middle	5.6	0.4	142	27.8	27.8	7.9	7.9	11.6	11.6	88.7	88.6	6.5		5.5		6		88				<0.2		1.2	
						5.6	0.4	155	27.8		7.9		11.6		88.5		6.5		5.6		5		87				<0.2		1.4	
					Bottom	10.2	0.3	135	27.7	27.7	7.9	7.9	13.9	13.9	88.5	88.5	6.4	6.5	5.3		5		89				<0.2		2.0	
						10.2	0.3	136	27.7		7.9		13.9		88.5		6.5		5.2		5		89				<0.2		2.0	
C3	Fine	Moderate	15:02	12.1	Surface	1.0	0.3	99	28.5	28.5	8.0	8.0	17.0	17.0	92.9	92.9	6.6	6.6	5.7	5.9	3	3	85	88	822096	817786	<0.2	<0.2	2.2	2.1
						1.0	0.3	108	28.5		8.0		17.0		92.9		6.6		5.8		3		86				<0.2		2.2	
					Middle	6.1	0.3	92	27.9	27.9	8.0	8.0	19.2	19.2	91.9	91.9	6.5		8.0		3		88				<0.2		2.1	
						6.1	0.3	96	27.9		8.0		19.2		91.9		6.5		8.1		4		87				<0.2		2.2	
					Bottom	11.1	0.2	87	27.8	27.9	8.0	8.0	20.9	20.9	90.5	90.6	6.3	6.3	3.9		3		89				<0.2		2.0	
						11.1	0.2	91	27.9		8.0		20.8		90.7		6.3		3.9		4		90				<0.2		1.9	
IM1	Fine	Moderate	14:01	5.7	Surface	1.0	0.1	258	28.2	28.2	8.0	8.0	13.9	13.9	93.5	93.5	6.8	6.8	3.8	3.8	4	3	84	86	817940	807153	<0.2	<0.2	1.2	1.3
						1.0	0.1	260	28.2		8.0		13.9		93.5		6.8		3.8		3		84				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	223	28.2	28.2	8.0	8.0	13.9	13.9	94.0	94.1	6.8	6.8	3.8		3		89				<0.2		1.3	
						4.7	0.1	244	28.2		8.0		13.9		94.1		6.8		3.9		3		88				<0.2		1.5	
IM2	Fine	Moderate	13:55	8.5	Surface	1.0	0.5	232	28.2	28.2	8.1	8.1	16.2	16.2	94.4	94.4	6.7	6.7	3.7	3.8	5	5	82	85	818163	806154	<0.2	<0.2	1.7	1.4
						1.0	0.5	233	28.2		8.1		16.2		94.4		6.7		3.7		4		82				<0.2		1.6	
					Middle	4.3	0.4	226	28.1	28.1	8.0	8.0	16.4	16.4	94.0	94.0	6.7		3.7		4		85				<0.2		1.4	
						4.3	0.4	228	28.1		8.0		16.4		94.0		6.7		3.7		4		85				<0.2		1.5	
					Bottom	7.5	0.3	216	28.0	28.0	8.0	8.0	16.9	16.8	94.2	94.3	6.7	6.7	3.8		5		88				<0.2		1.2	
						7.5	0.3	225	28.0		8.0		16.8		94.3		6.7		4.1		6		88				<0.2		1.1	
IM3	Fine	Moderate	13:49	8.9	Surface	1.0	0.6	212	28.0	28.0	8.0	8.0	15.2	15.2	93.7	93.7	6.7	6.7	9.1	6.5	4	4	82	85	818769	805579	<0.2	<0.2	1.4	1.5
						1.0	0.6	218	28.0		8.1		15.2		93.6		6.7		8.9		4		82				<0.2		1.3	
					Middle	4.5	0.4	254	27.8	27.8	8.1	8.1	15.5	15.5	93.3	93.3	6.7		4.7		4		85				<0.2		1.7	
						4.5	0.4	225	27.8		8.1		15.5		93.3		6.7		4.6		4		85				<0.2		1.6	
					Bottom	7.9	0.3	246	27.7	27.7	8.0	8.0	16.8	16.8	93.4	93.5	6.7	6.7	5.5		4		88				<0.2		1.3	
						7.9	0.3	228	27.7		8.0		16.8		93.5		6.7		5.9		5		88				<0.2		1.4	
IM4	Fine	Moderate	13:41	9.1	Surface	1.0	0.6	219	28.3	28.3	8.0	8.0	13.8	13.8	92.9	92.9	6.7	6.7	4.0	4.2	4	5	81	85	819724	804594	<0.2	<0.2	2.0	1.9
						1.0	0.6	220	28.2		8.0		13.8		92.9		6.7		4.0		5		81				<0.2		1.8	
					Middle	4.6	0.6	211	28.0	28.0	8.0	8.0	13.8	13.8	92.5	92.5	6.7		3.7		5		85				<0.2		1.7	
						4.6	0.7	200	28.0		8.0		13.8		92.4		6.7		3.8		4		85				<0.2		1.9	
					Bottom	8.1	0.5	249	27.7	27.7	8.0	8.0	17.4	17.4	91.9	92.0	6.6	6.6	4.8		5		88				<0.2		2.0	
						8.1	0.5	221	27.7		8.0		17.4		92.1		6.6		5.2		6		87				<0.2		2.0	
IM5	Fine	Moderate	13:32	8.2	Surface	1.0	0.9	218	28.1	28.1	8.0	8.0	11.2	11.2	89.8	89.8	6.6	6.6	4.0	4.4	4	5	80	84	820722	804843	<0.2	<0.2	1.5	1.6
						1.0	0.9	204	28.1		8.0		11.2		89.7		6.6		4.0		5		80				<0.2		1.4	
					Middle	4.1	0.7	239	27.9	28.0	8.0	8.0	11.0	11.0	89.3	89.4	6.6		4.7		6		84				<0.2		1.2	
						4.1	0.7	241	28.0		8.0		11.0		89.4		6.6		4.8		5		84				<0.2		1.4	
					Bottom	7.2	0.5	241	28.1	28.1	8.0	8.0	14.0	14.0	90.3	90.3	6.5	6.5	4.4		6		87				<0.2		1.9	
						7.2	0.6	243	28.1		8.0		14.0		90.3		6.5		4.4		5		87				<0.2		1.9	
IM6	Fine	Moderate	13:25	8.0	Surface	1.0	0.2	205	28.1	28.1	8.0	8.0	14.3	14.3	89.2	89.2	6.4	6.4	4.4	4.6	5	6	80	84	821043	805805	<0.2	<0.2	1.4	1.7
						1.0	0.2	201	28.1		8.0		14.3		89.2		6.4		4.4		6		80				<0.2		1.5	
					Middle	4.0	0.3	223	28.1	28.1	8.0	8.0	14.3	14.3	88.9	88.9	6.4		4.5		5		84				<0.2		1.6	
						4.0	0.3	199	28.1		8.0		14.3		88.9		6.4		4.5		6		84				<0.2		1.8	
					Bottom	7.0	0.2	229	28.0	28.0	8.0	8.0	15.1	15.1	89.5	89.6	6.4	6.5	4.9		6		87				<0.2		1.9	
						7.0	0.2	218	28.0		8.0		15.1		89.7		6.5		4.8		6		86				<0.2		1.8	
IM7	Fine	Moderate	13:19	8.8	Surface	1.0	0.1	187	28.2	28.2	7.9	7.9	13.0	13.0	89.0	89.0	6.5	6.5	4.8	5.0	4	5	81	84	821349	806830	<0.2	<0.2	1.4	1.7
						1.0	0.1	179	28.2		7.9		13.0		89.0		6.5		4.8		3		80				<0.2		1.5	
					Middle	4.4	0.3	213	28.1	28.1	7.9	7.9	13.1	13.1	88.4	88.3	6.4		5.8		6		84				<0.2		1.9	
						4.4	0.3	200	28.1		7.9		13.1		88.2		6.4		5.8		4		83				<0.2		1.9	
					Bottom	7.8	0.5	204	28.0	28.1	7.9	7.9	14.2	14.2	87.9	88.0	6.4	6.4	4.6		6		87				<0.2		1.7	
						7.8	0.6	211	28.2		7.9		14.2		88.0		6.4		4.4		6		87				<0.2		1.7	
IM8	Fine	Moderate	14:04	7.6	Surface	1.0	0.1	166	28.3	28.3	7.9	7.9	14.0	14.0	90.6	90.6	6.5	6.5	4.5	5.0	5	5	84	87	821842	808138	<0.2	<0.2	2.5	2.2
						1.0	0.1	167	28.3		7.9		14.0		90.6		6.5		4.5		4		84				<0.2		2.5	
					Middle	3.8	0.2	180	28.4	28.4	7.9	7.9	13.6	13.6	90.7	90.7	6.5		5.5		4		87				<0.2		2.2	
						3.8	0.2	194	28.4		7.9		13.6		90.7		6.5		5.5		4		88				<0.2		2.2	
					Bottom	6.6	0.1	191	29.1	29.1	7.9	7.9	13.8	13.8	92.5	92.6	6.6	6.6	5.0		6		89				<0.2		1.9	
						6.6	0.1	198	29.1		7.9		13.8		92.7		6.6		5.1		6		90				<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 06 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	14:09	7.4	Surface	1.0	0.3	178	27.7	27.7	7.9	7.9	15.0	15.0	90.2	90.3	6.5	6.5	9.3	8.0	5	6	85	87	822113	808831	<0.2	<0.2	2.4	2.5
						1.0	0.3	172	27.7		7.9		15.0		90.3		6.5		9.3		6		84				<0.2		2.5	
					Middle	3.7	0.3	164	27.9	27.9	7.9	7.9	14.7	14.7	88.7	88.7	6.4		8.8		6		89				<0.2		2.4	
						3.7	0.3	168	27.9		7.9		14.7		88.7		6.4		8.8		6		87				<0.2		2.4	
					Bottom	6.4	0.2	171	28.0	28.0	7.9	7.9	15.1	15.1	88.9	89.1	6.4	6.4	6.0		6		89				<0.2		2.6	
						6.4	0.2	173	28.0		7.9		15.1		89.2		6.4		5.8		6		88				<0.2		2.5	
IM10	Fine	Moderate	14:16	7.7	Surface	1.0	0.8	151	27.9	27.9	7.9	7.9	13.4	13.4	89.4	89.4	6.5	6.6	7.8	7.9	4	8	84	87	822378	809813	<0.2	<0.2	2.2	2.3
						1.0	0.9	162	27.9		7.9		13.4		89.4		6.5		7.8		5		84				<0.2		2.1	
					Middle	3.9	0.9	162	27.8	27.8	7.9	7.9	13.5	13.5	91.1	91.2	6.6		5.9		8		86				<0.2		2.4	
						3.9	0.9	163	27.8		7.9		13.5		91.2		6.7		5.8		9		88				<0.2		2.3	
					Bottom	6.7	0.5	159	27.6	27.6	7.9	7.9	15.9	15.9	90.4	90.4	6.5	6.5	10.1		11		88				<0.2		2.4	
						6.7	0.5	144	27.6		7.9		15.9		90.4		6.5		10.1		12		89				<0.2		2.5	
IM11	Fine	Moderate	14:25	7.8	Surface	1.0	1.0	149	28.1	28.1	7.9	7.9	15.4	15.4	92.5	92.5	6.6	6.6	4.9	4.6	4	4	84	86	822058	811458	<0.2	<0.2	2.2	2.4
						1.0	1.1	136	28.1		7.9		15.4		92.5		6.6		4.8		4		84				<0.2		2.1	
					Middle	3.9	0.8	110	28.1	28.1	7.9	7.9	15.8	15.8	92.3	92.3	6.6		3.7		5		87				<0.2		2.5	
						3.9	0.9	116	28.1		7.9		15.8		92.3		6.6		3.8		4		86				<0.2		2.6	
					Bottom	6.8	0.6	114	28.0	28.0	7.9	7.9	15.0	15.0	92.1	92.1	6.6	6.6	5.0		4		88				<0.2		2.6	
						6.8	0.6	114	28.0		7.9		15.0		92.1		6.6		5.2		5		89				<0.2		2.5	
IM12	Fine	Moderate	14:33	7.9	Surface	1.0	0.9	124	28.1	28.1	8.0	8.0	16.5	16.5	93.6	93.6	6.7	6.8	9.4	8.4	4	5	84	87	821477	812039	<0.2	<0.2	2.2	2.2
						1.0	0.9	132	28.1		8.0		16.5		93.6		6.7		9.4		4		84				<0.2		2.0	
					Middle	4.0	0.5	113	28.0	28.0	8.0	8.0	16.7	16.7	94.7	94.7	6.8		8.4		4		87				<0.2		2.5	
						4.0	0.5	123	28.0		8.0		16.7		94.7		6.8		8.4		5		86				<0.2		2.3	
					Bottom	6.9	0.4	103	27.2	27.2	8.0	8.0	18.1	18.1	92.5	92.8	6.6	6.7	7.5		6		89				<0.2		2.1	
						6.9	0.4	104	27.1		8.0		18.1		93.0		6.7		7.4		6		89				<0.2		2.1	
SR1A	Fine	Moderate	14:36	4.7	Surface	1.0	-	-	28.2	28.2	8.0	8.0	15.7	15.7	90.9	91.0	6.5	6.5	4.7	4.1	6	6	-	-	819973	812657	-	-	-	-
						1.0	-	-	28.2		8.0		15.7		91.0		6.5		4.7		6		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.0	28.0	8.0	8.0	16.9	16.9	91.3	91.3	6.5	6.5	3.6		5		-				-		-	
						3.7	-	-	28.0		8.0		16.9		91.3		6.5		3.6		5		-				-		-	
SR2	Fine	Moderate	14:43	4.3	Surface	1.0	0.6	100	28.0	28.0	8.0	8.0	17.6	17.6	91.8	91.9	6.5	6.5	9.5	8.8	4	6	87	88	821465	814158	<0.2	<0.2	2.5	2.6
						1.0	0.6	109	28.0		8.0		17.6		91.9		6.5		9.5		4		86				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	128	27.2	27.3	8.0	8.0	21.6	21.6	88.5	88.7	6.2	6.2	8.2		8		89				<0.2		2.7	
						3.3	0.3	137	27.3		8.0		21.5		88.9		6.2		7.9		6		89				<0.2		2.6	
SR3	Fine	Moderate	13:59	8.7	Surface	1.0	0.2	201	29.2	29.2	7.9	7.9	13.6	13.6	91.6	91.6	6.5	6.6	4.0	6.0	4	5	-	-	822136	807586	-	-	-	-
						1.0	0.2	206	29.2		7.9		13.6		91.6		6.5		4.0		4		-				-		-	
					Middle	4.4	0.1	166	28.2	28.2	7.9	7.9	13.2	13.2	90.9	90.9	6.6		8.2		4		-				-		-	
						4.4	0.1	168	28.2		7.9		13.2		90.8		6.6		8.3		4		-				-		-	
					Bottom	7.7	0.1	168	28.0	28.0	7.9	7.9	14.3	14.3	86.7	86.7	6.3	6.3	5.8		7		-				-		-	
						7.7	0.1	173	28.0		7.9		14.3		86.7		6.3		5.9		6		-				-		-	
SR4A	Fine	Calm	14:28	10.0	Surface	1.0	0.5	60	28.1	28.1	8.1	8.1	16.6	16.6	93.7	93.7	6.7	6.7	4.2	4.8	5	6	-	-	817187	807790	-	-	-	-
						1.0	0.5	63	28.1		8.1		16.6		93.7		6.7		4.2		5		-				-		-	
					Middle	5.0	0.6	59	28.2	28.3	8.1	8.1	16.6	16.6	93.6	93.7	6.7		4.5		6		-				-		-	
						5.0	0.6	60	28.3		8.1		16.6		93.7		6.7		4.7		5		-				-		-	
					Bottom	9.0	0.3	39	28.5	28.5	8.1	8.1	17.6	17.6	94.2	94.3	6.6	6.6	5.5		7		-				-		-	
						9.0	0.3	41	28.5		8.1		17.6		94.4		6.6		5.5		8		-				-		-	
SR5A	Fine	Calm	14:42	3.3	Surface	1.0	0.0	309	30.6	30.6	8.1	8.1	16.0	16.1	97.7	97.6	6.7	6.7	4.0	4.2	2	4	-	-	816616	810706	-	-	-	-
						1.0	0.0	337	30.5		8.1		16.1		97.5		6.7		4.0		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	122	29.6	29.7	8.1	8.1	17.4	17.4	94.3	94.3	6.5	6.5	4.4		6		-				-		-	
						2.3	0.1	126	29.7		8.1		17.3		94.3		6.5		4.4		6		-				-		-	
SR6	Fine	Calm	15:13	4.2	Surface	1.0	0.1	20	30.5	30.5	8.0	8.0	16.3	16.3	93.8	93.8	6.4	6.4	4.4	4.0	4	4	-	-	817891	814641	-	-	-	-
						1.0	0.1	21	30.5		8.0		16.3		93.8		6.4		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.1	22	30.4	30.4	8.0	8.0	16.8	16.8	93.2	93.2	6.4	6.4	3.6		4		-				-		-	
						3.2	0.1	22	30.4		8.0		16.8		93.1		6.4		3.6		4		-				-		-	
SR7	Fine	Moderate	15:26	16.5	Surface	1.0	0.9	71	27.4	27.4	8.0	8.0	21.5	21.5	91.1	91.1	6.4	6.5	3.0	7.0	3	3	-	-	823613	823727	-	-	-	-
						1.0	1.0	74	27.4		8.0		21.5		91.1		6.4		3.0		2		-				-		-	
					Middle	8.3	0.4	29	27.5	27.5	8.0	8.0	21.5	21.5	92.5	92.6	6.5		9.2		3		-				-		-	
						8.3	0.5	31	27.5		8.0		21.5		92.6		6.5		9.2		4		-				-		-	
					Bottom	15.5	0.2	58	27.8	27.8	8.0	8.0	21.7	21.7	88.9	89.0	6.2	6.2	8.8		4		-				-		-	
						15.5	0.2	59	27.8		8.0		21.7		89.0		6.2		8.8		4		-				-		-	
SR8	Fine	Moderate	14:34	4.9	Surface	1.0	-	-	28.1	28.1	8.0	8.0	16.8	16.8	91.3	91.3	6.5	6.5	3.8	3.9	4	5	-	-	820385	811632	-	-	-	-
						1.0	-	-	28.1		8.0		16.8		91.3		6.5		3.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.0	28.0	8.0	8.0	16.9	16.9	92.2	92.2	6.6	6.6	4.1		6		-				-		-	
						3.9	-	-	28.0		8.0		16.9		92.2		6.6		4.1		5		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Moderate	08:09	7.6	Surface	1.0	0.6	43	27.7	27.8	8.0	8.0	15.5	15.5	92.1	92.1	6.6	6.6	4.4	5.4	5	5	82	85	815611	804254	<0.2	<0.2	1.7	1.6
						1.0	0.6	44	27.8		8.0		15.5		92.1		6.6		4.3		4		82				<0.2		1.7	
					Middle	3.8	0.5	35	27.8	27.8	8.0	8.0	15.3	15.3	91.5	91.4	6.6		4.5		5		84				<0.2		1.6	
						3.8	0.6	35	27.7		8.0		15.3		91.2		6.6		4.7		4		84				<0.2		1.6	
					Bottom	6.6	0.4	18	27.7	27.7	8.0	8.0	17.6	17.6	90.8	90.9	6.5	6.5	6.9		6		88				<0.2		1.4	
						6.6	0.4	18	27.7		8.0		17.6		91.0		6.5		7.4		6		87				<0.2		1.5	
C2	Fine	Moderate	09:40	11.6	Surface	1.0	0.6	18	27.8	27.8	7.9	7.9	12.0	12.0	90.1	90.2	6.6	6.5	5.5	6.4	4	5	85	87	825668	806947	<0.2	<0.2	2.4	2.6
						1.0	0.7	19	27.8		7.9		12.0		90.2		6.6		5.5		4		84				<0.2		2.5	
					Middle	5.8	0.3	15	27.8	27.8	8.0	8.0	13.3	13.3	88.0	88.1	6.4		4.1		5		87				<0.2		2.8	
						5.8	0.3	16	27.8		8.0		13.3		88.1		6.4		4.1		5		88				<0.2		2.6	
					Bottom	10.6	0.3	13	27.6	27.7	8.0	8.0	14.5	14.5	87.4	87.6	6.4	6.4	9.7		5		89				<0.2		2.5	
						10.6	0.3	14	27.7		8.0		14.5		87.7		6.4		9.6		5		89				<0.2		2.6	
C3	Fine	Moderate	07:56	12.2	Surface	1.0	0.5	222	27.5	27.5	8.0	8.0	15.7	15.7	88.5	88.6	6.4	6.5	3.8	6.1	4	5	87	88	822097	817819	<0.2	<0.2	2.4	2.5
						1.0	0.5	226	27.5		8.0		15.7		88.6		6.4		3.8		5		85				<0.2		2.6	
					Middle	6.1	0.5	241	27.6	27.6	8.0	8.0	15.5	15.5	89.7	90.5	6.5		7.5		5		88				<0.2		2.5	
						6.1	0.5	256	27.5		8.0		15.5		91.3		6.6		7.5		5		89				<0.2		2.6	
					Bottom	11.2	0.1	264	27.4	27.4	8.0	8.0	19.6	19.6	89.2	89.3	6.3	6.3	7.0		5		90				<0.2		2.4	
						11.2	0.1	272	27.4		8.0		19.6		89.4		6.3		7.0		4		89				<0.2		2.7	
IM1	Fine	Moderate	08:19	5.4	Surface	1.0	0.3	28	28.1	28.1	8.0	8.0	12.1	12.1	90.3	90.3	6.6	6.6	4.3	4.3	4	5	83	85	817966	807121	<0.2	<0.2	2.0	2.0
						1.0	0.3	30	28.1		8.0		12.1		90.2		6.6				5		83				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	23	28.2	28.2	8.0	8.0	12.2	12.2	90.3	90.4	6.6	6.6	4.4		5		86				<0.2		2.0	
						4.4	0.2	24	28.2		8.0		12.2		90.4		6.6		4.4		5		86				<0.2		1.9	
IM2	Fine	Moderate	08:24	8.3	Surface	1.0	0.5	42	27.8	27.8	7.9	7.9	11.2	11.2	89.0	89.0	6.6	6.6	5.0	4.7	4	4	81	85	818174	806189	<0.2	<0.2	2.2	2.0
						1.0	0.5	43	27.8		7.9		11.2		89.0		6.6		5.0		4		82				<0.2		2.1	
					Middle	4.2	0.5	28	27.8	27.8	8.0	8.0	11.1	11.1	89.1	89.1	6.6		4.2		4		85				<0.2		2.0	
						4.2	0.5	28	27.7		8.0		11.1		89.1		6.6		4.3		5		84				<0.2		1.9	
					Bottom	7.3	0.4	359	27.6	27.6	8.0	8.0	13.5	13.5	89.1	89.2	6.5	6.5	4.8		5		88				<0.2		2.0	
						7.3	0.4	330	27.6		8.0		13.5		89.2		6.5		4.9		4		87				<0.2		2.0	
IM3	Fine	Moderate	08:29	8.5	Surface	1.0	0.4	12	27.7	27.7	7.9	7.9	11.6	11.6	86.7	86.8	6.4	6.5	4.6	4.7	4	4	81	84	818801	805608	<0.2	<0.2	2.0	2.0
						1.0	0.5	12	27.7		7.9		11.6		86.8		6.4		4.7		4		82				<0.2		2.2	
					Middle	4.3	0.5	11	27.6	27.6	7.9	7.9	11.7	11.7	88.4	88.5	6.5		4.6		4		84				<0.2		2.1	
						4.3	0.5	11	27.6		7.9		11.7		88.6		6.5		4.6		4		84				<0.2		2.0	
					Bottom	7.5	0.4	347	27.6	27.6	7.9	7.9	15.1	15.1	89.5	89.7	6.5	6.5	4.7		5		87				<0.2		1.9	
						7.5	0.4	319	27.6		7.9		15.1		89.8		6.5		4.8		5		87				<0.2		2.0	
IM4	Fine	Moderate	08:36	9.1	Surface	1.0	0.8	0	28.1	28.1	7.9	7.9	9.1	9.1	88.7	88.7	6.6	6.6	4.2	4.4	3	4	81	84	819735	804601	<0.2	<0.2	2.1	2.0
						1.0	0.9	0	28.1		7.9		9.1		88.7		6.6		4.3		4		81				<0.2		2.0	
					Middle	4.6	0.9	8	27.9	27.9	7.9	7.9	9.3	9.3	87.7	87.6	6.5		4.6		3		84				<0.2		2.0	
						4.6	1.0	8	27.9		7.9		9.3		87.5		6.5		4.6		4		84				<0.2		1.9	
					Bottom	8.1	0.5	340	27.7	27.7	7.9	7.9	12.8	12.8	87.4	87.5	6.4	6.4	4.2		3		86				<0.2		2.1	
						8.1	0.5	313	27.7		7.9		12.8		87.5		6.4		4.3		4		87				<0.2		2.1	
IM5	Fine	Moderate	08:43	8.4	Surface	1.0	0.9	18	28.0	28.0	7.9	7.9	11.9	11.9	88.1	88.1	6.5	6.5	5.7	5.5	4	5	81	84	820711	804862	<0.2	<0.2	2.2	2.1
						1.0	0.9	18	28.0		7.9		11.9		88.1		6.5		5.7		3		81				<0.2		2.0	
					Middle	4.2	0.7	24	28.0	28.0	7.9	7.9	11.8	11.8	88.7	88.8	6.5		4.6		5		84				<0.2		2.1	
						4.2	0.8	25	27.9		7.9		11.8		88.8		6.5		4.5		6		84				<0.2		2.1	
					Bottom	7.4	0.6	27	27.8	27.8	7.9	7.9	14.2	14.1	89.3	89.4	6.5	6.5	6.3		5		87				<0.2		2.1	
						7.4	0.7	27	27.8		7.9		14.1		89.5		6.5		6.5		5		87				<0.2		2.2	
IM6	Fine	Moderate	08:48	8.1	Surface	1.0	0.3	59	28.1	28.1	8.0	8.0	11.6	11.6	89.4	89.4	6.6	6.5	5.6	5.5	4	5	82	84	821081	805839	<0.2	<0.2	2.2	2.2
						1.0	0.4	64	28.1		8.0		11.6		89.3		6.5		5.7		4		81				<0.2		2.2	
					Middle	4.1	0.3	62	28.0	28.0	8.0	8.0	11.9	11.9	88.3	88.2	6.5		4.9		5		84				<0.2		2.2	
						4.1	0.3	66	27.9		8.0		11.9		88.1		6.5		5.1		4		85				<0.2		2.2	
					Bottom	7.1	0.2	94	27.8	27.8	8.0	8.0	16.0	16.0	88.1	88.2	6.3	6.3	5.9		6		87				<0.2		2.2	
						7.1	0.2	96	27.8		8.0		16.0		88.2		6.3		6.0		6		86				<0.2		2.2	
IM7	Fine	Moderate	08:54	9.0	Surface	1.0	0.1	293	28.6	28.6	7.9	7.9	12.5	12.5	91.0	90.9	6.6	6.6	5.2	4.9	4	4	80	83	821347	806835	<0.2	<0.2	2.2	2.2
						1.0	0.1	314	28.6		7.9		12.5		90.8		6.6		5.2		4		80				<0.2		2.2	
					Middle	4.5	0.2	5	28.3	28.3	7.9	7.9	12.5	12.5	89.1	89.0	6.5		4.6		4		83				<0.2		2.2	
						4.5	0.2	5	28.3		7.9		12.5		88.9		6.5		4.7		5		84				<0.2		2.1	
					Bottom	8.0	0.5	59	28.3	28.3	7.9	7.9	14.4	14.4	89.0	89.2	6.4	6.4	4.7		4		86				<0.2		2.2	
						8.0	0.5	64	28.3		7.9		14.4		89.3		6.4		4.8		5		87				<0.2		2.1	
IM8	Fine	Moderate	09:15	7.9	Surface	1.0	0.3	331	27.6	27.6	7.9	7.9	13.3	13.3	86.2	86.2	6.3	6.4	4.9	8.1	4	6	84	87	821821	808150	<0.2	<0.2	2.6	2.3
						1.0	0.3	338	27.6		7.9		13.3		86.2		6.3		4.9		4		84				<0.2		2.3	
					Middle	4.0	0.2	316	27.6	27.6	8.0	8.0	13.5	13.5	88.2	88.2	6.5		10.8		5		87				<0.2		2.2	
						4.0	0.2	319	27.6		8.0		13.5		88.1		6.4		10.8		6		88				<0.2		2.2	
					Bottom	6.9	0.3	291	27.7	27.7	8.0	8.0	15.4	15.4	86.7	86.7	6.3	6.3	8.7		9		90				<0.2		2.2	
						6.9	0.3	288	27.7		8.0		15.4		86.7		6.3		8.8		10		89				<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 06 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	09:05	7.5	Surface	1.0	0.6	301	27.6	27.6	7.9	7.9	14.6	14.6	89.1	89.1	6.5	6.5	6.5	8.4	7	10	83	87	822085	808808	<0.2	<0.2	2.3	2.6
						1.0	0.6	308	27.6		7.9		14.6		89.1		6.5		6.6		8		85				<0.2		2.3	
					Middle	3.8	0.6	294	27.6	27.6	8.0	8.0	14.6	14.6	88.9	89.0	6.5		9.4		10		87				<0.2		2.6	
						3.8	0.6	295	27.6		8.0		14.6		89.0		6.5		9.8		10		88				<0.2		2.8	
					Bottom	6.5	0.5	265	27.4	27.4	8.0	8.0	16.8	16.8	86.6	86.7	6.2	6.2	8.9		12		89				<0.2		2.8	
						6.5	0.5	269	27.4		8.0		16.8		86.7		6.2		9.0		12		90				<0.2		2.6	
IM10	Fine	Moderate	08:59	7.7	Surface	1.0	0.7	291	27.7	27.7	8.0	8.0	14.1	14.1	88.6	88.6	6.5	6.4	4.8	5.6	3	5	84	87	822393	809805	<0.2	<0.2	2.8	2.6
						1.0	0.7	299	27.7		8.0		14.1		88.6		6.5		4.8		4		84				<0.2		2.4	
					Middle	3.9	0.8	298	27.4	27.4	8.0	8.0	16.5	16.5	87.2	87.3	6.3		5.5		6		86				<0.2		2.5	
						3.9	0.8	285	27.4		8.0		16.5		87.4		6.3		5.5		5		87				<0.2		2.6	
					Bottom	6.7	0.5	280	27.6	27.6	8.0	8.0	17.0	17.0	89.8	89.7	6.4	6.4	6.5		6		89				<0.2		2.5	
						6.7	0.5	284	27.6		8.0		17.0		89.5		6.4		6.5		6		89				<0.2		2.5	
IM11	Fine	Moderate	08:48	7.9	Surface	1.0	0.6	287	27.4	27.4	8.0	8.0	17.0	17.0	90.0	90.0	6.5	6.5	10.4	8.7	4	8	85	87	822063	811456	<0.2	<0.2	2.4	2.5
						1.0	0.7	272	27.4		8.0		17.0		90.0		6.5		10.2		5		84				<0.2		2.4	
					Middle	4.0	0.4	261	27.5	27.5	8.0	8.0	16.8	16.8	89.2	89.2	6.4		4.4		7		88				<0.2		2.7	
						4.0	0.5	269	27.5		8.0		16.8		89.1		6.4		4.4		8		87				<0.2		2.6	
					Bottom	6.9	0.3	259	27.3	27.3	7.9	7.9	18.0	18.0	86.0	86.1	6.2	6.2	11.4		12		89				<0.2		2.6	
						6.9	0.3	265	27.3		7.9		18.0		86.1		6.2		11.5		10		89				<0.2		2.4	
IM12	Fine	Moderate	08:44	8.2	Surface	1.0	0.6	276	27.4	27.4	8.0	8.0	16.8	16.8	89.7	89.7	6.5	6.4	4.6	7.9	6	9	84	87	821474	812039	<0.2	<0.2	2.5	2.4
						1.0	0.6	280	27.4		8.0		16.8		89.7		6.5		4.6		5		84				<0.2		2.4	
					Middle	4.1	0.3	266	27.4	27.4	8.0	8.0	16.8	16.8	88.1	88.1	6.3		8.9		9		89				<0.2		2.5	
						4.1	0.3	267	27.4		8.0		16.8		88.0		6.3		8.9		8		88				<0.2		2.3	
					Bottom	7.2	0.1	255	27.2	27.2	8.0	8.0	18.8	18.8	85.7	85.7	6.1	6.1	10.1		12		89				<0.2		2.4	
						7.2	0.1	257	27.2		8.0		18.8		85.6		6.1		10.1		12		89				<0.2		2.4	
SR1A	Fine	Moderate	08:28	4.8	Surface	1.0	-	-	27.6	27.6	8.0	8.0	14.6	14.6	90.1	90.2	6.6	6.6	9.1	8.4	4	4	-	-	819980	812658	-	-	-	-
						1.0	-	-	27.6		8.0		14.6		90.2		6.6		9.1		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.6	27.6	8.0	8.0	14.9	14.9	89.8	89.9	6.5	6.5	7.6		4		-				-		-	
						3.8	-	-	27.6		8.0		14.9		90.0		6.5		7.8		4		-				-		-	
SR2	Fine	Moderate	08:16	4.6	Surface	1.0	0.4	248	27.5	27.5	7.9	7.9	16.1	16.1	89.5	89.5	6.5	6.5	4.7	5.8	4	6	85	87	821478	814150	<0.2	<0.2	2.5	2.6
						1.0	0.4	249	27.5		7.9		16.1		89.5		6.5		4.8		4		87				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	212	27.5	27.5	7.9	7.9	16.6	16.6	87.6	87.7	6.3	6.3	6.8		7		88				<0.2		2.7	
						3.6	0.4	222	27.5		7.9		16.6		87.7		6.3		6.9		8		89				<0.2		2.5	
SR3	Fine	Moderate	09:23	8.4	Surface	1.0	0.2	16	27.7	27.7	7.9	7.9	12.6	12.6	88.3	88.3	6.5	6.5	4.2	4.9	4	4	-	-	822155	807565	-	-	-	-
						1.0	0.2	17	27.7		7.9		12.6		88.3		6.5		4.2		3		-				-		-	
					Middle	4.2	0.2	19	27.7	27.7	7.9	7.9	12.9	12.9	87.2	87.1	6.4		4.4		4		-				-		-	
						4.2	0.2	20	27.7		7.9		12.9		87.0		6.4		4.4		4		-				-		-	
					Bottom	7.4	0.0	57	27.6	27.7	8.0	8.0	13.7	13.7	87.0	87.1	6.4	6.4	6.4		4		-				-		-	
						7.4	0.0	59	27.7		8.0		13.7		87.2		6.4		6.1		4		-				-		-	
SR4A	Fine	Calm	07:54	9.2	Surface	1.0	0.1	219	27.7	27.7	8.0	8.0	13.6	13.6	88.9	88.9	6.5	6.5	4.6	4.7	5	5	-	-	817206	807809	-	-	-	-
						1.0	0.1	231	27.7		8.0		13.6		88.9		6.5		4.6		5		-				-		-	
					Middle	4.6	0.1	242	27.7	27.7	8.0	8.0	13.1	13.1	88.9	89.0	6.5		4.7		6		-				-		-	
						4.6	0.1	244	27.7		8.0		13.1		89.0		6.5		4.7		5		-				-		-	
					Bottom	8.2	0.2	261	27.7	27.7	8.0	8.0	15.3	15.3	89.0	89.0	6.4	6.4	4.8		5		-				-		-	
						8.2	0.2	263	27.7		8.0		15.3		89.0		6.4		4.8		6		-				-		-	
SR5A	Fine	Calm	07:39	3.7	Surface	1.0	0.1	344	28.0	28.0	8.0	8.0	16.7	16.7	89.1	89.1	6.4	6.4	6.2	5.8	6	7	-	-	816593	810695	-	-	-	-
						1.0	0.1	359	28.0		8.0		16.7		89.1		6.4		6.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	221	28.0	28.0	7.9	7.9	16.6	16.6	90.2	90.3	6.4	6.4	5.4		7		-				-		-	
						2.7	0.0	233	28.0		7.9		16.6		90.3		6.4		5.6		7		-				-		-	
SR6	Fine	Calm	07:14	4.1	Surface	1.0	0.1	261	27.8	27.8	7.9	7.9	15.5	15.5	85.8	85.9	6.2	6.2	3.7	3.9	6	6	-	-	817890	814675	-	-	-	-
						1.0	0.1	268	27.8		7.9		15.5		85.9		6.2		3.7		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	217	27.9	27.9	7.9	7.9	15.4	15.4	87.0	87.0	6.3	6.3	4.0		5		-				-		-	
						3.1	0.1	223	27.9		7.9		15.4		87.0		6.3		4.0		6		-				-		-	
SR7	Fine	Moderate	07:30	16.8	Surface	1.0	0.1	333	27.7	27.7	7.8	7.8	15.8	15.8	91.0	91.0	6.6	6.6	3.0	4.3	3	4	-	-	823655	823733	-	-	-	-
						1.0	0.1	337	27.7		7.8		15.8		91.0		6.6		3.0		4		-				-		-	
					Middle	8.4	0.2	253	27.6	27.6	7.8	7.8	16.2	16.2	90.8	90.9	6.5		3.0		3		-				-		-	
						8.4	0.2	258	27.6		7.8		16.2		90.9		6.6		3.0		3		-				-		-	
					Bottom	15.8	0.2	295	27.3	27.3	7.7	7.7	18.6	18.6	90.8	90.8	6.5	6.5	6.9		5		-				-		-	
						15.8	0.2	287	27.3		7.7		18.6		90.8		6.5		6.8		4		-				-		-	
SR8	Fine	Moderate	08:36	5.1	Surface	1.0	-	-	27.7	27.7	8.0	8.0	15.2	15.2	88.0	88.1	6.4	6.4	8.1	9.8	5	8	-	-	820402	811639	-	-	-	-
						1.0	-	-	27.7		8.0		15.2		88.2		6.4		8.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.3	27.3	8.0	8.0	18.3	18.3	89.5	89.6	6.4	6.4	11.4		11		-				-		-	
						4.1	-	-	27.3		8.0		18.3		89.7		6.4		11.1		10		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 08 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	16:18	9.2	Surface	1.0	0.4	122	28.5	28.5	8.0	8.0	13.2	13.2	97.5	97.5	7.0	7.0	4.8	5.9	6	6	86	88	815623	804229	<0.2	<0.2	2.0	1.9
						1.0	0.4	123	28.5		8.0		13.2		97.5		7.0		4.9		6		85				<0.2		2.0	
					Middle	4.6	0.4	121	28.3	28.3	8.0	8.0	14.9	14.9	96.3	96.3	6.9		5.7		6		88				<0.2		1.9	
						4.6	0.4	134	28.3		8.0		14.9		96.3		6.9		5.9		6		89				<0.2		1.8	
					Bottom	8.2	0.3	116	28.3	28.3	7.9	7.9	16.0	16.0	95.1	95.1	6.8	6.8	7.0		6		91				<0.2		1.7	
						8.2	0.3	122	28.3		7.9		16.0		95.1		6.8		7.0		6		91				<0.2		1.7	
C2	Sunny	Moderate	15:03	11.4	Surface	1.0	0.3	163	29.1	29.1	7.8	7.8	11.4	11.4	85.9	85.9	6.2	5.8	12.6	10.7	5	5	82	85	825684	806929	<0.2	<0.2	2.7	2.7
						1.0	0.3	158	29.1		7.8		11.4		85.8		6.2		12.7		5		81				<0.2		2.7	
					Middle	5.7	0.3	142	28.0	28.0	7.8	7.8	17.7	17.7	74.8	74.9	5.3		9.4		4		85				<0.2		3.1	
						5.7	0.4	156	28.0		7.8		17.7		74.9		5.3		9.4		4		85				<0.2		2.6	
					Bottom	10.4	0.3	130	27.8	27.8	7.9	7.9	18.7	18.7	75.7	75.8	5.4	5.4	10.1		5		90				<0.2		2.5	
						10.4	0.3	143	27.8		7.9		18.7		75.8		5.4		10.0		5		89				<0.2		2.7	
C3	Sunny	Moderate	17:14	11.2	Surface	1.0	0.1	98	28.2	28.2	7.9	7.9	19.3	19.3	84.9	84.9	5.9	5.7	8.7	9.2	3	4	82	86	822106	817803	<0.2	<0.2	1.7	1.7
						1.0	0.2	104	28.2		7.9		19.3		84.9		5.9		8.7		4		83				<0.2		1.7	
					Middle	5.6	0.5	154	27.5	27.5	7.9	7.9	23.6	23.6	79.2	79.3	5.5		8.9		4		86				<0.2		1.8	
						5.6	0.5	155	27.5		7.9		23.6		79.3		5.5		8.9		3		86				<0.2		1.7	
					Bottom	10.2	0.6	152	26.3	26.3	7.9	7.9	29.6	29.6	70.4	70.5	4.8	4.8	9.9		3		90				<0.2		1.6	
						10.2	0.7	172	26.3		7.9		29.6		70.6		4.8		10.0		4		90				<0.2		1.6	
IM1	Sunny	Moderate	15:56	5.4	Surface	1.0	0.2	254	28.7	28.7	8.0	8.0	15.2	15.2	99.7	99.7	7.1	7.1	5.4	5.4	5	5	84	87	817967	807150	<0.2	<0.2	2.1	1.9
						1.0	0.3	225	28.7		8.0		15.2		99.7		7.1		5.4		4		86				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	235	28.7	28.7	8.0	8.0	15.1	15.1	100.4	100.4	7.1	7.1	5.5		6		89				<0.2		1.9	
						4.4	0.3	218	28.7		8.0		15.1		100.4		7.1		5.5		6		90				<0.2		1.8	
IM2	Sunny	Moderate	15:50	6.6	Surface	1.0	0.6	235	28.5	28.5	8.0	8.0	14.0	14.0	98.5	98.5	7.1	7.1	4.3	4.3	5	5	83	87	818146	806160	<0.2	<0.2	1.9	1.9
						1.0	0.6	236	28.5		8.0		14.1		98.5		7.1		4.3		5		84				<0.2		1.8	
					Middle	3.3	0.4	246	28.5	28.5	8.0	8.0	14.1	14.1	98.3	98.3	7.1		4.1		5		88				<0.2		1.9	
						3.3	0.4	228	28.5		8.0		14.1		98.3		7.1		4.1		4		87				<0.2		1.8	
					Bottom	5.6	0.4	228	28.3	28.3	8.0	8.0	14.9	14.9	98.9	99.0	7.1	7.1	4.7		4		89				<0.2		1.8	
						5.6	0.4	231	28.2		8.0		15.0		99.1		7.1		4.6		5		90				<0.2		1.9	
IM3	Sunny	Moderate	15:42	7.3	Surface	1.0	0.4	217	28.3	28.3	7.9	7.9	13.4	13.4	96.4	96.4	7.0	7.0	5.3	5.6	3	4	86	88	818768	805607	<0.2	<0.2	1.9	1.9
						1.0	0.5	225	28.3		7.9		13.4		96.4		7.0		5.6		4		85				<0.2		1.9	
					Middle	3.7	0.4	239	28.2	28.2	7.9	7.9	13.9	13.9	95.1	95.1	6.9		7.4		4		88				<0.2		1.9	
						3.7	0.4	251	28.2		7.9		13.9		95.0		6.9		7.5		4		87				<0.2		1.8	
					Bottom	6.3	0.3	243	28.2	28.2	7.9	7.9	15.0	15.0	94.6	94.6	6.8	6.8	3.9		5		89				<0.2		1.8	
						6.3	0.4	225	28.2		7.9		15.0		94.6		6.8		3.9		5		90				<0.2		1.8	
IM4	Sunny	Moderate	15:31	6.8	Surface	1.0	0.6	201	28.6	28.6	7.9	7.9	11.2	11.2	95.7	95.7	7.0	7.0	3.9	5.0	5	5	84	87	819731	804612	<0.2	<0.2	1.9	1.9
						1.0	0.7	224	28.6		7.9		11.2		95.6		7.0		3.9		5		85				<0.2		1.9	
					Middle	3.4	0.6	239	28.5	28.5	7.9	7.9	13.3	13.3	95.5	95.6	6.9		6.0		5		88				<0.2		1.9	
						3.4	0.7	224	28.5		7.9		13.3		95.7		6.9		6.0		5		87				<0.2		1.9	
					Bottom	5.8	0.4	238	28.4	28.4	7.9	7.9	15.4	15.4	92.7	92.8	6.6	6.6	5.0		6		90				<0.2		1.9	
						5.8	0.4	210	28.4		7.9		15.4		92.8		6.6		5.0		5		90				<0.2		2.0	
IM5	Sunny	Moderate	15:21	8.1	Surface	1.0	0.8	258	28.5	28.5	8.0	8.0	12.6	12.6	96.3	96.3	7.0	7.0	5.8	6.8	5	10	86	87	820739	804848	<0.2	<0.2	2.0	1.9
						1.0	0.9	239	28.5		8.0		12.6		96.2		7.0		5.9		5		84				<0.2		1.9	
					Middle	4.1	0.9	225	28.4	28.4	8.0	8.0	13.9	13.9	96.5	96.8	6.9		4.5		10		87				<0.2		1.9	
						4.1	0.9	226	28.3		8.0		13.9		97.1		7.0		4.7		10		88				<0.2		1.9	
					Bottom	7.1	0.4	232	28.0	28.0	7.9	7.9	19.5	19.4	88.5	88.6	6.2	6.2	9.9		15		90				<0.2		1.9	
						7.1	0.5	224	28.0		7.9		19.4		88.6		6.2		9.9		14		89				<0.2		1.8	
IM6	Sunny	Moderate	15:13	7.7	Surface	1.0	0.3	193	28.6	28.6	7.9	7.9	12.8	12.8	96.0	96.1	6.9	6.9	8.4	8.5	7	9	85	88	821053	805828	<0.2	<0.2	2.1	2.0
						1.0	0.3	194	28.6		7.9		12.8		96.1		6.9		8.4		6		85				<0.2		1.9	
					Middle	3.9	0.5	177	28.5	28.5	7.9	7.9	13.9	13.9	94.7	94.5	6.8		8.5		9		89				<0.2		1.9	
						3.9	0.5	189	28.5		7.9		13.9		94.3		6.8		8.5		9		90				<0.2		2.0	
					Bottom	6.7	0.3	162	28.4	28.4	7.9	7.9	16.3	16.3	92.0	92.1	6.5	6.5	8.3		11		90				<0.2		2.0	
						6.7	0.3	163	28.4		7.9		16.3		92.1		6.5		8.7		11		90				<0.2		1.9	
IM7	Sunny	Moderate	15:05	7.6	Surface	1.0	0.1	187	28.5	28.5	7.9	7.9	12.6	12.6	93.2	93.1	6.7	6.9	3.9	5.2	6	7	84	87	821325	806831	<0.2	<0.2	2.2	2.1
						1.0	0.1	182	28.5		7.9		12.6		93.0		6.7		4.0		7		85				<0.2		2.0	
					Middle	3.8	0.2	186	28.4	28.4	7.9	7.9	12.7	12.7	96.3	96.5	7.0		4.4		7		88				<0.2		2.0	
						3.8	0.2	194	28.3		7.9		12.7		96.6		7.0		4.4		7		87				<0.2		2.0	
					Bottom	6.6	0.3	189	28.3	28.3	7.9	7.9	13.6	13.6	92.0	92.1	6.6	6.7	7.3		7		89				<0.2		2.0	
						6.6	0.3	195	28.3		7.9		13.6		92.1		6.7		7.4		8		90				<0.2		2.1	
IM8	Sunny	Moderate	15:34	8.7	Surface	1.0	0.3	176	28.6	28.6	7.8	7.8	13.6	13.6	81.5	81.4	5.9	5.7	10.3	11.3	6	6	83	86	821830	808117	<0.2	<0.2	2.4	2.3
						1.0	0.3	177	28.6		7.8		13.6		81.2		5.8		10.3		7		82				<0.2		2.3	
					Middle	4.4	0.2	167	28.2	28.2	7.8	7.8	15.2	15.2	78.7	78.7	5.6		11.5		7		86				<0.2		2.2	
						4.4	0.2	169	28.2		7.8		15.2		78.6		5.6		11.5		6		87				<0.2		2.1	
					Bottom	7.7	0.3	170	28.1	28.1	7.8	7.8	15.9	15.9	79.0	79.0	5.7	5.7	12.0		5		90				<0.2		2.3	
						7.7	0.3	176	28.1		7.8		15.9		79.0		5.7		12.0		6		90				<0.2		2.2	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:41	7.7	Surface	1.0	0.4	170	28.5	28.5	7.8	7.8	13.7	13.7	80.8	80.8	5.8	5.6	11.2	16.1	6	7	83	86	822111	808795	<0.2	<0.2	2.6	2.2
						1.0	0.4	176	28.5		7.8		13.7		80.7		5.8		11.3		7		82				<0.2		2.2	
					Middle	3.9	0.3	183	28.1	28.1	7.8	7.8	16.6	16.6	76.1	76.1	5.4		17.9		6		86				<0.2		2.3	
						3.9	0.3	188	28.1		7.8		16.6		76.1		5.4		17.9		7		86				<0.2		2.1	
					Bottom	6.7	0.2	163	28.1	28.1	7.8	7.8	17.1	17.1	76.0	76.0	5.4	5.4	19.1		7		90				<0.2		2.0	
						6.7	0.2	166	28.1		7.8		17.1		76.0		5.4		19.2		7		90				<0.2		2.0	
IM10	Sunny	Moderate	15:52	7.4	Surface	1.0	0.3	159	28.6	28.6	7.8	7.8	14.1	14.1	85.7	85.7	6.1	6.1	10.7	10.7	4	5	82	86	822408	809789	<0.2	<0.2	2.3	2.1
						1.0	0.3	151	28.6		7.8		14.1		85.7		6.1		10.7		4		81				<0.2		2.3	
					Middle	3.7	0.4	143	28.5	28.5	7.8	7.8	14.5	14.5	84.9	85.0	6.1		10.8		4		87				<0.2		2.2	
						3.7	0.4	144	28.5		7.8		14.5		85.0		6.1		10.8		5		87				<0.2		1.9	
					Bottom	6.4	0.2	126	28.4	28.4	7.9	7.8	15.5	15.6	84.7	84.7	6.0	6.0	10.5		5		90				<0.2		2.0	
						6.4	0.2	144	28.4		7.8		15.6		84.6		6.0		10.6		5		90				<0.2		1.9	
IM11	Sunny	Moderate	16:04	7.8	Surface	1.0	0.2	135	28.7	28.7	7.9	7.9	15.9	15.9	88.0	88.0	6.2	6.0	9.4	10.8	4	3	83	86	822076	811476	<0.2	<0.2	2.1	2.0
						1.0	0.3	140	28.7		7.9		15.9		87.9		6.2		9.4		3		82				<0.2		2.0	
					Middle	3.9	0.2	122	28.2	28.2	7.9	7.9	17.1	17.1	81.4	81.4	5.8		10.2		4		86				<0.2		2.0	
						3.9	0.2	141	28.2		7.9		17.1		81.3		5.8		10.2		3		87				<0.2		1.8	
					Bottom	6.8	0.1	174	27.5	27.5	7.8	7.8	21.9	21.9	73.9	73.9	5.2	5.2	12.7		2		90				<0.2		1.9	
						6.8	0.1	168	27.5		7.8		21.9		73.9		5.2		12.7		3		90				<0.2		1.9	
IM12	Sunny	Moderate	16:12	8.7	Surface	1.0	0.4	141	28.6	28.6	7.9	7.9	16.9	16.9	85.3	85.2	6.0	5.7	9.5	11.8	3	4	82	86	821443	812046	<0.2	<0.2	1.7	1.7
						1.0	0.5	122	28.6		7.9		16.9		85.1		6.0		9.5		3		82				<0.2		1.6	
					Middle	4.4	0.2	106	27.7	27.7	7.9	7.9	20.5	20.5	75.3	75.3	5.3		12.3		4		85				<0.2		1.7	
						4.4	0.2	119	27.7		7.9		20.5		75.3		5.3		12.3		4		86				<0.2		1.6	
					Bottom	7.7	0.2	166	27.3	27.3	7.9	7.9	23.4	23.4	72.7	72.8	5.1	5.1	13.7		5		89				<0.2		1.6	
						7.7	0.2	169	27.3		7.9		23.4		72.8		5.1		13.7		4		90				<0.2		1.7	
SR1A	Sunny	Moderate	16:36	5.3	Surface	1.0	-	-	28.5	28.5	7.9	7.9	16.8	16.8	84.5	84.5	6.0	6.0	9.6	9.5	5	5	-	-	819982	812661	-	-	-	-
						1.0	-	-	28.5		7.9		16.8		84.5		6.0		9.6		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	28.1	28.1	7.9	7.9	18.0	18.0	81.1	81.2	5.7	5.8	9.4		4		-				-		-	
						4.3	-	-	28.1		7.9		18.0		81.3		5.8		9.4		4		-				-		-	
SR2	Sunny	Moderate	16:52	4.8	Surface	1.0	0.4	150	28.5	28.5	7.9	7.9	16.6	16.6	85.3	85.3	6.0	6.0	9.6	9.5	4	5	82	84	821475	814145	<0.2	<0.2	1.8	1.9
						1.0	0.5	142	28.5		7.9		16.6		85.2		6.0		9.6		5		83				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	127	28.1	28.1	7.9	7.9	17.9	17.9	82.1	82.1	5.8	5.8	9.4		6		86				<0.2		1.9	
						3.8	0.3	133	28.1		7.9		17.9		82.1		5.8		9.4		5		86				<0.2		1.9	
SR3	Sunny	Moderate	15:27	8.2	Surface	1.0	0.1	151	28.7	28.7	7.7	7.7	12.9	12.9	82.5	82.6	5.9	5.7	9.9	11.2	4	6	-	-	822161	807580	-	-	-	-
						1.0	0.1	154	28.7		7.7		12.9		82.6		5.9		9.9		5		-				-		-	
					Middle	4.1	0.1	166	28.1	28.1	7.8	7.8	15.0	15.0	77.2	77.2	5.6		10.6		6		-				-		-	
						4.1	0.1	168	28.1		7.8		15.0		77.1		5.5		10.7		6		-				-		-	
					Bottom	7.2	0.3	174	28.1	28.1	7.9	7.9	16.5	16.5	78.4	78.5	5.6	5.6	13.1		6		-				-		-	
						7.2	0.3	180	28.1		7.9		16.5		78.5		5.6		13.1		6		-				-		-	
SR4A	Sunny	Moderate	16:39	9.5	Surface	1.0	0.6	66	28.9	28.9	8.0	8.0	15.1	15.1	100.0	100.0	7.1	7.1	8.8	7.4	7	7	-	-	817211	807813	-	-	-	-
						1.0	0.6	66	28.9		8.0		15.1		99.9		7.1		8.8		7		-				-		-	
					Middle	4.8	0.4	57	29.0	29.0	8.0	8.0	15.6	15.6	99.6	99.6	7.0		6.2		7		-				-		-	
						4.8	0.4	60	29.0		8.0		15.6		99.6		7.0		6.3		6		-				-		-	
					Bottom	8.5	0.2	63	29.0	29.0	8.0	8.0	15.8	15.7	99.6	99.6	7.0	7.0	7.0		7		-				-		-	
						8.5	0.2	67	29.0		8.0		15.7		99.6		7.0		7.0		8		-				-		-	
SR5A	Sunny	Moderate	17:08	5.1	Surface	1.0	0.2	162	29.0	29.0	8.0	8.0	16.3	16.3	98.0	98.0	6.9	6.9	7.2	6.6	7	7	-	-	816569	810699	-	-	-	-
						1.0	0.2	169	29.0		8.0		16.3		97.9		6.9		7.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	164	29.1	29.1	8.0	8.0	16.5	16.5	97.8	98.0	6.9	6.9	6.0		7		-				-		-	
						4.1	0.2	164	29.1		8.0		16.5		98.1		6.9		6.1		8		-				-		-	
SR6	Sunny	Moderate	17:41	5.2	Surface	1.0	0.0	1	29.8	29.8	7.9	7.9	15.1	15.1	97.4	97.3	6.8	6.8	13.8	11.8	7	8	-	-	817909	814681	-	-	-	-
						1.0	0.0	1	29.8		7.9		15.1		97.2		6.8		13.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	129	29.8	29.8	7.8	7.8	16.0	16.0	96.8	96.8	6.7	6.7	9.9		9		-				-		-	
						4.2	0.1	120	29.8		7.8		16.0		96.7		6.7		9.9		9		-				-		-	
SR7	Sunny	Moderate	17:40	14.6	Surface	1.0	0.1	59	28.2	28.2	7.9	7.9	20.3	20.3	86.1	86.0	6.0	5.5	8.5	9.2	6	7	-	-	823630	823741	-	-	-	-
						1.0	0.1	60	28.2		7.9		20.3		85.9		6.0		8.5		6		-				-		-	
					Middle	7.3	0.2	70	26.8	26.8	7.9	7.9	27.2	27.2	71.4	71.4	4.9		9.2		7		-				-		-	
						7.3	0.2	70	26.8		7.9		27.2		71.4		4.9		9.2		7		-				-		-	
					Bottom	13.6	0.1	115	26.3	26.3	8.0	8.0	29.7	29.7	70.4	70.5	4.8	4.8	9.8		6		-				-		-	
						13.6	0.1	115	26.3		8.0		29.7		70.6		4.8		9.8		8		-				-		-	
SR8	Sunny	Moderate	16:28	4.4	Surface	1.0	-	-	28.4	28.4	7.9	7.9	17.1	17.1	83.7	83.7	5.9	5.9	9.6	9.5	4	5	-	-	820406	811611	-	-	-	-
						1.0	-	-	28.4		7.9		17.1		83.7		5.9		9.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	28.1	28.1	7.9	7.9	18.2	18.2	82.2	82.3	5.8	5.8	9.4		4		-				-		-	
						3.4	-	-	28.1		7.9		18.1		82.3		5.8		9.4		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 08 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	09:13	8.3	Surface	1.0	0.4	55	28.2	28.3	8.0	8.0	15.3	15.3	96.0	96.0	6.9	6.9	8.5	6.4	6	6	85	88	815634	804258	<0.2	<0.2	1.3	1.4
						1.0	0.4	59	28.3		8.0		15.3		96.0		6.9		8.6		5		86						1.5	
					Middle	4.2	0.3	21	28.2	28.2	8.0	8.0	15.6	15.6	95.0	95.0	6.8		5.4		6		88						1.3	
						4.2	0.3	21	28.2		8.0		15.6		94.9		6.8		5.3		6		87						1.4	
					Bottom	7.3	0.3	351	28.2	28.2	8.0	8.0	16.9	16.9	94.6	94.7	6.7	6.7	5.3		6		89						1.4	
						7.3	0.3	357	28.2		8.0		16.9		94.7		6.7		5.6		6		90						1.4	
C2	Sunny	Moderate	09:59	10.7	Surface	1.0	0.3	333	29.0	29.0	7.8	7.8	11.5	11.5	86.0	86.0	6.2	5.8	10.3	9.9	3	4	86	89	825703	806936	<0.2	<0.2	2.6	2.8
						1.0	0.3	335	29.0		7.8		11.5		86.0		6.2		10.3		4		85						2.5	
					Middle	5.4	0.4	326	28.1	28.1	7.9	7.9	17.1	17.1	75.0	75.0	5.3		9.7		4		89						3.0	
						5.4	0.4	357	28.1		7.9		17.1		74.9		5.3		9.7		4		89						3.0	
					Bottom	9.7	0.4	326	28.1	28.1	7.9	7.9	17.6	17.6	75.2	75.2	5.3	5.3	9.6		3		94						2.9	
						9.7	0.4	354	28.1		7.9		17.6		75.2		5.3		9.6		3		93						2.8	
C3	Fine	Moderate	08:22	11.3	Surface	1.0	0.3	264	28.3	28.3	7.8	7.8	14.6	14.6	82.3	82.3	5.9	5.8	9.6	9.0	3	3	84	88	822123	817802	<0.2	<0.2	2.8	2.6
						1.0	0.3	267	28.3		7.8		14.6		82.3		5.9		9.6		3		84						2.6	
					Middle	5.7	0.4	246	27.9	27.9	7.8	7.8	18.9	18.9	79.9	79.9	5.6		8.8		3		88						2.7	
						5.7	0.5	257	27.9		7.8		18.9		79.9		5.6		8.8		3		88						2.5	
					Bottom	10.3	0.4	284	27.1	27.2	7.9	7.9	25.2	25.1	76.6	76.8	5.3	5.3	8.7		3		92						2.9	
						10.3	0.4	296	27.2		7.9		25.1		77.0		5.3		8.7		3		92						2.3	
IM1	Fine	Moderate	09:30	5.4	Surface	1.0	0.3	34	28.2	28.2	8.0	8.0	16.6	16.6	94.4	94.4	6.7	6.7	5.6	5.9	5	6	87	89	817953	807125	<0.2	<0.2	2.3	2.3
						1.0	0.3	35	28.2		8.0		16.6		94.3		6.7		5.6		5		86						2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-	-	-	
					Bottom	4.4	0.3	24	28.2	28.2	7.9	7.9	17.6	17.6	93.5	93.5	6.6	6.6	6.1		6		92				<0.2		2.2	
						4.4	0.3	24	28.2		7.9		17.6		93.5		6.6		6.4		6		90				<0.2		2.2	
IM2	Fine	Moderate	09:37	7.6	Surface	1.0	0.5	43	28.3	28.3	8.0	8.0	13.5	13.5	95.6	95.6	6.9	6.9	4.0	4.5	4	4	85	88	818140	806170	<0.2	<0.2	2.2	2.3
						1.0	0.5	44	28.3		8.0		13.5		95.6		6.9		4.0		4		86				<0.2		2.3	
					Middle	3.8	0.3	7	28.3	28.3	8.0	8.0	14.9	14.9	94.8	94.8	6.8		4.4		3		88				<0.2		2.4	
						3.8	0.4	7	28.3		8.0		14.9		94.7		6.8		4.4		2		87				<0.2		2.2	
					Bottom	6.6	0.4	322	28.3	28.3	8.0	8.0	15.7	15.7	94.2	94.3	6.7	6.7	5.1		4		90				<0.2		2.3	
						6.6	0.4	328	28.3		8.0		15.7		94.4		6.7		5.1		4		90				<0.2		2.2	
IM3	Fine	Moderate	09:42	7.7	Surface	1.0	0.4	26	28.3	28.3	8.0	7.9	13.5	13.5	94.0	93.8	6.8	6.7	7.4	5.4	4	5	86	88	818770	805598	<0.2	<0.2	2.0	2.1
						1.0	0.5	28	28.2		7.9		13.5		93.6		6.8		7.5		4		86				<0.2		2.0	
					Middle	3.9	0.4	334	28.2	28.2	7.9	7.9	15.4	15.4	92.9	92.8	6.7		4.3		5		89				<0.2		2.2	
						3.9	0.4	336	28.2		7.9		15.4		92.7		6.6		4.4		6		88				<0.2		2.0	
					Bottom	6.7	0.4	319	28.2	28.2	7.9	7.9	16.9	16.9	92.4	92.4	6.6	6.6	4.3		5		90				<0.2		2.1	
						6.7	0.4	341	28.2		7.9		16.9		92.4		6.6		4.3		5		90				<0.2		2.0	
IM4	Fine	Moderate	09:52	7.8	Surface	1.0	0.5	355	28.2	28.2	8.1	8.1	8.4	8.4	93.8	93.8	7.0	6.9	5.6	5.3	4	5	84	87	819741	804625	<0.2	<0.2	2.0	2.0
						1.0	0.5	327	28.2		8.1		8.4		93.7		7.0		5.6		4		85				<0.2		2.0	
					Middle	3.9	0.6	340	28.0	28.0	8.0	8.0	14.6	14.6	93.3	93.3	6.7		5.5		5		87				<0.2		2.1	
						3.9	0.6	354	28.0		8.0		14.6		93.3		6.7		5.5		4		88				<0.2		2.0	
					Bottom	6.8	0.4	353	28.0	28.0	8.0	8.0	16.3	16.3	93.7	93.8	6.7	6.7	4.7		5		90				<0.2		2.1	
						6.8	0.5	325	28.0		8.0		16.3		93.8		6.7		4.6		5		90				<0.2		2.0	
IM5	Fine	Moderate	09:58	7.4	Surface	1.0	0.7	28	28.4	28.4	7.9	7.9	10.9	10.9	94.4	94.4	6.9	6.9	6.2	5.4	4	4	85	88	820717	804848	<0.2	<0.2	2.3	2.3
						1.0	0.7	29	28.4		7.9		10.9		94.4		6.9		6.2		3		85				<0.2		2.2	
					Middle	3.7	0.8	5	28.3	28.3	7.9	7.9	12.5	12.5	94.2	94.2	6.8		4.7		3		88				<0.2		2.3	
						3.7	0.8	5	28.3		7.9		12.5		94.2		6.8		4.7		4		88				<0.2		2.3	
					Bottom	6.4	0.5	38	28.5	28.5	8.0	8.0	13.2	13.2	94.8	94.8	6.8	6.8	5.2		4		90				<0.2		2.3	
						6.4	0.5	38	28.4		8.0		13.2		94.8		6.8		5.2		5		90				<0.2		2.4	
IM6	Fine	Moderate	10:05	7.6	Surface	1.0	0.5	55	28.4	28.4	7.9	7.9	12.8	12.8	96.4	96.5	7.0	7.0	7.0	7.2	5	5	84	88	821039	805831	<0.2	<0.2	2.3	2.3
						1.0	0.5	57	28.4		7.9		12.8		96.5		7.0		7.0		6		86				<0.2		2.3	
					Middle	3.8	0.6	35	28.5	28.5	7.9	7.9	13.4	13.4	96.1	96.2	6.9		6.8		5		88				<0.2		2.3	
						3.8	0.6	37	28.5		7.9		13.4		96.3		6.9		6.7		5		90				<0.2		2.3	
					Bottom	6.6	0.4	51	28.6	28.7	7.9	7.9	13.8	13.8	95.8	95.9	6.9	6.9	7.9		5		90				<0.2		2.3	
						6.6	0.4	55	28.7		7.9		13.7		96.0		6.9		7.9		6		90				<0.2		2.4	
IM7	Fine	Moderate	10:12	8.1	Surface	1.0	0.1	241	28.5	28.5	7.9	7.9	12.7	12.7	93.4	93.4	6.8	6.8	6.3	6.2	4	5	85	88	821358	806858	<0.2	<0.2	2.2	2.2
						1.0	0.1	260	28.5		7.9		12.7		93.3		6.8		6.3		4		84				<0.2		2.2	
					Middle	4.1	0.2	135	28.4	28.4	7.9	7.9	12.9	12.9	93.1	93.2	6.7		5.0		4		88				<0.2		2.1	
						4.1	0.2	147	28.4		7.9		12.9		93.2		6.7		5.2		4		89				<0.2		2.2	
					Bottom	7.1	0.5	87	28.3	28.3	7.9	7.9	13.7	13.7	94.3	94.4	6.8	6.8	7.4		6		90				<0.2		2.2	
						7.1	0.5	87	28.2		7.9		13.7		94.5		6.8		7.3		6		89				<0.2		2.2	
IM8	Sunny	Moderate	09:41	8.6	Surface	1.0	0.2	262	28.5	28.5	7.8	7.8	12.4	12.4	80.7	80.7	5.9	5.7	10.0	10.7	4	5	84	89	821837	808126	<0.2	<0.2	2.6	2.5
						1.0	0.2	283	28.5		7.8		12.4		80.7		5.9		10.0		5		85				<0.2		2.5	
					Middle	4.3	0.1	232	28.1	28.1	7.8	7.8	14.7	14.7	76.7	76.7	5.5		10.6		5		90				<0.2		2.6	
						4.3	0.1	244	28.1		7.8		14.7		76.7		5.5		10.6		5		89				<0.2		2.4	
					Bottom	7.6	0.0	194	28.1	28.1	7.8	7.8	14.9	14.9	77.4	77.5	5.6	5.6	11.4		4		93				<0.2		2.5	
						7.6	0.0	209	28.1		7.8		14.9		77.5		5.6		11.4		4		93				<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 08 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	09:34	7.9	Surface	1.0	0.3	260	28.5	28.5	7.8	7.8	12.3	12.3	81.6	81.6	5.9	5.8	10.2	11.5	4	4	85	89	822104	808791	<0.2	<0.2	2.7	2.6
						1.0	0.3	280	28.5		7.8		12.3		81.6		5.9		10.2		5		85				<0.2		2.6	
					Middle	4.0	0.4	270	28.3	28.3	7.8	7.8	13.9	13.9	79.0	79.1	5.7		10.5		4		89				<0.2		2.8	
						4.0	0.5	271	28.3		7.8		13.9		79.1		5.7		10.5		4		88				<0.2		2.5	
					Bottom	6.9	0.1	259	28.1	28.1	7.8	7.8	16.1	16.1	78.2	78.2	5.6	5.6	13.9		4		93				<0.2		2.4	
						6.9	0.2	268	28.1		7.8		16.1		78.2		5.6		13.9		5		93				<0.2		2.4	
IM10	Sunny	Moderate	09:27	8.2	Surface	1.0	0.5	304	28.4	28.4	7.8	7.8	13.5	13.5	82.4	82.5	5.9	5.8	10.1	12.0	4	4	85	89	822400	809802	<0.2	<0.2	2.6	2.4
						1.0	0.6	316	28.4		7.8		13.5		82.5		6.0		10.1		4		86				<0.2		2.5	
					Middle	4.1	0.6	304	28.2	28.2	7.8	7.8	14.5	14.5	78.7	78.7	5.7		11.1		5		89				<0.2		2.4	
						4.1	0.6	323	28.2		7.8		14.5		78.7		5.7		11.1		4		88				<0.2		2.3	
					Bottom	7.2	0.4	301	28.0	28.0	7.8	7.8	17.6	17.6	75.4	75.4	5.4	5.4	14.7		4		93				<0.2		2.3	
						7.2	0.5	301	28.0		7.8		17.6		75.3		5.4		14.7		4		93				<0.2		2.2	
IM11	Sunny	Moderate	09:17	8.4	Surface	1.0	0.5	302	28.4	28.4	7.8	7.8	12.2	12.2	82.9	82.9	6.0	5.7	10.1	11.9	3	3	85	89	822037	811476	<0.2	<0.2	2.5	2.4
						1.0	0.5	323	28.4		7.8		12.2		82.9		6.0		10.1		3		85				<0.2		2.4	
					Middle	4.2	0.5	284	28.0	28.0	7.8	7.8	17.0	17.0	76.0	76.0	5.4		11.2		4		88				<0.2		2.4	
						4.2	0.6	295	28.0		7.8		17.0		75.9		5.4		11.3		4		89				<0.2		2.4	
					Bottom	7.4	0.3	293	27.6	27.6	7.8	7.8	20.9	20.9	72.4	72.5	5.1	5.1	14.4		3		93				<0.2		2.3	
						7.4	0.3	321	27.6		7.8		20.9		72.5		5.1		14.4		3		92				<0.2		2.5	
IM12	Sunny	Moderate	09:11	7.3	Surface	1.0	0.4	277	28.5	28.5	7.8	7.8	12.2	12.2	81.6	81.7	5.9	5.7	10.1	10.9	4	4	85	89	821466	812033	<0.2	<0.2	2.5	2.7
						1.0	0.4	280	28.5		7.8		12.2		81.7		5.9		10.1		5		84				<0.2		2.7	
					Middle	3.7	0.5	278	28.1	28.1	7.8	7.8	16.1	16.1	77.5	77.4	5.5		10.5		4		89				<0.2		2.6	
						3.7	0.6	288	28.1		7.8		16.1		77.3		5.5		10.5		4		89				<0.2		2.7	
					Bottom	6.3	0.5	274	27.8	27.8	7.8	7.8	18.4	18.7	75.2	75.2	5.3	5.3	12.0		4		94				<0.2		2.7	
						6.3	0.5	294	27.8		7.8		19.0		75.2		5.3		12.0		4		93				<0.2		2.7	
SR1A	Fine	Moderate	08:53	5.7	Surface	1.0	-	-	28.4	28.4	7.8	7.8	13.0	13.0	82.8	82.9	6.0	6.0	9.9	10.2	4	4	-	-	819980	812662	-	-	-	-
						1.0	-	-	28.4		7.8		13.0		82.9		6.0		9.9		4		-				-		-	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	-	-	28.3	28.3	7.8	7.8	15.1	15.1	81.2	81.3	5.8	5.8	10.4		5		-				-		-	
						4.7	-	-	28.3		7.8		15.1		81.4		5.8		10.5		4		-				-		-	
SR2	Fine	Moderate	08:42	5.4	Surface	1.0	0.3	300	28.3	28.3	7.8	7.8	15.5	15.5	79.4	79.4	5.7	5.7	10.4	11.4	5	5	84	87	821467	814158	<0.2	<0.2	2.6	2.6
						1.0	0.3	314	28.3		7.8		15.5		79.4		5.7		10.4		5		85				<0.2		2.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	310	28.0	28.0	7.8	7.8	18.3	18.3	80.8	80.8	5.7	5.7	12.3		5		89				<0.2		2.6	
						4.4	0.3	328	28.0		7.8		18.3		80.8		5.7		12.4		5		89				<0.2		2.6	
SR3	Sunny	Moderate	09:45	7.6	Surface	1.0	0.2	311	28.6	28.6	7.8	7.8	12.4	12.4	81.5	81.5	5.9	5.8	10.0	11.1	5	6	-	-	822146	807592	-	-	-	-
						1.0	0.2	313	28.6		7.8		12.4		81.5		5.9		10.0		4		-				-		-	
					Middle	3.8	0.1	292	28.1	28.1	7.8	7.8	15.3	15.3	77.4	77.4	5.6		10.6		6		-				-		-	
						3.8	0.2	319	28.1		7.8		15.3		77.4		5.6		10.6		7		-				-		-	
					Bottom	6.6	0.1	256	28.1	28.1	7.9	7.9	16.9	16.9	79.4	79.4	5.7	5.7	12.7		6		-				-		-	
						6.6	0.1	271	28.1		7.9		16.9		79.4		5.7		12.7		6		-				-		-	
SR4A	Fine	Moderate	08:51	8.7	Surface	1.0	0.3	245	28.3	28.3	8.0	8.0	15.7	15.7	95.1	95.1	6.8	6.7	6.2	7.9	7	9	-	-	817195	807824	-	-	-	-
						1.0	0.3	255	28.3		8.0		15.7		95.1		6.8		6.2		7		-				-		-	
					Middle	4.4	0.1	262	28.3	28.3	8.0	8.0	16.0	16.0	93.2	93.1	6.6		8.9		9		-				-		-	
						4.4	0.2	271	28.3		8.0		16.0		93.0		6.6		8.9		9		-				-		-	
					Bottom	7.7	0.0	337	28.2	28.2	8.0	8.0	17.6	17.6	92.0	92.1	6.5	6.5	8.7		10		-				-		-	
						7.7	0.0	310	28.2		8.0		17.6		92.1		6.5		8.7		9		-				-		-	
SR5A	Fine	Moderate	08:27	4.6	Surface	1.0	0.1	270	28.4	28.4	7.9	7.9	16.3	16.3	95.5	95.6	6.8	6.8	5.5	6.0	10	9	-	-	816610	810715	-	-	-	-
						1.0	0.1	277	28.4		7.9		16.3		95.6		6.8		5.5		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	265	28.5	28.5	7.9	7.9	16.4	16.4	96.1	96.2	6.8	6.8	6.7		9		-				-		-	
						3.6	0.2	269	28.4		7.9		16.4		96.2		6.8		6.5		9		-				-		-	
SR6	Fine	Moderate	08:00	4.3	Surface	1.0	0.1	266	28.3	28.3	7.5	7.5	14.4	14.4	91.9	91.9	6.6	6.6	5.6	6.0	7	7	-	-	817916	814647	-	-	-	-
						1.0	0.1	270	28.3		7.5		14.4		91.8		6.6		5.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	272	28.3	28.3	7.3	7.2	14.6	14.6	91.8	92.0	6.6	6.6	6.2		7		-				-		-	
						3.3	0.1	287	28.3		7.2		14.6		92.1		6.6		6.2		7		-				-		-	
SR7	Fine	Moderate	07:52	14.7	Surface	1.0	0.1	255	28.3	28.3	7.8	7.8	14.6	14.6	84.2	84.2	6.0	5.7	9.0	8.9	4	4	-	-	823616	823758	-	-	-	-
						1.0	0.1	258	28.3		7.8		14.6		84.1		6.0		8.9		4		-				-		-	
					Middle	7.4	0.1	278	27.7	27.7	7.8	7.8	20.2	20.2	77.3	77.3	5.4		9.1		4		-				-		-	
						7.4	0.1	285	27.7		7.8		20.2		77.2		5.4		9.2		4		-				-		-	
					Bottom	13.7	0.1	238	26.8	26.8	7.8	7.8	27.1	27.1	71.5	71.5	4.9	4.9	8.7		4		-				-		-	
						13.7	0.1	241	26.8		7.8		27.1		71.4		4.9		8.7		5		-				-		-	
SR8	Fine	Moderate	09:02	5.5	Surface	1.0	-	-	28.4	28.4	7.8	7.8	12.9	12.9	80.3	80.2	5.8	5.8	10.2	11.1	4	4	-	-	820408	811600	-	-	-	-
						1.0	-	-	28.4		7.8		12.9		80.1		5.8		10.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.1	28.1	7.8	7.8	17.2	17.2	78.6	78.7	5.6	5.6	11.9		5		-				-		-	
						4.5	-	-	28.1		7.8		17.2		78.7		5.6		12.0		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**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Rough	07:59	8.5	Surface	1.0	0.1	164	28.1	28.1	8.0	8.0	13.2	13.2	94.7	94.7	6.9	6.9	4.0	4.9	4	4	83	86	815611	804229	<0.2	<0.2	1.7	1.8
						1.0	0.1	169	28.1		8.0		13.2		94.7		6.9		3.9		4		84				<0.2		1.7	
					Middle	4.3	0.1	170	28.1	28.1	8.0	8.0	13.3	13.3	94.8	94.8	6.9		5.2		5		86				<0.2		1.8	
						4.3	0.1	176	28.1		8.0		13.3		94.8		6.9		5.1		4		87				<0.2		1.9	
					Bottom	7.5	0.2	206	28.0	28.0	8.0	8.0	13.9	13.9	94.5	94.6	6.9	6.9	5.4		4		88				<0.2		1.8	
						7.5	0.2	188	28.0		8.0		13.9		94.7		6.9		5.5		5		88				<0.2		1.9	
C2	Rainy	Moderate	09:34	11.8	Surface	1.0	0.5	159	28.3	28.3	8.1	8.1	9.8	9.8	91.9	92.0	6.8	6.7	10.2	10.2	4	5	85	87	825687	806945	<0.2	<0.2	2.2	2.2
						1.0	0.5	163	28.2		8.1		9.8		92.0		6.8		10.3		5		84				<0.2		2.2	
					Middle	5.9	0.2	121	27.4	27.4	8.1	8.1	10.2	10.2	88.2	88.2	6.6		10.7		6		87				<0.2		2.1	
						5.9	0.2	125	27.4		8.1		10.3		88.1		6.6		10.8		5		87				<0.2		2.2	
					Bottom	10.8	0.1	201	27.2	27.2	8.1	8.1	16.9	16.9	88.9	89.1	6.4	6.5	9.6		4		87				<0.2		2.3	
						10.8	0.1	189	27.2		8.1		16.9		89.2		6.5		9.6		5		89				<0.2		2.2	
C3	Rainy	Moderate	07:49	12.1	Surface	1.0	0.2	86	28.4	28.4	8.1	8.1	15.1	15.1	93.3	93.4	6.7	6.7	6.6	7.4	4	4	84	87	822115	817826	<0.2	<0.2	3.6	3.7
						1.0	0.2	88	28.4		8.1		15.1		93.4		6.7		6.5		4		85				<0.2		3.6	
					Middle	6.1	0.1	109	28.3	28.3	8.1	8.1	14.9	14.9	92.6	92.6	6.6		6.9		3		88				<0.2		3.8	
						6.1	0.1	114	28.3		8.1		14.9		92.5		6.6		7.0		4		87				<0.2		3.8	
					Bottom	11.1	0.1	142	28.3	28.3	8.1	8.1	15.3	15.3	91.9	91.9	6.6	6.6	8.8		5		90				<0.2		3.7	
						11.1	0.1	143	28.3		8.1		15.3		91.9		6.6		8.8		4		90				<0.2		3.7	
IM1	Rainy	Moderate	08:12	5.7	Surface	1.0	0.2	207	27.9	27.9	8.0	8.0	14.2	14.2	93.5	93.5	6.8	6.8	7.8	7.2	3	4	82	85	817954	807121	<0.2	<0.2	2.1	2.0
						1.0	0.2	221	27.9		8.0		14.2		93.5		6.8		7.7		3		82				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	225	27.8	27.8	7.9	7.9	17.6	17.6	90.0	90.1	6.4	6.4	6.7		4		87				<0.2		2.0	
						4.7	0.1	244	27.8		7.9		17.6		90.2		6.4		6.6		4		87				<0.2		1.8	
IM2	Rainy	Moderate	08:18	7.4	Surface	1.0	0.1	228	28.0	28.0	8.0	8.0	14.6	14.6	93.3	93.2	6.7	6.5	9.6	8.0	4	5	83	86	818178	806144	<0.2	<0.2	1.6	1.5
						1.0	0.1	229	28.0		8.0		14.6		93.1		6.7		9.2		4		83				<0.2		1.5	
					Middle	3.7	0.1	258	27.9	27.9	7.9	7.9	16.3	16.3	87.6	87.6	6.3		5.6		5		86				<0.2		1.5	
						3.7	0.1	229	27.9		7.9		16.3		87.5		6.3		5.8		5		87				<0.2		1.4	
					Bottom	6.4	0.1	266	27.6	27.6	7.9	7.9	18.7	18.7	84.9	85.0	6.0	6.0	9.2		5		89				<0.2		1.4	
						6.4	0.1	277	27.6		7.9		18.7		85.0		6.0		8.8		5		89				<0.2		1.5	
IM3	Rainy	Moderate	08:24	7.2	Surface	1.0	0.4	234	28.0	28.0	8.0	8.0	14.6	14.6	90.5	90.3	6.5	6.5	8.2	7.6	4	4	84	86	818771	805600	<0.2	<0.2	1.5	1.5
						1.0	0.4	239	28.0		8.0		14.6		90.1		6.5		8.4		4		84				<0.2		1.5	
					Middle	3.6	0.2	247	27.8	27.8	7.9	7.9	16.2	16.2	88.7	88.7	6.4		8.4		4		86				<0.2		1.4	
						3.6	0.2	252	27.8		7.9		16.2		88.7		6.4		8.4		4		86				<0.2		1.5	
					Bottom	6.2	0.3	221	27.6	27.6	7.9	7.9	19.0	19.0	86.5	86.8	6.1	6.2	6.0		5		88				<0.2		1.5	
						6.2	0.3	222	27.6		7.9		19.0		87.1		6.2		6.1		4		88				<0.2		1.6	
IM4	Rainy	Moderate	08:33	7.7	Surface	1.0	0.3	214	28.0	28.0	7.9	7.9	15.4	15.4	88.7	88.8	6.4	6.4	6.6	8.5	6	7	82	86	819736	804596	<0.2	<0.2	1.5	1.6
						1.0	0.3	216	28.0		7.9		15.4		88.9		6.4		6.5		7		83				<0.2		1.6	
					Middle	3.9	0.2	241	28.0	28.0	8.0	8.0	14.7	14.7	88.0	88.0	6.4		7.5		7		87				<0.2		1.5	
						3.9	0.2	242	27.9		8.0		14.7		87.9		6.4		7.4		7		87				<0.2		1.9	
					Bottom	6.7	0.1	226	27.4	27.4	7.9	7.9	20.0	20.0	81.0	81.2	5.7	5.8	11.4		7		89				<0.2		1.5	
						6.7	0.1	227	27.4		7.9		20.0		81.4		5.8		11.3		6		89				<0.2		1.4	
IM5	Rainy	Moderate	08:43	6.5	Surface	1.0	0.5	225	28.3	28.3	7.9	7.9	12.4	12.4	92.7	92.7	6.7	6.7	5.8	5.9	4	4	83	87	820744	804875	<0.2	<0.2	1.6	1.6
						1.0	0.5	222	28.3		8.0		12.4		92.7		6.7		5.6		5		84				<0.2		1.6	
					Middle	3.3	0.3	218	28.2	28.2	8.0	8.0	12.4	12.4	92.3	92.3	6.7		6.3		4		87				<0.2		1.7	
						3.3	0.3	213	28.2		8.0		12.5		92.2		6.7		6.5		5		87				<0.2		1.6	
					Bottom	5.5	0.1	220	28.1	28.1	8.0	8.0	13.4	13.4	92.8	93.0	6.7	6.8	5.6		4		89				<0.2		1.7	
						5.5	0.1	218	28.1		8.0		13.4		93.1		6.8		5.6		3		90				<0.2		1.5	
IM6	Rainy	Moderate	08:51	7.8	Surface	1.0	0.6	210	28.3	28.3	7.9	7.9	11.9	11.9	92.8	92.8	6.8	6.9	7.3	6.3	5	5	83	86	821063	805822	<0.2	<0.2	2.5	2.0
						1.0	0.6	204	28.3		7.9		11.9		92.8		6.8		7.3		4		83				<0.2		1.9	
					Middle	3.9	0.6	211	28.3	28.3	7.9	7.9	12.2	12.0	92.8	92.8	7.2		5.0		5		86				<0.2		1.9	
						3.9	0.6	215	28.3		7.9		11.9		92.8		6.8		5.0		5		87				<0.2		2.0	
					Bottom	6.8	0.2	202	28.1	28.1	8.0	8.0	12.1	12.1	93.4	93.5	6.8	6.8	6.7		5		89				<0.2		1.9	
						6.8	0.2	203	28.1		8.0		12.1		93.5		6.8		6.7		6		89				<0.2		1.9	
IM7	Rainy	Moderate	09:00	7.6	Surface	1.0	0.6	189	28.1	28.1	7.9	7.9	11.8	11.8	92.6	92.6	6.8	6.8	4.6	6.0	5	5	84	86	821369	806813	<0.2	<0.2	2.1	2.0
						1.0	0.7	199	28.1		7.9		11.8		92.5		6.8		4.7		4		84				<0.2		2.0	
					Middle	3.8	0.5	200	28.2	28.2	7.9	7.9	11.8	11.8	93.0	93.1	6.8		7.0		5		87				<0.2		2.0	
						3.8	0.6	198	28.2		7.9		11.9		93.1		6.8		7.3		4		87				<0.2		2.0	
					Bottom	6.6	0.3	199	28.2	28.2	8.0	8.0	11.8	11.8	94.4	94.5	6.9	6.9	6.4		4		88				<0.2		2.0	
						6.6	0.3	202	28.2		8.0		11.8		94.6		6.9		6.2		5		88				<0.2		2.0	
IM8	Rainy	Moderate	09:03	7.6	Surface	1.0	0.5	179	28.2	28.2	8.1	8.1	11.4	11.4	90.7	90.7	6.6	6.7	9.5	10.1	5	5	86	87	821826	808157	<0.2	<0.2	2.2	2.2
						1.0	0.5	176	28.2		8.1		11.4		90.7		6.7		9.5		5		84				<0.2		2.2	
					Middle	3.8	0.3	181	28.2	28.2	8.1	8.1	11.5	11.5	91.0	91.1	6.7		8.8		4		88				<0.2		2.3	
						3.8	0.4	173	28.2		8.1		11.5		91.1		6.7		8.9		4		86				<0.2		2.2	
					Bottom	6.6	0.4	183	27.6	27.6	8.1	8.1	12.0	12.0	92.3	92.4	6.8	6.8	11.8		4		90				<0.2		2.0	
						6.6	0.4	192	27.5		8.1		12.0		92.4		6.8		11.9		5		90				<0.2		2.2	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	08:57	7.3	Surface	1.0	0.6	188	28.3	28.3	8.1	8.1	11.3	11.3	91.8	91.9	6.7	6.9	9.5	10.0	4	4	85	87	822117	808816	<0.2	<0.2	2.8	2.3
						1.0	0.6	200	28.3		8.1		11.3		92.0		6.7		9.4		3		84				<0.2		2.2	
					Middle	3.7	0.3	189	27.8	27.8	8.1	8.1	11.5	11.5	95.0	95.3	7.0		7.2		3		87				<0.2		2.2	
						3.7	0.4	205	27.8		8.1		11.5		95.5		7.0		6.9		3		88				<0.2		2.2	
					Bottom	6.3	0.1	210	27.8	27.8	8.1	8.1	12.3	12.3	92.1	92.1	6.8	6.8	13.6		5		89				<0.2		2.2	
						6.3	0.1	217	27.8		8.1		12.3		92.1		6.8		13.6		6		88				<0.2		2.2	
IM10	Rainy	Moderate	08:48	7.7	Surface	1.0	0.4	137	28.4	28.5	8.1	8.1	11.8	11.8	91.4	91.4	6.7	6.7	11.1	13.7	6	5	84	87	822369	809774	<0.2	<0.2	2.2	2.9
						1.0	0.4	143	28.5		8.1		11.8		91.4		6.7		11.0		6		85				<0.2		2.2	
					Middle	3.9	0.3	104	28.6	28.6	8.1	8.1	11.9	11.9	91.7	91.8	6.7		15.2		4		87				<0.2		2.6	
						3.9	0.3	109	28.6		8.1		11.9		91.8		6.7		15.2		4		86				<0.2		2.6	
					Bottom	6.7	0.2	167	28.2	28.2	8.1	8.1	12.0	12.0	92.6	92.6	6.8	6.8	14.9		4		89				<0.2		4.0	
						6.7	0.2	182	28.2		8.1		12.0		92.6		6.8		14.9		4		88				<0.2		4.0	
IM11	Rainy	Moderate	08:36	7.6	Surface	1.0	0.4	112	28.5	28.5	8.1	8.1	11.5	11.5	92.9	92.9	6.8	6.8	16.9	14.5	3	3	86	88	822069	811455	<0.2	<0.2	3.9	**3.9**
						1.0	0.4	120	28.5		8.1		11.6		92.9		6.8		16.9		3		85				<0.2		3.8	
					Middle	3.8	0.2	80	28.1	28.1	8.1	8.1	12.8	12.8	92.7	92.8	6.8		13.6		3		87				<0.2		3.9	
						3.8	0.2	85	28.1		8.1		12.8		92.8		6.8		14.0		3		89				<0.2		3.9	
					Bottom	6.6	0.0	165	27.9	27.9	8.1	8.1	11.8	11.8	93.2	93.2	6.8	6.8	12.9		3		91				<0.2		4.0	
						6.6	0.0	168	27.9		8.1		11.8		93.1		6.8		12.9		3		90				<0.2		4.1	
IM12	Rainy	Moderate	08:27	8.1	Surface	1.0	0.3	109	28.4	28.4	8.1	8.1	11.7	11.7	92.5	92.5	6.7	6.7	13.0	12.5	2	3	84	88	821458	812067	<0.2	<0.2	2.2	2.8
						1.0	0.4	117	28.4		8.1		11.7		92.5		6.7		13.0		2		86				<0.2		1.9	
					Middle	4.1	0.3	91	28.4	28.4	8.1	8.1	11.8	11.8	92.3	92.3	6.7		12.7		3		88				<0.2		4.0	
						4.1	0.3	99	28.4		8.1		11.8		92.2		6.7		11.8		3		87				<0.2		3.9	
					Bottom	7.1	0.2	166	28.4	28.4	8.1	8.1	11.7	11.7	92.2	92.2	6.7	6.7	12.2		2		90				<0.2		2.2	
						7.1	0.2	171	28.4		8.1		11.7		92.2		6.7		12.3		3		90				<0.2		2.8	
SR1A	Rainy	Moderate	08:25	4.7	Surface	1.0	-	-	28.3	28.3	8.1	8.1	12.2	12.2	90.5	90.5	6.6	6.6	11.4	13.4	4	4	-	-	819981	812656	-	-	-	-
						1.0	-	-	28.3		8.1		12.2		90.4		6.6		11.0		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.3	28.3	8.1	8.1	13.8	13.8	90.3	90.4	6.5	6.5	15.6		3		-				-		-	
						3.7	-	-	28.3		8.1		13.8		90.4		6.5		15.6		3		-				-		-	
SR2	Rainy	Moderate	08:12	4.3	Surface	1.0	0.3	93	28.5	28.5	8.1	8.1	12.0	12.0	93.0	92.9	6.8	6.8	12.5	9.9	<2	3	85	87	821449	814184	<0.2	<0.2	2.1	3.0
						1.0	0.3	101	28.5		8.1		12.0		92.7		6.7		12.1		<2		86				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.2	118	28.5	28.5	8.1	8.1	13.1	13.1	93.0	93.2	6.7	6.7	7.5		3		89				<0.2		3.9	
						3.3	0.2	119	28.5		8.1		13.1		93.3		6.7		7.5		4		87				<0.2		4.0	
SR3	Rainy	Moderate	09:10	8.3	Surface	1.0	0.5	165	28.3	28.3	8.1	8.1	11.1	11.1	91.9	92.0	6.7	6.8	9.0	9.8	3	3	-	-	822159	807553	-	-	-	-
						1.0	0.5	171	28.3		8.1		11.1		92.1		6.7		9.0		3		-				-		-	
					Middle	4.2	0.3	150	28.2	28.2	8.1	8.1	11.2	11.2	92.6	92.7	6.8		9.1		3		-				-		-	
						4.2	0.3	165	28.1		8.1		11.2		92.7		6.8		9.9		4		-				-		-	
					Bottom	7.3	0.4	122	27.7	27.7	8.1	8.1	12.4	12.4	92.0	92.0	6.8	6.8	11.0		3		-				-		-	
						7.3	0.4	125	27.7		8.1		12.4		92.0		6.8		11.0		3		-				-		-	
SR4A	Rainy	Moderate	07:45	9.2	Surface	1.0	0.5	58	28.2	28.2	8.0	8.0	13.8	13.8	96.1	96.1	6.9	7.0	4.4	5.1	4	4	-	-	817210	807831	-	-	-	-
						1.0	0.5	62	28.2		8.0		13.8		96.1		6.9		4.6		3		-				-		-	
					Middle	4.6	0.3	66	28.2	28.2	8.0	8.0	13.9	13.9	96.4	96.5	7.0		5.3		3		-				-		-	
						4.6	0.3	70	28.2		8.0		13.9		96.6		7.0		5.6		4		-				-		-	
					Bottom	8.2	0.3	74	28.1	28.1	8.0	8.0	14.2	14.2	94.2	94.3	6.8	6.8	5.3		5		-				-		-	
						8.2	0.3	83	28.1		8.0		14.2		94.3		6.8		5.3		4		-				-		-	
SR5A	Rainy	Moderate	07:31	5.5	Surface	1.0	0.1	74	28.3	28.3	8.0	8.0	14.1	14.1	96.1	96.2	6.9	6.9	5.6	5.9	4	5	-	-	816586	810698	-	-	-	-
						1.0	0.1	86	28.3		8.0		14.1		96.3		6.9		6.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	79	28.3	28.3	8.0	8.0	14.5	14.5	96.0	96.1	6.9	6.9	6.1		6		-				-		-	
						4.5	0.1	83	28.3		8.0		14.5		96.1		6.9		6.0		5		-				-		-	
SR6	Cloudy	Moderate	07:07	4.2	Surface	1.0	0.1	141	28.6	28.6	7.8	7.8	13.8	13.8	97.1	97.1	7.0	7.0	3.6	3.5	3	4	-	-	817896	814643	-	-	-	-
						1.0	0.1	147	28.5		7.8		13.8		97.1		7.0		3.5		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	148	28.6	28.6	7.8	7.8	13.8	13.8	97.3	97.3	7.0	7.0	3.5		4		-				-		-	
						3.2	0.0	158	28.6		7.8		13.8		97.3		7.0		3.5		4		-				-		-	
SR7	Cloudy	Moderate	07:13	16.2	Surface	1.0	0.3	76	28.3	28.3	8.2	8.2	15.9	15.9	94.9	94.9	6.8	6.8	6.0	6.4	4	3	-	-	823655	823737	-	-	-	-
						1.0	0.3	79	28.3		8.2		15.9		94.8		6.8		6.0		4		-				-		-	
					Middle	8.1	0.2	83	28.3	28.3	8.2	8.2	15.9	15.9	94.8	94.8	6.8		6.0		3		-				-		-	
						8.1	0.2	84	28.3		8.2		15.9		94.7		6.8		6.1		3		-				-		-	
					Bottom	15.2	0.1	29	28.2	28.2	8.2	8.2	16.3	16.3	94.8	94.8	6.8	6.8	7.3		3		-				-		-	
						15.2	0.1	29	28.2		8.2		16.3		94.8		6.8		7.2		3		-				-		-	
SR8	Rainy	Moderate	08:25	4.9	Surface	1.0	-	-	28.3	28.3	8.1	8.1	14.3	14.3	91.3	91.3	6.6	6.6	12.0	11.8	4	3	-	-	820382	811635	-	-	-	-
						1.0	-	-	28.3		8.1		14.3		91.3		6.6		11.9		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.4	28.4	8.1	8.1	12.9	12.9	91.4	91.4	6.6	6.6	11.7		3		-				-		-	
						3.9	-	-	28.4		8.1		12.9		91.4		6.6		11.6		3		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 11 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	12:59	8.3	Surface	1.0	0.5	74	28.3	28.3	7.9	7.9	13.4	13.4	92.8	92.7	6.7	6.7	8.6	7.8	3	4	84	87	815617	804244	<0.2	<0.2	1.6	1.6
						1.0	0.5	77	28.2		7.9		13.4		92.5		6.7		8.6		3		84						1.5	
					Middle	4.2	0.5	67	28.2	28.2	7.9	7.9	13.8	13.8	92.5	92.6	6.7		7.3		4		87				<0.2		1.6	
						4.2	0.5	72	28.2		7.9		13.8		92.6		6.7		7.3		4		87				<0.2		1.6	
					Bottom	7.3	0.4	72	28.0	27.9	8.0	8.0	14.0	14.0	94.0	94.2	6.8	6.9	7.6		4		89				<0.2		1.5	
						7.3	0.4	74	27.8		8.0		14.0		94.4		6.9		7.4		4		89				<0.2		1.5	
C2	Rainy	Moderate	11:58	11.7	Surface	1.0	0.3	17	28.2	28.2	8.0	8.0	10.2	10.2	88.7	88.6	6.5	6.5	9.7	9.8	3	3	84	87	825697	806944	<0.2	<0.2	3.6	3.8
						1.0	0.4	18	28.2		8.0		10.2		88.5		6.5		9.5		3		85				<0.2		3.8	
					Middle	5.9	0.2	30	28.0	28.0	8.0	8.0	10.3	10.3	88.3	88.3	6.5		10.3		3		88				<0.2		3.9	
						5.9	0.2	33	28.0		8.0		10.3		88.3		6.5		10.3		4		86				<0.2		3.8	
					Bottom	10.7	0.1	31	28.0	28.0	8.0	8.0	15.5	15.5	88.3	88.4	6.4	6.4	9.6		3		90				<0.2		3.8	
						10.7	0.1	33	28.0		8.0		15.5		88.5		6.4		9.6		4		90				<0.2		3.9	
C3	Rainy	Moderate	13:39	12.1	Surface	1.0	0.2	264	28.6	28.6	8.2	8.2	13.3	13.3	96.4	96.4	6.9	7.0	9.9	10.0	2	3	85	87	822110	817821	<0.2	<0.2	3.8	2.9
						1.0	0.2	276	28.6		8.2		13.3		96.4		6.9		9.9		2		85				<0.2		3.7	
					Middle	6.1	0.4	260	28.3	28.3	8.2	8.2	13.5	13.5	96.4	96.4	7.0		10.2		3		87				<0.2		2.7	
						6.1	0.4	275	28.3		8.2		13.5		96.4		7.0		10.2		3		86				<0.2		2.6	
					Bottom	11.1	0.4	299	27.5	27.5	8.1	8.1	19.1	19.1	90.7	90.9	6.4	6.5	10.1		3		89				<0.2		2.2	
						11.1	0.4	325	27.5		8.1		19.1		91.1		6.5		10.1		3		88				<0.2		2.2	
IM1	Rainy	Moderate	12:46	5.5	Surface	1.0	0.5	28	28.2	28.2	8.0	8.0	13.2	13.2	95.7	95.5	6.9	6.9	7.3	6.7	4	4	83	85	817969	807110	<0.2	<0.2	1.7	1.7
						1.0	0.5	28	28.2		8.0		13.2		95.3		6.9		7.4		3		83				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	355	28.2	28.2	8.0	8.0	14.2	14.2	94.3	94.4	6.8	6.8	6.0		4		86				<0.2		1.7	
						4.5	0.2	327	28.2		8.0		14.2		94.4		6.8		6.1		4		86				<0.2		1.7	
IM2	Rainy	Moderate	12:40	8.0	Surface	1.0	0.5	14	28.2	28.2	8.0	8.0	13.6	13.6	96.4	96.3	7.0	6.9	7.7	6.8	4	4	82	86	818156	806143	<0.2	<0.2	1.7	1.7
						1.0	0.5	14	28.2		8.0		13.6		96.1		7.0		7.5		4		83				<0.2		1.7	
					Middle	4.0	0.2	343	28.2	28.2	8.0	8.0	14.1	14.1	94.1	94.0	6.8		8.8		3		86				<0.2		1.7	
						4.0	0.2	316	28.2		8.0		14.1		93.9		6.8		8.3		4		86				<0.2		1.7	
					Bottom	7.0	0.2	342	28.1	28.1	8.0	8.0	14.9	14.9	93.4	93.5	6.7	6.7	4.2		3		88				<0.2		1.6	
						7.0	0.2	350	28.1		8.0		14.9		93.6		6.7		4.3		4		88				<0.2		1.7	
IM3	Rainy	Moderate	12:34	7.5	Surface	1.0	0.4	0	28.1	28.1	8.0	8.0	14.7	14.7	96.6	96.6	7.0	7.0	5.6	6.3	3	3	83	86	818776	805593	<0.2	<0.2	1.7	1.7
						1.0	0.4	0	28.1		8.0		14.7		96.6		7.0		5.7		2		83				<0.2		1.7	
					Middle	3.8	0.3	350	28.1	28.1	8.0	8.0	15.3	15.3	96.1	96.4	6.9		5.5		4		86				<0.2		1.8	
						3.8	0.3	356	28.0		8.0		15.3		96.7		7.0		5.9		4		87				<0.2		1.7	
					Bottom	6.5	0.2	341	27.9	27.9	8.0	8.0	16.8	16.8	91.1	91.2	6.5	6.5	7.6		3		88				<0.2		1.7	
						6.5	0.2	343	27.9		8.0		16.8		91.3		6.5		7.6		3		88				<0.2		1.7	
IM4	Rainy	Moderate	12:24	7.8	Surface	1.0	0.5	334	28.1	28.1	7.9	7.9	14.7	14.7	90.6	90.5	6.5	6.5	6.0	6.5	5	6	82	86	819721	804585	<0.2	<0.2	1.7	1.6
						1.0	0.5	336	28.1		7.9		14.7		90.4		6.5		6.2		5		82				<0.2		1.7	
					Middle	3.9	0.2	335	28.1	28.1	7.9	7.9	15.3	15.3	90.0	90.0	6.5		7.0		6		87				<0.2		1.7	
						3.9	0.2	357	28.1		7.9		15.3		90.0		6.5		7.1		6		88				<0.2		1.5	
					Bottom	6.8	0.3	344	27.9	27.9	7.9	7.9	16.6	16.6	88.5	88.6	6.3	6.3	6.4		6		89				<0.2		1.6	
						6.8	0.3	359	27.9		7.9		16.6		88.6		6.3		6.5		7		89				<0.2		1.6	
IM5	Rainy	Moderate	12:17	7.3	Surface	1.0	0.4	269	28.4	28.4	7.9	7.9	11.8	11.8	92.7	92.6	6.8	6.6	7.1	8.1	4	5	83	87	820749	804874	<0.2	<0.2	2.2	2.3
						1.0	0.4	294	28.4		7.9		11.8		92.5		6.7		7.2		4		84				<0.2		2.3	
					Middle	3.7	0.2	340	28.2	28.2	7.9	7.9	13.1	13.1	90.0	89.9	6.5		7.8		5		87				<0.2		2.4	
						3.7	0.2	313	28.2		7.9		13.1		89.7		6.5		8.0		5		87				<0.2		2.4	
					Bottom	6.3	0.3	343	28.1	28.1	7.9	7.9	15.4	15.4	90.9	91.1	6.5	6.6	9.3		6		89				<0.2		2.2	
						6.3	0.3	352	28.1		7.9		15.4		91.3		6.6		9.3		6		89				<0.2		2.2	
IM6	Rainy	Moderate	12:10	7.0	Surface	1.0	0.7	279	28.4	28.4	7.9	7.9	11.7	11.7	93.5	93.5	6.8	6.8	6.0	6.4	4	5	83	86	821072	805841	<0.2	<0.2	2.2	2.1
						1.0	0.7	295	28.4		7.9		11.7		93.4		6.8		6.4		4		83				<0.2		2.2	
					Middle	3.5	0.5	284	28.4	28.4	7.9	7.9	11.7	11.7	92.9	93.0	6.8		7.7		5		86				<0.2		2.1	
						3.5	0.6	285	28.4		7.9		11.7		93.0		6.8		7.7		5		87				<0.2		2.0	
					Bottom	6.0	0.2	19	28.3	28.3	7.9	7.9	11.7	11.7	94.1	94.2	6.9	6.9	5.4		4		89				<0.2		2.1	
						6.0	0.2	19	28.3		7.9		11.7		94.3		6.9		5.1		5		89				<0.2		2.0	
IM7	Rainy	Moderate	12:02	7.3	Surface	1.0	0.5	232	28.4	28.4	7.9	7.9	11.8	11.8	91.7	91.7	6.7	6.7	6.5	5.9	5	5	83	86	821364	806858	<0.2	<0.2	2.0	2.1
						1.0	0.5	235	28.4		7.9		11.8		91.7		6.7		6.5		5		84				<0.2		2.0	
					Middle	3.7	0.5	249	28.4	28.4	7.9	7.9	11.8	11.8	91.9	91.9	6.7		6.4		5		87				<0.2		2.2	
						3.7	0.6	256	28.4		7.9		11.8		91.9		6.7		6.4		5		87				<0.2		2.0	
					Bottom	6.3	0.2	216	28.4	28.4	7.9	7.9	11.8	11.8	91.9	91.9	6.7	6.7	4.9		5		88				<0.2		2.0	
						6.3	0.2	237	28.4		7.9		11.8		91.9		6.7		4.9		6		89				<0.2		2.1	
IM8	Rainy	Moderate	12:15	7.9	Surface	1.0	0.2	196	28.4	28.4	8.1	8.1	10.8	10.8	91.4	91.5	6.7	6.7	8.7	9.4	3	4	84	87	821841	808124	<0.2	<0.2	3.8	<u>3.4</u>
						1.0	0.3	200	28.4		8.1		10.8		91.5		6.7		8.7		4		85				<0.2		3.8	
					Middle	4.0	0.2	241	28.4	28.4	8.1	8.1	10.8	10.8	91.9	91.9	6.7		9.3		3		83				<0.2		3.9	
						4.0	0.2	259	28.4		8.1		10.8		91.9		6.7		9.4		4		88				<0.2		3.9	
					Bottom	6.9	0.2	251	28.1	28.1	8.1	8.1	11.8	11.8	91.9	92.0	6.7	6.7	10.2		4		90				<0.2		2.3	
						6.9	0.2	260	28.1		8.1		11.8		92.0		6.7		10.3		4		91				<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 11 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	12:21	7.6	Surface	1.0	0.2	246	28.4	28.4	8.1	8.1	11.8	11.8	91.3	91.3	6.6	6.7	9.8	10.2	3	4	83	88	822073	808795	<0.2	<0.2	2.1	2.2
						1.0	0.2	246	28.4		8.1		11.8		91.3		6.6		9.8		4		85				<0.2		2.2	
					Middle	3.8	0.2	242	28.3	28.3	8.1	8.1	11.8	11.8	91.6	91.6	6.7		10.4		4		88				<0.2		2.2	
						3.8	0.2	248	28.3		8.1		11.8		91.6		6.7		10.3		4		89				<0.2		2.1	
					Bottom	6.6	0.2	244	28.3	28.3	8.1	8.1	11.7	11.7	92.3	92.4	6.7	6.8	10.5		3		90				<0.2		2.2	
						6.6	0.3	253	28.3		8.1		11.7		92.5		6.8		10.2		4		90				<0.2		2.1	
IM10	Rainy	Moderate	12:29	7.8	Surface	1.0	0.1	206	28.5	28.5	8.1	8.1	12.4	12.4	92.1	92.1	6.7	6.7	16.3	12.8	4	3	84	87	822395	809770	<0.2	<0.2	2.1	2.2
						1.0	0.1	224	28.5		8.1		12.4		92.1		6.7		16.4		3		85				<0.2		2.1	
					Middle	3.9	0.1	192	28.3	28.3	8.1	8.1	12.4	12.4	92.4	92.5	6.7		11.0		3		87				<0.2		1.9	
						3.9	0.1	201	28.3		8.1		12.4		92.5		6.7		11.3		3		86				<0.2		2.2	
					Bottom	6.8	0.3	309	28.3	28.4	8.1	8.1	12.8	12.8	91.8	91.9	6.7	6.7	11.0		3		90				<0.2		2.2	
						6.8	0.3	332	28.4		8.1		12.8		92.0		6.7		10.6		4		88				<0.2		2.4	
IM11	Rainy	Moderate	12:39	7.7	Surface	1.0	0.3	355	28.5	28.5	8.1	8.1	12.2	12.2	93.8	93.8	6.8	6.8	8.0	10.6	3	3	84	87	822045	811468	<0.2	<0.2	2.3	2.3
						1.0	0.3	327	28.5		8.1		12.2		93.8		6.8		8.0		3		85				<0.2		2.3	
					Middle	3.9	0.3	329	28.5	28.5	8.1	8.1	12.2	12.2	93.5	93.5	6.8		12.3		2		87				<0.2		2.3	
						3.9	0.3	343	28.5		8.1		12.2		93.4		6.8		12.3		3		88				<0.2		2.2	
					Bottom	6.7	0.3	300	28.3	28.3	8.1	8.1	13.6	13.6	91.8	91.9	6.6	6.6	11.5		5		89				<0.2		2.2	
						6.7	0.3	320	28.3		8.1		13.6		91.9		6.6		11.7		4		90				<0.2		2.3	
IM12	Rainy	Moderate	12:48	8.4	Surface	1.0	0.3	276	28.6	28.6	8.1	8.1	11.9	11.9	95.5	95.5	6.9	6.8	10.5	10.0	4	4	85	87	821477	812062	<0.2	<0.2	2.1	2.2
						1.0	0.3	290	28.6		8.1		11.9		95.5		6.9		10.5		5		84				<0.2		2.2	
					Middle	4.2	0.5	283	28.4	28.4	8.1	8.1	12.0	12.0	92.9	92.8	6.8		10.1		4		83				<0.2		2.2	
						4.2	0.5	305	28.3		8.1		12.0		92.6		6.7		10.1		2		88				<0.2		2.3	
					Bottom	7.4	0.0	326	28.0	28.0	8.1	8.1	16.8	16.8	91.2	91.3	6.5	6.5	9.9		4		90				<0.2		2.2	
						7.4	0.0	326	28.0		8.1		16.8		91.4		6.5		8.8		4		90				<0.2		2.2	
SR1A	Rainy	Moderate	13:04	4.9	Surface	1.0	-	-	28.3	28.3	8.1	8.1	12.5	12.4	97.4	97.5	7.1	7.1	7.4	8.4	2	3	-	-	819978	812658	-	-	-	-
						1.0	-	-	28.3		8.1		12.4		97.5		7.1		7.4		2		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.0	28.0	8.2	8.2	13.1	13.1	97.6	97.7	7.1	7.1	9.4		5		-				-		-	
						3.9	-	-	27.9		8.2		13.1		97.8		7.1		9.4		4		-				-		-	
SR2	Rainy	Moderate	13:16	4.6	Surface	1.0	0.7	303	28.3	28.3	8.2	8.2	14.2	14.2	96.5	96.5	7.0	7.0	7.6	10.0	4	4	85	86	821464	814181	<0.2	<0.2	2.3	2.3
						1.0	0.8	327	28.3		8.2		14.2		96.4		6.9		7.6		4		85				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.4	301	28.4	28.4	8.1	8.1	14.5	14.5	95.6	95.7	6.9	6.9	12.4		4		87				<0.2		2.3	
						3.6	0.4	319	28.4		8.1		14.5		95.7		6.9		12.4		3		88				<0.2		2.3	
SR3	Rainy	Moderate	12:11	8.6	Surface	1.0	0.3	19	28.3	28.3	8.1	8.0	10.4	10.4	91.1	91.0	6.7	6.7	6.3	8.9	3	4	-	-	822150	807548	-	-	-	-
						1.0	0.4	20	28.3		8.0		10.4		90.9		6.7		6.4		3		-				-		-	
					Middle	4.3	0.3	26	28.0	28.0	8.0	8.0	13.6	13.6	91.0	91.0	6.6		10.1		4		-				-		-	
						4.3	0.3	27	28.0		8.0		13.6		91.0		6.6		10.1		4		-				-		-	
					Bottom	7.6	0.3	23	27.9	27.9	8.1	8.1	10.2	10.2	91.4	91.4	6.8	6.8	10.1		4		-				-		-	
						7.6	0.4	25	27.9		8.1		10.2		91.4		6.8		10.2		4		-				-		-	
SR4A	Rainy	Calm	13:13	9.1	Surface	1.0	0.2	275	28.3	28.3	8.0	8.0	14.3	14.3	95.2	95.2	6.8	6.8	5.1	9.0	5	8	-	-	817177	807790	-	-	-	-
						1.0	0.3	275	28.3		8.0		14.3		95.2		6.8		5.1		5		-				-		-	
					Middle	4.6	0.4	264	28.4	28.4	8.0	8.0	15.1	15.1	94.9	95.1	6.8		10.2		9		-				-		-	
						4.6	0.4	272	28.4		8.0		15.1		95.3		6.8		10.3		10		-				-		-	
					Bottom	8.1	0.1	282	28.4	28.4	8.0	8.0	15.0	15.0	96.1	96.3	6.9	6.9	11.8		9		-				-		-	
						8.1	0.1	301	28.4		8.0		15.0		96.4		6.9		11.7		9		-				-		-	
SR5A	Cloudy	Calm	13:30	5.3	Surface	1.0	0.2	293	28.6	28.6	8.1	8.1	15.5	15.5	98.7	98.7	7.0	7.0	8.4	7.9	9	8	-	-	816579	810701	-	-	-	-
						1.0	0.2	316	28.6		8.1		15.5		98.7		7.0		8.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.2	218	28.6	28.5	8.1	8.1	15.4	15.5	99.7	99.8	7.1	7.1	7.3		7		-				-		-	
						4.3	0.2	223	28.4		8.1		15.5		99.9		7.1		7.3		7		-				-		-	
SR6	Cloudy	Moderate	13:56	4.7	Surface	1.0	0.1	274	28.7	28.7	8.0	8.0	12.7	12.7	97.3	97.3	7.0	7.0	4.5	6.0	4	6	-	-	817888	814675	-	-	-	-
						1.0	0.1	284	28.7		8.1		12.7		97.3		7.0		4.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	233	28.7	28.7	8.1	8.1	12.9	12.9	96.9	96.9	7.0	7.0	7.2		8		-				-		-	
						3.7	0.1	234	28.7		8.1		12.9		96.9		7.0		7.3		8		-				-		-	
SR7	Rainy	Moderate	14:14	16.6	Surface	1.0	0.1	256	28.4	28.4	8.2	8.2	15.6	15.6	95.2	95.2	6.8	6.8	8.6	8.6	2	2	-	-	823620	823757	-	-	-	-
						1.0	0.1	260	28.3		8.2		15.6		95.1		6.8		8.4		3		-				-		-	
					Middle	8.3	0.1	240	28.1	28.1	8.1	8.1	15.1	15.1	95.2	95.3	6.8		8.7		2		-				-		-	
						8.3	0.1	241	28.1		8.1		15.1		95.3		6.9		8.7		2		-				-		-	
					Bottom	15.6	0.1	226	27.8	27.8	8.1	8.1	18.5	18.5	96.0	96.1	6.8	6.8	8.8		2		-				-		-	
						15.6	0.1	231	27.8		8.1		18.5		96.2		6.8		8.7		2		-				-		-	
SR8	Rainy	Moderate	12:54	5.2	Surface	1.0	-	-	28.3	28.3	8.1	8.1	12.0	12.0	95.1	95.0	6.9	6.9	13.0	12.4	4	5	-	-	820372	811626	-	-	-	-
						1.0	-	-	28.3		8.1		12.0		94.9		6.9		13.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.3	28.3	8.1	8.1	12.9	12.9	93.9	94.0	6.8	6.8	11.8		5		-				-		-	
						4.2	-	-	28.3		8.1		12.9		94.1		6.8		11.8		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	15:51	8.5	Surface	1.0	0.4	33	28.2	28.2	7.8	7.8	12.1	12.1	91.6	91.6	6.7	6.7	3.2	3.3	5	5	86	88	815606	804264	<0.2	<0.2	2.1	2.1
						1.0	0.5	0	28.2		7.8		12.1		91.5		6.7		3.2		5		86				<0.2		2.0	
					Middle	4.3	0.4	31	28.2	28.2	7.8	7.8	12.4	12.4	90.7	90.7	6.6		3.2		4		88				<0.2		2.1	
						4.3	0.4	33	28.2		7.8		12.4		90.7		6.6		3.1		6		89				<0.2		2.1	
					Bottom	7.5	0.3	18	28.2	28.2	7.7	7.7	12.8	12.8	89.1	89.1	6.5	6.5	3.7		6		90				<0.2		2.1	
						7.5	0.3	18	28.2		7.7		12.8		89.1		6.5		3.7		6		90				<0.2		2.1	
C2	Rainy	Rough	14:38	11.8	Surface	1.0	1.1	69	28.0	28.0	7.6	7.6	11.1	11.1	63.8	63.8	4.7	4.4	12.1	12.2	11	11	80	85	825668	806933	<0.2	<0.2	3.4	3.2
						1.0	1.1	75	28.0		7.6		11.1		63.8		4.7		12.1		11		82				<0.2		2.9	
					Middle	5.9	0.7	69	27.3	27.3	7.7	7.7	21.5	21.5	57.2	57.2	4.0		11.5		11		85				<0.2		3.0	
						5.9	0.7	74	27.3		7.7		21.5		57.2		4.0		11.5		12		86				<0.2		3.2	
					Bottom	10.8	0.1	65	27.3	27.3	7.7	7.7	23.3	23.3	58.8	58.8	4.1	4.1	12.9		11		88				<0.2		3.2	
						10.8	0.1	69	27.3		7.7		23.3		58.8		4.1		12.9		12		89				<0.2		3.3	
C3	Rainy	Rough	16:21	12.4	Surface	1.0	0.6	264	27.9	27.9	7.8	7.8	16.7	16.7	66.0	66.0	4.7	4.5	9.2	9.4	6	7	86	89	822100	817810	<0.2	<0.2	3.1	3.3
						1.0	0.7	279	27.9		7.8		16.7		66.0		4.7		9.2		7		87				<0.2		3.2	
					Middle	6.2	0.0	256	27.1	27.1	7.8	7.8	22.7	22.7	61.2	61.2	4.3		9.5		7		89				<0.2		3.0	
						6.2	0.0	268	27.1		7.8		22.7		61.2		4.3		9.5		6		88				<0.2		3.4	
					Bottom	11.4	0.2	264	27.2	27.2	7.7	7.7	25.5	25.5	69.7	69.7	4.8	4.8	9.5		7		90				<0.2		3.4	
						11.4	0.2	288	27.2		7.7		25.5		69.7		4.8		9.5		6		91				<0.2		3.4	
IM1	Rainy	Moderate	15:25	5.7	Surface	1.0	0.5	15	28.3	28.3	7.8	7.8	12.9	12.9	93.2	93.1	6.8	6.8	4.7	4.0	4	4	84	86	817961	807117	<0.2	<0.2	2.1	2.1
						1.0	0.5	16	28.3		7.8		12.9		92.9		6.7		4.7		4		84				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	87	28.3	28.3	7.8	7.8	13.7	13.7	91.9	91.9	6.6	6.6	3.2		4		88				<0.2		2.1	
						4.7	0.1	94	28.3		7.8		13.7		91.9		6.6		3.3		4		89				<0.2		2.1	
IM2	Rainy	Moderate	15:20	6.8	Surface	1.0	0.2	354	28.3	28.3	7.8	7.8	14.6	14.6	92.1	92.0	6.6	6.6	5.5	3.7	4	4	84	86	818143	806164	<0.2	<0.2	2.4	2.5
						1.0	0.3	326	28.3		7.8		14.6		91.9		6.6		5.4		4		84				<0.2		2.5	
					Middle	3.4	0.3	343	28.2	28.2	7.8	7.8	15.0	15.0	91.1	91.1	6.5		2.9		4		85				<0.2		3.1	
						3.4	0.3	316	28.2		7.8		15.0		91.1		6.5		2.9		4		86				<0.2		2.4	
					Bottom	5.8	0.3	334	28.2	28.2	7.7	7.7	15.5	15.5	90.5	90.5	6.5	6.5	2.7		4		87				<0.2		2.4	
						5.8	0.3	352	28.2		7.7		15.5		90.5		6.5		2.7		4		88				<0.2		2.4	
IM3	Rainy	Rough	15:12	6.9	Surface	1.0	0.3	300	28.1	28.1	7.8	7.8	15.2	15.2	89.8	89.8	6.5	6.5	7.1	6.2	7	8	82	85	818771	805577	<0.2	<0.2	2.4	2.4
						1.0	0.3	318	28.1		7.8		15.2		89.8		6.5		7.1		7		83				<0.2		2.4	
					Middle	3.5	0.3	319	28.1	28.1	7.8	7.8	15.7	15.7	88.8	88.8	6.4		5.7		7		85				<0.2		2.4	
						3.5	0.3	349	28.1		7.8		15.7		88.8		6.4		5.7		7		86				<0.2		2.2	
					Bottom	5.9	0.2	328	28.1	28.1	7.7	7.7	15.8	15.8	89.0	89.0	6.4	6.4	5.8		8		88				<0.2		2.4	
						5.9	0.2	338	28.1		7.7		15.8		89.0		6.4		5.8		9		88				<0.2		2.4	
IM4	Rainy	Rough	15:04	7.3	Surface	1.0	0.1	21	28.1	28.1	7.8	7.8	16.2	16.2	88.7	88.8	6.3	6.2	5.7	6.6	6	7	84	86	819741	804595	<0.2	<0.2	2.3	2.4
						1.0	0.1	21	28.1		7.8		16.2		88.8		6.3		5.7		7		85				<0.2		2.4	
					Middle	3.7	0.1	22	28.0	28.0	7.8	7.8	16.7	16.7	86.1	86.2	6.1		8.2		7		85				<0.2		2.4	
						3.7	0.2	22	28.0		7.8		16.7		86.2		6.2		8.0		6		85				<0.2		2.5	
					Bottom	6.3	0.3	338	27.8	27.8	7.8	7.7	18.6	18.6	81.0	81.1	5.7	5.8	6.1		6		88				<0.2		2.4	
						6.3	0.3	311	27.8		7.7		18.6		81.2		5.8		6.3		7		89				<0.2		2.3	
IM5	Rainy	Rough	14:57	7.2	Surface	1.0	0.9	28	28.1	28.1	7.8	7.8	15.4	15.4	87.6	87.5	6.3	6.2	5.6	6.7	6	7	81	85	820726	804889	<0.2	<0.2	2.3	2.3
						1.0	0.9	27	28.1		7.8		15.4		87.4		6.3		5.7		6		82				<0.2		2.3	
					Middle	3.6	0.8	27	28.1	28.1	7.7	7.7	16.3	16.3	84.4	84.3	6.0		6.5		7		84				<0.2		2.3	
						3.6	0.8	26	28.0		7.7		16.3		84.1		6.0		6.5		8		85				<0.2		2.2	
					Bottom	6.2	0.5	23	28.0	28.0	7.7	7.7	17.2	17.2	83.2	83.3	5.9	5.9	7.6		8		87				<0.2		2.2	
						6.2	0.5	25	28.0		7.7		17.2		83.3		5.9		8.3		9		88				<0.2		2.3	
IM6	Rainy	Rough	14:50	6.6	Surface	1.0	0.9	29	28.2	28.2	7.7	7.7	10.8	10.8	84.9	85.1	6.2	6.2	5.6	6.0	7	7	81	84	821062	805840	<0.2	<0.2	2.2	2.2
						1.0	0.9	27	28.2		7.7		10.8		85.2		6.3		5.8		6		81				<0.2		2.2	
					Middle	3.3	0.8	26	28.2	28.2	7.7	7.7	12.2	12.2	85.2	85.2	6.2		5.8		7		85				<0.2		2.2	
						3.3	0.8	26	28.2		7.7		12.2		85.2		6.2		5.8		6		85				<0.2		2.2	
					Bottom	5.6	0.5	24	28.3	28.3	7.7	7.7	12.6	12.6	84.8	84.8	6.2	6.2	6.3		6		86				<0.2		2.1	
						5.6	0.5	26	28.3		7.7		12.6		84.8		6.2		6.4		7		87				<0.2		2.2	
IM7	Rainy	Rough	14:42	6.8	Surface	1.0	0.5	21	28.5	28.5	7.7	7.7	7.8	7.8	86.7	86.7	6.4	6.3	6.5	6.3	7	7	81	84	821336	806851	<0.2	<0.2	2.1	2.1
						1.0	0.5	24	28.5		7.7		7.8		86.6		6.4		6.6		7		81				<0.2		2.0	
					Middle	3.4	0.5	24	28.5	28.5	7.7	7.7	9.6	9.6	84.0	84.0	6.2		6.2		7		84				<0.2		2.1	
						3.4	0.5	26	28.5		7.7		9.6		84.0		6.2		6.3		6		84				<0.2		2.1	
					Bottom	5.8	0.2	21	28.5	28.5	7.7	7.7	10.8	10.8	82.5	82.5	6.0	6.0	6.1		7		86				<0.2		2.0	
						5.8	0.2	22	28.5		7.7		10.8		82.5		6.0		6.1		7		86				<0.2		2.0	
IM8	Rainy	Rough	14:56	7.6	Surface	1.0	0.5	294	28.1	28.1	7.4	7.4	8.1	8.1	72.0	72.0	5.4	5.4	12.3	11.7	9	9	84	86	821826	808127	<0.2	<0.2	3.0	3.1
						1.0	0.5	302	28.1		7.4		8.1		72.0		5.4		12.3		9		83				<0.2		3.1	
					Middle	3.8	0.4	319	28.1	28.1	7.5	7.5	10.9	10.9	72.1	72.1	5.3		11.5		9		86				<0.2		3.2	
						3.8	0.4	327	28.1		7.5		10.9		72.1		5.3		11.5		9		86				<0.2		3.0	
					Bottom	6.6	0.2	323	28.1	28.1	7.5	7.5	12.2	12.2	73.0	73.0	5.3	5.3	11.3		10		88				<0.2		3.3	
						6.6	0.3	348	28.1		7.5		12.2		73.0		5.3		11.3		9		89				<0.2		2.9	

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: The ebb tide monitoring session on 13 June 2019 was cancelled due to adverse weather and thunderstorm warning.

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Rough	15:03	6.9	Surface	1.0	0.3	258	28.1	28.1	7.4	7.4	8.5	8.5	73.0	73.0	5.4	5.4	12.3	11.8	9	9	85	88	822106	808802	<0.2	<0.2	3.0	3.1
						1.0	0.3	261	28.1		7.4		8.5		73.0		5.4		12.3		9		84				<0.2		3.0	
					Middle	3.5	0.1	291	28.1	28.1	7.4	7.4	9.8	9.8	73.4	73.5	5.4		11.6		9		88				<0.2		3.0	
						3.5	0.1	285	28.1		7.4		9.8		73.5		5.5		11.6		9		89				<0.2		3.2	
					Bottom	5.9	0.1	298	28.1	28.1	7.4	7.4	11.1	11.1	75.2	75.2	5.5	5.5	11.5		10		90				<0.2		3.2	
						5.9	0.1	300	28.1		7.4		11.1		75.2		5.5		11.5		9		89				<0.2		3.0	
IM10	Rainy	Rough	15:10	7.4	Surface	1.0	0.3	241	28.2	28.2	7.5	7.5	9.0	9.0	74.0	74.0	5.5	5.5	11.0	10.9	7	8	86	88	822382	809774	<0.2	<0.2	3.0	3.0
						1.0	0.3	245	28.2		7.5		9.0		74.0		5.5		11.0		8		84				<0.2		3.1	
					Middle	3.7	0.1	264	28.1	28.1	7.5	7.5	12.1	12.1	74.2	74.2	5.4		10.7		8		89				<0.2		3.0	
						3.7	0.1	259	28.1		7.5		12.1		74.2		5.4		10.7		8		88				<0.2		2.9	
					Bottom	6.4	0.2	229	28.1	28.1	7.4	7.4	13.4	13.4	77.1	77.1	5.6	5.6	10.9		7		90				<0.2		2.9	
						6.4	0.2	239	28.1		7.4		13.4		77.1		5.6		10.9		8		90				<0.2		3.0	
IM11	Rainy	Rough	15:19	7.4	Surface	1.0	0.4	244	28.2	28.2	7.6	7.6	10.4	10.4	71.7	71.7	5.3	5.0	11.1	11.4	8	8	85	88	822040	811447	<0.2	<0.2	2.9	3.0
						1.0	0.4	243	28.2		7.6		10.4		71.7		5.3		11.1		8		84				<0.2		3.1	
					Middle	3.7	0.2	229	27.9	27.9	7.7	7.7	16.8	16.8	64.1	64.1	4.6		10.8		8		89				<0.2		3.1	
						3.7	0.2	232	27.9		7.7		16.8		64.1		4.6		10.8		8		88				<0.2		3.0	
					Bottom	6.4	0.1	270	27.6	27.6	7.7	7.7	21.4	21.4	64.0	64.0	4.5	4.5	12.3		8		90				<0.2		3.0	
						6.4	0.1	277	27.6		7.7		21.4		64.0		4.5		12.3		9		90				<0.2		3.1	
IM12	Rainy	Rough	15:26	8.1	Surface	1.0	0.2	286	28.2	28.2	7.5	7.5	8.9	8.9	70.5	70.5	5.2	4.9	11.6	13.6	6	6	85	88	821441	812028	<0.2	<0.2	3.2	3.0
						1.0	0.2	288	28.2		7.5		8.9		70.5		5.2		11.6		6		86				<0.2		2.9	
					Middle	4.1	0.2	204	27.8	27.8	7.5	7.5	15.0	15.0	64.2	64.2	4.6		12.8		7		89				<0.2		2.9	
						4.1	0.2	225	27.8		7.5		15.0		64.2		4.6		12.8		6		88				<0.2		3.1	
					Bottom	7.1	0.2	217	27.5	27.5	7.5	7.5	21.0	21.0	65.3	65.3	4.6	4.6	16.5		7		90				<0.2		3.2	
						7.1	0.3	234	27.5		7.5		21.0		65.3		4.6		16.5		6		90				<0.2		2.9	
SR1A	Rainy	Moderate	15:41	4.7	Surface	1.0	-	-	28.2	28.2	7.5	7.5	9.9	9.9	72.3	72.3	5.3	5.3	10.9	10.8	6	6	-	-	819981	812659	-	-	-	-
						1.0	-	-	28.2		7.5		9.9		72.3		5.3		10.9		7		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.0	28.0	7.5	7.5	14.5	14.5	71.9	71.9	5.2	5.2	10.6		6		-				-		-	
						3.7	-	-	28.0		7.5		14.5		71.9		5.2		10.6		6		-				-		-	
SR2	Rainy	Rough	15:58	4.5	Surface	1.0	0.1	236	28.1	28.1	7.7	7.7	10.7	10.7	74.0	74.0	5.5	5.5	10.2	13.4	5	5	86	88	821439	814158	<0.2	<0.2	2.9	2.9
						1.0	0.1	260	28.1		7.7		10.7		74.0		5.5		10.2		5		87				<0.2		2.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	227	28.0	28.0	7.6	7.6	14.8	14.8	76.4	76.4	5.5	5.5	16.6		5		90				<0.2		3.0	
						3.5	0.2	241	28.0		7.6		14.8		76.4		5.5		16.6		6		90				<0.2		2.9	
SR3	Rainy	Rough	14:51	8.6	Surface	1.0	0.8	18	28.1	28.1	7.5	7.5	8.1	8.1	72.1	72.1	5.4	5.2	13.1	11.3	7	7	-	-	822164	807552	-	-	-	-
						1.0	0.9	19	28.1		7.5		8.1		72.1		5.4		13.1		7		-				-		-	
					Middle	4.3	0.3	20	27.9	27.9	7.7	7.7	15.6	15.6	67.9	67.9	4.9		10.4		6		-				-		-	
						4.3	0.4	21	27.9		7.7		15.6		67.8		4.9		10.4		7		-				-		-	
					Bottom	7.6	0.4	25	27.9	27.9	7.5	7.5	16.8	16.8	75.1	75.1	5.4	5.4	10.4		7		-				-		-	
						7.6	0.4	25	27.9		7.5		16.8		75.1		5.4		10.4		8		-				-		-	
SR4A	Rainy	Calm	16:11	8.7	Surface	1.0	0.3	257	28.1	28.1	7.8	7.8	16.1	16.1	90.4	90.4	6.5	6.4	7.4	7.7	7	8	-	-	817181	807833	-	-	-	-
						1.0	0.3	279	28.1		7.8		16.1		90.3		6.4		7.6		8		-				-		-	
					Middle	4.4	0.5	270	28.1	28.1	7.8	7.8	16.3	16.3	89.4	89.4	6.4		8.2		8		-				-		-	
						4.4	0.5	292	28.1		7.8		16.3		89.4		6.4		8.2		8		-				-		-	
					Bottom	7.7	0.3	276	28.0	28.0	7.7	7.7	17.2	17.2	85.9	86.0	6.1	6.1	7.3		8		-				-		-	
						7.7	0.3	285	28.0		7.7		17.2		86.0		6.1		7.3		9		-				-		-	
SR5A	Rainy	Calm	16:28	5.4	Surface	1.0	0.1	271	28.3	28.3	7.8	7.8	16.5	16.5	91.7	91.7	6.5	6.5	6.7	7.4	7	8	-	-	816591	810676	-	-	-	-
						1.0	0.1	287	28.3		7.8		16.5		91.6		6.5		7.1		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	319	28.2	28.2	7.7	7.7	17.1	17.1	89.8	89.8	6.4	6.4	7.9		8		-				-		-	
						4.4	0.2	336	28.2		7.7		17.1		89.8		6.4		8.1		9		-				-		-	
SR6	Rainy	Moderate	16:55	4.3	Surface	1.0	0.0	250	28.2	28.2	7.8	7.8	15.4	15.4	92.0	92.0	6.6	6.6	4.1	4.1	4	4	-	-	817896	814651	-	-	-	-
						1.0	0.0	251	28.2		7.8		15.4		92.0		6.6		4.2		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	226	28.2	28.2	7.7	7.7	15.6	15.6	91.8	91.8	6.6	6.6	3.9		3		-				-		-	
						3.3	0.1	228	28.2		7.7		15.6		91.8		6.6		4.2		4		-				-		-	
SR7	Rainy	Rough	16:58	16.8	Surface	1.0	0.1	255	27.5	27.5	7.8	7.8	19.0	19.0	75.4	75.4	5.4	5.0	8.6	9.0	6	6	-	-	823654	823729	-	-	-	-
						1.0	0.1	259	27.5		7.8		19.0		75.4		5.4		8.6		5		-				-		-	
					Middle	8.4	0.1	246	26.7	26.7	7.8	7.8	26.2	26.2	66.6	66.6	4.6		9.0		6		-				-		-	
						8.4	0.1	218	26.7		7.8		26.2		66.6		4.6		9.0		5		-				-		-	
					Bottom	15.8	0.1	231	26.2	26.2	7.7	7.7	30.0	30.0	59.7	59.7	4.1	4.1	9.3		6		-				-		-	
						15.8	0.1	244	26.2		7.7		30.0		59.7		4.1		9.3		6		-				-		-	
SR8	Rainy	Rough	15:32	4.9	Surface	1.0	-	-	28.2	28.2	7.6	7.6	10.1	10.1	71.8	71.8	5.3	5.3	10.8	10.7	6	7	-	-	820367	811622	-	-	-	-
						1.0	-	-	28.2		7.6		10.1		71.8		5.3		10.8		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.0	28.0	7.5	7.5	14.8	14.8	71.3	71.3	5.1	5.1	10.6		7		-				-		-	
						3.9	-	-	28.0		7.5		14.8		71.3		5.1		10.6		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**
Note: The ebb tide monitoring session on 13 June 2019 was cancelled due to adverse weather and thunderstorm warning.

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

Water Quality Monitoring

Water Quality Monitoring Results on 15 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	11:50	8.1	Surface	1.0	0.4	175	28.3	28.3	7.8	7.8	17.4	17.4	80.8	80.8	5.7	5.4	10.5	7.8	4	6	84	86	815618	804264	<0.2	<0.2	1.7	1.8
						1.0	0.4	178	28.2		7.9		17.5		80.7		5.7		10.2		4		84				<0.2		1.8	
					Middle	4.1	0.4	183	27.5	27.5	7.7	7.7	23.8	23.8	72.6	72.5	5.0		6.8		6		86				<0.2		1.8	
						4.1	0.4	196	27.5		7.7		23.8		72.4		5.0		6.8		6		86				<0.2		1.8	
					Bottom	7.1	0.2	179	27.4	27.4	7.7	7.7	25.3	25.3	74.4	74.6	5.1	5.1	6.2		8		88				<0.2		1.9	
						7.1	0.2	185	27.4		7.7		25.3		74.7		5.1		6.0		7		88				<0.2		1.8	
C2	Sunny	Moderate	12:47	10.8	Surface	1.0	0.8	183	27.9	27.9	7.2	7.2	11.1	11.1	59.2	59.2	4.4	4.1	11.2	11.2	5	6	83	87	825705	806943	<0.2	<0.2	3.1	3.0
						1.0	0.8	198	27.9		7.2		11.1		59.2		4.4		11.3		6		83				<0.2		3.1	
					Middle	5.4	0.3	209	27.3	27.3	7.5	7.5	22.5	22.5	54.9	54.9	3.8		10.3		6		88				<0.2		3.1	
						5.4	0.4	222	27.3		7.5		22.5		54.8		3.8		10.3		6		87				<0.2		2.8	
					Bottom	9.8	0.3	262	26.9	26.9	7.5	7.5	25.4	25.4	52.0	52.0	3.6	3.6	12.0		6		91				<0.2		2.9	
						9.8	0.3	277	26.9		7.5		25.4		52.0		3.6		12.0		6		91				<0.2		3.0	
C3	Sunny	Moderate	10:43	12.3	Surface	1.0	0.6	47	27.7	27.7	7.8	7.8	20.1	20.1	69.0	69.1	4.9	4.7	8.9	8.7	3	4	83	88	822103	817823	<0.2	<0.2	1.7	1.8
						1.0	0.6	47	27.7		7.8		20.1		69.1		4.9		8.9		4		84				<0.2		1.7	
					Middle	6.2	0.3	26	27.3	27.3	7.8	7.8	22.1	22.1	63.9	63.9	4.5		9.2		3		87				<0.2		1.8	
						6.2	0.3	27	27.3		7.8		22.1		63.8		4.5		9.2		4		88				<0.2		1.8	
					Bottom	11.3	0.4	47	26.6	26.6	7.9	7.9	26.3	26.3	59.2	59.3	4.1	4.1	8.1		5		92				<0.2		1.8	
						11.3	0.5	50	26.6		7.9		26.2		59.3		4.1		8.0		4		91				<0.2		1.7	
IM1	Sunny	Moderate	12:00	5.0	Surface	1.0	0.2	255	28.1	28.1	7.8	7.8	19.9	19.9	76.2	76.2	5.3	5.3	3.9	4.4	5	5	81	83	817950	807110	<0.2	<0.2	1.9	2.0
						1.0	0.2	279	28.0		7.8		20.0		76.1		5.3		4.0		4		81				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	188	27.9	27.9	7.8	7.8	22.3	22.3	70.7	70.8	4.9	4.9	4.8		5		84				<0.2		2.0	
						4.0	0.1	200	27.9		7.8		22.3		70.9		4.9		5.0		5		85				<0.2		2.0	
IM2	Sunny	Moderate	12:05	7.2	Surface	1.0	0.4	183	28.2	28.2	7.8	7.8	18.6	18.6	77.0	76.9	5.4	5.3	12.9	10.5	7	8	85	88	818156	806160	<0.2	<0.2	1.6	1.7
						1.0	0.5	190	28.1		7.8		18.6		76.8		5.4		13.1		7		85				<0.2		1.7	
					Middle	3.6	0.4	178	27.7	27.7	7.8	7.8	22.0	22.0	75.1	75.1	5.2		6.7		8		88				<0.2		1.6	
						3.6	0.4	194	27.7		7.8		22.0		75.0		5.2		6.4		9		89				<0.2		1.6	
					Bottom	6.2	0.2	181	28.0	28.0	7.8	7.8	22.1	22.1	78.0	78.6	5.4	5.5	12.0		8		90				<0.2		1.9	
						6.2	0.2	193	28.0		7.8		22.1		79.2		5.5		11.9		9		90				<0.2		1.8	
IM3	Sunny	Moderate	12:12	7.5	Surface	1.0	0.5	218	28.8	28.8	7.8	7.8	20.1	20.1	78.3	78.3	5.4	5.2	7.3	7.6	7	8	84	87	818781	805593	<0.2	<0.2	1.8	1.8
						1.0	0.5	226	28.8		7.8		20.1		78.2		5.4		7.6		6		85				<0.2		1.9	
					Middle	3.8	0.4	197	27.4	27.4	7.8	7.8	22.6	22.6	70.9	70.9	4.9		6.0		8		87				<0.2		1.8	
						3.8	0.5	213	27.4		7.8		22.6		70.9		4.9		6.0		8		88				<0.2		1.7	
					Bottom	6.5	0.4	165	27.4	27.4	7.8	7.8	23.1	23.1	72.6	73.0	5.1	5.1	9.7		9		90				<0.2		1.8	
						6.5	0.4	178	27.4		7.8		23.1		73.3		5.1		9.3		8		90				<0.2		1.8	
IM4	Sunny	Moderate	12:20	7.9	Surface	1.0	1.1	176	28.4	28.4	7.8	7.8	14.4	14.4	83.3	83.3	6.0	5.9	4.9	7.7	5	8	84	87	819723	804619	<0.2	<0.2	1.7	1.7
						1.0	1.1	192	28.4		7.8		14.4		83.3		6.0		5.1		5		85				<0.2		1.6	
					Middle	4.0	0.9	178	27.8	27.9	7.8	7.8	18.1	18.1	80.2	80.1	5.7		8.9		8		87				<0.2		1.7	
						4.0	1.0	185	27.9		7.8		18.1		80.0		5.7		9.1		7		88				<0.2		1.7	
					Bottom	6.9	0.4	158	28.0	28.0	7.8	7.8	20.5	20.5	79.5	79.6	5.6	5.6	9.2		10		90				<0.2		1.8	
						6.9	0.5	162	28.0		7.8		20.5		79.6		5.6		9.1		10		90				<0.2		1.8	
IM5	Sunny	Moderate	12:33	7.3	Surface	1.0	1.0	193	28.4	28.4	7.8	7.8	14.3	14.3	83.7	83.8	6.0	6.0	5.6	5.8	4	5	85	88	820724	804861	<0.2	<0.2	1.7	1.8
						1.0	1.0	211	28.4		7.8		14.3		83.9		6.0		5.7		4		86				<0.2		1.7	
					Middle	3.7	1.0	197	28.6	28.6	7.8	7.8	15.4	15.4	84.3	84.3	6.0		4.4		6		88				<0.2		1.8	
						3.7	1.0	201	28.6		7.8		15.4		84.2		6.0		4.4		6		88				<0.2		1.8	
					Bottom	6.3	0.7	195	29.0	29.0	7.9	7.9	15.8	15.8	82.1	82.3	5.8	5.8	7.3		6		89				<0.2		1.8	
						6.3	0.7	200	28.9		7.9		15.8		82.4		5.8		7.3		6		90				<0.2		1.8	
IM6	Sunny	Moderate	12:41	7.6	Surface	1.0	0.9	257	28.8	28.8	7.8	7.8	14.3	14.3	85.3	85.1	6.1	6.1	10.0	7.8	4	4	85	88	821072	805827	<0.2	<0.2	2.0	2.1
						1.0	1.0	263	28.7		7.9		14.3		84.9		6.1		10.0		4		85				<0.2		2.1	
					Middle	3.8	0.8	251	28.5	28.5	7.9	7.9	14.6	14.6	84.4	84.7	6.0		3.9		4		88				<0.2		2.1	
						3.8	0.8	274	28.5		7.9		14.6		84.9		6.1		3.9		4		89				<0.2		2.1	
					Bottom	6.6	0.6	227	28.5	30.0	7.9	7.8	18.4	18.3	86.8	90.0	6.2	6.2	9.5		5		90				<0.2		2.1	
						6.6	0.6	238	31.4		7.8		18.3		93.1		6.2		9.7		4		90				<0.2		2.1	
IM7	Sunny	Moderate	12:50	8.3	Surface	1.0	0.9	259	29.0	29.0	7.8	7.8	14.5	14.5	87.7	87.5	6.2	6.2	6.1	7.0	5	4	84	88	821325	806839	<0.2	<0.2	2.2	2.2
						1.0	1.0	271	28.9		7.8		14.5		87.3		6.2		6.2		4		85				<0.2		2.1	
					Middle	4.2	0.8	269	28.7	28.8	7.8	7.8	14.5	14.5	86.2	86.3	6.1		9.3		4		88				<0.2		2.1	
						4.2	0.8	294	28.8		7.8		14.5		86.3		6.2		9.5		5		88				<0.2		2.2	
					Bottom	7.3	0.5	264	29.1	29.1	7.9	7.9	14.8	14.8	87.8	87.8	6.2	6.2	5.3		4		90				<0.2		2.2	
						7.3	0.6	284	29.1		7.9		14.8		87.8		6.2		5.4		4		90				<0.2		2.2	
IM8	Sunny	Moderate	12:21	7.7	Surface	1.0	0.2	116	28.4	28.4	7.4	7.4	14.3	14.3	70.7	70.7	5.1	4.7	9.6	10.7	4	4	84	88	821818	808144	<0.2	<0.2	3.0	2.6
						1.0	0.2	123	28.4		7.4		14.3		70.6		5.1		9.6		3		83				<0.2		2.7	
					Middle	3.9	0.1	109	27.7	27.7	7.4	7.4	17.9	17.9	58.9	58.9	4.2		10.0		3		88				<0.2		2.7	
						3.9	0.2	119	27.7		7.4		17.9		58.8		4.2		10.1		3		88				<0.2		2.5	
					Bottom	6.7	0.3	117	27.3	27.3	7.4	7.4	20.8	20.8	52.8	52.9	3.7	3.7	12.3		4		92				<0.2		2.5	
						6.7	0.3	122	27.3		7.4		20.8		52.9		3.7		12.3		4		91				<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 15 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	12:15	7.1	Surface	1.0	0.8	119	28.3	28.3	7.4	7.4	14.0	14.0	74.0	74.0	5.3	5.2	9.8	12.7	3	4	83	88	822079	808821	<0.2	<0.2	2.8	2.9
						1.0	0.8	122	28.3		7.4		14.0		74.0		5.3		9.7		4		84				<0.2		2.9	
					Middle	3.6	0.9	122	28.2	28.2	7.4	7.4	14.5	14.5	68.8	68.8	5.0		10.7		4		87				<0.2		3.1	
						3.6	0.9	129	28.2		7.4		14.5		68.7		5.0		10.7		3		88				<0.2		2.9	
					Bottom	6.1	0.6	99	27.2	27.2	7.4	7.4	21.6	21.6	48.8	48.8	3.5	3.5	17.4		3		92				<0.2		2.9	
						6.1	0.6	100	27.2		7.4		21.6		48.7		3.5		17.6		4		91				<0.2		2.8	
IM10	Sunny	Moderate	12:06	8.3	Surface	1.0	0.9	107	28.2	28.2	7.4	7.4	14.3	14.3	70.1	70.0	5.1	4.5	9.6	10.5	3	4	83	88	822366	809781	<0.2	<0.2	2.8	2.9
						1.0	1.0	107	28.2		7.4		14.3		69.9		5.0		9.6		4		84				<0.2		2.9	
					Middle	4.2	0.8	109	27.5	27.5	7.4	7.4	18.9	18.9	56.2	56.2	4.0		10.5		5		88				<0.2		2.9	
						4.2	0.8	109	27.5		7.4		18.9		56.1		4.0		10.5		4		88				<0.2		2.8	
					Bottom	7.3	0.4	106	27.3	27.3	7.4	7.4	21.0	21.0	52.0	52.0	3.7	3.7	11.3		4		91				<0.2		2.8	
						7.3	0.4	108	27.3		7.4		21.0		52.0		3.7		11.3		5		92				<0.2		2.9	
IM11	Sunny	Moderate	11:49	7.6	Surface	1.0	0.7	101	28.1	28.1	7.3	7.3	15.2	15.2	68.2	68.2	4.9	4.4	9.6	13.0	3	3	83	88	822049	811451	<0.2	<0.2	2.9	2.9
						1.0	0.7	109	28.1		7.3		15.2		68.2		4.9		9.5		3		83				<0.2		3.0	
					Middle	3.8	0.5	110	27.5	27.5	7.4	7.4	19.8	19.8	55.1	55.0	3.9		12.2		3		88				<0.2		2.9	
						3.8	0.6	110	27.5		7.4		19.8		54.9		3.9		12.2		3		88				<0.2		2.9	
					Bottom	6.6	0.4	119	27.0	27.0	7.4	7.4	23.8	23.8	50.2	50.3	3.5	3.5	17.1		3		92				<0.2		2.9	
						6.6	0.4	129	27.0		7.4		23.8		50.4		3.5		17.1		4		92				<0.2		2.8	
IM12	Sunny	Moderate	11:41	9.7	Surface	1.0	0.5	105	28.4	28.4	7.3	7.3	14.2	14.2	72.5	72.5	5.2	4.4	9.5	16.4	3	3	83	88	821471	812065	<0.2	<0.2	3.4	3.1
						1.0	0.5	114	28.4		7.4		14.2		72.5		5.2		9.5		3		87				<0.2		2.9	
					Middle	4.9	0.6	115	27.2	27.2	7.3	7.3	22.1	22.1	50.6	50.7	3.6		13.8		3		88				<0.2		3.1	
						4.9	0.7	121	27.2		7.3		22.1		50.7		3.6		13.9		3		87				<0.2		3.0	
					Bottom	8.7	0.4	149	27.0	27.0	7.4	7.4	23.3	23.3	51.3	51.4	3.6	3.6	25.8		3		92				<0.2		3.0	
						8.7	0.5	153	27.0		7.4		23.3		51.4		3.6		26.0		4		91				<0.2		3.2	
SR1A	Sunny	Moderate	11:22	5.5	Surface	1.0	-	-	28.5	28.5	7.3	7.3	14.1	14.1	74.2	74.2	5.3	5.3	9.6	10.6	3	4	-	-	819973	812656	-	-	-	-
						1.0	-	-	28.5		7.3		14.1		74.1		5.3		9.6		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	27.2	27.2	7.3	7.3	21.6	21.6	58.3	58.4	4.1	4.1	11.6		5		-				-		-	
						4.5	-	-	27.2		7.3		21.6		58.4		4.1		11.6		4		-				-		-	
SR2	Sunny	Moderate	11:08	4.8	Surface	1.0	0.2	68	28.6	28.6	7.1	7.1	12.6	12.6	70.7	70.8	5.1	5.1	10.3	10.8	4	4	83	85	821440	814182	<0.2	<0.2	2.5	2.4
						1.0	0.2	70	28.6		7.2		12.6		70.8		5.1		10.3		4		83				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	46	27.6	27.6	7.3	7.3	18.2	18.1	66.3	66.4	4.7	4.7	11.2		4		88				<0.2		2.4	
						3.8	0.3	47	27.6		7.3		18.1		66.5		4.7		11.2		4		87				<0.2		2.3	
SR3	Sunny	Moderate	12:28	8.4	Surface	1.0	0.2	190	28.4	28.4	7.5	7.5	14.8	14.8	70.7	70.7	5.1	4.3	9.9	10.9	4	4	-	-	822145	807555	-	-	-	-
						1.0	0.3	192	28.4		7.5		14.8		70.6		5.1		9.9		4		-				-		-	
					Middle	4.2	0.2	202	27.3	27.3	7.4	7.4	21.0	20.9	50.2	50.2	3.5		11.2		4		-				-		-	
						4.2	0.2	207	27.3		7.4		20.9		50.2		3.5		11.2		4		-				-		-	
					Bottom	7.4	0.3	215	27.2	27.2	7.5	7.5	21.9	21.9	49.9	49.9	3.5	3.5	11.7		4		-				-		-	
						7.4	0.3	218	27.2		7.5		21.9		49.9		3.5		11.7		5		-				-		-	
SR4A	Sunny	Calm	11:25	8.8	Surface	1.0	0.1	253	27.6	27.6	7.7	7.7	21.7	21.7	73.2	73.3	5.1	5.4	5.3	7.6	6	9	-	-	817184	807787	-	-	-	-
						1.0	0.1	261	27.6		7.7		21.7		73.4		5.1		5.2		7		-				-		-	
					Middle	4.4	0.0	144	27.8	27.8	7.8	7.8	18.2	18.2	79.1	79.0	5.6		4.8		8		-				-		-	
						4.4	0.0	148	27.8		7.8		18.2		78.9		5.6		4.9		8		-				-		-	
					Bottom	7.8	0.1	58	27.3	27.3	7.7	7.7	25.7	25.7	69.3	69.4	4.8	4.8	12.7		12		-				-		-	
						7.8	0.1	58	27.3		7.7		25.7		69.5		4.8		12.7		12		-				-		-	
SR5A	Sunny	Calm	11:09	5.4	Surface	1.0	0.1	50	29.5	29.5	7.9	7.9	14.9	14.9	93.3	93.3	6.6	6.6	3.9	5.3	5	5	-	-	816586	810707	-	-	-	-
						1.0	0.1	51	29.5		7.9		14.9		93.2		6.6		4.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	285	29.3	29.3	7.8	7.8	15.7	15.7	90.9	90.9	6.4	6.4	6.7		5		-				-		-	
						4.4	0.1	306	29.3		7.8		15.7		90.9		6.4		6.6		6		-				-		-	
SR6	Sunny	Calm	10:44	5.0	Surface	1.0	0.1	10	28.2	28.2	7.8	7.8	15.0	15.0	85.9	85.9	6.2	6.2	5.8	8.3	8	11	-	-	817883	814676	-	-	-	-
						1.0	0.1	10	28.2		7.8		15.0		85.9		6.2		5.8		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	235	27.7	27.7	7.6	7.6	20.7	20.7	79.9	79.9	5.6	5.6	10.9		14		-				-		-	
						4.0	0.0	235	27.7		7.6		20.7		79.9		5.6		10.9		13		-				-		-	
SR7	Sunny	Moderate	10:01	14.6	Surface	1.0	0.8	59	27.4	27.4	7.8	7.8	21.4	21.4	67.0	67.0	4.7	**4.5**	8.5	8.4	3	3	-	-	823614	823732	-	-	-	-
						1.0	0.8	61	27.4		7.8		21.4		67.0		4.7		8.5		2		-				-		-	
					Middle	7.3	0.4	44	27.0	27.0	7.8	7.8	24.0	24.0	60.0	60.1	4.2		8.3		2		-				-		-	
						7.3	0.4	44	27.0		7.8		24.0		60.1		4.2		8.4		3		-				-		-	
					Bottom	13.6	0.5	44	26.6	26.6	7.9	7.9	27.6	27.6	57.7	57.8	4.0	4.0	8.4		3		-				-		-	
						13.6	0.5	46	26.6		7.9		27.6		57.9		4.0		8.4		3		-				-		-	
SR8	Sunny	Moderate	11:31	4.2	Surface	1.0	-	-	28.6	28.6	7.3	7.3	13.2	13.2	75.1	75.1	5.4	5.4	10.6	12.9	4	5	-	-	820393	811635	-	-	-	-
						1.0	-	-	28.6		7.3		13.2		75.0		5.4		10.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.2	28.2	7.3	7.3	15.8	15.8	72.4	72.5	5.2	5.2	15.2		6		-				-		-	
						3.2	-	-	28.3		7.4		15.9		72.5		5.2		15.2		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 15 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	17:47	8.2	Surface	1.0	0.4	58	28.2	28.2	7.8	7.8	19.6	19.6	81.4	81.4	5.7	5.7	4.1	7.3	5	5	85	88	815642	804231	<0.2	<0.2	1.8	1.8
						1.0	0.4	64	28.2		7.8		19.6		81.4		5.7		4.1		4		85				<0.2		1.8	
					Middle	4.1	0.4	43	28.3	28.3	7.8	7.8	20.1	20.1	82.3	82.3	5.7		6.7		6		89				<0.2		1.8	
						4.1	0.4	46	28.3		7.8		20.1		82.3		5.7		6.5		6		89				<0.2		1.7	
					Bottom	7.2	0.1	18	28.3	28.3	7.8	7.8	20.2	20.2	84.2	84.3	5.9	5.9	11.2		5		90				<0.2		1.8	
						7.2	0.1	19	28.3		7.8		20.2		84.3		5.9		11.0		6		90				<0.2		1.7	
C2	Sunny	Moderate	16:52	8.5	Surface	1.0	1.2	58	27.8	27.8	7.2	7.2	11.9	11.9	78.3	78.3	5.4	5.2	11.3	10.7	6	6	85	89	825685	806957	<0.2	<0.2	2.9	3.0
						1.0	1.3	54	27.8		7.2		11.9		78.2		5.4		11.2		5		86				<0.2		3.0	
					Middle	4.3	0.5	57	27.4	27.4	7.4	7.4	20.5	20.5	70.9	70.9	4.9		10.1		6		89				<0.2		3.1	
						4.3	0.6	59	27.4		7.4		20.5		70.9		4.9		10.2		6		89				<0.2		3.0	
					Bottom	7.5	0.1	55	27.3	27.3	7.5	7.5	21.4	21.4	58.9	58.9	4.1	4.1	10.6		6		93				<0.2		3.0	
						7.5	0.1	55	27.3		7.5		21.4		58.9		4.1		10.5		5		94				<0.2		3.0	
C3	Sunny	Moderate	18:34	10.8	Surface	1.0	0.4	242	28.0	28.0	7.5	7.5	19.0	19.0	67.4	67.4	4.8	4.5	9.8	10.0	4	5	85	89	822096	817806	<0.2	<0.2	2.5	2.4
						1.0	0.4	262	28.0		7.5		19.0		67.4		4.8		9.8		4		86				<0.2		2.3	
					Middle	5.4	0.4	236	27.3	27.3	7.5	7.5	22.9	22.9	58.7	58.8	4.1		9.6		4		89				<0.2		2.5	
						5.4	0.4	245	27.3		7.5		22.9		58.9		4.1		9.6		5		89				<0.2		2.3	
					Bottom	9.8	0.1	157	26.4	26.4	7.5	7.5	27.9	27.9	50.9	51.0	3.5	3.5	10.6		5		93				<0.2		2.5	
						9.8	0.2	161	26.4		7.5		27.9		51.0		3.5		10.5		6		92				<0.2		2.2	
IM1	Sunny	Moderate	17:27	5.4	Surface	1.0	0.1	57	28.3	28.3	7.8	7.8	20.9	20.9	82.8	82.8	5.8	5.8	6.7	6.9	6	6	84	86	817947	807149	<0.2	<0.2	1.7	1.8
						1.0	0.1	56	28.2		7.8		20.9		82.7		5.7		6.2		5		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.0	62	28.0	28.0	7.8	7.8	23.2	23.2	80.0	80.2	5.5	5.5	7.2		7		88				<0.2		1.8	
						4.4	0.0	69	28.0		7.8		23.2		80.3		5.5		7.5		7		88				<0.2		1.8	
IM2	Sunny	Moderate	17:23	6.9	Surface	1.0	0.4	62	28.3	28.3	7.8	7.8	18.5	18.5	79.9	79.9	5.6	5.4	10.3	10.1	8	9	85	88	818180	806180	<0.2	<0.2	2.0	2.0
						1.0	0.4	62	28.3		7.8		18.5		79.9		5.6		9.9		8		85				<0.2		1.9	
					Middle	3.5	0.1	65	27.9	27.9	7.8	7.8	21.1	21.1	73.9	73.8	5.2		13.1		9		88				<0.2		2.0	
						3.5	0.2	68	27.9		7.8		21.1		73.7		5.1		13.2		9		88				<0.2		1.9	
					Bottom	5.9	0.1	75	27.9	27.9	7.8	7.8	22.1	22.1	72.8	73.0	5.1	5.1	7.1		10		90				<0.2		1.9	
						5.9	0.1	76	27.9		7.8		22.1		73.1		5.1		7.1		11		90				<0.2		2.0	
IM3	Sunny	Moderate	17:16	7.0	Surface	1.0	0.9	52	28.5	28.5	7.8	7.8	16.6	16.6	81.3	81.3	5.8	5.8	7.1	11.7	8	11	85	88	818762	805581	<0.2	<0.2	2.4	1.9
						1.0	0.9	56	28.4		7.8		16.6		81.2		5.8		7.1		7		85				<0.2		1.6	
					Middle	3.5	0.4	59	28.3	28.3	7.8	7.8	17.8	17.8	82.2	82.2	5.8		11.9		12		88				<0.2		1.7	
						3.5	0.4	62	28.3		7.8		17.8		82.1		5.8		11.9		11		88				<0.2		1.7	
					Bottom	6.0	0.1	71	28.3	28.3	7.8	7.8	19.2	19.2	81.7	81.8	5.7	5.7	16.0		13		90				<0.2		1.9	
						6.0	0.1	75	28.2		7.8		19.2		81.9		5.7		16.1		13		90				<0.2		1.8	
IM4	Sunny	Moderate	17:08	7.4	Surface	1.0	1.5	48	28.8	28.8	7.8	7.8	13.7	13.7	87.1	87.1	6.2	6.2	3.4	4.2	4	4	85	88	819702	804587	<0.2	<0.2	1.7	1.8
						1.0	1.6	48	28.8		7.8		13.7		87.1		6.2		3.4		4		86				<0.2		1.9	
					Middle	3.7	1.4	52	28.8	28.8	7.8	7.8	13.7	13.7	87.3	87.3	6.2		3.1		5		87				<0.2		1.8	
						3.7	1.5	46	28.8		7.8		13.7		87.3		6.2		3.1		4		88				<0.2		1.8	
					Bottom	6.4	0.9	65	28.7	28.7	7.9	7.9	14.6	14.6	87.4	87.4	6.2	6.2	6.0		5		89				<0.2		1.8	
						6.4	1.0	63	28.7		7.9		14.6		87.4		6.2		6.0		4		90				<0.2		1.8	
IM5	Sunny	Moderate	17:03	6.7	Surface	1.0	1.2	24	28.4	28.4	7.8	7.8	14.7	14.7	79.9	79.9	5.7	5.7	9.5	7.7	4	5	84	87	820737	804888	<0.2	<0.2	1.8	2.1
						1.0	1.2	25	28.4		7.8		14.7		79.8		5.7		9.5		4		85				<0.2		1.9	
					Middle	3.4	1.1	24	28.3	28.3	7.8	7.8	14.7	14.7	79.3	79.3	5.7		7.5		5		87				<0.2		1.8	
						3.4	1.1	24	28.3		7.8		14.7		79.3		5.7		7.8		5		88				<0.2		2.4	
					Bottom	5.7	0.8	24	28.3	28.3	7.9	7.8	16.3	16.3	80.8	81.0	5.8	5.8	5.9		6		89				<0.2		2.4	
						5.7	0.8	25	28.3		7.8		16.3		81.2		5.8		5.9		6		89				<0.2		2.4	
IM6	Sunny	Moderate	16:58	6.9	Surface	1.0	1.1	23	28.2	28.2	7.8	7.8	15.4	15.4	82.0	82.1	5.9	5.9	8.1	9.5	5	5	84	87	821069	805812	<0.2	<0.2	2.5	2.5
						1.0	1.1	25	28.2		7.8		15.4		82.2		5.9		8.2		4		85				<0.2		2.2	
					Middle	3.5	1.0	23	28.3	28.3	7.8	7.8	15.6	15.6	82.0	82.0	5.9		12.8		4		88				<0.2		2.3	
						3.5	1.1	24	28.3		7.8		15.6		81.9		5.9		13.2		5		88				<0.2		2.4	
					Bottom	5.9	0.7	22	28.2	28.2	7.8	7.8	17.4	17.4	78.7	79.0	5.6	5.6	7.5		6		89				<0.2		2.7	
						5.9	0.7	22	28.1		7.8		17.4		79.2		5.6		7.5		5		90				<0.2		2.6	
IM7	Sunny	Moderate	16:53	7.7	Surface	1.0	1.0	11	28.7	28.7	7.8	7.8	14.5	14.5	85.1	85.2	6.1	6.1	7.2	6.8	4	4	84	87	821366	806819	<0.2	<0.2	2.5	2.3
						1.0	1.0	12	28.7		7.8		14.5		85.3		6.1		7.3		4		84				<0.2		2.4	
					Middle	3.9	0.9	17	28.6	28.6	7.8	7.8	14.5	14.5	85.7	85.7	6.1		7.7		4		87				<0.2		2.2	
						3.9	1.0	20	28.6		7.8		14.5		85.7		6.1		7.3		4		88				<0.2		2.3	
					Bottom	6.7	0.6	27	28.7	28.7	7.8	7.8	14.6	14.6	86.9	87.0	6.2	6.2	5.8		4		90				<0.2		2.2	
						6.7	0.6	29	28.7		7.8		14.6		87.1		6.2		5.7		5		90				<0.2		2.3	
IM8	Sunny	Moderate	17:11	7.9	Surface	1.0	0.8	355	28.4	28.4	7.4	7.4	13.2	13.2	69.1	69.1	5.0	4.9	10.5	11.9	5	5	86	90	821848	808126	<0.2	<0.2	2.6	2.4
						1.0	0.9	349	28.4		7.4		13.2		69.0		5.0		10.5		5		86				<0.2		2.6	
					Middle	4.0	0.5	308	28.2	28.2	7.4	7.4	14.3	14.3	66.8	66.8	4.8		10.4		5		89				<0.2		2.3	
						4.0	0.5	328	28.2		7.4		14.3		66.7		4.8		10.5		5		90				<0.2		2.3	
					Bottom	6.9	0.4	350	27.7	27.7	7.4	7.4	17.9	17.9	57.7	57.8	4.1	4.1	14.6		5		93				<0.2		2.5	
						6.9	0.4	331	27.7		7.4		17.9		57.8		4.1		14.7		6		93				<0.2		2.2	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) 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	Sunny	Moderate	17:17	7.3	Surface	1.0	0.5	311	28.3	28.3	7.4	7.4	13.0	13.0	69.0	69.0	5.0	5.0	10.4	10.9	4	5	86	90	822076	808833	<0.2	<0.2	2.8	2.8
						1.0	0.5	319	28.3		7.4		13.0		68.9		5.0		10.4		5		86				<0.2		2.8	
					Middle	3.7	0.5	285	28.1	28.1	7.4	7.4	14.5	14.5	67.4	67.5	4.9		10.6		6		89				<0.2		2.9	
						3.7	0.5	298	28.1		7.4		14.5		67.5		4.9		10.6		5		90				<0.2		2.6	
					Bottom	6.3	0.3	293	28.1	28.1	7.4	7.4	14.9	14.9	68.5	68.6	4.9	4.9	11.8		6		93				<0.2		2.6	
						6.3	0.3	299	28.1		7.4		14.9		68.7		4.9		11.8		5		93				<0.2		2.8	
IM10	Sunny	Moderate	17:25	7.5	Surface	1.0	0.4	294	28.6	28.6	7.5	7.5	13.1	13.1	74.8	74.8	5.4	4.7	9.8	10.4	4	3	85	90	822380	809784	<0.2	<0.2	2.4	2.3
						1.0	0.4	285	28.6		7.5		13.1		74.7		5.4		9.8		3		86				<0.2		2.3	
					Middle	3.8	0.3	242	27.5	27.5	7.5	7.5	19.7	19.7	55.6	55.6	3.9		10.4		3		90				<0.2		2.4	
						3.8	0.3	245	27.5		7.5		19.7		55.6		3.9		10.4		4		89				<0.2		2.3	
					Bottom	6.5	0.2	292	27.4	27.4	7.5	7.5	20.4	20.4	55.5	55.6	3.9	3.9	11.0		3		93				<0.2		2.3	
						6.5	0.2	293	27.4		7.5		20.4		55.6		3.9		11.1		3		94				<0.2		2.2	
IM11	Sunny	Moderate	17:35	8.3	Surface	1.0	1.1	280	28.5	28.5	7.5	7.5	14.3	14.3	73.1	73.1	5.2	4.6	10.0	11.7	4	4	85	90	822038	811447	<0.2	<0.2	2.4	2.3
						1.0	1.1	283	28.5		7.5		14.3		73.1		5.2		10.0		4		86				<0.2		2.3	
					Middle	4.2	0.9	242	27.6	27.6	7.4	7.4	18.8	18.8	56.8	56.9	4.0		10.9		4		90				<0.2		2.2	
						4.2	0.9	244	27.6		7.4		18.8		56.9		4.0		10.9		4		90				<0.2		2.3	
					Bottom	7.3	0.6	286	27.4	27.4	7.5	7.5	21.1	21.1	55.1	55.2	3.9	3.9	14.2		4		93				<0.2		2.4	
						7.3	0.6	270	27.4		7.5		21.1		55.2		3.9		14.2		5		94				<0.2		2.3	
IM12	Sunny	Moderate	17:40	7.8	Surface	1.0	0.9	277	28.1	28.1	7.5	7.5	15.9	15.9	69.3	69.4	4.8	4.6	10.5	13.1	4	4	85	90	821474	812049	<0.2	<0.2	1.8	1.8
						1.0	1.0	267	28.1		7.5		15.9		69.5		4.8		10.5		4		86				<0.2		1.8	
					Middle	3.9	0.8	231	27.6	27.6	7.5	7.5	19.2	19.2	61.0	61.1	4.4		13.0		4		90				<0.2		1.7	
						3.9	0.8	226	27.6		7.5		19.2		61.2		4.4		13.0		4		90				<0.2		1.9	
					Bottom	6.8	0.4	265	27.4	27.4	7.5	7.5	20.4	20.4	55.0	55.1	3.9	3.9	15.8		4		93				<0.2		1.7	
						6.8	0.4	250	27.4		7.5		20.4		55.2		3.9		15.8		4		94				<0.2		1.7	
SR1A	Sunny	Moderate	17:59	5.6	Surface	1.0	-	-	28.4	28.4	7.5	7.5	16.0	16.0	68.7	68.7	4.9	4.9	10.0	10.6	4	4	-	-	819981	812661	-	-	-	-
						1.0	-	-	28.4		7.5		16.0		68.7		4.9		10.0		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	27.7	27.7	7.5	7.5	18.7	18.7	61.9	61.9	4.4	4.4	11.1		4		-				-		-	
						4.6	-	-	27.7		7.5		18.7		61.9		4.4		11.2		5		-				-		-	
SR2	Sunny	Moderate	18:11	5.0	Surface	1.0	0.8	246	28.4	28.4	7.5	7.5	15.9	15.9	68.0	67.9	4.8	4.8	10.2	10.6	4	4	86	87	821471	814181	<0.2	<0.2	1.6	1.7
						1.0	0.9	252	28.4		7.5		15.9		67.8		4.8		10.2		3		85				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	277	27.7	27.7	7.5	7.5	18.8	18.8	61.0	61.1	4.3	4.3	11.1		4		89				<0.2		1.8	
						4.0	0.2	281	27.7		7.5		18.8		61.2		4.3		11.0		4		89				<0.2		1.8	
SR3	Sunny	Moderate	17:06	8.8	Surface	1.0	1.1	57	28.3	28.3	7.3	7.3	10.9	10.9	67.8	67.8	5.0	4.6	10.8	10.9	4	5	-	-	822145	807580	-	-	-	-
						1.0	1.1	59	28.3		7.3		10.9		67.7		5.0		10.7		4		-				-		-	
					Middle	4.4	0.5	66	27.7	27.7	7.4	7.4	17.9	17.9	57.8	57.8	4.1		10.7		5		-				-		-	
						4.4	0.6	72	27.7		7.4		17.9		57.7		4.1		10.7		5		-				-		-	
					Bottom	7.8	0.2	39	27.4	27.4	7.4	7.4	20.3	20.3	55.3	55.4	3.9	3.9	11.1		5		-				-		-	
						7.8	0.2	41	27.4		7.4		20.3		55.4		3.9		11.1		6		-				-		-	
SR4A	Sunny	Calm	18:01	8.5	Surface	1.0	0.8	252	29.2	29.2	7.9	7.9	16.6	16.6	95.7	95.6	6.7	6.7	14.0	11.5	4	5	-	-	817182	807804	-	-	-	-
						1.0	0.8	262	29.2		7.9		16.6		95.5		6.7		14.0		4		-				-		-	
					Middle	4.3	0.8	252	29.0	29.0	7.9	7.9	16.5	16.5	94.4	94.3	6.6		14.2		5		-				-		-	
						4.3	0.8	259	29.0		7.9		16.5		94.1		6.6		14.4		4		-				-		-	
					Bottom	7.5	0.7	243	29.0	29.0	7.9	7.9	17.1	17.1	92.9	93.0	6.5	6.5	6.2		7		-				-		-	
						7.5	0.7	255	29.0		7.9		17.1		93.0		6.5		6.1		6		-				-		-	
SR5A	Sunny	Calm	18:20	5.2	Surface	1.0	0.4	307	28.8	28.8	7.9	7.9	16.8	16.8	92.4	92.3	6.5	6.5	8.9	9.8	11	12	-	-	816608	810702	-	-	-	-
						1.0	0.4	308	28.8		7.9		16.8		92.2		6.5		9.1		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	291	28.8	28.8	7.9	7.9	17.7	17.7	91.8	91.8	6.4	6.4	10.5		12		-				-		-	
						4.2	0.3	297	28.8		7.9		17.7		91.8		6.4		10.5		13		-				-		-	
SR6	Sunny	Calm	18:57	4.7	Surface	1.0	0.1	265	29.8	29.8	8.0	8.0	11.5	11.5	96.1	95.9	6.9	6.9	6.3	6.4	7	7	-	-	817914	814641	-	-	-	-
						1.0	0.1	265	29.7		8.0		11.5		95.6		6.8		6.3		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	266	29.2	29.2	7.9	7.9	15.4	15.4	93.9	93.9	6.6	6.6	6.6		7		-				-		-	
						3.7	0.1	266	29.2		7.9		15.4		93.9		6.6		6.4		8		-				-		-	
SR7	Sunny	Moderate	19:02	14.4	Surface	1.0	0.6	203	28.4	28.4	7.4	7.4	17.1	17.1	74.3	74.3	5.3	5.1	9.1	9.8	6	8	-	-	823659	823761	-	-	-	-
						1.0	0.6	205	28.4		7.4		17.1		74.2		5.2		9.1		6		-				-		-	
					Middle	7.2	0.1	255	27.7	27.7	7.4	7.4	19.5	19.5	68.7	68.7	4.9		9.4		8		-				-		-	
						7.2	0.1	263	27.7		7.4		19.5		68.7		4.9		9.4		7		-				-		-	
					Bottom	13.4	0.1	249	27.0	27.0	7.5	7.5	23.3	23.3	58.8	58.8	4.1	4.1	10.9		10		-				-		-	
						13.4	0.1	251	27.0		7.5		23.4		58.7		4.1		10.9		10		-				-		-	
SR8	Sunny	Moderate	17:50	4.4	Surface	1.0	-	-	28.3	28.3	7.5	7.5	16.3	16.3	68.9	68.8	4.9	4.9	10.2	11.0	4	5	-	-	820400	811604	-	-	-	-
						1.0	-	-	28.3		7.5		16.3		68.7		4.9		10.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	27.6	27.6	7.5	7.5	19.1	19.1	60.0	60.0	4.3	4.3	11.8		5		-				-		-	
						3.4	-	-	27.6		7.5		19.1		60.0		4.3		11.8		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 18 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	13:00	8.6	Surface	1.0	0.4	188	28.2	28.2	7.9	7.9	16.2	16.2	89.8	89.8	6.4	6.4	5.3	6.1	5	5	86	88	815610	804257	<0.2	<0.2	1.6	1.7
						1.0	0.5	196	28.2		7.9		16.2		89.7		6.4		5.2		4		86				<0.2		1.8	
					Middle	4.3	0.3	172	28.1	28.1	8.0	8.0	16.8	16.8	88.9	88.9	6.3		6.4		5		89				<0.2		1.8	
						4.3	0.3	181	28.1		8.0		16.8		88.8		6.3		6.7		4		89				<0.2		1.7	
					Bottom	7.6	0.2	151	27.8	27.8	7.9	7.9	20.5	20.5	85.0	85.1	6.0	6.0	6.7		7		90				<0.2		1.7	
						7.6	0.2	164	27.8		8.0		20.5		85.2		6.0		6.6		6		90				<0.2		1.7	
C2	Cloudy	Moderate	11:58	11.8	Surface	1.0	0.5	177	27.8	27.8	7.7	7.7	9.4	9.4	91.8	91.8	6.8	6.8	4.6	5.6	4	6	85	87	825681	806926	<0.2	<0.2	2.0	2.0
						1.0	0.5	192	27.8		7.7		9.4		91.7		6.8		4.6		5		84				<0.2		2.1	
					Middle	5.9	0.5	162	28.3	28.3	7.7	7.7	10.4	10.4	91.4	91.4	6.7		5.0		4		87				<0.2		2.1	
						5.9	0.5	178	28.3		7.7		10.4		91.3		6.7		5.0		5		89				<0.2		1.8	
					Bottom	10.8	0.5	144	27.6	27.6	7.7	7.7	15.2	15.2	82.8	82.8	6.0	6.0	7.3		9		89				<0.2		1.9	
						10.8	0.5	151	27.6		7.7		15.2		82.8		6.0		7.3		8		89				<0.2		1.9	
C3	Rainy	Moderate	13:43	12.3	Surface	1.0	0.5	97	27.2	27.2	7.9	7.9	16.9	16.9	89.2	89.1	6.4	6.4	6.0	5.8	10	11	85	88	822123	817788	<0.2	<0.2	2.0	2.0
						1.0	0.5	101	27.2		7.9		16.9		88.9		6.4		6.0		11		85				<0.2		2.0	
					Middle	6.2	0.2	64	27.2	27.2	7.8	7.8	18.7	18.7	88.1	88.1	6.3		3.1		11		87				<0.2		2.0	
						6.2	0.2	67	27.2		7.8		18.7		88.1		6.3		3.1		10		89				<0.2		1.9	
					Bottom	11.3	0.2	81	27.0	27.0	7.8	7.8	20.3	20.2	87.1	87.2	6.2	6.2	8.1		11		90				<0.2		2.0	
						11.3	0.2	86	27.0		7.8		20.1		87.3		6.2		8.3		12		92				<0.2		2.0	
IM1	Cloudy	Moderate	12:34	5.7	Surface	1.0	0.3	204	27.9	27.9	7.9	7.9	17.9	17.9	87.5	87.4	6.2	6.2	8.8	8.0	6	7	82	86	817971	807119	<0.2	<0.2	1.6	1.6
						1.0	0.3	210	27.9		7.9		17.9		87.3		6.2		8.6		5		83				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	173	27.8	27.8	7.9	7.9	19.7	19.7	87.7	87.8	6.2	6.2	7.1		7		89				<0.2		1.6	
						4.7	0.2	187	27.8		7.9		19.7		87.9		6.2		7.4		8		90				<0.2		1.6	
IM2	Cloudy	Moderate	12:29	7.8	Surface	1.0	0.4	214	28.0	28.0	7.9	7.9	17.0	17.0	86.4	86.1	6.2	6.0	11.9	9.9	7	8	87	89	818169	806187	<0.2	<0.2	1.7	1.6
						1.0	0.4	227	27.9		7.9		17.0		85.8		6.1		11.1		6		88				<0.2		1.7	
					Middle	3.9	0.3	198	27.8	27.8	7.9	7.9	18.9	18.9	83.0	82.9	5.9		10.1		8		89				<0.2		1.6	
						3.9	0.3	204	27.7		7.9		18.9		82.8		5.9		10.4		9		89				<0.2		1.5	
					Bottom	6.8	0.2	142	27.6	27.6	7.9	7.9	21.2	21.1	83.2	83.4	5.8	5.9	7.9		9		90				<0.2		1.5	
						6.8	0.2	143	27.6		7.9		21.1		83.5		5.9		7.9		8		90				<0.2		1.4	
IM3	Cloudy	Moderate	12:24	7.9	Surface	1.0	0.4	230	28.0	28.0	7.9	7.9	19.0	19.0	85.7	85.7	6.0	5.9	8.8	11.5	10	11	86	88	818796	805600	<0.2	<0.2	1.5	1.5
						1.0	0.4	241	28.0		7.9		19.0		85.7		6.0		8.9		9		86				<0.2		1.5	
					Middle	4.0	0.4	185	27.8	27.8	7.9	7.9	19.9	19.9	83.1	83.0	5.9		15.1		11		88				<0.2		1.5	
						4.0	0.4	202	27.8		7.9		19.9		82.9		5.8		14.8		10		88				<0.2		1.5	
					Bottom	6.9	0.4	156	27.7	27.7	7.9	7.9	21.3	21.3	81.9	82.0	5.7	5.7	10.8		14		90				<0.2		1.4	
						6.9	0.4	161	27.7		7.9		21.3		82.0		5.7		10.8		13		90				<0.2		1.5	
IM4	Cloudy	Moderate	12:18	8.6	Surface	1.0	0.6	179	27.7	27.7	7.9	7.9	22.0	22.0	80.0	79.9	5.6	5.6	12.0	13.0	12	14	84	87	819723	804600	<0.2	<0.2	1.5	1.4
						1.0	0.6	192	27.7		7.9		22.0		79.8		5.6		12.4		12		85				<0.2		1.5	
					Middle	4.3	0.5	171	27.7	27.7	7.9	7.9	22.1	22.1	78.7	78.7	5.5		12.8		12		87				<0.2		1.5	
						4.3	0.6	186	27.7		7.9		22.1		78.7		5.5		12.8		12		88				<0.2		1.3	
					Bottom	7.6	0.3	146	27.8	27.8	7.9	7.8	23.0	23.0	78.8	78.9	5.5	5.5	14.0		16		90				<0.2		1.3	
						7.6	0.3	156	27.8		7.8		23.0		78.9		5.5		14.0		17		90				<0.2		1.3	
IM5	Cloudy	Moderate	12:11	8.3	Surface	1.0	0.8	243	28.2	28.2	7.9	7.9	15.4	15.4	89.7	89.6	6.4	6.3	3.3	5.5	3	6	84	87	820724	804875	<0.2	<0.2	1.9	1.9
						1.0	0.8	250	28.2		7.9		15.4		89.4		6.4		3.5		4		84				<0.2		2.0	
					Middle	4.2	0.5	209	28.0	28.0	7.9	7.9	17.0	17.0	87.4	87.3	6.2		4.5		6		88				<0.2		2.0	
						4.2	0.6	225	28.0		7.9		17.0		87.2		6.2		4.5		6		88				<0.2		1.9	
					Bottom	7.3	0.4	208	27.8	27.8	7.9	7.9	19.5	19.5	84.2	84.4	5.9	6.0	8.6		8		90				<0.2		1.9	
						7.3	0.4	220	27.8		7.9		19.5		84.6		6.0		8.6		7		90				<0.2		1.7	
IM6	Cloudy	Moderate	12:05	8.0	Surface	1.0	0.6	257	28.1	28.1	7.9	7.9	15.2	15.2	88.6	88.5	6.4	6.3	7.4	7.6	6	6	85	88	821065	805820	<0.2	<0.2	1.7	1.8
						1.0	0.6	263	28.0		7.9		15.2		88.3		6.4		7.7		5		85				<0.2		1.8	
					Middle	4.0	0.6	255	27.7	27.7	7.9	7.9	17.7	17.7	85.5	85.5	6.1		8.1		6		89				<0.2		1.8	
						4.0	0.6	258	27.7		7.9		17.7		85.4		6.1		8.5		5		89				<0.2		1.8	
					Bottom	7.0	0.4	209	27.7	27.7	7.9	7.9	19.2	19.2	80.3	80.4	5.7	5.7	6.8		7		90				<0.2		1.7	
						7.0	0.4	216	27.7		7.9		19.2		80.4		5.7		6.8		8		90				<0.2		1.8	
IM7	Cloudy	Moderate	11:59	8.6	Surface	1.0	0.3	273	28.7	28.7	7.9	7.9	15.6	15.6	89.1	89.1	6.3	6.3	9.8	9.0	4	5	85	88	821357	806831	<0.2	<0.2	1.8	1.7
						1.0	0.4	290	28.7		7.9		15.6		89.0		6.3		9.9		4		86				<0.2		1.7	
					Middle	4.3	0.3	232	28.7	28.7	7.9	7.9	16.3	16.3	88.3	88.3	6.2		9.6		4		88				<0.2		1.7	
						4.3	0.4	237	28.7		7.9		16.3		88.2		6.2		9.7		6		88				<0.2		1.7	
					Bottom	7.6	0.2	184	28.6	28.6	8.0	8.0	18.0	18.0	83.9	84.0	5.9	5.9	7.5		7		89				<0.2		1.8	
						7.6	0.2	197	28.6		8.0		18.0		84.1		5.9		7.5		7		90				<0.2		1.6	
IM8	Cloudy	Moderate	12:28	7.8	Surface	1.0	0.1	275	28.1	28.1	7.8	7.8	12.4	12.4	91.7	91.7	6.7	6.5	4.2	4.9	4	5	85	87	821852	808161	<0.2	<0.2	2.0	1.9
						1.0	0.1	299	28.0		7.8		12.4		91.6		6.7		4.2		4		85				<0.2		1.9	
					Middle	3.9	0.1	246	27.4	27.4	7.8	7.8	16.0	16.0	85.2	85.1	6.2		4.4		5		88				<0.2		1.9	
						3.9	0.1	260	27.4		7.8		16.0		84.9		6.2		4.4		5		87				<0.2		1.9	
					Bottom	6.8	0.0	99	27.2	27.2	7.8	7.8	18.5	18.5	82.4	82.6	5.9	5.9	6.1		7		90				<0.2		2.0	
						6.8	0.0	100	27.2		7.8		18.5		82.7		5.9		6.1		6		89				<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 18 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	12:35	7.2	Surface	1.0	0.2	107	27.7	27.7	7.8	7.8	11.9	11.9	92.2	92.2	6.8	6.8	4.8	6.3	4	4	84	87	822099	808834	<0.2	<0.2	2.0	1.9
						1.0	0.3	110	27.7		7.8		11.9		92.1		6.8		4.8		4		85				<0.2		2.0	
					Middle	3.6	0.4	112	27.7	27.7	7.8	7.8	12.5	12.5	91.6	91.6	6.7		8.9		4		87				<0.2		2.0	
						3.6	0.5	121	27.7		7.8		12.5		91.5		6.7		8.9		4		89				<0.2		1.8	
					Bottom	6.2	0.3	94	27.3	27.3	7.8	7.8	16.5	16.5	85.6	85.7	6.2	6.2	5.2		5		89				<0.2		1.8	
						6.2	0.3	101	27.3		7.8		16.5		85.8		6.2		5.2		5		90				<0.2		1.8	
IM10	Rainy	Moderate	12:42	7.6	Surface	1.0	0.8	110	27.5	27.5	7.8	7.8	11.6	11.6	90.5	90.5	6.7	6.7	4.0	4.2	4	4	85	87	822387	809776	<0.2	<0.2	1.9	2.0
						1.0	0.9	110	27.5		7.8		11.6		90.5		6.7		4.0		4		83				<0.2		1.9	
					Middle	3.8	0.9	107	27.5	27.5	7.8	7.8	12.2	12.2	88.8	88.8	6.6		3.8		4		87				<0.2		2.1	
						3.8	0.9	109	27.5		7.8		12.2		88.7		6.6		3.8		4		89				<0.2		1.9	
					Bottom	6.6	0.7	102	27.3	27.3	7.8	7.8	16.0	16.0	83.4	83.5	6.0	6.0	4.8		5		90				<0.2		1.9	
						6.6	0.7	104	27.3		7.8		16.0		83.5		6.0		4.8		5		88				<0.2		2.2	
IM11	Rainy	Moderate	12:51	7.4	Surface	1.0	0.9	117	27.8	27.8	7.8	7.8	14.1	14.1	90.8	90.8	6.6	6.6	3.8	4.5	4	5	85	88	822053	811481	<0.2	<0.2	1.9	2.2
						1.0	1.0	121	27.8		7.8		14.1		90.8		6.6		3.8		4		85				<0.2		2.0	
					Middle	3.7	0.6	110	27.6	27.6	7.8	7.8	12.6	12.6	88.5	88.4	6.5		3.8		4		89				<0.2		2.3	
						3.7	0.6	110	27.6		7.8		12.6		88.2		6.5		3.8		4		90				<0.2		2.4	
					Bottom	6.4	0.5	122	27.3	27.3	7.8	7.8	16.1	16.1	84.5	84.5	6.1	6.1	5.9		7		90				<0.2		2.3	
						6.4	0.6	129	27.2		7.8		16.1		84.5		6.1		5.9		6		88				<0.2		2.3	
IM12	Rainy	Moderate	12:58	8.2	Surface	1.0	0.7	109	27.4	27.4	7.8	7.8	13.6	13.6	89.4	89.5	6.6	6.6	4.4	5.9	4	5	85	88	821440	812045	<0.2	<0.2	2.3	2.2
						1.0	0.7	109	27.4		7.8		13.6		89.5		6.6		4.5		4		84				<0.2		2.2	
					Middle	4.1	0.5	98	27.5	27.5	7.8	7.8	14.1	14.1	89.9	89.9	6.6		5.4		4		87				<0.2		1.8	
						4.1	0.5	99	27.5		7.8		14.1		89.8		6.6		5.4		4		91				<0.2		2.3	
					Bottom	7.2	0.4	96	27.3	27.3	7.8	7.8	16.0	16.0	84.0	83.9	6.1	6.1	7.8		7		90				<0.2		2.2	
						7.2	0.4	100	27.2		7.8		16.0		83.8		6.1		7.9		6		90				<0.2		2.2	
SR1A	Rainy	Moderate	13:12	4.8	Surface	1.0	-	-	27.5	27.5	7.9	7.9	16.9	17.0	90.9	90.7	6.5	6.5	4.1	6.0	4	5	-	-	819978	812658	-	-	-	-
						1.0	-	-	27.4		7.9		17.0		90.5		6.5		4.2		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.3	27.3	7.9	7.9	19.1	19.1	87.1	87.5	6.2	6.3	7.8		4		-				-		-	
						3.8	-	-	27.3		7.9		19.1		87.8		6.3		7.8		5		-				-		-	
SR2	Rainy	Moderate	13:24	4.5	Surface	1.0	0.8	111	27.5	27.5	7.8	7.8	12.3	12.3	93.1	93.1	6.9	6.9	4.7	4.3	5	4	85	87	821471	814189	<0.2	<0.2	2.2	2.2
						1.0	0.9	113	27.5		7.8		12.3		93.1		6.9		4.7		4		85				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.5	122	27.6	27.6	7.8	7.8	12.6	12.6	93.7	93.8	6.9	6.9	3.9		4		90				<0.2		2.2	
						3.5	0.5	128	27.6		7.8		12.6		93.8		6.9		3.9		4		88				<0.2		2.2	
SR3	Cloudy	Moderate	12:23	8.8	Surface	1.0	0.1	198	27.7	27.7	7.8	7.8	14.8	14.8	90.2	90.2	6.5	6.4	3.9	4.1	4	4	-	-	822153	807586	-	-	-	-
						1.0	0.1	209	27.6		7.8		14.8		90.1		6.5		3.9		4		-				-		-	
					Middle	4.4	0.1	159	27.6	27.6	7.8	7.8	15.0	15.0	87.8	87.6	6.4		4.1		4		-				-		-	
						4.4	0.1	165	27.6		7.8		15.0		87.4		6.3		4.1		4		-				-		-	
					Bottom	7.8	0.1	231	27.7	27.7	7.8	7.8	15.7	15.7	86.3	86.4	6.2	6.2	4.3		5		-				-		-	
						7.8	0.1	239	27.7		7.8		15.7		86.4		6.2		4.3		5		-				-		-	
SR4A	Rainy	Moderate	13:23	8.9	Surface	1.0	0.0	171	28.4	28.4	7.9	7.9	13.0	13.0	93.2	93.1	6.7	6.6	6.4	9.0	5	5	-	-	817178	807786	-	-	-	-
						1.0	0.0	185	28.4		7.9		13.0		93.0		6.7		6.7		4		-				-		-	
					Middle	4.5	0.2	81	28.2	28.2	7.9	7.9	14.5	14.5	90.6	90.3	6.5		12.7		5		-				-		-	
						4.5	0.2	84	28.2		7.9		14.5		89.9		6.5		12.7		5		-				-		-	
					Bottom	7.9	0.1	122	27.9	27.9	7.9	7.9	17.6	17.6	87.5	87.6	6.2	6.2	7.8		7		-				-		-	
						7.9	0.1	133	27.9		7.9		17.6		87.6		6.2		7.7		6		-				-		-	
SR5A	Rainy	Moderate	13:37	5.6	Surface	1.0	0.1	81	28.3	28.3	8.0	8.0	15.0	15.0	103.3	103.3	7.4	7.4	5.3	5.6	5	6	-	-	816589	810719	-	-	-	-
						1.0	0.1	83	28.2		8.0		15.0		103.3		7.4		5.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	33	28.2	28.2	7.9	7.9	16.1	16.1	103.1	103.1	7.4	7.4	5.6		6		-				-		-	
						4.6	0.1	33	28.2		7.9		16.1		103.1		7.4		5.6		6		-				-		-	
SR6	Rainy	Moderate	14:12	4.4	Surface	1.0	0.1	119	28.1	28.1	8.0	8.0	17.7	17.7	100.5	100.5	7.1	7.1	5.0	6.3	6	8	-	-	817884	814665	-	-	-	-
						1.0	0.1	125	28.1		8.0		17.7		100.4		7.1		4.9		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	271	27.9	27.9	8.0	8.0	18.6	18.6	94.8	94.9	6.7	6.7	7.7		9		-				-		-	
						3.4	0.1	276	27.9		8.0		18.6		94.9		6.7		7.7		10		-				-		-	
SR7	Rainy	Moderate	14:07	16.6	Surface	1.0	1.2	77	27.8	27.8	7.9	7.9	16.3	16.3	95.4	95.4	6.9	6.9	4.2	6.9	5	5	-	-	823643	823718	-	-	-	-
						1.0	1.3	77	27.8		7.9		16.3		95.4		6.9		4.2		6		-				-		-	
					Middle	8.3	0.2	91	27.7	27.7	7.9	7.9	15.3	15.4	94.5	94.5	6.8		8.7		4		-				-		-	
						8.3	0.2	97	27.7		7.9		15.4		94.4		6.8		8.7		4		-				-		-	
					Bottom	15.6	0.1	18	27.0	27.1	7.8	7.8	20.5	20.5	88.4	88.5	6.3	6.3	7.8		5		-				-		-	
						15.6	0.1	19	27.1		7.8		20.5		88.6		6.3		7.6		4		-				-		-	
SR8	Rainy	Moderate	13:03	5.1	Surface	1.0	-	-	27.7	27.7	7.9	7.9	16.7	16.7	94.0	94.0	6.7	6.7	5.6	5.7	6	7	-	-	820406	811645	-	-	-	-
						1.0	-	-	27.7		7.9		16.7		93.9		6.7		5.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	27.7	27.7	7.9	7.9	16.4	16.4	93.2	93.3	6.7	6.7	5.7		7		-				-		-	
						4.1	-	-	27.7		7.9		16.4		93.4		6.7		5.8		7		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 18 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	06:32	8.3	Surface	1.0	0.2	208	27.7	27.7	7.9	7.9	13.1	13.1	88.8	88.7	6.5	6.4	6.1	8.6	4	5	81	85	815625	804263	<0.2	<0.2	1.5	1.6
						1.0	0.3	209	27.7		7.9		13.1		88.6		6.5		6.0		4		82				<0.2		1.5	
					Middle	4.2	0.1	72	27.6	27.6	8.0	8.0	13.9	13.9	86.9	86.9	6.3		12.0		4		85				<0.2		1.5	
						4.2	0.1	77	27.6		8.0		13.9		86.8		6.3		11.7		5		85				<0.2		1.6	
					Bottom	7.3	0.1	61	27.4	27.4	7.9	7.9	21.2	21.2	83.8	84.0	5.9	5.9	7.8		7		87				<0.2		1.6	
						7.3	0.1	62	27.4		7.9		21.2		84.1		5.9		7.9		8		88				<0.2		1.6	
C2	Cloudy	Moderate	07:28	11.6	Surface	1.0	0.6	60	27.6	27.7	7.8	7.8	9.8	9.8	89.1	89.1	6.6	6.6	4.9	5.7	5	5	84	87	825662	806926	<0.2	<0.2	1.8	1.8
						1.0	0.6	67	27.7		7.8		9.8		89.1		6.6		4.9		4		84				<0.2		1.8	
					Middle	5.8	0.2	72	27.8	27.8	7.8	7.8	10.7	10.7	88.9	88.8	6.6		5.2		5		88				<0.2		1.8	
						5.8	0.2	73	27.8		7.8		10.7		88.7		6.6		5.2		5		87				<0.2		1.7	
					Bottom	10.6	0.2	27	27.7	27.7	7.8	7.8	15.8	15.8	81.9	82.0	5.9	5.9	7.1		6		89				<0.2		1.8	
						10.6	0.2	25	27.7		7.8		15.8		82.0		5.9		7.1		6		90				<0.2		1.8	
C3	Cloudy	Moderate	05:30	12.4	Surface	1.0	0.6	244	26.9	26.9	7.9	7.9	23.2	23.2	85.5	85.6	6.0	6.0	2.7	2.9	4	5	84	87	822114	817789	<0.2	<0.2	1.8	1.8
						1.0	0.7	252	26.9		7.9		23.2		85.6		6.0		2.7		5		85				<0.2		1.7	
					Middle	6.2	0.7	259	26.9	26.9	7.9	7.9	23.5	23.5	85.4	85.4	6.0		3.0		4		88				<0.2		1.8	
						6.2	0.8	275	26.9		7.9		23.5		85.4		6.0		3.0		5		89				<0.2		1.9	
					Bottom	11.4	0.4	279	27.5	27.5	7.9	7.9	24.4	24.4	85.7	85.7	5.9	5.9	3.1		6		89				<0.2		1.8	
						11.4	0.4	283	27.5		7.9		24.4		85.7		5.9		3.1		6		88				<0.2		2.0	
IM1	Cloudy	Moderate	06:53	5.6	Surface	1.0	0.2	79	27.9	27.9	7.9	7.9	14.3	14.3	89.8	89.8	6.5	6.5	4.4	6.1	7	8	84	86	817957	807119	<0.2	<0.2	1.7	1.6
						1.0	0.3	80	27.9		7.9		14.3		89.7		6.5		4.8		6		84				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	35	27.8	27.8	7.9	7.9	18.5	18.5	84.9	84.9	6.0	6.0	7.6		9		88				<0.2		1.5	
						4.6	0.2	38	27.8		7.9		18.5		84.9		6.0		7.6		10		88				<0.2		1.6	
IM2	Cloudy	Moderate	06:57	8.1	Surface	1.0	0.4	64	27.9	27.9	7.9	7.9	13.4	13.4	85.8	85.7	6.3	6.2	10.1	10.0	4	5	84	86	818186	806150	<0.2	<0.2	1.6	1.7
						1.0	0.4	67	27.8		7.9		13.4		85.6		6.2		10.1		5		84				<0.2		1.7	
					Middle	4.1	0.2	45	27.7	27.7	7.9	7.9	15.5	15.5	84.3	84.2	6.1		12.3		5		86				<0.2		1.6	
						4.1	0.2	46	27.6		7.9		15.5		84.0		6.1		12.3		5		87				<0.2		1.7	
					Bottom	7.1	0.1	88	27.6	27.6	7.8	7.8	18.8	18.8	84.8	84.9	6.0	6.0	7.8		7		87				<0.2		1.7	
						7.1	0.1	91	27.6		7.8		18.8		84.9		6.0		7.6		6		88				<0.2		1.7	
IM3	Cloudy	Moderate	07:03	8.3	Surface	1.0	0.1	54	27.6	27.6	7.9	7.9	12.4	12.4	86.2	86.1	6.3	6.2	6.6	7.3	4	4	85	88	818763	805611	<0.2	<0.2	1.5	1.5
						1.0	0.1	50	27.6		7.9		12.4		85.9		6.3		6.9		3		85				<0.2		1.6	
					Middle	4.2	0.1	65	27.6	27.6	7.9	7.9	16.0	16.0	84.8	84.8	6.1		6.8		4		89				<0.2		1.4	
						4.2	0.1	69	27.6		7.9		16.0		84.8		6.1		7.3		4		89				<0.2		1.6	
					Bottom	7.3	0.1	77	27.5	27.5	7.8	7.8	19.2	19.2	84.8	84.9	6.0	6.0	8.3		5		90				<0.2		1.5	
						7.3	0.1	78	27.5		7.8		19.2		84.9		6.0		7.8		5		90				<0.2		1.5	
IM4	Cloudy	Moderate	07:11	8.5	Surface	1.0	0.0	55	27.6	27.6	8.0	8.0	11.9	11.9	86.3	86.2	6.4	6.3	6.0	5.5	3	4	84	87	819735	804628	<0.2	<0.2	1.5	1.5
						1.0	0.0	66	27.6		8.0		11.9		86.0		6.4		6.2		3		85				<0.2		1.5	
					Middle	4.3	0.3	60	27.5	27.5	7.9	7.9	16.1	16.1	85.0	85.0	6.1		4.6		4		87				<0.2		1.5	
						4.3	0.3	66	27.5		7.9		16.1		84.9		6.1		4.5		5		88				<0.2		1.5	
					Bottom	7.5	0.2	44	27.4	27.4	7.8	7.8	20.8	20.8	82.8	82.9	5.8	5.8	5.8		5		88				<0.2		1.5	
						7.5	0.2	45	27.4		7.8		20.8		82.9		5.8		5.8		4		89				<0.2		1.4	
IM5	Cloudy	Moderate	07:18	8.2	Surface	1.0	0.3	48	27.7	27.7	7.9	7.9	16.0	16.0	83.3	83.3	6.0	5.9	5.4	8.9	6	9	85	88	820750	804870	<0.2	<0.2	1.6	1.6
						1.0	0.3	46	27.7		7.9		16.0		83.3		6.0		5.5		6		85				<0.2		1.5	
					Middle	4.1	0.3	59	27.5	27.5	7.8	7.8	19.3	19.3	80.8	80.6	5.7		11.1		9		88				<0.2		1.7	
						4.1	0.3	69	27.5		7.8		19.3		80.4		5.7		11.2		8		88				<0.2		1.7	
					Bottom	7.2	0.2	64	27.5	27.5	7.7	7.7	21.6	21.6	82.3	82.5	5.8	5.8	10.1		11		89				<0.2		1.6	
						7.2	0.2	67	27.5		7.7		21.6		82.7		5.8		10.3		12		90				<0.2		1.6	
IM6	Cloudy	Moderate	07:27	8.6	Surface	1.0	0.4	35	28.0	28.0	7.8	7.8	14.4	14.4	90.2	90.2	6.5	6.5	3.8	5.6	4	5	84	87	821082	805823	<0.2	<0.2	1.6	1.6
						1.0	0.4	37	28.0		7.8		14.4		90.1		6.5		3.8		3		84				<0.2		1.5	
					Middle	4.3	0.2	36	28.0	28.0	7.9	7.9	14.6	14.6	89.9	90.0	6.5		4.3		4		88				<0.2		1.6	
						4.3	0.2	40	28.0		7.9		14.6		90.0		6.5		4.5		4		88				<0.2		1.6	
					Bottom	7.6	0.3	71	27.6	27.6	7.8	7.8	18.7	18.7	84.0	84.3	6.0	6.0	8.6		8		90				<0.2		1.6	
						7.6	0.3	78	27.6		7.8		18.7		84.5		6.0		8.7		7		89				<0.2		1.5	
IM7	Cloudy	Moderate	07:34	8.7	Surface	1.0	0.4	26	27.9	27.9	7.8	7.8	15.4	15.4	91.1	91.0	6.6	6.4	6.5	6.6	4	5	84	88	821338	806818	<0.2	<0.2	1.6	1.6
						1.0	0.4	26	27.9		7.8		15.4		90.9		6.5		6.6		4		85				<0.2		1.5	
					Middle	4.4	0.1	27	27.8	27.8	7.8	7.8	15.8	15.8	86.1	86.1	6.2		5.9		4		88				<0.2		1.6	
						4.4	0.1	25	27.8		7.8		15.8		86.0		6.2		5.9		5		88				<0.2		1.7	
					Bottom	7.7	0.1	45	27.7	27.7	7.8	7.8	17.7	17.7	84.9	85.1	6.1	6.1	7.4		6		90				<0.2		1.6	
						7.7	0.1	48	27.7		7.8		17.7		85.2		6.1		7.5		6		90				<0.2		1.6	
IM8	Cloudy	Moderate	06:56	7.8	Surface	1.0	0.5	352	27.3	27.3	7.7	7.7	14.0	14.0	86.6	86.6	6.4	6.3	5.1	5.2	4	5	86	87	821834	808138	<0.2	<0.2	2.3	2.2
						1.0	0.5	355	27.3		7.7		14.0		86.6		6.3		5.0		4		84				<0.2		2.4	
					Middle	3.9	0.4	306	27.5	27.5	7.8	7.8	13.6	13.6	85.6	85.5	6.3		4.9		4		87				<0.2		2.2	
						3.9	0.4	312	27.5		7.8		13.6		85.4		6.3		4.3		4		86				<0.2		2.2	
					Bottom	6.8	0.4	9	27.6	27.6	7.7	7.7	15.5	15.5	83.5	83.5	6.0	6.0	5.9		6		89				<0.2		2.2	
						6.8	0.5	8	27.6		7.7		15.5		83.5		6.0		6.0		6		90				<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 18 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	06:49	7.4	Surface	1.0	0.5	331	27.5	27.5	7.7	7.7	13.2	13.2	90.4	90.4	6.6	6.6	3.9	4.0	3	3	85	87	822076	808793	<0.2	<0.2	2.1	2.0
						1.0	0.5	312	27.5		7.7		13.2		90.3		6.6		3.9		2		84				<0.2		2.2	
					Middle	3.7	0.5	288	27.5	27.5	7.8	7.8	13.2	13.2	88.8	88.8	6.5		3.7		2		87				<0.2		1.7	
						3.7	0.5	295	27.5		7.8		13.2		88.7		6.5		3.7		2		88				<0.2		1.8	
					Bottom	6.4	0.5	305	27.7	27.7	7.7	7.7	14.1	14.1	87.5	87.5	6.4	6.4	4.4		4		89				<0.2		2.2	
						6.4	0.5	306	27.7		7.7		14.1		87.5		6.4		4.4		3		91				<0.2		1.9	
IM10	Cloudy	Moderate	06:41	7.6	Surface	1.0	0.6	314	27.3	27.3	7.8	7.8	14.1	14.1	89.8	89.6	6.6	6.5	5.0	5.1	3	4	84	87	822379	809793	<0.2	<0.2	1.8	1.9
						1.0	0.7	311	27.3		7.8		14.1		89.4		6.6		5.0		4		85				<0.2		1.8	
					Middle	3.8	0.6	282	27.3	27.3	7.8	7.8	14.3	14.3	87.6	87.6	6.4		4.7		3		87				<0.2		2.2	
						3.8	0.6	285	27.3		7.8		14.3		87.6		6.4		4.7		4		86				<0.2		2.2	
					Bottom	6.6	0.2	293	27.7	27.7	7.8	7.8	16.7	16.7	86.3	86.3	6.2	6.2	5.4		5		89				<0.2		1.8	
						6.6	0.2	299	27.7		7.8		16.7		86.3		6.2		5.5		6		90				<0.2		1.8	
IM11	Cloudy	Moderate	06:32	7.8	Surface	1.0	0.3	291	27.3	27.3	7.9	7.9	17.0	17.0	91.5	91.5	6.6	6.6	3.6	3.9	3	3	86	87	822046	811479	<0.2	<0.2	1.8	1.9
						1.0	0.3	295	27.3		7.9		17.0		91.4		6.6		3.7		3		85				<0.2		1.8	
					Middle	3.9	0.2	274	27.3	27.3	7.9	7.8	17.0	17.0	90.8	90.8	6.6		3.9		4		87				<0.2		1.8	
						3.9	0.2	286	27.3		7.8		17.0		90.7		6.5		3.9		3		86				<0.2		1.7	
					Bottom	6.8	0.3	280	27.1	27.1	7.8	7.8	18.3	18.3	84.0	84.1	6.0	6.0	4.0		3		89				<0.2		2.0	
						6.8	0.3	284	27.1		7.8		18.3		84.2		6.0		4.0		4		90				<0.2		2.0	
IM12	Cloudy	Moderate	06:26	8.4	Surface	1.0	0.2	275	27.5	27.5	7.9	7.9	19.5	19.5	92.1	92.1	6.5	6.4	3.4	4.0	4	5	85	87	821450	812037	<0.2	<0.2	2.0	2.0
						1.0	0.3	276	27.5		7.9		19.5		92.0		6.5		3.4		5		83				<0.2		2.0	
					Middle	4.2	0.3	266	27.3	27.3	7.9	7.9	18.7	18.7	88.3	88.3	6.3		4.1		5		87				<0.2		2.0	
						4.2	0.3	265	27.3		7.9		18.7		88.2		6.3		4.1		4		88				<0.2		2.1	
					Bottom	7.4	0.1	262	27.1	27.1	7.8	7.8	20.0	20.0	86.2	86.2	6.1	6.1	4.6		7		90				<0.2		1.9	
						7.4	0.1	269	27.1		7.8		20.0		86.2		6.1		4.6		6		89				<0.2		1.9	
SR1A	Cloudy	Moderate	06:08	4.9	Surface	1.0	-	-	27.2	27.2	7.9	7.9	17.4	17.4	91.3	91.3	6.6	6.6	7.0	6.1	5	5	-	-	819976	812660	-	-	-	-
						1.0	-	-	27.2		7.9		17.4		91.3		6.6		7.0		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.2	27.2	7.9	7.9	17.3	17.3	91.3	91.3	6.6	6.6	5.2		4		-				-		-	
						3.9	-	-	27.2		7.9		17.3		91.3		6.6		5.1		5		-				-		-	
SR2	Cloudy	Moderate	05:59	4.6	Surface	1.0	0.4	264	27.3	27.3	7.9	7.9	19.5	19.5	91.3	91.3	6.5	6.5	4.3	4.9	4	5	87	88	821460	814183	<0.2	<0.2	2.0	2.0
						1.0	0.4	266	27.2		7.9		19.5		91.3		6.5		4.4		5		85				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.3	244	27.2	27.2	7.9	7.9	17.3	17.3	91.2	91.2	6.6	6.6	5.3		4		89				<0.2		2.0	
						3.6	0.3	249	27.2		7.9		17.3		91.2		6.6		5.8		5		89				<0.2		1.9	
SR3	Cloudy	Moderate	07:02	8.4	Surface	1.0	0.3	45	27.2	27.2	7.8	7.8	14.5	14.5	86.2	86.3	6.3	6.4	6.6	6.4	5	6	-	-	822126	807574	-	-	-	-
						1.0	0.3	49	27.2		7.8		14.5		86.4		6.3		6.6		6		-				-		-	
					Middle	4.2	0.3	43	27.6	27.6	7.8	7.8	14.4	14.4	87.9	87.9	6.4		5.4		6		-				-		-	
						4.2	0.3	46	27.5		7.8		14.4		87.9		6.4		5.4		6		-				-		-	
					Bottom	7.4	0.1	18	27.2	27.2	7.7	7.7	16.8	16.8	84.1	84.1	6.1	6.1	7.1		6		-				-		-	
						7.4	0.2	19	27.2		7.7		16.8		84.1		6.1		7.1		6		-				-		-	
SR4A	Fine	Moderate	06:10	8.6	Surface	1.0	0.3	292	27.5	27.5	7.9	7.9	12.3	12.3	88.6	88.5	6.5	6.4	9.3	9.8	6	8	-	-	817209	807819	-	-	-	-
						1.0	0.4	298	27.5		7.9		12.3		88.4		6.5		9.2		6		-				-		-	
					Middle	4.3	0.5	282	27.8	27.9	7.9	7.9	14.1	14.1	87.5	87.5	6.4		10.9		8		-				-		-	
						4.3	0.5	286	27.9		7.9		14.1		87.4		6.3		10.9		7		-				-		-	
					Bottom	7.6	0.3	267	27.9	27.9	7.9	7.9	16.3	16.3	87.1	87.2	6.2	6.3	9.2		10		-				-		-	
						7.6	0.3	272	27.9		8.0		16.3		87.3		6.3		9.2		9		-				-		-	
SR5A	Fine	Calm	05:52	5.4	Surface	1.0	0.4	306	27.6	27.6	7.9	7.9	12.8	12.8	90.9	90.9	6.7	6.7	4.9	5.1	4	5	-	-	816611	810688	-	-	-	-
						1.0	0.4	310	27.6		7.9		12.8		90.8		6.7		5.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	288	27.8	27.8	7.9	7.9	15.9	15.9	90.9	91.0	6.5	6.6	5.2		5		-				-		-	
						4.4	0.2	290	27.8		7.9		15.9		91.0		6.6		5.2		6		-				-		-	
SR6	Fine	Moderate	05:31	5.1	Surface	1.0	0.1	228	27.6	27.6	7.9	7.9	18.1	18.1	85.5	85.6	6.1	6.1	8.8	6.2	6	8	-	-	817888	814676	-	-	-	-
						1.0	0.1	245	27.6		7.9		18.1		85.6		6.1		8.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	260	27.8	27.8	7.9	7.9	16.8	16.8	91.3	91.3	6.5	6.5	3.8		11		-				-		-	
						4.1	0.1	264	27.8		7.9		16.8		91.3		6.5		3.8		10		-				-		-	
SR7	Cloudy	Moderate	05:00	16.6	Surface	1.0	0.6	257	26.9	26.9	7.8	7.8	24.6	24.6	83.3	83.3	5.8	5.8	2.9	3.3	3	5	-	-	823634	823745	-	-	-	-
						1.0	0.6	259	26.9		7.8		24.6		83.3		5.8		2.9		4		-				-		-	
					Middle	8.3	0.1	250	26.8	26.8	7.8	7.8	24.6	24.6	82.9	82.9	5.8		3.1		4		-				-		-	
						8.3	0.1	256	26.8		7.8		24.6		82.9		5.8		3.1		4		-				-		-	
					Bottom	15.6	0.1	243	26.9	26.9	7.8	7.8	24.9	24.9	80.0	80.0	5.6	5.6	3.7		6		-				-		-	
						15.6	0.1	249	26.9		7.8		24.9		80.0		5.6		3.7		7		-				-		-	
SR8	Cloudy	Moderate	06:15	5.2	Surface	1.0	-	-	27.2	27.2	7.9	7.9	19.5	19.5	91.8	91.8	6.5	6.5	3.9	4.0	4	5	-	-	820400	811614	-	-	-	-
						1.0	-	-	27.2		7.9		19.5		91.8		6.5		3.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.2	27.2	7.9	7.9	17.3	17.3	91.7	91.7	6.6	6.6	4.1		6		-				-		-	
						4.2	-	-	27.2		7.9		17.3		91.6		6.6		4.1		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 20 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	14:25	8.3	Surface	1.0	0.2	103	28.3	28.3	7.9	7.9	15.7	15.7	91.7	91.8	6.6	6.6	4.9	5.7	5	5	85	87	815615	804245	<0.2	<0.2	1.5	1.5
						1.0	0.2	109	28.3		7.9		15.7		91.8		6.6		5.0		5		85				<0.2		1.4	
					Middle	4.2	0.3	104	28.4	28.4	7.9	7.9	15.8	15.8	92.2	92.2	6.6		4.7		4		87				<0.2		1.5	
						4.2	0.3	104	28.4		7.9		15.8		92.2		6.6		4.7		5		88				<0.2		1.4	
					Bottom	7.3	0.2	139	28.1	28.1	7.8	7.8	16.5	16.5	90.0	90.1	6.4	6.4	7.5		6		89				<0.2		1.6	
						7.3	0.3	141	28.1		7.8		16.5		90.1		6.4		7.4		7		90				<0.2		1.5	
C2	Sunny	Moderate	13:36	11.8	Surface	1.0	0.3	146	27.4	27.4	7.8	7.8	14.0	13.7	70.5	70.4	5.2	5.1	4.0	4.9	4	4	84	88	825701	806959	<0.2	<0.2	2.0	2.1
						1.0	0.4	159	27.4		7.8		13.4		70.3		5.2		4.1		4		85				<0.2		2.1	
					Middle	5.9	0.4	131	27.2	27.2	7.8	7.8	17.2	17.2	68.9	69.0	5.0		5.2		4		88				<0.2		2.0	
						5.9	0.4	155	27.2		7.8		17.2		69.0		5.0		5.3		4		88				<0.2		2.2	
					Bottom	10.8	0.5	108	27.2	27.2	7.8	7.8	19.4	19.4	70.3	70.6	5.0	5.1	5.4		4		90				<0.2		2.1	
						10.8	0.5	113	27.2		7.8		19.4		70.9		5.1		5.3		5		90				<0.2		2.0	
C3	Sunny	Moderate	14:58	12.6	Surface	1.0	0.3	78	27.5	27.5	8.0	8.0	18.7	18.5	86.4	86.5	6.1	5.6	2.6	2.7	4	5	85	88	822108	817789	<0.2	<0.2	1.7	1.7
						1.0	0.3	83	27.5		8.0		18.3		86.5		6.2		2.6		5		87				<0.2		1.7	
					Middle	6.3	0.3	118	26.8	26.8	8.0	8.0	24.7	24.8	71.0	70.9	5.0		2.8		4		88				<0.2		1.6	
						6.3	0.3	123	26.7		8.0		24.9		70.7		4.9		2.8		5		87				<0.2		1.7	
					Bottom	11.6	0.3	125	26.6	26.6	8.0	8.0	25.2	25.6	70.0	69.9	4.9	4.9	2.9		5		90				<0.2		1.6	
						11.6	0.3	122	26.6		8.0		26.0		69.7		4.8		2.8		5		88				<0.2		1.7	
IM1	Fine	Moderate	13:59	5.8	Surface	1.0	0.0	153	28.3	28.3	7.9	7.9	13.5	13.5	90.9	90.9	6.6	6.6	4.5	5.2	4	4	83	85	817961	807140	<0.2	<0.2	1.6	1.6
						1.0	0.0	144	28.3		8.0		13.5		90.9		6.6		4.8		4		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	155	28.3	28.3	8.0	8.0	12.1	12.1	92.1	92.2	6.7	6.7	5.9		4		86				<0.2		1.6	
						4.8	0.1	158	28.2		8.0		12.1		92.2		6.7		5.8		5		86				<0.2		1.6	
IM2	Fine	Moderate	13:53	8.4	Surface	1.0	0.3	210	28.4	28.4	7.9	7.9	14.3	14.3	91.8	91.8	6.6	6.6	3.4	4.1	5	5	85	86	818178	806172	<0.2	<0.2	1.3	1.3
						1.0	0.3	221	28.4		7.9		14.3		91.8		6.6		3.4		5		85				<0.2		1.3	
					Middle	4.2	0.4	226	28.4	28.4	7.9	7.9	14.5	14.5	92.0	92.0	6.6		4.2		5		86				<0.2		1.5	
						4.2	0.4	226	28.4		7.9		14.5		92.0		6.6		4.3		4		86				<0.2		1.5	
					Bottom	7.4	0.3	244	28.2	28.2	7.9	7.9	15.1	15.1	92.3	92.3	6.6	6.6	4.5		5		88				<0.2		1.2	
						7.4	0.4	245	28.2		7.9		15.1		92.3		6.6		4.6		5		88				<0.2		1.2	
IM3	Fine	Moderate	13:47	8.3	Surface	1.0	0.3	204	28.4	28.4	7.9	7.9	11.0	11.0	88.9	88.9	6.5	6.6	7.2	6.4	6	5	85	87	818764	805613	<0.2	<0.2	1.1	1.3
						1.0	0.3	200	28.4		7.9		11.0		88.9		6.5		6.8		5		85				<0.2		1.1	
					Middle	4.2	0.4	225	28.3	28.3	7.9	7.9	11.2	11.2	89.6	89.7	6.6		6.6		4		86				<0.2		1.4	
						4.2	0.5	213	28.3		7.9		11.2		89.7		6.6		6.8		4		87				<0.2		1.5	
					Bottom	7.3	0.4	220	28.2	28.2	8.0	8.0	12.1	12.1	91.0	91.1	6.6	6.6	5.5		4		89				<0.2		1.4	
						7.3	0.4	202	28.2		8.0		12.1		91.1		6.6		5.4		5		89				<0.2		1.5	
IM4	Fine	Moderate	13:37	8.5	Surface	1.0	0.8	211	28.3	28.3	8.0	8.0	11.8	11.8	88.2	88.2	6.4	6.4	4.8	6.4	4	5	84	86	819745	804588	<0.2	<0.2	1.8	1.7
						1.0	0.8	221	28.3		8.0		11.8		88.2		6.4		4.8		4		84				<0.2		1.7	
					Middle	4.3	0.7	220	28.2	28.2	7.9	7.9	14.2	14.2	88.4	88.5	6.4		7.4		6		85				<0.2		1.7	
						4.3	0.7	205	28.2		7.9		14.2		88.5		6.4		7.7		6		85				<0.2		1.7	
					Bottom	7.5	0.4	196	28.2	28.2	7.9	7.9	16.4	16.4	90.0	90.1	6.4	6.4	7.0		6		88				<0.2		1.8	
						7.5	0.5	198	28.2		7.9		16.4		90.1		6.4		6.9		6		88				<0.2		1.7	
IM5	Fine	Moderate	13:29	7.4	Surface	1.0	0.9	199	28.1	28.1	7.9	7.9	15.8	15.8	88.2	88.2	6.3	6.3	6.1	6.0	5	5	85	87	820731	804856	<0.2	<0.2	2.0	2.0
						1.0	0.9	203	28.1		7.9		15.8		88.1		6.3		6.1		4		85				<0.2		2.1	
					Middle	3.7	1.0	198	28.1	28.1	8.0	8.0	16.0	16.0	87.6	87.6	6.3		6.4		4		86				<0.2		1.9	
						3.7	1.0	189	28.1		8.0		16.0		87.6		6.3		6.5		4		87				<0.2		1.8	
					Bottom	6.4	0.6	191	28.0	28.0	8.0	8.0	16.3	16.3	88.6	88.7	6.3	6.4	5.5		5		88				<0.2		2.0	
						6.4	0.7	188	28.0		8.0		16.3		88.8		6.4		5.5		5		89				<0.2		1.9	
IM6	Fine	Moderate	13:22	8.2	Surface	1.0	0.6	186	28.2	28.2	7.9	7.9	16.7	16.7	89.3	89.4	6.4	6.4	7.2	8.0	6	7	84	87	821069	805804	<0.2	<0.2	1.8	1.8
						1.0	0.6	188	28.2		7.9		16.7		89.5		6.4		7.3		6		84				<0.2		1.9	
					Middle	4.1	0.4	192	28.1	28.1	7.9	7.9	16.7	16.7	89.6	89.6	6.4		9.1		7		87				<0.2		1.7	
						4.1	0.5	186	28.1		7.9		16.7		89.6		6.4		9.0		6		87				<0.2		1.7	
					Bottom	7.2	0.3	176	27.9	27.9	7.9	7.9	18.1	18.1	90.4	90.5	6.4	6.4	7.7		8		90				<0.2		1.8	
						7.2	0.3	178	27.9		7.9		18.2		90.6		6.4		7.7		7		90				<0.2		1.6	
IM7	Fine	Moderate	13:15	9.1	Surface	1.0	0.2	184	28.5	28.5	7.9	7.9	13.9	13.9	89.2	89.1	6.4	6.4	4.5	6.4	6	5	86	88	821343	806816	<0.2	<0.2	1.5	1.7
						1.0	0.2	192	28.4		7.9		13.9		88.9		6.4		4.6		6		85				<0.2		1.6	
					Middle	4.6	0.2	183	28.2	28.2	7.9	7.9	14.7	14.7	88.0	88.1	6.3		7.5		5		88				<0.2		1.6	
						4.6	0.2	183	28.1		7.9		14.7		88.1		6.3		7.8		4		88				<0.2		1.7	
					Bottom	8.1	0.3	184	28.1	28.1	7.9	7.9	15.3	15.3	89.5	89.7	6.4	6.5	7.0		5		90				<0.2		2.0	
						8.1	0.3	188	28.1		7.9		15.3		89.8		6.5		7.0		5		90				<0.2		2.0	
IM8	Sunny	Moderate	13:59	7.1	Surface	1.0	0.3	173	27.6	27.6	7.8	7.8	12.7	12.7	76.0	75.9	5.6	5.6	4.3	7.3	3	3	85	88	821852	808155	<0.2	<0.2	2.1	2.1
						1.0	0.3	179	27.6		7.8		12.7		75.8		5.6		4.4		3		86				<0.2		2.1	
					Middle	3.6	0.2	192	27.4	27.4	7.8	7.8	14.6	14.6	75.6	75.7	5.5		7.0		<2		88				<0.2		2.1	
						3.6	0.2	181	27.4		7.8		14.6		75.7		5.5		7.5		<2		87				<0.2		2.2	
					Bottom	6.1	0.4	197	27.3	27.3	7.9	7.9	20.2	20.3	76.2	76.5	5.4	5.4	10.3		3		90				<0.2		2.1	
						6.1	0.4	185	27.3		7.9		20.3		76.7		5.4		10.5		3		90				<0.2		2.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	14:03	7.2	Surface	1.0	0.3	162	27.5	27.5	7.8	7.8	13.6	13.6	74.5	74.4	5.5	5.4	4.3	6.8	3	4	85	88	822092	808793	<0.2	<0.2	1.5	1.5
						1.0	0.3	166	27.5		7.8		13.6		74.2		5.4		4.4		4		86				<0.2		1.4	
					Middle	3.6	0.4	184	27.4	27.4	7.9	7.9	15.3	15.3	72.4	72.4	5.3		6.7		4		88				<0.2		1.5	
						3.6	0.4	191	27.4		7.9		15.3		72.3		5.3		7.2		4		90				<0.2		1.6	
					Bottom	6.2	0.2	155	27.4	27.4	7.9	7.9	18.6	18.6	72.4	72.5	5.2	5.2	9.0		4		90				<0.2		1.6	
						6.2	0.2	158	27.4		7.9		18.7		72.6		5.2		9.3		5		91				<0.2		1.6	
IM10	Sunny	Moderate	14:12	7.5	Surface	1.0	0.5	156	27.9	27.9	7.8	7.8	13.0	13.0	80.0	80.0	5.8	5.5	3.4	5.7	3	4	86	88	822398	809789	<0.2	<0.2	1.6	1.8
						1.0	0.5	154	27.9		7.8		13.0		79.9		5.8		3.4		4		85				<0.2		1.7	
					Middle	3.8	0.4	177	27.4	27.4	7.8	7.8	16.1	16.1	71.0	70.9	5.1		6.2		4		89				<0.2		1.8	
						3.8	0.4	178	27.4		7.8		16.1		70.8		5.1		6.3		5		89				<0.2		1.7	
					Bottom	6.5	0.1	153	27.3	27.3	7.8	7.8	18.2	18.2	70.4	70.5	5.0	5.0	7.4		4		90				<0.2		1.8	
						6.5	0.1	156	27.3		7.8		18.2		70.5		5.0		7.3		4		90				<0.2		1.9	
IM11	Sunny	Moderate	14:22	7.4	Surface	1.0	0.3	159	27.6	27.6	7.9	7.9	17.6	17.6	81.8	81.8	5.9	5.8	3.7	3.6	4	5	85	88	822040	811461	<0.2	<0.2	2.2	2.2
						1.0	0.3	166	27.6		7.9		17.6		81.8		5.8		3.7		3		85				<0.2		2.2	
					Middle	3.7	0.1	172	27.6	27.6	7.9	7.9	18.1	18.1	81.4	81.4	5.8		3.7		6		87				<0.2		2.1	
						3.7	0.1	175	27.6		7.9		18.1		81.4		5.8		3.6		4		88				<0.2		2.2	
					Bottom	6.4	0.1	159	27.5	27.5	7.9	7.9	18.3	18.3	81.2	81.3	5.8	5.8	3.6		7		91				<0.2		2.2	
						6.4	0.2	140	27.5		7.9		18.3		81.3		5.8		3.6		6		90				<0.2		2.1	
IM12	Sunny	Moderate	14:28	8.2	Surface	1.0	0.3	140	27.7	27.7	7.9	7.9	16.8	16.8	83.8	83.7	6.0	5.7	3.3	5.9	5	6	86	88	821469	812028	<0.2	<0.2	2.1	2.1
						1.0	0.3	147	27.6		7.9		16.8		83.5		6.0		3.4		5		84				<0.2		2.1	
					Middle	4.1	0.1	174	27.2	27.2	7.9	7.9	18.7	18.6	74.4	74.3	5.3		5.0		6		87				<0.2		2.0	
						4.1	0.1	158	27.2		7.9		18.5		74.1		5.3		5.4		6		88				<0.2		2.0	
					Bottom	7.2	0.2	146	26.9	26.9	7.9	7.9	22.8	22.9	64.0	63.9	4.5	4.5	9.0		7		90				<0.2		2.1	
						7.2	0.2	144	26.9		7.9		23.0		63.7		4.5		9.2		7		90				<0.2		2.0	
SR1A	Sunny	Moderate	14:39	4.0	Surface	1.0	-	-	27.7	27.7	7.9	7.9	17.5	17.5	85.6	85.6	6.1	6.1	3.9	4.1	6	7	-	-	819978	812662	-	-	-	-
						1.0	-	-	27.7		7.9		17.5		85.5		6.1		3.9		6		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	27.1	27.2	7.9	7.9	19.5	19.7	72.7	72.6	5.2	5.2	4.4		8		-				-		-	
						3.0	-	-	27.2		7.9		19.8		72.4		5.1		4.4		6		-				-		-	
SR2	Sunny	Moderate	14:40	4.4	Surface	1.0	0.4	42	27.6	27.6	7.9	7.9	17.5	17.5	85.6	85.5	6.1	6.1	4.1	4.2	5	6	85	88	821477	814147	<0.2	<0.2	2.1	2.0
						1.0	0.5	42	27.6		7.9		17.5		85.4		6.1		4.2		6		86				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.4	52	27.2	27.2	7.9	7.9	19.0	19.1	77.6	77.5	5.5	5.5	4.3		5		90				<0.2		2.0	
						3.4	0.4	49	27.1		7.9		19.1		77.3		5.5		4.3		6		90				<0.2		2.0	
SR3	Sunny	Moderate	13:52	8.3	Surface	1.0	0.2	196	27.6	27.6	7.8	7.8	12.6	12.5	77.4	77.4	5.7	5.6	4.0	6.3	4	3	-	-	822135	807548	-	-	-	-
						1.0	0.2	183	27.6		7.8		12.5		77.3		5.7		4.0		4		-				-		-	
					Middle	4.2	0.3	181	27.4	27.4	7.8	7.8	14.6	14.6	73.8	73.9	5.4		4.1		3		-				-		-	
						4.2	0.3	187	27.4		7.8		14.5		73.9		5.4		4.1		4		-				-		-	
					Bottom	7.3	0.3	148	27.3	27.3	7.9	7.9	18.8	18.8	76.8	77.0	5.5	5.5	10.8		3		-				-		-	
						7.3	0.4	158	27.3		7.9		18.8		77.2		5.5		10.6		2		-				-		-	
SR4A	Fine	Calm	14:48	9.5	Surface	1.0	0.6	88	28.4	28.4	8.0	8.0	14.1	14.1	92.5	92.5	6.7	6.6	5.8	6.0	6	7	-	-	817198	807832	-	-	-	-
						1.0	0.6	89	28.4		8.0		14.1		92.4		6.6		5.9		6		-				-		-	
					Middle	4.8	0.6	83	28.3	28.3	8.0	8.0	15.5	15.5	91.9	91.9	6.6		5.3		7		-				-		-	
						4.8	0.7	84	28.3		8.0		15.5		91.8		6.6		5.3		6		-				-		-	
					Bottom	8.5	0.4	80	28.1	28.1	7.9	7.9	17.0	17.0	90.2	90.3	6.4	6.4	6.9		8		-				-		-	
						8.5	0.5	80	28.1		7.9		17.0		90.3		6.4		6.9		8		-				-		-	
SR5A	Fine	Calm	15:03	5.2	Surface	1.0	0.0	103	28.8	28.8	8.1	8.1	16.9	16.9	115.6	116.0	8.1	8.2	3.9	4.4	7	7	-	-	816605	810700	-	-	-	-
						1.0	0.0	111	28.8		8.1		16.9		116.4		8.2		4.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.1	78	28.7	28.7	8.1	8.1	17.0	16.9	108.6	108.8	7.6	7.7	4.8		7		-				-		-	
						4.2	0.1	78	28.7		8.1		16.9		109.0		7.7		4.8		7		-				-		-	
SR6	Fine	Calm	15:34	4.9	Surface	1.0	0.1	146	28.3	28.3	7.9	7.9	16.4	16.4	94.0	93.9	6.7	6.7	4.7	6.1	6	6	-	-	817876	814645	-	-	-	-
						1.0	0.1	156	28.3		7.9		16.4		93.8		6.7		4.8		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	80	27.9	27.9	7.9	7.9	17.9	17.9	75.1	75.2	5.3	5.3	7.4		6		-				-		-	
						3.9	0.0	87	27.9		7.9		17.8		75.2		5.3		7.3		6		-				-		-	
SR7	Sunny	Moderate	15:53	16.6	Surface	1.0	0.8	78	27.5	27.5	8.0	8.0	21.3	21.4	83.7	83.6	5.9	5.3	2.2	5.0	3	3	-	-	823625	823740	-	-	-	-
						1.0	0.8	78	27.5		8.0		21.4		83.5		5.9		2.3		3		-				-		-	
					Middle	8.3	0.2	1	26.6	26.6	8.0	8.0	26.6	26.6	66.8	66.7	4.6		5.4		2		-				-		-	
						8.3	0.2	1	26.6		8.0		26.7		66.5		4.6		5.6		2		-				-		-	
					Bottom	15.6	0.4	41	26.5	26.5	8.0	8.0	29.2	29.2	66.3	66.5	4.5	4.6	7.3		3		-				-		-	
						15.6	0.5	43	26.5		8.0		29.2		66.6		4.6		7.3		3		-				-		-	
SR8	Sunny	Moderate	14:39	5.0	Surface	1.0	-	-	27.6	27.6	7.9	7.9	17.5	17.5	86.4	86.4	6.2	6.2	4.1	4.3	5	5	-	-	820384	811645	-	-	-	-
						1.0	-	-	27.6		7.9		17.5		86.3		6.2		4.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.3	27.3	7.9	7.9	18.9	19.0	78.1	77.9	5.6	5.6	4.5		5		-				-		-	
						4.0	-	-	27.3		7.9		19.0		77.6		5.5		4.5		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 20 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	08:45	8.6	Surface	1.0	0.3	54	28.2	28.2	8.0	8.0	15.5	15.5	90.4	90.3	6.5	6.5	4.0	7.1	6	6	85	87	815642	804251	<0.2	<0.2	2.0	2.2
						1.0	0.3	58	28.1		8.0		15.5		90.1		6.5		4.1		6		85				<0.2		2.1	
					Middle	4.3	0.3	49	28.1	28.1	8.0	8.0	15.2	15.2	88.7	88.7	6.4		7.1		6		86				<0.2		2.3	
						4.3	0.3	49	28.1		8.0		15.2		88.6		6.4		7.3		5		87				<0.2		2.2	
					Bottom	7.6	0.2	40	28.1	28.1	8.0	8.0	16.6	16.6	88.5	88.6	6.3	6.3	10.2		5		88				<0.2		2.2	
						7.6	0.3	41	28.1		8.0		16.6		88.6		6.3		10.1		6		88				<0.2		2.1	
C2	Fine	Moderate	09:39	11.6	Surface	1.0	0.4	349	27.4	27.4	7.7	7.7	13.0	13.0	69.5	69.5	5.1	5.0	4.1	6.6	4	4	84	88	825698	806966	<0.2	<0.2	2.2	2.1
						1.0	0.4	353	27.4		7.7		12.9		69.5		5.1		4.2		5		85				<0.2		2.3	
					Middle	5.8	0.4	321	27.2	27.2	7.8	7.8	18.7	18.7	66.9	66.7	4.8		7.4		4		89				<0.2		2.0	
						5.8	0.4	322	27.1		7.8		18.8		66.5		4.8		7.4		4		87				<0.2		2.0	
					Bottom	10.6	0.2	338	27.1	27.1	7.8	7.8	21.1	21.1	66.2	66.4	4.7	4.7	8.2		4		90				<0.2		2.0	
						10.6	0.2	358	27.1		7.8		21.1		66.6		4.7		8.2		4		90				<0.2		1.9	
C3	Fine	Moderate	08:17	12.2	Surface	1.0	0.5	256	27.4	27.4	7.8	7.8	15.2	15.2	74.2	74.2	5.4	5.1	4.0	6.9	4	4	85	88	822125	817779	<0.2	<0.2	1.5	1.5
						1.0	0.5	276	27.4		7.8		15.2		74.1		5.4		4.0		4		86				<0.2		1.6	
					Middle	6.1	0.6	260	26.8	26.8	7.9	7.9	25.0	25.0	67.2	67.4	4.7		3.2		3		89				<0.2		1.4	
						6.1	0.7	277	26.8		7.9		25.0		67.6		4.7		3.2		3		89				<0.2		1.5	
					Bottom	11.2	0.5	291	26.5	26.5	7.9	7.9	27.7	27.7	63.3	63.4	4.4	4.4	14.0		4		90				<0.2		1.6	
						11.2	0.5	308	26.5		7.9		27.7		63.4		4.4		13.1		4		90				<0.2		1.6	
IM1	Fine	Moderate	09:04	5.6	Surface	1.0	0.5	50	28.2	28.2	8.0	8.0	12.7	12.7	90.1	90.2	6.6	6.6	5.7	7.4	5	5	81	83	817943	807150	<0.2	<0.2	1.5	1.5
						1.0	0.5	52	28.2		8.0		12.7		90.2		6.6		5.8		6		81				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.3	21	28.3	28.3	8.0	8.0	13.1	13.1	90.5	90.6	6.6	6.6	9.4		5		85				<0.2		1.4	
						4.6	0.3	22	28.3		8.0		13.1		90.6		6.6		8.9		5		85				<0.2		1.5	
IM2	Fine	Moderate	09:10	8.1	Surface	1.0	0.3	13	28.0	28.0	7.9	7.9	11.6	11.6	87.8	87.8	6.4	6.4	5.9	6.3	5	4	82	86	818168	806174	<0.2	<0.2	1.4	1.4
						1.0	0.3	13	28.0		7.9		11.6		87.8		6.4		5.8		5		83				<0.2		1.4	
					Middle	4.1	0.5	6	28.1	28.1	7.9	7.9	11.9	11.9	87.9	88.0	6.4		4.2		3		86				<0.2		1.4	
						4.1	0.5	6	28.0		7.9		11.9		88.0		6.4		4.3		4		86				<0.2		1.4	
					Bottom	7.1	0.4	351	27.9	28.0	7.8	7.8	15.0	15.0	86.7	86.8	6.3	6.3	8.8		4		88				<0.2		1.3	
						7.1	0.4	323	28.0		7.8		15.0		86.9		6.3		8.6		5		89				<0.2		1.4	
IM3	Fine	Moderate	09:15	8.5	Surface	1.0	0.3	349	28.0	28.0	7.9	7.9	8.5	8.5	88.1	88.1	6.6	6.6	4.8	5.4	4	5	84	86	818773	805608	<0.2	<0.2	1.4	1.4
						1.0	0.3	321	28.0		8.0		8.5		88.1		6.6		4.9		5		84				<0.2		1.3	
					Middle	4.3	0.5	348	28.1	28.1	8.0	8.0	8.7	8.7	87.8	87.8	6.5		3.7		3		85				<0.2		1.3	
						4.3	0.5	352	28.1		8.0		8.7		87.7		6.5		3.7		4		85				<0.2		1.3	
					Bottom	7.5	0.3	345	27.8	27.8	7.8	7.8	16.6	16.6	85.3	85.4	6.1	6.1	7.7		5		88				<0.2		1.4	
						7.5	0.3	351	27.8		7.8		16.6		85.5		6.1		7.6		6		89				<0.2		1.4	
IM4	Fine	Moderate	09:23	8.7	Surface	1.0	0.8	354	27.9	27.9	7.9	7.9	13.5	13.5	82.6	82.6	6.0	6.0	4.4	7.7	4	5	84	86	819718	804591	<0.2	<0.2	1.0	1.1
						1.0	0.8	354	27.9		7.9		13.5		82.5		6.0		4.4		4		85				<0.2		1.1	
					Middle	4.4	0.8	352	27.9	27.9	7.9	7.9	15.4	15.4	82.3	82.3	5.9		6.4		5		86				<0.2		0.8	
						4.4	0.8	324	27.9		7.9		15.4		82.3		5.9		6.5		4		86				<0.2		0.9	
					Bottom	7.7	0.6	358	27.8	27.8	7.9	7.9	17.8	17.8	82.6	82.6	5.9	5.9	12.2		6		88				<0.2		1.3	
						7.7	0.7	329	27.8		7.9		17.8		82.6		5.9		12.3		5		88				<0.2		1.3	
IM5	Fine	Moderate	09:28	7.9	Surface	1.0	0.9	27	28.1	28.1	7.9	7.9	14.4	14.4	84.6	84.7	6.1	6.1	9.3	9.1	3	4	82	84	820713	804878	<0.2	<0.2	1.0	1.3
						1.0	1.0	28	28.1		7.9		14.4		84.7		6.1		9.3		3		82				<0.2		1.2	
					Middle	4.0	0.8	32	28.1	28.1	7.9	7.8	15.2	15.2	84.5	84.6	6.1		7.8		4		84				<0.2		1.3	
						4.0	0.9	35	28.1		7.8		15.2		84.6		6.1		8.5		4		85				<0.2		1.5	
					Bottom	6.9	0.6	40	28.1	28.2	7.9	7.9	16.4	16.4	85.9	86.1	6.1	6.1	10.0		4		86				<0.2		1.4	
						6.9	0.7	42	28.2		7.9		16.3		86.2		6.1		9.7		4		87				<0.2		1.4	
IM6	Fine	Moderate	09:33	8.4	Surface	1.0	0.6	3	28.3	28.3	7.9	7.9	15.9	15.9	87.3	87.3	6.2	6.2	5.6	7.2	5	5	83	85	821071	805818	<0.2	<0.2	1.4	1.5
						1.0	0.6	3	28.3		7.9		15.9		87.3		6.2		5.7		6		83				<0.2		1.5	
					Middle	4.2	0.6	358	28.3	28.3	7.9	7.9	16.3	16.3	87.6	87.7	6.2		7.1		3		85				<0.2		1.5	
						4.2	0.6	329	28.3		7.9		16.3		87.7		6.2		7.5		4		85				<0.2		1.5	
					Bottom	7.4	0.4	13	28.3	28.3	7.8	7.8	17.4	17.4	87.9	88.0	6.2	6.2	8.5		6		88				<0.2		1.6	
						7.4	0.4	14	28.3		7.8		17.4		88.0		6.2		8.5		5		88				<0.2		1.6	
IM7	Fine	Moderate	09:39	9.6	Surface	1.0	0.2	151	28.4	28.4	7.9	7.9	15.3	15.3	88.5	88.5	6.3	6.3	4.5	5.7	5	5	84	86	821347	806842	<0.2	<0.2	1.4	1.5
						1.0	0.2	166	28.4		7.9		15.3		88.5		6.3		4.5		6		84				<0.2		1.6	
					Middle	4.8	0.2	62	28.4	28.4	7.9	7.9	15.4	15.4	88.6	88.6	6.3		6.7		4		86				<0.2		1.6	
						4.8	0.2	63	28.4		7.9		15.4		88.6		6.3		6.8		5		86				<0.2		1.4	
					Bottom	8.6	0.3	85	28.3	28.3	7.9	7.9	16.4	16.4	89.2	89.3	6.3	6.4	5.7		5		89				<0.2		1.5	
						8.6	0.4	92	28.3		7.9		16.4		89.4		6.4		5.7		5		89				<0.2		1.4	
IM8	Fine	Moderate	09:26	7.5	Surface	1.0	0.1	290	27.6	27.6	7.7	7.7	13.0	13.0	75.5	75.5	5.5	5.4	4.4	9.0	4	4	85	88	821831	808132	<0.2	<0.2	1.8	1.7
						1.0	0.2	315	27.6		7.7		13.0		75.4		5.5		4.5		4		86				<0.2		1.7	
					Middle	3.8	0.4	111	27.4	27.4	7.8	7.8	15.8	15.7	72.8	72.7	5.3		9.2		2		87				<0.2		1.6	
						3.8	0.4	113	27.4		7.8		15.7		72.6		5.3		9.2		<2		88				<0.2		1.6	
					Bottom	6.5	0.1	279	27.4	27.4	7.8	7.8	18.1	18.1	72.0	72.0	5.2	5.2	13.4		5		90				<0.2		1.6	
						6.5	0.1	299	27.4		7.8		18.1		72.0		5.2		13.4		4		90				<0.2		1.8	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Fine	Moderate	09:21	7.4	Surface	1.0	0.2	244	27.5	27.5	7.7	7.7	12.3	12.3	74.2	74.2	5.5	5.4	4.8	6.9	4	4	85	88	822113	808787	<0.2	<0.2	1.7	1.7
						1.0	0.2	263	27.5		7.7		12.3		74.1		5.5		5.0		5		86				<0.2		1.6	
					Middle	3.7	0.0	29	27.4	27.4	7.8	7.8	14.8	14.7	73.1	73.0	5.3		6.7		4		88				<0.2		1.7	
						3.7	0.0	30	27.4		7.8		14.7		72.9		5.3		7.0		4		89				<0.2		1.6	
					Bottom	6.4	0.2	81	27.4	27.4	7.8	7.8	16.9	17.0	72.4	72.5	5.2	5.2	9.0		4		90				<0.2		1.9	
						6.4	0.2	87	27.4		7.8		17.0		72.5		5.2		9.3		4		91				<0.2		1.8	
IM10	Fine	Moderate	09:15	7.4	Surface	1.0	0.7	310	27.5	27.5	7.8	7.8	14.5	14.5	79.3	79.3	5.8	5.6	5.3	7.8	6	5	84	87	822382	809805	<0.2	<0.2	1.5	1.4
						1.0	0.7	323	27.5		7.8		14.5		79.3		5.8		5.2		6		85				<0.2		1.5	
					Middle	3.7	0.8	298	27.4	27.4	7.8	7.8	16.2	16.1	74.1	74.1	5.4		7.5		5		87				<0.2		1.4	
						3.7	0.8	313	27.3		7.8		16.1		74.0		5.4		7.5		4		88				<0.2		1.4	
					Bottom	6.4	0.5	279	27.2	27.2	7.8	7.8	18.8	18.9	69.2	69.4	4.9	5.0	10.8		5		90				<0.2		1.3	
						6.4	0.6	302	27.2		7.8		18.9		69.6		5.0		10.8		4		90				<0.2		1.5	
IM11	Fine	Moderate	09:09	7.7	Surface	1.0	0.8	294	27.4	27.4	7.8	7.8	15.4	15.4	74.1	74.0	5.4	5.0	3.8	8.9	4	4	85	88	822053	811451	<0.2	<0.2	1.6	1.8
						1.0	0.9	315	27.4		7.8		15.4		73.9		5.4		3.8		4		86				<0.2		1.8	
					Middle	3.9	0.5	281	27.0	27.0	7.8	7.8	21.3	21.2	63.5	63.5	4.5		9.4		3		87				<0.2		1.6	
						3.9	0.5	293	27.0		7.8		21.2		63.5		4.5		9.3		4		89				<0.2		1.7	
					Bottom	6.7	0.3	303	26.9	26.9	7.8	7.8	22.5	22.5	61.1	61.1	4.3	4.3	13.6		4		90				<0.2		1.8	
						6.7	0.3	330	26.9		7.8		22.5		61.1		4.3		13.7		3		90				<0.2		2.0	
IM12	Fine	Moderate	09:04	8.1	Surface	1.0	0.8	291	27.7	27.7	7.8	7.8	14.5	14.5	77.6	77.6	5.6	5.1	5.6	9.3	4	4	86	88	821479	812024	<0.2	<0.2	1.7	1.6
						1.0	0.8	307	27.7		7.8		14.5		77.5		5.6		5.5		4		84				<0.2		1.8	
					Middle	4.1	0.5	277	27.1	27.1	7.8	7.8	19.8	19.8	64.6	64.4	4.6		10.1		4		87				<0.2		1.6	
						4.1	0.5	301	27.1		7.8		19.8		64.2		4.6		10.1		3		89				<0.2		1.5	
					Bottom	7.1	0.3	290	26.9	26.9	7.8	7.8	22.8	22.8	62.9	63.1	4.4	4.5	12.3		3		90				<0.2		1.4	
						7.1	0.3	303	26.9		7.8		22.8		63.3		4.5		12.3		4		91				<0.2		1.7	
SR1A	Fine	Moderate	08:46	5.2	Surface	1.0	-	-	27.6	27.6	7.8	7.8	13.2	13.2	80.4	80.3	5.9	5.9	3.9	4.3	2	3	-	-	819981	812662	-	-	-	-
						1.0	-	-	27.6		7.8		13.2		80.1		5.9		4.0		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.5	27.5	7.8	7.8	15.8	15.8	78.6	78.7	5.7	5.7	4.7		4		-				-		-	
						4.2	-	-	27.5		7.8		15.8		78.7		5.7		4.6		4		-				-		-	
SR2	Fine	Moderate	08:36	5.1	Surface	1.0	0.3	306	27.3	27.3	7.8	7.8	16.6	16.5	71.5	71.6	5.2	5.2	6.7	10.5	7	5	86	88	821480	814179	<0.2	<0.2	2.0	1.9
						1.0	0.4	331	27.3		7.8		16.3		71.6		5.2		7.2		6		86				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	291	27.1	27.1	7.8	7.8	20.4	20.4	68.2	68.3	4.8	4.9	14.0		4		89				<0.2		1.8	
						4.1	0.4	304	27.1		7.8		20.4		68.3		4.9		14.1		3		90				<0.2		1.8	
SR3	Fine	Moderate	09:32	8.3	Surface	1.0	0.2	302	27.5	27.5	7.7	7.7	11.7	11.7	72.0	71.9	5.3	5.3	4.0	4.7	3	4	-	-	822157	807579	-	-	-	-
						1.0	0.2	314	27.5		7.8		11.7		71.8		5.3		4.0		3		-				-		-	
					Middle	4.2	0.1	323	27.4	27.4	7.8	7.8	14.5	14.5	71.5	71.6	5.2		4.5		3		-				-		-	
						4.2	0.1	324	27.4		7.8		14.5		71.7		5.2		4.9		3		-				-		-	
					Bottom	7.3	0.2	52	27.4	27.4	7.8	7.8	16.9	16.9	72.4	72.5	5.2	5.2	5.5		5		-				-		-	
						7.3	0.2	57	27.4		7.8		16.9		72.5		5.2		5.4		4		-				-		-	
SR4A	Fine	Moderate	08:21	9.7	Surface	1.0	0.2	253	28.5	28.5	8.0	8.0	17.0	17.0	94.2	94.2	6.7	6.6	5.0	5.0	6	6	-	-	817186	807793	-	-	-	-
						1.0	0.2	277	28.5		8.0		17.0		94.1		6.6		5.1		6		-				-		-	
					Middle	4.9	0.1	284	28.5	28.5	8.0	8.0	16.3	16.3	93.0	92.9	6.6		5.7		6		-				-		-	
						4.9	0.1	291	28.4		8.0		16.3		92.7		6.6		5.7		6		-				-		-	
					Bottom	8.7	0.1	238	28.3	28.3	7.9	7.9	17.0	17.0	91.9	92.0	6.5	6.5	4.2		7		-				-		-	
						8.7	0.1	261	28.3		7.9		17.0		92.1		6.5		4.1		7		-				-		-	
SR5A	Fine	Calm	08:05	5.7	Surface	1.0	0.1	296	28.7	28.7	7.9	7.9	16.5	16.5	98.0	98.0	6.9	6.9	4.4	4.5	6	6	-	-	816593	810712	-	-	-	-
						1.0	0.1	321	28.7		7.9		16.5		97.9		6.9		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	309	28.7	28.8	7.9	7.9	15.6	15.5	97.4	97.5	6.9	6.9	4.3		5		-				-		-	
						4.7	0.1	323	28.8		7.9		15.5		97.5		6.9		4.4		6		-				-		-	
SR6	Fine	Calm	07:40	5.0	Surface	1.0	0.0	243	28.5	28.5	7.6	7.6	14.3	14.3	90.9	91.1	6.5	6.5	4.5	3.4	5	5	-	-	817896	814665	-	-	-	-
						1.0	0.0	246	28.5		7.6		14.3		91.2		6.5		4.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	232	28.6	28.6	7.6	7.5	11.0	11.0	93.4	93.4	6.8	6.8	2.4		3		-				-		-	
						4.0	0.1	238	28.6		7.5		11.0		93.4		6.8		2.3		4		-				-		-	
SR7	Fine	Moderate	07:49	16.4	Surface	1.0	0.2	217	27.4	27.4	7.8	7.8	16.1	16.1	80.2	80.2	5.8	5.3	3.2	2.9	3	4	-	-	823620	823740	-	-	-	-
						1.0	0.2	231	27.4		7.8		16.1		80.2		5.8		3.2		3		-				-		-	
					Middle	8.2	0.2	247	26.9	26.9	7.8	7.8	23.3	23.3	68.7	68.7	4.8		2.8		4		-				-		-	
						8.2	0.2	249	26.9		7.8		23.3		68.7		4.8		2.7		4		-				-		-	
					Bottom	15.4	0.2	240	26.5	26.5	7.9	7.9	28.0	28.0	64.0	64.1	4.4	4.4	2.8		5		-				-		-	
						15.4	0.2	240	26.5		7.9		28.0		64.1		4.4		2.9		4		-				-		-	
SR8	Fine	Moderate	08:54	5.0	Surface	1.0	-	-	27.7	27.8	7.8	7.8	14.0	13.9	91.6	91.7	6.7	6.7	4.6	4.7	6	5	-	-	820404	811626	-	-	-	-
						1.0	-	-	27.8		7.8		13.9		91.8		6.7		4.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.9	27.9	7.9	7.9	14.4	14.4	93.5	93.7	6.8	6.8	4.9		4		-				-		-	
						4.0	-	-	27.9		7.9		14.4		93.9		6.8		4.7		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 22 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	15:35	8.8	Surface	1.0	0.2	150	28.4	28.4	7.8	7.8	12.4	12.5	92.2	92.0	6.7	5.5	4.9	8.1	4	5	84	88	815619	804239	<0.2	<0.2	1.1	1.1
						1.0	0.2	155	28.3		7.8		12.5		91.8		6.7		5.1		4		85				<0.2		1.1	
					Middle	4.4	0.1	142	27.1	27.1	7.8	7.8	26.8	26.8	61.6	61.6	4.2		9.0		5		87				<0.2		1.2	
						4.4	0.1	154	27.1		7.8		26.8		61.5		4.2		9.3		5		87				<0.2		1.1	
					Bottom	7.8	0.3	144	27.0	27.0	7.8	7.8	28.4	28.4	59.9	60.0	4.1	4.1	10.1		6		91				<0.2		1.1	
						7.8	0.3	146	27.0		7.8		28.4		60.0		4.1		10.1		5		91				<0.2		1.1	
C2	Sunny	Moderate	14:29	11.5	Surface	1.0	0.4	159	29.2	29.2	7.7	7.7	10.4	10.4	90.2	90.2	6.5	6.0	9.9	10.4	4	4	87	89	825659	806927	<0.2	<0.2	1.7	1.6
						1.0	0.5	138	29.2		7.7		10.4		90.1		6.5		9.8		3		86				<0.2		1.8	
					Middle	5.8	0.5	136	28.4	28.4	7.7	7.7	18.9	18.9	78.6	78.6	5.5		9.7		3		88				<0.2		1.9	
						5.8	0.5	129	28.4		7.7		18.9		78.5		5.5		9.7		4		88				<0.2		1.7	
					Bottom	10.5	0.5	144	28.1	28.1	7.7	7.7	21.1	21.1	71.7	71.8	5.0	5.0	11.6		4		92				<0.2		1.2	
						10.5	0.5	136	28.1		7.7		21.1		71.8		5.0		11.4		4		91				<0.2		1.1	
C3	Sunny	Moderate	16:25	10.8	Surface	1.0	0.5	68	29.7	29.7	8.0	8.0	12.5	12.5	124.9	124.8	8.9	7.5	9.8	9.2	3	4	85	87	822126	817824	<0.2	<0.2	1.4	1.4
						1.0	0.5	68	29.7		8.0		12.5		124.7		8.9		9.9		4		85				<0.2		1.3	
					Middle	5.4	0.2	70	28.3	28.3	7.8	7.8	21.2	21.2	88.3	88.3	6.1		8.8		4		87				<0.2		1.4	
						5.4	0.2	71	28.3		7.8		21.2		88.2		6.1		8.7		3		86				<0.2		1.4	
					Bottom	9.8	0.1	58	27.9	27.9	7.7	7.7	23.5	23.4	80.6	80.7	5.6	5.6	9.0		3		89				<0.2		1.3	
						9.8	0.1	52	27.9		7.7		23.4		80.7		5.6		9.0		4		89				<0.2		1.5	
IM1	Cloudy	Moderate	15:22	5.4	Surface	1.0	0.1	235	28.3	28.3	7.9	7.9	11.8	11.8	108.9	108.9	7.9	7.9	4.2	4.3	4	3	83	87	817926	807131	<0.2	<0.2	1.1	1.2
						1.0	0.1	237	28.3		7.9		11.8		108.8		7.9		4.2		2		85				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.2	248	28.3	28.3	7.9	7.9	12.0	12.0	108.0	108.0	7.9	7.9	4.3		3		88				<0.2		1.1	
						4.4	0.2	249	28.3		7.9		12.1		108.0		7.9		4.3		4		90				<0.2		1.2	
IM2	Cloudy	Moderate	15:16	7.6	Surface	1.0	0.3	241	28.4	28.4	7.9	7.9	12.1	12.1	104.6	104.5	7.6	7.5	4.0	5.8	2	4	84	87	818149	806162	<0.2	<0.2	1.0	1.0
						1.0	0.3	242	28.3		7.9		12.1		104.3		7.6		4.1		4		86				<0.2		1.1	
					Middle	3.8	0.3	202	28.2	28.2	7.9	7.9	12.4	12.4	100.8	100.7	7.3		5.0		4		87				<0.2		1.1	
						3.8	0.3	202	28.2		7.9		12.4		100.5		7.3		5.3		4		88				<0.2		1.0	
					Bottom	6.6	0.1	209	27.9	28.0	7.8	7.8	15.7	16.2	86.7	86.6	6.2	6.2	8.1		4		89				<0.2		0.9	
						6.6	0.2	217	28.0		7.8		16.6		86.5		6.2		8.1		4		90				<0.2		1.0	
IM3	Cloudy	Moderate	15:08	7.7	Surface	1.0	0.3	214	28.3	28.3	7.8	7.8	11.4	11.4	99.3	99.2	7.3	6.7	4.4	7.2	3	4	84	88	818783	805577	<0.2	<0.2	1.3	1.2
						1.0	0.4	211	28.3		7.8		11.4		99.0		7.2		4.6		4		85				<0.2		1.2	
					Middle	3.9	0.4	207	28.0	28.0	7.8	7.8	15.8	15.9	85.1	84.9	6.1		7.0		3		90				<0.2		1.2	
						3.9	0.4	228	28.0		7.8		15.9		84.6		6.1		7.1		4		87				<0.2		1.2	
					Bottom	6.7	0.2	213	27.7	27.7	7.8	7.8	19.9	19.8	74.9	75.0	5.3	5.3	10.0		5		90				<0.2		1.1	
						6.7	0.2	218	27.7		7.8		19.8		75.0		5.3		10.0		6		90				<0.2		1.1	
IM4	Cloudy	Moderate	14:58	7.7	Surface	1.0	0.5	228	28.3	28.3	7.8	7.8	10.2	10.2	97.5	97.4	7.2	6.9	4.1	5.9	3	3	83	87	819742	804627	<0.2	<0.2	1.1	1.2
						1.0	0.5	207	28.2		7.8		10.2		97.3		7.2		4.1		3		85				<0.2		1.1	
					Middle	3.9	0.6	204	28.1	28.1	7.7	7.7	12.7	12.7	90.8	90.8	6.6		4.2		3		89				<0.2		1.3	
						3.9	0.6	198	28.1		7.8		12.7		90.7		6.6		4.2		2		88				<0.2		1.2	
					Bottom	6.7	0.4	204	27.7	27.7	7.8	7.8	19.1	19.1	78.0	77.9	5.5	5.5	9.4		3		89				<0.2		1.1	
						6.7	0.4	208	27.7		7.8		19.1		77.7		5.5		9.4		3		89				<0.2		1.1	
IM5	Cloudy	Moderate	14:48	7.6	Surface	1.0	0.7	209	28.3	28.3	7.8	7.8	10.3	10.3	96.0	96.0	7.1	7.0	4.3	7.3	3	4	84	88	820735	804847	<0.2	<0.2	1.1	1.2
						1.0	0.8	220	28.3		7.8		10.3		95.9		7.1		4.3		3		86				<0.2		1.0	
					Middle	3.8	0.8	192	28.2	28.2	7.8	7.8	13.5	13.5	94.5	94.4	6.8		4.6		4		89				<0.2		1.4	
						3.8	0.8	199	28.2		7.8		13.5		94.3		6.8		4.6		3		88				<0.2		1.2	
					Bottom	6.6	0.7	197	27.7	27.7	7.8	7.8	20.8	20.9	77.2	77.3	5.4	5.4	12.8		4		90				<0.2		1.2	
						6.6	0.7	191	27.6		7.8		20.9		77.4		5.4		12.9		4		90				<0.2		1.1	
IM6	Cloudy	Moderate	14:38	7.8	Surface	1.0	0.3	192	28.4	28.4	7.9	7.9	12.8	12.9	102.4	102.4	7.4	7.2	5.0	7.2	4	5	83	87	821073	805807	<0.2	<0.2	1.4	1.3
						1.0	0.4	188	28.3		7.9		12.9		102.3		7.4		5.0		4		85				<0.2		1.3	
					Middle	3.9	0.3	190	28.2	28.2	7.8	7.8	13.5	13.5	97.4	97.2	7.0		5.5		5		86				<0.2		1.3	
						3.9	0.4	187	28.2		7.8		13.5		97.0		7.0		5.5		4		88				<0.2		1.5	
					Bottom	6.8	0.3	186	27.7	27.7	7.8	7.8	20.7	20.7	79.7	79.9	5.6	5.6	11.4		5		90				<0.2		1.3	
						6.8	0.3	188	27.7		7.8		20.7		80.1		5.6		11.0		5		91				<0.2		1.2	
IM7	Cloudy	Moderate	14:28	8.1	Surface	1.0	0.6	184	28.2	28.2	7.8	7.8	10.4	10.4	99.4	99.4	7.3	7.0	5.0	7.7	4	4	85	88	821326	806827	<0.2	<0.2	1.3	1.4
						1.0	0.6	186	28.2		7.8		10.4		99.3		7.3		5.0		4		86				<0.2		1.4	
					Middle	4.1	0.4	166	28.1	28.1	7.8	7.8	14.5	14.5	92.4	92.2	6.7		7.0		5		87				<0.2		1.4	
						4.1	0.5	168	28.0		7.8		14.5		91.9		6.6		7.5		4		87				<0.2		1.3	
					Bottom	7.1	0.3	169	27.8	27.8	7.8	7.8	18.8	18.8	80.3	80.4	5.7	5.7	10.7		4		91				<0.2		1.4	
						7.1	0.3	172	27.8		7.8		18.8		80.5		5.7		10.8		5		91				<0.2		1.3	
IM8	Sunny	Moderate	14:56	8.0	Surface	1.0	0.3	174	29.0	29.0	7.8	7.8	10.6	10.5	101.3	101.3	7.4	7.1	10.5	10.6	3	3	83	85	821847	808140	<0.2	<0.2	1.7	1.6
						1.0	0.3	176	29.0		7.8		10.5		101.2		7.4		10.5		3		83				<0.2		1.6	
					Middle	4.0	0.3	168	28.9	28.9	7.7	7.7	12.8	12.8	94.5	94.5	6.8		10.4		3		85				<0.2		1.6	
						4.0	0.3	170	28.9		7.7		12.8		94.4		6.8		10.4		3		85				<0.2		1.5	
					Bottom	7.0	0.2	179	28.8	28.8	7.6	7.6	14.5	14.5	88.3	88.3	6.3	6.3	10.8		3		87				<0.2		1.5	
						7.0	0.2	182	28.8		7.6		14.5		88.2		6.3		10.7		3		87				<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 22 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	Moderate	15:03	7.6	Surface	1.0	0.5	164	29.2	29.2	7.8	7.8	9.6	9.6	102.4	102.3	7.4	7.1	10.4	12.0	2	3	83	86	822100	808829	<0.2	<0.2	1.7	1.8
						1.0	0.5	166	29.2		7.8		9.6		102.1		7.4		10.4		3		84				<0.2		1.7	
					Middle	3.8	0.3	153	28.9	28.9	7.7	7.7	13.9	13.9	94.1	94.2	6.7		11.6		3		85				<0.2		2.0	
						3.8	0.3	155	28.9		7.7		13.9		94.3		6.7		11.6		2		87				<0.2		1.9	
					Bottom	6.6	0.2	164	28.6	28.6	7.6	7.6	16.5	16.5	81.7	81.8	5.8	5.8	14.1		2		88				<0.2		1.6	
						6.6	0.3	168	28.6		7.6		16.5		81.8		5.8		14.1		3		88				<0.2		1.7	
IM10	Sunny	Moderate	15:11	8.4	Surface	1.0	0.5	163	29.4	29.4	7.8	7.8	12.0	12.0	108.8	108.8	7.8	7.9	9.8	10.8	3	4	85	87	822403	809782	<0.2	<0.2	1.6	1.5
						1.0	0.5	166	29.4		7.8		12.0		108.7		7.8		9.8		4		85				<0.2		1.5	
					Middle	4.2	0.3	141	29.1	29.1	7.9	7.9	13.2	13.2	111.8	111.8	8.0		10.9		4		86				<0.2		1.5	
						4.2	0.3	157	29.1		7.9		13.2		111.8		8.0		10.9		3		87				<0.2		1.5	
					Bottom	7.4	0.3	146	28.9	28.8	7.8	7.8	14.9	14.9	98.0	98.0	7.0	7.0	11.7		3		88				<0.2		1.5	
						7.4	0.3	128	28.8		7.8		14.9		97.9		7.0		11.6		4		88				<0.2		1.6	
IM11	Sunny	Moderate	15:23	8.9	Surface	1.0	0.1	171	29.2	29.2	7.7	7.7	13.7	13.7	103.3	103.3	7.3	6.9	9.7	10.7	4	4	83	86	822035	811441	<0.2	<0.2	2.1	1.9
						1.0	0.1	178	29.2		7.7		13.7		103.2		7.3		9.7		3		84				<0.2		2.1	
					Middle	4.5	0.1	155	28.8	28.8	7.7	7.7	15.0	14.9	90.2	90.2	6.4		10.1		3		85				<0.2		1.7	
						4.5	0.1	156	28.8		7.7		14.9		90.1		6.4		10.1		4		86				<0.2		1.9	
					Bottom	7.9	0.1	173	28.1	28.1	7.6	7.6	21.7	21.7	76.6	76.6	5.3	5.3	12.6		3		88				<0.2		1.9	
						7.9	0.2	174	28.1		7.6		21.7		76.6		5.3		12.2		4		87				<0.2		1.9	
IM12	Sunny	Moderate	15:31	8.3	Surface	1.0	0.1	150	29.2	29.2	7.8	7.8	13.9	13.8	103.5	103.6	7.4	6.6	10.0	11.2	3	3	83	86	821435	812029	<0.2	<0.2	1.6	1.6
						1.0	0.1	154	29.2		7.8		13.8		103.7		7.4		10.0		3		83				<0.2		1.6	
					Middle	4.2	0.0	171	28.4	28.4	7.6	7.6	19.5	19.5	81.6	81.7	5.7		10.8		3		85				<0.2		1.4	
						4.2	0.0	175	28.4		7.6		19.5		81.7		5.7		10.8		3		86				<0.2		1.5	
					Bottom	7.3	0.2	137	28.3	28.3	7.6	7.6	20.7	20.7	76.9	77.0	5.3	5.4	12.7		4		88				<0.2		1.6	
						7.3	0.2	140	28.3		7.6		20.7		77.1		5.4		12.6		4		89				<0.2		1.6	
SR1A	Sunny	Moderate	15:55	5.6	Surface	1.0	-	-	29.3	29.3	7.8	7.8	13.6	13.6	105.9	105.9	7.5	7.5	9.8	10.5	4	5	-	-	819972	812656	-	-	-	-
						1.0	-	-	29.3		7.8		13.5		105.9		7.5		9.8		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	28.3	28.3	7.6	7.6	20.3	20.3	82.4	82.6	5.7	5.8	11.2		5		-				-		-	
						4.6	-	-	28.3		7.6		20.3		82.7		5.8		11.2		5		-				-		-	
SR2	Sunny	Moderate	16:04	4.6	Surface	1.0	0.3	144	29.1	29.1	7.8	7.8	14.9	14.9	104.4	104.3	7.4	7.4	10.1	10.2	4	4	83	84	821461	814183	<0.2	<0.2	1.8	1.8
						1.0	0.3	149	29.1		7.8		14.9		104.1		7.4		10.1		4		83				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	127	28.4	28.4	7.7	7.7	20.0	20.0	81.4	81.4	5.7	5.7	10.3		4		84				<0.2		1.8	
						3.6	0.2	129	28.4		7.7		20.0		81.3		5.7		10.3		5		85				<0.2		1.8	
SR3	Sunny	Moderate	14:49	8.8	Surface	1.0	0.4	175	28.8	28.8	7.6	7.6	8.9	8.9	98.5	98.6	7.2	7.1	10.7	10.6	4	5	-	-	822128	807580	-	-	-	-
						1.0	0.5	177	28.8		7.6		8.9		98.6		7.2		10.7		5		-				-		-	
					Middle	4.4	0.2	176	28.9	28.9	7.7	7.7	13.2	13.2	95.7	95.7	6.9		10.3		5		-				-		-	
						4.4	0.3	181	28.9		7.7		13.2		95.6		6.9		10.3		5		-				-		-	
					Bottom	7.8	0.2	163	28.8	28.8	7.7	7.7	14.5	14.5	92.3	92.4	6.6	6.6	10.8		5		-				-		-	
						7.8	0.2	168	28.8		7.7		14.6		92.4		6.6		10.8		4		-				-		-	
SR4A	Cloudy	Calm	15:49	8.5	Surface	1.0	0.6	89	28.5	28.5	8.0	8.0	11.6	11.6	116.1	116.1	8.4	8.0	4.3	6.7	4	5	-	-	817173	807786	-	-	-	-
						1.0	0.6	95	28.5		8.0		11.6		116.1		8.4		4.4		3		-				-		-	
					Middle	4.3	0.6	88	28.4	28.4	7.9	7.9	12.1	12.1	104.0	103.9	7.6		6.3		5		-				-		-	
						4.3	0.6	88	28.4		7.9		12.1		103.7		7.5		6.5		5		-				-		-	
					Bottom	7.5	0.4	82	27.9	27.9	7.8	7.8	15.4	15.4	87.8	86.9	6.3	6.3	9.2		7		-				-		-	
						7.5	0.4	84	27.9		7.8		15.5		86.0		6.2		9.3		6		-				-		-	
SR5A	Cloudy	Calm	16:03	4.7	Surface	1.0	0.0	100	28.6	28.6	8.0	8.0	14.9	14.9	118.3	118.3	8.4	8.4	6.5	7.2	5	7	-	-	816595	810672	-	-	-	-
						1.0	0.0	104	28.6		8.0		14.9		118.2		8.4		6.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	0	28.5	28.5	8.0	8.0	16.3	16.3	111.5	111.6	7.9	7.9	7.8		9		-				-		-	
						3.7	0.1	0	28.5		8.0		16.3		111.7		7.9		7.8		8		-				-		-	
SR6	Cloudy	Calm	16:27	4.5	Surface	1.0	0.1	143	28.5	28.5	7.9	7.9	14.5	14.5	107.7	107.9	7.7	7.7	9.6	8.0	8	9	-	-	817875	814650	-	-	-	-
						1.0	0.1	148	28.5		7.9		14.5		108.0		7.7		9.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	84	28.2	28.2	7.8	7.8	15.7	15.7	98.7	98.8	7.1	7.1	6.6		10		-				-		-	
						3.5	0.0	90	28.2		7.8		15.6		98.8		7.1		6.4		11		-				-		-	
SR7	Sunny	Moderate	16:55	14.6	Surface	1.0	0.5	70	29.0	29.0	7.8	7.8	16.8	16.8	107.1	107.1	7.5	6.4	9.0	9.0	3	4	-	-	823621	823734	-	-	-	-
						1.0	0.5	74	29.0		7.8		16.8		107.1		7.5		9.0		3		-				-		-	
					Middle	7.3	0.3	44	27.9	27.9	7.7	7.7	25.3	25.3	77.6	77.6	5.3		8.8		3		-				-		-	
						7.3	0.3	45	27.9		7.7		25.3		77.6		5.3		8.8		4		-				-		-	
					Bottom	13.6	0.3	78	27.2	27.2	7.7	7.7	29.0	29.0	64.3	64.3	4.3	4.3	9.1		4		-				-		-	
						13.6	0.3	79	27.2		7.7		29.0		64.3		4.3		9.1		4		-				-		-	
SR8	Sunny	Moderate	15:44	4.3	Surface	1.0	-	-	28.9	28.9	7.7	7.7	15.3	15.3	95.8	95.8	6.8	6.8	10.0	10.2	4	4	-	-	820399	811600	-	-	-	-
						1.0	-	-	28.9		7.7		15.3		95.8		6.8		10.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.7	28.7	7.7	7.7	16.7	16.7	92.0	92.1	6.5	6.5	10.3		4		-				-		-	
						3.3	-	-	28.7		7.7		16.8		92.2		6.5		10.3		4		-				-		-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 22 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:53	8.8	Surface	1.0	0.4	39	28.1	28.1	7.8	7.8	11.0	11.0	97.9	98.0	7.2	7.1	4.4	4.8	4	4	84	87	815600	804256	<0.2	<0.2	1.0	1.0
						1.0	0.4	41	28.1		7.8		11.0		98.0		7.2		4.4		4		86				<0.2		1.0	
					Middle	4.4	0.3	28	28.2	28.2	7.8	7.8	13.0	13.0	97.1	97.1	7.1		4.5		4		86				<0.2		1.0	
						4.4	0.4	30	28.2		7.8		13.0		97.0		7.0		4.5		4		86				<0.2		1.0	
					Bottom	7.8	0.3	359	28.0	28.0	7.8	7.8	14.6	14.6	88.9	88.6	6.4	6.4	5.6		4		90				<0.2		1.1	
						7.8	0.3	23	28.0		7.8		14.6		88.3		6.4		5.4		5		89				<0.2		1.0	
C2	Sunny	Moderate	10:23	11.0	Surface	1.0	0.5	352	29.2	29.2	7.7	7.7	10.4	10.4	90.1	90.1	6.5	6.0	9.6	14.3	2	3	87	89	825690	806953	<0.2	<0.2	1.7	1.8
						1.0	0.5	324	29.2		7.7		10.4		90.1		6.5		9.6		3		87				<0.2		1.9	
					Middle	5.5	0.5	334	28.5	28.5	7.7	7.7	18.7	18.8	77.4	77.4	5.4		10.4		3		89				<0.2		2.0	
						5.5	0.5	338	28.5		7.7		18.8		77.3		5.4		10.4		2		90				<0.2		1.9	
					Bottom	10.0	0.4	342	28.0	28.0	7.7	7.7	21.9	21.9	65.6	65.7	4.6	4.6	23.0		2		92				<0.2		1.8	
						10.0	0.4	345	28.0		7.7		21.9		65.7		4.6		22.8		3		91				<0.2		1.6	
C3	Sunny	Moderate	08:29	10.8	Surface	1.0	0.3	268	29.0	29.0	7.8	7.8	12.8	12.8	93.8	93.8	6.7	6.4	9.8	9.3	3	4	85	89	822112	817781	<0.2	<0.2	2.0	1.8
						1.0	0.3	282	29.0		7.8		12.8		93.7		6.7		9.8		4		85				<0.2		2.0	
					Middle	5.4	0.3	260	28.7	28.7	7.8	7.8	17.6	17.6	86.5	86.5	6.1		9.3		4		90				<0.2		1.8	
						5.4	0.3	276	28.7		7.8		17.6		86.4		6.1		9.3		3		90				<0.2		1.7	
					Bottom	9.8	0.3	285	27.8	27.8	7.9	7.9	25.0	25.0	74.7	74.8	5.1	5.1	8.8		4		90				<0.2		1.7	
						9.8	0.4	305	27.8		7.9		25.0		74.9		5.1		8.8		3		91				<0.2		1.8	
IM1	Cloudy	Moderate	10:04	5.8	Surface	1.0	0.3	26	28.0	28.0	7.8	7.8	10.5	10.5	96.3	96.4	7.1	7.1	4.5	4.5	4	4	84	87	817966	807120	<0.2	<0.2	1.5	1.4
						1.0	0.3	26	28.0		7.8		10.5		96.5		7.1		4.5		3		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.2	349	28.1	28.1	7.8	7.8	11.5	11.5	97.7	97.8	7.2	7.2	4.4		4		90				<0.2		1.4	
						4.8	0.2	321	28.1		7.8		11.5		97.8		7.2		4.4		4		88				<0.2		1.4	
IM2	Cloudy	Moderate	10:10	7.6	Surface	1.0	0.4	40	28.0	28.0	7.8	7.8	10.4	10.4	94.6	94.7	7.0	7.1	4.6	5.4	2	3	86	88	818172	806178	<0.2	<0.2	1.6	1.6
						1.0	0.4	42	28.0		7.8		10.4		94.8		7.0		4.6		3		84				<0.2		1.6	
					Middle	3.8	0.4	6	28.2	28.2	7.8	7.8	12.7	12.7	97.2	97.1	7.1		4.5		3		89				<0.2		1.5	
						3.8	0.4	6	28.2		7.8		12.7		97.0		7.1		4.5		4		88				<0.2		1.5	
					Bottom	6.6	0.4	333	28.1	28.1	7.8	7.8	14.1	14.2	89.3	89.2	6.5	6.5	7.2		4		90				<0.2		1.5	
						6.6	0.5	357	28.0		7.8		14.2		89.0		6.4		7.2		4		89				<0.2		1.6	
IM3	Cloudy	Moderate	10:16	7.8	Surface	1.0	0.3	20	28.1	28.1	7.7	7.7	10.6	10.6	94.3	94.3	7.0	7.0	4.4	7.6	2	3	83	87	818790	805576	<0.2	<0.2	1.2	1.3
						1.0	0.3	20	28.1		7.7		10.6		94.3		7.0		4.4		3		85				<0.2		1.3	
					Middle	3.9	0.5	353	28.2	28.2	7.8	7.8	13.2	13.2	95.1	95.1	6.9		4.6		3		89				<0.2		1.4	
						3.9	0.6	325	28.2		7.8		13.2		95.0		6.9		4.6		4		88				<0.2		1.2	
					Bottom	6.8	0.4	321	27.5	27.5	7.8	7.8	23.4	23.5	68.5	68.6	4.8	4.8	14.0		4		90				<0.2		1.2	
						6.8	0.5	350	27.5		7.8		23.5		68.6		4.8		14.0		3		89				<0.2		1.2	
IM4	Cloudy	Moderate	10:24	7.7	Surface	1.0	0.5	12	28.1	28.1	7.8	7.8	10.0	10.0	92.1	92.0	6.8	6.7	4.4	8.2	3	3	84	88	819718	804611	<0.2	<0.2	1.4	1.4
						1.0	0.6	12	28.1		7.8		10.0		91.9		6.8		4.4		3		86				<0.2		1.4	
					Middle	3.9	0.6	353	28.1	28.1	7.8	7.8	12.4	12.4	89.7	89.6	6.6		4.5		3		89				<0.2		1.4	
						3.9	0.6	325	28.0		7.8		12.5		89.4		6.5		4.5		3		87				<0.2		1.4	
					Bottom	6.7	0.5	336	27.9	27.9	7.8	7.8	17.6	17.5	82.0	81.9	5.8	5.8	15.7		4		89				<0.2		1.3	
						6.7	0.5	354	27.9		7.8		17.5		81.8		5.8		15.6		3		90				<0.2		1.4	
IM5	Cloudy	Moderate	10:33	7.8	Surface	1.0	0.7	35	28.3	28.3	7.7	7.7	9.8	9.8	94.0	94.0	6.9	6.8	4.3	7.6	3	3	81	86	820711	804862	<0.2	<0.2	1.4	1.3
						1.0	0.7	37	28.3		7.8		9.8		93.9		6.9		4.3		3		83				<0.2		1.4	
					Middle	3.9	0.7	18	28.1	28.1	7.8	7.8	12.1	12.1	90.3	90.1	6.6		5.3		3		87				<0.2		1.3	
						3.9	0.8	19	28.1		7.8		12.1		89.9		6.6		5.9		3		88				<0.2		1.3	
					Bottom	6.8	0.6	28	27.6	27.6	7.8	7.8	21.2	21.2	74.5	74.7	5.2	5.2	12.9		4		88				<0.2		1.3	
						6.8	0.7	30	27.6		7.8		21.1		74.9		5.2		12.9		3		90				<0.2		1.3	
IM6	Cloudy	Moderate	10:38	7.4	Surface	1.0	0.7	46	28.2	28.2	7.8	7.8	10.4	10.4	96.4	96.3	7.1	7.1	4.7	5.7	3	3	82	87	821049	805811	<0.2	<0.2	1.4	1.4
						1.0	0.8	46	28.2		7.8		10.4		96.2		7.1		4.8		3		84				<0.2		1.4	
					Middle	3.7	0.6	51	28.2	28.2	7.8	7.8	12.1	12.1	95.6	95.6	7.0		5.0		3		88				<0.2		1.4	
						3.7	0.6	52	28.2		7.8		12.1		95.6		7.0		5.0		4		88				<0.2		1.4	
					Bottom	6.4	0.5	39	27.9	27.9	7.8	7.8	18.1	18.2	83.5	83.5	5.9	5.9	7.4		3		90				<0.2		1.4	
						6.4	0.5	39	27.9		7.8		18.2		83.4		5.9		7.4		4		89				<0.2		1.5	
IM7	Cloudy	Moderate	10:43	8.3	Surface	1.0	0.6	75	28.2	28.2	7.8	7.8	10.0	10.0	100.4	100.4	7.4	7.2	4.9	6.7	3	4	83	88	821334	806816	<0.2	<0.2	1.4	1.4
						1.0	0.6	75	28.2		7.8		10.0		100.4		7.4		5.0		3		85				<0.2		1.4	
					Middle	4.2	0.4	47	28.2	28.2	7.8	7.8	14.1	14.1	96.4	96.2	7.0		5.7		4		89				<0.2		1.4	
						4.2	0.4	47	28.2		7.8		14.1		96.0		6.9		5.7		5		88				<0.2		1.4	
					Bottom	7.3	0.3	87	27.9	27.9	7.8	7.8	17.6	17.6	83.1	83.0	5.9	5.9	9.6		5		90				<0.2		1.5	
						7.3	0.3	90	27.9		7.8		17.7		82.8		5.9		9.5		4		90				<0.2		1.4	
IM8	Sunny	Moderate	09:57	7.8	Surface	1.0	0.1	339	28.9	28.9	7.7	7.7	12.0	12.0	92.3	92.3	6.7	6.5	10.0	10.9	3	4	85	88	821813	808121	<0.2	<0.2	1.9	1.9
						1.0	0.1	358	28.9		7.7		12.0		92.3		6.7		9.9		4		85				<0.2		1.8	
					Middle	3.9	0.1	325	28.7	28.7	7.7	7.7	13.1	13.1	85.9	85.9	6.2		10.6		4		88				<0.2		2.0	
						3.9	0.1	333	28.7		7.7		13.1		85.8		6.2		10.6		3		88				<0.2		1.9	
					Bottom	6.8	0.1	79	28.6	28.5	7.7	7.7	15.9	15.9	81.1	81.1	5.8	5.8	12.0		3		91				<0.2		1.8	
						6.8	0.1	83	28.5		7.7		15.9		81.1		5.8		12.0		4		92				<0.2		1.8	

DA: Depth-Averaged

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

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

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	09:51	7.5	Surface	1.0	0.2	247	28.9	28.9	7.8	7.8	11.9	11.9	95.1	95.3	6.9	7.2	9.9	11.4	3	3	84	87	822094	808810	<0.2	<0.2	2.2	2.0
						1.0	0.2	263	28.9		7.8		11.9		95.4		6.9		9.9		4		84				<0.2		2.1	
					Middle	3.8	0.3	261	29.1	29.1	7.9	7.9	13.3	13.3	104.3	104.2	7.4		11.6		3		87				<0.2		2.1	
						3.8	0.3	264	29.1		7.9		13.3		104.0		7.4		11.6		3		88				<0.2		1.9	
					Bottom	6.5	0.1	269	28.8	28.8	7.7	7.7	14.8	14.8	88.0	88.0	6.3	6.3	12.6		4		91				<0.2		1.8	
						6.5	0.1	272	28.8		7.7		14.8		88.0		6.3		12.6		3		90				<0.2		1.8	
IM10	Sunny	Moderate	09:43	8.0	Surface	1.0	0.6	308	29.1	29.1	7.9	7.9	13.0	13.0	100.1	100.1	7.2	6.7	10.3	13.1	4	4	83	87	822369	809782	<0.2	<0.2	2.2	2.0
						1.0	0.6	332	29.1		7.9		13.0		100.1		7.2		10.4		4		82				<0.2		2.0	
					Middle	4.0	0.5	314	28.8	28.8	7.8	7.8	14.7	14.7	86.6	86.6	6.2		11.1		4		83				<0.2		2.0	
						4.0	0.6	315	28.8		7.8		14.7		86.6		6.2		11.2		4		84				<0.2		1.9	
					Bottom	7.0	0.3	297	28.4	28.4	7.7	7.7	18.5	18.5	74.7	74.7	5.2	5.2	17.8		5		94				<0.2		2.0	
						7.0	0.4	324	28.4		7.7		18.5		74.7		5.2		17.8		5		94				<0.2		2.1	
IM11	Sunny	Moderate	09:31	8.8	Surface	1.0	0.5	300	29.0	29.0	7.8	7.8	12.4	12.4	94.6	94.6	6.8	6.3	9.9	12.4	3	4	83	87	822061	811450	<0.2	<0.2	1.8	1.7
						1.0	0.5	300	29.0		7.8		12.4		94.6		6.8		10.0		4		83				<0.2		1.8	
					Middle	4.4	0.6	290	28.7	28.7	7.7	7.7	15.6	15.6	80.1	80.1	5.7		11.1		4		88				<0.2		1.8	
						4.4	0.7	301	28.7		7.7		15.6		80.0		5.7		11.2		4		88				<0.2		1.7	
					Bottom	7.8	0.2	307	28.0	28.0	7.7	7.7	22.2	22.2	70.3	70.4	4.9	4.9	16.0		5		91				<0.2		1.6	
						7.8	0.2	318	28.0		7.7		22.2		70.4		4.9		15.9		5		90				<0.2		1.7	
IM12	Sunny	Moderate	09:25	8.6	Surface	1.0	0.4	292	29.0	29.0	7.7	7.7	12.7	12.7	91.7	91.7	6.6	6.5	10.1	10.4	4	4	86	90	821444	812043	<0.2	<0.2	1.8	1.7
						1.0	0.4	308	29.0		7.7		12.7		91.7		6.6		10.1		3		86				<0.2		1.6	
					Middle	4.3	0.6	283	28.9	28.9	7.8	7.8	14.4	14.4	88.3	88.3	6.3		10.5		3		90				<0.2		1.7	
						4.3	0.6	293	28.9		7.8		14.4		88.2		6.3		10.5		4		91				<0.2		1.6	
					Bottom	7.6	0.3	309	28.2	28.2	7.7	7.7	20.7	20.7	78.0	78.0	5.4	5.4	10.5		4		92				<0.2		1.6	
						7.6	0.3	335	28.2		7.7		20.7		78.0		5.4		10.5		4		93				<0.2		1.7	
SR1A	Sunny	Moderate	09:05	5.1	Surface	1.0	-	-	29.1	29.1	7.8	7.8	11.8	11.8	99.0	99.0	7.1	7.1	10.2	10.5	3	3	-	-	819976	812665	-	-	-	-
						1.0	-	-	29.1		7.8		11.8		98.9		7.1		10.2		2		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	29.0	29.0	7.8	7.8	14.8	14.8	97.4	97.4	6.9	6.9	10.7		4		-				-		-	
						4.1	-	-	29.0		7.8		14.8		97.4		6.9		10.7		4		-				-		-	
SR2	Sunny	Moderate	08:51	4.6	Surface	1.0	0.0	181	29.0	29.0	7.7	7.7	11.9	11.9	88.9	88.9	6.4	6.4	10.6	13.5	4	5	86	87	821478	814166	<0.2	<0.2	1.6	1.6
						1.0	0.0	197	29.0		7.7		11.9		88.9		6.4		10.7		4		86				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	329	28.5	28.5	7.7	7.7	17.2	17.2	82.7	82.7	5.8	5.8	16.4		5		89				<0.2		1.6	
						3.6	0.2	335	28.5		7.7		17.2		82.7		5.8		16.4		5		88				<0.2		1.5	
SR3	Sunny	Moderate	10:04	9.1	Surface	1.0	0.2	40	29.1	29.1	7.8	7.8	11.3	11.3	100.1	100.0	7.2	6.7	10.2	10.3	3	4	-	-	822158	807588	-	-	-	-
						1.0	0.2	42	29.1		7.8		11.3		99.9		7.2		10.3		3		-				-		-	
					Middle	4.6	0.2	323	28.7	28.7	7.7	7.7	13.6	13.6	85.1	85.0	6.1		10.3		4		-				-		-	
						4.6	0.2	333	28.7		7.7		13.6		84.8		6.1		10.3		4		-				-		-	
					Bottom	8.1	0.2	45	28.4	28.4	7.7	7.7	18.7	18.7	80.7	80.8	5.7	5.7	10.2		4		-				-		-	
						8.1	0.2	47	28.4		7.7		18.7		80.8		5.7		10.2		4		-				-		-	
SR4A	Cloudy	Moderate	09:37	8.6	Surface	1.0	0.1	167	28.3	28.3	7.9	7.9	13.1	13.0	106.4	106.3	7.7	7.3	4.5	5.9	4	5	-	-	817177	807826	-	-	-	-
						1.0	0.1	175	28.3		7.9		13.0		106.2		7.7		4.5		4		-				-		-	
					Middle	4.3	0.2	275	28.3	28.3	7.9	7.9	14.7	14.7	96.4	96.3	6.9		5.5		4		-				-		-	
						4.3	0.2	279	28.3		7.9		14.7		96.2		6.9		5.5		5		-				-		-	
					Bottom	7.6	0.2	250	27.6	27.6	7.7	7.7	22.1	22.1	63.7	63.7	4.4	4.4	7.6		6		-				-		-	
						7.6	0.2	272	27.6		7.7		22.1		63.7		4.4		7.6		5		-				-		-	
SR5A	Cloudy	Calm	09:21	4.1	Surface	1.0	0.1	298	28.6	28.6	8.0	8.0	14.8	14.8	117.2	117.2	8.4	8.4	5.1	8.2	6	6	-	-	816575	810674	-	-	-	-
						1.0	0.1	301	28.6		8.0		14.8		117.1		8.4		5.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	345	28.5	28.5	8.1	8.1	17.0	17.0	115.8	115.7	8.2	8.2	11.2		6		-				-		-	
						3.1	0.1	317	28.5		8.1		17.0		115.6		8.2		11.1		6		-				-		-	
SR6	Cloudy	Calm	08:46	4.8	Surface	1.0	0.1	210	28.5	28.5	7.9	7.9	12.8	12.8	103.8	103.8	7.5	7.5	4.4	4.6	4	4	-	-	817910	814657	-	-	-	-
						1.0	0.1	211	28.5		7.9		12.8		103.7		7.5		4.3		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	197	28.3	28.3	7.8	7.8	13.2	13.2	100.1	100.1	7.2	7.2	4.8		4		-				-		-	
						3.8	0.1	213	28.3		7.8		13.2		100.1		7.2		4.9		5		-				-		-	
SR7	Sunny	Moderate	07:58	14.5	Surface	1.0	0.1	104	28.9	28.9	7.8	7.8	12.9	12.9	94.6	94.6	6.8	6.5	9.6	9.1	4	5	-	-	823613	823733	-	-	-	-
						1.0	0.1	111	28.9		7.8		12.9		94.6		6.8		9.6		5		-				-		-	
					Middle	7.3	0.1	180	28.6	28.6	7.8	7.8	17.2	17.3	86.3	86.3	6.1		9.0		5		-				-		-	
						7.3	0.1	197	28.6		7.8		17.3		86.2		6.1		9.0		6		-				-		-	
					Bottom	13.5	0.1	223	27.1	27.1	7.8	7.8	29.2	29.2	62.9	62.9	4.2	4.3	8.6		4		-				-		-	
						13.5	0.1	237	27.1		7.8		29.3		62.9		4.3		8.6		5		-				-		-	
SR8	Sunny	Moderate	09:16	4.4	Surface	1.0	-	-	28.9	28.9	7.7	7.7	12.9	12.9	88.7	88.8	6.4	6.4	10.5	10.7	3	4	-	-	820370	811631	-	-	-	-
						1.0	-	-	28.9		7.7		12.9		88.8		6.4		10.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	28.9	28.9	7.7	7.7	13.1	13.1	86.5	86.5	6.2	6.2	10.8		5		-				-		-	
						3.4	-	-	28.9		7.7		13.2		86.5		6.2		10.8		4		-				-		-	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	17:55	8.8	Surface	1.0	0.2	163	28.2	28.2	7.7	7.7	14.6	14.6	73.7	73.7	5.3	4.0	9.9	9.3	2	3	83	88	815629	804224	<0.2	<0.2	1.3	1.3
						1.0	0.2	172	28.2		7.7		14.6		73.7		5.3		9.9		3		86				<0.2		1.3	
					Middle	4.4	0.1	112	27.4	27.4	7.6	7.6	27.6	27.6	40.3	40.3	2.7		10.1		2		88				<0.2		1.3	
						4.4	0.1	113	27.4		7.6		27.6		40.3		2.7		10.2		3		90				<0.2		1.3	
					Bottom	7.8	0.0	339	27.1	27.1	7.6	7.6	30.4	30.4	42.0	42.0	2.8	2.8	7.7		4		91				<0.2		1.2	
						7.8	0.0	312	27.1		7.6		30.4		42.0		2.8		7.7		3		91				<0.2		1.3	
C2	Rainy	Moderate	16:45	11.4	Surface	1.0	0.5	168	27.9	27.9	7.7	7.7	11.6	11.6	80.6	80.5	5.9	5.8	4.3	4.0	6	6	85	88	825671	806961	<0.2	<0.2	2.0	1.8
						1.0	0.5	180	27.9		7.7		11.5		80.3		5.9		4.2		6		86				<0.2		1.8	
					Middle	5.7	0.2	179	27.9	27.9	7.7	7.7	14.2	14.2	78.4	78.1	5.7		3.6		6		89				<0.2		1.8	
						5.7	0.2	186	27.9		7.7		14.2		77.7		5.6		3.6		5		89				<0.2		1.7	
					Bottom	10.4	0.1	171	27.1	27.1	7.7	7.7	24.5	24.5	55.6	55.8	3.9	3.9	4.3		6		90				<0.2		1.7	
						10.4	0.1	174	27.1		7.7		24.5		55.9		3.9		4.3		5		90				<0.2		1.8	
C3	Rainy	Moderate	18:29	14.2	Surface	1.0	0.1	240	28.4	28.4	7.9	7.9	11.8	11.8	98.0	97.9	7.1	5.4	2.6	2.4	4	4	85	88	822092	817800	<0.2	<0.2	1.4	1.3
						1.0	0.1	263	28.4		7.9		11.9		97.8		7.1		2.6		4		84				<0.2		1.3	
					Middle	7.1	0.1	348	26.6	26.6	7.7	7.7	26.2	26.2	52.3	52.3	3.6		2.3		3		88				<0.2		1.4	
						7.1	0.1	320	26.6		7.7		26.3		52.2		3.6		2.3		4		88				<0.2		1.3	
					Bottom	13.2	0.1	223	25.6	25.6	7.7	7.7	31.5	31.5	45.4	46.0	3.1	3.2	2.1		4		90				<0.2		1.2	
						13.2	0.1	236	25.6		7.7		31.5		46.6		3.2		2.2		3		90				<0.2		1.3	
IM1	Rainy	Moderate	17:33	5.6	Surface	1.0	0.3	227	28.4	28.4	7.7	7.7	16.8	16.8	69.7	69.7	4.9	4.9	9.7	10.3	4	4	87	88	817945	807116	<0.2	<0.2	1.2	1.2
						1.0	0.3	205	28.4		7.7		16.8		69.7		4.9		9.7		3		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.1	219	27.5	27.5	7.6	7.6	28.8	28.8	52.8	52.8	3.6	3.6	10.8		4		88				<0.2		1.2	
						4.6	0.1	237	27.5		7.6		28.8		52.8		3.6		10.8		4		90				<0.2		1.1	
IM2	Rainy	Moderate	17:25	7.3	Surface	1.0	0.1	255	28.2	28.2	7.7	7.7	15.9	15.9	71.9	71.9	5.1	4.6	10.1	10.4	5	5	85	88	818172	806154	<0.2	<0.2	1.3	1.3
						1.0	0.1	270	28.2		7.7		15.9		71.9		5.1		10.1		4		84				<0.2		1.4	
					Middle	3.7	0.2	228	27.5	27.5	7.6	7.6	26.2	26.2	59.8	59.8	4.1		10.5		6		88				<0.2		1.3	
						3.7	0.3	204	27.5		7.6		26.2		59.8		4.1		10.5		5		88				<0.2		1.2	
					Bottom	6.3	0.2	203	27.2	27.2	7.6	7.6	29.5	29.5	53.3	53.3	3.6	3.6	10.6		5		90				<0.2		1.2	
						6.3	0.2	211	27.2		7.6		29.5		53.3		3.6		10.6		6		90				<0.2		1.2	
IM3	Rainy	Moderate	17:16	7.4	Surface	1.0	0.3	210	28.1	28.1	7.7	7.7	18.5	18.5	65.9	66.1	4.7	4.5	10.2	11.0	4	5	84	88	818768	805582	<0.2	<0.2	1.5	1.4
						1.0	0.4	225	28.1		7.7		18.5		66.2		4.7		10.2		5		86				<0.2		1.4	
					Middle	3.7	0.4	248	27.5	27.5	7.6	7.6	26.0	26.0	63.2	63.2	4.3		10.6		4		89				<0.2		1.4	
						3.7	0.4	220	27.5		7.6		26.0		63.2		4.3		10.6		5		90				<0.2		1.3	
					Bottom	6.4	0.2	216	27.1	27.1	7.6	7.6	30.3	30.3	52.3	52.3	3.5	3.5	12.1		4		90				<0.2		1.4	
						6.4	0.2	205	27.1		7.6		30.3		52.3		3.5		12.1		5		90				<0.2		1.4	
IM4	Rainy	Moderate	17:07	7.8	Surface	1.0	0.3	229	28.3	28.3	7.7	7.7	12.5	12.5	79.2	79.2	5.8	5.0	10.1	11.3	4	5	84	88	819726	804610	<0.2	<0.2	1.4	1.4
						1.0	0.3	239	28.3		7.7		12.5		79.2		5.8		10.1		5		85				<0.2		1.5	
					Middle	3.9	0.2	214	27.6	27.6	7.6	7.6	25.1	25.1	61.6	61.6	4.2		10.7		4		89				<0.2		1.5	
						3.9	0.2	216	27.6		7.6		25.1		61.6		4.2		10.7		5		87				<0.2		1.4	
					Bottom	6.8	0.2	218	27.0	27.0	7.6	7.6	30.6	30.6	55.5	55.5	3.7	3.7	13.2		5		90				<0.2		1.4	
						6.8	0.2	219	27.0		7.6		30.6		55.5		3.7		13.2		4		90				<0.2		1.4	
IM5	Rainy	Moderate	16:59	7.7	Surface	1.0	0.7	221	28.5	28.5	7.7	7.7	6.9	6.9	82.9	82.9	6.2	5.3	12.1	11.7	4	4	85	88	820745	804871	<0.2	<0.2	1.6	1.6
						1.0	0.8	234	28.5		7.7		6.9		82.9		6.2		12.1		4		84				<0.2		1.5	
					Middle	3.9	0.8	225	27.6	27.6	7.6	7.6	24.2	24.2	62.0	62.0	4.3		11.2		4		90				<0.2		1.6	
						3.9	0.9	240	27.6		7.6		24.2		62.0		4.3		11.2		4		87				<0.2		1.6	
					Bottom	6.7	0.7	222	27.4	27.4	7.6	7.6	29.3	29.3	55.2	55.2	3.7	3.7	11.8		5		89				<0.2		1.6	
						6.7	0.8	223	27.4		7.6		29.3		55.2		3.7		11.8		5		91				<0.2		1.5	
IM6	Rainy	Moderate	16:52	7.6	Surface	1.0	0.3	206	28.5	28.5	7.7	7.7	9.1	9.1	84.2	84.2	6.2	5.2	10.8	14.6	4	4	84	88	821058	805845	<0.2	<0.2	1.6	1.5
						1.0	0.4	202	28.5		7.7		9.1		84.2		6.2		10.8		4		85				<0.2		1.5	
					Middle	3.8	0.3	211	28.2	28.2	7.7	7.7	15.1	15.1	57.6	57.6	4.1		13.3		3		88				<0.2		1.6	
						3.8	0.4	199	28.2		7.7		15.1		57.6		4.1		13.3		4		87				<0.2		1.5	
					Bottom	6.6	0.3	210	27.6	27.6	7.6	7.6	25.7	25.7	52.4	52.4	3.6	3.6	19.8		4		90				<0.2		1.5	
						6.6	0.3	201	27.6		7.6		25.7		52.4		3.6		19.8		3		91				<0.2		1.5	
IM7	Rainy	Moderate	16:46	7.5	Surface	1.0	0.6	204	28.4	28.4	7.7	7.7	9.6	9.6	82.8	82.8	6.1	5.4	11.2	14.2	3	4	83	88	821337	806832	<0.2	<0.2	1.6	1.6
						1.0	0.6	224	28.4		7.7		9.6		82.7		6.1		11.2		2		85				<0.2		1.6	
					Middle	3.8	0.4	196	28.2	28.2	7.7	7.7	17.2	17.2	66.1	66.1	4.7		14.8		4		88				<0.2		1.7	
						3.8	0.4	186	28.2		7.7		17.2		66.1		4.7		14.8		4		89				<0.2		1.5	
					Bottom	6.5	0.3	188	28.0	28.0	7.6	7.6	21.7	21.7	59.4	59.4	4.1	4.1	16.5		6		90				<0.2		1.5	
						6.5	0.3	191	28.0		7.6		21.7		59.4		4.1		16.5		7		91				<0.2		1.6	
IM8	Rainy	Moderate	17:01	7.2	Surface	1.0	0.3	189	28.0	28.0	7.7	7.7	8.5	8.5	87.8	87.8	6.6	6.5	5.9	5.6	4	4	86	88	821818	808123	<0.2	<0.2	1.7	1.6
						1.0	0.3	174	28.0		7.7		8.5		87.8		6.6		5.7		4		87				<0.2		1.6	
					Middle	3.6	0.3	174	27.9	27.9	7.7	7.7	9.4	9.5	86.6	86.5	6.4		5.0		3		88				<0.2		1.5	
						3.6	0.3	175	27.9		7.7		9.5		86.3		6.4		5.1		4		88				<0.2		1.6	
					Bottom	6.2	0.1	181	27.3	27.4	7.6	7.6	23.9	23.9	58.5	59.1	4.1	4.1	5.9		3		90				<0.2		1.5	
						6.2	0.1	174	27.4		7.6		23.9		59.7		4.1		5.9		4		90				<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 25 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	17:09	7.0	Surface	1.0	0.2	171	28.1	28.1	7.6	7.6	8.0	8.0	85.3	85.3	6.4	6.3	6.4	6.5	2	4	84	87	822080	808828	<0.2	<0.2	1.5	1.5
						1.0	0.2	180	28.1		7.7		8.0		85.3		6.4		6.3		4		85				<0.2		1.6	
					Middle	3.5	0.1	175	28.0	28.0	7.7	7.7	9.6	9.6	82.1	81.9	6.1		5.4		4		86				<0.2		1.6	
						3.5	0.1	161	28.0		7.7		9.6		81.7		6.1		5.4		4		87				<0.2		1.5	
					Bottom	6.0	0.1	154	27.4	27.5	7.6	7.6	21.8	21.7	61.4	61.8	4.3	4.4	8.0		4		89				<0.2		1.5	
						6.0	0.1	159	27.5		7.6		21.7		62.1		4.4		7.6		4		89				<0.2		1.5	
IM10	Rainy	Moderate	17:16	6.8	Surface	1.0	0.3	166	28.0	28.0	7.7	7.7	9.7	9.7	85.4	85.3	6.3	6.0	5.3	6.4	3	4	86	88	822399	809780	<0.2	<0.2	1.5	1.5
						1.0	0.3	153	28.0		7.7		9.7		85.2		6.3		5.2		4		87				<0.2		1.5	
					Middle	3.4	0.3	169	27.8	27.8	7.7	7.7	12.5	12.5	76.7	76.4	5.6		4.5		4		88				<0.2		1.5	
						3.4	0.3	165	27.8		7.7		12.5		76.1		5.6		4.5		3		88				<0.2		1.5	
					Bottom	5.8	0.0	159	27.1	27.1	7.6	7.6	23.7	23.7	55.1	56.8	3.8	4.0	9.5		3		90				<0.2		1.5	
						5.8	0.0	166	27.1		7.6		23.7		58.5		4.1		9.5		4		90				<0.2		1.4	
IM11	Rainy	Moderate	17:27	8.6	Surface	1.0	0.2	154	28.0	28.0	7.8	7.8	10.2	10.2	92.5	92.5	6.8	5.9	3.7	4.5	3	4	86	89	822057	811454	<0.2	<0.2	1.6	1.5
						1.0	0.2	159	28.0		7.8		10.2		92.4		6.8		3.8		3		87				<0.2		1.5	
					Middle	4.3	0.3	155	27.8	27.8	7.6	7.6	16.9	16.8	69.2	69.3	5.0		3.8		3		89				<0.2		1.4	
						4.3	0.3	149	27.7		7.6		16.8		69.3		5.0		4.2		3		89				<0.2		1.5	
					Bottom	7.6	0.1	147	27.0	27.0	7.6	7.6	24.2	24.2	56.5	57.0	3.9	4.0	5.8		4		90				<0.2		1.5	
						7.6	0.1	151	27.0		7.7		24.2		57.4		4.0		5.9		5		90				<0.2		1.5	
IM12	Rainy	Moderate	17:36	7.7	Surface	1.0	0.2	138	28.1	28.1	7.7	7.7	10.7	10.7	88.8	88.7	6.5	5.6	3.8	4.3	6	6	82	85	821465	812060	<0.2	<0.2	1.5	1.6
						1.0	0.3	142	28.1		7.7		10.7		88.5		6.5		3.8		5		83				<0.2		1.6	
					Middle	3.9	0.3	145	27.6	27.6	7.7	7.7	19.7	19.7	66.2	66.1	4.7		3.2		6		85				<0.2		1.6	
						3.9	0.3	147	27.6		7.7		19.7		66.0		4.7		3.2		6		86				<0.2		1.5	
					Bottom	6.7	0.1	128	26.2	26.2	7.6	7.6	29.3	29.3	55.3	55.3	3.8	3.8	5.9		5		88				<0.2		1.5	
						6.7	0.1	136	26.2		7.6		29.3		55.3		3.8		5.9		6		88				<0.2		1.6	
SR1A	Rainy	Calm	17:51	4.8	Surface	1.0	-	-	28.1	28.1	7.7	7.7	12.8	12.8	87.3	87.1	6.4	6.4	2.8	3.1	3	4	-	-	819980	812661	-	-	-	-
						1.0	-	-	28.1		7.7		12.8		86.9		6.3		2.8		4		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.0	28.0	7.7	7.7	13.6	13.6	84.4	84.4	6.1	6.1	3.3		4		-				-		-	
						3.8	-	-	28.0		7.7		13.7		84.4		6.1		3.3		3		-				-		-	
SR2	Rainy	Moderate	18:05	5.7	Surface	1.0	0.3	91	28.0	28.0	7.7	7.7	14.4	14.4	80.9	80.8	5.9	5.9	3.6	4.0	4	4	82	85	821447	814172	<0.2	<0.2	1.5	1.5
						1.0	0.3	99	27.9		7.7		14.5		80.6		5.8		3.7		4		83				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	84	27.6	27.6	7.7	7.7	18.9	18.9	73.2	73.3	5.2	5.2	4.3		5		86				<0.2		1.4	
						4.7	0.1	84	27.6		7.7		18.9		73.4		5.2		4.3		4		87				<0.2		1.5	
SR3	Rainy	Moderate	16:56	8.5	Surface	1.0	0.3	225	28.0	28.0	7.7	7.7	9.8	9.9	84.8	84.8	6.3	6.1	5.1	5.2	7	7	-	-	822149	807561	-	-	-	-
						1.0	0.4	225	28.0		7.7		9.9		84.7		6.3		5.1		6		-				-		-	
					Middle	4.3	0.2	252	27.9	27.9	7.7	7.7	12.8	12.9	80.8	80.8	5.9		4.1		6		-				-		-	
						4.3	0.2	269	27.9		7.7		13.1		80.7		5.9		4.1		7		-				-		-	
					Bottom	7.5	0.1	197	27.0	27.0	7.6	7.6	25.0	25.0	50.5	50.6	3.5	3.5	6.4		6		-				-		-	
						7.5	0.1	212	27.0		7.6		25.0		50.7		3.5		6.4		7		-				-		-	
SR4A	Rainy	Moderate	18:16	8.4	Surface	1.0	0.6	142	28.5	28.5	7.6	7.6	15.7	15.7	72.7	72.7	5.2	4.7	9.8	11.2	3	5	-	-	817205	807808	-	-	-	-
						1.0	0.6	150	28.5		7.6		15.7		72.7		5.2		9.8		4		-				-		-	
					Middle	4.2	0.1	137	27.2	27.2	7.6	7.6	28.4	28.4	60.8	60.8	4.1		11.4		5		-				-		-	
						4.2	0.1	151	27.2		7.6		28.4		60.8		4.1		11.4		5		-				-		-	
					Bottom	7.4	0.0	133	27.2	27.2	7.7	7.7	29.7	29.7	52.2	52.2	3.5	3.5	12.3		7		-				-		-	
						7.4	0.0	149	27.2		7.7		29.7		52.2		3.5		12.3		7		-				-		-	
SR5A	Rainy	Moderate	18:31	4.5	Surface	1.0	0.1	91	28.6	28.6	7.8	7.8	14.1	14.1	78.6	78.6	5.6	5.6	9.9	10.2	4	4	-	-	816606	810673	-	-	-	-
						1.0	0.1	103	28.6		7.8		14.1		78.6		5.6		9.9		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	90	28.5	28.5	7.8	7.8	17.0	17.0	77.1	77.1	5.5	5.5	10.4		4		-				-		-	
						3.5	0.1	94	28.5		7.8		17.0		77.1		5.5		10.4		5		-				-		-	
SR6	Rainy	Moderate	18:58	4.6	Surface	1.0	0.1	149	28.5	28.5	7.7	7.7	13.7	13.7	81.7	81.7	5.9	5.9	9.6	10.1	4	5	-	-	817913	814660	-	-	-	-
						1.0	0.1	152	28.5		7.7		13.7		81.7		5.9		9.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	146	28.6	28.6	7.7	7.7	16.8	16.8	76.3	76.3	5.4	5.4	10.5		7		-				-		-	
						3.6	0.1	156	28.6		7.7		16.8		76.3		5.4		10.5		6		-				-		-	
SR7	Cloudy	Moderate	19:02	17.2	Surface	1.0	0.4	50	27.8	27.8	7.8	7.8	16.5	16.4	84.9	84.9	6.1	5.4	2.1	2.2	3	3	-	-	823624	823750	-	-	-	-
						1.0	0.4	51	27.8		7.8		16.4		84.8		6.1		2.1		2		-				-		-	
					Middle	8.6	0.1	51	27.0	27.0	7.7	7.7	22.7	22.5	66.1	65.9	4.6		2.2		2		-				-		-	
						8.6	0.1	51	27.0		7.7		22.4		65.7		4.6		2.2		3		-				-		-	
					Bottom	16.2	0.1	341	26.3	26.4	7.7	7.7	29.3	29.2	55.1	55.6	3.8	3.8	2.2		3		-				-		-	
						16.2	0.1	347	26.4		7.7		29.1		56.1		3.8		2.2		2		-				-		-	
SR8	Rainy	Calm	17:42	4.2	Surface	1.0	-	-	28.1	28.1	7.8	7.8	10.8	10.8	92.4	92.2	6.8	6.8	3.2	3.3	5	5	-	-	820412	811632	-	-	-	-
						1.0	-	-	28.1		7.8		10.9		91.9		6.8		3.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	28.0	28.0	7.7	7.7	14.4	14.4	82.9	83.6	6.0	6.1	3.4		5		-				-		-	
						3.2	-	-	28.0		7.7		14.4		84.2		6.1		3.3		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 25 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	12:12	8.8	Surface	1.0	0.4	41	28.5	28.5	7.7	7.7	15.0	15.0	75.6	75.6	5.4	4.6	9.4	10.4	3	4	84	87	815639	804238	<0.2	<0.2	1.4	1.3
						1.0	0.4	44	28.5		7.7		15.0		75.6		5.4		9.4		3		86				<0.2		1.3	
					Middle	4.4	0.3	22	27.9	27.9	7.7	7.7	22.9	22.9	53.5	53.5	3.7		9.8		4		86				<0.2		1.4	
						4.4	0.4	23	27.9		7.7		22.9		53.5		3.7		9.8		3		86				<0.2		1.2	
					Bottom	7.8	0.3	340	27.3	27.3	7.6	7.6	26.5	26.5	54.1	54.1	3.7	3.7	12.1		4		90				<0.2		1.2	
						7.8	0.3	10	27.3		7.6		26.5		54.1		3.7		12.1		4		89				<0.2		1.2	
C2	Cloudy	Moderate	13:27	8.6	Surface	1.0	0.2	281	27.9	27.9	7.6	7.6	10.6	10.7	78.1	78.0	6.0	5.0	5.4	4.6	8	10	84	88	825702	806934	<0.2	<0.2	1.9	1.8
						1.0	0.2	294	27.9		7.6		10.8		77.9		5.9		5.5		8		85				<0.2		1.9	
					Middle	4.3	0.2	289	27.4	27.4	7.7	7.7	22.3	22.2	58.2	58.1	4.1		3.5		10		89				<0.2		1.8	
						4.3	0.3	292	27.4		7.7		22.2		57.9		4.1		3.5		10		89				<0.2		1.7	
					Bottom	7.6	0.2	300	26.7	26.7	7.6	7.6	27.3	27.3	48.9	49.1	3.4	3.4	4.8		11		90				<0.2		1.7	
						7.6	0.2	313	26.7		7.6		27.3		49.3		3.4		4.8		10		90				<0.2		1.6	
C3	Cloudy	Moderate	11:24	14.4	Surface	1.0	0.2	228	27.6	27.6	7.8	7.8	14.3	14.3	84.8	84.7	6.2	5.8	2.9	2.5	4	4	85	86	822095	817806	<0.2	<0.2	1.6	1.6
						1.0	0.2	245	27.6		7.8		14.3		84.5		6.1		2.9		4		85				<0.2		1.6	
					Middle	7.2	0.2	268	27.6	27.6	7.8	7.7	18.0	18.1	75.5	75.3	5.4		2.4		5		86				<0.2		1.5	
						7.2	0.2	278	27.6		7.7		18.1		75.1		5.4		2.4		4		86				<0.2		1.6	
					Bottom	13.4	0.3	307	26.6	26.7	7.7	7.7	26.7	26.6	59.2	59.6	4.1	4.1	2.1		5		88				<0.2		1.7	
						13.4	0.3	325	26.7		7.7		26.6		59.9		4.1		2.1		4		88				<0.2		1.7	
IM1	Cloudy	Moderate	12:33	5.6	Surface	1.0	0.0	5	28.5	28.5	7.8	7.8	15.0	15.0	74.0	74.0	5.3	5.3	9.7	10.0	5	5	86	87	817972	807138	<0.2	<0.2	1.5	1.5
						1.0	0.0	5	28.5		7.8		15.0		74.0		5.3		9.7		4		84				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.3	325	27.7	27.7	7.6	7.6	26.2	26.2	54.9	54.9	3.7	3.7	10.3		5		89				<0.2		1.4	
						4.6	0.3	337	27.7		7.6		26.2		54.9		3.7		10.3		4		90				<0.2		1.5	
IM2	Cloudy	Moderate	12:39	7.6	Surface	1.0	0.4	12	28.4	28.4	7.8	7.8	15.1	15.1	80.8	80.8	5.8	4.6	9.6	11.2	3	5	83	87	818185	806157	<0.2	<0.2	1.4	1.3
						1.0	0.4	13	28.4		7.8		15.1		80.8		5.8		9.6		4		85				<0.2		1.3	
					Middle	3.8	0.2	32	27.8	27.8	7.7	7.7	24.6	24.6	47.6	47.6	3.3		10.2		4		89				<0.2		1.3	
						3.8	0.2	32	27.8		7.7		24.6		47.6		3.3		10.2		4		87				<0.2		1.4	
					Bottom	6.6	0.2	325	27.2	27.2	7.6	7.6	29.8	29.8	48.1	48.1	3.2	3.2	13.9		6		90				<0.2		1.3	
						6.6	0.3	350	27.2		7.6		29.8		48.1		3.2		13.9		6		90				<0.2		1.3	
IM3	Cloudy	Moderate	12:49	7.7	Surface	1.0	0.2	279	28.3	28.3	7.7	7.7	17.6	17.6	68.7	68.7	4.9	**4.0**	9.9	10.9	6	6	86	88	818795	805570	<0.2	<0.2	1.3	1.4
						1.0	0.2	306	28.3		7.7		17.6		68.7		4.9		9.9		5		84				<0.2		1.4	
					Middle	3.9	0.3	348	27.7	27.7	7.6	7.6	26.7	26.7	44.8	44.8	3.0		10.1		5		90				<0.2		1.3	
						3.9	0.3	359	27.7		7.6		26.7		44.8		3.0		10.1		6		87				<0.2		1.3	
					Bottom	6.7	0.3	315	27.2	27.2	7.6	7.6	29.8	29.8	51.3	51.3	3.5	3.5	12.7		6		90				<0.2		1.4	
						6.7	0.3	323	27.2		7.6		29.8		51.3		3.5		12.7		5		90				<0.2		1.5	
IM4	Cloudy	Moderate	12:58	7.9	Surface	1.0	0.3	313	28.4	28.4	7.7	7.7	13.5	13.5	76.1	76.1	5.5	4.5	10.5	10.8	5	6	84	87	819704	804609	<0.2	<0.2	1.3	1.3
						1.0	0.3	333	28.4		7.7		13.5		76.1		5.5		10.5		5		84				<0.2		1.2	
					Middle	4.0	0.3	352	27.9	27.9	7.6	7.6	22.7	22.7	51.3	51.3	3.5		10.3		5		89				<0.2		1.3	
						4.0	0.3	324	27.9		7.6		22.7		51.3		3.5		10.3		6		87				<0.2		1.3	
					Bottom	6.9	0.3	22	27.1	27.1	7.6	7.6	30.4	30.4	34.0	34.0	2.3	**2.3**	11.5		7		90				<0.2		1.3	
						6.9	0.3	22	27.1		7.6		30.4		34.0		2.3		11.5		7		90				<0.2		1.3	
IM5	Cloudy	Moderate	13:11	7.6	Surface	1.0	0.4	227	28.4	28.4	7.7	7.7	10.7	10.7	82.1	82.0	6.0	5.0	10.6	12.1	6	7	84	88	820742	804859	<0.2	<0.2	1.5	1.6
						1.0	0.5	244	28.4		7.7		10.7		81.9		6.0		10.6		6		85				<0.2		1.6	
					Middle	3.8	0.2	272	28.0	28.0	7.7	7.7	17.8	17.8	56.1	56.1	4.0		10.6		6		88				<0.2		1.6	
						3.8	0.2	288	28.0		7.7		17.8		56.1		4.0		10.6		7		88				<0.2		1.7	
					Bottom	6.6	0.5	355	27.2	27.2	7.6	7.6	29.9	29.9	37.1	37.1	2.5	**2.5**	15.0		7		90				<0.2		1.7	
						6.6	0.5	327	27.2		7.6		29.9		37.1		2.5		15.0		7		90				<0.2		1.7	
IM6	Cloudy	Moderate	13:18	7.4	Surface	1.0	0.4	270	28.6	28.6	7.7	7.7	8.7	8.7	81.1	81.1	6.0	5.4	11.7	14.1	7	7	82	87	821068	805812	<0.2	<0.2	1.5	1.6
						1.0	0.4	280	28.6		7.7		8.7		81.1		6.0		11.7		7		85				<0.2		1.5	
					Middle	3.7	0.3	277	28.2	28.2	7.7	7.7	15.1	15.1	67.1	67.1	4.8		14.6		7		88				<0.2		1.5	
						3.7	0.4	282	28.2		7.7		15.1		67.1		4.8		14.6		6		87				<0.2		1.6	
					Bottom	6.4	0.2	73	27.3	27.3	7.6	7.6	29.2	29.2	43.9	43.9	3.0	3.0	15.9		8		90				<0.2		1.6	
						6.4	0.3	76	27.3		7.6		29.2		43.9		3.0		15.9		9		89				<0.2		1.6	
IM7	Cloudy	Moderate	13:29	7.9	Surface	1.0	0.4	264	28.5	28.5	7.7	7.7	9.0	9.0	79.2	79.2	5.8	5.2	12.0	13.2	7	8	84	88	821353	806819	<0.2	<0.2	1.4	1.5
						1.0	0.4	277	28.5		7.7		9.0		79.2		5.8		12.0		8		83				<0.2		1.5	
					Middle	4.0	0.3	280	28.2	28.2	7.7	7.7	12.9	12.9	62.8	62.8	4.6		13.4		7		88				<0.2		1.4	
						4.0	0.4	286	28.2		7.7		12.9		62.8		4.6		13.4		7		90				<0.2		1.6	
					Bottom	6.9	0.1	287	28.0	28.0	7.6	7.6	21.8	21.8	59.5	59.5	4.1	4.1	14.3		9		90				<0.2		1.5	
						6.9	0.1	287	28.0		7.6		21.8		59.5		4.1		14.3		9		90				<0.2		1.6	
IM8	Cloudy	Moderate	12:58	7.5	Surface	1.0	0.3	254	27.8	27.8	7.7	7.7	7.5	7.6	90.3	90.1	6.8	6.6	5.5	5.1	7	7	82	85	821849	808134	<0.2	<0.2	2.0	2.0
						1.0	0.3	254	27.8		7.7		7.6		89.9		6.8		5.4		6		82				<0.2		2.1	
					Middle	3.8	0.4	263	27.8	27.8	7.7	7.7	10.2	10.2	86.1	86.0	6.4		4.5		7		85				<0.2		2.0	
						3.8	0.4	280	27.8		7.7		10.2		85.9		6.4		4.5		7		86				<0.2		2.0	
					Bottom	6.5	0.1	172	27.3	27.3	7.6	7.6	22.8	22.8	61.0	61.2	4.3	4.3	5.3		8		88				<0.2		2.0	
						6.5	0.1	187	27.3		7.6		22.8		61.3		4.3		5.3		7		88				<0.2		2.0	

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	12:53	7.3	Surface	1.0	0.2	220	27.9	27.9	7.7	7.7	8.9	8.8	88.5	88.5	6.6	6.5	5.3	4.6	8	8	82	85	822083	808815	<0.2	<0.2	1.9	1.8
						1.0	0.2	237	27.9		7.7		8.8		88.4		6.6		5.3		8		82				<0.2		1.8	
					Middle	3.7	0.1	233	27.8	27.8	7.7	7.7	10.4	10.4	85.2	85.1	6.3		4.4		8		85				<0.2		1.8	
						3.7	0.1	242	27.8		7.7		10.4		85.0		6.3		4.4		9		85				<0.2		1.7	
					Bottom	6.3	0.2	307	27.6	27.6	7.7	7.7	19.1	19.1	71.7	71.8	5.1	5.1	3.9		8		88				<0.2		1.7	
						6.3	0.2	309	27.6		7.7		19.1		71.8		5.1		4.1		9		88				<0.2		1.6	
IM10	Cloudy	Moderate	12:45	8.7	Surface	1.0	0.2	293	27.8	27.8	7.7	7.7	7.0	7.0	89.9	89.8	6.8	6.5	5.7	5.0	6	7	85	88	822371	809772	<0.2	<0.2	1.8	1.9
						1.0	0.2	313	27.8		7.7		7.0		89.6		6.8		5.7		7		86				<0.2		1.9	
					Middle	4.4	0.4	327	27.8	27.8	7.7	7.7	11.2	11.2	84.2	84.1	6.2		4.1		6		89				<0.2		1.9	
						4.4	0.5	333	27.8		7.7		11.2		84.0		6.2		4.1		6		89				<0.2		1.8	
					Bottom	7.7	0.2	291	27.5	27.5	7.7	7.7	21.2	21.2	58.3	58.4	4.1	4.1	5.3		7		90				<0.2		1.9	
						7.7	0.2	318	27.4		7.7		21.2		58.4		4.1		5.3		7		90				<0.2		1.8	
IM11	Cloudy	Moderate	12:32	8.3	Surface	1.0	0.2	283	27.9	27.9	7.7	7.7	11.0	11.0	86.8	86.5	6.4	5.7	3.7	4.2	6	6	86	88	822057	811483	<0.2	<0.2	1.7	1.7
						1.0	0.2	283	27.9		7.7		11.0		86.1		6.4		3.7		6		86				<0.2		1.8	
					Middle	4.2	0.3	288	27.8	27.8	7.7	7.7	17.7	17.7	70.4	70.4	5.0		3.9		7		88				<0.2		1.7	
						4.2	0.3	290	27.8		7.7		17.7		70.3		5.0		3.9		6		88				<0.2		1.6	
					Bottom	7.3	0.3	286	27.0	27.0	7.6	7.6	24.8	24.8	55.7	56.0	3.9	3.9	5.2		6		90				<0.2		1.6	
						7.3	0.3	303	27.0		7.6		24.8		56.2		3.9		5.1		7		91				<0.2		1.8	
IM12	Cloudy	Moderate	12:25	9.4	Surface	1.0	0.2	261	27.9	27.9	7.7	7.7	10.8	10.8	87.6	87.3	6.5	5.8	3.9	4.5	5	6	85	88	821442	812025	<0.2	<0.2	1.8	1.8
						1.0	0.2	265	27.9		7.7		10.8		86.9		6.4		3.9		5		85				<0.2		1.9	
					Middle	4.7	0.3	270	27.8	27.8	7.7	7.7	16.9	16.8	70.7	70.7	5.1		4.2		6		88				<0.2		1.8	
						4.7	0.3	285	27.8		7.7		16.7		70.6		5.1		4.1		5		89				<0.2		1.8	
					Bottom	8.4	0.2	273	27.2	27.3	7.6	7.6	24.6	24.6	56.3	57.3	3.9	4.0	5.6		6		89				<0.2		1.8	
						8.4	0.2	297	27.3		7.6		24.5		58.3		4.0		5.5		6		90				<0.2		1.8	
SR1A	Cloudy	Calm	12:09	4.1	Surface	1.0	-	-	27.9	27.9	7.7	7.7	10.1	10.1	83.1	82.9	6.2	6.2	4.5	4.4	4	4	-	-	819978	812661	-	-	-	-
						1.0	-	-	27.9		7.7		10.1		82.6		6.1		4.4		4		-				-		-	
					Middle	2.1	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.1	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	27.8	27.9	7.7	7.7	16.5	16.4	72.3	72.5	5.2	5.2	4.4		4		-				-		-	
						3.1	-	-	27.9		7.7		16.3		72.6		5.2		4.3		4		-				-		-	
SR2	Cloudy	Moderate	11:48	5.5	Surface	1.0	0.2	152	28.0	28.0	7.7	7.7	12.0	11.9	82.0	81.8	6.0	6.0	4.4	4.1	3	4	84	86	821454	814168	<0.2	<0.2	1.7	1.7
						1.0	0.2	154	28.0		7.7		11.9		81.6		6.0		4.4		4		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.0	292	28.0	28.0	7.7	7.7	14.9	14.9	81.4	81.6	5.9	5.9	3.9		4		87				<0.2		1.6	
						4.5	0.0	296	28.0		7.7		14.9		81.7		5.9		3.9		4		88				<0.2		1.7	
SR3	Cloudy	Moderate	13:03	8.8	Surface	1.0	0.3	247	27.9	27.9	7.7	7.7	9.4	9.4	85.7	85.8	6.4	6.2	4.9	5.2	6	6	-	-	822153	807558	-	-	-	-
						1.0	0.3	253	27.9		7.7		9.5		85.8		6.4		4.9		6		-				-		-	
					Middle	4.4	0.2	274	27.9	27.9	7.7	7.7	11.4	11.4	82.3	81.9	6.1		3.9		6		-				-		-	
						4.4	0.3	284	27.9		7.7		11.4		81.5		6.0		4.0		5		-				-		-	
					Bottom	7.8	0.1	174	27.1	27.1	7.6	7.6	22.7	23.5	51.2	51.0	3.6	3.6	6.5		5		-				-		-	
						7.8	0.1	176	27.1		7.6		24.3		50.8		3.5		6.9		6		-				-		-	
SR4A	Cloudy	Moderate	11:55	9.1	Surface	1.0	0.1	236	28.4	28.4	7.7	7.7	17.2	17.2	69.9	69.9	4.9	4.4	10.9	11.4	5	6	-	-	817168	807787	-	-	-	-
						1.0	0.1	255	28.4		7.7		17.2		69.9		4.9		10.9		6		-				-		-	
					Middle	4.6	0.0	187	28.2	28.2	7.7	7.7	20.1	20.1	56.5	56.5	3.9		11.5		5		-				-		-	
						4.6	0.0	202	28.2		7.7		20.1		56.5		3.9		11.5		5		-				-		-	
					Bottom	8.1	0.1	222	27.3	27.3	7.6	7.6	29.3	29.3	52.5	52.5	3.5	3.5	11.8		7		-				-		-	
						8.1	0.1	233	27.3		7.6		29.3		52.5		3.5		11.8		7		-				-		-	
SR5A	Cloudy	Calm	11:41	5.6	Surface	1.0	0.2	274	28.8	28.8	7.8	7.8	14.5	14.5	86.6	86.6	6.2	6.2	9.5	10.6	3	5	-	-	816613	810679	-	-	-	-
						1.0	0.2	286	28.8		7.8		14.5		86.6		6.2		9.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.0	273	28.4	28.4	7.7	7.7	18.5	18.5	69.4	69.4	4.9	4.9	11.6		6		-				-		-	
						4.6	0.0	274	28.4		7.7		18.5		69.4		4.9		11.6		6		-				-		-	
SR6	Cloudy	Calm	11:06	4.7	Surface	1.0	0.1	309	28.9	28.9	7.8	7.8	12.4	12.4	90.2	90.2	6.5	6.5	9.3	9.6	4	5	-	-	817909	814685	-	-	-	-
						1.0	0.1	314	28.9		7.8		12.4		90.2		6.5		9.3		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.0	323	28.5	28.5	7.7	7.7	15.8	15.8	84.3	84.3	6.0	6.0	9.8		6		-				-		-	
						3.7	0.0	342	28.5		7.7		15.8		84.3		6.0		9.8		6		-				-		-	
SR7	Cloudy	Moderate	10:48	16.8	Surface	1.0	0.2	163	27.8	27.8	7.8	7.8	13.8	13.8	88.3	88.2	6.4	6.2	2.5	2.5	4	5	-	-	823639	823741	-	-	-	-
						1.0	0.2	178	27.8		7.8		13.8		88.0		6.4		2.5		5		-				-		-	
					Middle	8.4	0.0	216	27.7	27.7	7.7	7.7	15.0	15.0	83.4	83.3	6.0		2.4		4		-				-		-	
						8.4	0.0	222	27.7		7.7		15.0		83.2		6.0		2.4		5		-				-		-	
					Bottom	15.8	0.1	104	26.0	26.0	7.6	7.6	29.4	29.2	55.8	57.3	3.8	4.0	2.5		5		-				-		-	
						15.8	0.1	106	26.0		7.6		29.1		58.8		4.1		2.4		5		-				-		-	
SR8	Cloudy	Calm	12:21	4.0	Surface	1.0	-	-	28.0	28.0	7.7	7.7	10.3	10.3	85.0	85.0	6.3	6.3	4.6	4.2	2	2	-	-	820378	811621	-	-	-	-
						1.0	-	-	28.0		7.7		10.3		85.0		6.3		4.5		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	28.0	28.0	7.7	7.7	13.7	13.7	80.4	80.5	5.8	5.9	3.9		2		-				-		-	
						3.0	-	-	28.0		7.7		13.7		80.6		5.9		4.0		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 27 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)				Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Roundup	Average	DA	Value	DA
C1	Cloudy	Moderate	09:43	8.7	Surface	1.0	0.2	226	28.9	28.9	8.0	8.0	3.4	3.4	84.2	84.1	6.4	4.7	7.8	8.7	4	5	83	86	815635	804242	<0.2	0.20	<0.2	<0.2	1.7	1.8
						1.0	0.2	243	28.9		8.0		3.4		84.0		6.4		7.8		5		84				<0.2	0.20			1.9	
					Middle	4.4	0.3	194	27.7	27.7	7.7	7.7	22.5	22.5	43.8	44.1	3.0		3.9		5		86				<0.2	0.20			1.9	
						4.4	0.3	198	27.7		7.7		22.6		44.3		3.1		4.3		5		86				<0.2	0.20			1.8	
					Bottom	7.7	0.2	234	26.9	26.9	7.6	7.6	29.1	29.1	41.9	44.1	2.8	3.0	14.2		5		88				<0.2	0.20	<0.2		1.7	
						7.7	0.2	238	26.9		7.6		29.0		46.2		3.1		14.5		5		89				<0.2	0.20			1.7	
C2	Cloudy	Moderate	11:03	11.6	Surface	1.0	0.9	157	28.0	28.0	7.4	7.4	7.5	7.5	64.6	64.6	4.9	3.9	7.8	6.9	5	5	85	87	825691	806959	<0.2	0.2	<0.2	<0.2	2.2	2.2
						1.0	0.9	170	28.0		7.4		7.5		64.6		4.9		7.8		6		84				<0.2	0.2			2.1	
					Middle	5.8	0.4	165	26.7	26.7	7.6	7.6	25.7	25.7	42.3	42.3	2.9		3.1		5		87				<0.2	0.2	<0.2		2.2	
						5.8	0.4	179	26.7		7.6		25.7		42.3		2.9		3.1		6		88				<0.2	0.2			2.2	
					Bottom	10.6	0.1	161	26.3	26.3	7.6	7.6	28.3	28.4	36.5	36.6	2.5	2.5	9.8		5		90				<0.2	0.2	<0.2		2.2	
						10.6	0.1	164	26.3		7.6		28.4		36.6		2.5		9.8		5		89				<0.2	0.2			2.3	
C3	Cloudy	Moderate	09:01	12.2	Surface	1.0	0.2	190	27.8	27.8	7.7	7.7	14.8	14.8	74.4	74.3	5.4	5.0	3.9	2.8	3	3	85	88	822090	817786	<0.2	0.2	<0.2	<0.2	1.6	1.6
						1.0	0.2	204	27.8		7.7		14.9		74.2		5.4		3.9		3		84				<0.2	0.2			1.7	
					Middle	6.1	0.2	23	27.3	27.3	7.7	7.7	20.3	20.4	65.3	65.3	4.6		2.5		4		88				<0.2	0.2	<0.2		1.5	
						6.1	0.2	23	27.2		7.7		20.4		65.2		4.6		2.5		3		89				<0.2	0.2			1.6	
					Bottom	11.2	0.1	148	25.6	25.6	7.6	7.6	30.6	30.6	41.6	41.9	2.9	2.9	1.9		3		90				<0.2	0.2	<0.2		1.6	
						11.2	0.1	153	25.5		7.6		30.6		42.1		2.9		1.9		4		91				<0.2	0.2			1.6	
IM1	Cloudy	Moderate	10:14	5.6	Surface	1.0	0.1	93	29.1	29.1	7.9	7.9	7.6	7.6	88.3	88.2	6.5	6.5	5.2	4.4	4	5	85	86	817927	807127	<0.2	0.2	<0.2	<0.2	1.9	1.8
						1.0	0.1	101	29.1		7.9		7.6		88.1		6.5		5.2		5		84				<0.2	0.2			1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	<0.2	-	1.8
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.6	0.1	177	27.3	27.4	7.7	7.7	26.4	26.5	53.1	54.5	3.6	3.7	3.5		5		88				<0.2	0.2	<0.2		1.8	
						4.6	0.1	177	27.4		7.7		26.6		55.8		3.8		3.5		6		88				<0.2	0.2			1.8	
IM2	Cloudy	Moderate	10:21	7.0	Surface	1.0	0.5	187	28.8	28.8	7.9	7.9	11.9	11.9	78.3	78.3	5.7	**4.0**	4.4	4.0	4	4	84	86	818185	806177	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.5	198	28.8		7.9		11.9		78.3		5.7		4.4		3		85				<0.2	0.2			1.8	
					Middle	3.5	0.2	208	27.3	27.3	7.7	7.7	25.9	25.9	33.9	34.1	2.3		3.1		4		86				<0.2	0.2	<0.2		1.8	
						3.5	0.2	209	27.3		7.7		25.9		34.2		2.4		3.1		5		86				<0.2	0.2			1.7	
					Bottom	6.0	0.0	144	27.0	27.1	7.7	7.7	28.8	28.7	51.5	53.9	3.5	3.7	4.5		5		88				<0.2	0.2	<0.2		1.7	
						6.0	0.0	156	27.1		7.7		28.6		56.2		3.8		4.6		5		88				<0.2	0.2			1.7	
IM3	Cloudy	Moderate	10:27	7.1	Surface	1.0	0.3	203	28.9	28.9	7.9	7.9	11.9	11.9	74.3	74.2	5.4	4.5	4.3	4.2	3	4	85	88	818765	805607	<0.2	0.2	<0.2	<0.2	1.8	1.9
						1.0	0.3	211	28.9		7.9		11.9		74.1		5.4		4.3		3		86				<0.2	0.2			1.8	
					Middle	3.6	0.3	236	28.1	28.2	7.7	7.7	24.2	23.7	51.4	53.5	3.5		4.9		4		88				<0.2	0.2	<0.2		1.8	
						3.6	0.3	245	28.3		7.7		23.2		55.5		3.8		4.9		4		88				<0.2	0.2			1.9	
					Bottom	6.1	0.1	229	27.0	27.0	7.7	7.7	28.5	28.5	47.0	48.5	3.2	3.3	3.4		4		90				<0.2	0.2	<0.2		2.0	
						6.1	0.1	240	27.0		7.7		28.5		49.9		3.4		3.5		5		90				<0.2	0.2			1.8	
IM4	Cloudy	Moderate	10:36	7.8	Surface	1.0	0.9	171	28.7	28.7	7.9	7.9	5.8	5.8	84.7	84.3	6.3	4.5	6.7	6.6	6	6	84	86	819719	804607	<0.2	0.2	<0.2	<0.2	1.9	1.9
						1.0	0.9	176	28.7		7.9		5.8		83.8		6.3		6.7		5		85				<0.2	0.2			2.0	
					Middle	3.9	0.4	187	27.4	27.4	7.7	7.7	24.9	24.9	38.4	38.7	2.7		6.3		6		85				<0.2	0.2	<0.2		2.0	
						3.9	0.4	194	27.4		7.7		24.9		39.0		2.7		6.4		6		85				<0.2	0.2			2.0	
					Bottom	6.8	0.1	296	27.0	27.0	7.7	7.7	28.4	28.5	44.1	46.2	3.0	3.2	7.0		6		88				<0.2	0.2	<0.2		1.9	
						6.8	0.1	317	27.0		7.7		28.5		48.2		3.3		6.6		5		88				<0.2	0.2			1.8	
IM5	Cloudy	Moderate	10:48	7.2	Surface	1.0	0.7	169	29.2	29.2	7.8	7.8	2.9	2.9	84.7	84.7	6.4	5.9	8.1	5.4	4	6	83	85	820711	804865	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.7	180	29.2		7.8		2.8		84.6		6.4		8.0		5		83				<0.2	0.2			1.8	
					Middle	3.6	0.6	198	28.5	28.5	7.8	7.8	11.2	11.2	72.6	72.6	5.3		4.8		6		84				<0.2	0.2	<0.2		1.8	
						3.6	0.6	207	28.4		7.8		11.3		72.6		5.3		4.6		6		85				<0.2	0.2			1.7	
					Bottom	6.2	0.4	216	28.0	28.0	7.8	7.8	17.6	17.7	59.7	59.4	4.2	4.2	3.5		6		87				<0.2	0.2	<0.2		1.8	
						6.2	0.4	223	27.9		7.8		17.9		59.1		4.2		3.5		6		88				<0.2	0.2			1.8	
IM6	Cloudy	Moderate	10:56	7.3	Surface	1.0	0.2	252	29.4	29.4	7.9	7.9	7.8	7.8	83.2	83.1	6.1	5.5	5.8	10.5	4	6	84	87	821049	805839	<0.2	0.2	<0.2	<0.2	2.0	1.9
						1.0	0.2	270	29.3		7.9		7.8		83.0		6.1		5.8		5		85				<0.2	0.2			2.0	
					Middle	3.7	0.3	255	28.5	28.5	7.8	7.8	14.6	14.6	66.7	66.7	4.8		10.8		6		88				<0.2	0.2	<0.2		2.0	
						3.7	0.3	262	28.5		7.8		14.6		66.7		4.8		10.7		6		88				<0.2	0.2			1.8	
					Bottom	6.3	0.1	250	27.5	27.5	7.7	7.7	24.5	24.5	43.8	44.2	3.0	3.1	15.0		7		89				<0.2	0.2	<0.2		1.8	
						6.3	0.1	271	27.5		7.7		24.5		44.5		3.1		14.8		6		89				<0.2	0.2			1.8	
IM7	Cloudy	Moderate	11:00	7.7	Surface	1.0	0.5	287	28.7	28.7	7.8	7.8	11.8	11.8	77.5	77.4	5.6	5.5	4.2	4.5	3	4	86	88	821342	806816	<0.2	0.2	<0.2	<0.2	2.1	2.1
						1.0	0.5	294	28.7		7.8		11.8		77.3		5.6		4.1		4		87				<0.2	0.2			2.1	
					Middle	3.9	0.4	280	28.6	28.6	7.8	7.8	11.9	11.9	74.6	74.5	5.4		4.3		4		88				<0.2	0.2	<0.2		2.1	
						3.9	0.4	287	28.5		7.8		11.9		74.3		5.4		4.4		5		88				<0.2	0.2			2.0	
					Bottom	6.7	0.2	229	27.5	27.6	7.7	7.6	24.6	24.6	54.6	55.7	3.8	3.9	5.1		5		89				<0.2	0.2	<0.2		2.1	
						6.7	0.3	233	27.6		7.6		24.6		56.7		3.9		4.8		4		89				<0.2	0.2			2.1	
IM8	Cloudy	Moderate	10:32	7.5	Surface	1.0	0.2	190	28.3	28.3	7.7	7.7	11.2	11.2	80.3	80.3	5.9	5.6	4.8	4.3	4	5	86	87	821823	808152	<0.2	0.2	<0.2	<0.2	1.6	1.7
						1.0	0.2	206	28.3		7.7		11.2		80.3		5.9		4.8		4		84				<0.2	0.2			1.6	
					Middle	3.8	0.1	199	28.1	28.1	7.6	7.6	12.8	12.9	73.2	73.1	5.3		4.7		4		87				<0.2	0.2	<0.2		1.7	
						3.8	0.1	211	28.1		7.6		12.9		73.0		5.3		4.7		5		88				<0.2	0.2			1.7	
					Bottom	6.5	0.1	323	27.1	27.1	7.6	7.6	22.5	22.5	51.7	51.8	3.6	3.6	3.4		6		89				<0.2	0.2	<0.2		1.7	
						6.5	0.1	344	27.1		7.6		22.5		51.8		3.6		3.4		5		90				<0.2	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 27 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)				Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Roundup	Average	DA	Value	DA
IM9	Cloudy	Moderate	10:26	6.7	Surface	1.0	0.3	159	29.0	29.0	7.6	7.6	6.9	6.8	87.2	87.2	6.5	6.2	6.5	5.2	6	5	84	88	822102	808803	<0.2	0.20	<0.2	<0.2	1.7	1.7
						1.0	0.3	165	29.0		7.6		6.8		87.1		6.5		6.6		6		85				<0.2	0.20			1.6	
					Middle	3.4	0.2	128	28.5	28.5	7.7	7.7	10.0	10.0	81.1	80.9	6.0		5.0		5		88				<0.2	0.20			1.7	
						3.4	0.2	135	28.5		7.7		10.1		80.7		5.9		5.0		5		89				<0.2	0.20			1.7	
					Bottom	5.7	0.3	28	27.5	27.5	7.6	7.6	18.4	18.3	58.7	58.7	4.2	4.2	4.1		4		90				<0.2	0.20	<0.2		1.6	
						5.7	0.3	28	27.5		7.6		18.2		58.6		4.2		4.1		5		89				<0.2	0.20			1.6	
IM10	Cloudy	Moderate	10:18	7.0	Surface	1.0	0.5	124	28.9	28.9	7.7	7.7	7.1	7.1	86.8	86.8	6.4	5.9	5.6	4.7	4	4	86	88	822394	809794	<0.2	0.2	<0.2	<0.2	1.6	1.6
						1.0	0.5	126	28.9		7.7		7.1		86.8		6.4		5.6		4		85				<0.2	0.2			1.6	
					Middle	3.5	0.5	109	28.1	28.1	7.6	7.6	12.7	12.7	74.3	74.2	5.4		4.6		5		88				<0.2	0.2			1.6	
						3.5	0.5	109	28.1		7.6		12.7		74.0		5.4		4.6		4		89				<0.2	0.2			1.6	
					Bottom	6.0	0.4	81	27.4	27.4	7.6	7.6	20.2	20.2	57.7	57.8	4.1	4.1	4.0		4		90				<0.2	0.2	<0.2		1.6	
						6.0	0.4	86	27.4		7.6		20.2		57.8		4.1		4.1		5		90				<0.2	0.2			1.5	
IM11	Cloudy	Moderate	10:05	7.6	Surface	1.0	0.6	119	28.1	28.2	7.6	7.6	12.8	12.8	74.3	74.3	5.4	4.7	4.7	4.6	4	4	86	88	822033	811469	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.6	123	28.3		7.6		12.8		74.3		5.4		4.7		4		85				<0.2	0.2			1.8	
					Middle	3.8	0.5	104	27.4	27.4	7.6	7.6	19.6	19.6	54.7	54.5	3.9		4.3		4		88				<0.2	0.2			1.8	
						3.8	0.5	109	27.4		7.6		19.6		54.3		3.9		4.3		4		87				<0.2	0.2			1.8	
					Bottom	6.6	0.2	113	26.4	26.4	7.6	7.6	26.9	26.9	41.2	41.4	2.9	2.9	4.9		4		90				<0.2	0.2	<0.2		1.8	
						6.6	0.2	121	26.4		7.6		26.9		41.6		2.9		4.9		4		90				<0.2	0.2			1.8	
IM12	Cloudy	Moderate	09:57	7.2	Surface	1.0	0.5	108	28.3	28.3	7.6	7.6	10.2	10.2	77.3	77.1	5.7	5.0	5.2	5.5	4	5	86	88	821470	812056	<0.2	0.2	<0.2	<0.2	1.7	1.7
						1.0	0.5	117	28.3		7.6		10.3		76.8		5.7		5.2		3		85				<0.2	0.2			1.7	
					Middle	3.6	0.3	102	27.7	27.7	7.6	7.6	16.4	16.3	60.1	60.0	4.3		5.3		4		88				<0.2	0.2	<0.2		1.7	
						3.6	0.3	102	27.7		7.6		16.3		59.9		4.3		5.4		4		89				<0.2	0.2			1.7	
					Bottom	6.2	0.4	128	26.8	26.8	7.6	7.6	24.6	24.5	41.6	41.7	2.9	2.9	6.1		6		90				<0.2	0.2	<0.2		1.8	
						6.2	0.4	129	26.8		7.6		24.5		41.7		2.9		6.0		6		89				<0.2	0.2			1.8	
SR1A	Cloudy	Moderate	09:41	5.1	Surface	1.0	-	-	28.3	28.3	7.7	7.7	10.1	10.1	77.8	77.6	5.7	5.7	4.4	4.6	4	4	-	-	819972	812662	-	-	-	-	-	-
						1.0	-	-	28.2		7.7		10.1		77.4		5.7		4.5		4		-				-	-			-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-	
						2.6	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.1	-	-	27.3	27.3	7.6	7.6	21.0	21.0	57.4	57.5	4.1	4.1	4.8		4		-				-	-	-		-	
						4.1	-	-	27.3		7.6		21.0		57.5		4.1		4.8		4		-				-	-			-	
SR2	Cloudy	Moderate	09:27	4.8	Surface	1.0	0.4	87	28.1	28.1	7.7	7.7	12.2	12.1	77.5	77.5	5.7	5.7	4.9	4.2	5	5	86	88	821479	814161	<0.2	0.2	<0.2	<0.2	1.7	1.7
						1.0	0.4	88	28.1		7.7		12.1		77.4		5.7		4.8		4		87				<0.2	0.2			1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	3.8	0.4	108	27.6	27.6	7.6	7.6	18.3	18.3	64.7	64.7	4.6	4.6	3.6		5		88				<0.2	0.2	<0.2		1.6	
						3.8	0.4	117	27.5		7.6		18.3		64.7		4.6		3.6		5		90				<0.2	0.2			1.6	
SR3	Cloudy	Moderate	10:37	8.4	Surface	1.0	0.4	189	28.1	28.1	7.6	7.6	11.0	11.0	71.1	71.0	5.2	4.8	5.1	5.4	5	5	-	-	822150	807549	-	-	-	-	-	-
						1.0	0.4	189	28.1		7.6		11.0		70.9		5.2		5.2		6		-				-	-			-	
					Middle	4.2	0.2	232	27.7	27.7	7.6	7.6	17.4	17.4	60.8	60.7	4.4		3.9		5		-				-	-	-		-	
						4.2	0.2	233	27.7		7.6		17.4		60.6		4.3		3.9		5		-				-	-			-	
					Bottom	7.4	0.1	329	26.8	26.8	7.5	7.5	26.4	26.4	29.4	29.5	2.0	**2.0**	7.3		5		-				-	-	-		-	
						7.4	0.1	359	26.8		7.5		26.4		29.6		2.0		7.2		5		-				-	-			-	
SR4A	Cloudy	Moderate	09:18	9.3	Surface	1.0	0.2	243	28.9	28.9	7.9	7.9	10.2	10.2	81.5	81.4	5.9	4.9	4.3	9.5	5	5	-	-	817188	807799	-	-	-	-	-	-
						1.0	0.2	246	28.9		7.9		10.2		81.3		5.9		4.3		5		-				-	-			-	
					Middle	4.7	0.1	61	27.4	27.5	7.7	7.7	25.8	25.7	55.2	57.7	3.8		8.3		5		-				-	-	-		-	
						4.7	0.1	65	27.5		7.7		25.7		60.1		4.1		8.4		4		-				-	-			-	
					Bottom	8.3	0.0	76	27.0	27.0	7.7	7.7	28.6	28.6	38.7	39.4	2.6	2.7	15.9		5		-				-	-	-		-	
						8.3	0.0	82	27.0		7.7		28.6		40.1		2.7		15.9		6		-				-	-			-	
SR5A	Cloudy	Calm	09:03	5.7	Surface	1.0	0.0	300	28.7	28.7	7.9	7.9	11.8	11.9	83.7	83.5	6.1	6.1	3.8	5.2	5	4	-	-	816591	810692	-	-	-	-	-	-
						1.0	0.0	319	28.6		7.9		11.9		83.2		6.0		3.8		4		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.7	0.0	60	27.8	27.8	7.7	7.7	21.7	21.7	47.7	47.8	3.3	3.3	6.8		4		-				-	-	-		-	
						4.7	0.0	61	27.7		7.7		21.7		47.8		3.3		6.2		4		-				-	-			-	
SR6	Cloudy	Calm	08:37	4.5	Surface	1.0	0.1	213	29.1	29.1	7.9	7.9	12.5	12.5	90.0	89.9	6.5	6.5	2.3	4.9	5	5	-	-	817877	814678	-	-	-	-	-	-
						1.0	0.1	220	29.1		7.9		12.5		89.8		6.4		2.3		5		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	3.5	0.1	168	28.2	28.2	7.7	7.7	18.2	18.2	61.7	61.9	4.4	4.4	7.5		4		-				-	-	-		-	
						3.5	0.1	170	28.2		7.7		18.2		62.0		4.4		7.5		4		-				-	-			-	
SR7	Cloudy	Moderate	08:22	16.8	Surface	1.0	0.3	69	27.8	27.8	7.7	7.7	15.5	15.5	77.8	77.7	5.6	5.3	3.2	2.8	5	5	-	-	823656	823729	-	-	-	-	-	-
						1.0	0.3	72	27.8		7.7		15.5		77.5		5.6		3.2		5		-				-	-			-	
					Middle	8.4	0.1	11	27.5	27.5	7.7	7.7	16.9	16.9	70.7	68.7	5.1		2.9		5		-				-	-	-		-	
						8.4	0.1	11	27.4		7.7		17.0		66.7		4.8		2.9		5		-				-	-			-	
					Bottom	15.8	0.2	26	25.1	25.1	7.6	7.6	32.6	32.6	37.3	37.4	2.6	**2.6**	2.4		6		-				-	-	-		-	
						15.8	0.2	27	25.1		7.6		32.6		37.5		2.6		2.4		6		-				-	-			-	
SR8	Cloudy	Moderate	09:50	5.0	Surface	1.0	-	-	28.4	28.4	7.7	7.7	8.0	8.0	78.5	78.4	5.8	5.8	13.2	9.9	6	7	-	-	820383	811627	-	-	-	-	-	-
						1.0	-	-	28.4		7.7		8.0		78.2		5.8		13.2		7		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-	-	-	
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.0	-	-	27.1	27.1	7.6	7.6	22.3	22.3	53.3	53.4	3.8	3.8	6.5		8		-				-	-	-		-	
						4.0	-	-	27.1		7.6		22.3		53.5		3.8		6.8		7		-				-	-			-	

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

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

Water Quality Monitoring

Water Quality Monitoring Results on 27 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)				Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Roundup	Average	DA	Value	DA
C1	Cloudy	Moderate	14:03	8.3	Surface	1.0	0.1	68	29.5	29.5	7.9	7.9	7.9	8.0	86.5	86.5	6.3	5.5	5.7	7.3	6	6	84	88	815624	804255	<0.2	0.20	<0.2	<0.2	1.8	1.7
						1.0	0.1	70	29.5		7.9		8.0		86.4		6.3		5.7		5		84				<0.2	0.20			1.7	
					Middle	4.2	0.1	71	28.4	28.4	7.8	7.8	15.2	15.2	65.8	65.8	4.7		4.0		6		89				<0.2	0.20			1.7	
						4.2	0.1	73	28.4		7.8		15.2		65.7		4.7		4.0		6		90				<0.2	0.20			1.7	
					Bottom	7.3	0.1	9	27.1	27.1	7.7	7.6	28.0	27.9	53.8	56.7	3.7	3.9	12.4		5		90				<0.2	0.20	<0.2		1.8	
						7.3	0.1	9	27.1		7.6		27.8		59.6		4.1		12.2		6		91				<0.2	0.20			1.7	
C2	Fine	Moderate	13:06	11.8	Surface	1.0	0.6	16	28.0	28.0	7.4	7.4	8.2	8.2	67.8	67.9	5.1	4.3	7.3	4.9	7	7	85	88	825705	806936	<0.2	0.2	<0.2	<0.2	2.4	2.3
						1.0	0.7	18	28.0		7.4		8.1		67.9		5.1		7.4		7		84				<0.2	0.2			2.3	
					Middle	5.9	0.4	17	27.2	27.2	7.6	7.6	21.7	21.7	50.4	50.4	3.5		3.8		7		89				<0.2	0.2			2.3	
						5.9	0.5	19	27.2		7.6		21.7		50.4		3.5		3.8		7		88				<0.2	0.2			2.3	
					Bottom	10.8	0.1	63	26.5	26.5	7.6	7.6	26.7	26.8	39.8	39.8	2.8	2.8	3.6		8		90				<0.2	0.2	<0.2		2.2	
						10.8	0.1	67	26.4		7.6		26.9		39.8		2.8		3.7		7		90				<0.2	0.2			2.3	
C3	Cloudy	Moderate	14:52	12.4	Surface	1.0	0.4	286	28.2	28.2	7.7	7.7	12.8	12.8	80.0	79.7	5.8	4.6	3.7	3.2	5	6	85	88	822099	817794	<0.2	0.2	<0.2	<0.2	1.5	1.5
						1.0	0.4	287	28.2		7.7		12.8		79.3		5.8		3.7		5		86				<0.2	0.2			1.4	
					Middle	6.2	0.2	218	26.5	26.6	7.7	7.6	25.3	25.2	48.1	48.2	3.4		2.5		6		88				<0.2	0.2	<0.2		1.4	
						6.2	0.2	228	26.6		7.6		25.1		48.3		3.4		2.5		6		87				<0.2	0.2			1.5	
					Bottom	11.4	0.1	292	26.0	26.0	7.6	7.6	28.5	28.5	38.9	38.9	2.7	2.7	3.5		6		90				<0.2	0.2	<0.2		1.7	
						11.4	0.1	317	26.0		7.6		28.5		38.9		2.7		3.5		7		90				<0.2	0.2			1.6	
IM1	Cloudy	Calm	13:37	5.4	Surface	1.0	0.4	27	29.1	29.1	8.1	8.1	5.9	5.9	100.4	100.1	7.5	7.5	5.7	6.4	7	8	85	87	817950	807130	<0.2	0.2	<0.2	<0.2	1.7	1.7
						1.0	0.4	29	29.1		8.1		5.9		99.8		7.4		5.6		7		85				<0.2	0.2			1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-	-	-		-	
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.4	0.3	323	27.2	27.2	7.7	7.7	27.4	27.2	66.2	66.1	4.5	4.5	7.4		9		88				<0.2	0.2	<0.2		1.7	
						4.4	0.3	348	27.2		7.7		27.0		66.0		4.5		7.0		8		88				<0.2	0.2			1.7	
IM2	Cloudy	Moderate	13:32	6.9	Surface	1.0	0.2	40	28.9	28.9	7.9	7.9	11.9	11.9	79.8	79.7	5.8	4.9	4.2	3.5	5	6	85	87	818147	806143	<0.2	0.2	<0.2	<0.2	2.5	2.4
						1.0	0.2	39	28.9		7.9		11.9		79.6		5.7		4.1		5		85				<0.2	0.2			2.5	
					Middle	3.5	0.1	38	27.5	27.5	7.8	7.8	23.7	23.8	57.2	57.1	4.0		3.6		7		86				<0.2	0.2	<0.2		2.5	
						3.5	0.1	38	27.5		7.8		23.9		57.0		3.9		3.5		7		87				<0.2	0.2			2.4	
					Bottom	5.9	0.1	31	27.1	27.1	7.7	7.7	28.0	28.0	51.3	51.2	3.5	3.5	2.9		6		89				<0.2	0.2	<0.2		2.3	
						5.9	0.1	33	27.1		7.7		27.9		51.1		3.5		2.8		6		89				<0.2	0.2			2.3	
IM3	Cloudy	Moderate	13:27	7.1	Surface	1.0	0.3	31	29.4	29.4	7.9	7.9	8.5	8.5	83.4	83.3	6.1	5.4	5.8	4.6	6	6	84	87	818787	805582	<0.2	0.2	<0.2	<0.2	2.1	2.2
						1.0	0.3	36	29.4		7.9		8.5		83.2		6.1		5.8		7		84				<0.2	0.2			2.1	
					Middle	3.6	0.4	43	28.4	28.4	7.8	7.8	16.2	16.6	64.6	64.7	4.6		4.9		6		88				<0.2	0.2	<0.2		2.2	
						3.6	0.4	45	28.3		7.8		16.9		64.8		4.6		4.7		6		89				<0.2	0.2			2.3	
					Bottom	6.1	0.3	60	27.3	27.3	7.6	7.6	26.7	26.7	54.2	58.3	3.7	4.0	3.2		6		89				<0.2	0.2	<0.2		2.2	
						6.1	0.3	62	27.3		7.6		26.7		62.3		4.3		3.3		7		89				<0.2	0.2			2.2	
IM4	Cloudy	Moderate	13:21	7.4	Surface	1.0	0.6	28	28.9	28.9	7.8	7.8	6.7	6.6	82.5	82.5	6.1	4.5	6.6	5.1	7	7	83	86	819701	804602	<0.2	0.2	<0.2	<0.2	2.4	2.3
						1.0	0.6	29	28.9		7.8		6.6		82.4		6.1		6.7		7		87				<0.2	0.2			2.2	
					Middle	3.7	0.1	26	27.5	27.5	7.7	7.7	24.4	24.5	42.0	42.6	2.9		4.6		7		84				<0.2	0.2	<0.2		2.2	
						3.7	0.1	29	27.5		7.7		24.6		43.1		3.0		4.6		7		84				<0.2	0.2			2.3	
					Bottom	6.4	0.1	33	27.3	27.3	7.7	7.7	26.2	26.3	52.4	52.4	3.6	3.6	4.1		7		90				<0.2	0.2	<0.2		2.3	
						6.4	0.1	37	27.3		7.7		26.4		52.3		3.6		4.1		6		90				<0.2	0.2			2.3	
IM5	Cloudy	Moderate	13:14	6.9	Surface	1.0	0.6	23	29.1	29.1	7.9	7.9	6.5	6.5	80.4	80.3	6.0	5.5	6.0	7.9	8	8	81	85	820750	804874	<0.2	0.2	<0.2	<0.2	2.4	2.4
						1.0	0.6	26	29.0		7.9		6.4		80.2		6.0		5.8		7		82				<0.2	0.2			2.4	
					Middle	3.5	0.5	25	28.2	28.2	7.8	7.8	15.6	15.6	68.1	68.1	4.9		6.2		8		84				<0.2	0.2	<0.2		2.5	
						3.5	0.5	25	28.2		7.8		15.6		68.0		4.9		6.1		7		85				<0.2	0.2			2.3	
					Bottom	5.9	0.3	29	27.5	27.5	7.7	7.7	23.5	23.5	55.1	55.1	3.8	3.8	11.9		7		88				<0.2	0.2	<0.2		2.3	
						5.9	0.4	25	27.5		7.7		23.5		55.0		3.8		11.7		8		88				<0.2	0.2			2.2	
IM6	Cloudy	Moderate	13:08	7.0	Surface	1.0	0.5	22	29.3	29.3	7.8	7.8	8.9	8.8	84.7	84.7	6.2	5.8	5.4	11.1	5	6	82	85	821049	805841	<0.2	0.2	<0.2	<0.2	2.4	2.4
						1.0	0.6	23	29.2		7.8		8.8		84.6		6.2		5.2		6		82				<0.2	0.2			2.3	
					Middle	3.5	0.6	16	28.7	28.7	7.8	7.8	11.8	11.9	74.3	74.2	5.4		4.4		7		85				<0.2	0.2	<0.2		2.5	
						3.5	0.6	18	28.7		7.8		11.9		74.0		5.4		4.4		6		85				<0.2	0.2			2.3	
					Bottom	6.0	0.4	0	27.4	27.5	7.7	7.7	24.5	24.5	52.1	54.7	3.6	3.8	23.7		6		88				<0.2	0.2	<0.2		2.4	
						6.0	0.4	0	27.5		7.7		24.5		57.2		3.9		23.2		6		88				<0.2	0.2			2.3	
IM7	Cloudy	Moderate	13:04	7.4	Surface	1.0	0.6	12	28.6	28.6	7.8	7.8	10.9	10.9	74.1	73.9	5.4	5.3	4.2	4.0	5	5	81	85	821342	806829	<0.2	0.2	<0.2	<0.2	2.3	2.1
						1.0	0.6	12	28.6		7.8		10.9		73.6		5.4		4.2		5		82				<0.2	0.2			2.3	
					Middle	3.7	0.6	15	28.5	28.5	7.8	7.8	12.9	13.0	72.1	71.9	5.2		4.2		4		85				<0.2	0.2	<0.2		2.0	
						3.7	0.6	16	28.5		7.8		13.0		71.7		5.2		4.2		6		85				<0.2	0.2			1.9	
					Bottom	6.4	0.3	13	27.8	27.8	7.8	7.8	20.3	20.3	55.7	55.7	3.9	3.9	3.6		6		88				<0.2	0.2	<0.2		2.0	
						6.4	0.3	14	27.8		7.8		20.3		55.7		3.9		3.7		5		88				<0.2	0.2			1.9	
IM8	Fine	Moderate	13:32	7.0	Surface	1.0	0.3	322	28.6	28.6	7.5	7.5	4.4	4.4	79.6	79.4	6.0	5.7	7.7	5.9	7	7	84	88	821848	808119	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	327	28.5		7.5		4.4		79.2		6.0		7.6		7		85				<0.2	0.2			1.8	
					Middle	3.5	0.3	354	28.2	28.2	7.6	7.6	9.7	9.7	72.2	72.1	5.3		6.2		7		88				<0.2	0.2	<0.2		1.7	
						3.5	0.3	341	28.2		7.6		9.7		72.0		5.3		6.2		6		89				<0.2	0.2			1.8	
					Bottom	6.0	0.3	305	27.4	27.4	7.6	7.6	19.9	19.5	56.2	56.1	4.0	4.0	3.9		7		90				<0.2	0.2	<0.2		1.8	
						6.0	0.3	309	27.4		7.6		19.2		56.0		4.0		3.9		6		90				<0.2	0.2			2.0	

DA: Depth-Averaged

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

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

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 June 19 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)				Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	Roundup	Average	DA	Value	DA
IM9	Fine	Moderate	13:39	6.8	Surface	1.0	0.2	297	28.2	28.2	7.5	7.5	6.6	6.6	72.0	72.0	5.4	5.3	6.9	6.0	6	6	86	88	822071	808825	<0.2	0.20	<0.2	<0.2	1.8	1.8
						1.0	0.2	285	28.2		7.5		6.6		72.0		5.4		6.9		6		84				<0.2	0.20			1.8	
					Middle	3.4	0.1	245	28.2	28.2	7.6	7.6	9.8	9.7	71.0	70.8	5.3		6.2		5		88				<0.2	0.20			1.8	
						3.4	0.1	247	28.2		7.6		9.7		70.5		5.2		6.3		6		89				<0.2	0.20			1.9	
					Bottom	5.8	0.2	269	27.2	27.2	7.6	7.6	22.0	22.0	52.6	52.6	3.7	3.7	4.8		4		89				<0.2	0.20	<0.2		1.9	
						5.8	0.2	273	27.2		7.6		22.1		52.6		3.7		4.7		6		90				<0.2	0.20			1.8	
IM10	Fine	Moderate	13:45	7.2	Surface	1.0	0.3	289	28.1	28.1	7.5	7.5	10.4	10.4	69.2	69.2	5.1	5.0	6.3	6.0	8	7	84	87	822395	809814	<0.2	0.2	<0.2	<0.2	1.7	1.8
						1.0	0.3	285	28.1		7.5		10.5		69.2		5.1		6.2		7		85				<0.2	0.2			1.8	
					Middle	3.6	0.2	278	27.9	27.9	7.6	7.6	13.9	13.9	66.4	66.2	4.8		5.0		7		88				<0.2	0.2	<0.2		1.8	
						3.6	0.2	279	27.9		7.6		13.9		65.9		4.8		5.0		6		87				<0.2	0.2			1.8	
					Bottom	6.2	0.1	248	27.1	27.2	7.6	7.6	22.7	22.6	48.9	48.9	3.4	3.4	6.8		6		90				<0.2	0.2	<0.2		1.8	
						6.2	0.1	231	27.2		7.6		22.6		48.9		3.4		6.7		6		89				<0.2	0.2			1.8	
IM11	Cloudy	Moderate	13:56	7.8	Surface	1.0	0.3	265	28.4	28.4	7.5	7.5	7.9	7.9	71.8	71.7	5.4	5.0	6.7	6.0	7	8	86	88	822047	811474	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.3	252	28.3		7.5		7.9		71.6		5.3		6.4		8		85				<0.2	0.2			1.8	
					Middle	3.9	0.2	268	27.8	27.8	7.6	7.6	15.0	15.0	64.0	63.9	4.6		4.9		8		89				<0.2	0.2	<0.2		1.8	
						3.9	0.2	270	27.8		7.6		15.0		63.8		4.6		4.9		7		87				<0.2	0.2			1.8	
					Bottom	6.8	0.2	228	27.0	27.0	7.6	7.6	26.0	25.9	50.8	50.8	3.5	3.5	6.5		7		89				<0.2	0.2	<0.2		1.8	
						6.8	0.2	203	27.0		7.6		25.9		50.8		3.5		6.4		8		90				<0.2	0.2			1.8	
IM12	Cloudy	Moderate	14:02	8.3	Surface	1.0	0.1	213	28.4	28.4	7.5	7.5	7.0	7.0	74.3	74.3	5.6	5.3	7.0	6.1	8	8	86	88	821444	812045	<0.2	0.2	<0.2	<0.2	1.8	1.8
						1.0	0.1	224	28.4		7.5		7.0		74.3		5.6		7.0		8		87				<0.2	0.2			1.8	
					Middle	4.2	0.2	243	28.0	28.0	7.6	7.6	12.9	12.9	67.0	67.0	4.9		5.0		7		88				<0.2	0.2	<0.2		1.9	
						4.2	0.2	255	27.9		7.6		12.9		67.0		4.9		5.0		8		88				<0.2	0.2			1.8	
					Bottom	7.3	0.1	220	26.8	26.9	7.6	7.6	27.2	27.2	53.6	53.6	3.7	3.7	6.4		7		90				<0.2	0.2	<0.2		1.8	
						7.3	0.1	209	26.9		7.6		27.2		53.6		3.7		6.1		8		91				<0.2	0.2			1.8	
SR1A	Cloudy	Calm	14:19	4.9	Surface	1.0	-	-	29.1	29.1	7.7	7.7	7.9	7.9	90.5	90.5	6.7	6.7	6.1	5.8	7	7	-	-	819982	812662	-	-	-	-	-	-
						1.0	-	-	29.1		7.7		7.9		90.4		6.6		6.1		7		-				-	-			-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-	-	-	-	-	-
						2.5	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	3.9	-	-	28.0	28.0	7.6	7.6	14.2	14.2	71.2	71.2	5.2	5.2	5.5		7		-				-	-	-		-	
						3.9	-	-	28.0		7.6		14.3		71.2		5.2		5.5		7		-				-	-			-	
SR2	Cloudy	Moderate	14:30	4.7	Surface	1.0	0.1	231	28.7	28.7	7.7	7.7	7.9	7.9	88.2	88.0	6.5	6.5	5.4	5.8	6	6	85	88	821481	814159	<0.2	0.2	<0.2	<0.2	1.8	1.9
						1.0	0.1	238	28.6		7.7		7.9		87.8		6.5		5.2		5		87				<0.2	0.2			2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	3.7	0.2	234	28.1	28.1	7.6	7.6	12.6	12.6	76.6	76.5	5.6	5.6	6.3		5		90				<0.2	0.2	<0.2		1.8	
						3.7	0.2	244	28.1		7.6		12.6		76.4		5.6		6.4		6		90				<0.2	0.2			1.9	
SR3	Fine	Moderate	13:26	8.1	Surface	1.0	0.3	190	27.9	27.9	7.5	7.5	12.3	12.3	66.3	66.3	4.9	4.8	5.8	5.2	7	6	-	-	822131	807558	-	-	-	-	-	-
						1.0	0.3	207	27.9		7.5		12.3		66.3		4.9		6.0		6		-				-	-			-	
					Middle	4.1	0.3	145	27.8	27.8	7.6	7.6	15.1	15.1	64.4	64.4	4.7		4.8		7		-				-	-	-		-	
						4.1	0.3	166	27.8		7.6		15.1		64.3		4.6		4.8		6		-				-	-			-	
					Bottom	7.1	0.2	204	27.0	27.0	7.6	7.6	23.3	23.3	50.2	50.2	3.5	3.5	4.8		4		-				-	-	-		-	
						7.1	0.2	210	27.0		7.6		23.4		50.2		3.5		4.9		4		-				-	-			-	
SR4A	Cloudy	Calm	14:26	8.9	Surface	1.0	0.4	247	29.7	29.7	8.1	8.1	9.1	9.1	102.8	102.8	7.4	5.7	3.9	4.1	4	6	-	-	817176	807808	-	-	-	-	-	-
						1.0	0.4	269	29.7		8.1		9.1		102.7		7.4		3.9		6		-				-	-			-	
					Middle	4.5	0.5	253	28.3	28.3	7.8	7.8	18.8	18.7	55.0	55.0	3.9		4.2		5		-				-	-	-		-	
						4.5	0.5	261	28.3		7.8		18.7		54.9		3.9		4.1		6		-				-	-			-	
					Bottom	7.9	0.3	246	27.9	28.0	7.7	7.7	27.6	27.5	66.3	66.4	4.5	4.5	4.3		7		-				-	-	-		-	
						7.9	0.4	254	28.0		7.7		27.5		66.5		4.5		4.3		6		-				-	-			-	
SR5A	Cloudy	Calm	14:42	5.5	Surface	1.0	0.2	218	29.8	29.8	8.1	8.1	12.2	12.2	99.9	99.7	7.1	7.1	2.7	3.2	5	6	-	-	816597	810689	-	-	-	-	-	-
						1.0	0.2	221	29.7		8.1		12.2		99.5		7.1		2.9		6		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.5	0.2	205	27.7	27.8	7.8	7.8	23.9	23.5	66.4	71.0	4.6	4.9	3.6		6		-				-	-	-		-	
						4.5	0.2	228	27.9		7.8		23.2		75.5		5.2		3.6		7		-				-	-			-	
SR6	Cloudy	Calm	15:12	4.4	Surface	1.0	0.0	186	29.4	29.4	8.1	8.1	11.6	11.6	101.1	101.1	7.3	7.3	3.0	9.8	5	5	-	-	817902	814664	-	-	-	-	-	-
						1.0	0.0	194	29.4		8.1		11.6		101.0		7.2		3.0		5		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	3.4	0.1	270	28.5	28.5	7.9	7.9	15.7	15.7	75.3	75.5	5.4	5.4	16.2		6		-				-	-	-		-	
						3.4	0.1	286	28.5		7.9		15.7		75.7		5.4		17.0		5		-				-	-			-	
SR7	Cloudy	Moderate	15:28	16.6	Surface	1.0	0.1	191	28.6	28.6	7.8	7.8	12.9	13.0	91.0	90.8	6.6	5.8	3.7	2.8	4	4	-	-	823657	823725	-	-	-	-	-	-
						1.0	0.1	200	28.6		7.8		13.1		90.6		6.5		3.7		4		-				-	-			-	
					Middle	8.3	0.0	234	26.0	26.0	7.7	7.7	27.9	28.0	73.8	73.8	5.1		2.4		4		-				-	-	-		-	
						8.3	0.0	235	26.0		7.7		28.0		73.8		5.1		2.4		4		-				-	-			-	
					Bottom	15.6	0.3	239	25.6	25.6	7.7	7.7	30.5	30.5	56.6	56.6	3.9	3.9	2.3		4		-				-	-	-		-	
						15.6	0.4	239	25.6		7.7		30.5		56.6		3.9		2.3		4		-				-	-			-	
SR8	Cloudy	Calm	14:12	5.1	Surface	1.0	-	-	28.5	28.5	7.5	7.5	7.3	7.2	75.7	75.7	5.6	5.6	7.7	6.3	6	6	-	-	820404	811642	-	-	-	-	-	-
						1.0	-	-	28.5		7.5		7.2		75.6		5.6		7.6		7		-				-	-			-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-			-	-	-	-	-	-
						-	-	-	-		-		-		-		-		-		-		-				-	-			-	
					Bottom	4.1	-	-	27.9	28.0	7.6	7.6	14.8	14.8	70.8	71.1	5.1	5.1	4.9		6		-				-	-	-		-	
						4.1	-	-	28.0		7.6		14.8		71.3		5.1		5.1		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 29 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:15	8.6	Surface	1.0	0.4	190	29.5	29.5	8.2	8.2	6.1	6.1	116.5	116.0	8.6	7.4	5.1	6.9	3	3	80	85	815640	804245	<0.2	<0.2	1.7	1.6
						1.0	0.4	208	29.4		8.2		6.1		115.5		8.5		5.0		3		81				<0.2		1.7	
					Middle	4.3	0.5	226	28.8	28.8	7.8	7.8	10.5	10.5	85.8	85.5	6.3		4.6		3		85				<0.2		1.5	
						4.3	0.6	246	28.8		7.8		10.5		85.1		6.2		4.6		4		85				<0.2		1.6	
					Bottom	7.6	0.5	246	26.4	26.4	7.6	7.6	29.6	29.6	36.9	37.8	2.5	2.6	10.9		3		88				<0.2		1.5	
						7.6	0.6	253	26.4		7.6		29.6		38.6		2.6		11.0		4		88				<0.2		1.4	
C2	Sunny	Moderate	12:27	10.7	Surface	1.0	1.2	169	29.3	29.3	7.5	7.5	5.6	5.6	80.2	80.2	6.0	4.7	13.6	12.0	7	7	83	87	825658	806936	<0.2	<0.2	2.2	2.3
						1.0	1.3	169	29.3		7.5		5.6		80.2		6.0		13.6		7		83				<0.2		2.4	
					Middle	5.4	0.9	162	27.9	27.9	7.5	7.5	20.9	20.9	46.7	46.7	3.3		11.5		7		87				<0.2		2.2	
						5.4	0.9	172	27.9		7.5		20.9		46.7		3.3		11.5		8		87				<0.2		2.4	
					Bottom	9.7	0.2	145	27.2	27.1	7.6	7.6	26.4	26.4	41.1	41.1	2.8	2.8	10.9		7		91				<0.2		2.3	
						9.7	0.2	150	27.1		7.6		26.5		41.1		2.8		10.9		8		91				<0.2		2.3	
C3	Cloudy	Moderate	10:17	12.4	Surface	1.0	0.1	244	28.7	28.7	7.8	7.8	16.5	16.5	80.3	80.4	5.7	5.5	9.1	9.0	4	4	83	88	822087	817806	<0.2	<0.2	1.6	1.7
						1.0	0.1	246	28.7		7.8		16.5		80.5		5.7		9.1		4		84				<0.2		1.6	
					Middle	6.2	0.2	355	28.5	28.5	7.8	7.8	17.7	17.7	76.1	76.1	5.4		9.0		4		87				<0.2		1.6	
						6.2	0.2	357	28.5		7.8		17.7		76.0		5.3		9.0		5		88				<0.2		1.7	
					Bottom	11.4	0.3	100	27.0	27.0	7.7	7.7	26.5	26.5	56.9	56.9	3.9	3.9	9.0		4		92				<0.2		2.0	
						11.4	0.4	104	27.0		7.7		26.5		56.9		3.9		9.0		5		91				<0.2		1.8	
IM1	Cloudy	Calm	11:34	5.5	Surface	1.0	0.4	3	29.0	29.0	7.9	7.9	10.4	10.3	97.7	97.7	7.1	7.1	4.7	4.5	4	4	82	83	817929	807116	<0.2	<0.2	1.5	1.5
						1.0	0.4	3	29.0		7.9		10.3		97.7		7.1		4.7		4		82				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	345	27.3	27.3	7.6	7.6	23.2	23.4	65.4	65.7	4.6	4.6	4.3		4		84				<0.2		1.5	
						4.5	0.2	317	27.3		7.6		23.5		65.9		4.6		4.5		5		85				<0.2		1.5	
IM2	Cloudy	Moderate	11:41	6.7	Surface	1.0	0.4	220	28.6	28.7	7.9	7.9	13.6	13.5	84.3	84.3	6.1	4.8	5.1	4.8	6	6	84	86	818169	806163	<0.2	<0.2	1.6	1.6
						1.0	0.4	225	28.7		7.9		13.4		84.3		6.1		5.1		5		84				<0.2		1.5	
					Middle	3.4	0.3	220	27.5	27.5	7.7	7.7	23.6	23.5	48.4	48.6	3.4		5.4		5		86				<0.2		1.6	
						3.4	0.4	233	27.5		7.7		23.3		48.8		3.4		5.5		6		86				<0.2		1.6	
					Bottom	5.7	0.3	275	26.4	26.4	7.6	7.6	29.4	29.3	67.2	67.4	4.6	4.6	4.0		6		88				<0.2		1.6	
						5.7	0.3	280	26.4		7.6		29.3		67.5		4.6		4.0		7		89				<0.2		1.6	
IM3	Cloudy	Moderate	11:48	6.9	Surface	1.0	0.7	194	29.2	29.2	8.0	8.0	9.3	9.3	103.8	103.4	7.6	5.8	5.2	4.9	5	5	84	87	818762	805602	<0.2	<0.2	1.6	1.7
						1.0	0.7	213	29.2		8.0		9.3		103.0		7.5		5.2		5		85				<0.2		1.6	
					Middle	3.5	0.5	190	27.8	27.8	7.7	7.7	19.1	19.1	58.1	58.0	4.1		5.0		4		86				<0.2		1.6	
						3.5	0.5	205	27.8		7.7		19.1		57.9		4.1		4.9		6		86				<0.2		1.8	
					Bottom	5.9	0.2	215	26.3	26.3	7.6	7.6	29.9	29.8	58.3	59.0	4.0	4.1	4.3		6		89				<0.2		1.9	
						5.9	0.2	225	26.3		7.6		29.6		59.6		4.1		4.5		4		89				<0.2		1.8	
IM4	Cloudy	Moderate	12:00	7.5	Surface	1.0	1.2	187	29.3	29.3	8.0	8.0	6.4	6.4	107.4	107.1	7.9	5.9	5.5	9.8	4	7	85	87	819743	804615	<0.2	<0.2	1.8	1.9
						1.0	1.2	192	29.2		8.0		6.4		106.8		7.9		5.5		5		85				<0.2		1.8	
					Middle	3.8	0.9	194	27.5	27.5	7.6	7.6	21.1	21.1	56.0	56.3	3.9		11.7		6		88				<0.2		1.9	
						3.8	0.9	205	27.5		7.6		21.1		56.6		4.0		11.6		6		88				<0.2		1.8	
					Bottom	6.5	0.2	224	26.7	26.7	7.6	7.6	25.0	25.5	49.2	49.1	3.4	3.4	12.6		11		88				<0.2		2.0	
						6.5	0.2	235	26.6		7.6		26.0		49.0		3.4		11.9		12		89				<0.2		2.0	
IM5	Cloudy	Rough	12:13	6.2	Surface	1.0	0.9	194	29.2	29.2	8.0	8.0	7.5	7.4	105.5	105.4	7.8	6.9	5.5	7.6	4	5	86	88	820716	804866	<0.2	<0.2	1.9	1.9
						1.0	0.9	197	29.2		8.0		7.4		105.2		7.7		5.6		5		86				<0.2		1.9	
					Middle	3.1	0.9	222	28.7	28.7	7.7	7.7	11.8	11.8	84.7	84.8	6.1		4.3		4		88				<0.2		2.0	
						3.1	0.9	238	28.7		7.7		11.8		84.8		6.1		4.3		4		88				<0.2		1.9	
					Bottom	5.2	0.6	223	27.0	27.0	7.5	7.5	24.5	24.5	55.8	58.5	3.9	4.1	13.0		7		90				<0.2		1.9	
						5.2	0.6	244	27.0		7.5		24.5		61.1		4.2		13.0		6		89				<0.2		1.8	
IM6	Cloudy	Moderate	12:20	6.7	Surface	1.0	0.7	250	29.0	29.0	7.8	7.8	11.2	10.9	93.5	93.5	6.8	6.2	4.7	5.9	3	4	85	88	821043	805832	<0.2	<0.2	1.8	2.0
						1.0	0.7	268	29.0		7.9		10.6		93.5		6.8		4.7		4		85				<0.2		1.9	
					Middle	3.4	0.7	230	28.4	28.4	7.7	7.7	13.8	13.8	76.7	76.7	5.5		4.2		3		88				<0.2		2.0	
						3.4	0.8	249	28.4		7.7		13.7		76.6		5.5		4.2		4		89				<0.2		2.1	
					Bottom	5.7	0.6	218	27.6	27.7	7.6	7.6	19.2	19.2	64.1	64.8	4.5	4.6	9.2		4		90				<0.2		2.0	
						5.7	0.7	222	27.7		7.6		19.1		65.5		4.6		8.8		3		90				<0.2		2.0	
IM7	Cloudy	Rough	12:27	7.4	Surface	1.0	0.7	266	29.3	29.3	7.9	7.9	9.7	9.8	100.1	99.8	7.3	6.3	4.8	4.5	3	4	81	85	821330	806824	<0.2	<0.2	1.8	1.9
						1.0	0.8	284	29.3		7.9		9.9		99.4		7.2		4.8		3		82				<0.2		1.8	
					Middle	3.7	0.7	269	28.3	28.3	7.7	7.7	14.1	14.1	73.6	73.5	5.3		4.3		4		84				<0.2		1.8	
						3.7	0.8	271	28.3		7.7		14.1		73.4		5.3		4.3		4		84				<0.2		2.0	
					Bottom	6.4	0.4	243	27.4	27.4	7.6	7.6	19.8	20.5	59.7	60.0	4.2	4.2	4.5		4		89				<0.2		1.9	
						6.4	0.4	254	27.4		7.6		21.2		60.3		4.2		4.5		4		90				<0.2		1.9	
IM8	Sunny	Moderate	11:58	7.8	Surface	1.0	0.3	230	29.7	29.7	7.8	7.8	10.4	10.4	92.1	92.2	6.6	6.1	10.4	10.1	5	5	84	88	821834	808140	<0.2	<0.2	1.8	1.8
						1.0	0.3	236	29.7		7.8		10.4		92.2		6.6		10.4		4		83				<0.2		1.9	
					Middle	3.9	0.4	248	29.0	29.0	7.6	7.6	13.3	13.3	76.5	76.5	5.5		10.0		4		88				<0.2		1.8	
						3.9	0.4	250	29.0		7.6		13.3		76.5		5.5		10.0		5		88				<0.2		1.8	
					Bottom	6.8	0.4	254	28.7	28.7	7.6	7.6	16.0	16.0	69.3	69.4	4.9	4.9	9.8		4		92				<0.2		1.8	
						6.8	0.5	256	28.7		7.6		16.0		69.4		4.9		9.8		5		91				<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 29 June 19 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	11:50	7.1	Surface	1.0	0.5	138	29.5	29.5	7.7	7.7	9.9	9.9	89.3	89.2	6.5	5.8	10.6	14.5	6	5	83	88	822104	808797	<0.2	<0.2	2.0	1.9
						1.0	0.5	149	29.5		7.7		9.9		89.0		6.4		10.7		5		84				<0.2		1.8	
					Middle	3.6	0.2	134	28.9	28.9	7.6	7.6	14.4	14.4	71.7	71.7	5.1		10.8		5		87				<0.2		1.8	
						3.6	0.2	144	28.9		7.6		14.4		71.6		5.1		10.8		6		88				<0.2		1.8	
					Bottom	6.1	0.2	110	28.2	28.2	7.6	7.6	19.3	19.3	55.3	55.4	3.9	3.9	22.0		5		92				<0.2		1.9	
						6.1	0.2	113	28.2		7.6		19.3		55.4		3.9		22.2		5		91				<0.2		1.8	
IM10	Sunny	Moderate	11:39	8.3	Surface	1.0	1.1	125	29.1	29.1	7.7	7.7	12.1	12.1	82.4	82.4	5.9	5.6	10.4	12.3	4	5	83	88	822377	809774	<0.2	<0.2	1.9	1.9
						1.0	1.2	126	29.1		7.7		12.1		82.3		5.9		10.4		5		83				<0.2		1.9	
					Middle	4.2	1.0	121	28.9	28.9	7.6	7.6	14.1	14.1	73.3	73.3	5.2		10.2		5		88				<0.2		1.9	
						4.2	1.1	123	28.9		7.6		14.1		73.2		5.2		10.2		6		88				<0.2		1.9	
					Bottom	7.3	0.7	107	28.3	28.3	7.6	7.6	18.6	18.6	62.6	62.7	4.4	4.4	16.3		6		91				<0.2		1.8	
						7.3	0.8	111	28.3		7.6		18.6		62.7		4.4		16.3		6		92				<0.2		1.9	
IM11	Sunny	Moderate	11:24	7.5	Surface	1.0	0.7	117	29.5	29.5	7.8	7.8	11.2	11.2	90.1	90.2	6.5	4.9	10.2	12.0	5	6	83	88	822080	811460	<0.2	<0.2	1.9	1.8
						1.0	0.7	123	29.5		7.8		11.2		90.3		6.5		10.2		6		83				<0.2		1.7	
					Middle	3.8	0.5	99	27.7	27.7	7.6	7.6	22.8	22.8	46.0	46.0	3.2		11.6		6		88				<0.2		2.0	
						3.8	0.6	108	27.7		7.6		22.8		46.0		3.2		11.5		5		88				<0.2		1.7	
					Bottom	6.5	0.2	88	27.1	27.1	7.6	7.6	26.5	26.5	40.4	40.5	2.8	2.8	14.2		6		92				<0.2		1.7	
						6.5	0.2	89	27.1		7.6		26.5		40.5		2.8		14.3		6		92				<0.2		1.7	
IM12	Sunny	Moderate	11:13	9.6	Surface	1.0	0.5	90	29.6	29.6	7.8	7.8	10.2	10.2	89.8	89.7	6.5	5.0	10.0	11.6	6	6	83	88	821447	812022	<0.2	<0.2	2.0	1.8
						1.0	0.6	96	29.6		7.8		10.2		89.6		6.5		10.0		6		87				<0.2		1.9	
					Middle	4.8	0.4	113	28.1	28.1	7.6	7.6	19.8	19.8	50.1	50.1	3.5		10.3		6		88				<0.2		1.8	
						4.8	0.4	118	28.1		7.6		19.8		50.1		3.5		10.3		6		87				<0.2		1.7	
					Bottom	8.6	0.2	76	27.2	27.2	7.6	7.6	26.0	26.0	41.1	41.2	2.8	2.8	14.4		7		92				<0.2		1.8	
						8.6	0.2	77	27.2		7.6		26.0		41.2		2.8		14.4		6		91				<0.2		1.8	
SR1A	Cloudy	Moderate	10:55	5.5	Surface	1.0	-	-	29.6	29.6	7.8	7.8	11.6	11.6	96.8	96.9	6.9	6.9	9.6	10.3	7	7	-	-	819977	812666	-	-	-	-
						1.0	-	-	29.6		7.8		11.6		97.0		6.9		9.6		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.4	28.4	7.6	7.6	18.1	18.1	62.0	62.1	4.4	4.4	11.0		7		-				-		-	
						4.5	-	-	28.4		7.6		18.1		62.1		4.4		11.0		7		-				-		-	
SR2	Cloudy	Moderate	10:42	4.8	Surface	1.0	0.4	101	29.4	29.4	7.7	7.7	10.9	11.0	85.4	85.4	6.1	6.1	10.2	10.3	5	6	83	85	821454	814164	<0.2	<0.2	1.8	1.9
						1.0	0.4	107	29.4		7.7		11.1		85.4		6.1		10.2		6		83				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	102	28.6	28.6	7.7	7.7	16.1	16.1	67.0	67.0	4.8	4.8	10.3		6		88				<0.2		2.0	
						3.8	0.2	102	28.6		7.7		16.1		66.9		4.7		10.3		7		87				<0.2		2.1	
SR3	Sunny	Moderate	12:04	8.4	Surface	1.0	0.4	222	30.0	30.0	7.8	7.8	9.4	9.4	96.9	97.0	7.0	5.7	10.6	10.1	5	5	-	-	822156	807584	-	-	-	-
						1.0	0.5	239	30.0		7.8		9.4		97.0		7.0		10.6		4		-				-		-	
					Middle	4.2	0.4	230	28.4	28.4	7.6	7.6	18.5	18.5	63.1	63.2	4.4		9.7		5		-				-		-	
						4.2	0.4	243	28.4		7.6		18.5		63.2		4.4		9.7		4		-				-		-	
					Bottom	7.4	0.3	255	27.9	27.9	7.6	7.6	21.6	21.6	47.7	47.7	3.3	3.3	10.0		5		-				-		-	
						7.4	0.3	278	27.9		7.6		21.6		47.7		3.3		10.1		4		-				-		-	
SR4A	Cloudy	Calm	10:55	9.5	Surface	1.0	0.2	234	29.5	29.5	8.2	8.2	7.2	7.2	112.9	112.6	8.3	6.3	4.2	4.7	6	6	-	-	817186	807801	-	-	-	-
						1.0	0.2	245	29.5		8.2		7.2		112.3		8.2		4.2		4		-				-		-	
					Middle	4.8	0.1	255	26.7	26.7	7.6	7.6	28.9	28.7	60.2	63.9	4.1		4.9		6		-				-		-	
						4.8	0.1	277	26.6		7.6		28.5		67.6		4.6		5.0		4		-				-		-	
					Bottom	8.5	0.1	232	26.4	26.4	7.5	7.5	30.3	30.2	47.2	49.7	3.2	3.4	5.0		6		-				-		-	
						8.5	0.1	233	26.4		7.5		30.2		52.2		3.6		5.0		7		-				-		-	
SR5A	Cloudy	Calm	10:38	5.6	Surface	1.0	0.0	178	29.5	29.5	8.1	8.1	10.8	10.8	118.3	118.1	8.5	8.5	3.8	4.5	4	6	-	-	816585	810692	-	-	-	-
						1.0	0.0	185	29.5		8.1		10.8		117.9		8.5		3.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	123	28.3	28.4	7.6	7.6	20.6	20.5	65.4	66.4	4.5	4.6	5.2		6		-				-		-	
						4.6	0.2	131	28.5		7.6		20.5		67.4		4.7		5.2		7		-				-		-	
SR6	Cloudy	Calm	10:12	4.5	Surface	1.0	0.1	101	28.8	28.8	7.8	7.8	13.4	13.4	91.7	91.3	6.6	6.6	3.8	5.0	4	7	-	-	817909	814673	-	-	-	-
						1.0	0.1	102	28.7		7.8		13.4		90.8		6.5		4.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	5	28.0	28.0	7.5	7.5	19.6	19.5	63.9	64.5	4.5	4.6	6.0		9		-				-		-	
						3.5	0.1	5	28.0		7.5		19.4		65.1		4.6		6.0		9		-				-		-	
SR7	Cloudy	Moderate	09:36	14.6	Surface	1.0	0.4	80	29.0	29.0	7.8	7.8	14.5	14.5	90.2	90.2	6.4	5.9	8.9	8.7	6	5	-	-	823652	823738	-	-	-	-
						1.0	0.4	83	29.0		7.8		14.4		90.1		6.4		9.0		5		-				-		-	
					Middle	7.3	0.1	54	28.7	28.7	7.8	7.8	16.2	16.2	77.1	77.0	5.4		8.8		5		-				-		-	
						7.3	0.1	55	28.7		7.8		16.3		76.8		5.4		8.8		5		-				-		-	
					Bottom	13.6	0.3	109	26.5	26.5	7.7	7.7	29.1	29.1	48.5	48.5	3.3	3.3	8.3		5		-				-		-	
						13.6	0.3	113	26.5		7.7		29.1		48.5		3.3		8.3		5		-				-		-	
SR8	Cloudy	Moderate	11:05	4.3	Surface	1.0	-	-	29.5	29.5	7.7	7.7	10.5	10.5	86.6	86.5	6.2	6.2	10.6	10.8	6	7	-	-	820405	811622	-	-	-	-
						1.0	-	-	29.5		7.7		10.5		86.4		6.2		10.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	-	-	28.4	28.4	7.6	7.6	18.1	18.1	62.5	62.5	4.4	4.4	11.0		8		-				-		-	
						3.3	-	-	28.4		7.6		18.1		62.5		4.4		11.0		8		-				-		-	

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

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

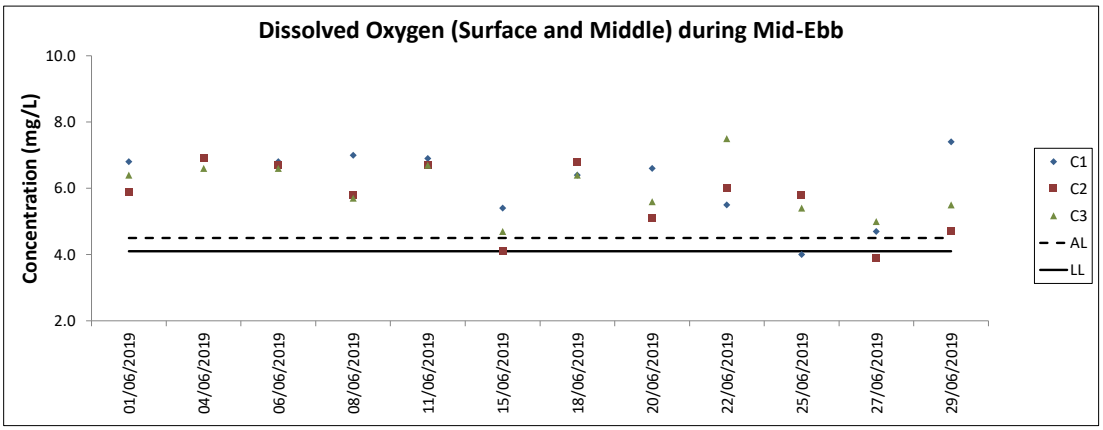
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	16:25	8.8	Surface	1.0	0.4	32	29.5	29.5	8.1	8.1	10.1	10.1	110.2	110.1	8.0	7.3	5.6	5.8	4	5	84	88	815609	804267	<0.2	<0.2	1.8	1.7
						1.0	0.4	30	29.4		8.1		10.2		109.9		7.9		5.5		5		85				<0.2		1.7	
					Middle	4.4	0.1	35	28.8	28.8	7.9	7.9	12.8	12.8	93.3	93.2	6.7		6.4		5		88				<0.2		1.7	
						4.4	0.1	34	28.7		7.9		12.9		93.1		6.7		6.5		5		88				<0.2		1.6	
					Bottom	7.8	0.1	32	28.3	28.3	7.8	7.8	14.4	14.6	76.7	76.1	5.5	5.5	5.6		5		90				<0.2		1.7	
						7.8	0.1	30	28.3		7.8		14.8		75.5		5.4		5.4		4		90				<0.2		1.6	
C2	Sunny	Moderate	15:27	8.5	Surface	1.0	1.2	14	29.0	29.0	7.4	7.4	6.1	6.1	77.0	77.1	5.7	4.5	12.9	11.9	6	7	85	89	825682	806927	<0.2	<0.2	2.3	2.4
						1.0	1.3	16	29.0		7.4		6.1		77.1		5.7		13.0		7		85				<0.2		2.3	
					Middle	4.3	0.7	16	27.9	27.9	7.5	7.5	20.6	20.6	46.9	47.0	3.3		11.5		7		88				<0.2		2.4	
						4.3	0.7	17	27.9		7.5		20.7		47.0		3.3		11.5		6		89				<0.2		2.3	
					Bottom	7.5	0.3	16	27.4	27.4	7.6	7.6	25.2	25.2	43.7	43.8	3.0	3.0	11.2		6		92				<0.2		2.4	
						7.5	0.3	17	27.4		7.6		25.2		43.8		3.0		11.2		7		93				<0.2		2.4	
C3	Sunny	Moderate	17:09	10.8	Surface	1.0	0.7	239	29.5	29.5	7.9	7.9	12.8	12.8	98.7	98.7	7.0	5.7	9.7	12.0	2	3	85	89	822109	817804	<0.2	<0.2	2.2	2.2
						1.0	0.7	246	29.5		7.9		12.8		98.6		7.0		9.7		2		85				<0.2		2.2	
					Middle	5.4	0.5	235	28.1	28.1	7.6	7.6	20.2	20.2	63.0	63.0	4.4		9.1		3		89				<0.2		2.2	
						5.4	0.5	245	28.1		7.6		20.2		63.0		4.4		9.1		3		88				<0.2		2.2	
					Bottom	9.8	0.3	268	27.5	27.5	7.7	7.7	23.7	23.6	56.3	56.3	3.9	3.9	17.2		3		93				<0.2		2.2	
						9.8	0.3	280	27.5		7.7		23.6		56.3		3.9		17.0		3		92				<0.2		2.2	
IM1	Fine	Moderate	16:05	5.8	Surface	1.0	0.4	10	29.6	29.6	8.2	8.2	8.7	8.7	116.5	116.0	8.5	8.5	5.0	5.0	4	5	81	83	817928	807129	<0.2	<0.2	1.8	1.8
						1.0	0.4	10	29.6		8.2		8.7		115.4		8.4		4.9		4		82				<0.2		1.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.8	0.1	26	27.6	27.7	7.6	7.6	26.2	26.4	53.2	53.1	3.6	3.6	5.2		5		84				<0.2		1.9	
						4.8	0.1	30	27.7		7.6		26.5		53.0		3.6		4.8		6		85				<0.2		1.8	
IM2	Fine	Moderate	15:58	6.9	Surface	1.0	0.2	33	30.0	30.0	8.2	8.2	9.3	9.3	126.5	126.2	9.1	6.9	4.8	4.9	6	7	82	85	818155	806175	<0.2	<0.2	1.9	1.8
						1.0	0.3	34	30.0		8.2		9.3		125.9		9.1		4.8		6		82				<0.2		1.8	
					Middle	3.5	0.3	37	27.9	28.0	7.7	7.7	18.8	18.7	66.8	67.1	4.7		4.5		7		84				<0.2		1.8	
						3.5	0.3	38	28.0		7.7		18.7		67.4		4.8		4.5		6		85				<0.2		1.8	
					Bottom	5.9	0.2	27	27.7	27.7	7.7	7.7	20.2	20.3	74.2	76.1	5.2	5.4	5.5		7		88				<0.2		1.7	
						5.9	0.2	28	27.7		7.7		20.4		77.9		5.5		5.1		7		88				<0.2		1.8	
IM3	Fine	Moderate	15:52	6.7	Surface	1.0	0.7	22	29.5	29.5	8.1	8.1	10.6	10.6	113.0	112.9	8.1	6.0	5.8	5.4	6	7	82	85	818763	805573	<0.2	<0.2	1.7	1.7
						1.0	0.7	23	29.5		8.1		10.6		112.7		8.1		5.8		6		83				<0.2		1.7	
					Middle	3.4	0.5	22	27.0	27.0	7.6	7.6	25.1	25.0	54.3	55.3	3.8		5.9		7		84				<0.2		1.7	
						3.4	0.6	24	27.0		7.6		24.9		56.2		3.9		6.1		8		85				<0.2		1.6	
					Bottom	5.7	0.2	26	26.2	26.3	7.6	7.6	30.5	30.4	66.0	66.0	4.5	4.5	4.3		8		88				<0.2		1.6	
						5.7	0.3	27	26.3		7.6		30.2		65.9		4.5		4.3		7		89				<0.2		1.6	
IM4	Cloudy	Moderate	15:45	7.7	Surface	1.0	0.7	24	28.8	28.9	7.8	7.8	14.5	14.5	85.7	86.3	6.1	5.2	5.5	6.3	3	6	84	88	819733	804590	<0.2	<0.2	1.9	1.9
						1.0	0.7	25	28.9		7.8		14.5		86.8		6.2		5.4		4		85				<0.2		2.0	
					Middle	3.9	0.2	28	27.3	27.3	7.6	7.6	24.6	24.7	60.3	60.2	4.2		6.8		4		88				<0.2		2.0	
						3.9	0.2	28	27.3		7.6		24.9		60.1		4.1		6.8		6		89				<0.2		1.9	
					Bottom	6.7	0.2	28	26.9	26.9	7.6	7.6	25.8	25.8	53.3	53.3	3.7	3.7	6.7		8		90				<0.2		1.9	
						6.7	0.2	30	26.9		7.6		25.8		53.2		3.7		6.6		8		90				<0.2		1.8	
IM5	Cloudy	Rough	15:38	6.9	Surface	1.0	1.0	26	29.2	29.2	7.9	7.9	9.3	9.3	97.6	97.4	7.1	6.1	5.0	9.1	3	4	82	85	820739	804878	<0.2	<0.2	1.8	1.8
						1.0	1.0	24	29.1		7.9		9.3		97.2		7.1		4.9		4		83				<0.2		1.9	
					Middle	3.5	0.9	23	28.1	28.1	7.7	7.7	13.3	13.8	73.0	70.3	5.3		7.3		3		85				<0.2		1.8	
						3.5	0.9	25	28.0		7.6		14.2		67.6		4.9		8.1		3		85				<0.2		1.8	
					Bottom	5.9	0.5	22	28.0	28.1	7.6	7.6	19.3	19.3	64.2	64.9	4.5	4.6	14.6		6		88				<0.2		1.7	
						5.9	0.5	23	28.2		7.6		19.3		65.6		4.6		14.9		7		89				<0.2		1.8	
IM6	Cloudy	Rough	15:31	6.5	Surface	1.0	0.9	26	29.4	29.4	7.9	7.9	9.8	9.8	102.3	102.1	7.4	6.3	4.6	6.9	3	5	84	87	821068	805818	<0.2	<0.2	1.9	1.8
						1.0	0.9	28	29.4		7.9		9.8		101.9		7.4		4.6		4		84				<0.2		1.9	
					Middle	3.3	0.8	27	28.2	28.2	7.6	7.6	14.6	14.6	72.6	72.6	5.2		4.6		5		87				<0.2		1.9	
						3.3	0.8	28	28.2		7.6		14.6		72.6		5.2		4.4		6		88				<0.2		1.7	
					Bottom	5.5	0.4	25	28.1	28.2	7.6	7.6	18.4	18.3	67.4	69.0	4.8	4.9	11.5		7		90				<0.2		1.7	
						5.5	0.5	26	28.2		7.6		18.3		70.5		5.0		11.5		7		90				<0.2		1.8	
IM7	Cloudy	Moderate	15:25	7.6	Surface	1.0	0.8	27	29.4	29.4	7.9	7.9	9.7	9.7	101.1	101.0	7.3	6.5	4.8	4.6	4	4	83	85	821330	806857	<0.2	<0.2	2.0	2.0
						1.0	0.9	29	29.3		7.9		9.7		100.9		7.3		4.8		5		83				<0.2		2.0	
					Middle	3.8	0.8	27	28.4	28.4	7.7	7.7	13.0	13.0	78.6	78.5	5.7		4.4		4		85				<0.2		2.0	
						3.8	0.8	28	28.4		7.7		13.0		78.3		5.7		4.3		4		85				<0.2		1.9	
					Bottom	6.6	0.5	25	27.7	27.7	7.6	7.6	19.0	18.9	67.1	68.7	4.8	4.9	4.5		5		86				<0.2		2.0	
						6.6	0.5	26	27.7		7.6		18.8		70.2		5.0		4.6		4		86				<0.2		2.0	
IM8	Sunny	Moderate	15:46	7.9	Surface	1.0	0.2	344	30.2	30.2	7.8	7.8	7.2	7.2	102.2	102.1	7.4	7.0	11.4	11.3	5	4	86	89	821833	808146	<0.2	<0.2	2.4	2.1
						1.0	0.2	347	30.2		7.8		7.2		102.0		7.4		11.4		5		85				<0.2		2.1	
					Middle	4.0	0.5	318	29.6	29.6	7.7	7.7	8.3	8.3	90.1	90.0	6.6		10.8		4		89				<0.2		2.2	
						4.0	0.5	318	29.6		7.7		8.3		89.9		6.5		10.8		4		89				<0.2		1.9	
					Bottom	6.9	0.2	315	28.7	28.7	7.6	7.6	15.3	15.3	68.1	68.1	4.8	4.8	11.6		4		93				<0.2		2.0	
						6.9	0.2	313	28.7		7.6		15.3		68.1		4.8		11.5		4		93				<0.2		2.0	

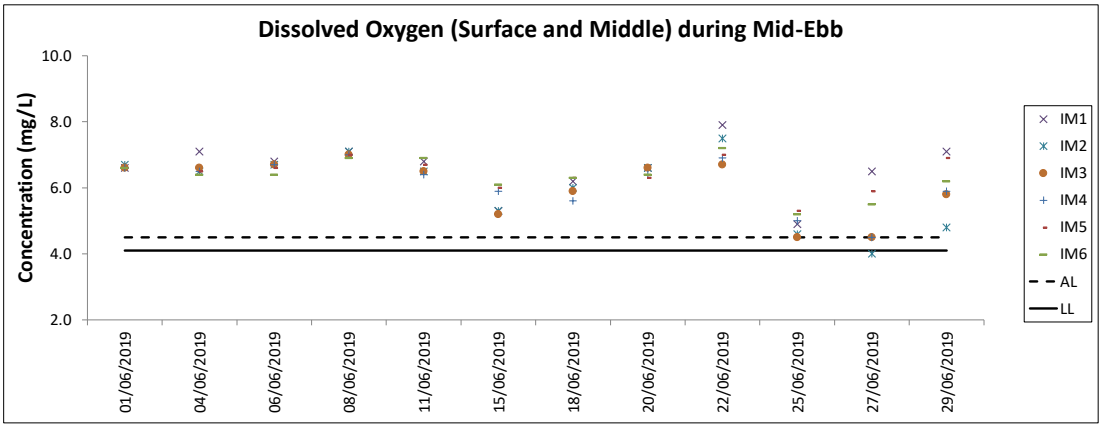
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

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

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	15:52	7.3	Surface	1.0	0.5	318	30.2	30.2	7.8	7.8	6.1	6.1	99.4	99.5	7.3	6.6	11.4	11.8	3	4	85	89	822087	808817	<0.2	<0.2	2.2	2.1
						1.0	0.5	317	30.2		7.8		6.1		99.5		7.3		11.4		4		85				<0.2		2.1	
					Middle	3.7	0.2	297	29.3	29.3	7.7	7.7	10.8	10.8	82.3	82.3	5.9		10.5		4		89				<0.2		2.2	
						3.7	0.3	288	29.3		7.7		10.8		82.2		5.9		10.5		4		89				<0.2		2.1	
					Bottom	6.3	0.2	287	28.9	28.9	7.6	7.6	14.0	14.1	72.7	72.7	5.2	5.2	13.5		5		93				<0.2		2.2	
						6.3	0.3	290	28.9		7.6		14.1		72.7		5.2		13.5		4		93				<0.2		2.0	
IM10	Sunny	Moderate	15:59	7.5	Surface	1.0	0.7	314	29.3	29.3	7.6	7.6	8.0	8.2	77.7	77.6	5.7	5.4	10.9	10.8	4	5	85	89	822376	809801	<0.2	<0.2	2.4	2.2
						1.0	0.7	318	29.3		7.6		8.3		77.5		5.7		10.9		4		85				<0.2		2.2	
					Middle	3.8	0.6	298	28.9	28.9	7.6	7.6	12.4	12.4	70.5	70.5	5.1		10.5		5		89				<0.2		2.1	
						3.8	0.6	277	28.9		7.6		12.4		70.4		5.1		10.5		5		89				<0.2		2.2	
					Bottom	6.5	0.4	272	28.6	28.6	7.6	7.6	16.0	16.0	65.9	65.9	4.7	4.7	11.0		4		92				<0.2		2.1	
						6.5	0.4	278	28.6		7.6		16.0		65.9		4.7		11.0		5		93				<0.2		2.0	
IM11	Sunny	Moderate	16:09	8.3	Surface	1.0	0.7	295	29.5	29.5	7.6	7.6	7.8	7.8	85.1	85.1	6.2	5.5	11.4	11.7	4	4	84	89	822037	811454	<0.2	<0.2	2.3	2.3
						1.0	0.8	292	29.5		7.6		7.8		85.1		6.2		11.4		3		85				<0.2		2.4	
					Middle	4.2	0.5	281	28.6	28.6	7.6	7.6	15.6	15.6	65.6	65.6	4.7		10.1		4		89				<0.2		2.3	
						4.2	0.5	284	28.6		7.6		15.6		65.5		4.7		10.1		4		89				<0.2		2.3	
					Bottom	7.3	0.1	266	27.9	27.9	7.6	7.6	21.2	21.2	54.1	54.2	3.8	3.8	13.5		4		93				<0.2		2.3	
						7.3	0.1	275	27.9		7.6		21.2		54.2		3.8		13.5		4		93				<0.2		2.2	
IM12	Sunny	Moderate	16:15	7.8	Surface	1.0	0.7	286	29.7	29.7	7.7	7.7	7.2	7.2	88.3	88.4	6.5	5.6	13.1	13.2	4	4	85	89	821453	812040	<0.2	<0.2	2.4	2.5
						1.0	0.7	274	29.7		7.7		7.2		88.4		6.5		13.1		4		85				<0.2		2.4	
					Middle	3.9	0.4	269	28.7	28.7	7.6	7.6	15.6	15.6	66.3	66.3	4.7		10.6		4		89				<0.2		2.5	
						3.9	0.4	263	28.7		7.6		15.6		66.2		4.7		10.6		4		89				<0.2		2.5	
					Bottom	6.8	0.0	250	27.7	27.7	7.6	7.6	21.3	21.3	49.0	49.0	3.4	3.4	15.8		4		92				<0.2		2.5	
						6.8	0.0	244	27.6		7.6		21.4		49.0		3.4		15.8		4		93				<0.2		2.5	
SR1A	Sunny	Moderate	16:34	5.6	Surface	1.0	-	-	29.7	29.7	7.7	7.7	8.8	8.8	92.4	92.3	6.7	6.7	11.3	11.7	3	4	-	-	819980	812653	-	-	-	-
						1.0	-	-	29.7		7.7		8.8		92.2		6.7		11.3		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	29.2	29.2	7.7	7.7	12.6	12.6	86.4	86.4	6.2	6.2	12.2		3		-				-		-	
						4.6	-	-	29.2		7.7		12.6		86.4		6.2		12.1		4		-				-		-	
SR2	Sunny	Moderate	16:46	5.0	Surface	1.0	0.2	254	29.8	29.8	7.7	7.7	9.2	9.3	92.9	92.9	6.7	6.7	11.5	11.4	3	3	85	87	821441	814147	<0.2	<0.2	2.1	2.1
						1.0	0.2	256	29.8		7.7		9.3		92.8		6.7		11.5		3		85				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	249	29.3	29.3	7.7	7.7	12.5	12.5	88.0	88.1	6.3	6.3	11.4		3		88				<0.2		2.1	
						4.0	0.1	251	29.3		7.7		12.5		88.1		6.3		11.3		4		88				<0.2		2.0	
SR3	Sunny	Moderate	15:41	8.8	Surface	1.0	0.6	13	29.9	29.9	7.8	7.8	8.3	8.3	93.4	93.3	6.8	5.6	10.8	11.7	5	5	-	-	822163	807575	-	-	-	-
						1.0	0.7	13	29.9		7.8		8.3		93.2		6.7		10.8		4		-				-		-	
					Middle	4.4	0.3	18	28.6	28.6	7.6	7.6	16.0	16.0	62.3	62.3	4.4		10.1		5		-				-		-	
						4.4	0.3	20	28.6		7.6		16.0		62.2		4.4		10.0		5		-				-		-	
					Bottom	7.8	0.3	25	28.1	28.1	7.6	7.6	19.3	19.3	56.3	56.3	3.9	3.9	14.2		6		-				-		-	
						7.8	0.3	27	28.1		7.6		19.3		56.3		3.9		14.3		7		-				-		-	
SR4A	Fine	Calm	16:55	9.0	Surface	1.0	0.6	275	30.1	30.1	8.5	8.5	9.0	9.0	146.3	145.3	10.5	6.6	4.8	8.8	6	9	-	-	817197	807803	-	-	-	-
						1.0	0.6	300	30.1		8.5		9.0		144.2		10.4		4.7		6		-				-		-	
					Middle	4.5	0.6	267	27.0	27.0	7.6	7.6	25.7	25.5	38.9	40.1	2.7		9.9		8		-				-		-	
						4.5	0.6	291	27.0		7.6		25.3		41.2		2.9		10.0		10		-				-		-	
					Bottom	8.0	0.4	277	26.6	26.6	7.6	7.6	28.4	28.4	55.4	59.2	3.8	4.1	11.9		13		-				-		-	
						8.0	0.5	283	26.6		7.6		28.4		63.0		4.3		11.4		13		-				-		-	
SR5A	Fine	Calm	17:13	5.5	Surface	1.0	0.1	218	29.7	29.7	8.3	8.3	12.7	12.7	131.9	129.4	9.4	9.2	4.3	6.5	5	7	-	-	816572	810691	-	-	-	-
						1.0	0.1	227	29.7		8.3		12.8		126.8		9.0		4.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.2	281	28.3	28.4	7.8	7.8	19.4	19.4	78.2	78.4	5.5	5.5	8.4		8		-				-		-	
						4.5	0.3	296	28.4		7.8		19.5		78.6		5.5		8.4		8		-				-		-	
SR6	Fine	Calm	17:43	4.4	Surface	1.0	0.0	221	29.2	29.2	8.2	8.2	12.3	12.3	134.4	132.1	9.6	9.5	3.9	4.3	4	7	-	-	817877	814663	-	-	-	-
						1.0	0.0	205	29.2		8.2		12.3		129.8		9.3		4.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	354	29.0	29.0	8.0	8.0	13.5	13.5	106.2	105.8	7.6	7.6	4.6		11		-				-		-	
						3.4	0.1	326	29.0		8.0		13.5		105.4		7.5		4.6		10		-				-		-	
SR7	Sunny	Moderate	17:37	14.4	Surface	1.0	0.1	267	29.5	29.5	7.8	7.8	13.2	13.2	96.8	96.8	6.9	5.7	9.4	9.3	3	3	-	-	823637	823747	-	-	-	-
						1.0	0.1	268	29.5		7.8		13.2		96.7		6.9		9.5		2		-				-		-	
					Middle	7.2	0.1	233	27.6	27.6	7.6	7.6	22.9	22.9	62.3	62.3	4.4		8.8		2		-				-		-	
						7.2	0.1	205	27.6		7.6		22.9		62.2		4.4		8.8		3		-				-		-	
					Bottom	13.4	0.2	220	26.6	26.6	7.7	7.7	28.9	28.9	58.2	58.1	4.0	4.0	9.6		3		-				-		-	
						13.4	0.2	222	26.6		7.7		28.9		58.0		4.0		9.6		3		-				-		-	
SR8	Sunny	Moderate	16:25	4.4	Surface	1.0	-	-	29.7	29.7	7.8	7.8	8.8	8.8	95.1	95.1	6.9	6.9	11.5	11.3	4	4	-	-	820391	811638	-	-	-	-
						1.0	-	-	29.7		7.8		8.8		95.0		6.9		11.5		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.3	29.3	7.8	7.8	12.6	12.6	86.3	86.3	6.2	6.2	11.1		3		-				-		-	
						3.4	-	-	29.3		7.8		12.6		86.2		6.2		11.0		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**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
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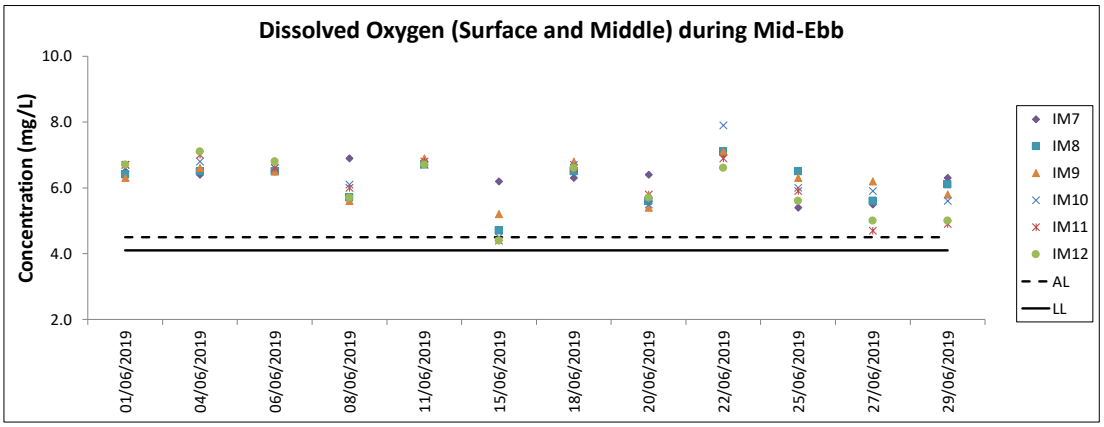
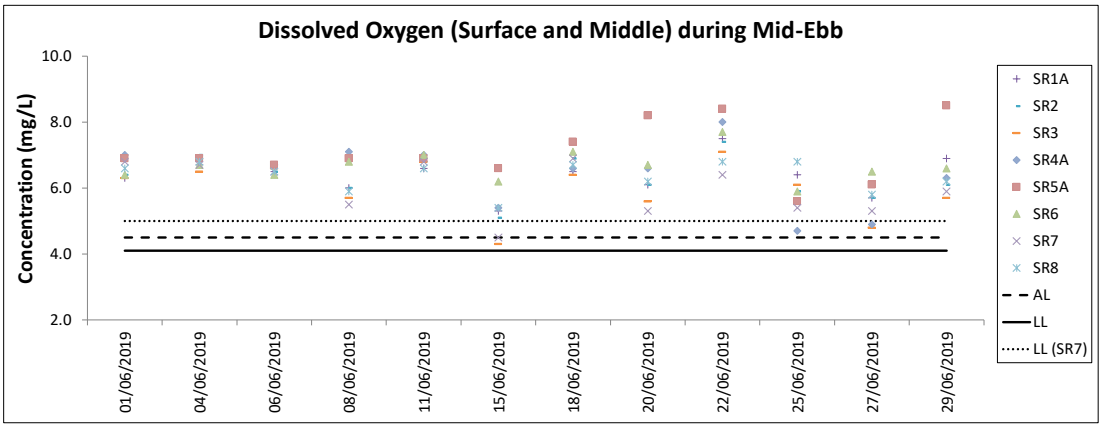
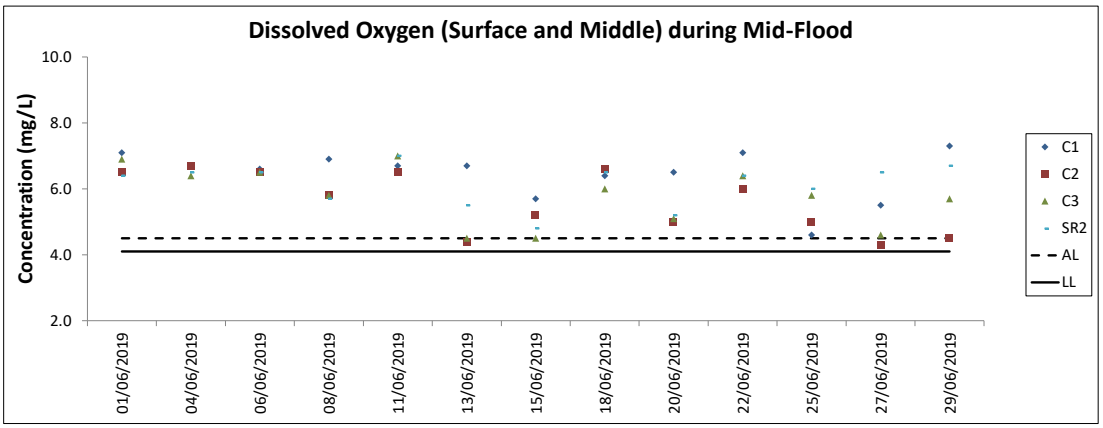
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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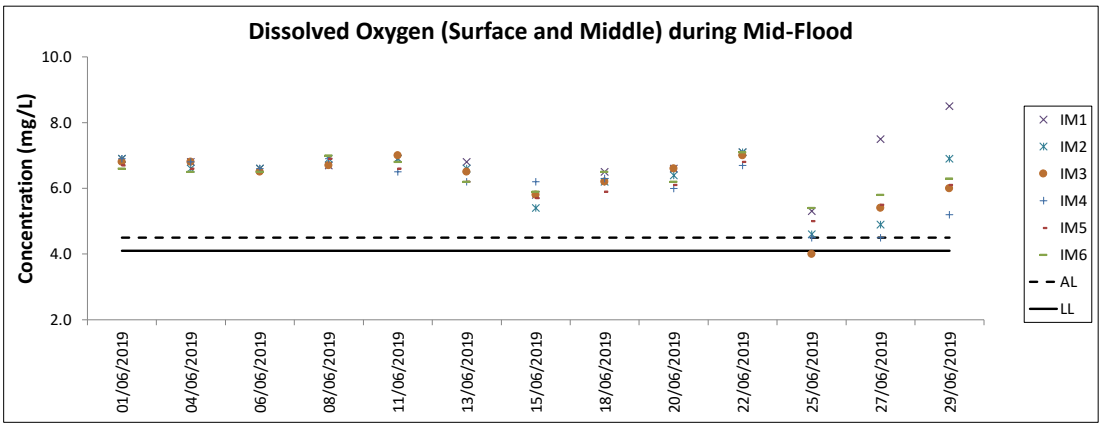
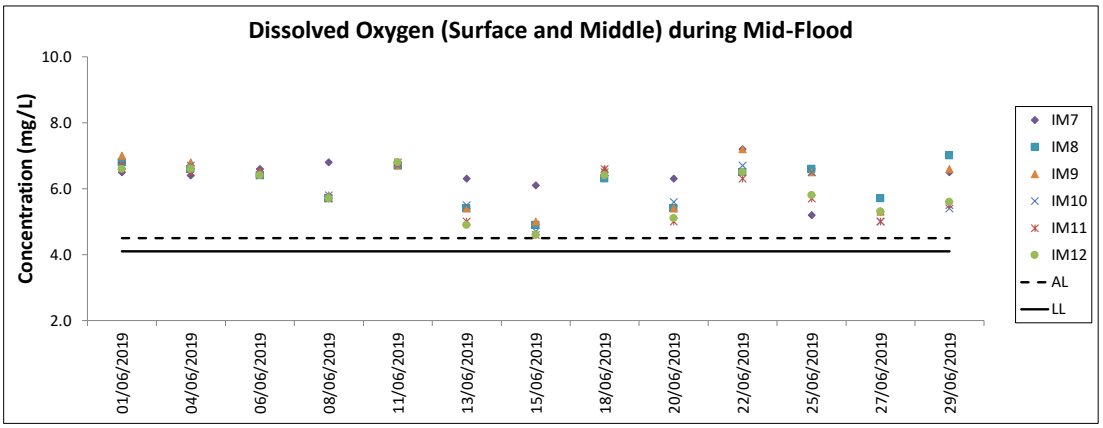
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
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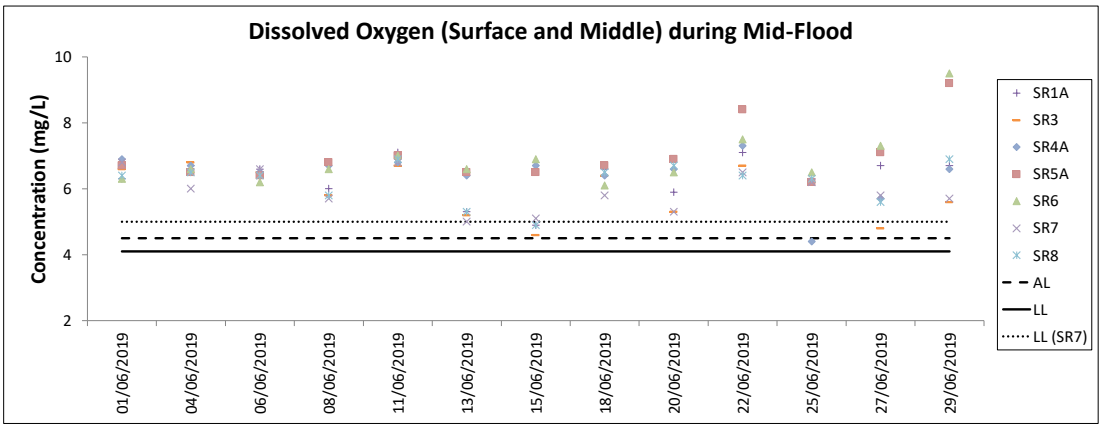
27/06/2019
29/06/2019
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
10
8
6
4
2
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
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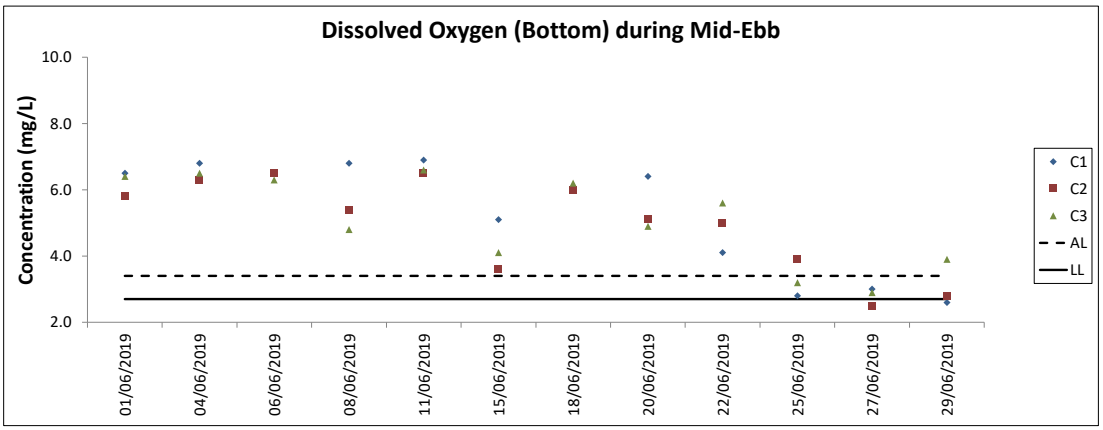
29/06/2019
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
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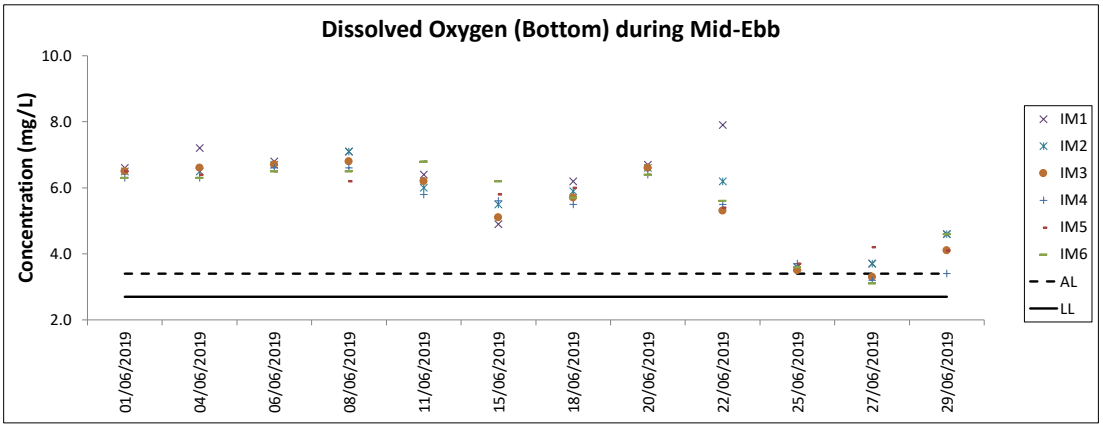
27/06/2019
29/06/2019
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
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8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
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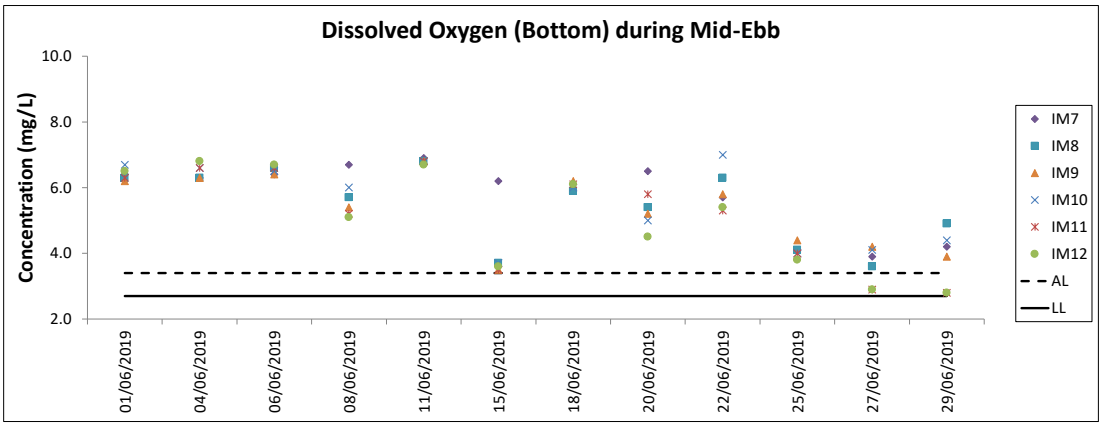
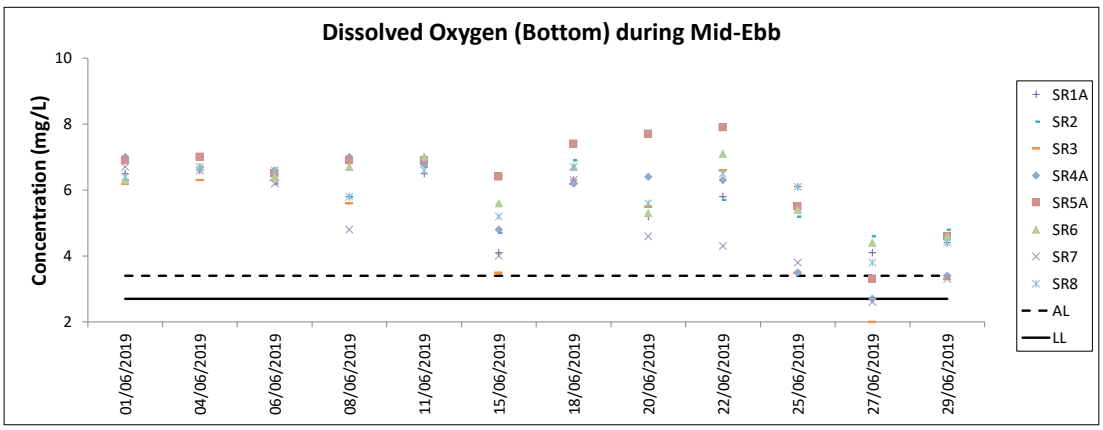
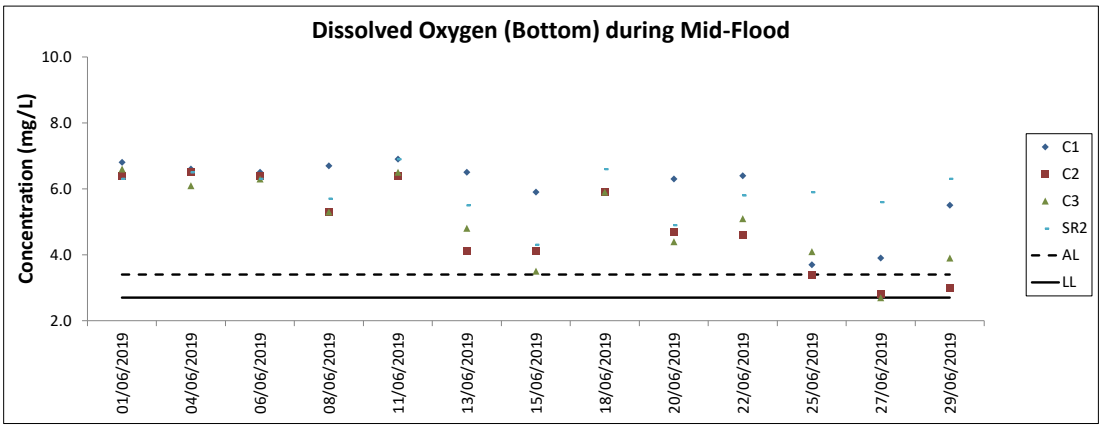
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
10
8
6
4
2
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
SR1A
SR2
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
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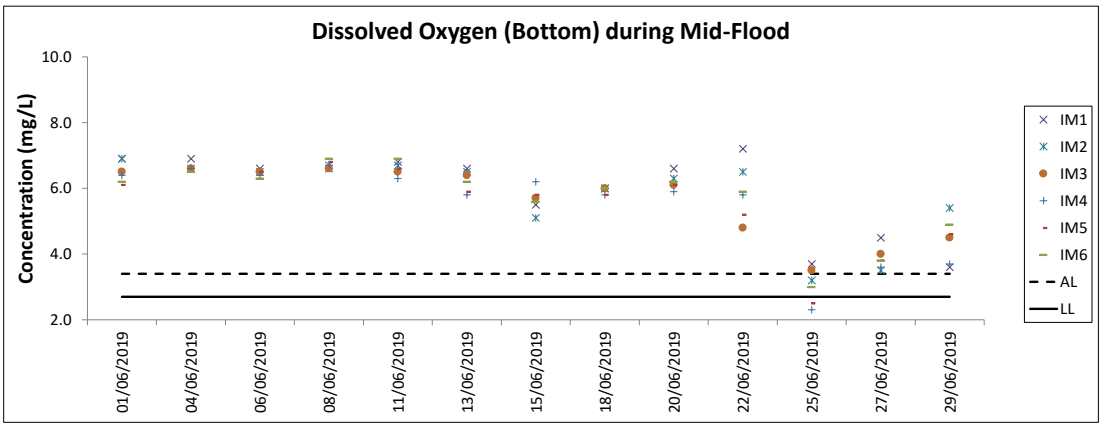
29/06/2019
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
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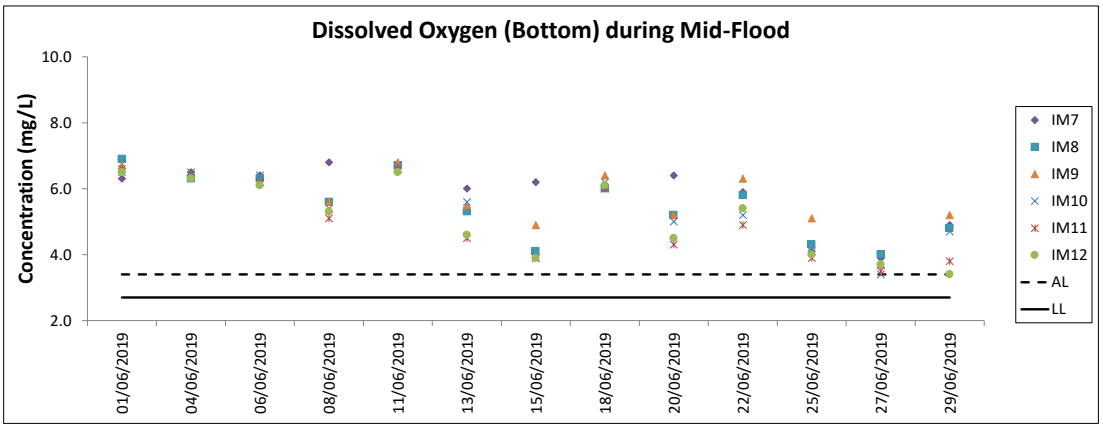
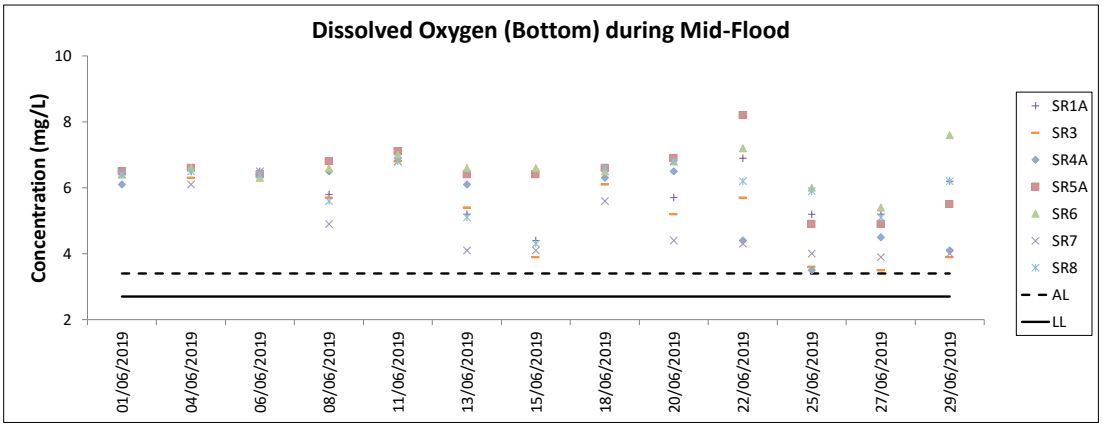
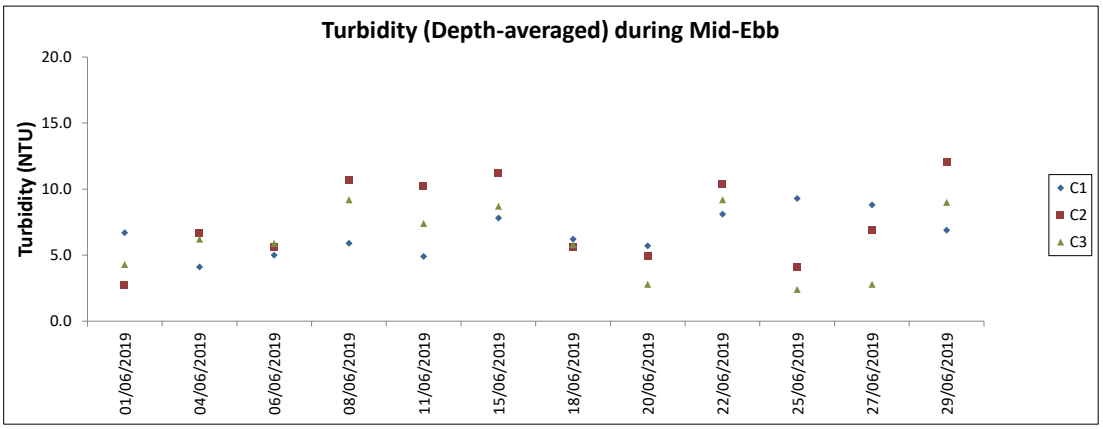
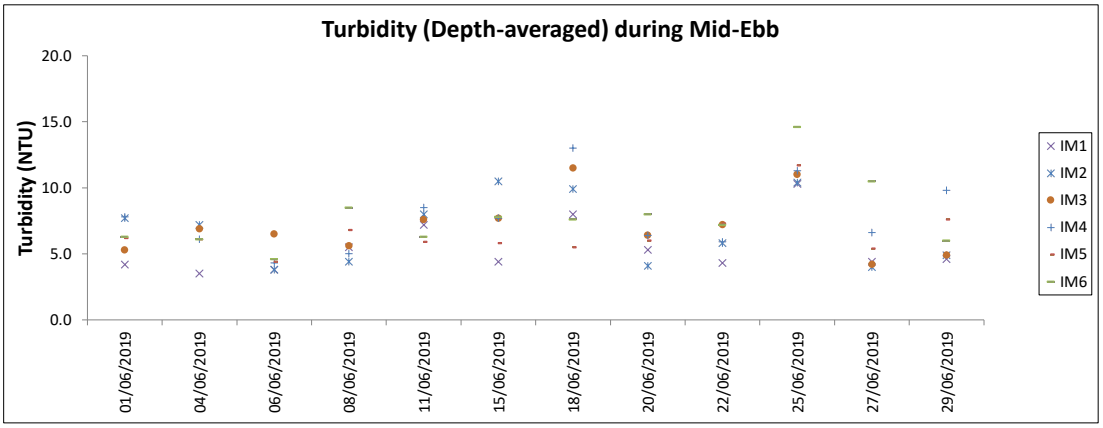
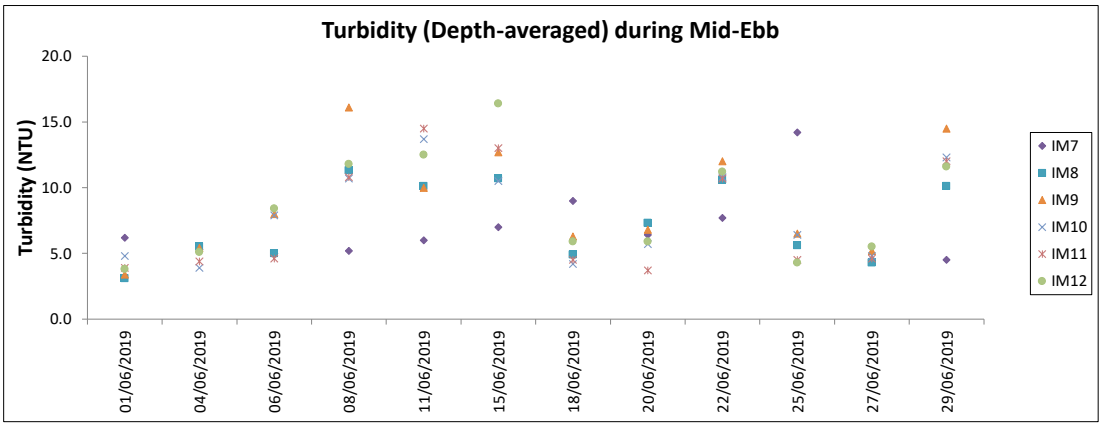
27/06/2019
29/06/2019
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL

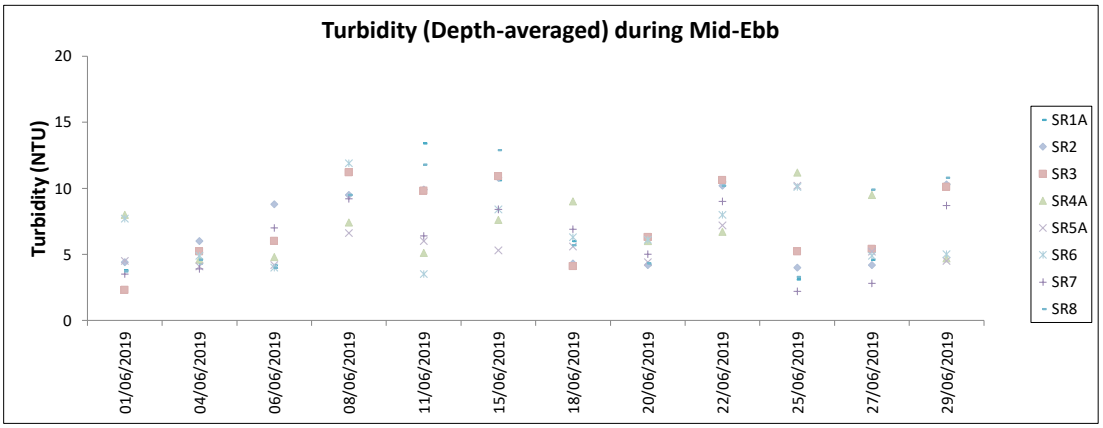

Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10.0
8.0
6.0
4.0
2.0
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
10
8
6
4
2
01/06/2019
04/06/2019
06/06/2019
08/06/2019
11/06/2019
13/06/2019
15/06/2019
18/06/2019
20/06/2019
22/06/2019
25/06/2019
27/06/2019
29/06/2019
SR1A
SR3
SR4A
SR5A
SR6
SR7
SR8
AL
LL

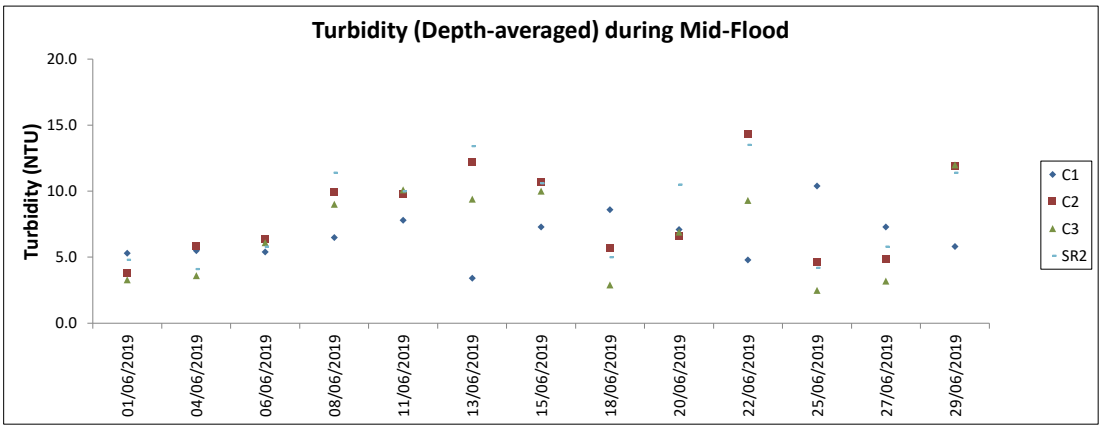


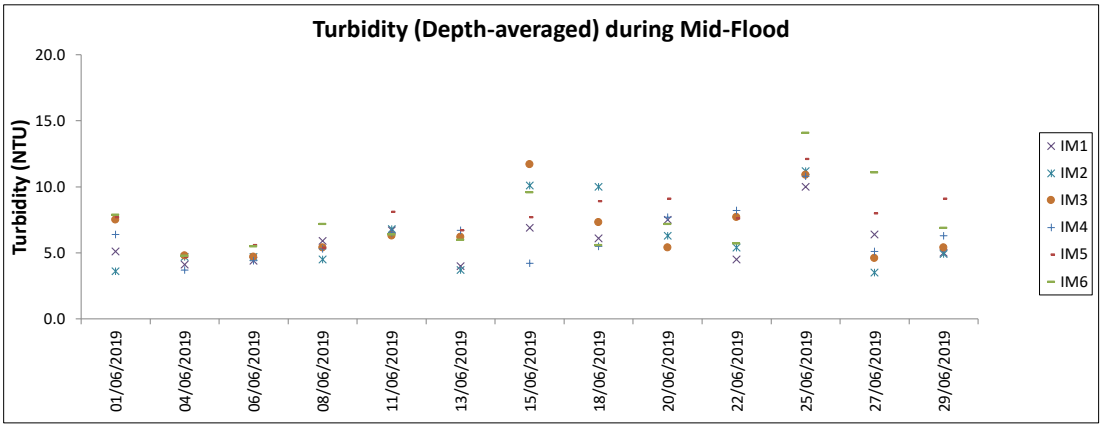


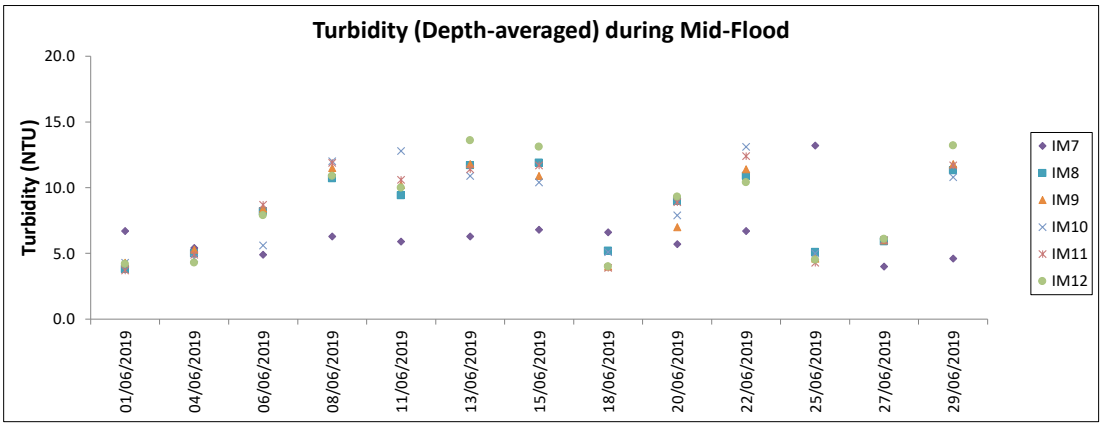


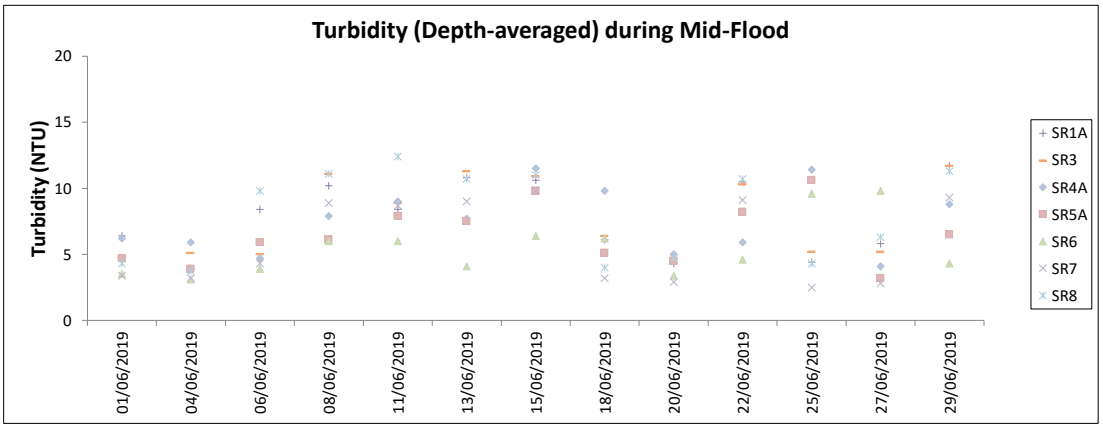


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

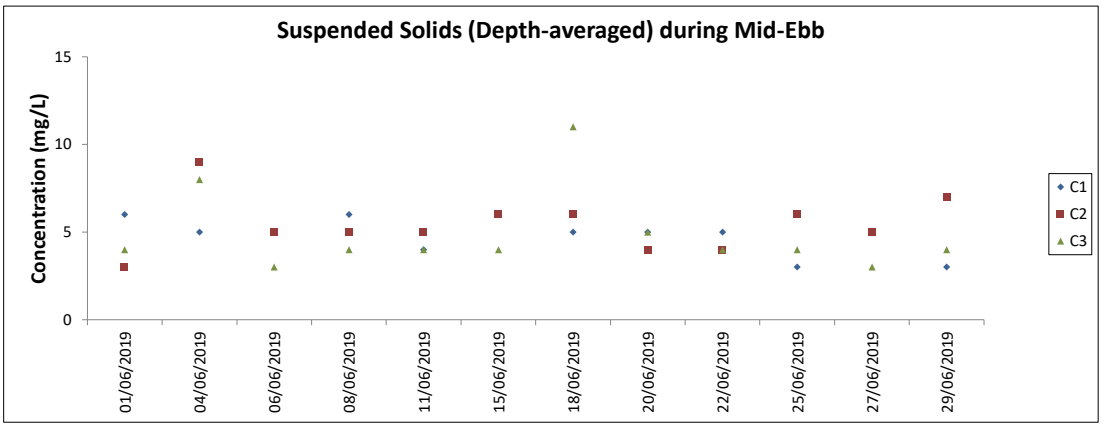


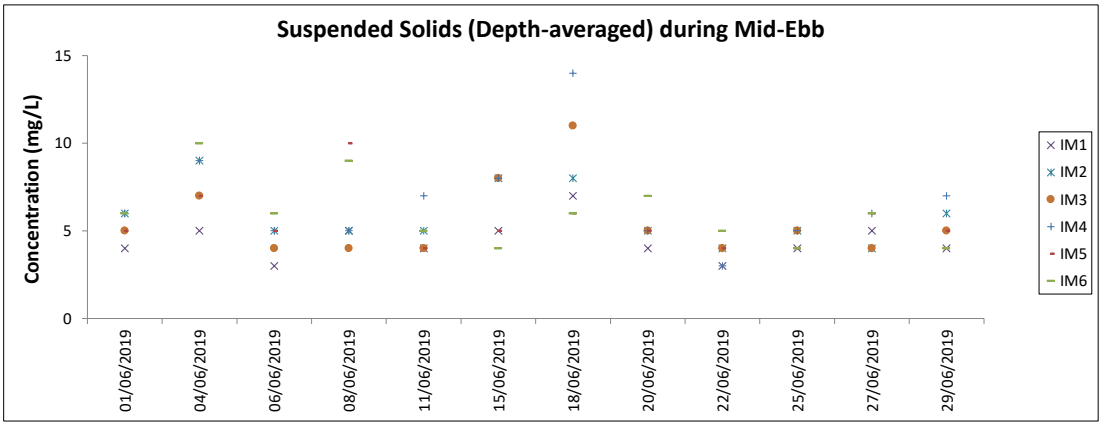


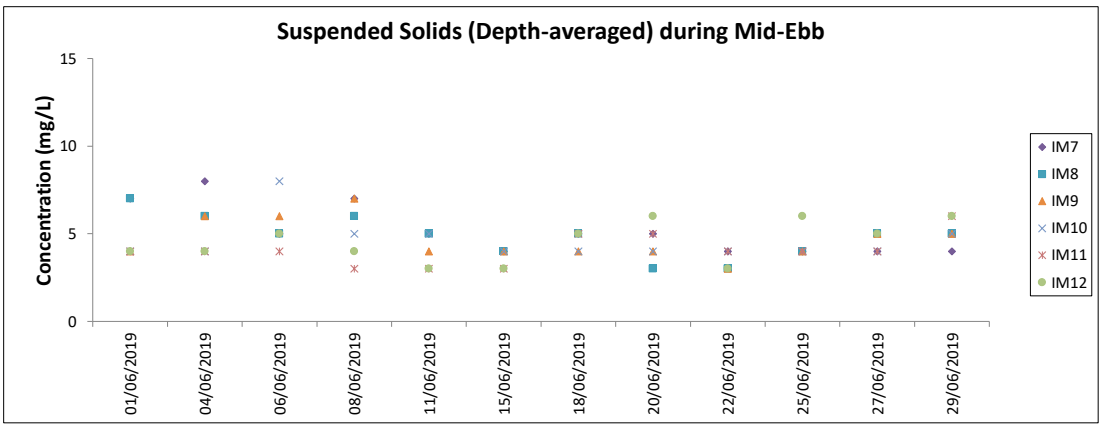


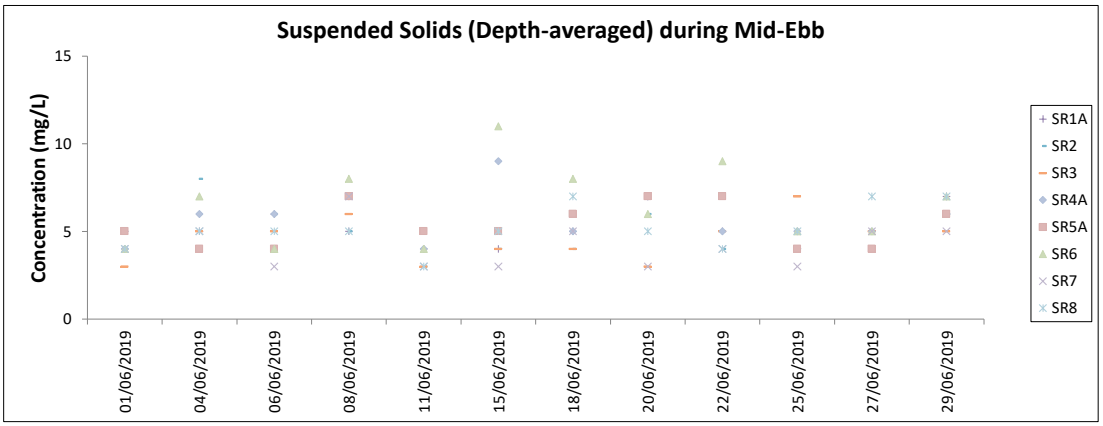


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

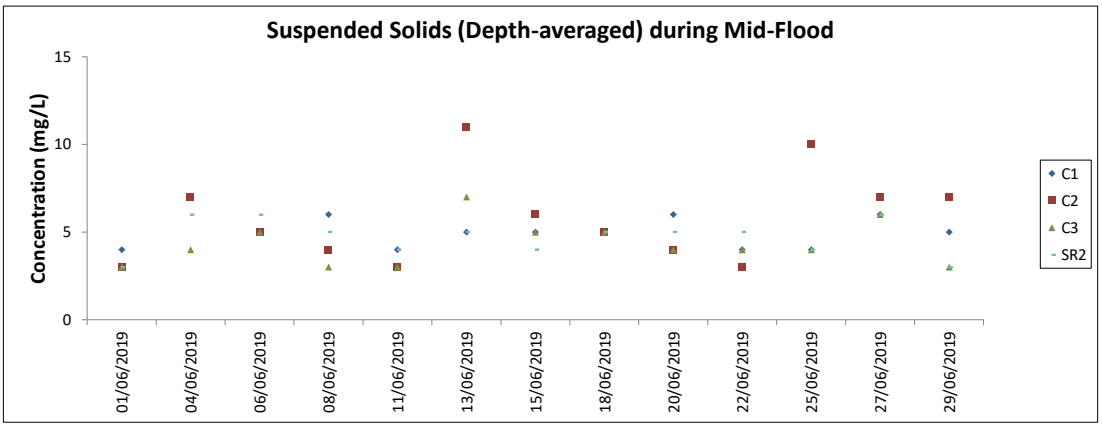


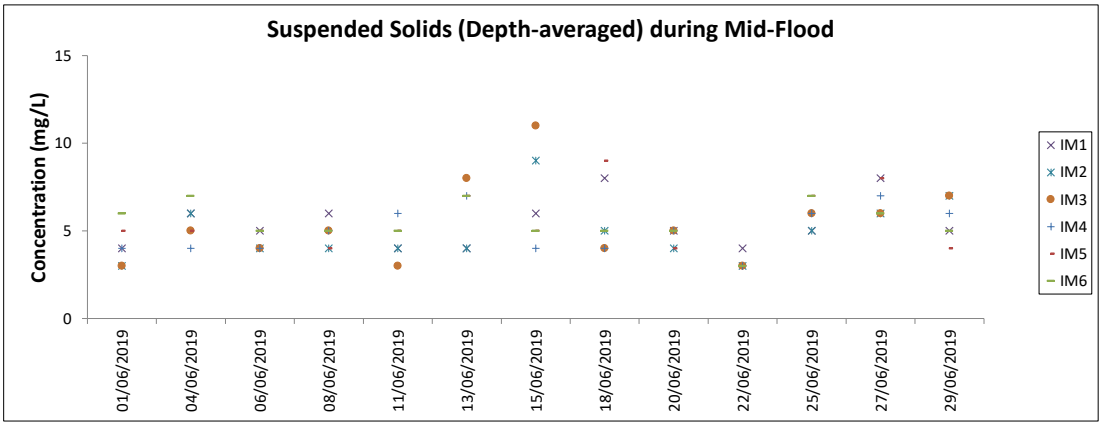


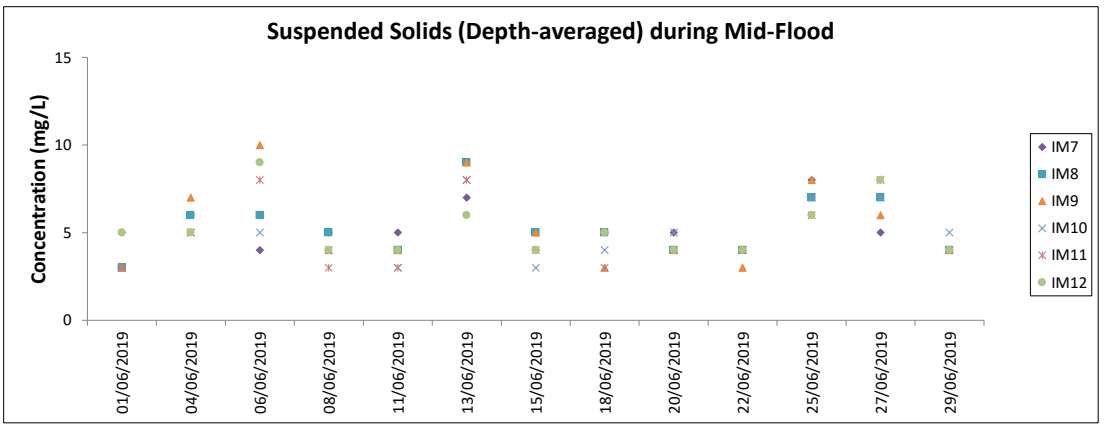


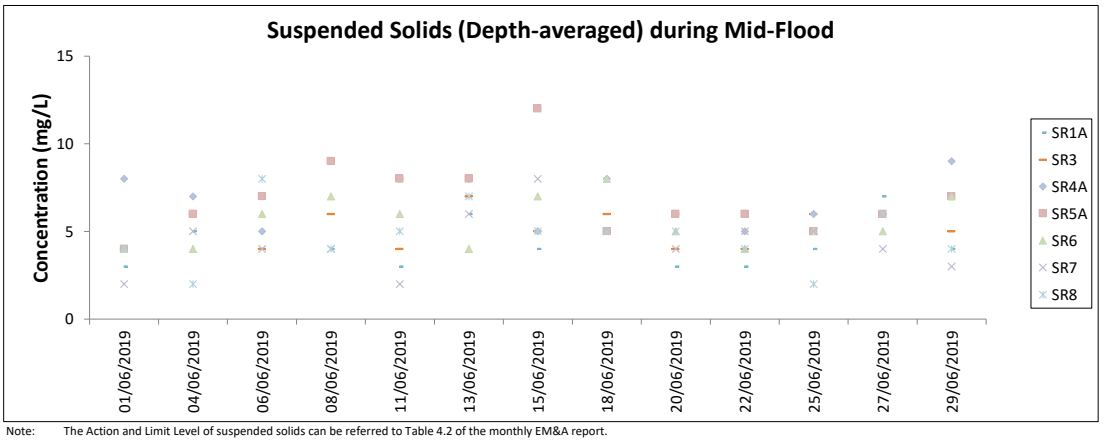


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

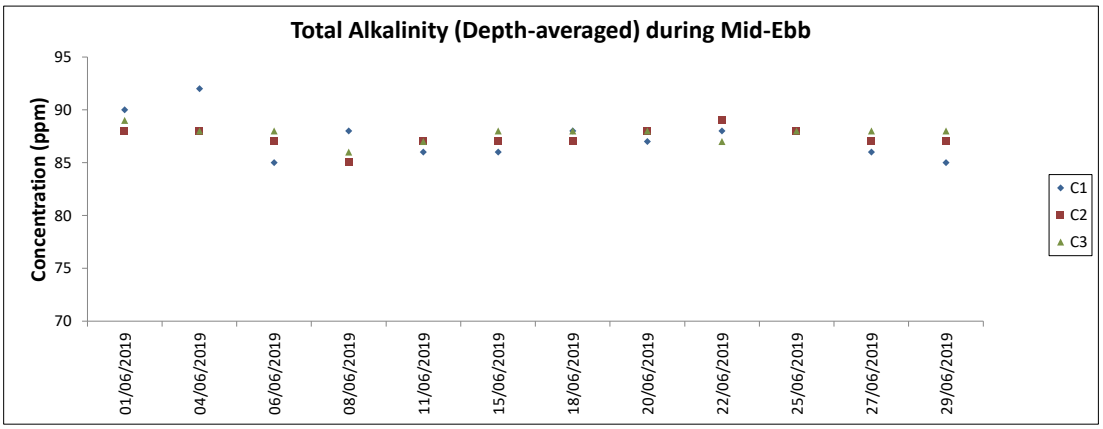


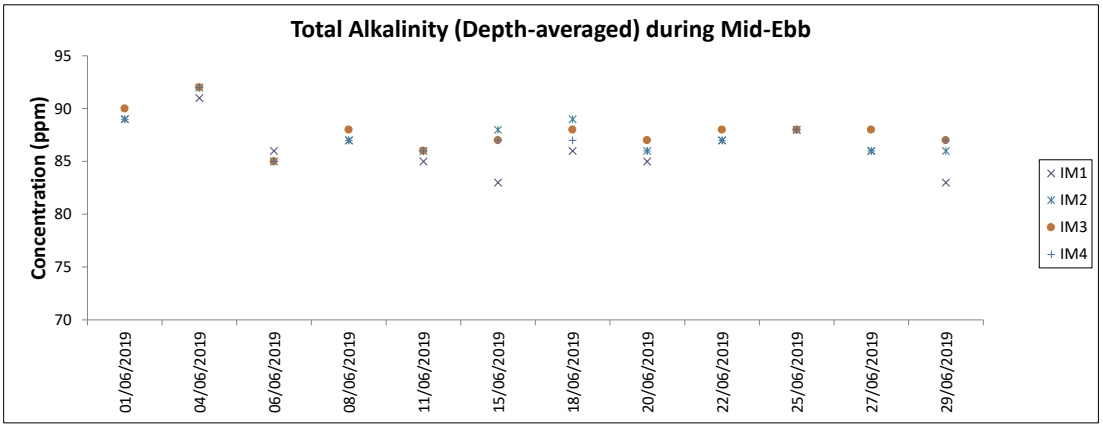


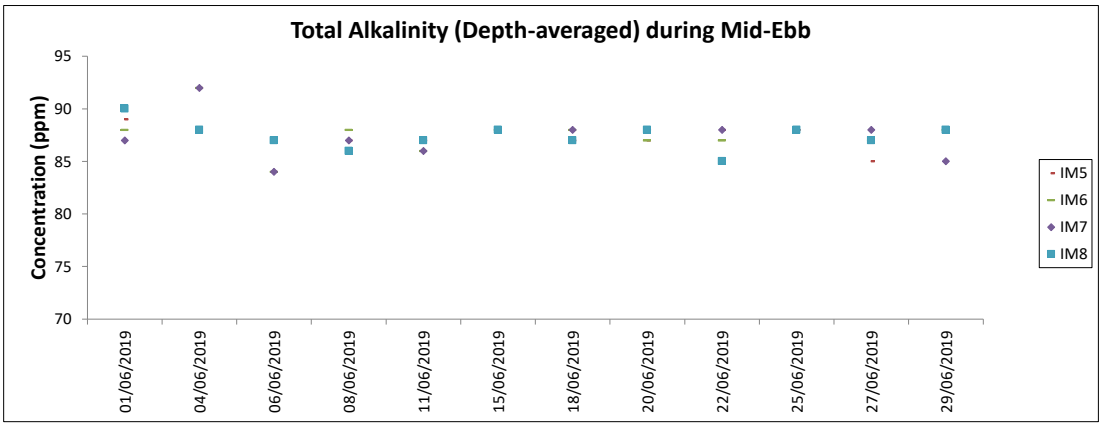


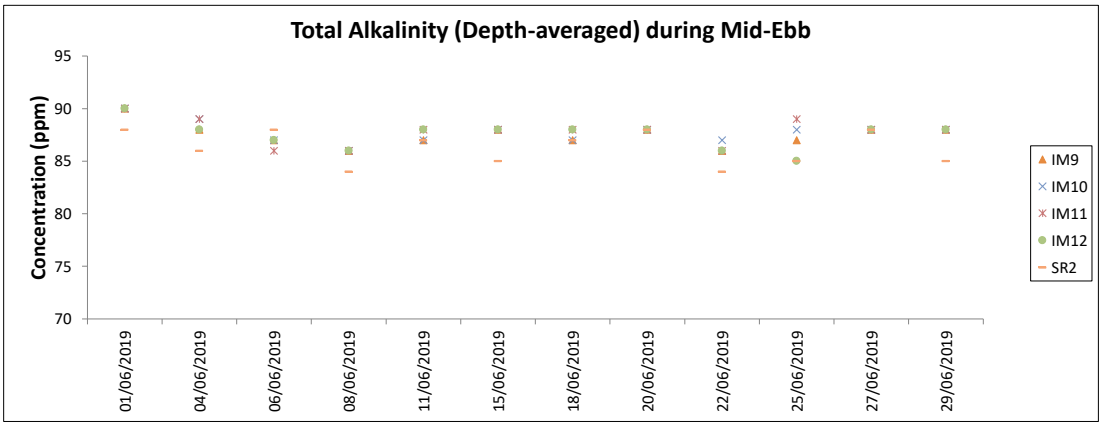


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

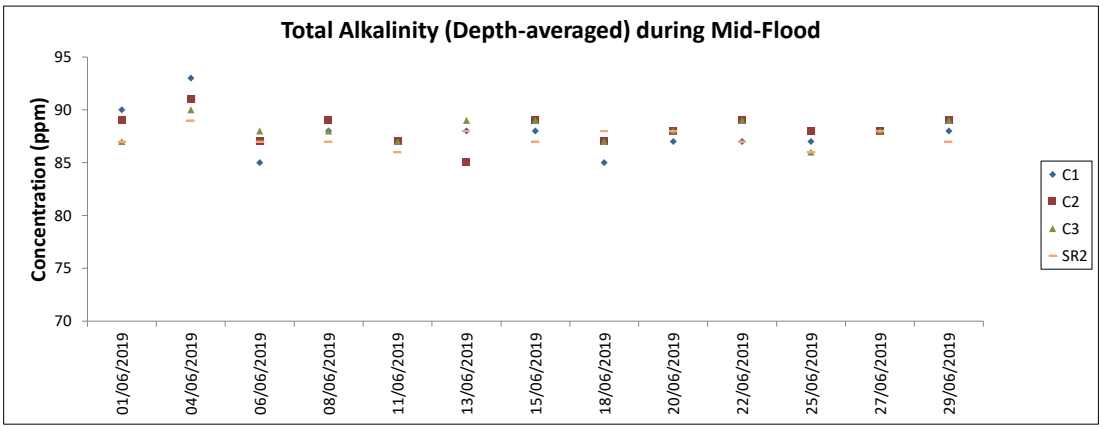


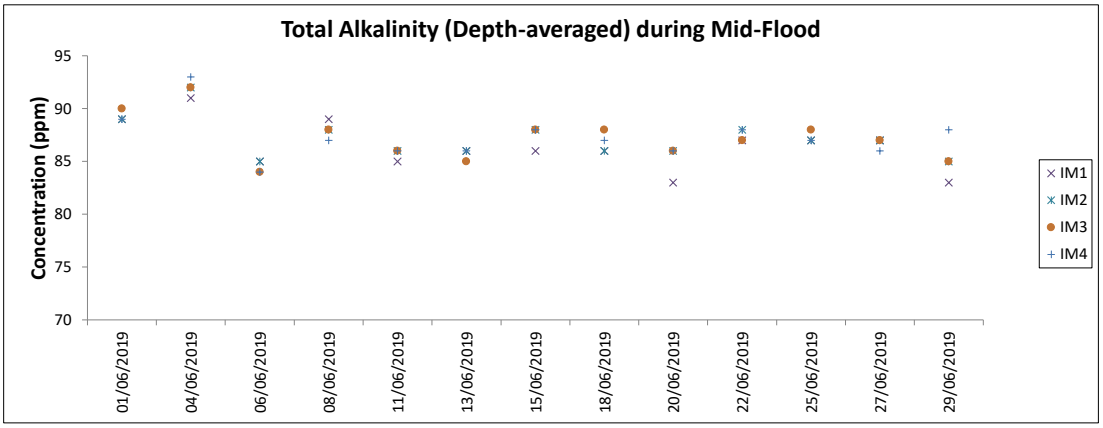


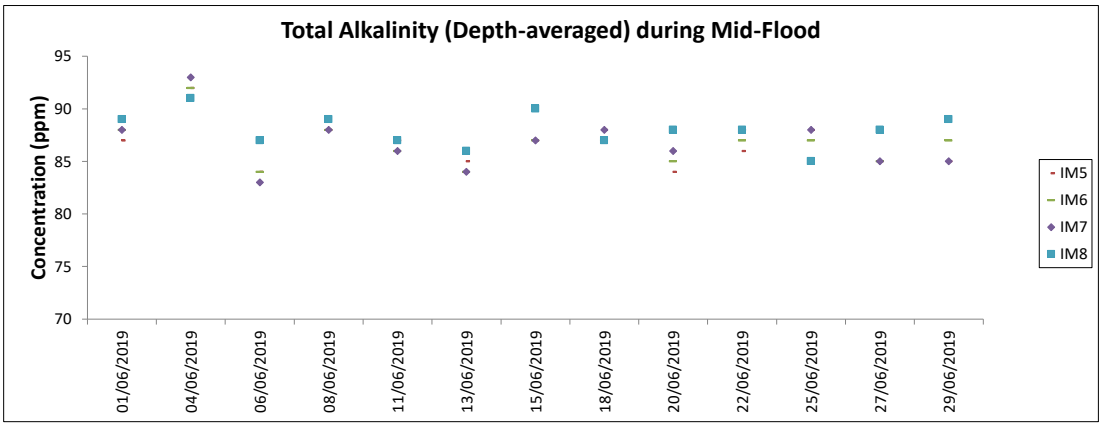


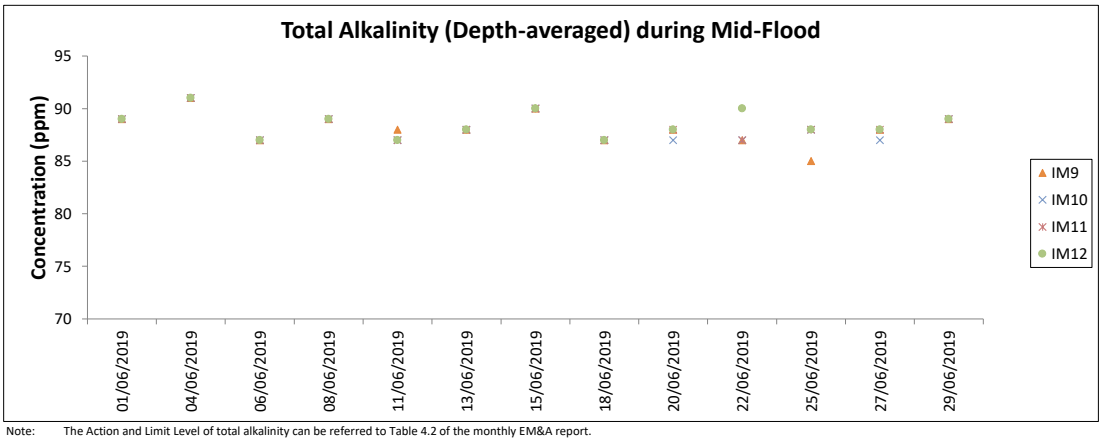


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

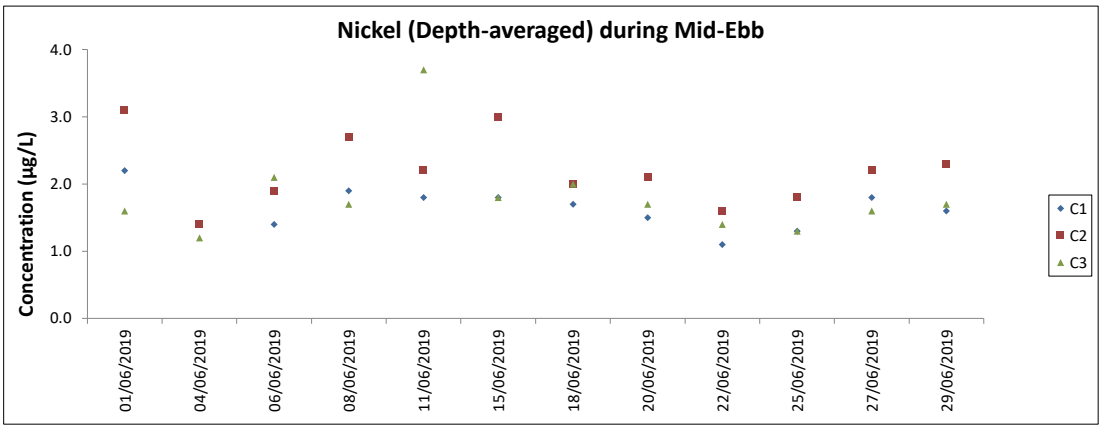


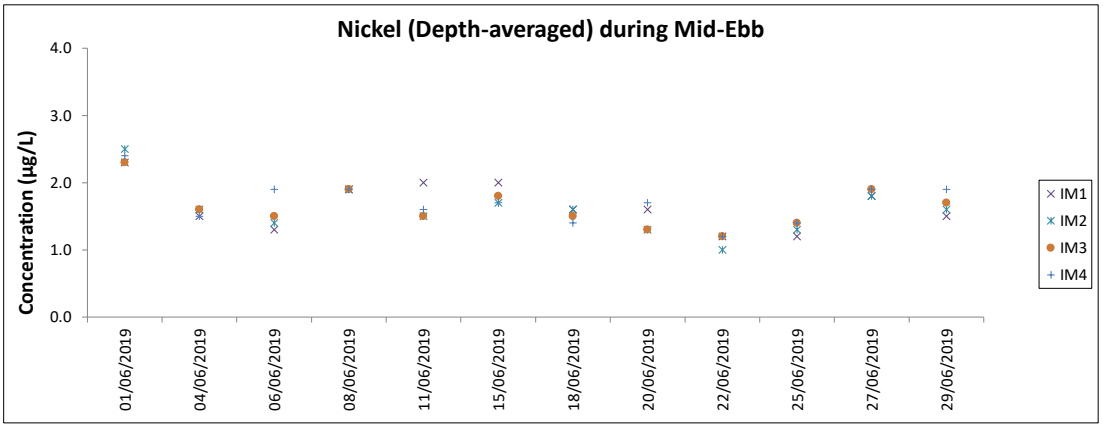


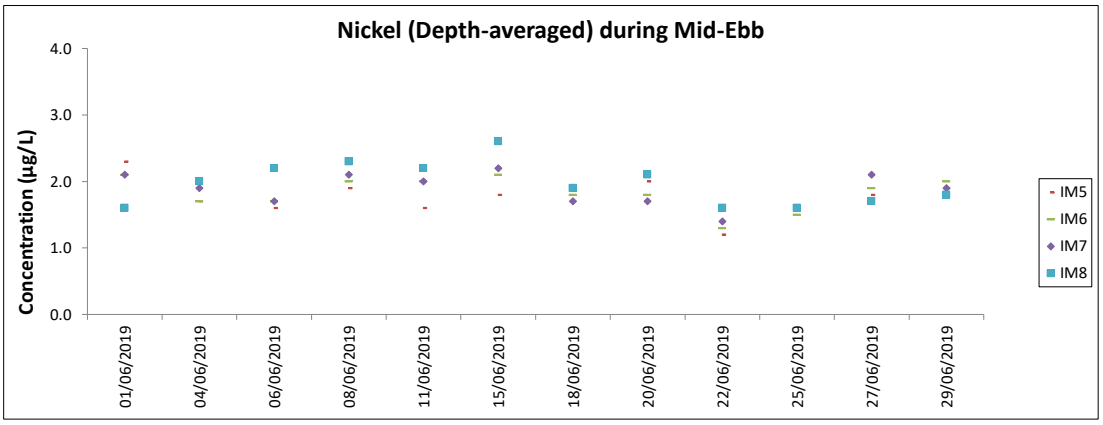


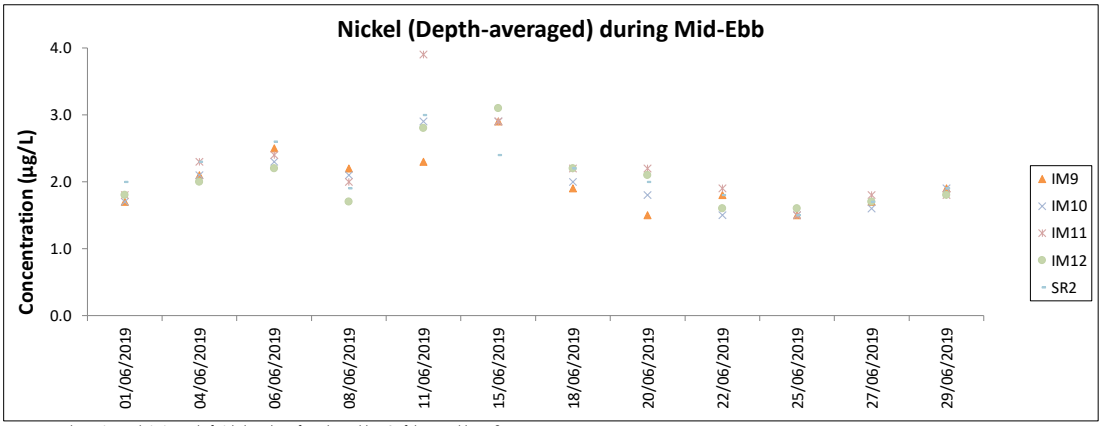


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

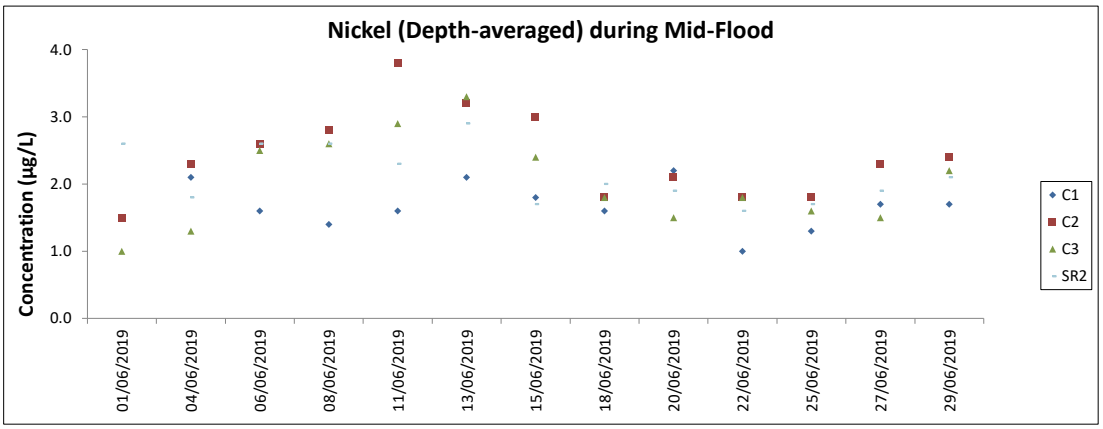


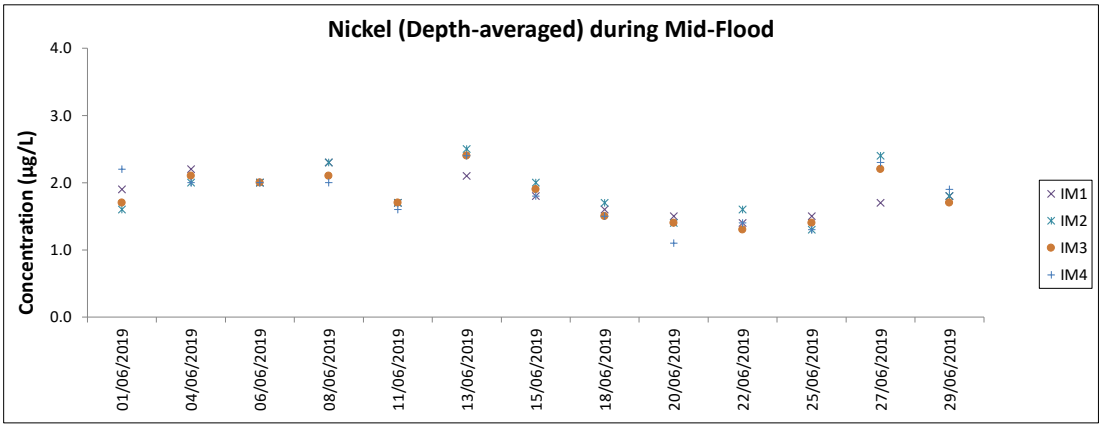


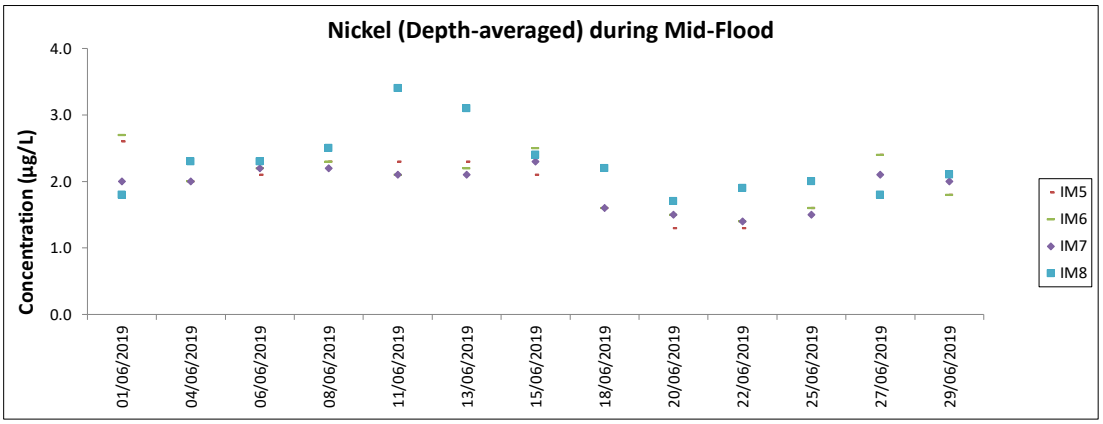


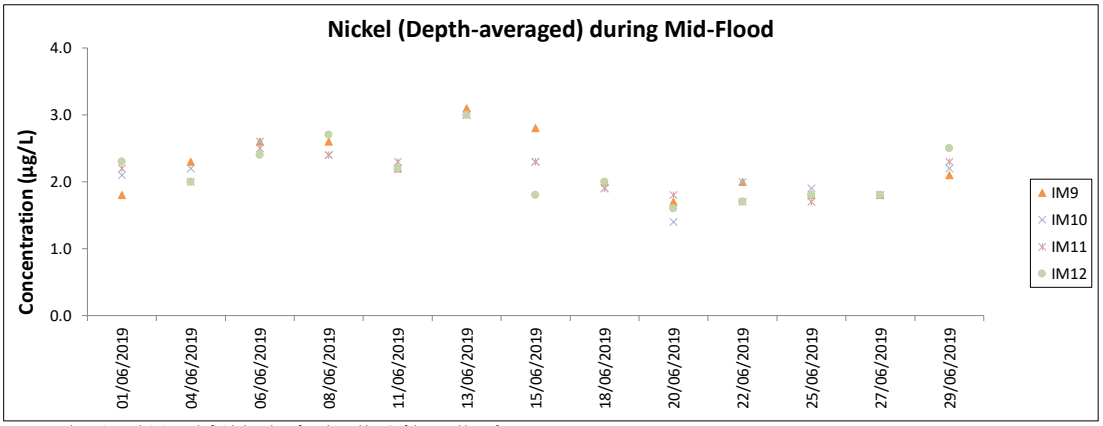


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









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

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
2-Apr-19	NEL	2	3.760	SPRING	32166	3RS ET	P
2-Apr-19	NEL	3	32.560	SPRING	32166	3RS ET	P
2-Apr-19	NEL	4	1.300	SPRING	32166	3RS ET	P
2-Apr-19	NEL	2	2.950	SPRING	32166	3RS ET	S
2-Apr-19	NEL	3	6.330	SPRING	32166	3RS ET	S
3-Apr-19	AW	3	4.860	SPRING	32166	3RS ET	P
3-Apr-19	WL	2	16.868	SPRING	32166	3RS ET	P
3-Apr-19	WL	3	6.320	SPRING	32166	3RS ET	P
3-Apr-19	WL	2	5.681	SPRING	32166	3RS ET	S
3-Apr-19	WL	3	3.930	SPRING	32166	3RS ET	S
9-Apr-19	SWL	2	4.100	SPRING	32166	3RS ET	P
9-Apr-19	SWL	3	50.530	SPRING	32166	3RS ET	P
9-Apr-19	SWL	4	1.000	SPRING	32166	3RS ET	P
9-Apr-19	SWL	2	1.200	SPRING	32166	3RS ET	S
9-Apr-19	SWL	3	13.470	SPRING	32166	3RS ET	S
11-Apr-19	SWL	2	50.110	SPRING	32166	3RS ET	P
11-Apr-19	SWL	3	5.000	SPRING	32166	3RS ET	P
11-Apr-19	SWL	2	13.420	SPRING	32166	3RS ET	S
11-Apr-19	SWL	3	2.340	SPRING	32166	3RS ET	S
17-Apr-19	AW	2	4.700	SPRING	32166	3RS ET	P
17-Apr-19	WL	1	3.160	SPRING	32166	3RS ET	P
17-Apr-19	WL	2	6.754	SPRING	32166	3RS ET	P
17-Apr-19	WL	3	13.978	SPRING	32166	3RS ET	P
17-Apr-19	WL	1	2.450	SPRING	32166	3RS ET	S
17-Apr-19	WL	2	2.196	SPRING	32166	3RS ET	S
17-Apr-19	WL	3	3.312	SPRING	32166	3RS ET	S
18-Apr-19	NEL	2	3.820	SPRING	32166	3RS ET	P
18-Apr-19	NEL	3	32.970	SPRING	32166	3RS ET	P
18-Apr-19	NEL	2	3.510	SPRING	32166	3RS ET	S
18-Apr-19	NEL	3	6.500	SPRING	32166	3RS ET	S
24-Apr-19	NWL	2	24.330	SPRING	32166	3RS ET	P
24-Apr-19	NWL	3	38.410	SPRING	32166	3RS ET	P
24-Apr-19	NWL	2	7.110	SPRING	32166	3RS ET	S
24-Apr-19	NWL	3	5.150	SPRING	32166	3RS ET	S
25-Apr-19	NWL	2	15.581	SPRING	32166	3RS ET	P
25-Apr-19	NWL	3	45.251	SPRING	32166	3RS ET	P
25-Apr-19	NWL	4	1.100	SPRING	32166	3RS ET	P
25-Apr-19	NWL	2	4.530	SPRING	32166	3RS ET	S
25-Apr-19	NWL	3	7.379	SPRING	32166	3RS ET	S
3-May-19	NEL	2	9.550	SPRING	32166	3RS ET	P
3-May-19	NEL	3	27.830	SPRING	32166	3RS ET	P
3-May-19	NEL	2	5.120	SPRING	32166	3RS ET	S
3-May-19	NEL	3	5.300	SPRING	32166	3RS ET	S
8-May-19	AW	3	2.330	SPRING	32166	3RS ET	P
8-May-19	AW	4	2.340	SPRING	32166	3RS ET	P
8-May-19	WL	2	8.310	SPRING	32166	3RS ET	P
8-May-19	WL	3	5.280	SPRING	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
8-May-19	WL	4	7.050	SPRING	32166	3RS ET	P
8-May-19	WL	2	5.150	SPRING	32166	3RS ET	S
8-May-19	WL	3	2.580	SPRING	32166	3RS ET	S
8-May-19	WL	4	3.130	SPRING	32166	3RS ET	S
9-May-19	NEL	1	2.300	SPRING	32166	3RS ET	P
9-May-19	NEL	2	32.170	SPRING	32166	3RS ET	P
9-May-19	NEL	3	3.160	SPRING	32166	3RS ET	P
9-May-19	NEL	1	1.000	SPRING	32166	3RS ET	S
9-May-19	NEL	2	8.970	SPRING	32166	3RS ET	S
10-May-19	SWL	2	6.600	SPRING	32166	3RS ET	P
10-May-19	SWL	3	48.980	SPRING	32166	3RS ET	P
10-May-19	SWL	2	2.120	SPRING	32166	3RS ET	S
10-May-19	SWL	3	13.300	SPRING	32166	3RS ET	S
14-May-19	AW	2	4.730	SPRING	32166	3RS ET	P
14-May-19	WL	2	12.245	SPRING	32166	3RS ET	P
14-May-19	WL	3	6.915	SPRING	32166	3RS ET	P
14-May-19	WL	2	5.880	SPRING	32166	3RS ET	S
14-May-19	WL	3	4.048	SPRING	32166	3RS ET	S
15-May-19	NWL	2	36.790	SPRING	32166	3RS ET	P
15-May-19	NWL	3	26.720	SPRING	32166	3RS ET	P
15-May-19	NWL	2	7.310	SPRING	32166	3RS ET	S
15-May-19	NWL	3	4.710	SPRING	32166	3RS ET	S
16-May-19	NWL	2	4.080	SPRING	32166	3RS ET	P
16-May-19	NWL	3	44.920	SPRING	32166	3RS ET	P
16-May-19	NWL	4	13.900	SPRING	32166	3RS ET	P
16-May-19	NWL	3	11.800	SPRING	32166	3RS ET	S
16-May-19	NWL	4	0.300	SPRING	32166	3RS ET	S
27-May-19	SWL	2	29.957	SPRING	32166	3RS ET	P
27-May-19	SWL	3	24.860	SPRING	32166	3RS ET	P
27-May-19	SWL	2	12.763	SPRING	32166	3RS ET	S
27-May-19	SWL	3	1.400	SPRING	32166	3RS ET	S
4-Jun-19	NEL	2	27.350	SUMMER	32166	3RS ET	P
4-Jun-19	NEL	3	7.700	SUMMER	32166	3RS ET	P
4-Jun-19	NEL	4	2.600	SUMMER	32166	3RS ET	P
4-Jun-19	NEL	2	7.050	SUMMER	32166	3RS ET	S
4-Jun-19	NEL	3	3.200	SUMMER	32166	3RS ET	S
6-Jun-19	AW	2	4.730	SUMMER	32166	3RS ET	P
6-Jun-19	WL	2	7.467	SUMMER	32166	3RS ET	P
6-Jun-19	WL	3	12.575	SUMMER	32166	3RS ET	P
6-Jun-19	WL	2	1.850	SUMMER	32166	3RS ET	S
6-Jun-19	WL	3	7.388	SUMMER	32166	3RS ET	S
6-Jun-19	WL	4	0.570	SUMMER	32166	3RS ET	S
11-Jun-19	NEL	1	1.600	SUMMER	32166	3RS ET	P
11-Jun-19	NEL	2	34.960	SUMMER	32166	3RS ET	P
11-Jun-19	NEL	1	1.200	SUMMER	32166	3RS ET	S
11-Jun-19	NEL	2	10.140	SUMMER	32166	3RS ET	S
17-Jun-19	SWL	3	10.690	SUMMER	32166	3RS ET	P
17-Jun-19	SWL	4	44.330	SUMMER	32166	3RS ET	P
17-Jun-19	SWL	2	0.900	SUMMER	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
17-Jun-19	SWL	3	2.800	SUMMER	32166	3RS ET	S
17-Jun-19	SWL	4	12.480	SUMMER	32166	3RS ET	S
18-Jun-19	SWL	2	51.312	SUMMER	32166	3RS ET	P
18-Jun-19	SWL	3	2.970	SUMMER	32166	3RS ET	P
18-Jun-19	SWL	2	10.560	SUMMER	32166	3RS ET	S
18-Jun-19	SWL	3	3.830	SUMMER	32166	3RS ET	S
19-Jun-19	NWL	1	7.700	SUMMER	32166	3RS ET	P
19-Jun-19	NWL	2	30.077	SUMMER	32166	3RS ET	P
19-Jun-19	NWL	3	24.682	SUMMER	32166	3RS ET	P
19-Jun-19	NWL	1	3.900	SUMMER	32166	3RS ET	S
19-Jun-19	NWL	2	6.050	SUMMER	32166	3RS ET	S
19-Jun-19	NWL	3	2.491	SUMMER	32166	3RS ET	S
26-Jun-19	AW	2	5.100	SUMMER	32166	3RS ET	P
26-Jun-19	WL	2	18.167	SUMMER	32166	3RS ET	P
26-Jun-19	WL	3	2.710	SUMMER	32166	3RS ET	P
26-Jun-19	WL	2	9.143	SUMMER	32166	3RS ET	S
26-Jun-19	WL	3	1.810	SUMMER	32166	3RS ET	S
27-Jun-19	NWL	2	4.700	SUMMER	32166	3RS ET	P
27-Jun-19	NWL	3	58.800	SUMMER	32166	3RS ET	P
27-Jun-19	NWL	2	2.200	SUMMER	32166	3RS ET	S
27-Jun-19	NWL	3	9.600	SUMMER	32166	3RS ET	S

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

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
3-Apr-19	1	1028	CWD	1	WL	2	355	ON	3RS ET	22.2658	113.8586	SPRING	NONE	S
3-Apr-19	2	1043	CWD	1	WL	2	202	ON	3RS ET	22.2603	113.8457	SPRING	NONE	P
3-Apr-19	3	1148	CWD	21	WL	3	728	ON	3RS ET	22.2187	113.8197	SPRING	PAIR TRAWLER	S
11-Apr-19	1	1041	FP	4	SWL	3	256	ON	3RS ET	22.1688	113.8569	SPRING	NONE	S
17-Apr-19	1	1043	CWD	3	WL	2	195	ON	3RS ET	22.2499	113.8366	SPRING	NONE	P
17-Apr-19	2	1059	CWD	1	WL	2	474	ON	3RS ET	22.2413	113.8370	SPRING	NONE	P
17-Apr-19	3	1114	CWD	2	WL	2	567	ON	3RS ET	22.2390	113.8271	SPRING	NONE	S
17-Apr-19	4	1127	CWD	4	WL	2	55	ON	3RS ET	22.2358	113.8250	SPRING	NONE	S
17-Apr-19	5	1143	CWD	3	WL	2	224	ON	3RS ET	22.2322	113.8308	SPRING	NONE	P
17-Apr-19	6	1200	CWD	4	WL	3	246	ON	3RS ET	22.2230	113.8306	SPRING	NONE	P
24-Apr-19	1	1038	CWD	1	NWL	3	33	ON	3RS ET	22.2711	113.8716	SPRING	NONE	S
25-Apr-19	1	0946	CWD	3	NWL	2	182	ON	3RS ET	22.3854	113.8697	SPRING	NONE	P
25-Apr-19	2	1000	CWD	2	NWL	2	319	ON	3RS ET	22.3797	113.8705	SPRING	NONE	P
25-Apr-19	3	1055	CWD	3	NWL	3	473	ON	3RS ET	22.2795	113.8699	SPRING	NONE	P
8-May-19	1	1120	CWD	12	WL	3	72	ON	3RS ET	22.2321	113.8295	SPRING	NONE	P
14-May-19	1	1038	CWD	2	WL	2	169	ON	3RS ET	22.2606	113.8545	SPRING	NONE	S
14-May-19	2	1102	CWD	7	WL	2	505	ON	3RS ET	22.2496	113.8407	SPRING	NONE	P
14-May-19	3	1229	CWD	4	WL	3	171	ON	3RS ET	22.2012	113.8245	SPRING	NONE	S
14-May-19	4	1249	CWD	8	WL	3	126	ON	3RS ET	22.1962	113.8363	SPRING	NONE	P
14-May-19	5	1318	CWD	2	WL	2	396	ON	3RS ET	22.1926	113.8423	SPRING	NONE	S
15-May-19	1	0955	CWD	2	NWL	2	305	ON	3RS ET	22.3681	113.8700	SPRING	NONE	P
15-May-19	2	1054	CWD	1	NWL	3	1539	ON	3RS ET	22.2727	113.8701	SPRING	NONE	P
15-May-19	3	1348	CWD	4	NWL	2	6	ON	3RS ET	22.4008	113.8978	SPRING	NONE	P
27-May-19	1	1210	FP	2	SWL	2	171	ON	3RS ET	22.1536	113.9084	SPRING	NONE	P
27-May-19	2	1316	FP	1	SWL	2	4	ON	3RS ET	22.1584	113.8976	SPRING	NONE	P
27-May-19	3	1443	CWD	4	SWL	2	15	ON	3RS ET	22.1987	113.8692	SPRING	NONE	P
6-Jun-19	1	1052	CWD	3	WL	3	325	ON	3RS ET	22.2518	113.8337	SUMMER	NONE	S
6-Jun-19	2	1123	CWD	6	WL	2	214	ON	3RS ET	22.2445	113.8496	SUMMER	NONE	S
6-Jun-19	3	1221	CWD	2	WL	2	82	ON	3RS ET	22.2144	113.8319	SUMMER	NONE	P
18-Jun-19	1	1134	CWD	1	SWL	2	22	ON	3RS ET	22.2055	113.9224	SUMMER	NONE	S
18-Jun-19	2	1406	CWD	3	SWL	2	89	ON	3RS ET	22.2096	113.8827	SUMMER	NONE	S

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
18-Jun-19	3	1505	CWD	4	SWL	2	348	ON	3RS ET	22.1764	113.8690	SUMMER	NONE	P
18-Jun-19	4	1603	CWD	1	SWL	2	70	ON	3RS ET	22.1866	113.8494	SUMMER	NONE	P
18-Jun-19	5	1609	CWD	4	SWL	2	225	ON	3RS ET	22.1892	113.8496	SUMMER	PURSE SEINER	P
19-Jun-19	1	1131	CWD	5	NWL	2	70	ON	3RS ET	22.3867	113.8780	SUMMER	NONE	P
19-Jun-19	2	1323	CWD	1	NWL	3	119	ON	3RS ET	22.3999	113.8974	SUMMER	NONE	P
26-Jun-19	1	1052	CWD	7	WL	2	117	ON	3RS ET	22.2231	113.8350	SUMMER	NONE	P
26-Jun-19	2	1211	CWD	3	WL	3	664	ON	3RS ET	22.2054	113.8309	SUMMER	NONE	P

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

Notes:

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

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

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

A total of 397.402 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 12 on-effort sightings and total number of 40 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in June 2019 are shown as below:

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

$$STG = \frac{12}{397.402}\ x\ 100 = 3.02$$

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

$$ANI = \frac{40}{397.402}\ x\ 100 = 10.07$$

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

A total of 1281.100 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 35 on-effort sightings and total number of 135 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

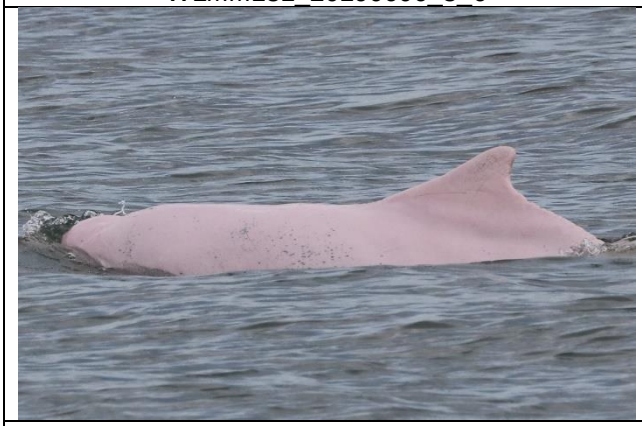
Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{35}{1281.100}\ x\ 100 = 2.73$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{135}{1281.100}\ x\ 100 = 10.54$$

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

	
WLMM068_20190606_1_2	WLMM043_20190606_2_9
	
WLMM083_20190606_2_17	WLMM138_20190606_2_7
	
WLMM131_20190606_3_6	SLMM028_20190618_1_6
	
SLMM011_20190618_2_1	WLMM027_20190618_2_4

	
WLMM078_20190618_2_3	WLMM079_20190618_3_1
	
NLMM019_20190619_1_5	NLMM021_20190619_1_11
	
NLMM027_20190619_1_2	NLMM034_20190626_1_14
	
NLMM046_20190626_1_4	NLMM070_20190626_1_1

	
WLMM043_20190626_1_1	WLMM052_20190626_1_7
	
WLMM122_20190626_1_16	SLMM025_20190626_2_8
	
WLMM073_20190626_2_11	

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
5/Jun/19	Lung Kwu Chau	8:51	14:51	6:00	2	2	3	2-3
18/Jun/19	Sha Chau	9:30	15:30	6:00	2	2	0	-
21/Jun/19	Lung Kwu Chau	8:55	14:55	6:00	2-3	2	0	-

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

Appendix E. Calibration Certificates

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. : AI060144
Date of Issue : 25 June, 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	15M100005
Date of Received	:	Jun 25, 2019
Date of Calibration	:	Jun 25, 2019
Date of Next Calibration[a]	:	Sep 25, 2019

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.02	0.02	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	10.01	0.00	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.0	15.1	0.1	Satisfactory
30.0	29.8	-0.2	Satisfactory
48.0	48.1	0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY: _____

LAM Ho-yee, Emma
Assistant Laboratory Manager

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

Report No. : AI060144
Date of Issue : 25 June, 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.45	0.03	-0.42	Satisfactory
2.88	3.26	0.38	Satisfactory
5.23	5.29	0.06	Satisfactory
8.12	7.64	-0.48	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	142.8	-2.8	Satisfactory
0.01	1412	1398	-1.0	Satisfactory
0.1	12890	12934	0.3	Satisfactory
0.5	58670	56361	-3.9	Satisfactory
1.0	111900	111597	-0.3	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.94	-0.6	Satisfactory
20	20.00	0.0	Satisfactory
30	30.14	0.5	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.00	--	--
10	10.07	0.7	Satisfactory
20	20.11	0.5	Satisfactory
100	101.20	1.2	Satisfactory
800	804.30	0.5	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI060143
Date of Issue : 25 June, 2019

PART A – CUSTOMER INFORMATION

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

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Jun 25, 2019
Date of Calibration	:	Jun 25, 2019
Date of Next Calibration[a]	:	Sep 25, 2019

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

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

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.01	0.01	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	10.03	0.02	Satisfactory

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

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
15.0	15.2	0.2	Satisfactory
30.0	30.0	0.0	Satisfactory
48.0	47.9	-0.1	Satisfactory

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

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

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

APPROVED SIGNATORY: _____

LAM Ho-yee, Emma
Assistant Laboratory Manager

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AI060143
Date of Issue : 25 June, 2019

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.45	0.03	-0.42	Satisfactory
2.84	3.26	0.42	Satisfactory
5.21	5.29	0.08	Satisfactory
8.03	7.64	-0.39	Satisfactory

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

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	145.1	-1.2	Satisfactory
0.01	1412	1402	-0.7	Satisfactory
0.1	12890	12921	0.2	Satisfactory
0.5	58670	56719	-3.3	Satisfactory
1.0	111900	111688	-0.2	Satisfactory

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

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.96	-0.4	Satisfactory
20	20.13	0.6	Satisfactory
30	30.00	0.0	Satisfactory

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

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0.01	--	Satisfactory
10	10.05	0.5	Satisfactory
20	20.12	0.6	Satisfactory
100	100.90	0.9	Satisfactory
800	805.40	0.7	Satisfactory

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

~ END OF REPORT ~

Remark(s): -

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

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

Appendix F. Status of Environmental Permits and Licences

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

Contract No.	Description	Location	Permit/ Reference No.	Status
P560 (R)	Notification of Construction Work under APCO	Site Office	397151	Receipt acknowledged by EPD on 15 Jan 2016
		Stockpiling Area	398015	Receipt acknowledged by EPD on 18 Jan 2016
	Discharge License under WPCO	Stockpiling Area	WT00024250-2016	Approved on 25 Apr 2016 to 30 Apr 2021
	Registration as Chemical Waste Producer	Stockpiling Area	WPN 5213-951-L2902-02	Registration was updated on 3 Oct 2016
	Bill Account for disposal		A/C 7023982	Approval granted from EPD on 14 Dec 2015
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-RS0130-19	Valid until 13 Aug 2019
	Discharge License under WPCO	Works area of 3201	WT00032628-2018	Valid from to 19 Dec 2018 to 31 Dec 2023
	Registration as Chemical Waste Producer	Works area of 3201	WPN 5213-951-P3231-01	Completion of Registration on 9 Sep 2016
	Bill Account for disposal		A/C 7025760	Approval granted from EPD on 31 Aug 2016
3202	Notification of Construction Work under APCO	Works area of 3202	439729	Receipt acknowledged by EPD on 23 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3202	WPN 5213-951-S3967-01	Registration was updated on 23 May 2017
	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
	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

Contract No.	Description	Location	Permit/ Reference No.	Status
3204	Notification of Construction Work under APCO	Works area of 3204	406446	Receipt acknowledged by EPD on 19 Aug 2016
	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-RS0303-19	Superseded by GW-RS0559-19 on 24 Jun 2019
			GW-RS0559-19	Valid until 23 Dec 2019
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0352-19	Superseded by GW-RS0482-19 on 10 Jun 2019
			GW-RS0482-19	Valid until 1 Dec 2019
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0266-19	Valid until 11 Oct 2019
		Works area of 3301	GW-RS0267-19	Valid until 11 Oct 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS0096-19	Valid until 10 Aug 2019
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
3402	Notification of Construction Work under APCO	Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018
		Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0207-19	Valid until 14 Aug 2019
3501	Notification of Construction Work under APCO	Works area of 3501	434640	Receipt acknowledged by EPD on 13 Jun 2018
	Registration as Chemical Waste Producer	Works area of 3501	WPN 5213-951-B2520-02	Completion of Registration on 25 Jul 2017
	Discharge License under WPCO	Works area of 3501	WT00031400-2018	Valid from 30 Aug 2018 to 31 Aug 2023
	Bill Account for disposal	Works area of 3501	A/C 7028144	Approval granted from EPD on 23 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3501	GW-RS0184-19	Valid until 4 Sep 2019
3502	Notification of Construction Work under APCO	Works area of 3502	437766	Receipt acknowledged by EPD on 26 Sep 2018
	Registration as Chemical Waste Producer	Works area of 3502	WPN 5213-951-B2520-01	Completion of Registration on 3 Jul 2017
	Bill Account for disposal	Works area of 3502	A/C 7028050	Approval granted from EPD on 21 Jun 2017
	Construction Noise Permit (General Works)	Works area of 3502	GW-RS0191-19	Valid until 10 Sep 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	439777	Receipt acknowledged by EPD on 26 Nov 2018
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
		Stockpiling area of 3503	WT00031826-2018	Valid from 18 Sep 2018 to 30 Sep 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0406-19	Superseded by GW-RS0554-19 on 24 Jun 2019
			GW-RS0554-19	Valid until 19 Dec 2019
		Stockpiling area of 3503	GW-RS0407-19	Valid until 13 Nov 2019
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951-S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0313-19	Valid until 25 Oct 2019
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS0068-19	Valid until 24 Jul 2019
		Works area of 3801	GW-RS0245-19	Valid until 26 Jun 2019
		(Drill and grouting works)	GW-RS0556-19	Valid from 27 Jun 2019 to 26 Sep 2019

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

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

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

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

Statistics for Complaints, Notifications of Summons and Prosecution

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

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 June 2019)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 June 2019)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
01-Jun	8:19	8S210	XZM	Arrival	13.7	-	-
01-Jun	8:52	3A061	YFT	Arrival	12.3	-	-
01-Jun	9:54	3A081	ZUI	Arrival	13.4	-	-
01-Jun	10:26	3A181	ZUI	Departure	12.5	-	-
01-Jun	10:38	8S212	XZM	Arrival	13.1	-	-
01-Jun	10:57	3A063	YFT	Arrival	12.2	-	-
01-Jun	11:08	8S121	XZM	Departure	12.6	-	-
01-Jun	12:34	8S215	XZM	Arrival	12.6	-	-
01-Jun	12:59	3A064	YFT	Arrival	11.5	-	-
01-Jun	14:01	3A082	ZUI	Arrival	13.7	-	-
01-Jun	14:12	3A182	ZUI	Departure	11.6	-	-
01-Jun	14:14	3A164	YFT	Departure	11.6	-	-
01-Jun	14:58	3A065	YFT	Arrival	12.1	-	-
01-Jun	16:18	3A167	YFT	Departure	12.7	-	-
01-Jun	17:00	3A067	YFT	Arrival	11.3	-	-
01-Jun	17:01	3A083	ZUI	Arrival	13	-	-
01-Jun	17:18	3A183	ZUI	Departure	13.1	-	-
01-Jun	18:06	8S126	XZM	Departure	11	-	-
01-Jun	20:34	3A084	ZUI	Arrival	13	-	-
01-Jun	20:54	8S2113	XZM	Arrival	11.7	-	-
01-Jun	20:56	3A185	ZUI	Departure	13	-	-
02-Jun	8:16	8S210	XZM	Arrival	11.7	-	-
02-Jun	8:57	3A061	YFT	Arrival	12	-	-
02-Jun	9:56	3A081	ZUI	Arrival	12.4	-	-
02-Jun	10:27	3A181	ZUI	Departure	12.6	-	-
02-Jun	10:40	8S212	XZM	Arrival	12.1	-	-
02-Jun	10:54	3A063	YFT	Arrival	12	-	-
02-Jun	11:09	8S121	XZM	Departure	12.7	-	-
02-Jun	12:33	8S215	XZM	Arrival	12.8	-	-
02-Jun	12:54	3A064	YFT	Arrival	11.7	-	-
02-Jun	13:59	3A082	ZUI	Arrival	13.1	-	-
02-Jun	14:18	3A182	ZUI	Departure	11.6	-	-
02-Jun	14:22	3A164	YFT	Departure	11.2	-	-
02-Jun	14:56	3A065	YFT	Arrival	12.7	-	-
02-Jun	16:24	3A167	YFT	Departure	12.7	-	-
02-Jun	16:59	3A067	YFT	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)
02-Jun	17:08	3A083	ZUI	Arrival	12.8	-	-
02-Jun	17:21	3A183	ZUI	Departure	12.8	-	-
02-Jun	18:02	8S126	XZM	Departure	12.6	-	-
02-Jun	20:35	3A084	ZUI	Arrival	12.7	-	-
02-Jun	20:53	3A185	ZUI	Departure	13.3	-	-
02-Jun	20:54	8S2113	XZM	Arrival	11.8	-	-
03-Jun	8:21	8S210	XZM	Arrival	11.6	-	-
03-Jun	8:50	3A061	YFT	Arrival	12.9	-	-
03-Jun	9:56	3A081	ZUI	Arrival	12.7	-	-
03-Jun	10:27	3A181	ZUI	Departure	12.7	-	-
03-Jun	10:37	8S212	XZM	Arrival	12.8	-	-
03-Jun	10:54	3A063	YFT	Arrival	12.6	-	-
03-Jun	11:04	8S121	XZM	Departure	12.6	-	-
03-Jun	12:41	8S215	XZM	Arrival	12.3	-	-
03-Jun	13:01	3A064	YFT	Arrival	12.3	-	-
03-Jun	13:59	3A082	ZUI	Arrival	13	-	-
03-Jun	14:16	3A164	YFT	Departure	12.6	-	-
03-Jun	14:18	3A182	ZUI	Departure	11.2	-	-
03-Jun	15:00	3A065	YFT	Arrival	11.7	-	-
03-Jun	16:29	3A167	YFT	Departure	13.7	-	-
03-Jun	16:59	3A067	YFT	Arrival	12.1	-	-
03-Jun	17:09	3A083	ZUI	Arrival	12.7	-	-
03-Jun	17:22	3A183	ZUI	Departure	12.1	-	-
03-Jun	17:59	8S126	XZM	Departure	13.4	-	-
03-Jun	20:36	3A084	ZUI	Arrival	11.8	-	-
03-Jun	20:46	8S2113	XZM	Arrival	12.1	-	-
03-Jun	20:55	3A185	ZUI	Departure	13.5	-	-
04-Jun	8:21	8S210	XZM	Arrival	11.7	-	-
04-Jun	8:57	3A061	YFT	Arrival	12.2	-	-
04-Jun	9:58	3A081	ZUI	Arrival	13	-	-
04-Jun	10:26	3A181	ZUI	Departure	13.1	-	-
04-Jun	10:48	8S212	XZM	Arrival	12.4	-	-
04-Jun	10:54	3A063	YFT	Arrival	12.5	-	-
04-Jun	11:17	8S121	XZM	Departure	12.7	-	-
04-Jun	12:33	8S215	XZM	Arrival	12.2	-	-
04-Jun	12:56	3A064	YFT	Arrival	12.7	-	-
04-Jun	13:59	3A082	ZUI	Arrival	13	-	-
04-Jun	14:21	3A164	YFT	Departure	11.5	-	-
04-Jun	14:25	3A182	ZUI	Departure	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)
04-Jun	15:04	3A065	YFT	Arrival	12.2	-	-
04-Jun	16:20	3A167	YFT	Departure	12.1	-	-
04-Jun	17:00	3A067	YFT	Arrival	12.5	-	-
04-Jun	17:08	3A083	ZUI	Arrival	12.6	-	-
04-Jun	17:24	3A183	ZUI	Departure	12	-	-
04-Jun	17:57	8S126	XZM	Departure	12.9	-	-
04-Jun	20:39	3A084	ZUI	Arrival	12	-	-
04-Jun	20:48	8S2113	XZM	Arrival	11.6	-	-
04-Jun	20:58	3A185	ZUI	Departure	13.6	-	-
05-Jun	8:26	8S210	XZM	Arrival	11	-	-
05-Jun	9:00	3A061	YFT	Arrival	11.5	-	-
05-Jun	10:00	3A081	ZUI	Arrival	12.8	-	-
05-Jun	10:27	3A181	ZUI	Departure	12.3	-	-
05-Jun	10:40	8S212	XZM	Arrival	11.9	-	-
05-Jun	10:57	3A063	YFT	Arrival	12.7	-	-
05-Jun	11:15	8S121	XZM	Departure	12.8	-	-
05-Jun	12:44	8S215	XZM	Arrival	12.8	-	-
05-Jun	12:55	3A064	YFT	Arrival	12.7	-	-
05-Jun	13:57	3A082	ZUI	Arrival	13	-	-
05-Jun	14:19	3A182	ZUI	Departure	11.9	-	-
05-Jun	14:23	3A164	YFT	Departure	13.1	-	-
05-Jun	14:56	3A065	YFT	Arrival	13	-	-
05-Jun	16:16	3A167	YFT	Departure	13.4	-	-
05-Jun	17:00	3A067	YFT	Arrival	12.5	-	-
05-Jun	17:04	3A083	ZUI	Arrival	12.8	-	-
05-Jun	17:16	3A183	ZUI	Departure	11.2	-	-
05-Jun	18:09	8S126	XZM	Departure	12.1	-	-
05-Jun	20:40	3A084	ZUI	Arrival	12.1	-	-
05-Jun	20:55	8S2113	XZM	Arrival	11.8	-	-
05-Jun	20:57	3A185	ZUI	Departure	13.3	-	-
06-Jun	8:18	8S210	XZM	Arrival	11.6	-	-
06-Jun	8:59	3A061	YFT	Arrival	12.7	-	-
06-Jun	9:58	3A081	ZUI	Arrival	12.9	-	-
06-Jun	10:29	3A181	ZUI	Departure	13.4	-	-
06-Jun	10:42	8S212	XZM	Arrival	12.5	-	-
06-Jun	11:05	3A063	YFT	Arrival	11.8	-	-
06-Jun	11:18	8S121	XZM	Departure	12.1	-	-
06-Jun	12:35	8S215	XZM	Arrival	11.9	-	-
06-Jun	12:56	3A064	YFT	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)
06-Jun	13:57	3A082	ZUI	Arrival	13.6	-	-
06-Jun	14:09	3A182	ZUI	Departure	12.5	-	-
06-Jun	14:15	3A164	YFT	Departure	11.3	-	-
06-Jun	14:59	3A065	YFT	Arrival	13.4	-	-
06-Jun	16:19	3A167	YFT	Departure	13.5	-	-
06-Jun	16:58	3A067	YFT	Arrival	12.9	-	-
06-Jun	16:58	3A083	ZUI	Arrival	13	-	-
06-Jun	17:16	3A183	ZUI	Departure	11.5	-	-
06-Jun	18:05	8S126	XZM	Departure	13.1	-	-
06-Jun	20:42	3A084	ZUI	Arrival	12.8	-	-
06-Jun	20:52	3A185	ZUI	Departure	13.3	-	-
06-Jun	21:00	8S2113	XZM	Arrival	11.8	-	-
07-Jun	8:15	8S210	XZM	Arrival	13.2	-	-
07-Jun	9:00	3A061	YFT	Arrival	11	-	-
07-Jun	9:57	3A081	ZUI	Arrival	12.5	-	-
07-Jun	10:25	3A181	ZUI	Departure	13.5	-	-
07-Jun	10:31	8S212	XZM	Arrival	13.2	-	-
07-Jun	10:58	3A063	YFT	Arrival	12.3	-	-
07-Jun	11:05	8S121	XZM	Departure	13.4	-	-
07-Jun	12:35	8S215	XZM	Arrival	11.6	-	-
07-Jun	12:58	3A064	YFT	Arrival	13.1	-	-
07-Jun	13:56	3A082	ZUI	Arrival	13.6	-	-
07-Jun	14:10	3A182	ZUI	Departure	12.6	-	-
07-Jun	14:16	3A164	YFT	Departure	12.1	-	-
07-Jun	14:58	3A065	YFT	Arrival	12.7	-	-
07-Jun	16:14	3A167	YFT	Departure	12.1	-	-
07-Jun	16:57	3A083	ZUI	Arrival	13.1	-	-
07-Jun	16:58	3A067	YFT	Arrival	12.3	-	-
07-Jun	17:26	3A183	ZUI	Departure	11.6	-	-
07-Jun	17:56	8S126	XZM	Departure	12.6	-	-
07-Jun	20:38	3A084	ZUI	Arrival	12.9	-	-
07-Jun	20:51	8S2113	XZM	Arrival	12.4	-	-
07-Jun	20:58	3A185	ZUI	Departure	12.7	-	-
08-Jun	8:15	8S210	XZM	Arrival	12.5	-	-
08-Jun	8:53	3A061	YFT	Arrival	11.8	-	-
08-Jun	10:00	3A081	ZUI	Arrival	12.4	-	-
08-Jun	10:28	3A181	ZUI	Departure	13.6	-	-
08-Jun	10:36	8S212	XZM	Arrival	11.7	-	-
08-Jun	10:59	3A063	YFT	Arrival	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)
08-Jun	11:07	8S121	XZM	Departure	11.8	-	-
08-Jun	12:43	8S215	XZM	Arrival	11.3	-	-
08-Jun	12:54	3A064	YFT	Arrival	12.4	-	-
08-Jun	13:55	3A082	ZUI	Arrival	13.1	-	-
08-Jun	14:09	3A182	ZUI	Departure	12.9	-	-
08-Jun	14:13	3A164	YFT	Departure	12.8	-	-
08-Jun	14:53	3A065	YFT	Arrival	12.9	-	-
08-Jun	16:17	3A167	YFT	Departure	13.7	-	-
08-Jun	16:52	3A067	YFT	Arrival	12.9	-	-
08-Jun	16:54	3A083	ZUI	Arrival	12.6	-	-
08-Jun	17:17	3A183	ZUI	Departure	12	-	-
08-Jun	18:02	8S126	XZM	Departure	12.9	-	-
08-Jun	20:45	3A084	ZUI	Arrival	12.6	-	-
08-Jun	20:47	8S2113	XZM	Arrival	11.9	-	-
08-Jun	20:56	3A185	ZUI	Departure	12.2	-	-
09-Jun	8:18	8S210	XZM	Arrival	12.8	-	-
09-Jun	8:57	3A061	YFT	Arrival	11.9	-	-
09-Jun	10:06	3A081	ZUI	Arrival	12.5	-	-
09-Jun	10:36	3A181	ZUI	Departure	13.7	-	-
09-Jun	10:52	8S212	XZM	Arrival	9.5	-	-
09-Jun	10:59	3A063	YFT	Arrival	11.6	-	-
09-Jun	11:12	8S121	XZM	Departure	12.8	-	-
09-Jun	12:41	8S215	XZM	Arrival	11.9	-	-
09-Jun	12:58	3A064	YFT	Arrival	11.3	-	-
09-Jun	13:57	3A082	ZUI	Arrival	12.5	-	-
09-Jun	14:19	3A182	ZUI	Departure	12.7	-	-
09-Jun	14:20	3A164	YFT	Departure	12.5	-	-
09-Jun	14:53	3A065	YFT	Arrival	13.1	-	-
09-Jun	16:12	3A167	YFT	Departure	13.5	-	-
09-Jun	17:00	3A067	YFT	Arrival	12	-	-
09-Jun	17:02	3A083	ZUI	Arrival	13.5	-	-
09-Jun	17:20	3A183	ZUI	Departure	12	-	-
09-Jun	18:12	8S126	XZM	Departure	13.6	-	-
09-Jun	20:38	3A084	ZUI	Arrival	12.5	-	-
09-Jun	20:47	8S2113	XZM	Arrival	11.5	-	-
09-Jun	20:57	3A185	ZUI	Departure	12	-	-
10-Jun	8:17	8S210	XZM	Arrival	12.2	-	-
10-Jun	8:55	3A061	YFT	Arrival	12.3	-	-
10-Jun	9:55	3A081	ZUI	Arrival	12.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
10-Jun	10:23	3A181	ZUI	Departure	13.2	-	-
10-Jun	10:41	8S212	XZM	Arrival	12.2	-	-
10-Jun	10:57	3A063	YFT	Arrival	12.2	-	-
10-Jun	11:10	8S121	XZM	Departure	13.1	-	-
10-Jun	12:39	8S215	XZM	Arrival	12.7	-	-
10-Jun	13:00	3A064	YFT	Arrival	10.7	-	-
10-Jun	13:56	3A082	ZUI	Arrival	12.2	-	-
10-Jun	14:14	3A182	ZUI	Departure	13	-	-
10-Jun	14:18	3A164	YFT	Departure	11.4	-	-
10-Jun	14:56	3A065	YFT	Arrival	11	-	-
10-Jun	16:32	3A167	YFT	Departure	13.5	-	-
10-Jun	16:57	3A067	YFT	Arrival	11.7	-	-
10-Jun	16:59	3A083	ZUI	Arrival	13.3	-	-
10-Jun	17:19	3A183	ZUI	Departure	12.5	-	-
10-Jun	18:17	8S126	XZM	Departure	11.6	-	-
10-Jun	20:40	3A084	ZUI	Arrival	12.7	-	-
10-Jun	20:49	8S2113	XZM	Arrival	12.4	-	-
10-Jun	20:57	3A185	ZUI	Departure	11.6	-	-
11-Jun	8:21	8S210	XZM	Arrival	13.1	-	-
11-Jun	8:55	3A061	YFT	Arrival	12.5	-	-
11-Jun	10:00	3A081	ZUI	Arrival	13.3	-	-
11-Jun	10:30	3A181	ZUI	Departure	12.3	-	-
11-Jun	10:31	8S212	XZM	Arrival	12.6	-	-
11-Jun	10:53	3A063	YFT	Arrival	12.6	-	-
11-Jun	11:04	8S121	XZM	Departure	13	-	-
11-Jun	12:35	8S215	XZM	Arrival	12.5	-	-
11-Jun	12:57	3A064	YFT	Arrival	11.8	-	-
11-Jun	13:59	3A082	ZUI	Arrival	12.8	-	-
11-Jun	14:11	3A164	YFT	Departure	12.5	-	-
11-Jun	14:14	3A182	ZUI	Departure	13.5	-	-
11-Jun	14:57	3A065	YFT	Arrival	12.1	-	-
11-Jun	16:24	3A167	YFT	Departure	12.8	-	-
11-Jun	16:56	3A083	ZUI	Arrival	12.9	-	-
11-Jun	16:57	3A067	YFT	Arrival	12.3	-	-
11-Jun	17:18	3A183	ZUI	Departure	12.6	-	-
11-Jun	18:01	8S126	XZM	Departure	12.7	-	-
11-Jun	20:38	3A084	ZUI	Arrival	13.3	-	-
11-Jun	20:55	8S2113	XZM	Arrival	12.1	-	-
11-Jun	20:59	3A185	ZUI	Departure	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
12-Jun	8:18	8S210	XZM	Arrival	12.4	-	-
12-Jun	8:59	3A061	YFT	Arrival	12.6	-	-
12-Jun	10:00	3A081	ZUI	Arrival	13.3	-	-
12-Jun	10:31	3A181	ZUI	Departure	11.8	-	-
12-Jun	10:31	8S212	XZM	Arrival	11.6	-	-
12-Jun	10:50	3A063	YFT	Arrival	12.9	-	-
12-Jun	11:02	8S121	XZM	Departure	12.5	-	-
12-Jun	12:44	8S215	XZM	Arrival	12.3	-	-
12-Jun	13:00	3A064	YFT	Arrival	12.8	-	-
12-Jun	14:00	3A082	ZUI	Arrival	12.4	-	-
12-Jun	14:16	3A164	YFT	Departure	12.7	-	-
12-Jun	14:19	3A182	ZUI	Departure	13	-	-
12-Jun	14:55	3A065	YFT	Arrival	11.9	-	-
12-Jun	16:23	3A167	YFT	Departure	12.1	-	-
12-Jun	16:54	3A067	YFT	Arrival	12.7	-	-
12-Jun	17:03	3A083	ZUI	Arrival	12.4	-	-
12-Jun	17:17	3A183	ZUI	Departure	12.9	-	-
12-Jun	18:00	8S126	XZM	Departure	13.9	-	-
12-Jun	20:43	3A084	ZUI	Arrival	13.1	-	-
12-Jun	20:48	8S2113	XZM	Arrival	12.9	-	-
12-Jun	20:57	3A185	ZUI	Departure	12.5	-	-
13-Jun	8:18	8S210	XZM	Arrival	12.5	-	-
13-Jun	9:04	3A061	YFT	Arrival	12.7	-	-
13-Jun	9:57	3A081	ZUI	Arrival	13.5	-	-
13-Jun	10:29	3A181	ZUI	Departure	12.3	-	-
13-Jun	10:35	8S212	XZM	Arrival	12.3	-	-
13-Jun	10:55	3A063	YFT	Arrival	12.8	-	-
13-Jun	11:16	8S121	XZM	Departure	12.5	-	-
13-Jun	12:32	8S215	XZM	Arrival	13	-	-
13-Jun	12:56	3A064	YFT	Arrival	12.7	-	-
13-Jun	14:01	3A082	ZUI	Arrival	13.1	-	-
13-Jun	14:13	3A164	YFT	Departure	13.7	-	-
13-Jun	14:17	3A182	ZUI	Departure	12.3	-	-
13-Jun	14:56	3A065	YFT	Arrival	12.2	-	-
13-Jun	16:12	3A167	YFT	Departure	13	-	-
13-Jun	16:58	3A067	YFT	Arrival	13.3	<= 5	< 2min
13-Jun	17:02	3A083	ZUI	Arrival	12.7	-	-
13-Jun	17:22	3A183	ZUI	Departure	13	-	-
13-Jun	18:13	8S126	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)
13-Jun	20:38	3A084	ZUI	Arrival	13.1	-	-
13-Jun	20:52	8S2113	XZM	Arrival	12.9	-	-
13-Jun	20:55	3A185	ZUI	Departure	12.2	-	-
14-Jun	8:16	8S210	XZM	Arrival	13	-	-
14-Jun	8:52	3A061	YFT	Arrival	12.5	-	-
14-Jun	9:58	3A081	ZUI	Arrival	13.4	-	-
14-Jun	10:24	3A181	ZUI	Departure	11.8	-	-
14-Jun	10:36	8S212	XZM	Arrival	11.7	-	-
14-Jun	10:56	3A063	YFT	Arrival	13	-	-
14-Jun	11:10	8S121	XZM	Departure	12	-	-
14-Jun	12:34	8S215	XZM	Arrival	12	-	-
14-Jun	13:01	3A064	YFT	Arrival	12.3	-	-
14-Jun	13:57	3A082	ZUI	Arrival	12.6	-	-
14-Jun	14:13	3A164	YFT	Departure	13.1	-	-
14-Jun	14:14	3A182	ZUI	Departure	12.2	-	-
14-Jun	14:58	3A065	YFT	Arrival	11.5	-	-
14-Jun	16:20	3A167	YFT	Departure	12.8	-	-
14-Jun	17:02	3A067	YFT	Arrival	13	-	-
14-Jun	17:10	3A083	ZUI	Arrival	12.5	-	-
14-Jun	17:22	3A183	ZUI	Departure	13.3	-	-
14-Jun	17:59	8S126	XZM	Departure	12.8	-	-
14-Jun	20:38	3A084	ZUI	Arrival	12.9	-	-
14-Jun	20:53	3A185	ZUI	Departure	12.9	-	-
14-Jun	21:00	8S2113	XZM	Arrival	12.5	-	-
15-Jun	8:19	8S210	XZM	Arrival	11.9	-	-
15-Jun	8:53	3A061	YFT	Arrival	12.1	-	-
15-Jun	10:00	3A081	ZUI	Arrival	13.1	-	-
15-Jun	10:33	8S212	XZM	Arrival	12.2	-	-
15-Jun	10:33	3A181	ZUI	Departure	12.1	-	-
15-Jun	10:56	3A063	YFT	Arrival	12.2	-	-
15-Jun	11:03	8S121	XZM	Departure	12.2	-	-
15-Jun	12:37	8S215	XZM	Arrival	13.3	<= 5	< 6min
15-Jun	12:58	3A064	YFT	Arrival	13.4	-	-
15-Jun	14:04	3A082	ZUI	Arrival	12.7	-	-
15-Jun	14:14	3A164	YFT	Departure	13.1	-	-
15-Jun	14:16	3A182	ZUI	Departure	12	-	-
15-Jun	14:55	3A065	YFT	Arrival	12.5	-	-
15-Jun	16:14	3A167	YFT	Departure	12.8	-	-
15-Jun	16:52	3A067	YFT	Arrival	12.5	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
15-Jun	17:03	3A083	ZUI	Arrival	12.6	-	-
15-Jun	17:16	3A183	ZUI	Departure	13.4	-	-
15-Jun	18:09	8S126	XZM	Departure	13.1	-	-
15-Jun	20:37	3A084	ZUI	Arrival	12.5	-	-
15-Jun	20:48	8S2113	XZM	Arrival	12.8	-	-
15-Jun	20:54	3A185	ZUI	Departure	13.5	-	-
16-Jun	8:13	8S210	XZM	Arrival	13.2	-	-
16-Jun	8:57	3A061	YFT	Arrival	13.1	-	-
16-Jun	9:59	3A081	ZUI	Arrival	13.2	-	-
16-Jun	10:27	3A181	ZUI	Departure	12.7	-	-
16-Jun	10:46	8S212	XZM	Arrival	12.2	-	-
16-Jun	10:56	3A063	YFT	Arrival	12.4	-	-
16-Jun	11:11	8S121	XZM	Departure	13.1	-	-
16-Jun	12:38	8S215	XZM	Arrival	13.3	-	-
16-Jun	12:53	3A064	YFT	Arrival	13.1	-	-
16-Jun	14:00	3A082	ZUI	Arrival	13.2	-	-
16-Jun	14:15	3A164	YFT	Departure	12.2	-	-
16-Jun	14:17	3A182	ZUI	Departure	11.6	-	-
16-Jun	14:54	3A065	YFT	Arrival	12	-	-
16-Jun	16:18	3A167	YFT	Departure	11.6	-	-
16-Jun	16:54	3A067	YFT	Arrival	12.2	-	-
16-Jun	17:06	3A083	ZUI	Arrival	11.1	-	-
16-Jun	17:21	3A183	ZUI	Departure	13.2	-	-
16-Jun	18:06	8S126	XZM	Departure	11.9	-	-
16-Jun	20:35	3A084	ZUI	Arrival	12.6	-	-
16-Jun	20:48	8S2113	XZM	Arrival	12.1	-	-
16-Jun	20:53	3A185	ZUI	Departure	13.6	-	-
17-Jun	8:20	8S210	XZM	Arrival	12.7	-	-
17-Jun	8:56	3A061	YFT	Arrival	13.1	-	-
17-Jun	9:58	3A081	ZUI	Arrival	13.3	-	-
17-Jun	10:25	3A181	ZUI	Departure	13.1	-	-
17-Jun	10:47	8S212	XZM	Arrival	12.4	-	-
17-Jun	10:56	3A063	YFT	Arrival	12.3	-	-
17-Jun	11:10	8S121	XZM	Departure	12.4	-	-
17-Jun	12:37	8S215	XZM	Arrival	11.8	-	-
17-Jun	12:57	3A064	YFT	Arrival	13.2	-	-
17-Jun	14:14	3A082	ZUI	Arrival	13.5	-	-
17-Jun	14:15	3A164	YFT	Departure	13.1	-	-
17-Jun	14:28	3A182	ZUI	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Jun	14:57	3A065	YFT	Arrival	12.3	-	-
17-Jun	16:24	3A167	YFT	Departure	13	<= 5	< 2min
17-Jun	16:58	3A067	YFT	Arrival	12.9	-	-
17-Jun	17:11	3A083	ZUI	Arrival	12.6	-	-
17-Jun	17:23	3A183	ZUI	Departure	12.2	-	-
17-Jun	18:03	8S126	XZM	Departure	13	-	-
17-Jun	20:39	3A084	ZUI	Arrival	12.6	-	-
17-Jun	20:44	8S2113	XZM	Arrival	11.8	-	-
17-Jun	21:00	3A185	ZUI	Departure	13.3	-	-
18-Jun	8:15	8S210	XZM	Arrival	12.2	-	-
18-Jun	8:51	3A061	YFT	Arrival	12.8	-	-
18-Jun	9:57	3A081	ZUI	Arrival	12.7	-	-
18-Jun	10:28	3A181	ZUI	Departure	13	-	-
18-Jun	10:46	8S212	XZM	Arrival	10.8	-	-
18-Jun	10:55	3A063	YFT	Arrival	12.7	-	-
18-Jun	11:04	8S121	XZM	Departure	11.5	-	-
18-Jun	12:39	8S215	XZM	Arrival	12.1	-	-
18-Jun	12:55	3A064	YFT	Arrival	12.3	-	-
18-Jun	13:58	3A082	ZUI	Arrival	13.2	-	-
18-Jun	14:12	3A182	ZUI	Departure	11.7	-	-
18-Jun	14:13	3A164	YFT	Departure	11	-	-
18-Jun	14:58	3A065	YFT	Arrival	11.4	-	-
18-Jun	16:20	3A167	YFT	Departure	12.9	-	-
18-Jun	16:55	3A067	YFT	Arrival	12.4	-	-
18-Jun	16:58	3A083	ZUI	Arrival	12.7	-	-
18-Jun	17:20	3A183	ZUI	Departure	11.9	-	-
18-Jun	17:59	8S126	XZM	Departure	13.2	-	-
18-Jun	20:36	3A084	ZUI	Arrival	12.4	-	-
18-Jun	20:50	8S2113	XZM	Arrival	12.1	-	-
18-Jun	21:04	3A185	ZUI	Departure	11.4	-	-
19-Jun	8:14	8S210	XZM	Arrival	12.7	-	-
19-Jun	8:56	3A061	YFT	Arrival	12.6	-	-
19-Jun	10:03	3A081	ZUI	Arrival	12.6	-	-
19-Jun	10:28	3A181	ZUI	Departure	13.4	-	-
19-Jun	10:40	8S212	XZM	Arrival	13.7	-	-
19-Jun	10:55	3A063	YFT	Arrival	12.8	-	-
19-Jun	11:15	8S121	XZM	Departure	13.2	-	-
19-Jun	12:38	8S215	XZM	Arrival	13.4	-	-
19-Jun	12:58	3A064	YFT	Arrival	11.8	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
19-Jun	13:57	3A082	ZUI	Arrival	13.3	-	-
19-Jun	14:17	3A182	ZUI	Departure	11.8	-	-
19-Jun	14:19	3A164	YFT	Departure	11.9	-	-
19-Jun	14:59	3A065	YFT	Arrival	12.7	-	-
19-Jun	16:15	3A167	YFT	Departure	11.9	-	-
19-Jun	17:02	3A083	ZUI	Arrival	12.7	-	-
19-Jun	17:04	3A067	YFT	Arrival	12.1	-	-
19-Jun	17:16	3A183	ZUI	Departure	11.5	-	-
19-Jun	17:59	8S126	XZM	Departure	11.4	-	-
19-Jun	20:42	3A084	ZUI	Arrival	12.7	-	-
19-Jun	20:53	8S2113	XZM	Arrival	11.6	-	-
19-Jun	20:55	3A185	ZUI	Departure	13.5	-	-
20-Jun	8:17	8S210	XZM	Arrival	11.6	-	-
20-Jun	8:52	3A061	YFT	Arrival	12.1	-	-
20-Jun	9:58	3A081	ZUI	Arrival	12.8	-	-
20-Jun	10:28	3A181	ZUI	Departure	13	-	-
20-Jun	10:30	8S212	XZM	Arrival	13.7	-	-
20-Jun	11:02	3A063	YFT	Arrival	12	-	-
20-Jun	11:07	8S121	XZM	Departure	12.5	-	-
20-Jun	12:36	8S215	XZM	Arrival	13.3	-	-
20-Jun	12:54	3A064	YFT	Arrival	12.5	-	-
20-Jun	13:58	3A082	ZUI	Arrival	12.9	-	-
20-Jun	14:06	3A164	YFT	Departure	12.5	-	-
20-Jun	14:15	3A182	ZUI	Departure	12	-	-
20-Jun	14:53	3A065	YFT	Arrival	13.3	-	-
20-Jun	16:19	3A167	YFT	Departure	13.5	-	-
20-Jun	16:58	3A067	YFT	Arrival	12.4	-	-
20-Jun	17:06	3A083	ZUI	Arrival	12.7	-	-
20-Jun	17:18	3A183	ZUI	Departure	11.6	-	-
20-Jun	18:00	8S126	XZM	Departure	11.1	-	-
20-Jun	20:47	3A084	ZUI	Arrival	12.3	-	-
20-Jun	20:49	8S2113	XZM	Arrival	12.4	-	-
20-Jun	20:58	3A185	ZUI	Departure	13.1	-	-
21-Jun	8:21	8S210	XZM	Arrival	12.7	-	-
21-Jun	8:53	3A061	YFT	Arrival	12.3	-	-
21-Jun	10:02	3A081	ZUI	Arrival	12.2	-	-
21-Jun	10:34	3A181	ZUI	Departure	12.8	-	-
21-Jun	10:43	8S212	XZM	Arrival	12.2	-	-
21-Jun	11:02	3A063	YFT	Arrival	11.3	-	-

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)
21-Jun	11:07	8S121	XZM	Departure	12.8	<= 5	< 2min
21-Jun	12:38	8S215	XZM	Arrival	12.9	-	-
21-Jun	12:56	3A064	YFT	Arrival	12.7	-	-
21-Jun	14:00	3A082	ZUI	Arrival	13.2	-	-
21-Jun	14:15	3A164	YFT	Departure	12.6	-	-
21-Jun	14:18	3A182	ZUI	Departure	12.3	-	-
21-Jun	15:00	3A065	YFT	Arrival	13.2	-	-
21-Jun	16:16	3A167	YFT	Departure	13.3	-	-
21-Jun	17:00	3A067	YFT	Arrival	12	-	-
21-Jun	17:06	3A083	ZUI	Arrival	12.3	-	-
21-Jun	17:20	3A183	ZUI	Departure	11.5	-	-
21-Jun	17:59	8S126	XZM	Departure	12.4	-	-
21-Jun	20:40	3A084	ZUI	Arrival	12.7	-	-
21-Jun	20:55	8S2113	XZM	Arrival	12.6	-	-
21-Jun	21:02	3A185	ZUI	Departure	12.8	-	-
22-Jun	8:16	8S210	XZM	Arrival	13.1	-	-
22-Jun	8:51	3A061	YFT	Arrival	12.1	-	-
22-Jun	10:03	3A081	ZUI	Arrival	12.5	-	-
22-Jun	10:34	8S212	XZM	Arrival	12.4	-	-
22-Jun	10:35	3A181	ZUI	Departure	13.4	-	-
22-Jun	10:54	3A063	YFT	Arrival	12.8	-	-
22-Jun	11:03	8S121	XZM	Departure	12.6	-	-
22-Jun	12:47	8S215	XZM	Arrival	12	-	-
22-Jun	13:02	3A064	YFT	Arrival	12.9	-	-
22-Jun	13:58	3A082	ZUI	Arrival	12.9	-	-
22-Jun	14:10	3A182	ZUI	Departure	12.3	-	-
22-Jun	14:18	3A164	YFT	Departure	12.7	-	-
22-Jun	14:56	3A065	YFT	Arrival	12.7	-	-
22-Jun	16:13	3A167	YFT	Departure	12	-	-
22-Jun	16:58	3A083	ZUI	Arrival	13.1	-	-
22-Jun	16:59	3A067	YFT	Arrival	12.7	-	-
22-Jun	17:16	3A183	ZUI	Departure	12	-	-
22-Jun	18:06	8S126	XZM	Departure	13.2	-	-
22-Jun	20:39	3A084	ZUI	Arrival	12.6	-	-
22-Jun	20:52	8S2113	XZM	Arrival	12.6	-	-
22-Jun	20:55	3A185	ZUI	Departure	12.1	-	-
23-Jun	8:19	8S210	XZM	Arrival	11.7	-	-
23-Jun	8:54	3A061	YFT	Arrival	12.2	-	-
23-Jun	9:58	3A081	ZUI	Arrival	12.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
23-Jun	10:29	3A181	ZUI	Departure	13.5	-	-
23-Jun	10:43	8S212	XZM	Arrival	12.3	-	-
23-Jun	10:57	3A063	YFT	Arrival	12.3	-	-
23-Jun	11:09	8S121	XZM	Departure	12.9	-	-
23-Jun	12:34	8S215	XZM	Arrival	11.9	-	-
23-Jun	12:59	3A064	YFT	Arrival	12.9	-	-
23-Jun	13:55	3A082	ZUI	Arrival	12.9	-	-
23-Jun	14:14	3A164	YFT	Departure	12.5	-	-
23-Jun	14:15	3A182	ZUI	Departure	12.6	-	-
23-Jun	14:50	3A065	YFT	Arrival	13.1	-	-
23-Jun	16:11	3A167	YFT	Departure	13.2	-	-
23-Jun	16:55	3A067	YFT	Arrival	13.5	-	-
23-Jun	17:00	3A083	ZUI	Arrival	13.5	-	-
23-Jun	17:16	3A183	ZUI	Departure	12	-	-
23-Jun	18:10	8S126	XZM	Departure	12.8	-	-
23-Jun	20:39	3A084	ZUI	Arrival	13.1	-	-
23-Jun	20:51	8S2113	XZM	Arrival	11.9	-	-
23-Jun	20:56	3A185	ZUI	Departure	12.2	-	-
24-Jun	8:18	8S210	XZM	Arrival	12.5	-	-
24-Jun	8:54	3A061	YFT	Arrival	12.1	-	-
24-Jun	9:59	3A081	ZUI	Arrival	13.1	-	-
24-Jun	10:31	3A181	ZUI	Departure	13	-	-
24-Jun	10:37	8S212	XZM	Arrival	11.4	-	-
24-Jun	10:57	3A063	YFT	Arrival	12.6	-	-
24-Jun	11:08	8S121	XZM	Departure	13	-	-
24-Jun	12:34	8S215	XZM	Arrival	12.5	-	-
24-Jun	12:53	3A064	YFT	Arrival	12.7	-	-
24-Jun	14:02	3A082	ZUI	Arrival	12.8	-	-
24-Jun	14:14	3A182	ZUI	Departure	12.7	-	-
24-Jun	14:17	3A164	YFT	Departure	12.5	-	-
24-Jun	14:50	3A065	YFT	Arrival	12.9	-	-
24-Jun	16:16	3A167	YFT	Departure	13.8	-	-
24-Jun	16:55	3A067	YFT	Arrival	12.9	-	-
24-Jun	17:02	3A083	ZUI	Arrival	13.2	-	-
24-Jun	17:30	3A183	ZUI	Departure	11.7	-	-
24-Jun	18:02	8S126	XZM	Departure	13.1	-	-
24-Jun	20:39	3A084	ZUI	Arrival	12.6	-	-
24-Jun	20:49	8S2113	XZM	Arrival	11.9	-	-
24-Jun	20:56	3A185	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)
25-Jun	8:15	8S210	XZM	Arrival	13.3	-	-
25-Jun	8:57	3A061	YFT	Arrival	12.9	-	-
25-Jun	10:09	3A081	ZUI	Arrival	13.3	-	-
25-Jun	10:40	8S212	XZM	Arrival	12.2	-	-
25-Jun	10:46	3A181	ZUI	Departure	13	-	-
25-Jun	10:56	3A063	YFT	Arrival	12.5	-	-
25-Jun	11:09	8S121	XZM	Departure	12.9	-	-
25-Jun	12:38	8S215	XZM	Arrival	13.2	-	-
25-Jun	13:03	3A064	YFT	Arrival	11.3	-	-
25-Jun	13:56	3A082	ZUI	Arrival	12.5	-	-
25-Jun	14:15	3A164	YFT	Departure	11.8	-	-
25-Jun	14:20	3A182	ZUI	Departure	13.1	-	-
25-Jun	14:58	3A065	YFT	Arrival	12.6	-	-
25-Jun	16:17	3A167	YFT	Departure	12.9	-	-
25-Jun	16:59	3A067	YFT	Arrival	12.6	-	-
25-Jun	17:04	3A083	ZUI	Arrival	12.9	-	-
25-Jun	17:23	3A183	ZUI	Departure	12.3	-	-
25-Jun	18:00	8S126	XZM	Departure	12.8	-	-
25-Jun	20:48	3A084	ZUI	Arrival	12.4	-	-
25-Jun	20:54	8S2113	XZM	Arrival	12	-	-
25-Jun	21:07	3A185	ZUI	Departure	12.3	-	-
26-Jun	8:22	8S210	XZM	Arrival	12.5	-	-
26-Jun	8:55	3A061	YFT	Arrival	12	-	-
26-Jun	9:58	3A081	ZUI	Arrival	13	-	-
26-Jun	10:33	3A181	ZUI	Departure	12.4	-	-
26-Jun	10:39	8S212	XZM	Arrival	12.5	-	-
26-Jun	10:53	3A063	YFT	Arrival	12.9	-	-
26-Jun	11:18	8S121	XZM	Departure	12.8	-	-
26-Jun	12:40	8S215	XZM	Arrival	11.8	-	-
26-Jun	12:55	3A064	YFT	Arrival	12.8	-	-
26-Jun	13:56	3A082	ZUI	Arrival	12.9	-	-
26-Jun	14:16	3A182	ZUI	Departure	13.1	-	-
26-Jun	14:19	3A164	YFT	Departure	13	-	-
26-Jun	14:59	3A065	YFT	Arrival	12.5	-	-
26-Jun	16:19	3A167	YFT	Departure	12.9	-	-
26-Jun	16:53	3A067	YFT	Arrival	13	-	-
26-Jun	17:01	3A083	ZUI	Arrival	13	-	-
26-Jun	17:17	3A183	ZUI	Departure	12.6	-	-
26-Jun	18:02	8S126	XZM	Departure	11.9	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Jun	20:39	3A084	ZUI	Arrival	13.2	-	-
26-Jun	20:54	3A185	ZUI	Departure	12.1	-	-
26-Jun	21:03	8S2113	XZM	Arrival	12.2	-	-
27-Jun	8:17	8S210	XZM	Arrival	12.3	-	-
27-Jun	8:59	3A061	YFT	Arrival	11.8	-	-
27-Jun	10:04	3A081	ZUI	Arrival	13.2	-	-
27-Jun	10:32	3A181	ZUI	Departure	12.4	-	-
27-Jun	10:42	8S212	XZM	Arrival	11.3	-	-
27-Jun	10:52	3A063	YFT	Arrival	13.2	-	-
27-Jun	11:10	8S121	XZM	Departure	10.9	-	-
27-Jun	12:38	8S215	XZM	Arrival	12.5	-	-
27-Jun	12:53	3A064	YFT	Arrival	12.4	-	-
27-Jun	13:57	3A082	ZUI	Arrival	13.1	-	-
27-Jun	14:14	3A182	ZUI	Departure	13.3	-	-
27-Jun	14:18	3A164	YFT	Departure	13	-	-
27-Jun	14:55	3A065	YFT	Arrival	11	-	-
27-Jun	16:18	3A167	YFT	Departure	13.3	-	-
27-Jun	16:54	3A067	YFT	Arrival	12.4	-	-
27-Jun	16:56	3A083	ZUI	Arrival	13.1	-	-
27-Jun	17:22	3A183	ZUI	Departure	13.2	-	-
27-Jun	18:06	8S126	XZM	Departure	12.4	-	-
27-Jun	20:39	3A084	ZUI	Arrival	13.3	-	-
27-Jun	20:57	3A185	ZUI	Departure	12.4	-	-
27-Jun	20:58	8S2113	XZM	Arrival	12.1	-	-
28-Jun	8:18	8S210	XZM	Arrival	12.6	-	-
28-Jun	8:57	3A061	YFT	Arrival	11.9	-	-
28-Jun	9:58	3A081	ZUI	Arrival	13	-	-
28-Jun	10:27	3A181	ZUI	Departure	12.1	-	-
28-Jun	10:37	8S212	XZM	Arrival	12.7	-	-
28-Jun	10:54	3A063	YFT	Arrival	13.1	-	-
28-Jun	11:03	8S121	XZM	Departure	13	-	-
28-Jun	12:39	8S215	XZM	Arrival	12.9	-	-
28-Jun	12:55	3A064	YFT	Arrival	12.7	-	-
28-Jun	13:56	3A082	ZUI	Arrival	13.2	-	-
28-Jun	14:13	3A164	YFT	Departure	13.5	-	-
28-Jun	14:14	3A182	ZUI	Departure	12.4	-	-
28-Jun	14:55	3A065	YFT	Arrival	11.4	-	-
28-Jun	16:14	3A167	YFT	Departure	11.5	-	-
28-Jun	16:55	3A067	YFT	Arrival	12.7	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
28-Jun	16:57	3A083	ZUI	Arrival	12.7	-	-
28-Jun	17:20	3A183	ZUI	Departure	13.7	-	-
28-Jun	18:01	8S126	XZM	Departure	13.6	-	-
28-Jun	20:34	3A084	ZUI	Arrival	13.3	-	-
28-Jun	20:56	8S2113	XZM	Arrival	12.2	-	-
28-Jun	21:03	3A185	ZUI	Departure	12.6	-	-
29-Jun	8:12	8S210	XZM	Arrival	12.7	-	-
29-Jun	8:55	3A061	YFT	Arrival	12.7	-	-
29-Jun	9:53	3A081	ZUI	Arrival	12.6	-	-
29-Jun	10:15	3A181	ZUI	Departure	12.6	-	-
29-Jun	10:40	8S212	XZM	Arrival	12.7	-	-
29-Jun	10:57	3A063	YFT	Arrival	11.9	-	-
29-Jun	11:09	8S121	XZM	Departure	12.6	-	-
29-Jun	12:37	8S215	XZM	Arrival	13.1	-	-
29-Jun	12:57	3A064	YFT	Arrival	12	-	-
29-Jun	14:11	3A082	ZUI	Arrival	12.7	-	-
29-Jun	14:14	3A164	YFT	Departure	12.5	-	-
29-Jun	14:23	3A182	ZUI	Departure	12.5	-	-
29-Jun	14:56	3A065	YFT	Arrival	11.5	-	-
29-Jun	16:15	3A167	YFT	Departure	12.4	-	-
29-Jun	16:59	3A067	YFT	Arrival	12.1	-	-
29-Jun	17:03	3A083	ZUI	Arrival	12.9	-	-
29-Jun	17:33	3A183	ZUI	Departure	13.5	-	-
29-Jun	18:18	8S126	XZM	Departure	12.7	-	-
29-Jun	20:37	3A084	ZUI	Arrival	13.4	-	-
29-Jun	20:56	3A185	ZUI	Departure	12.8	-	-
29-Jun	21:01	8S2113	XZM	Arrival	12.3	-	-
30-Jun	8:14	8S210	XZM	Arrival	13.2	-	-
30-Jun	8:52	3A061	YFT	Arrival	12.6	-	-
30-Jun	9:59	3A081	ZUI	Arrival	13.2	-	-
30-Jun	10:25	3A181	ZUI	Departure	11.2	-	-
30-Jun	10:35	8S212	XZM	Arrival	12.3	-	-
30-Jun	10:58	3A063	YFT	Arrival	12.1	-	-
30-Jun	11:03	8S121	XZM	Departure	12.7	-	-
30-Jun	12:38	8S215	XZM	Arrival	12.2	-	-
30-Jun	12:57	3A064	YFT	Arrival	12.9	-	-
30-Jun	14:02	3A082	ZUI	Arrival	12.9	-	-
30-Jun	14:20	3A164	YFT	Departure	13.3	-	-
30-Jun	14:41	3A182	ZUI	Departure	11.6	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
30-Jun	14:58	3A065	YFT	Arrival	12.1	-	-
30-Jun	16:19	3A167	YFT	Departure	12.9	-	-
30-Jun	16:52	3A067	YFT	Arrival	13.1	<= 5	< 2min
30-Jun	16:58	3A083	ZUI	Arrival	12.1	-	-
30-Jun	17:37	3A183	ZUI	Departure	12.4	-	-
30-Jun	18:09	8S126	XZM	Departure	13.1	-	-
30-Jun	20:42	3A084	ZUI	Arrival	12.6	-	-
30-Jun	20:56	3A185	ZUI	Departure	13.1	-	-
30-Jun	20:59	8S2113	XZM	Arrival	12	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in June 2019, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 5 HSF movements of which the durations of all instantaneous speeding cases were less than 1 minute. The AIS data and ferry operators' responses showed the cases were due to local strong water and giving way to vessels. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.